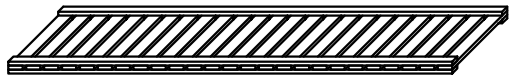



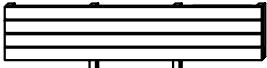

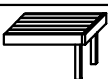













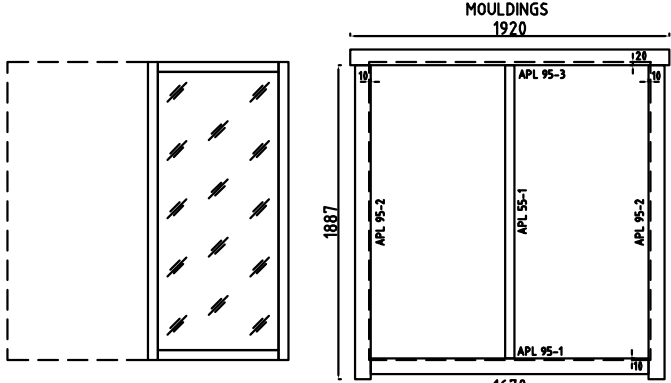
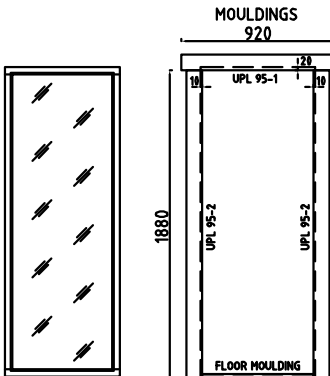
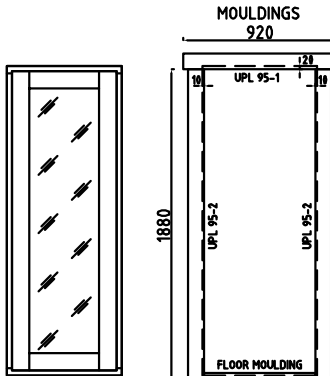
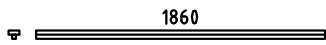
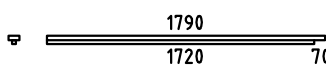


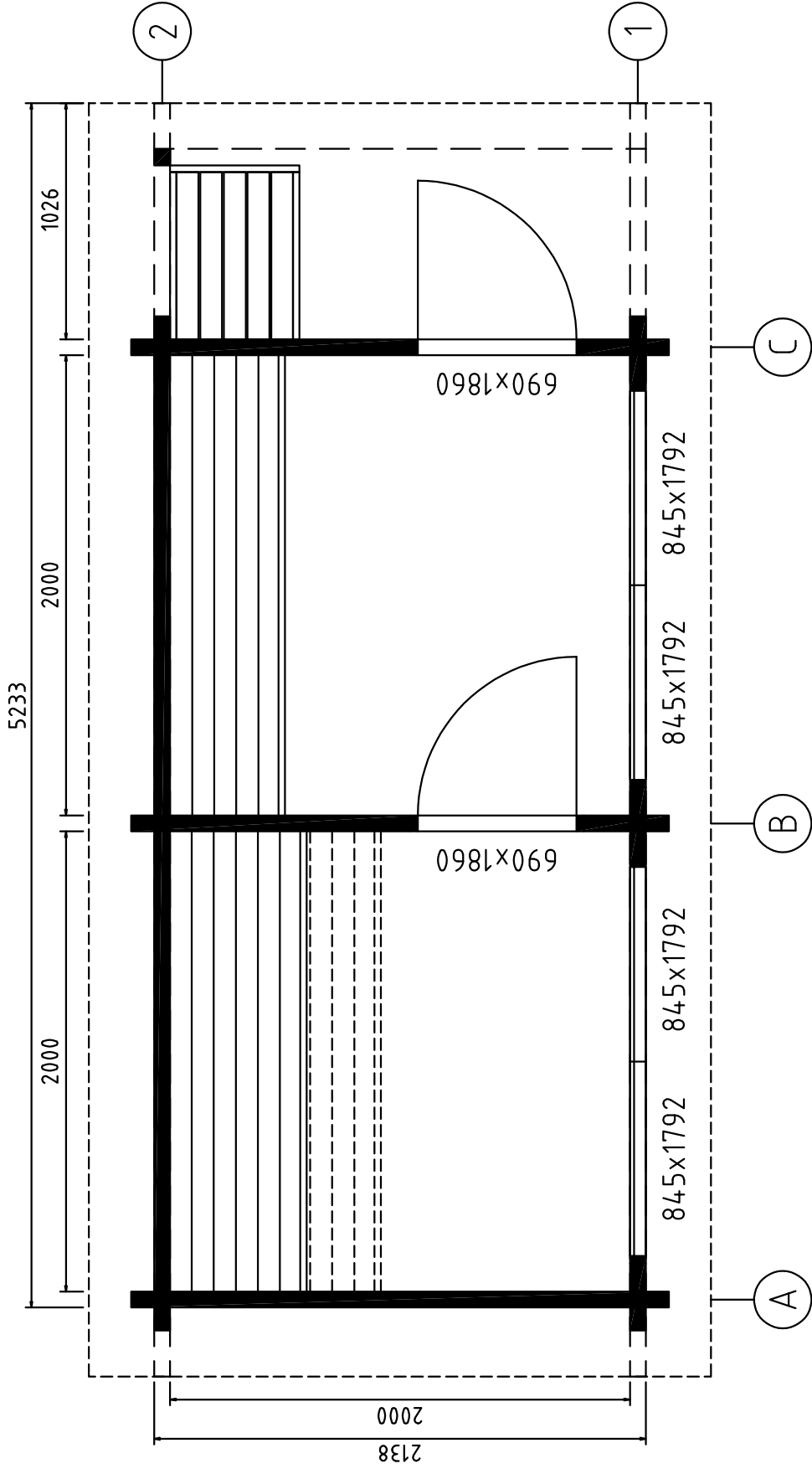
HALMAR 5 70 STANDARD INSTALLATION DRAWINGS



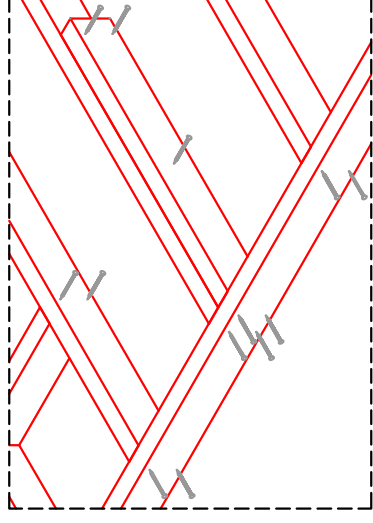
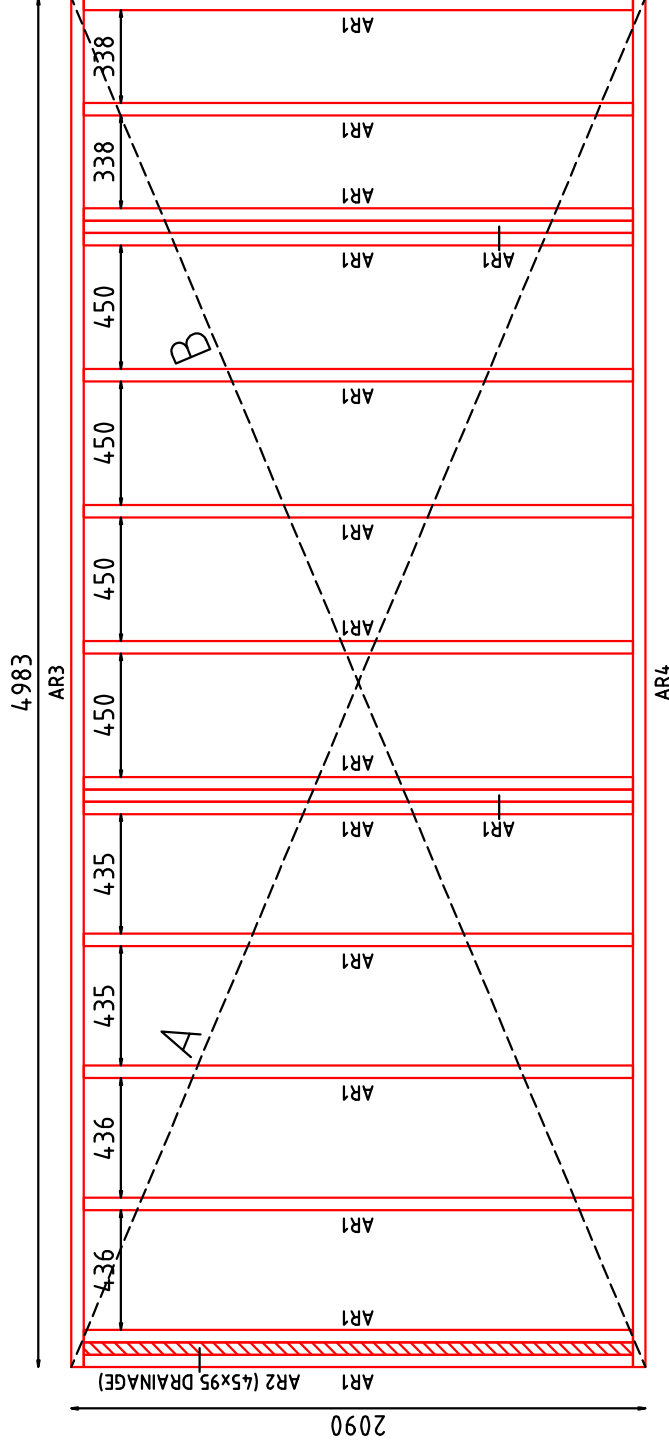
Pos	Drawing HALMAR 5	Pcs	Profile (mm)	Lenght (mm)
	GRID WALL 650x1711 	1		
	BENCH MODULE 400x1992 	1		
	BENCH MODULE 500x1992 	1		
	BENCH MODULE 600x1992 	1		
	BENCH SKIRT 376x1992 	1		
	BENCH SUPPORTS SET 45x45 (560-3tk, 500-1tk, 465-2tk, 452-2tk, 375-2tk) 	1		
	OUTDOOR BENCH 563x750 	1		
	DIY HEATER GUARD STANDARD	1		
	3MM SLOPE BOARD 	1	45x3	1996
	6MM SLOPE BOARD 	1	45x6	1996
	9MM SLOPE BOARD 	1	45x9	1996
	12MM SLOPE BOARD 	1	45x12	1996
	SPU INSULATION SHEET 30x600x1200 	6		
	SPU INSULATION SHEET 30x600x1200 FOR ADDITONAL INSULATION IN FRONT ROOM (ONLY IF ORDERED)	6		
	ALUMINUM TAPE 			20m
	ALUMINUM TAPE FOR ADDITONAL INSULATION IN FRONT ROOM (ONLY IF ORDERED)			20m
	WOODEN VENTILATION LOUVER D100 	2		
	METAL VENTILATION GRID D100 	2		
	DRAINAGE 2000+ (OPENING ON RIGHT) 	1		
	DRAINAGE 2000+ (OPENING ON LEFT) 	1		
	ADJUSTABLE POST SUPPORT 60x60 	1		
	SLIDING BRACKET 35x35x130 	2		
	WASHER M5 	2		
	SPRAY FOAM FOR DOORS/WINDOWS	1		

Pos	Drawing HALMAR 5	Pcs	Profile (mm)	Length (mm)
	<p style="text-align: center;">WINDOW 70x845x1792 (CLEAR)</p> 	4		
	<p style="text-align: center;">GLASS DOOR 70x690x1860 (BRONZE)</p> 	1		
	<p style="text-align: center;">EXTERIOR DOOR WITH WOODEN FRAME 70x690x1860 (CLEAR)</p> 	1		
	DOOR HANDLE SET FOR EXTERIOR DOOR	1		
	DOOR KNOB SET FOR GLASS DOOR	1		
	METAL THRESHOLD	1		
TL-1	FIXING POST	4		
TL-2	FIXING POST	4		

BASE PLAN



FLOOR FRAMING 45x95

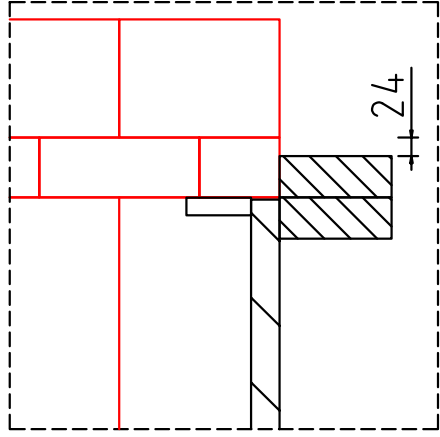


Use two 5x90 screws to fasten joist ends with crossing joists. Fix with parallel joists, when there is no crossing joists.

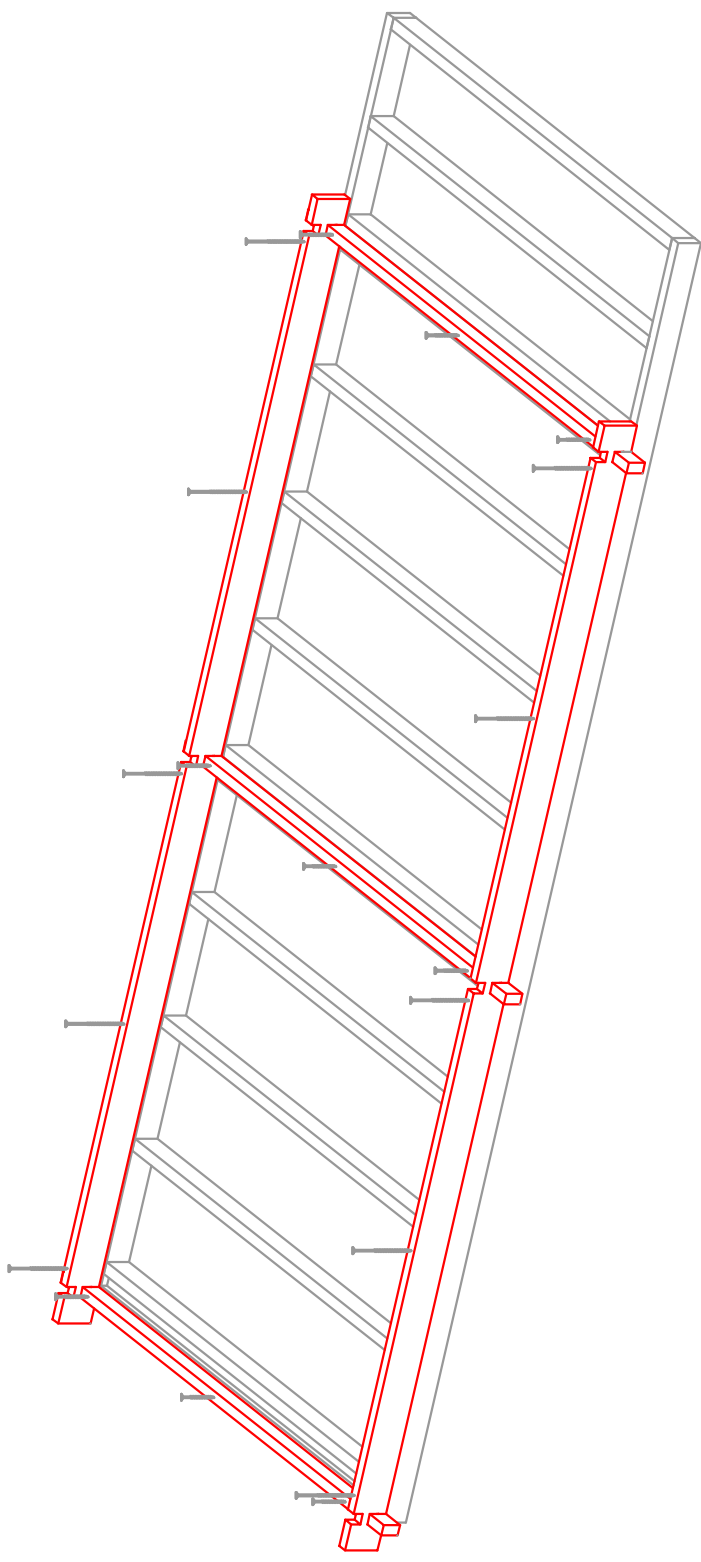
NB! Check diagonals, remember that $A=B=5404$

FASTENING OF WALL LOGS

Fasten first row to the floor framing. Use 5x90 screws for half logs (fix those first) and 6x180 screws for full logs. It is recommended to predrill the holes. If necessary use rubber hammer and hit block to secure logs tightly on top of each other.

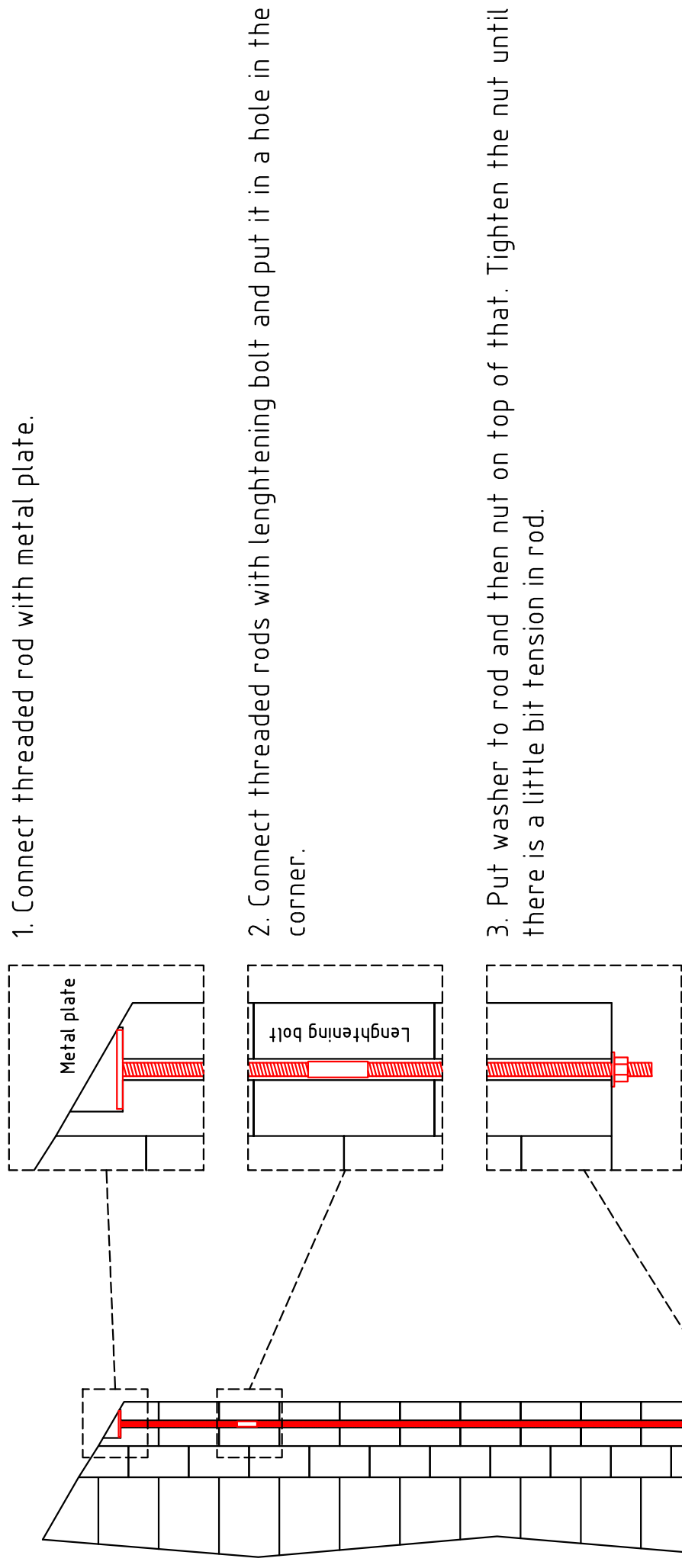


Framing should be 24mm inside from the outer wall.



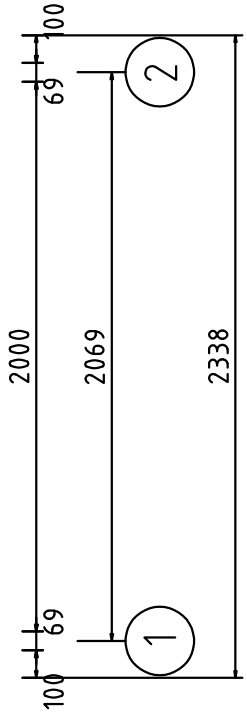
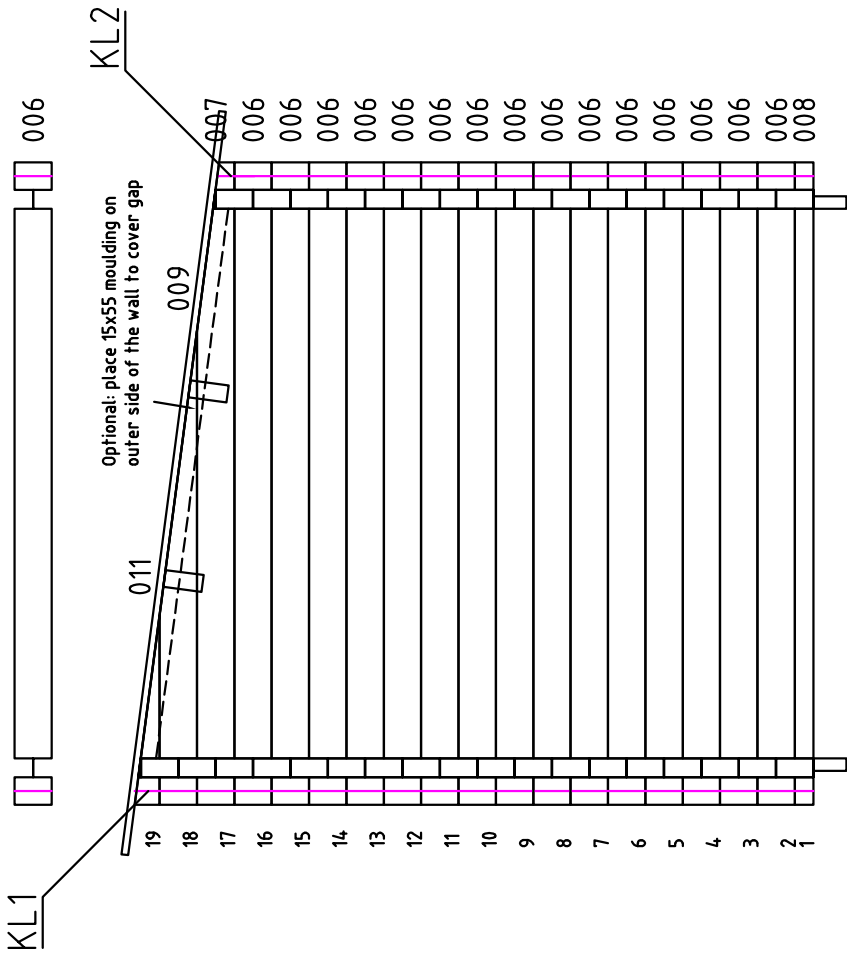
PLACING AND TIGHTENING THREADED RODS

When placing wall logs check that there are holes in the end of the logs for threaded rods. If there is no hole, drill it before placing next row of wall logs.

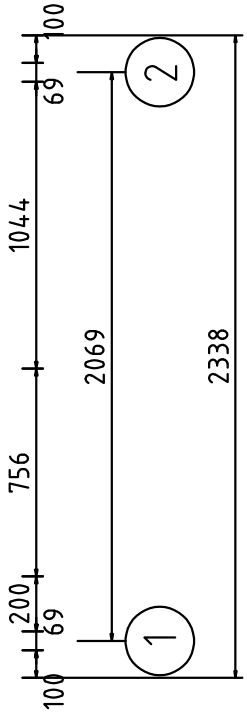
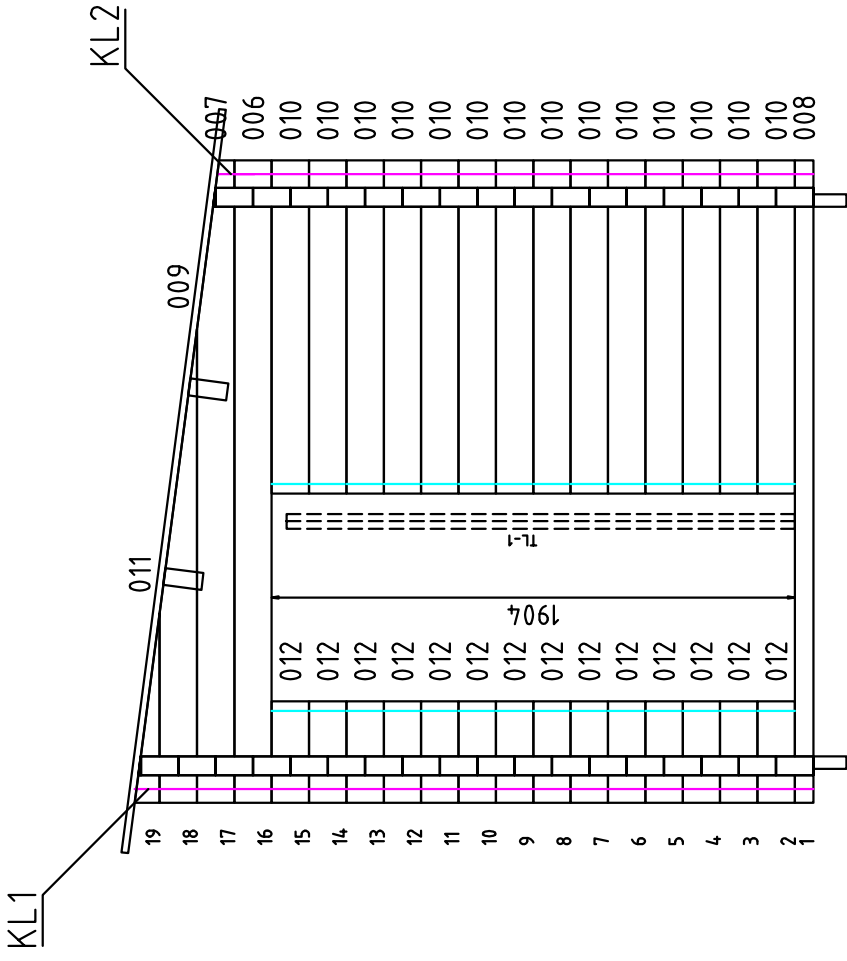


It is important to check tightness of threaded rods from time to time after house is built to avoid big gaps between wall logs. It is recommended to tighten rods every month after the house has been just built. Later it can be done twice a year. To tighten the rod, turn the nut first with fingers and then use wrench to add some more turns on it. When using wrench avoid hard force, because it can ruin threads and make it impossible to tighten it in the future.

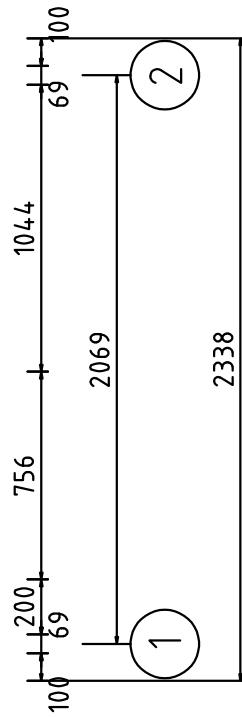
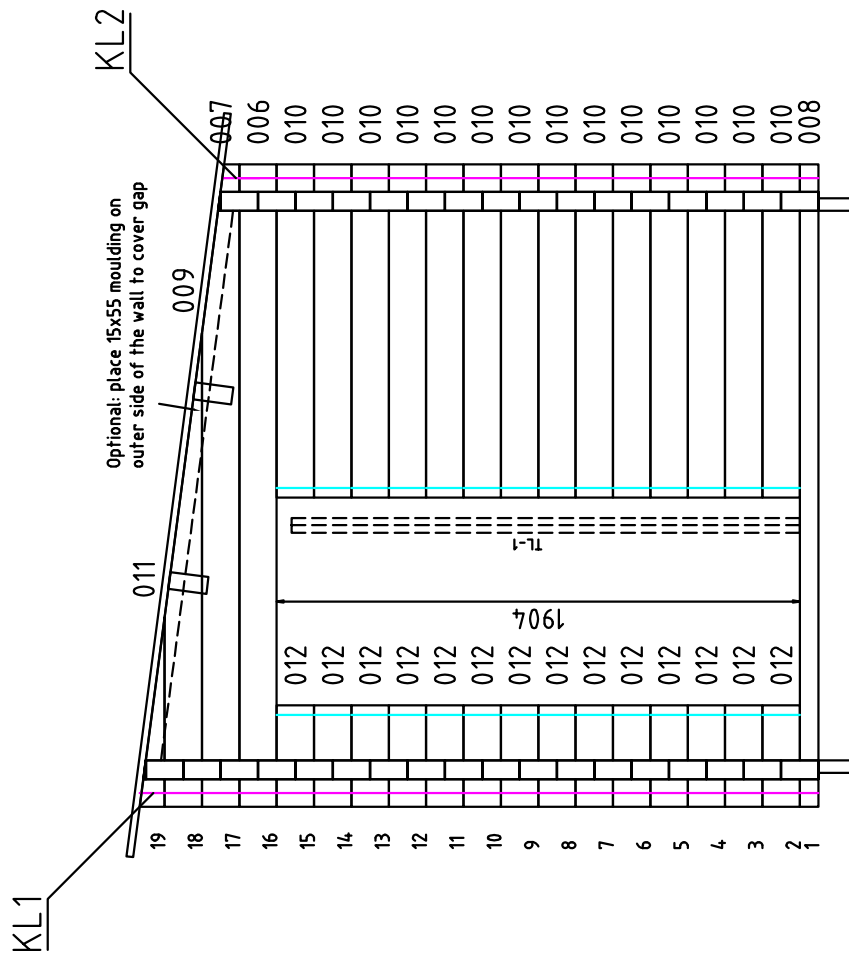
WALL A



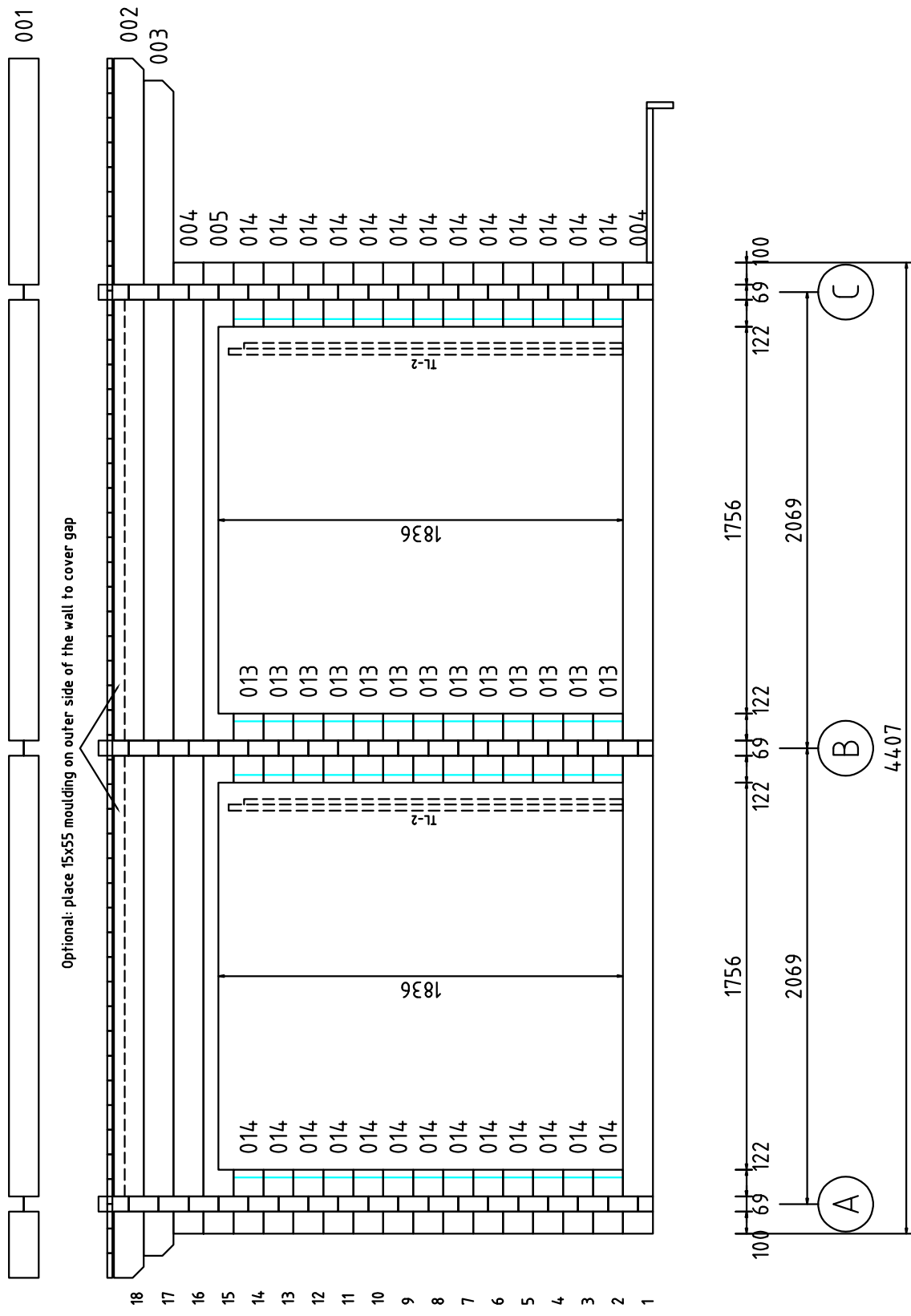
WALL B



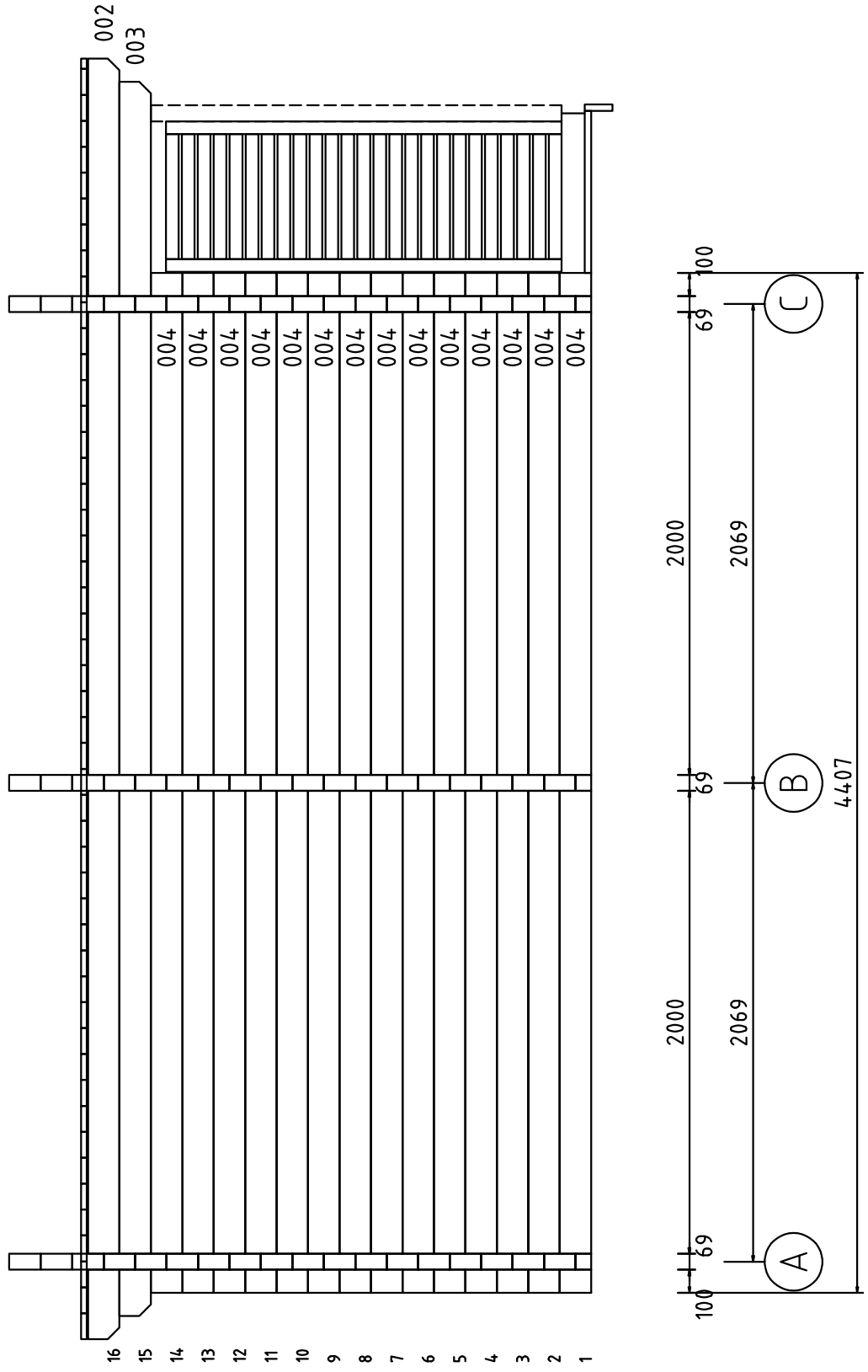
WALL C



WALL 1

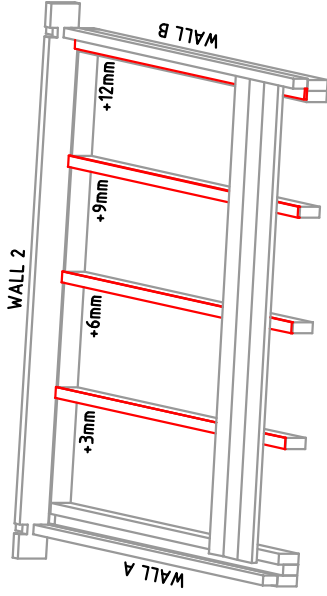


WALL 2

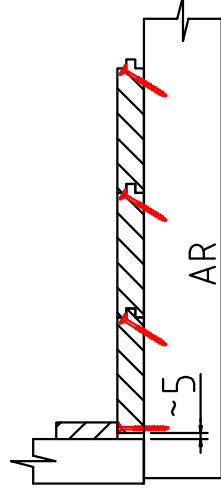
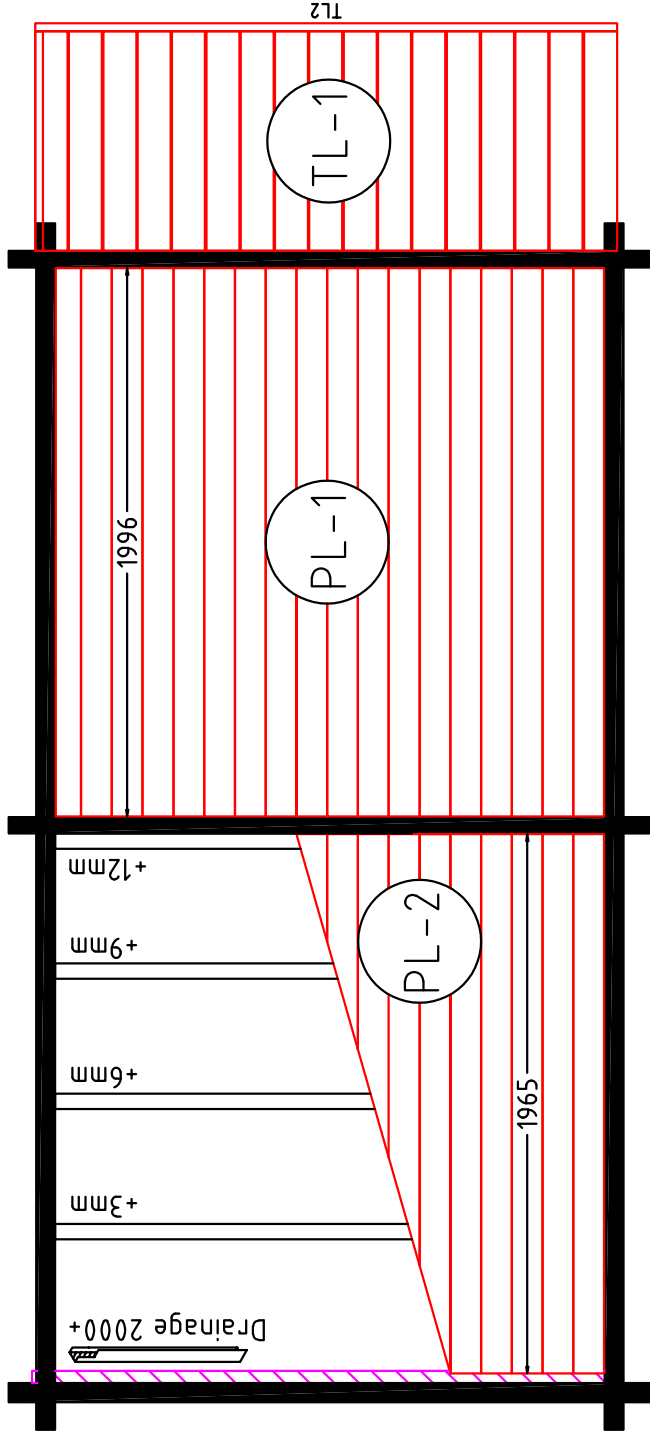
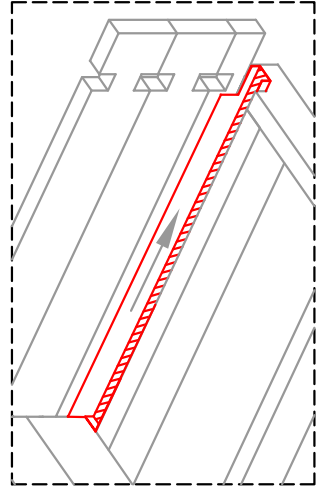


FLOOR BOARDS

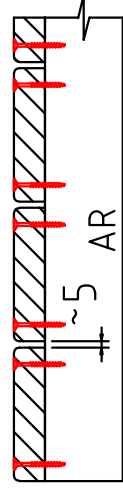
Add slope boards and drainage details before fixing floor boards.



When placing drainage, fix closed end temporarily ~5mm higher than opened end to guarantee slope towards outer wall for water. After placing floor boards fix it permanently with floor mouldings.



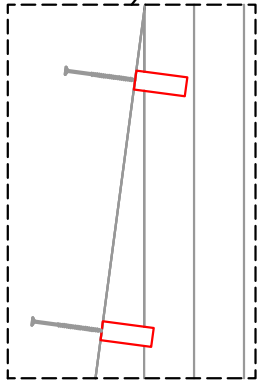
Fasten floor boards with screws from the tongue side of the board. First board should be placed ~5mm from wall and when cutting last board make sure there is 5mm gap as well. Leave ~2mm gap between floor board (cross cut sides) and walls. Lastly fix mouldings in place.



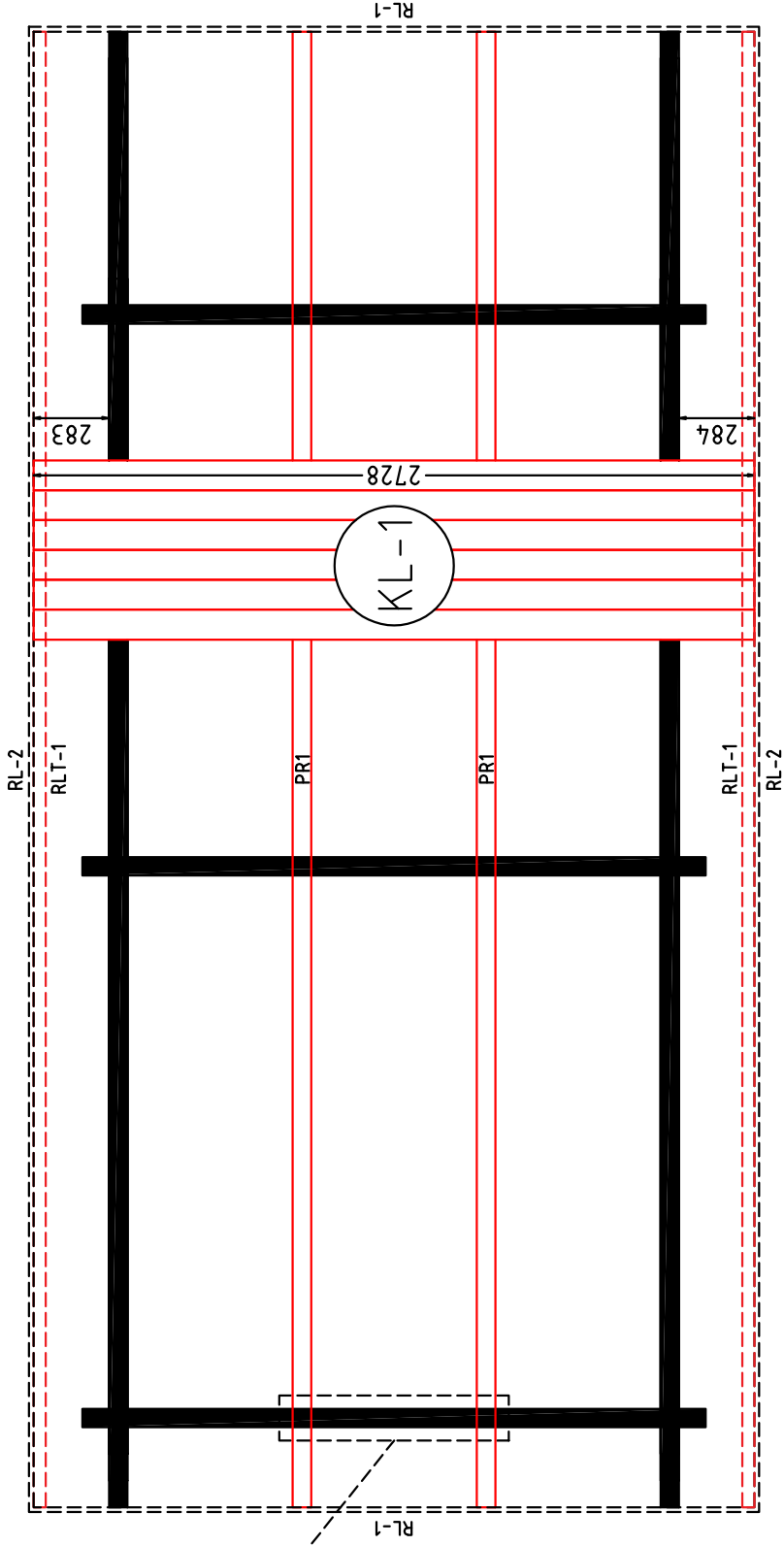
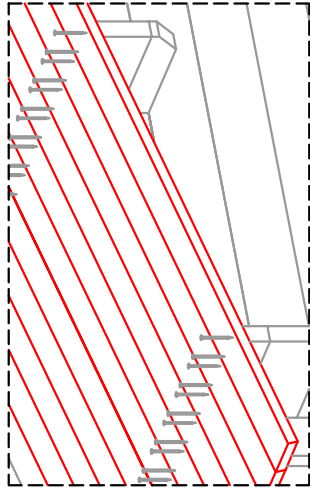
Fasten decking boards with two screws in each connection.

ROOF BOARDS

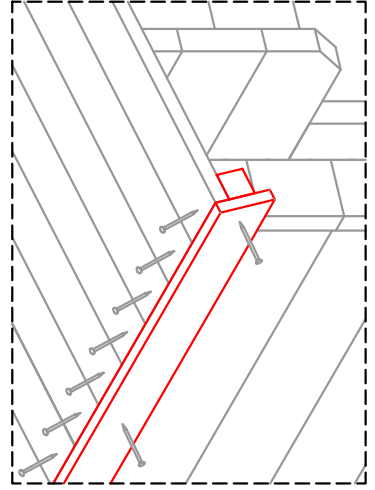
1. Fix purlins with 6x180 screws (pre-drill the holes).



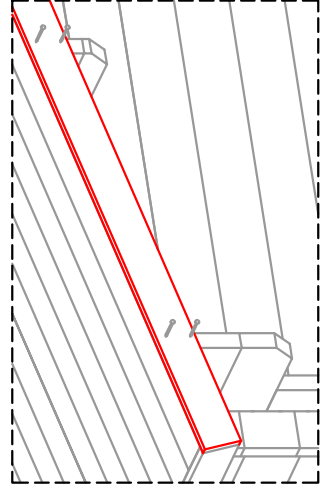
2. Fix roof boards with 75mm nails (2pcs for each connection).



3. Fasten roof edge support and board. Use 4,5x60 screws (one for each board ending) to fix edge support. For edge boards use 4,2x55 screws.

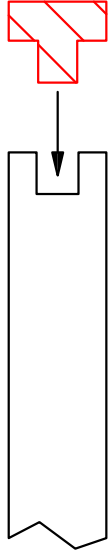


4. Cut gable edge boards to length and fix with 4,2x55 screws.

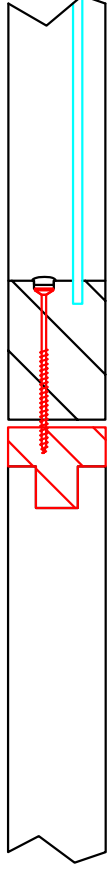


FIXING DOORS AND WINDOWS

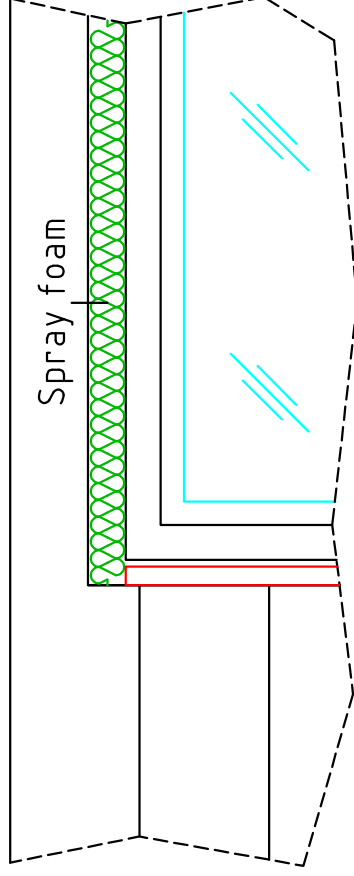
1. Place fixing slat in the opening. Screw it to the wall with 5x90 screw only in lower part. Do not screw in the upper part so that the house can settle.



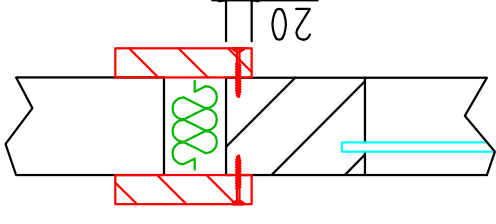
2. Lift door/window in place and fix with screws to fixing slat from the holes in frame.



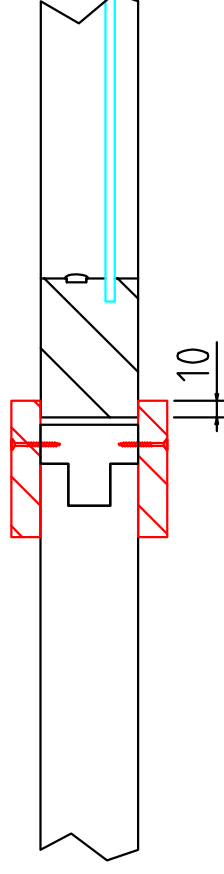
3. Use spray foam to fill the gap above door/windows.



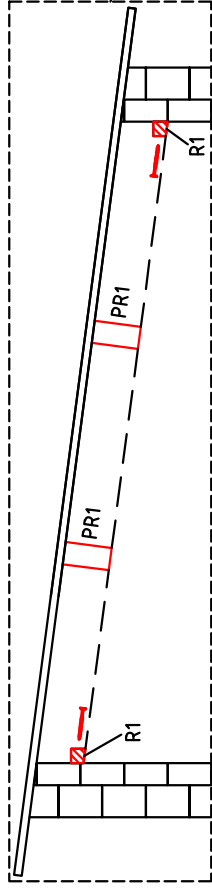
4. Fasten upper moulding to frame (not to wall) with 3x40 stainless screws. Upper moulding coverage should be about 20mm.



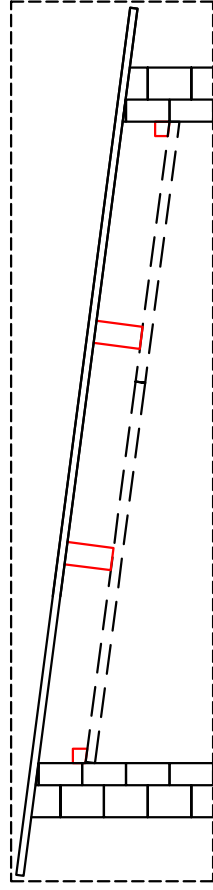
5. Fasten side mouldings to fixing slat with 3x40 screws. Side moulding coverage should be about 10mm. Bottom moulding can be screwed directly to wall.



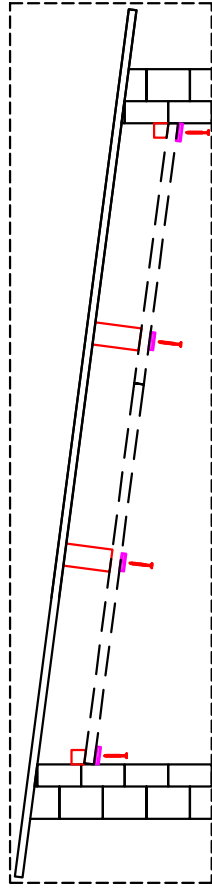
1. Fasten battens (R-1) to side walls so that they are in line with purlins. Use 5x90 screws.



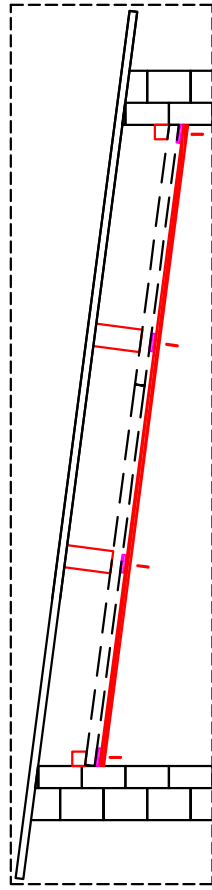
2. Place insulation sheets under purlins (use few left over screws from previous steps to hold sheets in place). Tape screw holes in sheets, connection seams and perimeter with aluminum tape.



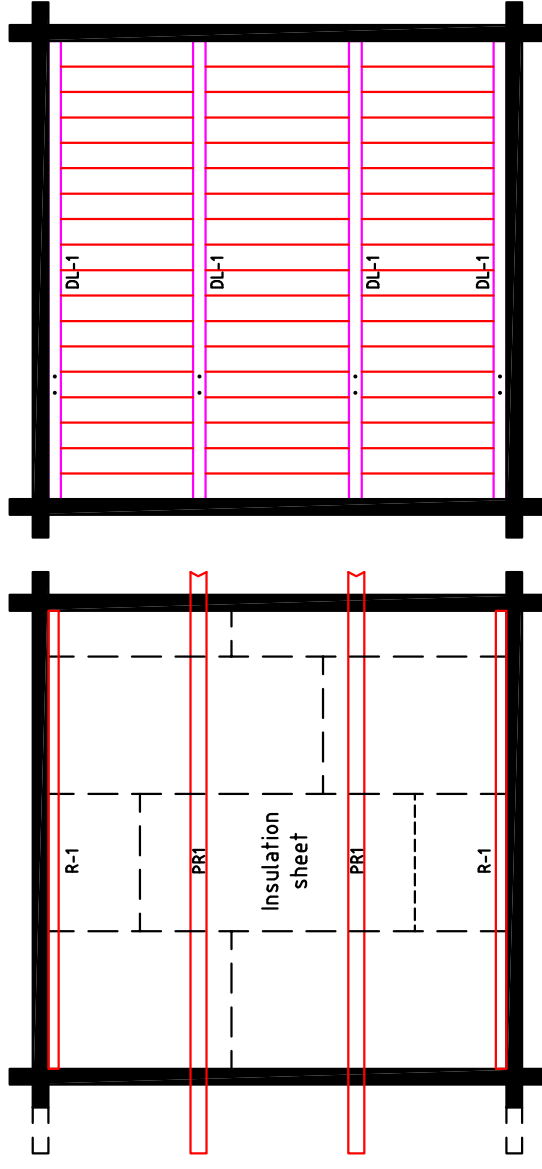
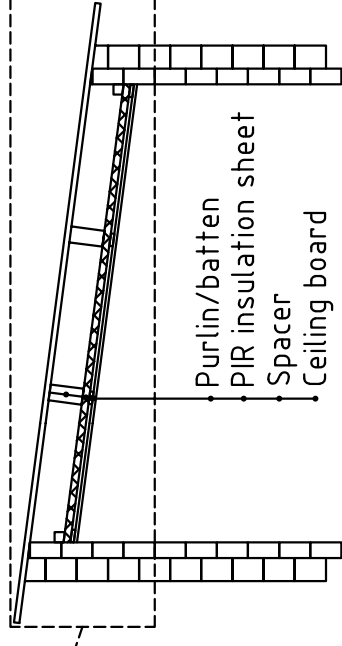
3. Fasten spacers under battens/purlins with 4,5x60 screws to secure insulation sheets properly in place.



4. Fix ceiling boards under spacers with lost head nails (two nails for each connection). Finally fasten mouldings around perimeter using lost head nails.



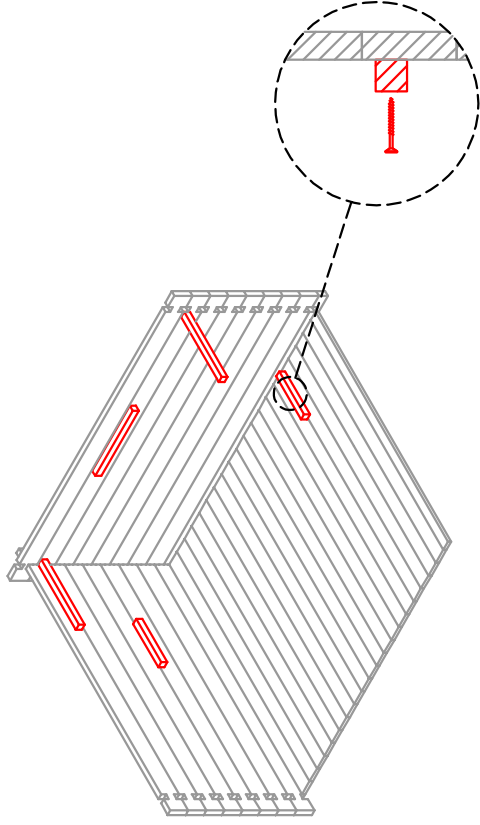
CEILING INSULATION IN SAUNA ROOM



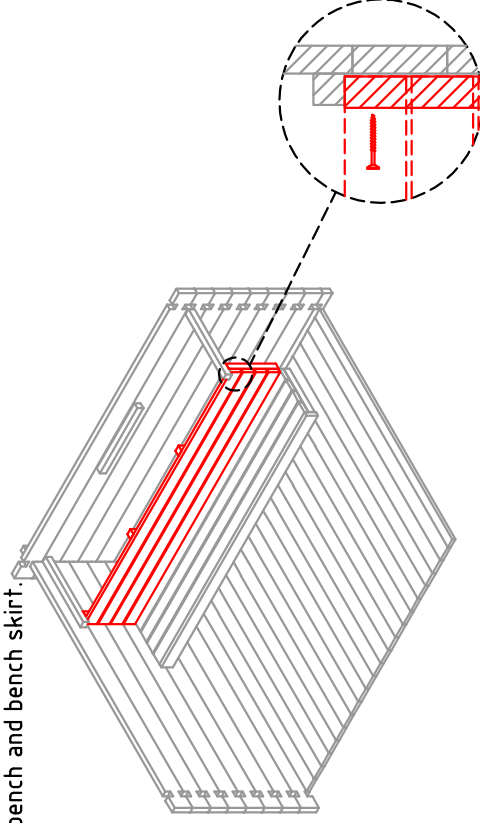
FASTENING OF BENCH MODULES

This is an overall manual for bench modules. You can skip some of the steps depending of the set (for example if there is no bench skirt). Precise heights for bench supports and benches can be found on the next page.

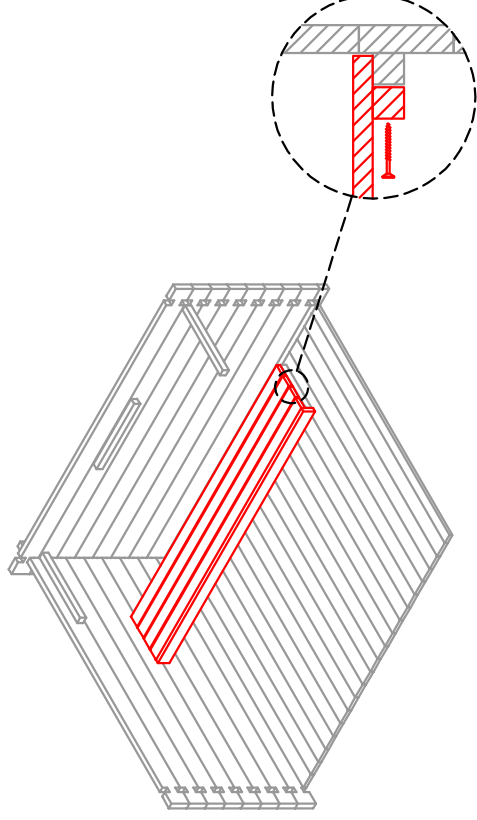
1. Fasten bench supports with screws to wall. Use glue between wall and support for stronger connection.



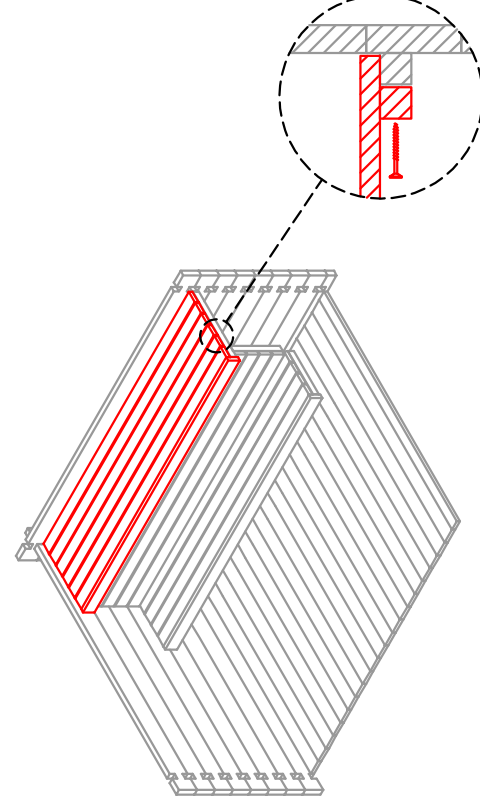
3. Lift bench skirt in place, attach it to wall from sides and to lower bench in middle. There should be 8mm gap between lower bench and bench skirt.



2. Lift modules in place and fix them to the supports on the walls. Do not install upper module in case there is bench skirt in set.

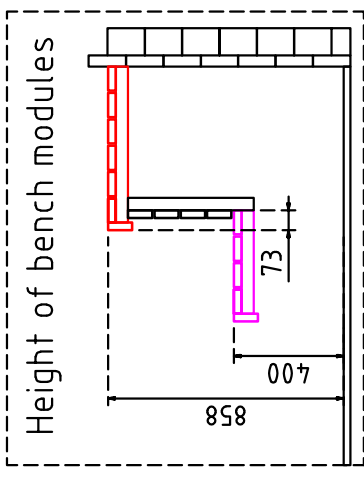
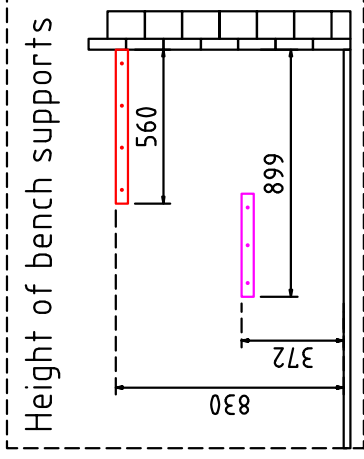


4. Place upper module and fix it in place as described in step two.

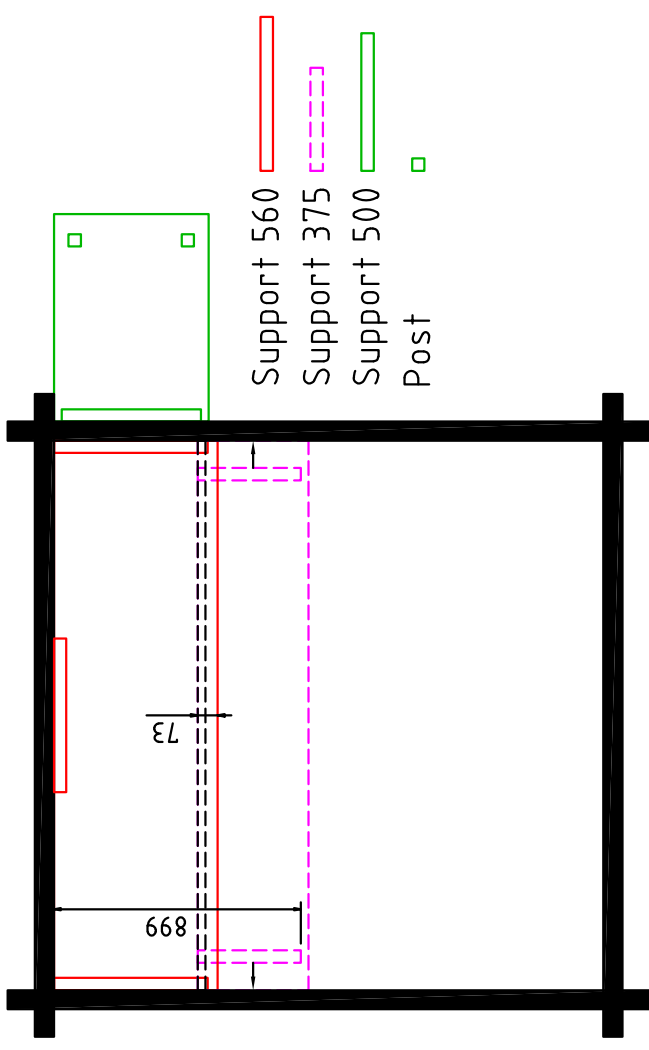
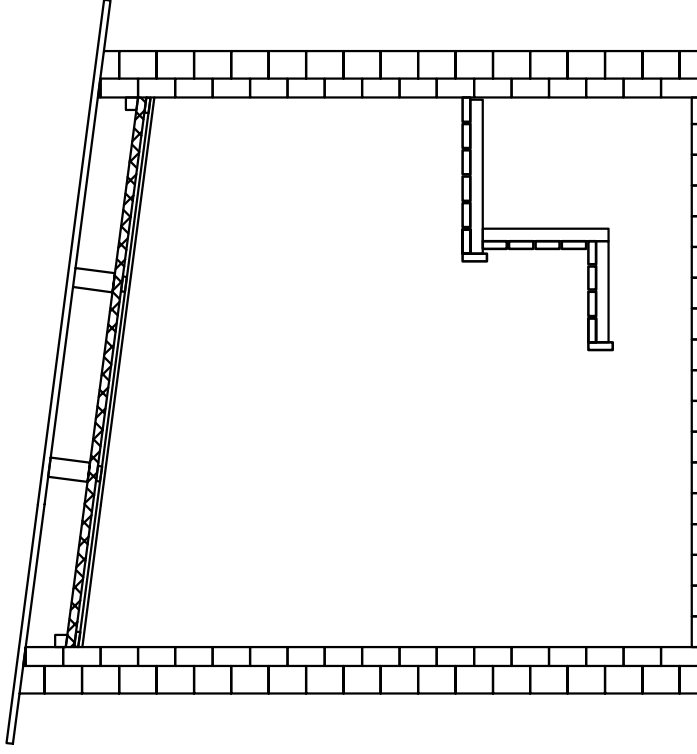


CROSS-SECTION OF SAUNA ROOM AND HEIGHT OF THE BENCH MODULES

Use 5x90 screws to fasten bench supports to walls and to fix benches to already fixed supports.



Outdoor bench support must be fixed at the same height as is the length of the vertical supports.



FASTENING OF GRID WALLS AND ADJUSTING POSTS

