K&K Data PIN001

Structural Document Set

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10

October 2026

Structural arrangement and design conditions, structural drawings, technical specifications, and site setting-out and procurement sheets. The scope of this edition, its local amendment and its design conditions are stated in Part 0.

Contents

Part	Content	Pages
Part 0	Structural Arrangement and Design Conditions	2–7
Index	Drawing Index	8–11
Part 1	Drawings — Structure, Connections, Foundation Interface, Floor and Roof	12–90
Part 2	Technical Specifications	91–165
Part 3	Site Setting-Out and Procurement Sheets	166–187

K&K Data Service Inc.
inquiry@kkdatasvc.com

Copyright © 2026 K&K Data Service Inc. · inquiry@kkdatasvc.com

K&K Data PIN001 — Structural Arrangement and Design Conditions

Part 0 of the structural document set · Public edition P2 · October 2026 · K&K Data Service Inc. · inquiry@kkdatasvc.com

This part describes the building structure, the floor build-up and the foundation interface, sets out the reading sequence of the drawings and specifications, cross-references the grid and zone designations used by the different packages, and lists the design conditions that remain to be defined for this edition. Dimensions and levels are in millimetres and are taken from dimensioned values, not scaled from drawings.

1 Building and Structural System

1.1 Building, grid and datum

The building is a single-storey steel frame on a rectangular grid of 106600 × 18300 mm. Nineteen transverse grid lines (axes 1 to 19) define eighteen bays: sixteen bays of 5800 mm and two widened bays of 6900 mm (bays 6 and 12), giving 16 × 5800 + 2 × 6900 = 106600. Four longitudinal column lines lie at Y = 0, 6000, 12000 and 18300 (spacings 6000 / 6000 / 6300). One main column HW350×350×12×19 stands on each grid intersection, 76 in total.

All levels are measured from the underside of the main columns, ±0 (model Z = 0). This is a project datum, not a site level; site levels are assigned by the level design.

1.2 Member families

The table gives the member families of the Revision 04 whole-building drawings (S-000 to S-720) with their sections and numbers. Masses by family are given in the materials and floor construction review R04B (Part 2).

System	Member family	Section	Number	Arrangement
Columns	Main columns	HW350×350×12×19	76	One on each grid intersection
Roof	Roof main beams	RHS 300×150×8	57	On the grid axes, bearing on the main columns
Roof	Purlins	RHS 200×100×6	360	Between roof main beams; cut lengths 5790, 5870 and 6890
Roof	Eaves edge beams / gable struts	RHS 200×100×6	54 / 6	Eaves lines and gable ends
Walls	Girts	RHS 100×150×4	292	270 on the longitudinal walls Y = 0, 6000 and 12000; 22 on the end walls
Walls	Wall studs / end wall studs	RHS 100×50×3 / RHS 50×100×3	648 / 48	Longitudinal walls / end walls X = 0 and 106600
Floor	Floor main beams	I 300×200×8×12, built up from 2 × PL200×12 + PL276×8	38	On the grid axes across the floor strip Y = 0 to 12000
Floor	Floor secondary beams	HN250×125×6×9	450	Along X at 500 mm centres, top flange at level 1000
Floor	Stub columns	SHS 100×100×5	171	In the band Y = 1000 to 5000; cap and base plates 200×200×12
Floor	IT support rails / risers	RHS 80×40×4 / SHS 40×40×4	11 / 22	Bay 1 only, with 22 equipment base plates (Section 4)
Under floor	Cable tray rungs	RHS 80×40×3	66	Bay 1, centre levels 140 / 340 / 540; labelled RACK_FRAME in the model and member schedule
Connections	Connection parts JSEC-01 to JSEC-08	Sleeves and angles	5942 / 2253	Typical connections S-601 to S-606; not repeated in the S-600 member count

The floor main beam is designated I 300×200×8×12 throughout this edition. The foundation setting-out sheets and pile requirement data show the same built-up section as "BP 200 × 300"; the dimensions are identical. The cable tray rungs carry cable trays below the floor; they are neither equipment racks nor primary structure.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

1.3 Roof

The roof has two monoslope planes, each falling at 2 %. The high span (Y = –338 to 6338) falls towards Y = 0, with bearing levels +7193.3 at Y = –338 and +7326.8 at Y = 6338. The low span (Y = 6260.819 to 18638) falls towards Y = 18300, with bearing levels +4702.8 at the high/low span junction and +4455.3 at the low eaves; the two planes are 2622.433 apart in level at the same Y. Purlins carry the roof build-up drawn on S-710 and S-711: a sandwich panel of nominal 100 mm with steel facings and a 1.5 mm PVC-P membrane, 101.5 mm in total normal to the roof plane. The drawings are based on the Kingspan KS FP K-ROC 100 panel (20.38 kg/m²) and the Renolit Alkorplan F35176 membrane (1.8 kg/m²) as reference products; fixings, edge trims and drainage follow the product finally selected (Section 6, item 11).

1.4 Walls

Girts span between main columns on the longitudinal wall lines Y = 0, 6000 and 12000 (S-400 to S-424) and on the end walls X = 0 and X = 106600 together with the end wall studs (S-510, S-511). Girt centre elevations are set out on S-430 and S-431 and tabulated in Technical appendix B.

1.5 Raised floor

The raised floor extends over Y = 0 to 12000; the boards cover X = 80 to 106520 and Y = 80 to 11920, interrupted by a 160 mm strip at Y = 5920 to 6080 along column line Y = 6000. Floor main beams run on the grid axes. Secondary beams HN250×125×6×9 span between them in X at 500 mm centres. In the band Y = 1000 to 5000, 171 stub columns SHS 100×100×5 support the floor framing through 200×200×12 cap plates with 4 × M12 bolts and stand on 200×200×12 base plates at level 0. The strip Y = 6000 to 12000 has no stub columns; there the floor main beams span between main columns. The floor has no steel deck plate: the 30 mm fibre cement boards bear directly on the secondary beam top flanges (Section 4).

1.6 Foundations

There are 247 support points: 76 main column points C001 to C076 and 171 stub column points F001 to F171. Each point has one helical pile, concentric with the supported member. Main columns stand on the base assembly CS-4: base plate PL 380×380×25 with two stiffeners PL 308×120×12, connected by 4 × M24 ASTM F3125 Gr. A325M bolts through machined shims (3 to 30 mm, nominal 15) to the pile cap cover plate PH-4, 380×380×25, with its top at nominal –40 (+12 / –15). Stub column pile heads are at level 0, 40 mm above the main column pile cap tops. Pile type, helix configuration and length are selected by the pile supplier to meet the per-point performance schedule FS-16 within the close-spacing limits of FS-09.

1.7 Gravity load path as drawn

Floor boards bear on the secondary beam top flanges. IT equipment base plates bear directly on the secondary beams, outside the boards. Secondary beams are supported by the floor main beams (S-603; SP-T1 / SP-T2 in the widened bays 6 and 12) and, in the stub column band, by stub column caps. Floor main beams are supported by stub columns and main columns, and these by the piles. Roof panels bear on purlins (S-604), purlins on roof main beams, and roof main beams on main columns (S-601). Floor main beams connect to main columns through double angle cleats shown by the typical detail S-602 (JD-02); at the two ends of WF-PB-A06-FB02 the column-side bolt groups follow S-607. This is the geometric support chain shown on the drawings; member, connection and foundation resistances depend on the design conditions of Section 6.

2 Reading Sequence

The document set is arranged from the whole building to the details. Part 0 is this document. Part 1 contains the drawings of the structure, Part 2 the technical specifications and technical appendices, and Part 3 the site setting-out and procurement sheets.

Group	Sheets	Content
1.1 General and locators	S-000, S-001; S-050; FS-01; F-001	Index and general notes, axonometric; equipment and support coordination plan; foundation support locator plan; floor key plan
1.2 Framing plans	S-100 to S-104; S-200 to S-204; S-300 to S-304	Column, base and support plans; roof framing; floor framing (each in four segments)
1.3 Elevations and sections	S-400 to S-424; S-430, S-431; S-501 to S-504; S-510, S-511; S-521, S-522	Wall framing elevations; girt setting-out; transverse frame sections; end walls; longitudinal section

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

1.4 Member schedule and connections	S-600; S-601 to S-606; S-607; PIN001-JC-01 / JC-02; PIN001-CS4-001 / CS4-002	Member schedule; typical connections; amended JD-02 detail for WF-PB-A06-FB02; secondary beam ends SP-T1 / SP-T2; main column base CS-4 / PH-4
1.5 Foundation interface	FS-02; FS-10 to FS-12; FS-16	Local coordinate system and survey handover; coordinate schedules; pile performance requirement schedule
1.6 Floor system	F-201 to F-203; F-301 to F-303; F-401; R-101 to R-104	Standard and widened bays; edge, notch, base plate and joist end details; post cap and base; board fastening and perimeter supports
1.7 Roof	S-700 to S-702; S-710, S-711; S-720	Roof surfacing; roof sections; roof interface geometry
Part 2	R04-0, R04A, R04B, R04C; D02-0, CS-4 J29, R-01, D02-N; SPB-1 R5; FS-A, FS-B; F02; D01, P04-0, P-01; Technical appendices A and B; FS-C	Technical conditions, specifications and record sheets (contents at the start of Part 2)
Part 3	FS-03 to FS-09; FS-13 to FS-15; FS-17; D01 F-101 to D01 F-103; D01 F-501; P-101 to P-105; F02 F-101 to F02 F-104 (details)	Zone setting-out and close-spacing details; tape checks; survey record; zone floor plans and installation zones; board procurement and trial assembly; finish and ESD details

Sheet S-050 sets the reference equipment envelopes against the modelled supports and the floor framing (Section 4). Sheet S-607 details the amended column-side bolt groups of the two JD-02 connections of floor main beam WF-PB-A06-FB02 (Section 3.3). The zone floor plans D01 F-101 to D01 F-103 and the finish details F02 F-101 to F02 F-104 share sheet numbers; they are cited with their package name.

3 Reference Tables and Edition Scope

3.1 Grid and zone designations

Item	Structural drawings (S)	Foundation setting-out (FS)	Floor drawings (D01)
Transverse grid lines	A01 to A19	AX01 to AX19	G01 to G19
Column lines Y = 0 / 6000 / 12000 / 18300	Column mark suffix -1 / -2 / -3 / -4 (e.g. C-A03-1 on Y = 0)	YA / YB / YC / YD	—
Bays	B01 to B18 in member marks	B01 to B18	Bays 1 to 18 (6 and 12 widened)
Zones	Segments 1 to 4: axes 1–6, 6–11, 11–16, 16–19	Zones A to F: X 0–17400, 17400–35900, 35900–53300, 53300–71800, 71800–89200, 89200–106600	Zones A to C: bays 1–6, 7–12, 13–18
Support points	Main column and stub column marks	C001 to C076, F001 to F171	Support index of 247 identifiers

3.2 Packages and current revisions

Package	Content	Revision
R04 Whole-building structure	Drawings S-000 to S-720 (53 A1 sheets, typical connections S-601 to S-606, roof interface S-720); technical conditions R04A; review R04B; board layout review R04C	Revision 04, 2026-09-25
Girt elevation setting-out	S-430 (longitudinal walls Y = 0 / 6000 / 12000), S-431 (end walls X = 0 / 106600)	Rev A
FS Foundation support setting-out	FS-01 to FS-17; notes FS-A; pile performance requirements FS-B; field record sheets FS-C	Rev B (FS-09 and FS-16 at Rev B, other sheets Rev A); FS-C Rev A
D01 Floor installation	F-001 to F-501 (12 A1 sheets); drawing index D01	01; F-303 and F-401 at 01B
D02 Floor and pile head connections	Secondary beam ends SP-T1 / SP-T2 (PIN001-JC-01 / JC-02); column base CS-4 / PH-4 (PIN001-CS4-001 / CS4-002); board fastening R-101 to R-104; notes D02-0, CS-4 J29, R-01, D02-N	D02B; PIN001-CS4-001 and CS-4 J29 at J29; R-101, R-102, R-104 and R-01 at R07
P04 Board procurement and installation	P-101 to P-105; technical conditions P-01	P04A (P-103 at 04A)

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

F02 Floor finish and ESD control	Technical conditions F02; details F02 F-101 to F02 F-104	F02, details issue 02
SPB-1 Stub column pile head interfaces	Interfaces F053, F054, F109, F110; 16-hole schedule	R5
WF-PB-A06-FB02 connections	13 connections of this floor main beam: angle chamfers (W36) and the local JD-02 bolt-pitch amendment; S-607; Technical appendix A	W36 with P2 local amendment
Equipment and support coordination	S-050	P2

3.3 Scope of this edition

Edition P2 presents the Revision 04 whole-building structural layout with the packages and revisions of Table 3.2. It incorporates one local geometric amendment, which applies only to the two JD-02 connections at the ends of floor main beam WF-PB-A06-FB02:

- Angles RCV34-ASJ-055-L, RCV34-ASJ-055-R, RCV34-ASJ-056-L and RCV34-ASJ-056-R (JSEC-01, length 260 mm) and their four column-side bolt groups of 6 × M16 (24 bolts, 48 holes in angles and column).
- Bolt pitch 43 mm (5 × 43 = 215) instead of 40 mm; nominal end distance 22.5 mm at both ends of each angle; angle length, angle centre position and the number of bolts are unchanged, and no steel or bolt is added.

The amended detail is drawn on S-607, and its fabrication requirements and open checks are given in Technical appendix A and Section 6, item 8. The amendment is held in a local model of the 13 connections of this beam; the Revision 04 whole-building model and sheets have not been regenerated to include it. S-602 continues to show the unamended typical JD-02 detail. The amendment does not change, and does not establish the geometry or resistance of, any other connection instance or typical detail, including S-601 (JD-01), the other JD-02 instances and the JD-03 connections; typical details that retain their original pitch show typical geometry only (Section 6, item 9). The angle chamfers of revision W36 on the same 13 connections remain in force.

4 Floor Construction, Levels and Equipment Interface

Item	Level	Definition
Secondary beam top	1000	HN250×125×6×9, top flange 991–1000, 125 wide
Fibre cement board	1000 – 1030	30 mm; 552 boards cut to their individual outlines; 3 mm joints centred on secondary beam centrelines; largest board 1197 × 1997
Finished floor	1030 + Δ	Δ is the total thickness of the finish system selected under F02; it is not yet selected
IT equipment base plate	1000 – 1008	145×115×8, bearing on the secondary beam top flange inside a board cut-out; M12×45 bolts in 13 mm holes, grip 17
IT support rail top (reference arrangement)	1128	98 above the board top, per the reference equipment arrangement below

With a board joint centred on the 125 mm flange the nominal bearing width is 61 mm on each side. Perimeter board edges are supported by the local supports SS-P1 (1328) fixed with CN-1 connectors (2656); boards are fixed with FX-S1 flush fasteners M6 (11619). The boards and the finish do not act as a horizontal diaphragm.

Equipment interface. The structural model contains the equipment supports of bay 1 only: IT support rails RHS 80×40×4, risers SHS 40×40×4 and 22 equipment base plates for 6 IT positions within X = 2507.5 to 5652.5, Y = 1942.5 to 3557.5. The current cabinet data of the Network Reference Design Brief EN-R1 (2026-09-28) define 130 reference cabinet envelopes for coordination: 90 GPU cabinets, 30 network cabinets (NET) and 10 central network cabinets (NETC), in a single row of depth 1200 between Y = 2150 and Y = 3350 and with individual cabinet positions between X = 2355 and X = 103645 and nine gaps between cabinets of 1550 to 1800 mm; the cabinet positions and gaps are those of the current EN-R1 schedule, and the X range is neither a continuous run nor a rail layout. The cabinets stand on IT support rails with top level 1128 (cabinet top 3422). The row lies within the stub column band Y = 1000 to 5000. Rails, risers and base plates for the remainder of the row are not part of the structural model. Sheet S-050 shows the reference cabinet envelopes and the modelled supports as separate layers against the floor framing; the modelled supports are not relocated to match the envelopes. The reference arrangement is not an equipment procurement selection, and the cabinet counts are not counts of structural support positions or ESD bonding points. Earlier editions cited 96 IT positions as a whole-building planning target; that figure is superseded by the reference arrangement and is not a design input.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

5 Materials and Fastening

"ASTM A36" (model notation ASTMA36) in the member schedules and on the main members of the model is a model material label. The procurement grade and product standard of the main member families are design parameters (Section 6, item 9); no material equivalence is assumed. The connection components of package D02 and the floor fixings are specified as follows.

Component	Specified material and fasteners	Document
SP-T1 / SP-T2 plates	ASTM A36, Fy 250 / Fu 400; if supplied as GB/T 700 Q235B, resistances are recalculated with Fy 235 / Fu 370. Bolts ISO 4014 M16×45-8.8, nuts ISO 4032-8, washers ISO 7089 200 HV; electrode E7018 (AWS A5.1), deposited metal tensile strength ≥ 480 MPa	PIN001-JC-01 / JC-02, D02-N
CS-4 base plate and stiffeners	ASTM A36, hot-dip galvanized to ASTM A123; faying surfaces Class A, μ = 0.30, power and hand wire brushing prohibited	PIN001-CS4-001 J29, CS-4 J29
PH-4 bolts	M24 ASTM F3125 Gr. A325M, galvanized to ASTM F2329; nuts ASTM A563M 10S; washers ASTM F436M	CS-4 J29
SS-P1 local supports	Q235B, hot-dip galvanized to EN ISO 1461	R-102, R-01
CN-1 connectors	ISO 10642 M10×25, 08.8, zinc flake coated; declared minimum tension ≥ 20.0 kN	R-01
FX-S1 fasteners	DIN 7984 M6×35, 8.8, electroplated zinc	R-01
30 mm floor boards	Fibre cement board, EN 12467 / ASTM C1185; characteristic flexural strength dry ≥ 16.0 MPa; equilibrium areal density ≤ 60 kg/m²	R-01
Typical connection angles and bolts (S-601 to S-606)	JSEC parts as drawn; bolts as listed on the sheets (for example M16 ISO 4014 8.8 on S-602); material, tolerance and edge preparation per item 9 of Section 6	R04A

6 Design Conditions of This Edition

The following parameters are not yet defined by this document set. Each item names the components it governs. None of the drawings or specifications states a verified whole-floor load rating, wind rating or whole-frame capacity.

1. **Design actions.** Site wind, roof and floor imposed loads and equipment loads for the whole frame are not defined in this set. They govern all member, connection and foundation checks and the roof details RF-01 to RF-06. The eight-case floor analysis of the floor framing (Robot Structural Analysis) is a force diagnosis of the floor framing; its supports are not established as the as-built restraints, and its results are not design forces.
2. **Floor board performance cases.** The board-system cases of R-01 qualify the board, its fixings and its local supports: 5 kPa uniform; 9 kN on a 762 × 762 mm pad; 2 kN on a 100 × 100 mm pad. They are not the permissible load of the floor framing. No pallets are placed on the floor until a verified permissible floor load is issued (F-501, P-01 Section 8).
3. **Equipment loads.** Equipment load cases for the floor framing are not established. The EN-R1 reference envelopes give cabinet positions and outlines, not reactions or support rail geometry; rack mass data from the equipment manufacturer are not available; and the six first-bay supports of the structural model are not extended along the row. Sheet S-050 will show the reference envelopes and the modelled supports as separate layers; it does not define load cases.
4. **Lateral load path.** The roof, wall, column and base members are listed in Section 1. Not stated in this edition: the lateral load-resisting system in each direction; horizontal transfer in the roof plane; the classification of the primary beam-to-column connections S-601 (roof beam to column) and S-602 (floor beam to column); the restraint provided by the other framing connections where the adopted load path relies on it — S-603 (floor joist to floor beam), S-604 (purlin to rafter), S-605 (wall rail and wall stud) and S-606 (short post cap and foot plate); and the base restraint of the main columns. No bracing, diaphragm or rigid joint beyond those drawn is assumed.
5. **Main column bases.** The base restraint is a decision of the structural design and enters the frame model; a bolted base is not automatically a fixed base. The pile supplier designs the pile cap PH-4, its transition to the pile shaft and the pile, and provides the pile head resistances and the translational and rotational stiffnesses listed in CS-4 J29, Section 7, by calculation or by assembly testing. Once the concurrent six-component reactions are available, the structural design checks the complete CS-4 / shim / bolt / PH-4 assembly for them with these data, by one interaction relationship per concurrent set

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

(CS-4 J29, Section 6). The bolt group component limit values are given in CS-4 J29, Section 5.

6. **Foundations.** The per-point demand fields of FS-16 (Fx, Fy, Fz, Mx, My, Mz with their concurrent combinations, stiffnesses, settlement and displacement limits) are to be completed from the frame reactions. Pile selection is to meet these demands within the close-spacing limits of FS-09. Pile head design levels, setting-out and construction tolerances, soil data and the site control network are established before construction.
7. **Secondary beam end connections SP-T1 / SP-T2.** Checks pending for the actual load cases: end reaction V; torque on the supporting main beam (T = V × 0.161 m) and on the main column (T = V × 0.065 m); effective width of the supporting web for out-of-plane bending; web-to-flange load transfer of the main beam; rotation capacity and joist end torsional bracing.
8. **Floor main beam WF-PB-A06-FB02 (2 JD-02, 11 JD-03 connections).** Geometry and fabrication requirements are in Technical appendix A and on S-607. For the amended JD-02 bolt groups, hole centres and cut angle ends are each held to ±0.15 mm from a common datum, and every as-built pitch and end distance is measured against the governing minima of Technical appendix A, Section A.2 (centre spacing 2⅔ d, end distance 22 mm). The supplier's ability to hold this tolerance is not yet confirmed, and the reduced end-distance provision is not used. Connection strength is not established: the concurrent six-component actions at the 13 connections; out-of-plane bending and prying of the angle short legs; out-of-plane resistance of the main beam web; the torsional restraint of the joist ends and the shared transfer of torque between the opposite SP-T1 and the JD-02 beam ends; local transverse, torsion and prying actions on the web-to-flange weld; directional tear-out at the chamfered angle edges; plate grade and electrode classification; and the qualification of the procured bolts (ISO 4014 property class 8.8 is not equivalent to ASTM F3125 A325M) and of the M12 bolts in 13 mm holes. The tightening method and torque for the 168 bolts of these connections, the procured tool dimensions and the erection stability measures are defined before erection (Technical appendix A, Section A.5).
9. **Other JD-02 connections.** The unamended typical detail S-602 shows a column-side group of 6 × M16 at 40 mm pitch (5 × 40 = 200) on a 260 mm angle; the end distance is (260 – 5 × 40) / 2 = 30 mm for the group centred on the 260 mm angle. A 40 mm pitch is below the governing minimum centre spacing 2⅔ d (Technical appendix A, Section A.2). The JD-02 instances other than the two amended on S-607 have not been inventoried for this edition; the applicability of the typical detail to each of them, their actual pitch and their correction by the same rule are to be confirmed. P2 does not change them.
10. **Materials and fabrication.** Procurement grades and product standards of the main member families and of the connection parts JSEC-01 to JSEC-08; fabrication and erection tolerances; welding procedures and effective throats, including the web-to-flange welds of the built-up floor main beams; the shop and site welding split (R04 has 3280 weld objects, 565.1 m, not split by location); corrosion protection; bolt pretension and tightening requirements; tube product standard, supplied wall thickness and corner radius as inputs to the eaves seat weld check.
11. **Floor boards.** Board manufacturer selection; test results TB-1 to TB-8 of R-01; fastener torques from TB-6 (FX-S1) and TB-7 (CN-1); the 20 mm bearing of the 12 perimeter X edges verified by TB-8.
12. **Roof details RF-01 to RF-06.** Fixing spacing, gutter section, flashing thickness and roof wind resistance follow from the site wind load, the rainfall intensity and the data of the roof products selected (Technical appendix B).
13. **Stub column pile head interfaces SPB-1 R5** (F053, F054, F109, F110). The interface geometry is defined. Capacity and stiffness of the bolts, base plate, pile cap and pile are checked once the concurrent design forces, including uplift, are available.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Drawing Index

K&K Data PIN001 · Public edition P2 · 101 sheets

Sheets are listed in reading order. Sheet numbers are those on the drawings. The floor installation sheets of package D01 and the floor finish detail sheets of package F02 share numbers F-101 to F-103; they are cited here, in the bookmarks and in cross-references with their package name (D01 F-1xx, F02 F-1xx). Book page numbers refer to this assembled set of 187 pages.

Part 1 — 1.1 General and locators

Sheet	Title	Package	Book page
S-000	STRUCTURAL DRAWING INDEX AND GENERAL NOTES	R04	12
S-001	WHOLEHOUSE STRUCTURAL ARRANGEMENT - AXONOMETRIC KEY VIEW	R04	13
S-050	EQUIPMENT REFERENCE ENVELOPES (EN-R1) AND MODELLED IT SUPPORTS, BAY 1 - COORDINATION PLAN	R04 (P2 new sheet)	14
FS-01	FOUNDATION SUPPORT SETTING-OUT PLAN - OVERALL AND ZONE INDEX	FS	15
D01 F-001	Floor key plan index	D01	16

Part 1 — 1.2 Framing plans

Sheet	Title	Package	Book page
S-100	OVERALL COLUMN, BASE AND SUPPORT PLAN - KEY PLAN	R04	17
S-101	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	R04	18
S-102	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	R04	19
S-103	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	R04	20
S-104	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	R04	21
S-200	OVERALL ROOF FRAMING PLAN - KEY PLAN	R04	22
S-201	ROOF FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	R04	23
S-202	ROOF FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	R04	24
S-203	ROOF FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	R04	25
S-204	ROOF FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	R04	26
S-300	OVERALL FLOOR FRAMING PLAN - KEY PLAN	R04	27
S-301	FLOOR FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	R04	28
S-302	FLOOR FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	R04	29
S-303	FLOOR FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	R04	30
S-304	FLOOR FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	R04	31

Part 1 — 1.3 Elevations and sections

Sheet	Title	Package	Book page
S-400	WALL FRAMING ELEVATION ON GRID LINE Y=0 - OVERALL	R04	32
S-401	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 1 OF 4, AXES 1 TO 6	R04	33
S-402	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 2 OF 4, AXES 6 TO 11	R04	34
S-403	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 3 OF 4, AXES 11 TO 16	R04	35
S-404	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 4 OF 4, AXES 16 TO 19	R04	36
S-410	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - OVERALL	R04	37
S-411	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 1 OF 4, AXES 1 TO 6	R04	38
S-412	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 2 OF 4, AXES 6 TO 11	R04	39

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

S-413	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 3 OF 4, AXES 11 TO 16	R04	40
S-414	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 4 OF 4, AXES 16 TO 19	R04	41
S-420	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - OVERALL	R04	42
S-421	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 1 OF 4, AXES 1 TO 6	R04	43
S-422	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 2 OF 4, AXES 6 TO 11	R04	44
S-423	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 3 OF 4, AXES 11 TO 16	R04	45
S-424	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 4 OF 4, AXES 16 TO 19	R04	46
S-430	Longitudinal wall girt elevation setting-out	R04 girt setting-out	47
S-431	End wall girt elevation setting-out	R04 girt setting-out	48
S-501	TRANSVERSE FRAME SECTION ON AXIS 3	R04	49
S-502	TRANSVERSE FRAME SECTION ON AXIS 7	R04	50
S-503	TRANSVERSE FRAME SECTION ON AXIS 12	R04	51
S-504	TRANSVERSE FRAME SECTION ON AXIS 17	R04	52
S-510	END WALL FRAMING ELEVATION ON AXIS 1, FIRST END WALL (X=0)	R04	53
S-511	END WALL FRAMING ELEVATION ON AXIS 19, OPPOSITE END WALL (X=106600)	R04	54
S-521	LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 1 OF 2, AXES 1 TO 10	R04	55
S-522	LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 2 OF 2, AXES 10 TO 19	R04	56

Part 1 — 1.4 Member schedule and connections

Sheet	Title	Package	Book page
S-600	MEMBER SCHEDULE	R04	57
S-601	BEAM TO COLUMN - DOUBLE ANGLE CLEAT, SLEEVED BOLT	R04	58
S-602	FLOOR BEAM TO COLUMN - DOUBLE ANGLE CLEAT, WEB BOLTED	R04	59
S-603	FLOOR JOIST TO FLOOR BEAM - DOUBLE ANGLE CLEAT SUPPORT	R04	60
S-604	ROOF PURLIN TO RAFTER - ANGLE SEAT, SLEEVED BOLT	R04	61
S-605	WALL RAIL TO COLUMN CLEAT AND WALL STUD SHOP WELD	R04	62
S-606	SHORT POST - WELDED CAP PLATE AND FOOT PLATE	R04	63
S-607	JD-02 AMENDMENT WF-PB-A06-FB02 COLUMN-SIDE BOLT GROUPS (4 GROUPS)	R04 (P2 new sheet)	64
PIN001-JC-01	Secondary beam end connection SP-T1	D02	65
PIN001-JC-02	Secondary beam end connection SP-T2	D02	66
PIN001-CS4-001	Main column base CS-4 / pile head PH-4, geometry and assembly	D02	67
PIN001-CS4-002	Main column base CS-4 / pile head PH-4, components and conditions	D02	68

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Part 1 — 1.5 Foundation interface

Sheet	Title	Package	Book page
FS-02	PROJECT LOCAL COORDINATE SYSTEM AND SURVEY HANDOVER METHOD	FS	69
FS-10	COORDINATE SCHEDULE 1 OF 3 - MAIN COLUMN SUPPORT POINTS C001-C076	FS	70
FS-11	COORDINATE SCHEDULE 2 OF 3 - FLOOR POST SUPPORT POINTS F001-F090	FS	71
FS-12	COORDINATE SCHEDULE 3 OF 3 - FLOOR POST SUPPORT POINTS F091-F171	FS	72
FS-16	PILE PERFORMANCE REQUIREMENT INTERFACE SCHEDULE	FS	73

Part 1 — 1.6 Floor system

Sheet	Title	Package	Book page
D01 F-201	Standard bay plan	D01	74
D01 F-202	Widened bay B06 plan	D01	75
D01 F-203	Widened bay B12 plan	D01	76
D01 F-301	Perimeter and mid-band edge sections	D01	77
D01 F-302	Notch, opening and rack base plate clearance details	D01	78
D01 F-303	Secondary beam end and joint on main beam details	D01	79
D01 F-401	Post cap and post base details	D01	80
R-101	Floor board fastening and support layout	D02	81
R-102	Perimeter support SS-P1 and connector CN-1	D02	82
R-103	Flush fastener FX-S1 and board machining	D02	83
R-104	Board edge conditions and test load positions	D02	84

Part 1 — 1.7 Roof

Sheet	Title	Package	Book page
S-700	ROOF SURFACING	R04	85
S-701	ROOF SURFACING	R04	86
S-702	ROOF SURFACING	R04	87
S-710	TRANSVERSE ROOF SECTION - HIGH ROOF, AND THE ROOF STEP BETWEEN THE BEARING STATIONS AT Y=6338 AND Y=6260.8 (NEAREST GRID LINE Y=6000)	R04	88
S-711	TRANSVERSE ROOF SECTION - LOW ROOF FROM ITS BEARING STATION AT Y=6260.8 TO THE LAST AT Y=18638 (NEAREST GRID LINES Y=6000 AND Y=18300)	R04	89
S-720	ROOF INTERFACE COORDINATION GEOMETRY - LOW-ROOF ABUTMENT, EAVE EDGE AND GABLE ENDS	R04	90

Part 3 — 3.1 Foundation setting-out

Sheet	Title	Package	Book page
FS-03	ZONE A SETTING-OUT PLAN X = 0 TO 17400	FS	166
FS-04	ZONE B SETTING-OUT PLAN X = 17400 TO 35900	FS	167
FS-05	ZONE C SETTING-OUT PLAN X = 35900 TO 53300	FS	168
FS-06	ZONE D SETTING-OUT PLAN X = 53300 TO 71800	FS	169
FS-07	ZONE E SETTING-OUT PLAN X = 71800 TO 89200	FS	170
FS-08	ZONE F SETTING-OUT PLAN X = 89200 TO 106600	FS	171
FS-09	CLOSE SPACING DETAIL PLANS AND INSTALLATION CLEARANCE CONDITIONS	FS	172
FS-13	TAPE CHECK - AXIS CHAIN, ROW CHAIN AND DIAGONALS	FS	173
FS-14	TAPE CHECK SCHEDULE 1 OF 2 - ZONES A, B, C	FS	174
FS-15	TAPE CHECK SCHEDULE 2 OF 2 - ZONES D, E, F	FS	175
FS-17	SURVEY HANDOVER RECORD AND AS-BUILT SETTING-OUT RECORD	FS	176

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Part 3 — 3.2 Floor installation

Sheet	Title	Package	Book page
D01 F-101	Zone A floor plan	D01	177
D01 F-102	Zone B floor plan	D01	178
D01 F-103	Zone C floor plan	D01	179
D01 F-501	Installation zones, sequence and finish level	D01	180

Part 3 — 3.3 Board procurement and trial assembly

Sheet	Title	Package	Book page
P-101	First bay plan	P04	181
P-102	Board edge support classification	P04	182
P-103	Local support sample articles	P04	183
P-104	Flush fixing sample articles	P04	184
P-105	Trial rig and installation sequence	P04	185

Part 3 — 3.4 Floor finish and ESD details

Sheet	Title	Package	Book page
F02 F-101/F-102	Finish build-up, board joint, movement joint termination	F02	186
F02 F-103/F-104	ESD interface for IT maintenance	F02	187

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

DRAWING INDEX

DRAWING	TITLE	SCALE
S-000	STRUCTURAL DRAWING INDEX AND GENERAL NOTES	NTS
S-001	WHOLEHOUSE STRUCTURAL ARRANGEMENT - AXONOMETRIC KEY VIEW	1:200
S-050	EQUIPMENT REFERENCE ENVELOPES (EN-R1) AND MODELLED IT SUPPORTS, BAY 1 - COORDINATION PLAN	AS SHOWN
S-100	OVERALL COLUMN, BASE AND SUPPORT PLAN - KEY PLAN	1:250
S-101	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-102	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-103	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-104	COLUMN, BASE AND SUPPORT PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	1:75
S-200	OVERALL ROOF FRAMING PLAN - KEY PLAN	1:250
S-201	ROOF FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-202	ROOF FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-203	ROOF FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-204	ROOF FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	1:75
S-300	OVERALL FLOOR FRAMING PLAN - KEY PLAN	1:250
S-301	FLOOR FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-302	FLOOR FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-303	FLOOR FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-304	FLOOR FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19	1:75
S-400	WALL FRAMING ELEVATION ON GRID LINE Y=0 - OVERALL	1:250
S-401	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-402	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-403	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-404	WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 4 OF 4, AXES 16 TO 19	1:50
S-410	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - OVERALL	1:250
S-411	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-412	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-413	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-414	WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 4 OF 4, AXES 16 TO 19	1:50
S-420	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - OVERALL	1:250
S-421	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 1 OF 4, AXES 1 TO 6	1:75
S-422	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 2 OF 4, AXES 6 TO 11	1:75
S-423	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 3 OF 4, AXES 11 TO 16	1:75
S-424	WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 4 OF 4, AXES 16 TO 19	1:50
S-501	TRANSVERSE FRAME SECTION ON AXIS 3	1:50
S-502	TRANSVERSE FRAME SECTION ON AXIS 7	1:50
S-503	TRANSVERSE FRAME SECTION ON AXIS 12	1:50
S-504	TRANSVERSE FRAME SECTION ON AXIS 17	1:50
S-510	END WALL FRAMING ELEVATION ON AXIS 1, FIRST END WALL (X=0)	1:50
S-511	END WALL FRAMING ELEVATION ON AXIS 19, OPPOSITE END WALL (X=106600)	1:50
S-521	LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 1 OF 2, AXES 1 TO 10	1:125
S-522	LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 2 OF 2, AXES 10 TO 19	1:150
S-600	MEMBER SCHEDULE AND MODEL QUANTITIES	NTS
S-601	BEAM TO COLUMN - DOUBLE ANGLE CLEAT, SLEEVED BOLT	1:5
S-602	FLOOR BEAM TO COLUMN - DOUBLE ANGLE CLEAT, WEB BOLTED - TYPICAL R04 TEMPLATE; AMENDED FB02 GROUPS ON S-607	1:5
S-603	FLOOR JOIST TO FLOOR BEAM - DOUBLE ANGLE CLEAT SUPPORT	1:5
S-604	ROOF PURLIN TO RAFTER - ANGLE SEAT, SLEEVED BOLT	1:5
S-605	WALL RAIL TO COLUMN CLEAT AND WALL STUD SHOP WELD	1:5
S-606	SHORT POST - WELDED CAP PLATE AND FOOT PLATE	1:2
S-607	JD-02 AMENDMENT WF-PB-A06-FB02 COLUMN-SIDE BOLT GROUPS (4 GROUPS)	AS SHOWN
S-700	ROOF SURFACING	1:200
S-701	ROOF SURFACING	1:100
S-702	ROOF SURFACING	1:100
S-710	TRANSVERSE ROOF SECTION - HIGH ROOF AND ROOF STEP AT Y=6338/6260.8	1:20
S-711	TRANSVERSE ROOF SECTION - LOW ROOF, Y=6260.8 TO Y=18638	1:25
S-720	ROOF INTERFACE COORDINATION GEOMETRY - LOW-ROOF ABUTMENT, EAVE EDGE AND GABLE ENDS	PER VIEW

GENERAL NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.
7. S-607 APPLIES ONLY TO THE FOUR COLUMN-SIDE BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN OF WF-PB-A06-FB02. S-602 REMAINS THE TYPICAL R04 TEMPLATE; ITS APPLICABILITY TO OTHER JD-02 INSTANCES REQUIRES CONFIRMATION.
8. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".
9. RELATED SERIES IN THIS VOLUME: FS-01 … FS-17 (FOUNDATION SETTING-OUT), S-430/S-431 (GIRT SETTING-OUT), D01 F-001 … F-501 (FLOOR INSTALLATION), D02 DETAILS (PIN001-JC, PIN001-CS4, R-101 … R-104), P-101 … P-105, F02 F-101 … F-104.

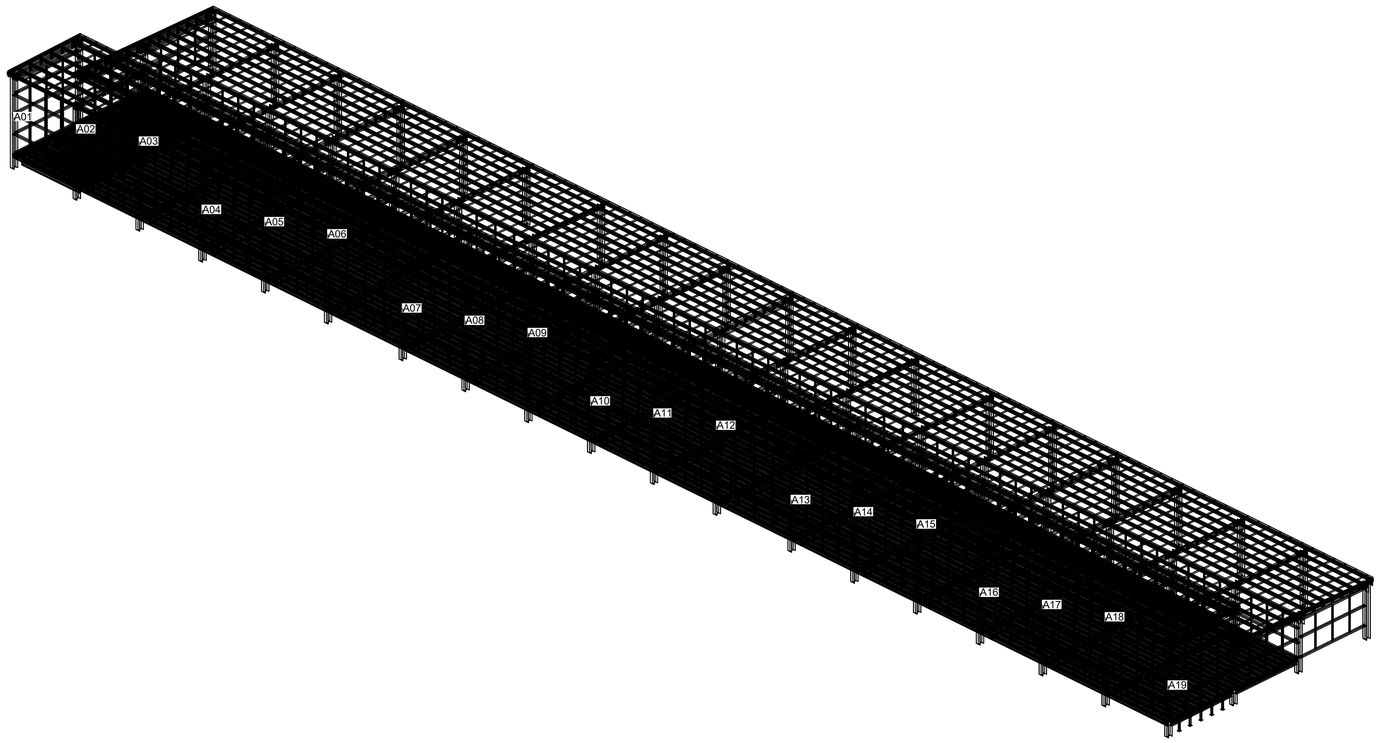
K&K Data / PIN001
STRUCTURAL DRAWINGS

STRUCTURAL DRAWING INDEX AND GENERAL NOTES

SHEET	SCALE	REVISION
S-000	SCHEDULE - NOT TO SCALE	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

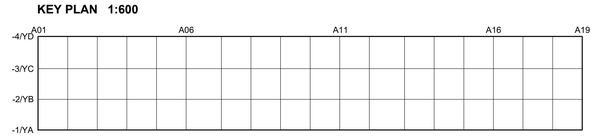
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



WHERE TO FIND

CONTENT	SHEETS
COLUMN, BASE AND SUPPORT PLANS	S-100 … S-104
ROOF FRAMING PLANS	S-200 … S-204
FLOOR FRAMING PLANS	S-300 … S-304
WALL ELEVATIONS Y = 0 / 6 000 / 12 000	S-400 … S-424
TRANSVERSE SECTIONS AND END WALLS	S-501 … S-511
LONGITUDINAL SECTION B-B	S-521, S-522
MEMBER SCHEDULE	S-600
CONNECTION DETAILS	S-601 … S-607
ROOF SURFACING AND ROOF SECTIONS	S-700 … S-720
EQUIPMENT REFERENCE / MODELLED IT SUPPORTS	S-050

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

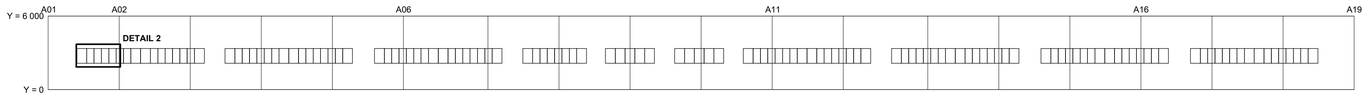
K&K Data / PIN001
STRUCTURAL DRAWINGS

WHOLEHOUSE STRUCTURAL ARRANGEMENT - AXONOMETRIC KEY VIEW

SHEET	SCALE	REVISION
S-001	1:200 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

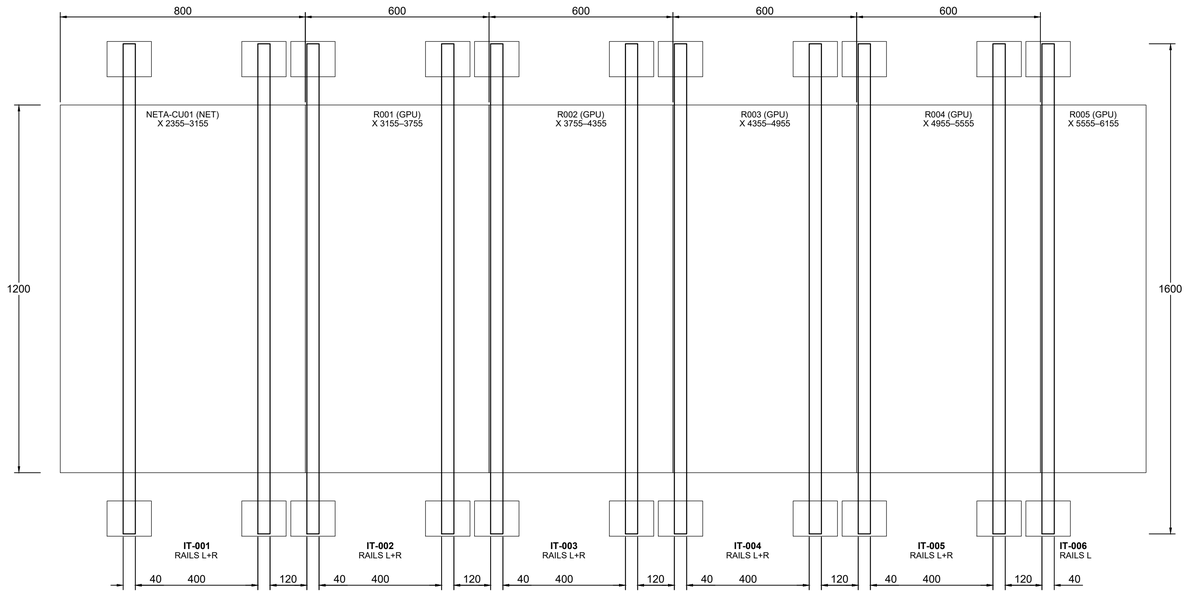
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



1 REFERENCE EQUIPMENT ROW, CURRENT EN-R1 ARRANGEMENT (130 ENVELOPES)

SCALE 1:250

ENVELOPES X 2355 TO 103645, Y 2150 TO 3350; GPU 90, NET 30, NETC 10. SOURCE: EN-R1 CURRENT CABINET TABLE.



2 BAY 1 — MODELLED IT SUPPORTS (R04 MODEL) AND REFERENCE ENVELOPES (EN-R1)

SCALE 1:10

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. LEGEND: HEAVY OUTLINE = MODELLED IT SUPPORT RAIL / BASE PLATE (R04); THIN GREY OUTLINE = REFERENCE EQUIPMENT ENVELOPE (EN-R1).
3. GRID: A01 … A19 = FS AX01 … AX19 = D01 G01 … G19; BAY 1 = A01–A02.
4. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

MODELLED IT SUPPORT POSITIONS (R04) AND OVERLAPPING REFERENCE ENVELOPES

POSITION	RAIL X	RAILS	TOP Z	ENVELOPE X (EN-R1)	ΔL	ΔR
IT-001	2560–3040	L+R	1128	NETA-CU01 2355–3155	205	115
IT-002	3160–3640	L+R	1128	R001 3155–3755	5	115
IT-003	3760–4240	L+R	1128	R002 3755–4355	5	115
IT-004	4360–4840	L+R	1128	R003 4355–4955	5	115
IT-005	4960–5440	L+R	1128	R004 4955–5555	5	115
IT-006	5560–5600	L	1128	R005 5555–6155	5	—

ΔL = OUTER FACE OF RAIL L MINUS ENVELOPE x0; ΔR = ENVELOPE x1 MINUS OUTER FACE OF RAIL R (mm, MODEL X). VALUES ARE FACTUAL DIFFERENCES BETWEEN THE TWO SOURCES, NOT DESIGN OFFSETS.

MODELLED SUPPORT OBJECTS IN BAY 1

OBJECT	N	SECTION / PLATE
IT SUPPORT RAIL (TOP Z 1128, Y 1950–3550)	11	RHS80x40x4
RISER	22	SHS40x40x4
BASE PLATE (Z 1000–1008)	22	t = 8, 145 x 115

COORDINATION NOTES

1. TWO SEPARATE SOURCE LAYERS ARE SHOWN: (1) REFERENCE EQUIPMENT ENVELOPES OF THE CURRENT EN-R1 ARRANGEMENT (130: 90 GPU, 30 NET, 10 NETC); (2) IT SUPPORTS THAT EXIST IN THE R04 MODEL (SIX POSITIONS IN BAY 1).
2. THE MODELLED SUPPORTS ARE SHOWN AT THEIR MODEL POSITIONS; THEY ARE NOT RELOCATED TO THE REFERENCE ARRANGEMENT. THEIR X POSITIONS DO NOT COINCIDE WITH THE REFERENCE ENVELOPES; THE DIFFERENCES ARE DIMENSIONED IN DETAIL 2.
3. POSITION IT-006 HAS ONE RAIL (L) IN THE MODEL. NO RAILS, RISERS OR BASE PLATES ARE MODELLED OUTSIDE BAY 1.
4. NO EQUIPMENT LOADS, REACTIONS OR SUPPORT CAPACITIES ARE STATED ON THIS SHEET. EQUIPMENT REACTIONS AND THE FULL-ROW SUPPORT GEOMETRY DEFINE FLOOR LOAD CASES THAT ARE NOT YET ESTABLISHED.
5. ENVELOPE HEIGHTS Z 1128 TO 3422 (REFERENCE). MODELLED RAIL TOP Z 1128. LEVELS FROM THE PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0).
6. SOURCES: EN-R1 CURRENT CABINET TABLE (REFERENCE ENVELOPES); R04 STRUCTURAL MODEL (IT SUPPORTS IN BAY 1). RELATED: S-101, S-301, S-600, D01 F-302, F02 F-103/F-104.

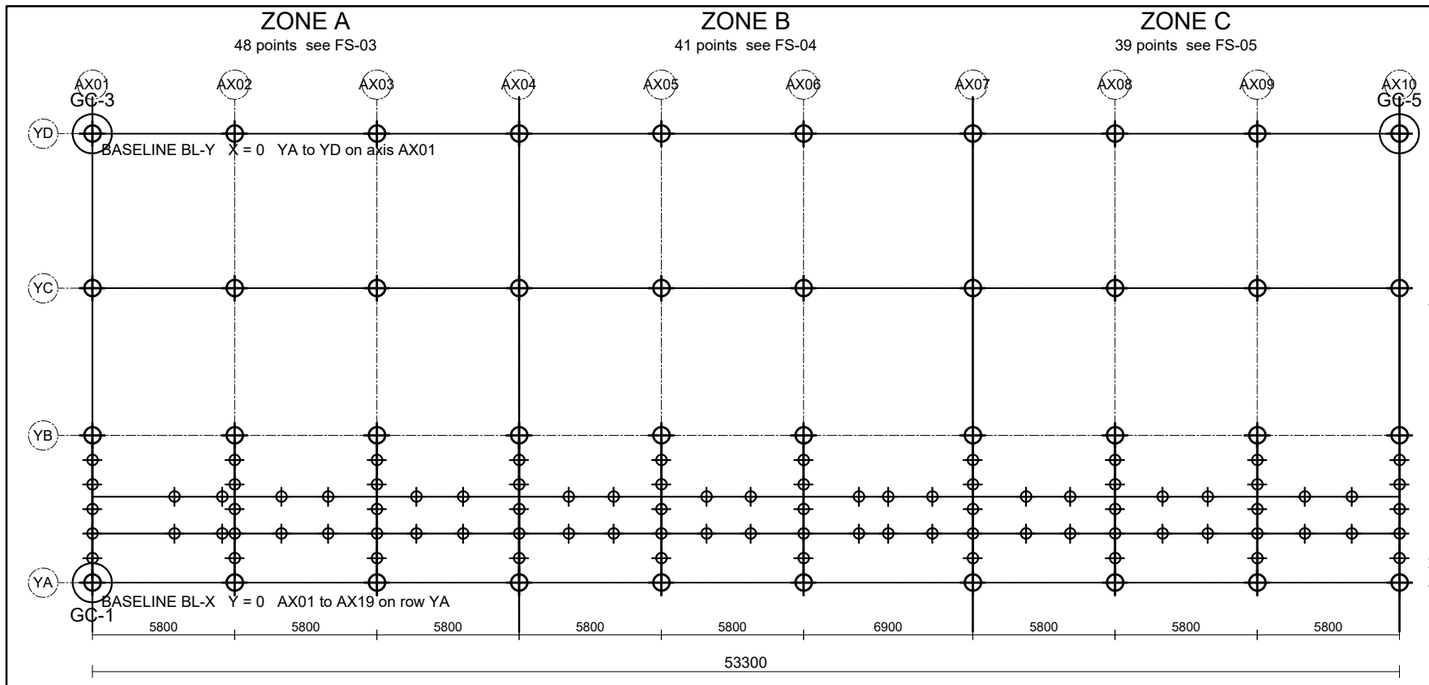
K&K Data / PIN001
STRUCTURAL DRAWINGS

EQUIPMENT REFERENCE ENVELOPES (EN-R1) AND MODELLED IT SUPPORTS, BAY 1 - COORDINATION PLAN

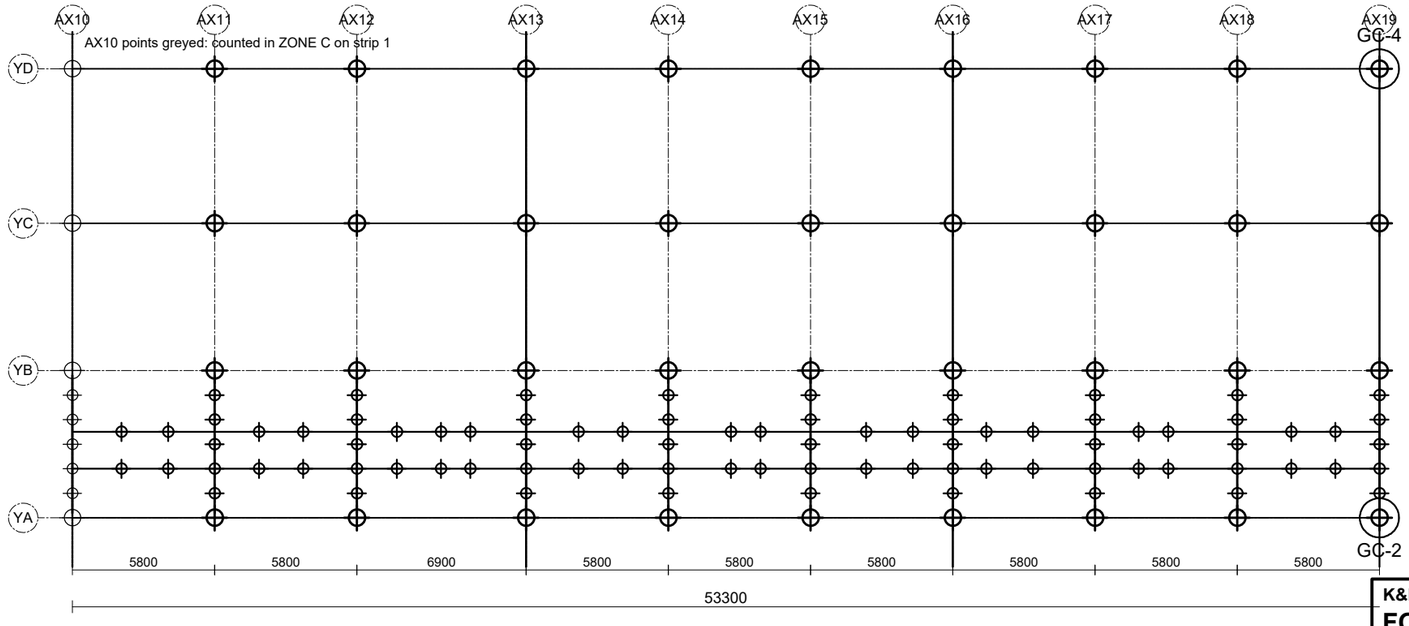
SHEET	SCALE	REVISION
S-050	AS SHOWN ON A1 841x594	P2 / 2026-10

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



STRIP 1: X = 0 to 53300 mm cumulative X from origin at AX01 = 0 mm row spacing YA-YB-YC-YD = 6000 / 6000 / 6300 = 18300 mm



STRIP 2: X = 53300 to 106600 mm cumulative X from origin at AX10 = 53300 mm row spacing YA-YB-YC-YD = 6000 / 6000 / 6300 = 18300 mm

LEGEND

- C001-C076 main column point (76)
- F001-F171 floor post point (171)
- floor edge girder BP 200x300 along Y
- floor joist HN250x125x6x9 along X
- frame axis AX01-AX19 / row line YA-YD
- zone boundary

GEOMETRY CHECK POINTS

CHK	PROJECT_X mm	PROJECT_Y mm	AT POINT	POSITION
GC-1	0	0	C001	on BL-X
GC-2	106600	0	C073	on BL-X
GC-3	0	18300	C004	off BL-X
GC-4	106600	18300	C076	off BL-X
GC-5	53300	18300	C040	off BL-X

Project-local geometric check points GC-1 to GC-5, computed in the project local system. Site control monuments and the survey transformation: TO BE COORDINATED.
GC-1, GC-2 and GC-3 are not collinear, and GC-4 and GC-5 give two further independent checks.

POINT COUNT BY ZONE

ZONE	X RANGE mm	MC	FP	TOTAL	SHEET
A	0 - 17400	16	32	48	FS-03
B	17400 - 35900	12	29	41	FS-04
C	35900 - 53300	12	27	39	FS-05
D	53300 - 71800	12	29	41	FS-06
E	71800 - 89200	12	27	39	FS-07
F	89200 - 106600	12	27	39	FS-08
TOTAL	0 - 106600	76	171	247	-

Each point is counted in exactly one zone. Points on a zone boundary axis belong to the zone on the left of that axis and appear greyed on the adjacent detail sheet.
Single pile concentric with the supported member axis at every point; eccentricity is 0.000 mm at all 247 points. If the foundation type changes the pile axis position this set must be revised.
Support points exist only in the band Y = 1000 to 5000 mm. The raised floor strip Y = 6000 to 12000 mm carries no floor post in the structural model and therefore no support point.

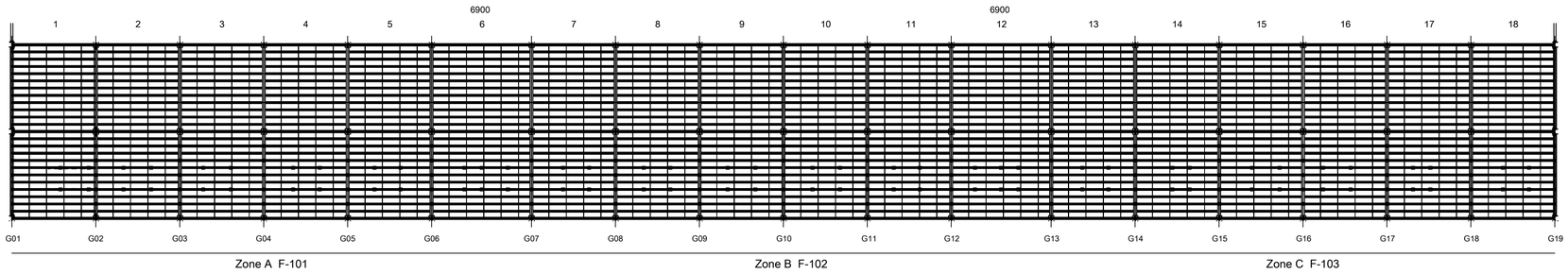
K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

FOUNDATION SUPPORT SETTING-OUT PLAN - OVERALL AND ZONE INDEX

SHEET	SCALE	REVISION
FS-01	1:250 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 1 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Floor key plan index 1:200



Drawing list
F-001 Floor key plan index 1:200
F-101 Zone A floor plan
F-102 Zone B floor plan
F-103 Zone C floor plan
F-201 Standard bay plan 1:25
F-202 Widened bay B06 plan 1:25
F-203 Widened bay B12 plan 1:25
F-301 Perimeter and mid-band edge sections 1:2
F-302 Notch, opening and IT base plate clearance details 1:2
F-303 Secondary beam end and joint on main beam details 1:2
F-401 Post cap and post base details 1:2
F-501 Installation zones, sequence and finish level

Grid lines and bays
19 grid lines; 18 bays: sixteen standard 5800, two widened 6900 (bays 6 and 12).
Total bay width 106600 mm, equal to the grid span.
Floor boards cover X 80…106520, Y 80…11920; nominal depth 12000.

Member quantities
552 floor boards: 30 per standard bay, 36 per widened bay.
488 members with top at Z1000: 450 secondary beams HN250×125×6×9, 38 transverse main beams.
76 main columns; 171 floor posts SHS100×100×5 with 171 post caps.
6 IT positions and 22 IT base plates, all in bay 1; 66 cable hanger rungs and 48 hanger plates.

Posts by family: WF-PO-PSTI secondary beam posts 72, WF-PO-PST frame posts 85, I33-P posts 14.

Widened bay post positions
12 posts strictly inside the bays (6 per bay).
20 frame posts on the four boundary grid lines (5 per grid line).
Interior post positions in B06 and B12 differ and are not mirrored; see F-202 and F-203.

Widened bay and whole-floor quantities
50 floor secondary beams in bays B06 and B12 together.
72 posts of family WF-PO-PSTI in the whole floor.
12 interior posts in the two widened bays; positions on F-202 and F-203.

Views
Board layout and beam/column layout are shown separately, each located by the grid lines and level range noted.
This set shows the members within the floor installation scope.
Board plan: board soffit 1000, top 1030; includes IT base plates (top 1008) and main columns and equipment uprights passing through the boards.
Main columns and equipment uprights passing through the boards are kept in the board plan; their sections are not floor boards.
Beam/column plan shows main beams, secondary beams, post caps, upper post segments and main columns.
Each installation zone has a board plan and a beam/column plan, checked against each other on the same grid lines.
Finished floor level = 1030 + Δ; Δ is the actual total thickness of the selected finish system.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Floor key plan index 1:200 — Grid lines, bays, zones and drawing list

SHEET	SCALE	REVISION
D01 F-001	1:200 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

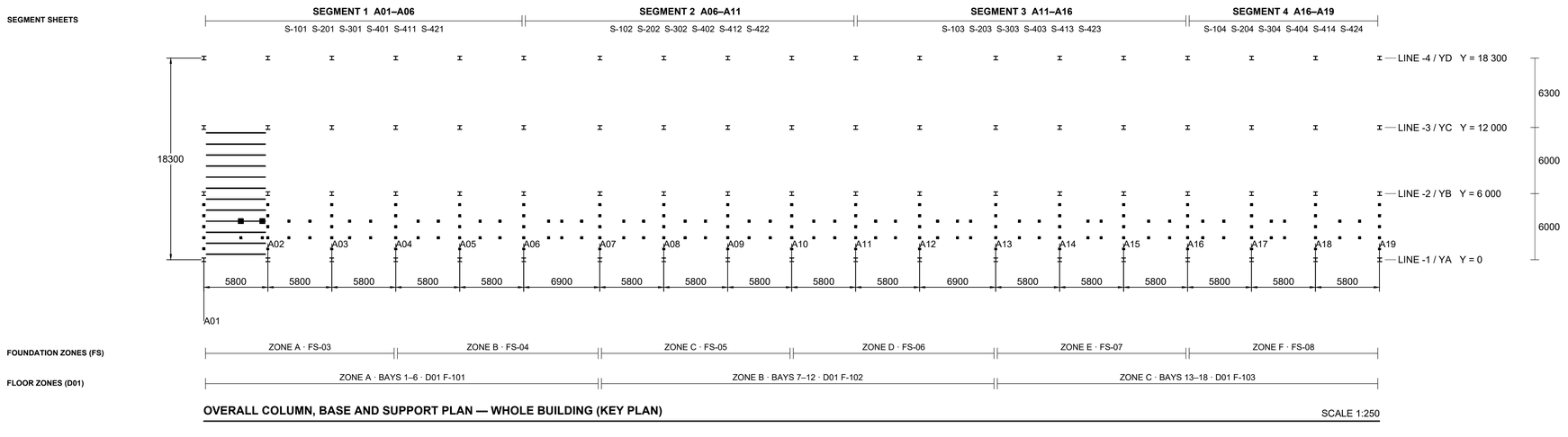
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	76	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	171	ASTM A36 (model label)
RACK_FRAME	UNDER-FLOOR CABLE TRAY RUNG	RHS80x40x3	66	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.

GRID AND ZONE DESIGNATIONS

ITEM	STRUCTURE (S)	FOUNDATION (FS)	FLOOR (D01)
TRANSVERSE GRID LINES	A01 … A19	AX01 … AX19	G01 … G19
COLUMN LINE Y = 0	SUFFIX -1	YA	—
COLUMN LINE Y = 6 000	SUFFIX -2	YB	—
COLUMN LINE Y = 12 000	SUFFIX -3	YC	—
COLUMN LINE Y = 18 300	SUFFIX -4	YD	—
ZONES	SEGMENTS 1–4	ZONES A–F	ZONES A–C



OVERALL COLUMN, BASE AND SUPPORT PLAN — WHOLE BUILDING (KEY PLAN) SCALE 1:250

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. SEGMENT SHEETS — S-101 TO S-104 (COLUMNS, BASES AND SUPPORTS), S-201 TO S-204 (ROOF), S-301 TO S-304 (FLOOR); WALL ELEVATIONS S-401 TO S-424.
6. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

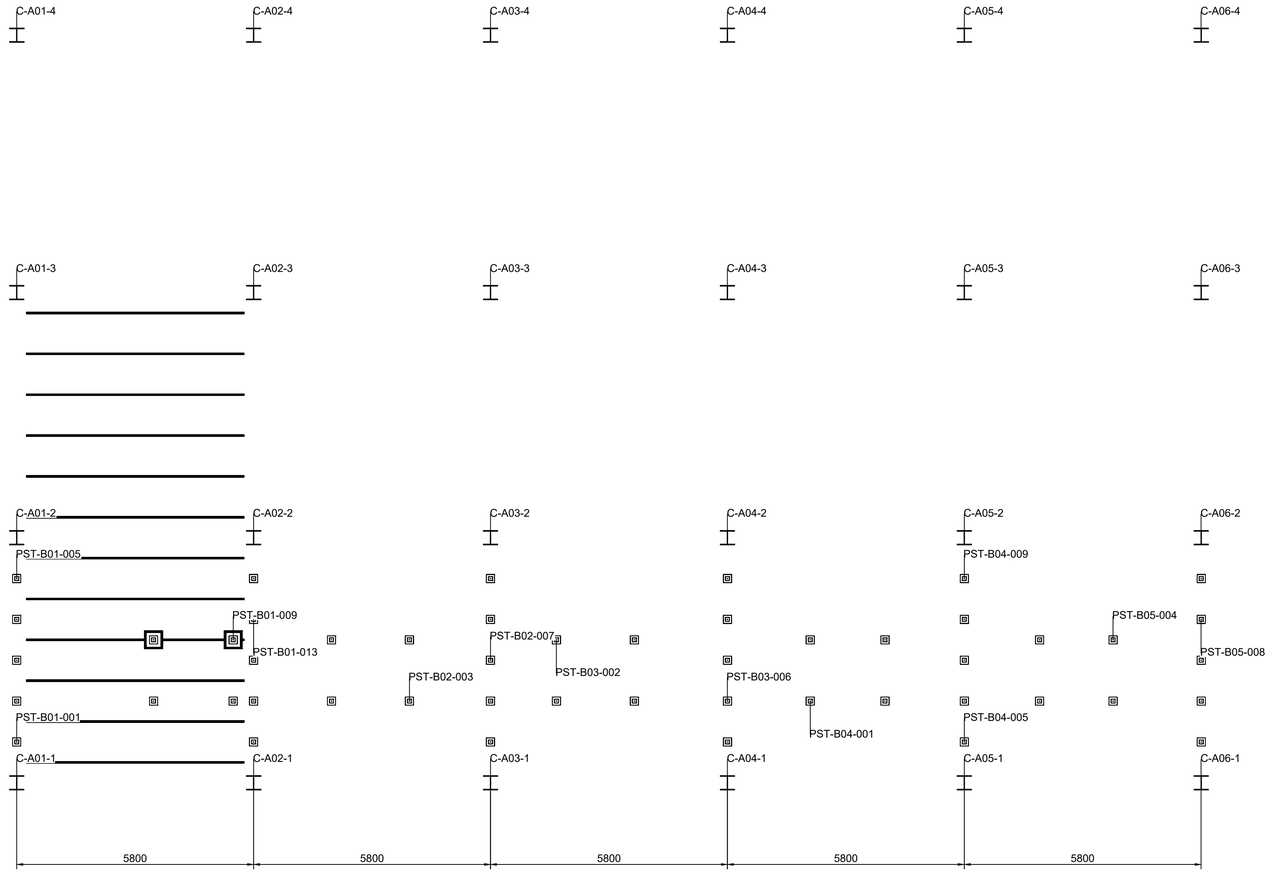
K&K Data / PIN001
STRUCTURAL DRAWINGS

OVERALL COLUMN, BASE AND SUPPORT PLAN - KEY PLAN

SHEET	SCALE	REVISION
S-100	1:250 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



COLUMN, BASE AND SUPPORT PLAN - SEGMENT 1 OF 4, AXES 1 TO 6 SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	50	ASTM A36 (model label)
RACK_FRAME	UNDER-FLOOR CABLE TRAY RUNG	RHS80x40x3	66	ASTM A36 (model label)

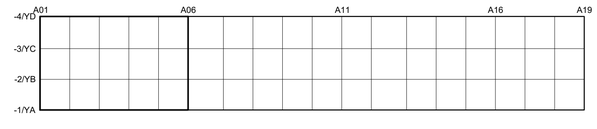
"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-102. OVERALL: S-100.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

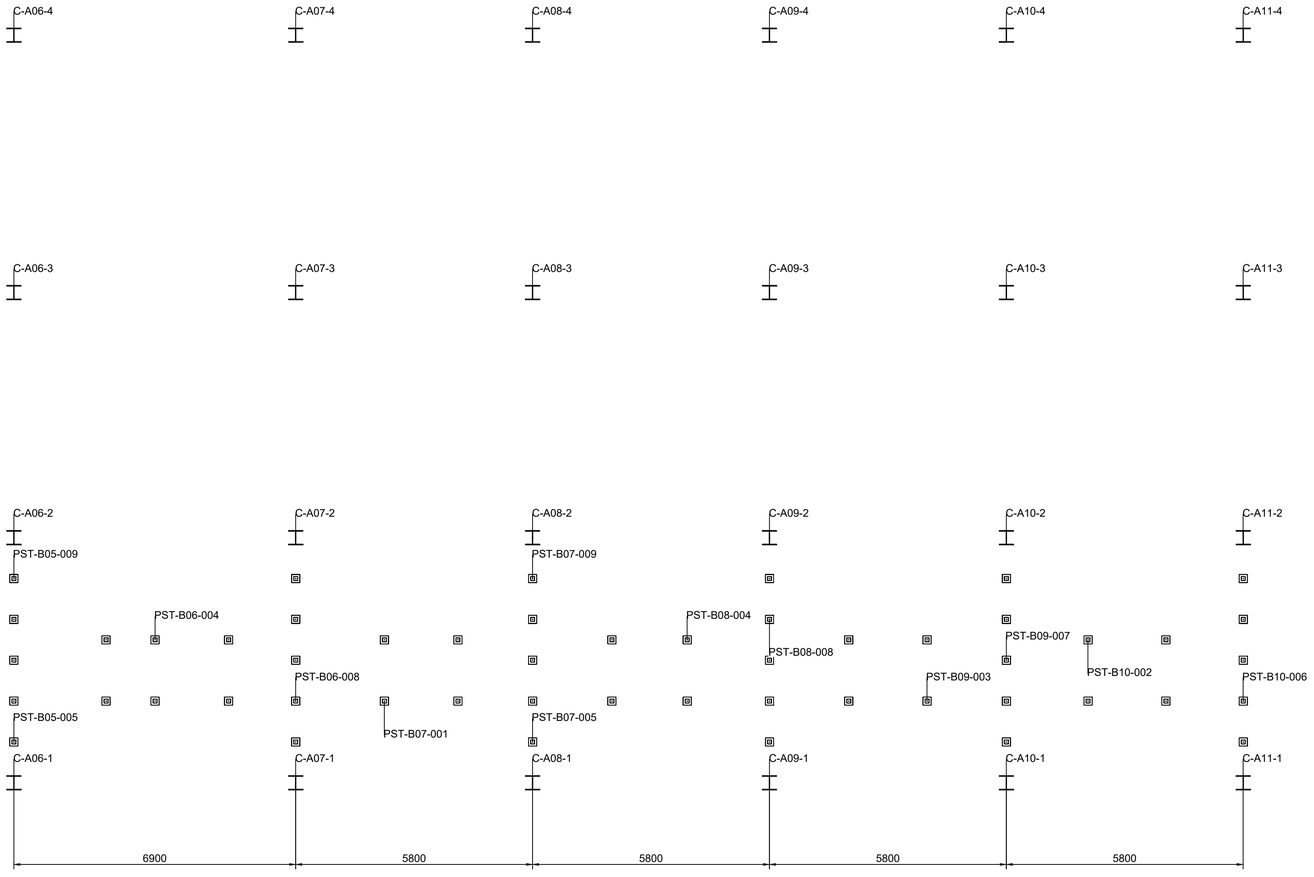
K&K Data / PIN001
STRUCTURAL DRAWINGS

COLUMN, BASE AND SUPPORT PLAN - SEGMENT 1 OF 4, AXES 1 TO 6

SHEET	SCALE	REVISION
S-101	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



COLUMN, BASE AND SUPPORT PLAN - SEGMENT 2 OF 4, AXES 6 TO 11 SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

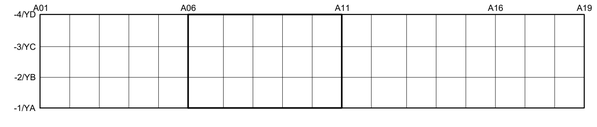
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	52	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-101, S-103. OVERALL: S-100.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

COLUMN, BASE AND SUPPORT PLAN - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-102	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

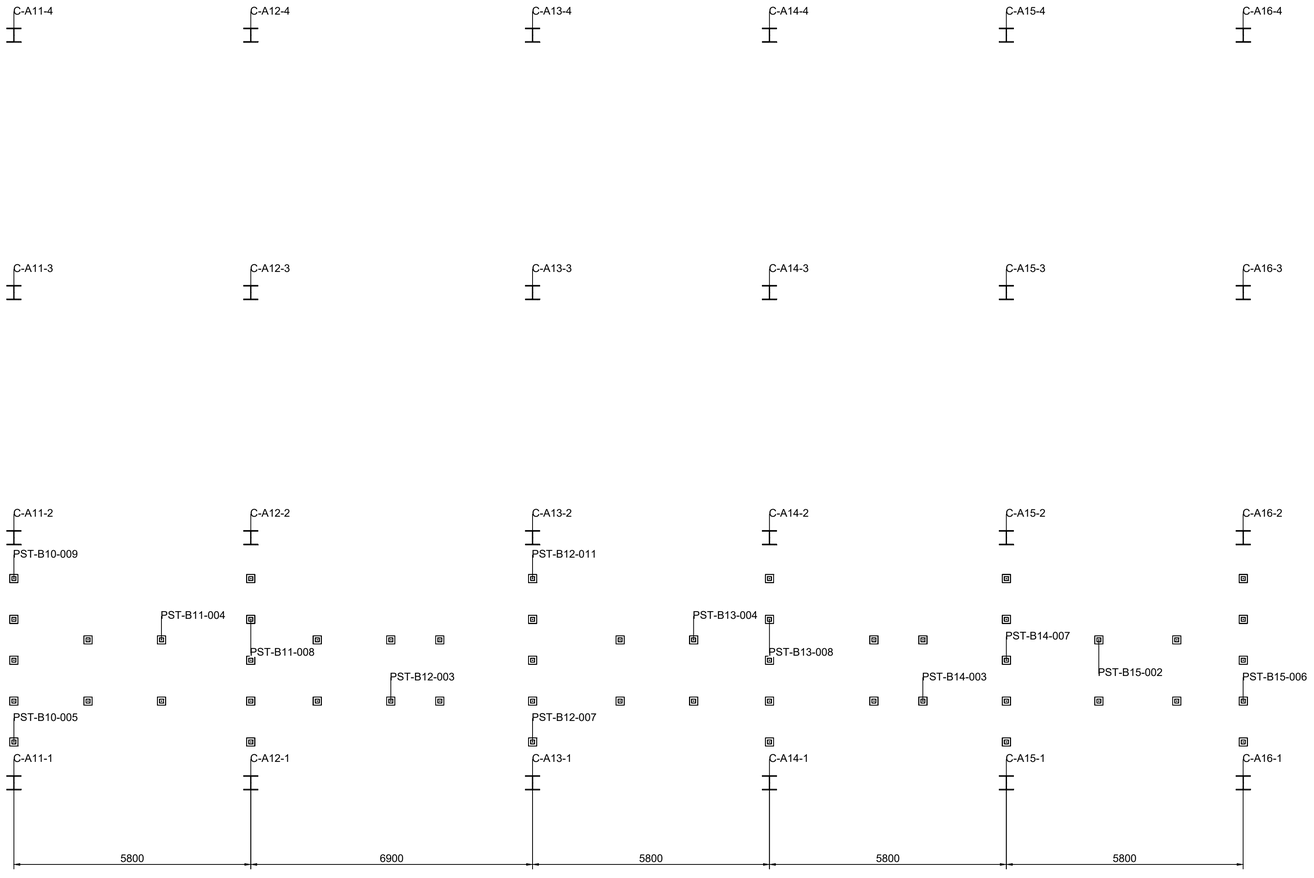
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	52	ASTM A36 (model label)

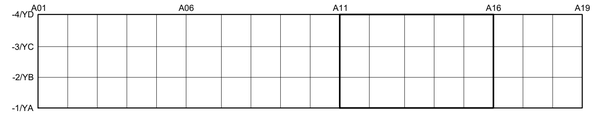
"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-102, S-104. OVERALL: S-100.



COLUMN, BASE AND SUPPORT PLAN - SEGMENT 3 OF 4, AXES 11 TO 16 SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

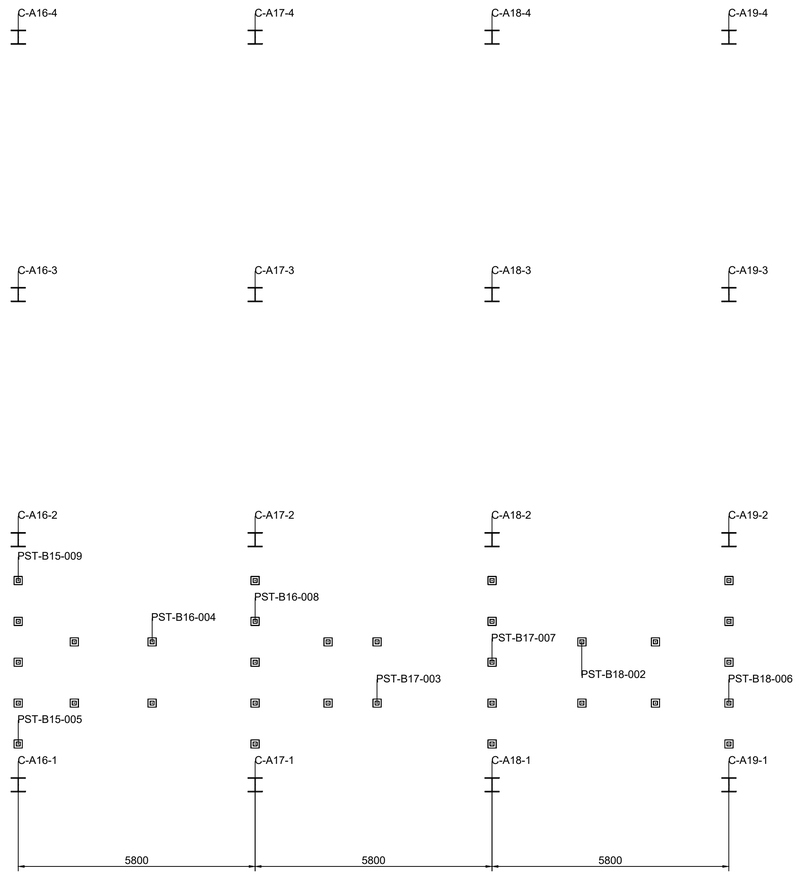
K&K Data / PIN001
STRUCTURAL DRAWINGS

COLUMN, BASE AND SUPPORT PLAN - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-103	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



COLUMN, BASE AND SUPPORT PLAN - SEGMENT 4 OF 4, AXES 16 TO 19 SCALE 1:75

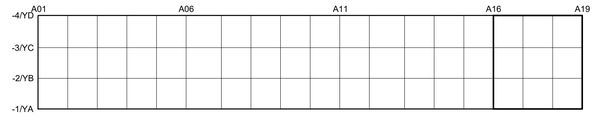
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	16	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	32	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-103. OVERALL: S-100.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

COLUMN, BASE AND SUPPORT PLAN - SEGMENT 4 OF 4, AXES 16 TO 19

SHEET	SCALE	REVISION
S-104	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

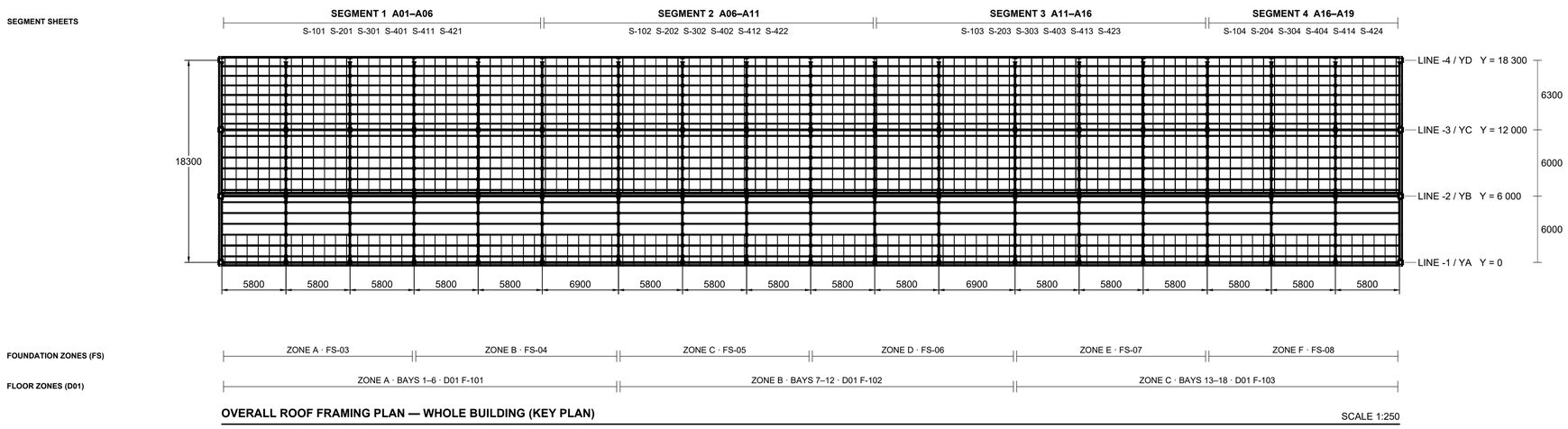
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	76	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	54	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	6	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	12	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	6	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	57	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	360	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	108	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	324	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

GRID AND ZONE DESIGNATIONS

ITEM	STRUCTURE (S)	FOUNDATION (FS)	FLOOR (D01)
TRANSVERSE GRID LINES	A01 … A19	AX01 … AX19	G01 … G19
COLUMN LINE Y = 0	SUFFIX -1	YA	—
COLUMN LINE Y = 6 000	SUFFIX -2	YB	—
COLUMN LINE Y = 12 000	SUFFIX -3	YC	—
COLUMN LINE Y = 18 300	SUFFIX -4	YD	—
ZONES	SEGMENTS 1–4	ZONES A–F	ZONES A–C



OVERALL ROOF FRAMING PLAN — WHOLE BUILDING (KEY PLAN) SCALE 1:250

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. SEGMENT SHEETS — S-101 TO S-104 (COLUMNS, BASES AND SUPPORTS), S-201 TO S-204 (ROOF), S-301 TO S-304 (FLOOR); WALL ELEVATIONS S-401 TO S-424.
6. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

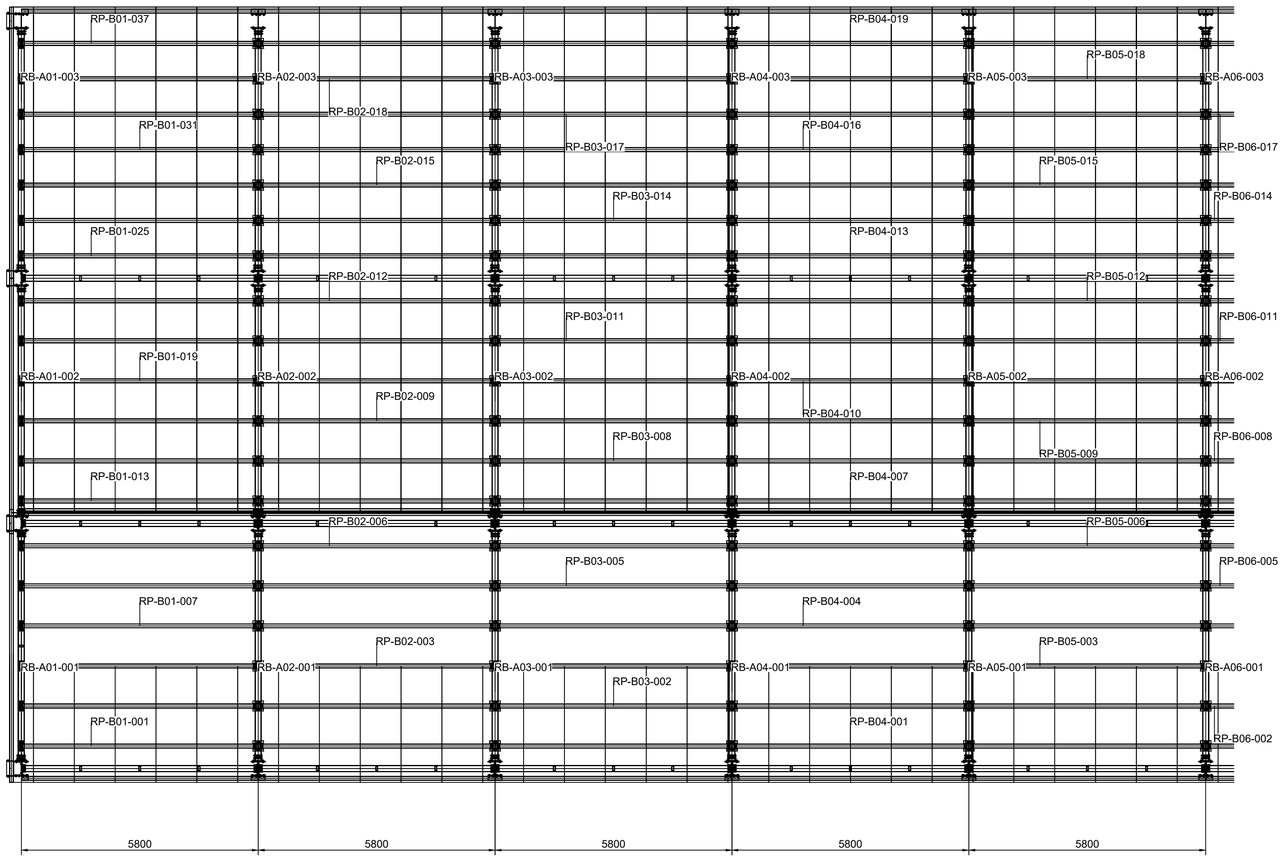
K&K Data / PIN001
STRUCTURAL DRAWINGS

OVERALL ROOF FRAMING PLAN - KEY PLAN

SHEET	SCALE	REVISION
S-200	1:250 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6 SCALE 1:75

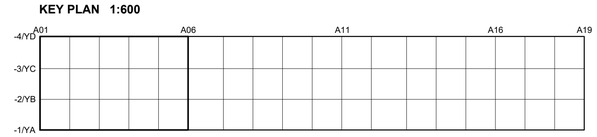
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	18	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	3	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	6	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	3	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	18	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	120	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	36	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	90	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-202. OVERALL: S-200.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

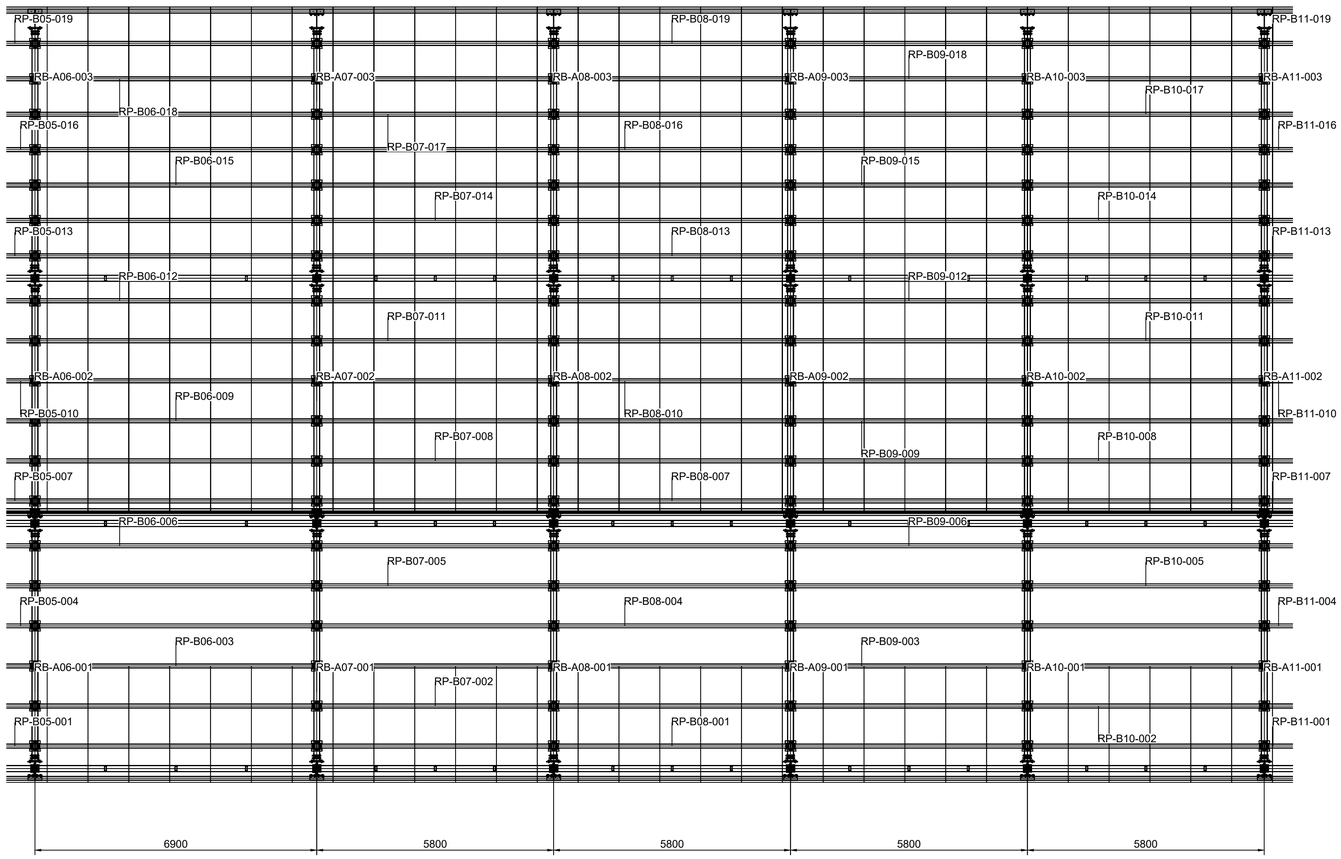
K&K Data / PIN001
STRUCTURAL DRAWINGS

ROOF FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6

SHEET	SCALE	REVISION
S-201	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11

SCALE 1:75

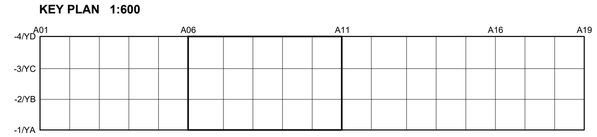
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	21	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	18	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	140	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	42	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	90	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-201, S-203. OVERALL: S-200.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

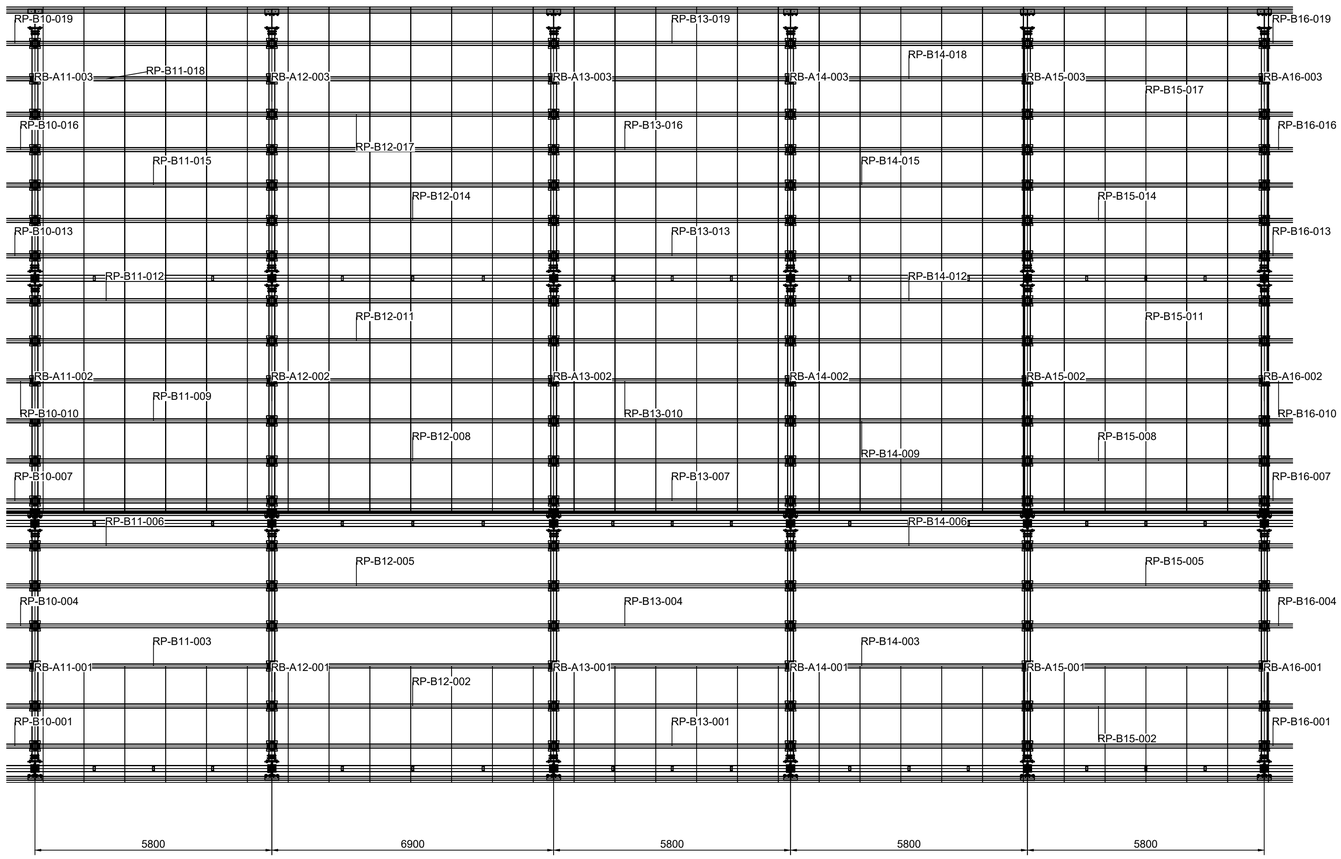
K&K Data / PIN001
STRUCTURAL DRAWINGS

ROOF FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-202	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16

SCALE 1:75

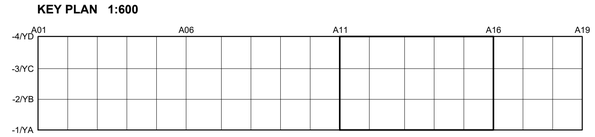
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	21	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	18	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	140	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	42	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	90	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-202, S-204. OVERALL: S-200.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

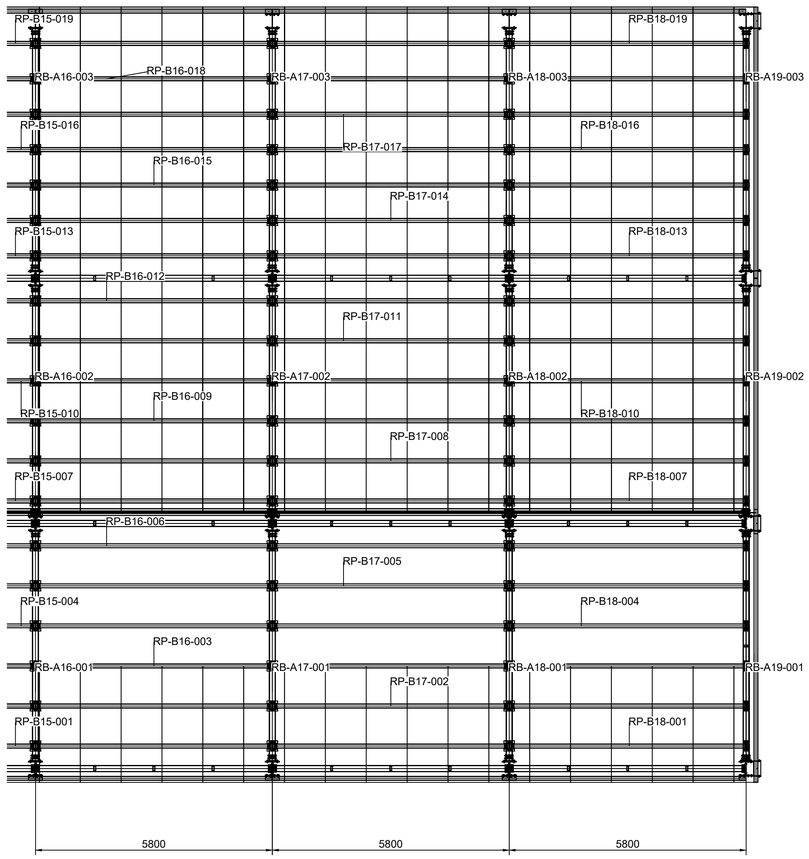
K&K Data / PIN001
STRUCTURAL DRAWINGS

ROOF FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-203	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19 SCALE 1:75

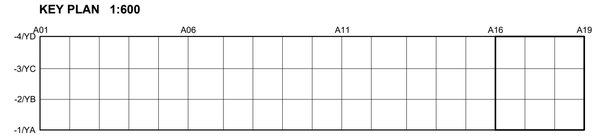
MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	16	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	12	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	3	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	6	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	3	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	12	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	80	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	24	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	54	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

ADJACENT SEGMENTS: S-203. OVERALL: S-200.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

ROOF FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19

SHEET	SCALE	REVISION
S-204	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

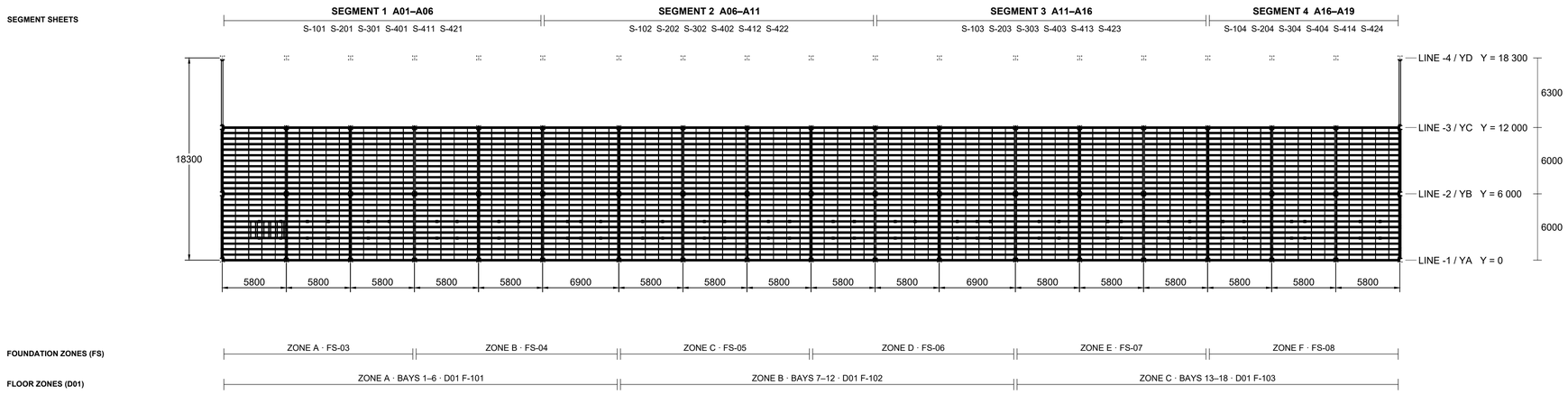
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	76	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	38	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	450	ASTM A36 (model label)
IT_SUPPORT	IT SUPPORT RAIL / RISER	SHS40x40x4	22	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	76	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

GRID AND ZONE DESIGNATIONS

ITEM	STRUCTURE (S)	FOUNDATION (FS)	FLOOR (D01)
TRANSVERSE GRID LINES	A01 … A19	AX01 … AX19	G01 … G19
COLUMN LINE Y = 0	SUFFIX -1	YA	—
COLUMN LINE Y = 6 000	SUFFIX -2	YB	—
COLUMN LINE Y = 12 000	SUFFIX -3	YC	—
COLUMN LINE Y = 18 300	SUFFIX -4	YD	—
ZONES	SEGMENTS 1–4	ZONES A–F	ZONES A–C

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.



OVERALL FLOOR FRAMING PLAN — WHOLE BUILDING (KEY PLAN) SCALE 1:250

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. SEGMENT SHEETS — S-101 TO S-104 (COLUMNS, BASES AND SUPPORTS), S-201 TO S-204 (ROOF), S-301 TO S-304 (FLOOR); WALL ELEVATIONS S-401 TO S-424.
6. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

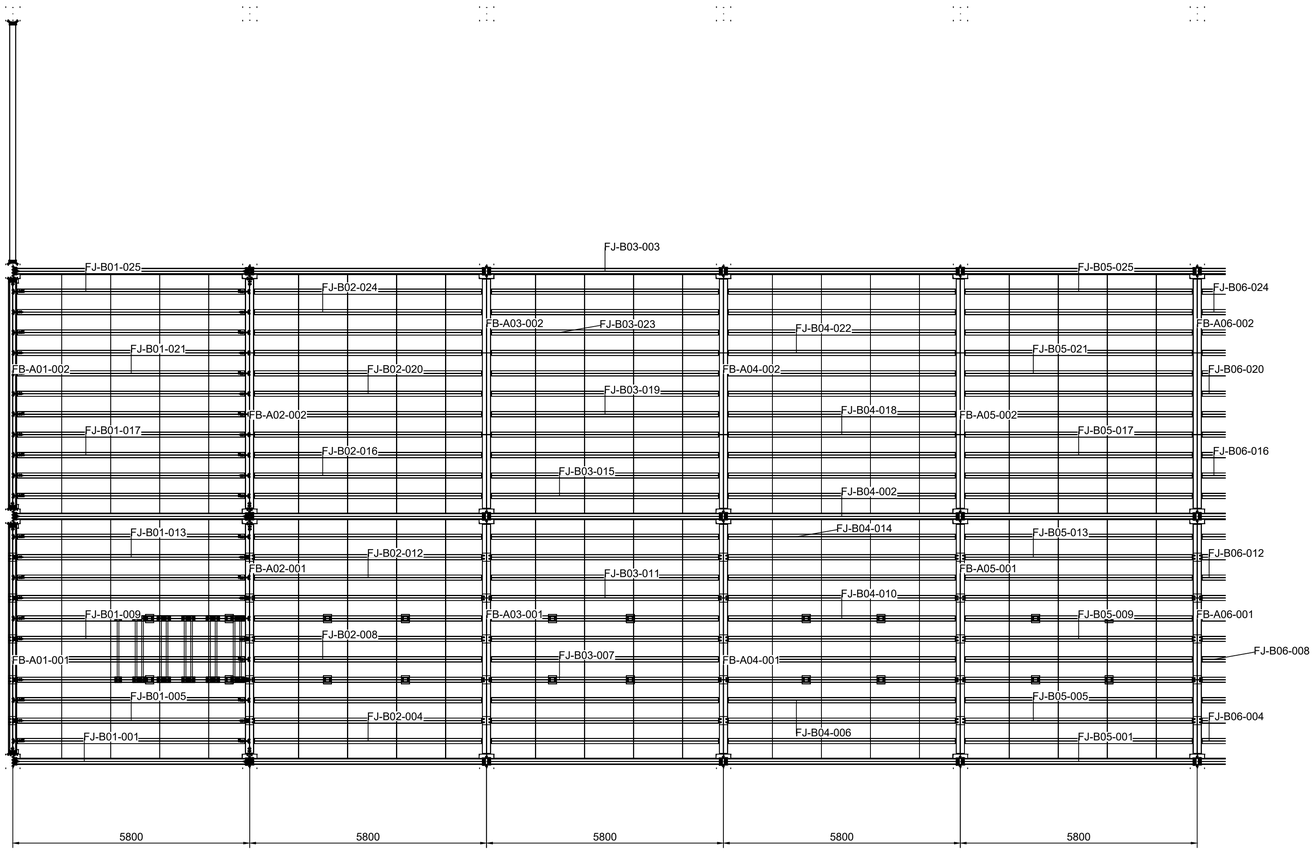
K&K Data / PIN001
STRUCTURAL DRAWINGS

OVERALL FLOOR FRAMING PLAN - KEY PLAN

SHEET	SCALE	REVISION
S-300	1:250 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



FLOOR FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6

SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	12	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	150	ASTM A36 (model label)
IT_SUPPORT	IT SUPPORT RAIL / RISER	SHS40x40x4	22	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	20	ASTM A36 (model label)

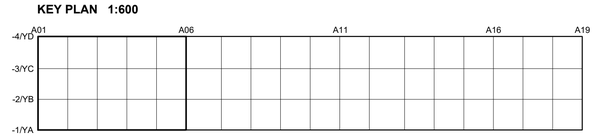
"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-302. OVERALL: S-300.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

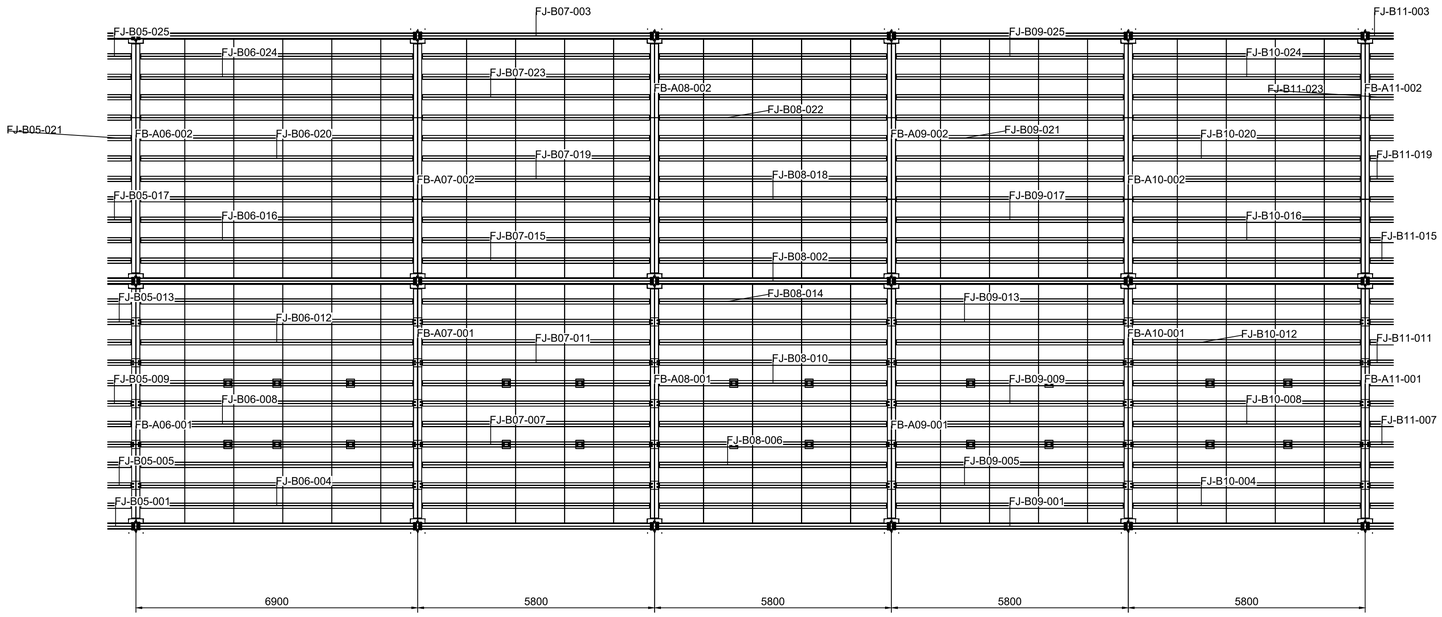
FLOOR FRAMING PLAN - SEGMENT 1 OF 4, AXES 1 TO 6

SHEET	SCALE	REVISION
S-301	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10

DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



FLOOR FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11

SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	12	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	175	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	22	ASTM A36 (model label)

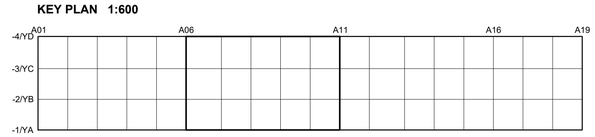
"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-301, S-303. OVERALL: S-300.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

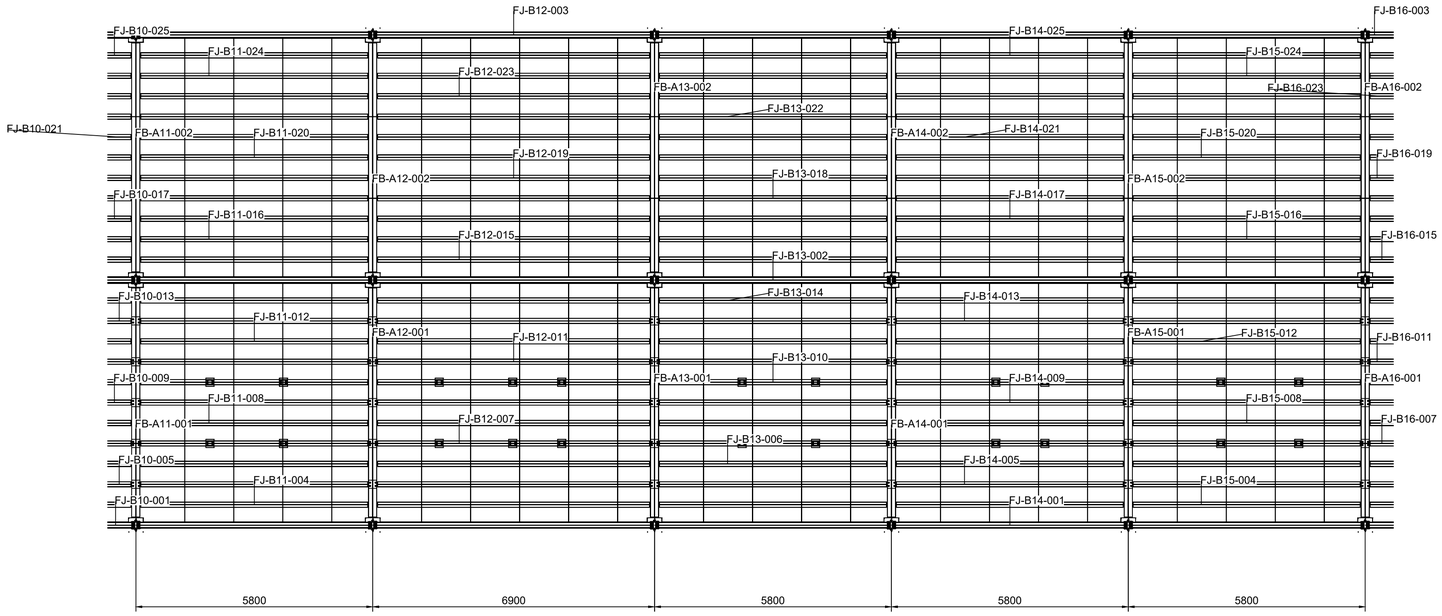
K&K Data / PIN001
STRUCTURAL DRAWINGS

FLOOR FRAMING PLAN - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-302	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



FLOOR FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16

SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

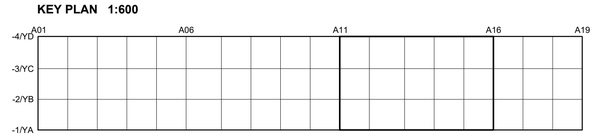
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	24	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	12	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	175	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	22	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ADJACENT SEGMENTS: S-302, S-304. OVERALL: S-300.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

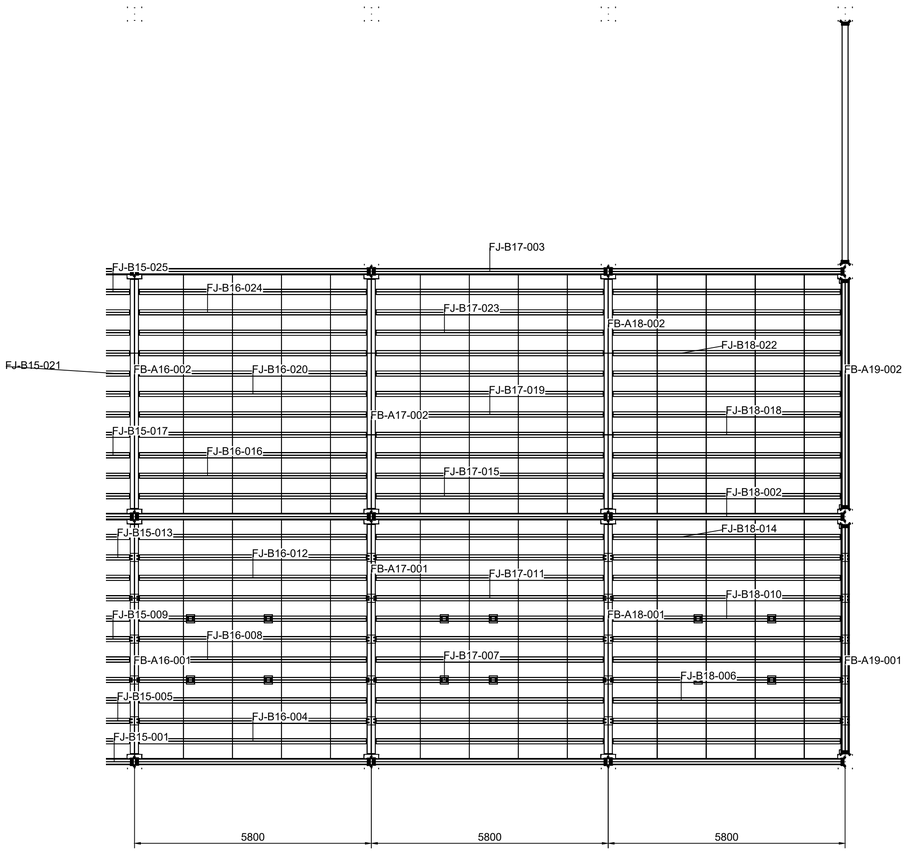
K&K Data / PIN001
STRUCTURAL DRAWINGS

FLOOR FRAMING PLAN - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-303	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



FLOOR FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19 SCALE 1:75

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

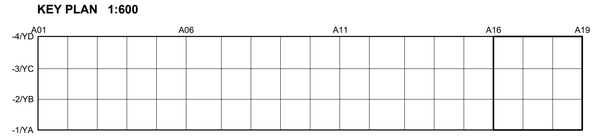
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	16	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	8	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	100	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	12	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ADJACENT SEGMENTS: S-303. OVERALL: S-300.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

FLOOR FRAMING PLAN - SEGMENT 4 OF 4, AXES 16 TO 19

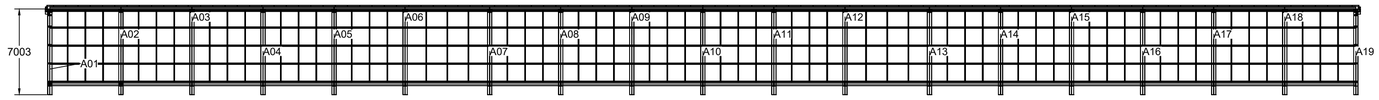
SHEET	SCALE	REVISION
S-304	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

SEGMENT ELEVATIONS

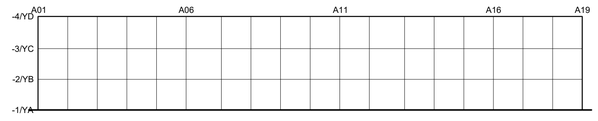
SEGMENT	AXES	SHEET
SEGMENT 1	A01–A06	S-401
SEGMENT 2	A06–A11	S-402
SEGMENT 3	A11–A16	S-403
SEGMENT 4	A16–A19	S-404



WALL FRAMING ELEVATION ON GRID LINE Y=0 - OVERALL

SCALE 1:250

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

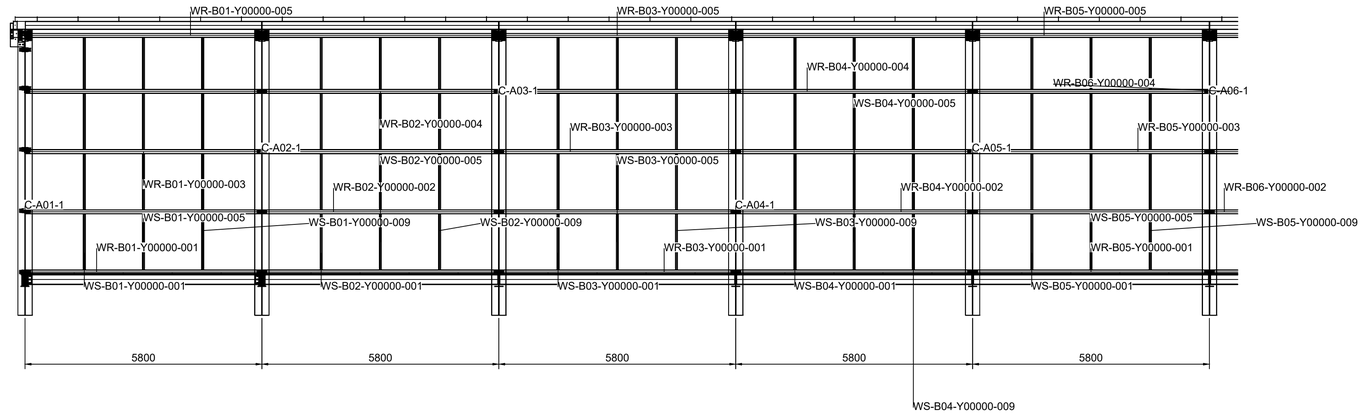
WALL FRAMING ELEVATION ON GRID LINE Y=0 - OVERALL

SHEET	SCALE	REVISION
S-400	1:250 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

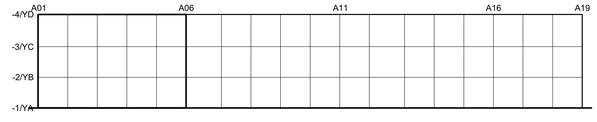
ADJACENT SEGMENTS: S-402. OVERALL: S-400.



WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 1 OF 4, AXES 1 TO 6

SCALE 1:75

KEY PLAN 1:600



NOTES

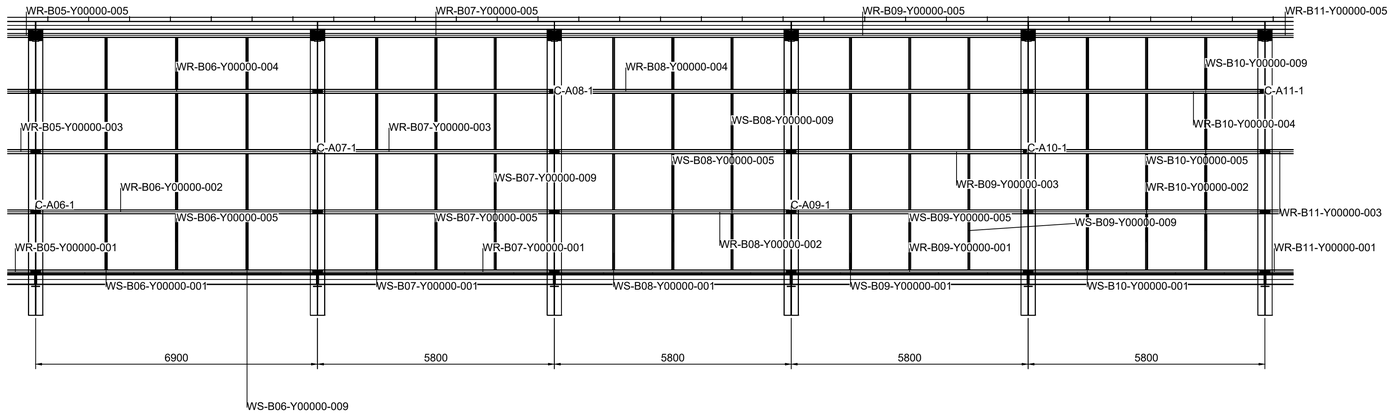
1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 1 OF 4, AXES 1 TO 6

SHEET	SCALE	REVISION
S-401	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

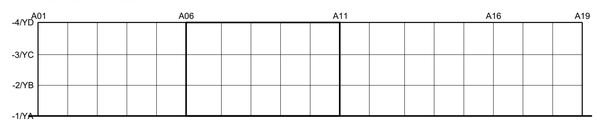
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 2 OF 4, AXES 6 TO 11

SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

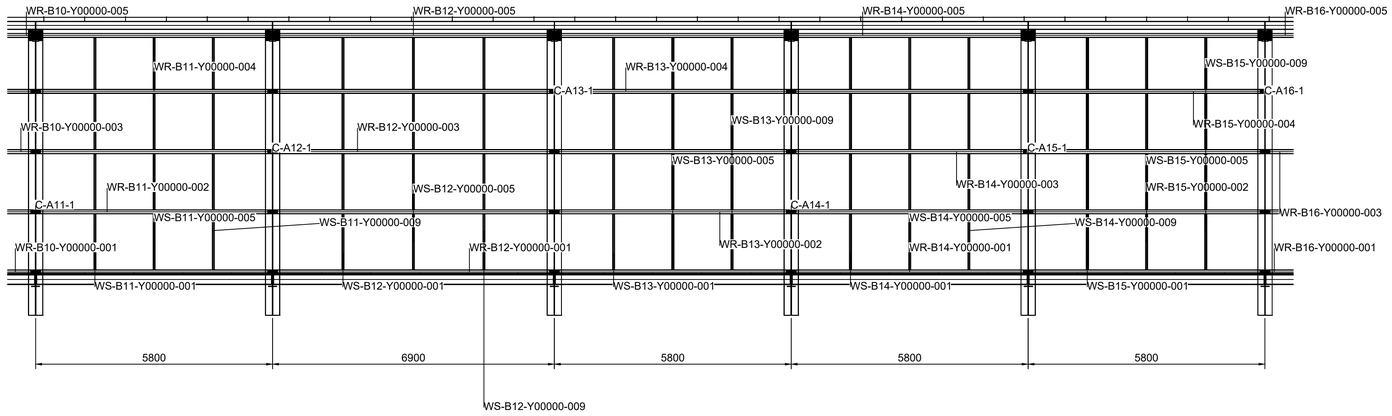
WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-402	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

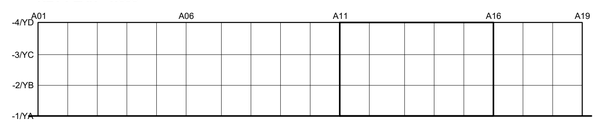
ADJACENT SEGMENTS: S-402, S-404. OVERALL: S-400.



WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 3 OF 4, AXES 11 TO 16

SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

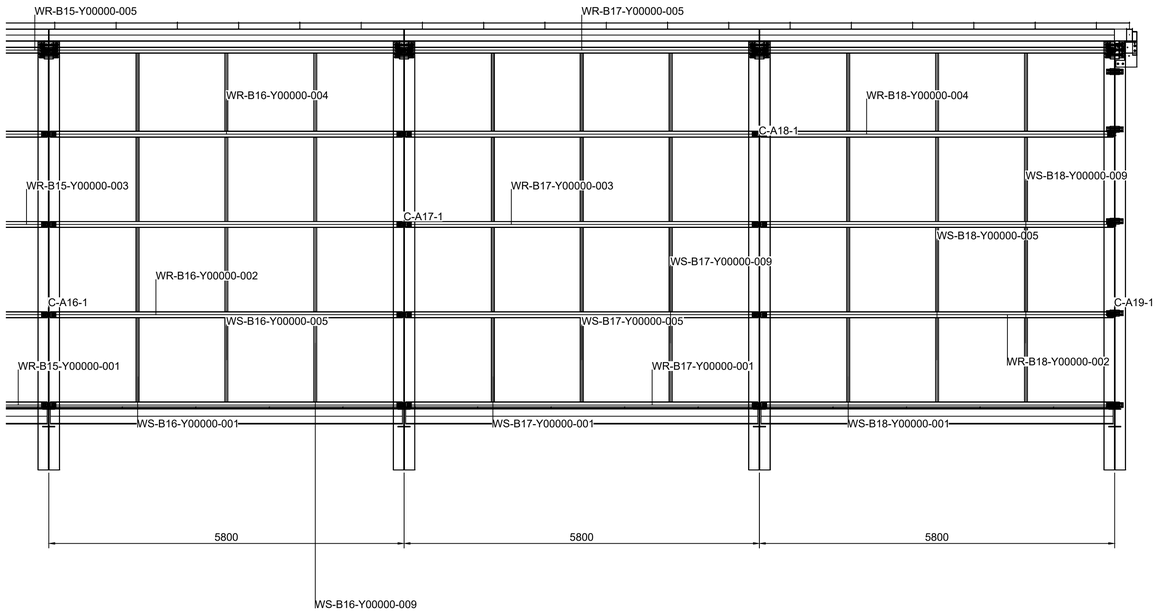
K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-403	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

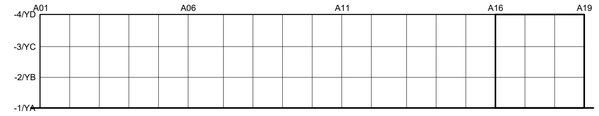
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 4 OF 4, AXES 16 TO 19

SCALE 1:50

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

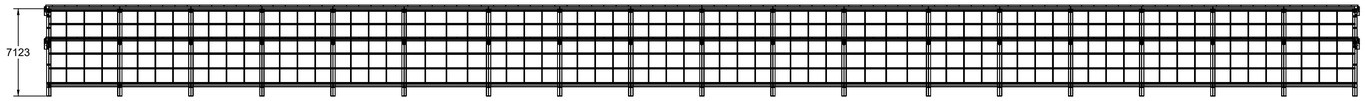
WALL FRAMING ELEVATION ON GRID LINE Y=0 - SEGMENT 4 OF 4, AXES 16 TO 19

SHEET	SCALE	REVISION
S-404	1:50 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

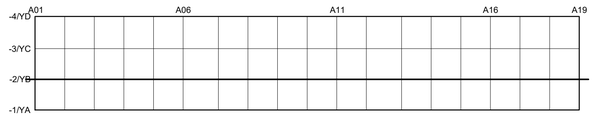
SEGMENT ELEVATIONS

SEGMENT	AXES	SHEET
SEGMENT 1	A01–A06	S-411
SEGMENT 2	A06–A11	S-412
SEGMENT 3	A11–A16	S-413
SEGMENT 4	A16–A19	S-414



WALL FRAMING ELEVATION ON GRID LINE Y=6000 - OVERALL SCALE 1:250

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

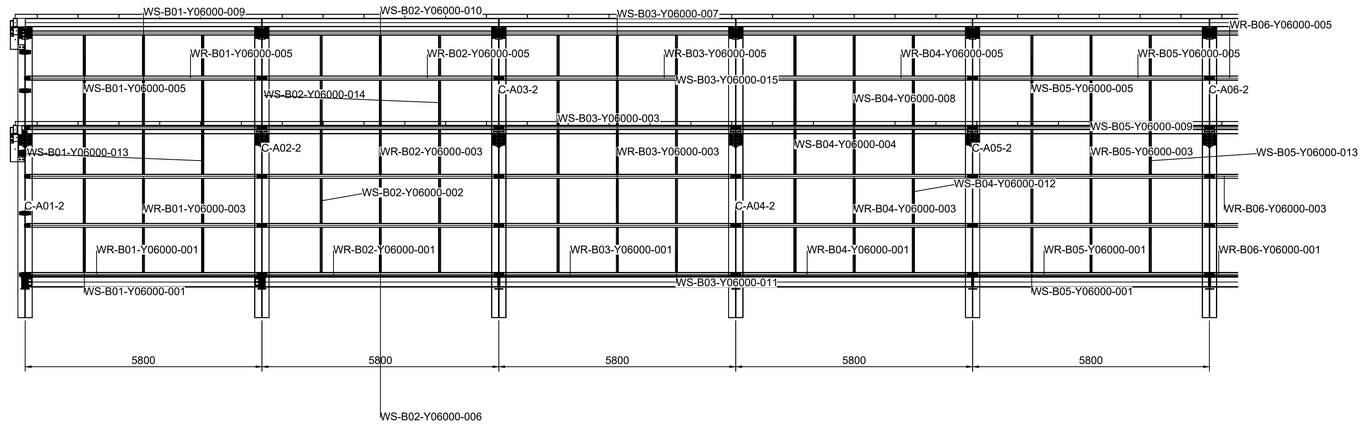
WALL FRAMING ELEVATION ON GRID LINE Y=6000 - OVERALL

SHEET	SCALE	REVISION
S-410	1:250 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

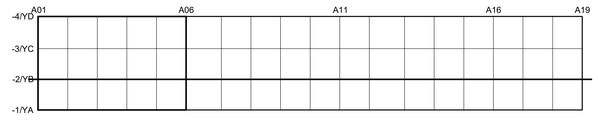
ADJACENT SEGMENTS: S-412. OVERALL: S-410.



WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 1 OF 4, AXES 1 TO 6 SCALE 1:75

WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 1 OF 4, AXES 1 TO 6 SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

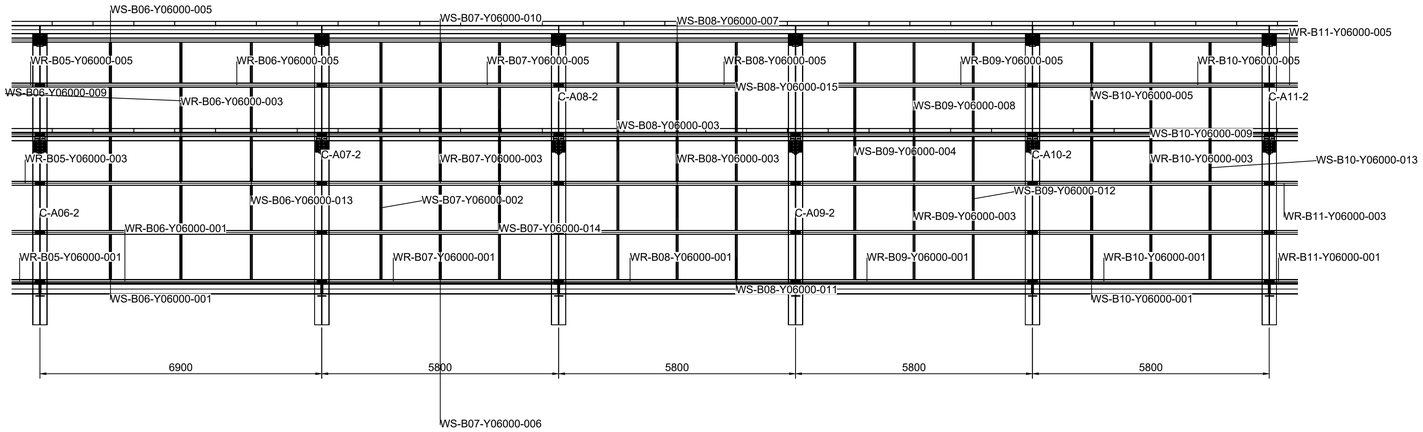
WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 1 OF 4, AXES 1 TO 6

SHEET	SCALE	REVISION
S-411	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

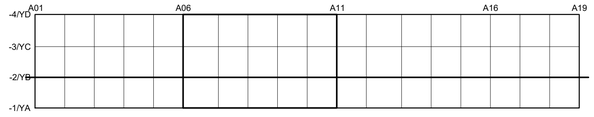
ADJACENT SEGMENTS: S-411, S-413. OVERALL: S-410.



WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 2 OF 4, AXES 6 TO 11

SCALE 1:75

KEY PLAN 1:600



NOTES

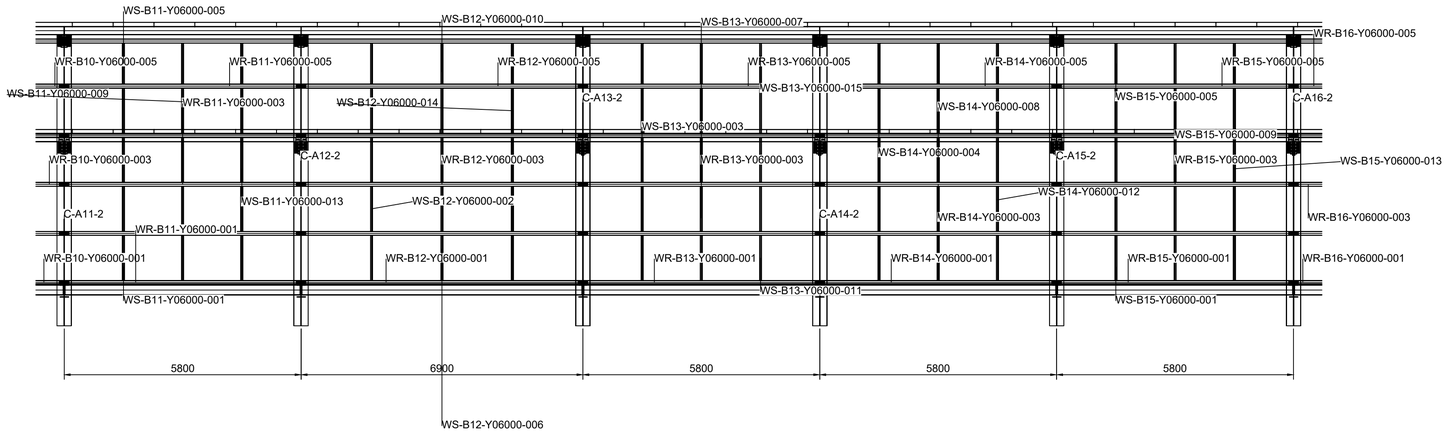
1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-412	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

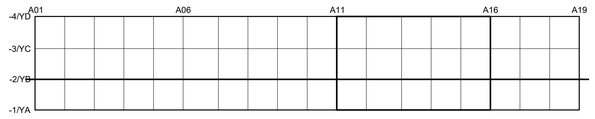
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 3 OF 4, AXES 11 TO 16 SCALE 1:75

WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 3 OF 4, AXES 11 TO 16 SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

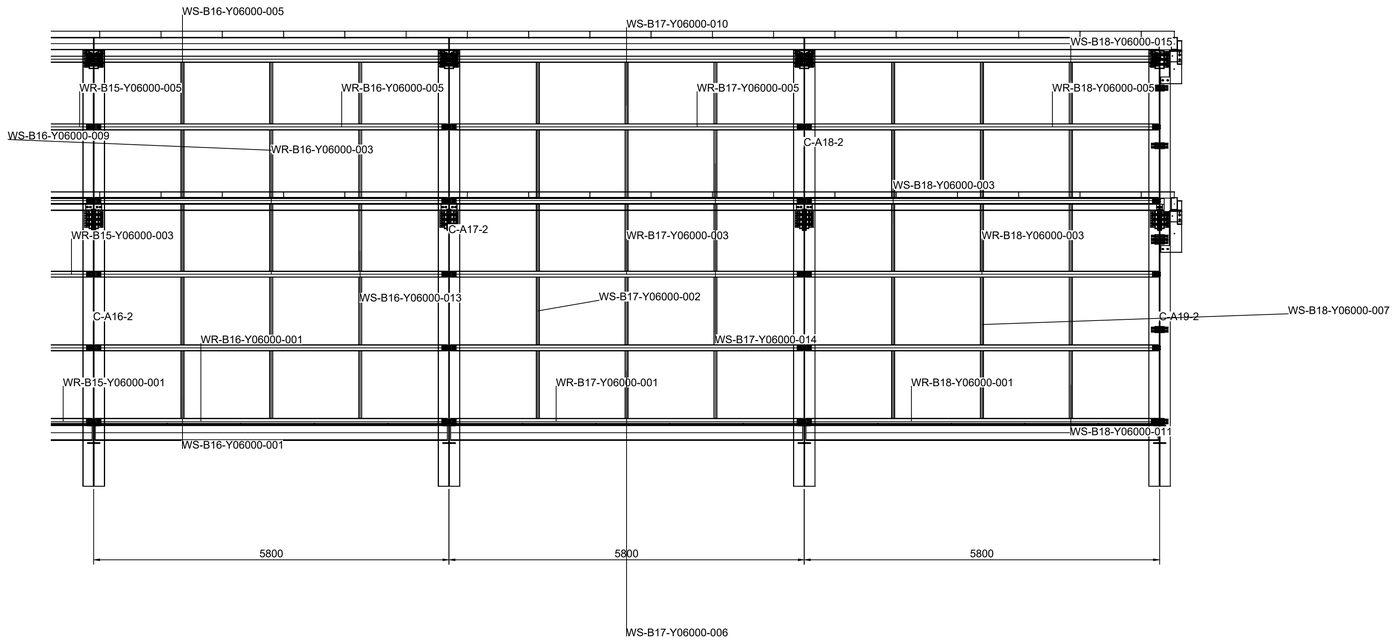
K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-413	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

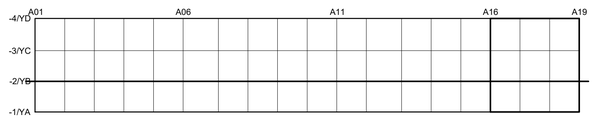
ADJACENT SEGMENTS: S-413. OVERALL: S-410.



WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 4 OF 4, AXES 16 TO 19

SCALE 1:50

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=6000 - SEGMENT 4 OF 4, AXES 16 TO 19

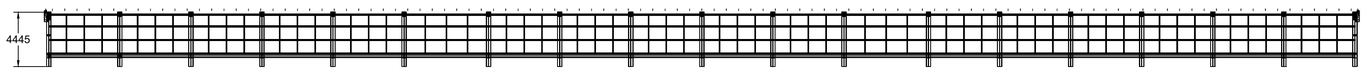
SHEET	SCALE	REVISION
S-414	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

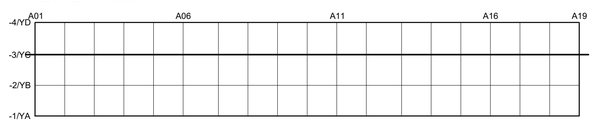
SEGMENT ELEVATIONS

SEGMENT	AXES	SHEET
SEGMENT 1	A01–A06	S-421
SEGMENT 2	A06–A11	S-422
SEGMENT 3	A11–A16	S-423
SEGMENT 4	A16–A19	S-424



WALL FRAMING ELEVATION ON GRID LINE Y=12000 - OVERALL SCALE 1:250

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=12000 - OVERALL

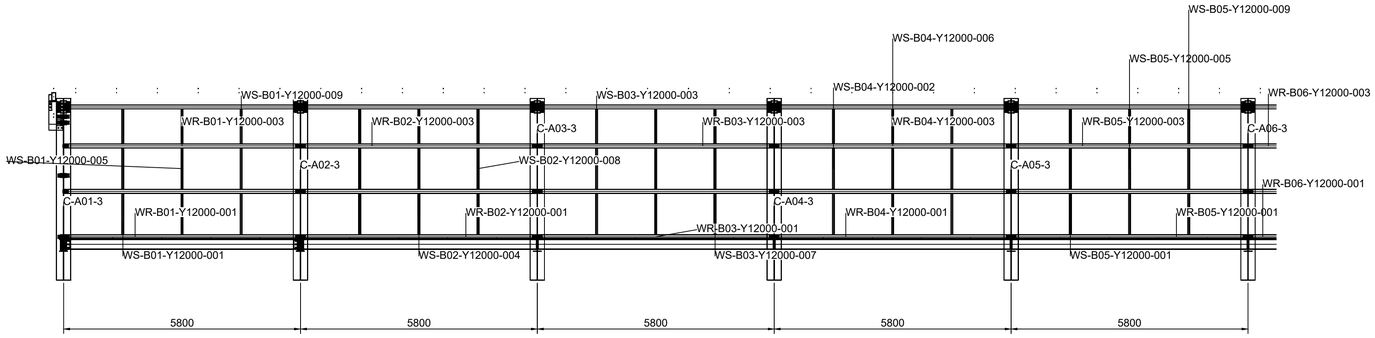
SHEET	SCALE	REVISION
S-420	1:250 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

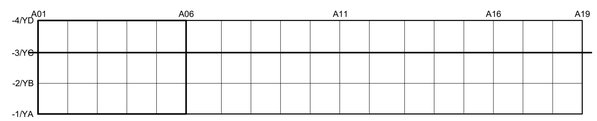
AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-422. OVERALL: S-420.



WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 1 OF 4, AXES 1 TO 6 SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 1 OF 4, AXES 1 TO 6

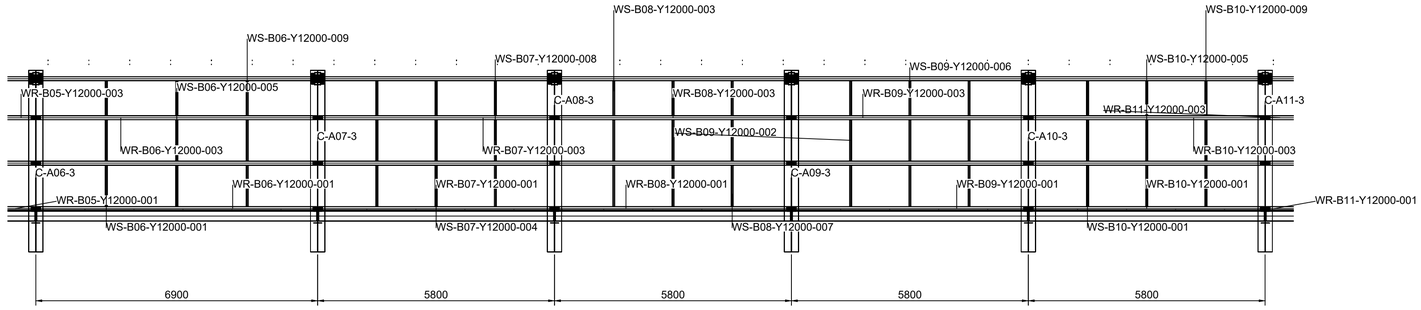
SHEET	SCALE	REVISION
S-421	1:75 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

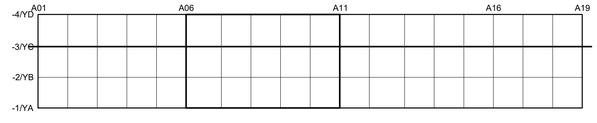
AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

ADJACENT SEGMENTS: S-421, S-423. OVERALL: S-420.



WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 2 OF 4, AXES 6 TO 11 SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

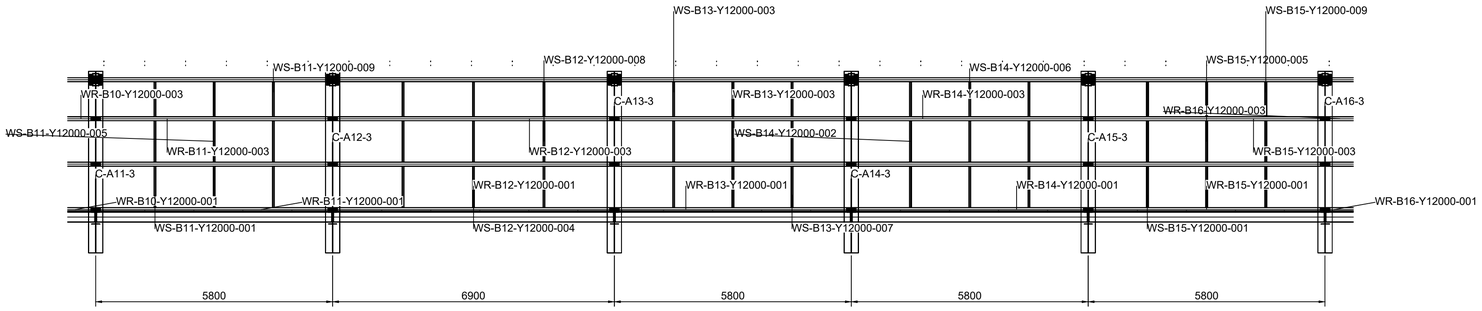
K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 2 OF 4, AXES 6 TO 11

SHEET	SCALE	REVISION
S-422	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

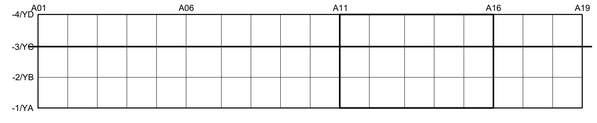
ADJACENT SEGMENTS: S-422, S-424. OVERALL: S-420.



WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 3 OF 4, AXES 11 TO 16

SCALE 1:75

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

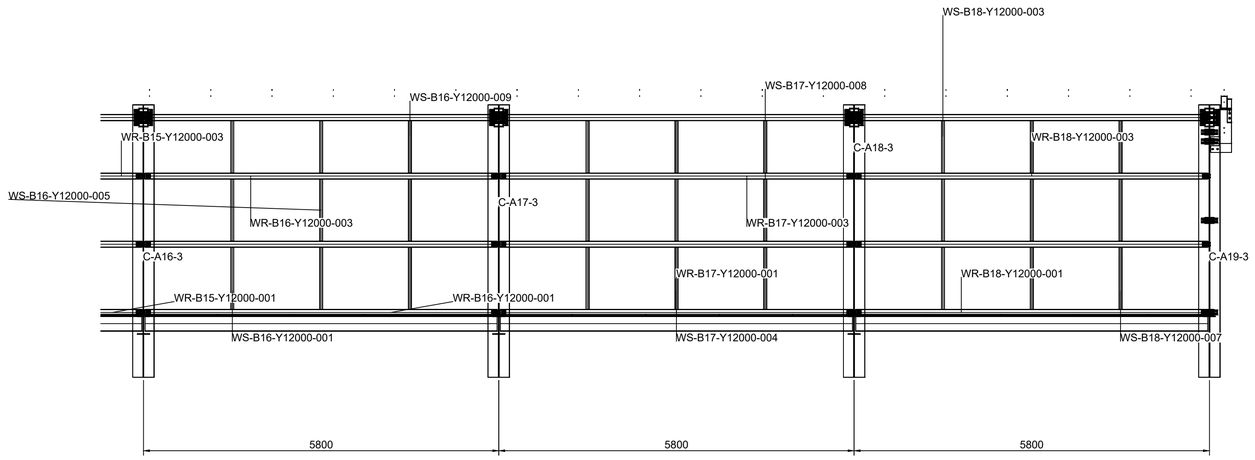
K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 3 OF 4, AXES 11 TO 16

SHEET	SCALE	REVISION
S-423	1:75 ON A1 841x594	04 / 25 SEP 2026
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10		DIMENSIONS IN MILLIMETRES

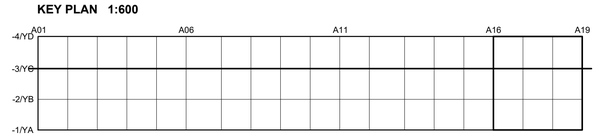
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

ADJACENT SEGMENTS: S-423. OVERALL: S-420.



WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 4 OF 4, AXES 16 TO 19 SCALE 1:50

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

K&K Data / PIN001
STRUCTURAL DRAWINGS

WALL FRAMING ELEVATION ON GRID LINE Y=12000 - SEGMENT 4 OF 4, AXES 16 TO 19

SHEET	SCALE	REVISION
S-424	1:50 ON A1 841x594	04 / 25 SEP 2026

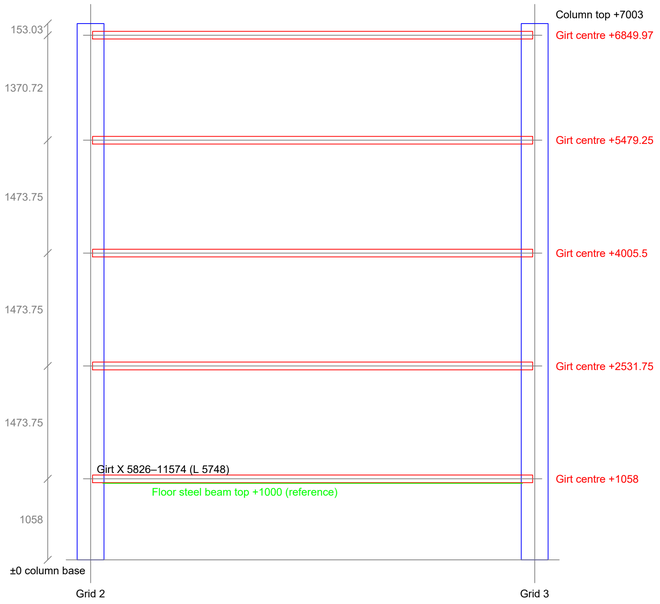
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Longitudinal wall girt elevation setting-out (Y = 0 / 6000 / 12000)

Projected from wall girts PIN001-WR (270 members) of the current whole-house model; used with wall frame elevations S-400 to S-424; girt level setting-out, wall fabrication per current details

Y = 0 longitudinal wall typical bay elevation 1:40 (B02, grids 2–3)

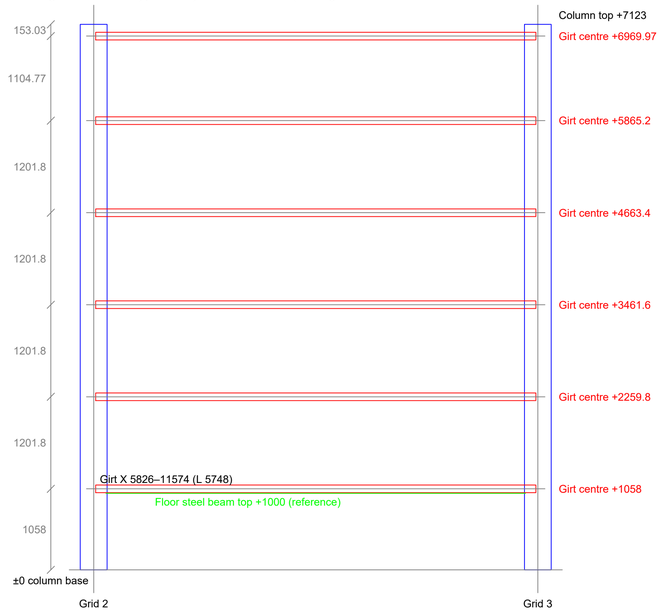


Centre elevations: +1058 / +2531.75 / +4005.5 / +5479.25 / +6849.97

5 per bay, 90 in 18 bays; current elevations S-400 to S-404

Section FRQ{97FA7DE0… (R04 table: RHS 100×150×4), vertical depth 100

Y = 6000 longitudinal wall typical bay elevation 1:40 (B02, grids 2–3)

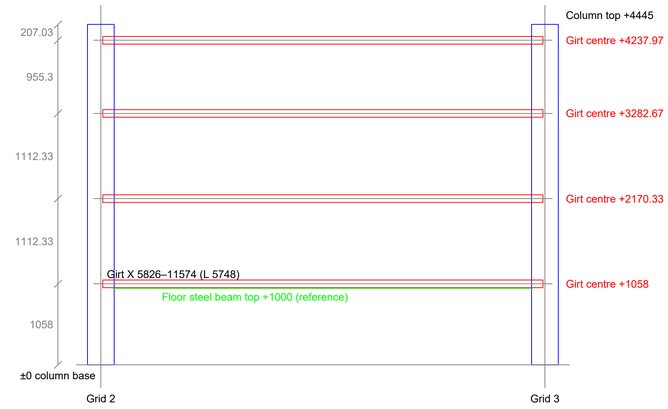


Centre elevations: +1058 / +2259.8 / +3461.6 / +4663.4 / +5865.2 / +6969.97

6 per bay, 108 in 18 bays; current elevations S-410 to S-414

Section FRQ{97FA7DE0… (R04 table: RHS 100×150×4), vertical depth 100

Y = 12000 longitudinal wall typical bay elevation 1:40 (B02, grids 2–3)



Centre elevations: +1058 / +2170.33 / +3282.67 / +4237.97

4 per bay, 72 in 18 bays; current elevations S-420 to S-424

Section FRQ{97FA7DE0… (R04 table: RHS 100×150×4), vertical depth 100

Bay applicability: girt centre elevations in all 18 bays are as the typical elevation of that wall; segments run between the two column faces, ends 26 from the grid; B06 and B12 are 6900 bays with segment length 6848

Bay	Grid line	Spacing	Girt segment X range	Seg. L	Y = 0 handles (5 runs, bottom to top)	Y = 6000 handles (6 runs)	Y = 12000 handles (4 runs)
B01	1–2	5800	26–5774	5748	2D6/2D8/2DA/2DC/2DE	2F9/2FB/2FD/2FF/301/303	323/325/327/329
B02	2–3	5800	5826–11574	5748	1521B/1521D/1521F/15221/15223	15225/15227/15229/1522B/1522D/1522F	15231/15233/15235/15237
B03	3–4	5800	11626–17374	5748	15281/15283/15285/15287/15289	1528B/1528D/1528F/15291/15293/15295	15297/15299/1529B/1529D
B04	4–5	5800	17426–23174	5748	152E7/152E9/152EB/152ED/152EF	152F1/152F3/152F5/152F7/152F9/152FB	152FD/152FF/15301/15303
B05	5–6	5800	23226–28974	5748	1534D/1534F/15351/15353/15355	15357/15359/1535B/1535D/1535F/15361	15363/15365/15367/15369
B06	6–7	6900	29026–35874	6848	157AF/157B1/157B3/157B5/157B7	157B9/157BB/157BD/157BF/157C1/157C3	157C5/157C7/157C9/157CB
B07	7–8	5800	35926–41674	5748	153B3/153B5/153B7/153B9/153BB	153BD/153BF/153C1/153C3/153C5/153C7	153C9/153CB/153CD/153CF
B08	8–9	5800	41726–47474	5748	15419/1541B/1541D/1541F/15421	15423/15425/15427/15429/1542B/1542D	1542F/15431/15433/15435
B09	9–10	5800	47526–53274	5748	1547F/15481/15483/15485/15487	15489/1548B/1548D/1548F/15491/15493	15495/15497/15499/1549B
B10	10–11	5800	53326–59074	5748	154E5/154E7/154E9/154EB/154ED	154EF/154F1/154F3/154F5/154F7/154F9	154FB/154FD/154FF/15501
B11	11–12	5800	59126–64874	5748	1554B/1554D/1554F/15551/15553	15555/15557/15559/1555B/1555D/1555F	15561/15563/15565/15567
B12	12–13	6900	64926–71774	6848	15815/15817/15819/1581B/1581D	1581F/15821/15823/15825/15827/15829	1582B/1582D/1582F/15831
B13	13–14	5800	71826–77574	5748	155B1/155B3/155B5/155B7/155B9	155BB/155BD/155BF/155C1/155C3/155C5	155C7/155C9/155CB/155CD
B14	14–15	5800	77626–83374	5748	15617/15619/1561B/1561D/1561F	15621/15623/15625/15627/15629/1562B	1562D/1562F/15631/15633
B15	15–16	5800	83426–89174	5748	1567D/1567F/15681/15683/15685	15687/15689/1568B/1568D/1568F/15691	15693/15695/15697/15699
B16	16–17	5800	89226–94974	5748	156E3/156E5/156E7/156E9/156EB	156ED/156EF/156F1/156F3/156F5/156F7	156F9/156FB/156FD/156FF
B17	17–18	5800	95026–100774	5748	15749/1574B/1574D/1574F/15751	15753/15755/15757/15759/1575B/1575D	1575F/15761/15763/15765
B18	18–19	5800	100826–106574	5748	158CF/158D1/158D3/158D5/158D7	158D9/158DB/158DD/158DF/158E1/158E3	158E5/158E7/158E9/158EB

1 Girt centre elevations are member end-point Z (member body Z range is centre ±50), shown to 0.01 mm; full values in the member table CSV. Floor steel beam top +1000, board top level +1030 and girt centres are different objects, Reference annotations only on this drawing, not aligned to each other. Column top is the top of the main column member on each longitudinal wall line.

2 Girts break at the main columns on both sides of each bay: X start = left grid + 26, end = right grid − 26. B06 (29000–35900) and B12 (64900–71800) are 6900 bays with segment length 6848; Other 16 bays segment length 5748. Quantities and centre elevations on the three longitudinal walls for all bays: see table above and typical elevations.

3 Member handles, marks and end coordinates: girt schedule WALL_RAIL_FINAL21_292.csv (Y = 0: 90, Y = 6000: 108, Y = 12000: 72).

4 Wall members per the current whole-house model (988 wall members); D02 does not alter wall members.

5 This sheet adds the vertical setting-out dimensions to the wall frame elevations S-400 to S-424; girt connections, purlin cleats and wall panel fixing per current details; no steel member is added, removed or changed.

K&K Data / PIN001 · GIRT SETTING-OUT

Longitudinal wall girt elevation setting-out (Y = 0 / 6000 / 12000)

SHEET	SCALE	REVISION
S-430	AS SHOWN ON A1 841x594	Rev A / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES

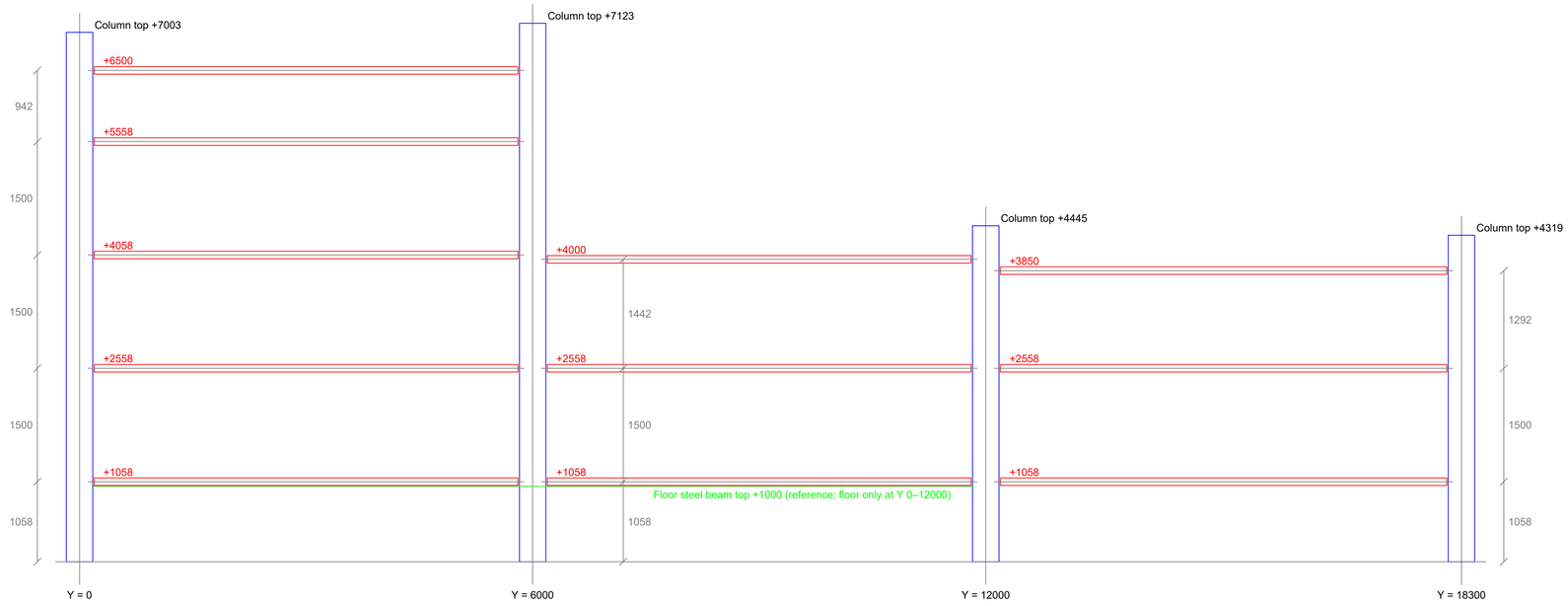
Units mm; elevations are model Z, main column base = 0

K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

End wall girt elevation setting-out (X = 0 / X = 106600)

Projected from end wall girts PIN001-EWR (22 members) of the current whole-house model; used with end wall frame elevations S-510 and S-511; girt level setting-out, wall fabrication per current details

End wall elevation 1:40 (X = 0 end wall viewed from inside toward −X, +Y to the right; X = 106600 end wall has the same elevations and segments, mirrored left-right when viewed from inside)



End wall zone elevation table (identical at X = 0 and X = 106600)

Zone	Girt Y range	Qty per wall	Centre elevation	Vertical spacing
1	195–5805	5	+1058 / +2558 / +4058 / +5558 / +6500	1058 / 1500 / 1500 / 1500 / 942
2	6195–11805	3	+1058 / +2558 / +4000	1058 / 1500 / 1442
3	12195–18105	3	+1058 / +2558 / +3850	1058 / 1500 / 1292

1 End wall girts are segmented by three zones, segment ends 195 from the grid (Y 195–5805, 6195–11805, 12195–18105); zones have different elevations and shall not be interchanged.

2 Zone 1 (Y 0–6000) 5 runs, zone 2 (Y 6000–12000) 3 runs, zone 3 (Y 12000–18300) 3 runs; 11 per end wall, 22 for both end walls.

3 The vertical dimension chain starts at main column base ±0 and runs to the centre of each girt; floor steel beam top +1000 is a reference object and is not aligned with girt centres.

4 Wall members per the current whole-house model (988 wall members); D02 does not alter wall members.

5 This sheet adds the vertical setting-out dimensions to end wall elevations S-510 and S-511; no steel member is added, removed or changed; wall fabrication per current details.

End wall girt member table (whole-house model, 22 members)

Handle	Mark	X	Y range	Centre Z
33D	PIN001-EWR1-0	0	195–5805	+1058
33F	PIN001-EWR1-1	0	195–5805	+2558
341	PIN001-EWR1-2	0	195–5805	+4058
343	PIN001-EWR1-3	0	195–5805	+5558
345	PIN001-EWR1-4	0	195–5805	+6500
360	PIN001-EWR2-0	0	6195–11805	+1058
362	PIN001-EWR2-1	0	6195–11805	+2558
364	PIN001-EWR2-2	0	6195–11805	+4000
372	PIN001-EWR3-0	0	12195–18105	+1058
374	PIN001-EWR3-1	0	12195–18105	+2558
8FEE	PIN001-EWR3-2	0	12195–18105	+3850
15883	PIN001-EWR1-0@X106600	106600	195–5805	+1058
15885	PIN001-EWR1-1@X106600	106600	195–5805	+2558
15887	PIN001-EWR1-2@X106600	106600	195–5805	+4058
15889	PIN001-EWR1-3@X106600	106600	195–5805	+5558
1588B	PIN001-EWR1-4@X106600	106600	195–5805	+6500
1588D	PIN001-EWR2-0@X106600	106600	6195–11805	+1058
1588F	PIN001-EWR2-1@X106600	106600	6195–11805	+2558
15891	PIN001-EWR2-2@X106600	106600	6195–11805	+4000
15893	PIN001-EWR3-0@X106600	106600	12195–18105	+1058
15895	PIN001-EWR3-1@X106600	106600	12195–18105	+2558
15897	PIN001-EWR3-2@X106600	106600	12195–18105	+3850

K&K Data / PIN001 · GIRT SETTING-OUT

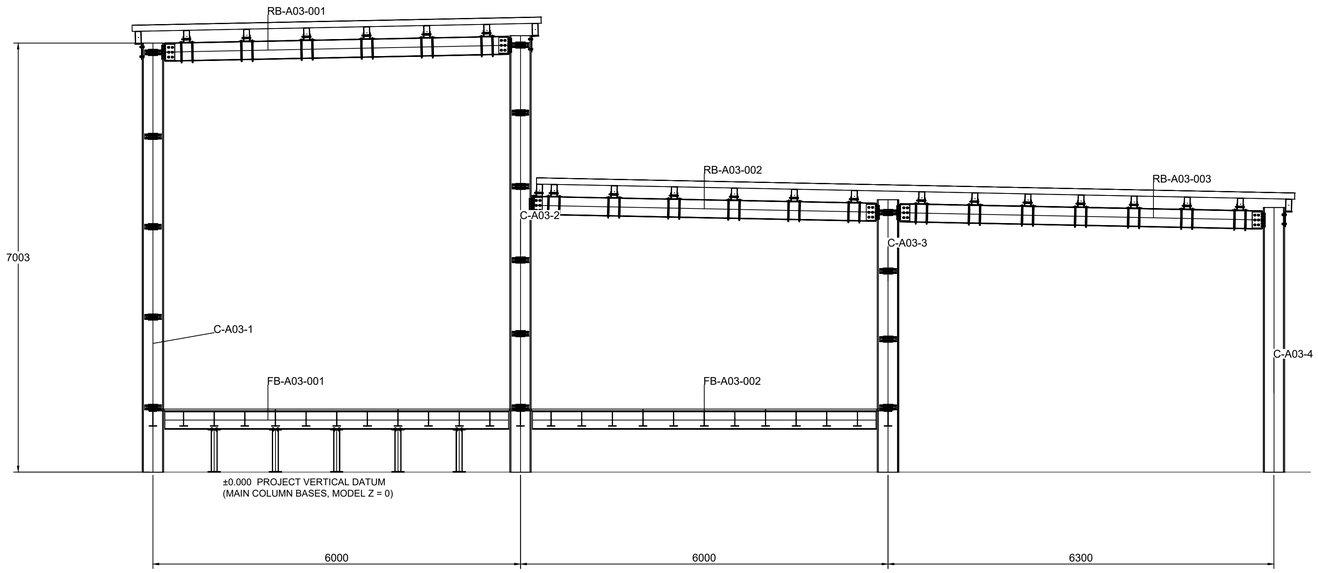
End wall girt elevation setting-out (X = 0 / X = 106600)

SHEET	SCALE	REVISION
S-431	AS SHOWN ON A1 841x594	Rev A / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES

Units mm; elevations are model Z, main column base = 0

K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



TRANSVERSE FRAME SECTION ON AXIS A03 (X = 11 600) SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	6	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	50	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	40	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	30	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

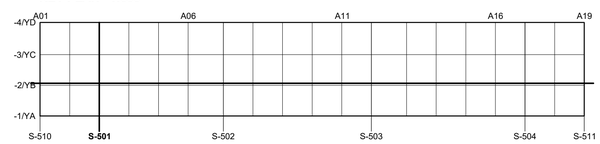
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

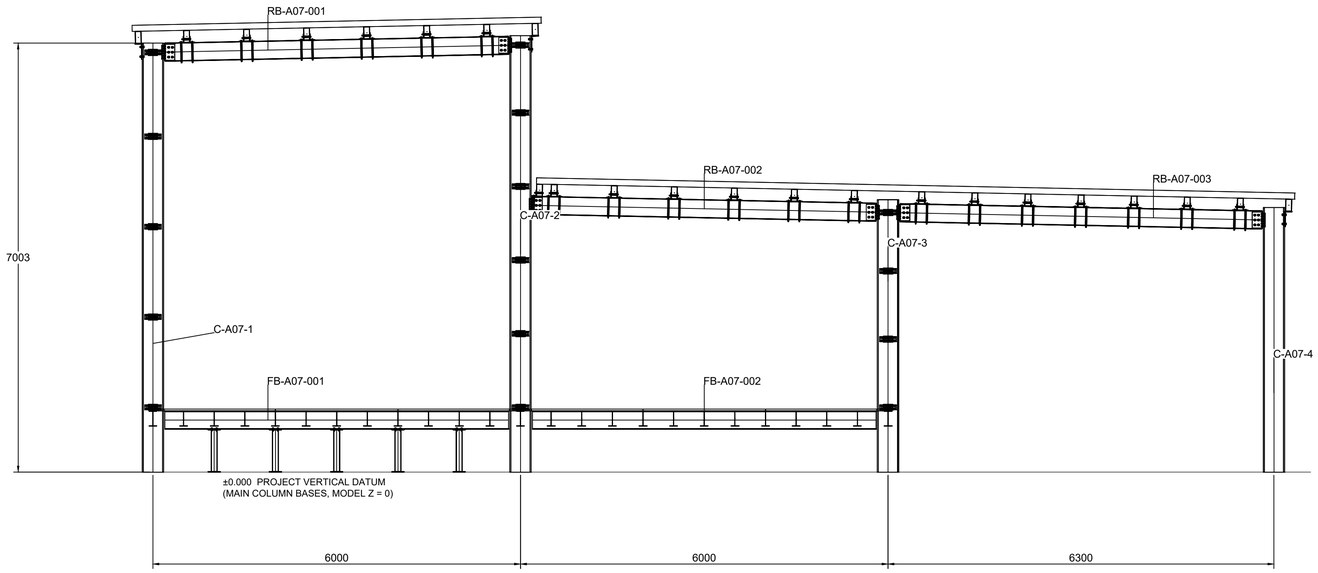
K&K Data / PIN001
STRUCTURAL DRAWINGS

TRANSVERSE FRAME SECTION ON AXIS 3

SHEET	SCALE	REVISION
S-501	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



TRANSVERSE FRAME SECTION ON AXIS A07 (X = 35 900) SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	6	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	50	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	40	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	30	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

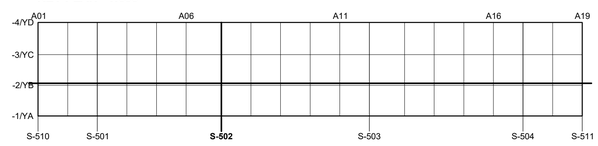
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

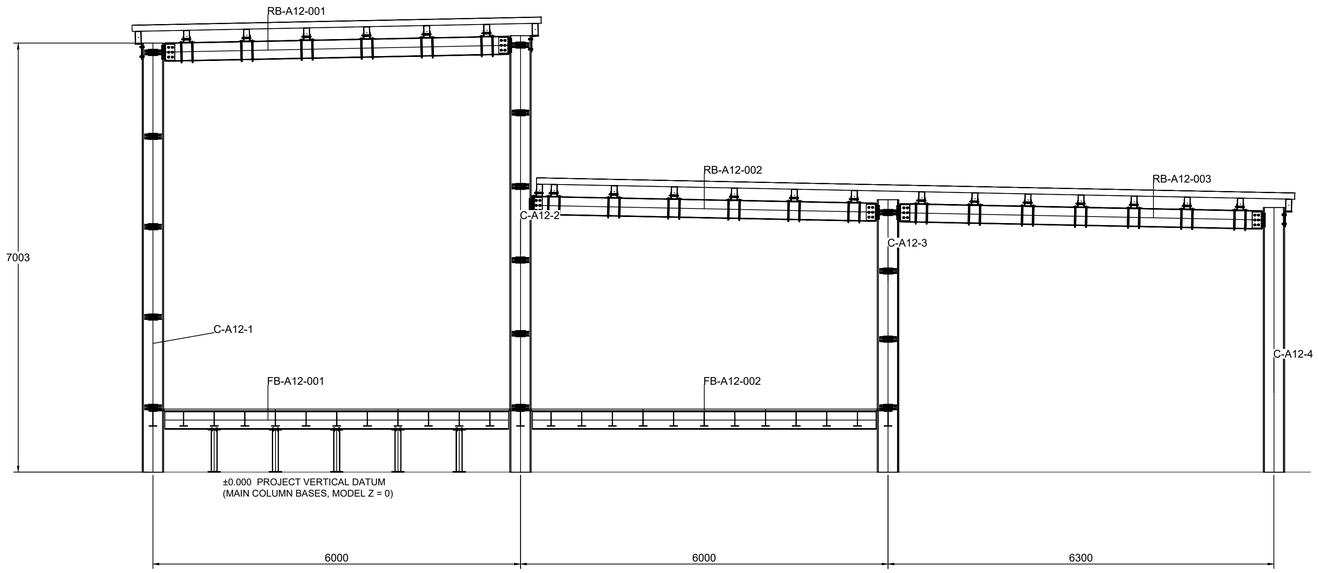
K&K Data / PIN001
STRUCTURAL DRAWINGS

TRANSVERSE FRAME SECTION ON AXIS 7

SHEET	SCALE	REVISION
S-502	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



TRANSVERSE FRAME SECTION ON AXIS A12 (X = 64 900) SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	6	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	50	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	40	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	30	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

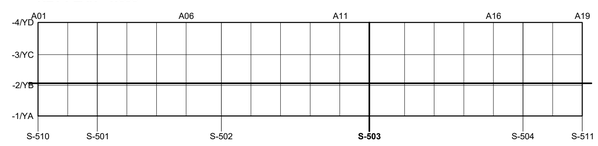
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

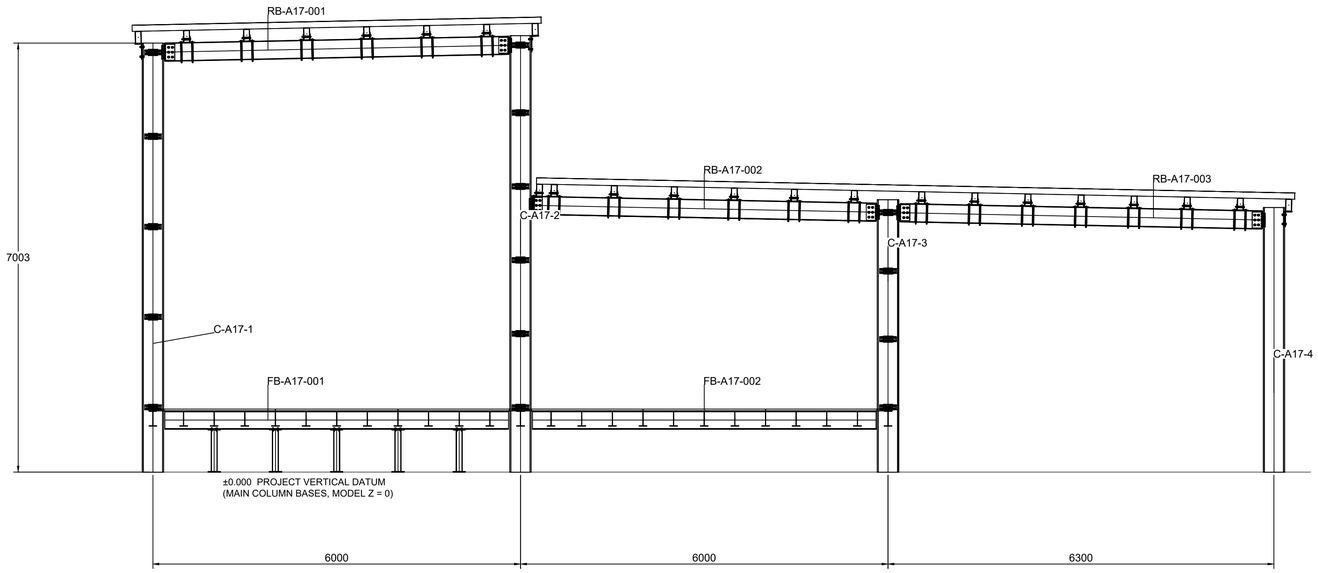
K&K Data / PIN001
STRUCTURAL DRAWINGS

TRANSVERSE FRAME SECTION ON AXIS 12

SHEET	SCALE	REVISION
S-503	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



TRANSVERSE FRAME SECTION ON AXIS A17 (X = 95 000) SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	6	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	50	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	40	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	30	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

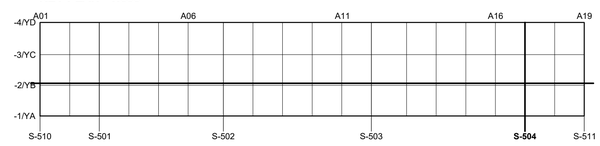
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

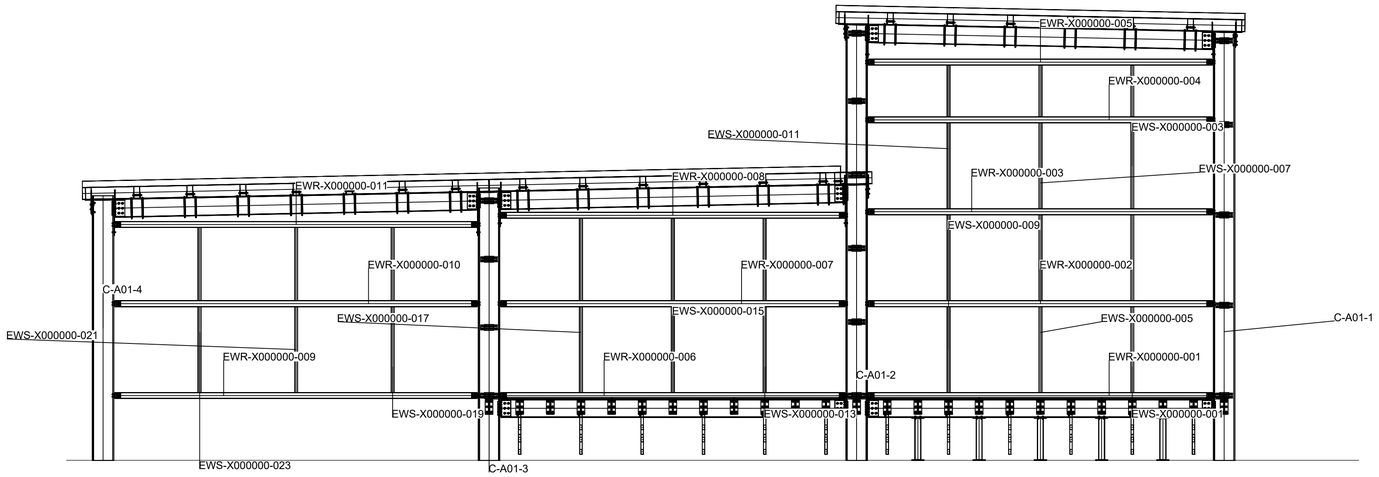
K&K Data / PIN001
STRUCTURAL DRAWINGS

TRANSVERSE FRAME SECTION ON AXIS 17

SHEET	SCALE	REVISION
S-504	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



±0.000 PROJECT VERTICAL DATUM
(MAIN COLUMN BASES, MODEL Z = 0)

END WALL FRAMING ELEVATION ON AXIS A01 (X = 0), FIRST END WALL (X=0)

SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	3	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	11	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	24	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	25	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	3	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RACK_FRAME	UNDER-FLOOR CABLE TRAY RUNG	RHS80x40x3	36	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	20	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	15	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.

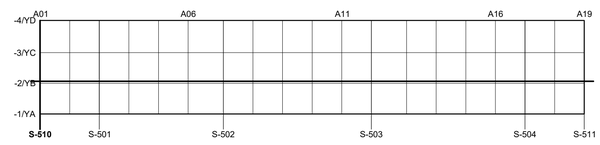
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

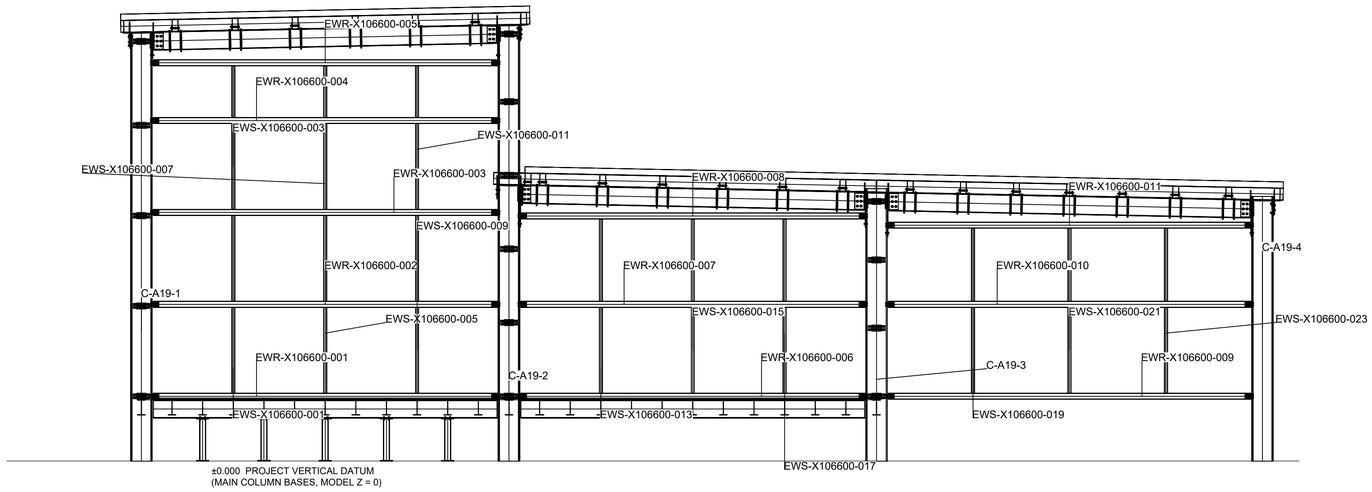
K&K Data / PIN001
STRUCTURAL DRAWINGS

END WALL FRAMING ELEVATION ON AXIS 1, FIRST END WALL (X=0)

SHEET	SCALE	REVISION
S-510	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



END WALL FRAMING ELEVATION ON AXIS A19 (X = 106 600), OPPOSITE END WALL (X=106600)

SCALE 1:50

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	4	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	3	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	11	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	24	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	2	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	25	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	3	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	5	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	3	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	20	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	15	ASTM A36 (model label)

*ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

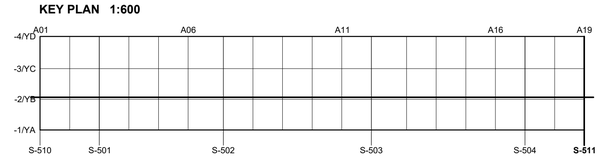
I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

ROOF LEVELS ON THIS SECTION (mm ABOVE DATUM)

Y (mm)	BEARING	FINISHED	ROOF SPAN
-338	+7193.3	+7294.8	HIGH SPAN (S-710)
0	+7200.0	+7301.6	HIGH SPAN (S-710)
6000	+7320.0	+7421.6	HIGH SPAN (S-710)
6338	+7326.8	+7428.3	HIGH SPAN (S-710)
6260.82	+4702.8	+4804.3	LOW SPAN (S-711)
12000	+4588.0	+4689.6	LOW SPAN (S-711)
18300	+4462.0	+4563.6	LOW SPAN (S-711)
18638	+4455.3	+4556.8	LOW SPAN (S-711)

ROOF STEP AT Y = 6260.82: HIGH-SPAN BEARING LINE 2622.4 ABOVE LOW-SPAN BEARING +4702.8 (LEVELS ROUNDED TO 0.1 mm). ROOF BUILD-UP AT Y = -338: 100.0 AND 101.5 (TO FINISHED +7294.8) ABOVE BEARING +7193.3. ROOF MAIN BEAM SYSTEM LINES ARE IDENTICAL ON ALL 19 FRAME AXES (NATIVE MODEL CENSUS), SO THESE LEVELS APPLY TO EVERY TRANSVERSE FRAME. ROOF BUILD-UP AND LEVEL DIMENSIONS: S-710, S-711.

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0); THIS IS A PROJECT DATUM, NOT A SITE LEVEL.

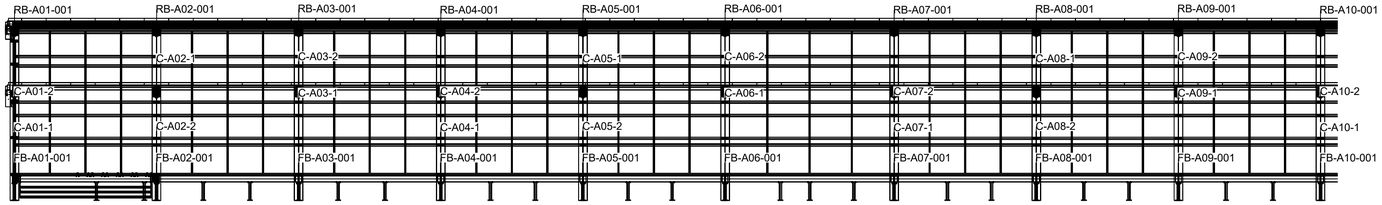
K&K Data / PIN001
STRUCTURAL DRAWINGS

END WALL FRAMING ELEVATION ON AXIS 19, OPPOSITE END WALL (X=106600)

SHEET	SCALE	REVISION
S-511	1:50 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 1 OF 2, AXES 1 TO 10 SCALE 1:125

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	20	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	20	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	8	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	12	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	20	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	130	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	2	ASTM A36 (model label)
IT_SUPPORT	IT SUPPORT RAIL / RISER	RHS80x40x4	11	ASTM A36 (model label)
IT_SUPPORT	IT SUPPORT RAIL / RISER	SHS40x40x4	22	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	88	ASTM A36 (model label)
RACK_FRAME	UNDER-FLOOR CABLE TRAY RUNG	RHS80x40x3	48	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	20	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	70	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	110	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	243	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

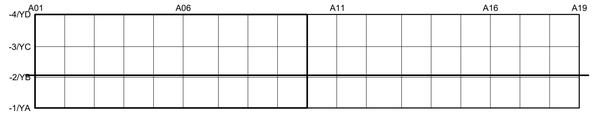
MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

AXIS A06, FLOOR MAIN BEAM WF-PB-A06-FB02: THE FOUR COLUMN-SIDE JD-02 BOLT GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE AMENDED ON S-607. THIS VIEW SHOWS THE UNAMENDED R04 MODEL GEOMETRY OF THOSE GROUPS.

OTHER PART: S-522 (AXES 10 TO 19).

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0).

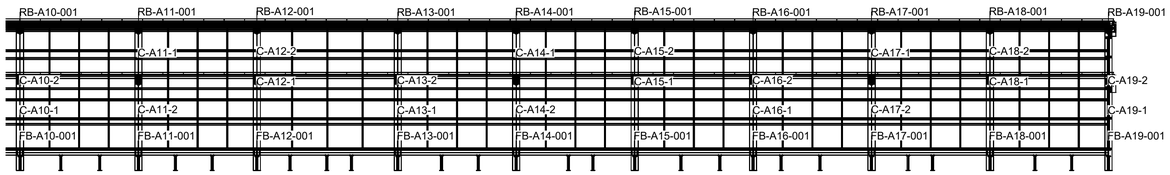
K&K Data / PIN001
STRUCTURAL DRAWINGS

LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 1 OF 2, AXES 1 TO 10

SHEET	SCALE	REVISION
S-521	1:125 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 2 OF 2, AXES 10 TO 19 SCALE 1:150

MEMBER SCHEDULE - QUANTITIES WITHIN VIEW

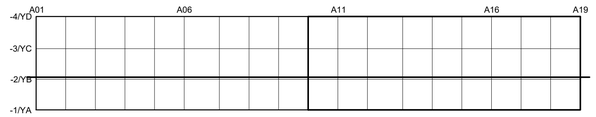
MODEL ROLE	MEMBER	SECTION (mm)	N	MATERIAL LABEL
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	20	ASTM A36 (model label)
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	20	ASTM A36 (model label)
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	8	ASTM A36 (model label)
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	12	ASTM A36 (model label)
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	20	ASTM A36 (model label)
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	130	ASTM A36 (model label)
GABLE_STRUT	GABLE STRUT	RHS200x100x6	2	ASTM A36 (model label)
POST_SHORT	STUB COLUMN	SHS100x100x5	88	ASTM A36 (model label)
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	20	ASTM A36 (model label)
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	70	ASTM A36 (model label)
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	110	ASTM A36 (model label)
WALL_STUD	WALL STUD	RHS100x50x3	243	ASTM A36 (model label)

"ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).

I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

OTHER PART: S-521 (AXES 1 TO 10).

KEY PLAN 1:600



NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. LEVELS ARE MEASURED FROM THE PROJECT VERTICAL DATUM ±0.000 AT THE MAIN COLUMN BASES (MODEL Z = 0).

K&K Data / PIN001
STRUCTURAL DRAWINGS

LONGITUDINAL SECTION B-B, CUT ON Y=6400 LOOKING TOWARD +Y - PART 2 OF 2, AXES 10 TO 19

SHEET	SCALE	REVISION
S-522	1:150 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

PRIMARY AND SECONDARY MEMBERS - QUANTITIES BY SECTION. CONNECTION PARTS: SEE DETAILS.

MODEL ROLE	MEMBER	SECTION AS MODELLED	MARK RANGE	N
COLUMN_MAIN	MAIN COLUMN	HW350x350x12x19	C-A01-1 .. C-A19-4	76
EAVE_EDGE_BEAM	EAVES EDGE BEAM	RHS200x100x6	PIN001-EF05-EB-L1-B01 .. PIN001-EF05-EB-L3-B18	54
ENDWALL_RAIL	END-WALL GIRT	RHS 100x150x4 (custom)	EWR-X000000-001 .. EWR-X106600-011	22
ENDWALL_STUD	END-WALL STUD	RHS 50x100x3 (custom)	EWS-X000000-001 .. EWS-X106600-024	48
FLOOR_BEAM	FLOOR MAIN BEAM	I 300x200x8x12 (custom)	FB-A01-001 .. FB-A19-002	38
FLOOR_JOIST	FLOOR SECONDARY BEAM	HN250x125x6x9	FJ-B01-001 .. FJ-B18-025	450
GABLE_STRUT	GABLE STRUT	RHS200x100x6	PIN001-GB06-G1-S1 .. PIN001-GB06-G2-S3	6
IT_SUPPORT	IT SUPPORT RAIL / RISER	RHS80x40x4	I33-IT-001-L .. I33-IT-006-L	11
IT_SUPPORT	IT SUPPORT RAIL / RISER	SHS40x40x4	I33-IT-001-L-A-RISER .. I33-IT-006-L-B-RISER	22
POST_SHORT	STUB COLUMN	SHS100x100x5	PST-B01-001 .. PST-B18-009	171
RACK_FRAME	UNDER-FLOOR CABLE TRAY RUNG	RHS80x40x3	RK-L1-RUNG01 .. RK-L3-RUNG12	66
RAFTER_BEAM	ROOF MAIN BEAM	RHS 300x150x8 (custom)	RB-A01-001 .. RB-A19-003	57
ROOF_PURLIN	ROOF PURLIN	RHS200x100x6	RP-B01-001 .. RP-B18-019; PIN001-RP02-00@LONGI_BAY01..18	360
WALL_RAIL	WALL GIRT	RHS 100x150x4 (custom)	WR-B01-Y00000-001 .. WR-B18-Y12000-004	270
WALL_STUD	WALL STUD	RHS100x50x3	WS-B01-Y00000-001 .. WS-B18-Y12000-009	648

FLOOR SURFACE COMPONENTS - QUANTITIES

MODEL ROLE	MEMBER	SECTION AS MODELLED	MARK RANGE	N
FIBRE_CEMENT_BOARD	FLOOR BOARD	FIBRE CEMENT t=30	FLOOR BOARDS - ALL BAYS	552

SCHEDULE NOTES

1. FLOOR SURFACE IS 30 mm FIBRE CEMENT BOARD ON STEEL FLOOR BEAMS AND JOISTS. NO STEEL FLOOR DECK IS PROVIDED.
2. FLOOR LEVELS, DATUM MAIN COLUMN BASE = 0: JOIST TOP 1000; BOARD SOFFIT 1000 AND BOARD TOP 1030; IT BASE PLATE 1000 TO 1008.
3. JSEC-08 CONNECTION ANGLE L150x60x8, LENGTH 210, 12 OFF. SECTION MEASURED FROM THE MODEL SOLID.
4. "ASTM A36" IN MEMBER SCHEDULES IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
5. MODEL ROLE RACK_FRAME (RHS80x40x3) = UNDER-FLOOR CABLE TRAY RUNG; NOT AN EQUIPMENT RACK AND NOT PRIMARY STRUCTURE.
6. IT SUPPORT RAILS RHS80x40x4 (11), RISERS SHS40x40x4 (22) AND 22 BASE PLATES ARE MODELLED FOR SIX IT POSITIONS IN BAY 1 ONLY; THE CURRENT REFERENCE EQUIPMENT ARRANGEMENT AND ITS RELATION TO THESE SUPPORTS: S-050.
7. FINISHED FLOOR LEVEL FFL = 1030 + Δ: BOARD TOP 1030 PLUS THE FINISH BUILD-UP Δ SPECIFIED BY F02; NO FINISH THICKNESS IS ASSUMED ON THIS SHEET.
8. I 300x200x8x12 (custom) IS THE WELDED FLOOR MAIN BEAM 2 x PL200x12 + PL276x8.

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. D01 FLOOR INSTALLATION SHEETS (F-001 … F-501) AND F02 FINISH/ESD SHEETS (F-101 … F-104) ARE SEPARATE SERIES; REFERENCES ARE QUALIFIED "D01 F-1xx" OR "F02 F-1xx".

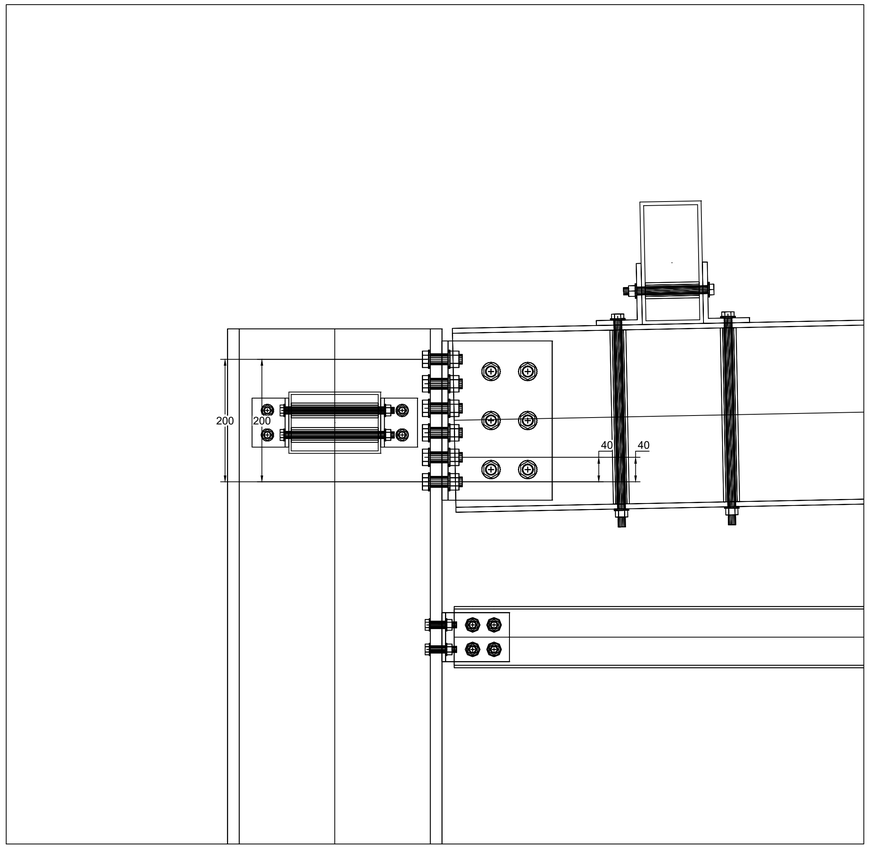
K&K Data / PIN001
STRUCTURAL DRAWINGS

MEMBER SCHEDULE

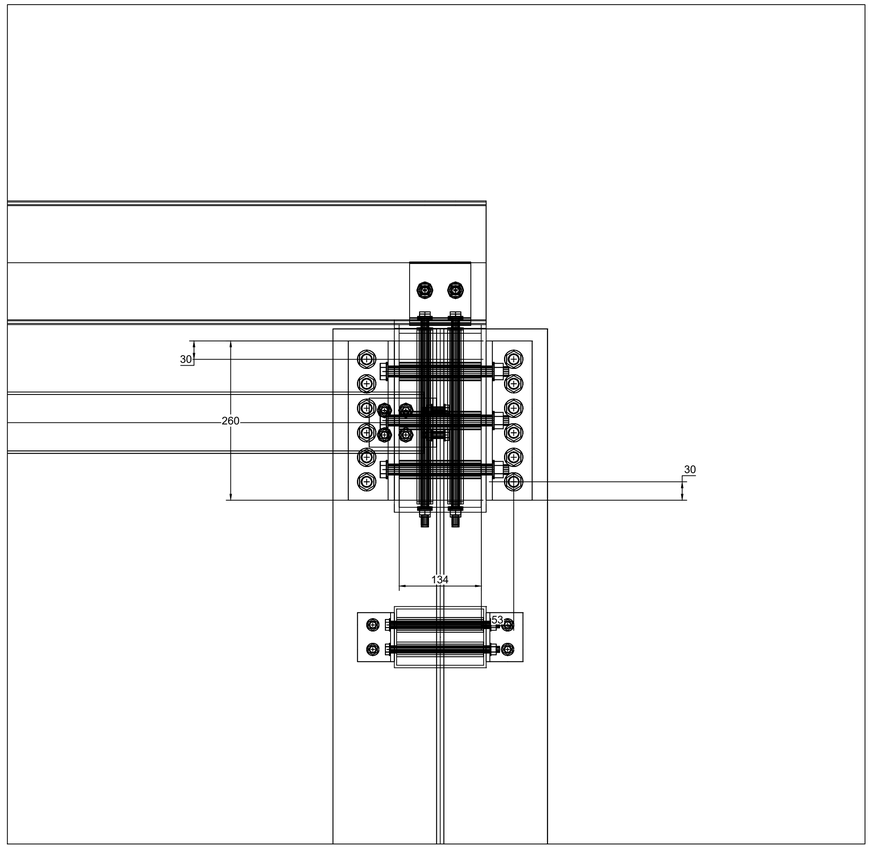
SHEET	SCALE	REVISION
S-600	SCHEDULE - NOT TO SCALE	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

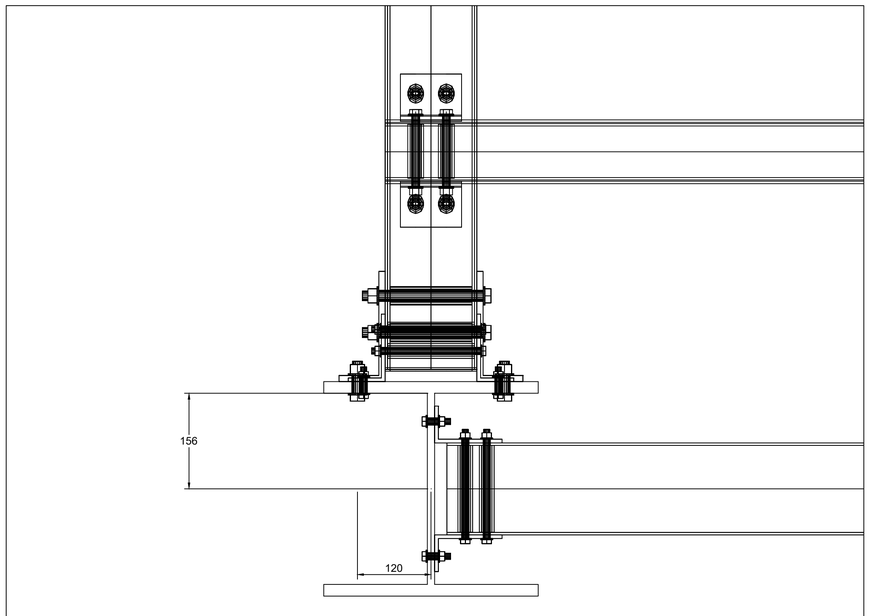
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-01 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:5



JD-01 VIEW B - SECTION (LOOKING +Y) SCALE 1:5



JD-01 VIEW C - PLAN (LOOKING DOWN) SCALE 1:5

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-01 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
PIN001-C01	BEAM	HW350x350x12x19	ASTM A36 (model label)	L=7003
PIN001-RB01	BEAM	RHS 300x150x8 (custom)	ASTM A36 (model label)	L=5611
ASJ-001-L	BEAM	JSEC-01	ASTM A36 (model label)	L=260
ASJ-001-R	BEAM	JSEC-01	ASTM A36 (model label)	L=260
ASJ-001-BEAM-SLEEVE-1	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-L-MAIN	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=6 HOLE D=18
ASJ-001-R-MAIN	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=6 HOLE D=18
ASJ-001-BEAM-SLEEVE-1-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-001-BEAM-SLEEVE-2	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-BEAM-SLEEVE-3	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-BEAM-SLEEVE-4	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-BEAM-SLEEVE-5	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-BEAM-SLEEVE-6	BEAM	JSEC-02	ASTM A36 (model label)	L=134
ASJ-001-BEAM-SLEEVE-2-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-001-BEAM-SLEEVE-3-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-001-BEAM-SLEEVE-4-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-001-BEAM-SLEEVE-5-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-001-BEAM-SLEEVE-6-BOLT	BOLT PATTERN	M16 L=200 STD 4014 GR 8.8	8.8	N=1 HOLE D=18

CONNECTION PARAMETERS - JD-01 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
PIN001-C01	Section	PIN001-C01 HW350x350x12x19
PIN001-RB01	Section	PIN001-RB01 RHS 300x150x8 (custom)
ASJ-001-L	Section	ASJ-001-L JSEC-01
ASJ-001-R	Section	ASJ-001-R JSEC-01
ASJ-001-BEAM-SLEEVE-1	Section	ASJ-001-BEAM-SLEEVE-1 JSEC-02
ASJ-001-L-MAIN	Bolt diameter (mm)	ASJ-001-L-MAIN M16 x 55 STD 4014 GR 8.8 HOLE D=18 TOL=2
ASJ-001-R-MAIN	Bolt diameter (mm)	ASJ-001-R-MAIN M16 x 55 STD 4014 GR 8.8 HOLE D=18 TOL=2
ASJ-001-BEAM-SLEEVE-1-BOLT	Bolt diameter (mm)	ASJ-001-BEAM-SLEEVE-1-BOLT M16 x 200 STD 4014 GR 8.8 HOLE D=18 TOL=2

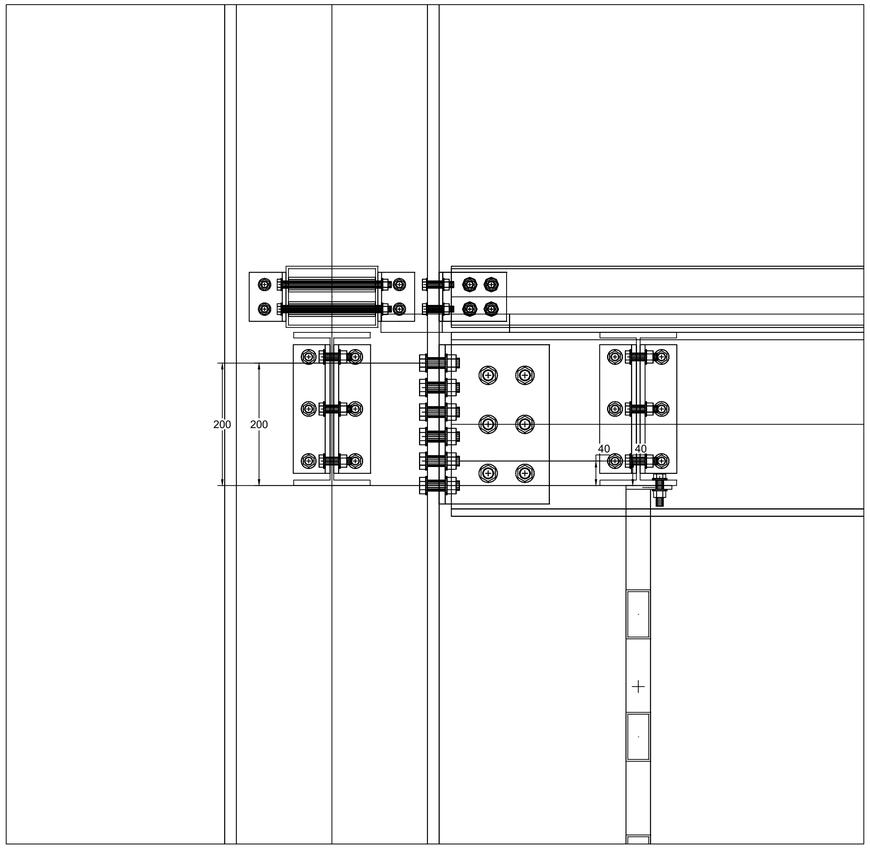
K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-01 BEAM TO COLUMN - DOUBLE ANGLE CLEAT, SLEEVED BOLT

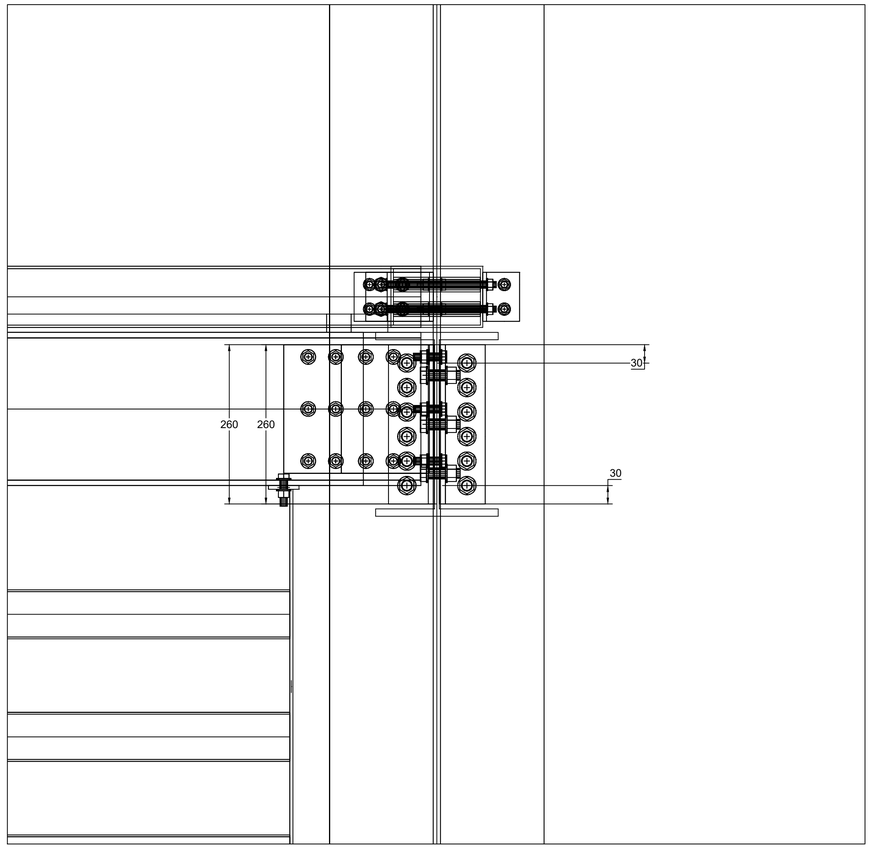
SHEET	SCALE	REVISION
S-601	1:5 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

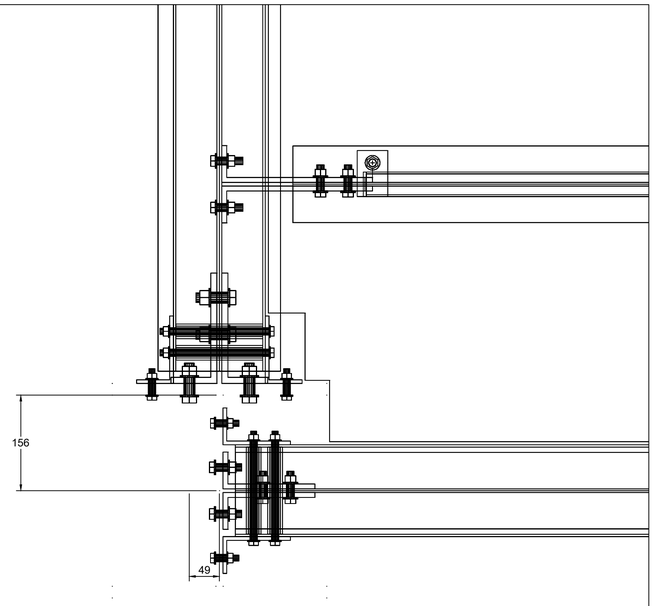
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-02 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:5



JD-02 VIEW B - SECTION (LOOKING +Y) SCALE 1:5



JD-02 VIEW C - PLAN (LOOKING DOWN) SCALE 1:5

NOTES

1. TYPICAL R04 TEMPLATE, DRAWN ON INSTANCE ASJ-049 (PIN001-C01 / PIN001-FB01). THE COLUMN-SIDE PITCH SHOWN (40) IS THE TEMPLATE VALUE; ITS APPLICABILITY TO OTHER JD-02 INSTANCES REQUIRES CONFIRMATION.
2. NOT CURRENT FOR WF-PB-A06-FB02: ITS FOUR COLUMN-SIDE GROUPS RCV34-ASJ-055-L/R-MAIN AND RCV34-ASJ-056-L/R-MAIN ARE DEFINED ON S-607 (6 x M16 AT 43).
3. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
7. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
8. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-02 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
PIN001-C01	BEAM	HW350x350x12x19	ASTM A36 (model label)	L=7003
PIN001-FB01	BEAM	I 300x200x8x12 (custom)	ASTM A36 (model label)	L=5610
ASJ-049-L	BEAM	JSEC-01	ASTM A36 (model label)	L=260
ASJ-049-R	BEAM	JSEC-01	ASTM A36 (model label)	L=260
ASJ-049-L-MAIN	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=6 HOLE D=18
ASJ-049-R-MAIN	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=6 HOLE D=18
ASJ-049-WEB-1-1	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-049-WEB-0-0	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-049-WEB-0-1	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-049-WEB-0-2	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-049-WEB-1-0	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18
ASJ-049-WEB-1-2	BOLT PATTERN	M16 L=55 STD 4014 GR 8.8	8.8	N=1 HOLE D=18

CONNECTION PARAMETERS - JD-02 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
PIN001-C01	Section	PIN001-C01 HW350x350x12x19
PIN001-FB01	Section	PIN001-FB01 I 300x200x8x12 (custom)
ASJ-049-L	Section	ASJ-049-L JSEC-01
ASJ-049-R	Section	ASJ-049-R JSEC-01
ASJ-049-L-MAIN	Bolt diameter (mm)	ASJ-049-L-MAIN M16 x 55 STD 4014 GR 8.8 HOLE D=18 TOL=2
ASJ-049-R-MAIN	Bolt diameter (mm)	ASJ-049-R-MAIN M16 x 55 STD 4014 GR 8.8 HOLE D=18 TOL=2
ASJ-049-WEB-1-1	Bolt diameter (mm)	ASJ-049-WEB-1-1 M16 x 55 STD 4014 GR 8.8 HOLE D=18 TOL=2

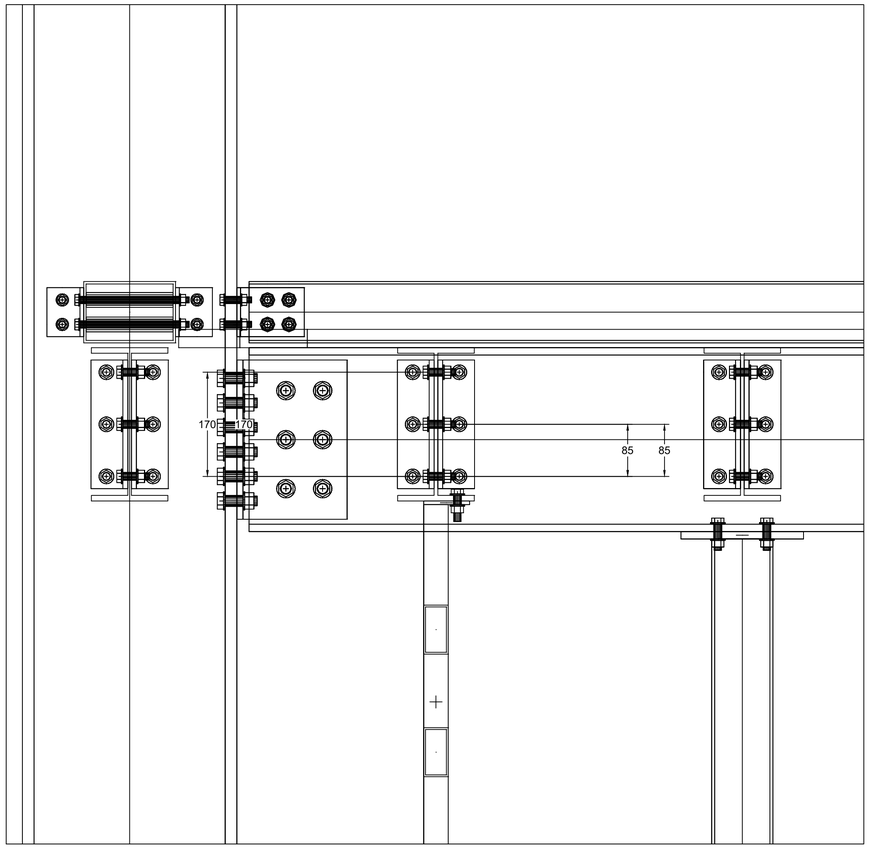
K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-02 FLOOR BEAM TO COLUMN - DOUBLE ANGLE CLEAT, WEB BOLTED

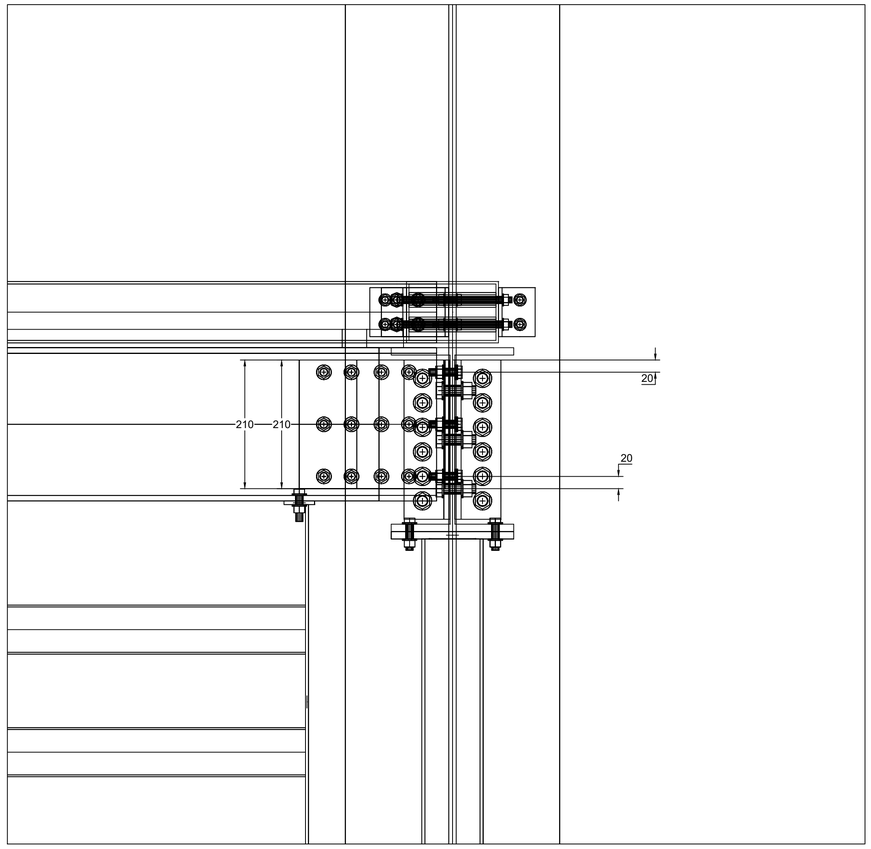
SHEET	SCALE	REVISION
S-602	1:5 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

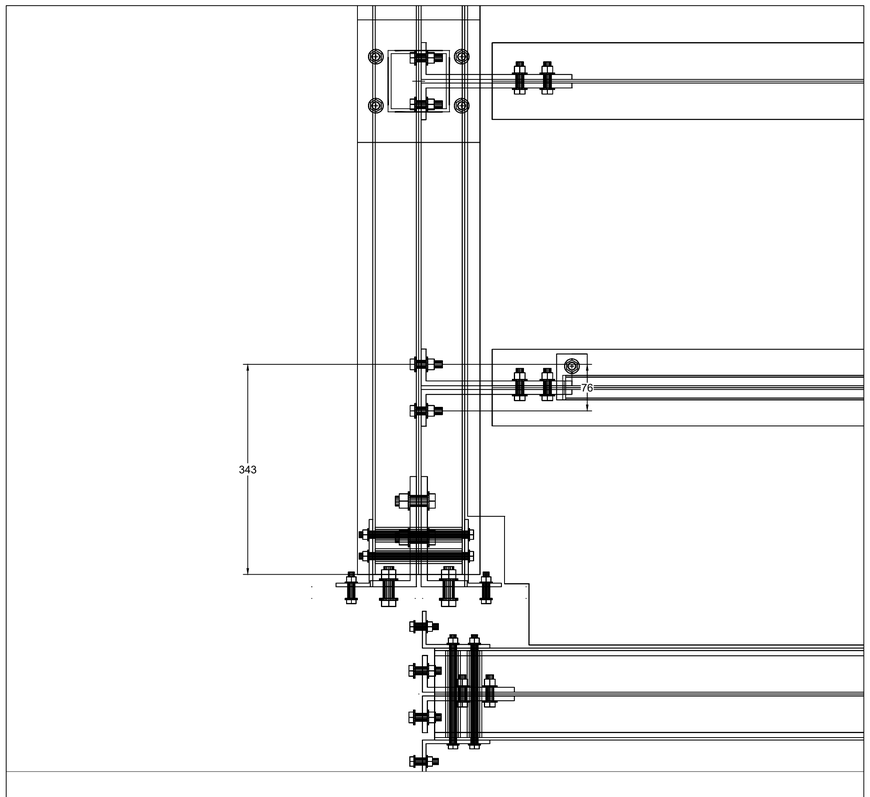
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-03 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:5



JD-03 VIEW B - SECTION (LOOKING +Y) SCALE 1:5



JD-03 VIEW C - PLAN (LOOKING DOWN) SCALE 1:5

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-03 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
PIN001-FB01	BEAM	I 300x200x8x12 (custom)	ASTM A36 (model label)	L=5610
PIN001-FJ02-R	BEAM	HN250x125x6x9	ASTM A36 (model label)	L=5560
ASJ-059-L	BEAM	JSEC-03	ASTM A36 (model label)	L=210
ASJ-059-R	BEAM	JSEC-03	ASTM A36 (model label)	L=210
ASJ-059-L-MAIN	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=3 HOLE D=13
ASJ-059-R-MAIN	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=3 HOLE D=13
ASJ-059-WEB-1-1	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-059-WEB-0-0	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-059-WEB-0-1	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-059-WEB-0-2	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-059-WEB-1-0	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-059-WEB-1-2	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13

CONNECTION PARAMETERS - JD-03 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
PIN001-FB01	Section	PIN001-FB01 I 300x200x8x12 (custom)
PIN001-FJ02-R	Section	PIN001-FJ02-R HN250x125x6x9
ASJ-059-L	Section	ASJ-059-L JSEC-03
ASJ-059-R	Section	ASJ-059-R JSEC-03
ASJ-059-L-MAIN	Bolt diameter (mm)	ASJ-059-L-MAIN M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
ASJ-059-R-MAIN	Bolt diameter (mm)	ASJ-059-R-MAIN M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
ASJ-059-WEB-1-1	Bolt diameter (mm)	ASJ-059-WEB-1-1 M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1

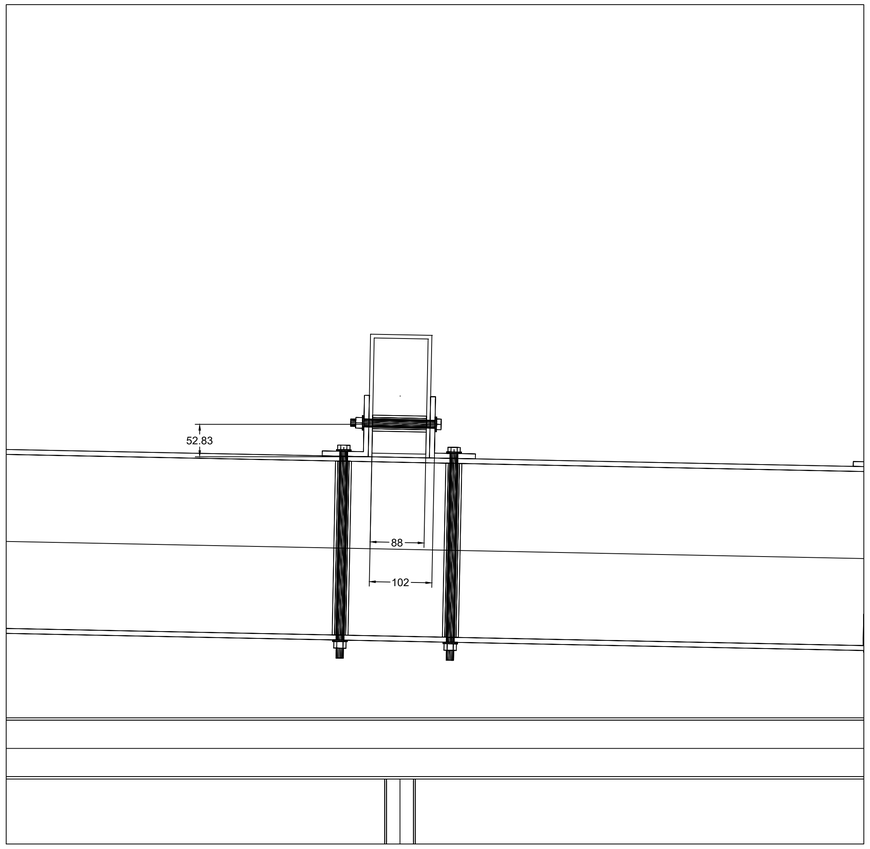
K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-03 FLOOR JOIST TO FLOOR BEAM - DOUBLE ANGLE CLEAT SUPPORT

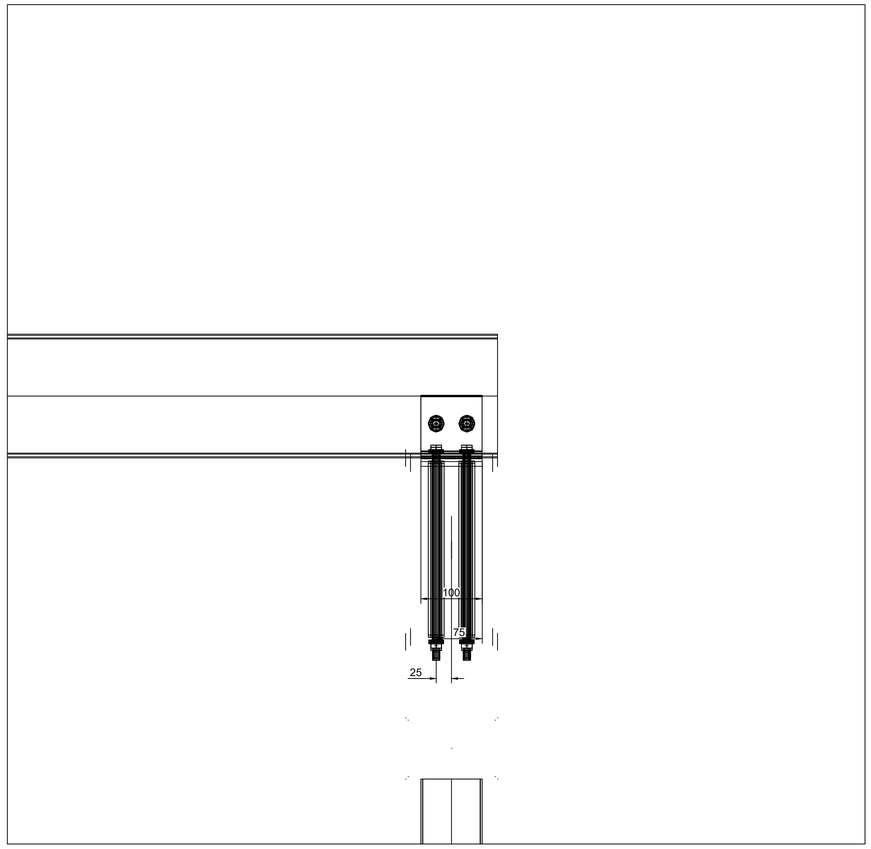
SHEET	SCALE	REVISION
S-603	1:5 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

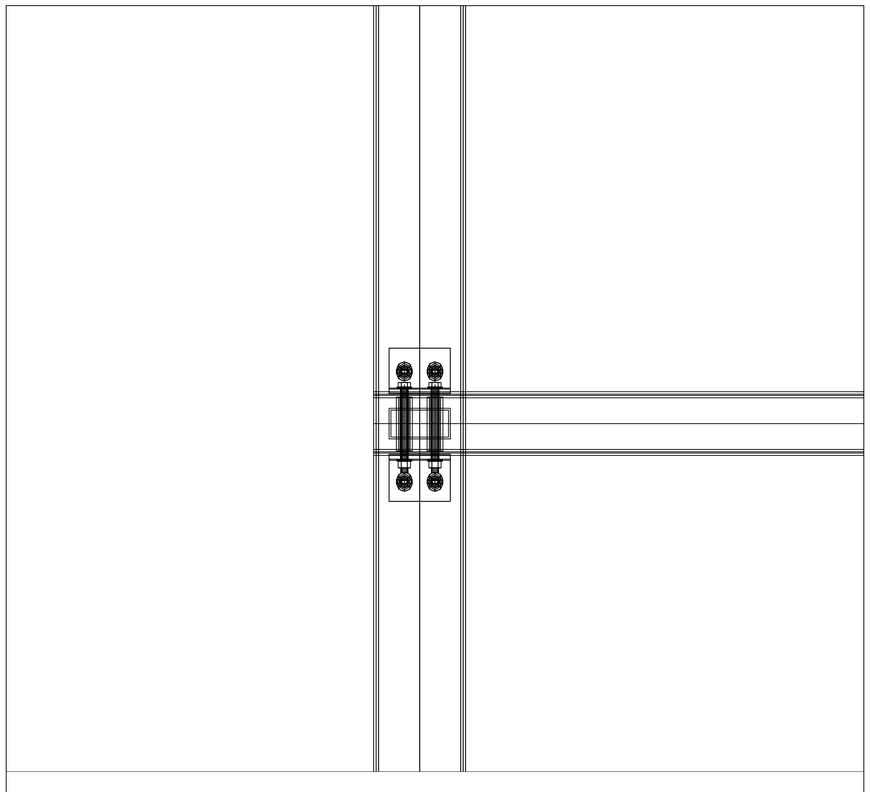
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-04 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:5



JD-04 VIEW B - SECTION (LOOKING +Y) SCALE 1:5



JD-04 VIEW C - PLAN (LOOKING DOWN) SCALE 1:5

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-04 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
PIN001-RB03	BEAM	RHS 300x150x8 (custom)	ASTM A36 (model label)	L=5911
PIN001-RP03-04	BEAM	RHS200x100x6	ASTM A36 (model label)	L=5870
ASJ-041-L	BEAM	JSEC-04	ASTM A36 (model label)	L=100
ASJ-041-R	BEAM	JSEC-04	ASTM A36 (model label)	L=100
ASJ-041-BEAM-SLEEVE-1	BEAM	JSEC-05	ASTM A36 (model label)	L=88
ASJ-041-BEAM-SLEEVE-1-BOLT	BOLT PATTERN	M12 L=140 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-041-BEAM-SLEEVE-0	BEAM	JSEC-05	ASTM A36 (model label)	L=88
ASJ-041-BEAM-SLEEVE-0-BOLT	BOLT PATTERN	M12 L=140 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-041-L-MAIN-SLEEVE-0	BEAM	JSEC-05	ASTM A36 (model label)	L=284
ASJ-041-L-MAIN-SLEEVE-0-BOLT	BOLT PATTERN	M12 L=340 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-041-L-MAIN-SLEEVE-1	BEAM	JSEC-05	ASTM A36 (model label)	L=284
ASJ-041-L-MAIN-SLEEVE-1-BOLT	BOLT PATTERN	M12 L=340 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-041-R-MAIN-SLEEVE-0	BEAM	JSEC-05	ASTM A36 (model label)	L=284
ASJ-041-R-MAIN-SLEEVE-0-BOLT	BOLT PATTERN	M12 L=340 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
ASJ-041-R-MAIN-SLEEVE-1	BEAM	JSEC-05	ASTM A36 (model label)	L=284
ASJ-041-R-MAIN-SLEEVE-1-BOLT	BOLT PATTERN	M12 L=340 STD 4014 GR 8.8	8.8	N=1 HOLE D=13

CONNECTION PARAMETERS - JD-04 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
PIN001-RB03	Section	PIN001-RB03 RHS 300x150x8 (custom)
PIN001-RP03-04	Section	PIN001-RP03-04 RHS200x100x6
ASJ-041-L	Section	ASJ-041-L JSEC-04
ASJ-041-R	Section	ASJ-041-R JSEC-04
ASJ-041-BEAM-SLEEVE-1	Section	ASJ-041-BEAM-SLEEVE-1 JSEC-05
ASJ-041-BEAM-SLEEVE-1-BOLT	Bolt diameter (mm)	ASJ-041-BEAM-SLEEVE-1-BOLT M12 x 140 STD 4014 GR 8.8 HOLE D=13 TOL=1

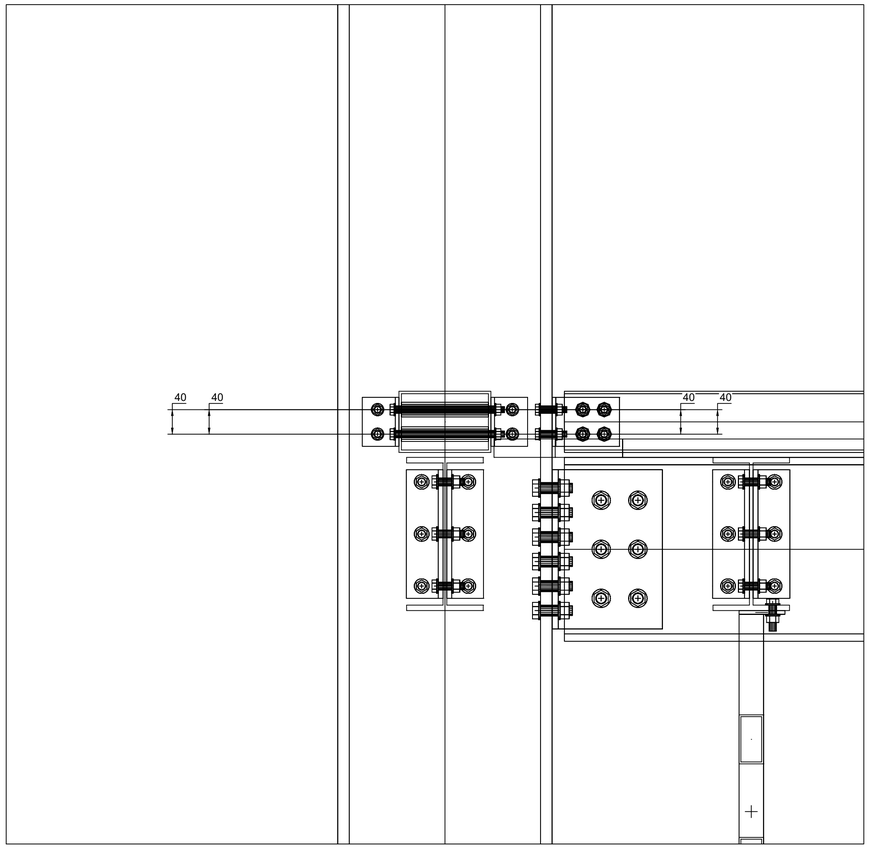
K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-04 ROOF PURLIN TO RAFTER - ANGLE SEAT, SLEEVED BOLT

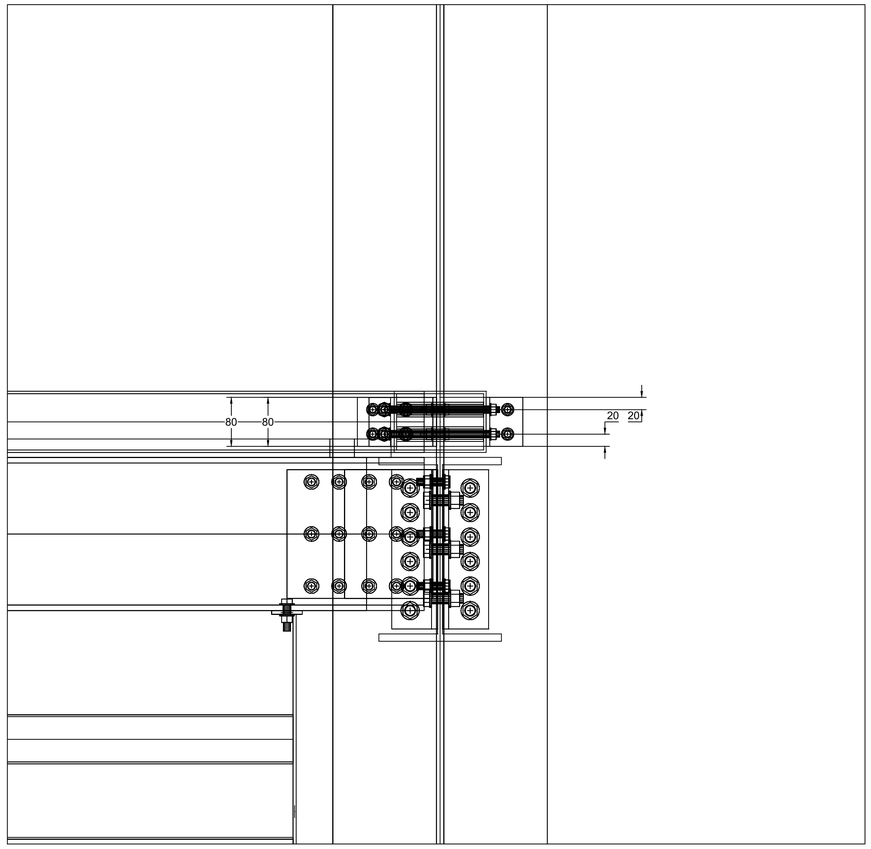
SHEET	SCALE	REVISION
S-604	1:5 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

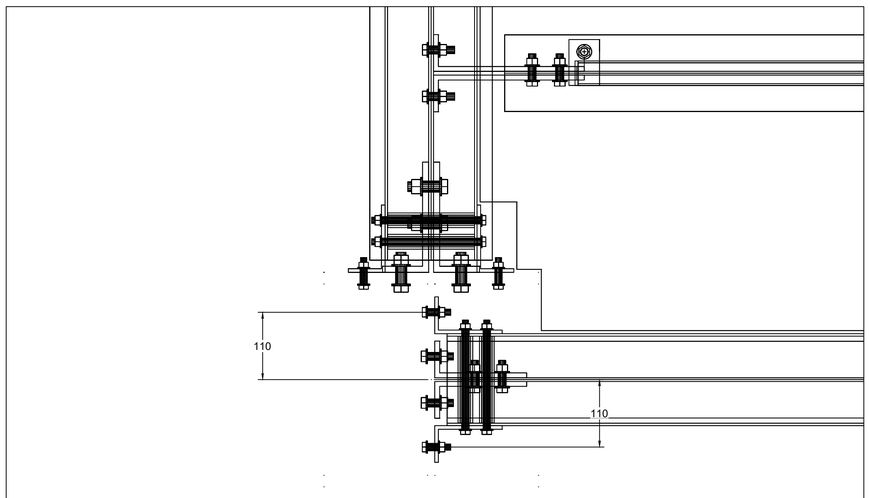
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-05 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:5



JD-05 VIEW B - SECTION (LOOKING +Y) SCALE 1:5



JD-05 VIEW C - PLAN (LOOKING DOWN) SCALE 1:5

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-05 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
PIN001-C01	BEAM	HW350x350x12x19	ASTM A36 (model label)	L=7003
PIN001-WR01-01-R	BEAM	RHS 100x150x4 (custom)	ASTM A36 (model label)	L=5748
ASJ-109-L	BEAM	JSEC-06	ASTM A36 (model label)	L=80
ASJ-109-R	BEAM	JSEC-06	ASTM A36 (model label)	L=80
ASJ-109-BEAM-SLEEVE-1	BEAM	JSEC-07	ASTM A36 (model label)	L=142
ASJ-109-L-MAIN	BOLT PATTERN	M10 L=40 STD 4014 GR 8.8	8.8	N=2 HOLE D=12
ASJ-109-R-MAIN	BOLT PATTERN	M10 L=40 STD 4014 GR 8.8	8.8	N=2 HOLE D=12
ASJ-109-BEAM-SLEEVE-1-BOLT	BOLT PATTERN	M10 L=180 STD 4014 GR 8.8	8.8	N=1 HOLE D=12
ASJ-119-SHOP	WELD	a=2 L=100	SEE TECHNICAL NOTES	OWNERS PIN001-WR01-01-R+ PIN001-WS01-03-01
ASJ-109-BEAM-SLEEVE-2	BEAM	JSEC-07	ASTM A36 (model label)	L=142
ASJ-109-BEAM-SLEEVE-3	BEAM	JSEC-07	ASTM A36 (model label)	L=142
ASJ-109-BEAM-SLEEVE-4	BEAM	JSEC-07	ASTM A36 (model label)	L=142
ASJ-109-BEAM-SLEEVE-2-BOLT	BOLT PATTERN	M10 L=180 STD 4014 GR 8.8	8.8	N=1 HOLE D=12
ASJ-109-BEAM-SLEEVE-3-BOLT	BOLT PATTERN	M10 L=180 STD 4014 GR 8.8	8.8	N=1 HOLE D=12
ASJ-109-BEAM-SLEEVE-4-BOLT	BOLT PATTERN	M10 L=180 STD 4014 GR 8.8	8.8	N=1 HOLE D=12

CONNECTION PARAMETERS - JD-05 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
PIN001-C01	Section	PIN001-C01 HW350x350x12x19
PIN001-WR01-01-R	Section	PIN001-WR01-01-R RHS 100x150x4 (custom)
ASJ-109-L	Section	ASJ-109-L JSEC-06
ASJ-109-R	Section	ASJ-109-R JSEC-06
ASJ-109-BEAM-SLEEVE-1	Section	ASJ-109-BEAM-SLEEVE-1 JSEC-07
ASJ-109-L-MAIN	Bolt diameter (mm)	ASJ-109-L-MAIN M10 x 40 STD 4014 GR 8.8 HOLE D=12 TOL=2
ASJ-109-R-MAIN	Bolt diameter (mm)	ASJ-109-R-MAIN M10 x 40 STD 4014 GR 8.8 HOLE D=12 TOL=2
ASJ-109-BEAM-SLEEVE-1-BOLT	Bolt diameter (mm)	ASJ-109-BEAM-SLEEVE-1-BOLT M10 x 180 STD 4014 GR 8.8 HOLE D=12 TOL=2
ASJ-119-SHOP	Weld throat a (mm)	ASJ-119-SHOP FILLET a=2 L=100

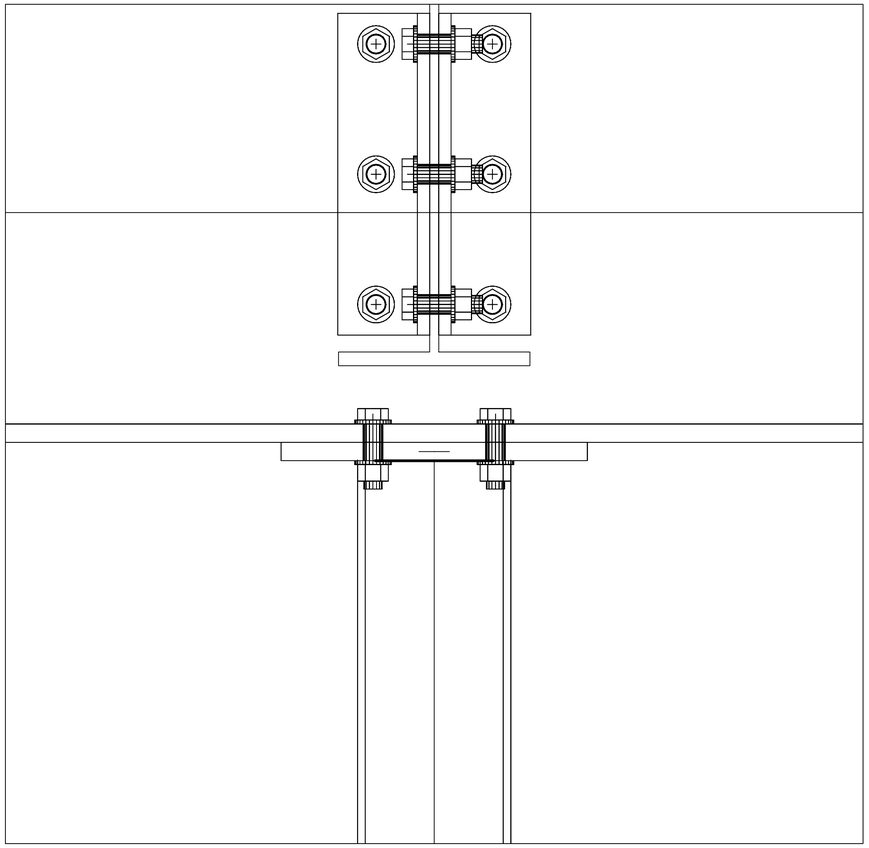
K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-05 WALL RAIL TO COLUMN CLEAT AND WALL STUD SHOP WELD

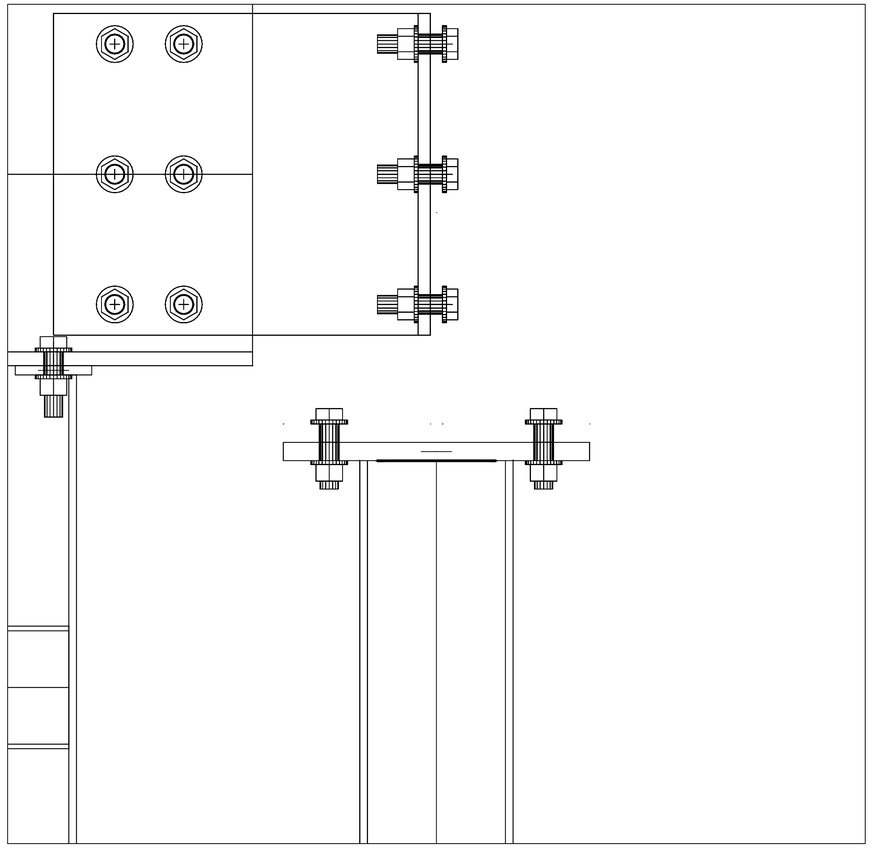
SHEET	SCALE	REVISION
S-605	1:5 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

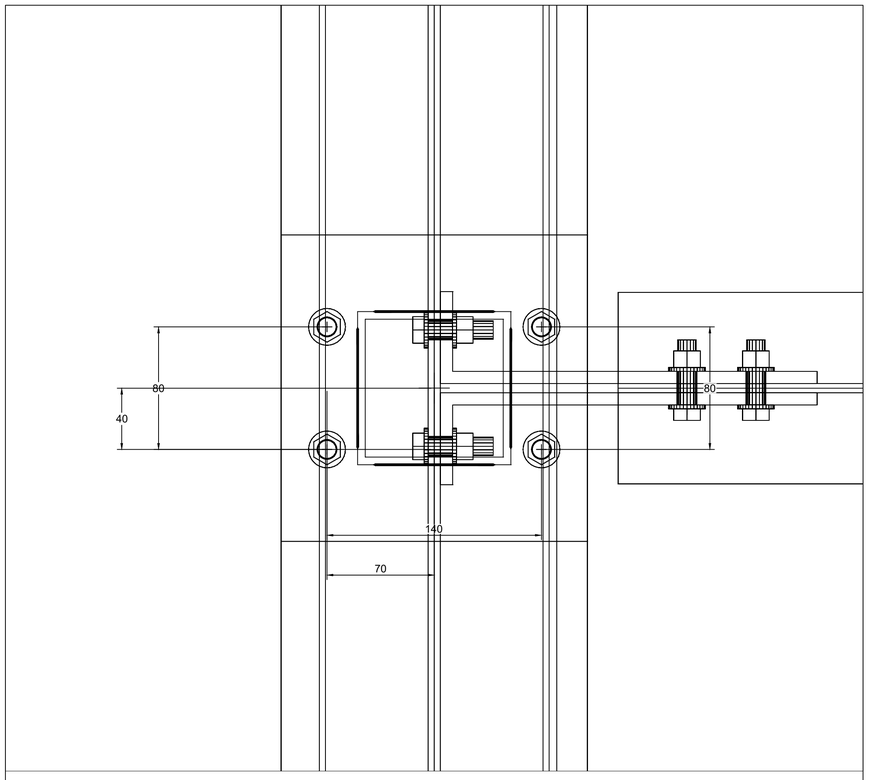
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



JD-06 VIEW A - ELEVATION ON GRID PLANE (LOOKING +X) SCALE 1:2



JD-06 VIEW B - SECTION (LOOKING +Y) SCALE 1:2



JD-06 VIEW C - PLAN (LOOKING DOWN) SCALE 1:2

NOTES

1. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
2. MEMBER SECTIONS AND MATERIALS: SEE S-600.
3. CONNECTION REFERENCES: S-601 TO S-607.
4. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
5. "ASTM A36" IN THE BOM IS THE MODEL MATERIAL LABEL. THE PROCUREMENT GRADE AND PRODUCT STANDARD OF EACH MEMBER FAMILY ARE DESIGN PARAMETERS LISTED IN THE STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).
6. BOLT ASSEMBLIES: SIZE, LENGTH, PRODUCT STANDARD, PROPERTY CLASS AND HOLE DIAMETER AS SCHEDULED IN THE BOM.

BOM - DETAIL JD-06 - ONE JOINT, CONNECTION PARTS

PART ID	MODEL TYPE	SIZE AS MODELLED	MATERIAL	REMARK
I33-P01	BEAM	SHS100x100x5	ASTM A36 (model label)	L=676
PIN001-FB01	BEAM	I 300x200x8x12 (custom)	ASTM A36 (model label)	L=5610
I33-P01-CAP	PLATE	PL12 x 200 x 200	ASTM A36 (model label)	CONTOUR 4 PTS AREA=40000 mm2 WEIGHT=3768
I33-P01-BASE	PLATE	PL12 x 200 x 200	ASTM A36 (model label)	CONTOUR 4 PTS AREA=40000 mm2 WEIGHT=3768
I33-P01-B1	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
I33-P01-B2	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
I33-P01-B3	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
I33-P01-B4	BOLT PATTERN	M12 L=45 STD 4014 GR 8.8	8.8	N=1 HOLE D=13
I33-P01-WB-X-1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-BASE
I33-P01-WB-X1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-BASE
I33-P01-WB-Y-1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-BASE
I33-P01-WB-Y1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-BASE
I33-P01-WC-X-1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-CAP
I33-P01-WC-X1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-CAP
I33-P01-WC-Y-1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-CAP
I33-P01-WC-Y1	WELD	a=3 L=80	SEE TECHNICAL NOTES	OWNERS I33-P01+I33-P01-CAP

CONNECTION PARAMETERS - JD-06 (VALUE / MEMBER / PARAMETER)

OBJECT	PARAMETER	MODEL PARAMETER
I33-P01	Section	I33-P01 SHS100x100x5
PIN001-FB01	Section	PIN001-FB01 I 300x200x8x12 (custom)
I33-P01-CAP	Thickness	I33-P01-CAP PL t=12
I33-P01-CAP	Length	I33-P01-CAP L=200
I33-P01-CAP	Width	I33-P01-CAP W=200
I33-P01-BASE	Thickness	I33-P01-BASE PL t=12
I33-P01-BASE	Length	I33-P01-BASE L=200
I33-P01-BASE	Width	I33-P01-BASE W=200
I33-P01-B1	Bolt diameter (mm)	I33-P01-B1 M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
I33-P01-B2	Bolt diameter (mm)	I33-P01-B2 M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
I33-P01-B3	Bolt diameter (mm)	I33-P01-B3 M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
I33-P01-B4	Bolt diameter (mm)	I33-P01-B4 M12 x 45 STD 4014 GR 8.8 HOLE D=13 TOL=1
I33-P01-WB-X-1	Weld throat a (mm)	I33-P01-WB-X-1 FILLET a=3 L=80
I33-P01-WB-X1	Weld throat a (mm)	I33-P01-WB-X1 FILLET a=3 L=80
I33-P01-WB-Y-1	Weld throat a (mm)	I33-P01-WB-Y-1 FILLET a=3 L=80
I33-P01-WB-Y1	Weld throat a (mm)	I33-P01-WB-Y1 FILLET a=3 L=80
I33-P01-WC-X-1	Weld throat a (mm)	I33-P01-WC-X-1 FILLET a=3 L=80
I33-P01-WC-X1	Weld throat a (mm)	I33-P01-WC-X1 FILLET a=3 L=80
I33-P01-WC-Y-1	Weld throat a (mm)	I33-P01-WC-Y-1 FILLET a=3 L=80
I33-P01-WC-Y1	Weld throat a (mm)	I33-P01-WC-Y1 FILLET a=3 L=80

K&K Data / PIN001
TYPICAL CONNECTION DETAILS

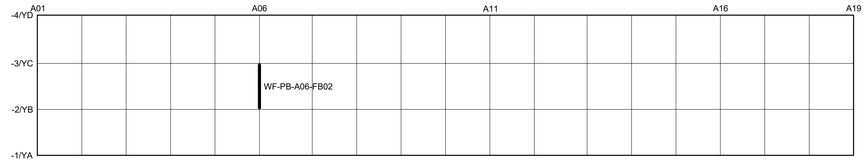
JD-06 SHORT POST - WELDED CAP PLATE AND FOOT PLATE

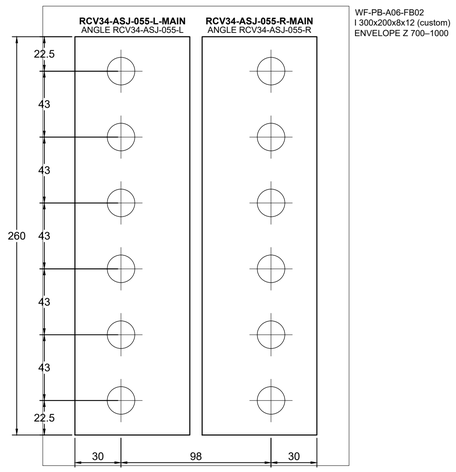
SHEET	SCALE	REVISION
S-606	1:2 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

KEY PLAN — WF-PB-A06-FB02 LOCATION 1:400

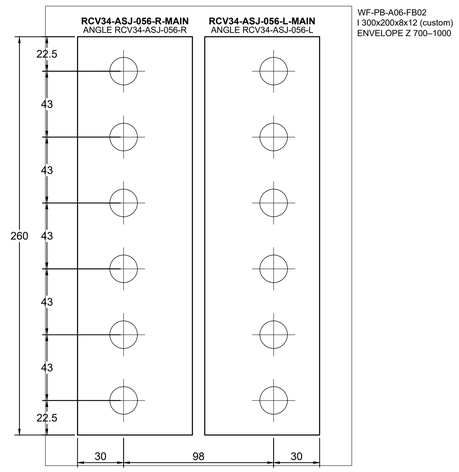




VIEW 1 JD-02 AT PIN001-C02 (AXIS A06, Y = 6 000), COLUMN-SIDE LEGS

SCALE 1:2

ELEVATION ON THE COLUMN FLANGE FACE (Y = 6156), LOOKING ALONG THE BEAM TOWARD THE COLUMN. MODEL X / Z SHOWN.



VIEW 2 JD-02 AT PIN001-C03 (AXIS A06, Y = 12 000), COLUMN-SIDE LEGS

SCALE 1:2

ELEVATION ON THE COLUMN FLANGE FACE (Y = 11844), LOOKING ALONG THE BEAM TOWARD THE COLUMN. MODEL X / Z SHOWN.

AMENDED GROUPS — BOLT CENTRES (MODEL mm, PROJECT COORDINATES)

GROUP	ANGLE	X	Y	Z OF 6 BOLTS	HOST HOLES IN
RCV34-ASJ-055-L-MAIN	RCV34-ASJ-055-L	28951	6156	742.5 / 785.5 / 828.5 / 871.5 / 914.5 / 957.5	PIN001-C02-FRAME02@ FRAME_AX06, RCV34-ASJ-055-L
RCV34-ASJ-055-R-MAIN	RCV34-ASJ-055-R	29049	6156	742.5 / 785.5 / 828.5 / 871.5 / 914.5 / 957.5	PIN001-C02-FRAME02@ FRAME_AX06, RCV34-ASJ-055-R
RCV34-ASJ-056-L-MAIN	RCV34-ASJ-056-L	29049	11844	742.5 / 785.5 / 828.5 / 871.5 / 914.5 / 957.5	PIN001-C03-FRAME02@ FRAME_AX06, RCV34-ASJ-056-L
RCV34-ASJ-056-R-MAIN	RCV34-ASJ-056-R	28951	11844	742.5 / 785.5 / 828.5 / 871.5 / 914.5 / 957.5	PIN001-C03-FRAME02@ FRAME_AX06, RCV34-ASJ-056-R

GROUP GEOMETRY (EACH OF THE FOUR GROUPS)

ITEM	VALUE
BOLTS PER GROUP / TOTAL	6 x M16 / 24
HOLE DIAMETER	18
CENTRES ALONG ANGLE	22.5 + 5 x 43 + 22.5 = 260
ANGLE LENGTH / CENTRE	260 / UNCHANGED
HOST HOLES (ANGLE + COLUMN FLANGE)	48
STEEL OR BOLTS ADDED	NONE

REQUIREMENTS AND TOLERANCE

ITEM	VALUE
MINIMUM CENTRE SPACING (2-2/3 d, d = 16)	2-2/3 x 16 = 42.6666667
MINIMUM END DISTANCE	22
HOLE CENTRES AND CUT ENDS FROM COMMON DATUM	±0.15 EACH
WORST-CASE TOLERANCE STACK, PITCH / END	42.70 / 22.20
INSPECTION	EVERY PITCH AND END DISTANCE

CONTROL NOTES

1. SCOPE: THIS SHEET APPLIES ONLY TO THE FOUR COLUMN-SIDE BOLT GROUPS LISTED, ON FLOOR MAIN BEAM WF-PB-A06-FB02 (AXIS A06, Y = 6 000 TO 12 000). JD-03 AND ALL OTHER JD-02 INSTANCES ARE NOT AMENDED BY THIS SHEET; S-602 REMAINS THE TYPICAL R04 TEMPLATE.
2. THE WHOLE-HOUSE R04 VIEWS SHOW THE UNAMENDED GEOMETRY OF THESE GROUPS AND POINT TO THIS SHEET. S-607 CONTROLS THE FOUR LISTED COLUMN-SIDE GROUPS.
3. THE TOLERANCE STACK VALUES RESULT FROM THE STATED ±0.15 TOLERANCE; THEY ARE NOT ACCEPTANCE LIMITS. SUPPLIER CAPABILITY FOR THIS TOLERANCE IS NOT YET CONFIRMED.
4. CONNECTION STRENGTH OF THESE JOINTS IS NOT RATED ON THIS SHEET. OPEN CONDITIONS: DESIGN ACTIONS AT A COMMON REFERENCE POINT; ANGLE OUTSTANDING-LEG BENDING AND PRYING; BEAM WEB OUT-OF-PLANE; BEAM-END TORSIONAL RESTRAINT; LOCAL ACTIONS ON THE BEAM WEB-FLANGE WELDS.
5. WELD, CHAMFER, EDGE-DISTANCE AND MATERIAL CONDITIONS OF WF-PB-A06-FB02 CONNECTIONS ARE UNCHANGED: STRUCTURAL TECHNICAL NOTES, APPENDIX "WF-PB-A06-FB02 CONNECTION REQUIREMENTS". TOOL-ACCESS CHECK RECORDED FOR THESE 24 BOLTS ONLY.
6. MATERIAL LABEL OF ANGLES AND BEAM: ASTM A36 (MODEL LABEL). BOLT PROPPERTY CLASS AND PRODUCT STANDARD AS IN THE R04 MODEL; EQUIVALENCE WITH OTHER BOLT STANDARDS IS NOT ASSUMED.
7. COORDINATES REFER TO THE PROJECT GRID SHOWN; THE TWO VIEWS DEFINE ONLY THE LISTED COLUMN-SIDE GROUPS.

K&K Data / PIN001
TYPICAL CONNECTION DETAILS

JD-02 AMENDMENT WF-PB-A06-FB02 COLUMN-SIDE BOLT GROUPS (4 GROUPS)

SHEET	SCALE	REVISION
S-607	AS SHOWN ON A1 841x594	P2 / 2026-10

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

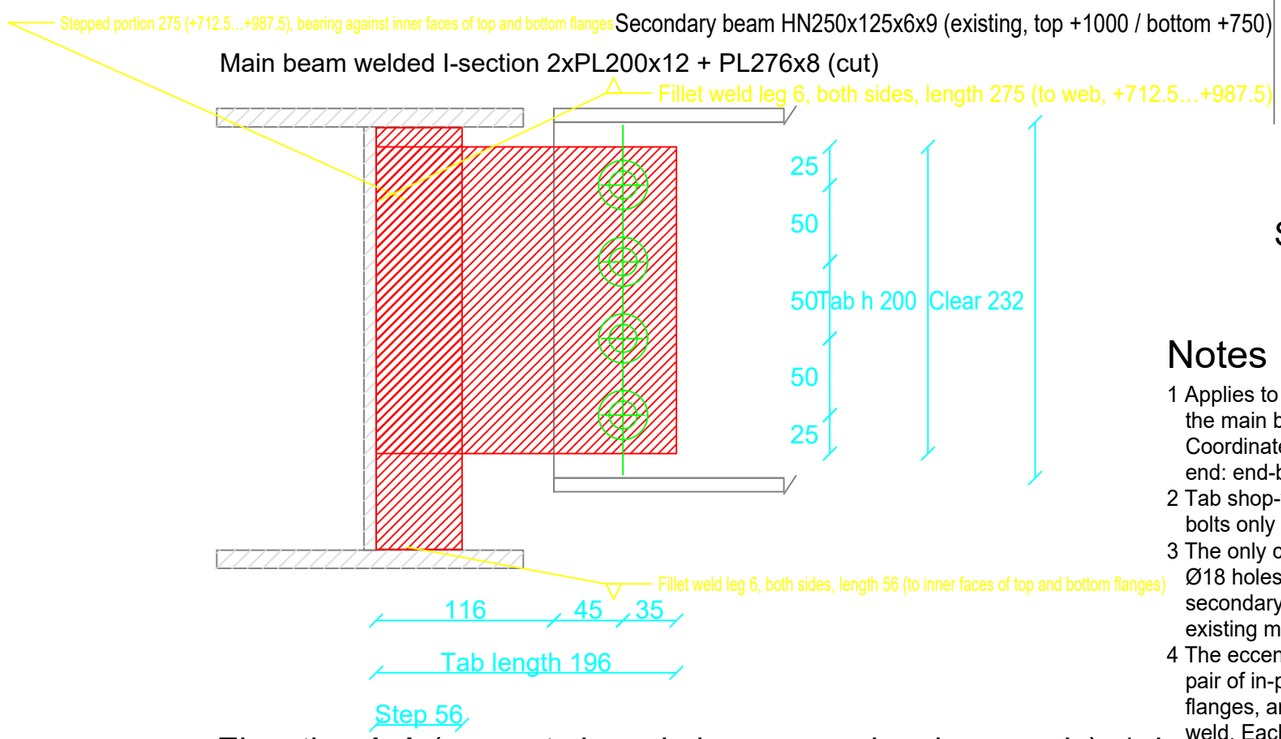
PIN001 floor secondary beam end connection details SP-T1

Drawing PIN001-JC-01 Rev B

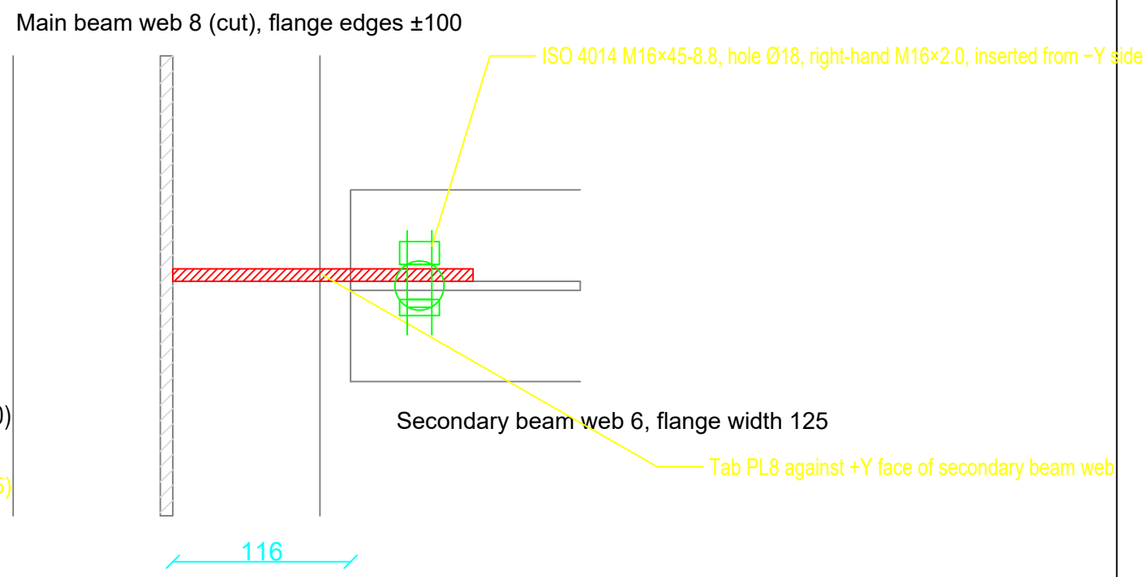
Basis AISC 360-22 (LRFD); units mm; elevations are model Z; plot scale 1:4

Parts list

Part No.	Size	Qty per end
TAB	PL8 stepped profile, height 200, length 196, stepped portion 275 long 56	1
BOLT	ISO 4014 M16×45-8.8, nut class 8, washer 200HV, hole Ø18	4
W-WEB	Fillet weld leg 6, length 275 (+712.5…+987.5), both sides	2
W-FL	Fillet weld leg 6, length 56, both sides × inner faces of top and bottom flanges	4



Elevation A-A (support viewed along secondary beam axis) 1:4



Section B-B (horizontal, through bolt centres) 1:4

Connection design requirements (TO BE COORDINATED):

A End reaction V at each end: by the structural designer for the actual load cases.

B This connection introduces a torque T = V × 0.161 m into the supporting main beam, checked with V of that end in the same load case. Secondary beams at the same position on both sides do not justify torque cancellation; unequal loads do not cancel.

C The couple F = 0.586 V enters the web through the flanges and relies on the main beam web–flange connection: TO BE COORDINATED.

D Effective width for out-of-plane bending of the main beam web: TO BE COORDINATED with the check of the supporting member. Connection resistance TO BE VERIFIED following the supporting-member check.

Notes

1 Applies to 88 ends: secondary beam end face 116 from the main beam web face, 20 from the flange edge. Coordinates, part numbers and hole positions of each end: end-by-end schedule issued with the drawing.

2 Tab shop-welded to the main beam before delivery; bolts only on site, no site welding.

3 The only change to existing members is drilling 400 Ø18 holes (4 per end) in the webs of 50 existing secondary beams; no drilling in supporting members; existing members are not moved, cut or strengthened.

4 The eccentric moment V·a has two parallel paths: a pair of in-plane horizontal forces at the top and bottom flanges, and the bending component of the vertical web weld. Each path is checked for the full V·a; the actual split is not derived from a stiffness analysis, and neither path is taken as the only path.

5 Top and bottom edges of the stepped portion fit the flange inner faces, root gap ≤ 1.5 mm; where g > 0, increase the weld leg by g.

6 Secondary beam web 4×Ø18 shop drilled, 45 from end face, spacing 50, plate edge distance 25; tab height 200, leaving 8 mm above and below the tangent points of the web root radius.

7 Electrode E7018, certified deposited metal tensile strength ≥ 480 MPa.

8 Fillet welds: minimum leg 5 mm for the 8 mm thinner part; 6 mm is specified, which is also the maximum along an 8 mm plate edge; the weld does not project beyond the plate edge.

9 Installation: secondary beam offset 70 in Y, lowered vertically to level, then shifted 70 into position with the tab entering between the flanges; bolts inserted from the −Y side, nuts on the +Y side.

10 At 20 of these ends existing post cap bolts lie below (nut top +733): the stepped portion stops at axis ±60, leaving 11.0 mm to the nut socket; do not lengthen.

11 Material ASTM A36.

K&K Data / PIN001 · D02 FLOOR AND PILE HEAD JOINT DETAILS

PIN001 floor secondary beam end connection details SP-T1

SHEET	SCALE	REVISION
PIN001-JC-01	AS SHOWN	Rev B / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES

End connection schedule (100 ends), plate list (124 parts) and web hole schedule (400 holes): · BY FABRICATOR, coordinated with these details.

K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

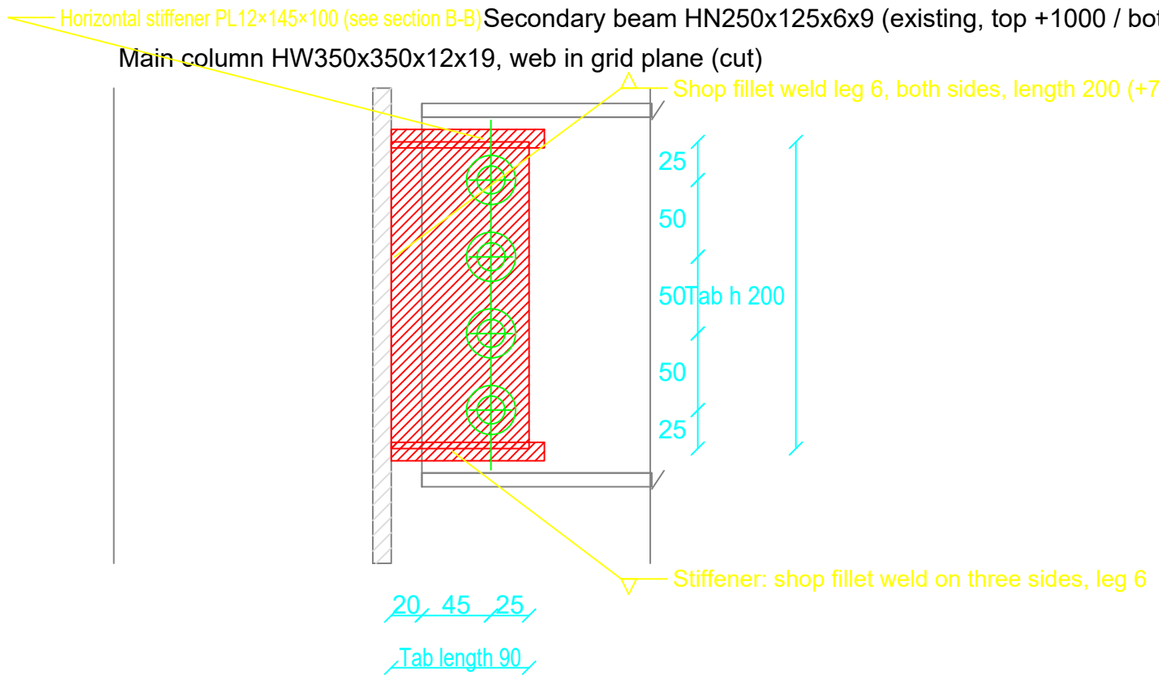
PIN001 floor secondary beam end connection details SP-T2

Drawing PIN001-JC-02 Rev B

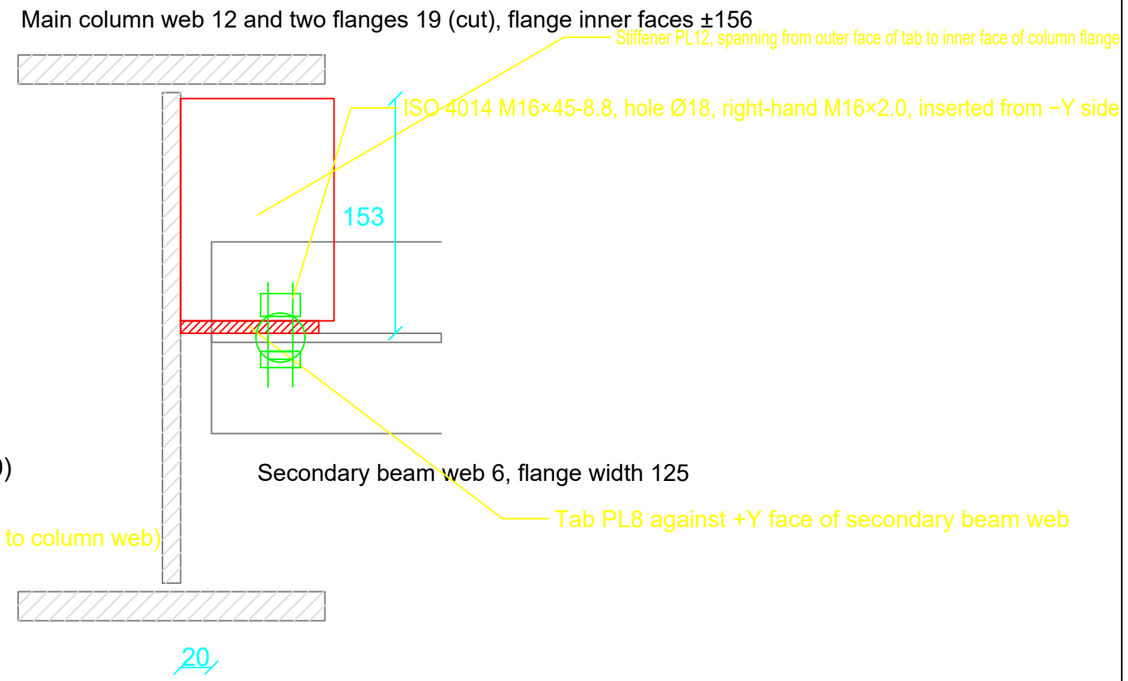
Basis AISC 360-22 (LRFD); units mm; elevations are model Z; plot scale 1:4

Parts list

Part No.	Size	Qty per end
TAB	PL8, height 200 (+775…+975), length 90	1
STIF	PL12, width 145, length 100, against outer face of tab	2
BOLT	ISO 4014 M16×45-8.8, nut class 8, washer 200HV, hole Ø18	4
W-WEB	Shop fillet weld leg 6, length 200, both sides, to column web	2
W-STIF	Shop fillet weld leg 6: to column web 145, to column flange 100, to tab 100, top and bottom runs each	12



Elevation A-A (support viewed along secondary beam axis) 1:4



Section B-B (horizontal, through bolt centres) 1:4

Connection design requirements (TO BE COORDINATED):

A End reaction V at each end: by the structural designer for the actual load cases.
B This connection introduces an additional vertical reaction and a torque T = V × 0.065 m into the main column, checked in the same load case.
C Effective width for out-of-plane bending of the main column web: TO BE COORDINATED with the check of the supporting member. Connection resistance TO BE VERIFIED following the supporting-member check.

Notes

1 Applies to 12 ends: the secondary beam passes between the two flanges of the main column, end face 20 from the column web face, at Y=0 / 6000 / 12000. End-by-end coordinates and part numbers: schedule issued with the drawing.
2 The column flange and tab are not coplanar, so a horizontal stiffener is added above and below the tab to carry the couple in its own plane to the column flange inner face. Out-of-plane bending of the column web: TO BE COORDINATED, see condition of use C.
3 Stiffener bottom +767 / top +983, spanning from the tab outer face Y+11 to the column flange inner face Y+156.
4 Tab and 2 stiffeners shop-welded to the main column before delivery; main columns are not drilled; no welding, cutting or hot work on main columns on site, bolts only.
5 Drilling only in the secondary beam web: 4 × Ø18 per end, shop drilled.
6 Electrode E7018, certificate ≥ 480 MPa; for the 8 mm thinner part the minimum leg is 5 mm, 6 mm is specified, which is also the maximum along an 8 mm plate edge; the weld does not project beyond the plate edge.
7 Installation as SP-T1: offset 70 in Y, lower, then shift into position; bolts inserted from the −Y side.
8 Directly above these 12 ends at +1008 there is an existing longitudinal member (full bay span, both ends connected to main columns, no bolts shared with the secondary beam): install the secondary beam before that member, otherwise it cannot be lowered vertically.
9 Material ASTM A36.

K&K Data / PIN001 · D02 FLOOR AND PILE HEAD JOINT DETAILS

PIN001 floor secondary beam end connection details SP-T2

SHEET	SCALE	REVISION
PIN001-JC-02	AS SHOWN	Rev B / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES

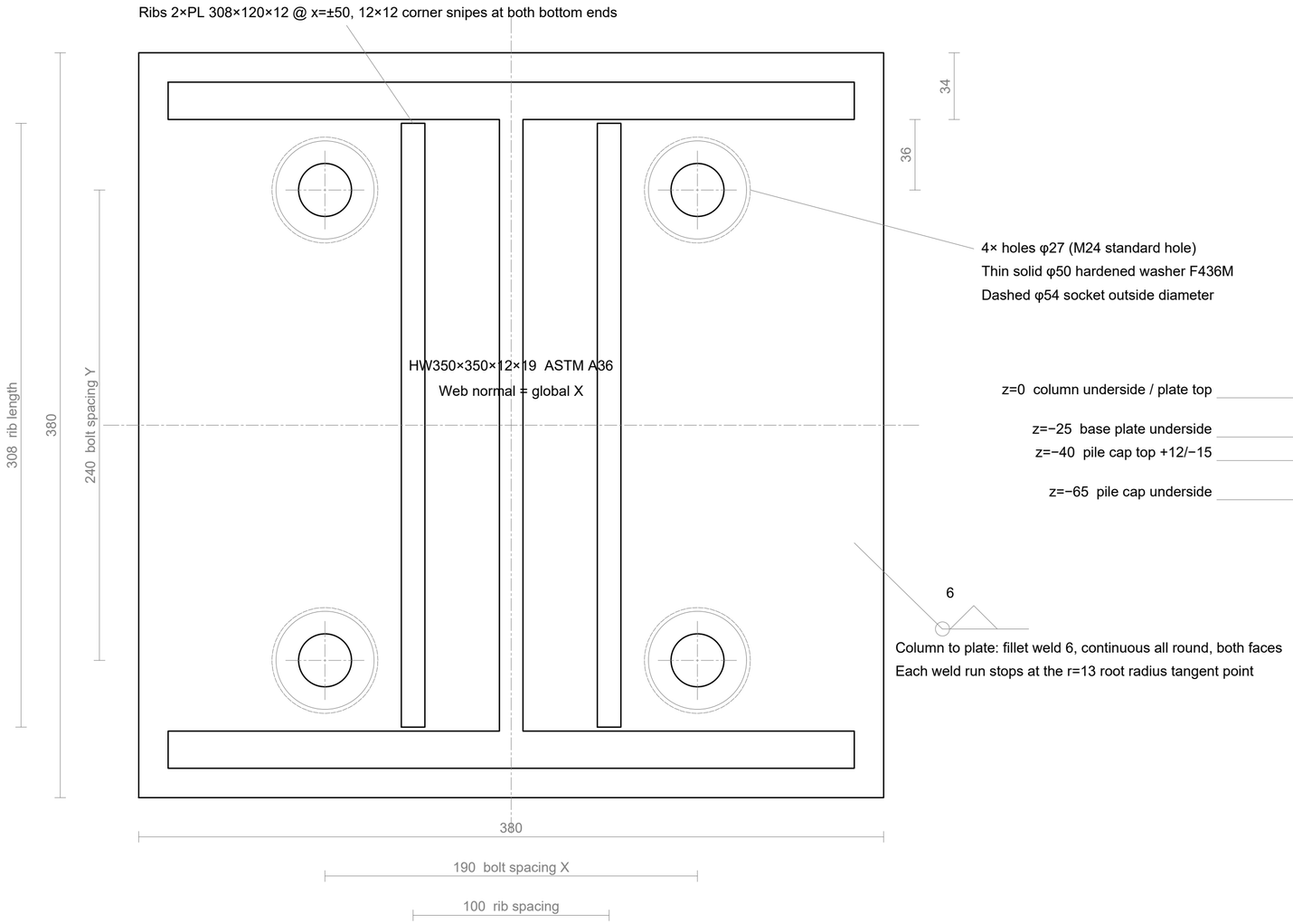
End connection schedule (100 ends), plate list (124 parts) and web hole schedule (400 holes): · BY FABRICATOR, coordinated with these details.

K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

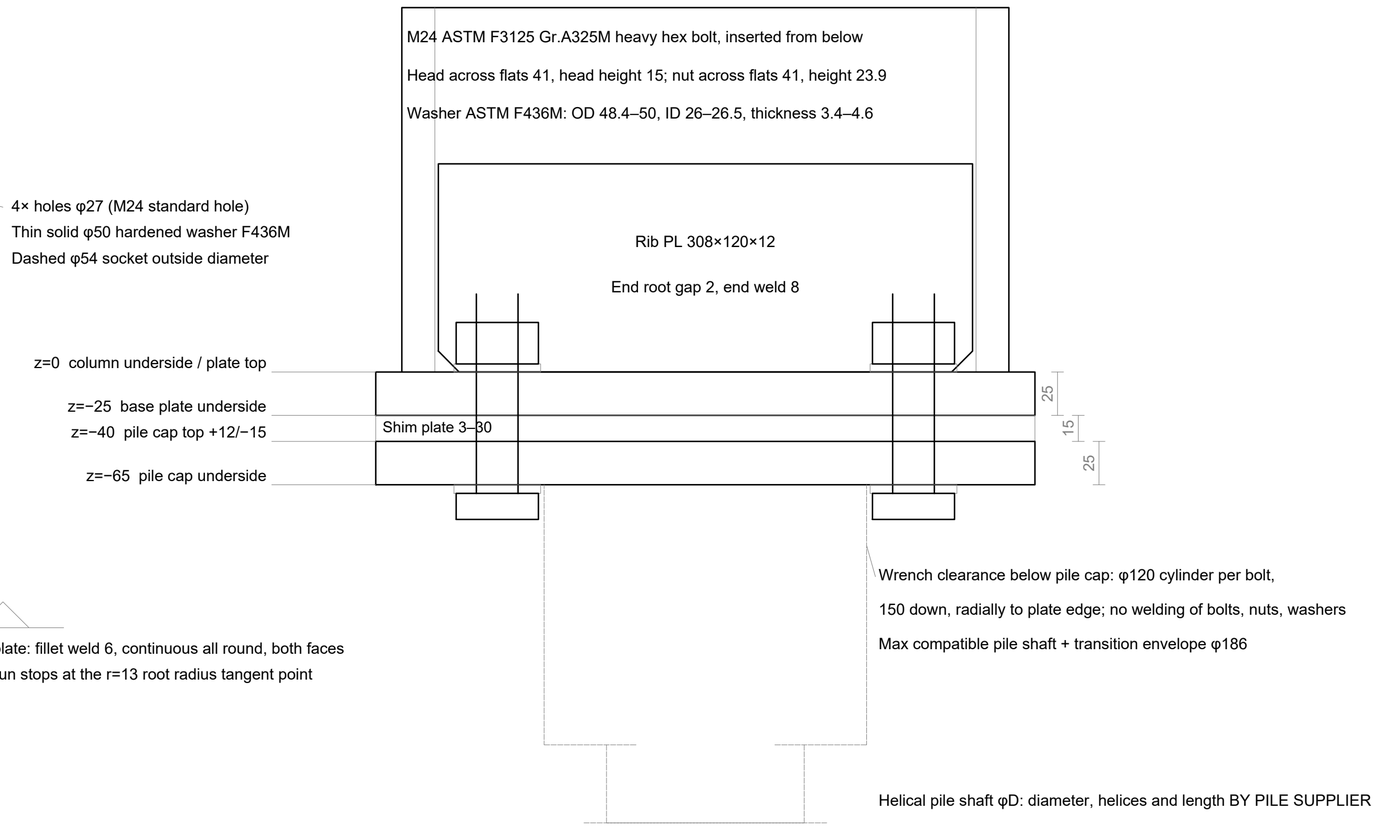
Main column base CS-4 and pile head interface PH-4 geometry and assembly

Column underside at model z = 0. Bolts sit in the openings between the flanges; base plate outline is only 15 mm larger than the column outline.

1 Base plan (looking down) 1:2



2 Section A—A (looking along global X) 1:2



3 Assembly

1. Column end saw-cut squareness ≤1 mm; cut and drill base plate and ribs, hole position tolerance ±1.0 mm.
2. Weld ribs to base plate and both flange inner faces first, then column to plate continuously all round both faces; plate underside flatness after welding ≤1 mm/300 mm.
3. Steel components are hot-dip galvanized to ASTM A123. Faying surfaces are Class A (μ = 0.30); power or hand wire brushing is prohibited.
4. Bolts inserted upward from pile cap underside, head down. After piling and re-survey of pile cap top level, select shim thickness and bolt length per column.
5. Place shims → erect column → washers and nuts → hold bolt heads from below, pretension from above with 41 mm socket (turn-of-nut or DTI) → seal plate stack perimeter with non-hardening PU sealant.

K&K Data / PIN001 · D02 MAIN COLUMN BASE / PILE HEAD

Main column base CS-4 and helical pile head interface PH-4

SHEET	SCALE	REVISION
PIN001-CS4-001	AS SHOWN	Rev — / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
2 sheets units mm 2026-09-26 · Applies to C001–C076: 76 main columns HW350×350×12×19, identical detail
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Main column base CS-4 and pile head interface PH-4 components, limits and technical conditions

Use together with sheet 1. Table values are component limits of the bolts and base plate, not the capacity of the complete joint and not pile capacity.

4 Components and detailing

Part No.	Size	Detailing conditions
CS4-PL	PL 380×380×25 ASTM A36	Holes 4×φ27 @ (±95, ±120); edge distance 70; bolt-hole clearance 1.5/side
CS4-RIB	2×PL 308×120×12 @ x=±50	12×12 snipes at both bottom ends; end 2 from flange inner face (root gap)
CS4-W1	Fillet weld 6, column to plate, continuous all round both faces	Flange outside 350; inside 4×156; web 2×286; total 1896; stops at r=13 tangent
CS4-W2	Rib to plate fillet weld 6; rib end fillet weld 8	End welds leg 6 → 8 for the 2 mm root gap; total 2000
PH4-CAP	380×380×25 flat top plate	Hole pattern as CS4-PL, hole position tolerance ±1.5; top surface flatness ≤1 mm/300
PH4-BOLT	M24 F3125 Gr.A325M heavy hex	HDG F2329; inserted from below; length per table 5; no welding/heating
PH4-NUT / WASH	A563M 10S nut; F436M hardened washer	Per bolt 1 nut + 2 washers; washer OD 48.4–50, ID 26–26.5, t 3.4–4.6
PH4-SHIM	380×380, thickness 3–30 (nominal 15)	Machined, hole pattern as above; single layer preferred

5 Bolt group component limits (bolts and base plate only, not complete joint capacity)

Item	Value	Condition
Single bolt tension φRn	210.4 kN	Fnt=620 MPa; base plate t=25 ≥ t_c=23.93, prying Q=0
Single bolt shear φRn	106.7 kN	Fnv=370 MPa, threads in shear plane; filler factor 0.85
Bearing / tear-out φRn	432 / 508 kN	Not governing
Bolt group tension / shear	841 / 427 kN	Sum of four bolts
Slip resistance (serviceability)	278 kN	Class A μ=0.30, single shim layer; 2+ layers 236 kN
Bolt group geometric couple about X / about Y	120.1 / 68.7 kNm	Compression at opposite flange bearing line; lever arm 285.5 / 163.4
Bolt group torsion about Z	65.3 kNm	Polar radius 153.1
Tension–shear interaction	AISC Eq. J3-3a	Tension per bolt 154 / 95 / 35 kN at shear 53 / 80 / 107 kN
Column base stiffness and compression rating	Not given on this drawing	By qualification assessment of the complete assembly

6 Bolt length table (shim thickness selected from measured pile cap top level)

Shim thickness mm	Grip mm	Bolt length mm	Nut thread projection mm
3 – 5	59.8 – 64.2	100	11.9 – 16.3
6 – 15	62.8 – 74.2	110	11.9 – 23.3
16 – 25	72.8 – 84.2	120	11.9 – 23.3
26 – 30	82.8 – 89.2	130	16.9 – 23.3
Grip = base plate 25 + shims + pile cap	25 + 2 washers (3.4–4.6 each)		

7 Bill of materials (density 7850 kg/m³)

Part No.	Per column	Unit gross kg	Unit net kg	Total 76 columns	Supply	Notes
CS4-PL	1 no.	28.34	27.89	2119.6 kg (net)	Own shop	Net mass deducts 4×φ27 holes
CS4-RIB	2 no.	3.48	3.47	527.1 kg (net)	Own shop	Net mass deducts 12×12 snipes at both ends
CS4-W1 / W2	1896 / 2000 mm	—	0.27 / 0.38	144 / 152 m	Own shop	Weld metal
PH4-CAP	1 no.	28.34	27.89	2119.6 kg (net)	Pile cap supplier	Net mass deducts 4×φ27 holes
PH4-BOLT	4 no.	—	0.62	304 no.	Pile cap supplier	
PH4-NUT / WASH	4 / 8 no.	—	0.19 / ≤0.052	304 / 608 no.	Pile cap supplier	Washer 0.034–0.052, per F436M dimension range
PH4-SHIM	1 set	17.00	16.73	1271.7 kg (net)	Pile cap supplier	Nominal 15; selected thickness see note
Total shop-fabricated parts	—	35.95	35.48	2696.1 kg (net)	—	CS4-PL + 2×CS4-RIB + weld metal
Total all steel parts	—	84.95	83.75	6365.3 kg (net)	—	Shims at nominal 15, washers at 0.052, sealant excluded

Note: one shim set per column; t = total shim thickness of that column (mm, sum of layers), selected within 3–30 from the measured pile cap top level, single layer preferred; per set gross = 1.1335 × t kg, net = 1.1156 × t kg (t = 3: 3.40 / 3.35 kg; t = 30: 34.01 / 33.47 kg). All steel per column: gross 67.95 + 1.1335 × t, net 67.02 + 1.1156 × t kg. SHOE_ASSY_KG = 35.28 kg in the base assembly table = CS4-PL bounding gross 28.34 + net 3.47 of 2 CS4-RIB, excluding weld metal; WELD_COL_MM = 1896 and WELD_RIB_MM = 2000 are weld lengths per column (mm); legs: column–plate 6, rib–plate 6, rib end 8.

8 Wrench clearance below pile cap (provided by pile cap supplier)

Item	Requirement
Wrench clearance shape	φ120 cylinder on each bolt axis, 150 downward from the pile cap underside
Radial access	Each cylinder shall run radially to the cover plate edge, width 120, height 150
Basis	Head AF 41; socket OD 54, or ring/open wrench swing radius 60
Shim cases	Measured from pile cap underside; valid for shims 3, 15 and 30
Compatibility with pile shaft	Cylinder inner edges 93.1 from column axis; compatible shaft/transition envelope φ186
If exceeded	Supplier to propose and qualify another fastening method
Prohibited	No welding, tack welding or heating of bolts, nuts or washers

9 Technical conditions

1. Table 5 covers bolts and base plate only; the pile cap to pile shaft path is outside this drawing. Table 5 is not complete-joint capacity.
2. Capacity of the complete assembly (CS-4 + shims + PH4-CAP + cover plate to shaft transition) is assessed by the pile head supplier to AISC 360-22, by calculation or test, against the interaction of concurrent Fx, Fy, Fz, Mx, My, Mz; independent component maxima shall not be combined.
3. Kx, Ky, Kz, Krx, Kry, Krz of the column base come from that assessment as frame support inputs; no stiffness or compression rating is given here.
4. Compression path: flange bearing lines y=±165.5 and web line x=0 → base plate and two ribs → pile cap bearing face actually provided.
5. Selected detail: PL 380×380×25; ribs 2×PL 308×120×12; 4×M24 F3125 Gr.A325M; column–plate fillet 6; rib end fillet 8 (2 mm root gap). Complete joint: TO BE COORDINATED; table 5 = component limits; six-component interaction BY PILE SUPPLIER; base stiffness = frame input; plate–shaft path BY PILE SUPPLIER.
6. Model z is a relative level, not a site level. The 171 stub column pile heads are at model z = 0, 40 mm above the main column pile cap top.
7. Coordinates, holes, shims and bolt lengths of the 76 columns: accompanying table; 247 pile plan coordinates agree with the setting-out drawings.
8. The rib end root gap shall be checked against the actual rolled root radius and delivered end faces before the snipe size is frozen.

K&K Data / PIN001 · D02 MAIN COLUMN BASE / PILE HEAD

Main column base CS-4 and helical pile head interface PH-4

SHEET	SCALE	REVISION
PIN001-CS4-002	AS SHOWN	Rev B / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES

2 sheets units mm Rev B 2026-09-27 · Applies to C001–C076: 76 main columns HW350×350×12×19, identical detail

K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

1 COORDINATE DEFINITION

Origin: project local (0,0) is the structural model origin, coincident with support point C001 at the intersection of frame axis AX01 and row line YA.
+X runs along the 106600 mm building length, AX01 towards AX19.
+Y runs along the 18300 mm building width, YA towards YD.
The system is a plane rectangular project system. It is not true north, not grid north, and not any site E/N system. No rotation, translation or scale factor to a site system is defined by this drawing set.

Drawing and coordinate tables in millimetres. The survey table is in metres to six decimals, which carries the 0.001 mm record precision of the geometric source. The number of decimals is record precision, not measured accuracy and not a construction tolerance.

Metric file: FS_POINTS_PROJECT_LOCAL_M.csv, columns PROJECT_X_M and PROJECT_Y_M.
PROJECT_X_M = X_local / 1000 PROJECT_Y_M = Y_local / 1000
Columns are named PROJECT_X_M / PROJECT_Y_M, not E / N, because these coordinates are not site east / north coordinates. The Z field is not used and is left blank, not 0.

Map PROJECT_X_M to the instrument local E column and PROJECT_Y_M to the local N column in a custom import, and confirm the job local coordinate setting on the instrument agrees. The Z field is not used. Import format and column mapping for the site instrument: TO BE COORDINATED by the surveyor.

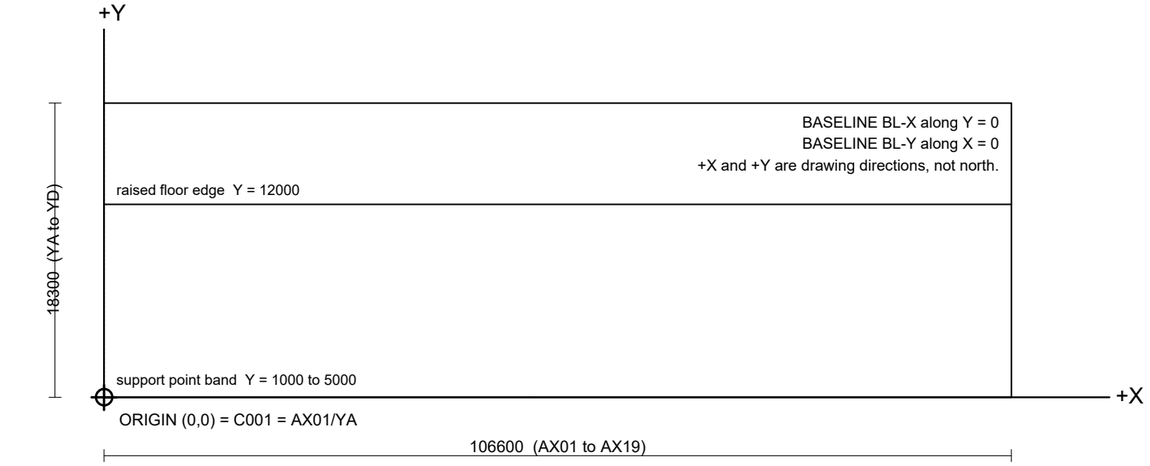
No Z column is issued. Pile head design level is not defined by this set, and Z = 0 is not a pile head level. Plan setting-out and level control are carried out separately.

2 SURVEY TABLE COLUMN DEFINITION

COLUMN	TYPE	UNIT	CONTENT
POINT_ID	text	-	stable point number C001-C076 / F001-F171
PROJECT_X_M	decimal	m	X_local / 1000, building length direction, 6 decimals
PROJECT_Y_M	decimal	m	Y_local / 1000, building width direction, 6 decimals
CODE	text	-	MC = main column point, FP = floor post point
DESCRIPTION	text	-	point class and grid reference

Before import, check three non-collinear points (GC-1, GC-2, one of GC-3 to GC-5); import all 247 points after the residuals pass; then spot-check two known axis points against FS-13.

KEY DIAGRAM (not to scale)



3 SITE CONTROL TO BE ESTABLISHED BY THE SURVEYOR

There is no existing site control point and no monumented origin on site. The project local system must be positioned on the ground by the surveying contractor before any pile position is set out.

3.1 Establish a site base: set two intervisible permanent marks and give them site E/N in the site system that will govern the works.
3.2 Position the project local system: fix the position of local (0,0) and the bearing of the +X axis on the ground by agreement with the owner and the structural designer, then record the translation and rotation applied. Setting out from an instrument standing on an unpositioned origin is not permitted.
3.3 Independent third point check: after the transformation is entered, observe a third point that was not used to derive it, and record the residual in E and N.
3.4 Protect offset control: place at least two offset reference marks clear of the piling and traffic zone, outside the building footprint, and record their local and site coordinates so the system can be recovered.
3.5 Record the transformation, instrument, prism constant, date and operator on the handover record on FS-17 before piling starts.

Geometry check positions GC-1 to GC-5 on FS-01 are computed from the structural model. They are a check on the transformation, not a substitute for site control.

4 SETTING-OUT SEQUENCE

a. Recover the two site base marks and check the distance between them.
b. Enter the local-to-site transformation; observe GC-1, GC-2 and one of GC-3 to GC-5 and record residuals.
c. Set out the 19 frame axes on baseline BL-X first, then the row lines.
d. Set out C001-C076, then F001-F171 zone by zone from FS-03 to FS-08.
e. Tape check each zone against FS-13 to FS-15 before piling.
f. Record as-built positions on FS-17 and in FS_AS_BUILT_RECORD_BLANK.csv.

Coordinate precision printed in these tables is the precision of the geometric source. It is not a construction tolerance. No positional tolerance is stated by this set.

Site use: print A3 at 100% (no fit-to-page or scaling); drawing and CSV revisions used on site must match (see title block); plan setting-out and level control are recorded separately; no levels on this set.

5 FILE INDEX

FILE	CONTENT
FS_SETTING_OUT_SHEETS.pdf / .dxf	17 A3 sheets, this set
FS_SETTING_OUT_MODEL_1TO1.dxf	model space at 1:1 in project local mm, snappable point blocks with attributes
FS_POINTS_LOCAL_MM.csv	247 points, project local mm, primary table
FS_POINTS_PROJECT_LOCAL_M.csv	247 points, metres to 6 decimals, survey use
FS_POINT_TO_SOURCE_MEMBER.csv	point to original mark, handle and section
FS_TAPE_CHECK_POINTS.csv	offsets and tie distances, 247 rows
FS_AXIS_CHAIN_X.csv / FS_ROW_CHAIN_Y.csv	axis and row chains
FS_BAY_DIAGONALS.csv / FS_ZONE_DIAGONALS.csv	diagonal checks
FS_PILE_REQUIREMENT_SCHEDULE.csv	247-row demand interface
FS_AS_BUILT_RECORD_BLANK.csv	247-row as-built record
SUPPORT_MAPPING.json	point to supported member, with the geometric basis

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

PROJECT LOCAL COORDINATE SYSTEM AND SURVEY HANDOVER METHOD

SHEET	SCALE	REVISION
FS-02	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 2 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Project local 2D, millimetres. No Z column is issued.

ID	PROJECT_X	PROJECT_Y	ZN	GRID REF	SOURCE MARK	SUPPORTS MEMBER
C001	0.000	0.000	A	AX01/YA	PIN001-C01	PIN001-C01
C002	0.000	6000.000	A	AX01/YB	PIN001-C02	PIN001-C02
C003	0.000	12000.000	A	AX01/YC	PIN001-C03	PIN001-C03
C004	0.000	18300.000	A	AX01/YD	PIN001-C04	PIN001-C04
C005	5800.000	0.000	A	AX02/YA	PIN001-C01-FRAME02	PIN001-C01-FRAME02
C006	5800.000	6000.000	A	AX02/YB	PIN001-C02-FRAME02	PIN001-C02-FRAME02
C007	5800.000	12000.000	A	AX02/YC	PIN001-C03-FRAME02	PIN001-C03-FRAME02
C008	5800.000	18300.000	A	AX02/YD	PIN001-C04-FRAME02	PIN001-C04-FRAME02
C009	11600.000	0.000	A	AX03/YA	PIN001-C01-FRAME02@FRAME_AX03	PIN001-C01-FRAME02@FRAME_AX03
C010	11600.000	6000.000	A	AX03/YB	PIN001-C02-FRAME02@FRAME_AX03	PIN001-C02-FRAME02@FRAME_AX03
C011	11600.000	12000.000	A	AX03/YC	PIN001-C03-FRAME02@FRAME_AX03	PIN001-C03-FRAME02@FRAME_AX03
C012	11600.000	18300.000	A	AX03/YD	PIN001-C04-FRAME02@FRAME_AX03	PIN001-C04-FRAME02@FRAME_AX03
C013	17400.000	0.000	A	AX04/YA	PIN001-C01-FRAME02@FRAME_AX04	PIN001-C01-FRAME02@FRAME_AX04
C014	17400.000	6000.000	A	AX04/YB	PIN001-C02-FRAME02@FRAME_AX04	PIN001-C02-FRAME02@FRAME_AX04
C015	17400.000	12000.000	A	AX04/YC	PIN001-C03-FRAME02@FRAME_AX04	PIN001-C03-FRAME02@FRAME_AX04
C016	17400.000	18300.000	A	AX04/YD	PIN001-C04-FRAME02@FRAME_AX04	PIN001-C04-FRAME02@FRAME_AX04
C017	23200.000	0.000	B	AX05/YA	PIN001-C01-FRAME02@FRAME_AX05	PIN001-C01-FRAME02@FRAME_AX05
C018	23200.000	6000.000	B	AX05/YB	PIN001-C02-FRAME02@FRAME_AX05	PIN001-C02-FRAME02@FRAME_AX05
C019	23200.000	12000.000	B	AX05/YC	PIN001-C03-FRAME02@FRAME_AX05	PIN001-C03-FRAME02@FRAME_AX05
C020	23200.000	18300.000	B	AX05/YD	PIN001-C04-FRAME02@FRAME_AX05	PIN001-C04-FRAME02@FRAME_AX05
C021	29000.000	0.000	B	AX06/YA	PIN001-C01-FRAME02@FRAME_AX06	PIN001-C01-FRAME02@FRAME_AX06
C022	29000.000	6000.000	B	AX06/YB	PIN001-C02-FRAME02@FRAME_AX06	PIN001-C02-FRAME02@FRAME_AX06
C023	29000.000	12000.000	B	AX06/YC	PIN001-C03-FRAME02@FRAME_AX06	PIN001-C03-FRAME02@FRAME_AX06
C024	29000.000	18300.000	B	AX06/YD	PIN001-C04-FRAME02@FRAME_AX06	PIN001-C04-FRAME02@FRAME_AX06
C025	35900.000	0.000	B	AX07/YA	PIN001-C01-FRAME02@FRAME_AX07	PIN001-C01-FRAME02@FRAME_AX07
C026	35900.000	6000.000	B	AX07/YB	PIN001-C02-FRAME02@FRAME_AX07	PIN001-C02-FRAME02@FRAME_AX07
C027	35900.000	12000.000	B	AX07/YC	PIN001-C03-FRAME02@FRAME_AX07	PIN001-C03-FRAME02@FRAME_AX07
C028	35900.000	18300.000	B	AX07/YD	PIN001-C04-FRAME02@FRAME_AX07	PIN001-C04-FRAME02@FRAME_AX07
C029	41700.000	0.000	C	AX08/YA	PIN001-C01-FRAME02@FRAME_AX08	PIN001-C01-FRAME02@FRAME_AX08
C030	41700.000	6000.000	C	AX08/YB	PIN001-C02-FRAME02@FRAME_AX08	PIN001-C02-FRAME02@FRAME_AX08
C031	41700.000	12000.000	C	AX08/YC	PIN001-C03-FRAME02@FRAME_AX08	PIN001-C03-FRAME02@FRAME_AX08
C032	41700.000	18300.000	C	AX08/YD	PIN001-C04-FRAME02@FRAME_AX08	PIN001-C04-FRAME02@FRAME_AX08
C033	47500.000	0.000	C	AX09/YA	PIN001-C01-FRAME02@FRAME_AX09	PIN001-C01-FRAME02@FRAME_AX09
C034	47500.000	6000.000	C	AX09/YB	PIN001-C02-FRAME02@FRAME_AX09	PIN001-C02-FRAME02@FRAME_AX09
C035	47500.000	12000.000	C	AX09/YC	PIN001-C03-FRAME02@FRAME_AX09	PIN001-C03-FRAME02@FRAME_AX09
C036	47500.000	18300.000	C	AX09/YD	PIN001-C04-FRAME02@FRAME_AX09	PIN001-C04-FRAME02@FRAME_AX09
C037	53300.000	0.000	C	AX10/YA	PIN001-C01-FRAME02@FRAME_AX10	PIN001-C01-FRAME02@FRAME_AX10
C038	53300.000	6000.000	C	AX10/YB	PIN001-C02-FRAME02@FRAME_AX10	PIN001-C02-FRAME02@FRAME_AX10
C039	53300.000	12000.000	C	AX10/YC	PIN001-C03-FRAME02@FRAME_AX10	PIN001-C03-FRAME02@FRAME_AX10
C040	53300.000	18300.000	C	AX10/YD	PIN001-C04-FRAME02@FRAME_AX10	PIN001-C04-FRAME02@FRAME_AX10
C041	59100.000	0.000	D	AX11/YA	PIN001-C01-FRAME02@FRAME_AX11	PIN001-C01-FRAME02@FRAME_AX11
C042	59100.000	6000.000	D	AX11/YB	PIN001-C02-FRAME02@FRAME_AX11	PIN001-C02-FRAME02@FRAME_AX11
C043	59100.000	12000.000	D	AX11/YC	PIN001-C03-FRAME02@FRAME_AX11	PIN001-C03-FRAME02@FRAME_AX11
C044	59100.000	18300.000	D	AX11/YD	PIN001-C04-FRAME02@FRAME_AX11	PIN001-C04-FRAME02@FRAME_AX11
C045	64900.000	0.000	D	AX12/YA	PIN001-C01-FRAME02@FRAME_AX12	PIN001-C01-FRAME02@FRAME_AX12
C046	64900.000	6000.000	D	AX12/YB	PIN001-C02-FRAME02@FRAME_AX12	PIN001-C02-FRAME02@FRAME_AX12
C047	64900.000	12000.000	D	AX12/YC	PIN001-C03-FRAME02@FRAME_AX12	PIN001-C03-FRAME02@FRAME_AX12
C048	64900.000	18300.000	D	AX12/YD	PIN001-C04-FRAME02@FRAME_AX12	PIN001-C04-FRAME02@FRAME_AX12
C049	71800.000	0.000	D	AX13/YA	PIN001-C01-FRAME02@FRAME_AX13	PIN001-C01-FRAME02@FRAME_AX13
C050	71800.000	6000.000	D	AX13/YB	PIN001-C02-FRAME02@FRAME_AX13	PIN001-C02-FRAME02@FRAME_AX13
C051	71800.000	12000.000	D	AX13/YC	PIN001-C03-FRAME02@FRAME_AX13	PIN001-C03-FRAME02@FRAME_AX13
C052	71800.000	18300.000	D	AX13/YD	PIN001-C04-FRAME02@FRAME_AX13	PIN001-C04-FRAME02@FRAME_AX13
C053	77600.000	0.000	E	AX14/YA	PIN001-C01-FRAME02@FRAME_AX14	PIN001-C01-FRAME02@FRAME_AX14
C054	77600.000	6000.000	E	AX14/YB	PIN001-C02-FRAME02@FRAME_AX14	PIN001-C02-FRAME02@FRAME_AX14
C055	77600.000	12000.000	E	AX14/YC	PIN001-C03-FRAME02@FRAME_AX14	PIN001-C03-FRAME02@FRAME_AX14
C056	77600.000	18300.000	E	AX14/YD	PIN001-C04-FRAME02@FRAME_AX14	PIN001-C04-FRAME02@FRAME_AX14
C057	83400.000	0.000	E	AX15/YA	PIN001-C01-FRAME02@FRAME_AX15	PIN001-C01-FRAME02@FRAME_AX15
C058	83400.000	6000.000	E	AX15/YB	PIN001-C02-FRAME02@FRAME_AX15	PIN001-C02-FRAME02@FRAME_AX15
C059	83400.000	12000.000	E	AX15/YC	PIN001-C03-FRAME02@FRAME_AX15	PIN001-C03-FRAME02@FRAME_AX15
C060	83400.000	18300.000	E	AX15/YD	PIN001-C04-FRAME02@FRAME_AX15	PIN001-C04-FRAME02@FRAME_AX15
C061	89200.000	0.000	E	AX16/YA	PIN001-C01-FRAME02@FRAME_AX16	PIN001-C01-FRAME02@FRAME_AX16
C062	89200.000	6000.000	E	AX16/YB	PIN001-C02-FRAME02@FRAME_AX16	PIN001-C02-FRAME02@FRAME_AX16
C063	89200.000	12000.000	E	AX16/YC	PIN001-C03-FRAME02@FRAME_AX16	PIN001-C03-FRAME02@FRAME_AX16
C064	89200.000	18300.000	E	AX16/YD	PIN001-C04-FRAME02@FRAME_AX16	PIN001-C04-FRAME02@FRAME_AX16
C065	95000.000	0.000	F	AX17/YA	PIN001-C01-FRAME02@FRAME_AX17	PIN001-C01-FRAME02@FRAME_AX17
C066	95000.000	6000.000	F	AX17/YB	PIN001-C02-FRAME02@FRAME_AX17	PIN001-C02-FRAME02@FRAME_AX17
C067	95000.000	12000.000	F	AX17/YC	PIN001-C03-FRAME02@FRAME_AX17	PIN001-C03-FRAME02@FRAME_AX17
C068	95000.000	18300.000	F	AX17/YD	PIN001-C04-FRAME02@FRAME_AX17	PIN001-C04-FRAME02@FRAME_AX17
C069	100800.000	0.000	F	AX18/YA	PIN001-C01-FRAME02@FRAME_AX18	PIN001-C01-FRAME02@FRAME_AX18
C070	100800.000	6000.000	F	AX18/YB	PIN001-C02-FRAME02@FRAME_AX18	PIN001-C02-FRAME02@FRAME_AX18
C071	100800.000	12000.000	F	AX18/YC	PIN001-C03-FRAME02@FRAME_AX18	PIN001-C03-FRAME02@FRAME_AX18
C072	100800.000	18300.000	F	AX18/YD	PIN001-C04-FRAME02@FRAME_AX18	PIN001-C04-FRAME02@FRAME_AX18
C073	106600.000	0.000	F	AX19/YA	PIN001-C01@FRAME_AX19	PIN001-C01@FRAME_AX19
C074	106600.000	6000.000	F	AX19/YB	PIN001-C02@FRAME_AX19	PIN001-C02@FRAME_AX19
C075	106600.000	12000.000	F	AX19/YC	PIN001-C03@FRAME_AX19	PIN001-C03@FRAME_AX19
C076	106600.000	18300.000	F	AX19/YD	PIN001-C04@FRAME_AX19	PIN001-C04@FRAME_AX19

76 rows on this sheet. Identical values in FS_POINTS_LOCAL_MM.csv.
Column ZN is the zone, not an elevation.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

COORDINATE SCHEDULE 1 OF 3 - MAIN COLUMN SUPPORT POINTS C001-C076

SHEET	SCALE	REVISION
FS-10	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 10 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Project local 2D, millimetres. No Z column is issued.

ID	PROJECT_X	PROJECT_Y	ZN	GRID REF	SOURCE MARK	SUPPORTS MEMBER
F001	0.000	1000.000	A	AX01/+1000Y	I33-P01	PIN001-FB01
F002	0.000	2000.000	A	AX01/+2000Y	I33-P02	PIN001-FB01
F003	0.000	3000.000	A	AX01/+3000Y	I33-P03	PIN001-FB01
F004	0.000	4000.000	A	AX01/+4000Y	I33-P04	PIN001-FB01
F005	0.000	5000.000	A	AX01/+5000Y	I33-P05	PIN001-FB01
F006	3350.000	2000.000	A	B01/+3350.000X/+2000Y	I33-P11	PIN001-FJ05-R
F007	3350.000	3500.000	A	B01/+3350.000X/+3500Y	I33-P12	PIN001-FJ08-R
F008	5300.000	2000.000	A	B01/+5300.000X/+2000Y	I33-P13	PIN001-FJ05-R
F009	5300.000	3500.000	A	B01/+5300.000X/+3500Y	I33-P14	PIN001-FJ08-R
F010	5800.000	1000.000	A	AX02/+1000Y	I33-P06	PIN001-FB01-FRAME02
F011	5800.000	2000.000	A	AX02/+2000Y	I33-P07	PIN001-FB01-FRAME02
F012	5800.000	3000.000	A	AX02/+3000Y	I33-P08	PIN001-FB01-FRAME02
F013	5800.000	4000.000	A	AX02/+4000Y	I33-P09	PIN001-FB01-FRAME02
F014	5800.000	5000.000	A	AX02/+5000Y	I33-P10	PIN001-FB01-FRAME02
F015	7707.143	2000.000	A	B02/+1907.143X/+2000Y	WF-PO-PSTI-B02-01-Y2000	WF-JO-B02-FJ05-R
F016	7707.143	3500.000	A	B02/+1907.143X/+3500Y	WF-PO-PSTI-B02-01-Y3500	WF-JO-B02-FJ08-R
F017	9614.286	2000.000	A	B02/+3814.286X/+2000Y	WF-PO-PSTI-B02-02-Y2000	WF-JO-B02-FJ05-R
F018	9614.286	3500.000	A	B02/+3814.286X/+3500Y	WF-PO-PSTI-B02-02-Y3500	WF-JO-B02-FJ08-R
F019	11600.000	1000.000	A	AX03/+1000Y	WF-PO-PST-A03-01	WF-PB-A03-FB01
F020	11600.000	2000.000	A	AX03/+2000Y	WF-PO-PST-A03-02	WF-PB-A03-FB01
F021	11600.000	3000.000	A	AX03/+3000Y	WF-PO-PST-A03-03	WF-PB-A03-FB01
F022	11600.000	4000.000	A	AX03/+4000Y	WF-PO-PST-A03-04	WF-PB-A03-FB01
F023	11600.000	5000.000	A	AX03/+5000Y	WF-PO-PST-A03-05	WF-PB-A03-FB01
F024	13214.286	2000.000	A	B03/+1614.286X/+2000Y	WF-PO-PSTI-B03-01-Y2000	WF-JO-B03-FJ05-R
F025	13214.286	3500.000	A	B03/+1614.286X/+3500Y	WF-PO-PSTI-B03-01-Y3500	WF-JO-B03-FJ08-R
F026	15121.428	2000.000	A	B03/+3521.428X/+2000Y	WF-PO-PSTI-B03-02-Y2000	WF-JO-B03-FJ05-R
F027	15121.428	3500.000	A	B03/+3521.428X/+3500Y	WF-PO-PSTI-B03-02-Y3500	WF-JO-B03-FJ08-R
F028	17400.000	1000.000	A	AX04/+1000Y	WF-PO-PST-A04-01	WF-PB-A04-FB01
F029	17400.000	2000.000	A	AX04/+2000Y	WF-PO-PST-A04-02	WF-PB-A04-FB01
F030	17400.000	3000.000	A	AX04/+3000Y	WF-PO-PST-A04-03	WF-PB-A04-FB01
F031	17400.000	4000.000	A	AX04/+4000Y	WF-PO-PST-A04-04	WF-PB-A04-FB01
F032	17400.000	5000.000	A	AX04/+5000Y	WF-PO-PST-A04-05	WF-PB-A04-FB01
F033	19428.571	2000.000	B	B04/+2028.571X/+2000Y	WF-PO-PSTI-B04-01-Y2000	WF-JO-B04-FJ05-R
F034	19428.571	3500.000	B	B04/+2028.571X/+3500Y	WF-PO-PSTI-B04-01-Y3500	WF-JO-B04-FJ08-R
F035	21258.000	2000.000	B	B04/+3858.000X/+2000Y	WF-PO-PSTI-B04-02-Y2000	WF-JO-B04-FJ05-R
F036	21258.000	3500.000	B	B04/+3858.000X/+3500Y	WF-PO-PSTI-B04-02-Y3500	WF-JO-B04-FJ08-R
F037	23200.000	1000.000	B	AX05/+1000Y	WF-PO-PST-A05-01	WF-PB-A05-FB01
F038	23200.000	2000.000	B	AX05/+2000Y	WF-PO-PST-A05-02	WF-PB-A05-FB01
F039	23200.000	3000.000	B	AX05/+3000Y	WF-PO-PST-A05-03	WF-PB-A05-FB01
F040	23200.000	4000.000	B	AX05/+4000Y	WF-PO-PST-A05-04	WF-PB-A05-FB01
F041	23200.000	5000.000	B	AX05/+5000Y	WF-PO-PST-A05-05	WF-PB-A05-FB01
F042	25042.857	2000.000	B	B05/+1842.857X/+2000Y	WF-PO-PSTI-B05-01-Y2000	WF-JO-B05-FJ05-R
F043	25042.857	3500.000	B	B05/+1842.857X/+3500Y	WF-PO-PSTI-B05-01-Y3500	WF-JO-B05-FJ08-R
F044	26842.857	2000.000	B	B05/+3642.857X/+2000Y	WF-PO-PSTI-B05-02-Y2000	WF-JO-B05-FJ05-R
F045	26842.857	3500.000	B	B05/+3642.857X/+3500Y	WF-PO-PSTI-B05-02-Y3500	WF-JO-B05-FJ08-R
F046	29000.000	1000.000	B	AX06/+1000Y	WF-PO-PST-A06-01	WF-PB-A06-FB01
F047	29000.000	2000.000	B	AX06/+2000Y	WF-PO-PST-A06-02	WF-PB-A06-FB01
F048	29000.000	3000.000	B	AX06/+3000Y	WF-PO-PST-A06-03	WF-PB-A06-FB01
F049	29000.000	4000.000	B	AX06/+4000Y	WF-PO-PST-A06-04	WF-PB-A06-FB01
F050	29000.000	5000.000	B	AX06/+5000Y	WF-PO-PST-A06-05	WF-PB-A06-FB01
F051	31257.143	2000.000	B	B06/+2257.143X/+2000Y	WF-PO-PSTI-B06-01-Y2000	WF-JO-B06-FJ05-R
F052	31257.143	3500.000	B	B06/+2257.143X/+3500Y	WF-PO-PSTI-B06-01-Y3500	WF-JO-B06-FJ08-R
F053	32457.143	2000.000	B	B06/+3457.143X/+2000Y	WF-PO-PSTI-B06-02-Y2000	WF-JO-B06-FJ05-R
F054	32457.143	3500.000	B	B06/+3457.143X/+3500Y	WF-PO-PSTI-B06-02-Y3500	WF-JO-B06-FJ08-R
F055	34257.143	2000.000	B	B06/+5257.143X/+2000Y	WF-PO-PSTI-B06-03-Y2000	WF-JO-B06-FJ05-R
F056	34257.143	3500.000	B	B06/+5257.143X/+3500Y	WF-PO-PSTI-B06-03-Y3500	WF-JO-B06-FJ08-R
F057	35900.000	1000.000	B	AX07/+1000Y	WF-PO-PST-A07-01	WF-PB-A07-FB01
F058	35900.000	2000.000	B	AX07/+2000Y	WF-PO-PST-A07-02	WF-PB-A07-FB01
F059	35900.000	3000.000	B	AX07/+3000Y	WF-PO-PST-A07-03	WF-PB-A07-FB01
F060	35900.000	4000.000	B	AX07/+4000Y	WF-PO-PST-A07-04	WF-PB-A07-FB01
F061	35900.000	5000.000	B	AX07/+5000Y	WF-PO-PST-A07-05	WF-PB-A07-FB01
F062	38071.429	2000.000	C	B07/+2171.429X/+2000Y	WF-PO-PSTI-B07-01-Y2000	WF-JO-B07-FJ05-R
F063	38071.429	3500.000	C	B07/+2171.429X/+3500Y	WF-PO-PSTI-B07-01-Y3500	WF-JO-B07-FJ08-R
F064	39871.429	2000.000	C	B07/+3971.429X/+2000Y	WF-PO-PSTI-B07-02-Y2000	WF-JO-B07-FJ05-R
F065	39871.429	3500.000	C	B07/+3971.429X/+3500Y	WF-PO-PSTI-B07-02-Y3500	WF-JO-B07-FJ08-R
F066	41700.000	1000.000	C	AX08/+1000Y	WF-PO-PST-A08-01	WF-PB-A08-FB01
F067	41700.000	2000.000	C	AX08/+2000Y	WF-PO-PST-A08-02	WF-PB-A08-FB01
F068	41700.000	3000.000	C	AX08/+3000Y	WF-PO-PST-A08-03	WF-PB-A08-FB01
F069	41700.000	4000.000	C	AX08/+4000Y	WF-PO-PST-A08-04	WF-PB-A08-FB01
F070	41700.000	5000.000	C	AX08/+5000Y	WF-PO-PST-A08-05	WF-PB-A08-FB01
F071	43642.000	2000.000	C	B08/+1942.000X/+2000Y	WF-PO-PSTI-B08-01-Y2000	WF-JO-B08-FJ05-R
F072	43642.000	3500.000	C	B08/+1942.000X/+3500Y	WF-PO-PSTI-B08-01-Y3500	WF-JO-B08-FJ08-R
F073	45485.714	2000.000	C	B08/+3785.714X/+2000Y	WF-PO-PSTI-B08-02-Y2000	WF-JO-B08-FJ05-R
F074	45485.714	3500.000	C	B08/+3785.714X/+3500Y	WF-PO-PSTI-B08-02-Y3500	WF-JO-B08-FJ08-R
F075	47500.000	1000.000	C	AX09/+1000Y	WF-PO-PST-A09-01	WF-PB-A09-FB01
F076	47500.000	2000.000	C	AX09/+2000Y	WF-PO-PST-A09-02	WF-PB-A09-FB01
F077	47500.000	3000.000	C	AX09/+3000Y	WF-PO-PST-A09-03	WF-PB-A09-FB01
F078	47500.000	4000.000	C	AX09/+4000Y	WF-PO-PST-A09-04	WF-PB-A09-FB01
F079	47500.000	5000.000	C	AX09/+5000Y	WF-PO-PST-A09-05	WF-PB-A09-FB01
F080	49442.000	2000.000	C	B09/+1942.000X/+2000Y	WF-PO-PSTI-B09-01-Y2000	WF-JO-B09-FJ05-R
F081	49442.000	3500.000	C	B09/+1942.000X/+3500Y	WF-PO-PSTI-B09-01-Y3500	WF-JO-B09-FJ08-R
F082	51358.000	2000.000	C	B09/+3858.000X/+2000Y	WF-PO-PSTI-B09-02-Y2000	WF-JO-B09-FJ05-R
F083	51358.000	3500.000	C	B09/+3858.000X/+3500Y	WF-PO-PSTI-B09-02-Y3500	WF-JO-B09-FJ08-R
F084	53300.000	1000.000	C	AX10/+1000Y	WF-PO-PST-A10-01	WF-PB-A10-FB01
F085	53300.000	2000.000	C	AX10/+2000Y	WF-PO-PST-A10-02	WF-PB-A10-FB01
F086	53300.000	3000.000	C	AX10/+3000Y	WF-PO-PST-A10-03	WF-PB-A10-FB01
F087	53300.000	4000.000	C	AX10/+4000Y	WF-PO-PST-A10-04	WF-PB-A10-FB01
F088	53300.000	5000.000	C	AX10/+5000Y	WF-PO-PST-A10-05	WF-PB-A10-FB01
F089	55300.000	2000.000	D	B10/+2000.000X/+2000Y	WF-PO-PSTI-B10-01-Y2000	WF-JO-B10-FJ05-R
F090	55300.000	3500.000	D	B10/+2000.000X/+3500Y	WF-PO-PSTI-B10-01-Y3500	WF-JO-B10-FJ08-R

90 rows on this sheet. Identical values in FS_POINTS_LOCAL_MM.csv.
Column ZN is the zone, not an elevation.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

COORDINATE SCHEDULE 2 OF 3 - FLOOR POST SUPPORT POINTS F001-F090

SHEET	SCALE	REVISION
FS-11	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 11 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Project local 2D, millimetres. No Z column is issued.

ID	PROJECT_X	PROJECT_Y	ZN	GRID REF	SOURCE MARK	SUPPORTS MEMBER
F091	57207.143	2000.000	D	B10/+3907.143X/+2000Y	WF-PO-PSTI-B10-02-Y2000	WF-JO-B10-FJ05-R
F092	57207.143	3500.000	D	B10/+3907.143X/+3500Y	WF-PO-PSTI-B10-02-Y3500	WF-JO-B10-FJ08-R
F093	59100.000	1000.000	D	AX11/+1000Y	WF-PO-PST-A11-01	WF-PB-A11-FB01
F094	59100.000	2000.000	D	AX11/+2000Y	WF-PO-PST-A11-02	WF-PB-A11-FB01
F095	59100.000	3000.000	D	AX11/+3000Y	WF-PO-PST-A11-03	WF-PB-A11-FB01
F096	59100.000	4000.000	D	AX11/+4000Y	WF-PO-PST-A11-04	WF-PB-A11-FB01
F097	59100.000	5000.000	D	AX11/+5000Y	WF-PO-PST-A11-05	WF-PB-A11-FB01
F098	60914.286	2000.000	D	B11/+1814.286X/+2000Y	WF-PO-PSTI-B11-01-Y2000	WF-JO-B11-FJ05-R
F099	60914.286	3500.000	D	B11/+1814.286X/+3500Y	WF-PO-PSTI-B11-01-Y3500	WF-JO-B11-FJ08-R
F100	62714.286	2000.000	D	B11/+3614.286X/+2000Y	WF-PO-PSTI-B11-02-Y2000	WF-JO-B11-FJ05-R
F101	62714.286	3500.000	D	B11/+3614.286X/+3500Y	WF-PO-PSTI-B11-02-Y3500	WF-JO-B11-FJ08-R
F102	64900.000	1000.000	D	AX12/+1000Y	WF-PO-PST-A12-01	WF-PB-A12-FB01
F103	64900.000	2000.000	D	AX12/+2000Y	WF-PO-PST-A12-02	WF-PB-A12-FB01
F104	64900.000	3000.000	D	AX12/+3000Y	WF-PO-PST-A12-03	WF-PB-A12-FB01
F105	64900.000	4000.000	D	AX12/+4000Y	WF-PO-PST-A12-04	WF-PB-A12-FB01
F106	64900.000	5000.000	D	AX12/+5000Y	WF-PO-PST-A12-05	WF-PB-A12-FB01
F107	66528.571	2000.000	D	B12/+1628.571X/+2000Y	WF-PO-PSTI-B12-01-Y2000	WF-JO-B12-FJ05-R
F108	66528.571	3500.000	D	B12/+1628.571X/+3500Y	WF-PO-PSTI-B12-01-Y3500	WF-JO-B12-FJ08-R
F109	68328.571	2000.000	D	B12/+3428.571X/+2000Y	WF-PO-PSTI-B12-02-Y2000	WF-JO-B12-FJ05-R
F110	68328.571	3500.000	D	B12/+3428.571X/+3500Y	WF-PO-PSTI-B12-02-Y3500	WF-JO-B12-FJ08-R
F111	69528.571	2000.000	D	B12/+4628.571X/+2000Y	WF-PO-PSTI-B12-03-Y2000	WF-JO-B12-FJ05-R
F112	69528.571	3500.000	D	B12/+4628.571X/+3500Y	WF-PO-PSTI-B12-03-Y3500	WF-JO-B12-FJ08-R
F113	71800.000	1000.000	D	AX13/+1000Y	WF-PO-PST-A13-01	WF-PB-A13-FB01
F114	71800.000	2000.000	D	AX13/+2000Y	WF-PO-PST-A13-02	WF-PB-A13-FB01
F115	71800.000	3000.000	D	AX13/+3000Y	WF-PO-PST-A13-03	WF-PB-A13-FB01
F116	71800.000	4000.000	D	AX13/+4000Y	WF-PO-PST-A13-04	WF-PB-A13-FB01
F117	71800.000	5000.000	D	AX13/+5000Y	WF-PO-PST-A13-05	WF-PB-A13-FB01
F118	73942.857	2000.000	E	B13/+2142.857X/+2000Y	WF-PO-PSTI-B13-01-Y2000	WF-JO-B13-FJ05-R
F119	73942.857	3500.000	E	B13/+2142.857X/+3500Y	WF-PO-PSTI-B13-01-Y3500	WF-JO-B13-FJ08-R
F120	75742.857	2000.000	E	B13/+3942.857X/+2000Y	WF-PO-PSTI-B13-02-Y2000	WF-JO-B13-FJ05-R
F121	75742.857	3500.000	E	B13/+3942.857X/+3500Y	WF-PO-PSTI-B13-02-Y3500	WF-JO-B13-FJ08-R
F122	77600.000	1000.000	E	AX14/+1000Y	WF-PO-PST-A14-01	WF-PB-A14-FB01
F123	77600.000	2000.000	E	AX14/+2000Y	WF-PO-PST-A14-02	WF-PB-A14-FB01
F124	77600.000	3000.000	E	AX14/+3000Y	WF-PO-PST-A14-03	WF-PB-A14-FB01
F125	77600.000	4000.000	E	AX14/+4000Y	WF-PO-PST-A14-04	WF-PB-A14-FB01
F126	77600.000	5000.000	E	AX14/+5000Y	WF-PO-PST-A14-05	WF-PB-A14-FB01
F127	80157.143	2000.000	E	B14/+2557.143X/+2000Y	WF-PO-PSTI-B14-01-Y2000	WF-JO-B14-FJ05-R
F128	80157.143	3500.000	E	B14/+2557.143X/+3500Y	WF-PO-PSTI-B14-01-Y3500	WF-JO-B14-FJ08-R
F129	81357.143	2000.000	E	B14/+3757.143X/+2000Y	WF-PO-PSTI-B14-02-Y2000	WF-JO-B14-FJ05-R
F130	81357.143	3500.000	E	B14/+3757.143X/+3500Y	WF-PO-PSTI-B14-02-Y3500	WF-JO-B14-FJ08-R
F131	83400.000	1000.000	E	AX15/+1000Y	WF-PO-PST-A15-01	WF-PB-A15-FB01
F132	83400.000	2000.000	E	AX15/+2000Y	WF-PO-PST-A15-02	WF-PB-A15-FB01
F133	83400.000	3000.000	E	AX15/+3000Y	WF-PO-PST-A15-03	WF-PB-A15-FB01
F134	83400.000	4000.000	E	AX15/+4000Y	WF-PO-PST-A15-04	WF-PB-A15-FB01
F135	83400.000	5000.000	E	AX15/+5000Y	WF-PO-PST-A15-05	WF-PB-A15-FB01
F136	85664.286	2000.000	E	B15/+2264.286X/+2000Y	WF-PO-PSTI-B15-01-Y2000	WF-JO-B15-FJ05-R
F137	85664.286	3500.000	E	B15/+2264.286X/+3500Y	WF-PO-PSTI-B15-01-Y3500	WF-JO-B15-FJ08-R
F138	87571.429	2000.000	E	B15/+4171.429X/+2000Y	WF-PO-PSTI-B15-02-Y2000	WF-JO-B15-FJ05-R
F139	87571.429	3500.000	E	B15/+4171.429X/+3500Y	WF-PO-PSTI-B15-02-Y3500	WF-JO-B15-FJ08-R
F140	89200.000	1000.000	E	AX16/+1000Y	WF-PO-PST-A16-01	WF-PB-A16-FB01
F141	89200.000	2000.000	E	AX16/+2000Y	WF-PO-PST-A16-02	WF-PB-A16-FB01
F142	89200.000	3000.000	E	AX16/+3000Y	WF-PO-PST-A16-03	WF-PB-A16-FB01
F143	89200.000	4000.000	E	AX16/+4000Y	WF-PO-PST-A16-04	WF-PB-A16-FB01
F144	89200.000	5000.000	E	AX16/+5000Y	WF-PO-PST-A16-05	WF-PB-A16-FB01
F145	90571.429	2000.000	F	B16/+1371.429X/+2000Y	WF-PO-PSTI-B16-01-Y2000	WF-JO-B16-FJ05-R
F146	90571.429	3500.000	F	B16/+1371.429X/+3500Y	WF-PO-PSTI-B16-01-Y3500	WF-JO-B16-FJ08-R
F147	92478.572	2000.000	F	B16/+3278.572X/+2000Y	WF-PO-PSTI-B16-02-Y2000	WF-JO-B16-FJ05-R
F148	92478.572	3500.000	F	B16/+3278.572X/+3500Y	WF-PO-PSTI-B16-02-Y3500	WF-JO-B16-FJ08-R
F149	95000.000	1000.000	F	AX17/+1000Y	WF-PO-PST-A17-01	WF-PB-A17-FB01
F150	95000.000	2000.000	F	AX17/+2000Y	WF-PO-PST-A17-02	WF-PB-A17-FB01
F151	95000.000	3000.000	F	AX17/+3000Y	WF-PO-PST-A17-03	WF-PB-A17-FB01
F152	95000.000	4000.000	F	AX17/+4000Y	WF-PO-PST-A17-04	WF-PB-A17-FB01
F153	95000.000	5000.000	F	AX17/+5000Y	WF-PO-PST-A17-05	WF-PB-A17-FB01
F154	96785.714	2000.000	F	B17/+1785.714X/+2000Y	WF-PO-PSTI-B17-01-Y2000	WF-JO-B17-FJ05-R
F155	96785.714	3500.000	F	B17/+1785.714X/+3500Y	WF-PO-PSTI-B17-01-Y3500	WF-JO-B17-FJ08-R
F156	97985.714	2000.000	F	B17/+2985.714X/+2000Y	WF-PO-PSTI-B17-02-Y2000	WF-JO-B17-FJ05-R
F157	97985.714	3500.000	F	B17/+2985.714X/+3500Y	WF-PO-PSTI-B17-02-Y3500	WF-JO-B17-FJ08-R
F158	100800.000	1000.000	F	AX18/+1000Y	WF-PO-PST-A18-01	WF-PB-A18-FB01
F159	100800.000	2000.000	F	AX18/+2000Y	WF-PO-PST-A18-02	WF-PB-A18-FB01
F160	100800.000	3000.000	F	AX18/+3000Y	WF-PO-PST-A18-03	WF-PB-A18-FB01
F161	100800.000	4000.000	F	AX18/+4000Y	WF-PO-PST-A18-04	WF-PB-A18-FB01
F162	100800.000	5000.000	F	AX18/+5000Y	WF-PO-PST-A18-05	WF-PB-A18-FB01
F163	103000.000	2000.000	F	B18/+2200.000X/+2000Y	WF-PO-PSTI-B18-01-Y2000	WF-JO-B18-FJ05-R
F164	103000.000	3500.000	F	B18/+2200.000X/+3500Y	WF-PO-PSTI-B18-01-Y3500	WF-JO-B18-FJ08-R
F165	104800.000	2000.000	F	B18/+4000.000X/+2000Y	WF-PO-PSTI-B18-02-Y2000	WF-JO-B18-FJ05-R
F166	104800.000	3500.000	F	B18/+4000.000X/+3500Y	WF-PO-PSTI-B18-02-Y3500	WF-JO-B18-FJ08-R
F167	106600.000	1000.000	F	AX19/+1000Y	WF-PO-PST-A19-01	WF-PB-A19-FB01
F168	106600.000	2000.000	F	AX19/+2000Y	WF-PO-PST-A19-02	WF-PB-A19-FB01
F169	106600.000	3000.000	F	AX19/+3000Y	WF-PO-PST-A19-03	WF-PB-A19-FB01
F170	106600.000	4000.000	F	AX19/+4000Y	WF-PO-PST-A19-04	WF-PB-A19-FB01
F171	106600.000	5000.000	F	AX19/+5000Y	WF-PO-PST-A19-05	WF-PB-A19-FB01

81 rows on this sheet. Identical values in FS_POINTS_LOCAL_MM.csv.
Column ZN is the zone, not an elevation.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

COORDINATE SCHEDULE 3 OF 3 - FLOOR POST SUPPORT POINTS F091-F171

SHEET	SCALE	REVISION
FS-12	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 12 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

1 GIVEN INTERFACE CONDITIONS

a. Support position: the 247 project local coordinates on FS-10 to FS-12, unchanged from the structural model; point centres are not changed individually.
b. Interface: one pile per point, pile axis concentric with the supported member axis; eccentricity 0.000 mm at all 247 points.

c. Supported members: C001-C076 main columns HW350x350x12x19; 95 floor post points: floor edge beam BP 200x300 built-up (existing floor main beam I 300x200x8x12, 2xPL200x12 + PL276x8); 76 floor post points: floor joists HN250x125x6x9.
d. Floor post base interface (171 points, given): base plate 200 x 200 x 12 mm, plate underside at model z = 0, plate top at model z = 12, post shaft starts at model z = 12. The pile head mates with this existing plate at every point.

e. Main column base interface (76 points, given by D02): base CS-4 per PIN001-CS4-001/002, base plate 380 x 380 x 25, underside at model z = -25; shims 3-30 (nominal 15); pile cap plate PH-4 380 x 380 x 25, top at nominal model z = -40 (+12 / -15). Column data: D02 main column base table (76 locations). Six-component capacity and stiffness of the assembly: BY PILE SUPPLIER, TO BE COORDINATED.

f. These z values are relative model levels, not site pile head levels; pile heads are not all at model z = 0. Pile head level is issued by the level design.

g. Centre spacing (all 247 points of FS-10 to FS-12, 30381 pairs, 76 main column and 171 floor post points): below 1000 mm only three pairs in bay B01, F008-F011 500.000 mm, F009-F012 707.107 mm, F009-F013 707.107 mm, outline clearance 400.0 / 565.7 / 565.7 mm, see FS-09; bay B01 also F008-F010 and F008-F012 at 1118.034 mm. All other pairs min 1000.000 mm (38 main column / axis post pairs, 76 axis post pairs); non-axis posts min 1200.000 mm (F051-F053, F052-F054 in B06, 6 further pairs in B12, B14, B17); outside B01, non-axis to axis posts min 1371.429 mm (B16, F141-F145). Helix diameter and rig envelope: BY PILE SUPPLIER within these limits.

2 DEMAND FIELDS

FIELD	UNIT	CONTENT
LOAD_COMBINATION_ID	-	combination the six components belong to
CONCURRENT_SET_ID	-	set keeping signs and simultaneity of the six components
LIMIT_STATE	-	strength or serviceability
FX_KN / FY_KN / FZ_KN	kN	pile-head action in project X/Y/Z, +Z up
MX_KNM / MY_KNM / MZ_KNM	kNm	moment about the three local axes, MZ is the torsion term, signed
FZ_COMPRESSION_ENVELOPE_KN	kN	governing negative FZ, quoted with its CONCURRENT_SET_ID
FZ_TENSION_ENVELOPE_KN	kN	governing positive FZ, quoted with its CONCURRENT_SET_ID
KX_KN_PER_MM / KY / KZ	kN/mm	translational spring on each local axis
KRX_KNM_PER_RAD / KRY / KRZ	kNm/rad	rotational restraint about each local axis
SETTLEMENT_LIMIT_MM	mm	permissible settlement at the point
DEFLECTION_LIMIT_X_MM / _Y_MM	mm	permissible head deflection on each axis
PILE_HEAD_LEVEL_ADJUST_RANGE_MM	mm	level adjustment the head must provide
PLAN_ADJUST_RANGE_MM	mm	plan adjustment the head must absorb
DESIGN_LIFE_YEARS	yr	design life governing corrosion allowance
CORROSION_PROTECTION_CLASS	-	protection class and its basis

The six components are Fx / Fy / Fz / Mx / My / Mz; torsion Mz is not omitted. Compression and tension are signed envelopes of Fz, quoted with their concurrent combination, not assembled from independent component maxima. Stiffness is given per direction as three translational and three rotational terms, not as one non-directional stiffness. All demand fields are TO BE SUPPLIED; they are not filled with 0 and no capacity values from other models or projects are used.

3 DESIGN INPUTS

DESIGN INPUT	SOURCE
six force components per point, Fx Fy Fz Mx My Mz	frame reaction run on a consistent load basis for the current whole frame
concurrent sets, signs and limit-state class	same reaction run, exported as combination sets, not component maxima
base restraint assumed in the frame model	structural model decision; a bolted head is not automatically a fixed base
settlement and deflection limits	structural serviceability criteria for the raised floor and the frame
main column base CS-4 / pile cap PH-4 assembly: six-component capacity and stiffness	D02 PIN001-CS4-001/002 give the detail; assembly evaluation per the D02 interface specification
pile head design level and level adjustment range	level design, issued separately from this plan set
soil profile, groundwater level, torque correlation	site investigation report for this site
shaft size, helix configuration, length, installation torque window, group analysis, test regime	pile supplier and foundation designer against the demands and the site data

4 SCHEDULE FORMAT EXTRACT

POINT_ID	PROJECT_X mm	PROJECT_Y mm	SUPPORTED SECTION	BASE PLATE	NEAREST c/c mm	FX...MZ, K, LIMITS
C001	0.000	0.000	HW350x350x12x19	CS-4 380x380x25	1000.000	TO BE SUPPLIED
C002	0.000	6000.000	HW350x350x12x19	CS-4 380x380x25	1000.000	TO BE SUPPLIED
F001	0.000	1000.000	BP 200x300 built-up	200x200x12	1000.000	TO BE SUPPLIED
F008	5300.000	2000.000	HN250x125x6x9	200x200x12	500.000	TO BE SUPPLIED
F015	7707.143	2000.000	HN250x125x6x9	200x200x12	1500.000	TO BE SUPPLIED
F171	106600.000	5000.000	BP 200x300 built-up	200x200x12	1000.000	TO BE SUPPLIED

Table file FS_PILE_REQUIREMENT_SCHEDULE.csv, 247 rows keyed by POINT_ID. The first 18 columns are the position and interface conditions given by this set; demand fields follow.
Shaft diameter, helix configuration and pile length: BY PILE SUPPLIER with the site foundation design, to meet the above demands. Ultimate capacity is not a working capacity; rated installation torque is not a complete acceptance criterion.
If the foundation selection changes the pile axis position, this set shall be revised.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

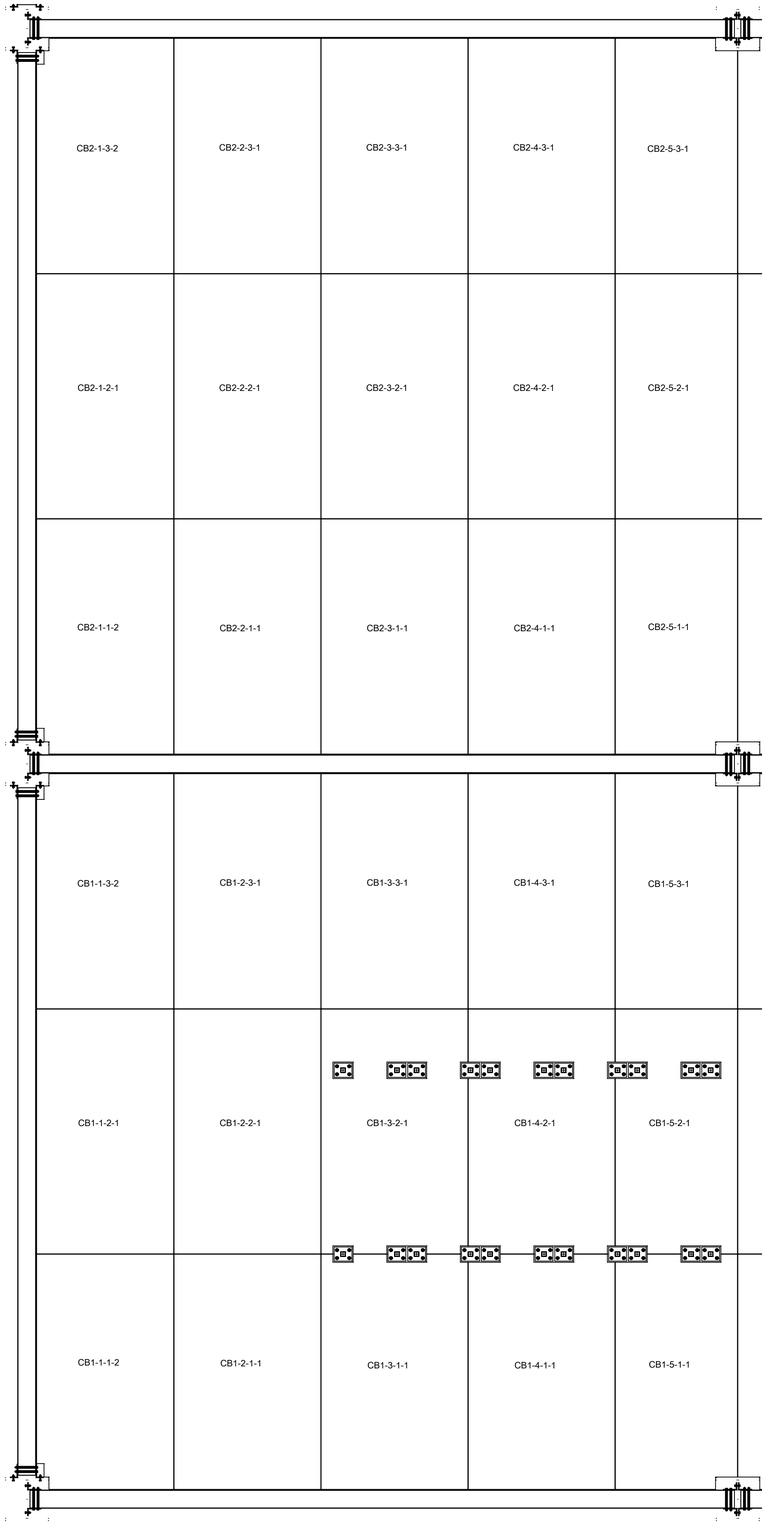
PILE PERFORMANCE REQUIREMENT INTERFACE SCHEDULE

SHEET	SCALE	REVISION
FS-16	NOT TO SCALE	B

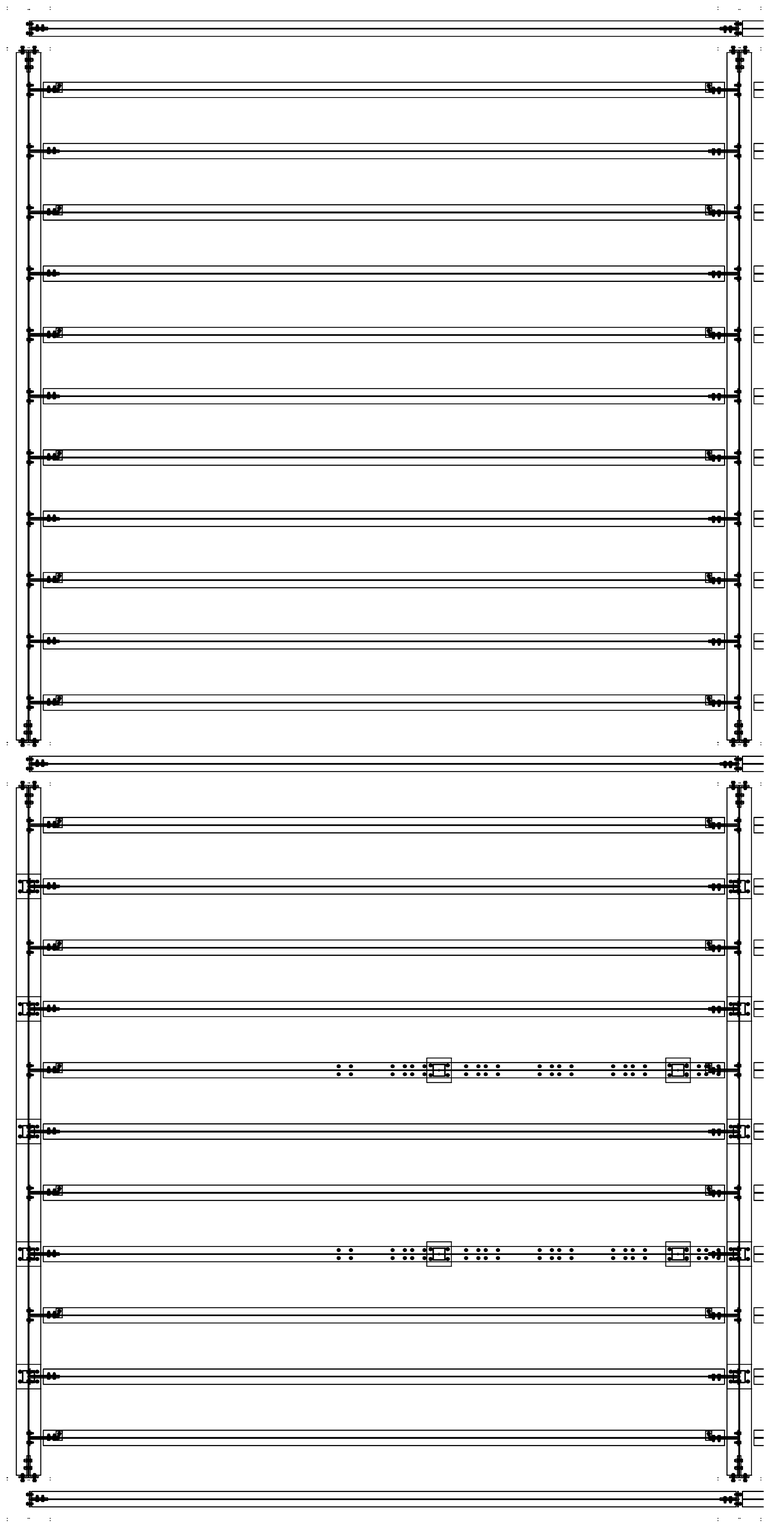
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-27 LOCAL 2D · SHEET 16 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Standard bay plan 1:25

Board view 1:25



Structural layout view 1:25 (beams and columns)



Bay 1 width 5800 30 boards
Secondary beams along X at 500 centres, flange top Z1000, flange 125 wide 9 thick, web 6 thick, beam soffit Z750.
Transverse main beams 200 wide, flange top Z1000, in two segments along Y: 195…5805 and 6195…11805.
Board 30 thick, soffit Z1000, top Z1030, joints 3 between boards.
Secondary beams spanned per board in this bay: 20 boards span 4, 10 boards span 5.

Board plan shows floor boards, IT base plates and members passing through; beams on the beam/column plan.
Sections other than floor boards are main columns and equipment uprights crossing this level, not boards.
Beam/column plan shows main beams, secondary beams, post caps and upper post segments.
During installation check board, beam and post numbers against the same grid lines.
Details: F-301 to F-303; post caps and post bases: F-401.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Standard bay plan 1:25 — Bay 1 shown as representative; 16 similar bays

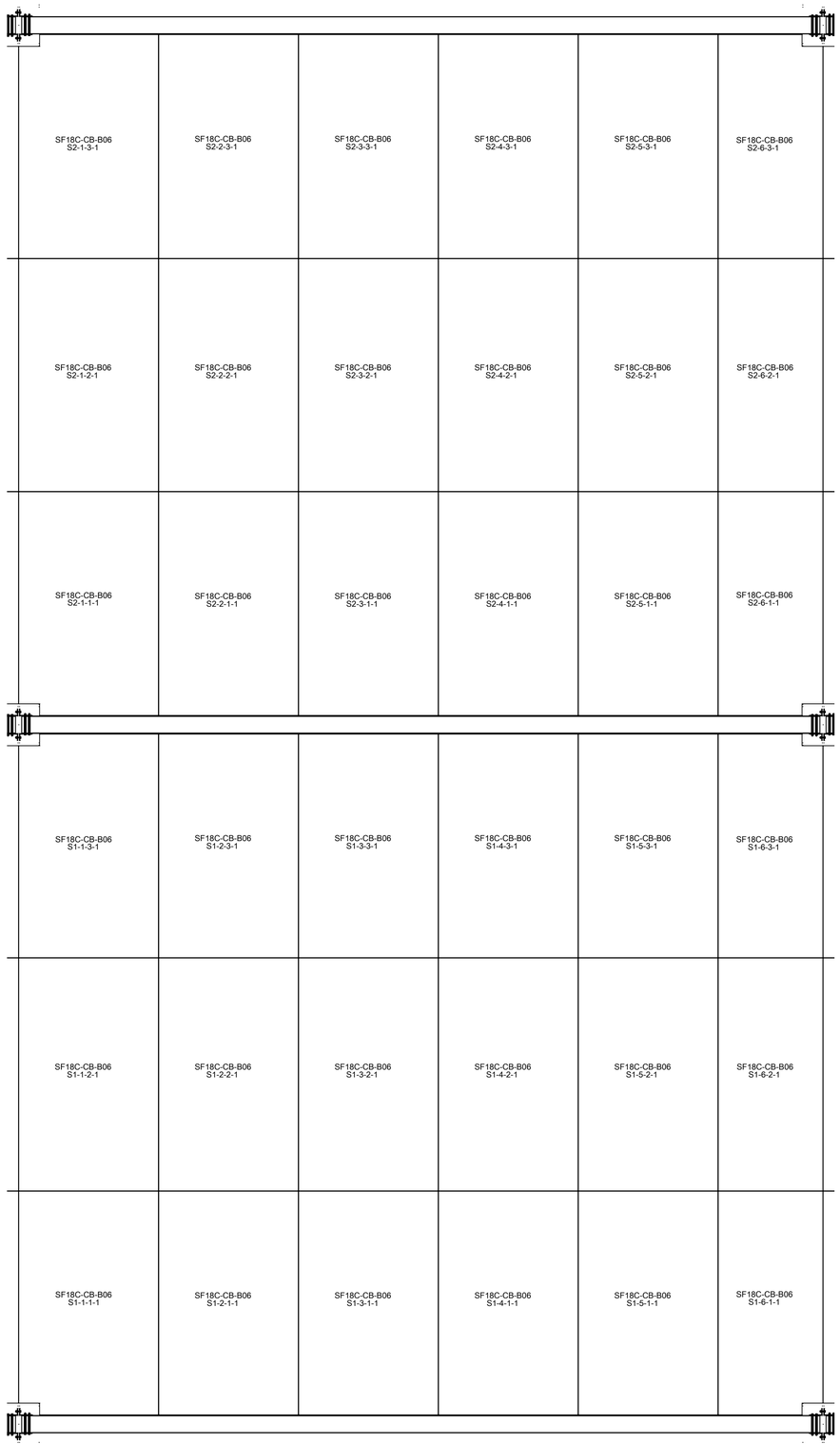
SHEET	SCALE	REVISION
D01 F-201	1:25 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

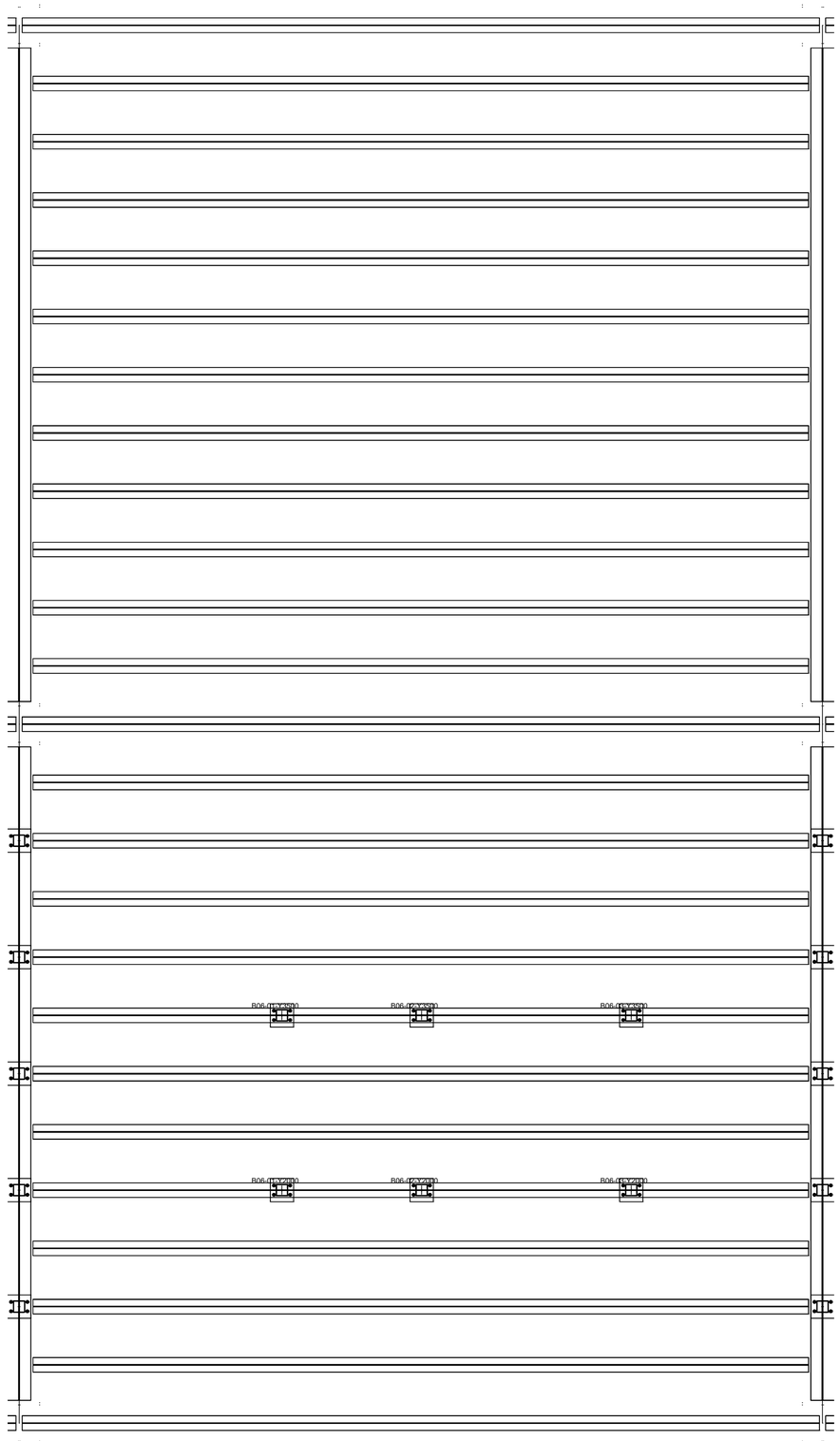
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Widened bay B06 plan 1:25

Board view 1:25



Structural layout view 1:25 (beams and columns)



B06 secondary beams 25, marks WF-JO-B06-FJ01-R … WF-JO-B06-FJ25-R
WF-JO-B06-FJ01-R WF-JO-B06-FJ02-R WF-JO-B06-FJ03-R
WF-JO-B06-FJ04-R WF-JO-B06-FJ05-R WF-JO-B06-FJ06-R
WF-JO-B06-FJ07-R WF-JO-B06-FJ08-R WF-JO-B06-FJ09-R
WF-JO-B06-FJ10-R WF-JO-B06-FJ11-R WF-JO-B06-FJ12-R
WF-JO-B06-FJ13-R WF-JO-B06-FJ14-R WF-JO-B06-FJ15-R
WF-JO-B06-FJ16-R WF-JO-B06-FJ17-R WF-JO-B06-FJ18-R
WF-JO-B06-FJ19-R WF-JO-B06-FJ20-R WF-JO-B06-FJ21-R
WF-JO-B06-FJ22-R WF-JO-B06-FJ23-R WF-JO-B06-FJ24-R
WF-JO-B06-FJ25-R

Secondary beam length in X
29026…35874 L 6848 3 beams
29120…35780 L 6660 22 beams

Interior posts 6, only at FJ05 (Y2000) and FJ08 (Y3500); the other 23 secondary beams have no intermediate post
X stations: 31257.143, 32457.143, 34257.143
WF-PO-PSTI-B06-01-Y2000 15DA3 X 31257.143 Y 2000 post top Z738
WF-PO-PSTI-B06-01-Y3500 15DA5 X 31257.143 Y 3500 post top Z738
WF-PO-PSTI-B06-02-Y2000 15DA7 X 32457.143 Y 2000 post top Z738
WF-PO-PSTI-B06-02-Y3500 15DA9 X 32457.143 Y 3500 post top Z738
WF-PO-PSTI-B06-03-Y2000 15DAB X 34257.143 Y 2000 post top Z738
WF-PO-PSTI-B06-03-Y3500 15DAD X 34257.143 Y 3500 post top Z738

Frame posts on boundary grid lines 5 per grid line at Y1000…5000, on the FB01 side only; none at FB02.
The 12 interior and 20 boundary posts are different sets and are not added.
X stations of B06 and B12 differ; they are not mirrored and not interchangeable.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Widened bay B06 plan 1:25 — Grid X 29000…35900 width 6900 25 secondary beams 6 interior posts

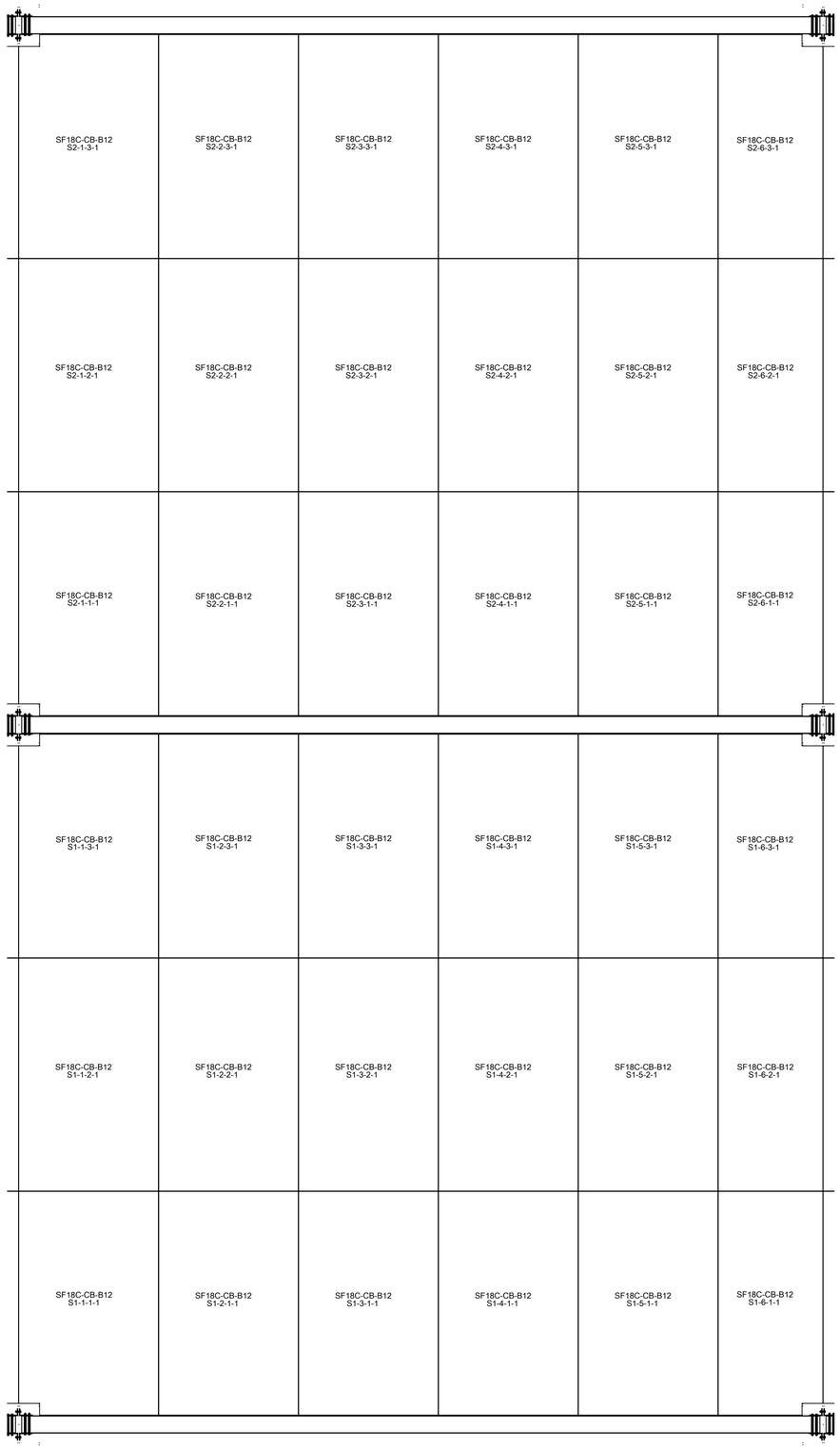
SHEET	SCALE	REVISION
D01 F-202	1:25 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

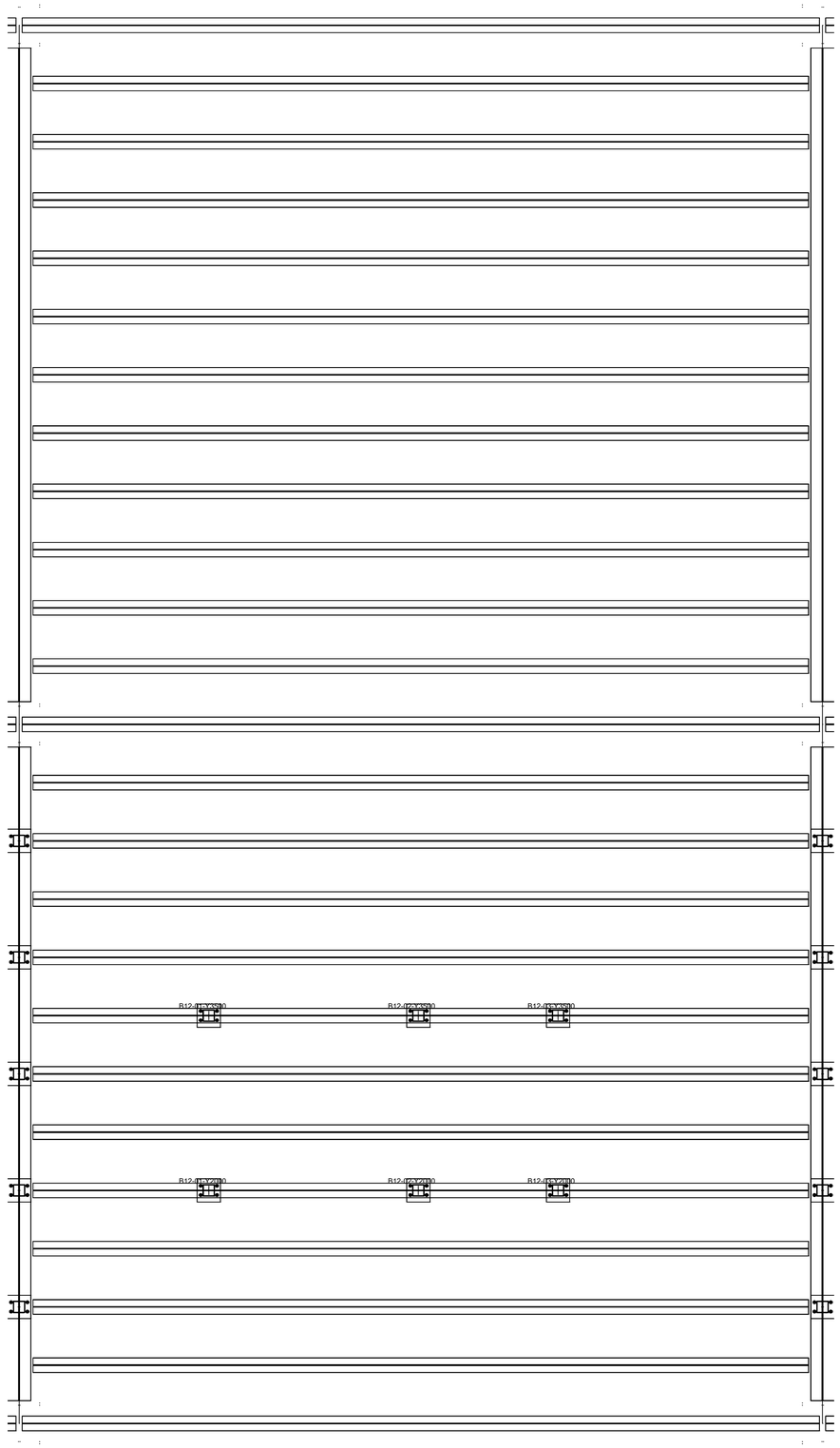
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Widened bay B12 plan 1:25

Board view 1:25



Structural layout view 1:25 (beams and columns)



B12 secondary beams 25, marks WF-JO-B12-FJ01-R … WF-JO-B12-FJ25-R
WF-JO-B12-FJ01-R WF-JO-B12-FJ02-R WF-JO-B12-FJ03-R
WF-JO-B12-FJ04-R WF-JO-B12-FJ05-R WF-JO-B12-FJ06-R
WF-JO-B12-FJ07-R WF-JO-B12-FJ08-R WF-JO-B12-FJ09-R
WF-JO-B12-FJ10-R WF-JO-B12-FJ11-R WF-JO-B12-FJ12-R
WF-JO-B12-FJ13-R WF-JO-B12-FJ14-R WF-JO-B12-FJ15-R
WF-JO-B12-FJ16-R WF-JO-B12-FJ17-R WF-JO-B12-FJ18-R
WF-JO-B12-FJ19-R WF-JO-B12-FJ20-R WF-JO-B12-FJ21-R
WF-JO-B12-FJ22-R WF-JO-B12-FJ23-R WF-JO-B12-FJ24-R
WF-JO-B12-FJ25-R

Secondary beam length in X
64926…71774 L 6848 3 beams
65020…71680 L 6660 22 beams

Interior posts 6, only at FJ05 (Y2000) and FJ08 (Y3500); the other 23 secondary beams have no intermediate post
X stations: 66528.571, 68328.571, 69528.571
WF-PO-PSTI-B12-01-Y2000 15DD7 X 66528.571 Y 2000 post top Z738
WF-PO-PSTI-B12-01-Y3500 15DD9 X 66528.571 Y 3500 post top Z738
WF-PO-PSTI-B12-02-Y2000 15DDB X 68328.571 Y 2000 post top Z738
WF-PO-PSTI-B12-02-Y3500 15DDD X 68328.571 Y 3500 post top Z738
WF-PO-PSTI-B12-03-Y2000 15DDF X 69528.571 Y 2000 post top Z738
WF-PO-PSTI-B12-03-Y3500 15DE1 X 69528.571 Y 3500 post top Z738

Frame posts on boundary grid lines 5 per grid line at Y1000…5000, on the FB01 side only; none at FB02.
The 12 interior and 20 boundary posts are different sets and are not added.
X stations of B06 and B12 differ; they are not mirrored and not interchangeable.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Widened bay B12 plan 1:25 — Grid X 64900…71800 width 6900 25 secondary beams 6 interior posts

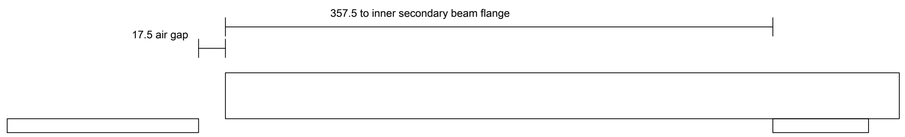
SHEET	SCALE	REVISION
D01 F-203	1:25 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Perimeter and mid-band edge sections 1:2

D-1 Perimeter board edge Y80 1:2



Between board edge Y80 and outer secondary beam flange tip Y62.5 is a 17.5 air gap; the 17.5 is not an overhang.
Without a local support, the governing dimension is the 357.5 overhang from the inner secondary beam flange at Y437.5.
Mid-band edges Y5920 and Y6080 are one family with identical geometry. 368 free-edge boards in the whole floor.

D-2 Mid-band edge Y5920 / Y6080 1:2



Board edges on both sides of the mid band equal the perimeter condition: 17.5 from the flange tip, 357.5 overhang from the next bearing flange.
No floor boards within the band Y5920…6080.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Perimeter and mid-band edge sections 1:2 — Actual geometry and control dimensions of free edges

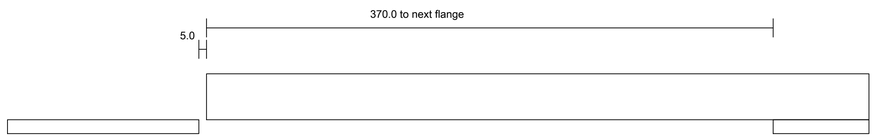
SHEET	SCALE	REVISION
D01 F-301	1:2 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

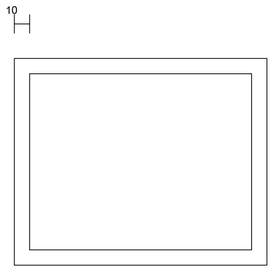
Notch, opening and IT base plate clearance details 1:2

D-3 Notch back edge (representative section, cut at Y2067.5) 1:2



Representative section cut at Y2067.5, for the family of notch back edges 67.5 from the secondary beam centre.
This family passes the flange tip by 5.0; on the other side 370.0 to the next flange. The 5 offset is not a 5 overhang.
Also 144 notch back edges at 180 from the centre and 8 at 210; different geometry, treated in the same way as this detail.
149 boards with notch back edges in the whole floor; positions and special conditions: BOARD_MAP_D01.csv.

D-4 IT base plate clearance (plan) 1:2



IT base plate 145×115×8, underside Z1000, top Z1008, inside a floor board cut-out: the board is cut away at the rack legs,
the base plate does not bear on the board; plan clearance from board outline to base plate 10.0.
22 IT base plates and 6 IT positions, all in bay 1; 6 boards cut for them: CB1-3-1-1, CB1-3-2-1, CB1-4-1-1, CB1-4-2-1, CB1-5-1-1, CB1-5-2-1.
Only base plates present in the model are drawn; no planned rack positions are copied.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Notch, opening and IT base plate clearance details 1:2 — Interface between actual board cut-outs and existing equipment

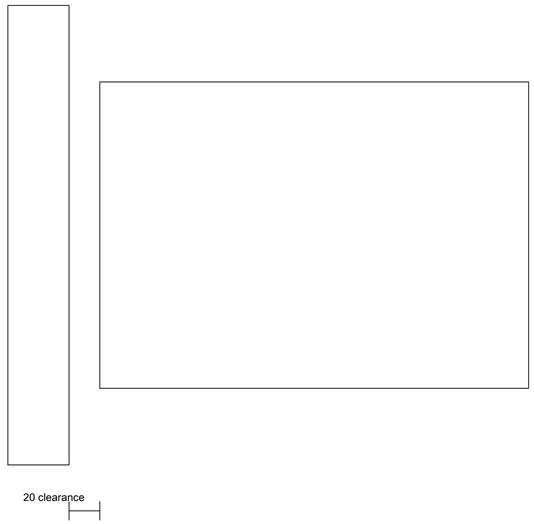
SHEET	SCALE	REVISION
D01 F-302	1:2 ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

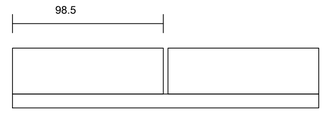
Secondary beam end and joint on main beam detail 1:2

D-5 Secondary beam end (representative section, typical end) 1:2



All 50 secondary beams, 100 ends: 88 ends have 20 clearance to the main beam face.
Existing model end geometry; end connections per D02 SP-T1 (88) / SP-T2 (12).
FJ01, FJ13, FJ25 (6 beams in the two bays) do not meet FB01 or FB02 in Y, 12 ends in total;
no bolts or welds in the model reference these 6 beams; they are not shown as bearing on main beams.
R04 model geometry; end reaction V, eccentricity and effective width of the supporting web: TO BE COORDINATED; no resistance is stated here.

D-6 Joint on main beam flange 1:2



68 edge instances, 34 joint lines fully on the 200 wide main beam flange, total 135.796 m.
136 further edge instances partly on that flange: main beams end at Y195 and Y5805, 15 unsupported at each end.
The other 1072 X edge instances span secondary beams only (P-911). 216 boards involve main beam flanges.

Current interface basis
Secondary beam ends: 100 ends connected per D02 SP-T1 / SP-T2; end-by-end in the D02 end connection index (100 rows).
Main column bases: per D02 CS-4 / PH-4, base plate 380×380×25; column-by-column in the D02 base assembly table (76 rows).
Post pile heads at model Z=0; main column PH4 pile cap top nominal Z=−40, difference 40; CS4 plate underside Z=−25.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Secondary beam end and joint on main beam detail 1:2 — Existing end geometry; end connections see D02 SP-T1 / SP-T2

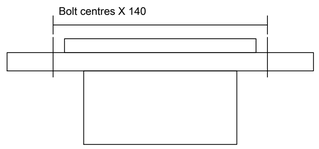
SHEET	SCALE	REVISION
D01 F-303	1:2 ON A1 841x594	Rev 01B / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

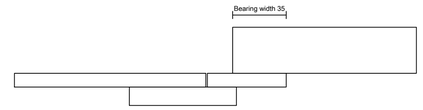
Post cap and post base details 1:2

D-7 Secondary beam post cap (post top Z738, cap Z738…750) 1:2



Post cap 200×200×12. 171 caps, 4 bolts each, centres X 140, Y 80 (±70 and ±40 from the post centre).
Bolts M12×45, standard 4014, grade 8.8, assembly Mu2S, holes 13/13.
Grip: secondary beam cap 21, frame cap 24.
Three cap families: 72 secondary beam caps (Z738…750), 85 frame caps (Z688…700),
14 of family I33 in bay 1 (both levels). Bolt size and centres identical in all three.
8 welds per post, length 80, size 3: 4 at the base plate at Z12, 4 at the cap underside at Z688 or Z738.
Fastener and weld geometry as defined in the model; connection resistance: TO BE COORDINATED.
Bolt centres per cap: all 171 caps 140×80, including the 14 caps of family I33-P.

D-8 P04 early local support sketch (superseded by D02 R-102) 1:2



D-8 shows early P04 dimensions (plate width 130, tongue length 70); current SS-P1 is 9×140×51.5, 12×120×96.
SS-P1 fabrication and installation per D02 R-102 and the perimeter support setting-out table (1328); not modelled as objects.
CN-1, FX-S1 per D02 R-102, R-103; SS-X1 quantity 0, conditional on the TB-4 result.
CN-1 and FX-S1 holes in existing flanges are D02 machining requirements, not modelled.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Post cap and post base details 1:2 — Existing post cap fasteners and welds; local supports see D02 R-102

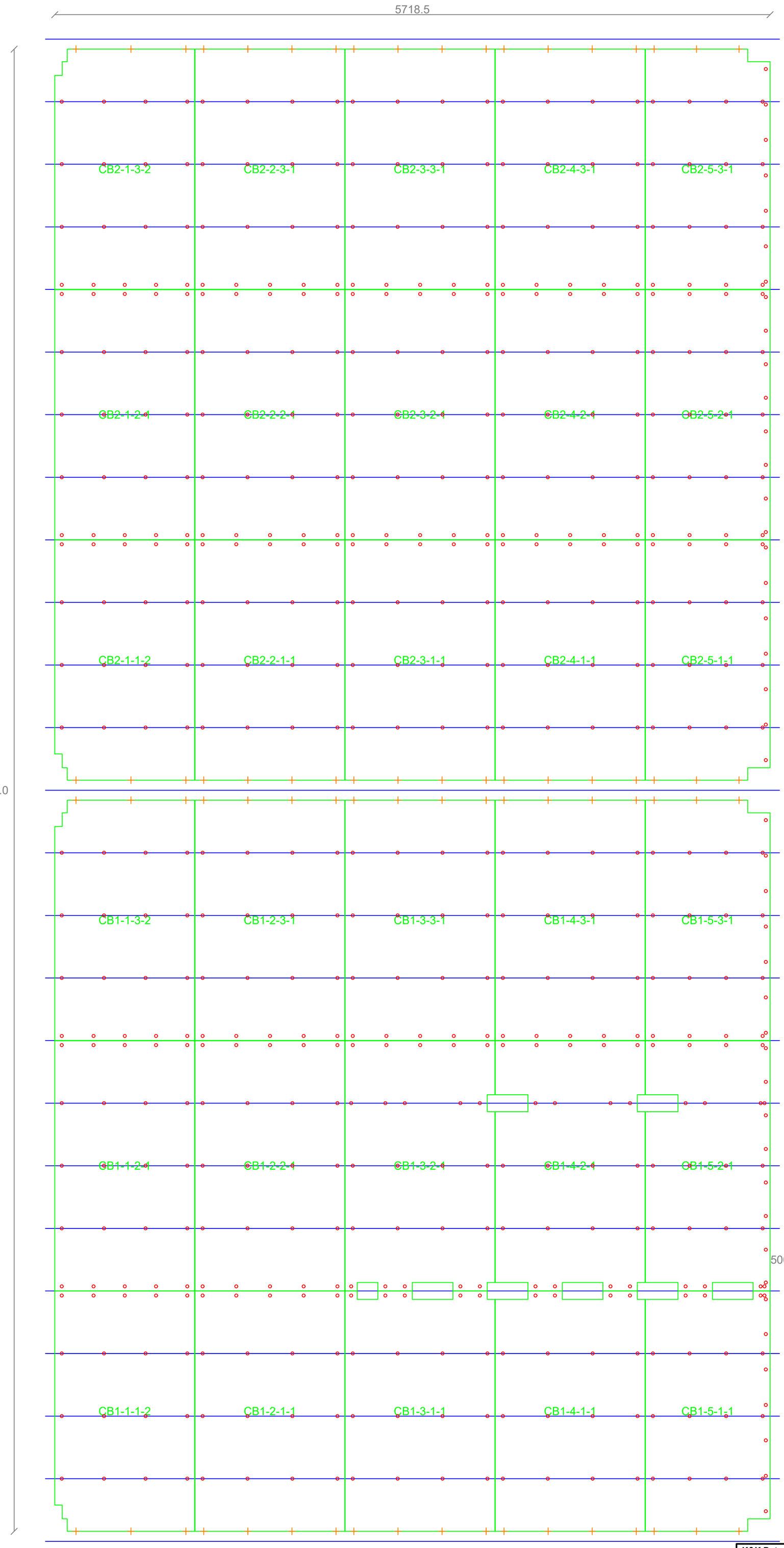
SHEET	SCALE	REVISION
D01 F-401	1:2 ON A1 841x594	Rev 01B / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Floor board fastening and support layout

Full plan of bay 1 scale 1:25 (drawn at this scale; do not rescale when printing)



Legend

- Board outlines and board numbers (30 native boards on this drawing)
- Flush fastener FX-S1 (595 on this drawing)
- Perimeter support SS-P1 (72 on this drawing)
- Secondary beam HN250x125x6x9 centreline

Whole-floor quantities

Flush fastener FX-S1 11619

Perimeter support SS-P1 1328

Support connector CN-1 2656

SS-X1 0

Notes

1 Full plan of bay 1, X 80…5798.5, Y 80…11920, 30 native boards; coordinates from the board coordinate table, not scaled or rounded.

2 Drawn at 1:25 (actual plot scale); do not rescale when printing.

3 Fastener and support positions are actual layout points; coordinates per the layout tables.

4 Other bays: see D01 floor installation drawings; this sheet shows bay 1 only.

5 Board edge conditions (air gap, bearing width, free overhang): see R-104.

6 Fasteners and board machining: R-103; perimeter supports and connectors: R-102.

Extent of this drawing X 80…5798, Y 80…11920, i.e. the whole of bay 1; whole-floor plan see D01 floor installation drawings.

K&K Data / PIN001 · D02 FLOOR BOARD DETAILS (30 mm BOARD)

Floor board fastening and support layout

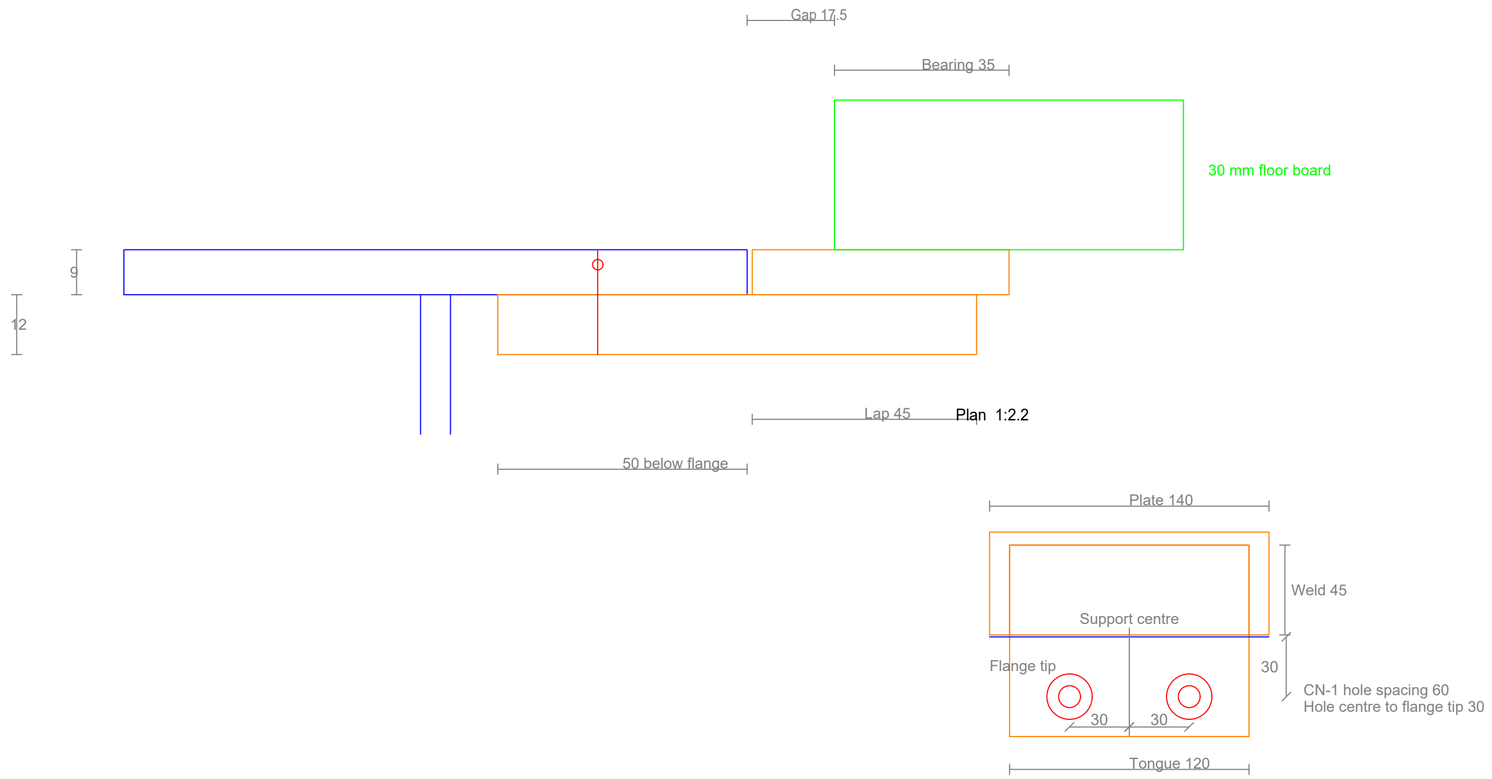
R-101 SCALE AS SHOWN · Rev R07 / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Perimeter support SS-P1 and connector CN-1

Units mm; detail scale 1:2.2; elevations are model Z; technical conditions: '30 mm Floor Board Supply, Fastening and Performance Verification Conditions' R-01 (Rev R07)

Perimeter support SS-P1 and connector CN-1 1:2.2



Support and connector annotation

Support plate 9x140x51.5 top Z1000

Tongue plate 12x120x96 top Z991

CN-1 ISO 10642 M10x25 08.8

Weld 5 45 on each long edge + 120 across the tongue plate outer end total 210 shop welded from outside the support plate underside

Weld toe landing width 10 per side > weld leg 5

CN-1 holes 2 per part, spacing 60, X ±30 from support centre; hole centre 30 from existing flange tip, 32.5 from the anchoring secondary beam axis (towards the material side).

Hole positions per part CN1_x1_mm / CN1_x2_mm / CN1_y_mm in the perimeter support setting-out CSV (1328 parts); 2656 hole positions for 1328 parts.

Material side +Y (664 parts): CN1_y = secondary beam y + 32.5, board edge y = secondary beam y + 80; material side −Y (664 parts): CN1_y = secondary beam y − 32.5, board edge y = secondary beam y − 80.

Technical conditions

Blue: existing steel, dimensions from model geometry; green: 30 mm floor boards; red: fasteners; orange: local supports.

Design basis AISC 360-22; ASCE 7-22 strength combination 1.2D+1.6L. Board flexure, elastic modulus and moist areal density are performance requirements. No floor load capacity is stated on this drawing.

Perimeter free-edge support SS-P1 and connector CN-1

Cross-section along Y-Z 1:1.15

Existing secondary beam HN250x125x6x9 flange top Z1000

Weld size AISC 360-22 J2.2b and Table J2.4

Joint classification support plate and tongue plate overlap after coplanar contact at Z991: lap joint; the thinner part is the 9 mm support plate.

Minimum weld leg Table J2.4, thinner part >6 to 13 mm: 5.

Maximum weld leg J2.2b(b)(2), along edges of material ≥ 6: thickness − 2 = 7.

Minimum lap J2.2b(f), 5 × 9 = 45, and not less than 25.

Minimum weld length J2.2b(c), 4 × 5 = 20; side weld length 45 adopted.

Ends J2.2b(g): welds on both sides stop 5 short of the support plate edge.

Load

Design reaction 2.9 kN per part (spacing 500), governed by a 2 kN / 100 pad directly over one support, saturated condition.

Vertical load is transferred by direct bearing of the support plate underside Z991 on the tongue plate top Z991 over a 45 × 120 contact area.

Prying the flange sits above the tongue plate and can only press it downward; the load point is outside the bolts and the contact resultant is inside the bolts.

CN-1 design tension 11.0 kN each. Minimum tension ≥ 20.0 kN BY MANUFACTURER declaration, verified per TB-7 on the actual stack pulled to failure, single minimum ≥ 16.5 kN; record head seating and effective thread engagement length.

Existing flange countersunk hole actually removes 133.2 mm²; net-to-gross ratio of one flange half-width 0.763.

Validity condition not more than 1 countersunk hole in the same flange half-width at the same section; no tapped holes within X±15 of a countersunk hole.

No new welds on existing secondary beams: SS-P1 is a shop-welded part; site work is bolting and tapping only.

Supersession the SS-P1 dimensions on this drawing supersede the SS-P1 values in 'Floor Board Procurement and Installation Technical Conditions' P01 (P04 package), Section 4 'Local support specimen' (footer P04 · 5) and drawing P-103:

Support plate 9×130×51.5 changed to 9×140×51.5; tongue plate 12×120×70 changed to 12×120×96; lap 19 changed to 45;

Fillet weld leg 4, total length 158 changed to leg 5, total length 210. CN-1 hole spacing 60 and hole centre 30 from flange tip unchanged.

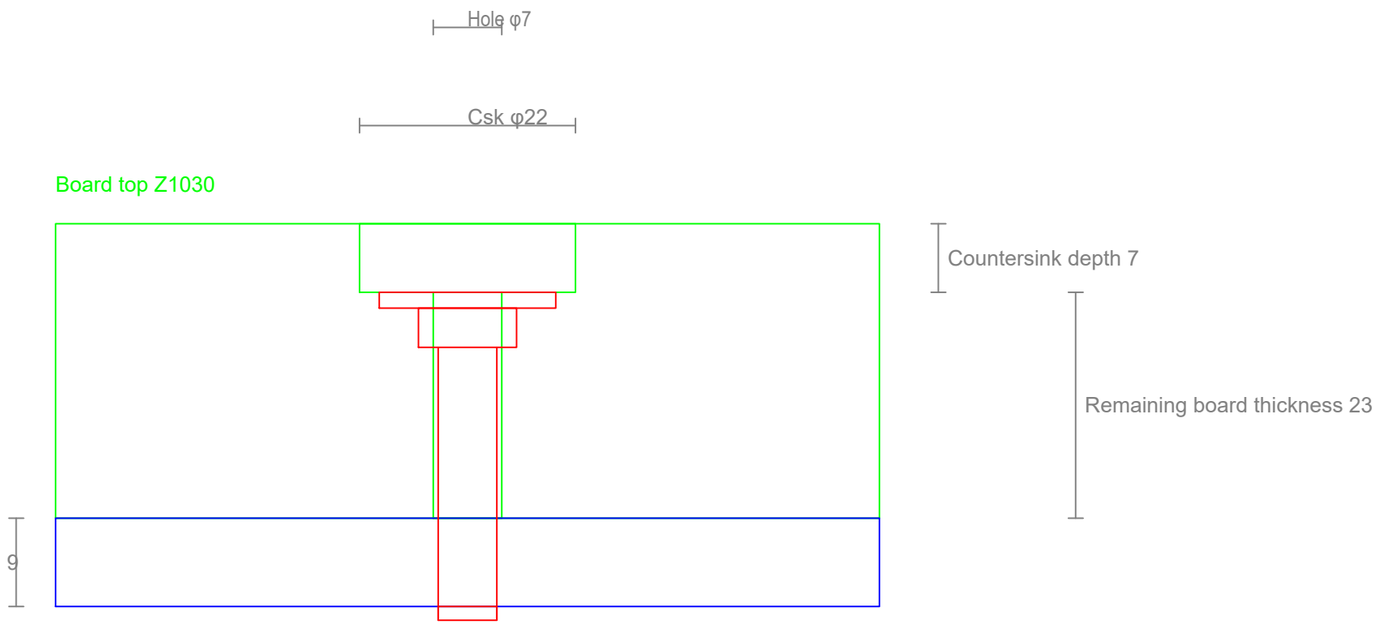
K&K Data / PIN001 · D02 FLOOR BOARD DETAILS (30 mm BOARD)
Perimeter support SS-P1 and connector CN-1

R-102 SCALE AS SHOWN · Rev R07 / 2026-09-27

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Flush fastener FX-S1 and board machining

Units mm; detail scale 1:1.6; elevations are model Z; technical conditions: '30 mm Floor Board Supply, Fastening and Performance Verification Conditions' R-01 (Rev R07)



Fastener and support annotation

Screw DIN 7984 M6x35 8.8 zinc plated

Washer φ7.0 / φ18.0 x 1.6 bearing annulus 215.98 mm²

Head top Z1028.6 1.4 below board top

Steel machining φ5.0 drill + M6 tap through 9 thick flange

Shank end Z989.6 projects 1.4 below flange underside

Technical clauses

Blue: existing steel, dimensions from model geometry; green: 30 mm floor boards; red: fasteners; orange: local supports.

Design basis AISC 360-22; ASCE 7-22 strength combination 1.2D+1.6L. Board flexure, elastic modulus and moist areal density are performance requirements. No floor load capacity is stated on this drawing.

Flush fastener FX-S1 and board machining 1:1.6

Hole position rules

Edge row where the board edge lands on an existing flange, hole centre 35 in from the board edge, spacing ≤ 300, first and last hole 60 from board edge

Field row other secondary beam centrelines, hole centre on centreline, spacing ≤ 400

Board-side clearance hole centre to any board edge ≥ 24 (countersink radius 11 + board 13)

Steel-side clearance ≥ 20 from flange tip, ≥ 15 from member end

Existing objects ≥ 30 from existing bolt assemblies; no overlap with existing holes; ≥ 25 from the rack base plate outline

Countersunk hole centre ≥ 40 from any CN-1 countersunk hole

Between countersinks centre distance of any two φ22 countersinks ≥ 30 (diameter 22 + margin 8), applies jointly to the same board, adjacent boards and the same fastened member

Net section no tapped holes within X±15 of a countersunk hole

Performance requirements

Head pull-through 5 specimens, single minimum ≥ 4.0 kN, mean ≥ 5.0 kN

Head seating increment ≤ 0.5 mm under 1.5 kN

Effective thread engagement first article measured ≥ 5.0 mm

Tightening torque set from first article and recorded in installation record

Installation sequence

1 Check existing flange top elevation Z1000 and flatness

2 Set out the low-X and low-Y edges of each board from the bay grid lines

3 Machine CN-1 mating holes, deburr, apply zinc-rich touch-up coating

4 Install SS-P1, adjust support plate top to Z1000, fit CN-1 and tighten

5 Drill φ5.0 and tap M6 at hole positions, apply touch-up coating

6 Re-check no projection above Z1000

7 Lay board, align holes, place washers and drive screws

8 Re-measure board level differences and joint widths before finishing works

Board underside Z1000 existing flange top flange thickness 9

K&K Data / PIN001 · D02 FLOOR BOARD DETAILS (30 mm BOARD)

Flush fastener FX-S1 and board machining

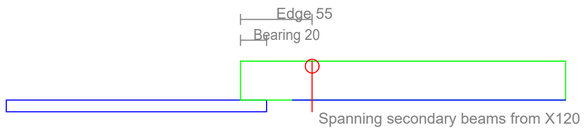
R-103 SCALE AS SHOWN · Rev R06 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Board edge conditions and test load positions

Units mm; detail scale 1:3.3; elevations are model Z; technical conditions: '30 mm Floor Board Supply, Fastening and Performance Verification Conditions' R-01 (Rev R07)

Perimeter regular X board edge bearing detail main beam end 1:3.3



Board edge conditions 2592 edge segments of 552 boards classified by actual coordinates

Type	Edge instances	Length m	Treatment
Regular Y joint on flange 3 open joint centred	744	845.768	bearing 61 each side, edge-row fasteners
Regular Y free edge overhang 357.5	368	399.592	SS-P1 at spacing ≤ 500
Regular Y free edge overhang 370.0	32	7.136	notch on bearing line, no support
Regular Y free edge overhang 257.5	144	24.596	notch on bearing line, no support
Regular Y free edge overhang 147.5	8	0.480	notch on bearing line, no support
Regular X edge spanning secondary beams	1080	1744.280	supported every 500, max. unsupported 375
Regular X edge on transverse main beam	216	404.768	edge-row fasteners; 12 perimeter edges see detail top left

Counts and total lengths per class; classified by actual coordinates.

Tests TB-1…TB-8 load positions and acceptance criteria

Fastener X135 on spanning secondary beam
TB-1 Field mid-span 5 kPa uniform and 9 kN / 762 pad deflection ≤ 1.389, residual ≤ 0.14, no cracks
TB-2 Field mid-span 2 kN / 100 pad deflection ≤ 1.389, residual ≤ 0.14, no through cracks or spalling
TB-3 Regular Y free edge overhang 357.5 with SS-P1 5 kPa along the edge line and 2 kN / 100 directly over one support
TB-4 Regular X open joint at midpoint of 375 clear span one side 2 kN / 100: offset ≤ 0.80, residual ≤ 0.10;
one side 5 kPa: offset ≤ 0.30. If passed, SS-X1 = 0 in the bill of materials; if not passed, this detail does not meet
the project requirement; a changed support or board edge detail requires its own detail drawing and check before adoption
TB-5 Notch corners and closed-opening corners (overhang 370.0 / 257.5 / 147.5, worst measured case of each family)
TB-6 FX-S1 head pull-through 5 specimens, single minimum ≥ 4.0 kN, mean ≥ 5.0 kN;
M6 installation torque determined on the same specimen set; catalogue values not used
TB-7 CN-1 actual stack remaining straight-bore thickness below the countersink measured before and after the 16.5 kN assembly test (nominal 3.15)
and head protrusion; the head shall not pull through the countersink, s ≥ 0; then pull to failure, single minimum ≥ 16.5 kN
TB-8 Perimeter regular X board edge (main beam bearing 20, fastener edge distance 55) 5 kPa or 9 kN / 762, and board edge 2 kN / 100:
board edge deflection ≤ 1.00, residual ≤ 0.10, no crushing or spalling in the 20 bearing zone, no fastener pull-out

Technical conditions

Blue: existing steel, dimensions from model geometry; green: 30 mm floor boards; red: fasteners; orange: local supports.
Design basis AISC 360-22; ASCE 7-22 strength combination 1.2D+1.6L. Board flexure, elastic modulus and moist areal density are performance requirements. No floor load capacity is stated on this drawing.
Board edge conditions, perimeter edge bearing and test load positions
Perimeter regular X board edge main beam end 1:3.3
200-wide transverse main beam ends at X100
This edge also receives full 125 bearing at every secondary beam crossing.
Main beams end at X100, secondary beams start at X120; tapped holes ≥ 15 from member end,
so there is no steel 35 in from the board edge; the nearest tappable point X135 is used.
This difference is stated here; spacing and bearing width are not relaxed.
Free edge versus notch an edge at least 2 times as long as its overhang is treated as a one-way free edge; otherwise it is a notch on a bearing line,
the board bridges the notch by bearing on both sides of the notch in the same flange.
Overhang screening limit for ranking 265 (governed by saturated condition: strength 265.8, deflection 309.2). This limit is used for geometric ranking only.
Regular X edges are not treated as cantilevers: their span is 500 as in the field area, and the maximum unsupported length is 375 between flange tips.
Test load position 2 kN / 100 pad shall be satisfied at any accessible position; no load exclusion zones
Number of specimens TB-1, TB-2, TB-3, TB-4, TB-5 and TB-8: ≥ 3 full assemblies per arrangement and per moisture condition,
made to the worst measured geometry of all 552 boards; specimen board numbers and outlines per technical conditions Section 5.1.
Moisture condition dry: 23 °C / 50 % RH equilibrated to constant mass (difference between two weighings 24 h apart ≤ 0.1 %); wet: immersed 48 h.
Load steps 25 / 50 / 75 / 100 / 125 %, each held 5 min and recorded; 100 % step held 24 h; after unloading rest 1 h and record residuals.
The table above states test arrangements and acceptance criteria as required values.

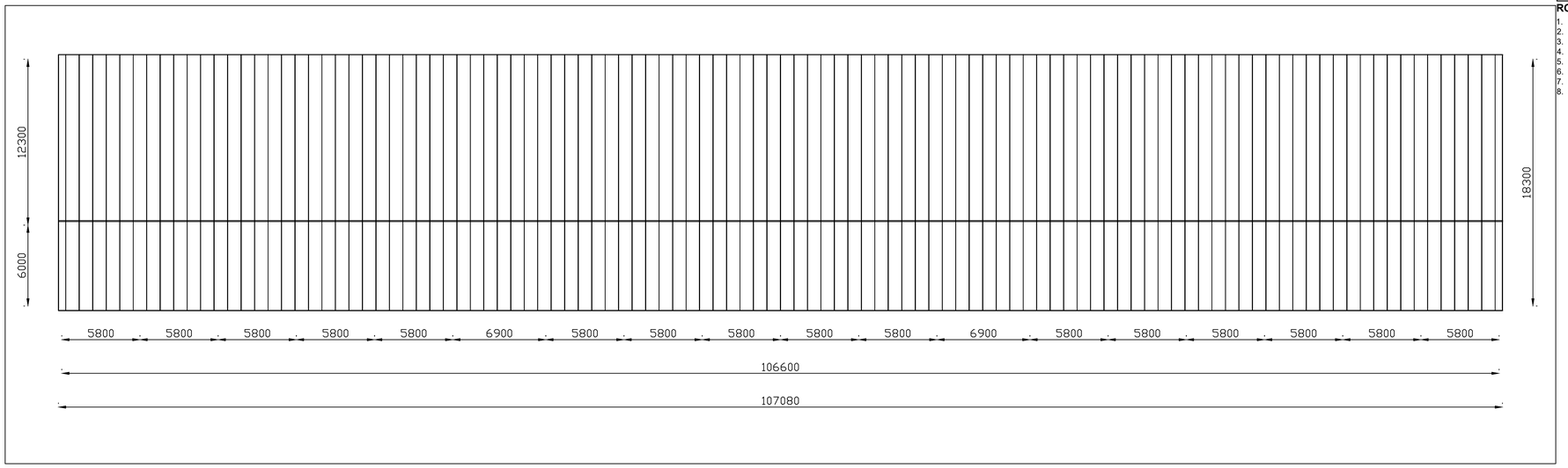
K&K Data / PIN001 · D02 FLOOR BOARD DETAILS (30 mm BOARD)
Board edge conditions and test load positions
R-104 SCALE AS SHOWN · Rev R07 / 2026-09-27
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

ROOF SURFACING QUANTITIES

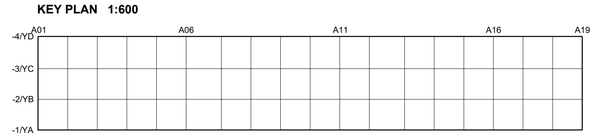
ITEM	UNIT	VALUE
HIGH ROOF PANELS	count	108
HIGH ROOF MEMBRANE STRIPS	count	54
LOW ROOF PANELS	count	108
LOW ROOF MEMBRANE STRIPS	count	54
HIGH ROOF NET FIELD AREA	m2	715.009
LOW ROOF NET FIELD AREA	m2	1325.614
TOTAL PANELS AND MEMBRANE STRIPS	count	324
BUILD-UP SHOWN, ALONG THE PANEL PLANE NORMAL	mm	101.500
BUILD-UP LAYER: KINGSPAN KS FP K-ROC 100 NOMINAL COMPOSITE	mm	100.000
BUILD-UP LAYER: RENOLIT ALKORPLAN F35176 PVC-P 1.5	mm	1.500
BUILD-UP TOTAL ALONG PANEL PLANE NORMAL	mm	101.500
FIXINGS / FLASHINGS / DRAINAGE: DETAIL DESIGN	-	-

ROOF NOTES

1. HIGH ROOF FALL 2% TOWARD Y=0; LOW ROOF FALL 2% TOWARD Y=18300.
2. LOW ROOF CONTINUES THROUGH GRID Y=12000; NO RIDGE.
3. PANEL COVER WIDTH 1000 mm; SLOPE LENGTH HIGH 6677 mm / LOW 12380 mm.
4. LOW ROOF PANEL START Y=6260.819; HIGH ROOF PANEL EDGE Y=6338.
5. ROOF BUILD-UP: NOMINAL COMPOSITE PANEL 100 mm + PVC MEMBRANE 1.5 mm.
6. STEEL SKINS 0.6/0.5 mm ARE INCLUDED IN THE 100 mm PANEL.
7. ROOF FIXINGS, FLASHINGS AND DRAINAGE DETAILS: TO BE COORDINATED.
8. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.



KEY PLAN 1:600



NOTES

1. UNITS: MILLIMETRES. DO NOT SCALE DRAWINGS.
2. UNITS: MILLIMETRES
3. LEVEL DATUM: MAIN COLUMN BASE = 0 mm
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

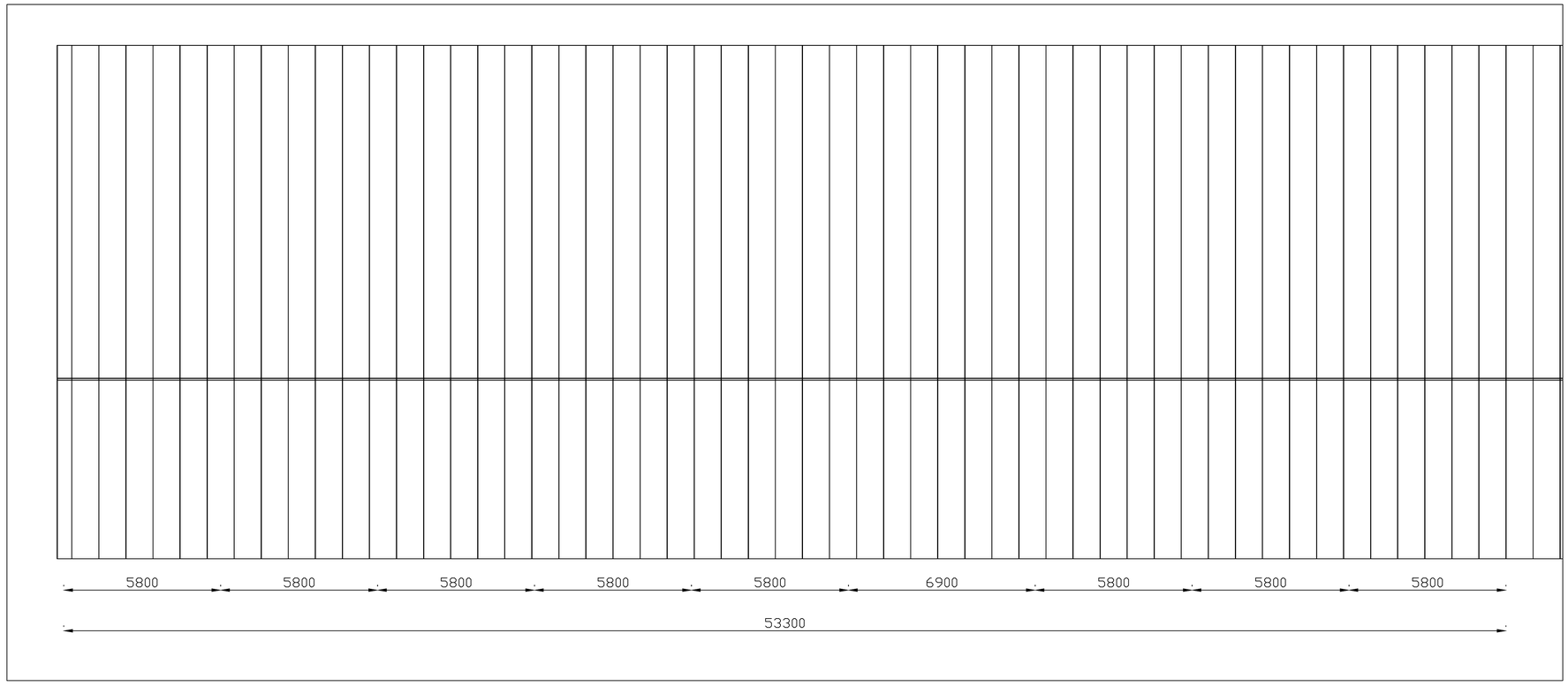
K&K Data / PIN001
ROOF SURFACING

ROOF SURFACING

SHEET	SCALE	REVISION
S-700	1:200 ON A1 (841 x 594 mm)	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

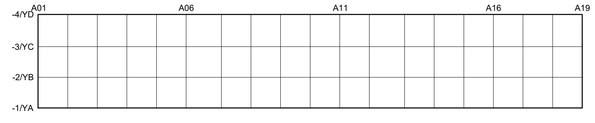
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF NOTES

1. HIGH ROOF FALL 2% TOWARD Y=0; LOW ROOF FALL 2% TOWARD Y=18300.
2. LOW ROOF CONTINUES THROUGH GRID Y=12000; NO RIDGE.
3. PANEL COVER WIDTH 1000 mm; SLOPE LENGTH HIGH 6677 mm / LOW 12380 mm.
4. LOW ROOF PANEL START Y=6260.819; HIGH ROOF PANEL EDGE Y=6338.
5. ROOF BUILD-UP: NOMINAL COMPOSITE PANEL 100 mm + PVC MEMBRANE 1.5 mm.
6. STEEL SKINS 0.6/0.5 mm ARE INCLUDED IN THE 100 mm PANEL.
7. ROOF FIXINGS, FLASHINGS AND DRAINAGE DETAILS: TO BE COORDINATED.
8. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

KEY PLAN 1:600



NOTES

1. UNITS: MILLIMETRES. DO NOT SCALE DRAWINGS.
2. UNITS: MILLIMETRES
3. LEVEL DATUM: MAIN COLUMN BASE = 0 mm
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

K&K Data / PIN001
ROOF SURFACING

ROOF SURFACING

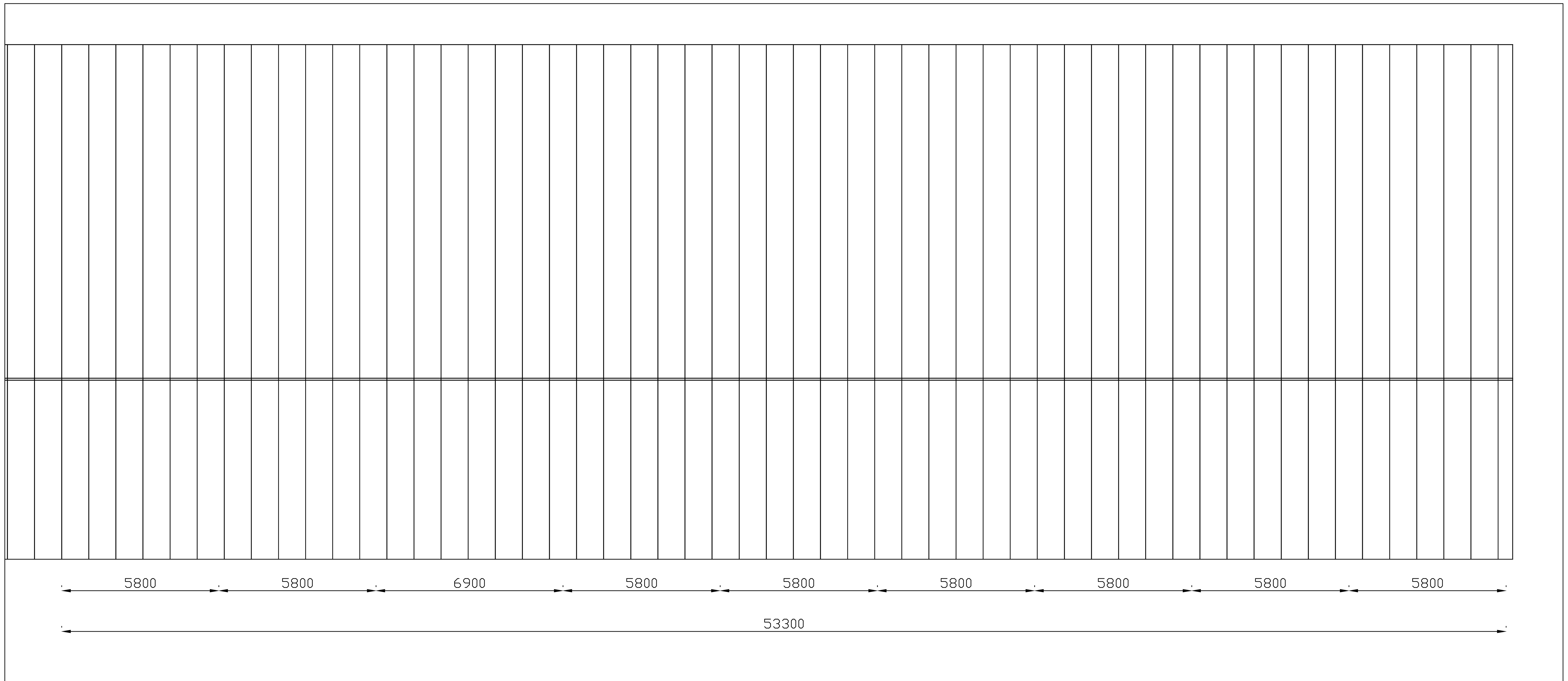
SHEET	SCALE	REVISION
S-701	1:100 ON A1 (841 x 594 mm)	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

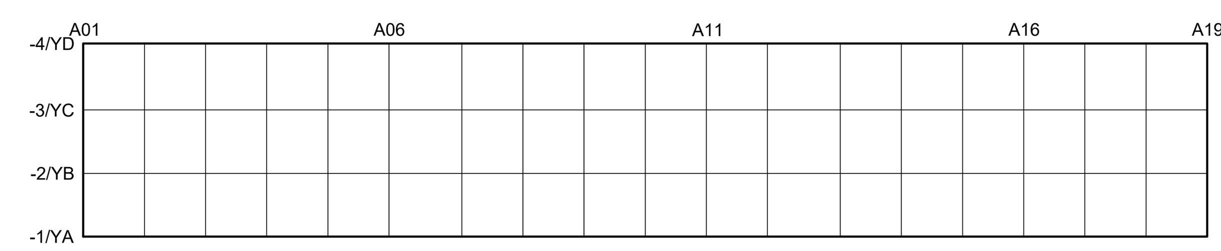
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

ROOF NOTES

1. HIGH ROOF FALL 2% TOWARD Y=0; LOW ROOF FALL 2% TOWARD Y=18300.
2. LOW ROOF CONTINUES THROUGH GRID Y=12000; NO RIDGE.
3. PANEL COVER WIDTH 1000 mm; SLOPE LENGTH HIGH 6677 mm / LOW 12380 mm.
4. LOW ROOF PANEL START Y=6260.819; HIGH ROOF PANEL EDGE Y=6338.
5. ROOF BUILD-UP: NOMINAL COMPOSITE PANEL 100 mm + PVC MEMBRANE 1.5 mm.
6. STEEL SKINS 0.6/0.5 mm ARE INCLUDED IN THE 100 mm PANEL.
7. ROOF FIXINGS, FLASHINGS AND DRAINAGE DETAILS: TO BE COORDINATED.
8. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.



KEY PLAN 1:600



NOTES

1. UNITS: MILLIMETRES. DO NOT SCALE DRAWINGS.
2. UNITS: MILLIMETRES
3. LEVEL DATUM: MAIN COLUMN BASE = 0 mm
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

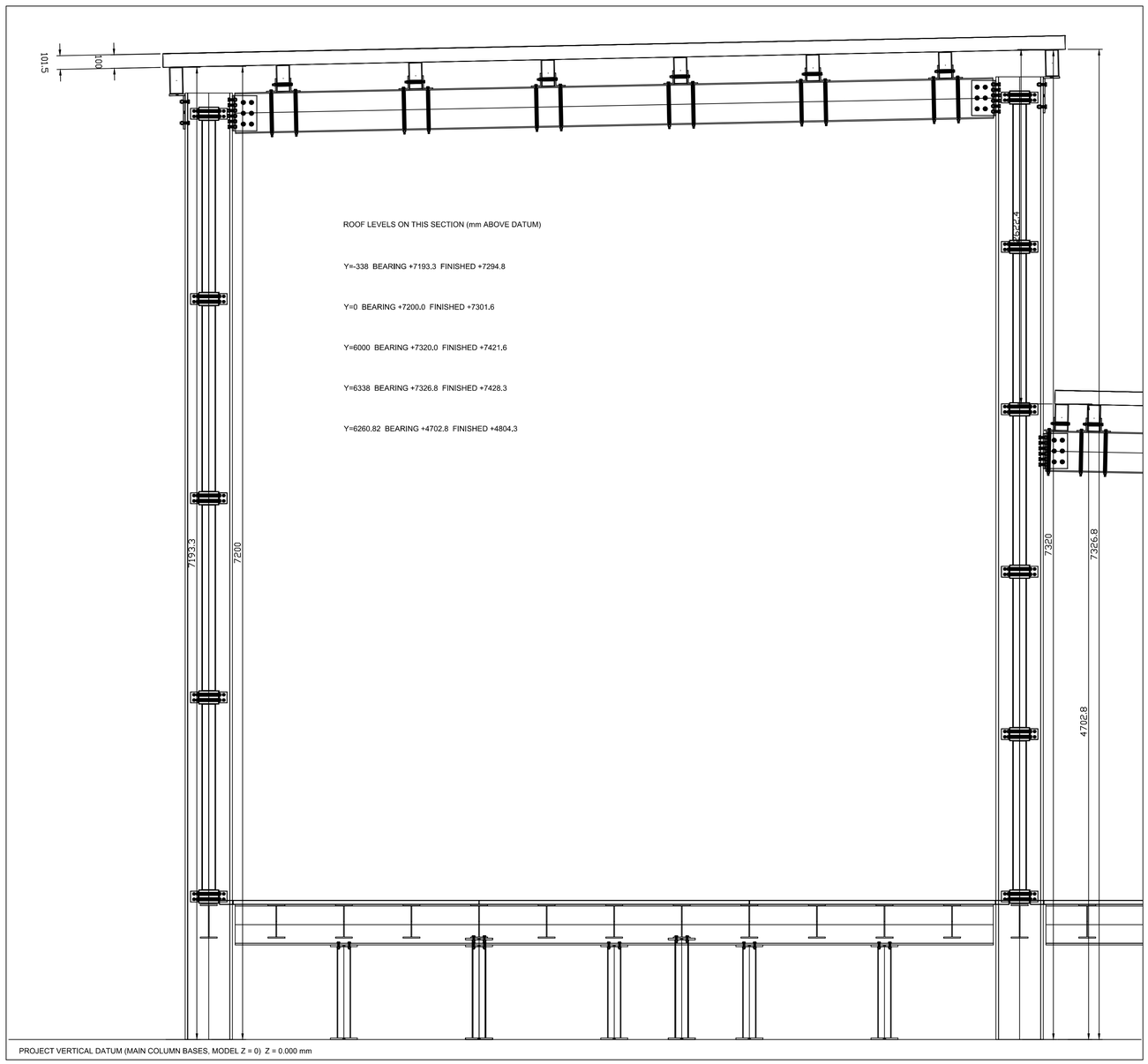
K&K Data / PIN001
ROOF SURFACING

ROOF SURFACING

SHEET	SCALE	REVISION
S-702	1:100 ON A1 (841 x 594 mm)	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

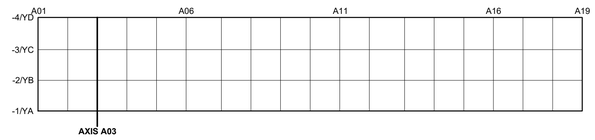


TRANSVERSE ROOF SECTION - HIGH ROOF, AND THE ROOF STEP BETWEEN THE BEARING STATIONS AT Y=6338 AND Y=6260.8 (NEAREST GRID LINE Y=6000) SCALE 1:20

ROOF NOTES

1. SECTION AT AXIS 3 (X=11600).
2. HIGH ROOF FALL 2% TOWARD Y=0; LOW ROOF FALL 2% TOWARD Y=18300.
3. LOW ROOF IS CONTINUOUS THROUGH GRID Y=12000. NO RIDGE.
4. BEARING PLANE OFFSET AT Y=6260.819: 2622.433 mm. OFFSET OF EXTENDED PLANES AT GRID Y=6000: 2612 mm.
5. ROOF PANEL: KINGSPAN KS FP K-ROC 100, NOMINAL TOTAL THICKNESS 100 mm INCLUDING 0.6/0.5 mm STEEL SKINS; SELF WEIGHT 20.38 kg/m2.
6. MEMBRANE: RENOLIT ALKORPLAN F35176 PVC-P, 1.5 mm; SELF WEIGHT 1.8 kg/m2. GROSS ROLL WIDTH 2100 mm, SIDE LAP 100 mm, COVER 2000 mm.
7. TOTAL BUILD-UP 101.5 mm NORMAL TO ROOF PLANE. MEMBRANE LAPS ARE ADDITIONAL. PANEL CORE PROFILE: BY MANUFACTURER.
8. PANEL/MEMBRANE FIXINGS, FLASHINGS, PROFILE FILLERS AND UPSTANDS: BY MANUFACTURER / TO BE COORDINATED.
9. DRAINAGE, GUTTERS, OUTLETS AND RAINWATER PIPEWORK: TO BE COORDINATED.
10. GENERAL NOTES:
11. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
12. LEVELS ARE TO PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0).
13. GRID DIMENSIONS ARE TO THE MAIN COLUMN AXES. THE ROOF EDGES AND THE ROOF BEARING STATIONS DO NOT COINCIDE WITH THE GRID LINES AND ARE DIMENSIONED SEPARATELY.
14. THE PANEL AND THE MEMBRANE ARE NOMINAL ENVELOPES. STEEL SKIN AND CORE PROFILE DIMENSIONS: BY MANUFACTURER, NOT TO BE TAKEN FROM THIS SECTION.
15. THE BUILD-UP IS 101.5 mm NORMAL TO THE PANEL PLANE, WHICH IS 101.52 mm MEASURED VERTICALLY.
16. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

KEY PLAN 1:600



NOTES

1. UNITS: MILLIMETRES. LEVEL DATUM: PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0).
2. UNITS: MILLIMETRES (mm). ALL DIMENSIONS IN mm.
3. LEVEL DATUM: PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0) = 0 mm
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

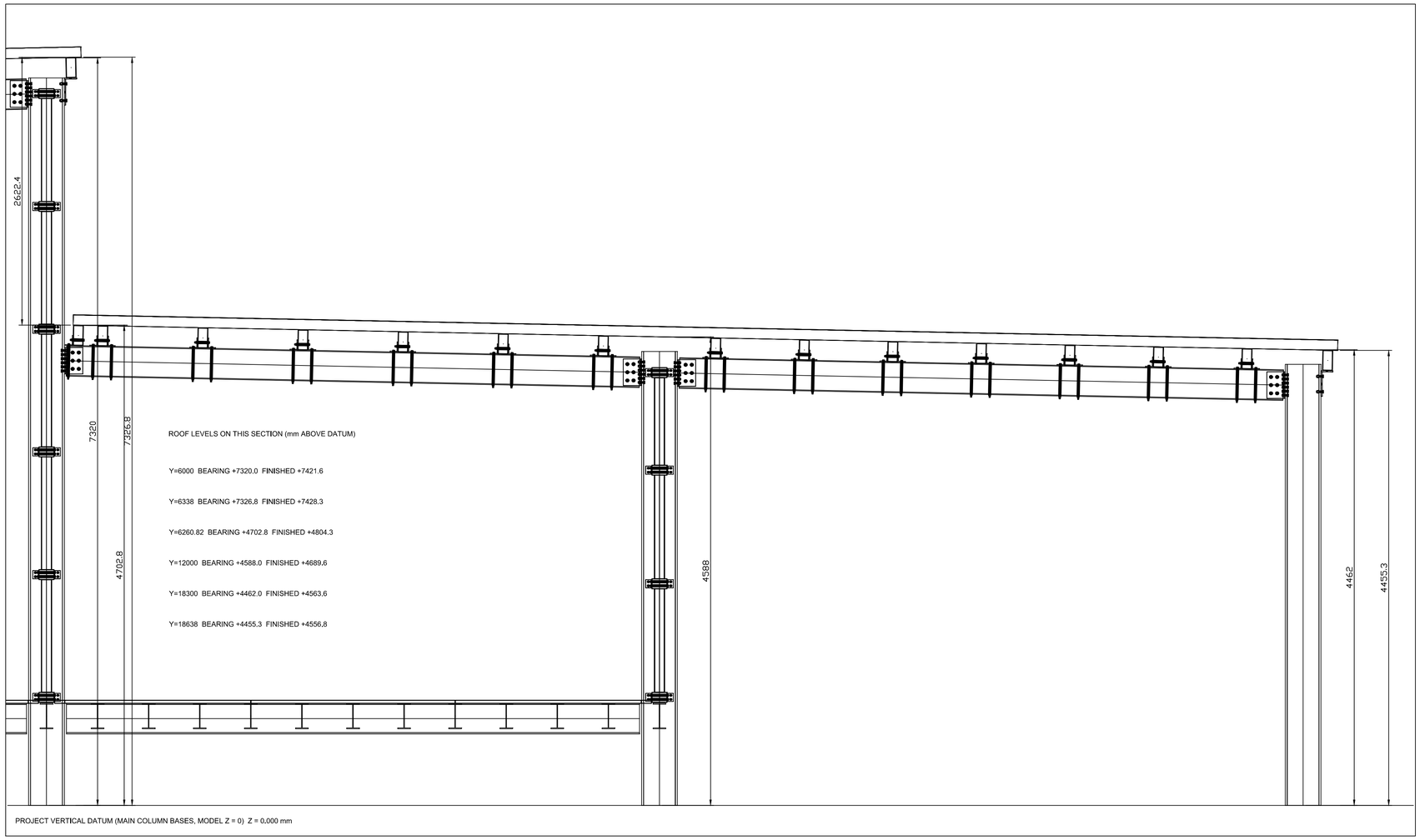
K&K Data / PIN001
ROOF SURFACING PACKAGE

TRANSVERSE ROOF SECTION - HIGH ROOF AND ROOF STEP AT Y=6338/6260.8

SHEET	SCALE	REVISION
S-710	1:20 ON A1 841x594	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



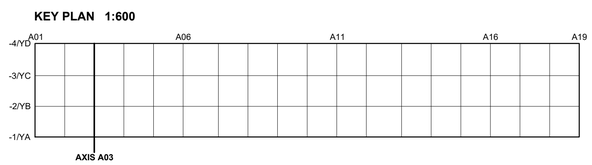
TRANSVERSE ROOF SECTION - LOW ROOF FROM ITS BEARING STATION AT Y=6260.8 TO THE LAST AT Y=18638 (NEAREST GRID LINES Y=6000 AND Y=18300)

SCALE 1:25

ROOF NOTES

1. SECTION AT AXIS 3 (X=11600).
2. HIGH ROOF FALL 2% TOWARD Y=0; LOW ROOF FALL 2% TOWARD Y=18300.
3. LOW ROOF IS CONTINUOUS THROUGH GRID Y=12000. NO RIDGE.
4. BEARING PLANE OFFSET AT Y=6260.819: 2622.433 mm. OFFSET OF EXTENDED PLANES AT GRID Y=6000: 2612 mm.
5. ROOF PANEL: KINGSPAN KS FP K-ROC 100, NOMINAL TOTAL THICKNESS 100 mm INCLUDING 0.6/0.5 mm STEEL SKINS; SELF WEIGHT 20.38 kg/m2.
6. MEMBRANE: RENOLIT ALKORPLAN F35176 PVC-P, 1.5 mm; SELF WEIGHT 1.8 kg/m2. GROSS ROLL WIDTH 2100 mm, SIDE LAP 100 mm, COVER 2000 mm.
7. TOTAL BUILD-UP 101.5 mm NORMAL TO ROOF PLANE. MEMBRANE LAPS ARE ADDITIONAL. PANEL CORE PROFILE: BY MANUFACTURER.
8. PANEL/MEMBRANE FIXINGS, FLASHINGS, PROFILE FILLERS AND UPSTANDS: BY MANUFACTURER / TO BE COORDINATED.
9. DRAINAGE, GUTTERS, OUTLETS AND RAINWATER PIPEWORK: TO BE COORDINATED.
10. GENERAL NOTES:
11. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
12. LEVELS ARE TO PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0).
13. GRID DIMENSIONS ARE TO THE MAIN COLUMN AXES. THE ROOF EDGES AND THE ROOF BEARING STATIONS DO NOT COINCIDE WITH THE GRID LINES AND ARE DIMENSIONED SEPARATELY.
14. THE PANEL AND THE MEMBRANE ARE NOMINAL ENVELOPES. STEEL SKIN AND CORE PROFILE DIMENSIONS: BY MANUFACTURER, NOT TO BE TAKEN FROM THIS SECTION.
15. THE BUILD-UP IS 101.5 mm NORMAL TO THE PANEL PLANE, WHICH IS 101.52 mm MEASURED VERTICALLY.
16. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

KEY PLAN 1:600



NOTES

1. UNITS: MILLIMETRES. LEVEL DATUM: PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0).
2. UNITS: MILLIMETRES (mm). ALL DIMENSIONS IN mm.
3. LEVEL DATUM: PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0) = 0 mm
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.

K&K Data / PIN001
ROOF SURFACING PACKAGE

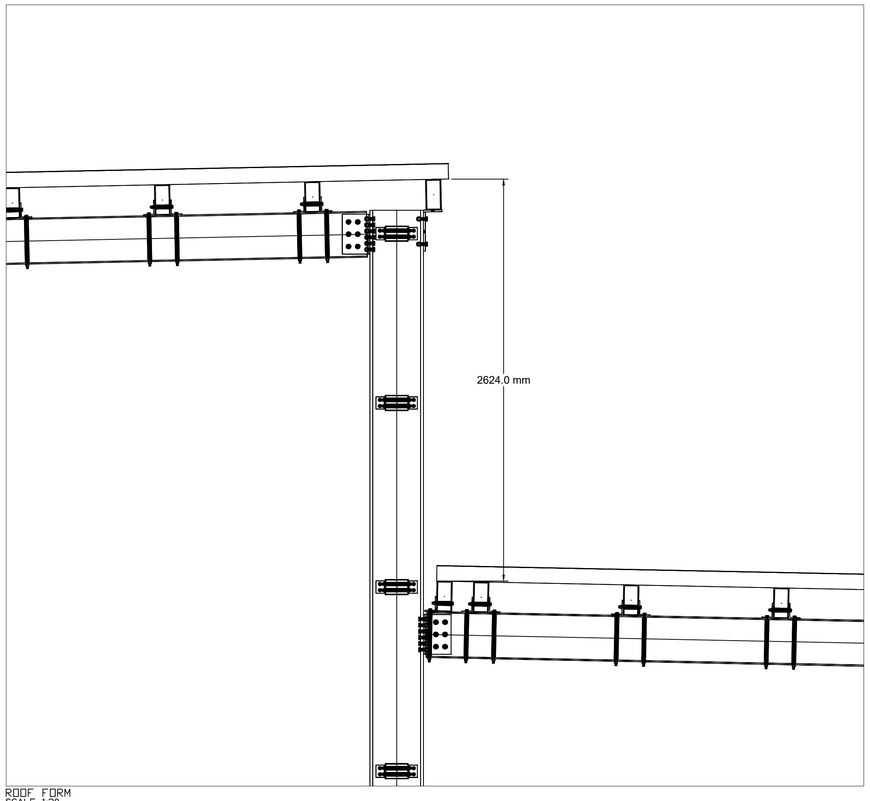
TRANSVERSE ROOF SECTION - LOW ROOF, Y=6260.8 TO Y=18638

SHEET	SCALE	REVISION
S-711	1:25 ON A1 841x594	04 / 25 SEP 2026

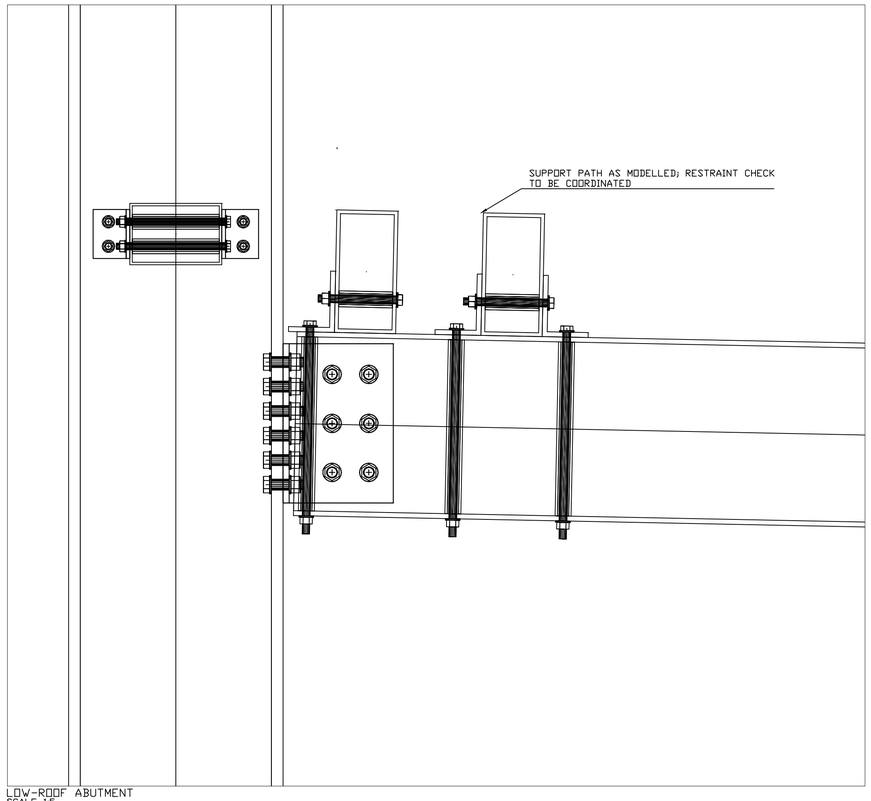
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10

DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.



ROOF FORM
SCALE 1:20



LOW-ROOF ABUTMENT
SCALE 1:5

ROOF FORM

LOW ROOF IS CONTINUOUS THROUGH GRID Y=12000. NO RIDGE.

HIGH ROOF PLANE Z = 7200.04 + 0.02*Y. LOW ROOF PLANE Z = 4828.04 − 0.02*Y.

BEARING PLANE OFFSET BETWEEN THE TWO ROOF PLANES AT Y=6260.819: 2622.43276 mm.

OFFSET OF THE TWO ROOF PLANES EXTENDED TO GRID Y=6000: 2612 mm.

THE HIGH AND LOW ROOF PLANE EDGES DO NOT MEET AT THE GRID LINE.

LOW-ROOF ABUTMENT

Y = 6260.819 IS THE GIVEN PANEL START EDGE AND BEARING STATION. IT IS NOT A PURLIN CENTROID.

PURLIN CENTROID Y = 6310.819.

SUPPORT NODE ABOVE COLUMN PIN001-C02. BOLT ACCESS CLEARANCE: TO BE COORDINATED.

RB02 END EDGE DISTANCE 20.842 mm; HOLE DIA. 13 mm; CLEAR EDGE 14.342 mm. BEARING AND TEAR-OUT RESISTANCE: TO BE COORDINATED.

USES THE -Y ANGLE; PANEL END CANTILEVERS 14.007 mm OUTBOARD OF THE 76 mm FLAT BEARING BAND (Y 6274.826 … 6350.811).

ANGLE TOE TO PIN001-C02 FLANGE CLEARANCE +8.844 mm PER FRAME.

PURLIN SUPPORT POSITION, PANEL END BEARING AND CONNECTION RESISTANCE: TO BE COORDINATED.

SINGLE-ANGLE SUPPORT: VERIFY BOLT EDGE DISTANCE, BEARING, TEAR-OUT AND ROTATIONAL RESTRAINT.

FLAT BEARING WIDTH 76 mm ON THE PURLIN CROWN.

PANEL END OVERHANGS THE FLAT BEARING BAND BY 14.007 mm.

NEW PURLIN RHS200x100x6, OUTER CORNER RADIUS 12 mm. PURLIN TOP Z = 4828.039996 − 0.02*Y. THE PURLIN SOFFIT AND THE RB02 TOP ARE THE SAME PLANE, Z = 4628.000000 − 0.02*Y.

SINGLE ANGLE L100x75x8. INTERIOR PURLINS ARE SET BACK 5 mm EACH SIDE OF THE AXIS, 10 mm GAP, WITH 75 mm OVERHANG AT EACH END.

VERIFY CLEARANCE BETWEEN THE ROOF SUPPORT LINE AND EAVE/GABLE FRAMING BEFORE FIXING THE SUPPORT DETAIL.

EAVE EDGE AND JOINTS

JOINT CONTROL LINE REPRESENTS GEOMETRY. WELD PROCESS, FILLER AND EFFECTIVE THROAT TO BE SPECIFIED.

GABLE ENDS

PIN001-GB06-G1-S1, X=-240, Y 6338 to -338, high roof

PIN001-GB06-G1-S2, X=-240, Y 11995 to 5750

PIN001-GB06-G1-S3, X=-240, Y 18638 to 12005

PIN001-GB06-G2-S1, X=106840, same Y order

PIN001-GB06-G2-S2, X=106840, same Y order

PIN001-GB06-G2-S3, X=106840, same Y order

GABLE FASCIA BEAMS RHS200x100x6, ASTM A36 (MODEL LABEL). BEARING PLATE PL16, SIDE PLATES PL12, GABLE BEAM UPLIFT FIN PL12.

LOW-ROOF FASCIA HAS A 10 mm BREAK AT Y=11995..12005; ROOF IS CONTINUOUS. FASCIA JOINT CONNECTION DETAIL: TO BE COORDINATED.

FASTENER AND WELD SPECIFICATION AND CONNECTION RESISTANCE: TO BE COORDINATED.

ROOF BUILD-UP

ROOF PANEL: KINGSPAN KS FP K-ROC 100, NOMINAL TOTAL THICKNESS 100 mm INCLUDING 0.6/0.5 mm STEEL SKINS; SELF WEIGHT 20.38 kg/m2.

MEMBRANE: RENOLIT ALKORPLAN F35176 PVC-P, 1.5 mm; SELF WEIGHT 1.8 kg/m2. GROSS ROLL WIDTH 2100 mm, SIDE LAP 100 mm, COVER 2000 mm.

TOTAL BUILD-UP 101.5 mm NORMAL TO ROOF PLANE. MEMBRANE LAPS ARE ADDITIONAL. PANEL CORE PROFILE: BY MANUFACTURER.

PANEL/MEMBRANE FIXINGS, FLASHINGS, PROFILE FILLERS AND UPSTANDS: BY MANUFACTURER / TO BE COORDINATED.

LOW-ROOF PANEL LENGTH 12379.656 mm. PACKING ARRANGEMENT AND PANEL PRODUCT APPROVAL: BY MANUFACTURER / TO BE COORDINATED.

DRAINAGE

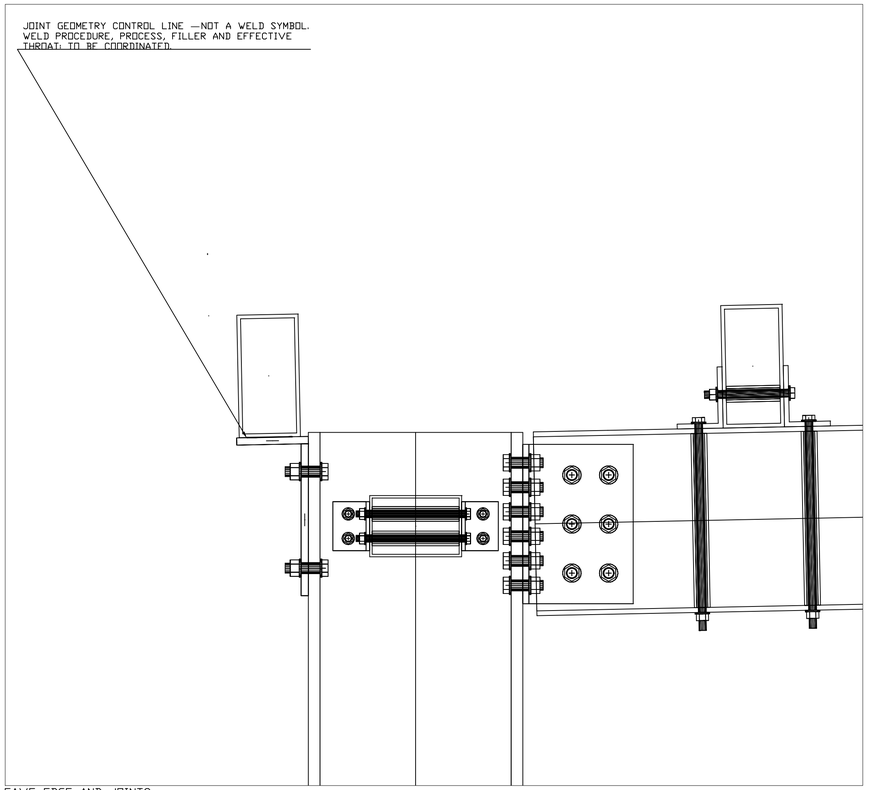
GUTTER, OUTLET, DOWNPIPE AND MAINTENANCE ACCESS DETAILS: TO BE COORDINATED.

PROFILE FILLERS AND PENETRATIONS

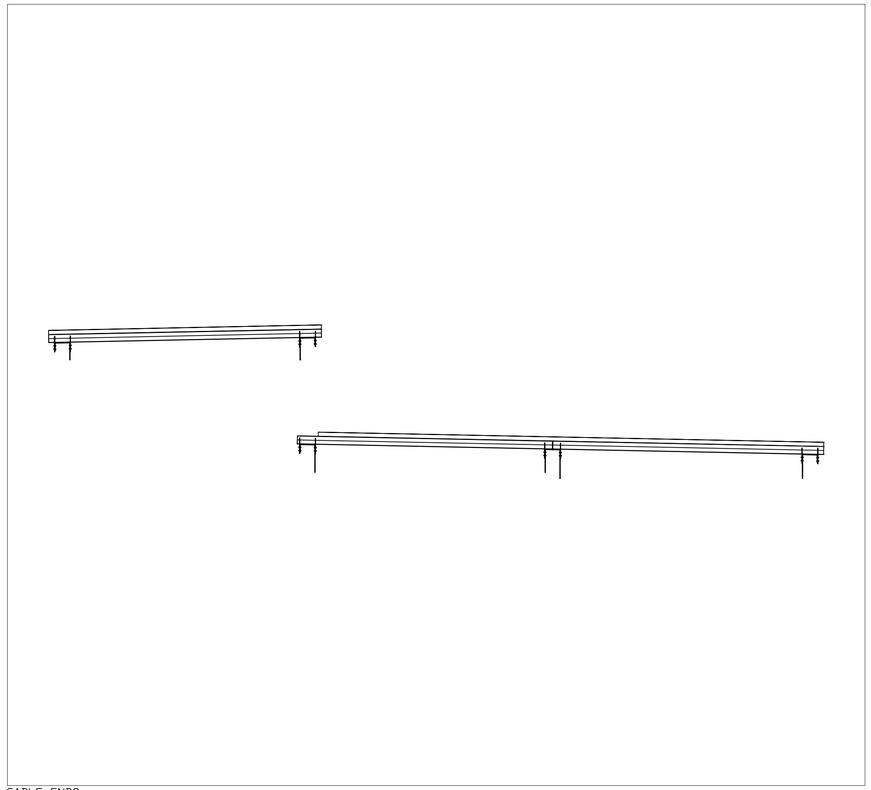
PROFILE FILLERS, UPSTANDS AND ROOF PENETRATION DETAILS: TO BE COORDINATED.

GENERAL NOTES

1. UNITS: MILLIMETRES (mm). ALL DIMENSIONS IN mm.
2. LEVEL DATUM: PROJECT VERTICAL DATUM (MAIN COLUMN BASES, MODEL Z = 0)
3. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DRAWINGS.
4. MEMBER SECTIONS AND MATERIALS: SEE S-600.
5. CONNECTION REFERENCES: S-601 TO S-607.
6. SEE ACCOMPANYING STRUCTURAL TECHNICAL NOTES FOR DESIGN CONDITIONS.
7. "ASTM A36" ON THIS SHEET IS THE MODEL MATERIAL LABEL; PROCUREMENT GRADE AND PRODUCT STANDARD: STRUCTURAL TECHNICAL NOTES (DESIGN CONDITIONS).



EAVE EDGE AND JOINTS
SCALE 1:5



GABLE ENDS
SCALE 1:75

K&K Data / PIN001
ROOF SURFACING PACKAGE

ROOF INTERFACE COORDINATION GEOMETRY - LOW-ROOF ABUTMENT, EAVE EDGE AND GABLE ENDS

SHEET	SCALE	REVISION
S-720	PER VIEW, STATED WITH EACH VIEW	04 / 25 SEP 2026

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

K&K Data PIN001 — Part 2 Technical Specifications

Public edition P2 · October 2026 · K&K Data Service Inc. · inquiry@kkdatasvc.com · 75 pages

Part 2 contains the technical conditions, specifications and notes of the packages of the structural document set, the two technical appendices and the site record sheets. Document numbers and revisions are those of the respective documents. The structure, the reading sequence of the drawings, the package revisions and the design conditions of this edition are described in Part 0.

Contents

Package group	Code	Document	Pages
1 Whole-building structure R04	R04-0	Structural Revision Notes (Revision 04)	3–3
1 Whole-building structure R04	R04A	Structural Drawing Technical Conditions	4–7
1 Whole-building structure R04	R04B	Structural Material and Floor Construction Review	8–11
1 Whole-building structure R04	R04C	Floor Board Layout and Support Review (figure)	12–12
2 Floor and pile head connections D02	D02-0	Floor and Pile Head Connection Drawing Set — User Notes (D02B)	13–14
2 Floor and pile head connections D02	CS-4 J29	Main Column Base CS-4 and Helical Pile Head PH-4 Interface Specification	15–18
2 Floor and pile head connections D02	R-01	30 mm Floor Board Supply, Fixing and Performance Verification Technical Conditions (R07)	19–23
2 Floor and pile head connections D02	D02-N	Secondary Beam End Connection Bolt Assembly	24–24
3 Stub column pile head interfaces SPB-1 R5	SPB-1 R5	Short Post Base to Pile Cap Bolted Interface SPB-1: Geometric Interface Note	25–29
4 Foundation setting-out FS	FS-A	Foundation Support Setting-Out Set — Notes (Rev B)	30–31
4 Foundation setting-out FS	FS-B	Helical Pile Performance Requirements	32–34
5 Floor finish and maintenance grounding F02	F02	Floor Finish and IT Maintenance ESD Control Technical Conditions	35–39
6 Floor installation and board procurement D01 / P04	D01	Floor Installation Drawings — Drawing Index	40–42
6 Floor installation and board procurement D01 / P04	P04-0	Floor Procurement and Installation Package — Notes (P04A)	43–43
6 Floor installation and board procurement D01 / P04	P-01	Floor Board Procurement and Installation Technical Conditions	44–54
7 Technical appendices	App. A	Floor Main Beam WF-PB-A06-FB02: Connection Requirements	55–57
7 Technical appendices	App. B	Package Scope, Revision Record, Materials, Fabrication, Roof Details and Verification Results	58–65
8 Site record sheets FS-C	FS-C	Site Setting-Out and Tape-Check Record Sheets (Rev A)	66–75

Documents and Related Sheets

For each document the table gives the related drawing sheets and the tables and figures it contains. Sheets are located through the reading sequence of Part 0, Section 2.

Code	Related sheets	Tables and figures
R04-0	S-000 to S-720	Contents of Revision 04
R04A	S-000 to S-720; S-430, S-431	Floor level table; member specification table
R04B	S-600	Steel tonnage and member group tables
R04C	S-300 to S-304, S-501 to S-504	First-bay board layout; joint and perimeter edge sections
D02-0	PIN001-JC-01/02, PIN001-CS4-001 J29/002, R-101 to R-104	D02 composition and D02B revision tables
CS-4 J29	PIN001-CS4-001 J29, PIN001-CS4-002	Supply split, levels, bolt length, component limit and supplier data tables
R-01	R-101 to R-104	Load case, board performance, board edge and test tables TB-1 to TB-8; specimen selection

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

D02-N	PIN001-JC-01/02	Bolt assembly table
SPB-1 R5	None; Figure 1 is rendered from the interface drawing SPB1_R5	Figure 1 (interface plan and section); 16-hole schedule; assembly and clearance summary
FS-A	FS-01 to FS-17	FS-B; FS-C; sheet list FS-01 to FS-17
FS-B	FS-10 to FS-12, FS-16	Given and demand field tables of the pile requirement schedule; close-pair table
F02	F02 details F-101 to F-104	Level, performance requirement, candidate comparison, coordination condition and inspection tables
D01	D01 F-001 to F-501	Drawing list; D02 supersession and errata table
P04-0	P-101 to P-105	Composition of package P04
P-01	P-101 to P-105	Edge condition, parent sheet, product data, finish, test and installation step tables; document list
App. A	S-602, S-607	Connections and parts; amended JD-02 bolt groups; chamfer table of 26 angles; weld requirement; open checks
App. B	All packages; S-430, S-431; S-700 to S-720	Package scope; superseded values; member families and materials; fabrication; roof details RF-01 to RF-06; girt elevations; verification results
FS-C	FS-01 to FS-17	Instruction page; record sheets of the 247 points

Page numbers of this part run from 1 to 75; references between documents use document codes and sheet numbers.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Structural Revision — Notes (Revision 04)

K&K Data Service Inc. Revision 04, 2026-09-25. Contact: inquiry@kkdatasvc.com

Revision 04 updates the whole-building structural drawing set and the floor construction and supersedes the corresponding drawing content of Revision 03.

Contents of Revision 04

Document	Content	Location
Whole-building structural drawing set R04	53 A1 structural sheets S-000 to S-720: main structure, roof and sections, typical connections S-601 to S-606, roof interface detail S-720	Part 1
Structural drawing technical conditions R04A	Member specifications, quantities, floor levels and related technical conditions	Part 2, document R04A
Structural material and floor construction review R04B	Corrections made, steel tonnage and priorities of the next design stage	Part 2, document R04B
Floor board layout and support review R04C	Review figure for the first-bay board layout, centred board joints and perimeter support	Part 2, document R04C

Main changes

The 36 continuous 8 mm steel deck plates and their welds are removed, reducing the theoretical steel mass of plate items by about 80.05 t. The 30 mm fibre cement board is retained with underside and top levels of 1000 and 1030 mm; the equipment base plates and connections are adjusted accordingly. Interior board joints are moved to the centrelines of existing secondary beams; the building still has 552 boards, the original clearances around openings are kept and no steel member is added. Section code JSEC-08 is added for the connection angles.

Floor board layout

Each of the 552 boards keeps its board number from the native model. Outlines, openings within boards and board numbers are defined in the R04 floor board layout data (CAD layers BOARD_OUTLINES, BOARD_HOLES and BOARD_IDS; outline data with global plan coordinates and local outlines from the lower-left corner of each board's bounding box; numbered dimension table). They are the cutting data for board fabrication; the first-bay layout is shown in R04C.

Coordinates are project local X, Y in millimetres on the drawing plane Z = 0; the board underside model level is 1000 mm and the thickness 30 mm.

The bounding X, Y of the dimension table are envelope values. The fabrication outline includes edge notches and openings within boards; cutting allowance, board properties, fixing method and perimeter support follow the associated technical conditions.

Quantities and technical conditions

Whole-building geometry and quantities are taken from the whole-building drawings; the typical connection sheets S-601 to S-606 and the roof interface detail S-720 repeat parts of the building, and their member counts are not added.

Revision 04 adopts no reduced sections for main columns, secondary beams or purlins. Boards and fixings, perimeter support, the column base foundation interface of the 76 main columns and the analysis conditions after removal of the steel plate shell are defined in the R04 Structural Drawing Technical Conditions (R04A) and the review report (R04B).

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Structural Drawing Technical Conditions (R04A)

K&K Data Service Inc. Revision 04, 2026-09-25. Contact: inquiry@kkdatasvc.com

Drawing scope

The building grid extent is 106,600 × 18,300 mm with 19 transverse grid lines (axes 1 to 19) and 76 main columns. The drawing set has 53 A1 sheets: 46 main structure, roof and section sheets, 6 typical connection sheets and one roof interface detail sheet S-720. Dimensions are in millimetres; scales are shown in the title block of each sheet.

Whole-building geometry and member quantities are taken from the whole-building sheets; the typical connection sheets S-601 to S-606 show local connections, and sheet S-720 shows the roof interface detail.

Technical changes of this revision relative to Revision 03 are three: the 8 mm continuous steel deck plate is removed and the 30 mm fibre cement board floor finish is supported directly on the floor steel beam system; section code JSEC-08 is added; the interior board joint positions of the floor finish are adjusted. Sections, quantities, grid and roof content of all other members are unchanged.

Floor construction

The floor load-bearing members are the floor main beams, floor secondary beams and floor stub columns; the finish is 30 mm fibre cement board resting directly on the top flanges of the beam system. There is no steel deck plate, and no other steel plate replaces the former 8 mm deck plate.

This revision removes the 36 plates of 8 mm steel deck listed in Revision 03 and their connecting welds to the beam system. At 7850 kg/m³ the theoretical steel mass of these plates is 80.05 t (plate material only, excluding weld metal).

The interior board joints of the floor finish are moved from Y = 2400, 4800, 8400, 10800 to Y = 2000, 4000, 8000, 10000 so that the four interior joints lie on floor secondary beam centrelines. The number of boards remains 552, board thickness 30 mm, joint width 3 mm, maximum single board 1197 × 1997 mm. The spatial position and clearance of the original avoidance openings are kept; openings crossing the new joints become edge notches of the adjacent boards. No steel member is added. The adjustment applies to all three drawings (whole building, typical connections, roof interface).

The plan coordinates of the 19 grid lines, 76 main columns, 171 floor stub columns and 247 support points are unchanged.

Floor levels and equipment interface

Levels are relative to the main column underside at ±0, in millimetres.

Item	Level	Thickness or note
Top of floor secondary beam	1000	Top flange 991–1000, flange thickness 9
Fibre cement board	Underside 1000, top 1030	Board thickness 30
Finished floor	1030 + Δ	Board top is 1030; Δ is the total finish-system thickness defined by F02 and remains dependent on the selected build-up
IT equipment base plate	1000–1008	Plate thickness 8

The IT equipment base plates bear on the top flanges of the floor secondary beams; the plate underside and the beam top are both at level 1000. The 88 bolted connections from base plate to secondary beam keep their original hole positions, hole diameter 13 mm; the actual grip is 17 mm, being the 8 mm base plate plus the 9 mm secondary beam top flange. Bolts are M12 × 45; no compensating shim is used.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Member specifications and quantities

Member	Section or thickness	Quantity shown
Main column	H-section HW350×350×12×19	76
Roof main beam	Rectangular hollow section 300×150×8	57
Floor main beam	I-section 300×200×8×12	38
Floor secondary beam	HN250×125×6×9	450
Roof purlin	Rectangular hollow section 200×100×6	360
Eaves edge beam / gable strut	Rectangular hollow section 200×100×6	54 / 6
Wall rail (incl. end walls) / side wall post	Rectangular hollow section 100×150×4 / 100×50×3	292 / 648
End wall post	Rectangular hollow section 50×100×3	48
Floor stub column	Square hollow section 100×100×5	171
Floor finish	Fibre cement board, 30 mm thick	552 boards
Roof sandwich panel / PVC waterproofing membrane	100 mm thick / 1.5 mm thick	216 panels / 108 strips

Quantities are whole-building counts of the members shown; material lists of overlapping local views are not added. The 8 mm steel deck plate is not part of the supply and fabrication scope.

Purlin cut lengths are 5,790, 5,870 and 6,890 mm; cutting corresponds to member numbers. PIN001-RP03-04 in the typical connections shows the connection end only, with the far end of its reference member drawn to the earlier geometry; the corresponding member of the whole building is 5,870 mm long, and cut lengths are taken from the whole-building member list.

Connection part section codes

JSEC-01 to JSEC-07 are section codes for connection parts. Their nominal geometries are, in millimetres: angle 180×75×10; tube outside diameter 30 × wall 6; angle 246×60×8; angle 100×75×8; tube outside diameter 26 × wall 6; angle 110×60×6; tube outside diameter 24 × wall 6. Wall thicknesses are those of this nominal geometry, not values back-calculated from section area or bounding box. Material, fabrication tolerance, edge preparation and the complete part definitions of these seven codes are TO BE COORDINATED in the connection fabrication details; this revision does not change their definitions.

JSEC-08 is added in this revision for the 12 floor connection angles with member marks ASJ-057, ASJ-058, ASJ-081, ASJ-082, ASJ-105 and ASJ-106 (left and right pieces): angle 150×60×8, length 210 mm, volume 339,360 mm³ per piece; outer leg dimensions 150 mm and 60 mm and leg thickness 8 mm are confirmed on all 12 pieces.

These 12 pieces are connection parts. The S-600 member schedule states that connection parts are shown on the connection sheets; they are therefore not counted again in that schedule, and the whole-building member count does not change with the addition of JSEC-08.

Support and connection conditions

The 50 floor secondary beams in the two 6,900 mm bays and the 72 interior stub columns are shown with quantities and coordinates; their setting-out basis is TO BE COORDINATED with the structural designer. The 100 end connections of these 50 secondary beams follow the Floor and Pile Head Connection Drawing Set D02, 01 secondary beam end connections: SP-T1 at 88 locations and SP-T2 at 12 locations, 124 connection plates and 400 M16 bolt holes. Connection checks for the actual load cases (TO BE COORDINATED): end reaction V with its eccentric effect, and the effective width of the supporting web. The support layout is coordinated with the structural analysis, rack positions and the cable space below the floor.

The column bases of the 76 main columns follow D02, 02 column base and pile head: base plate CS-4 (PL 380×380×25, 2 stiffeners, 4 × M24), pile cap interface PH-4, detail sheets PIN001-CS4-001/002 and the main column base setting-out and assembly table for 76 locations. Main column base plates and anchor bolts are defined by D02 and are not part of the whole-building drawings. The six-component capacity and stiffness of this column base assembly and of the pile cap to pile shaft transition are TO BE VERIFIED per D02 CS-4 J29 Section 6: pile head resistances and stiffnesses BY PILE SUPPLIER, check of the complete assembly with the concurrent frame reactions by the structural design; the base restraint used in the frame model is a decision of

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

the structural design. The existing 171 stub column base plates (200 × 200 × 12, underside at level 0, top at level 12) are separate from the main column bases. Foundation design inputs TO BE COORDINATED: complete column base forces of the whole frame and ground conditions; the 20 floor interface reaction points at level 850 mm of the floor analysis are not column base reactions.

The floor secondary beam top flange is 125 mm wide. With a board joint centred on the flange, the nominal bearing width on each side is 61 mm, i.e. (125 – 3) / 2. When the joint centre is offset ±61 mm from the flange centre the bearing width becomes zero; this is a geometric limit position, not an installation tolerance. The permissible joint centre offset is 61 mm minus the required minimum bearing width b_min, minus the reserved fabrication, cutting and installation tolerances. The 3 mm board joint is a detailing joint width and is a different quantity from the saw kerf width; one shall not substitute for the other. The board layout shall not assume zero waste.

The perimeter board edge starts 80 mm from the grid line, while the outer edge of the edge beam flange ends at 62.5 mm; the difference is 17.5 mm and the perimeter board edge does not bear on the edge beam flange. Whether local edge support members are needed depends on the selected board's rules for free edges and cantilevers (BY MANUFACTURER): if the product permits the free edge condition there, none is needed; if not, the effective spanning dimension of the edge support is 17.5 mm plus the required bearing width b_min, with a matching connection design, not a 17.5 mm gap filler. This treatment is local to the perimeter; no heavy edge beams are added along the full length. The local supports for the perimeter free edge are given in D02, 03 30 mm floor board, sheet R-102: SS-P1, 1328 pieces, and CN-1, 2656 pieces, each located in the perimeter support location table for 1328 locations. SS-P1 dimensions follow D02 and supersede the earlier dimensions in the Floor Procurement and Installation package P04 (support plate width 130, tongue length 70).

Bolt hole diameters, bolt specifications and weld geometry are shown on the corresponding details. Pretensioning and tightening requirements, welding procedures, effective throats and construction tolerances are TO BE COORDINATED in the fabrication specification. Inputs of the eaves seat weld capacity check: tube product standard, grade, supplied wall thickness and corner radius, the applicable combined stress criterion and complete design forces; joint force distributions are inputs to, not results of, that check.

Finish, drainage and installation interfaces

The following conditions of the 30 mm fibre cement board are BY MANUFACTURER, from the technical data of the selected product: support spacing, board edge support method, free edge and cantilever treatment, performance in damp conditions, fixing specification and spacing, and compatibility with the 9 mm steel flange. The floor secondary beam centre spacing of the model is 500 mm and the clear distance between the 125 mm wide flanges is 375 mm; these are geometric values of the model, and the permissible spans are those of the product data.

Board outlines are given in the R04 floor board layout data (outline, opening and numbered dimension data). Boards are cut to their complete outlines, including edge notches and openings within boards; the bounding dimensions of the dimension table are envelope values, not rectangular cutting dimensions.

Fixing and edge trim dimensions of the roof panels and waterproofing layer: TO BE COORDINATED with the selected roof products (roof details RF-01 to RF-06, Technical appendix B, Section B.5).

Drainage is a candidate scheme outside the whole-building drawings. The screening clearance between the candidate envelope and the current eaves is about 57.8 mm; the minimum vertical separation at the brackets is 36 mm. These are geometric screening values; installation, cleaning and maintenance working space is defined in the drainage design. Drainage design items TO BE COORDINATED: end sump box support, downpipe fixing and discharge positions, checks of the thin-walled gutter body with stiffeners and joints, checks of the bracket and column flange connections, and the cleaning method.

Cladding fixing products, connections and waterproofing details, transport segmentation, packing and site assembly sequence are coordinated as one scheme (TO BE COORDINATED); packing is checked with the complete member and connection geometry, not with member lengths alone.

Structural analysis conditions

The earlier whole-building analysis input modelled the 8 mm steel deck plate as shell elements of thickness 0.008 m contributing to global stiffness, not only as dead load; results of that input are not reused by deducting 80.05 t of mass. The analysis input for Revision 04: no deck plate shell stiffness; finish self-weight and rack loads transferred through the floor secondary beams, floor main beams and stub columns; no in-plane diaphragm

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

action from the fibre cement board.

Floor live load, finish capacity, board span limits and equipment (rack) placement load cases are TO BE COORDINATED; they follow from complete load cases and checks once the support method, board product and fixings are determined.

Material labels

ASTMA36 in the model and connection tables is a model material label used to distinguish member material categories. Member procurement grades, product standards, dimensional tolerances, delivery conditions and surface treatment are specified in the procurement documents (TO BE COORDINATED).

Application of the drawings

The drawing set defines the whole-building geometry, material quantities and the listed local connections. Member, connection, foundation and whole-building performance is TO BE VERIFIED by the design checks with complete design forces and material conditions. After model, viewport or member changes, dimensions and material lists are updated together; dimensions are taken from dimensioned values, not scaled from the drawing.

This is Revision 04, dated 2026-09-25. The floor construction change of this revision affects the views and tables on the floor plan, section and member schedule sheets; those sheets are drawn from the changed model, and the revision number and date in each sheet's title block govern for that sheet.

Basis: whole-building native model and member records; S-600 member schedule; S-601 to S-606 typical connections; S-700 to S-702 roof drawings; S-710, S-711 sections; S-720 roof interface detail.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Structural Material and Floor Construction Review (R04B)

K&K Data Service Inc. Revision 04, 2026-09-25. Contact: inquiry@kkdatasvc.com

Scope and basis of the review

The review covers the material composition of the whole-building steel structure and the floor construction: sections, quantities, lengths, positions and connection counts of each member type, the whole-building steel tonnage, and the levels and support geometry of the floor, including roof and wall members. It covers the models behind the three drawings: whole building, typical connections and roof interface.

The review is a material and geometry review. Capacity, deformation, stability, wind load, support reactions, drainage and roof and wall assembly conditions are TO BE VERIFIED by the whole-frame design.

Levels are relative to the main column underside at ±0; dimensions in millimetres. Masses are theoretical values at a steel density of 7850 kg/m³, excluding fasteners and non-steel materials.

Removal of the 8 mm continuous steel deck plate

The earlier floor included a layer of 8 mm continuous steel deck plate, represented in the model geometry, in the material quantity table and as an 8 mm steel plate shell in the global structural analysis input. Revision 04 removes it from the models of all three drawings.

Across the building the deck plate comprised 36 plates with a theoretical steel mass of 80.05 t (plate mass only, excluding weld metal). The 572 related welds with a cumulative length of 31.9 m are removed at the same time. The three drawings are representations of the same building; quantities are counted once for the building.

Floor construction of Revision 04

- The 552 boards of 30 mm fibre cement board are lowered by 8 mm as a whole: board underside at level 1000, board top at 1030, resting directly on the floor secondary beam top flanges.
- The IT equipment base plates are at level 1000–1008; the 88 bolt groups from base plate to floor secondary beam remain M12 × 45, hole diameter 13 mm, measured grip 17 mm (8 mm base plate plus 9 mm secondary beam top flange).
- The 12 floor connection angles without a previous section code are angle 150×60×8, length 210 mm (confirmed from the solid vertices), entered as section code JSEC-08.
- The plan coordinates of the 247 support points are unchanged and the main frame is not moved.

The interior board joints of the floor finish are moved from Y = 2400, 4800, 8400, 10800 to Y = 2000, 4000, 8000, 10000 so that the four interior joints lie on floor secondary beam centrelines. The number of boards remains 552, thickness 30 mm, joint width 3 mm, maximum single board 1197 × 1997 mm. The spatial position and clearance of the original avoidance openings are kept; openings crossing the new joints become edge notches of the adjacent boards. No steel member is added. The adjustment applies to all three drawings.

Steel tonnage

Item	Quantity	Theoretical mass
Beams and plates before correction	—	351.954 t
8 mm steel deck plate removed	36 plates	80.050 t
Beams and plates after correction	—	271.904 t

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Steel tonnage is reduced by about 22.7 %. The table below gives the share of each member group in the corrected 271.904 t. The shares set the order of the member checks of the next design stage; sections are unchanged by this review.

Member	Section	Quantity	Theoretical mass	Share
Floor secondary beam	HN250×125×6×9	450	74.605 t	27.4 %
Roof purlin	Rectangular hollow section 200×100×6	360	56.274 t	20.7 %
Main column	H-section HW350×350×12×19	76	58.730 t	21.6 %
Wall rail (incl. end walls)	Rectangular hollow section 100×150×4	292	25.991 t	9.6 %
Roof main beam	Rectangular hollow section 300×150×8	57	17.745 t	6.5 %
Floor main beam	I-section 300×200×8×12	38	11.728 t	4.3 %
Eaves edge beam	Rectangular hollow section 200×100×6	54	8.428 t	3.1 %
Gable strut	Rectangular hollow section 200×100×6	6	1.033 t	0.4 %

Connection parts are counted separately: 5942 sleeves and 2253 angles, 8195 pieces in total, 6.989 t, 2.6 %. Their mass share is small, but by count they are the majority of all member objects, which governs fabrication, marking, assembly and inspection effort; connection parts are kept as detailed. The model also contains 3280 weld objects with a cumulative length of 565.1 m, and 8236 bolt groups with 10678 bolts; these counts do not distinguish shop welding from site welding.

The eight groups in the table total 254.534 t; with the connection parts (6.989 t) the total is 261.523 t. The difference of 10.381 t from 271.904 t consists of the member groups below, not itemised in the table above. From the same whole-building model statistics at 7850 kg/m³ this group totals 10.382 t; the difference of about 1 kg arises from item-by-item rounding.

Member group (model mark)	Section	Quantity	Theoretical mass
Side wall post (WS)	Rectangular hollow section 100×50×3	648	4.828 t
End wall post (EWS)	Rectangular hollow section 50×100×3	48	0.422 t
Floor stub column (WF-PO-PST / WF-PO-PSTI / I33-P)	Square hollow section 100×100×5	171	1.720 t
Under-floor cable tray rung (model mark RK-L RUNG; labelled RACK_FRAME in the member schedule)	Rectangular hollow section 80×40×3	66	1.016 t
IT rail (I33-IT)	Rectangular hollow section 80×40×4	11	0.118 t
IT rail riser (I33-IT RISER)	Square hollow section 40×40×4	22	0.004 t
Plates other than deck plate (EF, stub column base plates, I, GB, RK-F)	Plates	678	2.273 t
Total	—	—	10.382 t

The 271.904 t covers the R04 whole-building model. Members defined by D02 are additional and are quantified in the D02 material lists: main column base CS-4 and pile cap interface PH-4, secondary beam end connection plates, perimeter supports SS-P1, CN-1, FX-S1 and similar.

The solid volume of each member group agrees with its designated section (group-average comparison). No two members share the same section and the same two end points. Member-by-member geometry, overlap and clash checks: TO BE COORDINATED.

Board joints and perimeter support

The floor secondary beam top flange is 125 mm wide. With a board joint centred on the flange, the nominal bearing width on each side is 61 mm, i.e. (125 – 3) / 2. When the joint centre is offset ±61 mm from the flange centre the bearing width becomes zero; this is a geometric limit position, not an installation tolerance. The permissible joint centre offset is 61 mm minus the required minimum bearing width b_min, minus the reserved fabrication, cutting and installation tolerances. The 3 mm board joint is a detailing joint width and is a different quantity from the saw kerf width; one shall not substitute for the other. The board layout shall not assume zero

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

waste.

The perimeter board edge starts 80 mm from the grid line, while the outer edge of the edge beam flange ends at 62.5 mm; the difference is 17.5 mm and the perimeter board edge does not bear on the edge beam flange. Whether local edge support members are needed depends on the selected board's rules for free edges and cantilevers (BY MANUFACTURER): if the product permits the free edge condition there, none is needed; if not, the effective spanning dimension of the edge support is 17.5 mm plus the required bearing width b_min, with a matching connection design, not a 17.5 mm gap filler. This treatment is local to the perimeter; no heavy edge beams are added along the full length. The local supports are given in D02 R-102 (SS-P1, 1328 pieces; CN-1, 2656 pieces); dimensions follow D02.

Boards and fixings

The support spacing, board edge support method, free edge and cantilever treatment, performance in damp conditions, fixing specification and spacing of the 30 mm fibre cement board, and its compatibility with the 9 mm steel flange, are all taken from the technical data of the selected product (BY MANUFACTURER). The floor secondary beam centre spacing of the model is 500 mm and the clear distance between the 125 mm wide flanges is 375 mm; these are geometric values of the model, and the permissible spans are those of the product data. Board outlines and openings are cut to the actual boundary of each board, not to the bounding rectangle. Board outlines are given in the R04 floor board layout data (outline, opening and numbered dimension data); the bounding dimensions of the dimension table are envelope values, not rectangular cutting dimensions.

Column base interface

At Z = 0 there are 171 existing floor stub column base plates, 200 × 200 × 12, underside at level 0, top at level 12. The R04 model has no base plate outline at the grid positions of the 76 main columns and no anchor bolt groups below Z = 100; main column base plates and anchor bolts are defined by D02 CS-4 / PH-4; the setting-out and assembly of each of the 76 columns are given in the D02 main column base setting-out and assembly table. The capacity and stiffness of the column base assembly and of the pile cap to pile shaft transition are TO BE VERIFIED per D02 CS-4 J29 Section 6: pile head resistances and stiffnesses BY PILE SUPPLIER, check of the complete assembly with the concurrent frame reactions by the structural design.

The plan coordinates of the 247 support points are unchanged. Pile type, pile length and procurement quantity are BY PILE SUPPLIER, with the column base reactions of the whole-frame design. The CS-4 base plate is 25 mm thick with its underside at model level –25; through the nominal 15 mm shim, the top of the PH-4 pile cap cover plate is at nominal model level –40 (+12 / –15), 40 mm lower than the 171 stub column pile heads (model level 0). Site pile head levels are given by the level design after conversion to the site datum.

Model scope items

The floor extends over Y = 0 to 12000: the finish boards extend over Y 80 to 11920, and outside this range there are no floor main beams, secondary beams, stub columns or boards; main columns are on the four grid lines Y = 0, 6000, 12000 and 18300. Under-floor cable tray rungs (labelled RACK_FRAME), IT support rails and cable trays are modelled in the first bay, X 235 to 5600. The reference equipment arrangement of the full row is set against the modelled supports on sheet S-050 (Part 0, Section 4). Both items are checked against the architectural brief (TO BE COORDINATED).

Analysis basis

The earlier whole-building analysis input modelled the 8 mm steel deck plate as a steel plate shell contributing to global stiffness, not only as dead load; results of that input are not reused by deducting 80.05 t of mass, and member sections are not changed on their basis. The analysis input for the current construction is defined in R04A, Structural analysis conditions.

Priorities for the next design stage

1. Determine the board product, fixing specification and spacing, and the construction of board joints and perimeter edge support, forming a complete floor finish scheme.
2. Establish a load model and analysis input consistent with that construction, without the steel plate shell.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

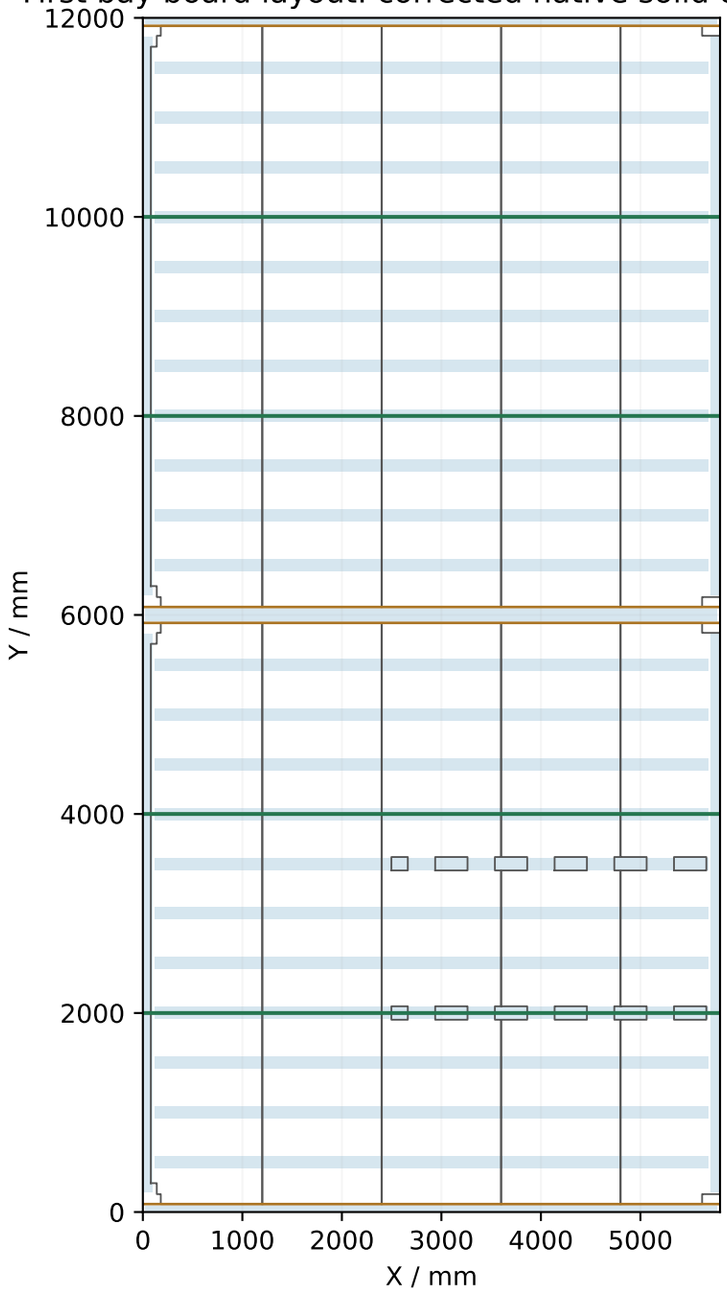
3. On that basis, check the member groups with the largest tonnage and complete the capacity and stiffness assessment of the 76 main column base assemblies (D02 CS-4 / PH-4) and of the pile cap to pile shaft transition.

Items 2 and 3 use the project structural analysis model.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

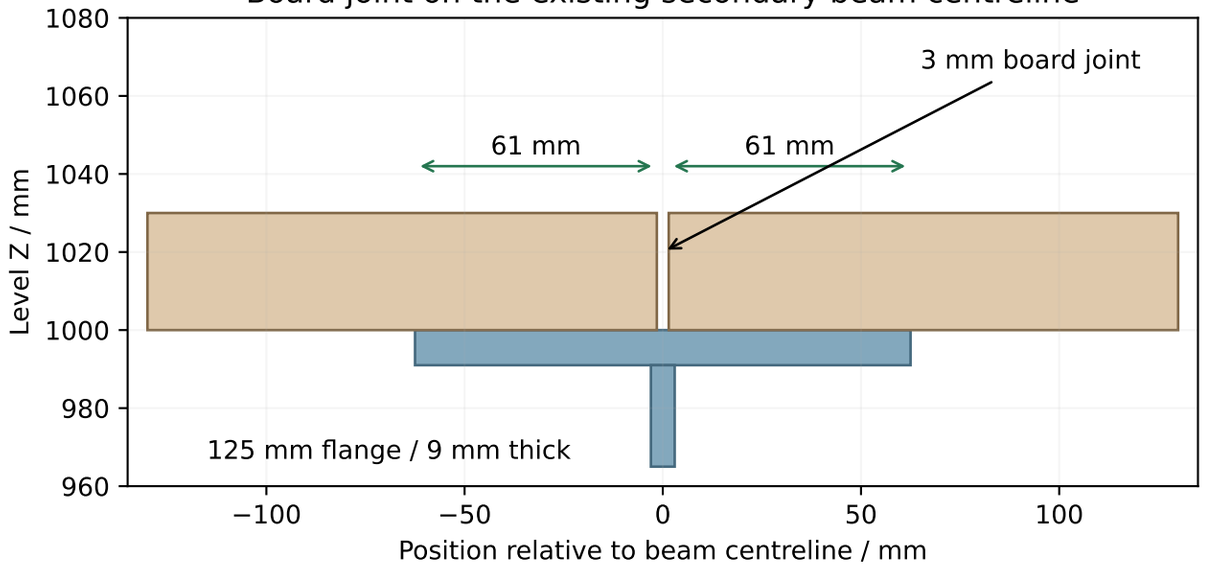
Floor Board Layout and Support Review · Revision 04

First bay board layout: corrected native solid outlines

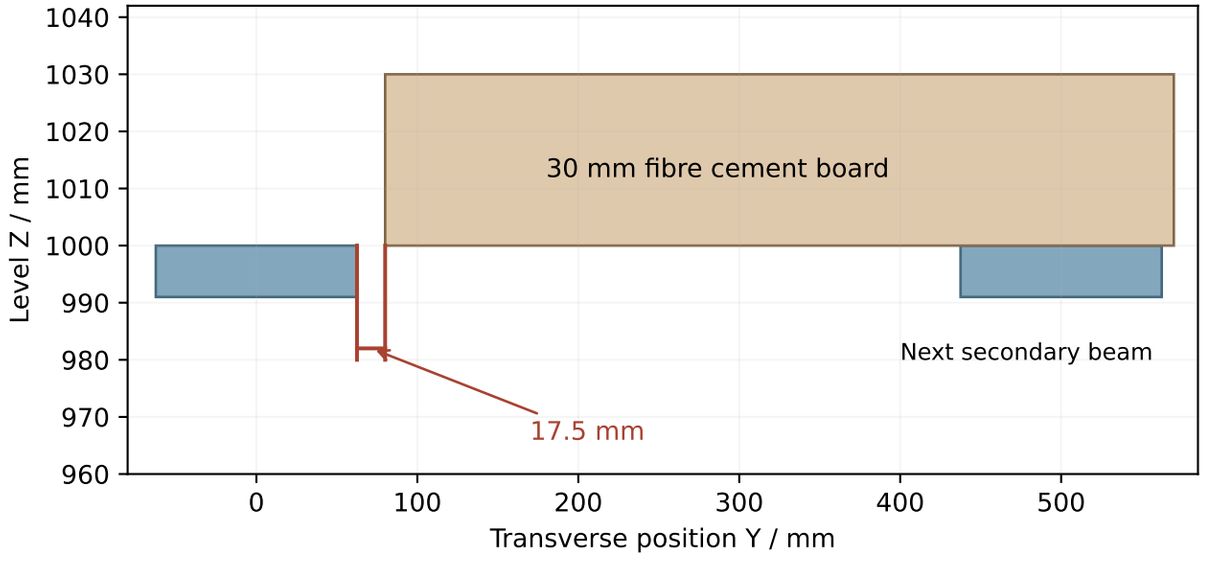


Green: the four interior board joints moved to beam centrelines.
Light blue: beam flange projection.
Grey: actual board outlines and clearance openings.
Amber: perimeter board edges whose support is checked.
Whole building 552 boards, 30 mm thick; largest bounding size 1197 × 1997 mm.

Board joint on the existing secondary beam centreline



Perimeter board edge support: TO BE COORDINATED



61 mm is the nominal bearing width on each side of a centred joint, not an installation tolerance.
Perimeter edge support depends on the free-edge performance and support requirements of the selected board (BY MANUFACTURER).
Geometric review figure: boards are cut to their complete individual outlines, not to bounding dimensions.

Data: solids of the corrected Advance Steel native model; coordinates and dimensions in mm. Local sections vertically exaggerated.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Floor and Pile Head Connection Drawing Set — User Notes (D02B)

Package D02 · revision D02B · 2026-09-27 · K&K Data Service Inc. · inquiry@kkdatasvc.com

1 Scope

This drawing set is used together with the Floor Installation Drawings D01. It provides the secondary beam end connections, the main column base and pile head interface, and the fabrication and assembly requirements of the 30 mm fibre cement board. The whole-building member layout, grid and original support positions are in D01; this set does not change the plan layout.

Part	Quantities and objects	Documents and location
01 Secondary beam end connections	100 ends of 50 secondary beams in areas B06 and B12; 124 connection plates; 400 M16 bolts	2 detail sheets PIN001-JC-01 / JC-02 (Part 1); 100-location index, 400-hole position table, connection plate list (fabrication data tables)
02 Column base and pile head	76 main column CS-4 interfaces	2 detail sheets PIN001-CS4-001 / 002 (Part 1); interface technical conditions (Part 2, document CS-4 J29); 76-location setting-out and assembly table (fabrication data table)
03 30 mm floor board	552 floor boards; 11619 FX-S1; 1328 SS-P1; 2656 CN-1	R-101 to R-104 (Part 1); supply and performance verification technical conditions R-01 revision R07 (Part 2, document R-01); whole-floor coordinate and material tables (fabrication data tables)

Revision D02B

Sheet or table	Current revision	Change
Secondary beam end connection details SP-T1 / SP-T2 (PIN001-JC-01 / JC-02)	B	The SP-T2 coordination requirement now refers to condition of use C; cut plates and stiffeners are shop welded to the main column, with no welding, cutting or hot work on main columns on site; title block cites the actual list names
PIN001-CS4-002	B	Material list gives gross and net mass per piece separately; nominal 15 mm shim gross 17.00 kg, net 16.73 kg; net mass per set 1.1156 × t kg (t = total shim thickness of that column, mm); definition of the weld length field
R-101	R07	Overall dimension moved above the plan, clear of the title block
R-102	R07	Local location of the CN-1 holes (spacing 60, ±30 from support centre, hole centre 30 from flange tip, 32.5 from the axis of the anchoring secondary beam); SS-P1 dimensions supersede the old P04 values
R-104	R07	Technical conditions frame clear of the title block
Main column base setting-out and assembly table, field descriptions (76 locations)	New	Meaning of each field of the 76-location table; the two weld columns are weld lengths per column, not weld leg sizes
Floor board coordinates and dimensions (552 boards)	Revised	The two outline string columns (outer loop and opening loops) are rewritten from the native board polygons; 120 vertices of 36 boards restored to native coordinates (e.g. 100801.5), all vertices of the 552 boards equal to the native polygons; total net area 1235.719828 m², equal to the native area; all other columns unchanged

PIN001-CS4-001, the column base and pile head interface technical conditions, R-103, the 30 mm floor board technical conditions R-01 and all coordinate tables other than the two outline loop columns of the floor board coordinate and dimension table are not changed by D02B.

J29 revision (2026-09-28): after D02B, PIN001-CS4-001 and the column base and pile head interface technical conditions are reissued with the J29 faying surface revision: steel components hot-dip galvanized to ASTM A123; faying surfaces Class A, slip coefficient μ = 0.30; power and hand wire brushing prohibited (RCSC 2020, 3.2.2(3)). The J29 editions are current: drawing PIN001-CS4-001 J29 in Part 1 and the interface technical conditions CS-4 J29 in Part 2.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

2 Use of drawings and coordinates

Print the drawings at 100 % on the title block sheet size; dimensions follow the dimensioned values and the coordinate tables. DXF units are mm; detail scales are given in the view titles, and distances shall not be scaled from paper as cutting dimensions. The board and fixing coordinate tables use the same project local coordinates as D01.

R-101 shows the 30 boards, 595 fixings and 72 supports of the first bay; whole-floor quantities follow the coordinate and material tables. The main column base table covers only the 76 main columns; the 171 stub column supports are in the FS set, which is the complete pile position plan (FS-01 to FS-17).

Fabrication checks link drawings and tables by member number: secondary beam end numbers to connection plates, bolts and hole positions; board numbers to board outlines and fixings; main column numbers to column base position, shims and bolt length. Cutting outlines of irregular boards and floor zoning are in D01; boards shall not be fabricated from bounding rectangles alone.

3 Supply, trial assembly and engineering conditions

Board supply is BY MANUFACTURER: the flexural strength, modulus of elasticity, surface density in the moist condition and assembly loading criteria in the technical conditions are procurement and verification requirements. The supplier submits the corresponding material reports and test records for the actual board shapes and connection constructions according to TB-1 to TB-8; installation torque is determined on the specified samples.

The SS-X1 quantity of 0 applies when the open ordinary X joint assembly satisfies TB-4; otherwise the board edge or support construction is redesigned.

Structural calculation of the secondary beam end connections (TO BE COORDINATED): actual shear and eccentric effects, out-of-plane bending of the supporting web, and web-to-flange load transfer of the existing main beam. Component values shown on the drawings are component limits.

Main column base assemblies shall be verified for the six concurrent reaction components at each point. Pile cap to pile shaft transition, pile–soil capacity and column base stiffness: TO BE VERIFIED; the actual construction and performance data are provided BY PILE SUPPLIER per the interface technical conditions, the stiffness values are inputs to the frame model, and the project structural design checks the whole assembly and the frame conditions with these data.

This set provides fabrication details, assembly dimensions and performance requirements; floor capacity and whole-building capacity are TO BE VERIFIED by the whole-frame design.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Main Column Base CS-4 and Helical Pile Head PH-4 Interface Specification (J29)

K&K Data / PIN001. Applies to the 76 main columns C001–C076, HW350×350×12×19. Drawings PIN001-CS4-001 and PIN001-CS4-002, 2 sheets.

1 Interface composition and division of supply

The interface consists of one shop-welded assembly and one part supplied with the pile, connected on site by four bolts, with one layer of machined shim between them to absorb level deviations of the pile cap top. The bolts are inserted upwards from the underside of the pile cap, heads down, without any additional retaining parts.

Item	Specification	Supplied by	Size varies with pile shaft diameter
CS4-PL	Base plate PL 380×380×25, ASTM A36	Our shop	No
CS4-RIB	Stiffeners 2 × PL 308×120×12 at x = ±50	Our shop	No
CS4-W1	Column to base plate fillet weld 6, continuous all round both faces, 1896 mm	Our shop	No
CS4-W2	Stiffener to plate fillet weld 6, stiffener end fillet weld 8, 2000 mm in total	Our shop	No
PH4-CAP	Pile cap cover plate 380×380×25, flat top plate	Pile cap supplier	Plate thickness and stiffening vary with shaft diameter
PH4-BOLT	M24 ASTM F3125 Gr. A325M heavy hex bolt, hot-dip galvanized	Pile cap supplier	Length varies with shim thickness
PH4-NUT	M24 nut ASTM A563M Class 10S heavy hex, overtapped	Pile cap supplier	No
PH4-WASH	M24 hardened washer ASTM F436M, 2 per bolt	Pile cap supplier	No
PH4-SHIM	Machined shim 380×380, thickness 3–30	Pile cap supplier	Thickness varies with the measured pile cap top level
Pile shaft and helices	Diameter φD, helix configuration, pile length, embedment depth	Pile supplier	Yes

2 Geometry and levels

Base plate holes are at (x, y) = (±95, ±120), hole diameter φ27 (M24 standard hole, AISC Table J3.3M), hole centre 70 mm from the plate edge, clearance between bolt and hole wall 1.5 mm per side. The base plate outline is only 15 mm larger than the 350 mm column outline: the bolts are in the openings between the two flanges and the socket enters from above, so the base plate need not be enlarged for bolts or tools.

The stiffeners are 308 mm long, each end 2 mm from the inner flange face as the root gap of the end fillet weld; per AWS D1.1, since the 2 mm root gap exceeds 1.6 mm, the end fillet weld leg is increased from 6 mm to 8 mm. Both bottom corners of each stiffener are clipped 12×12 so that the stiffener clears the zone y 150–156, z 0–6 occupied by the 6 mm fillet weld on the inner flange face; clear distance at the clip 8 mm. The stiffener faces are at x = 44 and 56; the r = 13 rolled fillet between web and flange lies at x 6–19, so the stiffener does not enter the fillet zone, clear distance 25 mm. The root gap at the stiffener ends shall be re-checked against the actual rolled fillet and the as-delivered end faces before the clip dimensions are frozen.

All column-to-plate weld runs stop at the tangent points of the r = 13 fillet: 350 mm on each outer flange face, four runs of 156 mm on the inner flange faces, two runs of 286 mm on the web faces, 1896 mm in total.

Position	Model z / mm
Column member underside, base plate top	0
Base plate underside	–25
Shim	–25 to –40 (thickness 3–30, nominal 15)
Pile cap cover plate top	–40, tolerance +12 / –15
Pile cap cover plate underside	–65

Model z is a relative level, not a site level. The 171 stub column pile heads are at model z = 0, 40 mm above the main column pile cap tops. The plan coordinates of the 247 pile positions agree with the foundation setting-out

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

drawings; coordinates, holes, shims and bolt lengths of each of the 76 main columns are given in the D02 main column base setting-out and assembly table (76 locations) for fabrication coordination.

3 Fasteners

Bolts are M24 ASTM F3125 Gr. A325M heavy hex structural bolts, hot-dip galvanized to ASTM F2329. Head across flats 41 mm, across corners max. 47.3 mm, head height 15 mm. Nuts ASTM A563M Class 10S heavy hex, across flats 41 mm, max. height 23.9 mm, overtapped.

Washers are ASTM F436M M24 hardened washers, two per bolt, one under the nut and one under the bolt head. Their dimensions are taken from the manufacturer's catalogue and the current ASTM F436/F436M: outside diameter 48.4–50 mm, inside diameter 26–26.5 mm, thickness 3.4–4.6 mm. Clearances in this specification are checked at the least favourable outside diameter of 50 mm; grip is calculated for both the lower and upper thickness limits.

Sources:

- Manufacturer's catalogue: https://mfindllc.com/wp-content/uploads/2019/10/MF-CATALOGUE-2019-1.pdf
- Scope of current ASTM edition: https://store.astm.org/f0436_f0436m-24.html

3.1 Bolt length

Grip = base plate 25 + shim + pile cap cover plate 25 + 2 washers (3.4–4.6 each). Bolt length = upper grip limit + 35 mm (RCSC length increment for M24), rounded up to a standard length.

Shim thickness mm	Grip mm	Bolt length mm	Thread projecting beyond nut mm
3 – 5	59.8 – 64.2	100	11.9 – 16.3
6 – 15	62.8 – 74.2	110	11.9 – 23.3
16 – 25	72.8 – 84.2	120	11.9 – 23.3
26 – 30	82.8 – 89.2	130	16.9 – 23.3

Thread projection is calculated with the maximum nut height of 23.9 mm; for all combinations of shim and washer thickness it is not less than 11.9 mm and the bolt end is always beyond the nut face.

3.2 Tightening and anti-rotation

No additional anti-rotation part is provided. Bolts are inserted upwards from the pile cap underside; during tightening the bolt head is held by a wrench from below and the nut is turned from above with a 41 mm socket, pretensioned by the turn-of-nut method or with DTIs.

Bolts, nuts and washers shall not be welded, tack welded or heated.

4 Wrench clearance below the pile cap (provided by the pile cap supplier)

Item	Requirement
Clearance shape	A φ120 mm cylinder on each bolt axis, extending 150 mm down from the pile cap cover plate underside, free of pile shaft, stiffeners, welds or other obstructions
Radial access	Each cylinder shall connect radially to the outer edge of the cover plate by a passage 120 mm wide and 150 mm high for the wrench handle
Basis	Head across flats 41 mm; stock hex socket outside diameter 54 mm, or ring/open-end wrench swing radius 60 mm
Shim cases	Clearance is measured from the cover plate underside and is independent of shim thickness; valid for shims of 3, 15 and 30 mm
Coexistence with the pile shaft	The inner edges of the four cylinders are 93.1 mm from the column axis; the pile shaft and cover plate transition envelope compatible with this clearance is φ186 mm at the cover plate underside
If exceeded	If the pile shaft and transition exceed φ186 mm, the supplier shall propose and assess another fastening method

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

5 Component limit values of the bolt group

The following values are calculated to AISC 360-22 for the four bolts and the base plate (component limit values). The load path from pile cap to pile shaft and the whole connection: TO BE VERIFIED per Section 6.

Item	Value	Condition
Single bolt tension φRn	210.4 kN	Fnt = 620 MPa; base plate t = 25 ≥ t_c = 23.93, prying Q = 0
Single bolt shear φRn	106.7 kN	Fnv = 370 MPa, threads in the shear plane; filler factor 0.85
Hole bearing / tearout φRn	432 / 508 kN	Not governing
Bolt group tension / shear	841 / 427 kN	Sum of four bolts
Slip resistance (serviceability)	278 kN	Class A faying surface μ = 0.30, single shim; 236 kN for two or more shims
Bolt group geometric couple about X / about Y	120.1 / 68.7 kNm	Compression resultant at the bearing line of the opposite flange; lever arms 285.5 / 163.4 mm
Bolt group torsion about Z	65.3 kNm	Polar radius 153.1 mm

Combined tension and shear per AISC Eq. J3-3a: at single-bolt shears of 53 / 80 / 107 kN the available tensions are 154 / 95 / 35 kN respectively. The maxima in the table shall not be taken simultaneously for all components.

Translational and rotational stiffnesses of the column base and the compression rating are outputs of the Section 6 assessment.

6 Qualification requirements for the complete connection assembly

The object of assessment is the complete assembly of CS-4, shims, PH4-CAP and the cover plate to pile shaft transition. The assessment has two parts. The pile head supplier (BY PILE SUPPLIER) designs PH4-CAP, the cover plate to pile shaft transition and the pile, and provides the data of Section 7, including the resistances and the six stiffnesses at the pile head, by calculation to AISC 360-22 and the pile shaft standard or by testing of the assembly. The structural design decides the base restraint used in the frame model, provides the concurrent six-component reactions and checks the complete assembly with these data against the acceptance conditions below.

Acceptance conditions:

1. For each concurrent set of Fx, Fy, Fz, Mx, My, Mz given for the point, judge by one interaction relationship; independent component maxima shall not be combined.
2. The compression path shall be traced from the column flange bearing lines y = ±165.5 and the web line x = 0, through the base plate and the two stiffeners, to the bearing surface actually provided by the pile cap, and judged on the actual geometry of that bearing surface.
3. Mz shall be declared with its sign and checked for each direction. The torsional resistance of a helical pile differs between the installation direction and the reverse direction.
4. The number and thickness of shims used in the assessment shall agree with this specification.
5. Translational stiffnesses Kx, Ky, Kz and rotational stiffnesses Krx, Kry, Krz shall be given as outputs of the assessment and used as support conditions in the frame model.

7 Data to be provided by the pile supplier

No.	Item	Unit
1	Pile shaft outside diameter D, wall thickness, material	mm
2	Cover plate thickness, stiffening, cover plate to shaft connection and bearing surface geometry	mm
3	Actual compliance with the wrench clearance below the cover plate	mm
4	Achievable level tolerance of the cover plate top and hole pattern fabrication tolerance	mm
5	Fx / Fy / Fz resistible at the pile head	kN
6	Mx / My / Mz resistible at the pile head, with sign and direction	kNm
7	Pile head Kx / Ky / Kz	kN/mm
8	Pile head Krx / Kry / Krz	kNm/rad
9	Shaft corrosion allowance and design life	mm / years
10	Plan installation deviation, the way it is absorbed, and the design eccentricity e_max	mm

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

If the supplier absorbs plan deviation with an eccentric cover plate, the additional moment P × e shall be included in the values of items 5 and 6.

8 Fabrication and installation

1. Saw the column end, flatness ≤ 1 mm. Cut and drill base plate and stiffeners, hole position tolerance ±1.0 mm.
2. Weld the stiffeners first to the base plate and the inner flange faces; then weld column to plate continuously on both faces all round the column section.
3. Straighten after welding; base plate underside flatness ≤ 1 mm / 300 mm, machined if necessary.
4. Steel components are hot-dip galvanized to ASTM A123. Faying surfaces are Class A (μ = 0.30); power or hand wire brushing is prohibited.
5. The pile cap supplier inserts the bolts upwards from the cover plate underside, heads down, and ensures the wrench clearance of Section 4.
6. Install the pile and re-survey the pile cap top level; select the shim thickness and the corresponding bolt length column by column.
7. Place the shim, erect the column, fit washers and nuts; hold the bolt head with a wrench from below and pretension from above by the turn-of-nut method or with DTIs.
8. Apply non-hardening polyurethane sealant around the perimeter of the plate stack. The interface shall be above the design ground level, at a height determined by the level design.

9 Conditions of application

Condition	Applicability and responsibility
Geometric basis	Column member underside at model z = 0; column inner flange faces y = ±156; plan coordinates of the 247 pile positions unchanged; geometry, dimensions and assembly on drawing PIN001-CS4-001; components, limits and technical conditions on drawing PIN001-CS4-002
Calculation basis	AISC 360-22; root gap compensation of welds per AWS D1.1; bolt length increment per RCSC
Washer dimensions	Per the manufacturer's catalogue and the M24 dimensional range of the current ASTM F436/F436M
Selected construction	Base plate PL 380×380×25; stiffeners 2 × PL 308×120×12; 4 × M24 ASTM F3125 Gr. A325M; column-to-plate fillet weld 6; stiffener end fillet weld 8, corresponding to the 2 mm root gap
Whole connection	Table 5 gives component limit values of the bolts and base plate; the interaction relationship of the six-component reactions, the column base stiffness (frame model input) and the cover plate to pile shaft load path: TO BE VERIFIED per Section 6 (pile head data BY PILE SUPPLIER; assembly check by the structural design)
Six-component reactions of the overall frame	From the whole-frame reaction calculation (TO BE COORDINATED); input to the Section 6 interaction check
Pile capacity, soil profile, installation torque, group effects	BY PILE SUPPLIER (site foundation design)
Physical tests	Assembly testing is one route for the supplier data of Section 6 (BY PILE SUPPLIER)
Six-degree-of-freedom stiffness of the column base	Output of the Section 6 assessment
Compression rating	Assessed on the actual bearing surface per Section 6, item 2
Cover plate to pile shaft transition	Supplier's geometry; designed and checked BY PILE SUPPLIER

Revision J29

This edition replaces the earlier text of Section 8, item 4, which called for hand wire brushing of faying surfaces after galvanizing; the earlier wording shall no longer be used. The J29 wording (hot-dip galvanized to ASTM A123, Class A, μ = 0.30, power or hand wire brushing prohibited) follows RCSC 2020, 3.2.2(3). The revision concerns faying surface preparation only; geometry and the values of Table 5 are unchanged. The same J29 wording is applied to note 3 on drawing PIN001-CS4-001.

Public edition P2 (2026-10): the division of the Section 6 assessment between the pile head supplier and the structural design is stated in Sections 6 and 9 consistently with the D02 user notes (Section 3) and the pile performance requirements FS-B (Section 3). Requirements, values and the J29 revision are unchanged.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data 30 mm Floor Board Supply, Fixing and Performance Verification Technical Conditions

Document R-01, revision R07, date 2026-09-26. K&K Data Service Inc., inquiry@kkdatasvc.com

These technical conditions are used for enquiry, supply and performance verification of the 30 mm floor board with its fixings and local supports. Board, fixings and local supports are supplied BY MANUFACTURER to meet the performance requirements below, demonstrated by test reports and the assembled performance verification tests of Section 5. Values in this document are of two kinds: geometric — dimensions taken from the existing model; performance requirements — criteria selected for this project by these conditions. The permissible floor load is TO BE VERIFIED by the floor design.

1 Design basis and loads

Steel members per AISC 360-22. Load combination per ASCE 7-22 strength design combination 1.2D + 1.6L. This is the design basis adopted for this project; the code edition adopted by the jurisdiction is TO BE COORDINATED.

Dead load D is calculated for two moisture states: equilibrium moisture with board 60 kg/m² and finish 5 kg/m², D = 0.6374 kPa; saturated with board 70 kg/m² and finish 5 kg/m², D = 0.7355 kPa. Where the supplier's measured surface density exceeds these upper values, the measured value is used for recalculation and shall not be truncated.

Board, fixing and local-support qualification load (not the permissible load of the floor framing) is the larger effect of the following two, not combined: uniform 5 kPa; concentrated 9 kN on a 762 × 762 mm pad (equivalent 15.500 kPa). A local project case is added: 2 kN on a 100 × 100 mm pad, acting alone, which shall be satisfied at any accessible position; no load-exclusion zones are set.

Case	Condition	Factored load kPa	Stress in board MPa	Service deflection mm	Deflection limit mm
5 kPa	Dry	8.765	1.826	0.340	1.389
5 kPa	Wet	8.883	1.851	0.432	1.389
9 kN / 762 pad	Dry	25.565	5.326	0.973	1.389
9 kN / 762 pad	Wet	25.683	5.351	1.223	1.389

For both cases the saturated state governs. The 2 kN / 100 mm pad case is not in the table: without any reduction for lateral spreading its upper-bound stress is 26.67 MPa. This upper bound is a reference value; the case is judged by the assembled performance verification tests of Section 5 at the actual least favourable positions.

2 Board performance requirements

Item	Requirement	Test method	Specimens and conditions
Thickness	30 mm, tolerance ±0.5 mm	ASTM C1185-23 dimensional measurement	Measuring points and gauges per the test method
Length and width	Cut to bounding dimensions, tolerance ±1.0 mm	Gauge	Every board
Characteristic flexural strength, dry	≥ 16.0 MPa	EN 12467 or ASTM C1185 flexure	Conditioned at 23 °C / 50 % RH to constant mass, 10 specimens
Characteristic flexural strength, wet	≥ 11.0 MPa	As above	Tested immediately after 48 h immersion, 10 specimens
Modulus of elasticity, dry	≥ 6000 MPa	Load–deflection range of the same flexural test	As above
Modulus of elasticity, wet	≥ 4800 MPa	As above	As above
Surface density, equilibrium moisture	≤ 60 kg/m²	Weighing in the specified moisture state; mass divided by measured net area	Conditioned at 23 °C / 50 % RH to constant mass

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Surface density, saturated	≤ 70 kg/m²	Weighing	Weighed immediately after 48 h immersion
Water absorption	Measured value declared by supplier	EN 12467	48 h immersion
Moisture movement	Measured value declared by supplier	EN 12467	Dry to saturated
Non-combustibility	Classification and report number declared by supplier	EN 13501-1 or ASTM E136	—

Characteristic values are the 5 % fractile or the minimum individual value of 10 specimens, whichever is smaller. The above criteria are performance requirements selected for this project. Where a value provided by the supplier is lower than a requirement, Sections 1 and 4 of this document are recalculated with the supplier value.

3 Fixings and local supports

FX-S1 flush fixing, 11619 pieces. Screw DIN 7984 M6×35, class 8.8, electroplated zinc; washer inside diameter 7.0, outside diameter 18.0, thickness 1.6, bearing annulus 215.98 mm². The board is machined with a φ22 × 7 flat-bottom counterbore and a coaxial φ7 through hole, leaving 23 mm of board below the counterbore. On the steel side a φ5.0 hole is drilled and tapped M6 through the 9 mm flange. Nominal screw head top level Z1028.6, 1.4 mm below the board surface; shank end at Z989.6. The centre distance between any two φ22 counterbores is not less than 30 mm (counterbore diameter 22 plus practical margin 8); from a counterbore centre to any CN-1 countersunk hole centre not less than 40 mm. These distances apply within one board, between adjacent boards and on the same fixed member, because board counterbores and tapped flange holes each lie in one physical plane. The actual minimum centre distance across the floor is 31.0 mm.

SS-P1 local support at perimeter free edges, 1328 pieces. Support plate 9 × 140 × 51.5 mm, top at Z1000 flush with the existing flange top; tongue plate 12 × 120 × 96 mm, top at Z991 against the underside of the existing flange, extending 50 mm below the flange. The two plates lap 45 mm; fillet weld leg 5 mm, 45 mm along each long edge of the tongue and 120 mm transversely at the outer tongue end, 210 mm in total, all shop welded from outside on the underside of the support plate. Lap and weld leg are determined per AISC 360-22 J2.2b(f) and Table J2.4: the thinner part is the 9 mm support plate, minimum lap 5 × 9 = 45 mm and not less than 25 mm, minimum weld leg 5 mm, maximum weld leg plate thickness minus 2 = 7 mm; minimum length of a strength-designed fillet weld 4 × 5 = 20 mm. After welding, drilling and tapping in the shop, parts are hot-dip galvanized as a whole to EN ISO 1461 and threads are re-tapped after galvanizing.

CN-1 countersunk bolted connection, 2656 pieces. ISO 10642 M10×25, 08.8, silver zinc flake coating. The existing flange is machined to the DIN 74 F10 fitting hole: φ22.7 H13 countersink, φ11 H13 through hole, 90° cone, nominal cone depth 5.85 mm. Design tension 11.0 kN per bolt, obtained from the support reaction of 2.9 kN amplified by lever action. The supplier shall declare a minimum tensile load of not less than 20.0 kN for the finished part including its head form. The 20.0 kN declared value (BY MANUFACTURER) is the procurement admission criterion; TB-7 verifies assembly and head seating in the actual stack of this project; both apply. Tightening torques are determined by the specimen groups of TB-7 (CN-1) and TB-6 (FX-S1); catalogue tightening torques and the full strength of class 8.8 are not used.

The quantity of SS-X1 in the material list is 0; the method for the open ordinary X joints is judged by TB-4, see Section 5.

4 Board edge conditions and treatment

All 2592 edge segments of the 552 boards are classified segment by segment from actual coordinates. Secondary beams run along X at 500 mm centres, their centrelines being the support lines; ordinary Y board edges run along the secondary beams and ordinary X board edges cross them.

Board edge type	Edge instances	Length m	Treatment
Ordinary Y joint on flange (3 mm open joint centred)	744	845.768	61 mm bearing each side; edge row fixings
Ordinary Y free edge, projection 357.5 mm	368	399.592	SS-P1 at ≤ 500 mm spacing
Ordinary Y free edge, projection 370.0 mm	32	7.136	Notch on a bearing line; no support

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Ordinary Y free edge, projection 257.5 mm	144	24.596	Notch on a bearing line; no support
Ordinary Y free edge, projection 147.5 mm	8	0.480	Notch on a bearing line; no support
Ordinary X edge crossing secondary beams	1080	1744.280	Supported every 500 mm, maximum unsupported length 375 mm, 3 mm open joint kept
Ordinary X edge on transverse main beam	216	404.768	Edge row fixings; for the 12 at the room perimeter see below

Free edges and notches are distinguished by the ratio of edge length to projection: where the edge length is not less than twice the projection the edge is treated as a one-way free edge; otherwise it is a notch on a bearing line, and the board transfers load around the notch through the bearing zones on either side of it on the same flange. The projection screening limit used for ranking is 265 mm (governed by the saturated state: strength 265.8 mm, deflection 309.2 mm). This limit is used for geometric ranking; the 257.5 mm projection family has a margin of only 7.5 mm to it and is included in the Section 5 tests together with the other families.

The 12 ordinary X board edges at the room perimeter are at X80, and the 200 mm wide transverse main beam below ends at X100, so the actual bearing on the main beam at that edge is 20 mm, not 35 mm. The same edge also has full 125 mm bearing at each secondary beam crossing. That edge is not a structurally fixed row. The general rule of this package, edge row holes 35 mm from the board edge, cannot be achieved here: the main beam ends at X100 and the secondary beams start at X120, and a tapped hole shall be not less than 15 mm from a member end, so there is no steel at 35 mm in from the board edge (X115). The nearest tappable point to the board edge on each crossing secondary beam row, X135 / 106465, is used, edge distance 55 mm. This value is taken from the final coordinate table and is not nominal: for all 12 edges the main beam bearing is minimum 20.0 and maximum 20.0 mm, and the edge distance of the first fixing minimum 55.0 and maximum 55.0 mm. Spacing and bearing requirements are unchanged; the actual 20 mm bearing of that edge, together with this fixing arrangement, is TO BE VERIFIED at full load by TB-8.

5 Assembled performance verification tests

Tests are carried out on a rig built to the actual geometry, reproducing the 500 mm secondary beam spacing, the 3 mm open joints, the actual board edge types and the actual fixing layout.

Number of specimens: for TB-1, TB-2, TB-3, TB-4, TB-5 and TB-8, not fewer than 3 assembled specimens per arrangement and per moisture state, made to the measured least favourable geometry listed item by item in Section 5.1. Specimens are selected by measured governing quantities, not by board edge family labels.

Moisture states: dry — conditioned at 23 °C / 50 % RH to constant mass, constant mass meaning that two successive weighings 24 h apart differ by not more than 0.1 % of the specimen mass. Wet — tested immediately after 48 h immersion.

Load steps: 25 %, 50 %, 75 %, 100 % and 125 % of the target load, each held for 5 min and recorded; the 100 % step is held for 24 h. After unloading, rest 1 h and record residual values.

No.	Position	Load	Acceptance criteria
TB-1	Mid-span in the field	5 kPa uniform, and 9 kN / 762 pad	Mid-span deflection ≤ 1.389 mm; residual ≤ 0.14 mm; no visible cracks
TB-2	Mid-span in the field	2 kN / 100 pad	Deflection at load point ≤ 1.389 mm; residual ≤ 0.14 mm; no through cracks, no spalling around counterbores
TB-3	Ordinary Y free edge, projection 357.5, with SS-P1	5 kPa along the edge line; 2 kN / 100 directly over one support	Edge deflection ≤ 1.00 mm; residual ≤ 0.10 mm; no slip or loosening of the support
TB-4	Ordinary X open joint, midpoint of the 375 clear opening	2 kN / 100 on one side; 5 kPa uniform on one side	At 2 kN, offset between top surfaces of adjacent boards ≤ 0.80 mm, residual ≤ 0.10 mm; at 5 kPa, offset ≤ 0.30 mm; no spalling of board edges
TB-5	Notch corners and closed opening corners (projections 370.0 / 257.5 / 147.5)	2 kN / 100 applied at the corner	No crack initiation at the corner; deflection ≤ 1.389 mm; residual ≤ 0.14 mm

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

TB-6	FX-S1 head pull-through	Single-point pull-out to failure, 5 specimens	Individual minimum ≥ 4.0 kN, mean ≥ 5.0 kN; increase of head sinkage ≤ 0.5 mm at 1.5 kN. On the same group of 5 specimens determine and record the installation torque of the M6 screw: this torque shall make the above pull-through values valid, and after tightening there shall be no crushing at the counterbore bottom, no ring cracking in the board and no stripping of the tapped thread. The installation torque is derived from this test group; no catalogue torque is cited
TB-7	CN-1 in the actual stack	Proof load 16.5 kN, then pulled to failure, 5 specimens	Measure before and after the proof load: the thickness of the remaining straight hole section of the 9 mm flange below the DIN 74 cone (nominal 3.15 mm) and the projection of the head top relative to the flange top. Acceptance: the head never pulls through the cone, the head top is not above the flange top (s ≥ 0), no visible crushing of the remaining straight section; effective thread engagement ≥ 9.0 mm; and the tightening torque is determined. Individual minimum failure load ≥ 16.5 kN. The shank strength of class 8.8 shall not replace this result
TB-8	Room perimeter ordinary X board edge (20 mm bearing on main beam)	5 kPa or 9 kN / 762 pad, and 2 kN / 100 at the board edge	Edge deflection ≤ 1.00 mm; residual ≤ 0.10 mm; no crushing or spalling in the 20 mm bearing zone; no pull-out of fixings

5.1 Specimen selection

Board numbers, outline dimensions and measured governing quantities in the table are taken from the actual outlines of all 552 boards and the actual fixing and support coordinates. Not fewer than 3 specimens per arrangement and per moisture state.

No.	Board	Outline mm	Measured governing quantity	Reason for selection
TB-1/ TB-2	CB1-2-2-1	1197.0 × 1997.0	Net area 2.3904 m², crossing 5 support lines	The three full boards with the largest net area
TB-1/ TB-2	CB2-2-2-1	1197.0 × 1997.0	Net area 2.3904 m², crossing 5 support lines	The three full boards with the largest net area
TB-1/ TB-2	CB2-3-2-1	1197.0 × 1997.0	Net area 2.3904 m², crossing 5 support lines	The three full boards with the largest net area
TB-3	SF18C-CB-B07-S1-1-1-1	1197.0 × 1918.5	Edge line Y80.0, anchoring secondary beam WF-JO-B07-FJ01-R, actual maximum support spacing 439.3 mm	The three free edge segments with the largest actual support spacing
TB-3	SF18C-CB-B08-S1-1-1-1	1197.0 × 1918.5	Edge line Y80.0, anchoring secondary beam WF-JO-B08-FJ01-R, actual maximum support spacing 439.3 mm	The three free edge segments with the largest actual support spacing
TB-3	SF18C-CB-B09-S1-1-1-1	1197.0 × 1918.5	Edge line Y80.0, anchoring secondary beam WF-JO-B09-FJ01-R, actual maximum support spacing 439.3 mm	The three free edge segments with the largest actual support spacing
TB-4	CB1-1-2-1	1118.5 × 1997.0	Edge X1198.5, unsupported 1500.0 mm, 4 segments of 375 clear, crossing 5 supports	The three ordinary X open joint edges with the largest unsupported length
TB-4	CB2-1-2-1	1118.5 × 1997.0	Edge X1198.5, unsupported 1500.0 mm, 4 segments of 375 clear, crossing 5 supports	The three ordinary X open joint edges with the largest unsupported length
TB-4	CB1-2-2-1	1197.0 × 1997.0	Edge X2398.5, unsupported 1500.0 mm, 4 segments of 375 clear, crossing 5 supports	The three ordinary X open joint edges with the largest unsupported length
TB-5	CB1-3-1-1	1197.0 × 1918.5	Edge Y1932.5, free projection 370.0 mm, edge length 325.0 mm, loop OUTER	The three longest edges of the 370.0 projection family, the largest free projection in the floor
TB-5	CB1-3-2-1	1197.0 × 1997.0	Edge Y2067.5, free projection 370.0 mm, edge length 325.0 mm, loop OUTER	The three longest edges of the 370.0 projection family, the largest free projection in the floor
TB-5	CB1-3-2-1	1197.0 × 1997.0	Edge Y3567.5, free projection 370.0 mm, edge length 325.0 mm, loop OPENING	The three longest edges of the 370.0 projection family, the largest free projection in the floor

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

TB-5	CB1-5-1-1	997.0 × 1918.5	Edge Y180.0, free projection 257.5 mm, edge length 178.5 mm, loop OUTER	The 257.5 projection family is only 7.5 mm from the screening limit; the longest edge of that family is taken
TB-5	CB1-1-1-2	1118.5 × 1918.5	Edge Y290.0, free projection 147.5 mm, edge length 60.0 mm, loop OUTER	The 147.5 projection family is also listed in this test; its measured least favourable case, the longest edge of that family, is taken
TB-8	CB1-1-2-1	1118.5 × 1997.0	Edge X80.0, main beam bearing 20.0 mm, first fixing edge distance 55.0 mm, edge length 1997.0 mm	The three longest of the 12 perimeter ordinary X board edges
TB-8	CB2-1-2-1	1118.5 × 1997.0	Edge X80.0, main beam bearing 20.0 mm, first fixing edge distance 55.0 mm, edge length 1997.0 mm	The three longest of the 12 perimeter ordinary X board edges
TB-8	SF18C-CB-B18-S1-5-2-1	918.5 × 1997.0	Edge X106520.0, main beam bearing 20.0 mm, first fixing edge distance 55.0 mm, edge length 1997.0 mm	The three longest of the 12 perimeter ordinary X board edges

If TB-4 is satisfied, the ordinary X open joints are valid as specified in these conditions and the quantity of SS-X1 in the material list is 0. If TB-4 is not satisfied, that board and assembled method do not meet these conditions; added local supports or a changed board edge method are detailed and calculated before adoption (TO BE COORDINATED).

Damage criteria are uniform: throughout loading there shall be no through cracks, delamination, spalling around counterbores, crushing in bearing zones or pull-out of fixings; any of these at the 125 % step constitutes failure. The tables are the test arrangement and acceptance criteria; the values in the tables are required values, and the test results are BY MANUFACTURER.

Test methods for dimensions, density and fibre cement board materials: see ASTM C1185-23, https://store.astm.org/c1185-23.html

6 Document list

The board outline and coordinate table, the point-by-point fixing coordinate table, the piece-by-piece local support coordinate table, the perimeter board edge condition table and the fixing and support material list (package D02 data for fabrication and installation coordination), and details R-101 to R-104 (Part 1) are used with these technical conditions.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Secondary Beam End Connection Bolt Assembly (D02-N)

K&K Data Service Inc. · inquiry@kkdatasvc.com · 2026-09-26

Model content

The D02 steel model adds to the model of the Floor Installation Drawings D01 the 100 secondary beam end connections in areas B06 and B12: 124 connection plates, 400 bolts and 696 welds (SP-T1 / SP-T2, sheets PIN001-JC-01 / JC-02). The column base and pile head interface and the floor board fixings are defined by the D02 sheets PIN001-CS4-001 / 002 and R-101 to R-104 with their technical conditions.

Bolt assembly

Item	Specification
Bolt	ISO 4014 M16×45-8.8
Nut	ISO 4032, property class 8
Washers	2 × ISO 7089 200 HV
Grip	14 mm (actual), 45 mm bolt, 0 mm length allowance

The supply standard follows the drawing notation above.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Short Post Base to Pile Cap Bolted Interface SPB-1: Geometric Interface Note

K&K Data Service Inc. · inquiry@kkdatasvc.com · K&K Data / PIN001 · Revision R5 · 2026-09-27

Geometric interface definition. Design capacity and connection stiffness: TO BE VERIFIED once the concurrent design forces are available.

1 Scope and Applicability

This note specifies the geometry, hole position tolerances, assembly clearances and measurement requirements of the bolted interface between the short post base and the pile cap (or pile cap adapter). It applies to the four short post supports F053, F054, F109 and F110 in bays B06 and B12, with 16 bolt holes in total.

This note defines the geometric interface. Force transfer and the design capacity and stiffness of the bolts, the post base plate, the pile cap and the pile: TO BE VERIFIED once the concurrent design forces are available (structural engineer; pile cap and pile BY PILE SUPPLIER); parameters in Section 9. Interface load rating: none assigned before this verification.

2 Existing Members and Modification

- The short post SHS100×100×5 and the base plate PL200×200×12 (plate underside z=0, plate top z=12) remain unchanged; the existing fillet weld between the base plate and the short post remains unchanged.
- The only modification: shop drilling of 4 holes in the existing base plate, each with a final hole diameter of 18.0 to 18.5 mm (after coating). The four holes are arranged on a 144 mm square, with hole centres at (±72, ±72) mm from the short post axis.
- The floor, the secondary beams and the short post top cap plate are not modified; no site welding is performed, and the support plan coordinates are not moved.

3 Hole Positions and Datums

- **Base plate:** Datum A is the base plate underside (mating plane); B and C are the actual median planes of the short post in the two directions. All four holes are toleranced with position Ø1.0 mm RFS relative to A|B|C and are accepted on final dimensions after coating.
- **Pile cap or adapter:** Datum A is its upper face (mating plane); B and C are the short post design axes physically marked on the adapter. All four holes are likewise toleranced with position Ø1.0 mm RFS relative to A|B|C and are accepted on final dimensions after coating.
- **Basic dimensions:** The 144 mm square and (±72, ±72) are basic (theoretically exact) dimensions.
- **Assembly registration:** At assembly, B and C of the adapter are registered to B and C of the short post. If the adapter cannot be registered to this datum system, the assembly is rejected.
- **No compensation of deviations by hole clearance:** Eccentricity between the pile axis and the short post axis is handled by the adapter design and is not compensated by bolt hole clearance.
- **Distinction between the two kinds of position:** This section controls only the local position of the holes in the fabricated parts relative to the short post; the site plan position of the pile is handled under Section 7. The two shall not be offset against each other.

4 Procurement Dimensional Envelope

The following dimensions are the geometric limits required of procured parts by this interface:

Item	Requirement
Final bolt shank diameter d	15.5 to 16.5 mm
Final hole diameter H	18.0 to 18.5 mm
Socket outside diameter	≤ 36 mm
Washer outside diameter / inside diameter	≤ 34 mm / ≤ 18.0 mm
Nut width across corners	≤ 31.2 mm

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

5 Two-Plate Assembly Check

The hole positions of both plates refer to the same datum system, each with position tolerance Ø1.0 mm. The worst-case relative offset between hole centres of the two plates is 1.0 mm. The minimum fit clearance is H_min – d_max = 18.0 – 16.5 = 1.5 mm, giving an assembly margin of 0.5 mm.

Condition	Worst-case relative offset	Minimum fit clearance	Margin
Position Ø1.0 RFS to A|B|C, d_max 16.5, H_min 18.0	1.0 mm	1.5 mm	0.5 mm

6 Assembly Clearances

Obstruction envelope (conservative values): - The short post is taken as a 100×100 sharp-cornered outline, ignoring corner radii; - The weld is taken as the outline offset outward by 6 mm (±56 mm); - Hole centre to the weld envelope corner: 22.63 mm; to the sharp post corner: 31.11 mm.

Bolt float in the hole: The bolt axis may shift within the hole; the radial float is taken as (H_max – d_min)/2 = (18.5 – 15.5)/2 = 1.5 mm.

Socket from above: - Required radius = 36/2 + 0.5 (position) + 1.5 (float) + 1.0 (running clearance) = 21.0 mm. - Margin to the weld envelope 1.63 mm; margin to the sharp post corner 10.11 mm.

Washer: - Envelope radius = 34/2 + 0.5 + 1.5 + 1.25 = 20.25 mm, where 1.25 is the float of the washer on the bolt, (18.0 – 15.5)/2. - Margin to the weld envelope 2.38 mm; margin to the plate edge 7.75 mm. - Nut envelope radius 17.6 mm, lying within the washer envelope.

Edge distance: - Nominal edge distance 28 mm; minimum 27.5 mm after allowing for position tolerance. - Minimum hole edge to plate edge: 18.25 mm. - The edge distance shall be checked against the M16 minimum edge distance in AISC 360-22 Table J3.4M.

Offset of the base plate outline relative to the short post: - The plate edges are not part of the A|B|C datum system. The offset δ_pe of the base plate outline of the existing welded assembly relative to B and C shall be measured. - δ_pe ≤ 7.75 mm on each side (full washer bearing). - In addition, (27.5 – δ_pe) shall satisfy the minimum edge distance.

Axial working space above: Required: not less than 150 mm. Directly above the hole positions, from the base plate top z=12 to the underside of the short post top cap plate z=738, the clear height is 726 mm.

Lateral driving: The ratchet handle swing sector radius R_drive and its clearance to adjacent members, including the clash check against adjacent members of the building, are design coordination requirements of the construction method statement (TO BE COORDINATED).

Bolt head below: - The holding tool is likewise taken as outside diameter ≤ 36 mm with the same float. No pile shaft or stiffener plate shall lie within a radius of 21.0 mm around each hole. - In the diagonal direction, the radial upper limit from the axis to the outer edge of the pile shaft or stiffener plate is 101.82 – 21.0 = 80.8 mm. - Vertical clearance and holding access are shown on the pile cap supplier's drawings (BY PILE SUPPLIER).

7 Pile Position Deviation and Pile Cap Adapter

- Bolt hole clearance is used only for fabrication fit and does not absorb pile position deviation; oversized or slotted holes are not used in the base plate.
- For installed pile heads, the plan position, elevation and inclination shall first be surveyed; the adapter is then shop-fabricated to the survey. The hole group and the B and C marks of the adapter are placed on the short post design axes and are registered to the short post at assembly.
- For each support, the eccentricity e (vector) between the pile axis and the short post axis shall be reported for the design checks of the pile, pile cap and short post (additional moment P·e and the corresponding shear).
- The pile and adapter suppliers shall declare the maximum deviation e_max that can be absorbed and submit the corresponding verification. e_max affects only the design of the adapter and pile and does not enter the assembly clearance margins of Section 6.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

8 Bolt Length and Assembly

- Bolt length L ≥ 12 + t_cap + t_shim + t_washer + h_nut + p.
- Where t_cap, t_shim, t_washer and h_nut are pile cap and assembly parameters, and p is the stick-out: the bolt end shall be at least flush with the outer face of the nut, as determined by the assembly specification.
- The thread runout shall not enter the nut engagement length.
- The bolt assemblies shall be certified M16 structural bolt assemblies; their grade, installation method (snug-tight or pretensioned) and faying surface treatment are determined by the structural engineer in accordance with the RCSC Specification. ISO property class 8.8 is not automatically equivalent to ASTM F3125.
- A hardened washer is provided under the turned nut.

9 Design Coordination Requirements and Their Effects

Parameter	Effect	Provided by
t_cap, t_shim, pile shaft diameter, stiffener arrangement	Bolt length, holding access below, radial upper limit	Pile cap supplier
Bolt assembly grade, nut height, washer thickness	Length, strength and installation method	Structural engineer and assembly supplier
δ_pe (base plate outline relative to short post median planes)	Edge distance and washer bearing	Fabrication survey
e_max	Adapter and pile eccentricity checks	Structural engineer and pile supplier
R_drive and clearance to adjacent members	Lateral driving operation	Construction method statement
Concurrent design forces (including uplift)	Bolt tension and prying, base plate and pile cap, pile capacity and stiffness	Structural engineer

10 Hole Coordinates

The global coordinates of the 16 holes are given in the hole schedule below. The coordinates are taken from the short post and base plate positions of the R04 model.

Hole schedule (global coordinates, mm; z = base plate top/underside). Operation for every hole: shop drill existing base plate (recorded change to existing part). Final hole diameter 18.0-18.5 mm. Position: Ø1.0 RFS after coating | A|B|C (A underside, B/C SHS median planes).

Support	Post mark	Base plate object	Hole	X	Y	z top/ bottom	Final hole dia.	Position
F053	WF-PO-PSTI-B06-02-Y2000	1B3E8	-X-Y	32385.143	1928.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F053	WF-PO-PSTI-B06-02-Y2000	1B3E8	-X+Y	32385.143	2072.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F053	WF-PO-PSTI-B06-02-Y2000	1B3E8	+X-Y	32529.143	1928.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F053	WF-PO-PSTI-B06-02-Y2000	1B3E8	+X+Y	32529.143	2072.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F054	WF-PO-PSTI-B06-02-Y3500	1B3EC	-X-Y	32385.143	3428.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F054	WF-PO-PSTI-B06-02-Y3500	1B3EC	-X+Y	32385.143	3572.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F054	WF-PO-PSTI-B06-02-Y3500	1B3EC	+X-Y	32529.143	3428.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F054	WF-PO-PSTI-B06-02-Y3500	1B3EC	+X+Y	32529.143	3572.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F109	WF-PO-PSTI-B12-02-Y2000	1B450	-X-Y	68256.571	1928.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

F109	WF-PO-PSTI-B12-02-Y2000	1B450	-X+Y	68256.571	2072.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F109	WF-PO-PSTI-B12-02-Y2000	1B450	+X-Y	68400.571	1928.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F109	WF-PO-PSTI-B12-02-Y2000	1B450	+X+Y	68400.571	2072.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F110	WF-PO-PSTI-B12-02-Y3500	1B454	-X-Y	68256.571	3428.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F110	WF-PO-PSTI-B12-02-Y3500	1B454	-X+Y	68256.571	3572.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F110	WF-PO-PSTI-B12-02-Y3500	1B454	+X-Y	68400.571	3428.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C
F110	WF-PO-PSTI-B12-02-Y3500	1B454	+X+Y	68400.571	3572.0	12/0	18.0-18.5	Ø1.0 RFS A|B|C

11 Assembly and Clearance Summary

Item	Value (mm)	Requirement / margin
Worst-case relative offset of the two plates	1.0	≤ 1.5; margin 0.5
Bolt radial float	1.5	(18.5 – 15.5)/2
Socket required radius	21.0	Margin 1.63 / 10.11
Washer envelope radius	20.25	Margin 2.38 / plate edge 7.75
Minimum edge distance	27.5	Check against J3.4M
Radial upper limit below	80.8	Pile shaft / stiffener plate

Notes:

- Datums: base plate A = underside, B and C = actual short post median planes; adapter A = upper face, B and C = short post design axes marked on the adapter, registered to the short post at assembly.
- Position Ø1.0 RFS relative to A|B|C, accepted on final dimensions after coating.
- If registration is not possible, the assembly is rejected; pile eccentricity is handled by the adapter design.
- The procurement envelope is the geometric limit required by this interface.
- The offset δ_pe of the base plate outline relative to the short post shall be measured: ≤ 7.75 on each side, and the edge distance (27.5 – δ_pe) shall satisfy the minimum edge distance.
- Hole clearance is used only for fabrication fit and does not absorb pile position deviation.

12 Plan and Section (Figure 1)

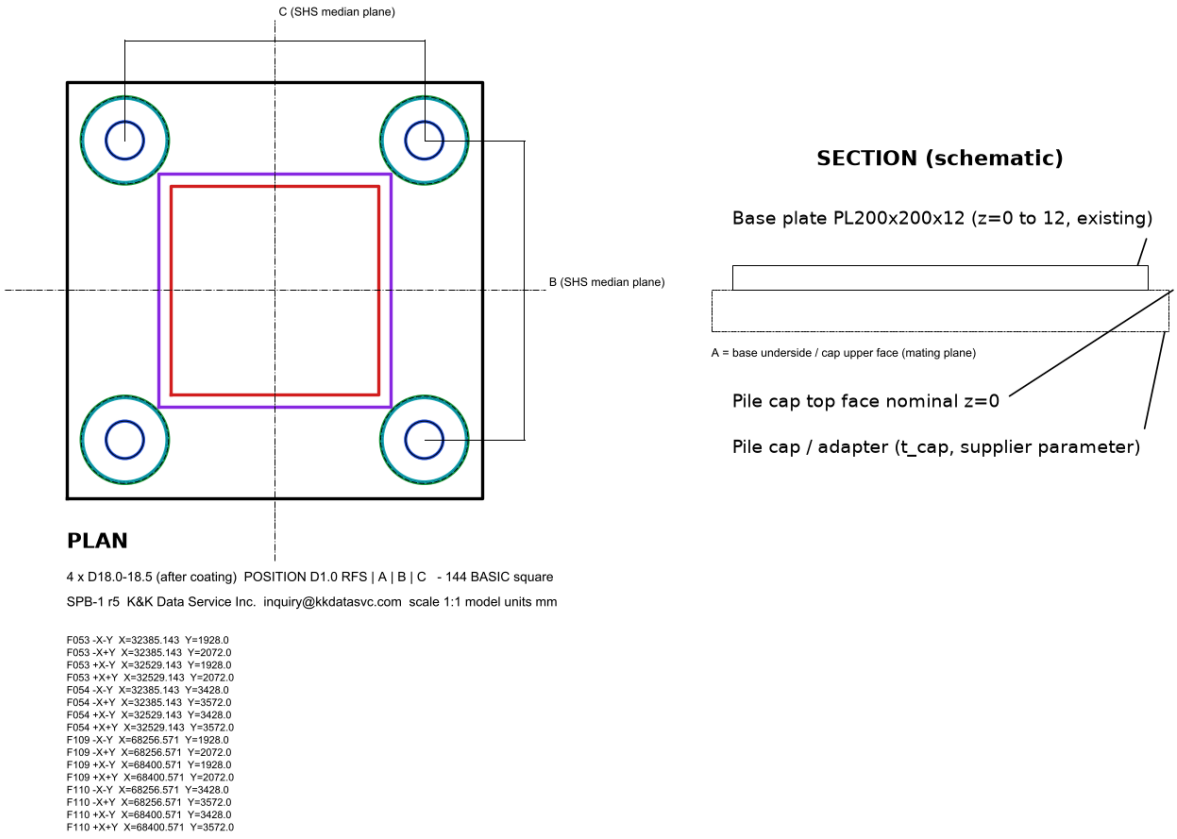
Figure 1 is rendered from the interface drawing SPB1_R5 (model units mm; drawing scale 1:2, A3) and shows:

- Plan (scale 1:2): B and C are the actual short post median planes; A is the base plate underside. Dimensions: 144 (hole spacing, basic dimension), 200, 144, 28. Hole callout: 4×Ø18.0 to 18.5 (after coating), position Ø1.0 RFS | A | B | C; 144 is a basic dimension.
- Legend: blue, Ø18 hole (18.0 to 18.5 after coating); green, socket required radius 21.0; cyan, washer envelope 20.25; purple, weld envelope ±56; red, SHS. Dashed line: pile cap / adapter (thickness t_cap, supplier parameter).
- Section (schematic, scale 1:2): above, hardened washer plus nut, tightened from above; axial clear height above the holes 726 (to the underside of the short post top cap plate); below, bolt head inserted and held from below the pile cap, with access and clearance to be shown on the supplier's drawings. Base plate PL200×200×12 (z=0 to 12, existing); pile cap top face at nominal z=0.
- Applicable supports: F053, F054, F109, F110 (B06, B12), 16 holes in total.
- Hole positions: (±72, ±72) relative to the short post median planes B and C, 144 square (basic dimension).
- Position: each hole Ø1.0 RFS relative to A|B|C, accepted after coating; the adapter is registered to the same system.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

- Procurement envelope: shank 15.5 to 16.5; hole 18.0 to 18.5; socket outside diameter ≤ 36.
- Two plates: worst-case offset 1.0 ≤ minimum clearance 18.0 – 16.5 = 1.5, margin 0.5.
- Socket required radius 21.0 (including float 1.5): margin to the weld envelope 1.63.
- Washer envelope 20.25: 2.38 to the weld envelope, 7.75 to the plate edge; edge distance ≥ 27.5.
- Modification: shop drilling of the existing base plate; no site welding; support coordinates unchanged.

Figure 1 Interface Plan and Section Rendered from the Interface Drawing SPB1_R5



Plan: blue Ø18 hole (18.0 to 18.5 after coating); green socket required radius 21.0; cyan washer envelope 20.25; purple weld envelope ±56; red SHS100×100; black PL200×200. Section rectangles: base plate z=0 to 12 above pile cap/adapter. The drawing text lists the 16 hole coordinates. Model units mm.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Foundation Support Setting-Out Set — Notes (Rev B)

K&K Data / PIN001. Rev B, 2026-09-27: FS-09 and FS-16 are at revision B; the 76 main column rows of the pile requirement table carry the column base interface per D02 CS-4; all other sheets and all coordinates are as Rev A.

247 support points = 76 main column points C001–C076 + 171 floor stub column points F001–F171. Coordinates are project local two-dimensional coordinates in millimetres, identical to the member axes of the structural model (XY); no point is moved.

1 Composition of the set

The set comprises 17 A3 setting-out sheets FS-01 to FS-17 and the two documents FS-B and FS-C.

Item	Content	Location
FS-01	Key plan and zone index	Part 1
FS-02	Local coordinate system and survey handover method	Part 1
FS-03 to FS-08	Zone A–F setting-out enlargements 1:100	Part 3
FS-09 (Rev B)	Close-point enlargements and installation space conditions	Part 3
FS-10 to FS-12	Coordinate tables of the 247 points	Part 1
FS-13	Tape check of grid chains, transverse grid spacing and diagonals	Part 3
FS-14, FS-15	Tape check point tables: grid offset, BL-X offset and distances to two reference points	Part 3
FS-16 (Rev B)	Pile performance requirement interface table	Part 1
FS-17	Survey handover record and blank as-built record	Part 3
FS-C	Site setting-out and tape-check record sheets Rev A: 10 A4 field sheets with instructions, the coordinates of the 247 points, two reference distances and columns for measured differences	Part 2, document FS-C
FS-B	Pile performance requirements and design inputs	Part 2, document FS-B

The same data are held in the FS digital coordinate tables (millimetre table PROJECT_X_MM / PROJECT_Y_MM; metre survey table PROJECT_X_M / PROJECT_Y_M with six decimals and no elevation column; tape-check, grid chain, diagonal, pile requirement and as-built tables) and in the 1:1 setting-out CAD model with 247 snappable point blocks. They are used for the survey handover described on FS-02 and FS-17.

2 Setting-out data and field use

1. Project local 2D coordinates, point numbers, zones and member correspondence of the 247 points are identical in all sheets and tables.
2. Continuous and cumulative dimensions of the 19 grid lines, transverse grid spacing, diagonal check values by bay and by zone; dimension chain checks 16 × 5800 + 2 × 6900 = 106600 and 6000 + 6000 + 6300 = 18300.
3. For each off-grid point: grid offset, BL-X offset and the two distances to the positions of the bay's bounding grid lines on BL-X; together with the rule that all stub column points lie on the +Y side of BL-X, this excludes a mirrored set-out.
4. For each point: the supported steel member, the top plate thickness and the concentric interface condition.
5. 171 stub column base interfaces: base plate 200 × 200 × 12, plate underside at model z = 0, plate top at model z = 12, stub column member start at model z = 12.
6. Enlargements of the three close pairs (500 mm and 707.107 mm), envelope clearances and installation space conditions, and the per-point nearest-neighbour distance constraint.
7. Instrument import of the metre table: columns PROJECT_X_M / PROJECT_Y_M are mapped to the instrument's local E and N columns, with the job local coordinate setting confirmed; the Z field is not

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

used. The instrument model is selected by the surveyor.

8. Site use requirements are on FS-17: print A3 at actual size (100 %), sheet and table revisions match, plan and level are recorded separately, and three non-collinear check points are verified before all points are imported.

3 Items established on site before setting out

1. Site reference: two intervisible permanent marks with site E/N coordinates are established first; the site has no existing control points or located origin.
2. Site location of the local system: the ground position of local (0,0) and the bearing of the +X axis are fixed after confirmation by the owner and the structural designer; the translation, rotation and scale factor applied are recorded. Local lengths are kept at 1:1; survey error is not absorbed by scaling. Where ground-to-projection conversion is applied, the basis of the scale is recorded. The instrument is set up on the origin only after the origin is located.
3. Independent third-point check and record of residuals.
4. Establishment and coordinate record of offset protection control points.
5. Instrument model, prism constant, survey date, surveyor and checker signatures (FS-17 form 1).
6. Pile head design levels: the FS set is a plan set without elevations. All z values in the sheets are relative model levels. Main column bases per D02 CS-4 / PH-4: pile cap cover plate top at nominal model z = –40 (+12 / –15); stub column pile heads at model z = 0. **All pile heads shall not be assumed at model z = 0.** Piling depth and cut-off level follow the level design (TO BE COORDINATED).
7. Setting-out and construction tolerances: TO BE COORDINATED with the foundation design. The printed number of digits (0.001 mm in the millimetre table, six decimals in the metre table) is the recording precision of the geometric source, not a measurement precision or construction tolerance.

4 Items determined by the foundation and structural design

- BY PILE SUPPLIER and foundation designer: pile shaft diameter, helix diameter and configuration, pile length and embedment depth, single pile capacity, installation torque window, pile group analysis, test requirements and final procured pile quantity.
- Per D02 CS-4 J29 Section 6: pile head resistances and stiffnesses of the main column base assembly (CS-4 / PH-4) BY PILE SUPPLIER; base restraint in the frame model and the check of the complete assembly with the concurrent reactions by the structural design.
- TO BE SUPPLIED from the whole-frame reaction calculation: superstructure reactions Fx/Fy/Fz/Mx/My/Mz with their concurrent combinations, six directional stiffnesses, settlement and two-direction displacement limits.
- TO BE COORDINATED with the structural designer: the setting-out basis of the X coordinates of the 72 interior stub columns, which this issue keeps concentric with the current member axes.
- If the foundation selection changes pile axis positions, this drawing set is revised.

For points on AX19 the two reference distances use AX18 and AX19, with the offset measured from AX19; SIDE = 0 means the point lies on baseline BL-X.

5 Section designations

Sheets and the pile requirement table use the designations HW350x350x12x19, HN250x125x6x9, SHS100x100x5 and BP 200 × 300 built-up section. The last is the floor main beam, designated I 300 × 200 × 8 × 12 in this edition (built up from 2 × PL200 × 12 + PL276 × 8, 38 members in R04); the two designations describe the same section. The prefix CHS in the model section strings is a catalogue marker and does not denote a circular hollow section.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Helical Pile Performance Requirements

Scope: K&K Data / PIN001, 247 foundation support points. This document defines the position interface and the demand structure. Pile shaft diameter, helices, length, embedment depth and capacity values are determined by the site foundation design and the pile supplier to satisfy these requirements (BY PILE SUPPLIER).

1 Conditions fixed by this issue

1. Support positions: the 247 project local coordinates of FS-10 to FS-12, identical to the structural model and not moved; no centre shall be changed point by point.
2. Interface: one pile per point, pile axis concentric with the axis of the supported member; eccentricity 0.000 mm at all 247 points.
3. Supported members: C001–C076 are main columns HW350x350x12x19; 95 stub column points are floor main beams I 300 × 200 × 8 × 12 (built up from 2 × PL200 × 12 + PL276 × 8; "BP 200 × 300 built-up" in the data tables); 76 stub column points are floor secondary beams HN250x125x6x9. (The CHS prefix of the source model section strings is a database catalogue marker and does not denote a circular hollow section; the original strings are in column SOURCE_SECTION_RAW of data table FS_POINT_TO_SOURCE_MEMBER.)
4. Stub column base interface (171 points, given): base plate 200 × 200 × 12 mm, **plate underside at model z = 0, plate top at model z = 12, stub column member start at model z = 12**; stub column section SHS100x100x5. The pile head shall match this existing base plate point by point.
5. Main column base interface (76 points, given by D02): main column member underside at model z = 0; column base CS-4 per D02 PIN001-CS4-001/002, base plate 380 × 380 × 25 with underside at model z = –25; machined shims 3–30 thick (nominal 15); pile cap cover plate PH-4 380 × 380 × 25, top at nominal model z = –40 (+12 / –15), underside –65; connection 4 × M24. Column-by-column data in the D02 main column base setting-out and assembly table (76). Base plate and anchor bolts are defined by D02 and are not part of the R04 whole-building model. The six-component capacity and stiffness of the column base assembly and of the pile cap to pile shaft transition are TO BE VERIFIED per D02 CS-4 J29 Section 6: pile head resistances and stiffnesses BY PILE SUPPLIER, check of the complete assembly with the concurrent frame reactions by the structural design.
6. All z values above are relative model levels, **not site pile head levels**; all pile heads shall not be assumed at model z = 0. Pile head levels are issued separately by the level design; plan setting-out and level control are separate.
7. Close-distance constraint (given): see Section 4; helix diameter and installation rig envelope shall be resolved within this constraint.
8. If the foundation selection changes pile axis positions, this setting-out drawing set is revised.

2 Per-point demand schedule

Pile requirement schedule (interface table FS-16; full schedule FS_PILE_REQUIREMENT_SCHEDULE for foundation design coordination), 247 rows keyed by POINT_ID. The first 18 columns are the position and interface conditions given by this set (coordinates, zone, grid, supported member, base plate size and model levels, basis of pile head level, nearest point number, centre distance and envelope clearance); the following columns are demand fields, all marked TO BE SUPPLIED from the reaction calculation of this project; 0 is not used as a placeholder and values of other models or projects are not used.

2.1 Given columns (extract)

Field	Unit	Content
PROJECT_X_MM / PROJECT_Y_MM	mm	Project local coordinates, identical to FS-10 to FS-12
SUPPORTED_MEMBER_MARK / _SECTION	—	Member supported at the point and its section designation
BASE_INTERFACE_GIVEN	—	Existing state of the base interface at the point
BASE_PLATE_PLAN_MM / _THICKNESS_MM	mm	Stub columns 200 × 200 and 12; main column base CS-4: 380 × 380 and 25, per the D02 CS-4 / PH-4 interface specification
BASE_PLATE_UNDERSIDE_MODEL_Z_MM	mm	Stub columns 0; main column CS-4 base plate –25
BASE_PLATE_TOP_MODEL_Z_MM	mm	Stub columns 12; main column CS-4 base plate 0

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

MEMBER_START_MODEL_Z_MM	mm	Stub column member start 12; main column member underside 0
PILE_HEAD_LEVEL_BASIS	—	Pile head level given by the level design; model z is not a site level
NEAREST_POINT_ID / _C_TO_C_MM / _CLEAR_ENVELOPE_MM	mm	Nearest point number, centre distance and envelope clearance; constraint on helix and rig space

2.2 Demand columns

Field	Unit	Content
LOAD_COMBINATION_ID	—	Load combination to which the six components belong
CONCURRENT_SET_ID	—	Component set keeping signs and simultaneity
LIMIT_STATE	—	Strength or serviceability
FX_KN / FY_KN / FZ_KN	kN	Pile head forces along project axes X / Y / Z (superstructure acting on the foundation, Z upward), signed
MX_KNM / MY_KNM / MZ_KNM	kNm	Pile head moments about project axes X / Y / Z, positive by the right-hand rule; MZ is the torsion
FZ_COMPRESSION_ENVELOPE_KN	kN	Governing negative Fz, stated with its CONCURRENT_SET_ID
FZ_TENSION_ENVELOPE_KN	kN	Governing positive Fz, stated with its CONCURRENT_SET_ID
KX_KN_PER_MM / KY / KZ	kN/mm	Translational spring stiffness along project axes X / Y / Z
KRX_KNM_PER_RAD / KRY / KRZ	kNm/ rad	Rotational restraint stiffness about project axes X / Y / Z
SETTLEMENT_LIMIT_MM	mm	Permissible settlement at the point
DEFLECTION_LIMIT_X_MM / _Y_MM	mm	Permissible horizontal pile head displacement in two directions
PILE_HEAD_LEVEL_ADJUST_RANGE_MM	mm	Level adjustment range the pile head shall provide
PLAN_ADJUST_RANGE_MM	mm	Plan adjustment range the pile head shall absorb
DESIGN_LIFE_YEARS	years	Design life governing the corrosion allowance
CORROSION_PROTECTION_CLASS	—	Corrosion protection class and its basis

Where structural support reactions are output, they shall be converted to pile head loads by action and reaction, and the basis of the conversion recorded.

The six components are Fx / Fy / Fz / Mx / My / Mz; **the torsion Mz shall not be omitted.** Compression and tension are the signed envelopes of Fz; when quoted, their original concurrent combination shall be retained, and independent component maxima shall not be combined. Stiffness is given separately for three translations and three rotations by direction; a single non-directional stiffness shall not stand in for six-degree-of-freedom conditions.

3 Design inputs and their source

Design input	Provided by
Per-point Fx / Fy / Fz / Mx / My / Mz	Structural reaction calculation of the current whole frame on a consistent load basis
Concurrent combinations, signs and limit state classification	The same reaction calculation, exported by combination, not assembled from component maxima
Column base restraint used in the structural model	Structural model decision; a bolted base is not automatically a fixed base
Settlement and two-direction displacement limits	Serviceability criteria for the floor and frame
Six-component capacity and stiffness of the main column base CS-4 and pile cap PH-4 assembly	Detail per D02 PIN001-CS4-001/002; pile head resistances and stiffnesses BY PILE SUPPLIER and check of the complete assembly by the structural design, per the D02 column base and pile head interface technical conditions, Section 6
Pile head design level and level adjustment range	Level design, issued separately from this plan set
Soil profile, groundwater level, torque correlation	Site investigation report for this site

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Shaft diameter, helix configuration, length, installation torque window, pile group analysis, test requirements	BY PILE SUPPLIER and foundation designer, based on the above demands and site data

4 Geometric conditions at the close pairs

Point pair	Centre distance mm	Clearance between 100 × 100 post envelopes mm	Clearance between 200 × 200 base plate envelopes mm
F008 – F011	500.000	400.0	300.0
F009 – F012	707.107	565.7	424.3
F009 – F013	707.107	565.7	424.3

Computed over all pairs of the 247 support points (30381 pairs, 76 main column points and 171 stub column points), centre distances below 1000 mm occur only for the three pairs above in bay B01; bay B01 also has two pairs F008 – F010 and F008 – F012 at 1118.034 mm. All other pairs have a minimum centre distance of 1000.000 mm (38 pairs main column to on-grid stub column, 76 pairs between on-grid stub columns); between off-grid stub columns the minimum is 1200.000 mm (B06: F051 – F053, F052 – F054; B12: F109 – F111, F110 – F112; B14: F127 – F129, F128 – F130; B17: F154 – F156, F155 – F157); outside bay B01, between off-grid and on-grid stub columns the minimum is 1371.429 mm (B16, F141 – F145).

The clearances in the table are plan envelope clearances between the existing steel posts and base plates. Helix clearance, rig clearance, pile type, helix configuration, group effects and construction space are determined BY PILE SUPPLIER from the site soil profile, the selected pile type and the rig. Setting-out symbols mark pile axes, not pile diameter.

5 Installation space conditions

1. The construction sequence is: install piles, re-survey pile positions, then erect the upper steel frame. Where work proceeds with the steel frame in place, rig access paths and working space are determined separately; stub column height or model levels shall not be taken as available installation headroom.
2. Plan space shall account together for the pile shaft, helices, drive head, torque equipment, column base connection parts and operators; the steel clearances in the table are only one geometric input.
3. The main column section envelope is 350 × 350 mm; the base plate and pile cap cover plate are 380 × 380 mm (D02 CS-4 / PH-4); wrench clearance below the pile cap per D02 PIN001-CS4-002 table 8. Stub column base plate clearances do not replace a spatial check of the main column bases.
4. The layout assumes a concentric single-pile interface. If the foundation design uses pile groups, eccentric pile caps or changed pile axes, the setting-out drawings and coordinate tables shall be revised together.

6 Items determined by the foundation design

BY PILE SUPPLIER and the site foundation design, to satisfy these requirements: pile shaft diameter, helix configuration, pile length, single pile capacity, final procured pile quantity, and whether a uniform pile diameter or depth and single piles for all main columns are used. TO BE COORDINATED: the actual fixity of the existing column bases in the frame model, pile head design levels (level design), setting-out and construction tolerances. Pile acceptance uses the allowable working capacity, not the ultimate capacity; the rated installation torque is one acceptance criterion together with the other criteria of the foundation design.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Floor Finish and IT Maintenance Electrostatic Discharge Control Technical Conditions

K&K Data Service Inc. Issue F02, 2026-09-25. Contact: inquiry@kkdatasvc.com

Scope

This document supplements the floor content of the Revision 04 structural drawing set. It specifies the performance requirements of the floor finish, its interface conditions with the floor steel beam system and the equipment base plates, the treatment of board joints and movement joints, and the electrostatic discharge (ESD) control interface for IT maintenance work. Structural geometry, member sections and quantities are those of Revision 04. The finish self-weight is added to the gravity load input of the floor design.

The associated documents are supplementary details F-101 to F-104 (issue 02, two A3 sheets) and quantity table F-901. The supplementary details (Part 3) show the finish build-up, movement joints, finish terminations and equipotential bonding as design intent.

Adopted ESD control route

On 2026-09-25 the owner adopted the "local continuous IT maintenance static control" route: no whole-floor static-dissipative floor system is required. The finish product and build-up thickness are selected per this document (TO BE COORDINATED).

ASHRAE Applications Chapter 20 recognises data centres with non-ESD floors where personnel wear non-ESD footwear; the same chapter states that personnel touching IT equipment during hardware maintenance must wear functioning, grounded wrist straps. Accordingly the finish is selected for durability, low dust, ease of cleaning and suitability for equipment handling, and static control is achieved through the maintenance interface. The wrist strap is only one element and shall not be relied on to cover all static risks; the following are all in effect together: equipment protective equipotential bonding points on the rack side (bonding target and limits determined by the electrical design); wrist straps worn continuously throughout maintenance, with the current-limiting resistor only in the wrist strap cord; bench mats or ESD workbenches at maintenance stations; static-protective packaging and transit containers for replaceable parts; dissipative or conductive castors on trolleys and handling equipment; temperature, humidity and other environmental conditions controlled per the machine room design.

A one-time discharge at the entrance is not a sufficient measure. The EOS/ESD Association fundamentals document classifies personnel grounding into two types: wrist straps, or a floor/footwear system formed by an ESD floor together with ESD footwear, the latter also requiring dissipative or conductive wheels on mobile equipment. A single touch-point discharge belongs to neither class of continuous grounding. This document does not by habit specify a whole-room copper foil grid and conductive adhesive: that construction is the grounding detail of static-dissipative finish products themselves and is applied only when such a product is selected, as the product requires.

Safety boundary: the above measures apply only to static control during IT equipment maintenance and not to live electrical work. The EOS/ESD Association fundamentals document states explicitly that wrist straps shall not be worn when personnel may contact circuits of 250 V or more. Personnel protection for live electrical work is specified separately by the electrical discipline.

Floor datum and finished level

Levels are relative to the main column underside at ±0, in millimetres.

Item	Level	Note
Top of floor secondary beam	1000	Top flange 991–1000, flange thickness 9, flange width 125
Fibre cement board	Underside 1000, top 1030	Board thickness 30, Revision 04 geometry
Finish build-up datum	1030	This document takes this surface as the finish datum
Finished floor	1030 + Δ	Δ is the total thickness increment of the finish build-up as actually completed; not selected

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

IT equipment base plate	1000–1008	Plate thickness 8, bearing on the secondary beam top flange; hard support path

Δ is undetermined until the finish product and build-up layers are selected. The finished level is neither still 1030 nor to be taken automatically as the nominal thickness of any candidate finish. The board-top level is 1030. The finished-floor level includes the complete finish build-up and is 1030 + Δ, consistent with the structural drawing technical conditions.

Finish performance requirements

The finish is defined by performance. The following conditions shall be met by the product technical data and checked before selection.

Item	Requirement	Verification basis	Status
Durability class	Heavy commercial and suitable for light industrial use	EN ISO 10874 or equivalent	Awaiting product data check
Residual indentation	Limit compatible with rack feet and handling wheel loads	EN ISO 24343-1	Awaiting product data check
Rolling load	Checked for the wheel diameter and wheel load of the actual handling equipment	CISCA method or manufacturer's published values	Awaiting handling equipment
Dust and cleaning	Low dust, cleanable by damp mopping, no waxing or polishing	Manufacturer's cleaning instructions	Awaiting product data check
Substrate compatibility	Permitted to be laid on 30 mm fibre cement board	Manufacturer's written confirmation for this substrate	Not obtained
Joint treatment	Treatment method and limits for board joints and movement joints	Manufacturer's installation instructions	Not obtained

Finishes requiring waxing, polishing or heavy scrubbing maintenance, and carpet-type finishes, shall not be used in the data halls. On that basis the same ASHRAE chapter, in the context of raised floor panels, excludes vinyl composition tile, solid vinyl tile and linoleum; that conclusion applies to those specific types and is not a general prohibition of all resilient finishes. Actual selection is judged from the residual indentation and load data published for the selected product.

Candidate finish systems

Candidates are limited to two; the selection is TO BE COORDINATED with the manufacturer confirmations listed below. Candidate A is a high-durability homogeneous resilient finish that is not static-dissipative; static control is provided entirely by the maintenance interface; product and type not selected.

Candidate B is a static-dissipative homogeneous tile, with Forbo Colorex SD as reference. This type of product has its own grounding construction: copper strip is laid beneath it before the conductive adhesive, the grounding connection is made by a qualified electrician, and for rooms larger than 50 m² the copper strip is laid as a loop and continuity is tested before tiling. The IT hall area of this project is far larger than 50 m², so selecting candidate B means accepting a whole-room copper strip loop and conductive adhesive; it is therefore an alternative system TO BE COORDINATED, beyond the default scheme of candidate A.

Comparison item	Candidate A	Candidate B (Colorex SD published values)
Role in personnel grounding	None; provided by the maintenance interface	Yes; requires ESD footwear
Finish resistance	No requirement	1×10^6 – 1×10^8 Ω (IEC 61340-4-1)
Grounding construction	None	Whole-room copper strip loop + conductive adhesive
Nominal thickness	Not selected	2.0 mm or 3.0 mm (EN ISO 24346)

The right-hand column gives the manufacturer's values published for acceptable substrate conditions. Suitability for the substrate condition "laid on 30 mm fibre cement board, 3 mm detailing joints between boards, secondary beams at 500 mm centres" is confirmed in writing BY MANUFACTURER for the selected candidate. The 2 mm PVC sheet named in P-01 is an enquiry candidate, not a selected material.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Substrate and interface conditions

The substrate is the Revision 04 30 mm fibre cement board with 3 mm detailing joints between boards; the four interior board joints lie on secondary beam centrelines; secondary beams at 500 mm centres, clear distance between flanges 375 mm. The perimeter board edge starts 80 mm from the grid line and the outer edge of the edge beam flange ends at 62.5 mm, so the perimeter board edge does not bear on the edge beam flange.

The following values are taken from the manufacturer's documents for candidate B and listed here as reference values: flatness not worse than SR1, i.e. 3 mm under a 2 m straightedge (BS 8203:2017 Annex C); substrate clean, sound and permanently dry, with moisture testing; temperature in the laying area kept at 18–27 °C for 48 h before, during and 24 h after laying, with material and adhesive conditioned in the same environment for not less than 24 h. They become acceptance conditions when the finish product is selected or when the owner adopts them as project target values.

Condition to be coordinated	Effect	Direction of resolution
Measured flatness of the board surface	Determines whether a levelling layer is needed and its thickness	Measure after board installation is complete
Treatment of the 3 mm board joints under a bonded finish	Determines filling, isolation strip or reinforcement method	Per the joint rules of the selected finish
Board deflection and measured offset at joints	Determines whether the finish can run continuously across the joints	From floor structural checks and measurement
Manufacturer's confirmation for this substrate	Determines whether a candidate is viable	Written enquiry to the manufacturer

The resolution excludes an added steel deck plate or heavy levelling layer: Revision 04 removed the 8 mm continuous steel deck plate, and such construction would change the floor self-weight and the structural analysis input.

Equipment handling and hard support of equipment

Rolling load behaviour and static capacity shall both be considered when selecting the finish, because equipment is often placed on small-diameter solid wheels. The CISCA rolling load test is run at 10 and 10,000 passes, and the test wheel sizes differ between tests; direct comparison can lead to wrong conclusions.

Temporary rigid load-spreading boards distribute wheel loads and protect the finish surface; the load path remains finish, 30 mm fibre cement board and beam system unless a temporary support construction bearing directly on the beam top flanges is separately designed. Machinery on the floor, and the wheel diameter, wheel load and route of the handling equipment, are TO BE COORDINATED with the transport plan.

Heavy equipment positions do not bear through the finish: the IT equipment base plates at level 1000–1008 bear directly on the secondary beam top flanges and are connected by 88 bolt groups M12×45, grip 17 mm. The finish and fibre cement board terminate around the equipment base plates and do not enter that vertical bearing path; see F-104. Floor live load, finish capacity, board span limits and rack placement load cases are TO BE COORDINATED; they follow from complete load cases and checks once the support method, board product and fixings are determined.

Board joints and movement joints

The 3 mm board joint is a detailing joint, centred on the secondary beam top flange, with a nominal bearing width of 61 mm on each side, i.e. (125 – 3) / 2. A detailing joint is not automatically a structural movement joint; the two shall be marked separately. When the joint centre is offset ±61 mm from the flange centre, the bearing width becomes zero; this is a geometric limit, not an installation tolerance.

Whether the finish can run continuously across a detailing joint depends on three conditions all being met: the selected product gives joint treatment instructions suitable for this joint width; an approved filler, isolation strip or reinforcement layer is used at the joint; and the measured offset at that location is within the permissible range of that treatment. A continuous finish across a 3 mm board joint requires all three conditions at that joint; the geometric position of a joint alone does not make it continuously coverable.

Movement joints actually required pass through the finish, with edge protection profiles on both sides and a compressible core with elastic sealant in the joint; they shall not be rigidly filled. Their positions, spacing and width follow from the movement requirements of the selected product and the calculated structural deformations (TO BE COORDINATED).

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Room categories and differences in measures

IT halls: finish per the performance requirements of this document; static control by rack-side bonding points, wrist straps, maintenance bench mats, static-protective packaging and dissipative castors. Electrical and UPS rooms: finish per the electrical discipline's requirements; these are places of live work and wrist straps shall not be used as personnel grounding there. Entrances and buffer zones: dust-control mats are provided; a one-time discharge is not the only measure. Room numbering and area division follow the architectural drawings; this document adds no room list.

ESD control hardware and connections

Rack-side bonding points are on the maintenance side so that maintenance personnel can connect at the working position without cords crossing aisles. The bonding points connect to the equipment protective equipotential bonding specified by the electrical design. Bonding point positions, heights, conductor sizes and resistance limits are specified by the electrical design (TO BE COORDINATED). Personnel shall not be grounded to painted steel members within reach, and no isolated ground rod shall be installed for this purpose.

The current-limiting resistor of the wrist strap is in the wrist strap cord, typically 1 MΩ, power rating not less than 1/4 W, working voltage rating 250 V. The protective earth conductor does not pass through this resistor, and the resistor shall not be inserted in the PE circuit. Wrist straps have several failure modes and shall be tested regularly: daily test station or continuous workstation monitor. Static-protective packaging inside the ESD protected area uses low-charging dissipative or conductive materials; packaging leaving the area shall also have a discharge shielding structure.

Construction and inspection

Item	Method	Acceptance condition	Status
Substrate flatness and moisture content	2 m straightedge measurement; method specified for the selected finish	Per the selected product or the owner-adopted target values	Awaiting product selection
Board joint offset	Measured after placement	Within the permissible range of the selected joint treatment	Awaiting measurement
Finish appearance and joints	Visual and measurement	No hollow spots, no steps, straight joints	During construction
Rack-side bonding points	Measured resistance to the protective equipotential bonding	Limit specified by the electrical discipline	Limit awaited from the electrical discipline
Wrist straps	Test while worn	Limits of the ESD control programme	Operations

Quantities

The model has 552 actually cut boards (149 non-rectangular, 3 with openings within the board); this is the number of boards actually cut, not the number of boards procured. Net board area 1235.720 m², outer outline area 1235.874 m², openings within boards 0.154 m².

The bounding rectangle of the board area, 106440 × 11840 mm, area 1260.250 m², is only a gross reference value: it includes the 160 mm central non-floor strip at Y 5920–6080 (about 17.030 m²), column notches and openings within boards, none of which are board joints or within the finish area. The finish area excludes these zones, and the gross reference value is not an order quantity. The plan extent of the board area is X 80–106520, Y 80–11920; the structural grid extent is X 0–106600; the two shall not be used interchangeably.

Quantities of ESD control hardware are given as counting rules. The model contains 6 IT positions and 22 equipment base plates, only in the first bay, plan extent X 2507.5–5652.5, Y 1942.5–3557.5. By the rule "one bonding point on the accessible maintenance side per IT position", the suggested quantity for these 6 model positions is 6; where both front and rear sides need maintenance and a single point would cause a cord to cross an aisle, one more point is added on that side. The Network Design Brief EN-R1 dated 2026-09-28 defines a reference equipment arrangement of 130 cabinet envelopes: 90 GPU cabinets and 40 network cabinets (30 NET and 10 NETC), per the current EN-R1 cabinet data. These equipment quantities do not establish the number of structurally modelled support positions or ESD bonding points. The whole-building bonding-point schedule follows the coordinated equipment positions and maintenance access, with the counting rules above applied to the adopted layout.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Design coordination requirements

Item (TO BE COORDINATED)	Effect
Finish product and build-up layers; manufacturer's confirmation for the 30 mm fibre cement board substrate	Determine Δ, substrate preparation and joint method, and whether either candidate is viable
Floor live load, finish capacity, board span limits and board deflection	Determine suitability of finish and board and whether board joints can be continuously covered
Added finish self-weight	Shall be included in the subsequent gravity load input
Movement joint positions, spacing and width; treatment of the 17.5 mm free edge at the perimeter	Determine finish zoning, edge trims and whether local edge support members are needed
Final layout and quantity of IT positions in the building	Determines the number of ESD bonding points and corrections to the finish footprint
Wheel diameter and wheel load of handling equipment; resistance limits and target of bonding points	Given by the transport plan and by the electrical discipline respectively

The owner has adopted the static control route; the finish material and the floor capacity are TO BE COORDINATED.

References

Project basis: K&K Data Structural Drawing Technical Conditions R04A, Revision 04 (floor construction, levels, sections, support conditions); native board polygons of the R04 floor board layout (outlines and areas of the 552 boards); the R04 model count and extent of the IT equipment base plates; all dated 2026-09-25. External references:

- ASHRAE Handbook—HVAC Applications, SI edition, Chapter 20 Data Centers and Telecommunication Facilities. Table 1 note i (non-ESD floors and maintenance wrist straps); entries on raised floor finishes and rolling loads. https://handbook.ashrae.org/Handbooks/A23/SI/A23_Ch20/a23_ch20_si.aspx
- EOS/ESD Association, ESD Fundamentals Part 3: Basic ESD Control Procedures and Materials. Sections WRIST STRAPS, FLOORING/FLOOR MATS/FLOOR FINISHES, PACKAGING. https://www.esda.org/esd-overview/esd-fundamentals/part-3-basic-esd-control-procedures-and-materials/
- Rack OEM installation guidelines for the NVIDIA GB300 NVL72 system, the reference GPU cabinet of the Network Reference Design Brief EN-R1 (reference equipment, not an equipment procurement selection). Attention paragraph (handling static-sensitive parts).
- Forbo Colorex Technical Specification UK, September 2020 edition, page 1. Candidate B published values. https://www.forbo.com/flooring/en-uk/commercial-products/esd-cleanroom-flooring/colorex-sd/b2db4b
- Forbo Colorex SD/EC Installation Guidance UK, September 2020 edition, pages 1–2. Substrate and environment reference values; copper strip and conductive adhesive grounding construction. Download area of the same product page.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Floor Installation Drawings — Drawing Index (D01)

K&K Data PIN001 data centre, floor board installation drawings D01, revision 01B, date 2026-09-27. K&K Data Service Inc., inquiry@kkdatasvc.com

This package contains 12 A1 floor board installation drawings (F-001 and F-201 to F-401 in Part 1; F-101 to F-103 and F-501 in Part 3) and three cross-reference tables. The drawings are native model views and 2D details; dimensions are taken from the existing R04 native geometry. D01 is used together with the Revision 04 structural drawing set, the F02 finish document and the P04 procurement and installation package. Secondary beam end connections, the main column base and pile head interface, and the fixing and perimeter supports of the 30 mm floor board follow the Floor and Pile Head Connection Drawing Set D02; the scope of supersession is given in Section 7.

Dimensions, coordinates and levels are in millimetres (mm) unless noted otherwise.

1 Drawing list

Sheet	Title	Scale	Content
F-001	Floor general plan index	Plan 1:200	Building grid, 18 bays, zones A/B/C and drawing list; quantities and counting scope
F-101	Zone A floor plan	Board view 1:50, structural layout view 1:100	Board number and special conditions of every board in zone A (bays 1…6); structural layout of the zone
F-102	Zone B floor plan	Board view 1:50, structural layout view 1:100	Board number and special conditions of every board in zone B (bays 7…12); structural layout of the zone
F-103	Zone C floor plan	Board view 1:50, structural layout view 1:100	Board number and special conditions of every board in zone C (bays 13…18); structural layout of the zone
F-201	Standard bay plan	Board view 1:25, structural layout view 1:25	Board positions and member relationships of the standard 5800 bay, representing 16 similar bays
F-202	Widened bay B06 plan	Board view 1:25, structural layout view 1:25	Board positions of widened 6900 bay B06, 25 secondary beams and actual positions of 6 interior stub columns
F-203	Widened bay B12 plan	Board view 1:25, structural layout view 1:25	Board positions of widened 6900 bay B12, 25 secondary beams and actual positions of 6 interior stub columns
F-301	Perimeter and central strip edge sections	Details 1:2	Section geometry and governing dimensions of perimeter board edges and central strip board edges
F-302	Notch, opening and rack base plate clearance details	Details 1:2	Sections and plans of notches, openings within boards and clearances at rack base plates
F-303	Secondary beam end and joint on main beam details	Details 1:2	Existing geometry at secondary beam ends and joints on main beam flanges; end connection construction per D02 secondary beam end connection details SP-T1 / SP-T2 (Section 7)
F-401	Stub column cap and base details	Details 1:2	Existing bolt and weld geometry of stub column caps and bases; the P04 sample support dimensions listed in D-8 are superseded by D02 R-102 (Section 7)
F-501	Installation zones, sequence and finish level	Plan 1:250	Installation zones and board laying sequence, installation conditions of each bay, definition of the finished level 1030 + Δ

Drawings are used at A1 actual size.

2 Reading order

1. F-001 establishes the overall picture: 19 grid lines, 18 bays (sixteen standard 5800 bays and two widened 6900 bays), zones A/B/C and the counting scope of each quantity.
2. Use F-101 to F-103 by zone to find a board: the board number is written at the board centroid, long numbers wrapped at the last segment; the small text below the number gives the special conditions of

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

that board. The lower part of each sheet is the structural layout view of the zone.

3. For dimensional relationships within a bay go to F-201; secondary beam and interior stub column positions of the widened bays are on F-202 and F-203 respectively. The positions differ between the two bays and shall not be interchanged.
4. Actual geometry of edges, notches, openings, rack base plate clearances and secondary beam ends is on F-301 to F-303; stub column caps and bases on F-401. Each detail states the representative section position used.
5. F-501 gives the installation zones and board laying sequence, the installation conditions of each bay and the definition of the finished level.

3 Numbering cross-reference

- Board numbers correspond to the "board number" column of data table BOARD_MAP_D01; next to it is the "native handle" column, used to trace back to the model object.
- The "plan-associated secondary beam mark" and "plan-associated transverse main beam mark" in the board table correspond to member marks recorded in the native model and can be searched with member position and DWG attributes.
- Support identifiers correspond to the "identifier" column of data table SUPPORT_INDEX_D01, 247 in total: 76 main columns and 171 floor stub columns.
- The three cross-reference tables are package D01 data for installation coordination.

4 Meaning of values in the tables

- The X/Y limits in the board table are the bounding limits of the actual outline and are used only for location; cutting outlines and notches always follow the R04 floor board layout data.
- The nearest floor stub column column is a plan distance, not a support assignment, not a load path and not a reaction distribution.
- Plan-associated secondary beam and main beam marks express positional relationships in plan and do not represent verified support.
- The column member lower end level 0 or 12 in the support index is a geometric end point of the member, not a pile head level and not a foundation level; coordinates are project local coordinates, not survey coordinates.
- Original material records are geometric basis, not calculated capacity ratings.

5 Interface conditions

- Secondary beam end connections: 50 floor secondary beams with 100 ends in the two widened bays. At 88 of these ends there is 20 mm clear between the beam end and the main beam face; the other 12 ends do not meet a main beam in the Y direction. The connection construction follows D02, 01 secondary beam end connections: SP-T1 at 88 locations and SP-T2 at 12 locations; end-by-end index in the secondary beam end connection index (100 locations). Connection checks for the actual load cases (TO BE COORDINATED): end reaction V, eccentric effects and effective width of the supporting web.
- Main column bases: the 76 main column bases follow CS-4 / PH-4 of D02, 02 column base and pile head, and the main column base setting-out and assembly table (76 locations); the six-component capacity and stiffness of the column base assembly and of the pile cap to pile shaft transition are TO BE VERIFIED per D02 CS-4 J29 Section 6: pile head resistances and stiffnesses BY PILE SUPPLIER, check of the complete assembly with the concurrent frame reactions by the structural design.
- Column caps: all 171 column caps have 4 bolts (centres 140 × 80) and column member welds; bolts and member welds are both represented in the model.
- Fixing and local support: the whole-floor fixings FX-S1 and perimeter supports SS-P1 follow D02, 03 30 mm floor board, R-101 to R-104 and their coordinate tables; where the P04 sample method listed on F-401 differs from D02, D02 governs (see Section 7). Board and assembly tests TB-1 to TB-8 per R-01 (BY MANUFACTURER).
- Equipment interface: D01 shows the 6 IT positions and 22 rack base plates of bay 1, the only

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

equipment supports in the structural model. The reference equipment arrangement of the Network Reference Design Brief EN-R1 (130 reference cabinet envelopes: 90 GPU, 30 NET and 10 NETC network cabinets, in one row, Y 2150 to 3350, individual positions between X 2355 and 103645 with nine gaps between cabinets of 1550 to 1800 mm, per the current EN-R1 schedule) is shown with the modelled supports on S-050 as separate layers; support positions in the other bays are TO BE COORDINATED with the adopted equipment layout.

- Finished level: board top level is 1030; finished level = 1030 + Δ, where Δ is the actual total thickness of the selected finish system. This package does not set Δ.
- Rack bearing positions: no board or finish is laid at the rack bearing base plates or where they bear directly on steel beams; clearance cut-outs are formed according to the complete cutting outlines.
- Existing drawings: the existing S-600 member schedule is unchanged; the floor finish levels follow this installation drawing set. The finished level is defined on F-001 and F-501.
- Load paths, support conditions and permissible floor loads: structural design (TO BE COORDINATED); D01 defines geometry and positional relationships.

6 Composition of package D01

Item	Content	Quantity	Location
F-001 … F-501	A1 floor board installation drawings	12 sheets	Parts 1 and 3
DRAWING_INDEX_D01	Drawing list	12	Installation coordination data
BOARD_MAP_D01	Floor board cross-reference table with native handles	552	Installation coordination data
SUPPORT_INDEX_D01	Support identifier and coordinate index	247	Installation coordination data
Drawing index D01	This document	1	Part 2, document D01

Board cutting outlines and notches follow the R04 floor board layout data (board numbering and dimensions, board outlines).

7 D02 scope of supersession and drawing errata

Sheet and location	Superseded statement or value	Current basis
F-303 title and notes	Secondary beam ends an "unresolved end interface"; no support drawn on this sheet	D02 secondary beam end connection details SP-T1 / SP-T2 (PIN001-JC-01 / JC-02) and the 100-location index
F-303 detail D-6 note	The other 1024 X edges only span secondary beams	Per P04 support classification table P-911, 1072 edge instances; 1024 has no corresponding statistical record; corrected to 1072
F-401	P04 sample support SS-P1: support plate 9×130×51.5, tongue plate 12×120×70, lap 19, fillet weld 4, total length 158	D02 R-102: support plate 9×140×51.5, tongue plate 12×120×96, lap 45, fillet weld 5, total length 210; CN-1 hole spacing 60 and hole centre 30 from flange tip unchanged
F-303 "list of unresolved interfaces"	Secondary beam end connections may be built only after the connection design is completed by the structural engineer	D02 SP-T1 / SP-T2 give the connection construction; checks of end reaction V, eccentric effects and effective width of the supporting web: TO BE COORDINATED
F-303 "list of unresolved interfaces"	Stub column underside Z12 and main column base underside are not at the same level; the difference is unresolved	D02 CS-4: main column base plate underside –25, PH-4 pile cap cover plate top nominal –40; stub column pile head model level 0, 40 mm above the main column pile cap top
Section 5, former "main column base" item	The 76 main column bases are undefined	D02 PIN001-CS4-001 / 002 and the column base and pile head interface technical conditions

Board edge counts differ by object: the 1072 of P-911 are instances of ordinary X edges spanning only secondary beams; the 1080 of D02 R-104 are ordinary X edge segments crossing secondary beams, 8 loop edges of the 4 closed openings more than 1072, with 1.080 m more length (1744.280 m against 1743.200 m); ordinary X edge instances on transverse main beams and the room perimeter are 68 + 136 + 12 = 216. The 216 boards involving main beam flanges is a board count; it has the same value as the 216 edge instances above but counts different objects.

Sheets F-303 and F-401 are at revision 01B; the construction follows this section and the D02 drawings listed. The other 10 installation drawings are at revision 01.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Floor Procurement and Installation Package — Notes (P04A)

K&K Data Service Inc. Contact: inquiry@kkdatasvc.com. Date: 27 September 2026 (issue P04A)

Purpose

P04 is used for enquiries, sample fabrication and installation trials of the 30 mm fibre cement board, the thin floor finish, the local supports and the fixings. R04 is the geometric basis for the main structure and the floor board layout. The local supports and fixings of P04 are sample designs for the trial assembly; whole-floor quantities and positions follow D02 (R-101 to R-104).

Revision P04A

The dimensions of perimeter support SS-P1 are updated to the Floor and Pile Head Connection Drawing Set D02, sheet R-102 (revision R07): support plate 9×140×51.5, tongue plate 12×120×96, lap 45, 5 mm fillet weld total length 210, material Q235B, 1328 pieces for the building. The revision affects technical conditions P-01 Section 4, drawing P-103 (revision 04A) and the SS-P1 entries of data tables S-921 and S-922. CN-1 hole spacing 60 and hole centre 30 from the flange tip are unchanged. All other P04 content is as issued. Fabrication, sampling and installation of SS-P1 follow D02 R-102 and its 1328-location setting-out table.

Composition of package P04

Item	Content	Location
Technical conditions P-01	Procurement requirements, sample definitions, finish and installation conditions	Part 2, document P-01
Drawings P-101 to P-105	First bay layout, local supports, fixing, trial assembly and installation	Part 3
Data tables P-911…P-914, S-921…S-922, Q-921…Q-922, C-901…C-904	Board-by-board records, sample materials, enquiry returns, calculation input and test matrix	Listed in P-01 Section 10; enquiry and calculation-input data
Board layout R04	Outlines and dimension table of the 552 boards: actual notches, holes and cutting numbers	R04 floor board layout data (see R04-0)

Order of use

The procurement and installation technical conditions P-01 are read first, then drawings P-101 to P-105. Board quotations use the board outlines, the dimension table and the parent sheet quantity table; connection part quotations use the sample details and the sample bill of materials. Suppliers return the matching product, fabrication conditions, test basis and price in the enquiry return table. Sample tests record board surface deformation, local failure, fixing condition and actual installed gaps according to the test matrix.

With the current board layout and 1220 × 2440 mm parent sheets, the 552 finished boards correspond to a baseline of 552 parent sheets. Samples, spares and breakage replacements are listed separately. Finished cutting follows the complete R04 outlines; notches and holes are cut to the outline, not to the bounding rectangle.

Interface conditions

The load-bearing board product, its mass in the moist condition, local bearing and fixing pull-through performance correspond to the quoted product and test conditions (BY MANUFACTURER). New steel parts of the samples, flange holes and connection resistance are TO BE VERIFIED in the trial assembly and by structural calculation before batch drilling or installation of parts on the structure (TO BE COORDINATED).

The thin finish enquiry route is a 2 mm sheet that is not a dedicated static-dissipative product; adhesive, substrate preparation and compatibility with the board joints are confirmed for the quoted system (BY MANUFACTURER). Rack load-bearing bases bear directly on steel members; board and finish are not in that hard support path. The finish is laid after the envelope is closed and the substrate conditions are met; wheel loads of the installation roller and equipment handling are included as installation load cases.

The 247-point support table (C-902) gives the column axis coordinates and column member end levels of the model; main columns and stub columns start at different levels, identified by the object type and level fields of the table. Pile positions and site control follow FS-A; foundation reactions follow the demand schedule of FS-B.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data Floor Board Procurement and Installation Technical Conditions

Document P-01, issue P04A, date 2026-09-27

These technical conditions are used for enquiries, sample fabrication and full-board trial assembly of the floor boards. They give the floor geometry, the technical requirements for boards and fixings, the design dimensions of the local support and fixing samples, the finish enquiry conditions, the test arrangement and the installation sequence.

Values in this document have three states. Geometric: existing dimensions and published data taken from the model geometry or from published manufacturer data. Proposed: design dimensions and methods selected by these conditions so that samples can be made and quoted. To be verified: determined by calculation, testing or written confirmation by the supplier. The local supports and fixings of Sections 4 and 5 are samples; their member resistance, connection resistance, seating and pull-through are TO BE VERIFIED by calculation and by the trial assembly, with the conditions listed at the end of each section. The permissible floor load is determined by structural calculation (TO BE COORDINATED).

1 Floor geometry

The floor boards are laid on the existing steel structure. Secondary beams HN250×125×6×9 run in the X direction at 500 mm centres, flange top at Z1000, flange 125 mm wide and 9 mm thick, web 6 mm, beam underside Z750. Transverse main beams are 200 mm wide with flange top also at Z1000. Board thickness 30 mm, board underside Z1000, board top Z1030, joints between boards 3 mm.

The floor has 552 boards with a total net area of 1235.720 m², 10 outline sizes, largest 1197 × 1997 mm, smallest 897 × 1918.5 mm, smallest net area 1.7030445 m².

The first bay is grid X 0…5800, boards X80…5798.5, 30 boards (5 columns × 6 rows). The bay also contains 22 rack base plates (range X2507.5…5652.5, Y1942.5…3557.5, 145 × 115 × 8, top Z1008), 6 IT positions, 66 cable tray rungs (RHS80×40×3, centre levels Z140 / Z340 / Z540), 24 end hanger plates and 24 top plates. The tray top plate top at Z750 is flush with the secondary beam underside; clearance from board underside Z1000 to tray top is 250 mm. See P-101 for the first bay plan.

The site has 247 distinct plan coordinates of support columns and stub columns (76 main columns, 171 stub columns); the plan coordinates are those of setting-out sheets FS-10 to FS-12 (Part 1), and P04 support table C-902 adds the column member end levels of the model. These are column member end coordinates, not pile head levels and not column base reactions.

2 Board edge support conditions

Board edge support is checked segment by segment on the actual outline of each board, including all outer loops and hole loops; the bounding box of the outline does not replace the cut edges. Covered lengths are computed against the bounding boxes of the 488 beams with top at Z1000; they are a geometric upper bound of contact, not structural resistance, and do not mean that support at that location is accepted. Edge instances are not members: two adjacent boards share the same physical notch, so counts shall be de-duplicated before being used as member or order quantities.

Condition	Count and length	Note
All board edges (outer and hole loops)	3426.620 m, of which 1776.524 m without steel below	Total of 552 boards
Interior joint edges	744 instances, 845.768 m, of which 5.760 m without steel	845.768 m is the total length of this edge family, not the length bearing on steel
20 mm support interruption	288 edge instances; 144 plan gaps after de-duplication; 216 boards affected	Secondary beams stop short of the transverse main beam flange: main beam ends at X100, secondary beam starts at X120
X edge fully on main beam flange	68 instances / 34 joint lines / 135.796 m	Bears on the 200 mm wide transverse main beam flange
X edge partly on main beam flange	136 instances	Main beam ends at Y195 and Y5805; 15 mm unsupported at each end

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

X edge spanning only between secondary beams	1072 instances	No member below the joint
Perimeter X edges	12 instances	X80 edges total 5840 mm, of which about 5610 mm bear on the transverse main beam; 115 mm without beam at each end
Notch back edge (67.5 from secondary beam centre)	24 edges, 4.856 m	Passes the flange tip by 5.0 mm; 370.0 mm from this edge to the next flange on the other side
Notch back edge (180 from secondary beam centre)	144 edges, 24.596 m	117.5 mm and 257.5 mm to the flanges on either side
Notch back edge (210 from secondary beam centre)	8 edges, 0.320 m	147.5 mm and 227.5 mm to the flanges on either side
Long edges of closed openings	8 edges, 2.280 m	Same position as the 67.5 mm notch back edges

Between the perimeter board edge at Y80 and the tip of the outer secondary beam flange at Y62.5 there is a 17.5 mm air gap. The 17.5 mm is not a cantilever length. Without a local support, the governing dimension of this edge is the 357.5 mm projection measured from the inner secondary beam flange at Y437.5. The central strip edges at Y5920 and Y6080 are the same.

A notch back edge passing the flange tip by 5.0 mm does not mean a cantilever of only 5 mm; it shall be judged by the actual distance from that edge to the next flange. The distances on both sides of each segment are part of the board-by-board edge support classification P-911 of the P04 enquiry data.

The above is a classification of geometric conditions. These notches and projections are not automatically engineering defects and do not automatically trigger strengthening; their treatment is decided by the full-board trial assembly and subsequent calculation. The classification is shown on P-102 (Part 3); board-by-board data are the P04 classification and exception tables P-911 and P-912.

3 Board technical requirements

Board thickness 30 mm. Boards are supplied cut to their bounding dimensions with length and width tolerances tightened to ±1.0 mm; the published ±3 mm is incompatible with the 3 mm joint.

Setting-out datum: the low-X and low-Y edges of each board are set out by measurement from the bay grid lines (X = 0, 5800, 11600 …; Y = 0 and each secondary beam centreline), not from the laid edge of the adjacent board. Single-edge setting-out error e = ±0.5 mm. With the grid lines as datum, the position error of each board resets at that board and does not accumulate along a row; the setting-out errors of adjacent boards are independent. Chain laying by pushing each board tight with shims is not used.

Joint width = nominal 3 + e_next – e_current – board width deviation. The setting-out errors of both adjacent boards enter the same joint, so the joint width range = 3 ± (0.5 + 0.5 + 1.0) = 1.0 … 5.0 mm. The least favourable narrow joint is e_next = –0.5, e_current = +0.5, board width deviation = +1.0, giving joint width = 3 – 0.5 – 0.5 – 1.0 = 1.0 mm.

This is assembly geometry: it shows that boards do not press against each other at the given tolerances. The minimum joint width rules of the board and finish suppliers apply in addition (Section 6, BY MANUFACTURER).

Bearing width check: bearing width is determined by the position of an individual board edge relative to the flange centreline, not by the joint width. Single-edge position error = setting-out 0.5 + board width deviation 1.0 = 1.5 mm; the bearing width on each side of a centred 3 mm joint on a 125 mm flange therefore reduces from the nominal 61.0 mm to 59.5 mm in the least favourable case.

Conditions of validity of this check: the 500 mm secondary beam spacing and the 125 mm flange width shall be confirmed by site measurement (the check uses the model geometry); flatness of the flange top and the thickness of existing coatings are not included. The check establishes geometric feasibility; load capacity is TO BE VERIFIED by the tests of Section 7 and by structural calculation.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Parent sheets and quantities:

Item	Value	Note
Parent sheet size	1220 × 2440 mm	1220 − 3 negative tolerance − 2 × 4 edge trim = usable width 1209 mm; widest board 1197 mm, 12.0 mm remaining. Length direction 2440 − 3 − 2 × 4 = 2429 mm; longest board 1997 mm, 432 mm remaining
1200 × 2400	Not a usable cutting size	Under the same conditions usable width is 1189 mm, 8.0 mm less than the widest board; at negative tolerance the edge trim is zero and there is no room for the saw kerf
Baseline sheet count	552 sheets	One full parent sheet per board
Basis	Smallest net area 1.7030445 m² > half sheet 1.4884 m²	No two existing boards can be nested on one parent sheet; no rotation or nesting changes this conclusion
Trial boards and spares	Not included in the 552	4 boards for the full-board trial rig are ordered separately; the spare ratio is set by owner and supplier according to transport and construction losses

The 552 sheets are a geometric conclusion, not a procurement quantity derived from area ratios. The 4 mm edge trim, 4 mm saw kerf and absence of grain direction are values selected by these conditions to check the feasibility of the sheet size; they are not order quantities and shall be confirmed by the supplier.

Self-weight: the supplier's published minimum density ≥ 1.50 g/cm³ corresponds to 45.0 kg/m² for a 30 mm board, a lower bound of self-weight. The supplier also publishes a nominal 150 kg per sheet for 30 mm board; on 1200 × 2400 this is 52.08 kg/m², a back-calculated density of 1.736 g/cm³, which satisfies the lower bound, so the two do not conflict. The nominal sheet weight is a reference point subject to tolerance and does not constitute a guaranteed upper bound. These conditions therefore do not adopt 45…52.1 kg/m² as a design self-weight range and derive no lifting rating from it; before structural calculation a single declared, measured surface density for the boards of this project shall be obtained from the supplier.

Status of product data:

Supplier	Published content	Status of adoption
Xinghan (Shandong)	20/24/30 mm; 30 mm about 150 kg per sheet; density ≥ 1.50 g/cm³; 1200 × 2400; published 600 × 1200 two-way framing and fastener length rules	A supply lead exists; product qualification not obtained. The three mutually contradictory capacity claims on the same page (5 kN/m², > 3 t/m², > 2000 kg/m²) give no span, support method or test standard and are not used as capacity basis for this project.
Frametec	4.5–30 mm, widths 1200/1220; density column published with the literal unit 0.9–1.1 g/m3; flexural strength 12 MPa (EMC) and 15 MPa (GB/T 7019-1997) without a common grade; "non-combustible 4 hours"	The published unit is defective and there is no evidence for a 30 mm floor system; not classified until the supplier corrects it and provides test reports. g/m3 shall not be silently rewritten as g/cm³, nor shall the board be judged non-structural from density alone.
SHERA	The matching fastener FIX-W45 listed in this manual is limited to "framing < 4 mm", drilling capacity 3.2 mm, length 45 mm	The listed fastener does not suit the 9 mm flange; the board products are not assessed in these conditions. This evidence only shows that the listed FIX-W45 fastener is unsuitable for the 9 mm flange of this project; the fastener limitation does not exclude any board product of that company and does not qualify any board for the 30 mm floor of this project.
SFS	#12 Impax SD5, hex washer head, drilling capacity 1.91–12.7 mm, published load-bearing grip lengths 10 / 16 / 29 mm, for metal sheet to metal	Used only as the class basis for the FX-M1 drilling test. The published 29 mm grip does not cover a 30 mm board, so this page cannot support final selection of #12 × 60–65; only its drilling capacity is cited.
Forbo	Sphera element total thickness 2.0 mm (EN ISO 24346), 2900 g/m² = 2.9 kg/m² (EN ISO 23997), EN ISO 10874 commercial 34 / light industrial 43, residual indentation EN ISO 24343-1 ≤ 0.10 mm (typical ~0.03), ISO 4918 castor chair pass, DIN 51130 R9, EN 13501-1 Bfl-s1, ISO 14644-1 cleanroom ISO class 4, EN 1815 body voltage ≤ 2.0 kV, roll width 2.0 m, length ≤ 27 m	Enquiry route; suitability and adhesive system await the manufacturer's written reply. The data sheet gives no forklift or wheel loads and no approval for a 30 mm fibre cement board substrate with open 3 mm joints; a body voltage limit is not a static-dissipative floor.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Forbo	Colorex Plus Basic 10.3 mm, 12 000 g/m², EN ISO 10874 commercial 34 / light industrial 43; adhesive-free loose-lay tiles with hidden dovetail interlock	Not a finish route. Describing it as "10.3 mm + adhesive" misstates its installation method; its published loaded vehicle and wheel load data refer to the manufacturer's specified substrate and cannot qualify this floor board. The fixing heads of this project are already below the board surface, so no thick finish is needed to accommodate heads.

4 Local support samples

The tops of both parts are at Z1000, flush with the existing flange top, and do not raise the board underside. Packing plates on the existing flange top would raise the board underside and are not used. All connections are shop welded plus site bolted; no site welding and no new continuous heavy edge beams. See P-103 for details.

Connection CN-1: countersunk bolt inserted from above. The bolt head and the thread must be in two different connected parts: the head bears on the existing flange side and the thread is in tension in the tongue plate. If head and thread were both in the tongue plate, tightening would only push the bolt into the clearance hole of the flange and would produce no clamping force.

Flange holes are machined to the fastener manufacturer's fitting hole for ISO 10642 countersunk heads (DIN 74 form F, F10): countersink diameter φ22.7 H13, through hole φ11 H13, 90° cone. The hole table gives a reference depth of 5.9 mm; the geometric nominal depth of the 90° cone = (22.7 – 11) / 2 = 5.85 mm. Cone angle and the two diameters are mutually consistent; no second independent depth control value is set.

The cone occupies Z994.15…1000; below it is the φ11 straight hole with nominal height 9 – 5.85 = 3.15 mm; the actual minimum depends on machining tolerances. The cone removes 5.85 mm from the 9 mm existing flange.

Bolt: ISO 10642 M10×25, 08.8, silver zinc flake coating; reference part Würth 412241025 or a certified equivalent. This coating is not the same as the electroplated zinc of FX-S1; the two shall not be described interchangeably.

The head outside diameter alone does not determine seating depth. The M10 row of ISO 10642 lists both the theoretical maximum head diameter 22.4 mm and the actual minimum head diameter 19.22 mm. The theoretical value corresponds to the geometric construction "head fully sunk into the 90° hole" and is not a measured diameter; a catalogue entry marked 22.4 mm therefore cannot be taken as a different physical head. Equivalence is decided by measured seating of the actual head profile and coating in this fitting hole.

These conditions therefore give no fixed sinkage. Let the measured head sinkage of the first article be s; s ≥ 0 is required, i.e. the head top is not above the flange top. Nominal length 25 mm minus the connected stack 21 mm (flange 9 + tongue 12) gives 4 mm; with the head sunk by s, the nominal projection of the shank below the tongue underside = 4 + s, within the cavity below the flange. The tongue plate is 12 mm thick, nominal engagement length 12 mm; the effective engagement of full threads shall be measured. The hexagon socket is operated from above; there is no nut in the cavity.

The first article is trial-fitted on 9 mm sample material and the following are measured: the height s of the head top relative to the flange top, the contact between head and cone, whether the coating affects seating, the actual shank projection and the full-thread engagement length. Catalogue values do not replace these measurements, and catalogue tightening torques or capacities are not cited. Countersinks are not deepened or enlarged on site to suit seating; the fit of the first article is resolved before structural members are machined. Sequence for structural members: trial fit on sample material, check of the flange net section and the connection, then batch drilling.

Hole positions: 2 per tongue plate, hole centre 30 mm from the flange tip. SS-X1 tongue plate 90 mm wide, hole spacing 40 mm, edge distance 25 mm each side; SS-P1 tongue plate 120 mm wide, hole spacing 60 mm. The FX-S1 M6 hole centre shall be not less than 40 mm from an M10 hole centre.

Checks TO BE COORDINATED: the effect on the flange net section (structural engineer); the capacity of the ISO 10642 countersunk head, which its own standard classifies as a head type of reduced load capacity (no catalogue capacity is cited); the measured seating of the first article.

SS-X1, local support under an X-direction joint. Rectangular hollow section 80×40×4, Q235B, length 369 mm, tube top Z1000, tube bottom Z960, 3 mm air gap at each end (369 + 3 + 3 = 375). Clearance from tube bottom to cable tray top Z750 is 210 mm. Board bearing: tube width 80 mm with the 3 mm joint centred gives 38.5 mm each side.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

At each end one tongue plate 12 × 90 × 113 mm with its top at Z991 against the underside of the flange: it enters a slot in the tube wall for 60 mm, spans the 3 mm air gap and extends 50 mm below the flange; its inner end is 9.5 mm from the 6 mm web face. Both tube side walls have slots 12 mm high × 60 mm long.

The tongue plate is 90 mm wide rather than the tube width: with the tongue flush with the tube outer wall the slot faces would be coplanar and would form no fillet weld corner. At 90 mm the tongue projects 5 mm beyond the 80 mm tube on each side, giving landing width for a 4 mm weld leg and forming a real weld leg on the tube outer wall top and bottom; weld leg outer edge X±44 mm, tongue edge X±45 mm, nominal margin 1 mm.

4 mm fillet welds, 4 runs × 60 mm per end, 8 runs in total at both ends, 480 mm total, welded from outside the tube; no welding inside the tube through the slot is required. There is no weld in the 3 mm air gap, none above Z1000 and none in the existing flange material. See P-103 for the cross-section.

SS-X1 installation procedure. The plan outline of the finished part, 475 × 90 mm, is governed by the tongue plates; the overall length 475 mm exceeds the 375 mm clear opening between flange tips, so the part cannot be lowered vertically in its working orientation. In this bay the secondary beam ends meet transverse main beams (X–100…100 and X5700…5900, flange top Z1000), so the path of pushing the part in along X from an open beam end is blocked; that method works only on a rig open at both ends. The adopted procedure is a plan rotation below the flanges between the two web faces:

Item	Value
Clear opening between flange tips (above Z991)	375 mm
Plan clearance between web faces (at the selected rotation level)	494.0 mm
Plan outline of the finished part (governed by the tongue plates)	475 × 90 mm
Plan rotation diameter	483.4511 mm
Rotation margin	10.5489 mm in total, nominal 5.2744 mm each side
Rotation radius of the farthest weld point	189.67 mm, less than 241.73 mm of the tongue outer corner; the welds do not govern the rotation envelope
Rotation level	Tube top Z980, 11 mm below the flange underside and still 190 mm above the tray top Z750

The 494 mm in the table is the plan clearance between the two secondary beam web faces at the selected rotation level only; the bottom flanges and the web root fillets are at lower levels, so Z750…991 does not have this clearance over its full height.

SS-P1, local support at the perimeter board edge; dimensions agree with the Floor and Pile Head Connection Drawing Set D02, R-102 (revision R07). Material Q235B, 1328 pieces for the building; each piece located in the D02 perimeter support location table (1328 locations). Support plate 9 × 140 × 51.5 mm, Y63.5…115, top Z1000, 1 mm clear of the flange tip at Y62.5; tongue plate 12 × 120 × 96 mm, Y12.5…108.5, top Z991, extending 50 mm below the flange, inner end 9.5 mm from the web face. The two plates lap over Y63.5…108.5, 45 mm (AISC 360-22 J2.2b(f), 5 × 9 = 45); the whole lap is outside the existing flange.

The support plate is 140 mm wide, 10 mm wider each side than the 120 mm tongue, giving landing width for a 5 mm weld leg on the underside of the support plate; with equal widths the contact faces would be coplanar and form no weldable corner. Weld leg outer edge X±65 mm, support plate edge X±70 mm, nominal margin 5 mm.

The 5 mm fillet welds are all shop welded on the outside of the support plate underside: one 45 mm run along each long edge of the tongue at X±60 mm and one 120 mm transverse run at the outer tongue end at Y108.5, 210 mm in total. The welds lie at Y ≥ 63.5 and Z ≤ 991, do not enter the existing flange material, are not in the contact face of the two plates or on the board bearing face, and nothing projects above Z1000.

Board edge at Y80, bearing width 35 mm. The support is anchored to the outer secondary beam and only needs to span the 17.5 mm air gap; it does not extend to the inner secondary beam at Y437.5. Sample spacing along X 500 mm.

The bearing width of 35 mm leaves 5 mm over the 30 mm sample assumed bearing width stated in these conditions. The 30 mm is a sample assumption, not an accepted value, and shall be confirmed in writing by the board supplier.

Fit at the section root: the inner ends of both tongue plates are 12.5 mm from the secondary beam centre and 9.5 mm from the 6 mm web face. Hot-rolled sections have a rolled fillet at the web-to-flange junction; this fillet

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

and the existing coating thickness take up part of that clearance. One section catalogue publishes a root radius of 8 mm for H250×125×6×9; this is only a published example and not a determined value for the steel procured for this project. The contact position and the actual clearances during the SS-X1 rotation shall be confirmed by site measurement; catalogue values or sample models shall not replace them.

Corrosion protection: after all welding, drilling and tapping are completed in the shop, parts are hot-dip galvanized as a whole (EN ISO 1461) and threads are re-tapped after galvanizing. CN-1 bolts are silver zinc-flake coated and FX-S1 screws are electroplated zinc; the coatings differ and shall not be described interchangeably. At site drilling, countersinking and tapping of the existing flanges, bare steel is cleaned and coated with zinc-rich repair paint; the repair method is confirmed against the coating system of the existing steelwork (TO BE COORDINATED).

Design coordination requirements (TO BE COORDINATED): flexural and shear resistance and deflection of both parts, connection resistance and prying effects, net section effect at the countersinks in the existing flange, weakening of the SS-X1 tube wall by the slots, actual support spacing and number along joints and along X, and point-by-point position checks against the existing rack base plate bolt groups and cable trays. These conditions give no whole-floor quantity of supports.

5 Fixing samples

FX-S1 is the preferred flush fixing assembly and is compatible with the finish; FX-M1 is a separate drilling and holding sample and does not receive finish. See P-104 for details.

FX-S1. Screw DIN 7984 M6×35, property class 8.8, electroplated zinc (different from the zinc-flake coating of CN-1). The board is machined with a φ22 flat-bottom counterbore 7 mm deep, leaving 23 mm of board below, with a coaxial φ7 through hole. The washer is a non-standard flat washer made for the sample: inner diameter 7.0 mm, outer diameter 18.0 mm, thickness 1.6 mm; bearing annulus $\pi(18^2 - 7^2)/4 = 215.98$ mm². The DIN 9021 M6 washer has an inner diameter of 6.4 mm, which interferes with the underhead fillet of DIN 7984 (maximum 6.8 mm), so it cannot lie flat and is not used. The counterbore is enlarged from φ20 to φ22 to give the φ18 washer 2 mm radial clearance. Screw DIN 7984 M6×35, class 8.8, zinc plated: head diameter φ9.78…10 mm, head height 3.82…4.0 mm, 4 mm hexagon socket, thread length 18 mm; the nominal length is the length under the head.

At the nominal sample dimensions, head top level = 1030 − 7 + 1.6 + 4.0 = 1028.6, 1.4 mm below the board surface; at minimum head height it is 1.58 mm below, i.e. lower still. Actual seating shall be measured on the sample. Shank end = 35 − 1.6 − 23 − 9 = 1.4, projecting 1.4 mm below the flange underside. On the steel side a φ5.0 hole is drilled and tapped M6 through the 9 mm flange; all work is done from above the board, with no nut below.

Supplier data and verification requirements (TO BE COORDINATED): head pull-through resistance in the 23 mm of board remaining below the counterbore, and bearing on the counterbore bottom, to be measured in this board; net section of the tapped flange; effective thread engagement length — the incomplete first threads of the screw take up part of the 1.4 mm projection, so it shall not be recorded as 1.5d and shall be measured on the first article; upper torque limit and number of repeated removals.

Coverage required of a proprietary fixing: it shall both drill 9 mm steel and fix a 30 mm fibre cement board, with a head pull-through value in this board. None of the products reviewed meets this: CBSDQ is limited to 3 mm steel; SR 10g × 40 is for 0.75–1.6 mm steel; Hilti S-MD 05Z drills 4.6–15 mm but is intended for metal sheet and gives no pull-through value for this board; SFS Impax SD5 publishes load-bearing grip lengths of 10 / 16 / 29 mm, which do not cover a 30 mm board. This assembly is therefore made of machine parts and marked as a sample, not as a manufacturer-approved fibre cement board fixing. If a supplier provides a product that meets the above coverage and gives a pull-through value in this board, it may replace the assembly under the same test requirements.

FX-M1. #12 (φ5.4) × 60–65 mm, No. 5 drill point, hex washer head, φ6.5 through hole pre-drilled in the board. The basis is two published rules of the fastener manufacturer: the drill point cannot drill further than its own length, and the drill point shall pass through the whole connected thickness before the thread engages. The No. 5 drill point is about 13 mm, far less than the 30 + 9 = 39 mm stack of this project, so the screw cannot self-drill through board and steel in one operation; the board end shall be pre-drilled and the screw starts drilling at the steel face. This sample only records the actual time to drill through the 9 mm flange, whether the thread engaged first, the measured projection of the drill point below the flange underside, the depth of head indentation into the board surface and any ring cracking; it gives no capacity. Its head stands about 8 mm above the board surface

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

and cannot receive a thin finish; it is placed only in a test area not receiving finish.

6 Floor finish

The enquiry product is Forbo Sphera element, a homogeneous resilient sheet. At the nominal FX-S1 sample dimensions the fixing head is 1.4 mm below the board surface, so no thick finish is needed to accommodate heads, and no full-area levelling layer or heavy underlay is used; actual seating shall still be measured on the sample.

Item	Standard	Published value
Total thickness	EN ISO 24346	2.0 mm
Total weight	EN ISO 23997	2900 g/m² = 2.9 kg/m²
Commercial class	EN ISO 10874	Class 34
Light industrial class	EN ISO 10874	Class 43
Residual indentation	EN ISO 24343-1	≤ 0.10 mm, typical ~0.03 mm
Continuous castor chair	ISO 4918	Pass
Slip resistance (ramp)	DIN 51130	R9
Slip resistance (friction coefficient)	EN 13893	μ ≥ 0.30
Reaction to fire	EN 13501-1	Bfl-s1
Dimensional stability	EN ISO 23999	≤ 0.4 %, typical ~0.2 %
Material particle emission class	ISO 14644-1	ISO class 4
Indoor air emission TVOC 28 days	ISO 16516	≤ 0.01 mg/m³
Body voltage	EN 1815	≤ 2.0 kV
Thermal conductivity	EN 12524	0.25 W/mK
Roll size	EN ISO 24341	Width 2.0 m, length ≤ 27 m

Selection note: of the three columns of this data sheet, element is the only one giving a material particle emission class, matching the low-particulate requirement of a machine room. ISO 14644-1 ISO class 4 is the particle emission class of the floor material itself, not a room cleanliness certification. This project takes the thin, light route (2.0 mm / 2.9 kg/m²), compared with the 10.3 mm thick tile route; energetic (2850 g/m²) and elite (2700 g/m²) of the same range are lighter, so "lightest" is not the selection reason. The EN 1815 body voltage ≤ 2.0 kV is the limit of that standard and is not a static-dissipative floor; this project does not require a whole-room ESD floor.

Installation system (per the manufacturer's installation guide):

Item	Requirement
Adhesive	Eurocol 640 Eurostar Special, low emission EC1
Application	1.5 mm × 5 mm V-notch trowel. The notch depth is a tool specification, not the cured adhesive film thickness
Rolling	Roll immediately in all directions with a 68 kg roller within the adhesive open time
Substrate	Lay indoors after the building is enclosed and weathertight; substrate clean, flat, sound and permanently dry; moisture and adhesion tests are required
Environment	18…27 °C for 48 h before, during and 24 h after laying; material and adhesive conditioned for 24 h, extended to 48 h if below 10 °C before delivery
Curing	Avoid heavy traffic for 72 h after laying; 5 days where high point loads or wheeled traffic occur

Finished level = 1030 + Δ (F02). For this enquiry product Δ would be 2.0 mm + adhesive film; Δ is fixed only when the finish system is selected under F02. The adhesive film thickness shall be measured on a trial installation of the selected system and shall not be derived from trowel notch depth or coverage tables. Contact loads of the roller and operator are included in the trial assembly loading conditions (see T-9 in Section 7).

Joints: the 3 mm joints between boards are laying tolerance joints and do not automatically become movement joints of the finish; their treatment is determined in writing by the finish supplier according to the list below. Actual architectural and structural movement joints shall not be bridged by the finish; corresponding joints shall be formed in the finish at their positions. Local continuous static-conductive and equipotential bonding at IT maintenance positions follow the adopted F02; these conditions do not repeat its provisions.

The manufacturer's installation guide and data sheet refer to their specified acceptable substrates. They do not

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

qualify the 30 mm fibre cement board substrate with open 3 mm joints of this project and give no forklift or wheel loads. The following shall be requested from the manufacturer and verified in the full-board trial assembly:

- written suitability opinion for a 30 mm fibre cement board substrate with open 3 mm joints;
- the specified adhesive and primer system, and the actual adhesive film thickness of that system on this substrate (to determine Δ);
- treatment of the 3 mm joints between boards and the permissible offset;
- opinion on rolling loads at the wheel diameter and wheel load of the handling equipment of this project;
- cleaning methods and the conditions of application of the material particle emission class.

Comparison: Forbo Colorex Plus Basic is an adhesive-free loose-lay tile, 10.3 mm, 12 000 g/m², with hidden dovetail interlock, a different system. Describing it as "10.3 mm + adhesive" misstates its installation method, and these conditions add no adhesive mass to it; its published loaded vehicle and wheel load data refer to the manufacturer's specified substrate and cannot qualify this floor board. The product is not included in the enquiry route.

7 Full-board trial assembly and tests

Full-board trial rig TR-1 is laid out at the actual 500 mm spacing and with the actual edge conditions; two or three shortened supports shall not represent a full board. The rig has 9 HN250×125×6×9 at 500 mm centres covering Y0…4000, each 2500 mm long; 4 boards are used, forming one 3 mm X-direction joint. See P-105 for the rig layout. Edge conditions reproduced:

- one full 1197 × 1997 board spanning 5 flanges;
- one full 1197 × 1918.5 perimeter-row board, including the Y80 edge and the 357.5 mm projection;
- one 3 mm Y-direction joint centred on a flange;
- one 3 mm X-direction joint spanning the 375 mm clear opening;
- one notch back edge passing the flange tip by 5.0 mm.

The rig carries one SS-X1, three SS-P1 (500 mm apart along X) and the full set of FX-S1; FX-M1 is placed at two additional points in the test area not receiving finish. The rig is open at both ends, whereas the actual bay ends are closed by transverse main beams, so the rig shall also be used to rehearse the SS-X1 plan rotation procedure. The mass of the rig boards is determined separately from the supplier's measured surface density. If the supplier's rig is smaller than specified here, it shall reproduce at least "one full board spanning 5 flanges" and "the perimeter 357.5 mm projection"; the other conditions shall then not be regarded as verified.

No.	Test condition	Loaded area	Measurements	Acceptance basis
T-1	Dead load before use	Uniform	Midspan deflection, surface cracking	Limits published by the board supplier
T-2	Installation point load	100 × 100 mm block	Deflection at load point, local failure mode	Point load value published by the board supplier
T-3	Perimeter 357.5 projecting edge	Along the Y80 edge line	Edge deflection, any spalling	As above
T-4	X joint over the 375 clear opening	100 × 100 each side of the joint	Offset between boards, change in joint width	As above
T-5	Notch back edge 5.0 mm past the flange	Notch corner	Load at crack initiation at the corner	As above
T-6	FX-S1 head pull-through	Single-point pull-out	Pull-through load and failure mode	As above
T-7	CN-1 connection	Vertical load at the support end	Slip, loosening, deformation at the flange countersink	Acceptance conditions given by the structural engineer
T-8	SS-X1 installation procedure	No load	Actual clearances during rotation, hole alignment, time taken	No interference throughout; rotation, hole alignment and 20 mm lift can be completed; record the minimum actual clearance
T-9	Contact loads of finish installation	68 kg roller + operator	Board deflection during rolling, joint offset, cracking at board edges and supports	Limits published by the board supplier

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

T-10	Rolling load	Actual handling wheels	Wheel diameter, wheel load, number of cycles, residual indentation	Values published by the finish and board suppliers
T-11	Finish adhesion	Adhesion test per the manufacturer	Substrate moisture content, bond strength, actual adhesive film thickness	Finish supplier's requirements

Acceptance values are BY MANUFACTURER (board supplier, finish supplier) and by the structural engineer; the table fixes the test arrangement and the records. The rolling load condition T-10 follows the handling equipment (TO BE COORDINATED).

8 Installation sequence, handling and storage

All local supports and all holes in the existing flanges shall be completed before boards are laid. See P-105 for the sequence; key points:

Step	Content
S1	Check level Z1000 and flatness of the existing secondary and main beam flange tops
S2	Setting-out: locate the low-X and low-Y edges of each board from the bay grid lines
S3	Using a drilling jig, drill φ11 H13 in the existing flange to the DIN 74 F10 fitting hole and countersink 90° φ22.7 H13 from the top; deburr; coat bare steel with zinc-rich repair paint
S4	Install SS-P1: slide the tongue plate below the flange, adjust the support plate top to Z1000, install and tighten CN-1
S5	Install SS-X1: rotate 90° in plan and lower through the 375 mm opening to tube top Z980, rotate back 90° between the webs, lift the whole part 20 mm to tube top Z1000 with 3 mm at each end, tongue tops rising to Z991; align holes and install and tighten 4 CN-1
S6	Drill φ5.0 and tap M6 in the existing flange; apply repair paint
S7	Re-check that tube tops and support plate tops are flush with the flange top at Z1000 and nothing projects above Z1000; boards may be laid only after all re-checks pass
S8	Lay boards: place in sequence from one end of the bay and align holes
S9	Insert washers and drive DIN 7984 M6×35 to the torque determined on the first article
S10	Re-measure surface level differences and joint widths; record before proceeding to the finish

Alignment of flange holes: flange holes and tapped holes in the tongue plates are located with the same drilling jig, position tolerance ±0.5 mm; hole alignment shall be measured on the first article. Holes shown in the existing flanges are new fabrication in the existing steelwork.

The handling and placing route is shown in the flow chart at the lower right of P-101. The storage area is outside the floor; until a verified permissible floor load is available (TO BE COORDINATED), no pallets are placed on the floor — placing a pallet directly over a secondary beam does not bypass the load path through the board. Place one board at a time: enter from the outer edge of the bay and advance inwards column by column along X; complete all six rows of a column before moving to the next.

Sequence of work: handling and placing of boards may take place before the building is enclosed, and openings left before the building is enclosed help bring boards in, but the clearance and slewing radius of lifting operations shall be verified for the actual envelope state at that time. The finish shall be laid only after the building is enclosed, waterproofing is complete, the substrate is accepted and permanently dry; it does not run in parallel with board handling.

Working surface: operatives move only on temporary working surfaces that are fixed and confirmed as able to carry them, or on independent working platforms; they do not walk on bare steel beams or loosely laid covers. The rated capacity and working radius of lifting equipment are verified point by point for the weighed single board mass plus rigging, according to the actual site arrangement; these conditions do not specify a machine type and do not mean that any machinery is approved for use on the floor. Single boards are lifted from the outside using a rated lifting clamp, a supporting pallet or a lifting beam; the board surface is porous, so vacuum lifters are not used until verified on this board surface. The wheel diameter and wheel load of handling equipment and the rolling load conditions are TO BE COORDINATED.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

9 Structural calculation input and design coordination requirements

The P04 structural calculation input C-901 contains the self-weight sources, load cases L1…L6, the actual support geometry, the plan coordinates of the 247 columns and stub columns, and the inputs to be coordinated listed below. C-901 does not declare a support model: the actual support geometry of the floor includes the 5.760 m without steel within the 744 interior joint edges, the 144 de-duplicated 20 mm plan gaps, the perimeter 357.5 mm projection, the notch back edges passing the flange tip by 5.0 mm and closed openings, and the 34 X joint lines lying fully on main beam flanges. The subsequent analysis shall select and justify a verifiable support and connection model; a statement in which "simply supported" and "continuous" coexist shall not replace it. The finish is not a structural flexural member and does not form a horizontal diaphragm.

The shell stiffness of the former 8 mm steel deck plate is invalid for this floor and shall not be carried over, nor reused by deducting its mass. The load cases of C-901 are limited to the six families L1…L6 of this floor and its installation stages and do not include whole-building cases; C-902 gives column member end coordinates and does not include column base reactions or pile head levels.

Design coordination requirements (TO BE COORDINATED; responsible supplier data item or discipline in brackets):

- supplier's measured single declared surface density (Q-02);
- board rules for free edges, minimum bearing width, screw spacing and edge distances (Q-04, Q-05, Q-08);
- measured head bearing and pull-through values of the FX-S1 counterbore construction (Q-07);
- written suitability opinion of the finish for this substrate and the actual Δ (Q-13, Q-14);
- wheel diameter and wheel load of the handling equipment (Q-15);
- rack OEM mass data;
- section resistance, connection resistance and spacing of SS-X1 / SS-P1 (structural engineer);
- effect of new holes and tapping in the existing flanges on the flange net section (structural engineer);
- permissible floor load (structural engineer);
- architectural interface for transport and lifting (door openings, lifting equipment): TO BE COORDINATED.

10 Document list

Drawings P-101 to P-105 are in Part 3. The P-911 to P-914, S-921, S-922, Q-921, Q-922 and C-901 to C-904 tables are the P04 enquiry, sample and calculation-input data for supplier enquiries and the structural calculation (TO BE COORDINATED).

Drawing or table	Title	Form or use
P-101	First bay plan	A3 drawing
P-102	Board edge support condition classification	A3 drawing
P-103	Local support samples SS-X1 and SS-P1, connection CN-1	A3 drawing
P-104	Flush fixing sample FX-S1 and drilling sample FX-M1	A3 drawing
P-105	Trial rig, SS-X1 installation procedure, handling and installation sequence	A3 drawing
P-911	Board edge support condition classification table (552 boards individually)	Enquiry use, TO BE COORDINATED
P-912	Exception board table	Enquiry use, TO BE COORDINATED
P-913	Board edge segment check table	Enquiry use, TO BE COORDINATED
P-914	Support interruption interval table (144 after de-duplication)	Enquiry use, TO BE COORDINATED
S-921	Sample definition and parameter table	Sample use, TO BE COORDINATED
S-922	Sample material list	Sample use, TO BE COORDINATED
Q-921	Parent sheet baseline, tolerance chain and product data status	Enquiry use, TO BE COORDINATED
Q-921	Enquiry return table	Enquiry use, TO BE COORDINATED
Q-922	Board outline size table	Enquiry use, TO BE COORDINATED

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

C-901	Structural calculation input	Calculation-input use, TO BE COORDINATED
C-902	Plan coordinates of support columns and stub columns (247)	Calculation-input use, TO BE COORDINATED
C-903	Test matrix	Calculation-input use, TO BE COORDINATED
C-904	Load case table	Calculation-input use, TO BE COORDINATED

Product data cited. The following documents are cited for their published content within the scope stated in each original; suitability for this project is confirmed by the supplier data and tests of Sections 3 to 7 (BY MANUFACTURER).

Purpose	**Document**
Finish performance	Forbo Sphera Technical Specification Document UK April 2022
Finish installation	Forbo Sphera Homogeneous Vinyl installation guide (file name marked UK April 2022, body footer marked Issue Date September 2021)
Finish product page	forbo.com/flooring/en-uk/commercial-products/sphera-homogeneous-vinyl/sphera-element
Comparison tiles	Forbo Colorex technical specification and product page
CN-1 fitting hole	Fastener manufacturer's engineering notes on ISO 10642 and the DIN 74 form F fitting hole table: wuerth.de/web/de/awkg/kompetenz/din_iso_normteile/din-7991-iso-10642-senkkopfschrauben-innensechskant.php
CN-1 reference part	Würth 412241025, ISO 10642 M10×25, 08.8, silver zinc flake coating; eshop.wuerth.de product page
Theoretical and actual head diameter	ISO 10642 specification table, M10 theoretical maximum 22.4 / actual minimum 19.22: fullerfasteners.com/tech/iso-10642-specifications-hex-socket-countersunk-head-screws/
Explanation of theoretical head diameter	Lindstrom Technical Manual 2017: lindstromfasteners.com/wp-content/uploads/2017/06/Lindstrom-Technical-Manual-2017.pdf
Section root radius example	Nippon Steel section catalogue K004en-nw, H250×125×6×9 root radius 8 mm (published example, not a determination for this project's steel)
Board supply lead	Xinghan steel structure floor board product page
Unit in doubt	Frametec fibre cement board product page
Fastener suitability	SHERA Exterior Decking manual, listed FIX-W45 limited to framing < 4 mm
Drilling class	SFS Impax SD5 product page; Unite Fasteners drilling capacity notes; EYBY drill point table

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Technical Appendix A — Floor Main Beam WF-PB-A06-FB02: Connection Requirements

K&K Data PIN001 · Public edition P2 · October 2026 · K&K Data Service Inc. · inquiry@kkdatasvc.com

This appendix applies to the 13 connections of floor main beam WF-PB-A06-FB02: the two JD-02 beam-end connections to the main columns and the eleven JD-03 connections of the secondary beams framing into this beam. It collects the fabrication requirements of two local revisions of these connections — the angle contact-edge chamfers of revision W36 and the P2 amendment of the JD-02 column-side bolt groups shown on sheet S-607 — together with the web-to-flange weld requirement of the beam and the checks that remain open. All other connections and members of R04 and D02, and the unamended typical detail S-602, are unchanged by this appendix.

A.1 Connections and Parts

Connection	Number	Angles	Local revision
JD-02 floor main beam end to main column	2	RCV34-ASJ-055-L / -R and RCV34-ASJ-056-L / -R; JSEC-01, length 260, model z 720 to 980	W36 chamfers s = 3 mm; P2 column-side bolt pitch 43 mm (Section A.2)
JD-03 secondary beam to WF-PB-A06-FB02	11	RCV34-ASJ-084 to RCV34-ASJ-104 (even numbers), -L / -R; model z 770 to 980	W36 chamfers s = 2 mm

The 13 connections comprise 26 angles, 104 bolt groups, 168 bolts and 414 physical holes (286 hole features), with 74 chamfers. These quantities are unchanged by the P2 amendment, which moves bolts and holes without adding steel or bolts.

A.2 Amended JD-02 Column-Side Bolt Groups (S-607)

The unamended typical detail S-602 places the six column-side M16 bolts of a JD-02 angle at 40 mm pitch. The governing minima for these M16 bolts are a centre-to-centre spacing of 2⅔ d = 2⅔ × 16 = 42.6666667 mm (AISC 360-22) and an end distance of 22 mm (AISC 360-22 Table J3.4M); a sufficient clear distance between holes does not replace the centre spacing requirement. For the four column-side groups of the two JD-02 connections of WF-PB-A06-FB02 the column-side pitch is increased within the unchanged angle length to a nominal 43 mm, with nominal end distances of 22.5 mm. Other instances of the typical detail are not covered by this section (Part 0, Section 6, item 9).

Item	S-602 typical detail (unamended)	Amended groups of WF-PB-A06-FB02 (S-607)
Bolt groups	Column-side group of each JD-02 angle	RCV34-ASJ-055-L-MAIN, -055-R-MAIN, -056-L-MAIN, -056-R-MAIN: 4 groups, 24 bolts, 48 hole positions in angles and columns
Bolts	6 × M16 (ISO 4014 M16×55-8.8 as listed on S-602), N = 6, hole diameter 18 mm	Unchanged
Pitch / group length	40 / 200	43 / 215 (20 pitches)
End distance, both ends of the angle	(260 – 5 × 40) / 2 = 30 mm for the group centred on the 260 mm angle	22.5 nominal (8 end distances)
Angle	JSEC-01, length 260	Unchanged; angle centre and position unchanged

Fabrication requirements for the amended groups:

1. Hole centres and both cut ends of each angle are set out from one common datum, each within ±0.15 mm. The least favourable tolerance stack then gives a pitch of 43 – 0.30 = 42.70 mm and an end distance of 22.5 – 0.30 = 22.20 mm. These stack values show that the tolerance keeps the nominal geometry above the governing minima; they are not acceptance thresholds.
2. Acceptance: every as-built pitch is not less than 2⅔ d = 42.6666667 mm and every as-built end distance not less than 22 mm. Each of the 20 pitches and 8 end distances is measured and recorded.
3. The matching holes in the main columns are set out at the same 43 mm pitch on the same group centre.
4. The supplier's ability to hold ±0.15 mm on hole centres and cut ends is not yet confirmed and is confirmed before these parts are fabricated. A reduced end distance below 22 mm is not used.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

The amendment establishes geometry only. It does not establish the strength of the connections (Section A.6). The amended geometry is held in a local model of the 13 connections; the Revision 04 whole-building model and sheets are not regenerated with it.

A.3 Angle Contact-Edge Chamfers (W36)

Each angle receives a 45° chamfer of leg s on the edges that bear against the main beam web (N1) and, for JD-03, against the secondary beam web (N2): JD-03 s = 2 mm on N1 top and N2 top and bottom (66 chamfers); JD-02 s = 3 mm on N1 top and bottom (8 chamfers). Holes, bolts and parent members are not changed by the chamfers. With the chamfer, the clearance budget (gap + s – weld leg or root radius – hole slip – fabrication 1.5 – erection 0.5) leaves +1.0 mm at the main beam weld for JD-02 and JD-03, and +2.0 mm at the secondary beam root for a procured secondary beam root radius r ≤ 8 mm; this supersedes the earlier r ≤ 10 mm. The M12 contact-face edge distance is 18 mm, equal to the AISC 360-22 Table J3.4M minimum, and shall remain at least 18 mm as built, including fabrication tolerances; the nominal 18 mm is not a zero-tolerance dimension.

The amended JD-02 column-side groups do not change the chamfered edges or the beam-side bolt groups. The clearance and edge-distance conditions of this section were established for these 26 angles and are not transferred to other connections without their own check.

Table A.3 Chamfered edges of the 26 angles (N1 = edge against the main beam web, N2 = edge against the secondary beam web)

Angle mark	Connection	Location, model z (mm)	Chamfered edges, nominal leg s (mm)
RCV34-ASJ-055-L	JD-02	720 – 980	N1 top: 3; N1 bottom: 3
RCV34-ASJ-055-R	JD-02	720 – 980	N1 top: 3; N1 bottom: 3
RCV34-ASJ-056-L	JD-02	720 – 980	N1 top: 3; N1 bottom: 3
RCV34-ASJ-056-R	JD-02	720 – 980	N1 top: 3; N1 bottom: 3
RCV34-ASJ-084-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-084-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-086-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-086-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-088-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-088-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-090-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-090-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-092-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-092-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-094-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-094-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-096-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-096-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-098-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-098-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-100-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-100-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-102-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-102-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-104-L	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2
RCV34-ASJ-104-R	JD-03	770 – 980	N1 top: 2; N2 top: 2; N2 bottom: 2

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

A.4 Main Beam Web-to-Flange Weld

The web-to-flange weld of the built-up floor main beams (2×PL200×12 + PL276×8) is a design parameter of the R04 set (Part 0, Section 6, item 10). For WF-PB-A06-FB02 the requirement is a continuous double fillet weld of leg z = 5 mm (effective throat a = 3.54 mm) with an E70 class electrode, governed by the AISC 360-22 Table J2.4 minimum size for the 8 mm web. The longitudinal shear flow at the full web design shear strength φVn = 324 kN is q = 985.6 N/mm, which requires z = 3.23 mm. Within the 26 angle zones the maximum as-welded leg is 6 mm. This size covers the longitudinal shear flow and the code minimum; it is a conditional requirement pending the checks of Section A.6.

A.5 Installation

All 168 bolts, including the 24 bolts of the amended JD-02 groups, can be inserted and tightened with defined tool envelopes and connected entry paths; the boards are laid after the bolts are tightened. The 24 relocated bolts are checked with the compact tool envelope, with a minimum free tool outside diameter of 59.2 mm; of the other 144 bolts, 93 are served by the standard envelope and 51 require a deep socket. The tool envelopes are catalogue-equivalent; the procured tool dimensions, the tightening method and torque for the 168 bolts and the erection stability measures are defined before erection.

A.6 Open Checks

The strength of the 13 connections is not established. The following are required before a connection resistance can be stated:

1. The concurrent six-component actions (Fx, Fy, Fz, Mx, My, Mz) at each of the 13 connections for the actual load cases, at a defined reference point, from a model whose restraints correspond to the built construction.
2. Out-of-plane bending and prying of the short legs of the JD-02 and JD-03 angles; out-of-plane resistance of the main beam web.
3. Torsional restraint of the secondary beam ends and the transfer of torque between the SP-T1 connections opposite this beam and the JD-02 beam ends, on the actual construction.
4. Local transverse, torsion and prying actions on the web-to-flange weld of Section A.4.
5. Directional tear-out at the chamfered angle edges, including the changed edge condition of the holes next to the chamfers.
6. Plate grade and electrode classification; qualification of the procured bolts (ISO 4014 property class 8.8 is not equivalent to ASTM F3125 A325M) and the hole type of the M12 bolts in 13 mm holes; fabrication tolerances.

Resistances of individual components, such as a single bolt group or angle section, are not a rating of the connection.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Technical Appendix B — Package Scope, Revision Record, Materials, Fabrication, Roof Details and Verification Results

K&K Data PIN001 · Public edition P2 · October 2026 · K&K Data Service Inc. · inquiry@kkdatasvc.com

This appendix carries the detailed records referred to by Part 0: the scope of application of each package, the revisions and superseded values, the member families with their materials and product standards, the fabrication and fastening conditions, the girt elevations, the roof detail conditions and the results of the connection verifications with their applicability. Values are those of the documents named in each table.

B.1 Packages and Scope of Application

Package	Content and revision	Location in this edition	Scope of application
01 Foundation setting-out FS	FS Rev B: setting-out sheets FS-01 to FS-17 with coordinate tables, tape-check tables and pile requirement interface table; site record sheets	Parts 1 and 3; Part 2 documents FS-A, FS-B, FS-C	Plan position of 247 support points (76 main columns, 171 stub columns) in project local coordinates. Site control points, level datum and survey transformation: TO BE COORDINATED on site. Pile type and capacity: BY PILE SUPPLIER to the requirements of FS-B.
02 Whole-building structure R04	Drawing set S-000 to S-720 with typical connections S-601 to S-606, wall rail levels S-430/S-431 and roof interface S-720	Part 1; Part 2 documents R04-0, R04A, R04B, R04C	Whole-building geometry, members and quantities, including sections S-710/S-711. Material lists are read with the technical conditions R04A.
03 Floor installation D01	Installation drawings F-001 to F-501; F-303/F-401 Rev 01B	Parts 1 and 3; Part 2 document D01	Board installation sequence and detail locations. The sample dimensions of F-401 detail D-8 are superseded by D02 R-102.
04 Board procurement and installation P04	P04A: P-101 to P-105 and technical conditions P-01	Part 3; Part 2 documents P04-0, P-01	Performance requirements, procurement and test conditions of the 30 mm fibre cement board; board product BY MANUFACTURER.
05 Finish and maintenance grounding F02	Details F-101 to F-104 and technical conditions F02	Part 3; Part 2 document F02	Floor finish and IT maintenance grounding; the finish is not part of the load-bearing construction.
06 Floor and pile head connections D02	D02B with the J29 revision of the CS4 faying surface note: PIN001-JC-01/02, PIN001-CS4-001 J29, PIN001-CS4-002, R-101 to R-104	Part 1; Part 2 documents D02-0, CS-4 J29, R-01, D02-N	Secondary beam end connections, main column bases and board fixing; the sheets and technical conditions are used together. Current revision D02B with J29; it supersedes D02A.
07 Stub column pile head interfaces SPB-1 R5	Interface note with Figure 1 (interface plan and section) and 16-hole schedule	Part 2 document SPB-1 R5	Geometric interface of the four stub column supports F053, F054, F109, F110.
08 Floor main beam WF-PB-A06-FB02, 13 connections	W36 chamfer geometry of 26 angles; P2 local amendment of the four JD-02 column-side bolt groups	Technical appendix A; S-607	The 13 connections on floor main beam WF-PB-A06-FB02; other R04 and D02 connections, and the unamended typical detail S-602, are not changed by it.
09 Structural verification	Analysis and check basis of selected connections	Section B.7	Each verification applies to the object and result stated in the table below.

B.2 Revisions and Superseded Values

B.2.1 Key revisions

1. D02 adds 100 secondary beam end connections SP-T1/SP-T2 (PIN001-JC-01/02): 124 plates, 400 M16 bolt sets and 696 shop welds. The main column bases CS-4/PH-4 and the board fixings FX-S1, SS-P1 and CN-1 are defined by PIN001-CS4-001/002 and R-101 to R-104 with their technical conditions.
2. J29 revision of CS4: steel parts hot-dip galvanized to ASTM A123; faying surfaces Class A, slip coefficient μ = 0.30; power or hand wire brushing of faying surfaces prohibited. The revised drawing PIN001-CS4-001, the revised technical conditions and the revised DXF carry the J29 designation. J29

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

supersedes the earlier wording "hand wire brushing after galvanizing".

3. SPB-1 R5 keeps SHS100×100×5 and PL200×200×12; four holes on a 144 mm square, hole diameter 18–18.5 mm after galvanizing. Tolerances, datums, tool clearance and installation conditions are defined in document SPB-1 R5.
4. W36 applies 74 local 45° chamfers to the 26 angles of the 13 connections on WF-PB-A06-FB02: JD02 chamfers 3 mm, JD03 chamfers 2 mm; the 104 bolt groups and 168 bolts are unchanged. Supplied secondary beam root radius r ≤ 8 mm; this supersedes the earlier r ≤ 10 mm. Contact-face hole edge distance ≥ 18 mm as built, including fabrication tolerances.
5. W36 main beam web-to-flange weld: leg z = 5 mm with a maximum of 6 mm in the angle zones, sized for longitudinal shear flow and the code minimum size. Connection checks TO BE COORDINATED: local transverse, torsion and prying actions on the weld, directional tear-out at the chamfered edges, and the resistance of the complete connection; the chamfers change the edge condition of some holes, which enters these checks.
6. P2 local amendment of WF-PB-A06-FB02: the four column-side bolt groups of the two JD-02 connections (angles RCV34-ASJ-055-L/R and RCV34-ASJ-056-L/R) are set out at 6 × M16 with 43 mm pitch and 22.5 mm nominal end distance on the unchanged 260 mm angles (S-607; Technical appendix A, Section A.2). No other connection is changed.
7. Floor: 30 mm fibre cement board on the steel beam system; the 8 mm full-coverage steel plate is not used. Board type, test reports and results of TB-1 to TB-8: BY MANUFACTURER.

B.2.2 Superseded values

Superseded content	Original document and location	Current basis	Extent and remaining conditions
Main column base "base plate and anchor bolts missing / to be determined"	R04 technical conditions and review; D01 drawing index section 5; FS-09 c, FS-16 e and the 76 main column rows of the pile schedule	D02 CS-4 base details (two sheets), column base and pile head interface conditions, main column base setting-out and assembly table (76)	76 column bases in detail and model elevation; six-component capacity and stiffness of the assembly TO BE VERIFIED per CS-4 J29 Section 6: pile head resistances and stiffnesses BY PILE SUPPLIER, assembly check with the concurrent frame reactions by the structural design
Secondary beam ends "no end connection record, unresolved interface"	D01 F-303 title, notes and list of unresolved interfaces	D02 SP-T1 (88 ends), SP-T2 (12 ends)	100 ends; checks of end reaction V, eccentric effects and effective width of the supporting web TO BE COORDINATED
Stub column base and main column base "difference unresolved"	D01 F-303 list of unresolved interfaces	D02 CS-4: main column base plate underside –25, pile cap cover plate top nominal –40; stub column pile head model level 0	Nominal level difference of 40 mm between the two pile head types; site levels converted by the level design
SS-P1 support plate 9×130×51.5, tongue plate 12×120×70, lap 19, weld leg 4, total length 158	P04 technical conditions P-01 section 4; P-103; S-921; S-922; D01 F-401 detail D-8	D02 R-102: 9×140×51.5, 12×120×96, lap 45, weld leg 5, total length 210, Q235B	P04 updated in P04A; D01 F-401 rev 01B identifies D-8 as early dimensions; CN-1 hole spacing 60 and hole centre 30 from flange tip unchanged
"The other 1024 X edges only span secondary beams"	D01 F-303 detail D-6 note	P-911 measured classification: 1072 edge instances	Numerical correction
FS-16 "minimum centre distance outside bay B01 1371.429 mm"	FS-16 section 1 g	All 247 points: outside B01 minimum 1000 mm; between off-grid stub columns minimum 1200.000 mm	Text correction; coordinates unchanged
PH4-SHIM 21.67 kg, total 1647 kg	D02 PIN001-CS4-002 bill of materials	Nominal 15 mm: gross 17.00 kg, net 16.73 kg; net mass per set 1.1156 × t kg (t = total shim thickness in mm)	Actual thickness selected within 3–30 mm from the measured pile cap top level
Board outline rings in the 552-board coordinate table rounded to integers (36 rows, 120 vertices)	D02 30 mm floor board tables	Outline and opening rings rewritten from the native board polygons; all vertices equal to the native polygons; net area 1235.719828 m²	Other columns unchanged

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Wall frame elevations without vertical girt dimensions	R04 S-400 to S-424, S-510, S-511	S-430, S-431 girt elevation setting-out	Dimensions only; not a wall fabrication detail; no steel member changed
CS-4 faying surface: hand wire brushing after galvanizing	PIN001-CS4-001 note 3; column base and pile head interface conditions Section 8 item 4	J29: hot-dip galvanized to ASTM A123; Class A, μ = 0.30; power and hand wire brushing prohibited (RCSC 2020, 3.2.2(3))	Surface preparation only; geometry and component limit values unchanged
R-101 overall dimension line and R-104 technical conditions frame entering the title block	D02 R-101, R-104	R-101, R-104 at their current sheet revisions (R07)	Drawing layout adjustment; content unchanged
WF-PB-A06-FB02 JD-02 column-side bolt groups 6 × M16 at 40 mm pitch, end distance (260 – 5 × 40) / 2 = 30 for the centred group	R04 typical detail S-602 as applied to WF-PB-A06-FB02	S-607: 6 × M16 at 43 mm pitch, nominal end distance 22.5, angle 260 unchanged; hole centres and cut ends ±0.15 from a common datum	Four bolt groups, 24 bolts, 48 holes of this beam only; no other connection instance or typical detail is changed or verified by this amendment; other JD-02 instances per Part 0, Section 6, item 9; joint strength per Technical appendix A, Section A.6
"The 96 IT positions for the whole building are a planning target"	F02, Quantities	Network Reference Design Brief EN-R1: 130 reference cabinet envelopes (90 GPU, 30 NET, 10 NETC) from the current EN-R1 cabinet data; S-050	Reference arrangement, not a count of structural support positions or ESD bonding points; equipment load cases not established
Finished floor 1030, "board surface is the finished floor; no additional finish layer"	R04A, Floor levels	Finished floor 1030 + Δ (F02); board top 1030	Δ depends on the selected finish system
Main column base plate "to be designed"	FS-B, Table 2.1	CS-4 base plate 380 × 380 × 25 per D02	Text correction; geometry unchanged
Column base assembly assessment stated as BY PILE SUPPLIER only	R04A, R04B, D01, FS-A, FS-B, CS-4 J29 Sections 6 and 9	Pile head resistances and stiffnesses BY PILE SUPPLIER; base restraint and check of the complete assembly by the structural design	Wording aligned with D02-0 Section 3 and FS-B Section 3; requirements and values unchanged
95 stub column points "floor edge beams"	FS-B, Section 1 item 3	Floor main beams I 300 × 200 × 8 × 12 ("BP 200 × 300 built-up" in data tables)	Naming only
"Rack rung (RK-L RUNG)"	R04B, Steel tonnage	Under-floor cable tray rung, labelled RACK_FRAME	Naming only; 66 members, 1.016 t unchanged
Appendix A of the structural basis summary and document W36	Public edition P1	Technical appendix A	Fabrication requirements remain in Technical appendix A, Section A.3; the model measurement record (chamfer depths, removed volumes) is not reprinted in this edition

B.3 Member Families, Materials and Product Standards

The 10494 beam-type objects (including 8195 JSEC connection parts) and 678 plates of the R04 native model carry the material label ASTM A36 (model notation ASTMA36). This label is a model attribute and not a procurement grade. The table records the material stated by each document; where no grade is stated, the grade is a design coordination requirement (TO BE COORDINATED).

Member family	Size and quantity	Material	Product standard and performance class	Source
Main columns	HW350×350×12×19, 76	Model label; procurement grade TO BE COORDINATED	Section product standard and tolerances TO BE COORDINATED	R04
Roof main beams, purlins, eaves edge beams, gable struts	RHS 300×150×8 / 200×100×6; 57 / 360 / 54 / 6	Model label; procurement grade TO BE COORDINATED	Tube standard, supplied wall thickness and corner radius TO BE COORDINATED; eaves seat weld check depends on this	R04

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Floor main beams	I 300×200×8×12, built up from 2×PL200×12 + PL276×8, 38	Model label; plate grade TO BE COORDINATED	Plate standard TO BE COORDINATED; web-to-flange weld requirement for WF-PB-A06-FB02 see Technical appendix A, Section A.4	R04, JC-01
Floor secondary beams	HN250×125×6×9, 450	Model label; procurement grade TO BE COORDINATED	Section standard TO BE COORDINATED	R04
Girts (including end wall girts)	RHS 100×150×4, 292 (longitudinal WR 270 + end wall EWR 22)	Model label; procurement grade TO BE COORDINATED	Tube standard TO BE COORDINATED	R04, S-430, S-431
Longitudinal wall studs	RHS 100×50×3, 648 (WS)	Model label; procurement grade TO BE COORDINATED	Tube standard TO BE COORDINATED	R04
End wall studs	RHS 50×100×3, 48 (EWS)	Model label; procurement grade TO BE COORDINATED	Tube standard TO BE COORDINATED	R04
Floor stub columns and base plates	SHS 100×100×5, 171; base plate 200×200×12	Model label; procurement grade TO BE COORDINATED	TO BE COORDINATED	R04, FS
Connection parts JSEC-01 to 08	Sleeves 5942, angles 2253	TO BE COORDINATED	Material, fabrication tolerance and edge preparation TO BE COORDINATED	R04
SP-T1, SP-T2 secondary beam end connections	Tab PL8, stiffener PL12, 124 parts	ASTM A36, Fy 250 / Fu 400; if supplied as GB/T 700 Q235B, resistances recalculated with 235 / 370	Bolts ISO 4014 M16×45-8.8, nuts ISO 4032-8, washers ISO 7089 200HV; electrode E7018 (AWS A5.1), deposited metal tensile strength ≥ 480 MPa	D02 SP-T details and design record
Main column base CS-4	PL 380×380×25, ribs 2×PL 308×120×12, 76 sets	ASTM A36	Design basis AISC 360-22	D02 CS-4
Pile cap interface PH-4	Cover plate 380×380×25, shims 3–30, 4×M24	Cover plate and shim grades by the pile cap supplier per the interface conditions	Bolts ASTM F3125 Gr.A325M, nuts ASTM A563M 10S, washers ASTM F436M	D02 CS-4
Perimeter support SS-P1	Support plate 9×140×51.5, tongue plate 12×120×96, 1328	Q235B	Design basis AISC 360-22 J2.2b and Table J2.4	D02 R-102
CN-1 connector	ISO 10642 M10×25, 2656	Property class 08.8	Supplier-declared minimum tension ≥ 20.0 kN; assembly verification TB-7	D02 R-01
FX-S1 flush fastener	DIN 7984 M6×35, 11619	Property class 8.8	Installation torque determined by TB-6	D02 R-01
30 mm floor boards	Fibre cement board, 552	Manufacturer not selected	Thickness 30 ± 0.5; characteristic flexural strength dry ≥ 16.0 MPa; equilibrium moist areal density ≤ 60 kg/m²; EN 12467 / ASTM C1185	D02 R-01
Roof panels and waterproofing membrane	Sandwich panels 216; membrane 108 rolls	Reference products of S-710 / S-711: Kingspan KS FP K-ROC 100 (20.38 kg/m²); Renolit Alkorplan F35176 PVC-P 1.5 mm (1.8 kg/m²); product selection per Section B.5	Core and steel facing section dimensions not defined	S-710, S-711

Within one package, ASTM A36 and Q235B are used for different member families, each with its own resistance values; this is not a conflict. The procurement grade, product standard and corrosion protection system of the main steel members are to be defined family by family in the procurement specification.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

B.4 Fabrication, Fastening and Corrosion Protection

Member family	Dimensional tolerance	Welding	Fastening	Corrosion protection and shop / site split
Main steel members (columns, beams, purlins, girts, studs, stub columns)	TO BE COORDINATED: fabrication and erection tolerances; amended JD-02 groups of WF-PB-A06-FB02 per Technical appendix A, Section A.2	Welding procedure and effective throat TO BE COORDINATED; R04 existing welds 3280, total 565.1 m, shop and site not distinguished; D02 adds 696 shop welds at secondary beam ends, not included in the 3280	Hole sizes and bolt sizes per joint details; pretension and tightening requirements TO BE COORDINATED	Surface treatment and the shop and site welding scope TO BE COORDINATED; the welding scope affects transport segmentation and site hot work
SP-T1	Root gap ≤ 1.5 mm; weld leg increased by g where g > 0	Tab shop-welded to the main beam, leg 6	4×M16-8.8 per end, inserted from −Y	Bolting only on site; corrosion protection TO BE COORDINATED
SP-T2	As SP-T1	Tab and 2 stiffeners shop-welded to the main column, leg 6	4×M16-8.8 per end	Main columns not drilled; no welding, cutting or hot work on main columns on site; corrosion protection TO BE COORDINATED
CS-4	Column end saw-cut squareness ≤ 1 mm; hole position ±1.0 mm	Column to plate leg 6, rib to plate leg 6, rib end leg 8 (root gap 2 mm); WELD_COL_MM 1896 and WELD_RIB_MM 2000 are weld lengths per column	4×M24, turn-of-nut or DTI pretension; faying surface Class A, μ = 0.30; power and hand wire brushing prohibited	Hot-dip galvanized after welding to ASTM A123; own shop
PH-4	Cover plate top −40 (+12 / −15); hole pattern ±1.5; flatness ≤ 1 mm/300	No welding or heating of bolts, nuts or washers	Bolts inserted from below; length selected by shim thickness	Bolts hot-dip galvanized to ASTM F2329; supplied by the pile cap supplier
SS-P1	Dimensions per R-102	Leg 5, 2×45 + 120, shop-welded from outside the support plate underside	2 CN-1 per part	Hot-dip galvanized after welding, drilling and tapping to EN ISO 1461, threads re-tapped after galvanizing; no new welds on existing secondary beams
CN-1	Flange holes DIN 74 F10 φ22.7 H13 / φ11 H13	—	Tightening torque determined by TB-7	Zinc flake coating; R-102 specifies bolting and tapping only on site
FX-S1	Countersink φ22×7; hole centre distance ≥ 30	—	Installation torque determined by TB-6	Zinc plated; location of board countersinking and through holes and of steel-side φ5.0 drilling and M6 tapping TO BE COORDINATED
30 mm floor boards	Thickness ± 0.5; length and width ± 1.0	—	FX-S1	Cut to the complete outline including notches and openings; test results TB-1 to TB-8 BY MANUFACTURER

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

B.5 Roof Fixing, Flashing, Edge Trim and Drainage Details

Roof fixings, flashings, closer pieces, upstands and the drainage system (gutters, outlets and downpipes) are detailed separately from the structural drawings S-700 to S-702, S-710 and S-711. The conditions given by these drawings and the details RF-01 to RF-06 are listed below.

Item	Given condition	Source
Roof slope	High span falls to Y = 0, low span falls to Y = 18300, both 2%	S-700 to S-711
Roof build-up	Sandwich panel nominal 100 (including 0.6 / 0.5 steel facings) + PVC membrane 1.5; total normal thickness 101.5	S-710, S-711
Cover width and slope length	Panel cover width 1000; slope length high span 6677, low span 12380; membrane roll width 2100, side lap 100, cover 2000	S-700, S-710
High span control levels	Y = –338 bearing 7193.3 / finished 7294.8; Y = 6338 bearing 7326.8 / finished 7428.3	S-710
High / low span junction	Y = 6260.819 low span bearing 4702.8 / finished 4804.3; level difference of the two planes at the same Y 2622.433	S-710
Low span eaves	Y = 18638 bearing 4455.3 / finished 4556.8	S-711
Drainage candidate	Clearance between candidate envelope and eaves control about 57.8; minimum vertical separation of brackets 36; candidate scheme outside the whole-house drawings	R04 technical conditions

Detail	Location	Parameters to be coordinated
RF-01 Roof panel to purlin fixing	Whole roof	Design wind suction (site wind speed, exposure category, zone coefficients); panel manufacturer fixing type, spacing and pull-out value; screw engagement for the purlin wall thickness
RF-02 Membrane fixing and laps	Whole roof	Membrane fixing system (mechanical or adhered) and fixing density; lap weld width; correspondence with wind suction zones
RF-03 High / low span junction flashing	Y = 6260.819 to 6338, full length 106.6 m	Flashing material and thickness; upstand height at the wall; connection to the girt line Y = 6000; thermal movement between high and low spans
RF-04 High span eaves trim	Y = –338	Eaves closer material and thickness; drip detail; fixing to the eaves edge beam
RF-05 Low span eaves and gutter	Y = 18638	Gutter section for the design rainfall intensity and catchment; number and position of outlets; downpipe fixing and discharge; sump support
RF-06 Gable trim	X = 0 and X = 106600	Gable closer material; membrane upstand height; fixing to the end wall studs

Fixing spacing, gutter section, flashing thickness and roof wind resistance are TO BE COORDINATED; they follow from the site wind load, the rainfall intensity and the manufacturer data of the selected roof products.

B.6 Girt Vertical Setting-Out

Girt elevations are measured from the main column base ±0 in mm and shown to 0.01 mm (full values in the R04 girt setting-out data of S-430/S-431). Girt section 100×150×4, vertical depth 100; the values below are centre elevations. Floor steel beam top +1000, board top +1030 (finished floor 1030 + Δ, F02) and girt centres are different objects. Longitudinal girts break between the columns of each bay with ends 26 from the grid; B06 and B12 are 6900 bays with segment length 6848, the other 16 bays have segment length 5748, and centre elevations are identical in all 18 bays.

Wall line	Quantity	Centre elevations	Spacing
Y = 0	90 (18 bays × 5)	1058, 2531.75, 4005.5, 5479.25, 6849.97	1058, 1473.75, 1473.75, 1473.75, 1370.72
Y = 6000	108 (18 bays × 6)	1058, 2259.8, 3461.6, 4663.4, 5865.2, 6969.97	1058, 1201.8, 1201.8, 1201.8, 1201.8, 1104.77
Y = 12000	72 (18 bays × 4)	1058, 2170.33, 3282.67, 4237.97	1058, 1112.33, 1112.33, 955.3
End wall zone 1	5 per wall (Y 195–5805)	1058, 2558, 4058, 5558, 6500	1058, 1500, 1500, 1500, 942
End wall zone 2	3 per wall (Y 6195–11805)	1058, 2558, 4000	1058, 1500, 1442

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

End wall zone 3	3 per wall (Y 12195–18105)	1058, 2558, 3850	1058, 1500, 1292

B.7 Verification Basis and Results

B.7.1 Verification basis and applicability

Verification	Object	Applicability of the result
Whole-building member, load and support input	Model members, loads and support mapping	Consistency of analysis input and member ownership.
Capacity methods	Calculation methods and required engineering inputs	Defines the inputs of the connection and member checks.
Floor framing analysis, eight load cases (Robot Structural Analysis), two floor models	Force distribution in the floor framing	Force diagnosis of the floor framing; the model supports are not established as the as-built restraints, and the results are not design forces. Permissible floor load and design wind speed: TO BE COORDINATED with the whole-frame design.
Representative connections (two native models)	Connection behaviour under the specified model conditions	Comparison of connection behaviour.
Interface and equilibrium checks	J29 column base interface, SPB-1 R5 interface, connection equilibrium	Interface geometry and load representation. Pile, column base and bolt capacities follow FS-B, CS-4 J29 and SPB-1 R5 (BY PILE SUPPLIER / TO BE COORDINATED).
Connection demand representation	SP-T1 bolt and weld demands from unit forces	Demand mechanics of SP-T1.
Plate-shell method diagnosis	Shell model of the SP-T1 tab region	Method boundary; no connection stiffness value is derived.
Conditional connection resistance	SP-T1 tab, bolts, welds and supporting web	The stated geometry, materials, load cases and failure modes.
Connection installation and contact	The 168 bolts of the W36 connections	Installation access and contact geometry.
W36 solid geometry	The 26 revised angles	Chamfer geometry, hole positions and member ownership.

B.7.2 Connection verification results

Each result below applies to the object stated; the whole-building capacity assessment is separate (Part 0, Section 6).

Verification	Object	Result	Applicability
Component demand mechanics	SP-T1 connection at a representative secondary beam end	In-plane bolt shear demands from unit native forces; three-dimensional rigid line-weld statics including the 7 mm lap eccentricity; material reference checks	Demand mechanics of SP-T1; joint capacity per Part 0, Section 6, item 7
Shell stiffness model	Native shell model of the SP-T1 tab region	Web depth 276 and main beam area 7008 mm² in the model; analytical benchmark error 0.76 %	No connection stiffness value is derived; connection stiffness TO BE COORDINATED
Conditional strength calculation	SP-T1 tab, bolts, welds and supporting web, AISC 360-22	138 check rows, with net-section deductions per AISC B4.3b; M16 in Ø18 is a standard hole	Checks TO BE COORDINATED: rotation capacity, joist end torsional bracing, main beam web and built-up weld load transfer, prying and six-component design actions
Connection placement	13 connections on main beam WF-PB-A06-FB02 (2 JD02, 11 JD03): 26 angles, 104 bolt groups, 168 bolts, 414 physical holes	No penetration with non-owning members; 48 contact pairs non-penetrating at nominal geometry	Geometry and member ownership; unchanged in number by the P2 JD-02 amendment; capacity and stiffness per Technical appendix A, Section A.6

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Installation access	The same 168 bolts	All 168 bolts insertable, including the 24 bolts of the amended JD-02 groups; tool envelopes and connected entry paths defined per bolt; boards installed after tightening	Tool dimensions are catalogue-equivalent envelopes; procured tools, torque and erection stability per Technical appendix A, Section A.5
Angle clearance to main beam weld (W36)	The 26 angles of the same 13 connections	74 local 45° contact-edge chamfers; see Technical appendix A, Section A.3	Clearance geometry; weld requirement per Technical appendix A, Section A.4; connection checks per Section A.6

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site use instructions

This booklet is used together with setting-out sheets FS-01 to FS-17 of the same revision; the coordinates are those of the record sheets of this booklet and of FS-10 to FS-12. Of the 247 setting-out points, C001–C076 are main column points and F001–F171 are floor stub column points.

1 Coordinate datum: the origin is AX01/YA (C001); +X runs along AX01 to AX19 and +Y along YA to YD. 106600 × 18300 mm is the column grid extent, not the outside face of the walls. Site placement and setbacks use the associated site plan and the actual outer outline.

2 Site control: the surveyor first establishes the actual position of the building origin and axis bearing, sets control marks protected outside the construction area, and records the coordinate system, translation, rotation and any ground/grid conversion. Building dimensions shall not be scaled to absorb control point error. The set-out is checked from an independent site control point that was not used in the setting-out calculation.

3 Instrument coordinates: Project X and Project Y of this booklet are project local coordinates in metres; where they agree with the job local coordinate setting they are used as local E and N respectively. They are not existing site geographic eastings and northings. No elevations are given, and none are set to zero.

4 Coordinate check: check C001 = (0, 0), C004 = (0, 18.3) and C073 = (106.6, 0) in metres; check orientation, distances and the 247 point numbers. Independent site control points and survey transformation TO BE COORDINATED; the three listed checkpoints check the entered coordinates against the drawings.

5 Tape check: set out by the reference axis and the X/Y offsets. Axes A and B denote the intersection of that axis with YA (Y = 0); tabulated distances are horizontal distances. Take the intersection on the +Y side of the baseline to prevent a mirrored set-out; on sloping ground tape in horizontal steps. Check segment dimensions against cumulative dimensions, then check the diagonals.

6 Measured record: convert the actual point positions back to the same project local coordinates; measured difference = measured value − design value, in millimetres. Record the total station model, prism constant, control points, independent check residuals, surveyor and checker. Measured differences are entered in the Meas. dX and Meas. dY columns; site E/N coordinates are recorded separately and are not mixed with local X/Y.

7 Revision and levels: drawings and this booklet are of the same revision. Print A4 landscape at actual size. This booklet gives plan setting-out only; pile head levels, pile head connections and installation tolerances follow the associated design (TO BE COORDINATED). Coordinates are printed to the recording precision of the model; permissible deviations are those of the associated design.

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 2/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
C001	0.000000	0.000000	AX01	0.0	0.0	01	0.0	02	5800.0			
C002	0.000000	6.000000	AX01	0.0	6000.0	01	6000.0	02	8345.1			
C003	0.000000	12.000000	AX01	0.0	12000.0	01	12000.0	02	13328.2			
C004	0.000000	18.300000	AX01	0.0	18300.0	01	18300.0	02	19197.1			
C005	5.800000	0.000000	AX02	0.0	0.0	02	0.0	03	5800.0			
C006	5.800000	6.000000	AX02	0.0	6000.0	02	6000.0	03	8345.1			
C007	5.800000	12.000000	AX02	0.0	12000.0	02	12000.0	03	13328.2			
C008	5.800000	18.300000	AX02	0.0	18300.0	02	18300.0	03	19197.1			
C009	11.600000	0.000000	AX03	0.0	0.0	03	0.0	04	5800.0			
C010	11.600000	6.000000	AX03	0.0	6000.0	03	6000.0	04	8345.1			
C011	11.600000	12.000000	AX03	0.0	12000.0	03	12000.0	04	13328.2			
C012	11.600000	18.300000	AX03	0.0	18300.0	03	18300.0	04	19197.1			
C013	17.400000	0.000000	AX04	0.0	0.0	04	0.0	05	5800.0			
C014	17.400000	6.000000	AX04	0.0	6000.0	04	6000.0	05	8345.1			
C015	17.400000	12.000000	AX04	0.0	12000.0	04	12000.0	05	13328.2			
C016	17.400000	18.300000	AX04	0.0	18300.0	04	18300.0	05	19197.1			
C017	23.200000	0.000000	AX05	0.0	0.0	05	0.0	06	5800.0			
C018	23.200000	6.000000	AX05	0.0	6000.0	05	6000.0	06	8345.1			
C019	23.200000	12.000000	AX05	0.0	12000.0	05	12000.0	06	13328.2			
C020	23.200000	18.300000	AX05	0.0	18300.0	05	18300.0	06	19197.1			
C021	29.000000	0.000000	AX06	0.0	0.0	06	0.0	07	6900.0			
C022	29.000000	6.000000	AX06	0.0	6000.0	06	6000.0	07	9143.9			
C023	29.000000	12.000000	AX06	0.0	12000.0	06	12000.0	07	13842.3			
C024	29.000000	18.300000	AX06	0.0	18300.0	06	18300.0	07	19557.6			
C025	35.900000	0.000000	AX07	0.0	0.0	07	0.0	08	5800.0			
C026	35.900000	6.000000	AX07	0.0	6000.0	07	6000.0	08	8345.1			
C027	35.900000	12.000000	AX07	0.0	12000.0	07	12000.0	08	13328.2			
C028	35.900000	18.300000	AX07	0.0	18300.0	07	18300.0	08	19197.1			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
C029	41.700000	0.000000	AX08	0.0	0.0	08	0.0	09	5800.0			
C030	41.700000	6.000000	AX08	0.0	6000.0	08	6000.0	09	8345.1			
C031	41.700000	12.000000	AX08	0.0	12000.0	08	12000.0	09	13328.2			
C032	41.700000	18.300000	AX08	0.0	18300.0	08	18300.0	09	19197.1			
C033	47.500000	0.000000	AX09	0.0	0.0	09	0.0	10	5800.0			
C034	47.500000	6.000000	AX09	0.0	6000.0	09	6000.0	10	8345.1			
C035	47.500000	12.000000	AX09	0.0	12000.0	09	12000.0	10	13328.2			
C036	47.500000	18.300000	AX09	0.0	18300.0	09	18300.0	10	19197.1			
C037	53.300000	0.000000	AX10	0.0	0.0	10	0.0	11	5800.0			
C038	53.300000	6.000000	AX10	0.0	6000.0	10	6000.0	11	8345.1			
C039	53.300000	12.000000	AX10	0.0	12000.0	10	12000.0	11	13328.2			
C040	53.300000	18.300000	AX10	0.0	18300.0	10	18300.0	11	19197.1			
C041	59.100000	0.000000	AX11	0.0	0.0	11	0.0	12	5800.0			
C042	59.100000	6.000000	AX11	0.0	6000.0	11	6000.0	12	8345.1			
C043	59.100000	12.000000	AX11	0.0	12000.0	11	12000.0	12	13328.2			
C044	59.100000	18.300000	AX11	0.0	18300.0	11	18300.0	12	19197.1			
C045	64.900000	0.000000	AX12	0.0	0.0	12	0.0	13	6900.0			
C046	64.900000	6.000000	AX12	0.0	6000.0	12	6000.0	13	9143.9			
C047	64.900000	12.000000	AX12	0.0	12000.0	12	12000.0	13	13842.3			
C048	64.900000	18.300000	AX12	0.0	18300.0	12	18300.0	13	19557.6			
C049	71.800000	0.000000	AX13	0.0	0.0	13	0.0	14	5800.0			
C050	71.800000	6.000000	AX13	0.0	6000.0	13	6000.0	14	8345.1			
C051	71.800000	12.000000	AX13	0.0	12000.0	13	12000.0	14	13328.2			
C052	71.800000	18.300000	AX13	0.0	18300.0	13	18300.0	14	19197.1			
C053	77.600000	0.000000	AX14	0.0	0.0	14	0.0	15	5800.0			
C054	77.600000	6.000000	AX14	0.0	6000.0	14	6000.0	15	8345.1			
C055	77.600000	12.000000	AX14	0.0	12000.0	14	12000.0	15	13328.2			
C056	77.600000	18.300000	AX14	0.0	18300.0	14	18300.0	15	19197.1			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 4/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
C057	83.400000	0.000000	AX15	0.0	0.0	15	0.0	16	5800.0			
C058	83.400000	6.000000	AX15	0.0	6000.0	15	6000.0	16	8345.1			
C059	83.400000	12.000000	AX15	0.0	12000.0	15	12000.0	16	13328.2			
C060	83.400000	18.300000	AX15	0.0	18300.0	15	18300.0	16	19197.1			
C061	89.200000	0.000000	AX16	0.0	0.0	16	0.0	17	5800.0			
C062	89.200000	6.000000	AX16	0.0	6000.0	16	6000.0	17	8345.1			
C063	89.200000	12.000000	AX16	0.0	12000.0	16	12000.0	17	13328.2			
C064	89.200000	18.300000	AX16	0.0	18300.0	16	18300.0	17	19197.1			
C065	95.000000	0.000000	AX17	0.0	0.0	17	0.0	18	5800.0			
C066	95.000000	6.000000	AX17	0.0	6000.0	17	6000.0	18	8345.1			
C067	95.000000	12.000000	AX17	0.0	12000.0	17	12000.0	18	13328.2			
C068	95.000000	18.300000	AX17	0.0	18300.0	17	18300.0	18	19197.1			
C069	100.800000	0.000000	AX18	0.0	0.0	18	0.0	19	5800.0			
C070	100.800000	6.000000	AX18	0.0	6000.0	18	6000.0	19	8345.1			
C071	100.800000	12.000000	AX18	0.0	12000.0	18	12000.0	19	13328.2			
C072	100.800000	18.300000	AX18	0.0	18300.0	18	18300.0	19	19197.1			
C073	106.600000	0.000000	AX19	0.0	0.0	18	5800.0	19	0.0			
C074	106.600000	6.000000	AX19	0.0	6000.0	18	8345.1	19	6000.0			
C075	106.600000	12.000000	AX19	0.0	12000.0	18	13328.2	19	12000.0			
C076	106.600000	18.300000	AX19	0.0	18300.0	18	19197.1	19	18300.0			
F001	0.000000	1.000000	AX01	0.0	1000.0	01	1000.0	02	5885.6			
F002	0.000000	2.000000	AX01	0.0	2000.0	01	2000.0	02	6135.1			
F003	0.000000	3.000000	AX01	0.0	3000.0	01	3000.0	02	6529.9			
F004	0.000000	4.000000	AX01	0.0	4000.0	01	4000.0	02	7045.6			
F005	0.000000	5.000000	AX01	0.0	5000.0	01	5000.0	02	7657.7			
F006	3.350000	2.000000	AX01	3350.0	2000.0	01	3901.6	02	3162.7			
F007	3.350000	3.500000	AX01	3350.0	3500.0	01	4844.8	02	4272.3			
F008	5.300000	2.000000	AX01	5300.0	2000.0	01	5664.8	02	2061.6			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 5/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F009	5.300000	3.500000	AX01	5300.0	3500.0	01	6351.4	02	3535.5			
F010	5.800000	1.000000	AX02	0.0	1000.0	02	1000.0	03	5885.6			
F011	5.800000	2.000000	AX02	0.0	2000.0	02	2000.0	03	6135.1			
F012	5.800000	3.000000	AX02	0.0	3000.0	02	3000.0	03	6529.9			
F013	5.800000	4.000000	AX02	0.0	4000.0	02	4000.0	03	7045.6			
F014	5.800000	5.000000	AX02	0.0	5000.0	02	5000.0	03	7657.7			
F015	7.707143	2.000000	AX02	1907.1	2000.0	02	2763.5	03	4376.6			
F016	7.707143	3.500000	AX02	1907.1	3500.0	02	3985.9	03	5234.9			
F017	9.614286	2.000000	AX02	3814.3	2000.0	02	4306.8	03	2818.3			
F018	9.614286	3.500000	AX02	3814.3	3500.0	02	5176.8	03	4024.1			
F019	11.600000	1.000000	AX03	0.0	1000.0	03	1000.0	04	5885.6			
F020	11.600000	2.000000	AX03	0.0	2000.0	03	2000.0	04	6135.1			
F021	11.600000	3.000000	AX03	0.0	3000.0	03	3000.0	04	6529.9			
F022	11.600000	4.000000	AX03	0.0	4000.0	03	4000.0	04	7045.6			
F023	11.600000	5.000000	AX03	0.0	5000.0	03	5000.0	04	7657.7			
F024	13.214286	2.000000	AX03	1614.3	2000.0	03	2570.2	04	4639.0			
F025	13.214286	3.500000	AX03	1614.3	3500.0	03	3854.3	04	5456.2			
F026	15.121429	2.000000	AX03	3521.4	2000.0	03	4049.7	04	3031.8			
F027	15.121429	3.500000	AX03	3521.4	3500.0	03	4964.9	04	4176.3			
F028	17.400000	1.000000	AX04	0.0	1000.0	04	1000.0	05	5885.6			
F029	17.400000	2.000000	AX04	0.0	2000.0	04	2000.0	05	6135.1			
F030	17.400000	3.000000	AX04	0.0	3000.0	04	3000.0	05	6529.9			
F031	17.400000	4.000000	AX04	0.0	4000.0	04	4000.0	05	7045.6			
F032	17.400000	5.000000	AX04	0.0	5000.0	04	5000.0	05	7657.7			
F033	19.428571	2.000000	AX04	2028.6	2000.0	04	2848.7	05	4268.9			
F034	19.428571	3.500000	AX04	2028.6	3500.0	04	4045.4	05	5145.3			
F035	21.258000	2.000000	AX04	3858.0	2000.0	04	4345.6	05	2787.7			
F036	21.258000	3.500000	AX04	3858.0	3500.0	04	5209.0	05	4002.7			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 6/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F037	23.200000	1.000000	AX05	0.0	1000.0	05	1000.0	06	5885.6			
F038	23.200000	2.000000	AX05	0.0	2000.0	05	2000.0	06	6135.1			
F039	23.200000	3.000000	AX05	0.0	3000.0	05	3000.0	06	6529.9			
F040	23.200000	4.000000	AX05	0.0	4000.0	05	4000.0	06	7045.6			
F041	23.200000	5.000000	AX05	0.0	5000.0	05	5000.0	06	7657.7			
F042	25.042857	2.000000	AX05	1842.9	2000.0	05	2719.6	06	4433.8			
F043	25.042857	3.500000	AX05	1842.9	3500.0	05	3955.5	06	5282.9			
F044	26.842857	2.000000	AX05	3642.9	2000.0	05	4155.8	06	2941.6			
F045	26.842857	3.500000	AX05	3642.9	3500.0	05	5051.8	06	4111.4			
F046	29.000000	1.000000	AX06	0.0	1000.0	06	1000.0	07	6972.1			
F047	29.000000	2.000000	AX06	0.0	2000.0	06	2000.0	07	7184.0			
F048	29.000000	3.000000	AX06	0.0	3000.0	06	3000.0	07	7524.0			
F049	29.000000	4.000000	AX06	0.0	4000.0	06	4000.0	07	7975.6			
F050	29.000000	5.000000	AX06	0.0	5000.0	06	5000.0	07	8521.2			
F051	31.257143	2.000000	AX06	2257.1	2000.0	06	3015.7	07	5055.3			
F052	31.257143	3.500000	AX06	2257.1	3500.0	06	4164.7	07	5814.3			
F053	32.457143	2.000000	AX06	3457.1	2000.0	06	3994.0	07	3981.6			
F054	32.457143	3.500000	AX06	3457.1	3500.0	06	4919.5	07	4909.5			
F055	34.257143	2.000000	AX06	5257.1	2000.0	06	5624.7	07	2588.2			
F056	34.257143	3.500000	AX06	5257.1	3500.0	06	6315.7	07	3866.4			
F057	35.900000	1.000000	AX07	0.0	1000.0	07	1000.0	08	5885.6			
F058	35.900000	2.000000	AX07	0.0	2000.0	07	2000.0	08	6135.1			
F059	35.900000	3.000000	AX07	0.0	3000.0	07	3000.0	08	6529.9			
F060	35.900000	4.000000	AX07	0.0	4000.0	07	4000.0	08	7045.6			
F061	35.900000	5.000000	AX07	0.0	5000.0	07	5000.0	08	7657.7			
F062	38.071429	2.000000	AX07	2171.4	2000.0	07	2952.1	08	4143.3			
F063	38.071429	3.500000	AX07	2171.4	3500.0	07	4118.9	08	5041.5			
F064	39.871429	2.000000	AX07	3971.4	2000.0	07	4446.6	08	2709.9			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 7/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F065	39.871429	3.500000	AX07	3971.4	3500.0	07	5293.6	08	3948.9			
F066	41.700000	1.000000	AX08	0.0	1000.0	08	1000.0	09	5885.6			
F067	41.700000	2.000000	AX08	0.0	2000.0	08	2000.0	09	6135.1			
F068	41.700000	3.000000	AX08	0.0	3000.0	08	3000.0	09	6529.9			
F069	41.700000	4.000000	AX08	0.0	4000.0	08	4000.0	09	7045.6			
F070	41.700000	5.000000	AX08	0.0	5000.0	08	5000.0	09	7657.7			
F071	43.642000	2.000000	AX08	1942.0	2000.0	08	2787.7	09	4345.6			
F072	43.642000	3.500000	AX08	1942.0	3500.0	08	4002.7	09	5209.0			
F073	45.485714	2.000000	AX08	3785.7	2000.0	08	4281.5	09	2838.5			
F074	45.485714	3.500000	AX08	3785.7	3500.0	08	5155.7	09	4038.2			
F075	47.500000	1.000000	AX09	0.0	1000.0	09	1000.0	10	5885.6			
F076	47.500000	2.000000	AX09	0.0	2000.0	09	2000.0	10	6135.1			
F077	47.500000	3.000000	AX09	0.0	3000.0	09	3000.0	10	6529.9			
F078	47.500000	4.000000	AX09	0.0	4000.0	09	4000.0	10	7045.6			
F079	47.500000	5.000000	AX09	0.0	5000.0	09	5000.0	10	7657.7			
F080	49.442000	2.000000	AX09	1942.0	2000.0	09	2787.7	10	4345.6			
F081	49.442000	3.500000	AX09	1942.0	3500.0	09	4002.7	10	5209.0			
F082	51.358000	2.000000	AX09	3858.0	2000.0	09	4345.6	10	2787.7			
F083	51.358000	3.500000	AX09	3858.0	3500.0	09	5209.0	10	4002.7			
F084	53.300000	1.000000	AX10	0.0	1000.0	10	1000.0	11	5885.6			
F085	53.300000	2.000000	AX10	0.0	2000.0	10	2000.0	11	6135.1			
F086	53.300000	3.000000	AX10	0.0	3000.0	10	3000.0	11	6529.9			
F087	53.300000	4.000000	AX10	0.0	4000.0	10	4000.0	11	7045.6			
F088	53.300000	5.000000	AX10	0.0	5000.0	10	5000.0	11	7657.7			
F089	55.300000	2.000000	AX10	2000.0	2000.0	10	2828.4	11	4294.2			
F090	55.300000	3.500000	AX10	2000.0	3500.0	10	4031.1	11	5166.2			
F091	57.207143	2.000000	AX10	3907.1	2000.0	10	4389.3	11	2753.7			
F092	57.207143	3.500000	AX10	3907.1	3500.0	10	5245.5	11	3979.1			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 8/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F093	59.100000	1.000000	AX11	0.0	1000.0	11	1000.0	12	5885.6			
F094	59.100000	2.000000	AX11	0.0	2000.0	11	2000.0	12	6135.1			
F095	59.100000	3.000000	AX11	0.0	3000.0	11	3000.0	12	6529.9			
F096	59.100000	4.000000	AX11	0.0	4000.0	11	4000.0	12	7045.6			
F097	59.100000	5.000000	AX11	0.0	5000.0	11	5000.0	12	7657.7			
F098	60.914286	2.000000	AX11	1814.3	2000.0	11	2700.3	12	4459.4			
F099	60.914286	3.500000	AX11	1814.3	3500.0	11	3942.3	12	5304.3			
F100	62.714286	2.000000	AX11	3614.3	2000.0	11	4130.7	12	2962.7			
F101	62.714286	3.500000	AX11	3614.3	3500.0	11	5031.2	12	4126.4			
F102	64.900000	1.000000	AX12	0.0	1000.0	12	1000.0	13	6972.1			
F103	64.900000	2.000000	AX12	0.0	2000.0	12	2000.0	13	7184.0			
F104	64.900000	3.000000	AX12	0.0	3000.0	12	3000.0	13	7524.0			
F105	64.900000	4.000000	AX12	0.0	4000.0	12	4000.0	13	7975.6			
F106	64.900000	5.000000	AX12	0.0	5000.0	12	5000.0	13	8521.2			
F107	66.528571	2.000000	AX12	1628.6	2000.0	12	2579.2	13	5638.1			
F108	66.528571	3.500000	AX12	1628.6	3500.0	12	3860.3	13	6327.6			
F109	68.328571	2.000000	AX12	3428.6	2000.0	12	3969.3	13	4006.3			
F110	68.328571	3.500000	AX12	3428.6	3500.0	12	4899.5	13	4929.6			
F111	69.528571	2.000000	AX12	4628.6	2000.0	12	5042.2	13	3026.4			
F112	69.528571	3.500000	AX12	4628.6	3500.0	12	5802.9	13	4172.5			
F113	71.800000	1.000000	AX13	0.0	1000.0	13	1000.0	14	5885.6			
F114	71.800000	2.000000	AX13	0.0	2000.0	13	2000.0	14	6135.1			
F115	71.800000	3.000000	AX13	0.0	3000.0	13	3000.0	14	6529.9			
F116	71.800000	4.000000	AX13	0.0	4000.0	13	4000.0	14	7045.6			
F117	71.800000	5.000000	AX13	0.0	5000.0	13	5000.0	14	7657.7			
F118	73.942857	2.000000	AX13	2142.9	2000.0	13	2931.2	14	4168.3			
F119	73.942857	3.500000	AX13	2142.9	3500.0	13	4103.9	14	5062.1			
F120	75.742857	2.000000	AX13	3942.9	2000.0	13	4421.1	14	2729.3			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Rev A | 9/10

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F121	75.742857	3.500000	AX13	3942.9	3500.0	13	5272.2	14	3962.2			
F122	77.600000	1.000000	AX14	0.0	1000.0	14	1000.0	15	5885.6			
F123	77.600000	2.000000	AX14	0.0	2000.0	14	2000.0	15	6135.1			
F124	77.600000	3.000000	AX14	0.0	3000.0	14	3000.0	15	6529.9			
F125	77.600000	4.000000	AX14	0.0	4000.0	14	4000.0	15	7045.6			
F126	77.600000	5.000000	AX14	0.0	5000.0	14	5000.0	15	7657.7			
F127	80.157143	2.000000	AX14	2557.1	2000.0	14	3246.4	15	3810.0			
F128	80.157143	3.500000	AX14	2557.1	3500.0	14	4334.6	15	4771.4			
F129	81.357143	2.000000	AX14	3757.1	2000.0	14	4256.3	15	2858.9			
F130	81.357143	3.500000	AX14	3757.1	3500.0	14	5134.8	15	4052.6			
F131	83.400000	1.000000	AX15	0.0	1000.0	15	1000.0	16	5885.6			
F132	83.400000	2.000000	AX15	0.0	2000.0	15	2000.0	16	6135.1			
F133	83.400000	3.000000	AX15	0.0	3000.0	15	3000.0	16	6529.9			
F134	83.400000	4.000000	AX15	0.0	4000.0	15	4000.0	16	7045.6			
F135	83.400000	5.000000	AX15	0.0	5000.0	15	5000.0	16	7657.7			
F136	85.664286	2.000000	AX15	2264.3	2000.0	15	3021.1	16	4062.2			
F137	85.664286	3.500000	AX15	2264.3	3500.0	15	4168.6	16	4975.1			
F138	87.571429	2.000000	AX15	4171.4	2000.0	15	4626.1	16	2579.2			
F139	87.571429	3.500000	AX15	4171.4	3500.0	15	5445.3	16	3860.3			
F140	89.200000	1.000000	AX16	0.0	1000.0	16	1000.0	17	5885.6			
F141	89.200000	2.000000	AX16	0.0	2000.0	16	2000.0	17	6135.1			
F142	89.200000	3.000000	AX16	0.0	3000.0	16	3000.0	17	6529.9			
F143	89.200000	4.000000	AX16	0.0	4000.0	16	4000.0	17	7045.6			
F144	89.200000	5.000000	AX16	0.0	5000.0	16	5000.0	17	7657.7			
F145	90.571429	2.000000	AX16	1371.4	2000.0	16	2425.0	17	4859.2			
F146	90.571429	3.500000	AX16	1371.4	3500.0	16	3759.1	17	5644.7			
F147	92.478572	2.000000	AX16	3278.6	2000.0	16	3840.4	17	3218.3			
F148	92.478572	3.500000	AX16	3278.6	3500.0	16	4795.7	17	4313.7			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.

Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

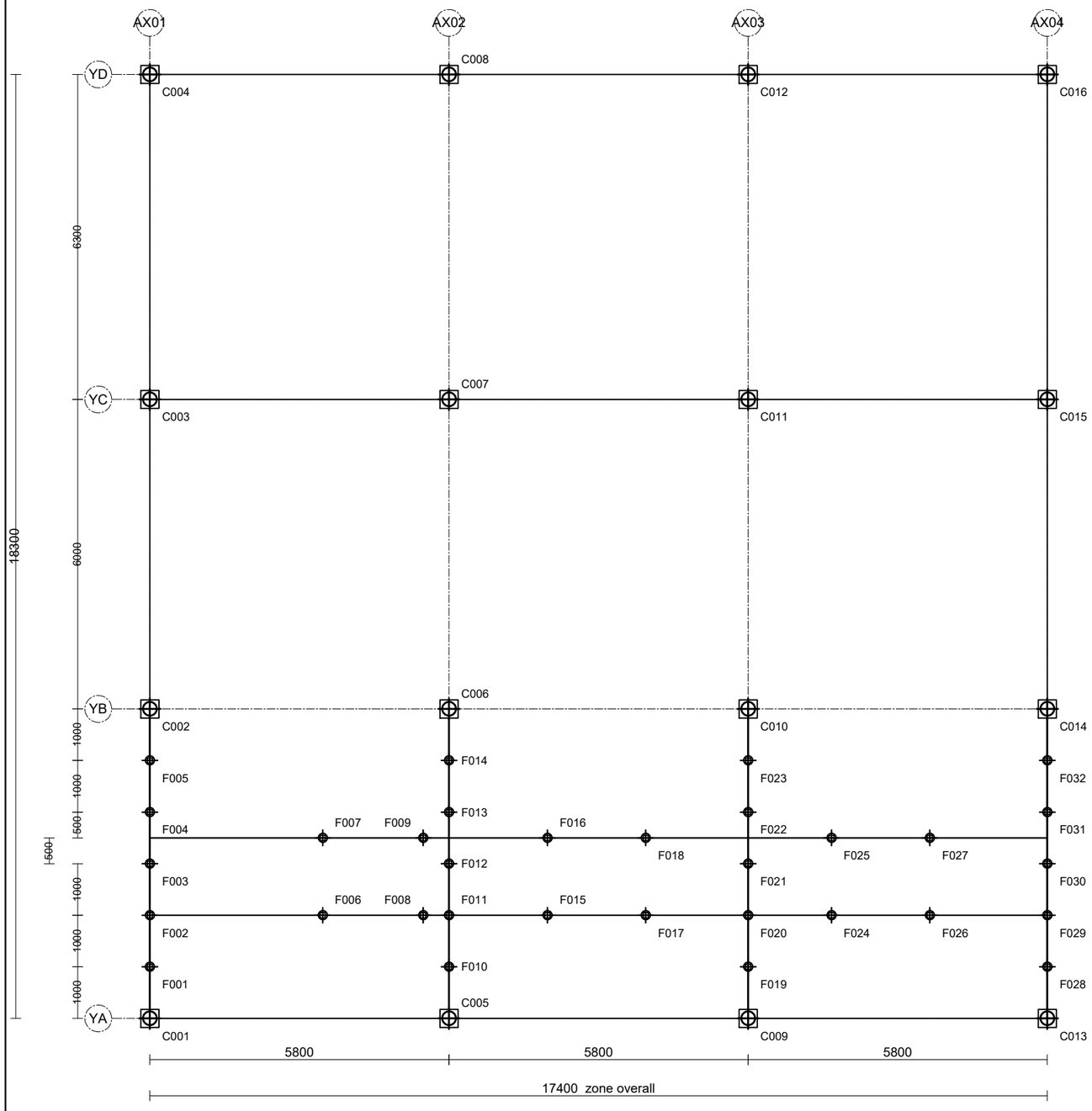
K&K Data foundation support setting-out | Site setting-out and tape-check record sheet

Project local plane coordinates; X along the building length, Y along the building width. No elevation column; C = main column point, F = floor stub column point.
Axes A and B denote the intersection of that axis with YA (Y = 0); all other points lie on the +Y side of the baseline. Check the zone plan and point number first.

Point	Project X m	Project Y m	From axis	Offset X mm	Offset Y mm	Axis A	To A mm	Axis B	To B mm	Meas. dX mm	Meas. dY mm	Checked
F149	95.000000	1.000000	AX17	0.0	1000.0	17	1000.0	18	5885.6			
F150	95.000000	2.000000	AX17	0.0	2000.0	17	2000.0	18	6135.1			
F151	95.000000	3.000000	AX17	0.0	3000.0	17	3000.0	18	6529.9			
F152	95.000000	4.000000	AX17	0.0	4000.0	17	4000.0	18	7045.6			
F153	95.000000	5.000000	AX17	0.0	5000.0	17	5000.0	18	7657.7			
F154	96.785714	2.000000	AX17	1785.7	2000.0	17	2681.2	18	4484.9			
F155	96.785714	3.500000	AX17	1785.7	3500.0	17	3929.2	18	5325.8			
F156	97.985714	2.000000	AX17	2985.7	2000.0	17	3593.7	18	3452.6			
F157	97.985714	3.500000	AX17	2985.7	3500.0	17	4600.5	18	4491.1			
F158	100.800000	1.000000	AX18	0.0	1000.0	18	1000.0	19	5885.6			
F159	100.800000	2.000000	AX18	0.0	2000.0	18	2000.0	19	6135.1			
F160	100.800000	3.000000	AX18	0.0	3000.0	18	3000.0	19	6529.9			
F161	100.800000	4.000000	AX18	0.0	4000.0	18	4000.0	19	7045.6			
F162	100.800000	5.000000	AX18	0.0	5000.0	18	5000.0	19	7657.7			
F163	103.000000	2.000000	AX18	2200.0	2000.0	18	2973.2	19	4118.3			
F164	103.000000	3.500000	AX18	2200.0	3500.0	18	4134.0	19	5021.0			
F165	104.800000	2.000000	AX18	4000.0	2000.0	18	4472.1	19	2690.7			
F166	104.800000	3.500000	AX18	4000.0	3500.0	18	5315.1	19	3935.7			
F167	106.600000	1.000000	AX19	0.0	1000.0	18	5885.6	19	1000.0			
F168	106.600000	2.000000	AX19	0.0	2000.0	18	6135.1	19	2000.0			
F169	106.600000	3.000000	AX19	0.0	3000.0	18	6529.9	19	3000.0			
F170	106.600000	4.000000	AX19	0.0	4000.0	18	7045.6	19	4000.0			
F171	106.600000	5.000000	AX19	0.0	5000.0	18	7657.7	19	5000.0			

Horizontal distances; on sloping ground tape in horizontal steps. Measured difference = measured local coordinate − design local coordinate; limits per the associated design requirements (TO BE COORDINATED); the number of digits in the table is the recording precision.
Print A4 landscape at actual size. Establish and check the site reference before use. Surveyor: _____ Checker: _____ Date: _____

inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



Off-axis posts occur only on the Y = 2000 and Y = 3500 joist lines; the chain above applies to both lines.

ZONE A POINT SCHEDULE

16 main column + 32 floor post = 48 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C001	0.000	0.000	MC	AX01/YA
C002	0.000	6000.000	MC	AX01/YB
C003	0.000	12000.000	MC	AX01/YC
C004	0.000	18300.000	MC	AX01/YD
C005	5800.000	0.000	MC	AX02/YA
C006	5800.000	6000.000	MC	AX02/YB
C007	5800.000	12000.000	MC	AX02/YC
C008	5800.000	18300.000	MC	AX02/YD
C009	11600.000	0.000	MC	AX03/YA
C010	11600.000	6000.000	MC	AX03/YB
C011	11600.000	12000.000	MC	AX03/YC
C012	11600.000	18300.000	MC	AX03/YD
C013	17400.000	0.000	MC	AX04/YA
C014	17400.000	6000.000	MC	AX04/YB
C015	17400.000	12000.000	MC	AX04/YC
C016	17400.000	18300.000	MC	AX04/YD
F001	0.000	1000.000	FP	AX01/+1000Y
F002	0.000	2000.000	FP	AX01/+2000Y
F003	0.000	3000.000	FP	AX01/+3000Y
F004	0.000	4000.000	FP	AX01/+4000Y
F005	0.000	5000.000	FP	AX01/+5000Y
F006	3350.000	2000.000	FP	B01/+3350.000X/+2000Y
F007	3350.000	3500.000	FP	B01/+3350.000X/+3500Y
F008	5300.000	2000.000	FP	B01/+5300.000X/+2000Y
F009	5300.000	3500.000	FP	B01/+5300.000X/+3500Y
F010	5800.000	1000.000	FP	AX02/+1000Y
F011	5800.000	2000.000	FP	AX02/+2000Y
F012	5800.000	3000.000	FP	AX02/+3000Y
F013	5800.000	4000.000	FP	AX02/+4000Y
F014	5800.000	5000.000	FP	AX02/+5000Y
F015	7707.143	2000.000	FP	B02/+1907.143X/+2000Y
F016	7707.143	3500.000	FP	B02/+1907.143X/+3500Y
F017	9614.286	2000.000	FP	B02/+3814.286X/+2000Y
F018	9614.286	3500.000	FP	B02/+3814.286X/+3500Y
F019	11600.000	1000.000	FP	AX03/+1000Y
F020	11600.000	2000.000	FP	AX03/+2000Y
F021	11600.000	3000.000	FP	AX03/+3000Y
F022	11600.000	4000.000	FP	AX03/+4000Y
F023	11600.000	5000.000	FP	AX03/+5000Y
F024	13214.286	2000.000	FP	B03/+1614.286X/+2000Y
F025	13214.286	3500.000	FP	B03/+1614.286X/+3500Y
F026	15121.428	2000.000	FP	B03/+3521.428X/+2000Y
F027	15121.428	3500.000	FP	B03/+3521.428X/+3500Y
F028	17400.000	1000.000	FP	AX04/+1000Y
F029	17400.000	2000.000	FP	AX04/+2000Y
F030	17400.000	3000.000	FP	AX04/+3000Y
F031	17400.000	4000.000	FP	AX04/+4000Y
F032	17400.000	5000.000	FP	AX04/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX01/YA to AX04/YA	17400	0	17400.0
AX01/YA to AX04/YB	17400	6000	18405.4
AX01/YA to AX04/YD	17400	18300	25251.7
AX01/YD to AX04/YA	17400	-18300	25251.7

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

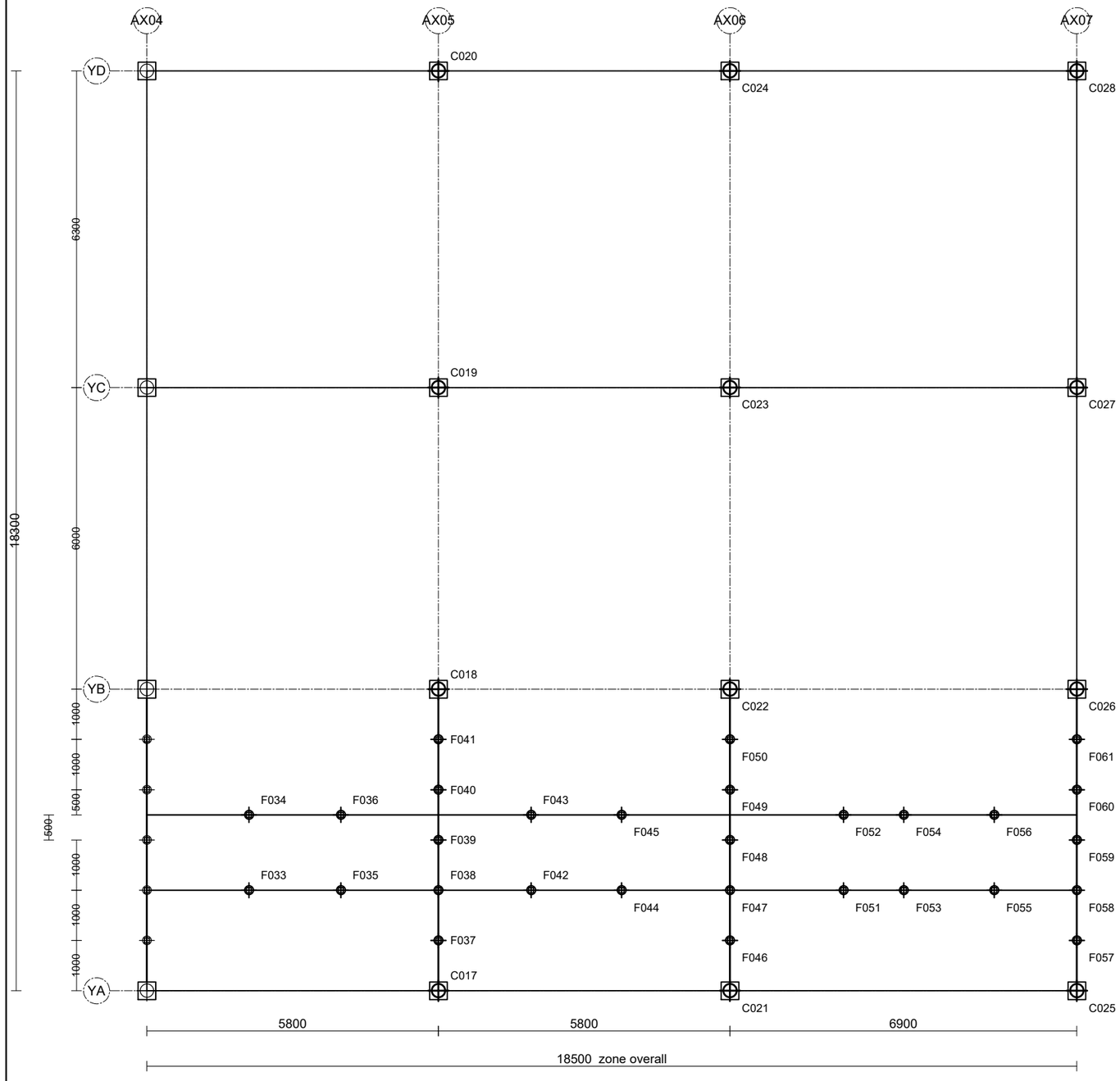
SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
PIN001-FB01	BP 200x300 built-up	edge girder along Y	5	F001, F002, F003, F004, F005
PIN001-FB01-FRAME02	BP 200x300 built-up	edge girder along Y	5	F010, F011, F012, F013, F014
PIN001-FJ05-R	HN250x125x6x9	joist along X	2	F006, F008
PIN001-FJ08-R	HN250x125x6x9	joist along X	2	F007, F009
WF-JO-B02-FJ05-R	HN250x125x6x9	joist along X	2	F015, F017
WF-JO-B02-FJ08-R	HN250x125x6x9	joist along X	2	F016, F018
WF-JO-B03-FJ05-R	HN250x125x6x9	joist along X	2	F024, F026
WF-JO-B03-FJ08-R	HN250x125x6x9	joist along X	2	F025, F027
WF-PB-A03-FB01	BP 200x300 built-up	edge girder along Y	5	F019, F020, F021, F022, F023
WF-PB-A04-FB01	BP 200x300 built-up	edge girder along Y	5	F028, F029, F030, F031, F032
16 main columns	HW350x350x12x19	column served directly	16	C-numbers in the schedule above

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE A SETTING-OUT PLAN X = 0 TO 17400

SHEET	SCALE	REVISION
FS-03	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 3 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



ZONE B POINT SCHEDULE

12 main column + 29 floor post = 41 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C017	23200.000	0.000	MC	AX05/YA
C018	23200.000	6000.000	MC	AX05/YB
C019	23200.000	12000.000	MC	AX05/YC
C020	23200.000	18300.000	MC	AX05/YD
C021	29000.000	0.000	MC	AX06/YA
C022	29000.000	6000.000	MC	AX06/YB
C023	29000.000	12000.000	MC	AX06/YC
C024	29000.000	18300.000	MC	AX06/YD
C025	35900.000	0.000	MC	AX07/YA
C026	35900.000	6000.000	MC	AX07/YB
C027	35900.000	12000.000	MC	AX07/YC
C028	35900.000	18300.000	MC	AX07/YD
F033	19428.571	2000.000	FP	B04/+2028.571X/+2000Y
F034	19428.571	3500.000	FP	B04/+2028.571X/+3500Y
F035	21258.000	2000.000	FP	B04/+3858.000X/+2000Y
F036	21258.000	3500.000	FP	B04/+3858.000X/+3500Y
F037	23200.000	1000.000	FP	AX05/+1000Y
F038	23200.000	2000.000	FP	AX05/+2000Y
F039	23200.000	3000.000	FP	AX05/+3000Y
F040	23200.000	4000.000	FP	AX05/+4000Y
F041	23200.000	5000.000	FP	AX05/+5000Y
F042	25042.857	2000.000	FP	B05/+1842.857X/+2000Y
F043	25042.857	3500.000	FP	B05/+1842.857X/+3500Y
F044	26842.857	2000.000	FP	B05/+3642.857X/+2000Y
F045	26842.857	3500.000	FP	B05/+3642.857X/+3500Y
F046	29000.000	1000.000	FP	AX06/+1000Y
F047	29000.000	2000.000	FP	AX06/+2000Y
F048	29000.000	3000.000	FP	AX06/+3000Y
F049	29000.000	4000.000	FP	AX06/+4000Y
F050	29000.000	5000.000	FP	AX06/+5000Y
F051	31257.143	2000.000	FP	B06/+2257.143X/+2000Y
F052	31257.143	3500.000	FP	B06/+2257.143X/+3500Y
F053	32457.143	2000.000	FP	B06/+3457.143X/+2000Y
F054	32457.143	3500.000	FP	B06/+3457.143X/+3500Y
F055	34257.143	2000.000	FP	B06/+5257.143X/+2000Y
F056	34257.143	3500.000	FP	B06/+5257.143X/+3500Y
F057	35900.000	1000.000	FP	AX07/+1000Y
F058	35900.000	2000.000	FP	AX07/+2000Y
F059	35900.000	3000.000	FP	AX07/+3000Y
F060	35900.000	4000.000	FP	AX07/+4000Y
F061	35900.000	5000.000	FP	AX07/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX04/YA to AX07/YA	18500	0	18500.0
AX04/YA to AX07/YB	18500	6000	19448.7
AX04/YA to AX07/YD	18500	18300	26021.9
AX04/YD to AX07/YA	18500	-18300	26021.9
AX04/YA to AX07/YD	18500	18300	26021.9
AX04/YD to AX07/YA	18500	-18300	26021.9

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

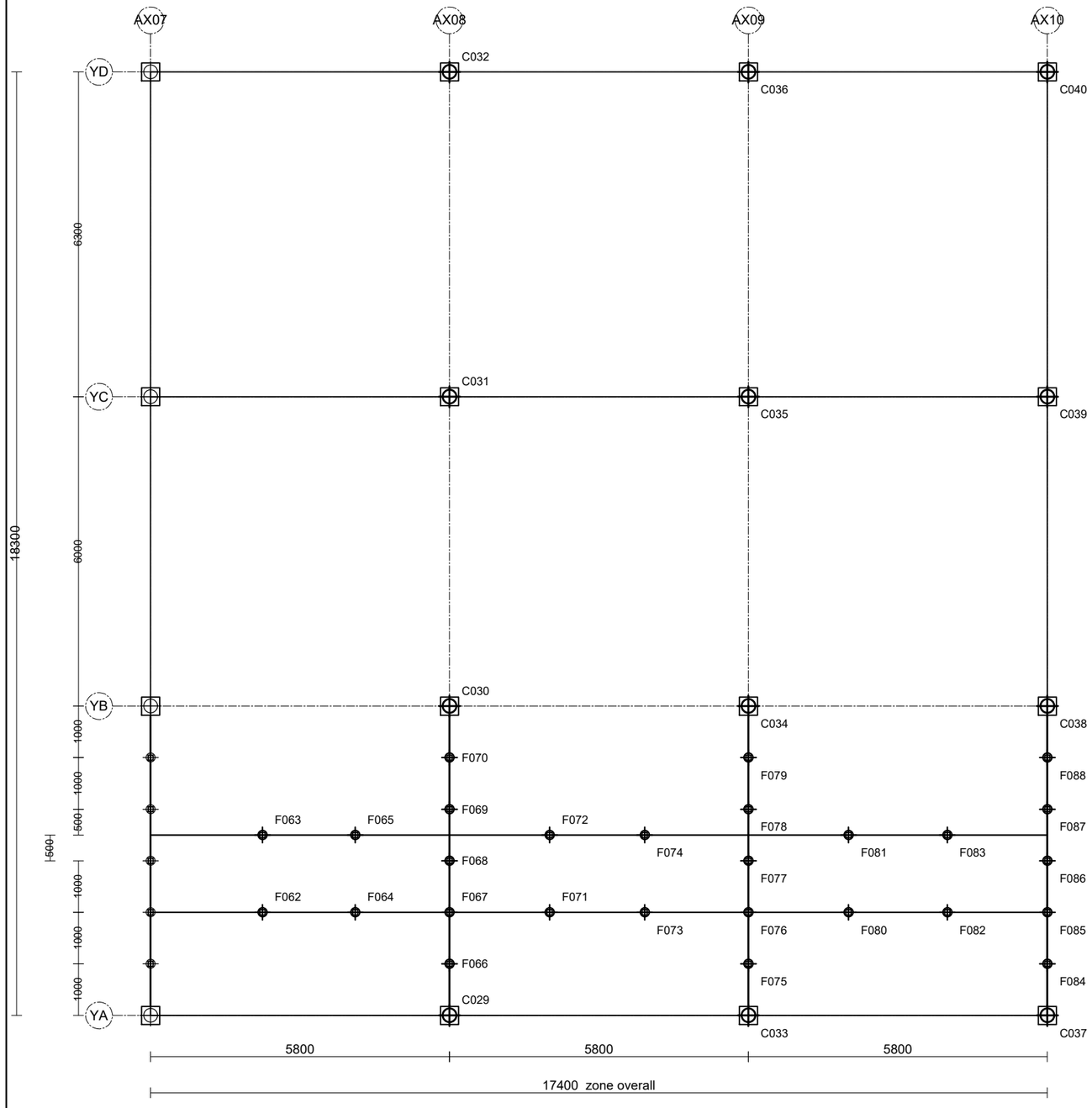
SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
WF-JO-B04-FJ05-R	HN250x125x6x9	joist along X	2	F033, F035
WF-JO-B04-FJ08-R	HN250x125x6x9	joist along X	2	F034, F036
WF-JO-B05-FJ05-R	HN250x125x6x9	joist along X	2	F042, F044
WF-JO-B05-FJ08-R	HN250x125x6x9	joist along X	2	F043, F045
WF-JO-B06-FJ05-R	HN250x125x6x9	joist along X	3	F051, F053, F055
WF-JO-B06-FJ08-R	HN250x125x6x9	joist along X	3	F052, F054, F056
WF-PB-A05-FB01	BP 200x300 built-up	edge girder along Y	5	F037, F038, F039, F040, F041
WF-PB-A06-FB01	BP 200x300 built-up	edge girder along Y	5	F046, F047, F048, F049, F050
WF-PB-A07-FB01	BP 200x300 built-up	edge girder along Y	5	F057, F058, F059, F060, F061
12 main columns	HW350x350x12x19	column served directly	12	C-numbers in the schedule above

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE B SETTING-OUT PLAN X = 17400 TO 35900

SHEET	SCALE	REVISION
FS-04	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 4 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



ZONE C POINT SCHEDULE

12 main column + 27 floor post = 39 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C029	41700.000	0.000	MC	AX08/YA
C030	41700.000	6000.000	MC	AX08/YB
C031	41700.000	12000.000	MC	AX08/YC
C032	41700.000	18300.000	MC	AX08/YD
C033	47500.000	0.000	MC	AX09/YA
C034	47500.000	6000.000	MC	AX09/YB
C035	47500.000	12000.000	MC	AX09/YC
C036	47500.000	18300.000	MC	AX09/YD
C037	53300.000	0.000	MC	AX10/YA
C038	53300.000	6000.000	MC	AX10/YB
C039	53300.000	12000.000	MC	AX10/YC
C040	53300.000	18300.000	MC	AX10/YD
F062	38071.429	2000.000	FP	B07/+2171.429X/+2000Y
F063	38071.429	3500.000	FP	B07/+2171.429X/+3500Y
F064	39871.429	2000.000	FP	B07/+3971.429X/+2000Y
F065	39871.429	3500.000	FP	B07/+3971.429X/+3500Y
F066	41700.000	1000.000	FP	AX08/+1000Y
F067	41700.000	2000.000	FP	AX08/+2000Y
F068	41700.000	3000.000	FP	AX08/+3000Y
F069	41700.000	4000.000	FP	AX08/+4000Y
F070	41700.000	5000.000	FP	AX08/+5000Y
F071	43642.000	2000.000	FP	B08/+1942.000X/+2000Y
F072	43642.000	3500.000	FP	B08/+1942.000X/+3500Y
F073	45485.714	2000.000	FP	B08/+3785.714X/+2000Y
F074	45485.714	3500.000	FP	B08/+3785.714X/+3500Y
F075	47500.000	1000.000	FP	AX09/+1000Y
F076	47500.000	2000.000	FP	AX09/+2000Y
F077	47500.000	3000.000	FP	AX09/+3000Y
F078	47500.000	4000.000	FP	AX09/+4000Y
F079	47500.000	5000.000	FP	AX09/+5000Y
F080	49442.000	2000.000	FP	B09/+1942.000X/+2000Y
F081	49442.000	3500.000	FP	B09/+1942.000X/+3500Y
F082	51358.000	2000.000	FP	B09/+3858.000X/+2000Y
F083	51358.000	3500.000	FP	B09/+3858.000X/+3500Y
F084	53300.000	1000.000	FP	AX10/+1000Y
F085	53300.000	2000.000	FP	AX10/+2000Y
F086	53300.000	3000.000	FP	AX10/+3000Y
F087	53300.000	4000.000	FP	AX10/+4000Y
F088	53300.000	5000.000	FP	AX10/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX07/YA to AX10/YA	17400	0	17400.0
AX07/YA to AX10/YB	17400	6000	18405.4
AX07/YA to AX10/YD	17400	18300	25251.7
AX07/YD to AX10/YA	17400	-18300	25251.7

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

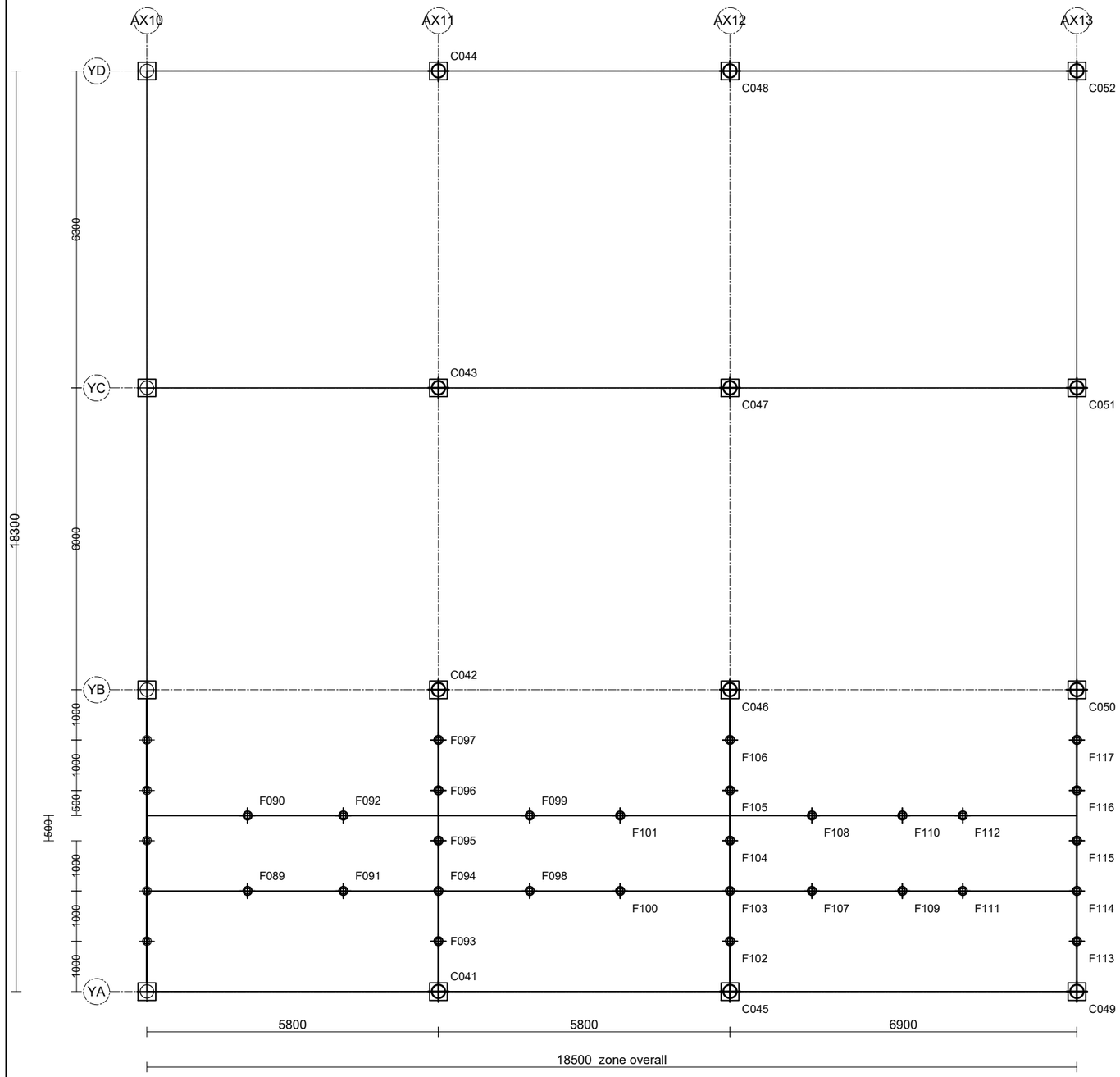
SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
WF-JO-B07-FJ05-R	HN250x125x6x9	joist along X	2	F062, F064
WF-JO-B07-FJ08-R	HN250x125x6x9	joist along X	2	F063, F065
WF-JO-B08-FJ05-R	HN250x125x6x9	joist along X	2	F071, F073
WF-JO-B08-FJ08-R	HN250x125x6x9	joist along X	2	F072, F074
WF-JO-B09-FJ05-R	HN250x125x6x9	joist along X	2	F080, F082
WF-JO-B09-FJ08-R	HN250x125x6x9	joist along X	2	F081, F083
WF-PB-A08-FB01	BP 200x300 built-up	edge girder along Y	5	F066, F067, F068, F069, F070
WF-PB-A09-FB01	BP 200x300 built-up	edge girder along Y	5	F075, F076, F077, F078, F079
WF-PB-A10-FB01	BP 200x300 built-up	edge girder along Y	5	F084, F085, F086, F087, F088
12 main columns	HW350x350x12x19	column served directly	12	C-numbers in the schedule above

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE C SETTING-OUT PLAN X = 35900 TO 53300

SHEET	SCALE	REVISION
FS-05	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 5 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



cumulative X from origin: AX10 = 53300 mm AX13 = 71800 mm

2000	1907.143	1892.857	1814.286	1800	2185.714	1628.571	1800	1200	2271.429

bay B10: off-axis X offsets from AX10 — bay B11: off-axis X offsets from AX11 — bay B12: off-axis X offsets from AX12

Off-axis posts occur only on the Y = 2000 and Y = 3500 joist lines; the chain above applies to both lines.

ZONE D POINT SCHEDULE

12 main column + 29 floor post = 41 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C041	59100.000	0.000	MC	AX11/YA
C042	59100.000	6000.000	MC	AX11/YB
C043	59100.000	12000.000	MC	AX11/YC
C044	59100.000	18300.000	MC	AX11/YD
C045	64900.000	0.000	MC	AX12/YA
C046	64900.000	6000.000	MC	AX12/YB
C047	64900.000	12000.000	MC	AX12/YC
C048	64900.000	18300.000	MC	AX12/YD
C049	71800.000	0.000	MC	AX13/YA
C050	71800.000	6000.000	MC	AX13/YB
C051	71800.000	12000.000	MC	AX13/YC
C052	71800.000	18300.000	MC	AX13/YD
F089	55300.000	2000.000	FP	B10/+2000.000X/+2000Y
F090	55300.000	3500.000	FP	B10/+2000.000X/+3500Y
F091	57207.143	2000.000	FP	B10/+3907.143X/+2000Y
F092	57207.143	3500.000	FP	B10/+3907.143X/+3500Y
F093	59100.000	1000.000	FP	AX11/+1000Y
F094	59100.000	2000.000	FP	AX11/+2000Y
F095	59100.000	3000.000	FP	AX11/+3000Y
F096	59100.000	4000.000	FP	AX11/+4000Y
F097	59100.000	5000.000	FP	AX11/+5000Y
F098	60914.286	2000.000	FP	B11/+1814.286X/+2000Y
F099	60914.286	3500.000	FP	B11/+1814.286X/+3500Y
F100	62714.286	2000.000	FP	B11/+3614.286X/+2000Y
F101	62714.286	3500.000	FP	B11/+3614.286X/+3500Y
F102	64900.000	1000.000	FP	AX12/+1000Y
F103	64900.000	2000.000	FP	AX12/+2000Y
F104	64900.000	3000.000	FP	AX12/+3000Y
F105	64900.000	4000.000	FP	AX12/+4000Y
F106	64900.000	5000.000	FP	AX12/+5000Y
F107	66528.571	2000.000	FP	B12/+1628.571X/+2000Y
F108	66528.571	3500.000	FP	B12/+1628.571X/+3500Y
F109	68328.571	2000.000	FP	B12/+3428.571X/+2000Y
F110	68328.571	3500.000	FP	B12/+3428.571X/+3500Y
F111	69528.571	2000.000	FP	B12/+4628.571X/+2000Y
F112	69528.571	3500.000	FP	B12/+4628.571X/+3500Y
F113	71800.000	1000.000	FP	AX13/+1000Y
F114	71800.000	2000.000	FP	AX13/+2000Y
F115	71800.000	3000.000	FP	AX13/+3000Y
F116	71800.000	4000.000	FP	AX13/+4000Y
F117	71800.000	5000.000	FP	AX13/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX10/YA to AX13/YA	18500	0	18500.0
AX10/YA to AX13/YB	18500	6000	19448.7
AX10/YA to AX13/YD	18500	18300	26021.9
AX10/YD to AX13/YA	18500	-18300	26021.9

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

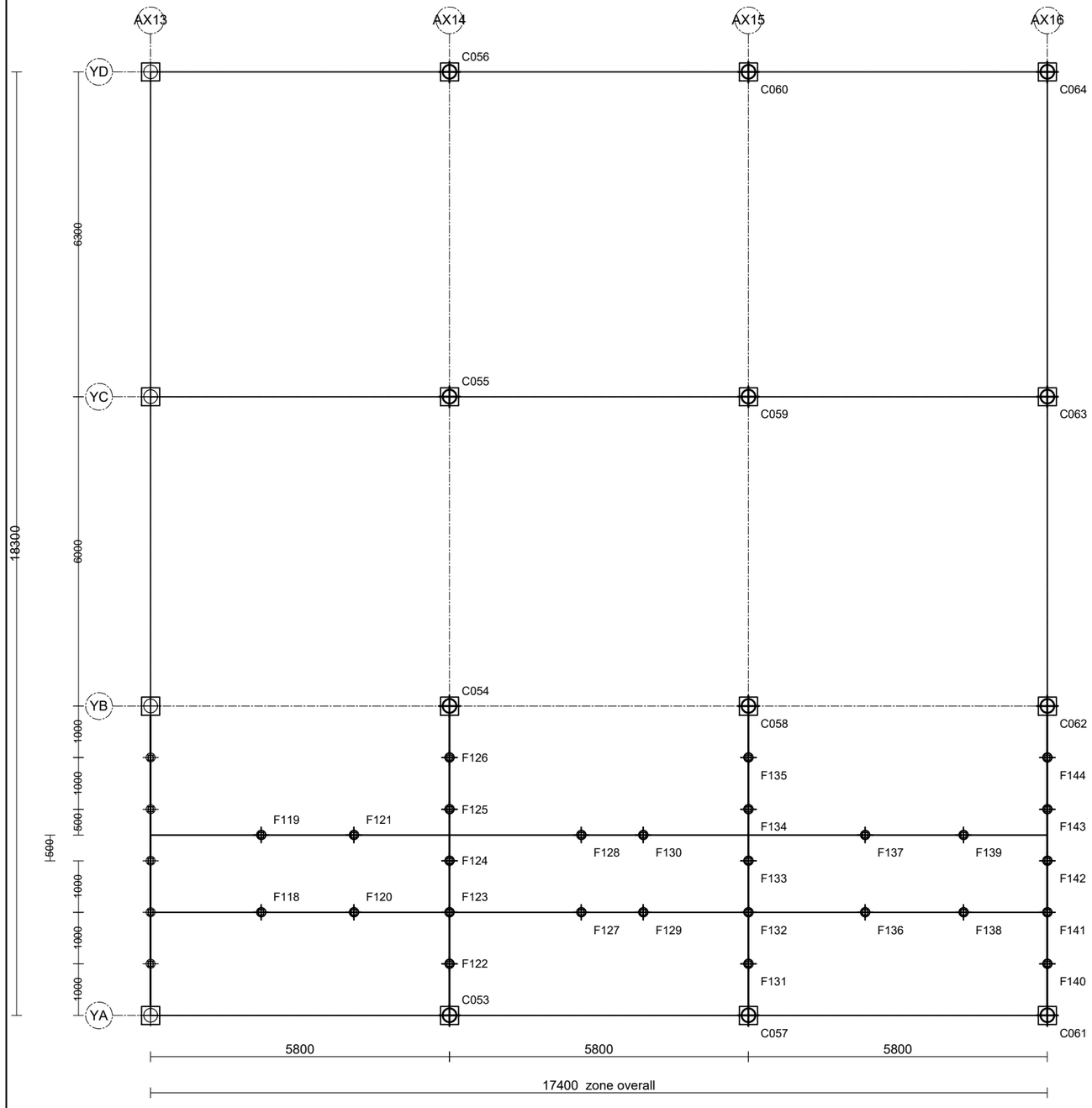
SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
WF-JO-B10-FJ05-R	HN250x125x6x9	joist along X	2	F089, F091
WF-JO-B10-FJ08-R	HN250x125x6x9	joist along X	2	F090, F092
WF-JO-B11-FJ05-R	HN250x125x6x9	joist along X	2	F098, F100
WF-JO-B11-FJ08-R	HN250x125x6x9	joist along X	2	F099, F101
WF-JO-B12-FJ05-R	HN250x125x6x9	joist along X	3	F107, F109, F111
WF-JO-B12-FJ08-R	HN250x125x6x9	joist along X	3	F108, F110, F112
WF-PB-A11-FB01	BP 200x300 built-up	edge girder along Y	5	F093, F094, F095, F096, F097
WF-PB-A12-FB01	BP 200x300 built-up	edge girder along Y	5	F102, F103, F104, F105, F106
WF-PB-A13-FB01	BP 200x300 built-up	edge girder along Y	5	F113, F114, F115, F116, F117
12 main columns	HW350x350x12x19	column served directly	12	C-numbers in the schedule above

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE D SETTING-OUT PLAN X = 53300 TO 71800

SHEET	SCALE	REVISION
FS-06	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 6 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



ZONE E POINT SCHEDULE

12 main column + 27 floor post = 39 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C053	77600.000	0.000	MC	AX14/YA
C054	77600.000	6000.000	MC	AX14/YB
C055	77600.000	12000.000	MC	AX14/YC
C056	77600.000	18300.000	MC	AX14/YD
C057	83400.000	0.000	MC	AX15/YA
C058	83400.000	6000.000	MC	AX15/YB
C059	83400.000	12000.000	MC	AX15/YC
C060	83400.000	18300.000	MC	AX15/YD
C061	89200.000	0.000	MC	AX16/YA
C062	89200.000	6000.000	MC	AX16/YB
C063	89200.000	12000.000	MC	AX16/YC
C064	89200.000	18300.000	MC	AX16/YD
F118	73942.857	2000.000	FP	B13/+2142.857X/+2000Y
F119	73942.857	3500.000	FP	B13/+2142.857X/+3500Y
F120	75742.857	2000.000	FP	B13/+3942.857X/+2000Y
F121	75742.857	3500.000	FP	B13/+3942.857X/+3500Y
F122	77600.000	1000.000	FP	AX14/+1000Y
F123	77600.000	2000.000	FP	AX14/+2000Y
F124	77600.000	3000.000	FP	AX14/+3000Y
F125	77600.000	4000.000	FP	AX14/+4000Y
F126	77600.000	5000.000	FP	AX14/+5000Y
F127	80157.143	2000.000	FP	B14/+2557.143X/+2000Y
F128	80157.143	3500.000	FP	B14/+2557.143X/+3500Y
F129	81357.143	2000.000	FP	B14/+3757.143X/+2000Y
F130	81357.143	3500.000	FP	B14/+3757.143X/+3500Y
F131	83400.000	1000.000	FP	AX15/+1000Y
F132	83400.000	2000.000	FP	AX15/+2000Y
F133	83400.000	3000.000	FP	AX15/+3000Y
F134	83400.000	4000.000	FP	AX15/+4000Y
F135	83400.000	5000.000	FP	AX15/+5000Y
F136	85664.286	2000.000	FP	B15/+2264.286X/+2000Y
F137	85664.286	3500.000	FP	B15/+2264.286X/+3500Y
F138	87571.429	2000.000	FP	B15/+4171.429X/+2000Y
F139	87571.429	3500.000	FP	B15/+4171.429X/+3500Y
F140	89200.000	1000.000	FP	AX16/+1000Y
F141	89200.000	2000.000	FP	AX16/+2000Y
F142	89200.000	3000.000	FP	AX16/+3000Y
F143	89200.000	4000.000	FP	AX16/+4000Y
F144	89200.000	5000.000	FP	AX16/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX13/YA to AX16/YA	17400	0	17400.0
AX13/YA to AX16/YB	17400	6000	18405.4
AX13/YA to AX16/YD	17400	18300	25251.7
AX13/YD to AX16/YA	17400	-18300	25251.7

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

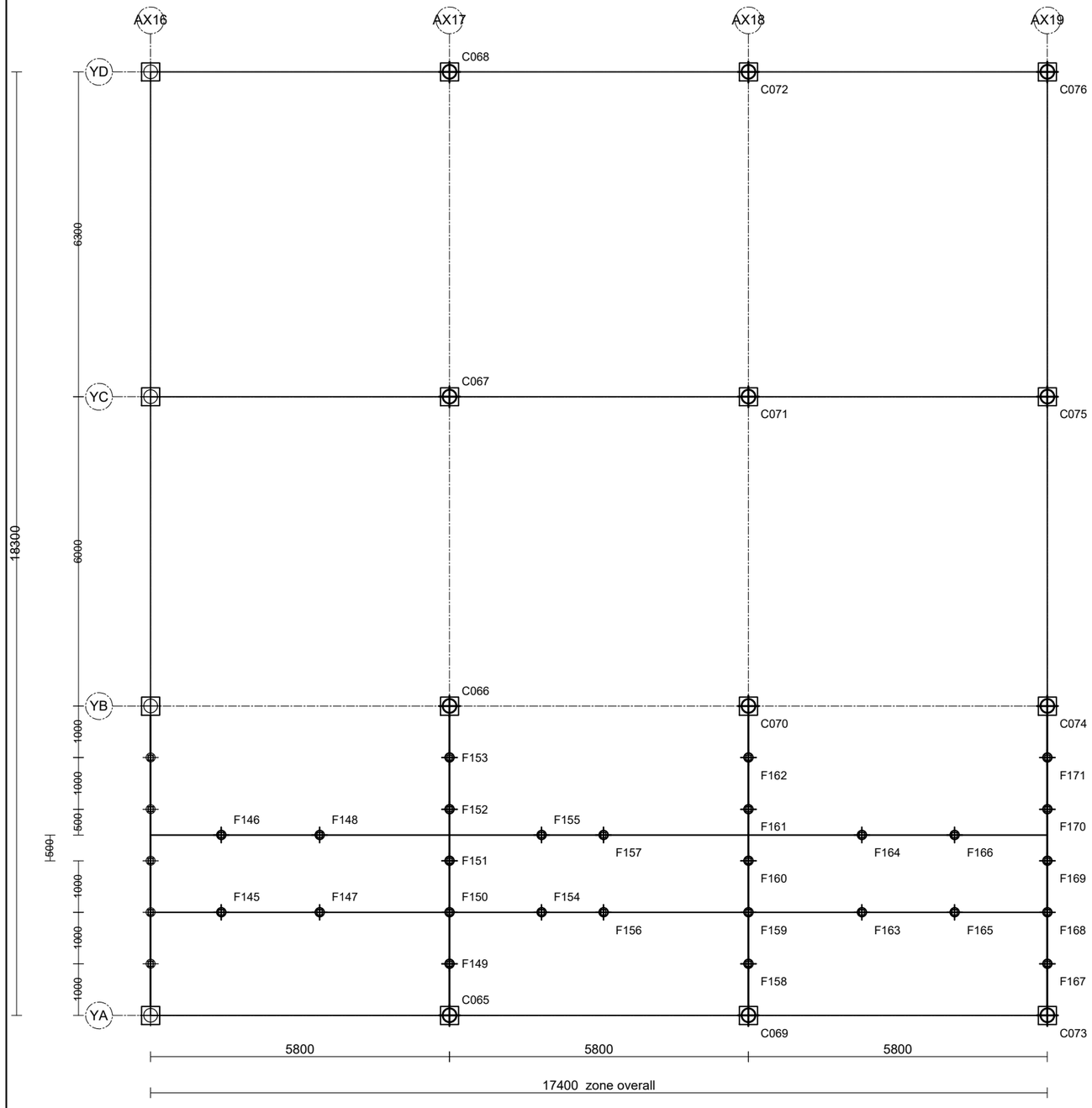
SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
WF-JO-B13-FJ05-R	HN250x125x6x9	joist along X	2	F118, F120
WF-JO-B13-FJ08-R	HN250x125x6x9	joist along X	2	F119, F121
WF-JO-B14-FJ05-R	HN250x125x6x9	joist along X	2	F127, F129
WF-JO-B14-FJ08-R	HN250x125x6x9	joist along X	2	F128, F130
WF-JO-B15-FJ05-R	HN250x125x6x9	joist along X	2	F136, F138
WF-JO-B15-FJ08-R	HN250x125x6x9	joist along X	2	F137, F139
WF-PB-A14-FB01	BP 200x300 built-up	edge girder along Y	5	F122, F123, F124, F125, F126
WF-PB-A15-FB01	BP 200x300 built-up	edge girder along Y	5	F131, F132, F133, F134, F135
WF-PB-A16-FB01	BP 200x300 built-up	edge girder along Y	5	F140, F141, F142, F143, F144
12 main columns	HW350x350x12x19	column served directly	12	C-numbers in the schedule above

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE E SETTING-OUT PLAN X = 71800 TO 89200

SHEET	SCALE	REVISION
FS-07	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 7 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.



ZONE F POINT SCHEDULE

12 main column + 27 floor post = 39 points. PROJECT_X / PROJECT_Y in mm.

ID	PROJECT_X	PROJECT_Y	CL	GRID REF
C065	95000.000	0.000	MC	AX17/YA
C066	95000.000	6000.000	MC	AX17/YB
C067	95000.000	12000.000	MC	AX17/YC
C068	95000.000	18300.000	MC	AX17/YD
C069	100800.000	0.000	MC	AX18/YA
C070	100800.000	6000.000	MC	AX18/YB
C071	100800.000	12000.000	MC	AX18/YC
C072	100800.000	18300.000	MC	AX18/YD
C073	106600.000	0.000	MC	AX19/YA
C074	106600.000	6000.000	MC	AX19/YB
C075	106600.000	12000.000	MC	AX19/YC
C076	106600.000	18300.000	MC	AX19/YD
F145	90571.429	2000.000	FP	B16/+1371.429X/+2000Y
F146	90571.429	3500.000	FP	B16/+1371.429X/+3500Y
F147	92478.572	2000.000	FP	B16/+3278.572X/+2000Y
F148	92478.572	3500.000	FP	B16/+3278.572X/+3500Y
F149	95000.000	1000.000	FP	AX17/+1000Y
F150	95000.000	2000.000	FP	AX17/+2000Y
F151	95000.000	3000.000	FP	AX17/+3000Y
F152	95000.000	4000.000	FP	AX17/+4000Y
F153	95000.000	5000.000	FP	AX17/+5000Y
F154	96785.714	2000.000	FP	B17/+1785.714X/+2000Y
F155	96785.714	3500.000	FP	B17/+1785.714X/+3500Y
F156	97985.714	2000.000	FP	B17/+2985.714X/+2000Y
F157	97985.714	3500.000	FP	B17/+2985.714X/+3500Y
F158	100800.000	1000.000	FP	AX18/+1000Y
F159	100800.000	2000.000	FP	AX18/+2000Y
F160	100800.000	3000.000	FP	AX18/+3000Y
F161	100800.000	4000.000	FP	AX18/+4000Y
F162	100800.000	5000.000	FP	AX18/+5000Y
F163	103000.000	2000.000	FP	B18/+2200.000X/+2000Y
F164	103000.000	3500.000	FP	B18/+2200.000X/+3500Y
F165	104800.000	2000.000	FP	B18/+4000.000X/+2000Y
F166	104800.000	3500.000	FP	B18/+4000.000X/+3500Y
F167	106600.000	1000.000	FP	AX19/+1000Y
F168	106600.000	2000.000	FP	AX19/+2000Y
F169	106600.000	3000.000	FP	AX19/+3000Y
F170	106600.000	4000.000	FP	AX19/+4000Y
F171	106600.000	5000.000	FP	AX19/+5000Y

ZONE CHECK DIMENSIONS

FROM - TO	dX mm	dY mm	DIAGONAL mm
AX16/YA to AX19/YA	17400	0	17400.0
AX16/YA to AX19/YB	17400	6000	18405.4
AX16/YA to AX19/YD	17400	18300	25251.7
AX16/YD to AX19/YA	17400	-18300	25251.7

Horizontal distances between point centres. On sloping ground a slope distance may not be used directly. Keep the tape horizontal and the corner square.
Point classes: MC = main column point, pile serves the column directly. FP = floor post point. Grid reference of an off-axis point reads bay / X offset from the bay left axis / Y from baseline BL-X.

SUPPORTED MEMBER BY POINT

SUPPORTED MEMBER MARK	SECTION	RUNS	PTS	POINT IDs
WF-JO-B16-FJ05-R	HN250x125x6x9	joist along X	2	F145, F147
WF-JO-B16-FJ08-R	HN250x125x6x9	joist along X	2	F146, F148
WF-JO-B17-FJ05-R	HN250x125x6x9	joist along X	2	F154, F156
WF-JO-B17-FJ08-R	HN250x125x6x9	joist along X	2	F155, F157
WF-JO-B18-FJ05-R	HN250x125x6x9	joist along X	2	F163, F165
WF-JO-B18-FJ08-R	HN250x125x6x9	joist along X	2	F164, F166
WF-PB-A17-FB01	BP 200x300 built-up	edge girder along Y	5	F149, F150, F151, F152, F153
WF-PB-A18-FB01	BP 200x300 built-up	edge girder along Y	5	F158, F159, F160, F161, F162
WF-PB-A19-FB01	BP 200x300 built-up	edge girder along Y	5	F167, F168, F169, F170, F171
12 main columns	HW350x350x12x19	column served directly	12	C-numbers in the schedule above

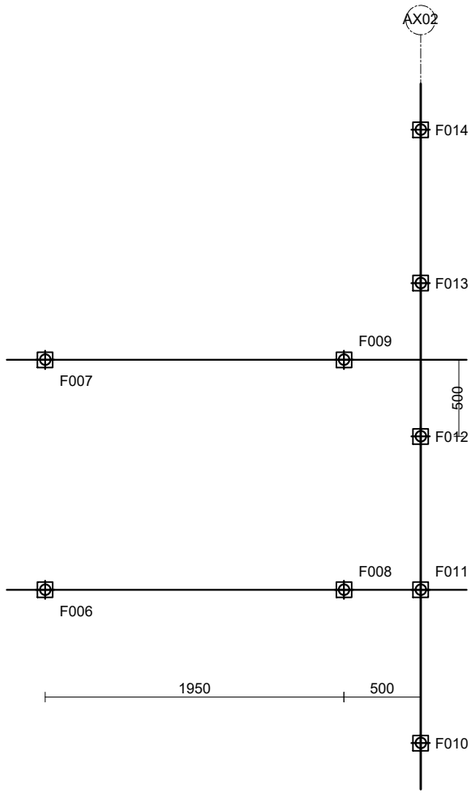
K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

ZONE F SETTING-OUT PLAN X = 89200 TO 106600

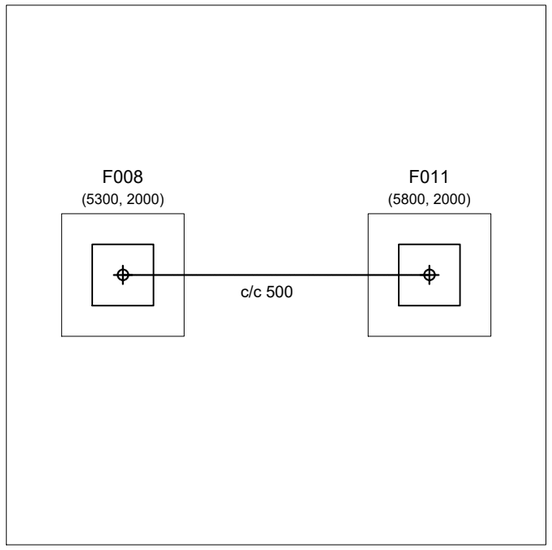
SHEET	SCALE	REVISION
FS-08	1:100 (A3)	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 8 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

CONTEXT BAY B01 AT AXIS AX02 1:40

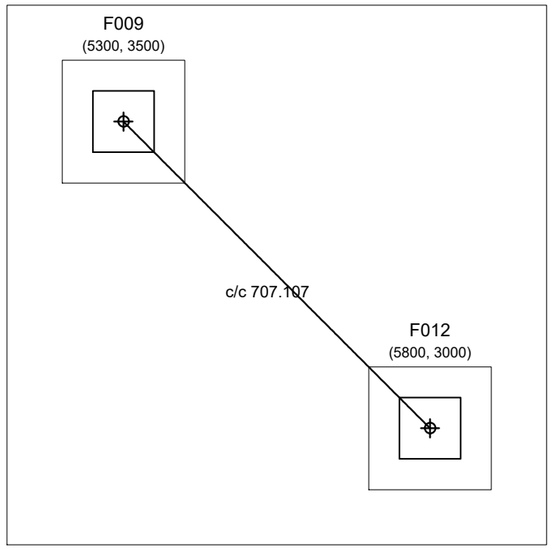


D1 F008 - F011 1:10



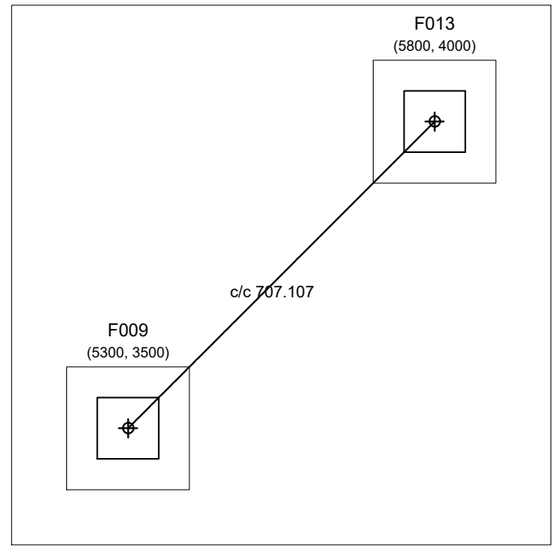
clear between 100x100 post envelopes: 400 mm
outer square = 200 x 200 base plate

D2 F009 - F012 1:10



clear between 100x100 post envelopes: 565.7 mm
outer square = 200 x 200 base plate

D3 F009 - F013 1:10



clear between 100x100 post envelopes: 565.7 mm
outer square = 200 x 200 base plate

Off-axis posts in bay B01 are at X = 3350.000 and X = 5300.000 mm.

CLOSE-POINT GEOMETRY

PAIR	c/c S / mm	Post clear / mm	Plate clear / mm
F008 - F011	500.000	400.0	300.0
F009 - F012	707.107	565.7	424.3
F009 - F013	707.107	565.7	424.3

Tabulated clearances are plan envelope clearances of the existing steel posts and base plates, not helix or rig clearances. Outer square: 200x200 mm base plate; inner square: 100x100 mm post; the symbol is not the pile diameter.
All three close pairs are in bay B01 (two interior supports at X=5300 mm and the AX02 axis support). Helix diameter, group interaction and installability: BY PILE SUPPLIER for the actual pile type, soil and rig; shaft clash-freedom alone is not sufficient.
Clearances are modeled steel envelopes only. Helix/group behaviour and rig access require the selected pile and installation method.

INSTALLATION SEQUENCE AND WORKING SPACE

a. Sequence: install piles, re-survey pile positions, then erect the steel frame. For piling with the frame in place, rig path and working space are checked separately; post height or model level is not an available installation clearance.
b. The piling method statement checks the space for drive head, torque equipment and operators. Pile centres are not moved to suit the rig. This sheet gives local plan coordinates; pile head level and levelling detail per the associated design.
c. Existing floor post base plates 200x200x12 mm. Main column bases per D02 PIN001-CS4-001/002: base plate 380x380x25 on shims (3-30, nominal 15), 4xM24 to pile cap plate PH-4 (380x380x25). Tabulated plate clearances do not replace the main column base / pile cap spatial check.
d. Concentric single-pile interface. If the pile type or foundation scheme offsets the pile axis or adds pile groups, pile position drawings and coordinate tables are revised together.

Install piles before the steel frame. No installation headroom or pile capacity is inferred from this geometric layout.

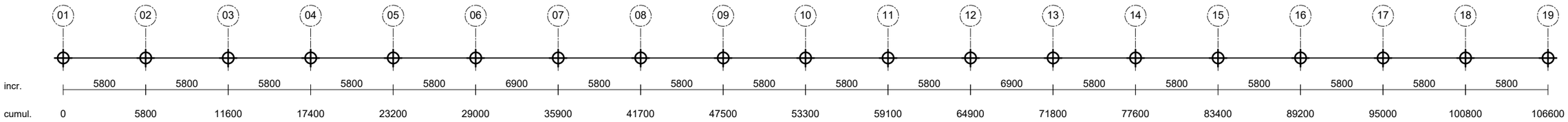
K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

CLOSE SPACING DETAIL PLANS AND INSTALLATION CLEARANCE CONDITIONS

SHEET	SCALE	REVISION
FS-09	1:40 and 1:10 (A3)	B

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-27 LOCAL 2D · SHEET 9 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

1 FRAME AXIS CHAIN ALONG BASELINE BL-X (Y = 0), 19 AXES, CHAIN AND CUMULATIVE DIMENSIONS



Chain closes on 106600 mm: 16 x 5800 + 2 x 6900 = 92800 + 13800 = 106600.

Tape in short runs axis to axis and record a cumulative reading at every axis. Do not rely on a single 106 m pull.

2 ROW CHAIN ACROSS THE WIDTH

ROW LINE	MODEL COLUMN ROW	CUMULATIVE Y mm	INCREMENT mm
YA	PIN001-C01	0	-
YB	PIN001-C02	6000	6000
YC	PIN001-C03	12000	6000
YD	PIN001-C04	18300	6300

Chain closes on 18300 mm: 6000 + 6000 + 6300 = 18300.

3 STANDARD DIAGONALS

dX mm	dY mm	DIAGONAL mm
5800	6000	8345.1
5800	12000	13328.2
5800	18300	19197.1
6900	6000	9143.9
6900	12000	13842.3
6900	18300	19557.6
17400	18300	25251.7
18500	18300	26021.9

Every bay and every zone is checked on both axes and on at least one diagonal. Full bay list below and in FS_BAY_DIAGONALS.csv; zone list in FS_ZONE_DIAGONALS.csv.

4 TAPE METHOD

a. All dimensions on this set are horizontal distances between point centres in the project local plane.
b. On sloping or uneven ground a slope distance read along the surface is not the dimension shown. Level the tape, or measure in stepped horizontal runs.
c. Hold the tape square to the line being offset. An out-of-square offset of 100 mm over a 2000 mm offset run changes the measured position; check every offset against the two tie distances in FS-14 and FS-15.
d. Check each zone on both axes and on a diagonal before accepting the zone.
e. The tie distances resolve the mirror ambiguity: every floor post lies on the +Y side of baseline BL-X.

5 PRECISION OF THE PRINTED VALUES

Axis and row values are exact integers in the structural model. All coordinates are printed to 0.001 mm, which is the precision of the geometric source. 58 of the 247 X values carry more than two decimals, and 4 of them are rounded at the third decimal, the largest rounding being 0.5 micrometre.
Tie distances are printed to 0.1 mm as computed values. These are calculated dimensions, not measured values, and not a tolerance.

No setting-out tolerance and no installation tolerance is stated anywhere in this set.

6 BAY DIAGONAL SCHEDULE

BAY	BETWEEN AXES	dX mm	YA-YB diag	YA-YC diag	YA-YD diag
B01	AX01-AX02	5800	8345.1	13328.2	19197.1
B02	AX02-AX03	5800	8345.1	13328.2	19197.1
B03	AX03-AX04	5800	8345.1	13328.2	19197.1
B04	AX04-AX05	5800	8345.1	13328.2	19197.1
B05	AX05-AX06	5800	8345.1	13328.2	19197.1
B06	AX06-AX07	6900	9143.9	13842.3	19557.6
B07	AX07-AX08	5800	8345.1	13328.2	19197.1
B08	AX08-AX09	5800	8345.1	13328.2	19197.1
B09	AX09-AX10	5800	8345.1	13328.2	19197.1
B10	AX10-AX11	5800	8345.1	13328.2	19197.1
B11	AX11-AX12	5800	8345.1	13328.2	19197.1
B12	AX12-AX13	6900	9143.9	13842.3	19557.6
B13	AX13-AX14	5800	8345.1	13328.2	19197.1
B14	AX14-AX15	5800	8345.1	13328.2	19197.1
B15	AX15-AX16	5800	8345.1	13328.2	19197.1
B16	AX16-AX17	5800	8345.1	13328.2	19197.1
B17	AX17-AX18	5800	8345.1	13328.2	19197.1
B18	AX18-AX19	5800	8345.1	13328.2	19197.1

Diagonals are from the axis on the left of the bay at row YA to the axis on the right of the bay at rows YB, YC and YD.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

TAPE CHECK - AXIS CHAIN, ROW CHAIN AND DIAGONALS

SHEET	SCALE	REVISION
FS-13	SCHEMATIC, NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 13 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Offsets from the frame axis and from baseline BL-X, plus two tie distances to set-out reference points on BL-X. All horizontal, millimetres.
Axis offset, BL-X offset and distances to the two set-out reference points; all horizontal distances in millimetres; SIDE = 0 means on the baseline.

ID	Z	AXIS	dX	Y	TIE A	DIST A	TIE B	DIST B	SIDE
C001	A	AX01	0.000	0	(0,0)	0.0	(5800,0)	5800.0	0
C002	A	AX01	0.000	6000	(0,0)	6000.0	(5800,0)	8345.1	+Y
C003	A	AX01	0.000	12000	(0,0)	12000.0	(5800,0)	13328.2	+Y
C004	A	AX01	0.000	18300	(0,0)	18300.0	(5800,0)	19197.1	+Y
C005	A	AX02	0.000	0	(5800,0)	0.0	(11600,0)	5800.0	0
C006	A	AX02	0.000	6000	(5800,0)	6000.0	(11600,0)	8345.1	+Y
C007	A	AX02	0.000	12000	(5800,0)	12000.0	(11600,0)	13328.2	+Y
C008	A	AX02	0.000	18300	(5800,0)	18300.0	(11600,0)	19197.1	+Y
C009	A	AX03	0.000	0	(11600,0)	0.0	(17400,0)	5800.0	0
C010	A	AX03	0.000	6000	(11600,0)	6000.0	(17400,0)	8345.1	+Y
C011	A	AX03	0.000	12000	(11600,0)	12000.0	(17400,0)	13328.2	+Y
C012	A	AX03	0.000	18300	(11600,0)	18300.0	(17400,0)	19197.1	+Y
C013	A	AX04	0.000	0	(17400,0)	0.0	(23200,0)	5800.0	0
C014	A	AX04	0.000	6000	(17400,0)	6000.0	(23200,0)	8345.1	+Y
C015	A	AX04	0.000	12000	(17400,0)	12000.0	(23200,0)	13328.2	+Y
C016	A	AX04	0.000	18300	(17400,0)	18300.0	(23200,0)	19197.1	+Y
C017	B	AX05	0.000	0	(23200,0)	0.0	(29000,0)	5800.0	0
C018	B	AX05	0.000	6000	(23200,0)	6000.0	(29000,0)	8345.1	+Y
C019	B	AX05	0.000	12000	(23200,0)	12000.0	(29000,0)	13328.2	+Y
C020	B	AX05	0.000	18300	(23200,0)	18300.0	(29000,0)	19197.1	+Y
C021	B	AX06	0.000	0	(29000,0)	0.0	(35900,0)	6900.0	0
C022	B	AX06	0.000	6000	(29000,0)	6000.0	(35900,0)	9143.9	+Y
C023	B	AX06	0.000	12000	(29000,0)	12000.0	(35900,0)	13842.3	+Y
C024	B	AX06	0.000	18300	(29000,0)	18300.0	(35900,0)	19557.6	+Y
C025	B	AX07	0.000	0	(35900,0)	0.0	(41700,0)	5800.0	0
C026	B	AX07	0.000	6000	(35900,0)	6000.0	(41700,0)	8345.1	+Y
C027	B	AX07	0.000	12000	(35900,0)	12000.0	(41700,0)	13328.2	+Y
C028	B	AX07	0.000	18300	(35900,0)	18300.0	(41700,0)	19197.1	+Y
C029	C	AX08	0.000	0	(41700,0)	0.0	(47500,0)	5800.0	0
C030	C	AX08	0.000	6000	(41700,0)	6000.0	(47500,0)	8345.1	+Y
C031	C	AX08	0.000	12000	(41700,0)	12000.0	(47500,0)	13328.2	+Y
C032	C	AX08	0.000	18300	(41700,0)	18300.0	(47500,0)	19197.1	+Y
C033	C	AX09	0.000	0	(47500,0)	0.0	(53300,0)	5800.0	0
C034	C	AX09	0.000	6000	(47500,0)	6000.0	(53300,0)	8345.1	+Y
C035	C	AX09	0.000	12000	(47500,0)	12000.0	(53300,0)	13328.2	+Y
C036	C	AX09	0.000	18300	(47500,0)	18300.0	(53300,0)	19197.1	+Y
C037	C	AX10	0.000	0	(53300,0)	0.0	(59100,0)	5800.0	0
C038	C	AX10	0.000	6000	(53300,0)	6000.0	(59100,0)	8345.1	+Y
C039	C	AX10	0.000	12000	(53300,0)	12000.0	(59100,0)	13328.2	+Y
C040	C	AX10	0.000	18300	(53300,0)	18300.0	(59100,0)	19197.1	+Y
F001	A	AX01	0.000	1000	(0,0)	1000.0	(5800,0)	5885.6	+Y
F002	A	AX01	0.000	2000	(0,0)	2000.0	(5800,0)	6135.1	+Y
F003	A	AX01	0.000	3000	(0,0)	3000.0	(5800,0)	6529.9	+Y
F004	A	AX01	0.000	4000	(0,0)	4000.0	(5800,0)	7045.6	+Y
F005	A	AX01	0.000	5000	(0,0)	5000.0	(5800,0)	7657.7	+Y
F006	A	AX01	3350.000	2000	(0,0)	3901.6	(5800,0)	3162.7	+Y
F007	A	AX01	3350.000	3500	(0,0)	4844.8	(5800,0)	4272.3	+Y
F008	A	AX01	5300.000	2000	(0,0)	5664.8	(5800,0)	2061.6	+Y
F009	A	AX01	5300.000	3500	(0,0)	6351.4	(5800,0)	3535.5	+Y
F010	A	AX02	0.000	1000	(5800,0)	1000.0	(11600,0)	5885.6	+Y
F011	A	AX02	0.000	2000	(5800,0)	2000.0	(11600,0)	6135.1	+Y
F012	A	AX02	0.000	3000	(5800,0)	3000.0	(11600,0)	6529.9	+Y
F013	A	AX02	0.000	4000	(5800,0)	4000.0	(11600,0)	7045.6	+Y
F014	A	AX02	0.000	5000	(5800,0)	5000.0	(11600,0)	7657.7	+Y
F015	A	AX02	1907.143	2000	(5800,0)	2763.5	(11600,0)	4376.6	+Y
F016	A	AX02	1907.143	3500	(5800,0)	3985.9	(11600,0)	5234.9	+Y
F017	A	AX02	3814.286	2000	(5800,0)	4306.8	(11600,0)	2818.3	+Y
F018	A	AX02	3814.286	3500	(5800,0)	5176.8	(11600,0)	4024.1	+Y
F019	A	AX03	0.000	1000	(11600,0)	1000.0	(17400,0)	5885.6	+Y
F020	A	AX03	0.000	2000	(11600,0)	2000.0	(17400,0)	6135.1	+Y
F021	A	AX03	0.000	3000	(11600,0)	3000.0	(17400,0)	6529.9	+Y
F022	A	AX03	0.000	4000	(11600,0)	4000.0	(17400,0)	7045.6	+Y
F023	A	AX03	0.000	5000	(11600,0)	5000.0	(17400,0)	7657.7	+Y
F024	A	AX03	1614.286	2000	(11600,0)	2570.2	(17400,0)	4639.0	+Y
F025	A	AX03	1614.286	3500	(11600,0)	3854.3	(17400,0)	5456.2	+Y
F026	A	AX03	3521.428	2000	(11600,0)	4049.7	(17400,0)	3031.8	+Y
F027	A	AX03	3521.428	3500	(11600,0)	4964.9	(17400,0)	4176.3	+Y
F028	A	AX04	0.000	1000	(17400,0)	1000.0	(23200,0)	5885.6	+Y
F029	A	AX04	0.000	2000	(17400,0)	2000.0	(23200,0)	6135.1	+Y
F030	A	AX04	0.000	3000	(17400,0)	3000.0	(23200,0)	6529.9	+Y
F031	A	AX04	0.000	4000	(17400,0)	4000.0	(23200,0)	7045.6	+Y
F032	A	AX04	0.000	5000	(17400,0)	5000.0	(23200,0)	7657.7	+Y
F033	B	AX04	2028.571	2000	(17400,0)	2848.7	(23200,0)	4268.9	+Y
F034	B	AX04	2028.571	3500	(17400,0)	4045.4	(23200,0)	5145.3	+Y
F035	B	AX04	3858.000	2000	(17400,0)	4345.6	(23200,0)	2787.7	+Y
F036	B	AX04	3858.000	3500	(17400,0)	5209.0	(23200,0)	4002.7	+Y
F037	B	AX05	0.000	1000	(23200,0)	1000.0	(29000,0)	5885.6	+Y
F038	B	AX05	0.000	2000	(23200,0)	2000.0	(29000,0)	6135.1	+Y
F039	B	AX05	0.000	3000	(23200,0)	3000.0	(29000,0)	6529.9	+Y
F040	B	AX05	0.000	4000	(23200,0)	4000.0	(29000,0)	7045.6	+Y
F041	B	AX05	0.000	5000	(23200,0)	5000.0	(29000,0)	7657.7	+Y
F042	B	AX05	1842.857	2000	(23200,0)	2719.6	(29000,0)	4433.8	+Y
F043	B	AX05	1842.857	3500	(23200,0)	3955.5	(29000,0)	5282.9	+Y
F044	B	AX05	3642.857	2000	(23200,0)	4155.8	(29000,0)	2941.6	+Y
F045	B	AX05	3642.857	3500	(23200,0)	5051.8	(29000,0)	4111.4	+Y
F046	B	AX06	0.000	1000	(29000,0)	1000.0	(35900,0)	6972.1	+Y
F047	B	AX06	0.000	2000	(29000,0)	2000.0	(35900,0)	7184.0	+Y
F048	B	AX06	0.000	3000	(29000,0)	3000.0	(35900,0)	7524.0	+Y
F049	B	AX06	0.000	4000	(29000,0)	4000.0	(35900,0)	7975.6	+Y
F050	B	AX06	0.000	5000	(29000,0)	5000.0	(35900,0)	8521.2	+Y
F051	B	AX06	2257.143	2000	(29000,0)	3015.7	(35900,0)	5055.3	+Y
F052	B	AX06	2257.143	3500	(29000,0)	4164.7	(35900,0)	5814.3	+Y
F053	B	AX06	3457.143	2000	(29000,0)	3994.0	(35900,0)	3981.6	+Y
F054	B	AX06	3457.143	3500	(29000,0)	4919.5	(35900,0)	4909.5	+Y
F055	B	AX06	5257.143	2000	(29000,0)	5624.7	(35900,0)	2588.2	+Y
F056	B	AX06	5257.143	3500	(29000,0)	6315.7	(35900,0)	3866.4	+Y
F057	B	AX07	0.000	1000	(35900,0)	1000.0	(41700,0)	5885.6	+Y
F058	B	AX07	0.000	2000	(35900,0)	2000.0	(41700,0)	6135.1	+Y
F059	B	AX07	0.000	3000	(35900,0)	3000.0	(41700,0)	6529.9	+Y
F060	B	AX07	0.000	4000	(35900,0)	4000.0	(41700,0)	7045.6	+Y
F061	B	AX07	0.000	5000	(35900,0)	5000.0	(41700,0)	7657.7	+Y
F062	C	AX07	2171.429	2000	(35900,0)	2952.1	(41700,0)	4143.3	+Y
F063	C	AX07	2171.429	3500	(35900,0)	4118.9	(41700,0)	5041.5	+Y
F064	C	AX07	3971.429	2000	(35900,0)	4446.6	(41700,0)	2709.9	+Y
F065	C	AX07	3971.429	3500	(35900,0)	5293.6	(41700,0)	3948.9	+Y
F066	C	AX08	0.000	1000	(41700,0)	1000.0	(47500,0)	5885.6	+Y
F067	C	AX08	0.000	2000	(41700,0)	2000.0	(47500,0)	6135.1	+Y
F068	C	AX08	0.000	3000	(41700,0)	3000.0	(47500,0)	6529.9	+Y
F069	C	AX08	0.000	4000	(41700,0)	4000.0	(47500,0)	7045.6	+Y
F070	C	AX08	0.000	5000	(41700,0)	5000.0	(47500,0)	7657.7	+Y
F071	C	AX08	1942.000	2000	(41700,0)	2787.7	(47500,0)	4345.6	+Y
F072	C	AX08	1942.000	3500	(41700,0)	4002.7	(47500,0)	5209.0	+Y
F073	C	AX08	3785.714	2000	(41700,0)	4281.5	(47500,0)	2838.5	+Y
F074	C	AX08	3785.714	3500	(41700,0)	5155.7	(47500,0)	4038.2	+Y
F075	C	AX09	0.000	1000	(47500,0)	1000.0	(53300,0)	5885.6	+Y
F076	C	AX09	0.000	2000	(47500,0)	2000.0	(53300,0)	6135.1	+Y
F077	C	AX09	0.000	3000	(47500,0)	3000.0	(53300,0)	6529.9	+Y
F078	C	AX09	0.000	4000	(47500,0)	4000.0	(53300,0)	7045.6	+Y
F079	C	AX09	0.000	5000	(47500,0)	5000.0	(53300,0)	7657.7	+Y
F080	C	AX09	1942.000	2000	(47500,0)	2787.7	(53300,0)	4345.6	+Y
F081	C	AX09	1942.000	3500	(47500,0)	4002.7	(53300,0)	5209.0	+Y
F082	C	AX09	3858.000	2000	(47500,0)	4345.6	(53300,0)	2787.7	+Y
F083	C	AX09	3858.000	3500	(47500,0)	5209.0	(53300,0)	4002.7	+Y
F084	C	AX10	0.000	1000	(53300,0)	1000.0	(59100,0)	5885.6	+Y
F085	C	AX10	0.000	2000	(53300,0)	2000.0	(59100,0)	6135.1	+Y
F086	C	AX10	0.000	3000	(53300,0)	3000.0	(59100,0)	6529.9	+Y
F087	C	AX10	0.000	4000	(53300,0)	4000.0	(59100,0)	7045.6	+Y
F088	C	AX10	0.000	5000	(53300,0)	5000.0	(59100,0)	7657.7	+Y

128 points on this sheet. TIE A and TIE B are positions on baseline BL-X at the bounding frame axes of the point.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

TAPE CHECK SCHEDULE 1 OF 2 - ZONES A, B, C

SHEET	SCALE	REVISION
FS-14	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 14 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Offsets from the frame axis and from baseline BL-X, plus two tie distances to set-out reference points on BL-X. All horizontal, millimetres.
Axis offset, BL-X offset and distances to the two set-out reference points; all horizontal distances in millimetres; SIDE = 0 means on the baseline.

ID	Z AXIS	dX	Y	TIE A	DIST A	TIE B	DIST B	SIDE
C041	D AX11	0.000	0	(59100,0)	0.0	(64900,0)	5800.0	0
C042	D AX11	0.000	6000	(59100,0)	6000.0	(64900,0)	8345.1	+Y
C043	D AX11	0.000	12000	(59100,0)	12000.0	(64900,0)	13328.2	+Y
C044	D AX11	0.000	18300	(59100,0)	18300.0	(64900,0)	19197.1	+Y
C045	D AX12	0.000	0	(64900,0)	0.0	(71800,0)	6900.0	0
C046	D AX12	0.000	6000	(64900,0)	6000.0	(71800,0)	9143.9	+Y
C047	D AX12	0.000	12000	(64900,0)	12000.0	(71800,0)	13842.3	+Y
C048	D AX12	0.000	18300	(64900,0)	18300.0	(71800,0)	19557.6	+Y
C049	D AX13	0.000	0	(71800,0)	0.0	(77600,0)	5800.0	0
C050	D AX13	0.000	6000	(71800,0)	6000.0	(77600,0)	8345.1	+Y
C051	D AX13	0.000	12000	(71800,0)	12000.0	(77600,0)	13328.2	+Y
C052	D AX13	0.000	18300	(71800,0)	18300.0	(77600,0)	19197.1	+Y
C053	E AX14	0.000	0	(77600,0)	0.0	(83400,0)	5800.0	0
C054	E AX14	0.000	6000	(77600,0)	6000.0	(83400,0)	8345.1	+Y
C055	E AX14	0.000	12000	(77600,0)	12000.0	(83400,0)	13328.2	+Y
C056	E AX14	0.000	18300	(77600,0)	18300.0	(83400,0)	19197.1	+Y
C057	E AX15	0.000	0	(83400,0)	0.0	(89200,0)	5800.0	0
C058	E AX15	0.000	6000	(83400,0)	6000.0	(89200,0)	8345.1	+Y
C059	E AX15	0.000	12000	(83400,0)	12000.0	(89200,0)	13328.2	+Y
C060	E AX15	0.000	18300	(83400,0)	18300.0	(89200,0)	19197.1	+Y
C061	E AX16	0.000	0	(89200,0)	0.0	(95000,0)	5800.0	0
C062	E AX16	0.000	6000	(89200,0)	6000.0	(95000,0)	8345.1	+Y
C063	E AX16	0.000	12000	(89200,0)	12000.0	(95000,0)	13328.2	+Y
C064	E AX16	0.000	18300	(89200,0)	18300.0	(95000,0)	19197.1	+Y
C065	F AX17	0.000	0	(95000,0)	0.0	(100800,0)	5800.0	0
C066	F AX17	0.000	6000	(95000,0)	6000.0	(100800,0)	8345.1	+Y
C067	F AX17	0.000	12000	(95000,0)	12000.0	(100800,0)	13328.2	+Y
C068	F AX17	0.000	18300	(95000,0)	18300.0	(100800,0)	19197.1	+Y
C069	F AX18	0.000	0	(100800,0)	0.0	(106600,0)	5800.0	0
C070	F AX18	0.000	6000	(100800,0)	6000.0	(106600,0)	8345.1	+Y
C071	F AX18	0.000	12000	(100800,0)	12000.0	(106600,0)	13328.2	+Y
C072	F AX18	0.000	18300	(100800,0)	18300.0	(106600,0)	19197.1	+Y
C073	F AX19	0.000	0	(100800,0)	5800.0	(106600,0)	0.0	0
C074	F AX19	0.000	6000	(100800,0)	8345.1	(106600,0)	6000.0	+Y
C075	F AX19	0.000	12000	(100800,0)	13328.2	(106600,0)	12000.0	+Y
C076	F AX19	0.000	18300	(100800,0)	19197.1	(106600,0)	18300.0	+Y
F089	D AX10	2000.000	2000	(53300,0)	2828.4	(59100,0)	4294.2	+Y
F090	D AX10	2000.000	3500	(53300,0)	4031.1	(59100,0)	5166.2	+Y
F091	D AX10	3907.143	2000	(53300,0)	4389.3	(59100,0)	2753.7	+Y
F092	D AX10	3907.143	3500	(53300,0)	5245.5	(59100,0)	3979.1	+Y
F093	D AX11	0.000	1000	(59100,0)	1000.0	(64900,0)	5885.6	+Y
F094	D AX11	0.000	2000	(59100,0)	2000.0	(64900,0)	6135.1	+Y
F095	D AX11	0.000	3000	(59100,0)	3000.0	(64900,0)	6529.9	+Y
F096	D AX11	0.000	4000	(59100,0)	4000.0	(64900,0)	7045.6	+Y
F097	D AX11	0.000	5000	(59100,0)	5000.0	(64900,0)	7657.7	+Y
F098	D AX11	1814.286	2000	(59100,0)	2700.3	(64900,0)	4459.4	+Y
F099	D AX11	1814.286	3500	(59100,0)	3942.3	(64900,0)	5304.3	+Y
F100	D AX11	3614.286	2000	(59100,0)	4130.7	(64900,0)	2962.7	+Y
F101	D AX11	3614.286	3500	(59100,0)	5031.2	(64900,0)	4126.4	+Y
F102	D AX12	0.000	1000	(64900,0)	1000.0	(71800,0)	6972.1	+Y
F103	D AX12	0.000	2000	(64900,0)	2000.0	(71800,0)	7184.0	+Y
F104	D AX12	0.000	3000	(64900,0)	3000.0	(71800,0)	7524.0	+Y
F105	D AX12	0.000	4000	(64900,0)	4000.0	(71800,0)	7975.6	+Y
F106	D AX12	0.000	5000	(64900,0)	5000.0	(71800,0)	8521.2	+Y
F107	D AX12	1628.571	2000	(64900,0)	2579.2	(71800,0)	5638.1	+Y
F108	D AX12	1628.571	3500	(64900,0)	3860.3	(71800,0)	6327.6	+Y
F109	D AX12	3428.571	2000	(64900,0)	3969.3	(71800,0)	4006.3	+Y
F110	D AX12	3428.571	3500	(64900,0)	4899.5	(71800,0)	4929.6	+Y
F111	D AX12	4628.571	2000	(64900,0)	5042.2	(71800,0)	3026.4	+Y
F112	D AX12	4628.571	3500	(64900,0)	5802.9	(71800,0)	4172.5	+Y
F113	D AX13	0.000	1000	(71800,0)	1000.0	(77600,0)	5885.6	+Y
F114	D AX13	0.000	2000	(71800,0)	2000.0	(77600,0)	6135.1	+Y
F115	D AX13	0.000	3000	(71800,0)	3000.0	(77600,0)	6529.9	+Y
F116	D AX13	0.000	4000	(71800,0)	4000.0	(77600,0)	7045.6	+Y
F117	D AX13	0.000	5000	(71800,0)	5000.0	(77600,0)	7657.7	+Y
F118	E AX13	2142.857	2000	(71800,0)	2931.2	(77600,0)	4168.3	+Y
F119	E AX13	2142.857	3500	(71800,0)	4103.9	(77600,0)	5062.1	+Y
F120	E AX13	3942.857	2000	(71800,0)	4421.1	(77600,0)	2729.3	+Y
F121	E AX13	3942.857	3500	(71800,0)	5272.2	(77600,0)	3962.2	+Y
F122	E AX14	0.000	1000	(77600,0)	1000.0	(83400,0)	5885.6	+Y
F123	E AX14	0.000	2000	(77600,0)	2000.0	(83400,0)	6135.1	+Y
F124	E AX14	0.000	3000	(77600,0)	3000.0	(83400,0)	6529.9	+Y
F125	E AX14	0.000	4000	(77600,0)	4000.0	(83400,0)	7045.6	+Y
F126	E AX14	0.000	5000	(77600,0)	5000.0	(83400,0)	7657.7	+Y
F127	E AX14	2557.143	2000	(77600,0)	3246.4	(83400,0)	3810.0	+Y
F128	E AX14	2557.143	3500	(77600,0)	4334.6	(83400,0)	4771.4	+Y
F129	E AX14	3757.143	2000	(77600,0)	4256.3	(83400,0)	2858.9	+Y
F130	E AX14	3757.143	3500	(77600,0)	5134.8	(83400,0)	4052.6	+Y
F131	E AX15	0.000	1000	(83400,0)	1000.0	(89200,0)	5885.6	+Y
F132	E AX15	0.000	2000	(83400,0)	2000.0	(89200,0)	6135.1	+Y
F133	E AX15	0.000	3000	(83400,0)	3000.0	(89200,0)	6529.9	+Y
F134	E AX15	0.000	4000	(83400,0)	4000.0	(89200,0)	7045.6	+Y
F135	E AX15	0.000	5000	(83400,0)	5000.0	(89200,0)	7657.7	+Y
F136	E AX15	2264.286	2000	(83400,0)	3021.1	(89200,0)	4062.2	+Y
F137	E AX15	2264.286	3500	(83400,0)	4168.6	(89200,0)	4975.1	+Y
F138	E AX15	4171.429	2000	(83400,0)	4626.1	(89200,0)	2579.2	+Y
F139	E AX15	4171.429	3500	(83400,0)	5445.3	(89200,0)	3860.3	+Y
F140	E AX16	0.000	1000	(89200,0)	1000.0	(95000,0)	5885.6	+Y
F141	E AX16	0.000	2000	(89200,0)	2000.0	(95000,0)	6135.1	+Y
F142	E AX16	0.000	3000	(89200,0)	3000.0	(95000,0)	6529.9	+Y
F143	E AX16	0.000	4000	(89200,0)	4000.0	(95000,0)	7045.6	+Y
F144	E AX16	0.000	5000	(89200,0)	5000.0	(95000,0)	7657.7	+Y
F145	F AX16	1371.429	2000	(89200,0)	2425.0	(95000,0)	4859.2	+Y
F146	F AX16	1371.429	3500	(89200,0)	3759.1	(95000,0)	5644.7	+Y
F147	F AX16	3278.572	2000	(89200,0)	3840.4	(95000,0)	3218.3	+Y
F148	F AX16	3278.572	3500	(89200,0)	4795.7	(95000,0)	4313.7	+Y
F149	F AX17	0.000	1000	(95000,0)	1000.0	(100800,0)	5885.6	+Y
F150	F AX17	0.000	2000	(95000,0)	2000.0	(100800,0)	6135.1	+Y
F151	F AX17	0.000	3000	(95000,0)	3000.0	(100800,0)	6529.9	+Y
F152	F AX17	0.000	4000	(95000,0)	4000.0	(100800,0)	7045.6	+Y
F153	F AX17	0.000	5000	(95000,0)	5000.0	(100800,0)	7657.7	+Y
F154	F AX17	1785.714	2000	(95000,0)	2681.2	(100800,0)	4484.9	+Y
F155	F AX17	1785.714	3500	(95000,0)	3929.2	(100800,0)	5325.8	+Y
F156	F AX17	2985.714	2000	(95000,0)	3593.7	(100800,0)	3452.6	+Y
F157	F AX17	2985.714	3500	(95000,0)	4600.5	(100800,0)	4491.1	+Y
F158	F AX18	0.000	1000	(100800,0)	1000.0	(106600,0)	5885.6	+Y
F159	F AX18	0.000	2000	(100800,0)	2000.0	(106600,0)	6135.1	+Y
F160	F AX18	0.000	3000	(100800,0)	3000.0	(106600,0)	6529.9	+Y
F161	F AX18	0.000	4000	(100800,0)	4000.0	(106600,0)	7045.6	+Y
F162	F AX18	0.000	5000	(100800,0)	5000.0	(106600,0)	7657.7	+Y
F163	F AX18	2200.000	2000	(100800,0)	2973.2	(106600,0)	4118.3	+Y
F164	F AX18	2200.000	3500	(100800,0)	4134.0	(106600,0)	5021.0	+Y
F165	F AX18	4000.000	2000	(100800,0)	4472.1	(106600,0)	2690.7	+Y
F166	F AX18	4000.000	3500	(100800,0)	5315.1	(106600,0)	3935.7	+Y
F167	F AX19	0.000	1000	(100800,0)	5885.6	(106600,0)	1000.0	+Y
F168	F AX19	0.000	2000	(100800,0)	6135.1	(106600,0)	2000.0	+Y
F169	F AX19	0.000	3000	(100800,0)	6529.9	(106600,0)	3000.0	+Y
F170	F AX19	0.000	4000	(100800,0)	7045.6	(106600,0)	4000.0	+Y
F171	F AX19	0.000	5000	(100800,0)	7657.7	(106600,0)	5000.0	+Y

119 points on this sheet. TIE A and TIE B are positions on baseline BL-X at the bounding frame axes of the point.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

TAPE CHECK SCHEDULE 2 OF 2 - ZONES D, E, F

SHEET	SCALE	REVISION
FS-15	NOT TO SCALE	A

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 15 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

FORM 1 SURVEY HANDOVER RECORD

Site base mark 1 ID / local XY / site E,N	
Site base mark 2 ID / local XY / site E,N	
Ground position of project local origin (0,0)	
Bearing of the +X axis in the site coordinate system	
Translation applied dE / dN	
Rotation applied (decimal degrees, state sign convention)	
Scale factor applied (1.000000 if no scale correction)	
Site coordinate system name and datum	
Unit confirmation (drawings mm / survey table m)	
Instrument make, model, serial number	
Prism type and prism constant mm	
Independent third check point used ID	
Check residual dE / dN mm	
Protected offset control marks ID and position	
Date / time	
Surveyor: name and signature	
Checker: name and signature	

Complete this record before the first pile position is set out; no pile position of this set is set out from an instrument on an unpositioned origin.

FORM 3 ZONE TAPE-CHECK ACCEPTANCE

ZONE	X RANGE mm	PTS	AXIS CHAIN	ROW CHAIN	DIAGONAL	ALL PTS SET OUT	DATE	SURVEYOR / REVIEWER
A	0 - 17400	48						
B	17400 - 35900	41						
C	35900 - 53300	39						
D	53300 - 71800	41						
E	71800 - 89200	39						
F	89200 - 106600	39						
ALL	0 - 106600	247						

Enter measured values and differences from the FS-13 calculated dimensions. Accept a zone after both axis chains and at least one diagonal check pass.

SITE USE REQUIREMENTS

1. Print at actual size: A3, plot scale 100%, no fit-to-page or scaling. Check a known drawn length on FS-13 with a rule before measuring from the sheet.
2. Revisions: drawing, CSV and model DXF revisions used on site match; sheet number and revision per title block; superseded revisions are withdrawn.
3. Plan and level: this set gives plan positions only. Pile head, cut-off and levelling levels are issued by the level design, not derived on this set.
4. Check points: before setting out observe GC-1, GC-2 and one of GC-3 to GC-5 (not collinear), record residuals; check points are not instrument stations.
5. Total station import: import and check three non-collinear points, then all 247 points. PROJECT_X_M to local E, PROJECT_Y_M to local N; confirm the job local setting; Z not used. Column mapping for the site instrument: TO BE COORDINATED by the surveyor.
6. Checks: per zone at least one transverse, one longitudinal and one diagonal tape check (FS-13 to FS-15), short runs with cumulative readings, not one 106 m pull; horizontal distances only.
7. Deviations: no setting-out or construction tolerance is stated in this set. Record measured minus design values here; disposition by the designer; points are not moved on site.

FORM 2 AS-BUILT SETTING-OUT RECORD

Blank format. Full 247-row file: FS_AS_BUILT_RECORD_BLANK.csv

POINT_ID	DESIGN X mm	DESIGN Y mm	ACTUAL X mm	ACTUAL Y mm	dX mm	dY mm	SITE E m	SITE N m
C001	0.000	0.000						
C002	0.000	6000.000						
F001	0.000	1000.000						

DESIGN_PROJECT_X_MM and DESIGN_PROJECT_Y_MM are the project local coordinates of this set, in mm.
ACTUAL_PROJECT_X_MM and ACTUAL_PROJECT_Y_MM are measured positions in the same local system, in mm.
FINAL_SITE_E_M and FINAL_SITE_N_M are final site coordinates in metres, in separate columns; the two sets never share a column.
Record for every survey: instrument model and number, prism constant, control points used, independent check point and residual, date, surveyor and checker signatures. Full 247-row form: FS_AS_BUILT_RECORD_BLANK.csv.
No levels in this form. Plan and level records are kept separately; pile head level records are issued with the level design.

K&K Data / PIN001 · FOUNDATION SUPPORT SETTING-OUT SET

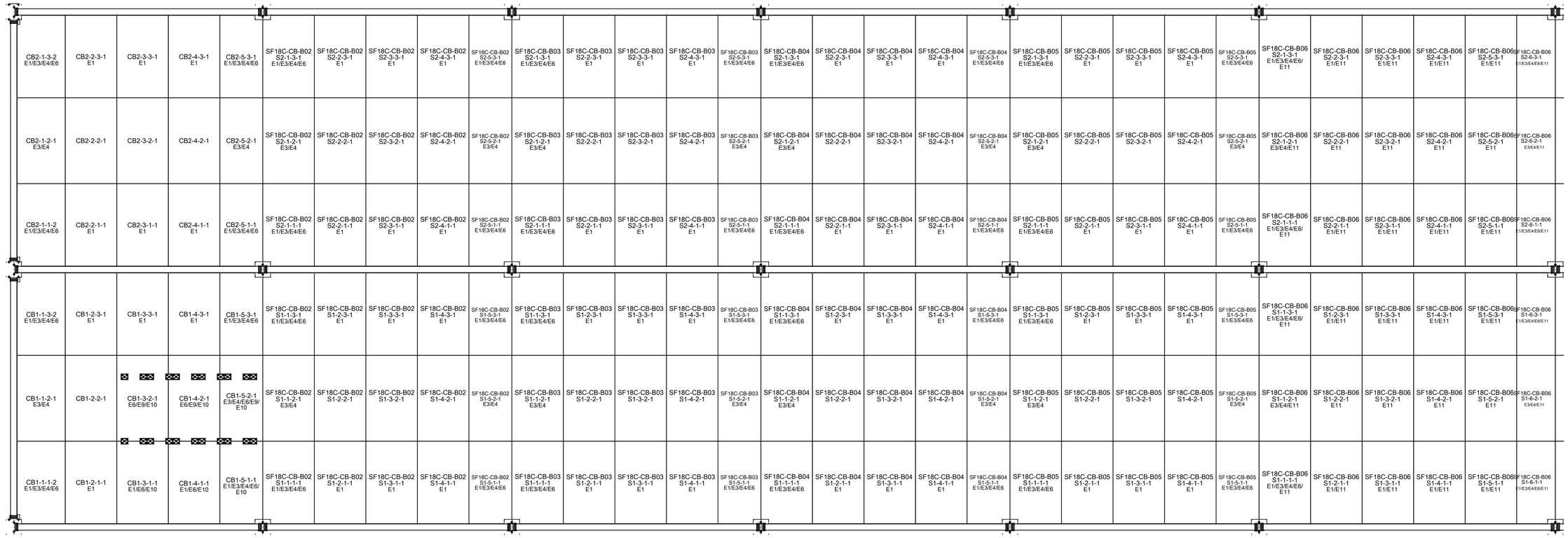
SURVEY HANDOVER RECORD AND AS-BUILT SETTING-OUT RECORD

SHEET	SCALE	REVISION
FS-17	NOT TO SCALE	A

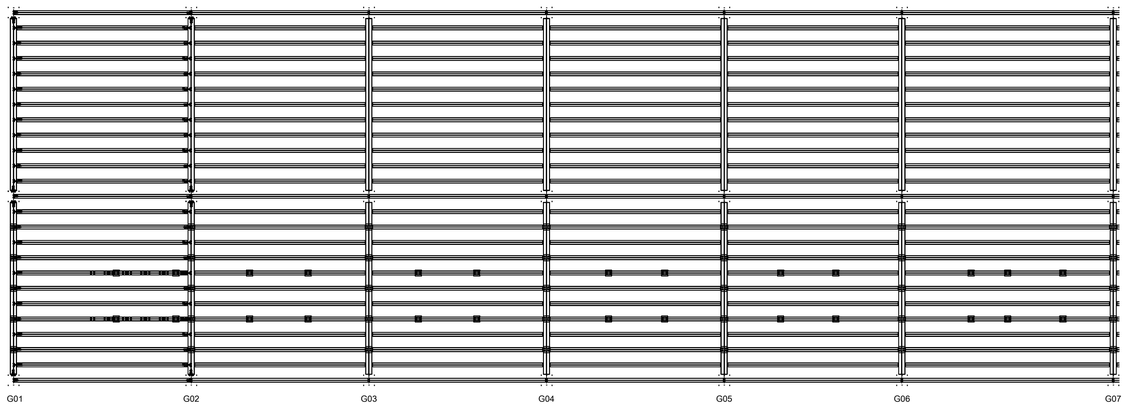
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES
UNITS mm drawing / m instrument · DATE / COORD 2026-09-25 LOCAL 2D · SHEET 17 / 17
K&K Data Service Inc. · inquiry@kkdatasvc.com · Copyright © 2026 K&K Data Service Inc.

Zone A floor plan

Board view 1:50 Z1000…1035



Structural layout view 1:100 Z685…998 (beams and columns)



Legend

Board number text is the native model mark of the board (long marks wrapped at the last segment), placed at the board centroid.
Small text below: exception marks of the board:
E1 free edge E3 support interrupted 20 E4 board edge on transverse main beam flange
E6 no member under notch back edge E9 enclosed opening E10 cut-out for IT base plate E11 in widened bay
Board view lower limit Z1000.1 is above flange top Z1000, so flanges are outside this window; sections other than boards are main columns and equipment uprights crossing this level. Beams and post caps on the structural layout view.
G numbers and their vertical setting-out lines follow actual member end points, not grid objects in the model; grid derivation on F-001.
186 boards in this zone, 158 with exceptions.
Board-to-member relations are plan geometry at top level Z1000 (potential contact or plan distance); support, load path and forces: TO BE COORDINATED.
Board numbers, location limits, net areas and special conditions: BOARD_MAP_D01.csv.
Cutting outlines: R04 floor board layout files; support positions: SUPPORT_INDEX_D01.csv.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Zone A floor plan — Bays 1…6 X 0…35900 186 boards board view 1:50 structural layout view 1:100

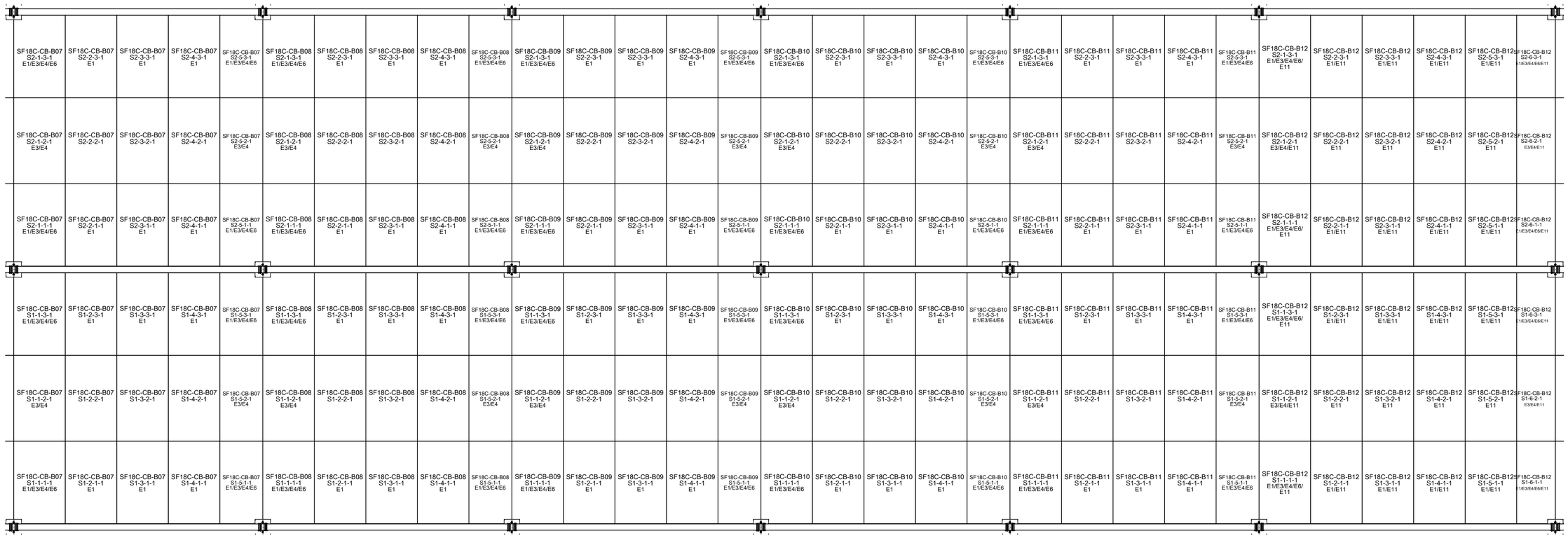
SHEET	SCALE	REVISION
D01 F-101	AS SHOWN ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

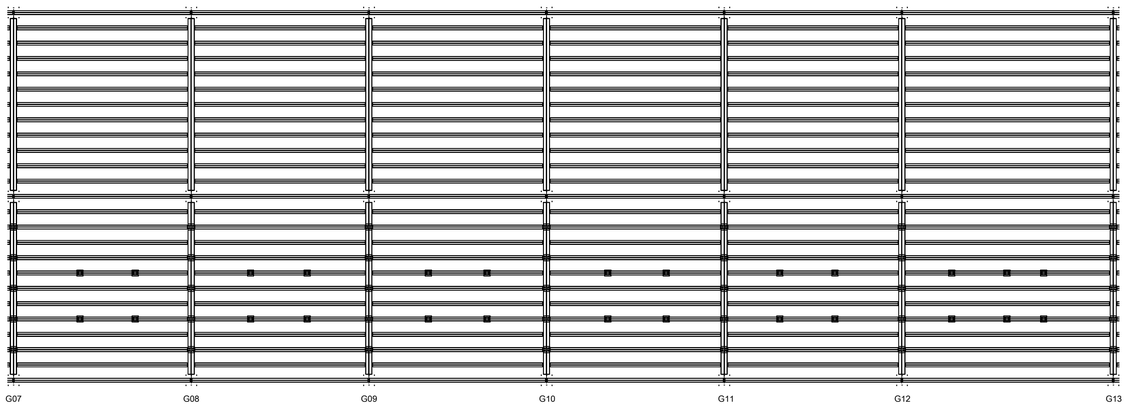
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Zone B floor plan

Board view 1:50 Z1000…1035



Structural layout view 1:100 Z685…998 (beams and columns)



Legend

Board number text is the native model mark of the board (long marks wrapped at the last segment), placed at the board centroid.
Small text below: exception marks of the board:
E1 free edge E3 support interrupted 20 E4 board edge on transverse main beam flange
E6 no member under notch back edge E9 enclosed opening E10 cut-out for IT base plate E11 in widened bay
Board view lower limit Z1000.1 is above flange top Z1000, so flanges are outside this window; sections other than boards are main columns and equipment uprights crossing this level. Beams and post caps on the structural layout view.
G numbers and their vertical setting-out lines follow actual member end points, not grid objects in the model; grid derivation on F-001.
186 boards in this zone, 156 with exceptions.
Board-to-member relations are plan geometry at top level Z1000 (potential contact or plan distance); support, load path and forces: TO BE COORDINATED.
Board numbers, location limits, net areas and special conditions: BOARD_MAP_D01.csv.
Cutting outlines: R04 floor board layout files; support positions: SUPPORT_INDEX_D01.csv.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Zone B floor plan — Bays 7…12 X 35900…71800 186 boards board view 1:50 structural layout view 1:100

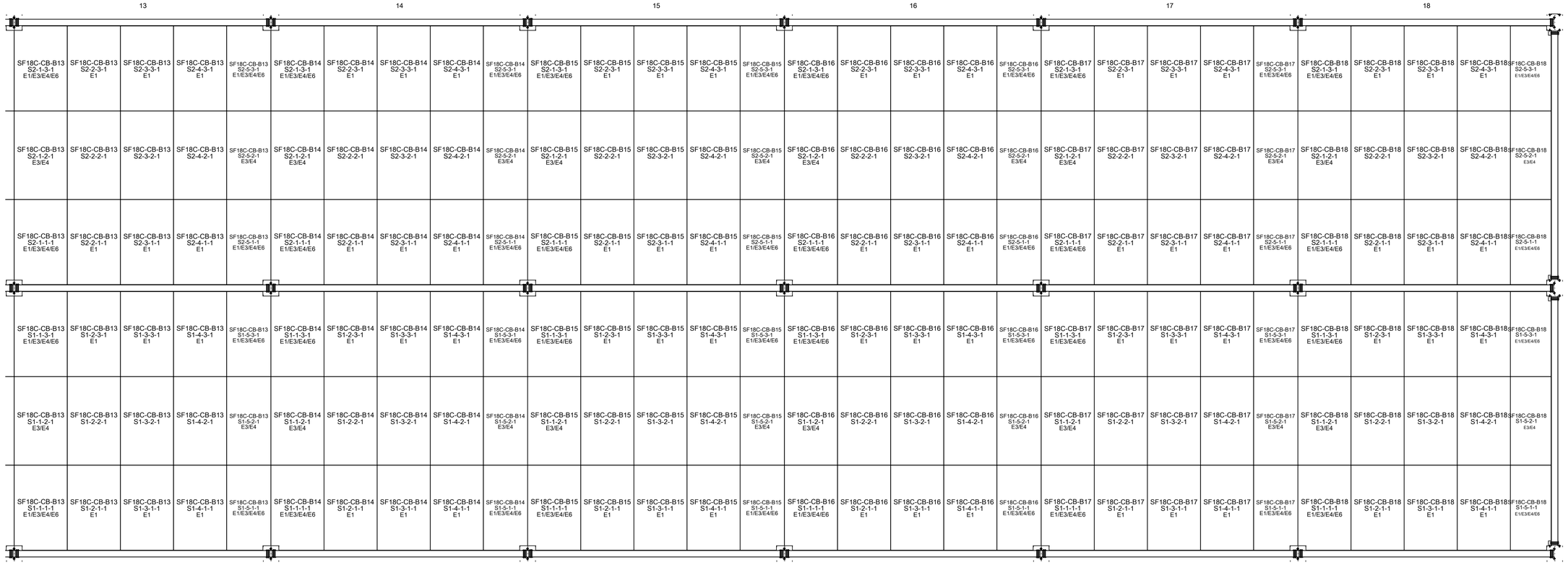
SHEET	SCALE	REVISION
D01 F-102	AS SHOWN ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

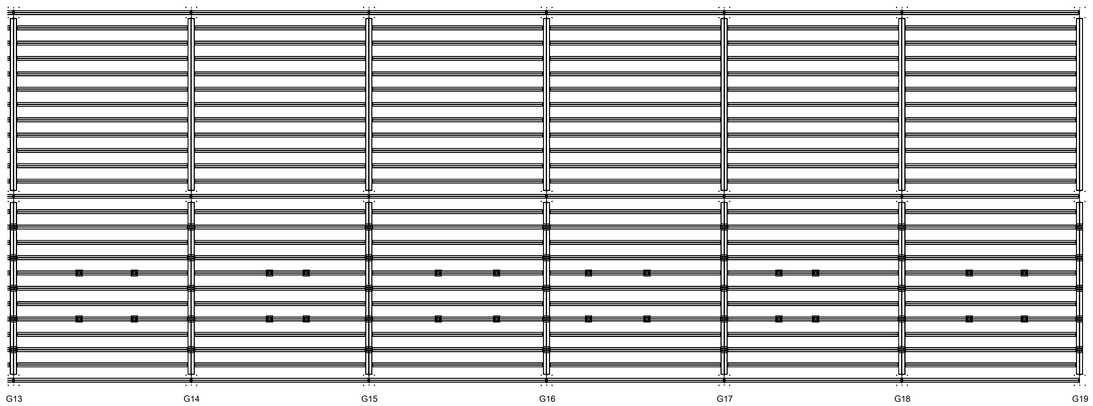
K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Zone C floor plan

Board view 1:50 Z1000…1035



Structural layout view 1:100 Z685…998 (beams and columns)



Legend

Board number text is the native model mark of the board (long marks wrapped at the last segment), placed at the board centroid.
Small text below: exception marks of the board:
E1 free edge E3 support interrupted 20 E4 board edge on transverse main beam flange
E6 no member under notch back edge E9 enclosed opening E10 cut-out for IT base plate E11 in widened bay
Board view lower limit Z1000.1 is above flange top Z1000, so flanges are outside this window; sections other than boards are main columns and equipment uprights crossing this level. Beams and post caps on the structural layout view.
G numbers and their vertical setting-out lines follow actual member end points, not grid objects in the model; grid derivation on F-001.
180 boards in this zone, 144 with exceptions.
Board-to-member relations are plan geometry at top level Z1000 (potential contact or plan distance); support, load path and forces: TO BE COORDINATED.
Board numbers, location limits, net areas and special conditions: BOARD_MAP_D01.csv.
Cutting outlines: R04 floor board layout files; support positions: SUPPORT_INDEX_D01.csv.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

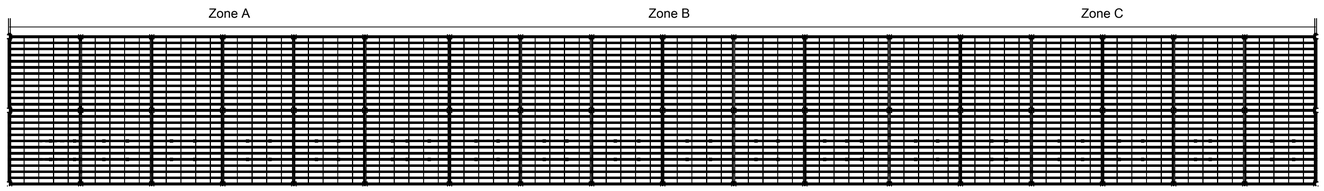
Zone C floor plan — Bays 13…18 X 71800…106600 180 boards board view 1:50 structural layout view 1:100

SHEET	SCALE	REVISION
D01 F-103	AS SHOWN ON A1 841x594	Rev 01 / 2026-09-26

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Installation zones, sequence and finish elevation



Off-floor storage area

Zones and sequence
1 Proceed bay by bay from G01 towards G19; within a bay lay from low Y to high Y; after six rows move to the next bay.
2 Storage area off the floor. No pallets are stacked on the floor until a verified allowable floor load is issued.
3 Board handling and placing may precede building enclosure; finish laying follows enclosure, substrate acceptance and lasting dryness.
4 Operatives move only on fixed temporary surfaces confirmed to carry load, or on independent platforms.
5 Lifting capacity and radius from weighed board mass plus lifting gear, checked point by point for the actual site layout.

Preconditions per bay before laying
a Check flange top level Z1000 and flatness of the secondary and main beams in the bay.
b Set out the low-X and low-Y edges of each board from the grid lines.
c Local supports and flange holes in the bay are completed and re-checked before laying.
d Lay boards after acceptance of c; re-measure level differences and joint widths after laying.

Coordination with existing drawing notes
Existing S-600 notes list floor levels: joist top 1000; board soffit 1000, top 1030; IT base plate 1000 to 1008.
Floor of 30 mm fibre cement board; surface finish laid per the selected system.
Board top level 1030; finished level = 1030 + Δ, Δ the actual total thickness of the selected finish system.
S-600 member schedule unchanged; floor finish levels per this installation set.
No board or finish where IT base plates bear directly on steel beams; cut-outs per the complete cutting outline.

SHEET REFERENCES F-001 … F-501 ON THIS SHEET ARE THE D01 SERIES. F02 F-101 … F-104 (FINISH / ESD) ARE A SEPARATE SERIES.

K&K Data / PIN001
D01 FLOOR BOARD INSTALLATION DRAWINGS

Installation zones, sequence and finish elevation — Board entry direction, installation conditions and finished floor elevation

SHEET	SCALE	REVISION
D01 F-501	AS SHOWN ON A1 841x594	Rev 01 / 2026-09-26

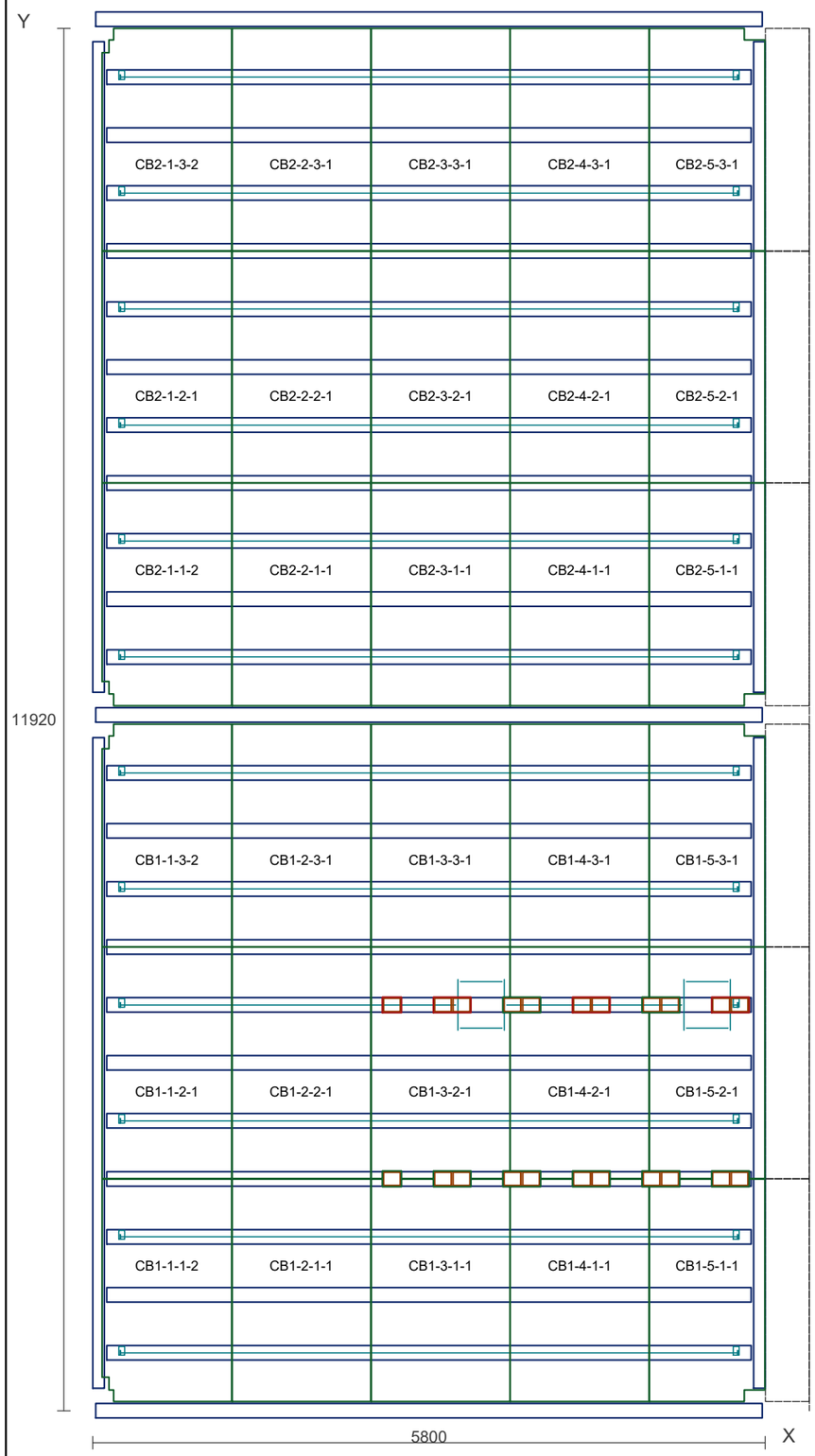
DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 | DIMENSIONS IN MILLIMETRES

K&K Data Service Inc. · inquiry@kkdatasvc.com
Copyright © 2026 K&K Data Service Inc.

Existing steel, floor boards, cabinet base plates and cable tray are drawn to R04 model geometry. Local supports and fixings are sample articles proposed in this package and do not exist in the model.
Blue: existing steel, dimensions from model geometry. Red and orange: sample articles, dimensions are package design values for trial fabrication and quotation; resistance TO BE COORDINATED. Parameters to be coordinated are noted on the drawing.

First Bay Plan 1:50

Grid X 0–5800 Boards X80–5798.5 30 boards (5 columns × 6 rows)



Legend

- Secondary beam HN250×125×6×9, 500 c/c, flange top Z1000
- Transverse main beam 200 wide, flange top Z1000
- Floor board, underside Z1000, top Z1030
- Enclosed opening in board
- Cabinet base plate 145×115×8, top Z1008
- Cable tray rungs with end hanger plates and top plates
- Next-bay board, indicative

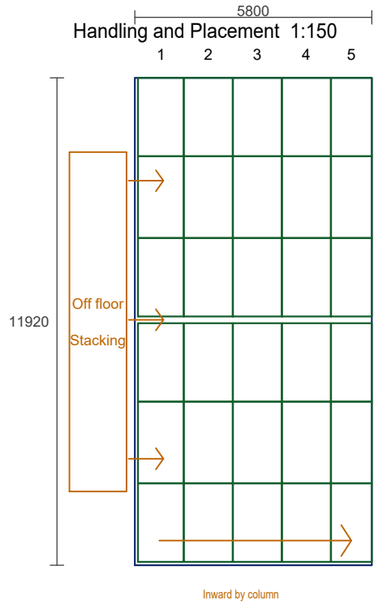
Member quantities in this bay

Floor boards 30 (5 columns × 6 rows), board numbers as marked
Cabinet base plates 22, extent X2507.5…5652.5, Y1942.5…3557.5
IT positions 6: I33-IT-001 … I33-IT-006
Cable tray rungs RHS80×40×3, 22 per tier, 3 tiers, rung centre levels Z140 / Z340 / Z540;
66 rungs in total. End hanger plates 24, 5 thick, X235…240 and X5560…5565, Z100…744;
top plates 24, 6 thick, Z744…750, flush with secondary beam underside Z750.
Clearance 250 from board underside Z1000 to tray top Z750.
Secondary beams 25 no. PIN001-FJnn-R in this bay, 500 c/c
Transverse main beams PIN001-FB01 (X−100…100) and PIN001-FB01-FRAME02 (X5700…5900),
Y195…5805, flange top Z1000
Support columns and short posts 247 distinct plan coordinates site-wide (76 main columns, 171 short posts),
coordinate table issued with the specification

Notes

1 Geometry is drawn to R04 model outlines without simplification; no existing member added or removed.
2 Cabinet base plates are hard bearing points; no floor finish is laid beneath them.
3 The cable tray is routed around the IT positions at Y3280…3700 and drawn by model segment.
4 Cable capacity of the existing tray: TO BE COORDINATED.
5 Board edge support conditions are classified on P-102, not taken generally as "61 continuous bearing on every edge".
6 All local supports and holes in existing flanges shall be completed before boards are laid; sequence on P-105.
7 Boards from X5801.5 belong to the next bay, shown dashed, and are not counted in the 30 boards of this bay.

Handling and Placement 1:150



1 The stacking area is outside the floor (X < 0 side). Until a verified allowable floor load is available, pallets shall not be stacked on the floor.
2 One board placed at a time: boards enter from the outer bay edge and advance inward column by column 1…5 along X; each column is laid from low Y to high Y, and all six rows of a column are completed before the next column.
3 Board handling and placement may proceed before the building is enclosed; openings before enclosure ease board entry, but lifting clearance and slewing radius shall be determined for the actual enclosure state at that time.
4 The floor finish is laid only after building enclosure, waterproofing, substrate acceptance and lasting dryness, and not concurrently with board handling.
5 Operatives move only on fixed temporary working surfaces confirmed to carry load, or on independent platforms; no walking on bare steel beams or loose-laid boards.
6 Rated capacity and working radius of lifting equipment are determined point by point from weighed board mass plus lifting gear mass and the actual site layout; no machine model is specified on this drawing.
7 Project-local installation layout. Site survey set-out and floor loading for handling equipment TO BE COORDINATED.

K&K Data / PIN001 · FLOOR BOARD PROCUREMENT AND INSTALLATION SPECIFICATION DETAILS
First Bay Plan

P-101 SCALE AS SHOWN · Rev 04 / 2026-09-25

 · Copyright © 2026 K&K Data Service Inc.

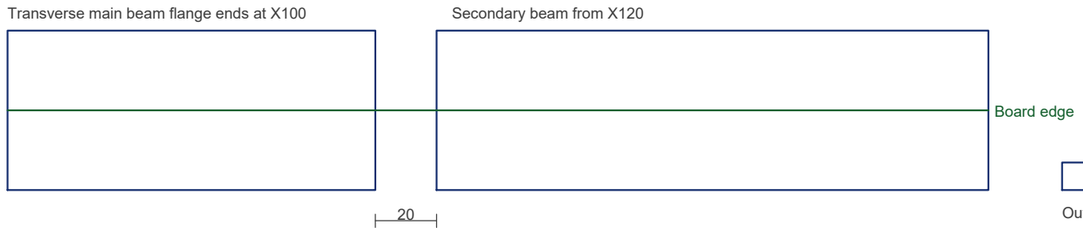
Existing steel, floor boards, cabinet base plates and cable tray are drawn to R04 model geometry. Local supports and fixings are sample articles proposed in this package and do not exist in the model.
Blue: existing steel, dimensions from model geometry. Red and orange: sample articles, dimensions are package design values for trial fabrication and quotation; resistance TO BE COORDINATED. Parameters to be coordinated are noted on the drawing.

Board Edge Support Condition Classification

P-102 Board edge support condition classification checked segment by segment on actual board outlines; bounding boxes not substituted for cut edges

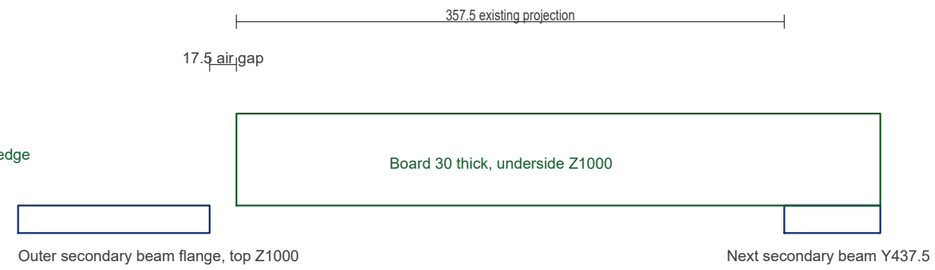
Covered lengths are from bounding boxes of the 488 beams at top face Z1000: a geometric upper bound of contact, not structural resistance.

D-A Support interruption 20 Plan 1:2



Adjacent boards share this gap: 288 edge instances, 144 plan gaps after de-duplication,
216 boards affected, 5.760 m without steel in total. Edge instances are not members and are not counted as 288 items.

D-B Perimeter board edge Y80 Section Y 1:4, Z 1:2



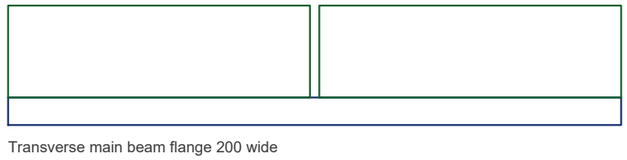
17.5 is the air gap between board edge and flange tip, not a cantilever length.
Without a bracket, the governing dimension is the 357.5 projection measured from Y437.5.
With the SS-P1 bracket this edge is carried by the outer secondary beam; see P-103.

D-C Notch back edge Section Y 1:4, Z 1:2



24 notch back edges at 67.5 from beam centre pass the flange tip by 5.0; 4.856 m in total.
An offset of 5 is not merely a 5 cantilever: on the other side the edge is 370.0 from the next flange.
Also 144 notch back edges at 180 from centre (24.596 m), 8 at 210 from centre
(0.320 m), and 8 long edges of 4 enclosed openings (2.280 m).

D-D X joint on transverse main beam flange Section 1:2



68 edge instances fully on this flange, 34 joint lines, 135.796 m in total.
136 edge instances partly on it: main beams end at Y195 and Y5805, leaving 15 unsupported at each end.
The remaining 1072 X edges only cross secondary beams, with no member under the joint.
X edges are therefore not uniformly "no member under the joint".

Classification summary

All edges (outer and hole loops) 3426.620 m, of which 1776.524 m without steel
Interior joint edges 744 instances, 845.768 m, of which 5.760 m without steel
845.768 m is the total length of this edge family, not the length on steel.
Support interruption 20 288 edge instances → 144 plan gaps → 216 boards
X edges fully on main beam flange 68 instances / 34 joint lines / 135.796 m
X edges partly on main beam flange 136 instances
X edges crossing secondary beams only 1072 instances
Perimeter X edges 12 instances

Detail

Boards 552; D1 114 / D2 110 / D3 112 / D4 146 / D5 3 / D6 67
D1 standard board D2 perimeter board D3 middle strip board
D4 notched board D5 board with opening D6 board with X edge on main beam flange

This table classifies geometric conditions. The gaps and projections above are not automatically engineering
defects and do not automatically call for strengthening; treatment is determined by trial installation and subsequent calculation.
Board-by-board support classification: BY FABRICATOR, coordinated with P-01 and this sheet.

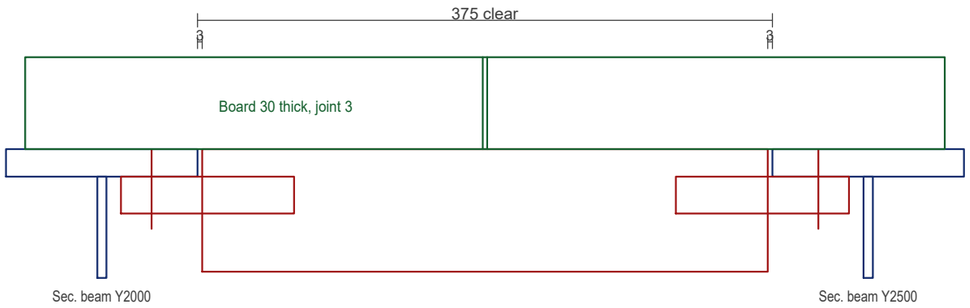
Copyright © 2026 K&K Data Service Inc.

Existing steel, floor boards, cabinet base plates and cable tray are drawn to R04 model geometry. Local supports and fixings are sample articles proposed in this package and do not exist in the model.
Blue: existing steel, dimensions from model geometry. Red and orange: sample articles, dimensions are package design values for trial fabrication and quotation; resistance TO BE COORDINATED. Parameters to be coordinated are noted on the drawing.

Local support sample articles SS-X1 and SS-P1, connection CN-1

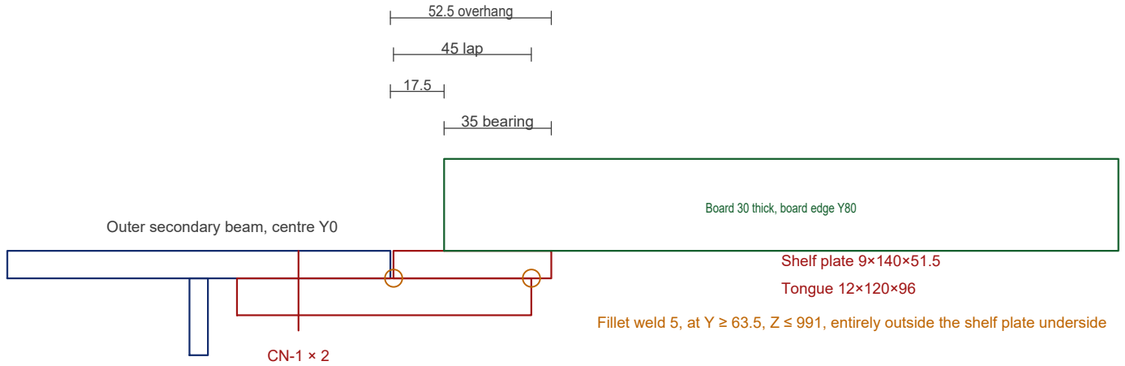
P-103 Local support samples top face Z1000, flush with existing flange top; shop welded, site bolted, no site welding

SS-X1 Section Y 1:4, Z 1:2



Tube RHS 80×40×4, Q235B, length 369; tube top Z1000, tube bottom Z960;
clearance 210 from tube bottom to cable tray top Z750.
Tongue plate 12×90×113, one per end; CN-1 2 per end, hole centre 30 from flange tip, edge distance 25 each side.
Tongue top face Z991 bears on flange underside: enters tube wall slot 60, spans air gap 3, extends 50 under flange,
inner end 9.5 from 6-thick web face.
Each tube side wall slotted 12 high × 60 long. Tongue 90 wide projects 5 each side beyond the 80-wide tube, giving seating width for 4 mm welds
above and below on the tube outer wall; weld toe X±44, tongue edge X±45, nominal margin 1.
4 mm fillet welds 4 × 60 per end, 8 in total, welded from outside the tube, not inside the slot. Cross section at lower right.
No weld within the 3 air gap, no weld above Z1000, no weld in the existing flange material.
Board bearing: tube width 80, joint 3 centred, 38.5 each side. Installation procedure on P-105.
TO BE COORDINATED: section bending, shear and deflection; connection resistance and prying; flange net section at countersink; tube wall slot reduction; support spacing along joint; actual clearance of tongue inner end to rolled root radius and existing coating to be confirmed by site measurement.

SS-P1 Section 1:2

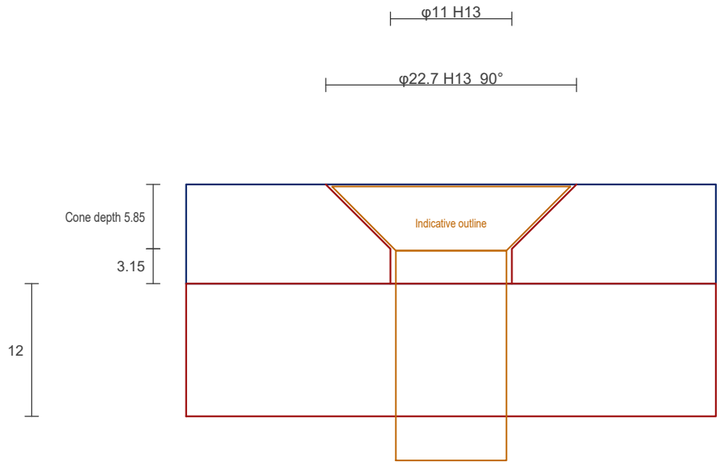


Shelf plate 9×140×51.5 is 10 wider each side than the 120-wide tongue, giving seating width on the shelf underside for 5 mm welds;
with equal widths the contact faces would be coplanar with no weldable corner. Weld toe X±65, shelf edge X±70, nominal margin 5.
Shelf and tongue lap 45 at Y63.5…108.5 (AISC 360-22 J2.2b(f): 5 × 9 = 45); the lap lies entirely outside the existing flange.
5 mm fillet welds all shop welded outside the shelf underside: one 45 along each long tongue edge X±60, and 120 across tongue outer end Y108.5; 210 in total.
Welds lie at Y ≥ 63.5 and Z ≤ 991, do not enter existing flange material, are not within the plate contact face or the board bearing face,
and nothing projects above Z1000.
Shelf starts at Y63.5, clear 1 of flange tip Y62.5, top face Z1000; board edge Y80, bearing 35.
Tongue extends 50 under flange, inner end 9.5 from 6-thick web face.
Bracket anchored to outer secondary beam spanning only the 17.5 air gap; not extended to inner secondary beam Y437.5; no new continuous edge beam.
Sample spacing 500 along X. SS-P1 dimensions agree with D02 R-102 (Rev R07); material Q235B; 1328 no. building-wide.
TO BE COORDINATED: cantilever bending and deflection of the 52.5 overhang, resistance of two CN-1 under prying, flange net section at countersink, actual support spacing.

Corrosion protection and notes

Hot-dip galvanized as a whole (EN ISO 1461) after all shop welding, drilling and tapping; threads re-tapped after galvanizing.
CN-1 bolts are silver zinc flake coated; FX-S1 screws are electro-zinc plated. The coatings differ and shall not be referred to interchangeably.
At site drilling, countersinking and tapping of existing flanges, bare steel is cleaned and coated with zinc-rich touch-up; the touch-up method is set after checking against the existing steel coating system. No site welding; no new continuous heavy edge beam.
Holes in existing flanges are machining requirements and are not in the model. Both articles are samples; resistance TO BE COORDINATED.

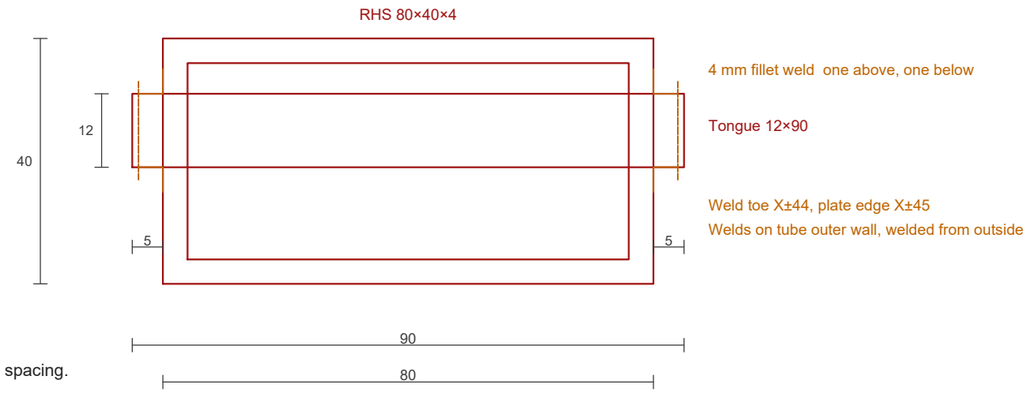
CN-1 Connection detail 1.8:1



ISO 10642 M10×25 08.8 silver zinc flake coating
Reference article Würth 412241025 or certified equivalent
Seating depth s measured, s ≥ 0; nominal shank projection 4 + s
Existing flange 9 thick
Tongue 12 thick, tapped M10

The bolt head bears from above on the countersink cone of the existing flange; the thread engages the tapped hole of the tongue below;
tightening draws the tongue up against the flange underside. Head and thread are in two different connected parts.
Flange hole machined to the fastener manufacturer's mating hole for ISO 10642 (DIN 74 F10):
φ22.7 H13 countersink mouth, φ11 H13 through hole, 90° cone. Table reference depth 5.9; 90° geometric nominal = (22.7−11)/2 = 5.85;
cone angle and both diameters are self-consistent; no second independent depth control value. Cone Z994.15…1000, nominal 3.15 straight hole remaining.
The cone removes 5.85 from the 9-thick flange; the removal is shown on the drawing.
Head diameter alone does not fix seating depth: the ISO 10642 M10 row lists theoretical max head diameter 22.4 and actual min 19.22;
the theoretical value is the geometric construction of a head fully sunk in a 90° hole, not a measured diameter. Actual fit shall be verified for the selected parts.
No fixed sinkage is therefore given: seating depth s is measured on the first article on 9 mm sample stock; only s ≥ 0 is required (head top not above flange top). Nominal length 25 minus stack 21 (flange 9 + tongue 12) gives 4, so nominal shank projection = 4 + s.
Actual projection, incomplete thread at screw end and complete-thread engagement length shall be measured. No catalogue torque or capacity values are cited.
Holes shall not be deepened or enlarged on site to suit seating; if the first article does not fit, resolve before machining structural members.
Hex socket operated from above; no nut in the cavity.
2 per tongue, hole centre 30 from flange tip; SS-X1 tongue 90 wide, hole spacing 40, edge distance 25;
SS-P1 tongue 120 wide, hole spacing 60.
TO BE COORDINATED: effect on flange net section (structural check); batch drilling of structural members subject to that check; at this stage fit is trialled on sample stock only. Countersunk head capacity values are not cited on this drawing.

SS-X1 Cross section through slot 1:1



4 mm fillet weld one above, one below
Tongue 12×90
Weld toe X±44, plate edge X±45
Welds on tube outer wall, welded from outside

K&K Data / PIN001 · FLOOR BOARD PROCUREMENT AND INSTALLATION SPECIFICATION DETAILS
Local Support Sample Articles

P-103 SCALE AS SHOWN · Rev 04A / 2026-09-27

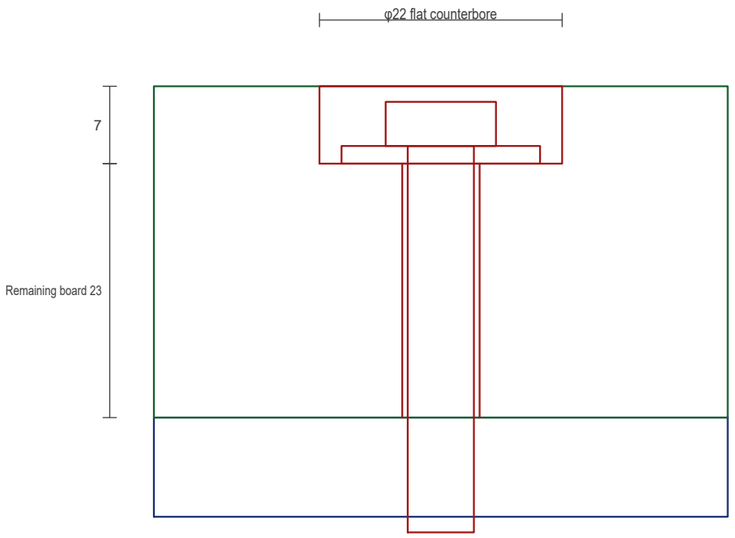
Copyright © 2026 K&K Data Service Inc.

Existing steel, floor boards, cabinet base plates and cable tray are drawn to R04 model geometry. Local supports and fixings are sample articles proposed in this package and do not exist in the model.
Blue: existing steel, dimensions from model geometry. Red and orange: sample articles, dimensions are package design values for trial fabrication and quotation; resistance TO BE COORDINATED. Parameters to be coordinated are noted on the drawing.

Flush fixing sample FX-S1 and drilling sample FX-M1

P-104 Flush fixing samples preferred set; drilling sample listed separately, does not receive floor finish

FX-S1 Section 1.8:1



DIN 7984 M6×35 head φ9.78…10, height 3.82…4.0

Non-standard flat washer ID 7.0 / OD 18.0 / t 1.6

φ7 through hole

Board 30 thick

Tapped M6, through 9-thick flange

Existing flange 9 thick, top Z1000

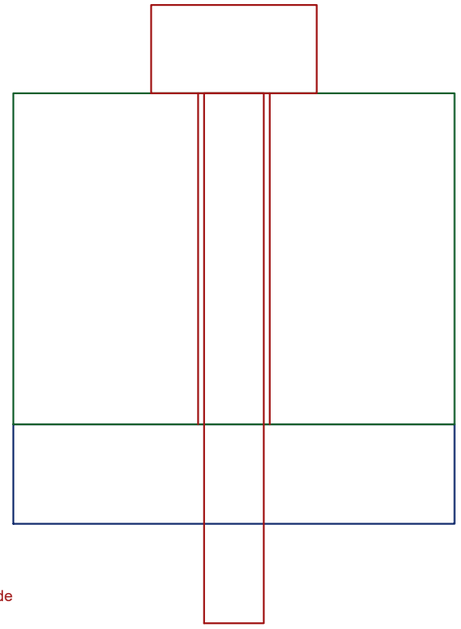
Head top 1.4 below board surface; shank end 1.4 beyond flange underside

Head top level = 1030 − 7 + 1.6 + 4.0 = 1028.6, 1.4 below board surface; with minimum head height 1.58, only lower.
Shank end = 35 − 1.6 − 23 − 9 = 1.4, projecting 1.4 beyond flange underside.
The washer is a non-standard sample-specific part. DIN 9021 M6 has ID 6.4, which interferes with the underhead fillet of up to 6.8, so the washer cannot sit flat and is not used; this part uses ID 7.0, bearing annulus π(18²−7²)/4 = 215.98 mm².
Counterbore enlarged from φ20 to φ22, leaving 2 radially around the φ18 washer. Board hole φ7 clears the underhead fillet.
Steel side drilled φ5.0 then tapped M6, all from above the board; no nut below required.
M6 hole centre not less than 40 from CN-1 M10 hole centre.

Coverage required of a proprietary fixing: it must both drill 9 mm steel and fix a 30 mm fibre cement board, with a head pull-through value in this board. Products reviewed do not comply: CBSDQ limited to 3 mm steel; SR 10g×40 for 0.75–1.6 mm steel; Hilti S-MD 05Z drills 4.6–15 mm but is for sheet metal and gives no pull-through value for this board; SFS Impax SD5 publishes clamping lengths 10 / 16 / 29 mm, not covering 30 mm board. This assembly is therefore made of machined parts and marked as a sample; a supplier product meeting the above coverage and giving a pull-through value in this board may be substituted under the same test requirements.

TO BE COORDINATED: head pull-through resistance at the 23 remaining board thickness and bearing on the counterbore floor, to be measured in this board; net section of tapped flange; effective thread engagement length: the incomplete lead threads of the screw take up part of the 1.4 projection and shall not be counted as 1.5d; to be measured on the first article; torque limit and number of re-installations.

FX-M1 Drilling and holding sample Section 1.8:1



Hex washer head, about 8 above board surface

φ6.5 pre-drilled through hole

#12 (φ5.4) × 60–65, No. 5 drill point

A drill point cannot drill beyond its own length; it shall penetrate the full connected thickness before the thread engages.
A No. 5 drill point is about 13, far less than this project's stack 30 + 9 = 39, so it cannot self-drill board and steel in one pass; the board is pre-drilled and the screw starts drilling at the steel face.
This article records only: actual time to drill the 9-thick flange; whether the thread engages first; measured drill point projection beyond the flange underside; head embedment depth in the board surface and any ring cracking. No capacity is given.
The head stands about 8 above the board surface and cannot receive a thin finish, so it is kept separate from FX-S1 and placed only in test zones without floor finish.

Floor finish and laying

Enquiry product: Forbo Sphera element total thickness 2.0 (EN ISO 24346), 2900 g/m² = 2.9 kg/m² (EN ISO 23997).
EN ISO 10874 commercial class 34 / light industrial class 43; EN ISO 24343-1 residual indentation ≤0.10 (typical ~0.03);
ISO 4918 continuous castor chair: pass; DIN 51130 R9; EN 13893 μ ≥ 0.30; EN 13501-1 Bfl-s1;
EN ISO 23999 dimensional stability ≤0.4%; ISO 16516 TVOC 28 days ≤0.01 mg/m³;
ISO 14644-1 ISO class 4: particle emission class of the floor material itself, not a room cleanliness certification;
EN 1815 body voltage ≤2.0 kV; this limit does not make it a static dissipative floor. Roll width 2.0 m, length ≤27 m.
This project takes the thin lightweight route (2.0 / 2.9), compared with a 10.3-thick tile route;
energetic 2850 g/m² and elite 2700 g/m² in the same range are lighter, so "lightest" is not the selection reason.

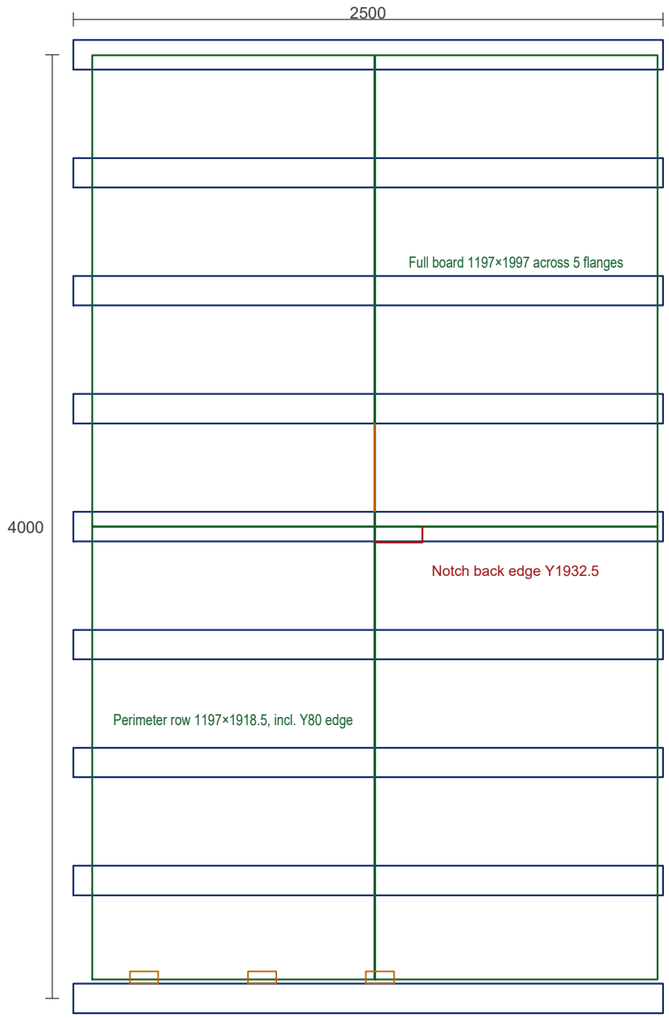
Laying (manufacturer's installation guide): adhesive Eurocol 640 Eurostar Special (EC1), applied with 1.5×5 mm V-notch trowel, rolled in all directions with a 68 kg roller within open time. Notch depth is a trowel specification, not cured adhesive film thickness.
Laid indoors after building enclosure and waterproofing; substrate clean, level, sound and lastingly dry, with moisture and adhesion tests.
Maintain 18…27 °C for 48 h before, during and 24 h after laying; condition material and adhesive 24 h, or 48 h if below 10 °C before delivery.
Avoid heavy traffic within 72 h of laying; 5 days for high point loads or wheeled traffic. No full-area levelling layer or heavy underlay.
Finished level = 1030 + Δ, Δ = 2.0 + adhesive film; film thickness measured on a trial lay of the selected system, not back-calculated from coverage data.
Contact loads of roller and operative are included in the trial installation load conditions. Installation guide compatibility with this project's 30-thick fibre cement board substrate with 3 open joints: BY MANUFACTURER confirmation; capacity of this project's boards TO BE VERIFIED.
The 3 joint between boards is a laying tolerance joint and does not automatically become a finish movement joint; actual building and structural movement joints shall not be bridged by the finish.
Local continuous conductive and equipotential provisions at IT maintenance positions follow adopted F02; a room-wide ESD floor is not required.

Existing steel, floor boards, cabinet base plates and cable tray are drawn to R04 model geometry. Local supports and fixings are sample articles proposed in this package and do not exist in the model.
Blue: existing steel, dimensions from model geometry. Red and orange: sample articles, dimensions are package design values for trial fabrication and quotation; resistance TO BE COORDINATED. Parameters to be coordinated are noted on the drawing.

Trial installation rig, SS-X1 installation procedure, handling and installation sequence

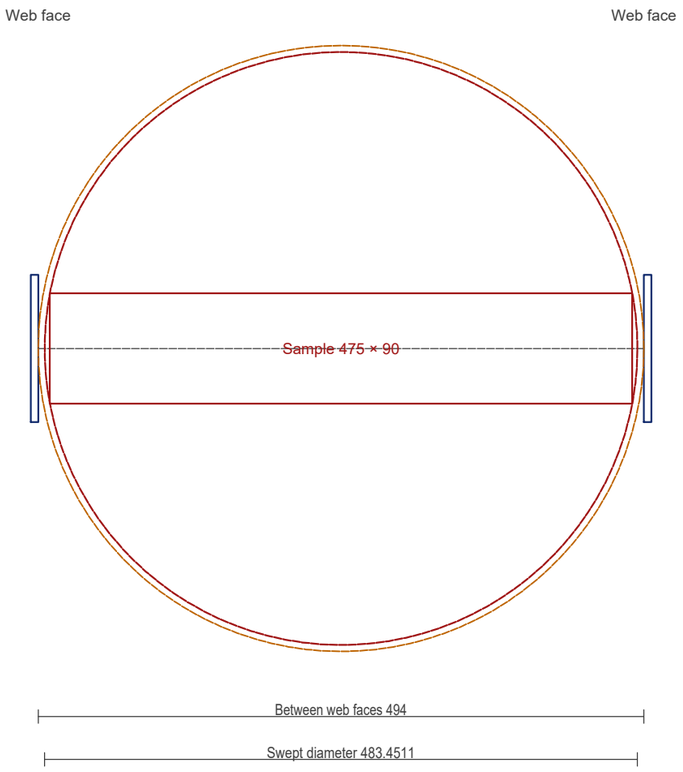
P-105 Full-board trial rig TR-1 laid out to actual 500 spacing and actual edge conditions

TR-1 Plan 1:26



9 no. HN250×125×6×9, 500 c/c, Y0…4000
Orange: one SS-X1 within 375 clear under X joint; three SS-P1 at 500 along X

SS-X1 installation procedure Plan rotation 1:5



Plan outline of the finished article 475 × 90 is governed by the tongue (projecting beyond the 80-wide tube by 5 each side). Overall length 475 exceeds the 375 clear between flange tips, so it cannot be lowered vertically in working orientation.
Transverse main beams at secondary beam ends in this bay (X−100…100 and X5700…5900, flange top Z1000) block the route of pushing in along X from the open beam end; that method works only on a rig open at both ends.
The adopted procedure is plan rotation below the flanges, between the two web faces: swept diameter 483.4511 < 494, nominal margin 5.2744 each side.
Farthest weld point swept radius 189.67, less than 241.73 at the tongue outer corner, so welds do not govern the swept envelope.
Rotation level: tube top Z980, 11 below flange underside, still 190 above tray top Z750. 494 is the plan clearance between web faces and applies only at this rotation level; bottom flanges and web root fillets lie lower and do not occupy plan space at this level.

Edge conditions reproduced by TR-1

a One full 1197×1997 board across 5 flanges
b One full 1197×1918.5 perimeter row board, incl. Y80 edge and 357.5 projection
c One 3 Y-direction joint centred on a flange
d One 3 X-direction joint across 375 clear
e One notch back edge passing the flange tip by 5.0
f One SS-X1, three SS-P1, all FX-S1; FX-M1 at two further points in test zones without floor finish

The rig is open at both ends, but actual bay ends are blocked by transverse main beams, so the rig shall also rehearse the SS-X1 plan rotation procedure.
Rig board mass calculated separately once the supplier's measured area density is available.
If the supplier's rig is smaller than shown, at least a and b shall be reproduced; other conditions shall not be regarded as verified.

Installation sequence all local supports and holes before boards are laid

S1 Check level Z1000 and flatness of existing secondary and main beam flange tops.
S2 Set out: from bay grid, fix low-X and low-Y edge positions of each board.
S3 With drill jig, drill φ11 H13 in existing flange to DIN 74 F10 mating hole and countersink 90° φ22.7 H13 from top (CN-1 holes), deburr, coat bare steel with zinc-rich touch-up.
S4 Install SS-P1: insert tongue under flange, set shelf top to Z1000, fit CN-1 and tighten.
S5 Install SS-X1: rotate sample 90° in plan and lower through the 375 gap, lower to tube top Z980, rotate back 90° between webs, lift 20 to tube top Z1000 with 3 at each end, tongue top at Z991, align holes, fit 4 CN-1 and tighten.
S6 Drill φ5.0 in existing flange and tap M6 (FX-S1 holes), coat with touch-up.
S7 Re-check: tube top, shelf top and flange top flush at Z1000, nothing above Z1000. Board laying starts only after all the above are complete and re-checked.
S8 Lay boards: place in order from one end of the bay and align holes.
S9 Insert washers and drive DIN 7984 M6×35 to the torque set on the first article.
S10 Re-measure board level differences and joint widths; record before finish works.

Handling route and stacking

1 Stacking area set outside the floor. Until a verified allowable floor load is available, pallets shall not be stacked on the floor. Placing pallets directly over secondary beams does not bypass the load path through the boards.
2 No heavy crane or skid-steer loader is assumed on site; loose-laid boards are not used as temporary walkways. Temporary walkways bear on fixed boards and secondary beams.
3 Single boards lifted from outside with rated lifting clamps, bottom-supported pallets or spreader beams. The board face is porous; vacuum lifters not used until verified on this board face.
4 Wheel diameter and wheel load of handling equipment: TO BE COORDINATED; the rolling load condition follows from them.

Supplementary details: finish, movement joints, finish terminations and ESD connections are design-intent linework not present in the native whole-house model; the whole-house model remains R04.
Units mm. Board and beam geometry from Structural Drawing Specification R04. Total finish build-up increment Δ not selected.

F-101 Floor finish build-up section 1:4 (finish build-up not to scale)

Finished level = 1030 + Δ; Δ is the actual completed total finish build-up increment, BY MANUFACTURER of the selected finish product

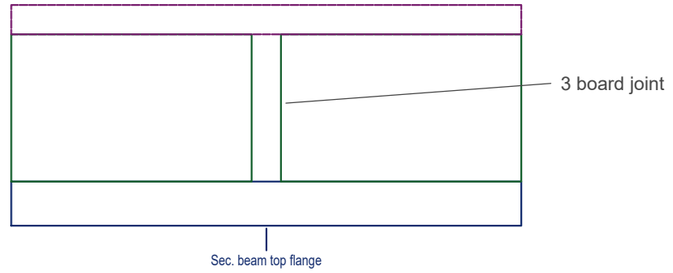


Fibre cement board 30 thick, underside 1000, top 1030; secondary beam top flange 991–1000, 9 thick, 125 wide.
Nominal bearing width 61 each side = (125 − 3) / 2; joint centre offset ±61 is the geometric limit of zero bearing, not an installation tolerance.
Flange clear distance 375 and beam spacing 500 are measured model geometry, not allowable board spans.
Perimeter board edge 80 from grid, edge beam flange outer edge ends at 62.5, difference 17.5; perimeter board edges do not bear on the edge beam flange.
Finish-to-board bonding, fixings and capacity: BY MANUFACTURER / TO BE COORDINATED; self-weight of new finish shall be included in subsequent gravity load input.

F-102a Ordinary board joint (construction joint) Schematic, not to scale

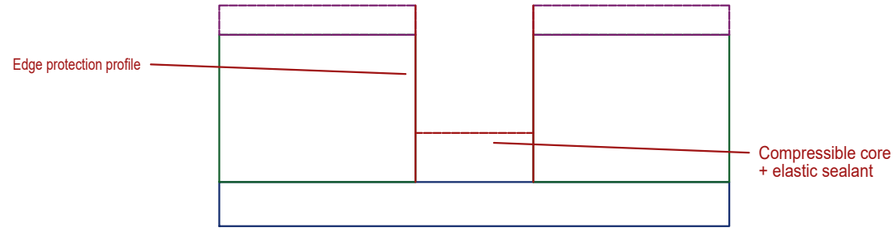
The 3 mm board joint is a construction joint, centred on the secondary beam top flange.
Whether the finish may run continuously shall satisfy both the product joint instructions, approved joint filling or separation treatment, and measured offset limits;
until then, it shall not be laid as continuous without joints.

Finish continuity: TO BE COORDINATED



F-102b Movement joint termination Schematic, not to scale

Movement joints actually required pass through the finish, with edge protection profiles both sides;
The joint contains compressible core and elastic sealant; it shall not be rigidly filled.



Movement joint location, spacing and width set by product movement requirements and structural deformation.
Movement joint layout TO BE COORDINATED with the structural deformation calculation.

A 3 mm board joint is not automatically a movement joint; mark each separately; board joints do not set movement joint layout.

K&K Data / PIN001 · FLOOR FINISH AND IT MAINTENANCE ESD INTERFACE SUPPLEMENTARY DETAILS

F-101 Finish build-up section F-102a Ordinary board joint F-102b Movement joint termination

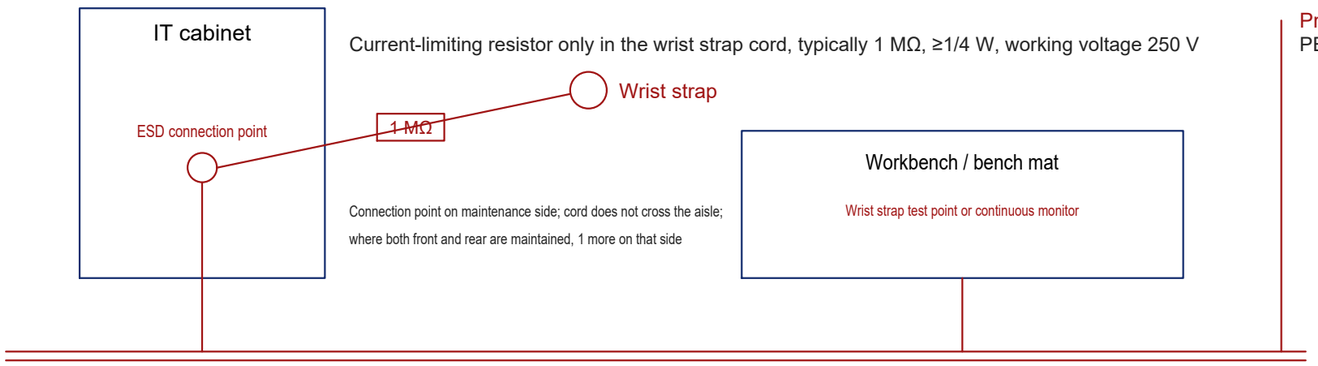
F02 F-101/F-102 SCALE AS SHOWN · Rev 02 / 2026-09-25

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · Sheet 1 of 2 ·
F02 SERIES; D01 F-001 … F-501 IS A SEPARATE SERIES · K&K Data Service Inc. · inquiry@kkdatasvc.com ·
Copyright © 2026 K&K Data Service Inc.

Supplementary details: finish, movement joints, finish terminations and ESD connections are design-intent linework not present in the native whole-house model; the whole-house model remains R04.
Units mm. Board and beam geometry from Structural Drawing Specification R04. Total finish build-up increment Δ not selected.

F-103 Cabinet-side ESD connection point and maintenance workbench connection schematic (not to scale)

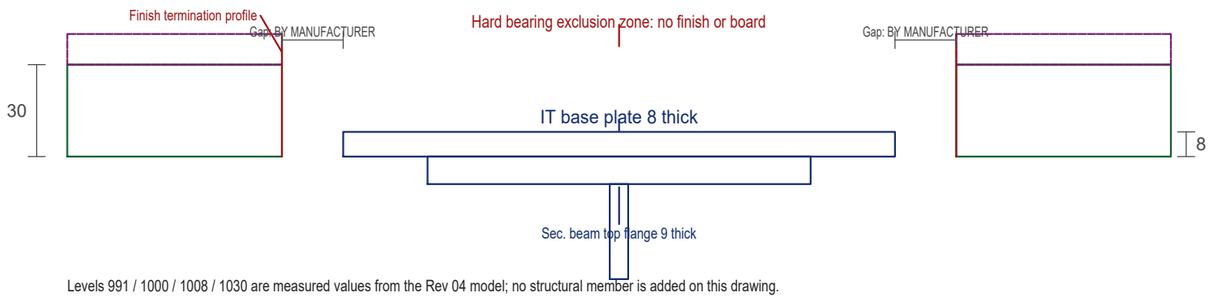
The connection target is the equipment protective equipotential bonding specified by the electrical design. This network is not in the native whole-house model and is not designed on this drawing.



1. This drawing is the electrostatic discharge control interface for IT maintenance; it does not apply to live electrical work.
2. Wrist straps shall not be worn where operatives may contact circuits of 250 V or more; such work follows live-work requirements separately.
3. Personnel shall not be earthed to nearby painted steel members or to new isolated earth rods.
4. Periodic wrist strap testing: daily test station or continuous workstation monitoring. One-off discharge at entry is not the only measure.
5. Static control is not only wrist straps: protective bonding, antistatic packaging, work surfaces, castors and ambient conditions act together.
6. ESD connection ports modelled in the native model: 0; the 6 IT positions in the model are in the first bay only.

F-104 Finish termination at equipment hard bearing zone 1:2 (finish build-up not to scale)

IT equipment base plate 1000–1008 sits directly on the secondary beam top flange as the vertical hard bearing path; finish and fibre cement board terminate around it and do not enter that path.



Levels 991 / 1000 / 1008 / 1030 are measured values from the Rev 04 model; no structural member is added on this drawing.

Gap between board edge and equipment base plate, termination profile size and any local support at the board edge follow the finish product and board requirements: BY MANUFACTURER / TO BE COORDINATED.

Equipment base plate connection check: TO BE COORDINATED; the existing connection of 88 sets of M12×45 bolts is unchanged.

K&K Data / PIN001 · FLOOR FINISH AND IT MAINTENANCE ESD INTERFACE SUPPLEMENTARY DETAILS

F-103 ESD equipotential connection schematic F-104 Finish termination at equipment hard bearing zone

F02 F-103/F-104

SCALE AS SHOWN · Rev 02 / 2026-09-25

DESIGN DEVELOPMENT — PUBLIC EDITION P2 / 2026-10 · DIMENSIONS IN MILLIMETRES · Sheet 2 of 2 ·
F02 SERIES; D01 F-001 … F-501 IS A SEPARATE SERIES · K&K Data Service Inc. · inquiry@kkdatasvc.com ·
Copyright © 2026 K&K Data Service Inc.