

PRODUCT MANUAL

20 x 40 FT ARCH WALL PEAK CEILING STORAGE SHELTER

Model: TMG-ST2040PV





- Please read the product manual completely before assembly
- · Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly

Missing parts or questions on assembly?
Please call: 1-877-761-2819 or email: cs@tmgindustrial.com
Do not return the product to dealer, they are not equipped to handle your requests

Main Specifications:

- Overall assembled size: W6.1 x L11.76 x H3.66 (m) / 20 x 39 x 12 (ft)
- Roll up door : W4.3 x H3.2 (m) /14 x 10 (ft)

Prior to assembly

Please read the instructions carefully before installation. It is 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, cage, and safety 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.

It is recommended to tape or add foam/rubber on the frame where joints connect and where it touches the cover. This will help extend the life span of the cover.

Read the following item list carefully and count the number of items to ensure that all parts are included prior to setup.

TMG-ST2040PV Part List						
Parts code	Graphical	Description	Length	Qty		
1		Peak arch tube	φ 42xL1712mm	10		
2		Middle bent tube	φ 42xL2145mm	20		
3		Lower bent tube	ф 42xL2128mm	20		
4	△	Roof purlin (horizontal tube)	ф 42xL1340mm	45		
5	•	Bottom tension tube (for both long bottom sides)	Ф 32xL1260mm	18		
6	· · · · · · · · · · · · · · · · · · ·	Diagonal bracing bar	Ф 42xL1900mm	4		
7	· · · · · · · · · · · · · · · · · · ·	Ceiling cross bar	Ф 32xL1890mm	10		
7L		Left corner baseplate (front and rear truss)	t4xW150mm	2		
7R		Right corner baseplate (front and rear truss)	t4xW150mm	2		
8		Middle truss baseplate	t4xL150xW150 mm	16		
9		Tube clamp	Ф 42	8		

10	-1	Expansion bolt (not included)	ф 14x100mm	60
11		Half round head bolt	M8x70mm	50
12		Hex bolt	M8x60mm	120
12A		Hex bolt	M10x30mm	8
13		Hex bolt	M10x20mm	56
14		Top cover panel		1
15		Front and rear cover panel		2
16		Braided rope	Ф8х100m	1 bundle
17		Scratch resistant tape	L10m	2

Installation steps

Step 1: Review the whole structure and choose the proper installation site

Choose a solid flat level ground area to set up the building. Do not install the building on soft ground, wetland, uneven surfaces, sloped surfaces, or on top of structures that are not rated to hold its weight.

We strongly recommend that you build the structure on a solid foundation such as cement and use anchor bolts on all baseplates.

Be aware of the surrounding area. Do not set up the building near snowdrifts, open flames or exposed electrical wires. Do not keep heat sources near the fabric cover. Keep the building surroundings clear at all times.

- Mark the ground in the final building location with a line showing the positions of base plates, front, and rear doors. All lines should be drawn from center to center of all baseplate tubes. Diagonal line X must be equal to Y.
- Baseplates: all baseplates must be installed firmly with expansion bolts (#10) on this step (refer to figure 1).
- Parts used in this step:
 - (4) Baseplates (#7L,7R)
 - (16) Baseplates (#8)
 - (60) Expansion bolts (#10)

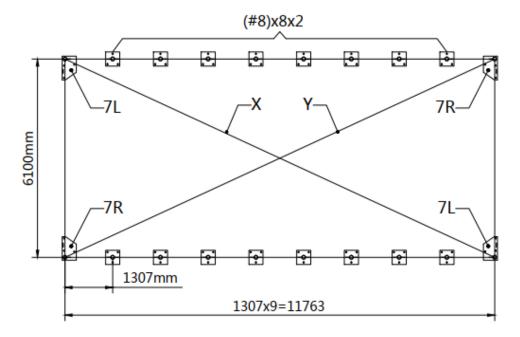
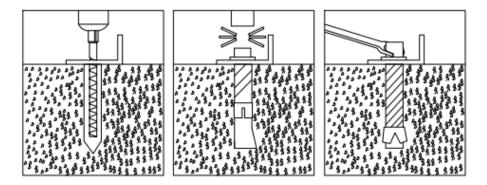


Figure 1

• Installation diagram of expansion bolt.



Step 2: Assemble all trusses

- The shelter includes 10 trusses, connect all tubes with bolt (#12) (refer to figure 2).
- Parts used on this step:
 - (1x10) Peak arch tube (#1)
 - (2x10) Middle bent tube (#2)
 - (2x10) Lower bent tube (#3)
 - (1x10) Ceiling cross bar (#7)
 - (2x10) Hex bolt M10x20 and nut (#13)
 - (8x10) Hex bolt M8x60 and nut (#12)

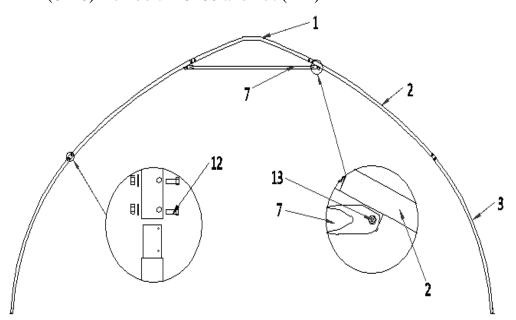


Figure 2

- Lay down all (10) trusses on the ground when the assembly is all completed and before moving to next step, and then wrap (#17) around the sharp points of the joint to avoid friction between the fabric and the interface, resulting in fabric damage (refer to figure 3).
 - (2) Scratch resistant tape (#17)

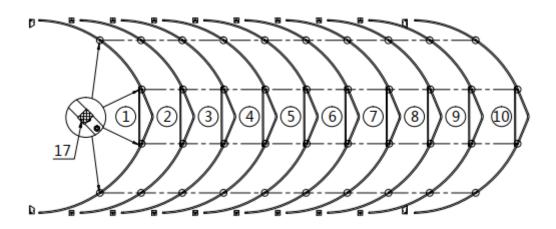


Figure 3

Step 3 : Put up the front (1st) truss

- Recommend a forklift to lift the truss up or a couple of people to pull from different directions. When the truss is up, tie the ropes to the heavy objects to make sure the truss will stay upright and use bolt (#12) to connect the truss to the baseplate on both sides (refer to figure 4).
 - (4) Hex bolt M8x60 and nut (#12)

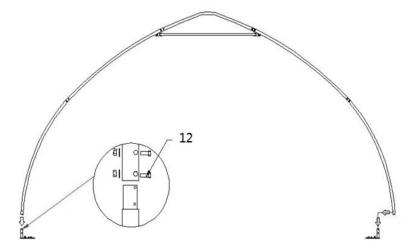


Figure 4

Step 4 : Put up the rest trusses

- Refer to step 3 to put up the rest trusses, connect roof purlin (#4) with bolts (#11), connect the bottom tension tube (#5) with baseplate (#8) (refer to figure 5).
 - (45) Roof purlin (#4)
 - (50) Half round head bolt (#11)
 - (18) Bottom tension tube (#5)
 - (36) Hex bolt M8x60 and nut (#12)
 - (36) Hex bolt M10x20 and nut (#13)

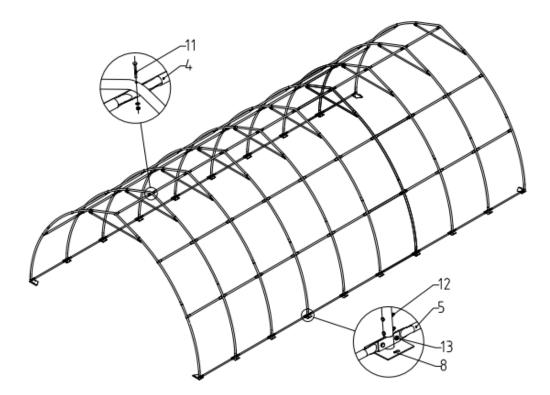


Figure 5

Step 5: Install the diagonal bracing bars (#6)

- Connect diagonal bracing bar (#6) with tube clamp (#9) and bolt (#12A) as figure 6.
- Parts used in this step:
 - (8) Tube clamps (#9)
 - (4) Diagonal bracing bar (#6)
 - (8) Hex bolt (#12A)

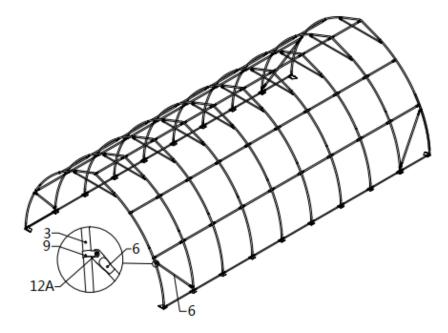


Figure 6

Step 6: Install front and rear fabric panels

• Lift up front fabric panel (#15), starting from the center point of the frame (highest ridge point) use rope (#16) through the grommets to tie the panel to the truss firmly. Repeat the same step to install the rear truss panel (refer to figure 7).

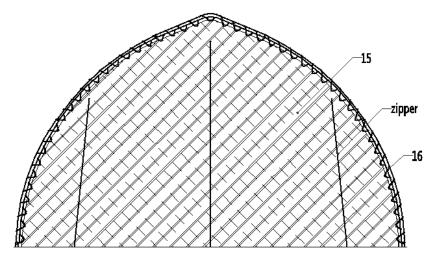


Figure 7

Step 7: Install the top cover (#14)

Do not install the cover during windy weather!

- Unpack the top cover and place it along one of the long sides of the structure.
- With a few people to pull the cover (#14) over the top of the structure, a couple of people standing inside on ladders to push upwards will help to move the cover smooth without any damage (refer to figure 8).

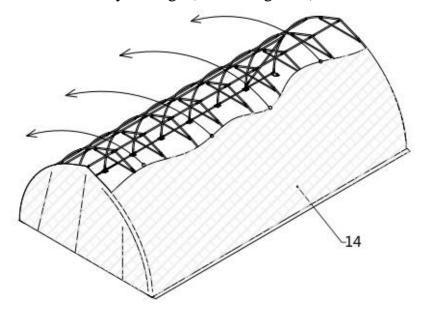


Figure 8

Step 8: Stretch and tighten top cover

- The roof cover must be stretched and tied to the front and rear truss by rope going through the flap grommets on the cover. Start from the top center and go toward both side on each end. Add or cut the rope as needed.
- Pull and stretch the cover enough only to take wrinkles out. Repeat for the rear truss. Do not over stretch as it could rip off the grommets (refer to figure 9).

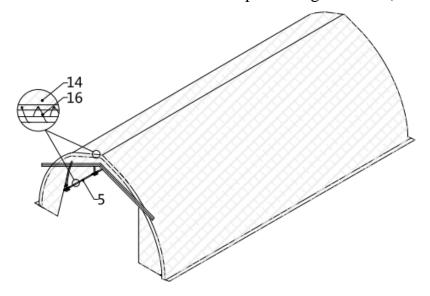


Figure 9

After the Installation

Walk around and inspect the shelter periodically to make sure all components are still firmly secured and the whole shelter is well supported. Check all bolts and nuts as well as all connection points to make sure they are all in good position. Check the base plates, adjust the ropes and tie downs if required and clean the cover regularly.

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

Keep the shelter on a dry ground most of the time. Do not keep the fabric dirt skirt under water all the time, otherwise the fabric will deteriorate.

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.