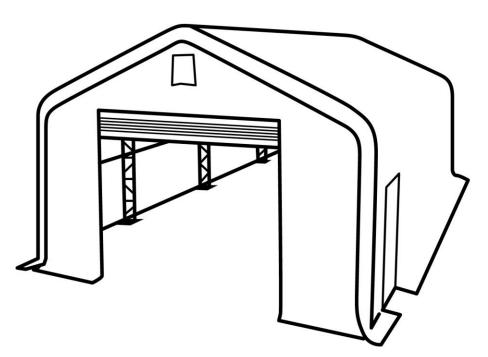


TMG-DT2041-PRO PRODUCT MANUAL v.2023.04.06

20' X 40' DUAL TRUSS PRO SERIES STORAGE SHELTER







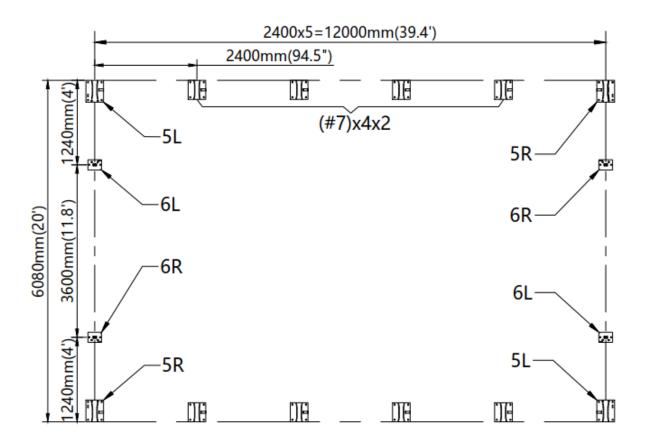
- · Please read and understand the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly
- Do not return the product to dealer. They are not equipped to handle your requests.

Missing parts or have questions on assembly? Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

MAIN SPECIFICATIONS :

- Assembly size : W6 x L12 x H4.5 (m) / 19.7 x 39.4 x 14.8 (ft)
- Ridge height : 4.5m / 14.8 ft
- Front and back door : 3.6 x 2.9 (m) / 11.8 x 9.5 (ft)
- Shoulder height : 3m / 9.9ft

CONCRETE FOUNDATION SIZE SEE BELOW FIGURE.



PRIOR TO ASSEMBLY

Please go through the whole instruction manual completely. 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, cage, and safety operation

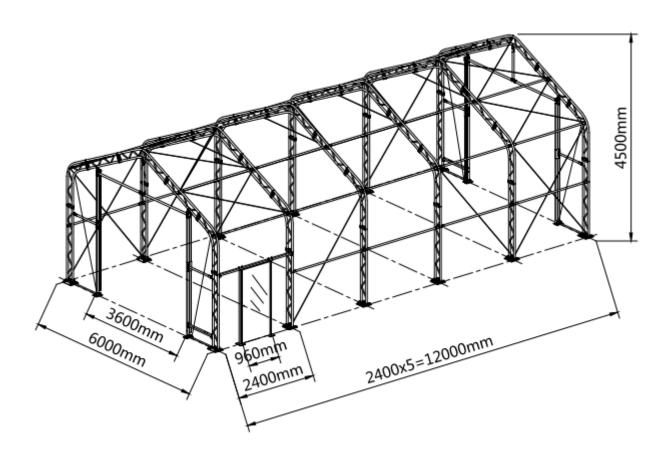
Check all components and parts before installation. All parts are marked with a part number, please refer to the parts list to ensure you have all parts. Choose a day with low or no wind to install, it is hard to assemble with heavy wind. Do not make any alterations to the structure. Do not hang any weight 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 use heavy duty duct tapes to tape the tube connection joint spots to protect the cover from damage and worn. It will help to extend the cover life span.

Check the parts list below to make sure all parts are received prior to assembly.

FRAME STRUCTURE DIAGRAM.



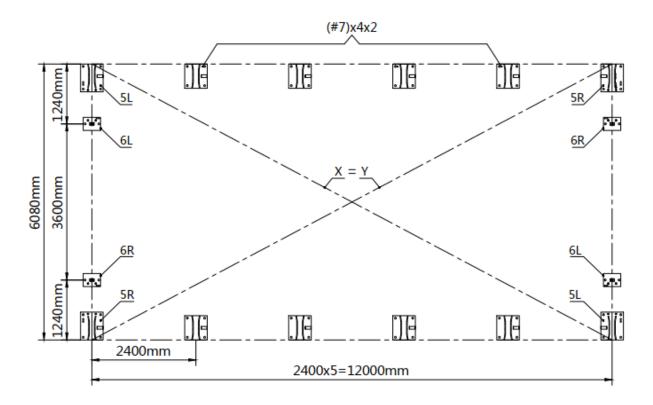
| | TMG-DT2031-PRO PART LIST | | | | | | |
|---------------|--------------------------|---|-------------|---|--|--|--|
| PARTS CODE | GRAPHICAL | LENGTH | QTY | | | | |
| 1 | | Peak arch tube (for middle trusses) | L2020mm | 4 | | | |
| 1A | | Peak arch tube (for front and rear truss) | L2020mm | 2 | | | |
| 2 | | Upper rafter tube (for middle trusses) | L 1495mm | 8 | | | |
| 2A | | Upper rafter tube (for front and rear truss) | L1495mm | 4 | | | |
| 3 | | Shoulder tube (for middle trusses) | 8 | | | | |
| 3A | | Shoulder tube (front and rear trusses) | 4 | | | | |
| 4 | | Sidewall tube (middle trusses) | L2163mm | 7 | | | |
| 4A | | Sidewall tube (front and rear left truss) | L2163mm | 2 | | | |
| 4B | | Sidewall tube (rear right truss) | L2163mm | 1 | | | |
| 4C | | Sidewall tube (front right truss) | L2163mm | 1 | | | |
| 4D | | Sidewall tube (second right truss) | L2163mm | 1 | | | |
| 5 | | Roof purlin (horizontal tube) | Roof purlin | | | | |
| 5L | | Baseplate for front and rear truss left corners | L320xW260mm | 2 | | | |
| 5R | | Baseplate for front and rear truss right corners | L320xW260mm | 2 | | | |
| 6L | | Left baseplate of front door frame | | 2 | | | |

| 6R | | Right baseplate of front door frame | L200xW150mm | 2 |
|-----|---|--|-------------------|----|
| 7 | | Baseplates for middle truss | L280xW260mm | 8 |
| 7A | 18 | Ratchets | L155mm | 37 |
| 7B | | Expansion bolts | φ 16x150mm | 60 |
| 8 | | Ceiling cross bar (front and rear truss) | L1748mm | 2 |
| 9 | ۵ ۵ ۵ | Ceiling cross bar (front and rear truss) | L1898mm | 2 |
| 9L | ··· · · | Front and rear vertical door rail (left side upper part) | L1465mm | 2 |
| 9R | ··· ·································· | Front and rear vertical door rail (right side upper part) | L1465mm | 2 |
| 9A | | Side door left tube | L2027mm | 1 |
| 9B | | Side door right tube | L2027mm | 1 |
| 9C | <u> </u> | Side door | L2005xW925mm | 1 |
| 10 | | Door center vertical supporting rod for cross beam | L930mm | 2 |
| 10L | | Front and rear vertical door rail (left side lower part) | L2015mm | 2 |
| 10R | | Front and rear vertical door rail (right side lower part) | L2015mm | 2 |
| 11 | <u>}</u> | Door frame horizontal tube (front and rear truss) | L940mm | 4 |
| 11C | | Side door upper tube | L2328mm | 1 |
| 12 | | Bottom tension bar (front and rear truss) | L930mm | 4 |
| 13 | þp | Door hand winch crossing tube | L944mm | 2 |
| 14 | 0 0 | Top cover tension tube (for both bottom sides) | L1993mm | 11 |

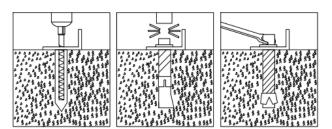
| 14A | ٥ | Top cover tension tube (for both bottom sides) | | 2 |
|-----|--|--|-------------------|----|
| 14B | | Top cover tension tube | L2450mm | 1 |
| 15 | · | Roll up door dropping tubes (to connect #16) | L1856mm | 10 |
| 16 | | Roll up door dropping tubes (to connect #15) | L1859mm | 10 |
| 17 | €- <u></u> , | Sidewall frame steel tension cables | φ 6x3700mm | 12 |
| 18 | (| Ridge steel tension cables (front and rear trusses) | φ 6x2800mm | 16 |
| 19 | ¢ | Middle truss crossing steel tension cables | φ 6x2m | 4 |
| 20 | · | Front and rear truss left and right steel cables | φ 6x3m | 4 |
| 21 | | Tie down straps (for #7A) | W38xL800mm | 37 |
| 22 | | Cable connection plate | 91mm | 24 |
| 22A | | Pressing plate | L2m | 6 |
| 22B | | Pressing plate | L1m | 5 |
| 23 | | Roll up door hand winch | | 2 |
| 23A | | Wire rope for front and rear door hand winch | L10m | 2 |
| 23B | | Right pulley system for front and rear doors | L150mm | 2 |
| 23C | | Left pulley system for front and rear doors | L150mm | 2 |
| 23D | Contraction of the second seco | Clip | | 6 |
| 24 | | Front and rear vertical door rail connection plate | L240mm | 4 |
| 24A | a a a a a a a a a a a a a a a a a a a | Front and rear vertical door rail end plate (floatable to keep door rail straight) | L220mm | 4 |

| 25 | | Tension tube end water plug | φ 32 | 14 |
|-----|---------|--|-----------------|-----|
| 26 | | Tube clamps | φ 48 | 6 |
| 27 | | Plastic hose (in grooves at both ends of #33) | φ 25xL4m | 7 |
| 27A | | Connector (for connection #27) | φ25 | 6 |
| 28 | | Self locking bolt and nuts | M10x70mm | 41 |
| 29 | O C C B | Strengthened bolt and nuts | M12x30mm | 156 |
| 30 | ED-DD | Hex bolt and nuts | M10x50mm | 10 |
| 31 | CED DE | Hex bolt and nuts | M10x70mm | 50 |
| 32 | | Braided rope (tie to front and back doors) | L100m | 1 |
| 33 | | Roof fabric tarp cover | L13.3xW10.2m | 1 |
| 34 | | Front and rear truss cover panel | L6xW4.7m | 2 |
| 35 | | Front and rear roll up door cover panel | L3.55xW3.46m | 2 |
| 36 | | Front and rear fabric tarp secure pin | 200mm | 2 |
| 37 | | Tapping screw | #12x25mm | 76 |
| 38 | Ô | Scratch resistant tape | 10m | 2 |

STEP 1 : BASE PLATE POSITIONING AND INSTALLATION.



• Installation diagram of expansion bolt.

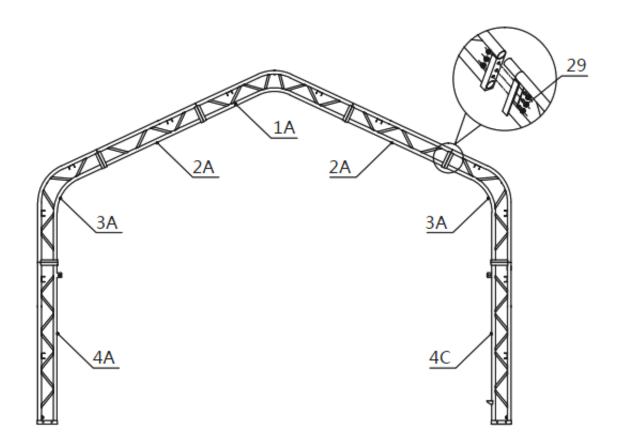


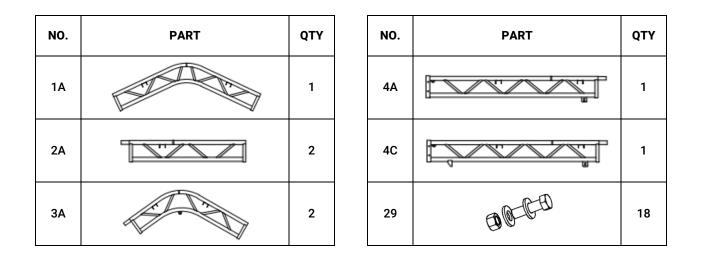
| NO. | PART | QTY |
|-----|------|-----|
| 5L | | 2 |
| 5R | | 2 |
| 6L | | 2 |

| NO. | PART | QTY |
|-----|------|-----|
| 6R | | 2 |
| 7 | | 8 |
| 7B | | 56 |

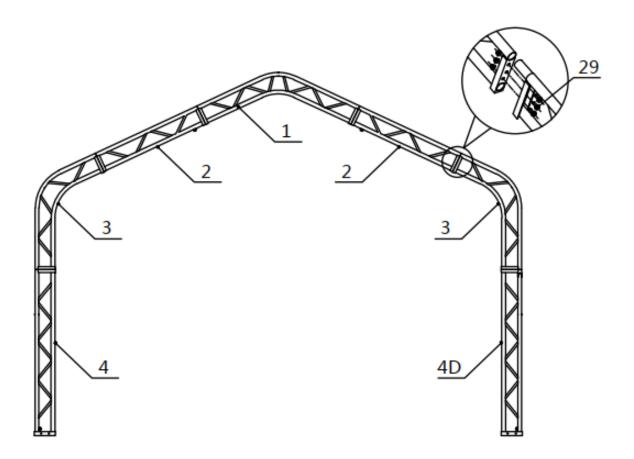
STEP 2 : ASSEMBLE ALL TRUSSES.

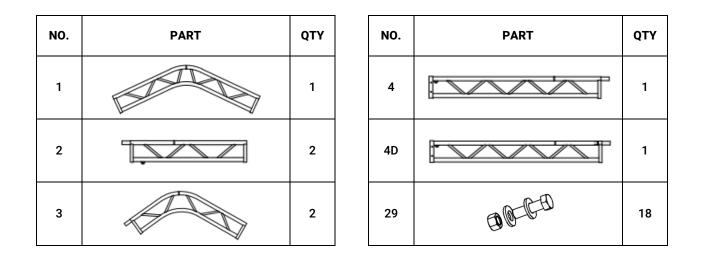
• Front truss.



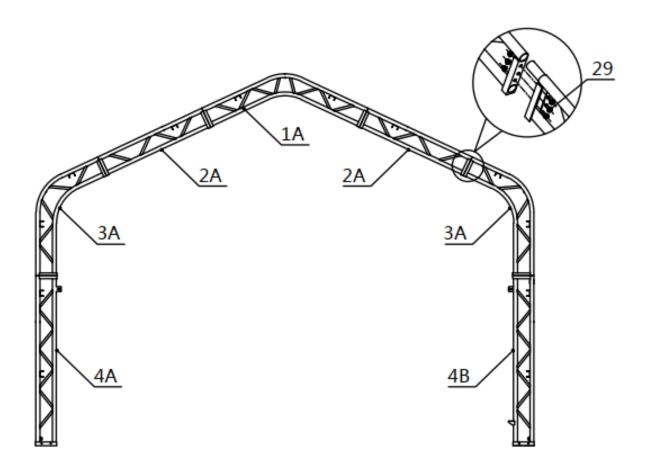


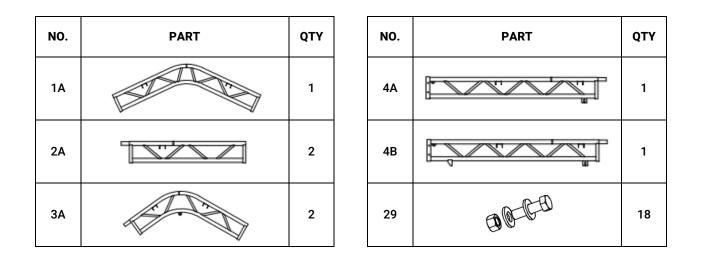
• Second truss.



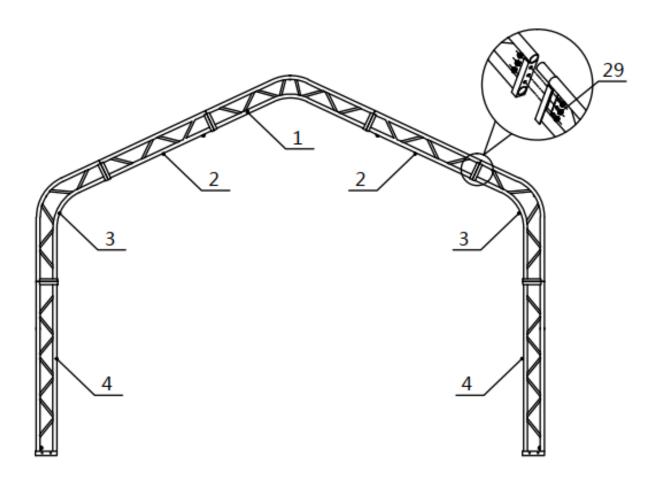


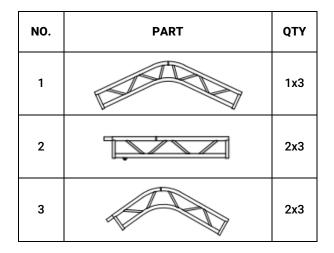
• Rear truss.

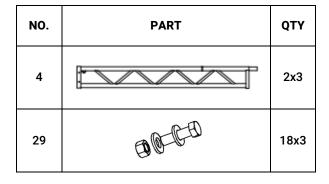




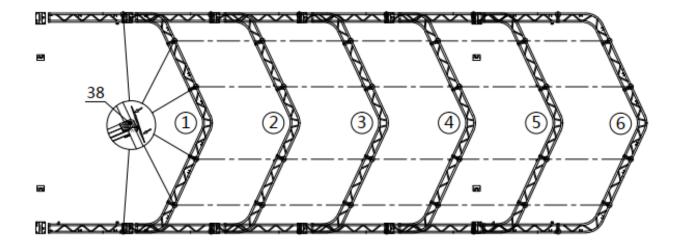
• The rest of the trusses. (3 trusses)





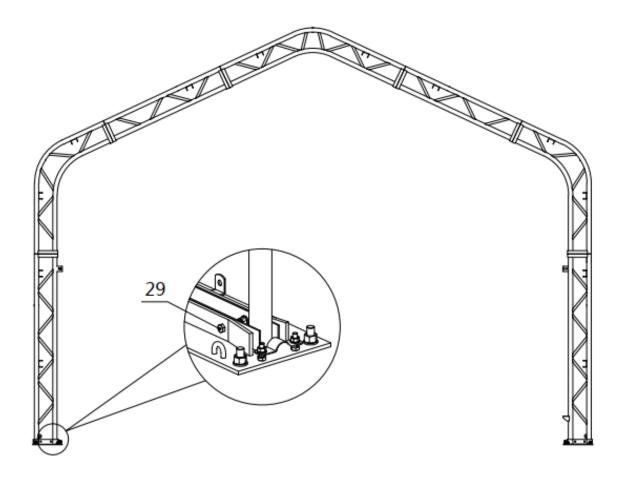


• Lay down all (6) trusses on the ground when the assembly is all completed and before moving to next step, and then wrap (#38) around the sharp points of the joint to avoid friction between the fabric and the interface, resulting in fabric damage.



| NO. | PART | QTY |
|-----|------|-----|
| 38 | | 2 |

STEP 3 : PUT UP THE FRONT TRUSS. (IT IS SUGGESTED TO USE CRANE FOR HOISTING)

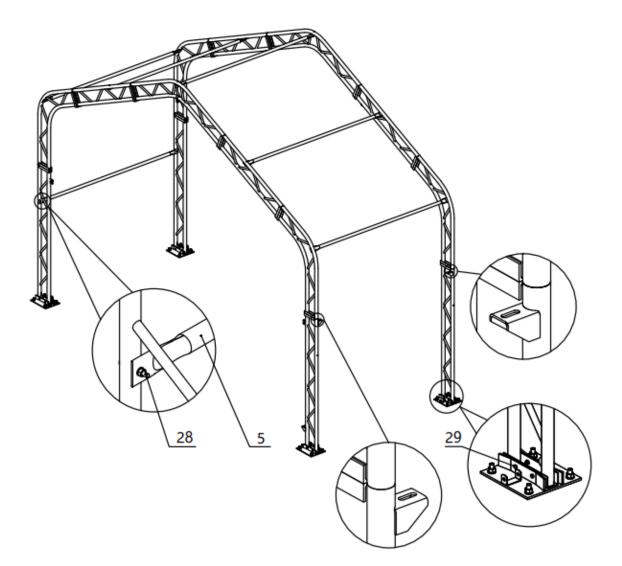


| NO. | PART | QTY |
|-----|--------|-----|
| 29 | CO-C-D | 8 |

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STEP 4 : PUT UP THE REST TRUSSES.

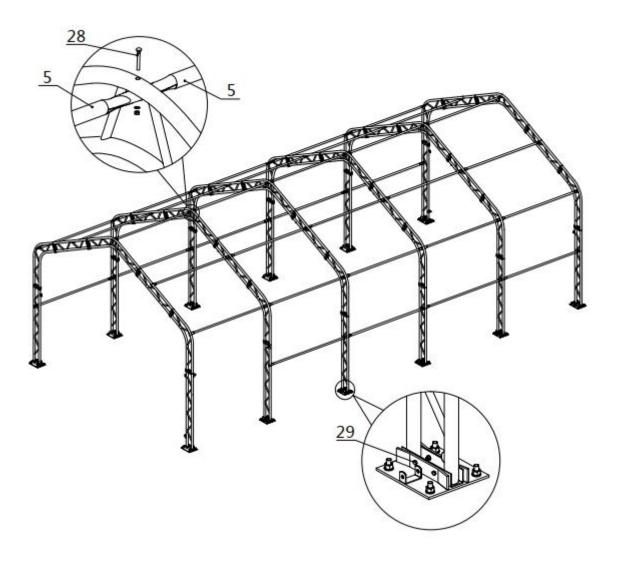
• Refer to step 3 to put up the rest trusses, connect all purlins (#5) with bolt (#28) and secure all bolts firmly on each span before going to next truss.

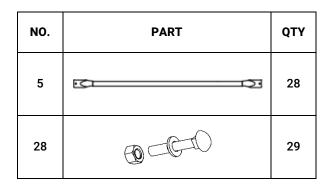


| NO. | PART | QTY |
|-----|------|-----|
| 5 | | 6 |
| 28 | | 12 |

| NO. | PART | QTY |
|-----|----------|-----|
| 29 | O OF CEE | 8 |

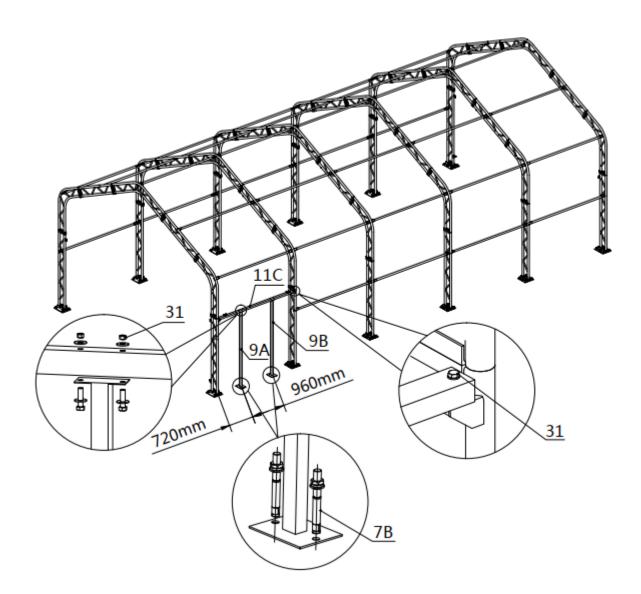
• Repeat above step to put up all other trusses (from 3rd to 6th truss), and connect all purlins.

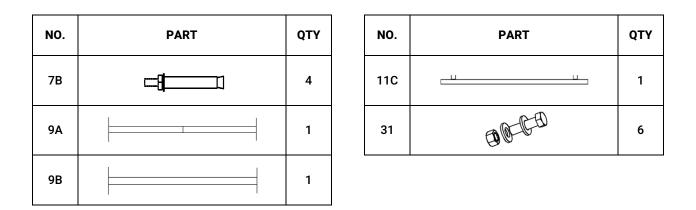




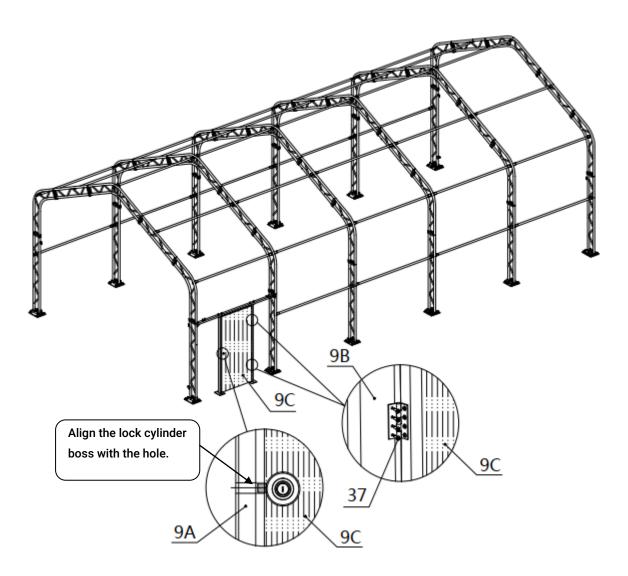
| NO. | PART | QTY |
|-----|----------|-----|
| 29 | O OF CEE | 32 |

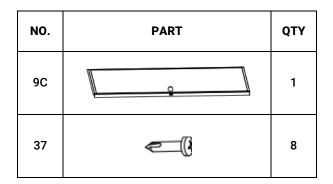
• Install the side door frame.



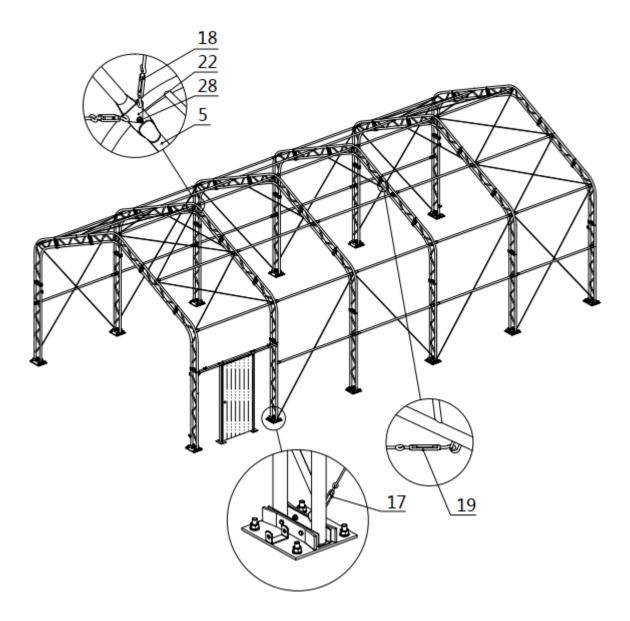


• Install the side door.



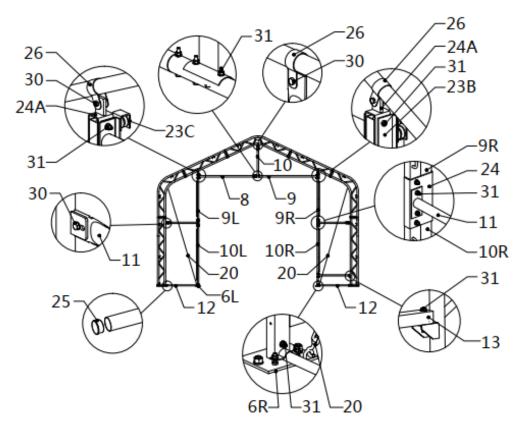


• Tension cable installation . All cables are diagonally installed on each side of the interval.



| NO. | PART | QTY | NO. | PART | QTY |
|-----|----------------|-----|-----|----------------|-----|
| 17 | (, | 12 | 19 | (, | 4 |
| 18 | (, | 16 | 22 | | 24 |

STEP 5 : FRONT AND REAR TRUSSES TO COMPLETE. (2 TRUSSES)

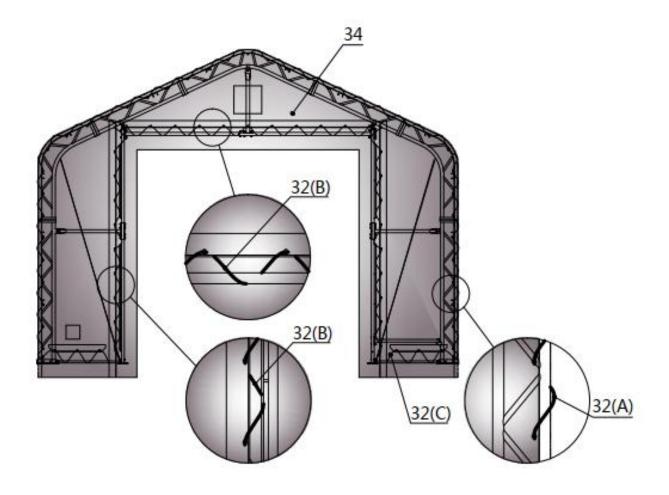


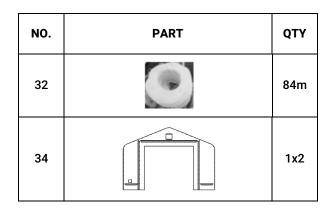
| NO. | PART | QTY | NO. | PART | QTY |
|-----|------------|-----|-----|---|------|
| 8 | a a | 1x2 | 20 | (; | 2x2 |
| 9 | 0 ø ø | 1x2 | 23B | Ø. | 1x2 |
| 9L | ··· · · , | 1x2 | 23C | Ø. | 1x2 |
| 9R | ··· | 1x2 | 24 | | 2x2 |
| 10L | • | 1x2 | 24A | A a a a a a a a a a a a a a a a a a a a | 2x2 |
| 10R | • • • | 1x2 | 25 | | 4x2 |
| 10 | | 1x2 | 26 | | 3x2 |
| 11 | <u>≥</u> | 2x2 | 30 | ac-ca | 5x2 |
| 12 | | 2x2 | 31 | OCTO | 20x2 |
| 13 | ţp | 1x2 | | | |

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STEP 6 : INSTALL FRONT AND REAR COVER PANELS.

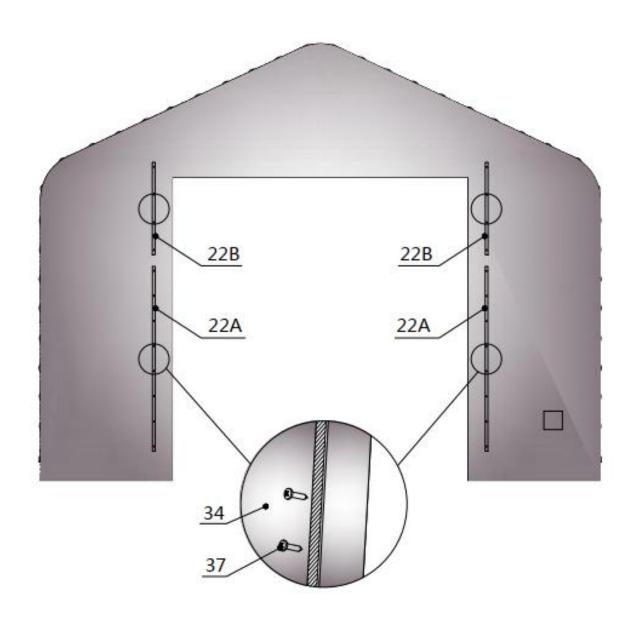
• Lift up (#34) cover panels, starting from the center point of the frame (highest ridge point) use ropes (#32) through the grommets to tie the panel to the truss firmly. All grommets need to be tied to the frame as shown.

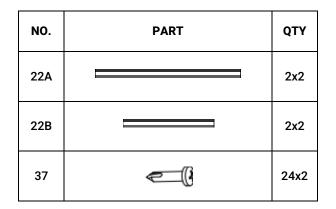




| ROPE SHEAR SIZE | | | | |
|-----------------|-----|-----|--|--|
| 32 | | QTY | | |
| А | 20m | 1x2 | | |
| В | 6m | 3x2 | | |
| С | 2m | 2x2 | | |

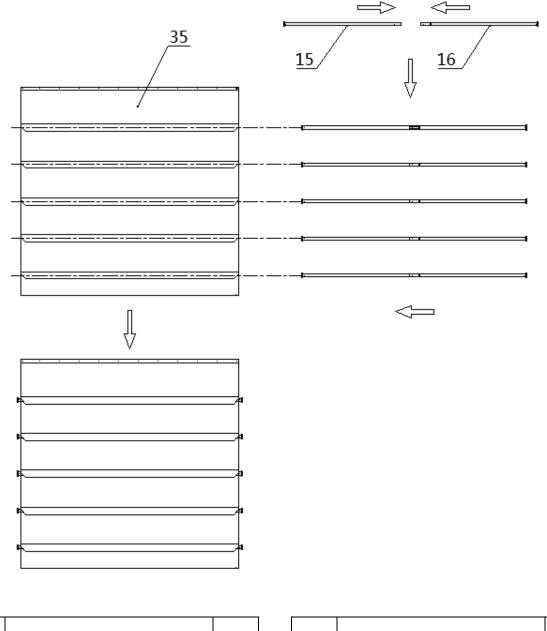
• Install the front and rear door pressing plate.





STEP 7 : INSTALL MECHANICAL ROLL UP DOORS.

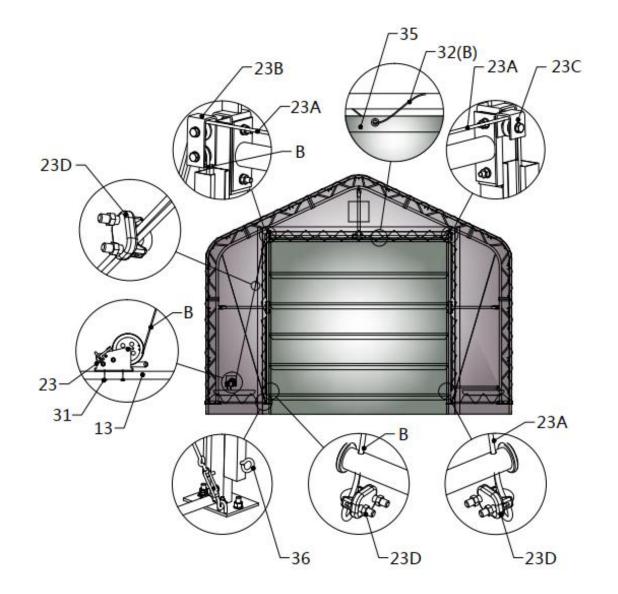
• Door curtain installation.

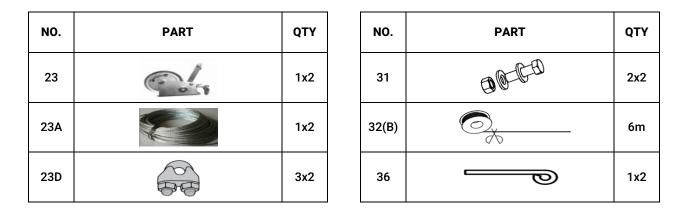


| NO. | PART | QTY |
|-----|---------|-----|
| 15 | | 5x2 |
| 16 | | 5x2 |

| NO. | PART | QTY |
|-----|------|-----|
| 35 | | 1x2 |

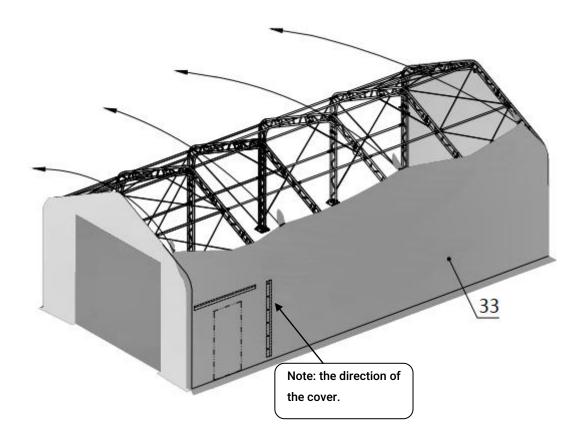
- Front and rear door installation, please look at the door from inside.
- The hand winch (#23) comes with a shorter cable, we call it cable (#B).

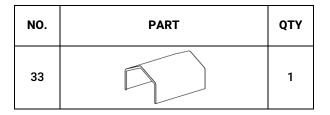




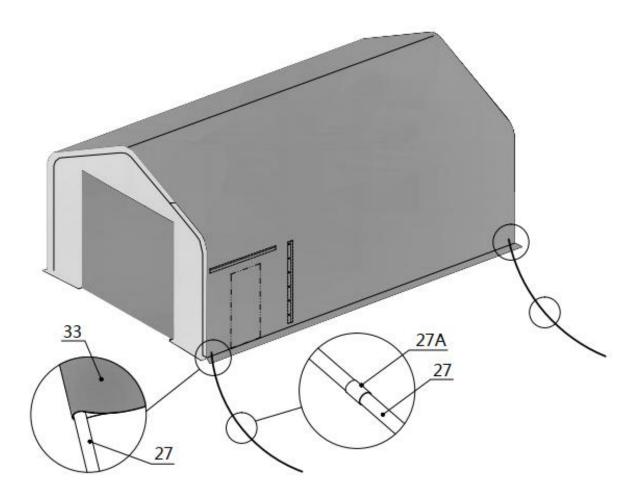
STEP 8 : INSTALL ROOF COVER.

- NOTE: The cover must be installed on a windless day. DO NOT attempt to install the cover during windy conditions.
- When you are ready to install the roof cover, unpack the cover and position it parallel to the building frame on one side.
- The cover must be pulled over the top of the truss frame without being snagged or stressed on any frame members.
- Use multiple ropes over the top of the frame as shown. Having a couple of people inside of the structure with a ladder to assist to push upwards would help the cover to be pulled over smoothly without any damage.



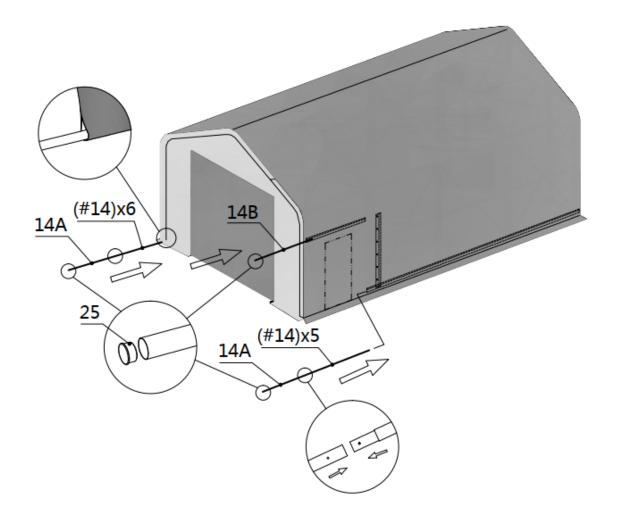


• After the cover is installed on the roof, insert the plastic pipe (#27) slowly into the grooves on two ends of the cover (not two sides).



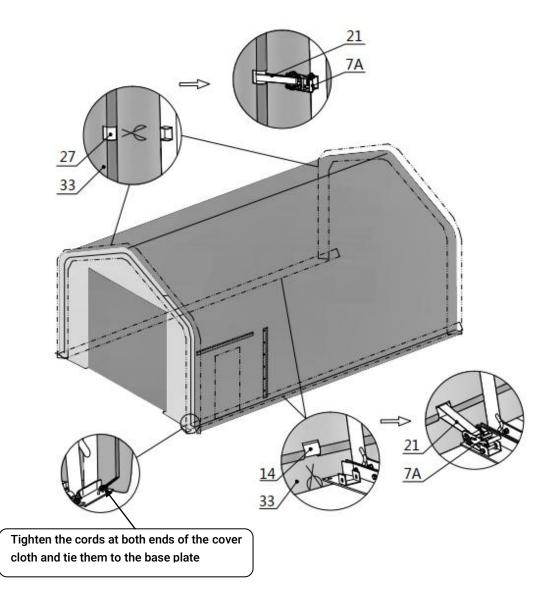
| NO. | PART | QTY |
|-----|------|-----|
| 27 | | 7 |
| 27A | | 6 |

• Then insert tension tubes (#14,#14A.#14B) in the groove on both sides of the cover bottom.



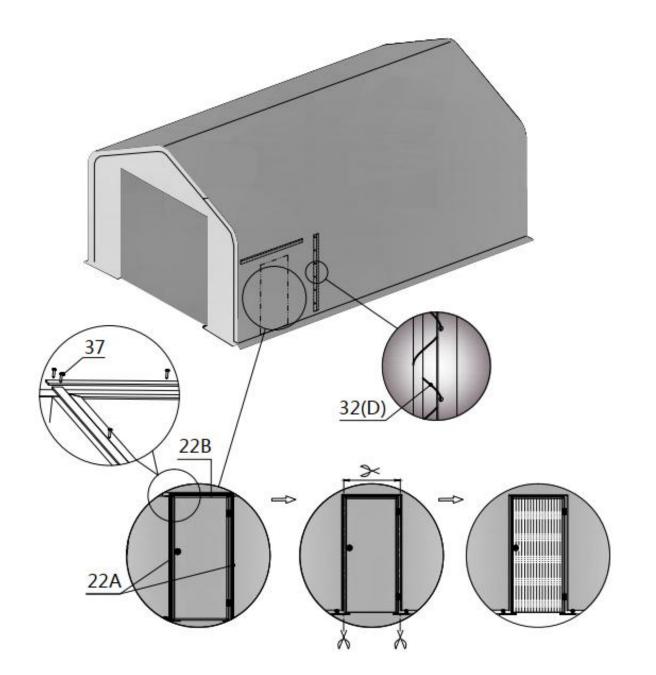
| NO. | PART | QTY | NO. | PART | QTY |
|-----|------|-----|-----|------|-----|
| 14 | 0 0 | 11 | 14B | | 1 |
| 14A | ٥ | 2 | 25 | | 6 |

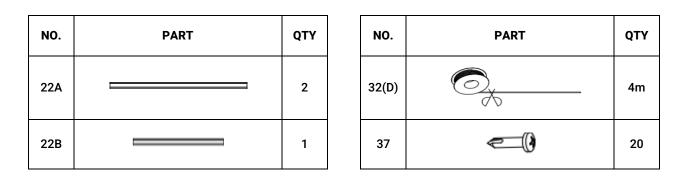
- Stretch and adjust the cover from left and right, back and forth, to make sure it is square and centered. Cut the grooves from inner side facing to the ratchet hardware (#7A), and add tie down straps (#21) to pull the tension tube and tie the strap to the base.
- Evenly adjust all ratchets on both sides to take wrinkles out and make the cover flat and smooth.



| NO. | PART | QTY |
|-----|------|-----|
| 7A | | 37 |
| 21 | | 37 |

• Complete side door installation.





AFTER THE INSTALLATION

Walk around and inspect the building periodically to make sure all components are still firmly secured and the whole building 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 collapses the building or reduce the life span eventually.

Keep the building 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 push from the sides toward inside will make the building collapsed at some point.