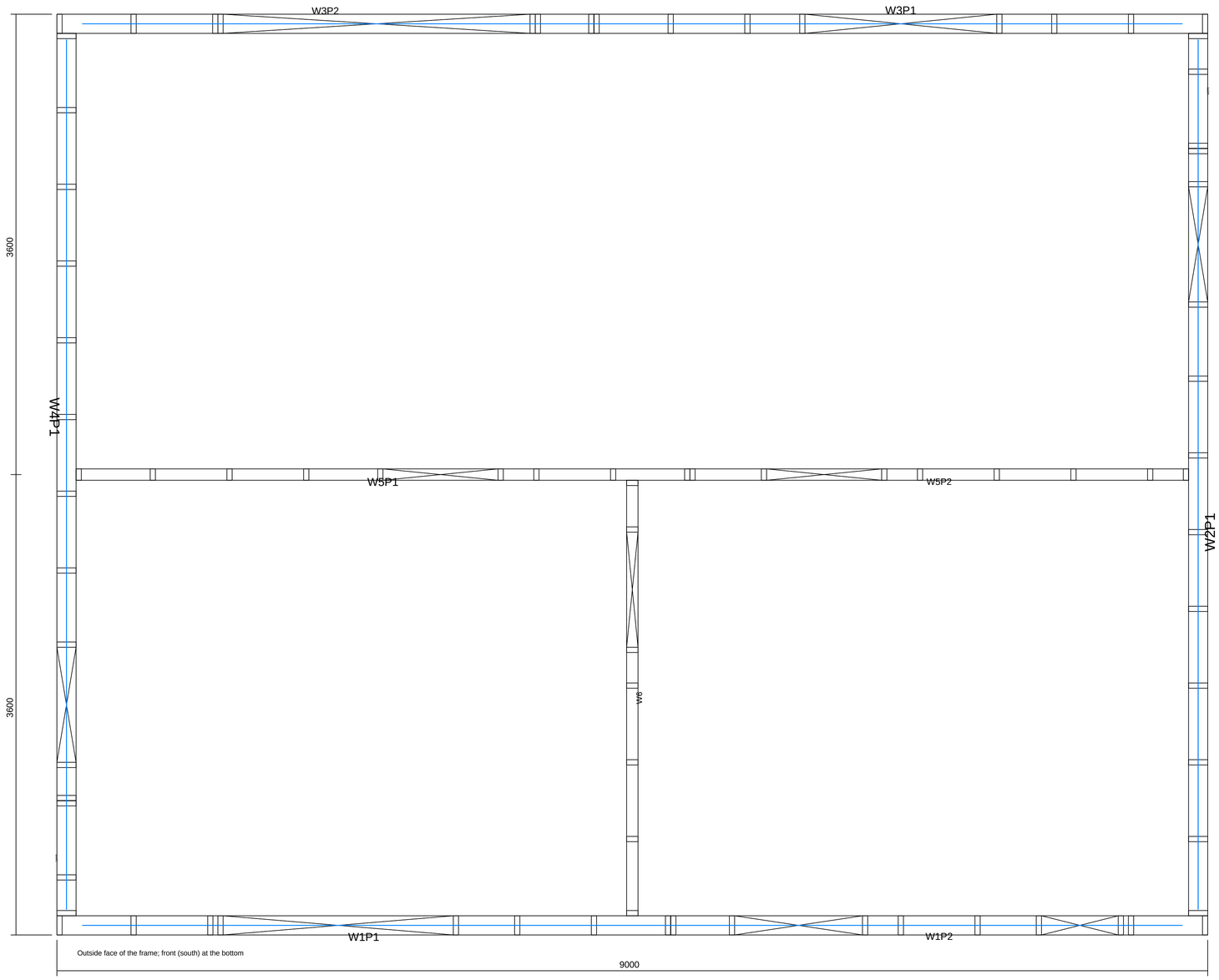
GROUND FLOOR WALL PANELS - PLAN 1:20

Plan of the lgs-frame objects on level 0 (walls 2400 high) with the ground floor service run.

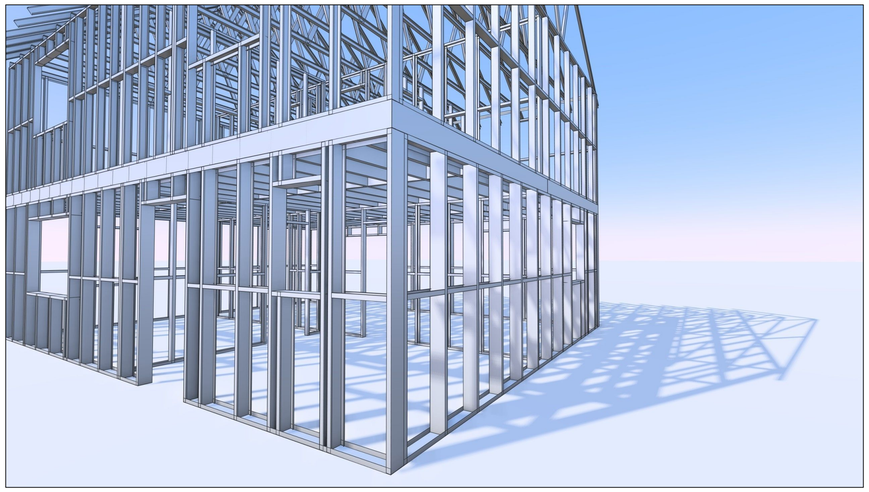


GROUND FLOOR PANELS (frame data, LGSLIST Cut)

Panel	Length	Height	Stud	Plate	BMT	Spacing	Openings	Bracing	Members	Ops	Mass kg
W1P1	4800	2400	C150	U150	1.15	600	1	Strap	23	160	85.6
W1P2	4200	2400	C150	U150	1.15	600	2	Strap	24	160	79.0
W2P1	6000	2400	C150	U150	1.15	600	1	Strap	26	176	102.3
W2P2	900	2400	C150	U150	1.15	600	0	Strap	7	39	21.8
W3P1	4800	2400	C150	U150	1.15	600	1	Strap	24	163	86.1
W3P2	4200	2400	C150	U150	1.15	600	1	Strap + double jambs	18	129	62.1
W4P1	6000	2400	C150	U150	1.15	600	1	Strap	26	178	102.0
W4P2	900	2400	C150	U150	1.15	600	0	Strap	7	39	21.8
W5P1	4800	2400	C89	U89	0.95	600	1	None	21	127	47.3
W5P2	3900	2400	C89	U89	0.95	600	1	None	19	114	40.6
W6	3405.5	2400	C89	U89	0.75	600	1	None	17	101	28.0
Total									212	1386	676.6

OPENINGS (LGSOPENING; mm)

Panel	Opening	Width	Head	Sill	From panel start
W1P1	Window	1800	2100	900	1300
W1P2	Door	1000	2100	-	500
W1P2	Window	600	2100	1200	2900
W2P1	Window	900	2100	1050	4800
W3P1	Window	1500	2100	1050	1650
W3P2	Door	2400	2100	-	500
W4P1	Window	900	2100	900	4800
W5P1	Door	900	2100	-	2400
W5P2	Door	900	2100	-	600
W6	Door	900	2100	-	2100



South-east corner: C150 ground floor, C89 first floor

NOTES

1. Wall panels framed by Steel Framing (LGS) on their centrelines. The plan graphics (studs, jambs, openings, panel names) are the plugin's own.
2. Outside walls C150 studs and U150 plates, 1.15 mm; spine wall C89 0.95 mm; hall wall C89 0.75 mm. All S450GD, Z275.
3. Panelised for transport with LGSPANEL Auto, longest panel 6000 mm. Walls stop at the faces of the walls they meet.
4. Blue line: power ring at 300 mm above floor (LGSSERVICE): 57 service holes in 8 panels.
5. Bracing: flat straps (not machined). Loads and design: see sheet 9.

Stratal CAD

cad.stratal.co.uk

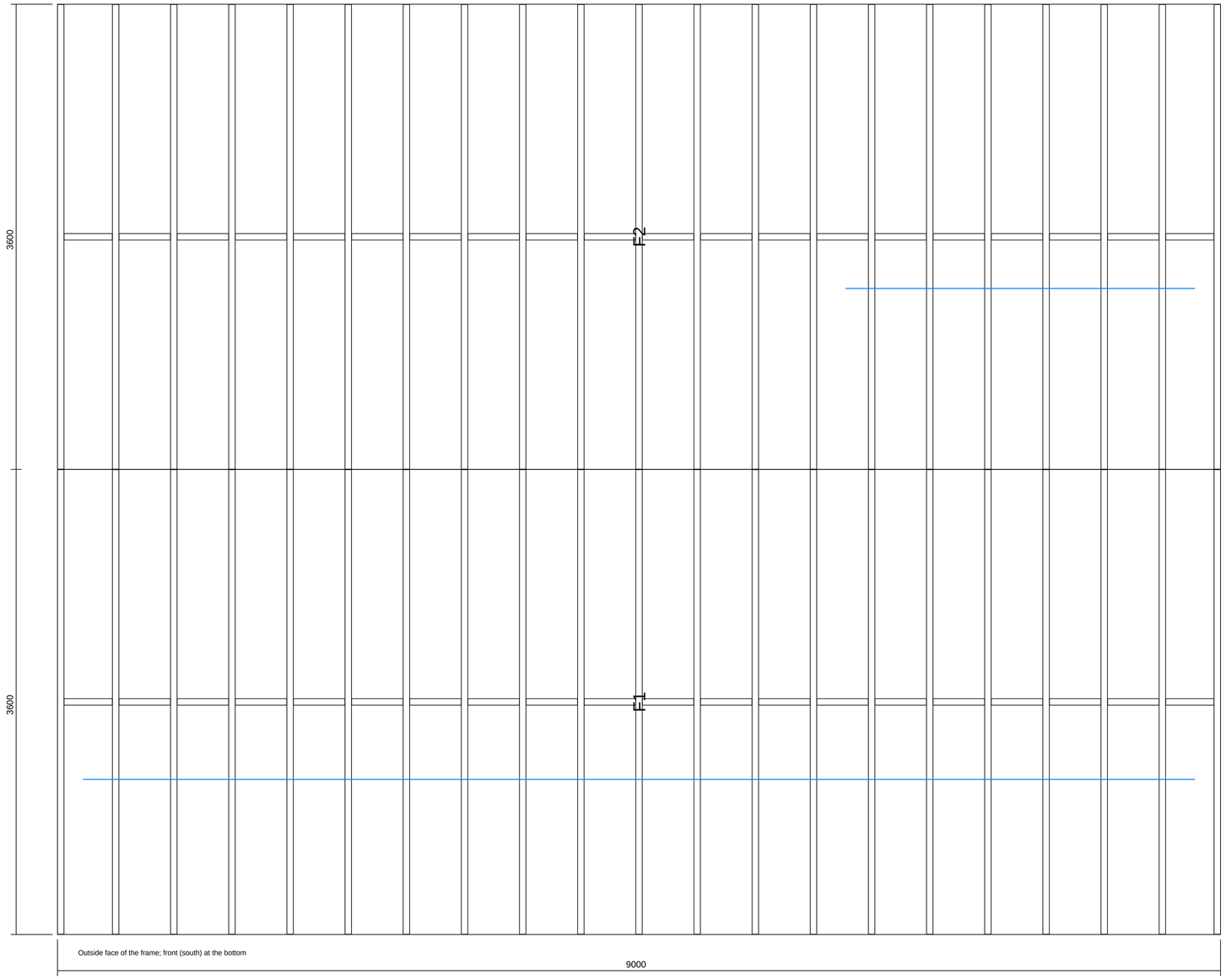
TITLE
Ground floor wall panels
Frame plan

PROJECT		DRAWN	
Plot 3, Kestrel Close, Thornbury (fictional)		Stratal CAD demo	
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-001	1 of 10	1:20	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

FIRST FLOOR JOISTS - PLAN 1:20

Plan of the floor frames F1 and F2 (top of joists 2600) with the first floor service runs.

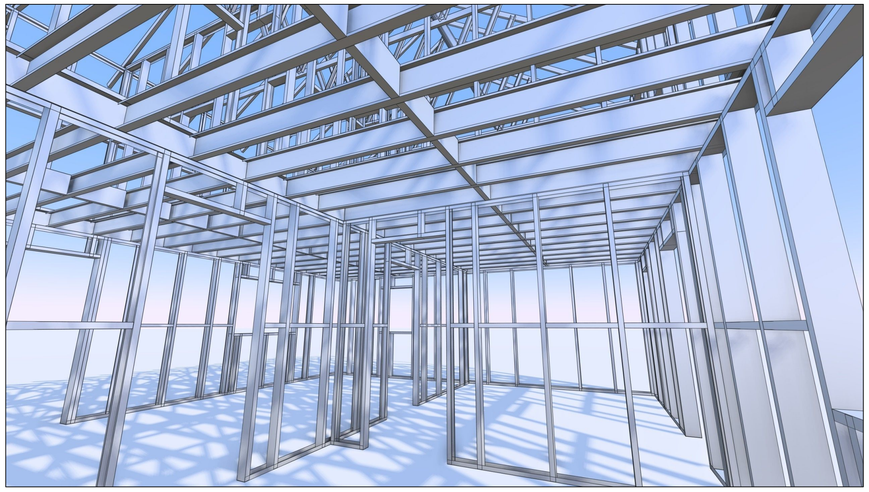


FLOOR MEMBERS, F1 + F2 (LGSLIST Cut)

Role	Section	BMT	Length mm	Count	Ops each	Mass each kg
Rim joist	U200	1.15	9000	4	21	24.19
Joist	C200	1.15	3595.7	17	5	10.56
Joist	C200	1.15	3595.7	25	6	10.56
Blocking	C200	1.15	373	4	4	1.1
Blocking	C200	1.15	398	36	4	1.17
Total				86		

JOIST DESIGN, EXAMPLE LOADS (LGSDESIGN Csv)

Floor	Role	Count	M kNm	V kN	MRd kNm	VRd kN	Util.	Governs	Defl. mm	Limit mm	Result
F1	Joist	2	1.065	1.19	5.788	8.99	0.184	bending	2.2	10	OK
F1	Joist	19	2.131	2.37	5.788	8.99	0.368	bending	4.3	10	OK
F2	Joist	2	1.065	1.19	5.788	8.99	0.184	bending	2.2	10	OK
F2	Joist	19	2.131	2.37	5.788	8.99	0.368	bending	4.3	10	OK



Ground floor: C200 joists and blocking over the spine wall

NOTES

1. First floor joists C200 at 450 mm centres, U200 rims, 1.15 mm, one row of blocking; top of joists at 2600 mm.
2. Floor plan graphics are the plugin's own (outline, joists, blocking). Two floors, F1 front and F2 back, meet over the spine wall.
3. Blue lines: heating flow and return (F1, 19 holes) and bath waste 60 mm (F2, 6 holes) at 2500 mm, through the joist webs (LGSSERVICE).
4. Example loads 2.93 kPa ULS, 2.0 kPa SLS: joists 0.37 utilised, 4.3 mm deflection against 10 mm (LGSDESIGN, design aid).

Stratal CAD

cad.stratal.co.uk

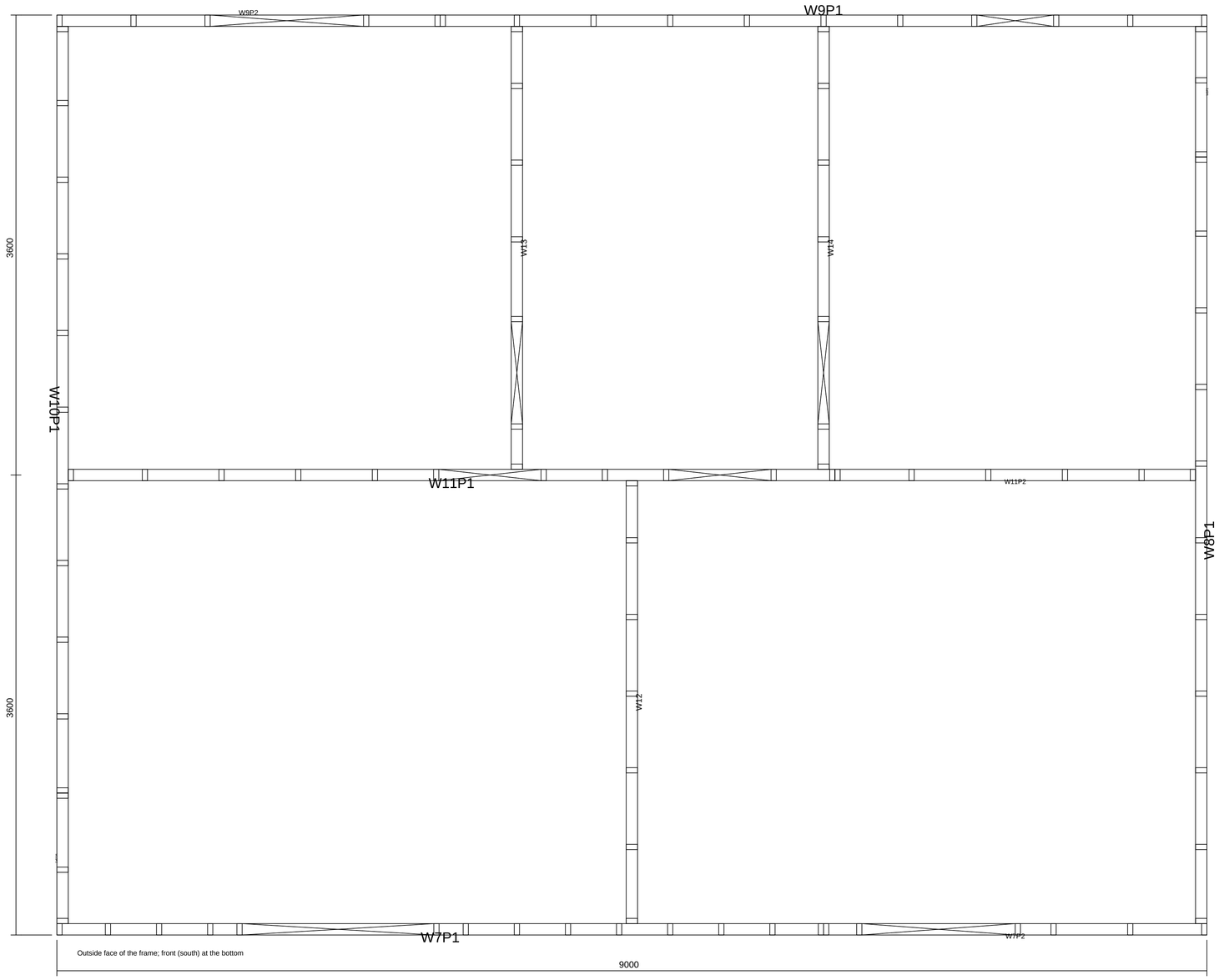
TITLE
First floor joists
Floor plan and services

PROJECT		DRAWN	
Plot 3, Kestrel Close, Thornbury (fictional)		Stratal CAD demo	
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-002	2 of 10	1:20	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

FIRST FLOOR WALL PANELS - PLAN 1:20

Plan of the lgs-frame objects on level 2600 (walls 2400 high).

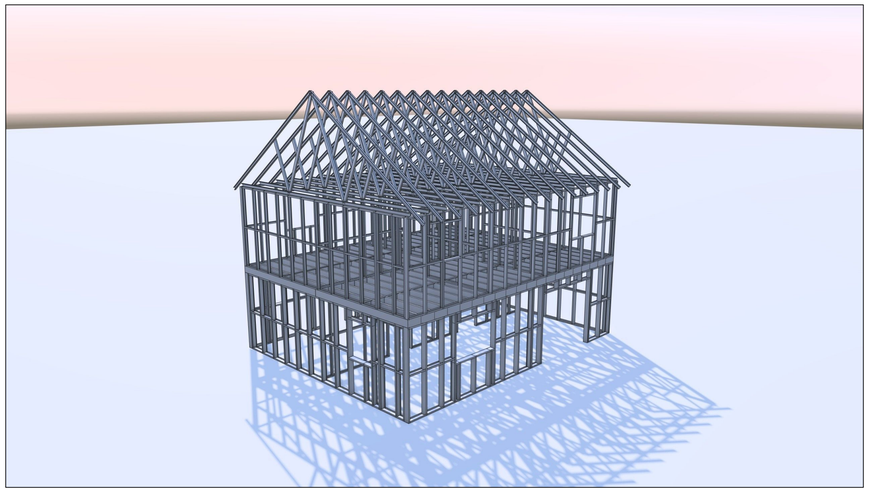


FIRST FLOOR PANELS (frame data, LGSLIST Cut)

Panel	Length	Height	Stud	Plate	BMT	Spacing	Openings	Bracing	Members	Ops	Mass kg
W7P1	6000	2400	C89	U89	1.15	400	1	Strap	38	248	93.8
W7P2	3000	2400	C89	U89	1.15	600	1	Strap	18	114	43.6
W8P1	6000	2400	C89	U89	1.15	600	0	Strap	23	145	71.2
W8P2	1022	2400	C89	U89	1.15	600	0	Strap	7	37	16.6
W9P1	6000	2400	C89	U89	1.15	600	1	Strap	24	153	72.2
W9P2	3000	2400	C89	U89	1.15	600	1	Strap	14	87	37.6
W10P1	6000	2400	C89	U89	1.15	600	0	Strap	23	145	71.2
W10P2	1022	2400	C89	U89	1.15	600	0	Strap	7	37	16.6
W11P1	6000	2400	C89	U89	0.95	600	2	None	29	179	58.9
W11P2	2822	2400	C89	U89	0.95	600	0	None	13	78	30.5
W12	3466.5	2400	C89	U89	0.75	600	0	None	15	91	28.7
W13	3466.5	2400	C89	U89	0.75	600	1	None	17	101	28.3
W14	3466.5	2400	C89	U89	0.75	600	1	None	17	101	28.3
Total									245	1516	597.6

OPENINGS (LGSOPENING; mm)

Panel	Opening	Width	Head	Sill	From panel start
W7P1	Window	1500	2100	900	1450
W7P2	Window	1200	2100	900	300
W9P1	Window	600	2100	1200	1200
W9P2	Window	1200	2100	900	600
W11P1	Door	800	2100	-	2900
W11P1	Door	800	2100	-	4700
W13	Door	800	2100	-	355.5
W14	Door	800	2100	-	355.5



From the north-east: patio door and kitchen window

NOTES

1. First floor wall panels on C89 studs, U89 plates: outside walls 1.15 mm, internal 0.75 to 0.95 mm, level 2600 mm.
2. Openings moved off the stud grid with LGSOPENING Move where the first framing made nogs shorter than the machine makes.
3. Bracing: flat straps, lengths listed by LGSCHECK as framing notes.

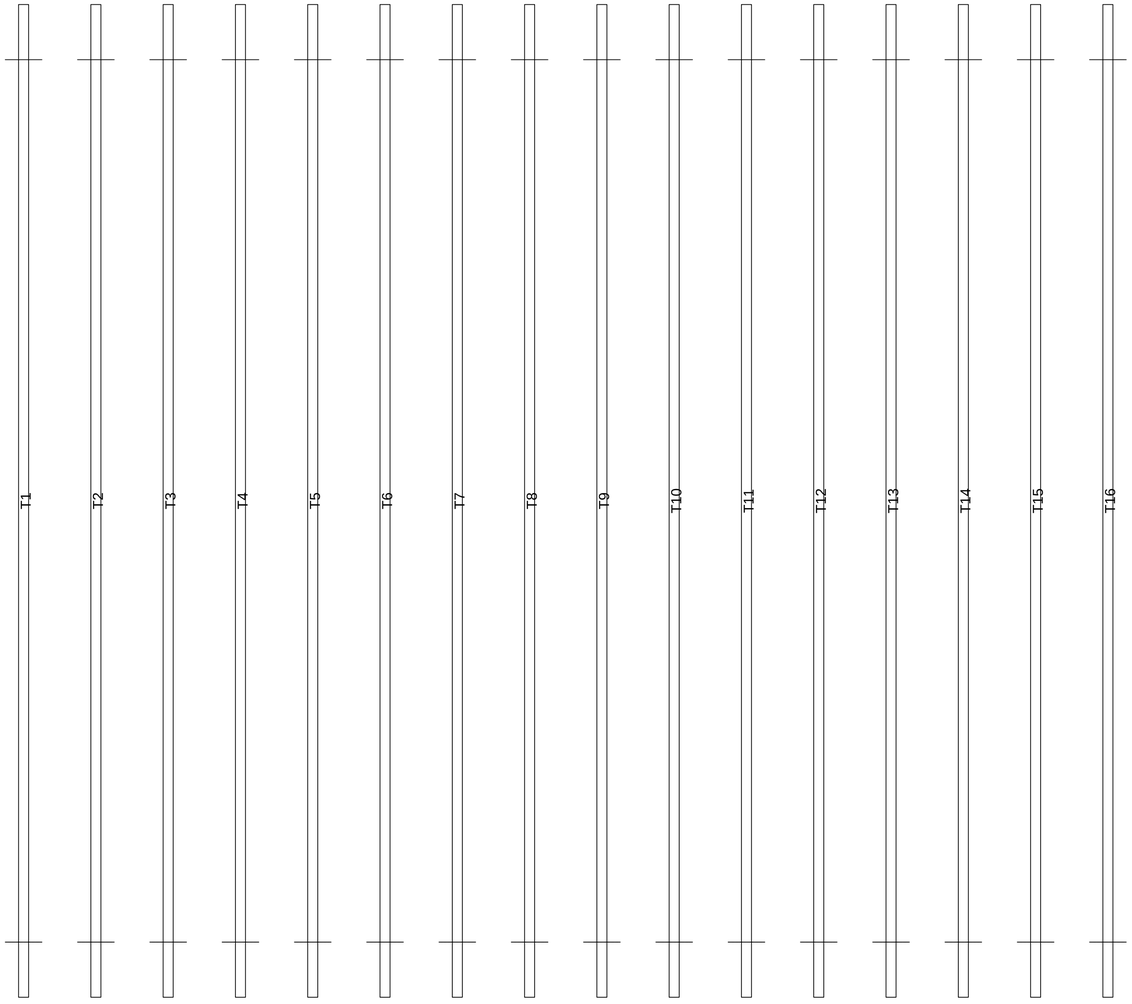
Stratal CAD

cad.stratal.co.uk

TITLE
First floor wall panels
Frame plan

PROJECT	DRAWN		
Plot 3, Kestrel Close, Thornbury (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-003	3 of 10	1:20	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

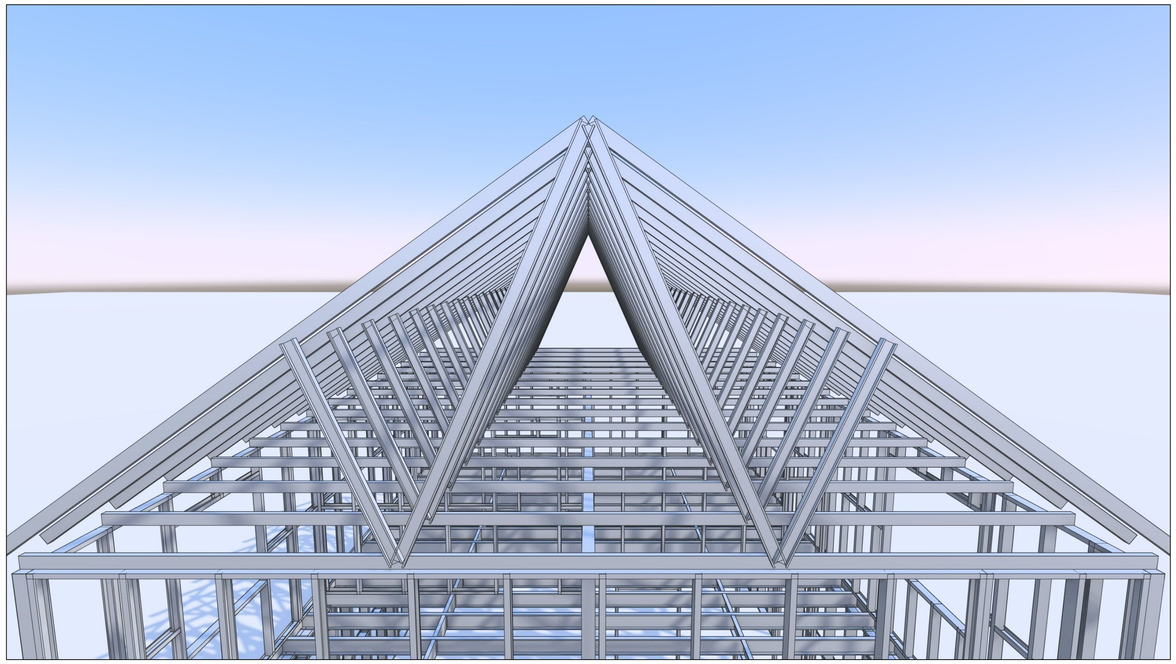


ROOF TRUSSES - PLAN 1:25

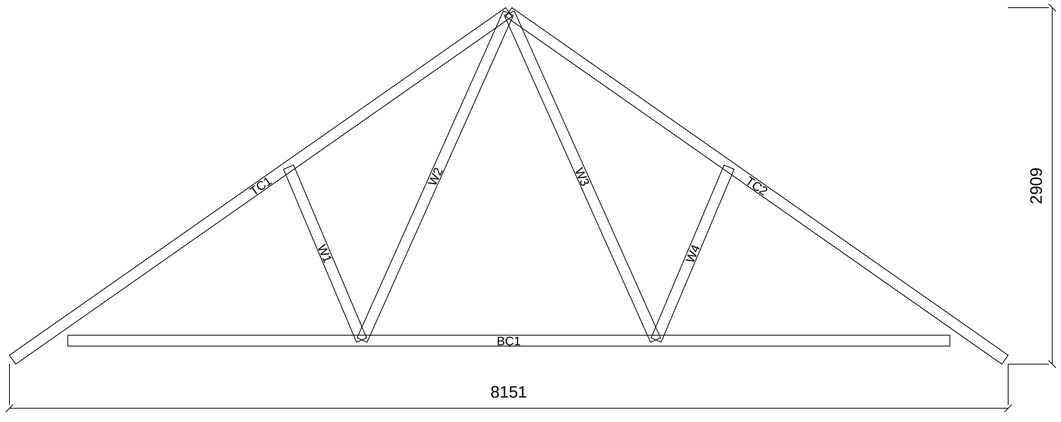
Plan of the 16 truss frames T1 to T16 (bearing 5000).

TRUSS T1 MEMBERS AND DESIGN (LGSLIST, LGSDESIGN)

Mark (T1)	Role	Section	BMT	Length mm	Ops	Force kN	Util.	Governs	Result
T1-TC1	Top chord	C89	0.95	4944.1	4	-7.13	0.687	compression + bending (6.36)	OK
T1-TC2	Top chord	C89	0.95	4944.1	4	-7.13	0.687	compression + bending (6.36)	OK
T1-BC1	Bottom chord	C89	0.95	7200	8	5.59	0.242	tension and bending	OK
T1-W1	Web	C89	0.95	1531.2	4	-1.49	0.085	flexural-torsional	OK
T1-W2	Web	C89	0.95	2921.7	4	2.6	0.032	tension	OK
T1-W3	Web	C89	0.95	2921.7	4	2.6	0.032	tension	OK
T1-W4	Web	C89	0.95	1531.2	4	-1.49	0.085	flexural-torsional	OK



Roof void: Fink trusses on the first floor walls



Mark	Member	Section	Length	Ops
TC1	Top chord	C89 89x41x11 0.95	4944	4
TC2	Top chord	C89 89x41x11 0.95	4944	4
BC1	Bottom chord	C89 89x41x11 0.95	7200	8
W1	Web	C89 89x41x11 0.95	1531	4
W2	Web	C89 89x41x11 0.95	2922	4
W3	Web	C89 89x41x11 0.95	2922	4
W4	Web	C89 89x41x11 0.95	1531	4

Stratal CAD | Steel Framing (LGS)

Truss assembly sheet: T1

7 members, 36.7 kg, S450GD Z275, machine wall

Drawn full size in millimetres. Check the setting out before making.

NOTES

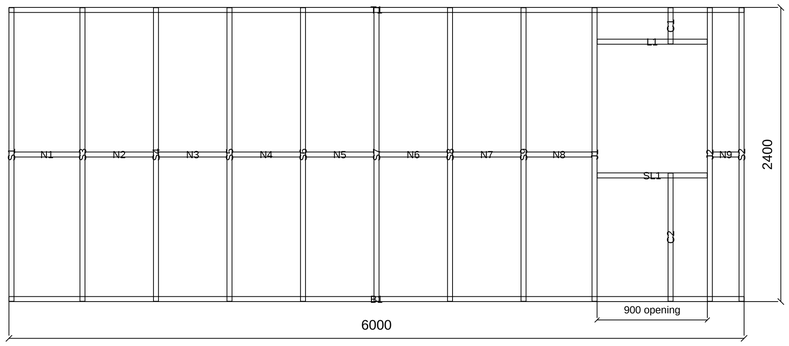
1. 16 Fink trusses at 590 mm centres, 7200 mm span, 35 degrees, 150 mm heel, 450 mm overhang, C89 0.95 mm, bearing at 5000 mm.
2. Truss T1 assembly sheet drawn by LGSSHOP Assembly (full size, plotted 1:25); all 16 trusses are the same.
3. Example roof load 2.14 kPa ULS on plan, ceiling 0.71 kPa: chords 0.69 utilised. Web-to-web node joints show 0 screws (findings).

Stratal CAD
cad.stratal.co.uk

TITLE
Roof trusses
Truss layout and truss T1

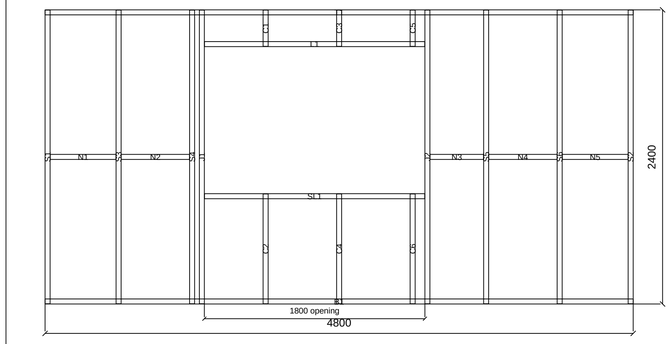
PROJECT	DRAWN		
Plot 3, Kestrel Close, Thornbury (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-004	4 of 10	1:25	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE



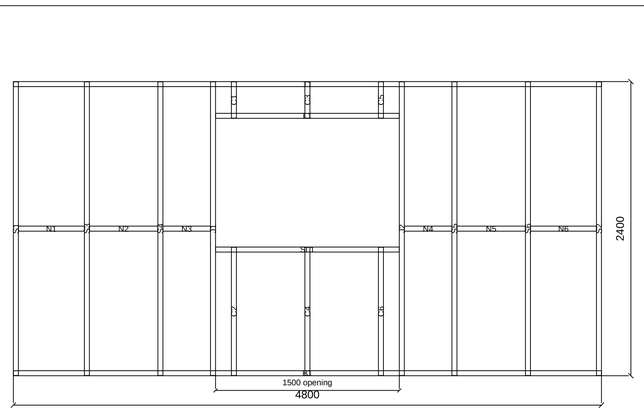
Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	6000	18
T1	Top plate	U150 150x41 1.15	6000	12
S1	Stud	C150 150x41x12 1.15	2396	7
S2	Stud	C150 150x41x12 1.15	2396	8
J1	Jamb	C150 150x41x12 1.15	2396	9
J2	Jamb	C150 150x41x12 1.15	2396	9
L1	Lintel	C150 150x41x12 1.15	898	6
SL1	Sill	C150 150x41x12 1.15	898	6
S3	Stud	C150 150x41x12 1.15	2396	8
S4	Stud	C150 150x41x12 1.15	2396	8
S5	Stud	C150 150x41x12 1.15	2396	8
S6	Stud	C150 150x41x12 1.15	2396	8
S7	Stud	C150 150x41x12 1.15	2396	8
S8	Stud	C150 150x41x12 1.15	2396	8
S9	Stud	C150 150x41x12 1.15	2396	8
C1	Cripple	C150 150x41x12 1.15	296	4
C2	Cripple	C150 150x41x12 1.15	1046	5
N1	Nog	C150 150x41x12 1.15	536	4
N2	Nog	C150 150x41x12 1.15	557	4
N3	Nog	C150 150x41x12 1.15	557	4
N4	Nog	C150 150x41x12 1.15	557	4
N5	Nog	C150 150x41x12 1.15	557	4
N6	Nog	C150 150x41x12 1.15	557	4
N7	Nog	C150 150x41x12 1.15	557	4
N8	Nog	C150 150x41x12 1.15	536	4
N9	Nog	C150 150x41x12 1.15	216	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W2P1
26 members, 102.3 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



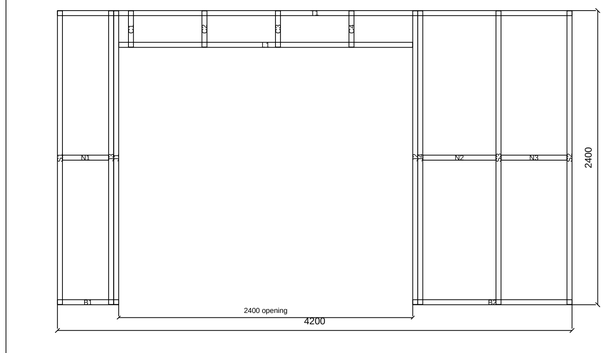
Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	4800	16
T1	Top plate	U150 150x41 1.15	4800	11
S1	Stud	C150 150x41x12 1.15	2396	7
S2	Stud	C150 150x41x12 1.15	2396	8
J1	Jamb	C150 150x41x12 1.15	2396	9
J2	Jamb	C150 150x41x12 1.15	2396	10
L1	Lintel	C150 150x41x12 1.15	1798	10
SL1	Sill	C150 150x41x12 1.15	1798	10
S3	Stud	C150 150x41x12 1.15	2396	8
S4	Stud	C150 150x41x12 1.15	2396	8
C1	Cripple	C150 150x41x12 1.15	296	4
C2	Cripple	C150 150x41x12 1.15	896	5
C3	Cripple	C150 150x41x12 1.15	296	4
C4	Cripple	C150 150x41x12 1.15	896	5
C5	Cripple	C150 150x41x12 1.15	296	4
C6	Cripple	C150 150x41x12 1.15	896	5
S5	Stud	C150 150x41x12 1.15	2396	8
S6	Stud	C150 150x41x12 1.15	2396	8
N1	Nog	C150 150x41x12 1.15	536	4
N2	Nog	C150 150x41x12 1.15	557	4
N3	Nog	C150 150x41x12 1.15	436	4
N4	Nog	C150 150x41x12 1.15	557	4
N5	Nog	C150 150x41x12 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W1P1
23 members, 85.6 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



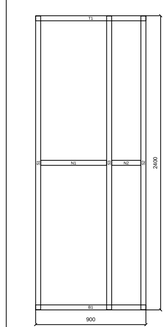
Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	4800	16
T1	Top plate	U150 150x41 1.15	4800	11
S1	Stud	C150 150x41x12 1.15	2396	7
S2	Stud	C150 150x41x12 1.15	2396	8
J1	Jamb	C150 150x41x12 1.15	2396	9
J2	Jamb	C150 150x41x12 1.15	2396	9
L1	Lintel	C150 150x41x12 1.15	1498	10
SL1	Sill	C150 150x41x12 1.15	1498	10
S3	Stud	C150 150x41x12 1.15	2396	8
S4	Stud	C150 150x41x12 1.15	2396	8
C1	Cripple	C150 150x41x12 1.15	296	4
C2	Cripple	C150 150x41x12 1.15	1046	5
C3	Cripple	C150 150x41x12 1.15	296	4
C4	Cripple	C150 150x41x12 1.15	1046	5
C5	Cripple	C150 150x41x12 1.15	296	4
C6	Cripple	C150 150x41x12 1.15	1046	5
S5	Stud	C150 150x41x12 1.15	2396	8
S6	Stud	C150 150x41x12 1.15	2396	8
N1	Nog	C150 150x41x12 1.15	536	4
N2	Nog	C150 150x41x12 1.15	557	4
N3	Nog	C150 150x41x12 1.15	386	4
N4	Nog	C150 150x41x12 1.15	386	4
N5	Nog	C150 150x41x12 1.15	557	4
N6	Nog	C150 150x41x12 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W3P1
24 members, 86.1 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



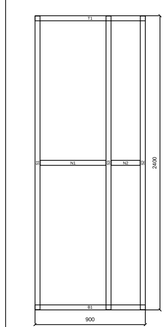
Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	500	5
B2	Bottom plate	U150 150x41 1.15	1300	6
T1	Top plate	U150 150x41 1.15	4200	11
S1	Stud	C150 150x41x12 1.15	2396	8
S2	Stud	C150 150x41x12 1.15	2396	7
J1	Jamb	C150 150x41x12 1.15	2396	11
J2	Jamb	C150 150x41x12 1.15	2396	11
J3	Jamb	C150 150x41x12 1.15	2396	11
J4	Jamb	C150 150x41x12 1.15	2396	11
L1	Lintel	C150 150x41x12 1.15	2398	12
C1	Cripple	C150 150x41x12 1.15	296	4
C2	Cripple	C150 150x41x12 1.15	296	4
C3	Cripple	C150 150x41x12 1.15	296	4
C4	Cripple	C150 150x41x12 1.15	296	4
S3	Stud	C150 150x41x12 1.15	2396	8
N1	Nog	C150 150x41x12 1.15	375	4
N2	Nog	C150 150x41x12 1.15	596	4
N3	Nog	C150 150x41x12 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W3P2
18 members, 62 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	900	3
T1	Top plate	U150 150x41 1.15	900	3
S1	Stud	C150 150x41x12 1.15	2396	3
S2	Stud	C150 150x41x12 1.15	2396	3
S3	Stud	C150 150x41x12 1.15	2396	3
N1	Nog	C150 150x41x12 1.15	536	4
N2	Nog	C150 150x41x12 1.15	236	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W2P2
7 members, 21.8 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



Mark	Member	Section	Length	Ops
B1	Bottom plate	U150 150x41 1.15	900	3
T1	Top plate	U150 150x41 1.15	900	3
S1	Stud	C150 150x41x12 1.15	2396	3
S2	Stud	C150 150x41x12 1.15	2396	3
S3	Stud	C150 150x41x12 1.15	2396	3
N1	Nog	C150 150x41x12 1.15	536	4
N2	Nog	C150 150x41x12 1.15	236	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W4P2
7 members, 21.8 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.

NOTES

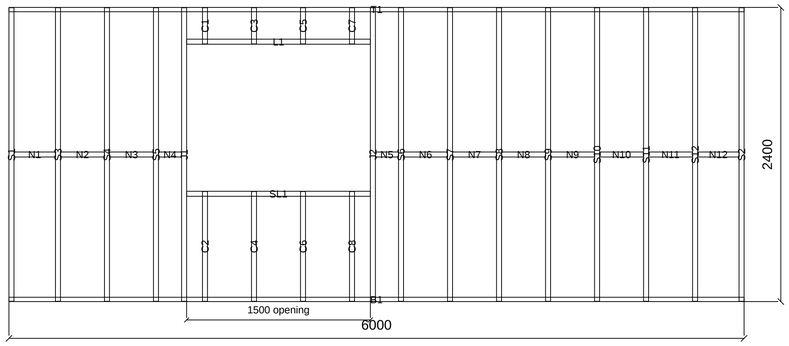
1. Panel assembly sheets drawn by LGSSHOP Assembly: members with short marks, opening dimensions, member table and the plugin's own title block.
2. Drawn full size by the plugin, plotted here at 1:25.

Stratal CAD
cad.stratal.co.uk

TITLE
Ground floor wall panels
Panel assembly sheets

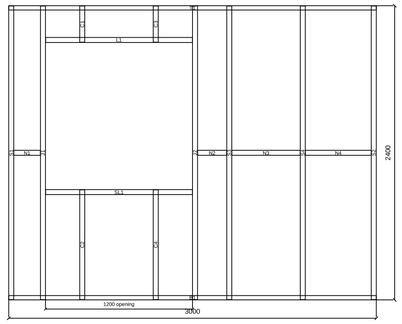
PROJECT		DRAWN	
Plot 3, Kestrel Close, Thornbury (fictional)		Stratal CAD demo	
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-005	5 of 10	1:25	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE



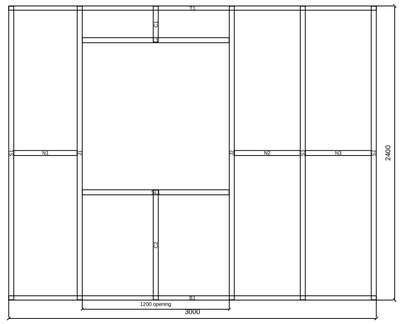
Mark	Member	Section	Length	Ops
B1	Bottom plate	U89 89x35 1.15	6000	24
T1	Top plate	U89 89x35 1.15	6000	18
S1	Stud	C89 89x41x11 1.15	2396	7
S2	Stud	C89 89x41x11 1.15	2396	7
J1	Jamb	C89 89x41x11 1.15	2396	9
J2	Jamb	C89 89x41x11 1.15	2396	9
L1	Lintel	C89 89x41x11 1.15	1498	12
SL1	Sill	C89 89x41x11 1.15	1498	12
S3	Stud	C89 89x41x11 1.15	2396	7
S4	Stud	C89 89x41x11 1.15	2396	7
S5	Stud	C89 89x41x11 1.15	2396	7
C1	Cripple	C89 89x41x11 1.15	296	4
C2	Cripple	C89 89x41x11 1.15	896	4
C3	Cripple	C89 89x41x11 1.15	296	4
C4	Cripple	C89 89x41x11 1.15	896	4
C5	Cripple	C89 89x41x11 1.15	296	4
C6	Cripple	C89 89x41x11 1.15	896	4
C7	Cripple	C89 89x41x11 1.15	296	4
C8	Cripple	C89 89x41x11 1.15	896	4
S6	Stud	C89 89x41x11 1.15	2396	7
S7	Stud	C89 89x41x11 1.15	2396	7
S8	Stud	C89 89x41x11 1.15	2396	7
S9	Stud	C89 89x41x11 1.15	2396	7
S10	Stud	C89 89x41x11 1.15	2396	7
S11	Stud	C89 89x41x11 1.15	2396	7
S12	Stud	C89 89x41x11 1.15	2396	7
N1	Nog	C89 89x41x11 1.15	336	4
N2	Nog	C89 89x41x11 1.15	357	4
N3	Nog	C89 89x41x11 1.15	357	4
N4	Nog	C89 89x41x11 1.15	186	4
N5	Nog	C89 89x41x11 1.15	186	4
N6	Nog	C89 89x41x11 1.15	357	4
N7	Nog	C89 89x41x11 1.15	357	4
N8	Nog	C89 89x41x11 1.15	357	4
N9	Nog	C89 89x41x11 1.15	357	4
N10	Nog	C89 89x41x11 1.15	357	4
N11	Nog	C89 89x41x11 1.15	357	4
N12	Nog	C89 89x41x11 1.15	336	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W7P1
38 members, 93.9 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



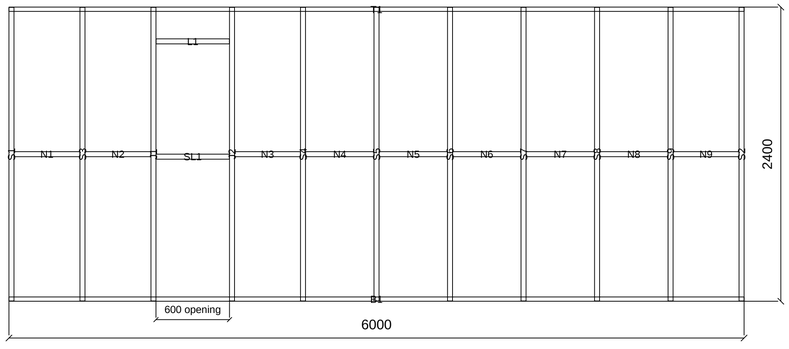
Mark	Member	Section	Length	Ops
B1	Bottom plate	U89 89x35 1.15	3000	12
T1	Top plate	U89 89x35 1.15	3000	8
S1	Stud	C89 89x41x11 1.15	2396	7
S2	Stud	C89 89x41x11 1.15	2396	7
J1	Jamb	C89 89x41x11 1.15	2396	9
J2	Jamb	C89 89x41x11 1.15	2396	9
L1	Lintel	C89 89x41x11 1.15	1198	8
SL1	Sill	C89 89x41x11 1.15	1198	8
C1	Cripple	C89 89x41x11 1.15	296	4
C2	Cripple	C89 89x41x11 1.15	896	4
C3	Cripple	C89 89x41x11 1.15	296	4
C4	Cripple	C89 89x41x11 1.15	896	4
S3	Stud	C89 89x41x11 1.15	2396	7
S4	Stud	C89 89x41x11 1.15	2396	7
N1	Nog	C89 89x41x11 1.15	210	4
N2	Nog	C89 89x41x11 1.15	236	4
N3	Nog	C89 89x41x11 1.15	557	4
N4	Nog	C89 89x41x11 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W7P2
18 members, 43.7 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



Mark	Member	Section	Length	Ops
B1	Bottom plate	U89 89x35 1.15	3000	10
T1	Top plate	U89 89x35 1.15	3000	6
S1	Stud	C89 89x41x11 1.15	2396	7
S2	Stud	C89 89x41x11 1.15	2396	7
J1	Jamb	C89 89x41x11 1.15	2396	9
J2	Jamb	C89 89x41x11 1.15	2396	9
L1	Lintel	C89 89x41x11 1.15	1198	6
SL1	Sill	C89 89x41x11 1.15	1198	6
C1	Cripple	C89 89x41x11 1.15	296	4
C2	Cripple	C89 89x41x11 1.15	896	4
S3	Stud	C89 89x41x11 1.15	2396	7
N1	Nog	C89 89x41x11 1.15	516	4
N2	Nog	C89 89x41x11 1.15	536	4
N3	Nog	C89 89x41x11 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W9P2
14 members, 37.7 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.



Mark	Member	Section	Length	Ops
B1	Bottom plate	U89 89x35 0.75	356	4
B2	Bottom plate	U89 89x35 0.75	2311	8
T1	Top plate	U89 89x35 0.75	3466	8
S1	Stud	C89 89x41x11 0.75	2396	7
S2	Stud	C89 89x41x11 0.75	2396	7
J1	Jamb	C89 89x41x11 0.75	2396	8
J2	Jamb	C89 89x41x11 0.75	2396	8
L1	Lintel	C89 89x41x11 0.75	798	6
C1	Cripple	C89 89x41x11 0.75	296	4
S3	Stud	C89 89x41x11 0.75	2396	7
S4	Stud	C89 89x41x11 0.75	2396	7
S5	Stud	C89 89x41x11 0.75	2396	7
N1	Nog	C89 89x41x11 0.75	272	4
N2	Nog	C89 89x41x11 0.75	581	4
N3	Nog	C89 89x41x11 0.75	557	4
N4	Nog	C89 89x41x11 0.75	557	4
N5	Nog	C89 89x41x11 0.75	403	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W13
17 members, 28.3 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.

Mark	Member	Section	Length	Ops
B1	Bottom plate	U89 89x35 1.15	6000	17
T1	Top plate	U89 89x35 1.15	6000	11
S1	Stud	C89 89x41x11 1.15	2396	7
S2	Stud	C89 89x41x11 1.15	2396	7
J1	Jamb	C89 89x41x11 1.15	2396	9
J2	Jamb	C89 89x41x11 1.15	2396	9
L1	Lintel	C89 89x41x11 1.15	598	4
SL1	Sill	C89 89x41x11 1.15	598	4
S3	Stud	C89 89x41x11 1.15	2396	7
S4	Stud	C89 89x41x11 1.15	2396	7
S5	Stud	C89 89x41x11 1.15	2396	7
S6	Stud	C89 89x41x11 1.15	2396	7
S7	Stud	C89 89x41x11 1.15	2396	7
S8	Stud	C89 89x41x11 1.15	2396	7
S9	Stud	C89 89x41x11 1.15	2396	7
N1	Nog	C89 89x41x11 1.15	536	4
N2	Nog	C89 89x41x11 1.15	536	4
N3	Nog	C89 89x41x11 1.15	536	4
N4	Nog	C89 89x41x11 1.15	557	4
N5	Nog	C89 89x41x11 1.15	557	4
N6	Nog	C89 89x41x11 1.15	557	4
N7	Nog	C89 89x41x11 1.15	557	4
N8	Nog	C89 89x41x11 1.15	557	4
N9	Nog	C89 89x41x11 1.15	536	4

Stratal CAD | Steel Framing (LGS)
Panel assembly sheet: W9P1
24 members, 72.2 kg, S450GD Z275, machine wall
Drawn full size in millimetres. Check the setting out before making.

NOTES

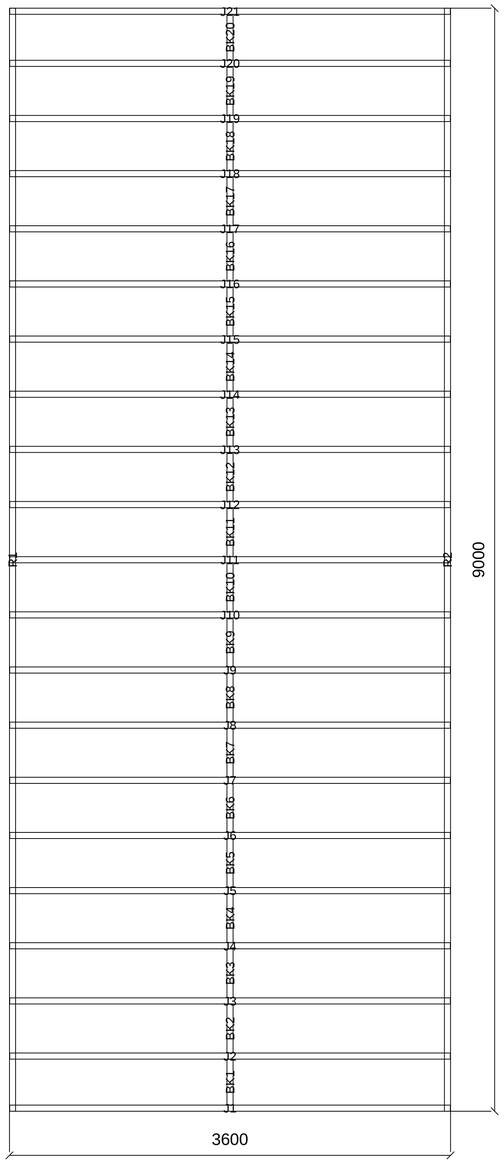
1. Panel assembly sheets drawn by LGSSHOP Assembly, plotted at 1:25.
2. W7P1 at 400 mm stud centres (changed in the Framing properties dock) so its window jambs pass the design check.

Stratal CAD
cad.stratal.co.uk

TITLE
First floor wall panels
Panel assembly sheets

PROJECT	DRAWN		
Plot 3, Kestrel Close, Thornbury (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-006	6 of 10	1:25	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE



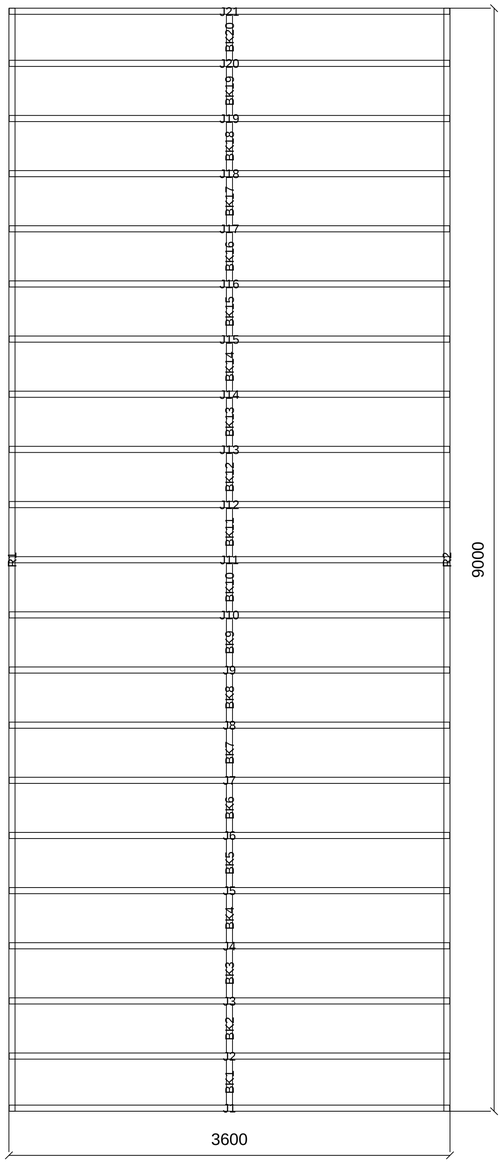
Mark	Member	Section	Length	Ops
R1	Rim joist	U200 200x50 1.15	9000	21
R2	Rim joist	U200 200x50 1.15	9000	21
J1	Joist	C200 200x50x15 1.15	3596	5
J2	Joist	C200 200x50x15 1.15	3596	6
J3	Joist	C200 200x50x15 1.15	3596	6
J4	Joist	C200 200x50x15 1.15	3596	6
J5	Joist	C200 200x50x15 1.15	3596	6
J6	Joist	C200 200x50x15 1.15	3596	6
J7	Joist	C200 200x50x15 1.15	3596	6
J8	Joist	C200 200x50x15 1.15	3596	6
J9	Joist	C200 200x50x15 1.15	3596	6
J10	Joist	C200 200x50x15 1.15	3596	6
J11	Joist	C200 200x50x15 1.15	3596	6
J12	Joist	C200 200x50x15 1.15	3596	6
J13	Joist	C200 200x50x15 1.15	3596	6
J14	Joist	C200 200x50x15 1.15	3596	6
J15	Joist	C200 200x50x15 1.15	3596	6
J16	Joist	C200 200x50x15 1.15	3596	6
J17	Joist	C200 200x50x15 1.15	3596	6
J18	Joist	C200 200x50x15 1.15	3596	6
J19	Joist	C200 200x50x15 1.15	3596	6
J20	Joist	C200 200x50x15 1.15	3596	6
J21	Joist	C200 200x50x15 1.15	3596	5
BK1	Blocking	C200 200x50x15 1.15	373	4
BK2	Blocking	C200 200x50x15 1.15	398	4
BK3	Blocking	C200 200x50x15 1.15	398	4
BK4	Blocking	C200 200x50x15 1.15	398	4
BK5	Blocking	C200 200x50x15 1.15	398	4
BK6	Blocking	C200 200x50x15 1.15	398	4
BK7	Blocking	C200 200x50x15 1.15	398	4
BK8	Blocking	C200 200x50x15 1.15	398	4
BK9	Blocking	C200 200x50x15 1.15	398	4
BK10	Blocking	C200 200x50x15 1.15	398	4
BK11	Blocking	C200 200x50x15 1.15	398	4
BK12	Blocking	C200 200x50x15 1.15	398	4
BK13	Blocking	C200 200x50x15 1.15	398	4
BK14	Blocking	C200 200x50x15 1.15	398	4
BK15	Blocking	C200 200x50x15 1.15	398	4
BK16	Blocking	C200 200x50x15 1.15	398	4
BK17	Blocking	C200 200x50x15 1.15	398	4
BK18	Blocking	C200 200x50x15 1.15	398	4
BK19	Blocking	C200 200x50x15 1.15	398	4
BK20	Blocking	C200 200x50x15 1.15	373	4

Stratal CAD | Steel Framing (LGS)

Floor assembly sheet: F1

43 members, 293.4 kg, S450GD Z275, machine floor-truss

Drawn full size in millimetres. Check the setting out before making.



Mark	Member	Section	Length	Ops
R1	Rim joist	U200 200x50 1.15	9000	21
R2	Rim joist	U200 200x50 1.15	9000	21
J1	Joist	C200 200x50x15 1.15	3596	5
J2	Joist	C200 200x50x15 1.15	3596	6
J3	Joist	C200 200x50x15 1.15	3596	6
J4	Joist	C200 200x50x15 1.15	3596	6
J5	Joist	C200 200x50x15 1.15	3596	6
J6	Joist	C200 200x50x15 1.15	3596	6
J7	Joist	C200 200x50x15 1.15	3596	6
J8	Joist	C200 200x50x15 1.15	3596	5
J9	Joist	C200 200x50x15 1.15	3596	5
J10	Joist	C200 200x50x15 1.15	3596	5
J11	Joist	C200 200x50x15 1.15	3596	5
J12	Joist	C200 200x50x15 1.15	3596	5
J13	Joist	C200 200x50x15 1.15	3596	5
J14	Joist	C200 200x50x15 1.15	3596	5
J15	Joist	C200 200x50x15 1.15	3596	5
J16	Joist	C200 200x50x15 1.15	3596	5
J17	Joist	C200 200x50x15 1.15	3596	5
J18	Joist	C200 200x50x15 1.15	3596	5
J19	Joist	C200 200x50x15 1.15	3596	5
J20	Joist	C200 200x50x15 1.15	3596	5
J21	Joist	C200 200x50x15 1.15	3596	5
BK1	Blocking	C200 200x50x15 1.15	373	4
BK2	Blocking	C200 200x50x15 1.15	398	4
BK3	Blocking	C200 200x50x15 1.15	398	4
BK4	Blocking	C200 200x50x15 1.15	398	4
BK5	Blocking	C200 200x50x15 1.15	398	4
BK6	Blocking	C200 200x50x15 1.15	398	4
BK7	Blocking	C200 200x50x15 1.15	398	4
BK8	Blocking	C200 200x50x15 1.15	398	4
BK9	Blocking	C200 200x50x15 1.15	398	4
BK10	Blocking	C200 200x50x15 1.15	398	4
BK11	Blocking	C200 200x50x15 1.15	398	4
BK12	Blocking	C200 200x50x15 1.15	398	4
BK13	Blocking	C200 200x50x15 1.15	398	4
BK14	Blocking	C200 200x50x15 1.15	398	4
BK15	Blocking	C200 200x50x15 1.15	398	4
BK16	Blocking	C200 200x50x15 1.15	398	4
BK17	Blocking	C200 200x50x15 1.15	398	4
BK18	Blocking	C200 200x50x15 1.15	398	4
BK19	Blocking	C200 200x50x15 1.15	398	4
BK20	Blocking	C200 200x50x15 1.15	373	4

Stratal CAD | Steel Framing (LGS)

Floor assembly sheet: F2

43 members, 293.4 kg, S450GD Z275, machine floor-truss

Drawn full size in millimetres. Check the setting out before making.

NOTES

1. Floor assembly sheets drawn by LGSSHOP Assembly, plotted at 1:25. Web holes from LGSSERVICE are in the member operations.

Stratal CAD

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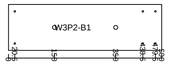
TITLE
First floor F1 and F2
Floor assembly sheets

PROJECT	DRAWN		
Plot 3, Kestrel Close, Thornbury (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-007	7 of 10	1:25	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		12 Nov 2026	

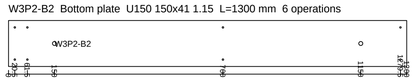
STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

PATIO PANEL W3P2

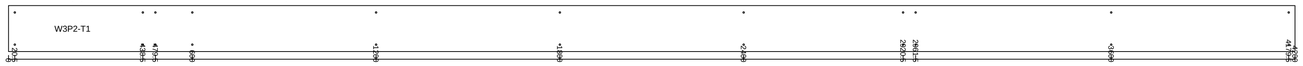
W3P2-B1 Bottom plate U150 150x41 1.15 L=500 mm 5 operations



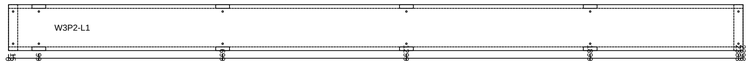
W3P2-B2 Bottom plate U150 150x41 1.15 L=1300 mm 6 operations



W3P2-T1 Top plate U150 150x41 1.15 L=4200 mm 11 operations



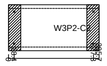
W3P2-L1 Lintel C150 150x41x12 1.15 L=2398 mm 12 operations



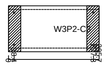
W3P2-C1 Cripple C150 150x41x12 1.15 L=295.7 mm 4 operations



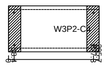
W3P2-C2 Cripple C150 150x41x12 1.15 L=295.7 mm 4 operations



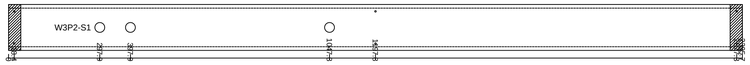
W3P2-C3 Cripple C150 150x41x12 1.15 L=295.7 mm 4 operations



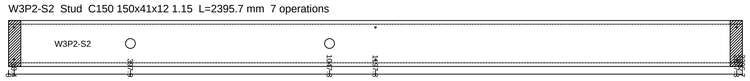
W3P2-C4 Cripple C150 150x41x12 1.15 L=295.7 mm 4 operations



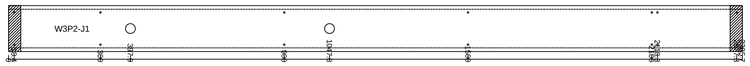
W3P2-S1 Stud C150 150x41x12 1.15 L=2395.7 mm 8 operations



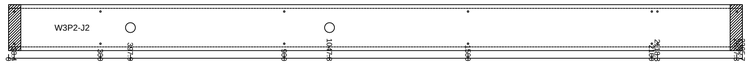
W3P2-S2 Stud C150 150x41x12 1.15 L=2395.7 mm 7 operations



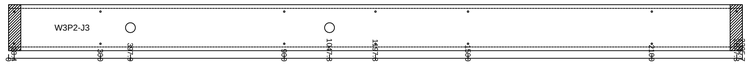
W3P2-J1 Jamb C150 150x41x12 1.15 L=2395.7 mm 11 operations



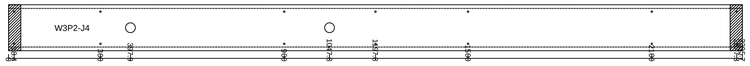
W3P2-J2 Jamb C150 150x41x12 1.15 L=2395.7 mm 11 operations



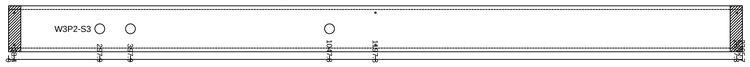
W3P2-J3 Jamb C150 150x41x12 1.15 L=2395.7 mm 11 operations



W3P2-J4 Jamb C150 150x41x12 1.15 L=2395.7 mm 11 operations



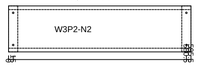
W3P2-S3 Stud C150 150x41x12 1.15 L=2395.7 mm 8 operations



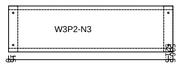
W3P2-N1 Nog C150 150x41x12 1.15 L=375 mm 4 operations



W3P2-N2 Nog C150 150x41x12 1.15 L=595.5 mm 4 operations



W3P2-N3 Nog C150 150x41x12 1.15 L=536.5 mm 4 operations



TRUSS T1 (all 16 trusses are the same)

Patio panel W3P2: 18 members, 129 operations; truss T1: 7 members, 32 operations (LGSLIST Cut).

T1-TC1 Top chord C89 89x41x11 0.95 L=4944.1 mm 4 operations



T1-TC2 Top chord C89 89x41x11 0.95 L=4944.1 mm 4 operations



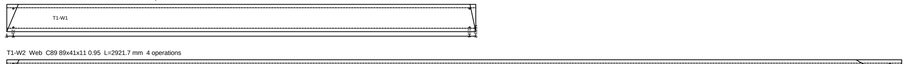
T1-BC1 Bottom chord C89 89x41x11 0.95 L=7200 mm 8 operations



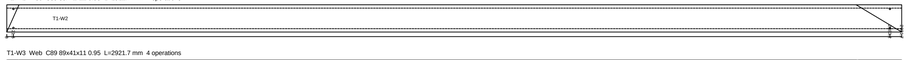
T1-W1 Web C89 89x41x11 0.95 L=1531.2 mm 4 operations



T1-W2 Web C89 89x41x11 0.95 L=2921.7 mm 4 operations



T1-W3 Web C89 89x41x11 0.95 L=2921.7 mm 4 operations



T1-W4 Web C89 89x41x11 0.95 L=1531.2 mm 4 operations



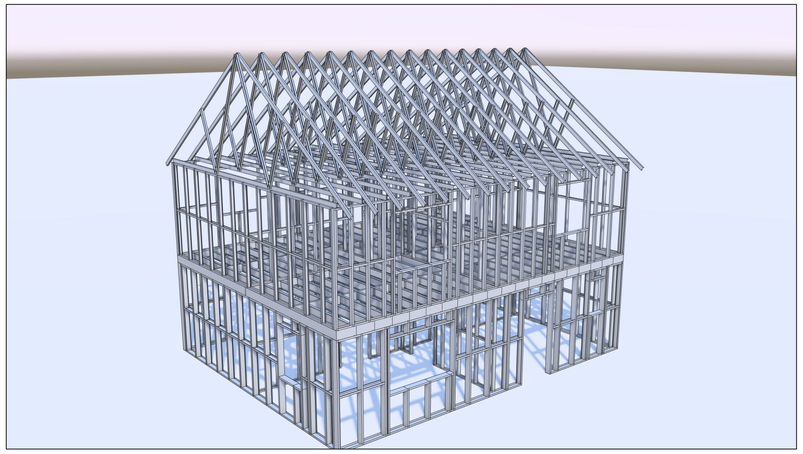
NOTES

1. Member shop drawings drawn by LGSSHOP Members for patio panel W3P2 and truss T1: every operation (dimples, lip notches, swages, service and bolt holes, flange cuts, chamfers, inkjet text).
2. Drawn full size by the plugin, plotted here at 1:10; one drawing per member, moved into columns.

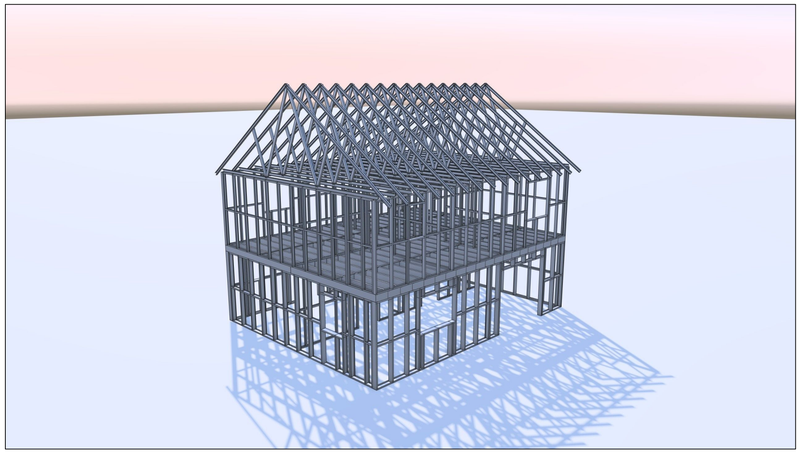
Stratal CAD

cad.stratal.co.uk

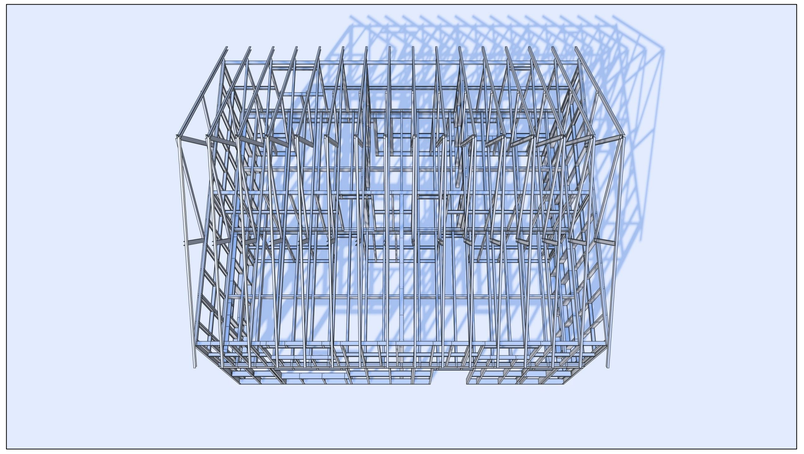
TITLE: Panel W3P2 and truss T1 Member shop drawings			
PROJECT: Plot 3, Kestrel Close, Thornbury (fictional)		DRAWN: Stratal CAD demo	
DRAWING NO.: STR-LGS-008	SHEET: 8 of 10	SCALE: 1:10	SIZE: A1
SOFTWARE: Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0		DATE: 12 Nov 2026	
STATUS: DEMONSTRATION DRAWING - NOT FOR MANUFACTURE			



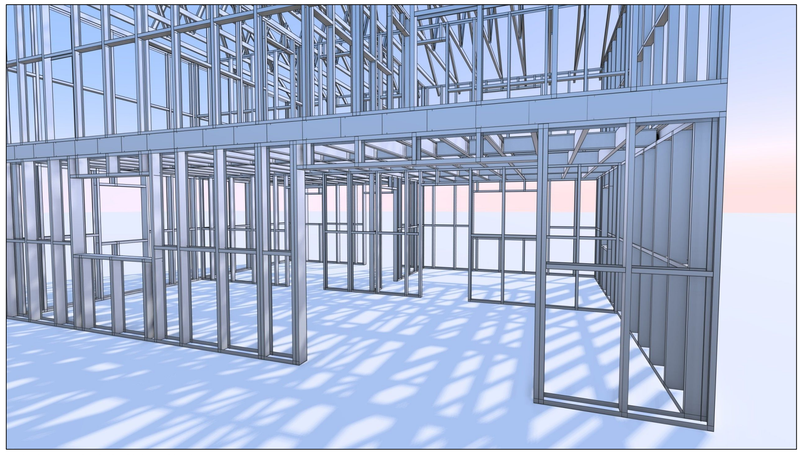
The frame from the south-west (RENDERSTILL)



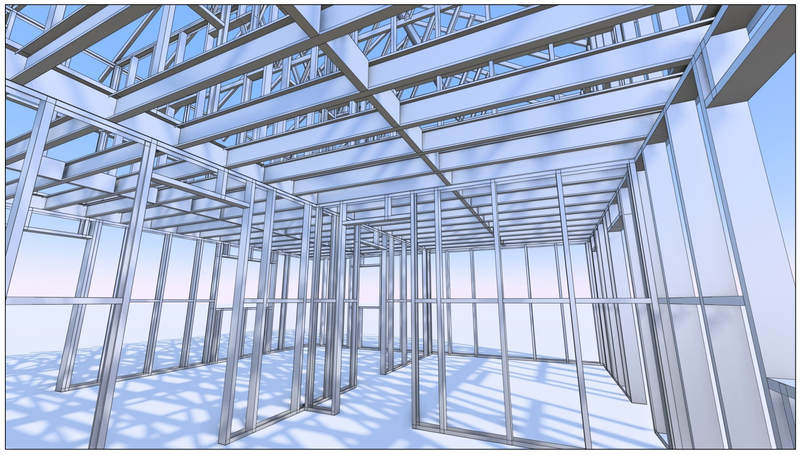
From the north-east: patio door and kitchen window



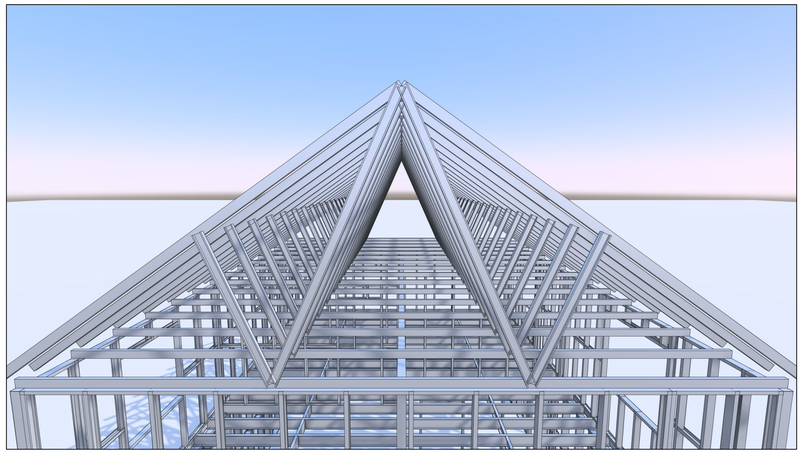
From above: trusses at 590 mm centres



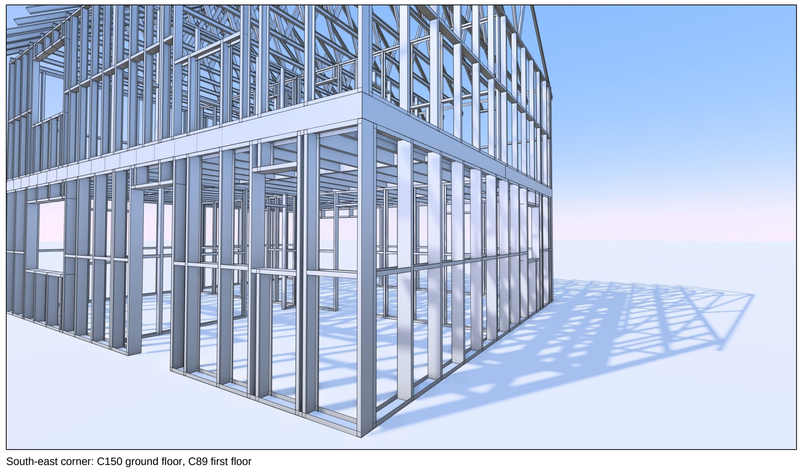
Patio door panel W3P2 with boxed jambs



Ground floor: C200 joists and blocking over the spine wall



Roof void: Fink trusses on the first floor walls



South-east corner: C150 ground floor, C89 first floor

THE JOB IN FIGURES (read from the plugin's outputs)

42 frames: 24 wall panels, 2 floors, 16 roof trusses (LGSCHECK: no problems, 56 framing notes)
655 members, 4548 punch-list operations, 655 labels with inkjet text and codes
1367.2 m of steel, 2448 kg, 10 section and gauge coils (LGSLIST Materials)
Ground floor walls 676.5 kg, first floor walls 597.9 kg, floors 586.9 kg, trusses 586.8 kg
208 machine files through 8 formats (LGSMACHINE), including one drafted with LGSFORMAT
Web model: 655 members as 27844 triangles in a 1.9 MB GLB (VIEWEREXPORT)

NOTES

1. Renders from Stratal CAD (RENDERSTILL) of the member solids the plugin makes.

Stratal CAD
cad.stratal.co.uk

TITLE
3D frame
Rendered views

PROJECT	DRAWN
Plot 3, Kestrel Close, Thornbury (fictional)	Stratal CAD demo

DRAWING NO.	SHEET	SCALE	SIZE
STR-LGS-010	10 of 10	NTS (renders)	A1

SOFTWARE	DATE
Stratal CAD 0.1.8, Steel Framing (LGS) 0.3.0	12 Nov 2026

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE