

20' x 40' (6m x 12m) Metal Garage Shed



⚠ WARNING



Please read and understand the product manual completely before assembly

- Check the parts list to make sure all parts are received.
- Wear safety goggles or other protective gear while assembling.
- Do not return products to dealers, who are not equipped to handle returns.

Missing parts or questions about assembly?

Email: cs@tmgindustrial.com

Or visit: tmgindustrial.com



Table of Contents

1. Specifications and Layout 2

2. Frame structure diagram..... 5

3. Parts list 6

4. Installation Instructions 11

1. Specifications and Layout

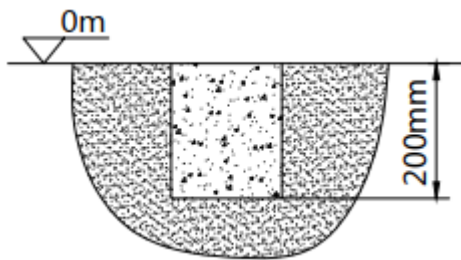
Main Specifications:

- Overall assembled size: W6 x L12.2 x H3.97 (m) / 19.7 x 40 x 13 (ft)
- Front door: W2.5 x H2.85 (m) / 8.2x 9.35 (ft)
- Side door: W0.9 x H2.0 (m) / 2.95 x 6.56 (ft)

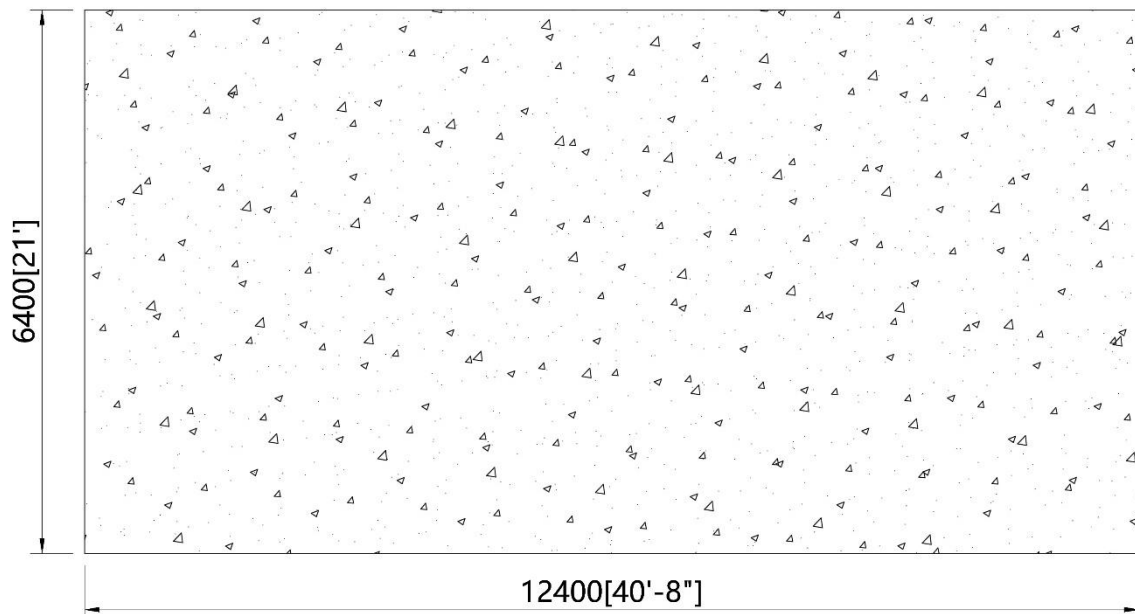
Concrete Foundation Size (See the Figure Below)

1. The layout of foundation (one).

Depth of cement



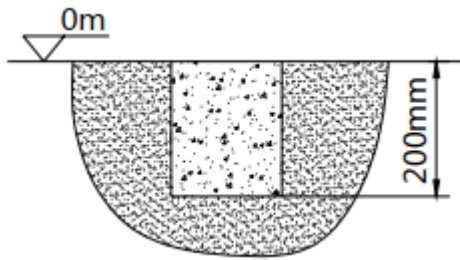
Unit: mm (ft)



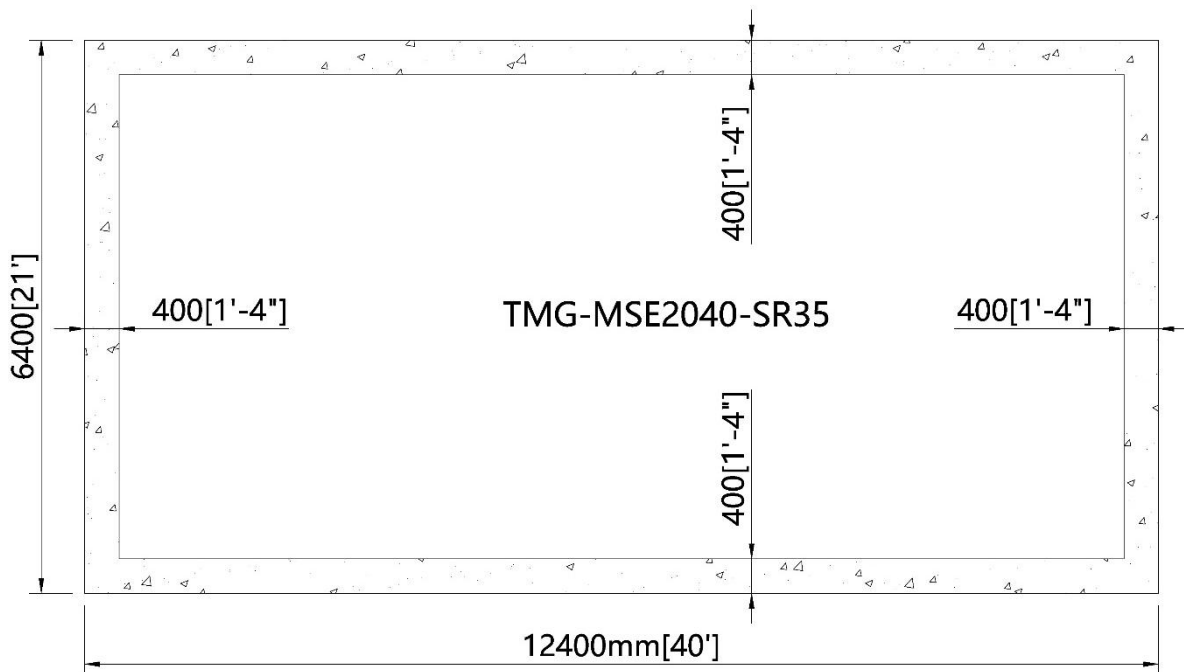
2. The layout of foundation(two).

Note: the ground anchor is installed on the cement block.

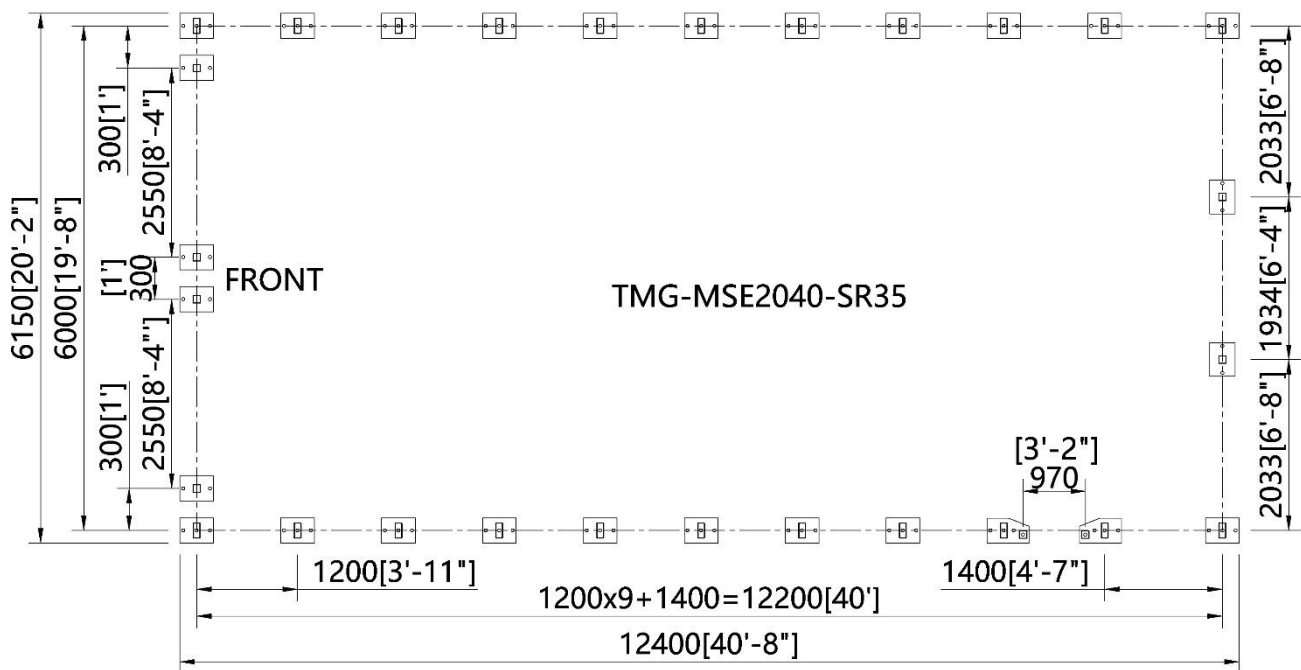
Depth of cement



Unit: mm (ft)



Baseplate layout.



Prior to Assembly

Please read the instructions carefully before installation. It is very important to follow your local safety regulations and industry standards during installation. Regulations may include but are not limited to:

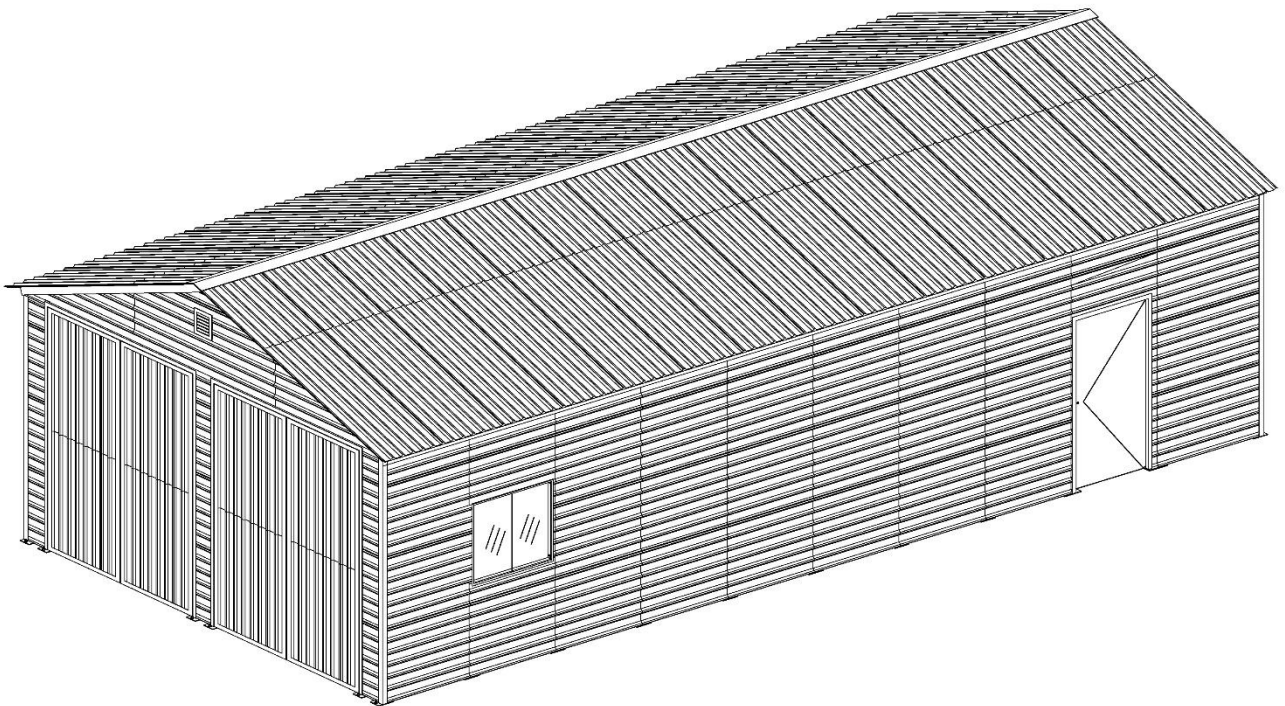
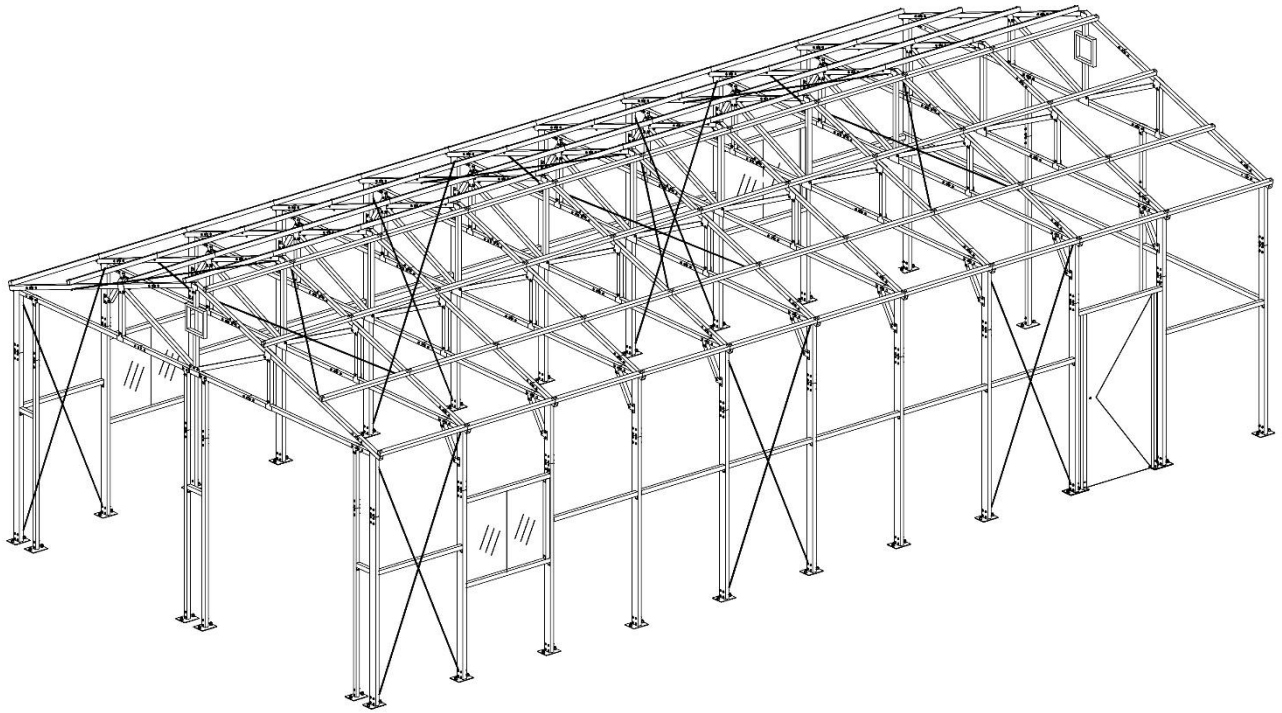
- Safety helmets, protective eyewear, and clothing.
- Safety harnesses for all elevated workers.
- Proper ladder use, safety cage, and safe operation.

Check all components and parts before installation. All parts are marked with a part number. Please refer to the parts list to make sure you have all parts.

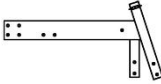
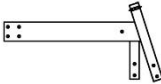
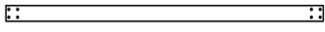
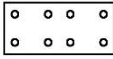
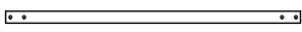
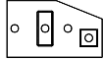
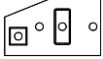
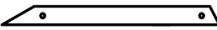
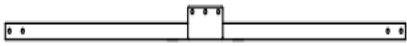
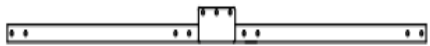
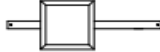
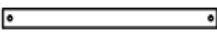
Choose a day with low or no wind to install, assembly is hard in heavy wind. Do not make any alterations to the structure. Do not hang any weights on the frame during installation, including parts. We are not responsible for any damages or injuries caused by inappropriate installation, unauthorized modifications or extreme weather.

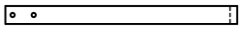
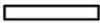
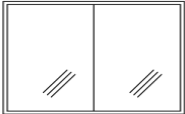
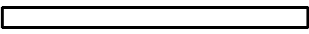
This building is not intended for human occupancy.

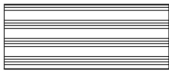
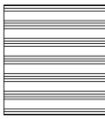
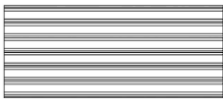
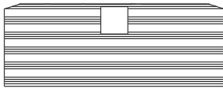
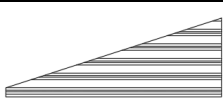
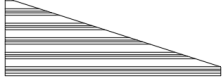
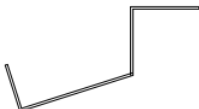
2. Frame structure diagram

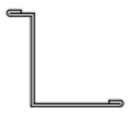
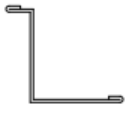
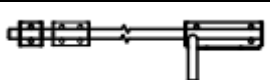


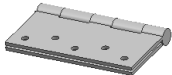
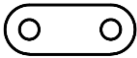
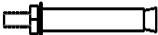
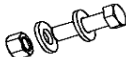
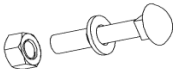
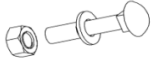
3. Parts list

TMG-MSE2040-SR35 Part List				
Parts Code	Graphical	Description	Length	Qty
1		Peak arch tube	L1371mm	11
2		Middle rafter tube	L2170mm	22
3		Shoulder tube	L844mm	18
3A		Shoulder tube (front and rear trusses)	L844mm	4
4		Sidewall tube	L2170mm	22
4A		Long casing	L198mm	96
4B		Long casing	L198mm	22
4C		Sidewall tube	L2170mm	6
5		Baseplate	W150xL200mm	6
5A		Baseplate	W150xL200mm	20
5L		Baseplate	W148xL250mm	1
5R		Baseplate	W148xL250mm	1
6		Bottom chord	L1833mm	22
6A		Reinforcing tube	L616mm	18
6E		Mounting plate	L100mm	84
7		Bottom chord	L1833mm	10
7A		Bottom chord (front truss)	L1833mm	1
8		Vertical member	L905mm	9
8A		Vertical member	L905mm	2
8B		Window shutter	W300xL300mm	2
9		Diagonal member	L1278mm	22
10		Vertical member	L521mm	22
11		Edge protector(top)	L1600mm	8

12		Column upper tube	L655mm	4
12A		Column upper tube	L655mm	2
13		Side cross bar	L1150mm	14
13A		Front cross bar	L250mm	1
13B		Rear cross bar	L1958mm	2
13C		Rear cross bar	L1883mm	1
13D		Corner code	W30xL40mm	44
13E		Front cross bar	L225mm	2
13F		Front cross bar	L1350mm	2
14		Top cross bar	L1200mm	72
14A		Top cross bar A	L1450mm	8
14B		Short casing	L100mm	72
15		Side door	L2005mm	1
15A		Side door column	L2016mm	2
15B		Side door frame cross tube	L1150mm	1
15C		Edge cover (side door)	L1000mm	1
15D		Edge cover (side door)	L2015mm	2
16		Casement window	W920xL1145mm	3
16A		Upper cross tube (window)	L1150mm	3
16B		Lower cross tube (window)	L1150mm	3
16D		Corner code	W40xL50mm	6
16E		Edge cover (window)	L1190mm	6
16F		Edge cover (window)	L920mm	6
17		Metal sheet (both sides)	W870xL1268mm	45

17A		Metal sheet (both sides)	W370xL1268mm	21
17B		Metal sheet (door sides)	W500xL 1268mm	4
17C		Metal sheet (Next to the small door)	W500xL160mm	2
17D		Metal sheet (Next to the small door)	W870xL160mm	4
17E		Metal sheet (door sides)	W370xL800mm	2
17F		Metal sheet (door sides)	W870xL800mm	6
18		Metal sheet (front and rear panel)	W320xL1750mm	2
18A		Metal sheet (front panel)	W370xL343mm	3
18B		Metal sheet (front panel)	W870xL343mm	9
19		Metal sheet (rear panel)	W870xL2120mm	9
19A		Metal sheet (front and rear panel)	W765xL2080mm	2
19B		Metal sheet (rear panel)	W370xL2080mm	3
19L		Metal sheet (front and rear panel)	W753xL2080mm	2
19R		Metal sheet (front and rear panel)	W753xL2080mm	2
20		Metal sheet (top)	W870xL2170mm	30
20A		Metal sheet (top)	W870xL1400mm	30
21		Edge cover (both sides)	L1600mm	16

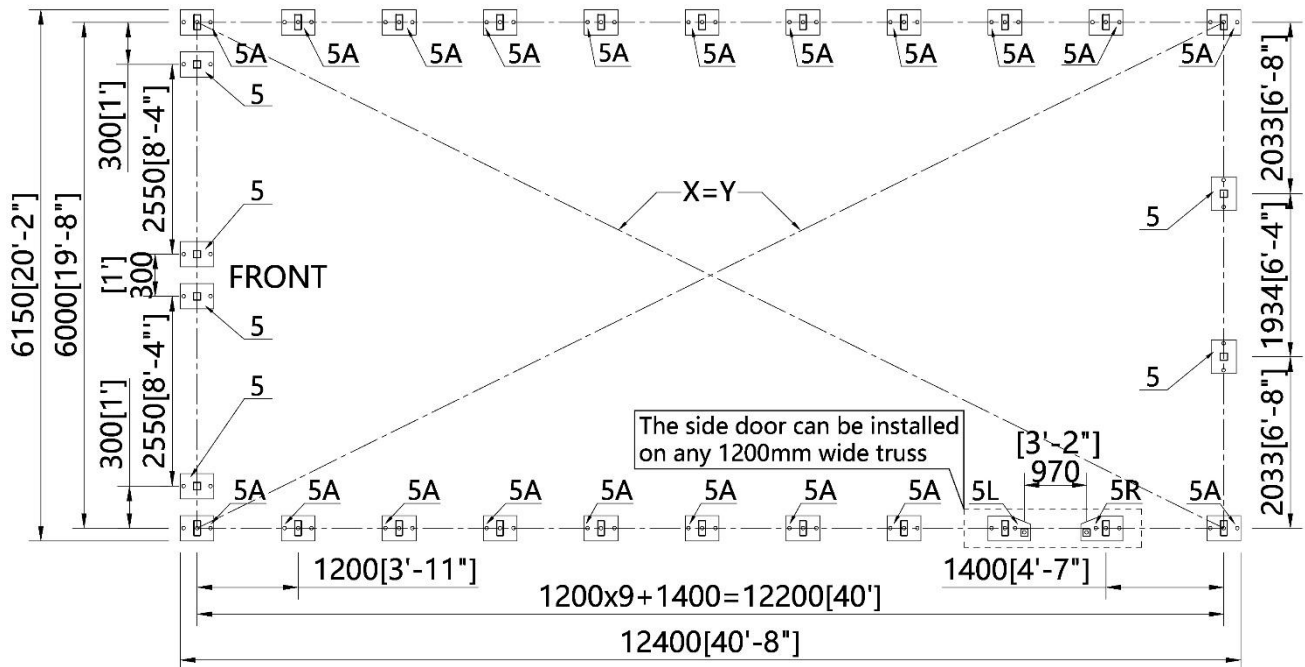
21A		Edge cover (front and rear)	L1700mm	8
21B		Edge cover (corner)	L1470mm	8
21C		Edge cover (front door frame)	L1500mm	4
21D		Edge cover (front door frame)	L1275mm	4
21R		Edge cover (front door frame)	L1500mm	2
21L		Edge cover (front door frame)	L1500mm	2
22		Metal sheet (front door)	W630xL1450mm	16
23A		Edge cover (front door)	L1405mm	12
23B		Edge cover (front door)	L1231mm	8
23C		Edge cover (front door)	L1405mm	4
24		Front door frame tube	L1352mm	16
24A		Front door frame tube	L1233mm	8
24B		Front door frame tube	L1230mm	4
25		Door bolt	L1000mm	4
26		Ground lock	φ12x12"	4
26A		Steel cable	φ6x2750mm	12
26B		Steel cable	φ6x2450mm	12

27		Hinge	5"	12
27A		Tensioning plate	L77mm	24
27B		Tensioning plate	L80mm	24
28		Expansion bolt	φ16x150mm	56
29		Hex bolt and nuts	M10x70mm	852
30		Self locking bolt and nuts	M10x120mm	72
31		Self locking bolt and nuts	M10x70mm	56
32		Self tapping screw	#12x25mm	1452
33		Self tapping screw	#12x25mm	64
34		Self tapping screw	#12x35mm	18
35		Blind rivet	φ5x16mm	128
36		Blind rivet	φ3.2x10mm	704
37		Hole drill	φ22mm	1
38		Door handle	L140mm	8
39		Sleeve	8mm	2
40		Drill	φ3.5	2
41		Drill	φ5.2	1
42		Waterproof silicon sealant		1
43		Caulking gun		1

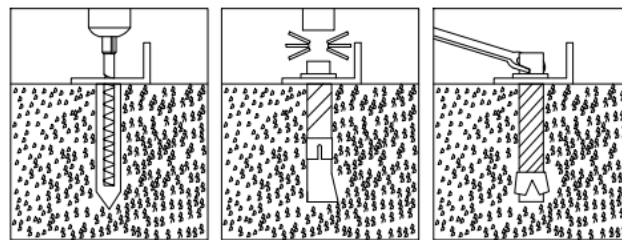
4. Installation Instructions

Step 1: Baseplate Positioning and Installation.

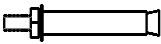
If it is necessary to move the installation position of the small door, the corresponding parts (# 15, # 15A, #15B, # 17A, # 17B, # 17C, # 17D) need to be moved together for installation



Installation diagram of expansion bolt.

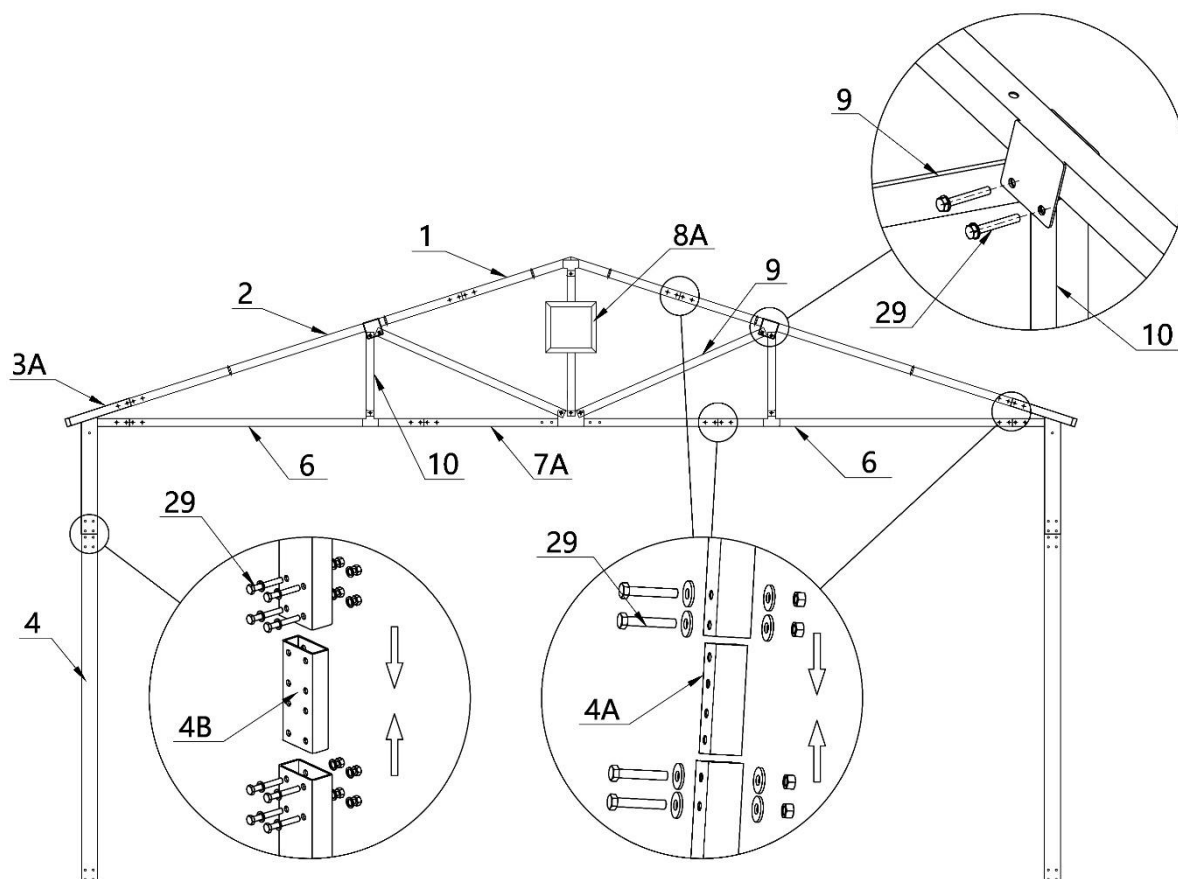


No.	Part	Qty
5		6
5A		20
5L		1

No.	Part	Qty
5R		1
28		56

Step 2: Install All Trusses.

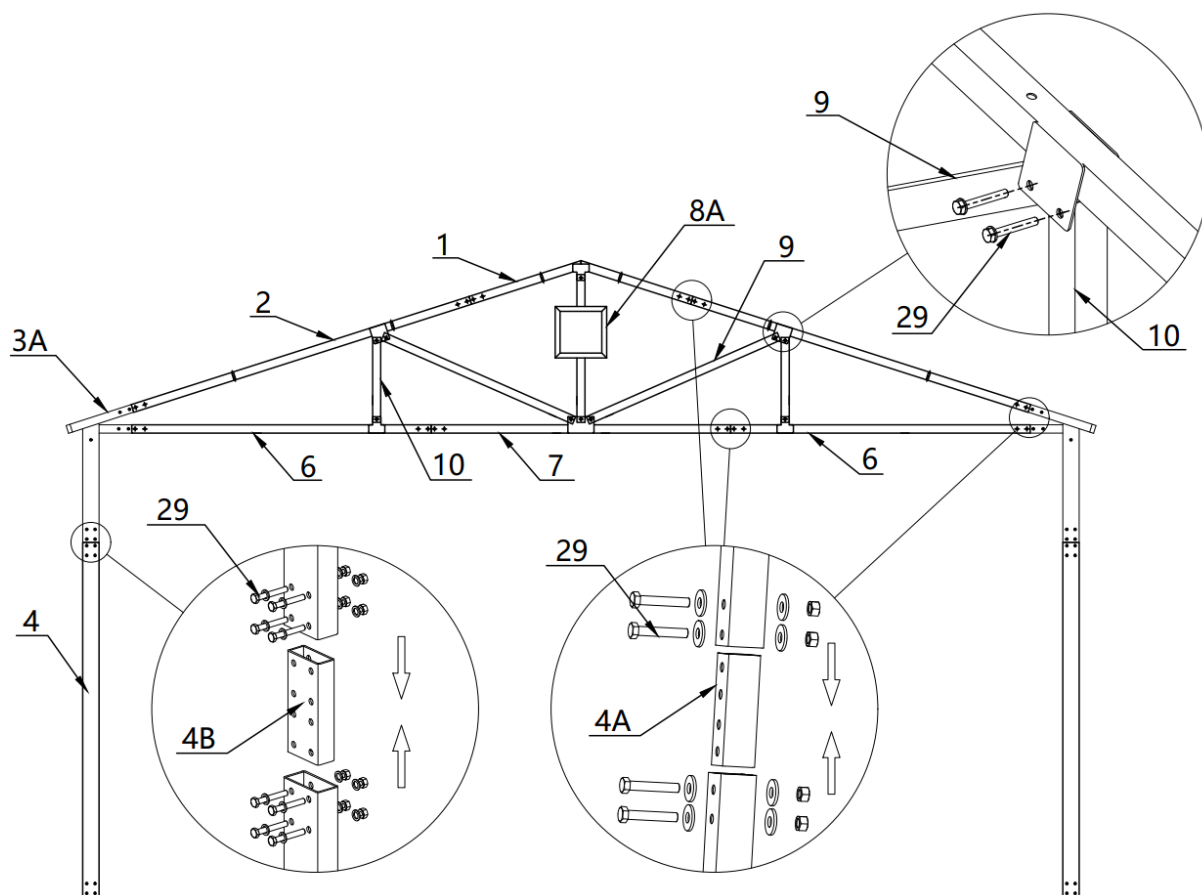
Install front truss.



No.	Part	Qty
1		1
2		2
3A		2
4		2
4A		8
4B		2

No.	Part	Qty
6		2
7A		1
8A		1
9		2
10		2
29		58

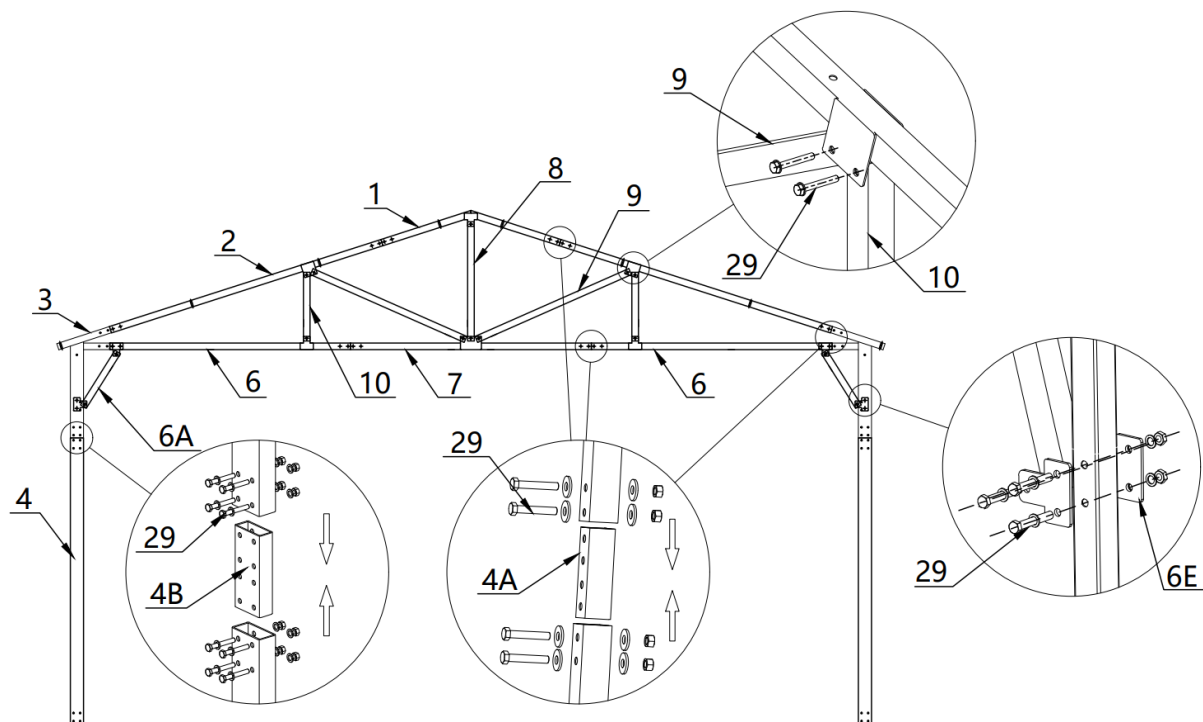
Install rear truss.

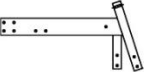
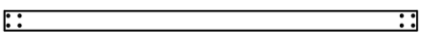
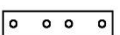
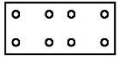


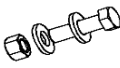
No.	Part	Qty
1		1
2		2
3A		2
4		2
4A		8
4B		2

No.	Part	Qty
6		2
7		1
8A		1
9		2
10		2
29		58

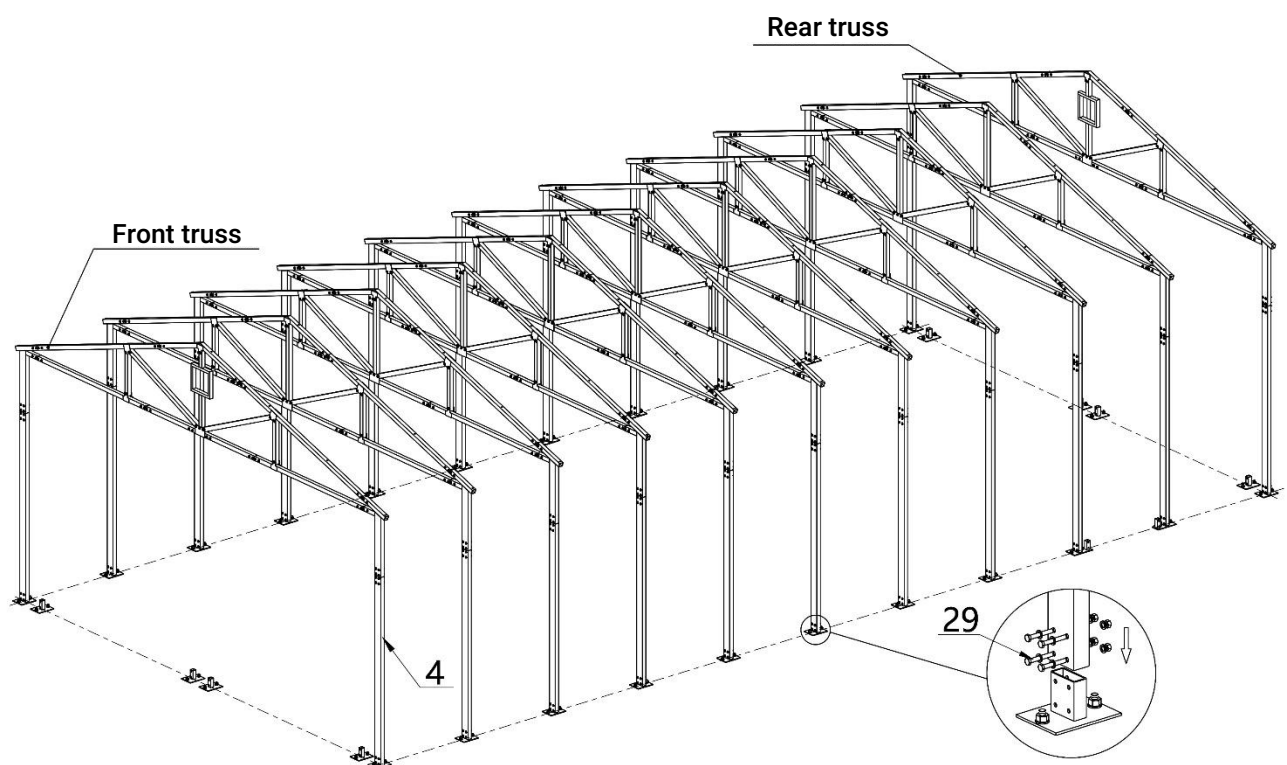
Install other trusses. (7 trusses)

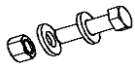


No.	Part	Qty
1		1x9
2		2x9
3		2x9
4		2x9
4A		8x9
4B		2x9
6		2x9

No.	Part	Qty
6A		2x9
6E		8x9
7		1x9
8		1x9
9		2x9
10		2x9
29		66x9

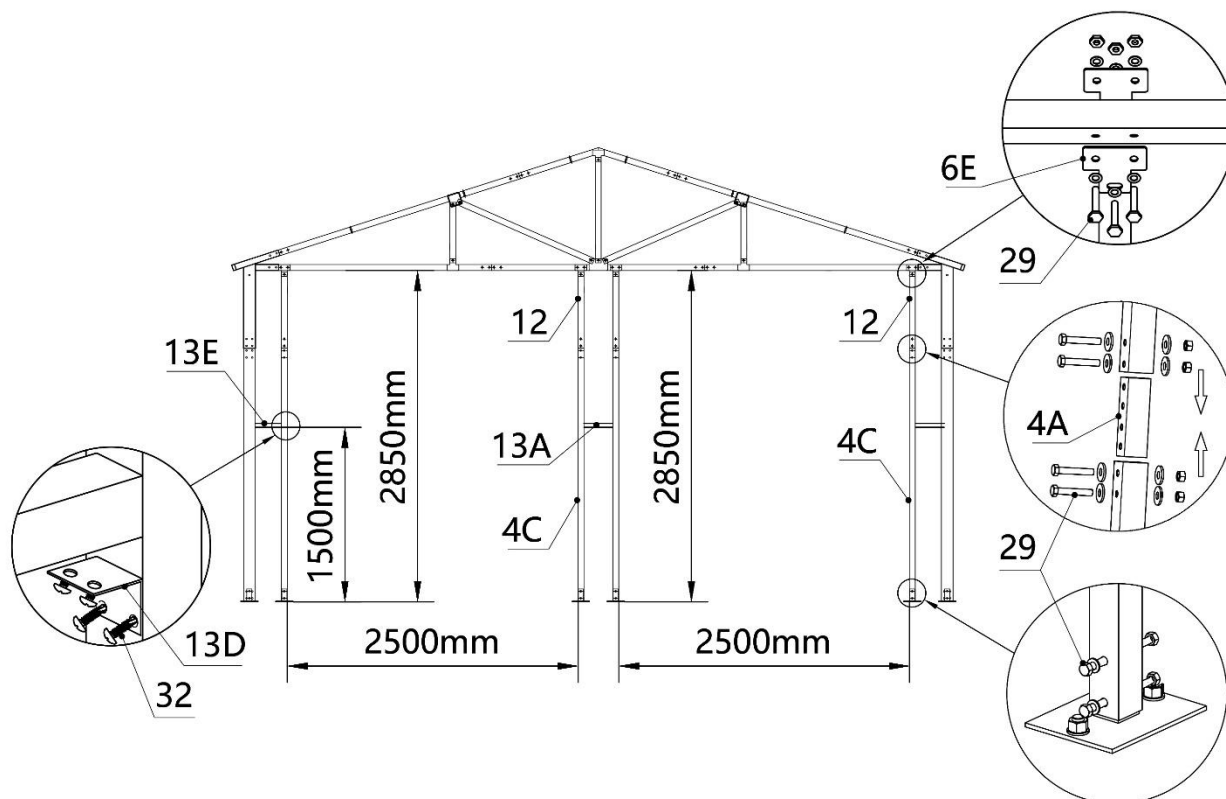
Step 3: Put Up All the Trusses.

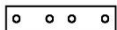
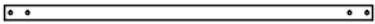


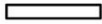
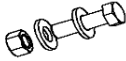
No.	Part	Qty
29		88

Install the front door frame.

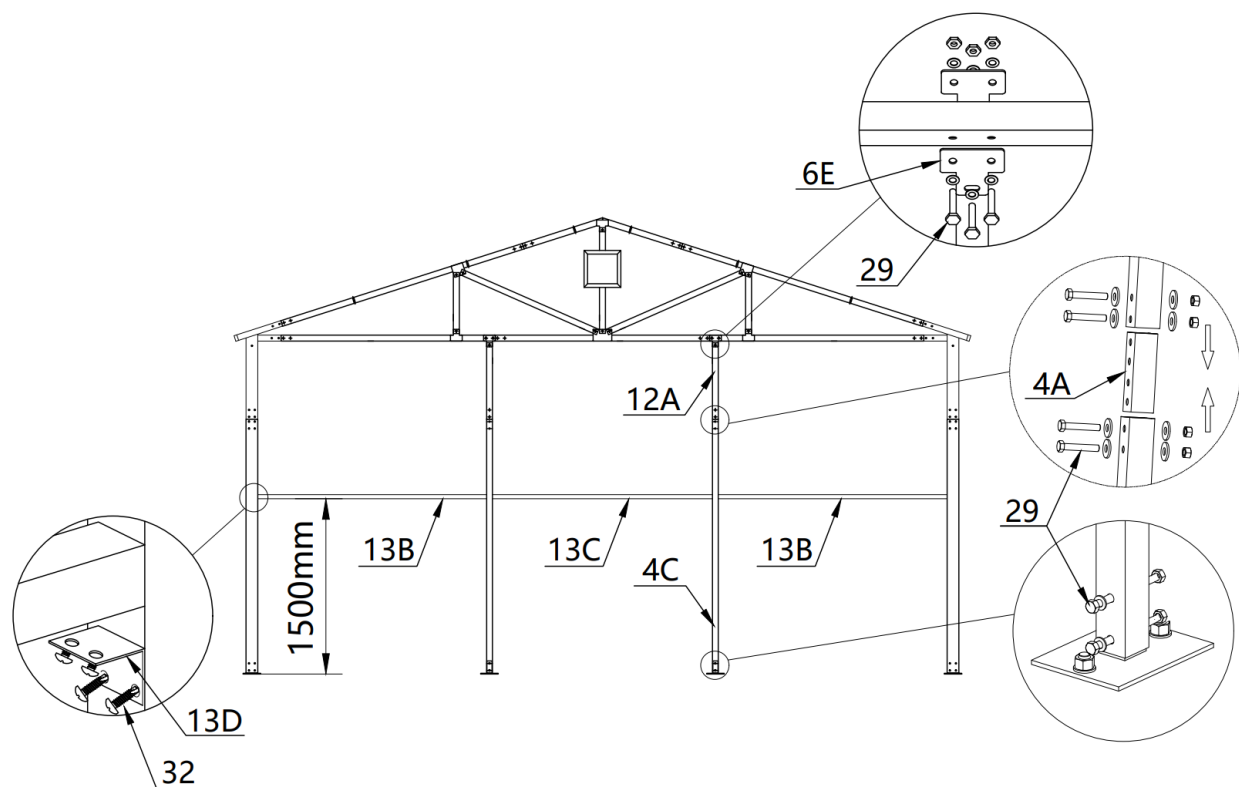
Note the size of the door frame, and the diagonal is equal.



No.	Part	Qty
4A		4
4C		4
6E		8
12		4
13A		1

No.	Part	Qty
13D		6
13E		2
29		32
32		24

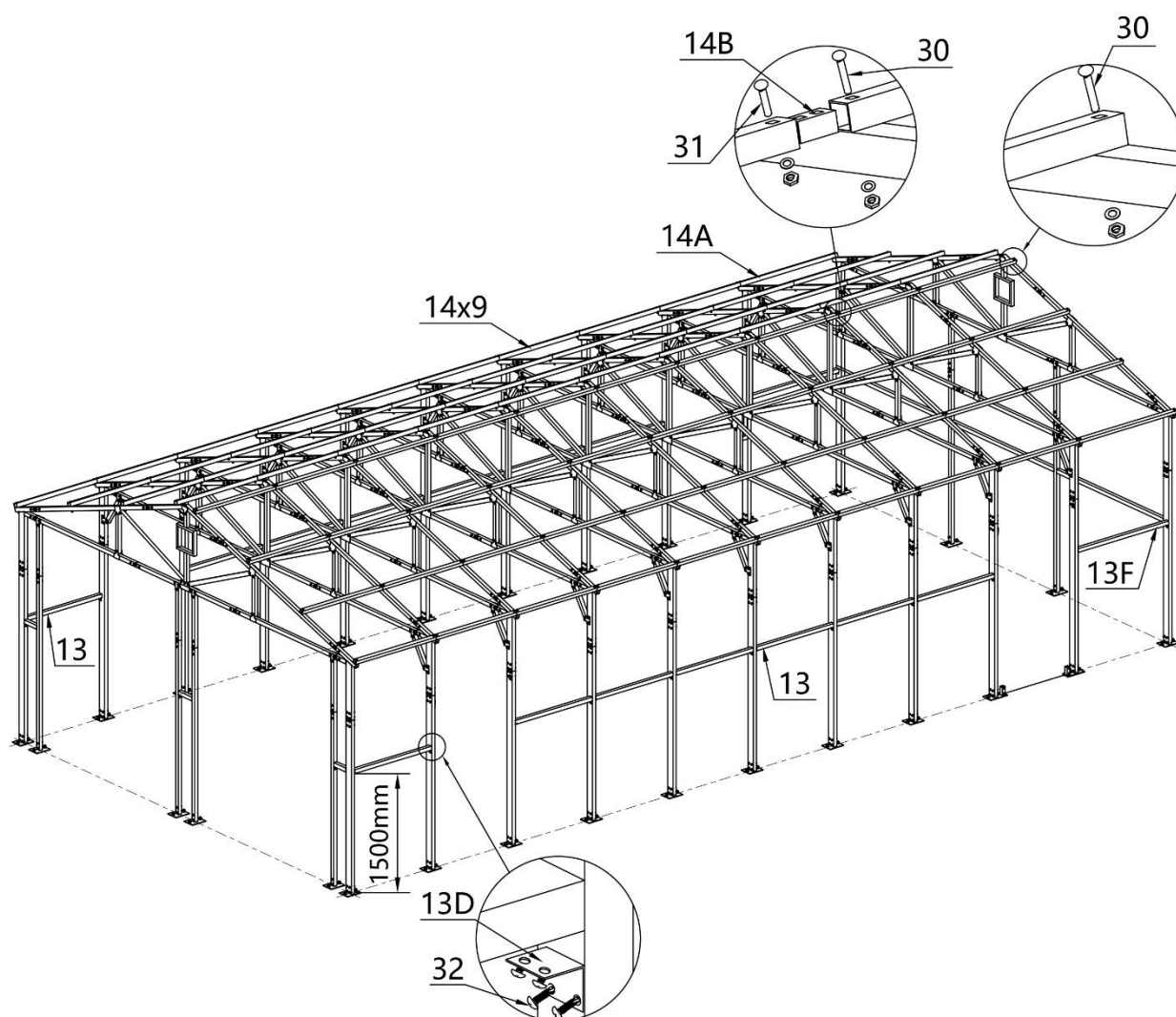
Install the rear wall.



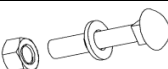
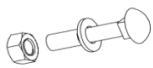
No.	Part	Qty
4A		2
4C		2
6E		4
12A		2
13B		2

No.	Part	Qty
13C		1
13D		6
29		14
32		24

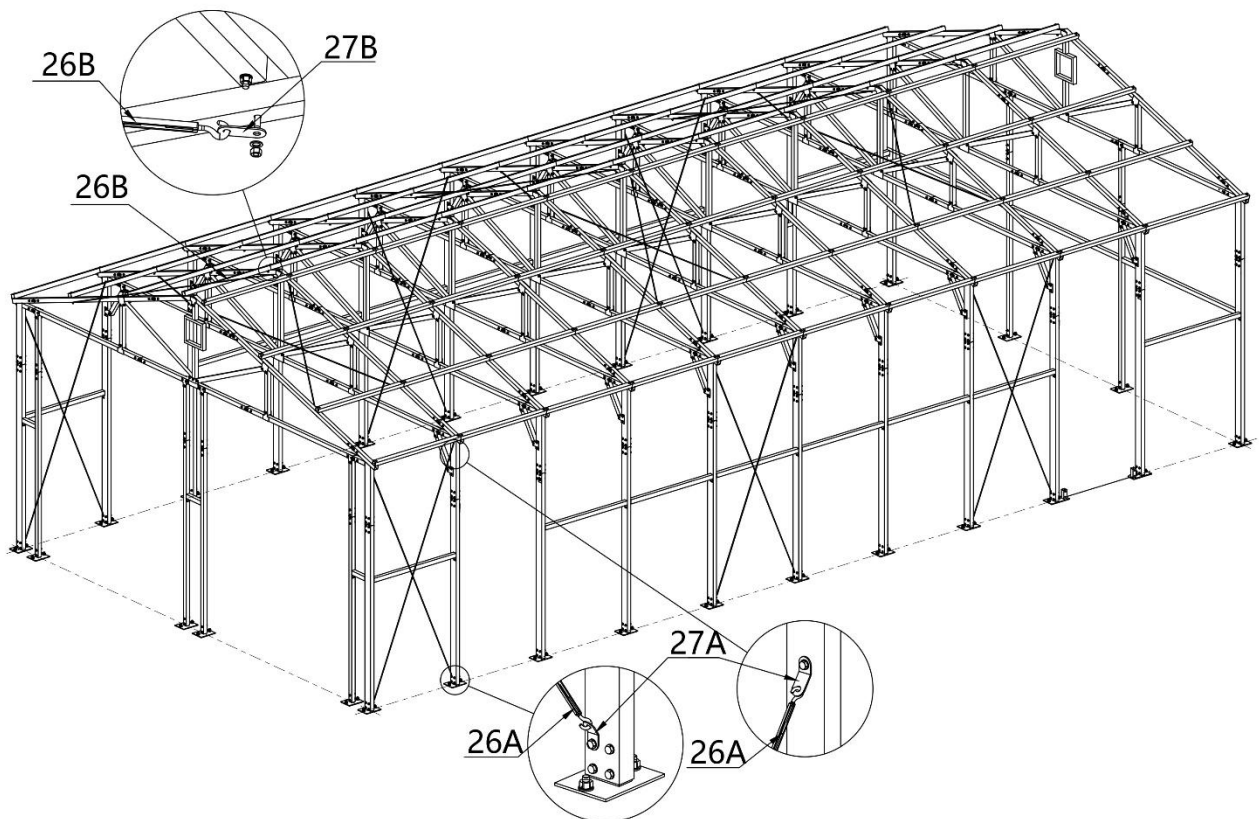
Step 4: Install Roof Purlins and Horizontal Tubes.



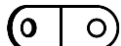
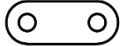
No.	Part	Qty
13		14
13D		32
13F		2
14		72
14A		8

No.	Part	Qty
14B		72
30		72
31		56
32		128

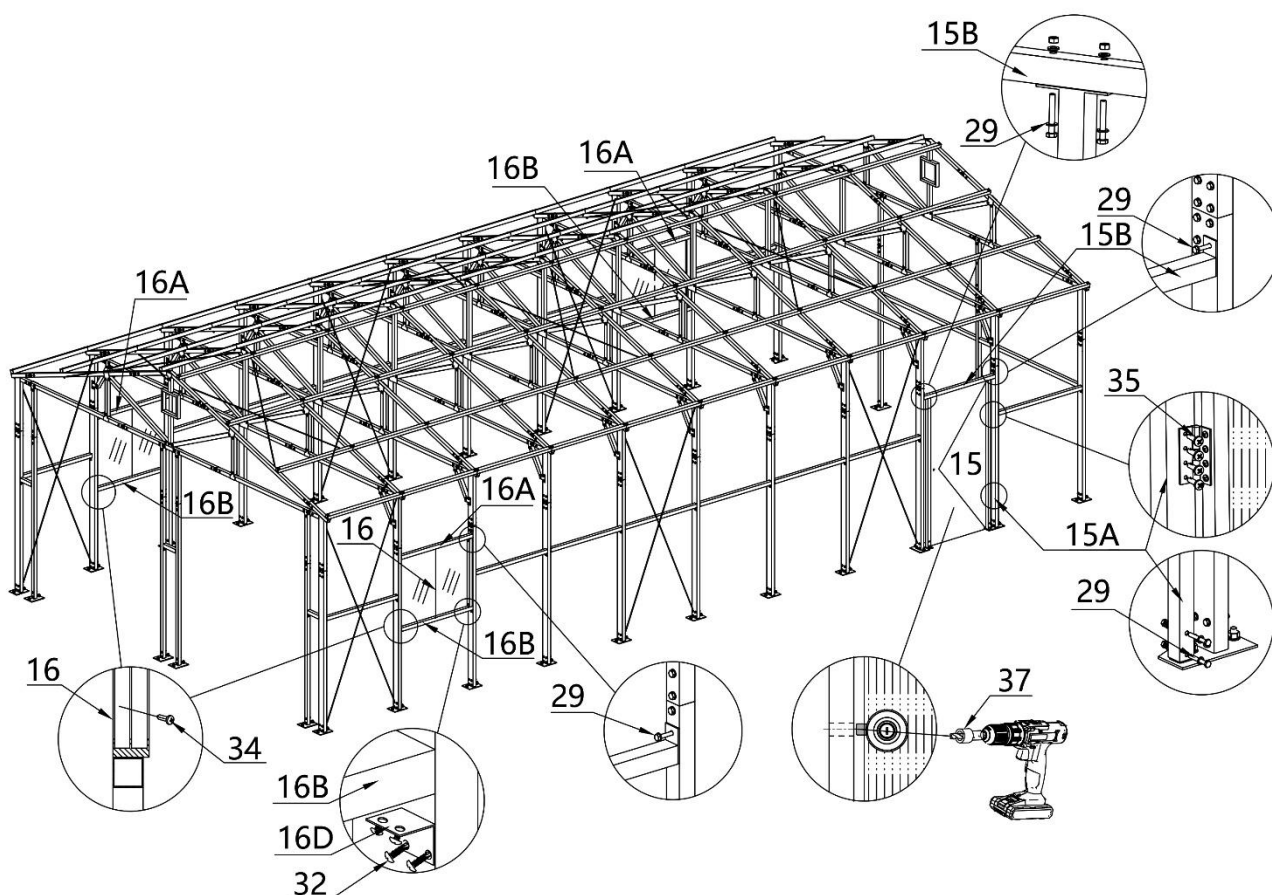
Step 5: Steel Cable Installation.



No.	Part	Qty
26A		12
26B		12

No.	Part	Qty
27A		24
27B		24

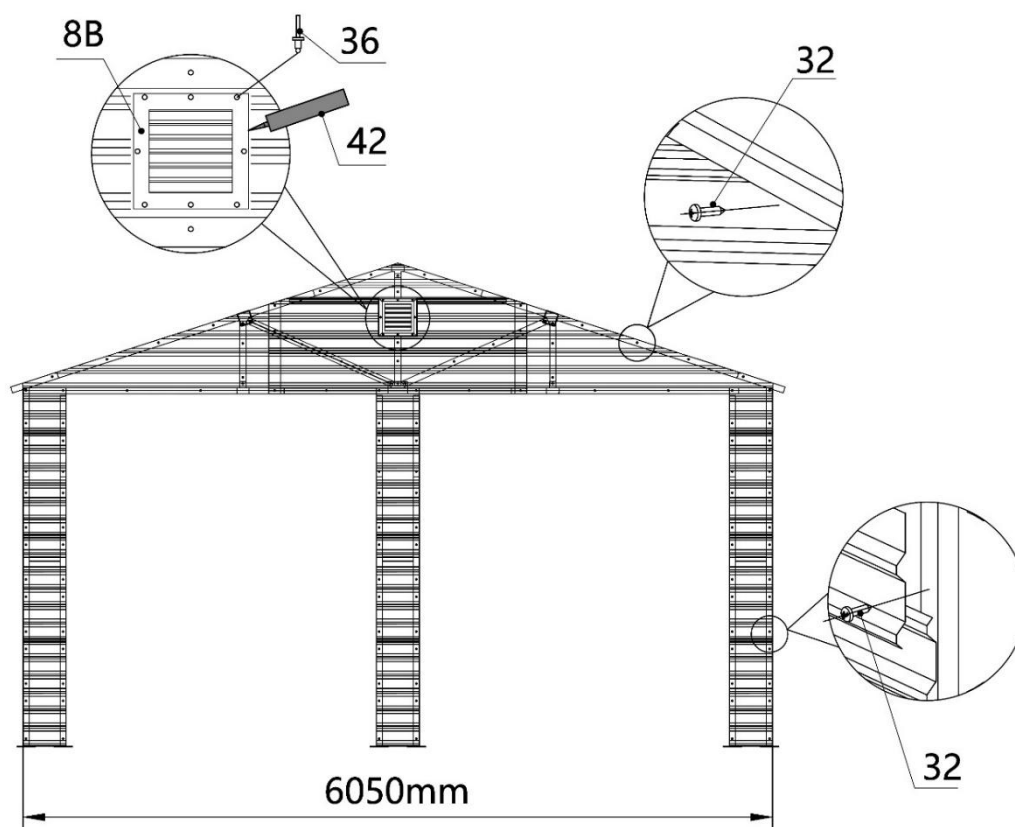
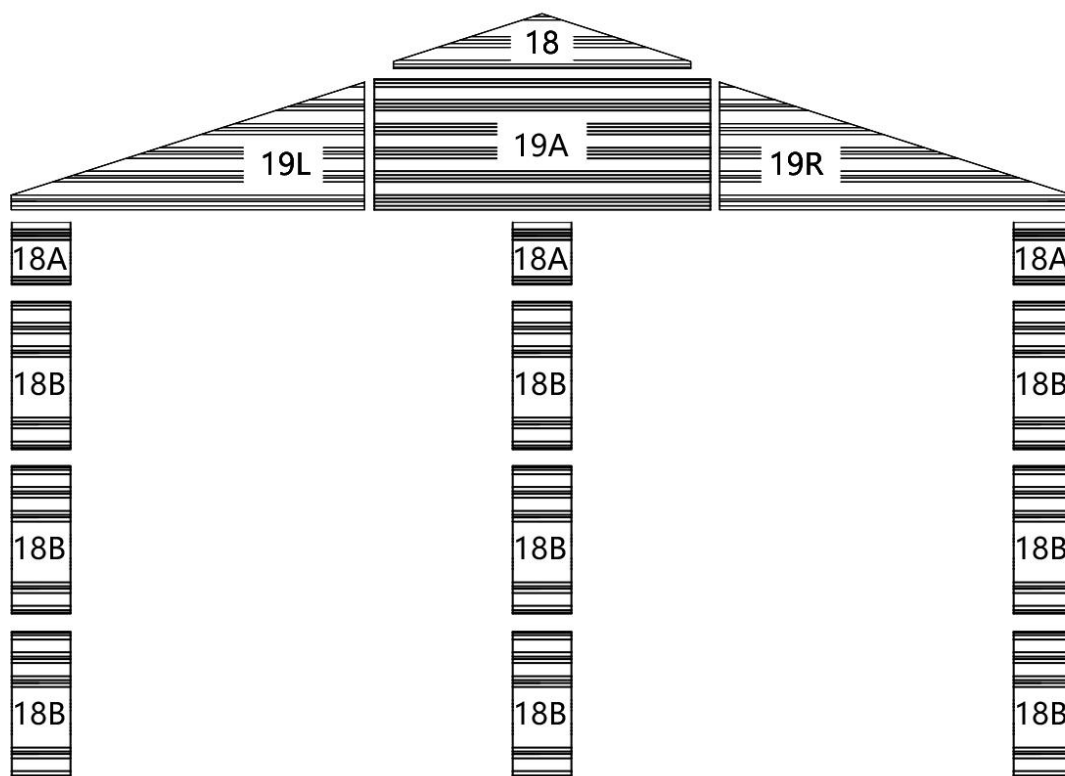
Step 6: Install Windows and Side Doors.

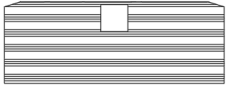


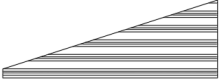
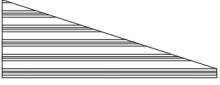
No.	Part	Qty
15		1
15A		2
15B		1
16		3
16A		3
16B		3

No.	Part	Qty
16D		6
29		8
32		24
34		18
35		8
37		1

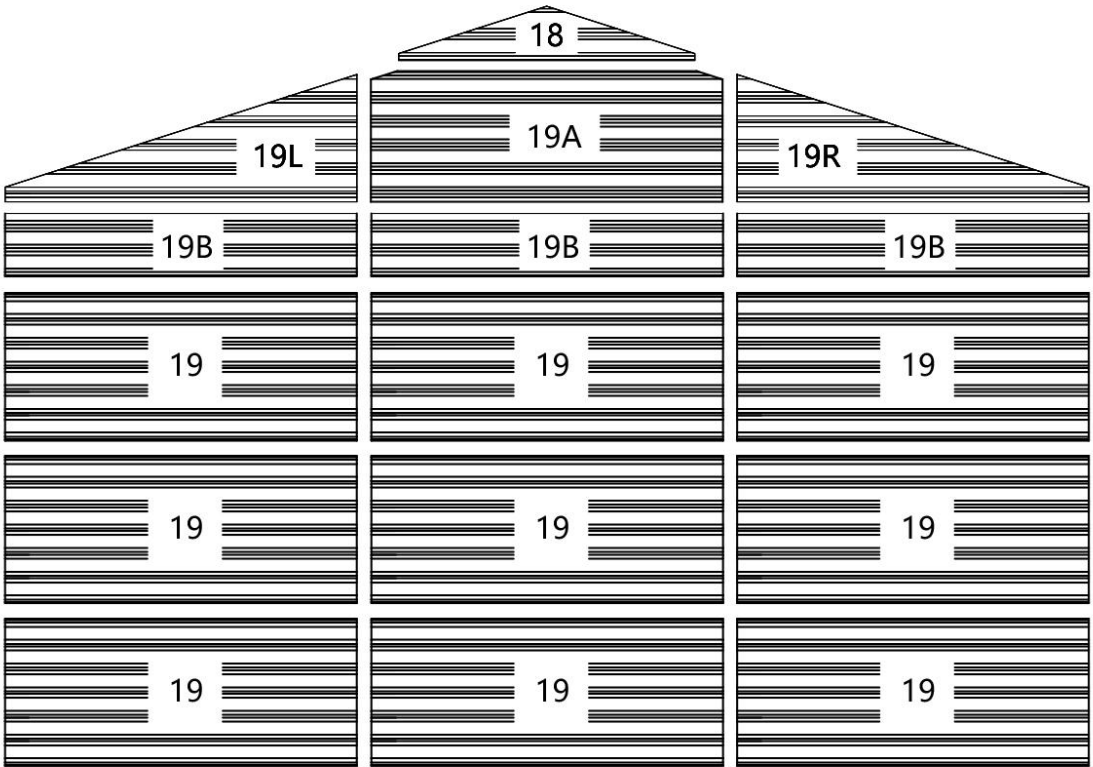
Step 7: Install Front Wall Panels.

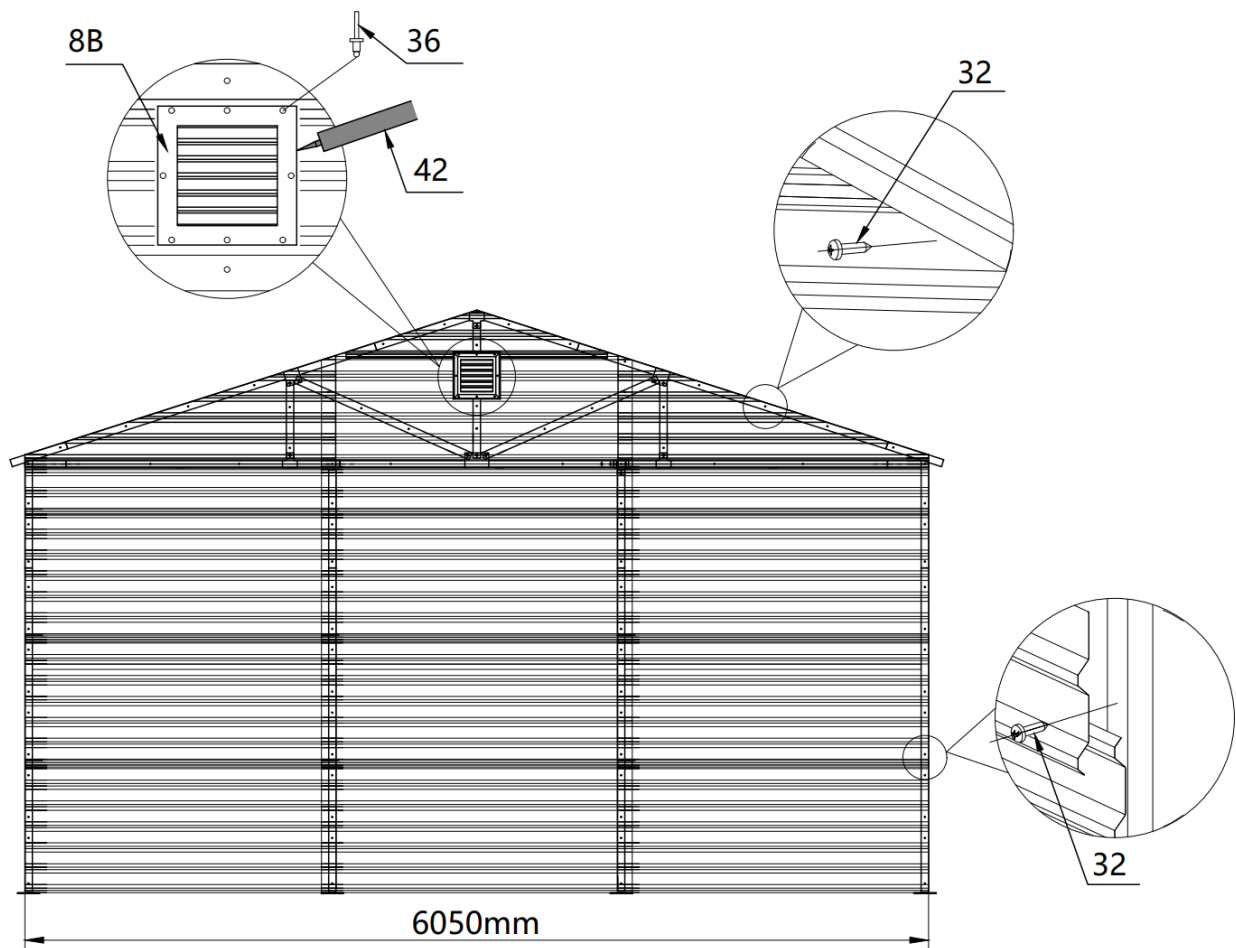


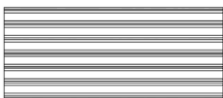
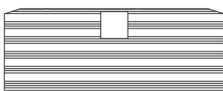
No.	Part	Qty
8B		1
18		1
18A		3
18B		9
19A		1

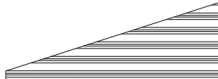
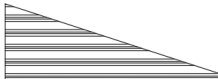
No.	Part	Qty
19L		1
19R		1
32		120
36		8
42		1

Step 8: Install Rear Wall Panels.



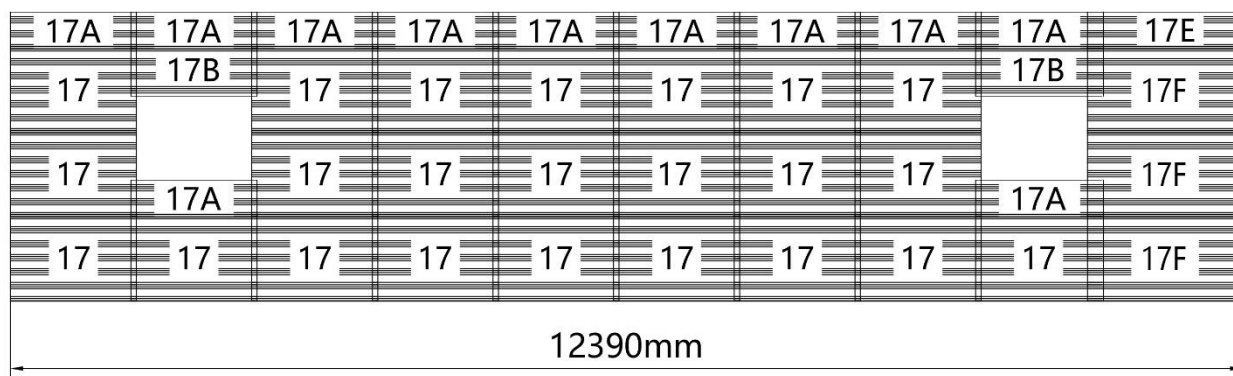


No.	Part	Qty
8B		1
18		1
19		9
19A		1
19B		3

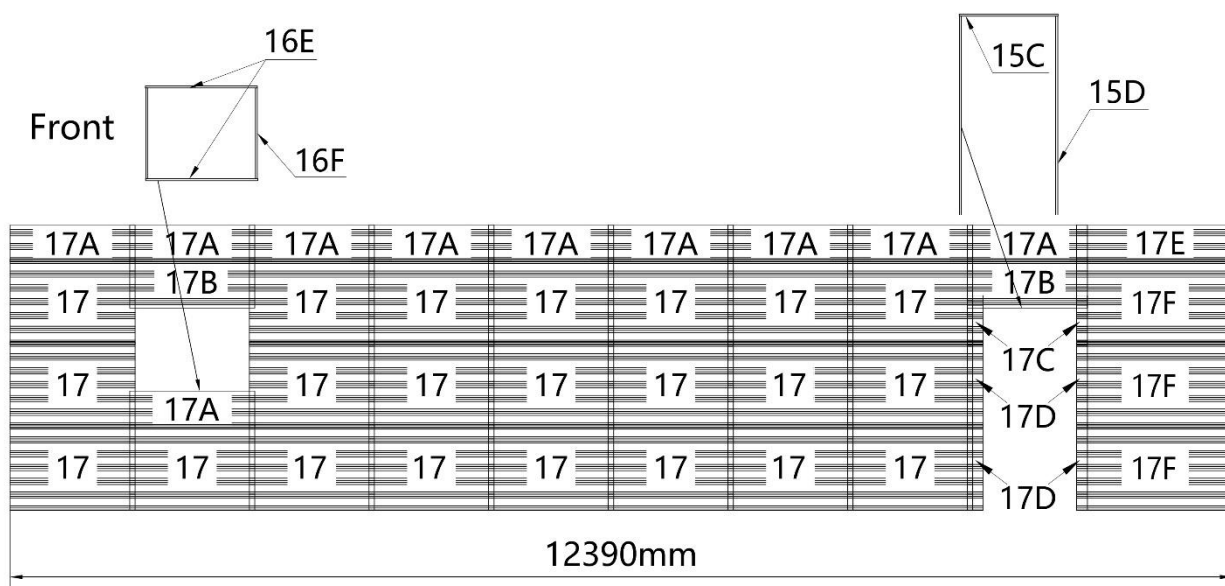
No.	Part	Qty
19L		1
19R		1
32		92
36		8
42		1

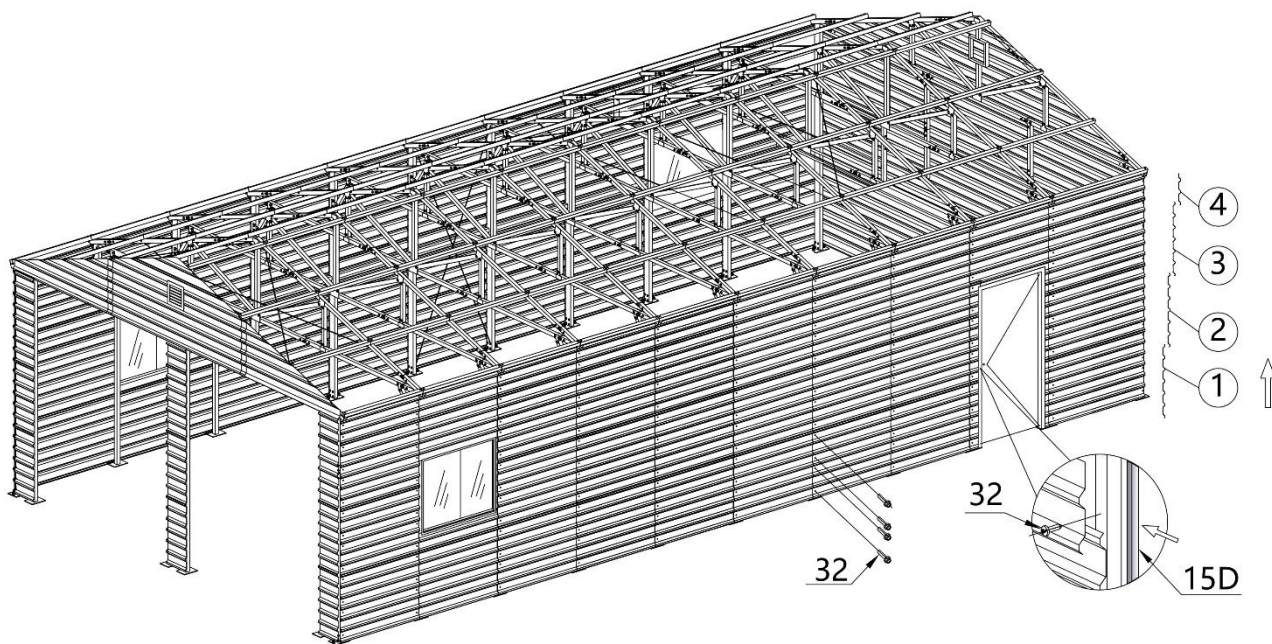
Step 9: Install Side Panels.

Left side.



Right side.

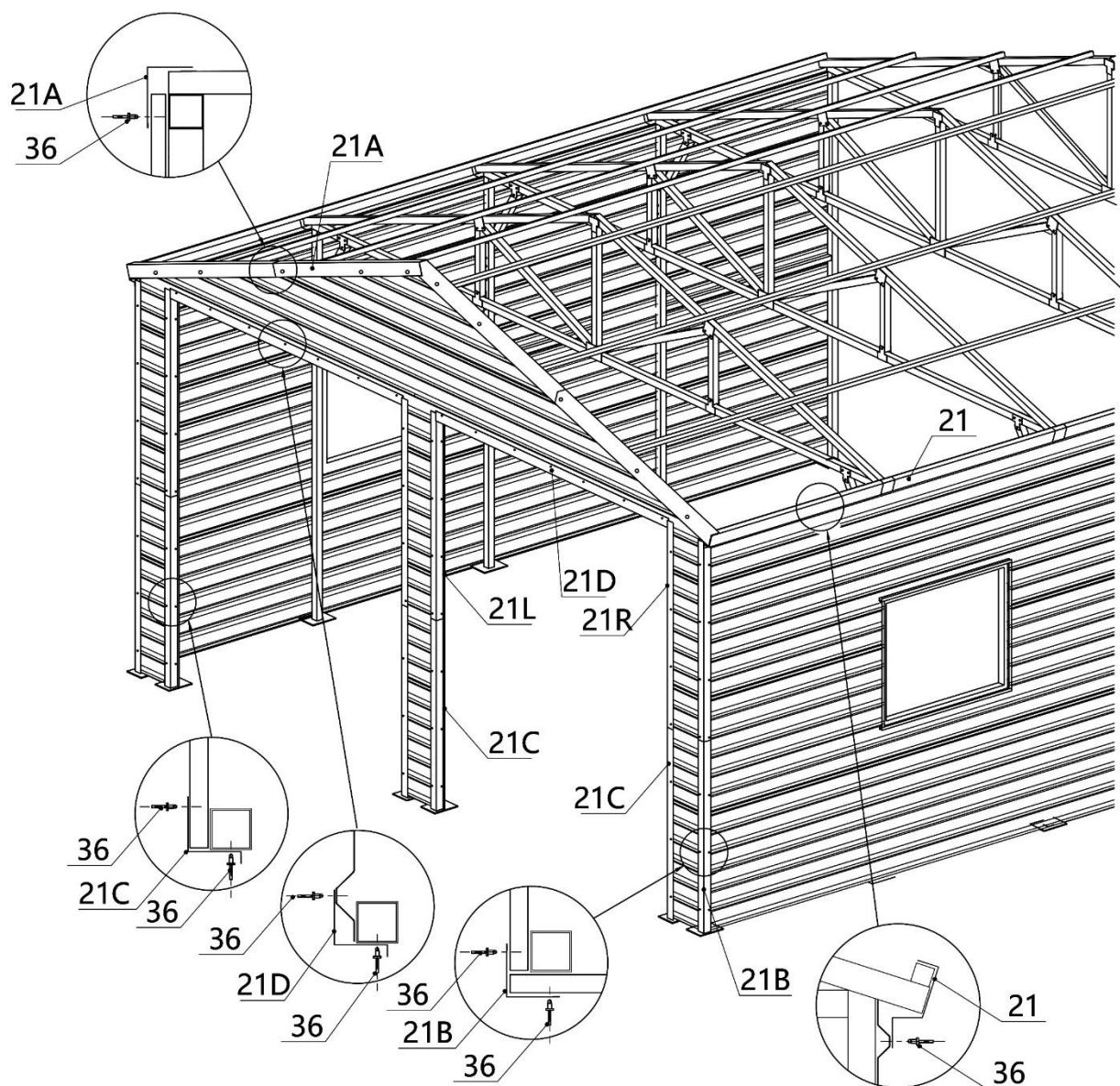




No.	Part	Qty
15C		1
15D		2
16E		6
16F		6
17		45
17A		21

No.	Part	Qty
17B		4
17C		2
17D		4
17E		2
17F		6
32		328

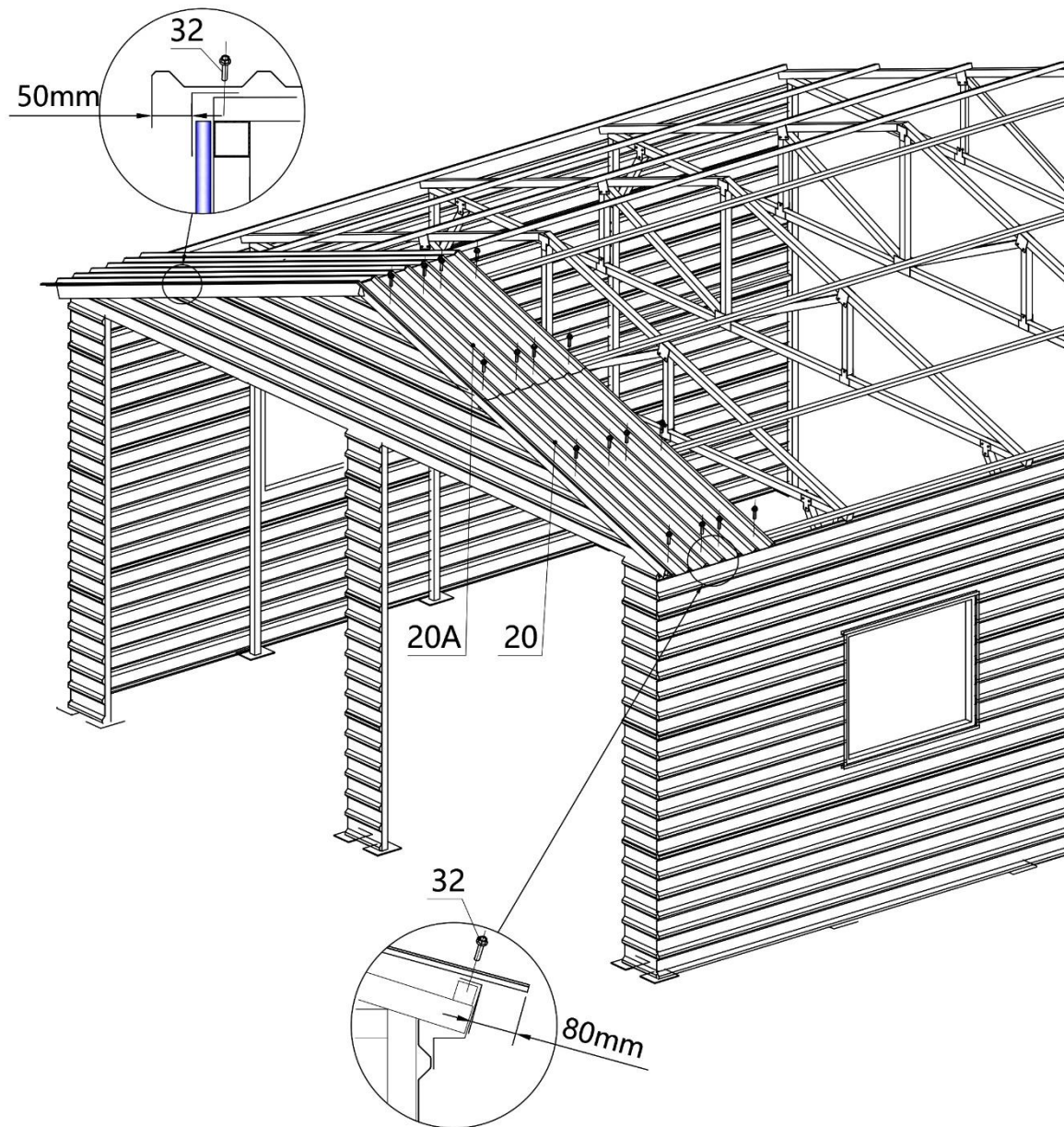
Step 10: Install Edge Covers.

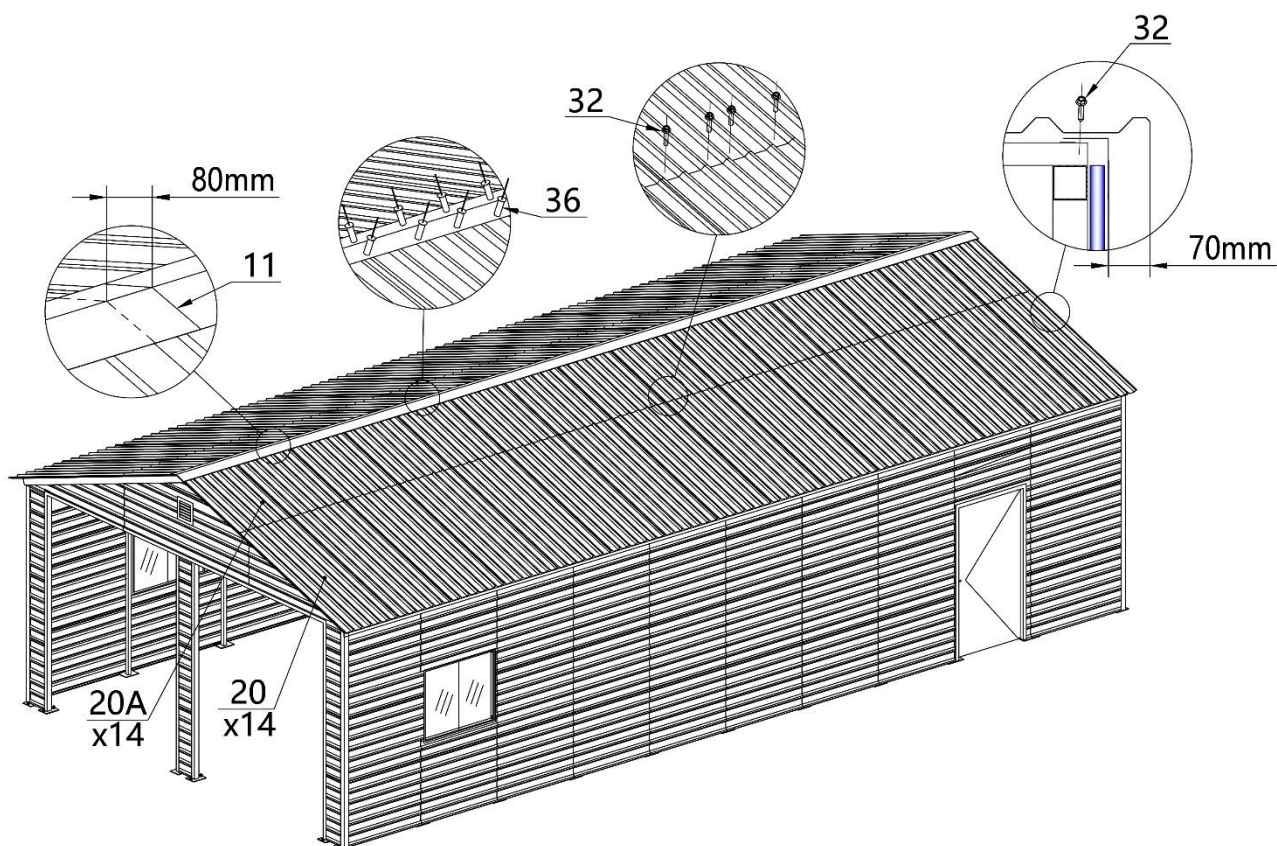


No.	Part	Qty
21		16
21A		8
21B		8
21C		4

No.	Part	Qty
21D		4
21L		2
21R		2
36		384

Step 11: Install the Roof Panels.



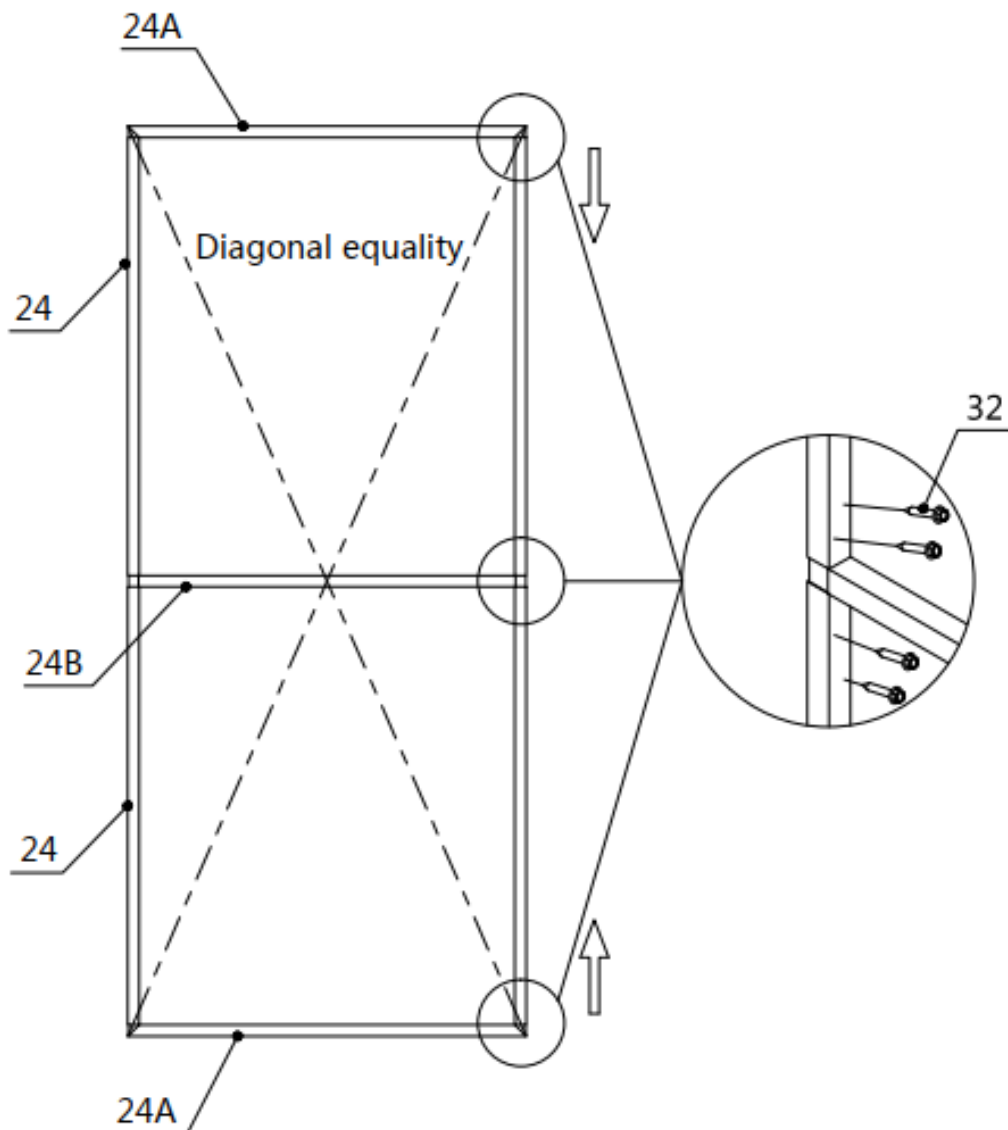


No.	Part	Qty
11		8
20		30
20A		30

No.	Part	Qty
32		480
36		96

Step 12: Install Front Door.

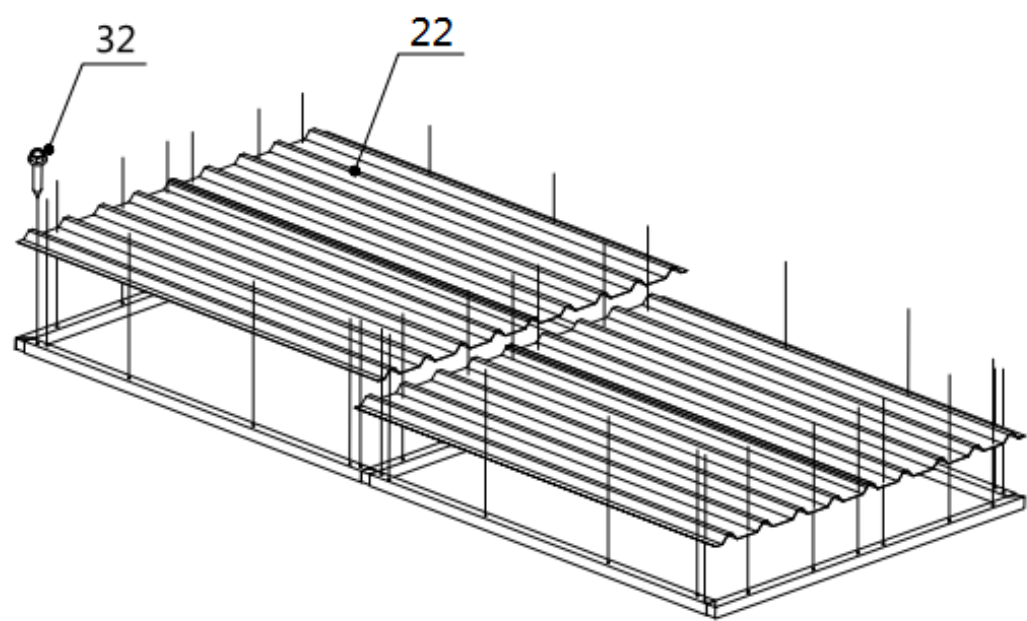
Install door frame.



No.	Part	Qty
24		4x4
24A		2x4

No.	Part	Qty
24B		1x4
32		16x4

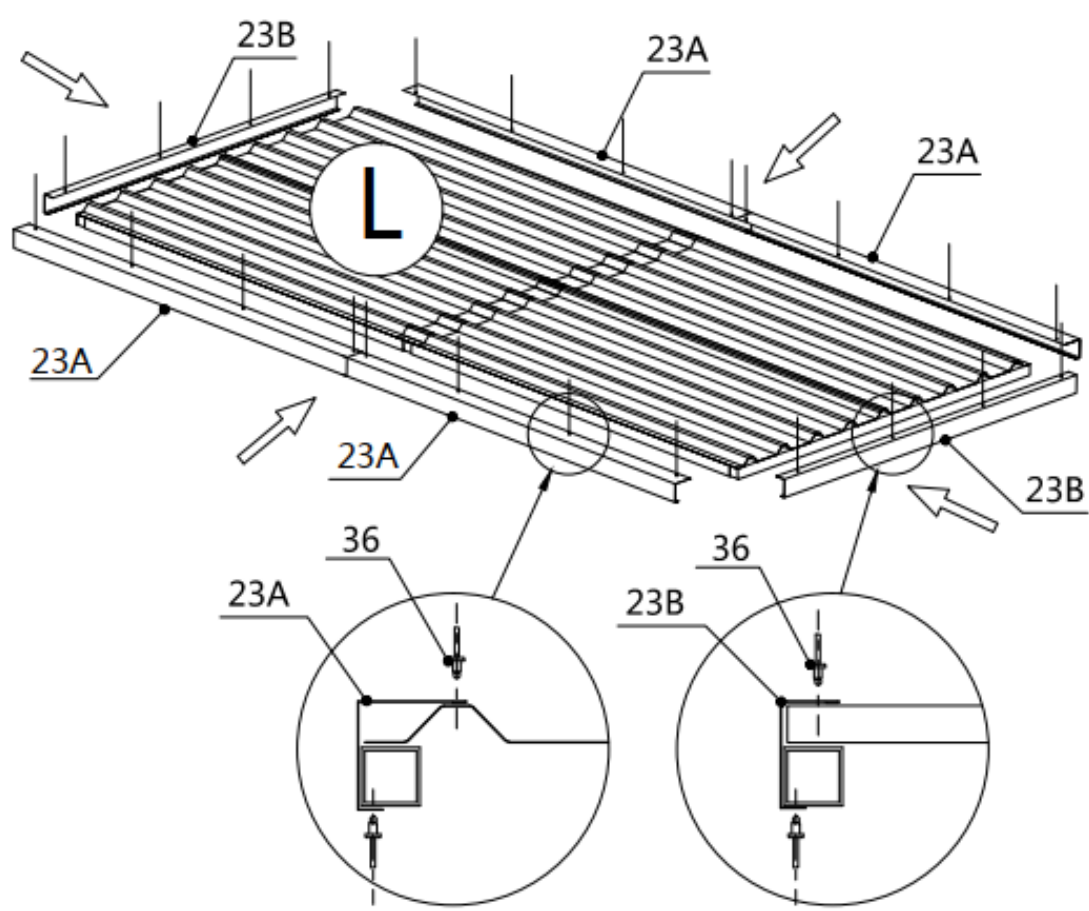
Install door panels.



No.	Part	Qty
22		4x4

No.	Part	Qty
32		42x4

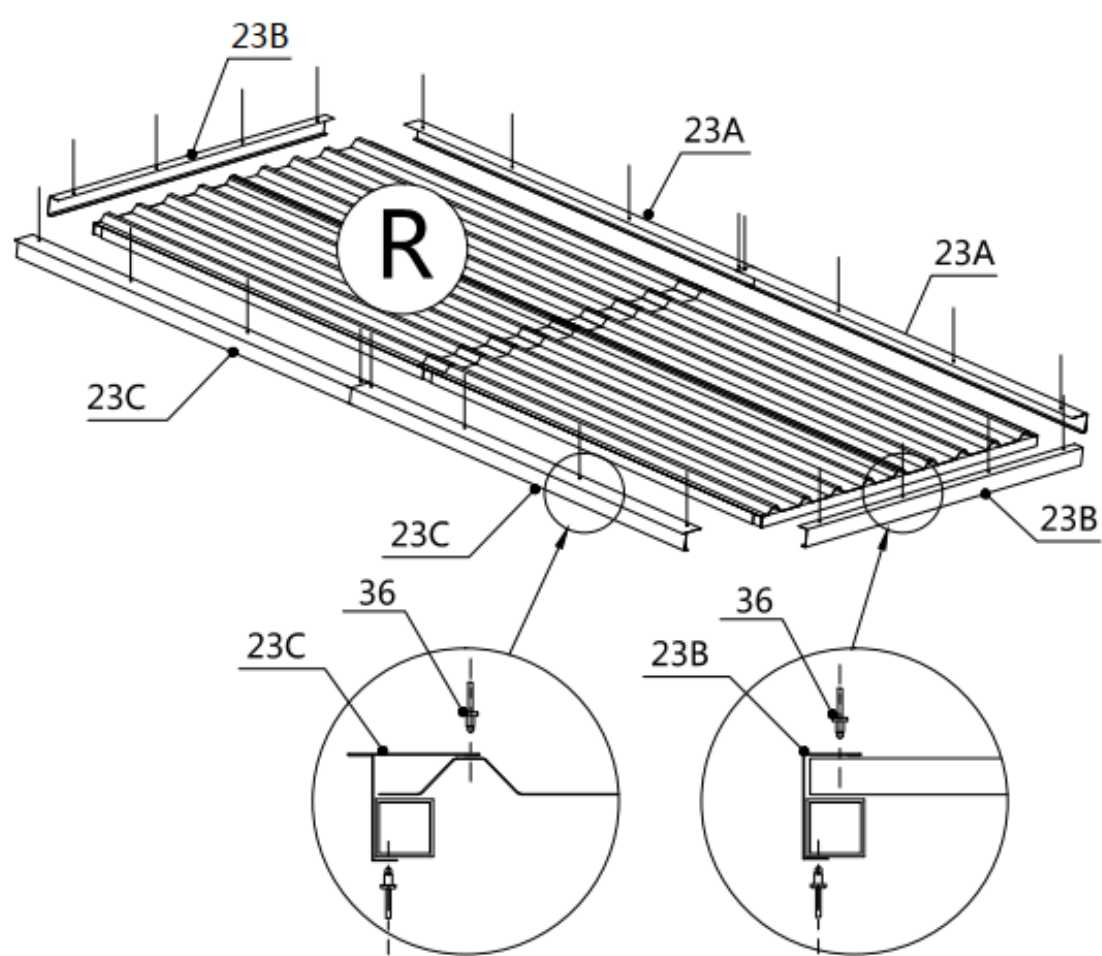
Install the left door edge cover.



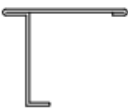
No.	Part	Qty
23A		4x2
23B		2x2

No.	Part	Qty
36		48x2

Install the right door edge cover.

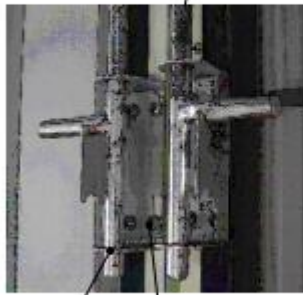


No.	Part	Qty
23A		2x2
23B		2x2

No.	Part	Qty
23C		2x2
36		48x2

Front door installation complete.





25 33



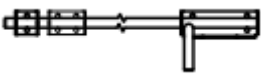
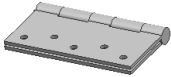
25 33



26 33



38 36

No.	Part	Qty
25		4
26		4
27		12
33		64

No.	Part	Qty
35		120
36		16
38		8

After the Installation

Walk around and inspect the garage periodically to make sure all components are still firmly secured and the whole garage is well supported. Check all bolts and nuts as well as all connection points to make sure they are all in good position.

Snow accumulating on the roof must be removed as soon as possible. If snow becomes solid ice on the roof, it will increase the weight on the roof and may collapse the garage or reduce the life span.

We strongly recommend you remove any snow from the roof immediately. Do not leave any snow load on the roof overnight. Keep 3 feet of clearance on all sides at all times. Do not allow snow to accumulate and pile up on the sides of the building. Otherwise the pressure from the sides will push inwards and could lead to a collapse.

WARRANTY INFORMATION:

Please refer to our website for detailed warranty conditions and coverage.
For the most up-to-date and comprehensive warranty information, visit www.tmgindustrial.com