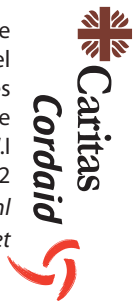


Shelter Programme.



13, Impasse Thécratie
Vivy Mitchel
Route de Frères
Pétion-Ville
Haïti, W.I
T +509 3609952
www.Cordaid.nl
Jip.nelissen@cordaid.net



Core Structure

Core Structure **3** | Floorplan **4** | Front wall **5** | Side Wall right **6** | Back wall **7** | Side wall left **8** | Foundation **9** | Trusses, doors and shutters **12** |
Gusset plates **13** | Hurricane straps **14** | Porch ceiling **15** | Roof **16** | Specifications **17**

Walls and Floors



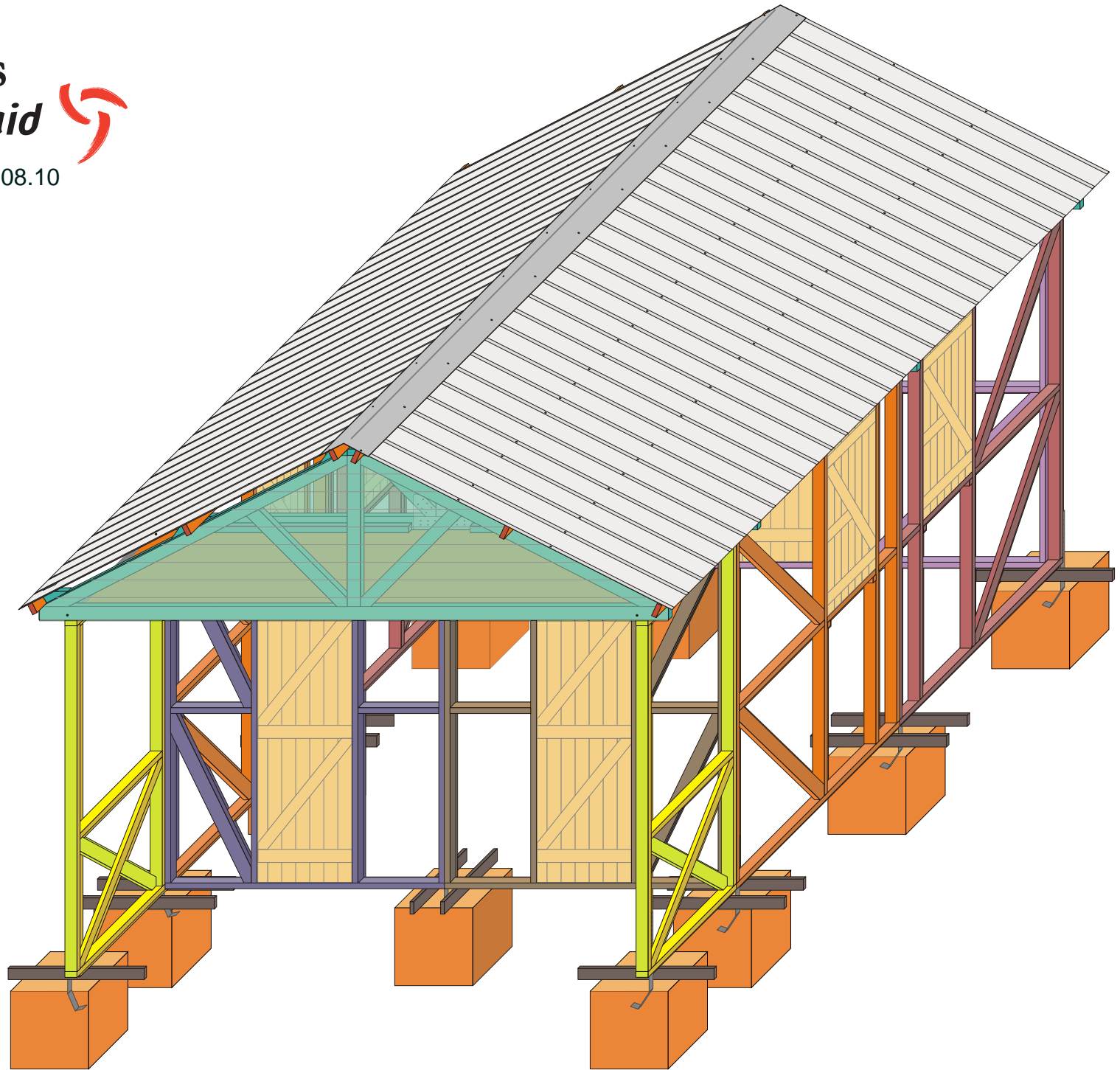
Caritas



Cordaid

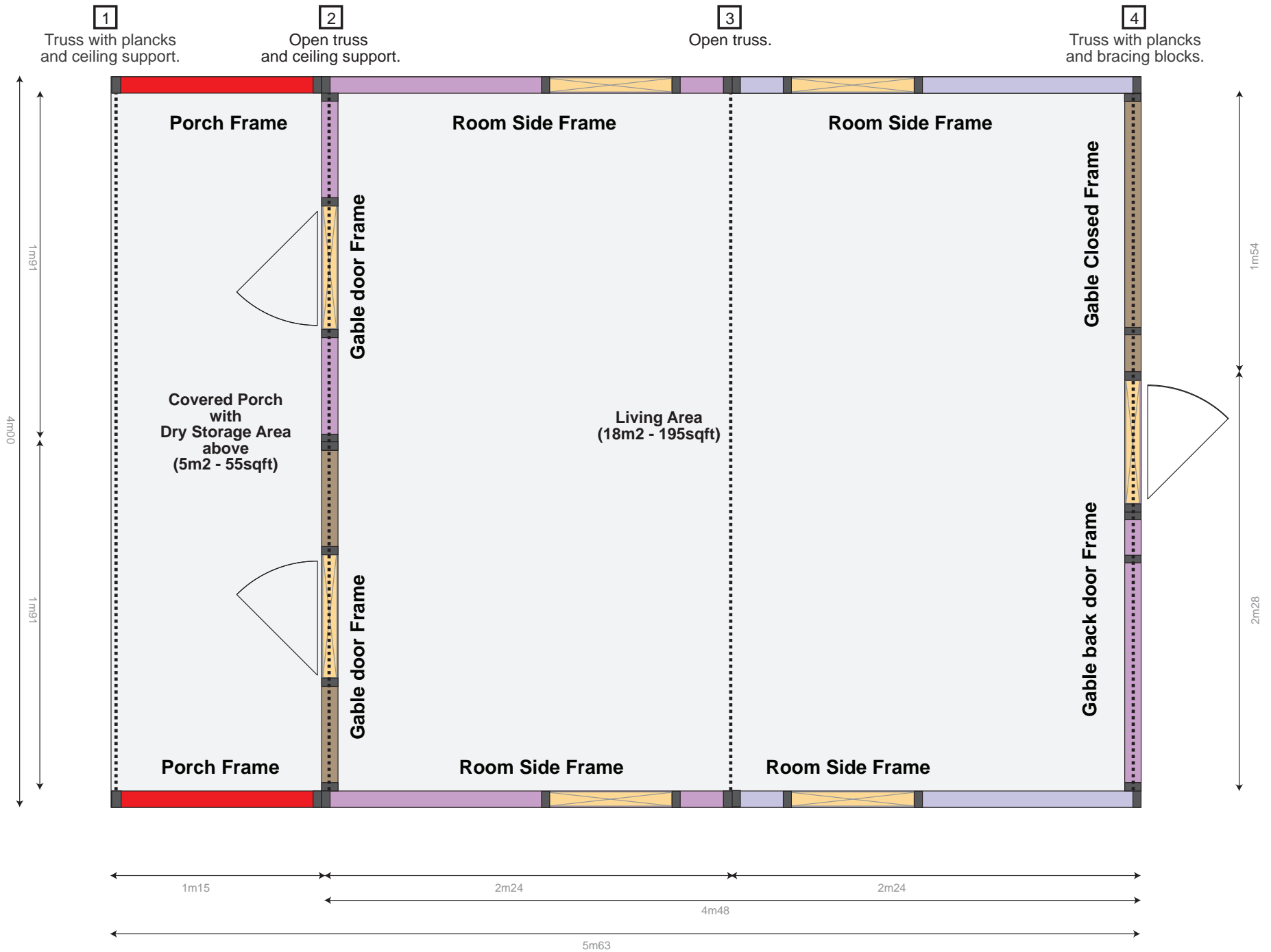


Cordaid T-shelter | V5.5 | 24.08.10

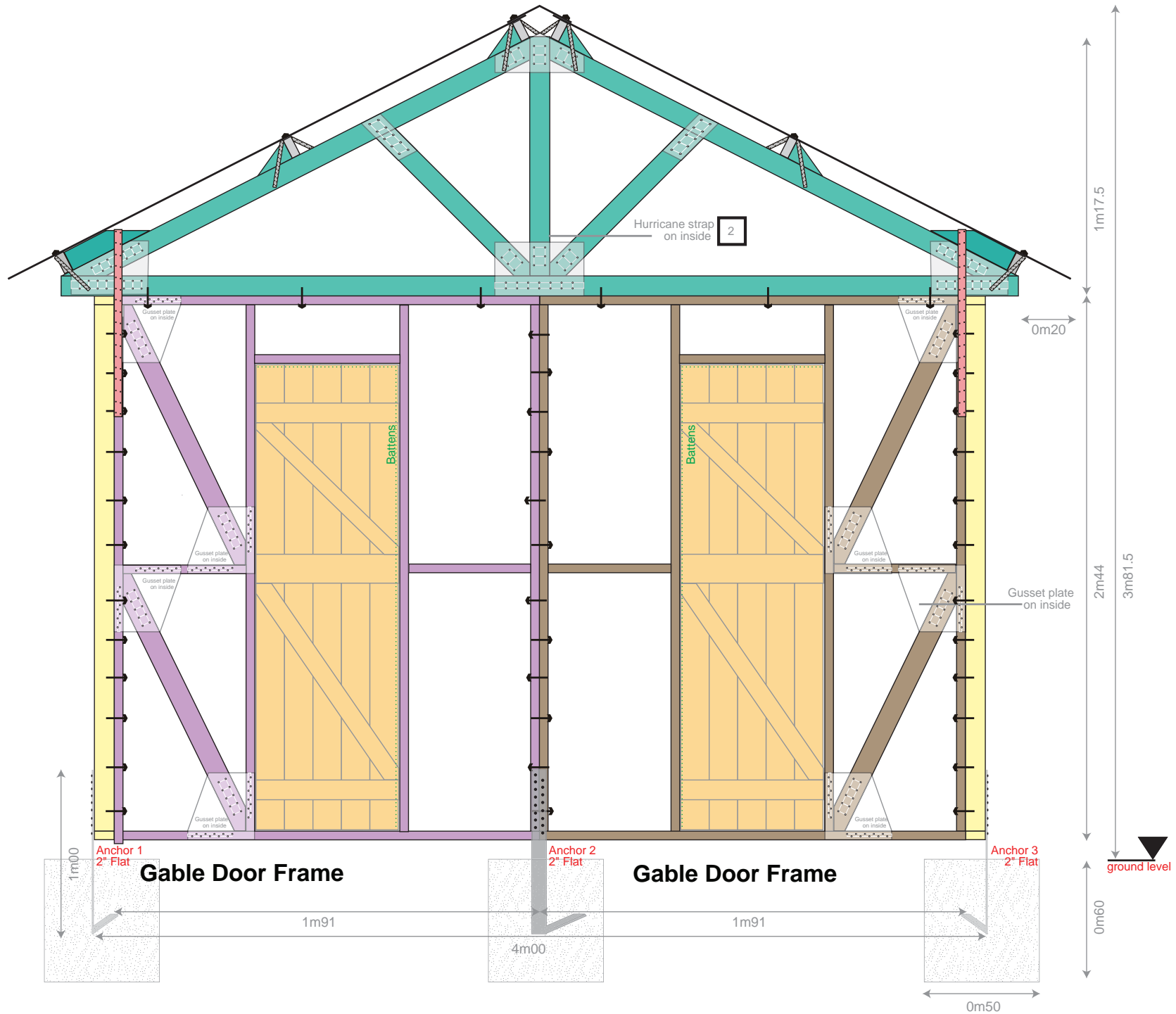


Core Structure.

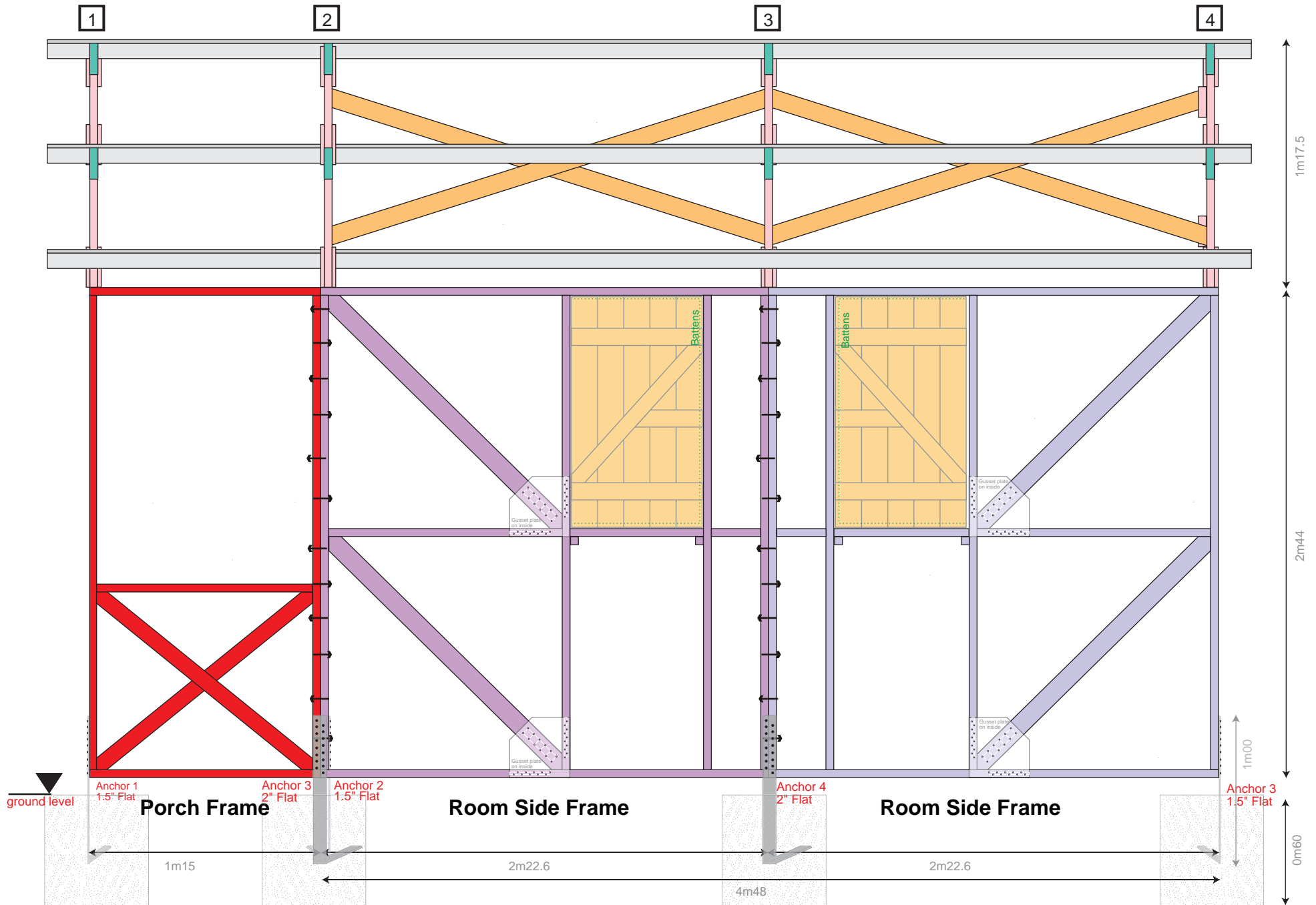
* Drawings are not on scale



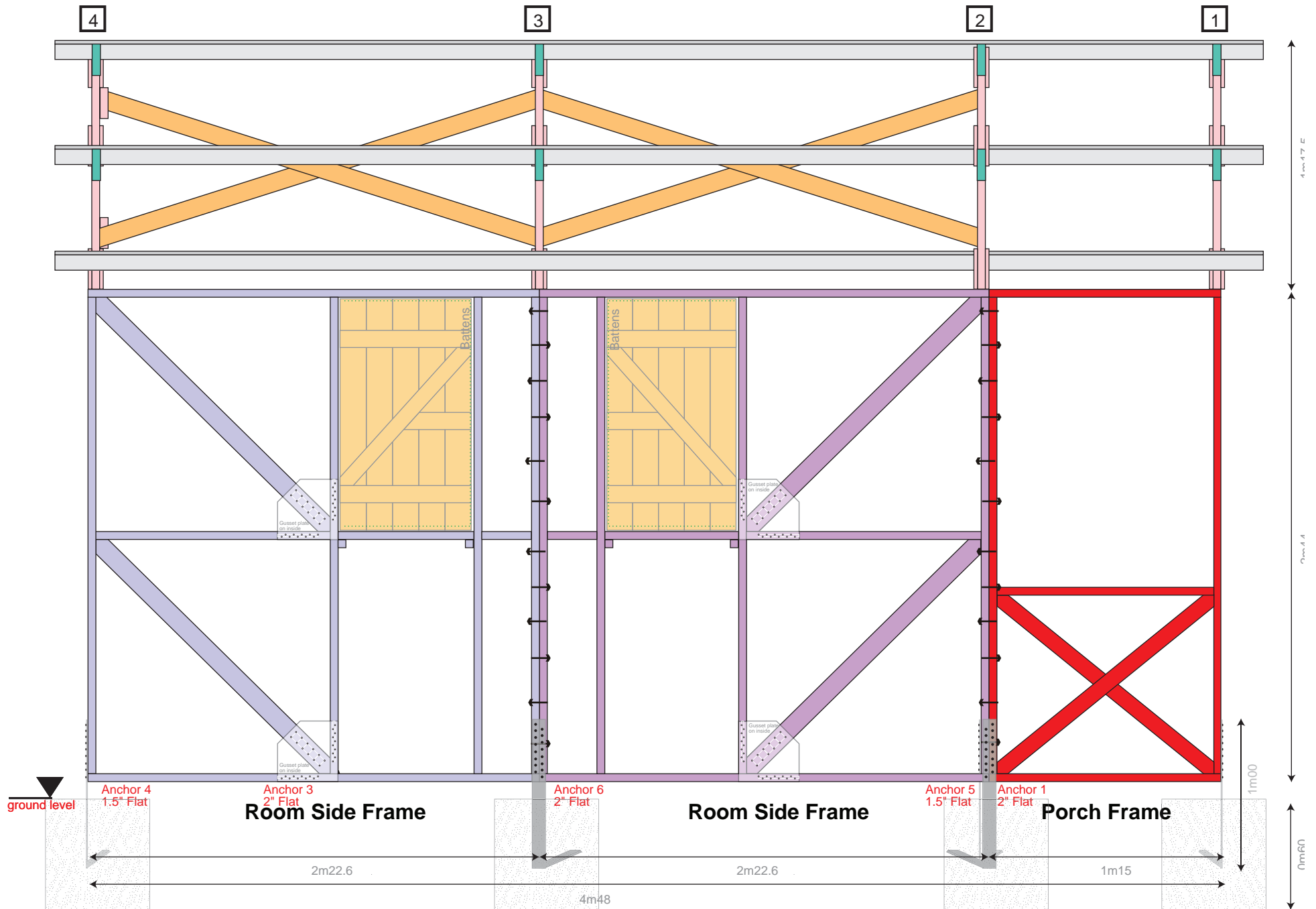
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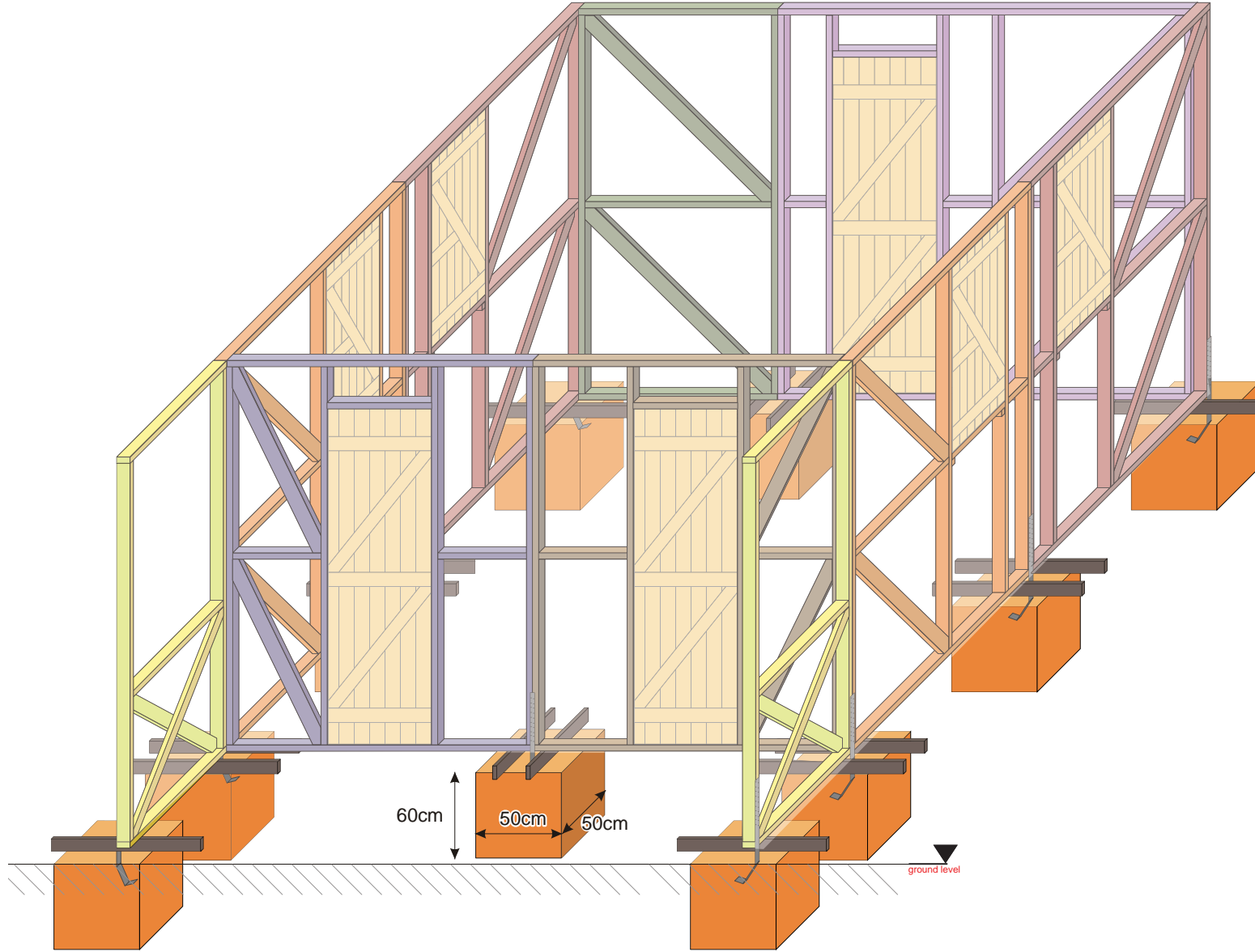
* Drawings are not on scale * Hurricane straps are not in drawing



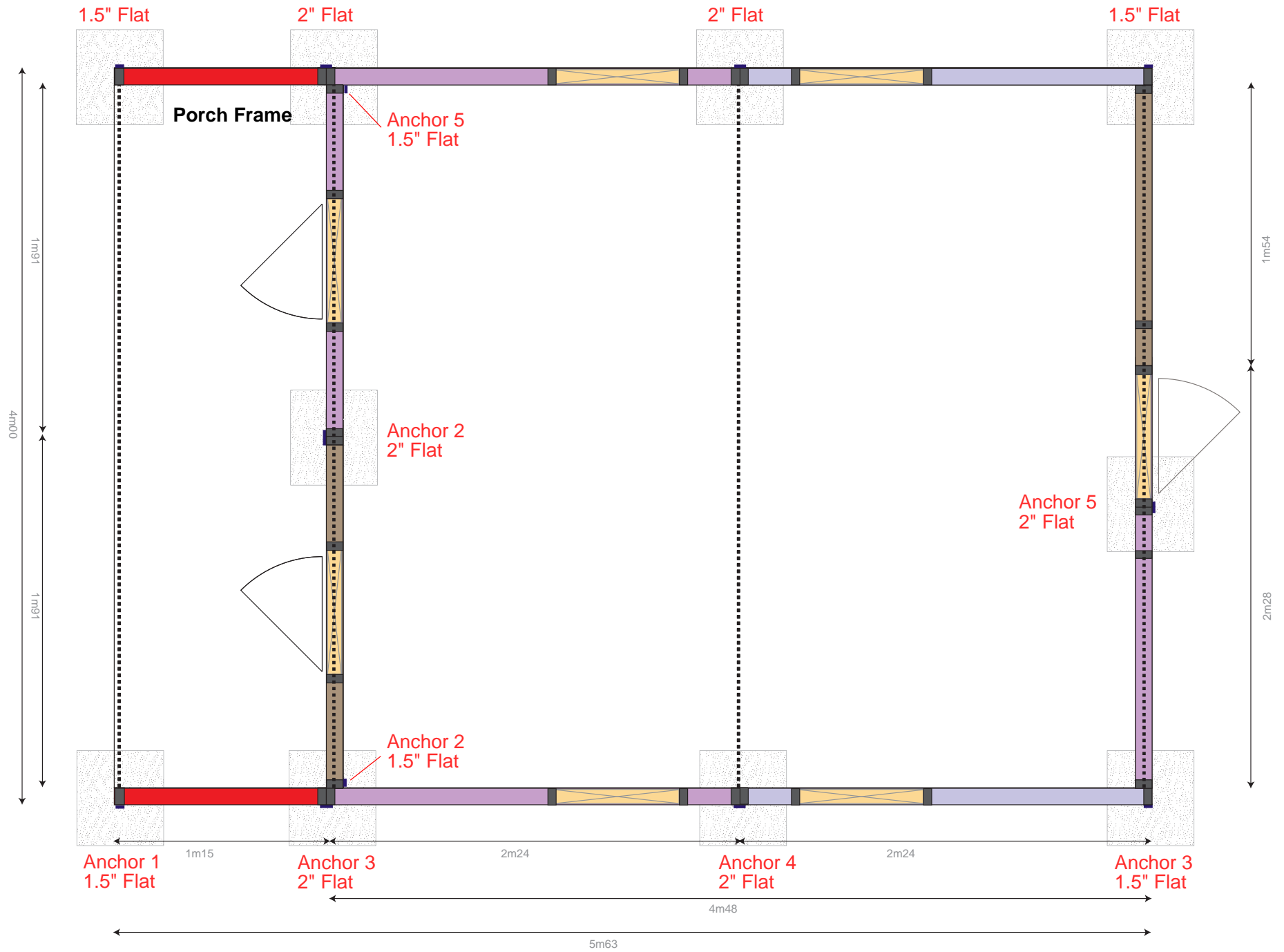
* Drawings are not on scale * Hurricane straps are not in drawing



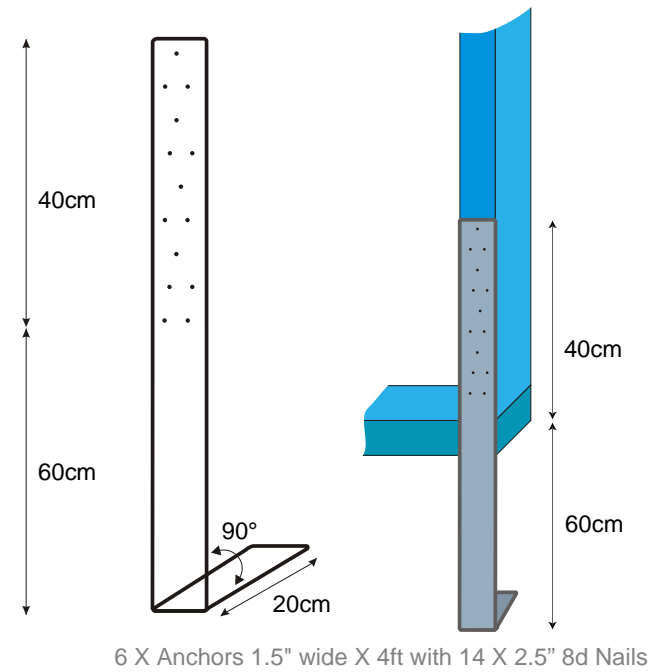
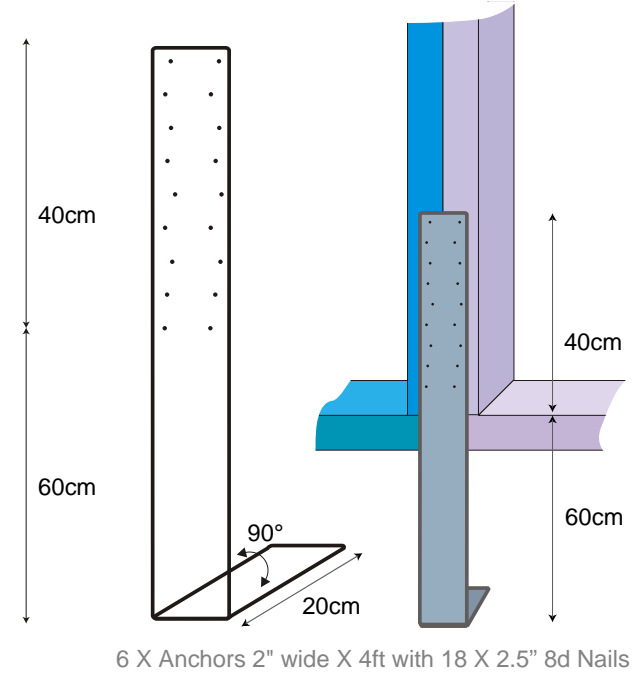
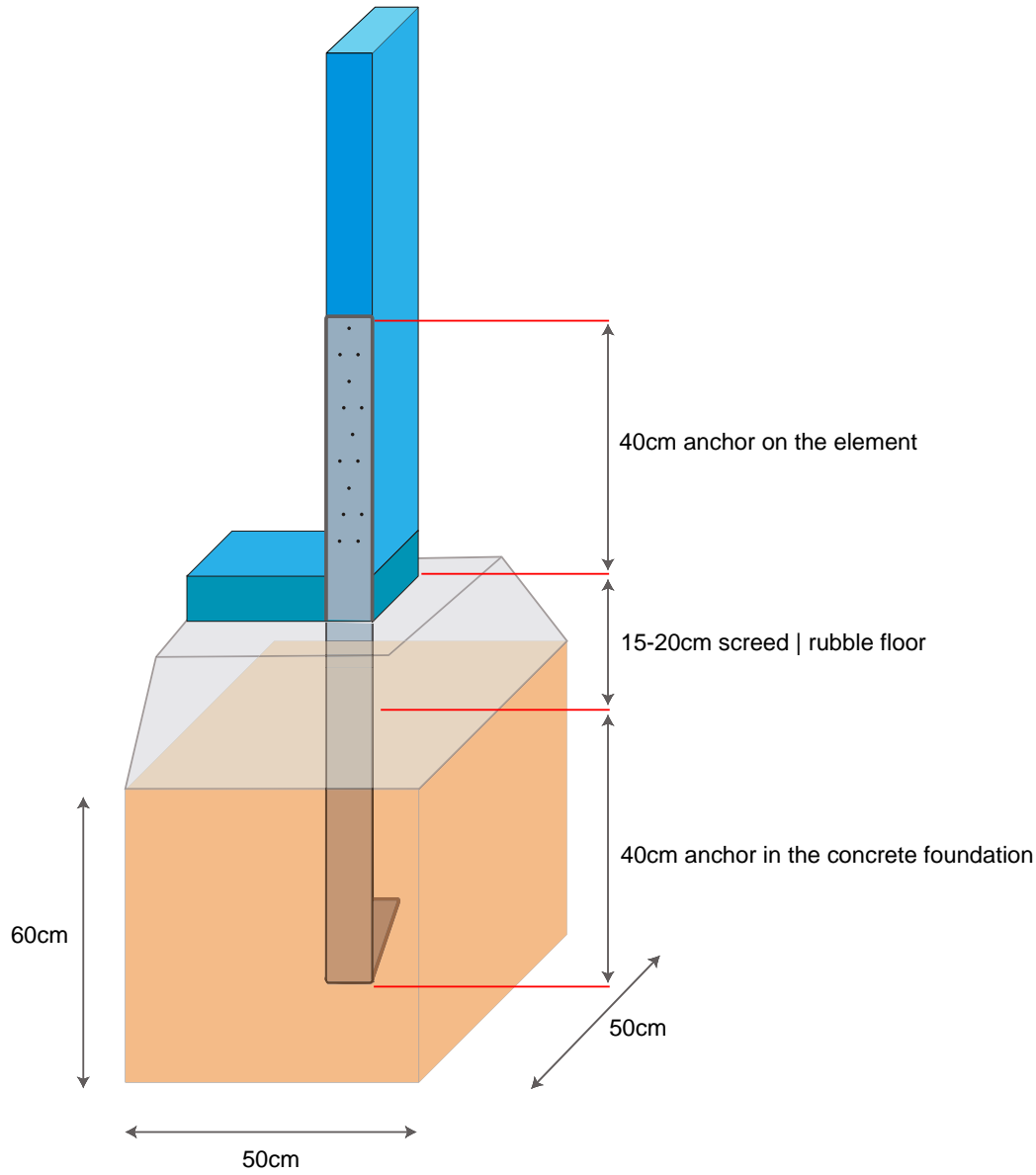
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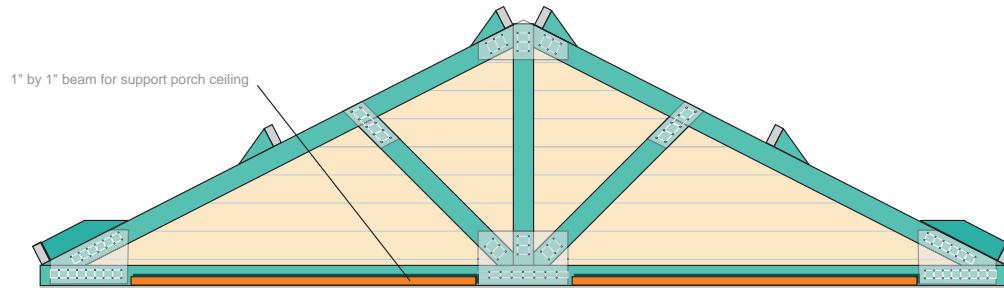
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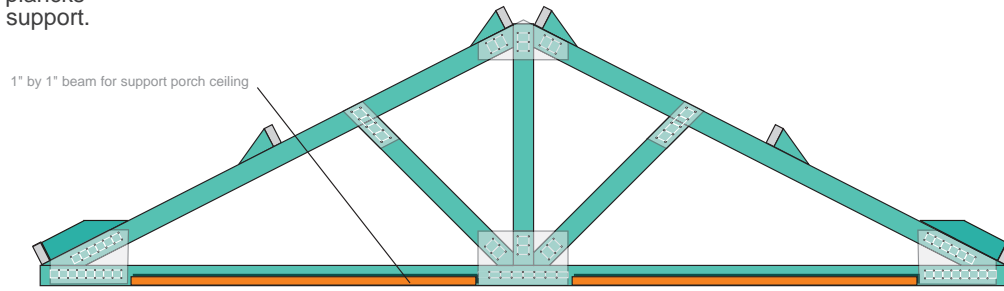
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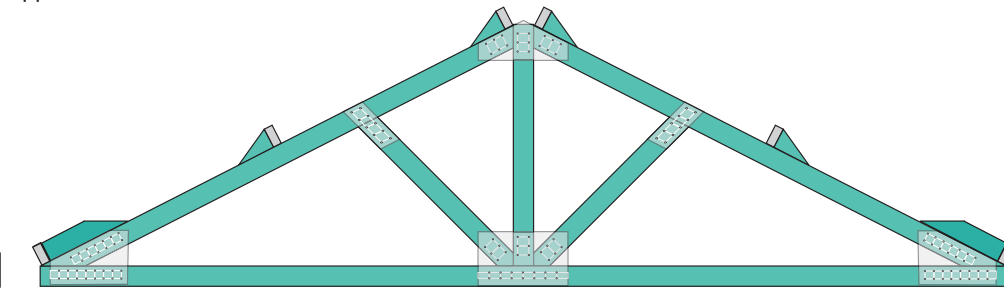
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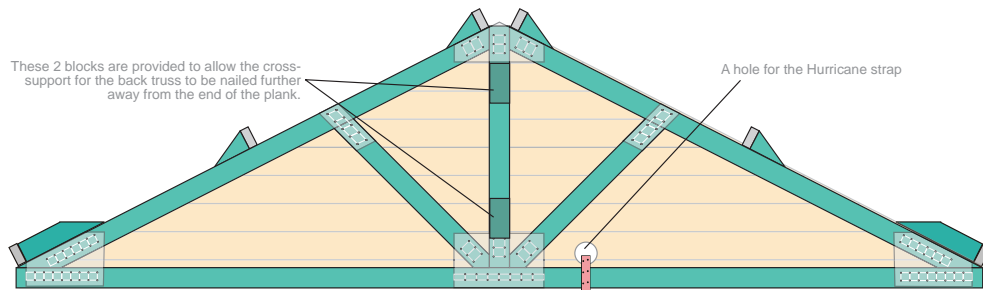
1
Truss with planks
and ceiling support.



2
Open truss
and ceiling support.



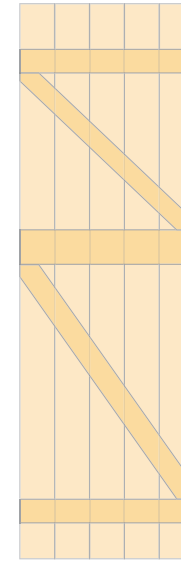
3
Open truss.



4
Truss with planks
and bracing blocks.

Door

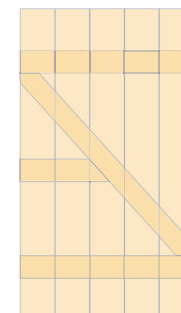
65



210

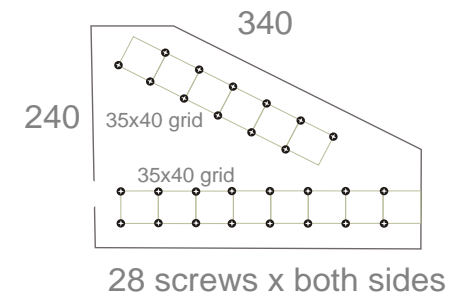
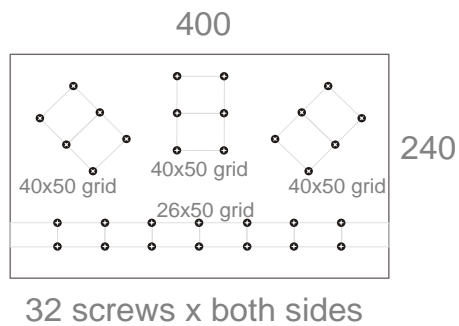
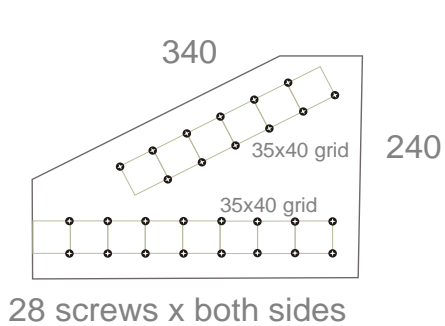
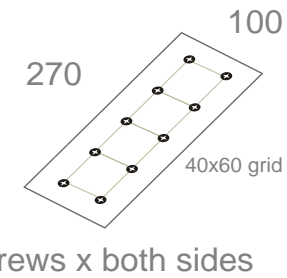
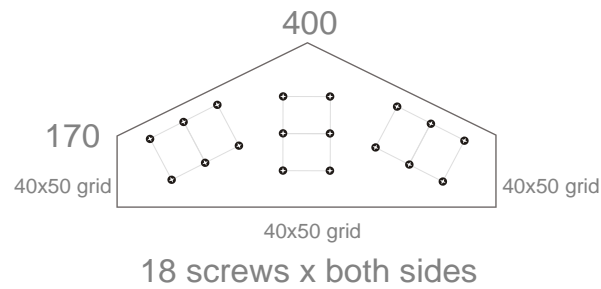
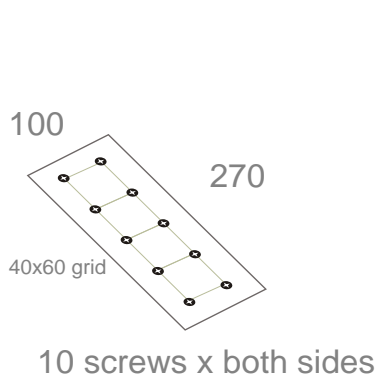
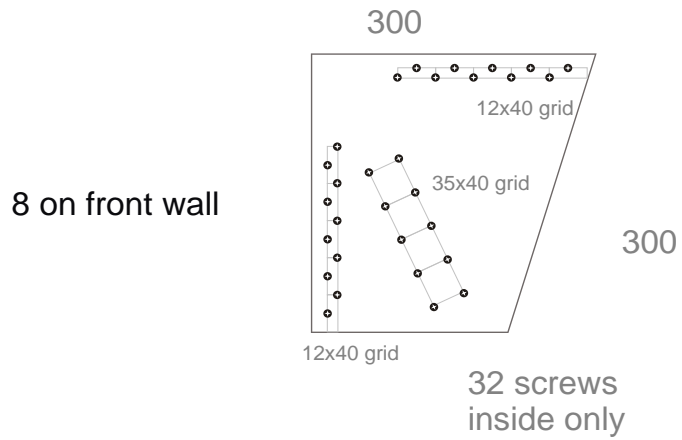
Shutter

65



115

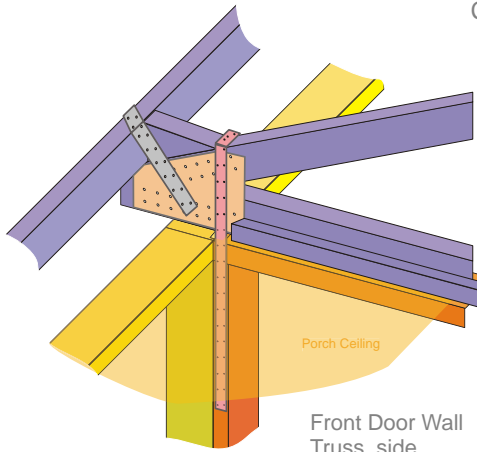
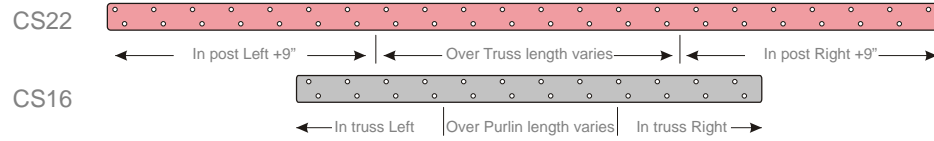
* Drawings are not on scale



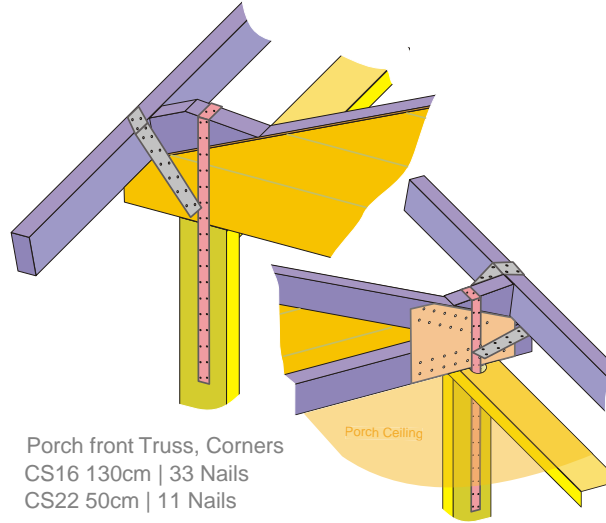
6 sets per house
+ front and back truss closed with planks.

* Drawings are not on scale

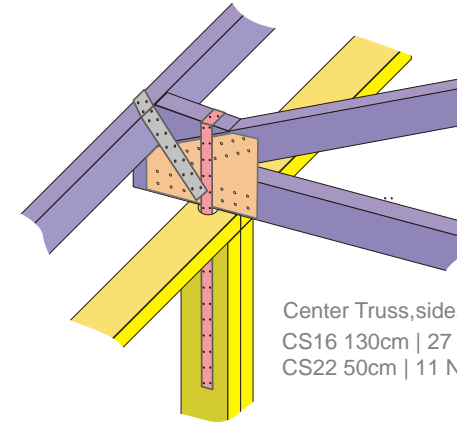
Positioning of the Hurricane Straps to hold down trusses and purlins.



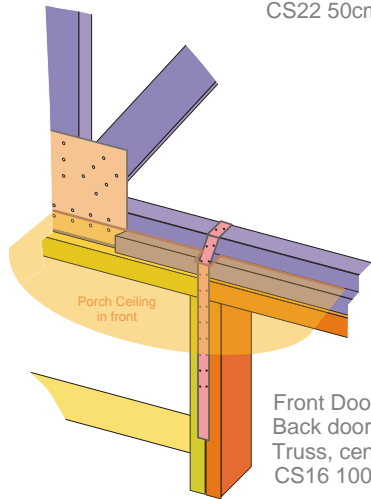
Front Door Wall
Truss, side
CS16 130cm | 27 Nails
CS22 50cm | 33 Nails



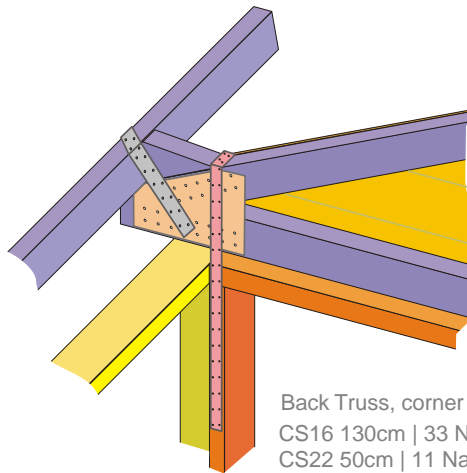
Porch front Truss, Corners
CS16 130cm | 33 Nails
CS22 50cm | 11 Nails



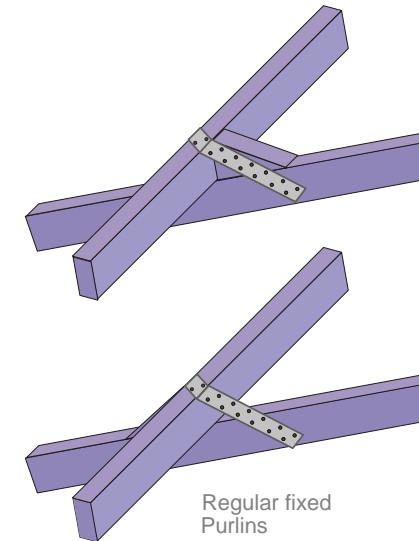
Center Truss, sides
CS16 130cm | 27 Nails
CS22 50cm | 11 Nails



Front Door Wall,
Back door Wall
Truss, center
CS16 100cm | 23 Nails



Back Truss, corner
CS16 130cm | 33 Nails
CS22 50cm | 11 Nails

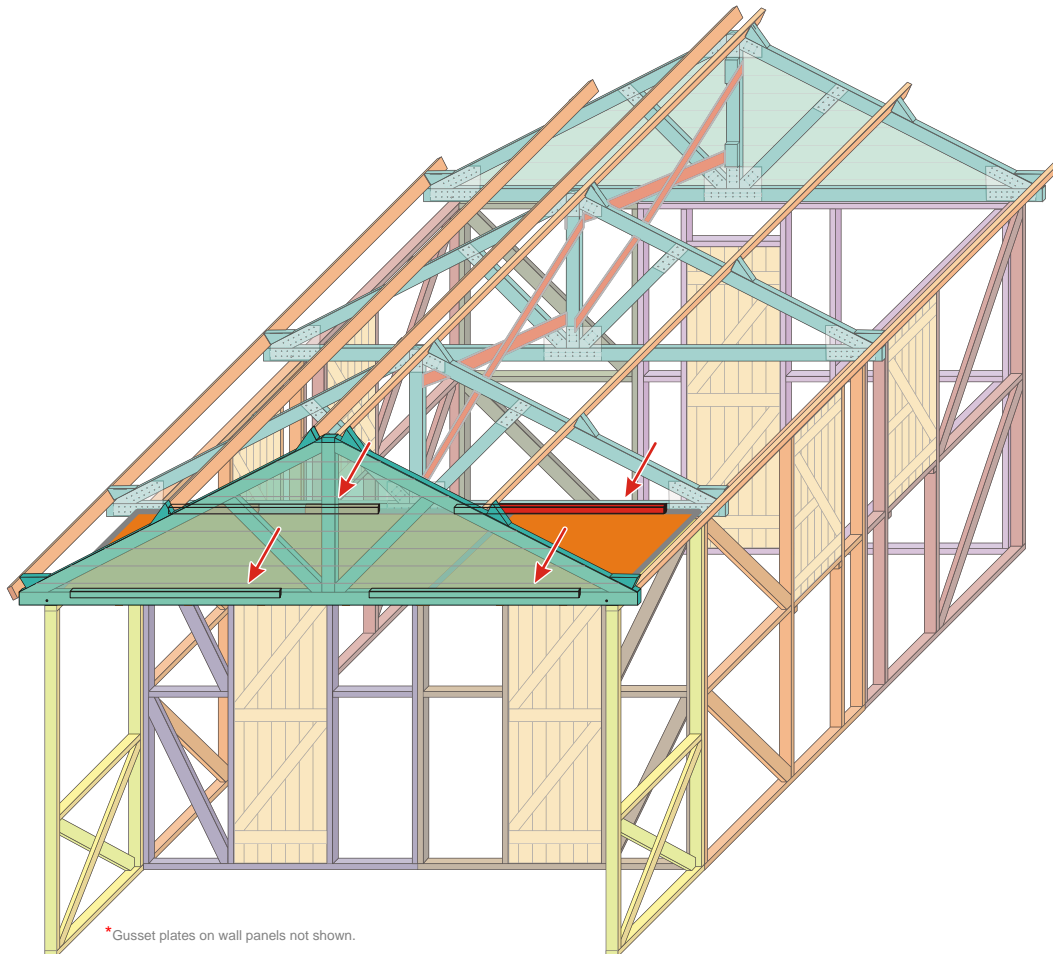
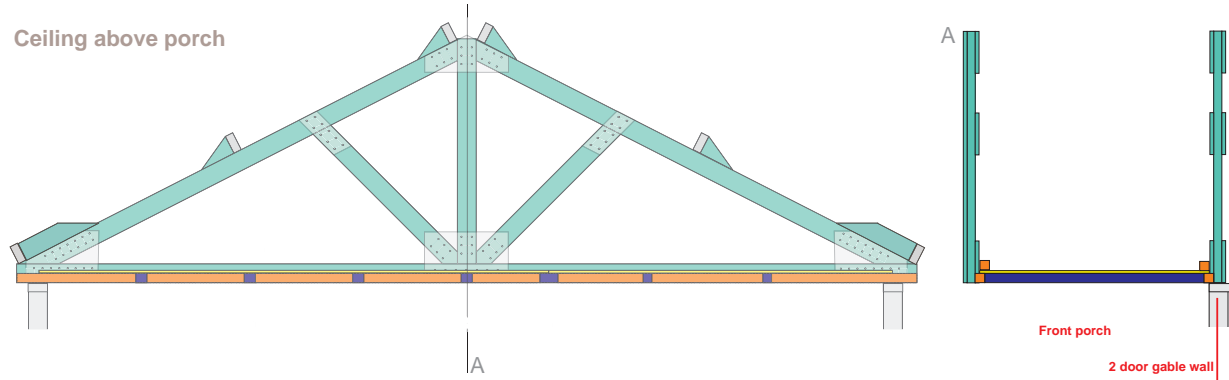


Regular fixed
Purlins
CS22 50cm | 11 Nails

* Gusset plates on wall panels not shown.

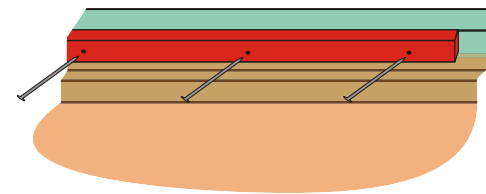
* Drawings are not on scale

Ceiling above porch

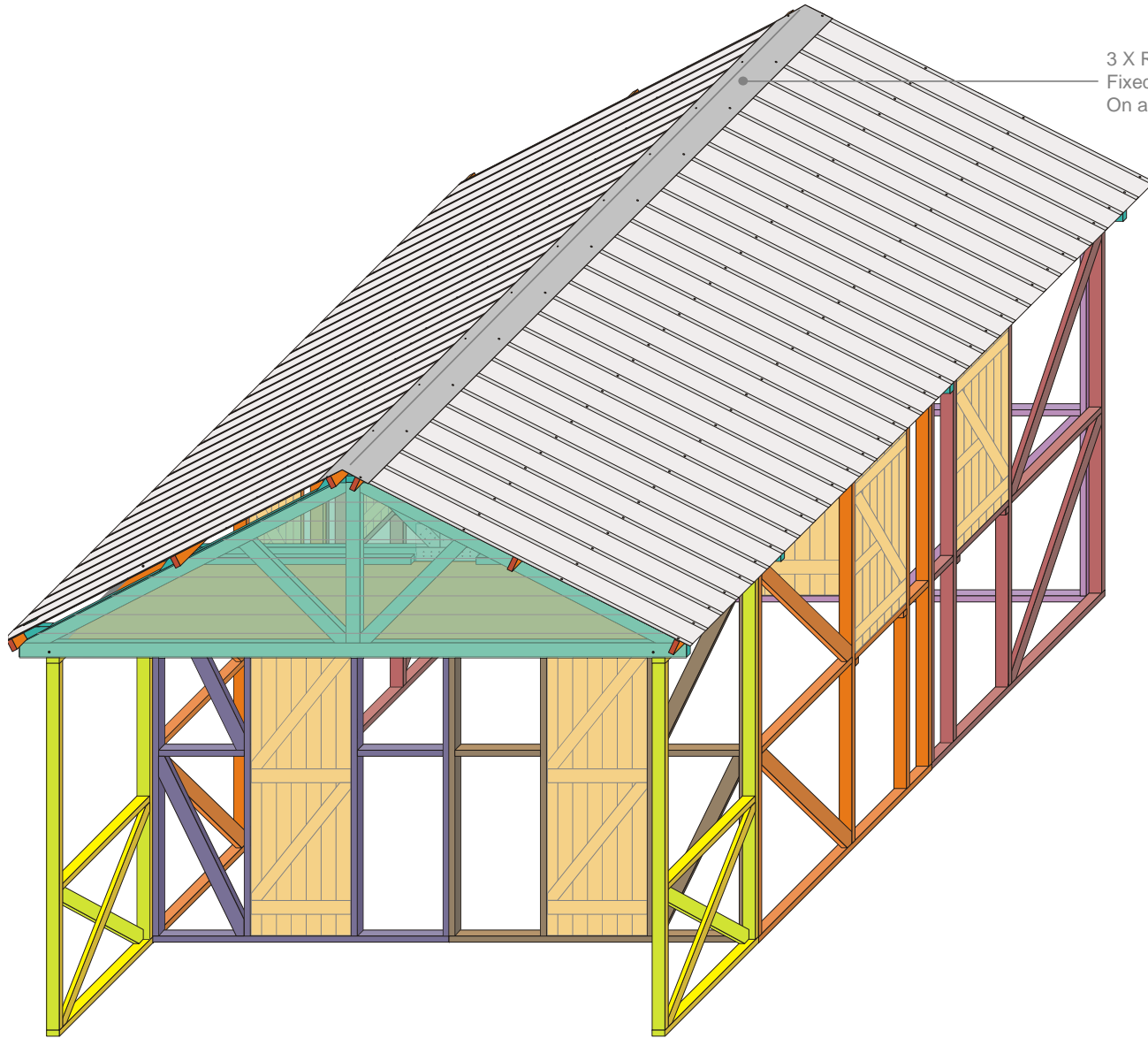


Drop in the porch Ceiling

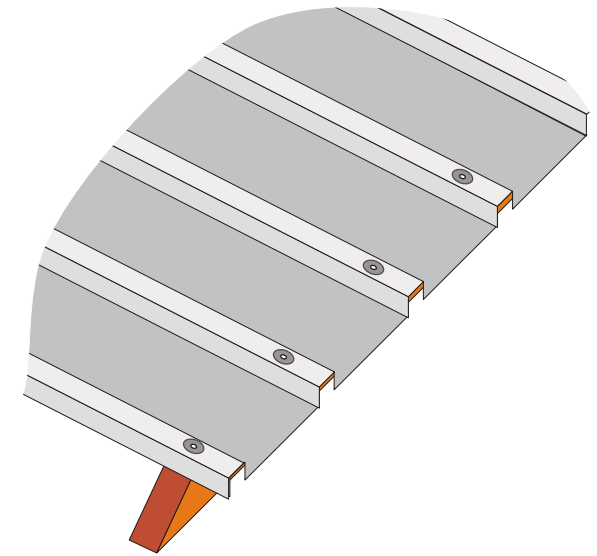
- The Porch Ceiling is put in 2 pieces, supplied with bottom supports fixed to each.
- Put the ceiling between the 2 front trusses, on the 2x2 support fixed to each truss.
- Keep it down with 4 pieces of 2x2 in the positions shown, each fixed with 4 nails of 3.5" HDG as indicated.



* Drawings are not on scale



3 X Ridge Pre-painted Aluzinc 7ft , 26GA (0.5mm)
Fixed with twisted Roofing nails 62 x 2.5" with Washer or Tar
On all 31 Ridges on both sides of the roof one



14 X Roofsheets Pre-painted Aluzinc 8 ft 6 , 26GA (0.5mm)
Fixed with twisted Roofing nails 186 x 2.5" with Washer or Tar
On all 31 ridges of the profiled sheet and in all 6 perlin one.

Category	Type				per house	1,850 houses	Aprox Price	Aprox Total	
Wood	Southern Yellow Pine, ACQ Pressure treated #2, Prime				300 bft	555,000 bft	1.10	610,500	
	2x4x8				106 bft	196,100 bft	1.10	215,710	
	Southern Yellow Pine, ACQ Pressure treated #2, Prime				62 bft	114,700 bft	1.10	125,170	
	2x4x12				88 bft	162,800 bft	1.10	179,080	
	Southern Yellow Pine, ACQ Pressure treated #2, Prime				24 bft	44,400 bft	1.10	48,840	
	1x4x16								
	Southern Yellow Pine, SAS #2, Prime				69 bft	109,150 bft	1.10	120,085	
	2x4x8				18 bft	33,300 bft	1.10	36,630	
	Southern Yellow Pine, SAS #2, Prime				52 bft	96,200 bft	1.10	105,820	
	2x4x14								
Roof	Roofing sheets				32 m2	59,200 m2	11.00	651,200	
	Ridge Cover	Pre-painted Aluzinc 8 ft 6 , 26GA (0.5mm)	260X110cm		12 pcs	24,420 pcs			
		Pre-painted Aluzinc 7ft , 26GA (0.5mm)	210X60cm		3 pcs	6,105 pcs			
	Hardware	Barrel bolts 80mm with lock				2 pcs	4,070 pcs	4.00	16,280
		Barrel bolts 60mm inside				7 pcs	14,245 pcs	1.50	21,368
		Hinges				17 pcs	34,595 pcs	0.85	29,406
		Anchors 1.5" wide x 4ft = 5 per bar				6 pcs	2,442 bars of 3/16" x 1.5" x 20ft	24.00	58,608
		Anchors 2" wide x 4ft = 5 per bar				6 pcs	2,442 bars of 3/16" x 2" x 20ft	24.00	58,608
		Hurricane Straps CS22 854 lbs 50 cm for purlins				24 pcs	287 rolls of 300ft each	165.00	44,065
		CS22 for perflins 24 x 50cm		1200 cm					
Hurricane Straps CS16 1370 lbs					10 pcs	552 rolls of 150ft each			
CS16 for corner trusses 8 x 130cm			1040 cm						
CS16 for center trusses 2 x 100cm			200 cm						
Screws	#10 x 4" screws zinc or treated for ACQ				344 pcs				
	Assemble Frames				344 pcs	700,040 pcs	/1000	50,403	
	Total #10 x 4" screws zinc or treated for ACQ								
	#8 x 3" screws zinc or treated for ACQ				48 pcs				
	To fix support for porch ceiling				30 pcs				
	To fix blocks for truss support				8 pcs				
	Total #8 x 3" screws zinc or treated for ACQ				86 pcs	175,010 pcs	/1000	6,650	
	#8 x 1.50" screws zinc or treated for ACQ				1,476 pcs				
	For Gussat plates total (6 sides)				220 pcs				
	Front and back planks on trusses				63 pcs				
Barrel Bolts x7 (8 per bolt)				136 pcs					
Hinges (17 hinges x 8screws)				67 pcs					
To assemble Porch frame				1,962 pcs	3,992,670 pcs	/1000	95,824		
#8 x 1.25" screws zinc or treated for ACQ				150 pcs					
Doors, 3x				160 pcs					
Shutters, 4x				310 pcs	630,850 pcs	/1000	15,140		
Total #8 x 1.25" screws zinc or treated for ACQ									
Roofing screws with washer 1/4" #14x2.5" (or same eqvt nails)				186 pcs					
To fix roofing sheets				62 pcs					
Total Roofing screws with washer 1/4" #14x2.5" (or nails)				248 pcs	504,680 pcs	/1000	65,608		
Nails	Nails 3.5" Hot Dipped Galvanized 16D				120 pcs				
	To connect 2x4 in corner (12 per length)				24 pcs				
	To pre-fix trusses				20 pcs	44 lb			
	To install porch ceiling				48 pcs	67 lb			
	To pre-fix purlins				212 pcs	431,420 pcs	6,499.10 lbs	2.10	13,522
	Total Nails 3" Hot Dipped Galvanized 10D								
	Nails 2.5" Hot Dipped Galvanized 8D				528 pcs				
	to fix CS16 100cm for trusses corner (65 each)				100 pcs				
	to fix CS16 100cm for trusses corner (50 each)				112 pcs				
	to fix 6 anchors 2" (14 each)				108 pcs				
to fix 6 anchors 2" (18 each)				360 pcs	94 lb				
Total Nails 2.5" Hot Dipped Galvanized 8D				1,208 pcs	2,468,280 pcs	26,151.91 lbs	2.10	54,919	
Nails 2" Hot Dipped Galvanized 6D				40 pcs					
to fix partitions for windows, 4x 10 nails				48 pcs					
to fix partitions for windows, 3x 10 nails				88 pcs	125 lb	1,432.64 lbs	2.10	3,009	
Total Nails 2" Hot Dipped Galvanized 6D									
Foundations	Foundations (10X) concrete 1,2,3 600x500x500 (0.15m3) - see drawing								
	Cement 49kg bags				10 psc	490 kg			
	Sand					900 kg			
	Aggregate					1800 kg			
	mass per foundation					3190 kg			
						360 kg			
	Floors	Cement 49kg bags				10 psc	490 kg		
		Sand					980 kg		
		Rubble					1495 kg		
							2965 kg		
Walls	Wall type A Heavy Wall Rocks/Debris infill of 100mm mill between timber of panel, cement render 15mm on both sides - see drawing								
	Cement 49kg bags				7 psc	343			
	Sand				1,000	2,000			
Total mass					3343 kg				
B	Wall type B Light Wall viber-cement board/plywood cladding mounted on timber of panel - see drawing								
	12mm plywood				negligible				