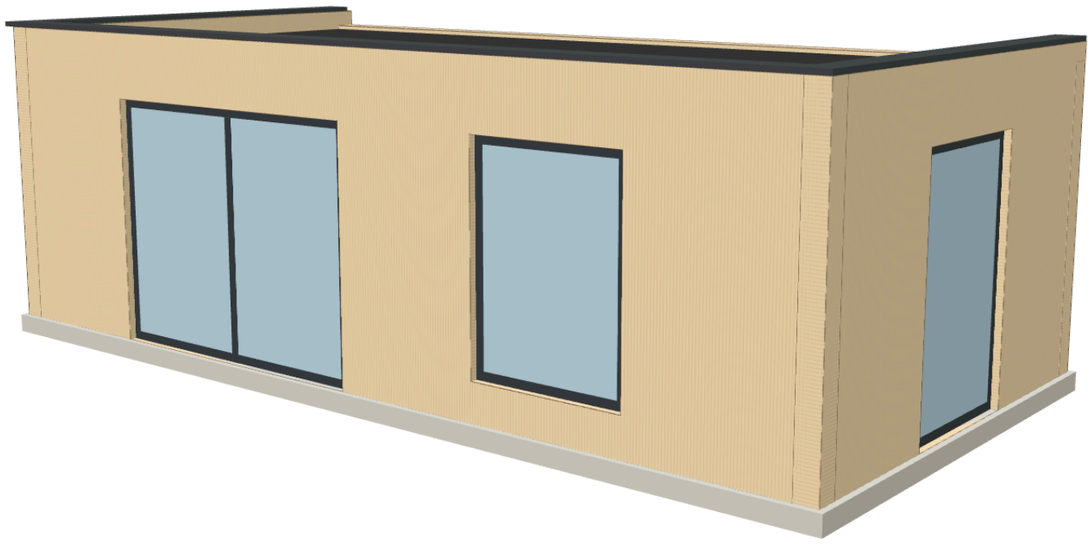
Garden cabin 30 m² – assembly drawings

SIP walls 124 mm · SIP roof 174 mm, 1.2°, EPDM · concrete base

Project: garden cabin 30 m², SIP 124 / 174 · Date: 2026-11-09



Sheets:

GR30-02 Plan, elevations
GR30-03 Assembly sequence
GR30-04 Concrete base, sole plate
GR30-05 Panel bottom plate
GR30-06 SIP plan, details
GR30-07 Cutting plan
GR30-08 Panel details (routing)
GR30-09 Wall panels: Wall-1, Wall-3
GR30-10 Timber: Wall-1, Wall-3
GR30-11 Wall panels: Wall-2, Wall-4
GR30-12 Timber: Wall-2, Wall-4
GR30-13 Roof panel details (routing)
GR30-14 Roof SIP panels
GR30-15 Section, details A, B
GR30-16 Details C, D
GR30-17 Windows and doors
GR30-18 Opening details
GR30-19 Specification: walls
GR30-20 Specification: roof, finishes

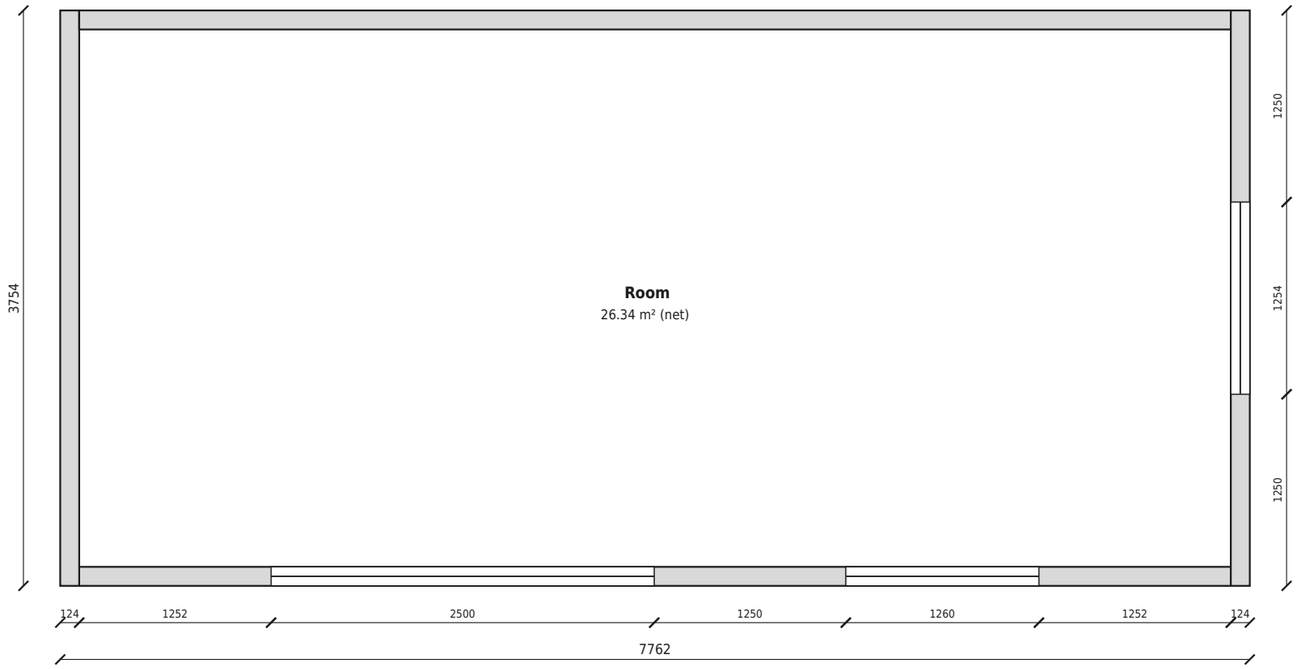
TimberFrameDrawings.com

YOUR COMPANY DETAILS CAN GO HERE

Company name, address
Company no. · VAT no. · website

SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)		Sheet
Cover Garden cabin 30 m², SIP 124 / 174	GR30-01 @A3 timberframedrawings.com · 2026-11-09	**1/20**

Plan and elevations – garden cabin 30 m² (7762 × 3754)



External size 7762 × 3754 = 29.1 m²; room 7514 × 3506 (between the inner SIP faces); internal finishes reduce it slightly.

Dimensions chosen for FULL 1250 SIP panels: side walls – 3 panels, front piers – 1 panel each, rear wall – 6 panels – minimal cutting and waste.

Openings (structural, from the SIP bottom)

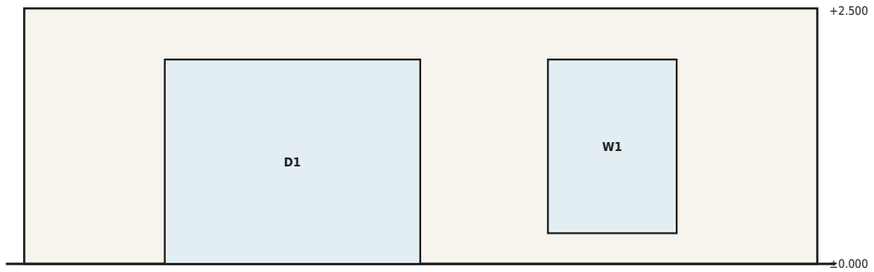
Mark	Opening	P × A, mm	Qty
D1	PVC terrace door, 2 parts	2500 × 2000	1
W1	PVC window, sill +300	1260 × 1700	1
D2	PVC external door + side light	1254 × 2000	1

Heights are measured from the SIP bottom = top of the sole plate.

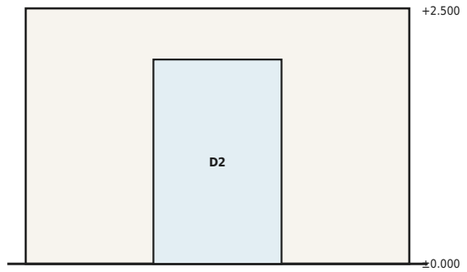
Room height: 2250 at the front, 2174 at the rear (roof 1.2°).

Opening width = panel module: openings between

full 1250 piers, wall panels are not cut lengthwise.



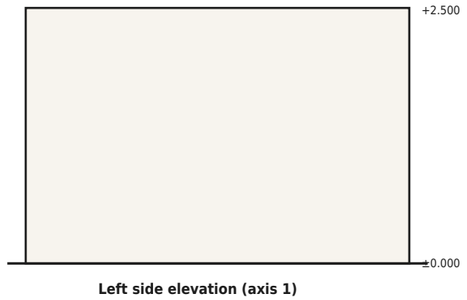
Front elevation (axis A)



Right side elevation (axis 2)



Rear elevation (axis B)



Left side elevation (axis 1)

TimberFrameDrawings.com

YOUR COMPANY DETAILS CAN GO HERE

Company name, address

Company no. · VAT no. · website

SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)

Plan, elevations

Garden cabin 30 m², SIP 124 / 174

GR30-02 @A3

timberframedrawings.com · 2026-11-09

Sheet

2/20

Assembly sequence and general notes

1	**Concrete base**	Check the slab: 7762 × 3754, diagonals 8622 ± 5 mm, flatness ± 5 mm. Lay damp-proof strips under the sole plates.
2	**Sole plate 45×145**	Lay the sole plates (GR30-04), outer edge flush with the slab; drill and fix with through anchors 8×120 (150 from the ends, at ≤ 900).
3	**Panel bottom plate 45×95**	Screw the panel bottom plates to the sole plate (4.5×80 at 400 mm, adhesive foam between them). Side walls (axes 1, 2) – full depth, front and rear – between them. No panel bottom plate in full-height openings (doors).
4	**Wall panels**	Start at a side wall corner. Fill the panel groove with foam, slide it onto the bottom plate, screw the OSB with 4.5×45 at 150 mm (both sides).
5	**Joints**	Fit a 45×95 spline into the 25 mm routing, 2 mm gap between panels, foam all joints, screws 4.5×45 at 150 mm on both sides.
6	**Openings**	Fit the opening studs (93 mm routing), the lintel (GL codes), the panel above the opening (and below the window). Check the diagonals of every opening.
7	**Corners**	Corners: foam + screws 4.5×80 at 400 mm through the side wall into the end stud of the front / rear wall. Check the diagonals of the whole building.
8	**Top plates**	Fit the 45×95 top plates into the routing at the top of all walls, screws 4.5×45 at 150 mm on both sides, metal angles at the joints.
9	**Roof**	Lay roof strips R1…R8 from the side wall: one G2 45×145 rafter at each joint (routing 25 + 25), cross joints staggered, everything foamed. Fixing: 6×240, 8×200, steel angles.
10	**EPDM**	At the rear fix the fascia board, half-round gutter brackets and the drip edge (150 mm on the roof, angled into the gutter); bond the EPDM in one sheet over the drip edge, lapping over the parapets.
11	**Windows and doors**	Fit the PVC frames, foam, sealing tape outside, airtight tape inside, sills.
12	**External finishes**	Breather membrane, vertical battens 18×45 at 600, horizontal battens 18×45 at 600, vertical boards 20×120 (2 stainless screws 4.5×60 at each batten), insect mesh at the bottom. Then – parapet flashings: fall towards the roof, ~50 mm lap onto the boards.
13	**Inside**	Vapour control layer 150 µm, all joints taped, battens 28×45 at 600 on walls and ceiling, internal boards 12.5 (T&G), timber corners and trims.

General: all dimensions in mm; check on site before cutting. SIP = OSB/3 12 + EPS 100 + OSB/3 12 (walls 124), OSB 12 + EPS 150 + OSB 12 (roof 174).

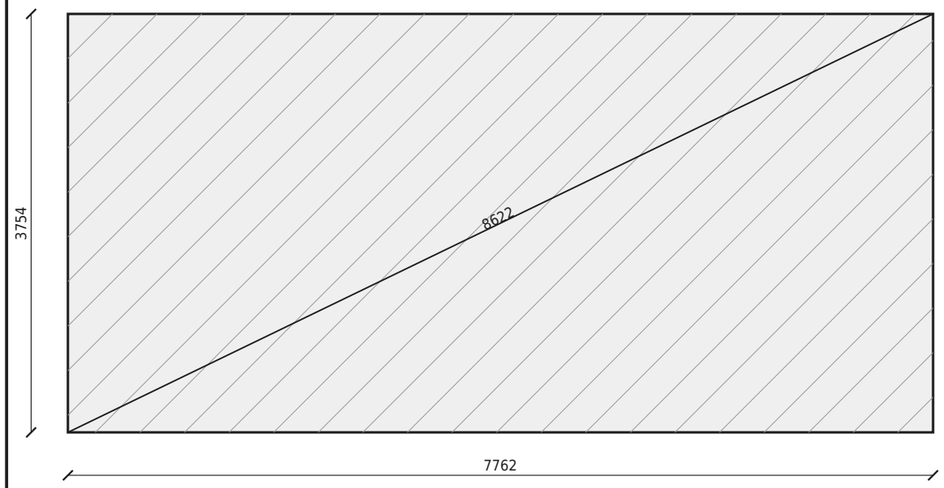
Timber C24, planed, moisture ≤ 18 %. Screws – structural timber screws (outside – galvanised, finishes – stainless). All SIP panel joints are filled with adhesive PU foam.

Dimensions 7762 × 3754 chosen for full 1250 SIP panels: each pier – one panel, side walls – 3, rear – 6 panels; only the panels above / below openings are cut.

Roof SIP 174: span ≈ 3.51 m between the front and rear walls; strips 641 / 621 from 1250, lengths 3000 + 745 alternating.

Snow / wind loads and the base slab are confirmed by a local structural engineer.

CONCRETE BASE

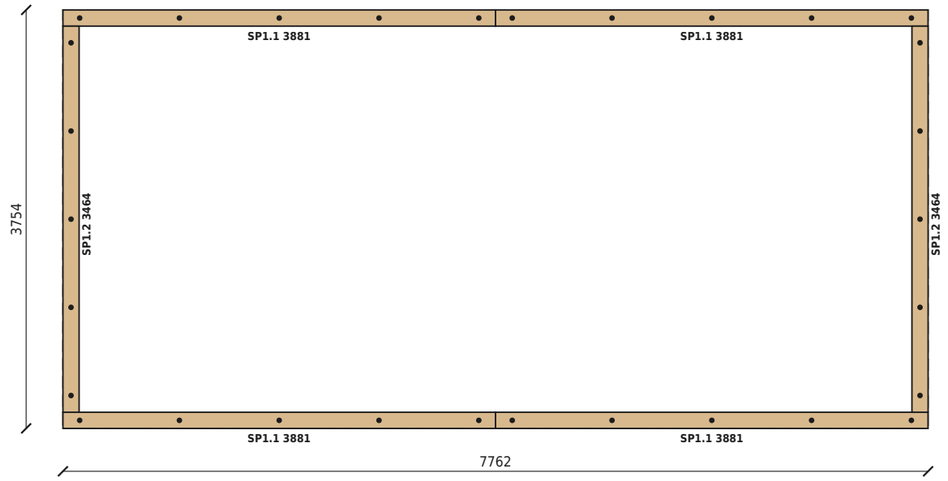


Reinforced concrete slab, top ±0.000 (= floor slab), outline = outer SIP faces.

Slab thickness, reinforcement and sub-base – by the structural engineer (not in this set). Flatness tolerance ±5 mm / 3 m.

Damp-proof strip under all sole plates.

SOLE PLATE 45×145 (on concrete)



Sole plate – materials

Nr.	Description	Qty
1	Anchor 8×120 (through), at ≤900, 150 from the ends	30
2	Structural timber C24 45×145×6000	6
3	Damp-proof strip 200 mm, m	24

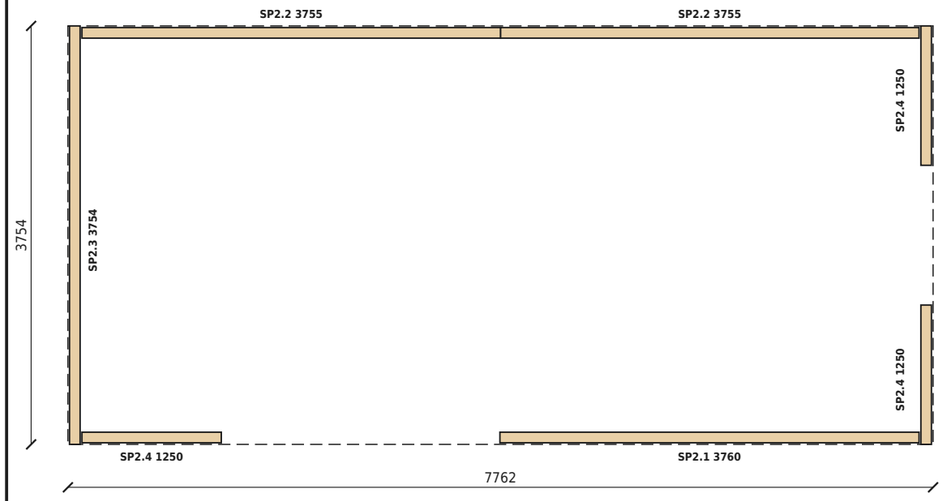
Sole plate parts (45×145)

Mark	Length	Qty
SP1.1	3881	4
SP1.2	3464	2

Sole plates: outer edge flush with the slab edge.

Joint of the long plates in the middle; ends butted, anchors on both sides.

PANEL BOTTOM PLATE 45×95 (at the SIP bottom)



Panel bottom plate parts (45×95)

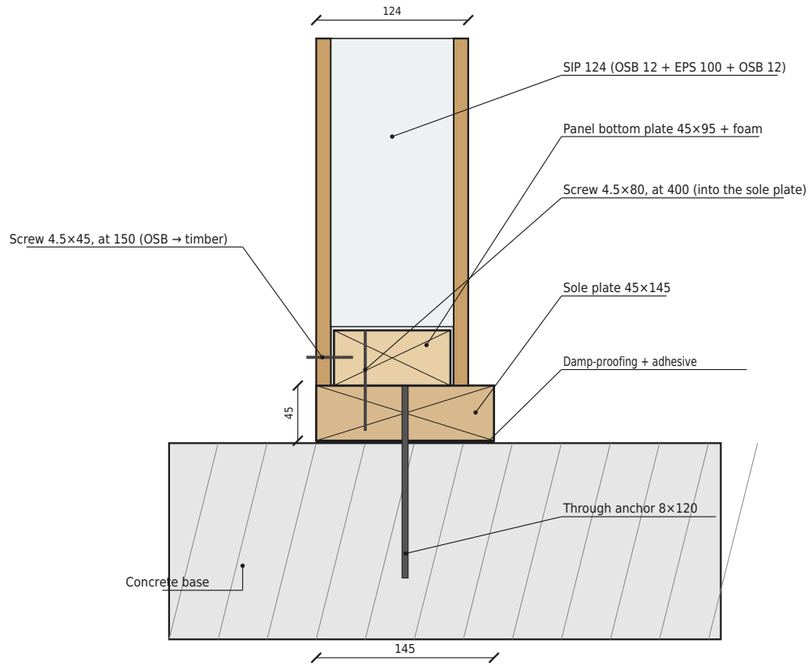
Mark	Length	Qty
SP2.1	3760	1
SP2.2	3755	2
SP2.3	3754	1
SP2.4	1250	3

Panel bottom plate – materials

Nr.	Description	Qty
1	Structural timber C24 45×95×6000	4
2	Screw 4.5×80 (to the sole plate), at 400	61
3	Adhesive PU foam, cans	2

The panel bottom plate is cut out in ALL full-height openings (terrace door D1, external door D2) – the doors stand on the sole plate with a base profile.

Fixing of the sole plate and panel bottom plate (1:5)



TimberFrameDrawings.com

YOUR COMPANY DETAILS CAN GO HERE

Company name, address
Company no. · VAT no. · website

SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)

Panel bottom plate

Garden cabin 30 m², SIP 124 / 174

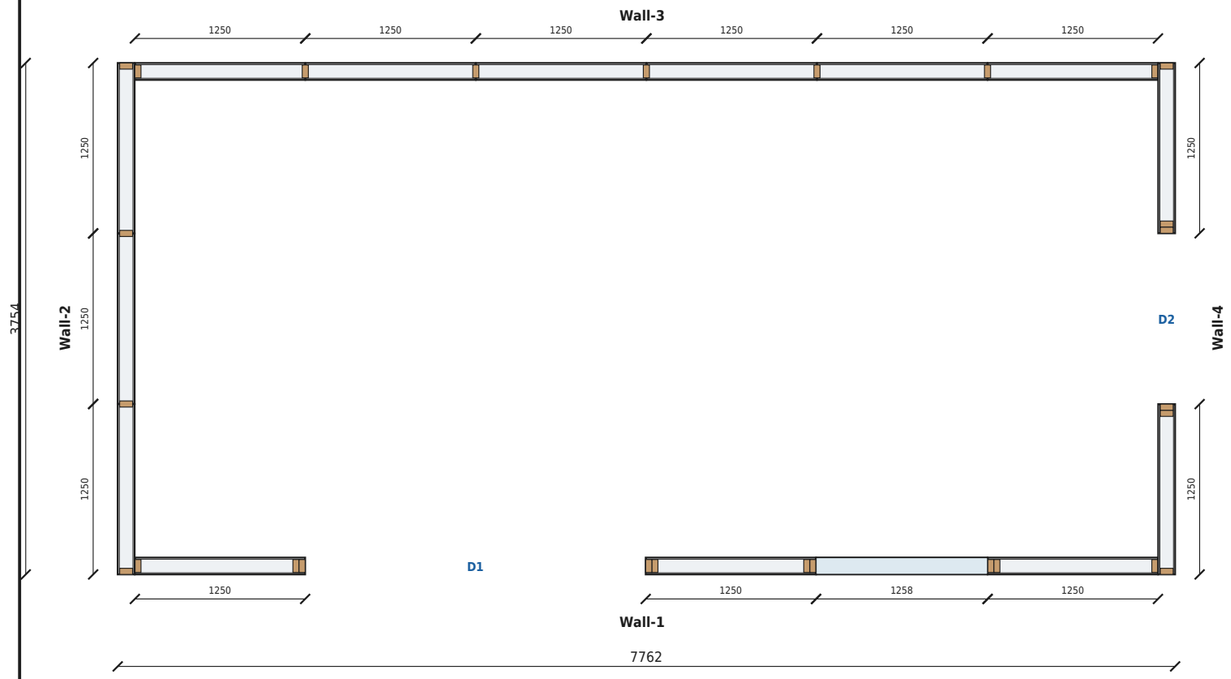
GR30-05 @A3

timberframedrawings.com · 2026-11-09

Sheet

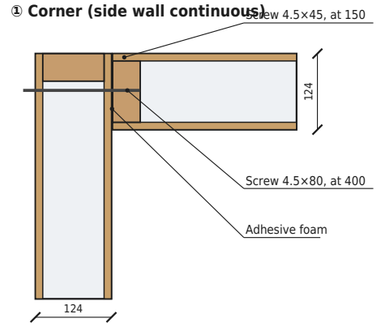
5/20

SIP dimensions – plan (panels, joints, timber)

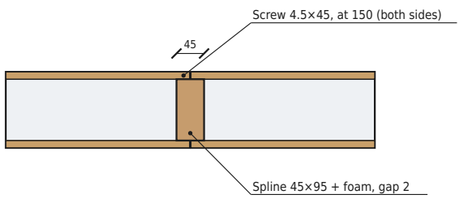


Panel widths – outside each wall; 2 mm between panels; brown – 45×95 timber at panel edges.

① Corner (side wall continuous)



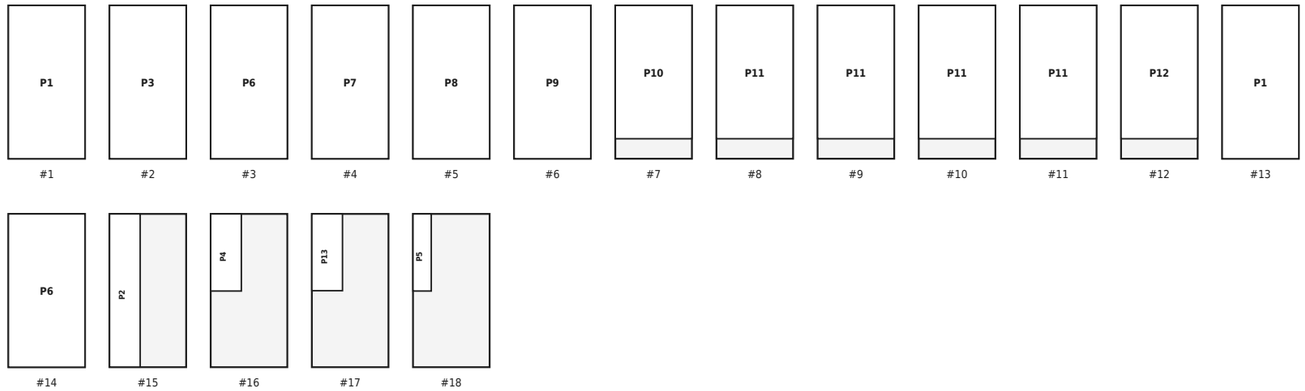
② Panel joint



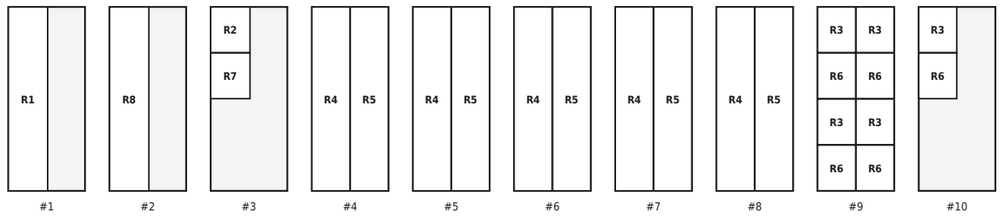
TimberFrameDrawings.com	**YOUR COMPANY DETAILS CAN GO HERE** Company name, address Company no. · VAT no. · website	**SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)** **SIP plan, details** Garden cabin 30 m², SIP 124 / 174	Sheet **6/20** GR30-06 @A3 timberframedrawings.com · 2026-11-09

SIP panel cutting plan (walls 1250 × 2500, roof 1250 × 3000), kerf 6 mm

Walls – SIP 124: 18 panels 1250 × 2500 (56.2 m²)



Roof – SIP 174: 10 panels 1250 × 3000 (37.5 m²) – short pieces 745 = a 3000 panel cut into 4

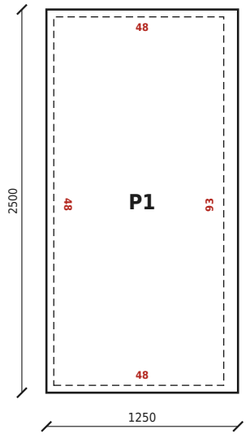


Part area: walls 44.2 m² (waste 21 %), roof 28.1 m² (waste 25 %).

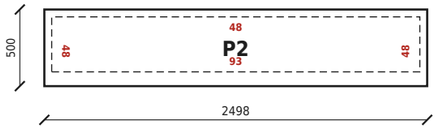
Wall panels stand vertically (2500 along the panel); panels above / below openings are cut across. Rear wall panels 2174: the 320 mm offcuts are spare.

Wall SIP panels 124 mm – cutting and routing, 1:40

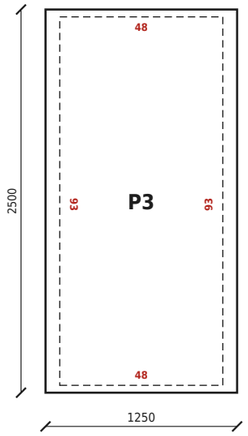
2 pcs · Wall-1



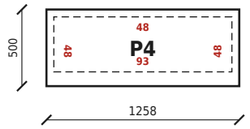
1 pc · Wall-1



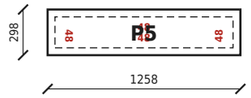
1 pc · Wall-1



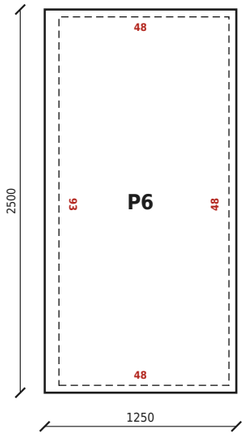
1 pc · Wall-1



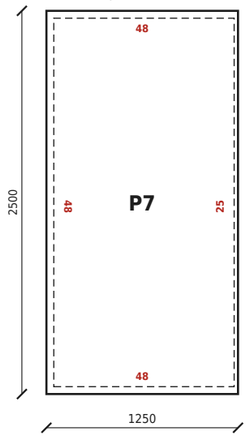
1 pc · Wall-1



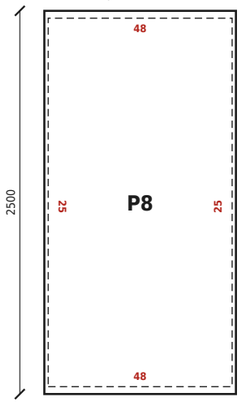
2 pcs · Wall-1



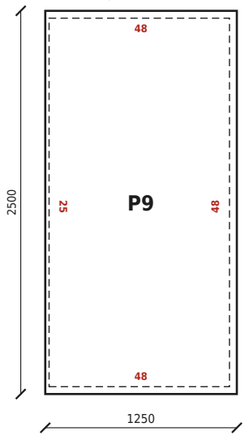
1 pc · Wall-2



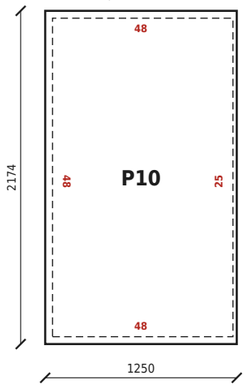
1 pc · Wall-2



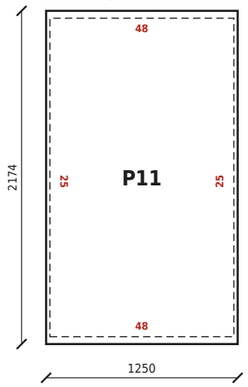
1 pc · Wall-2



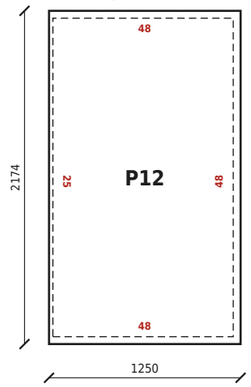
1 pc · Wall-3



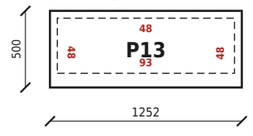
4 pcs · Wall-3



1 pc · Wall-3



1 pc · Wall-4



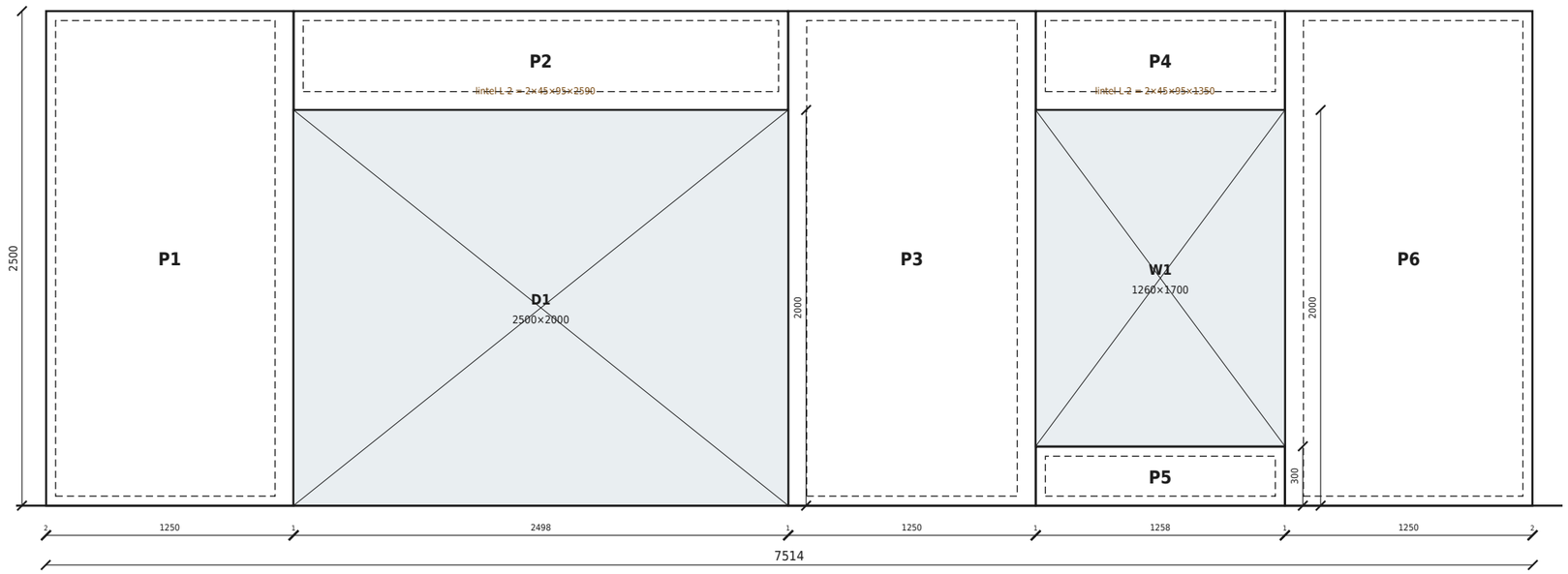
Red figures – EPS routing depth from that edge (mm). Dashed – routing line. Panels shown from outside.

Tolerance ±1 mm. Wall panels with the long side (2500) vertical, panels above / below openings – horizontal.

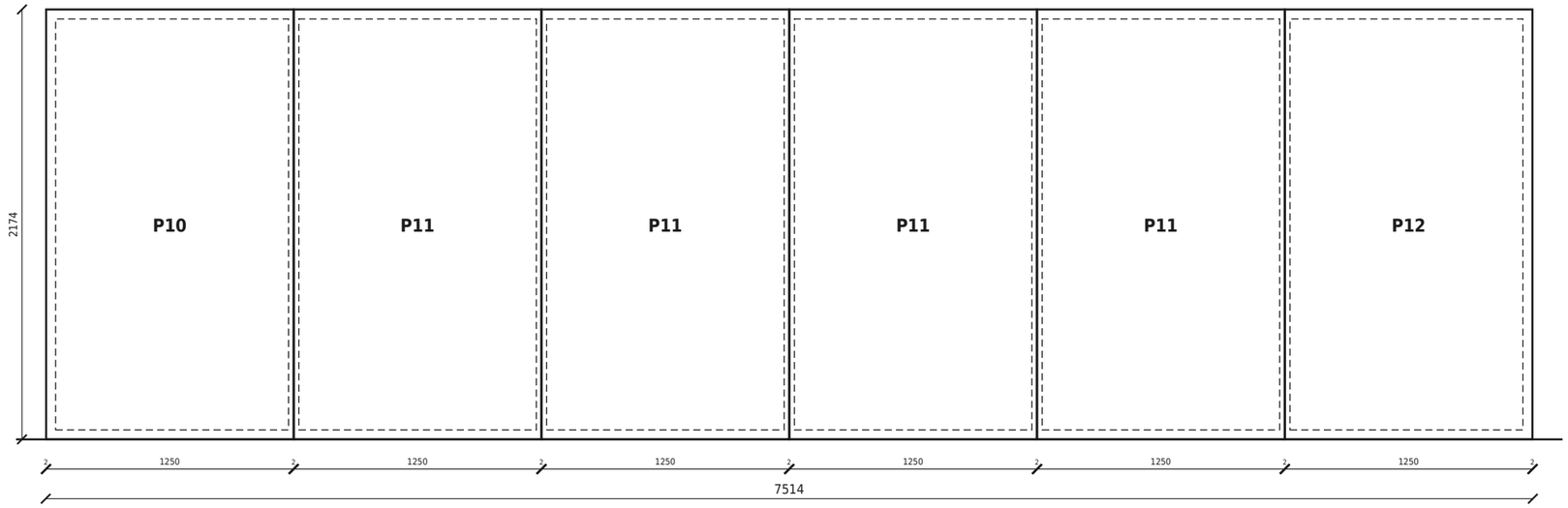
TimberFrameDrawings.com	**YOUR COMPANY DETAILS CAN GO HERE** Company name, address Company no. · VAT no. · website	**SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)** **Panel details (routing)** Garden cabin 30 m², SIP 124 / 174	Sheet **8/20** GR30-08 @A3 timberframedrawings.com · 2026-11-09

Wall panel layout (SIP dimensions) – external walls

Wall-1 – front wall (axis A) (view from outside)



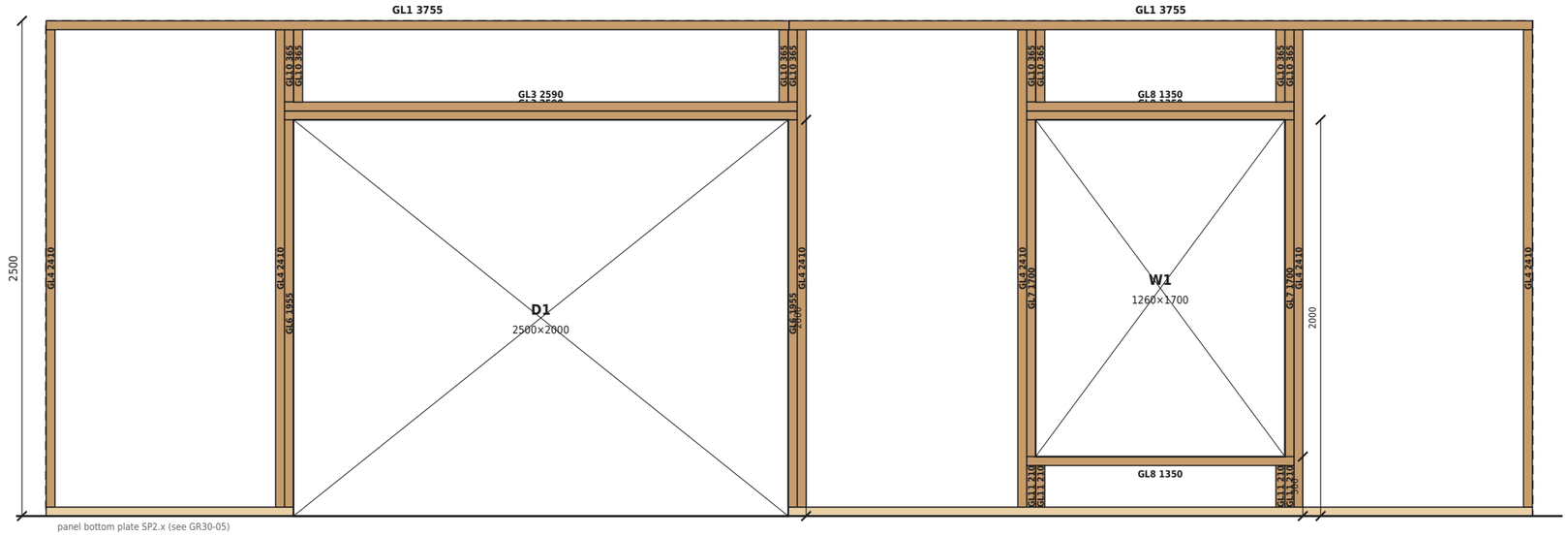
Wall-3 – rear wall (axis B) (view from outside)



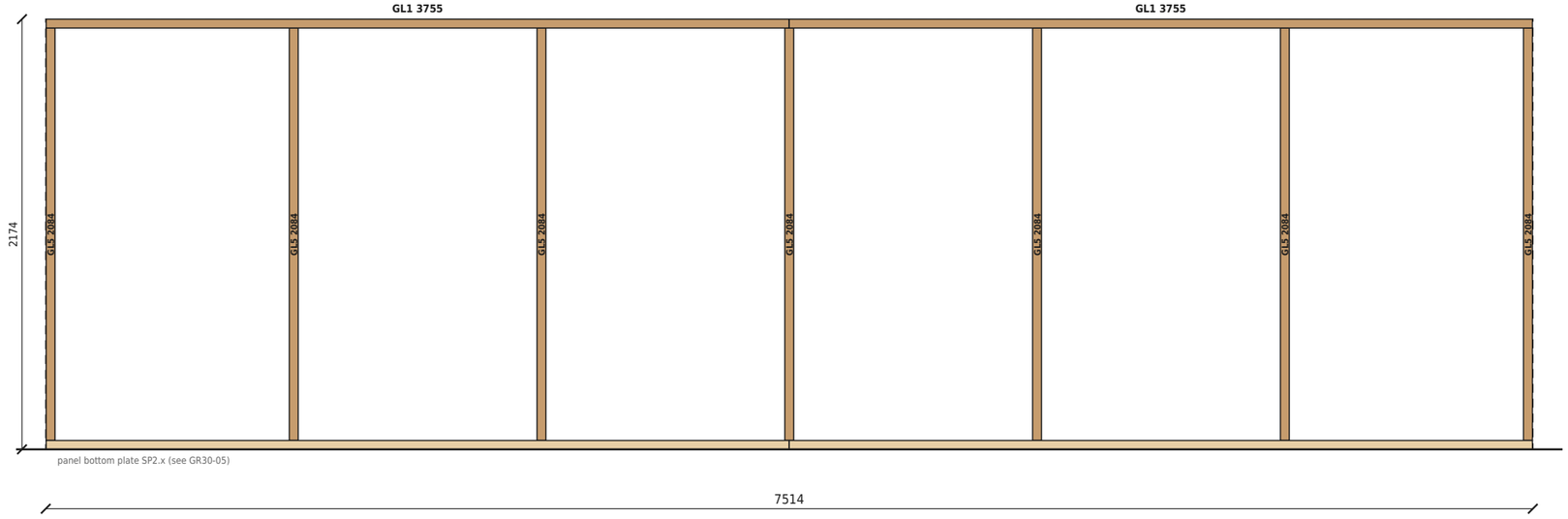
Dashed – EPS routing: 48 mm at timber (ends, top, bottom), 25 mm on both sides of the spline,
93 mm at opening studs (2 pieces), lintel height + 3 mm at the bottom of panels above openings. 2 mm between panels.
SIP bottom = top of sole plate. Panels are fixed with 4.5×45 screws at 150 mm to all timber (both OSB faces); all joints filled with PU foam.

Wall panel layout (timber dimensions) – external walls

Wall-1 – front wall (axis A) (view from outside)



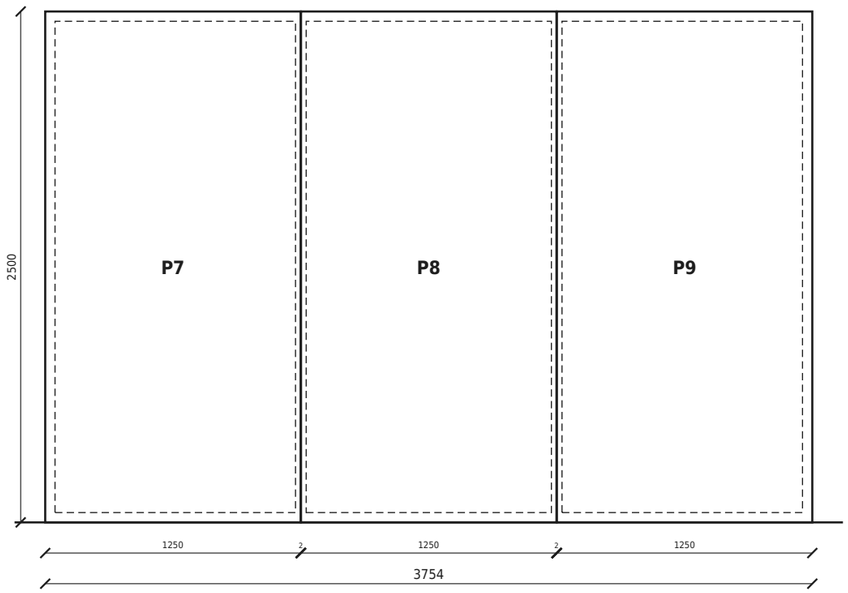
Wall-3 – rear wall (axis B) (view from outside)



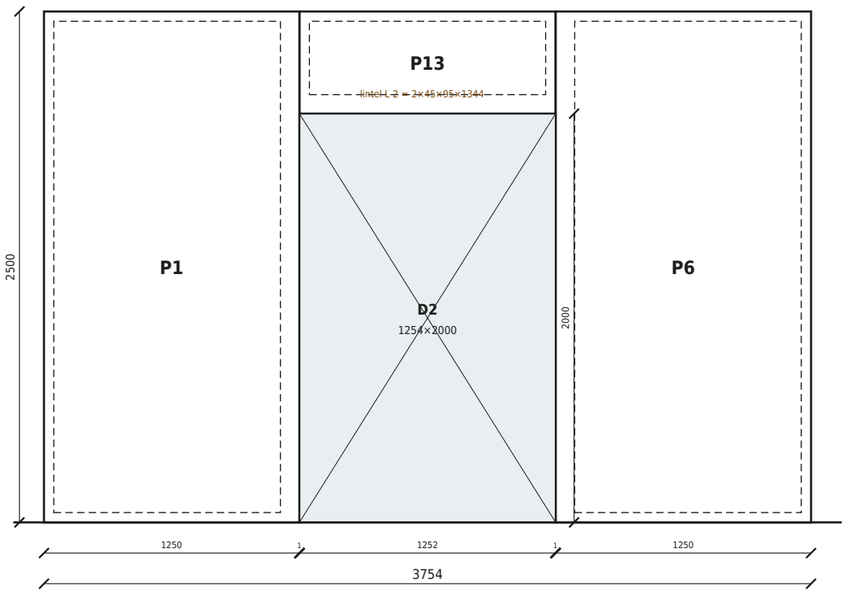
All timber C24, planed, 45×95 (fits the 100 mm core of SIP 124 with foam). Full-height stud – over the whole height; inner stud – carries the lintel; lintels L-2 / L-3: 2 / 3 pieces 45×95 laid flat, glued and screwed (4.5×80 at 300 mm). GL codes – in the specification.

Wall panel layout (SIP dimensions) – side walls

Wall-2 – left side wall (axis 1) (view from outside)



Wall-4 – right side wall (axis 2) (view from outside)

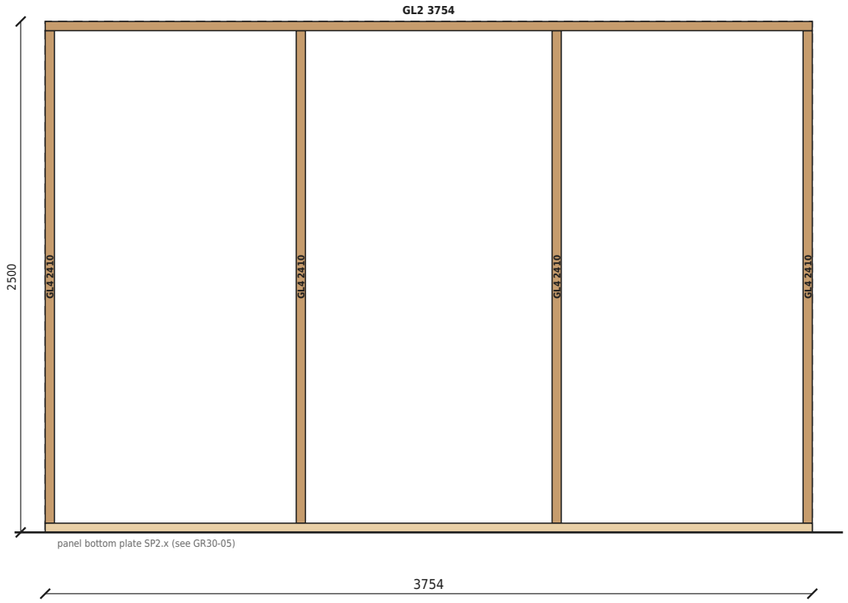


Dashed – EPS routing: 48 mm at timber (ends, top, bottom), 25 mm on both sides of the spline,
93 mm at opening studs (2 pieces), lintel height + 3 mm at the bottom of panels above openings. 2 mm between panels.
SIP bottom = top of sole plate. Panels are fixed with 4.5×45 screws at 150 mm to all timber (both OSB faces); all joints filled with PU foam.

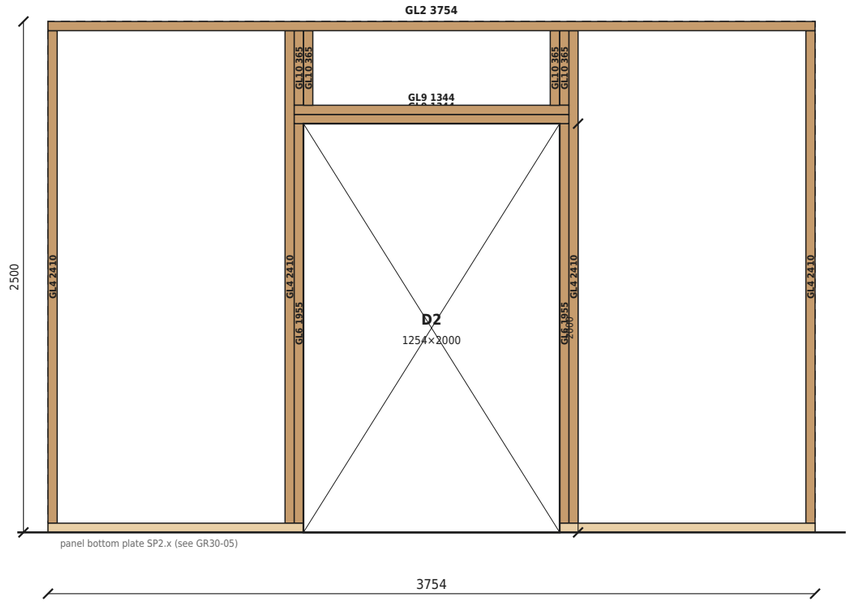
TimberFrameDrawings.com	**YOUR COMPANY DETAILS CAN GO HERE** Company name, address Company no. · VAT no. · website	**SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)** **Wall panels: Wall-2, Wall-4** Garden cabin 30 m², SIP 124 / 174 GR30-11 @A3 timberframedrawings.com · 2026-11-09	Sheet **11/20**

Wall panel layout (timber dimensions) – side walls

Wall-2 – left side wall (axis 1) (view from outside)

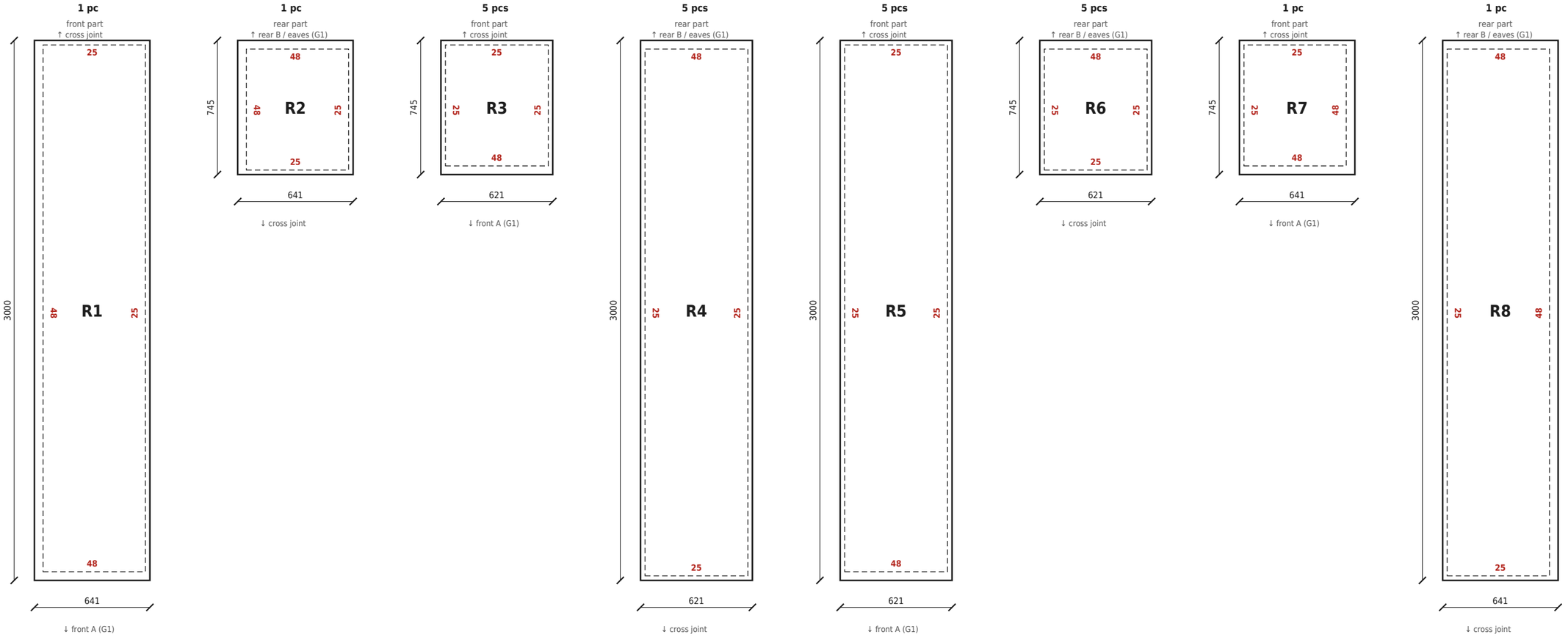


Wall-4 – right side wall (axis 2) (view from outside)



All timber C24, planed, 45×95 (fits the 100 mm core of SIP 124 with foam). Full-height stud – over the whole height; inner stud – carries the lintel; lintels L-2 / L-3: 2 / 3 pieces 45×95 laid flat, glued and screwed (4.5×80 at 300 mm). GL codes – in the specification.

Roof SIP panels 174 mm – cutting and routing, 1:25



Red figures – EPS routing depth from that edge (mm). Dashed – routing line. Panels shown from above, fall to the rear (axis B).

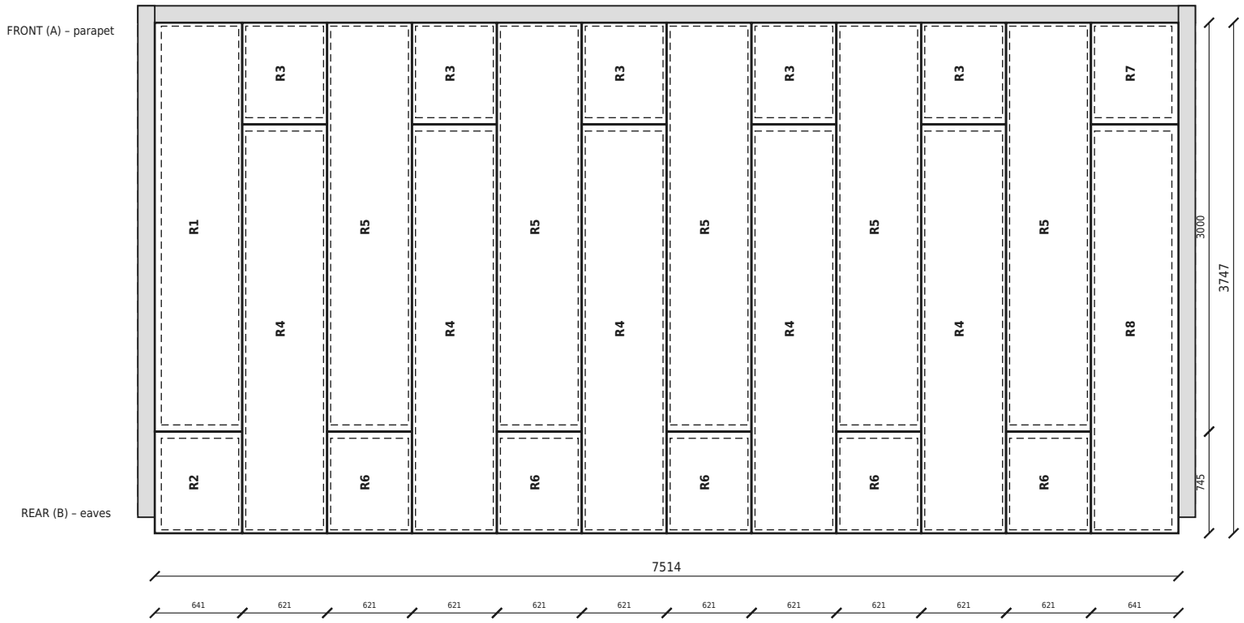
Long sides: 25 + 25 – ONE shared 45×145 rafter at each strip joint; 48 – only at the edges by the side walls (R1/R2 left, R7/R8 right). Front A and rear B edges: 48 – edge timber G1. Cross joint: 25 + 25 – one 45×145 timber.

Tolerance ±1 mm. Long side – along the fall. A 1250×3000 panel is ripped into strips 641 / 621; short pieces 745 – a 3000 panel cut into 4 (+ kerf).

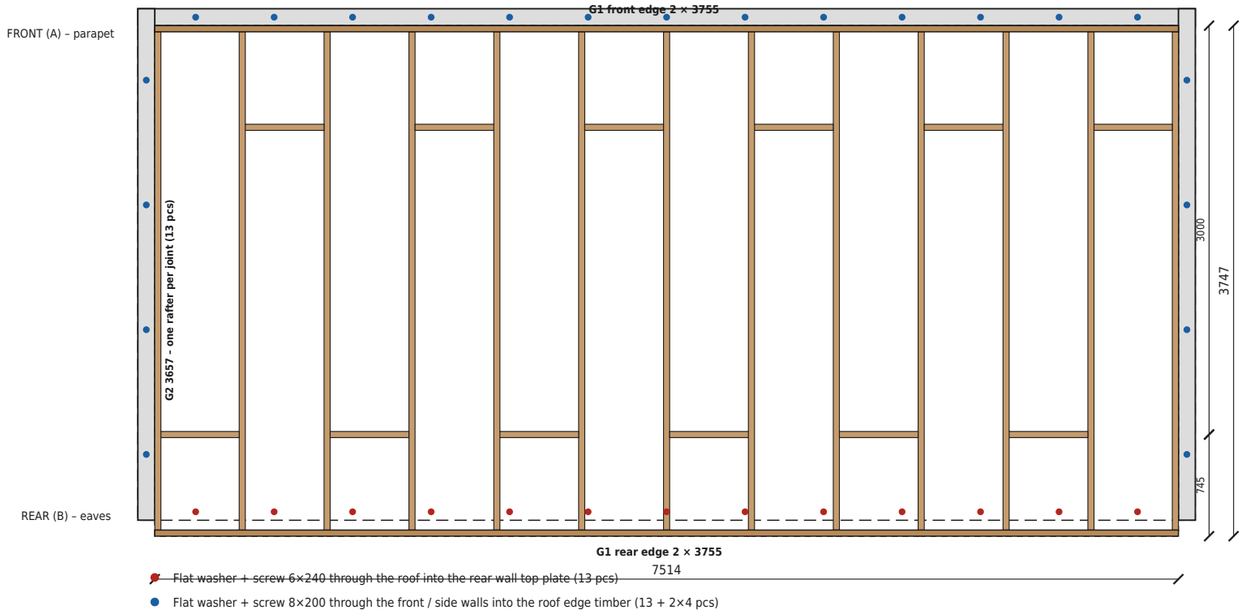
TimberFrameDrawings.com	**YOUR COMPANY DETAILS CAN GO HERE** Company name, address Company no. · VAT no. · website	**SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)** **Roof panel details (routing)** Garden cabin 30 m², SIP 124 / 174	Sheet **13/20** GR30-13 @A3 timberframedrawings.com · 2026-11-09

Roof panel layout – SIP 174, fall 1.2° to the rear (axis B), EPDM

SIP dimensions



Structural timber and fixings



Roof SIP panels

Mark	Width	Length	Thickness	Qty
R1	641	3000	174	1
R2	641	745	174	1
R3	621	745	174	5
R4	621	3000	174	5
R5	621	3000	174	5
R6	621	745	174	5
R7	641	745	174	1
R8	641	3000	174	1

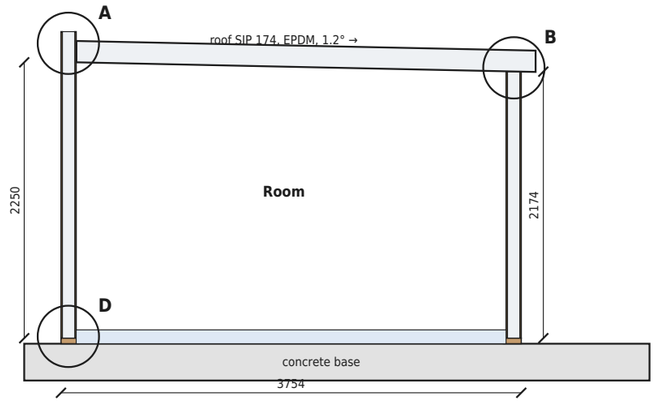
Roof timber 45×145 (C24)

Mark	Thickness	Width	Length	Qty	Use
G1	145	45	3755	4	front edge
G2	145	45	3657	13	rafter (edges + joints)
G3	145	45	576	10	cross joint
G4	145	45	572	2	cross joint

Strips 641 / 621 mm are cut from 1250;
one G2 rafter at each joint (routing 25 + 25), 48 at the side walls,
cross joints – one timber, routing 25 + 25.
Joints alternate 3000 / 745 in each strip.

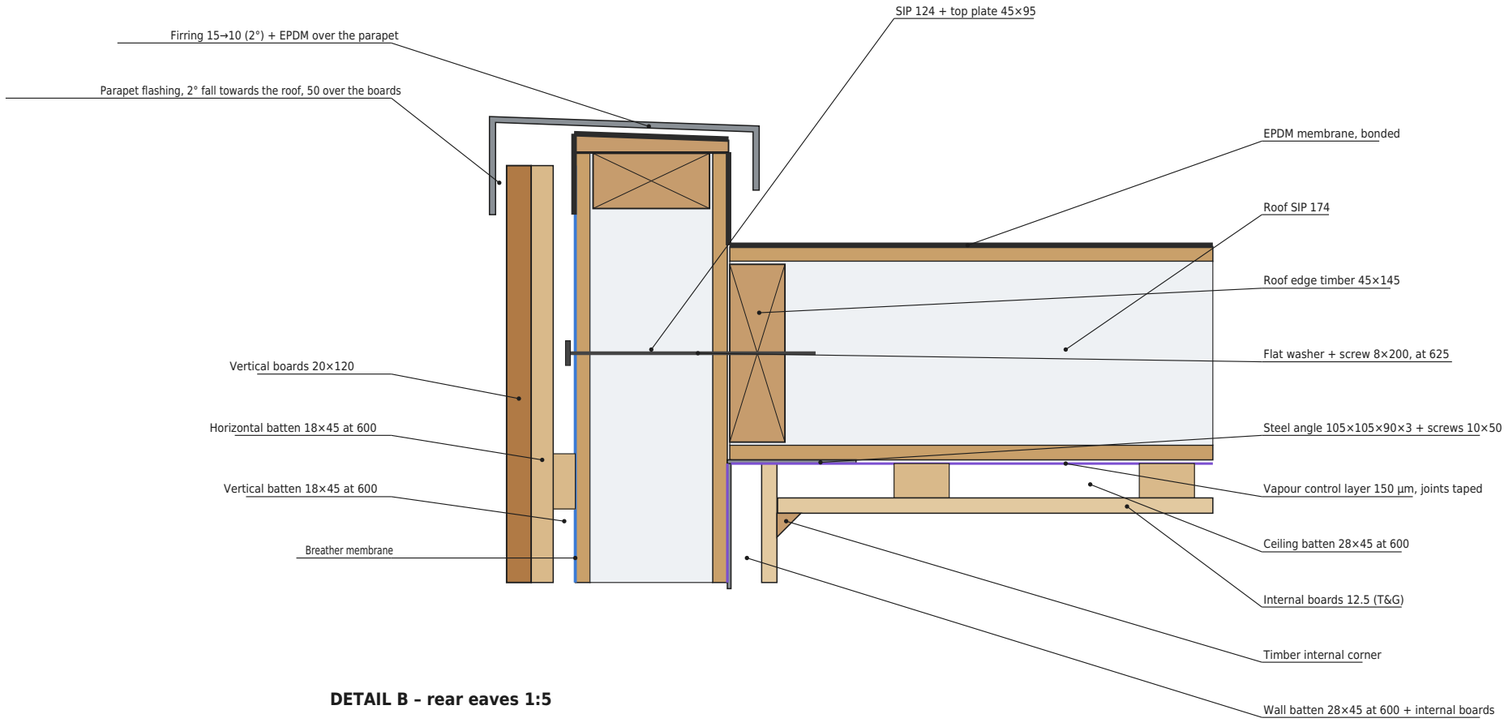
Sections and details

SECTION 1:50

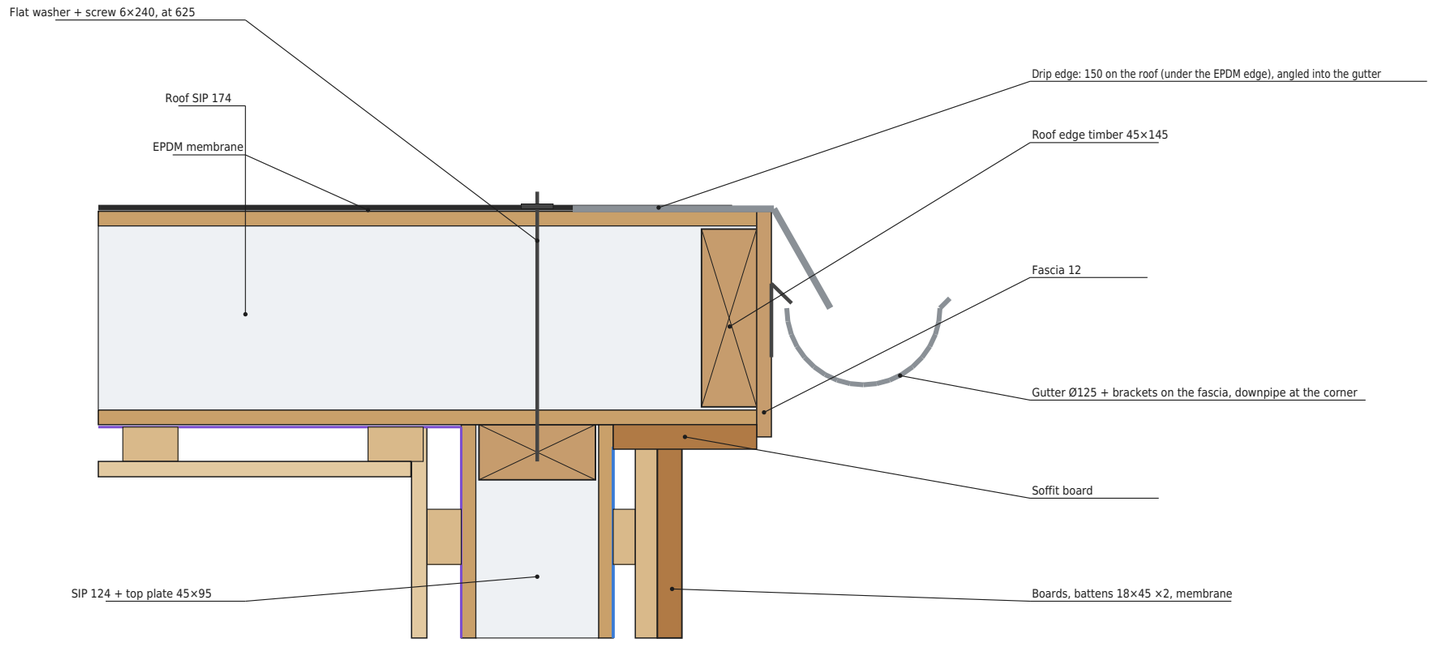


Heights from the SIP bottom (top of sole plate). Side walls – detail C.

DETAIL A – front parapet / roof 1:5



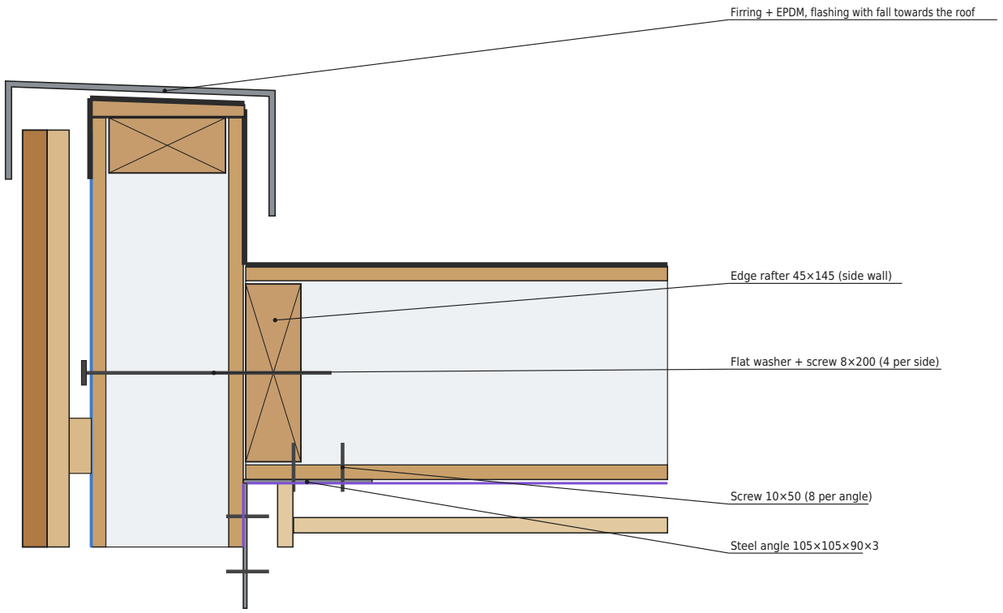
DETAIL B – rear eaves 1:5



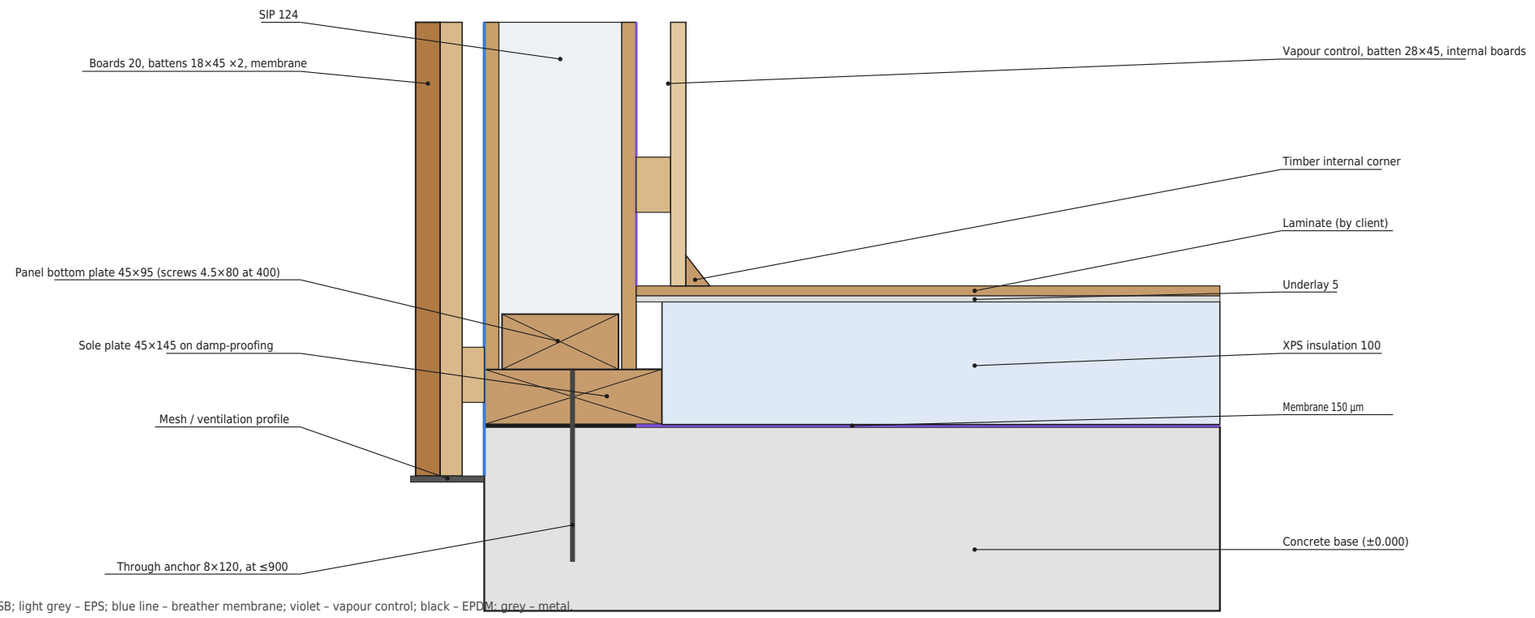
TimberFrameDrawings.com	**YOUR COMPANY DETAILS CAN GO HERE** Company name, address Company no. · VAT no. · website	**SIP GARDEN CABIN 30 m² (7.76 × 3.75 m)** **Section, details A, B** Garden cabin 30 m², SIP 124 / 174	Sheet **15/20**
		GR30-15 @A3 timberframedrawings.com · 2026-11-09	

Details C, D

DETAIL C – side wall / roof edge 1:5

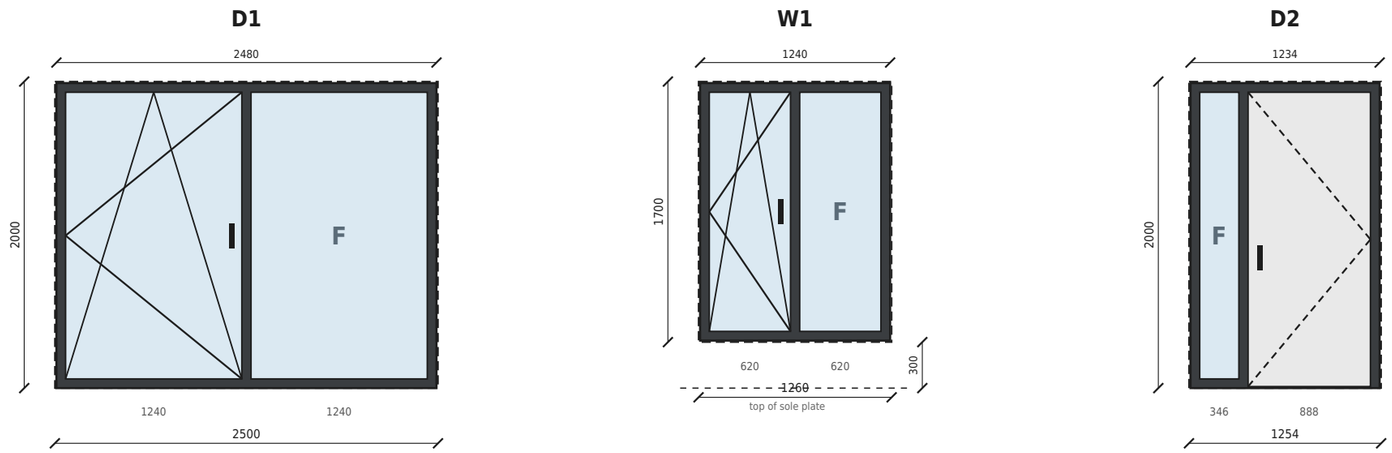


DETAIL D – wall base 1:5



Colours: brown – C24 timber; sand – OSB; light grey – EPS; blue line – breather membrane; violet – vapour control; black – EPDM; grey – metal.

Windows and doors – view FROM INSIDE and order sizes



Dashed – opening in the SIP wall; dark – frame (order size); F – fixed glazing; triangle – side-hung (apex – hinge side), apex at the top – bottom-hung; solid – inwards, dashed – outwards; view FROM INSIDE.

WINDOW AND DOOR SCHEDULE (mm)

Mark	Qty	Opening W × H	Frame (for ordering) W × H	Sill	Parts	Type / opening	Location
D1	1	2500 × 2000	2480 × 1990	0	2	Terrace door, 2 parts: left – tilt and turn (inwards), right – fixed	Wall-1 (front), terrace
W1	1	1260 × 1700	1240 × 1680	300	2	Window, 2 parts: left – tilt and turn, right – fixed	Wall-1 (front)
D2	1	1254 × 2000	1234 × 1990	0	2	External door with fixed side light; opens outwards, hinges on the right	Wall-4 (right), entrance

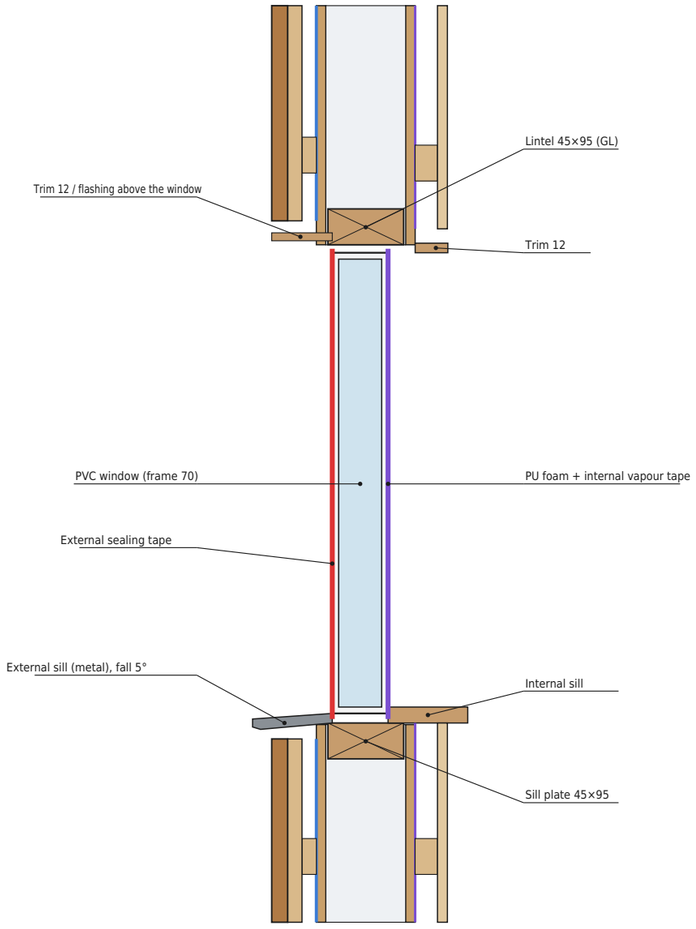
Opening = opening in the SIP wall (from the top of the sole plate). Order size = opening − 10 mm on each side and at the top (W1 – also at the bottom) – gap for foam and tapes.

Doors D1, D2 stand on the sole plate (no panel bottom plate in the opening): frame height with a ~30–45 mm base (threshold) profile – agree with the supplier when ordering.

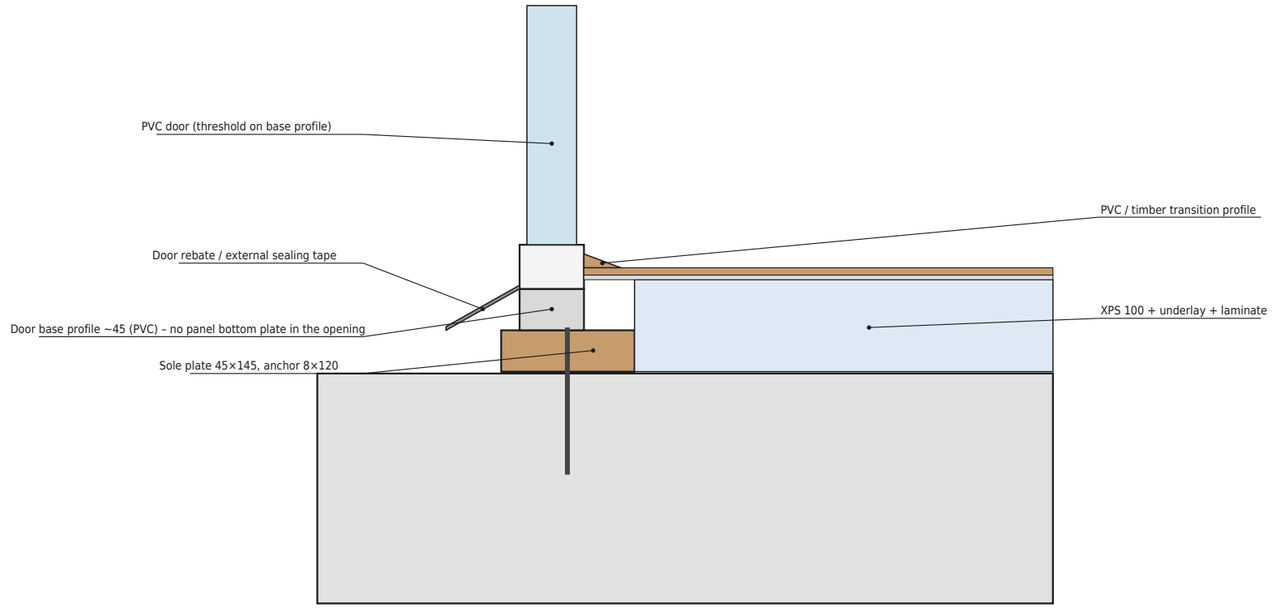
All units: PVC, anthracite outside / white inside, double glazing. Opening widths 2500 / 1260 / 1254 – between full 1250 SIP piers.

Opening details

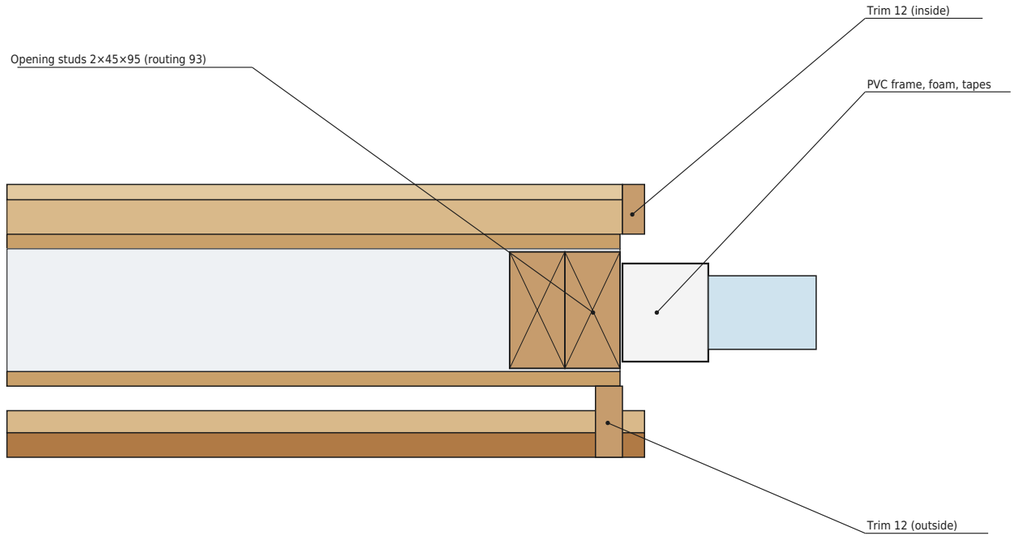
WINDOW – vertical section (sill / head) 1:7.5



PVC DOOR – threshold 1:6.7



DOOR / WINDOW JAMB – horizontal section 1:5



Openings in the SIP walls – structural dimensions (see GR30-02). Window / door frames are fixed with frame screws through the opening studs (≈ 150 from the corners, at ≤ 700), the 10–15 mm gap is filled with low-expansion PU foam; outside – breathable tape, inside – airtight tape. Lintels: L-2 = 2×45×95, L-3 = 3×45×95, glued and screwed.

Wall SIP panel and timber specification

WALL SIP PANELS (124)

Mark	Width	Length	Thickness	Qty	Wall / note
P1	1250	2500	124	2	Wall-1
P2	2498	500	124	1	Wall-1 (above opening)
P3	1250	2500	124	1	Wall-1
P4	1258	500	124	1	Wall-1 (above opening)
P5	1258	298	124	1	Wall-1 (below window)
P6	1250	2500	124	2	Wall-1
P7	1250	2500	124	1	Wall-2

Mark	Width	Length	Thickness	Qty	Wall / note
P8	1250	2500	124	1	Wall-2
P9	1250	2500	124	1	Wall-2
P10	1250	2174	124	1	Wall-3
P11	1250	2174	124	4	Wall-3
P12	1250	2174	124	1	Wall-3
P13	1252	500	124	1	Wall-4 (above opening)

WALL FIXINGS AND MATERIALS

Nr.	Description	Qty
1	Screw 4.5×45 (OSB to timber, at 150, both sides)	1780
2	Screw 4.5×80 (wall to wall, at 400; lintel layers)	60
3	Adhesive PU foam (750 ml)	12
4	Metal angle 105×105×90×3 (wall tops, joints)	12
5	External window / door tape, m	25
6	Internal airtight tape, m	25
7	Structural timber C24 45×95×6000 (walls and panel bottom plates)	21

Quantities – net (per drawings) + rounding; where not stated, add ~5 % for losses.

TIMBER 45×95 (C24)

Mark	Thickness	Width	Length	Qty	Use
GL1	95	45	3755	4	top plate
GL2	95	45	3754	2	top plate
GL3	95	45	2590	2	lintel
GL4	95	45	2410	14	end, opening stud, spline
GL5	95	45	2084	7	end, spline
GL6	95	45	1955	4	inner opening stud
GL7	95	45	1700	2	inner opening stud
GL8	95	45	1350	3	lintel, sill plate
GL9	95	45	1344	2	lintel
GL10	95	45	365	12	short timber, edge timber
GL11	95	45	210	4	short timber, edge timber

Roof, finishes and fixings specification

ROOF SIP PANELS (174)

Mark	Width	Length	Thickness	Qty
R1	641	3000	174	1
R2	641	745	174	1
R3	621	745	174	5
R4	621	3000	174	5
R5	621	3000	174	5
R6	621	745	174	5
R7	641	745	174	1
R8	641	3000	174	1

ROOF TIMBER 45×145 (C24)

Mark	Thickness	Width	Length	Qty	Use
G1	145	45	3755	4	front edge
G2	145	45	3657	13	rafter (edges + joints)
G3	145	45	576	10	cross joint
G4	145	45	572	2	cross joint

ROOF FIXINGS AND MATERIALS

Nr.	Description	Qty
1	Screw 4.5×45 (OSB to timber, at 150, both sides)	1010
2	Flat washer + screw 6×240 (roof to rear wall, at ≈ 625)	13
3	Flat washer + screw 8×200 (through the front wall into the roof edge, at ≈ 625)	13
4	Flat washer + screw 8×200 (side walls into the roof edge, 4 per side)	8
5	Steel angle 105×105×90×3 (roof to walls inside, at ≈ 625)	25
6	Screw 10×50 (for angles, 8 per angle)	200
7	Adhesive PU foam (750 ml)	8
8	Structural timber C24 45×145×6000 (roof)	17
9	EPDM membrane 1.2 mm, one sheet 8.5 × 4.5 m, m²	38.25
10	EPDM adhesive (field) / contact adhesive (upstands)	per the manufacturer
11	Parapet flashing 0.5 mm, girth 330 mm, m	17
12	Drip edge 150 on the roof, into the gutter (rear eaves), m	9
13	Fascia 12×180 (rear eaves), m	9
14	Gutter Ø125 (rear eaves) + brackets at 600, m	9
15	Downpipe Ø90 + outlet, end caps, set	1

FINISHING MATERIALS SPECIFICATION

Name	Thickness	Width	Length	Qty	Note
Breather membrane (outside, on SIP)				64 m²	walls, +10 %
External battens (vertical) 18×45 at 600	18	45	3000	107 m	layer 1
External battens (horizontal) 18×45 at 600	18	45	3000	107 m	layer 2
External boards, vertical	20	120	3000	156 pcs	S = 49 m² net
Vapour control membrane 150 µm				71 m²	walls + ceiling
Internal battens 28×45 at 600 (walls, ceiling)	28	45	3000	118 m	+10 %
Internal boards (T&G)	12.5	96	3000	281 pcs	S = 64 m²
Screw 4.5×50 (battens, at 400)				830 pcs	
Screw 4.5×60 stainless (external boards, 2 per batten)				1560 pcs	
Nails 1.6×30 / clips (internal boards)				2530 pcs	
Timber internal corners / trims 12 mm				69 m	ceiling + corners
Mesh / ventilation profile (bottom and top of boards)				25 m	

Areas: external walls 58.3 m², openings 9.7 m², net 48.7 m²; internal walls 38.6 m², ceiling 25.7 m².

Boards: +15 % for cutting; battens +10 %. Adhesive consumption – per the manufacturer.