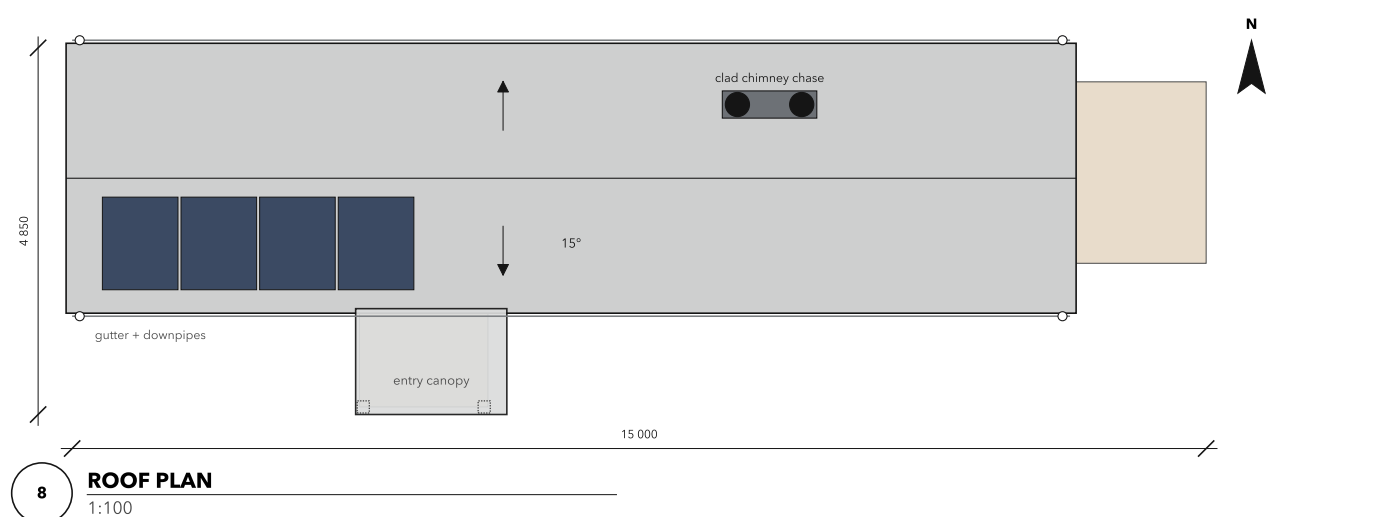
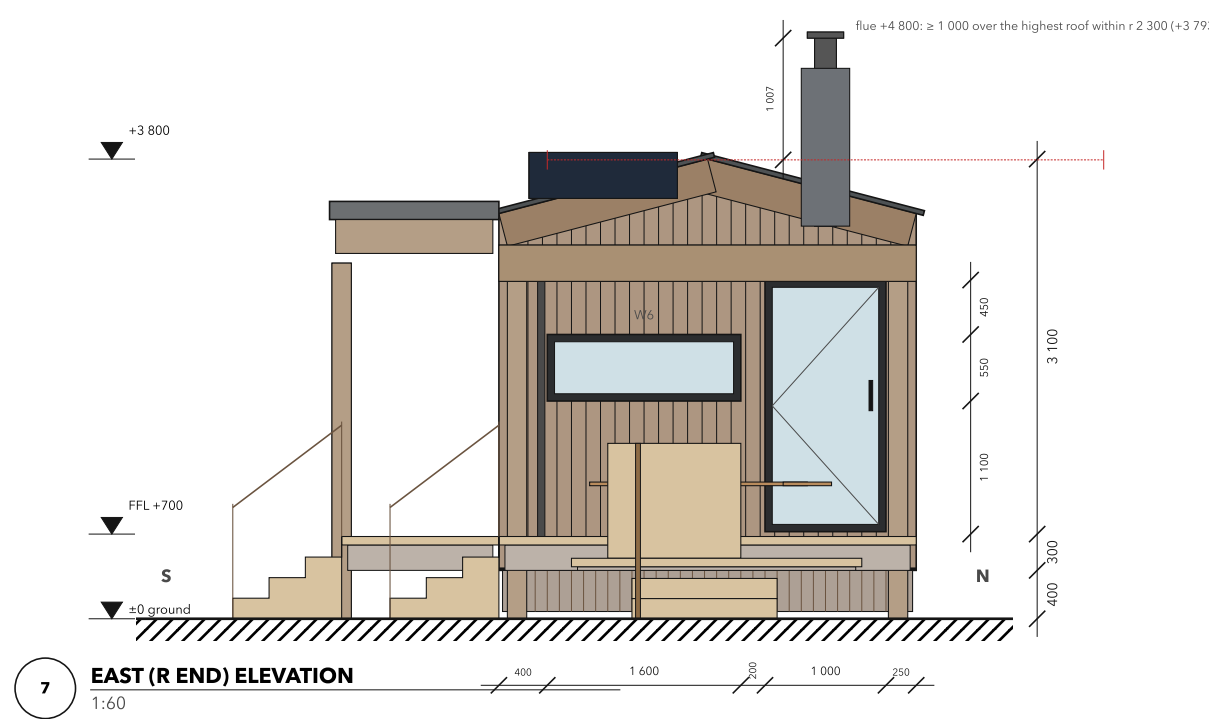
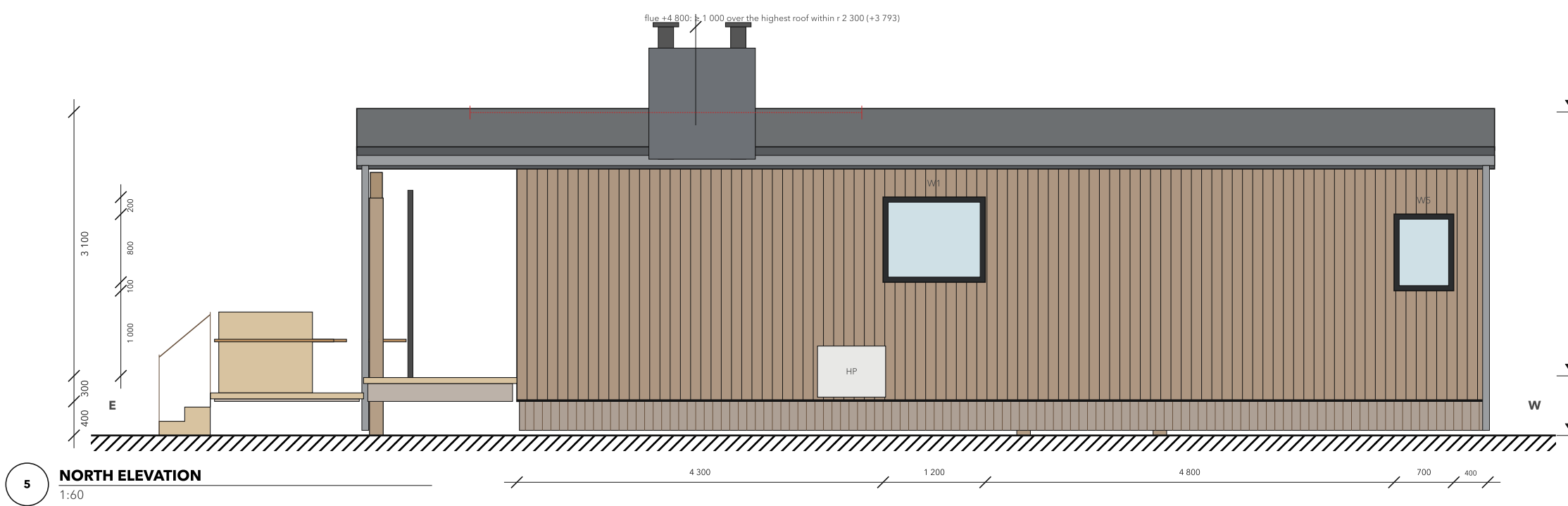
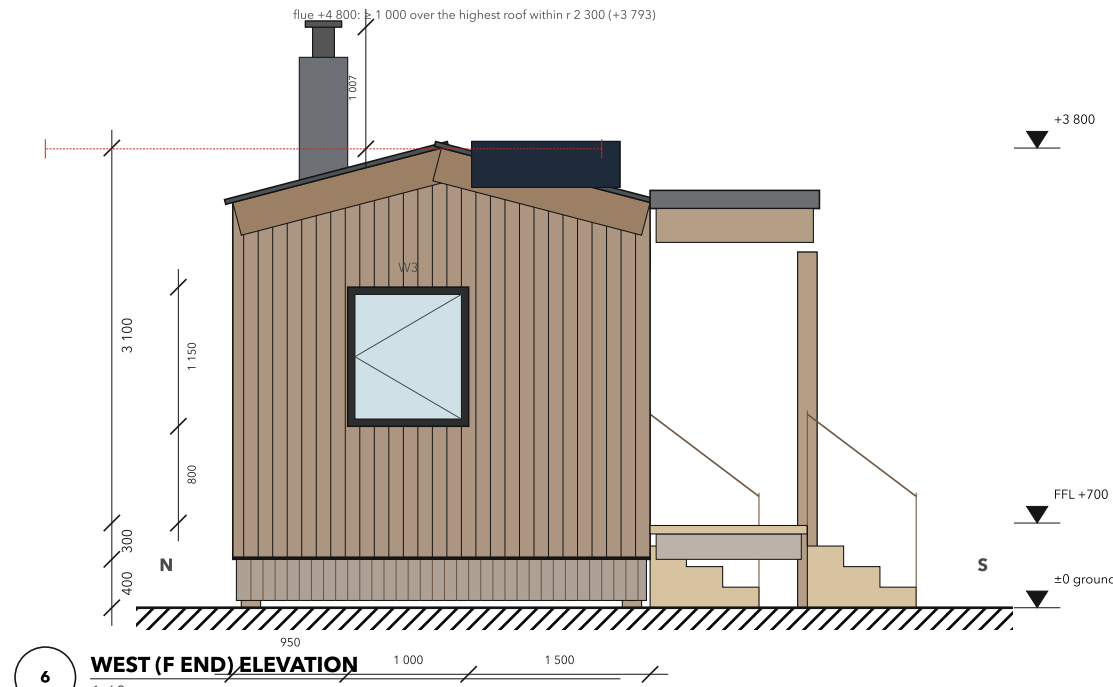
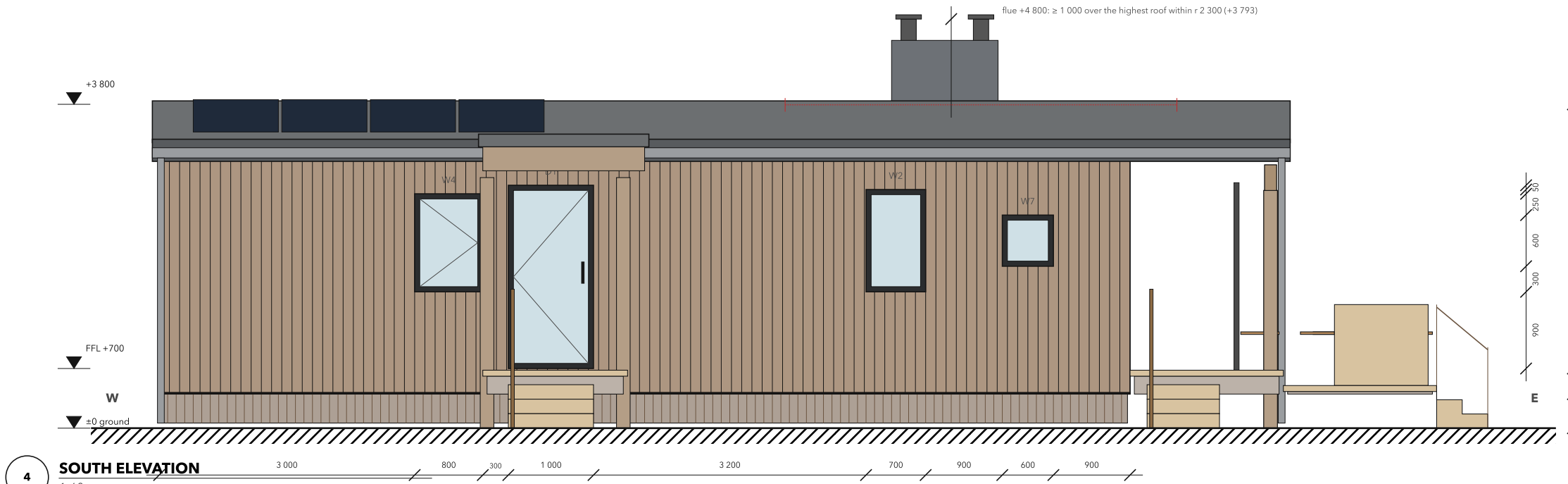




OPENING SCHEDULE						
ID	Type	Wall	W x H	Sill	Note	Sun
D1	glazed door	S	1 000 x 2 150	0	clear 880	porch roof
W1	fixed pane	N	1 200 x 1 000	1 100	-	-
W2	fixed pane	S	700 x 1 200	900	-	ext. blind
W3	tilt-turn window	F end	1 000 x 1 150	800	escape	ext. blind
W4	tilt-turn window	S	800 x 1 150	900	escape	ext. blind
W5	fixed pane	N	700 x 900	1 000	-	-
D2	glazed door	R end	1 000 x 2 080	20	clear 880	porch roof
W6	fixed pane	R end	1 600 x 550	1 100	-	porch roof
W7	fixed pane	S	600 x 600	1 200	-	ext. blind

MATERIALS		
	Thermo-ash cladding	
	Aspen sauna lining	

CONSTRUCTION, SERVICES, FIRE

Wall 220 18 thermo-ash on 28 vented battens / 18 wood fibre sheathing, taped (wind tight) / 145 C24 studs at 600 with PIR (λ 0.022) between / vapour-variable membrane, taped (airtight) / 12 birch ply, Rc = 4.8 m²/KW (15 % timber)

Floor 300 15 oiled oak / 25 wood fibre impact board / 22 ply / 220 C24 joists with PIR between, hung off two GL24 140 x 280 edge beams under the long walls, which bear on the screw pile heads / 18 breather board, Rc = 5.0; crawl space 400, closed by a larch skirt with insect mesh and vents

Roof 300 0.7 standing-seam zinc on 25 vented battens and underlay / 18 sarking / 220 rafters with PIR / vapour-variable membrane lapped onto the wall membrane / 12 ply, Rc = 6.5; gable 15°; the R end runs on 1.8 m over the porch on two posts

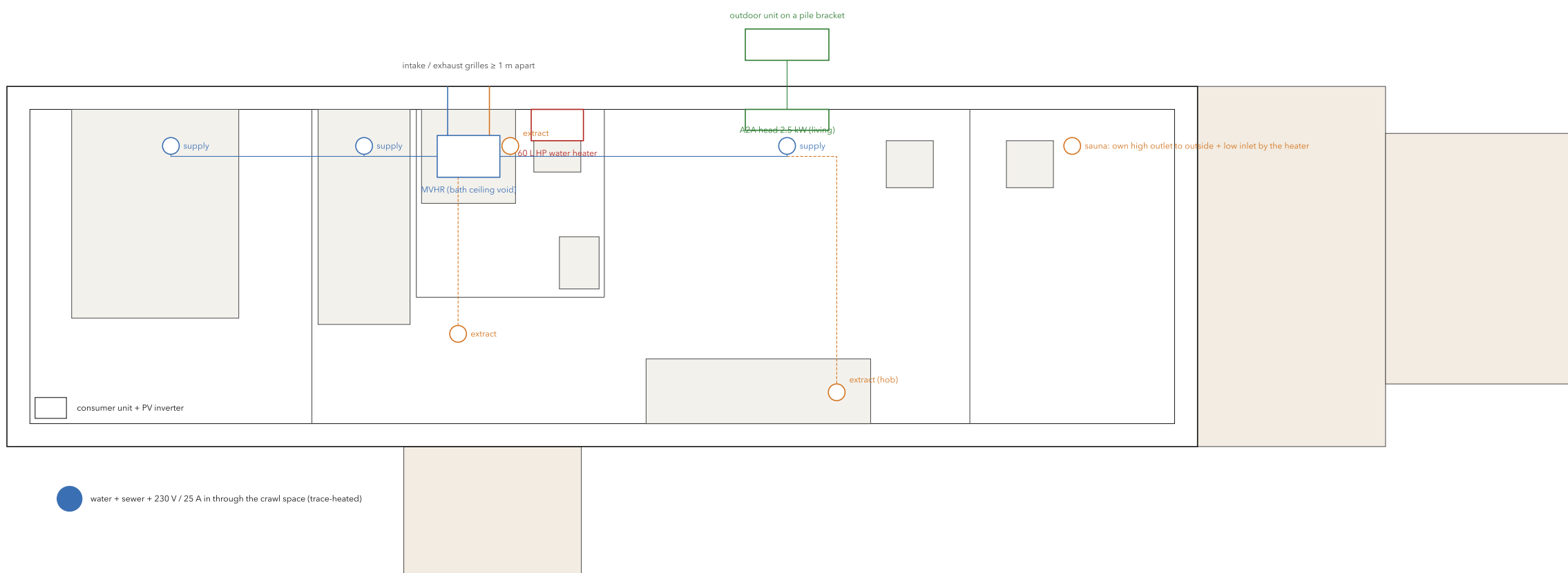
Sauna aspen lining on 25 battens, aluminium-foil vapour barrier taped to the wall membrane, 50 mineral wool; lowered aspen ceiling at 2 200; upper benches 900 (1 910 + 1 080), step benches 450; fresh air low behind the heater, exhaust high opposite; El 30 fire-rated glazed door in the fire wall to the living room, toughened 8 glazed door 880 clear to the porch with a 20 drained threshold; anti-slip grooved larch on the porch and plunge deck; tiles to a floor drain

Fire wall 100; 70 steel studs, 15 fire-rated board each side, plus 30 calcium-silicate on the appliance faces (130 there); stove and heater each 300 off it; one clad, insulated chimney chase with two Ø 150 flues, terminating 1 000 above the roof

Services all electric, 230 V / 25 A pitch hook-up: one air to air heat pump (2.5 kW, seasonal SCOP 3.5; outdoor unit on a pile-mounted bracket behind a larch louvre, on the outer wall behind the indoor head - see the services diagram), MWH (90 % recovery, 150 m³/h) in the bath ceiling, 40 L heat-pump water heater wall-hung over the WC frame in the bath (far from the bath exhaust), recirculating cooker hood with MWH extract 1.5 m from the hob, 1.6 kWp PV + 3 kW inverter, water and sewage to the campsite mains in trace heated pipes

Fire wood stove 3.5 kW nominal (2-4.5 kW, DINplus), outside-air kit; twin-wall insulated flue Ø 150 terminating 1 000 above any roof surface within 2.3 m (and ≥ 1 000 above the own ridge; stayed above 1.5 m free length), dimensioned on the elevations; 300 side and 500 front clearance to combustibles, non-combustible hearth 500 in front, 30 CaSi heat shield on timber within 450; smoke + CO alarm in every room except the bath and sauna (heat detectors there); extinguisher and fire blanket at the door

Installation craned in one lift per module with a 4-point spreader onto pre-set screw piles (Ø 76, 1.5-2.5 m, set to ±5 mm); edge beams bolted to the pile heads; porch, roof extensions and posts follow as a pre-cut kit in one day



16 SERVICES: VENTILATION, HEAT, WATER, POWER 1:50

