# Standard Guard Tower

# Installation Instructions



**Perimeter Security Products** 

**DIVISION OF SPIRIT OF AMERICA CORPORATION** 

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Note: Read the entire set of instructions prior to beginning the installation of the Standard Guard Tower.

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# **Components**

The following items are shipped inside of the Tricon Conex Boxes. Items packaged with the Standard Guard Tower include:

- 1 Tricon Conex Box Shipping Container
- 2. 2 Floor Panels (Front and Rear)
- 3. 2 -4' Wall Sections
- 4. 2 4' Wall Sections Short
- 5. 2 Joist Stringer
- 6. 10 Treated 4 x 4 x 96 (4 Posts & 6 Rafters)
- 7. 1 Treated 4 x 4 x 83 1/4
- 8. 4 Plywood Roof Panels 48" x 48"
- 9. 1 Plywood Roof Panels 24" x 96" with Hinged Access Door
- 10. 4 Anchor Bracket Corner
- 11. 4 Eye Bolts
- 12. 4 Anchor Cable Assemblies
- 13. 1 Sheet of Rubber Roofing
- 14. Hardware Misc
- 15. Tools Misc



### Introduction

The Standard Guard Tower includes one Guard Tower and one Tricon Conex Box.

The Guard Tower itself is manufactured with four separate wall units that allow quick and easy assembly on top of the standard Tricon Conex Box. Once placed on the Conex Box, the Standard Guard Tower will provide an eye level of approximately 13 ½ feet, giving the guards a greater view of the perimeter or area of threat. Once in position, the walls are filled from the top using sand as ballast. The sand filled walls provide the guards inside with 360 degrees of protection from 9mm, 5.56, and 7.62 threats. 12" dumps are provided for easy removal of the ballast allowing the Standard Guard Tower to be repositioned as needed.

The overhead cover is 3/4" plywood. Lights, sensors, and antenna can be installed if desired. Access onto the cover can be reached via a hatch type access panel that is pre-installed for convenience. The Standard Guard Tower eliminates the time and the mess associated with using sandbags. This product is a recoverable asset that can be broken down and stored inside the Conex Box base.

# **Preparation**

Each Standard Guard Tower has a base consisting of a Tricon Conex shipping container. Each unit will have a unique serial.

It is suggested that the contents of the container be removed, set aside, and readied for assembly. Verify that all components are accounted for, especially if the tower has been assembled and disassembled in the past.

Be sure to close the doors prior to assembly.

The footprint of the Tricon Conex Boxes is about 7' x 8'. Clear and level the ground where the box will be placed. The ground should be firm. Position the box in the desired location. The doors should be located towards the non-threat side.



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# **Floor Panel Installation**

The floor of the Standard Guard Tower is made by installing two preassembled 48" x 77 ½" panels.

The front strip is thinner than the back strip.

The panels have corner brackets on the outer corners to hold the wall panels in place. The front panel does NOT have a board under the brackets and does have a lip on the seam edge that will support the rear panel.



The rear floor panel has a wood strip under the plywood below the bracket and does not have a lipped edge on the seam side.

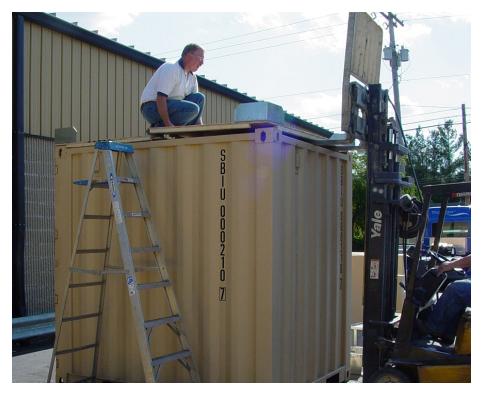


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Place the front floor panels on as shown with the front and sides of the panel lined up with the lifting corner blocks on the shipping container.



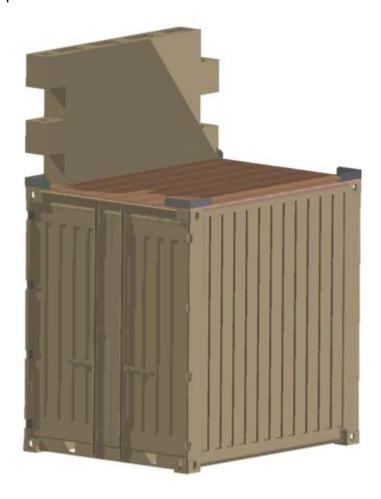
Position the rear floor panel such that it is snug and flush on the sides. Fasten the rear floor to the front floor panel down the seam using screws.



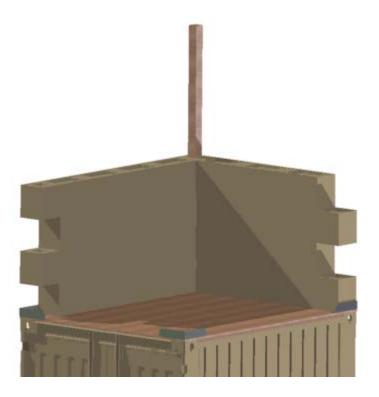
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# **Wall Assembly**

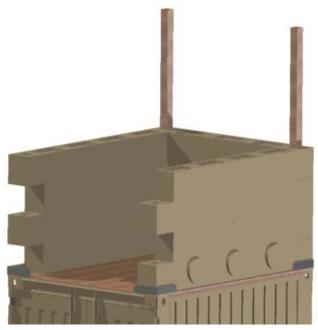
There are four wall sections on the Standard Guard Tower, two longer and two shorter. The two longer sections are the ends and the two shorter sections make up the front and rear walls. Place one long wall section on the left side with the fill holes up and the dumps (circular shaped caps) located toward the outside and pushed back as shown.



Add one of the shorter wall sections to the back and add a 4" x 4" x 96" (8') post thru the holes of both wall sections locking them together as shown in the following image.



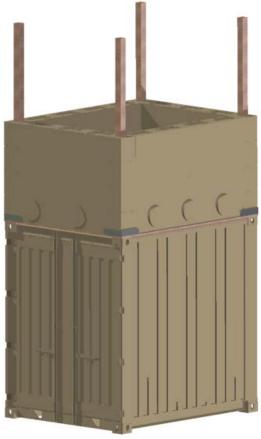
Continue by adding another long wall segment to the right and a second post in the back. These segments should be pretty easy to install.



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The last wall segment, a short one, will take lifting the fronts of the first and third wall sections, a little jogging of the first, third, and last wall sections to get the fourth wall section locked into position.



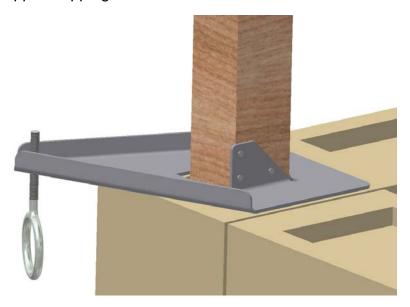


When the four walls are in place surrounded by the four corner brackets, add the last two 4" x 4" posts tying all of the wall segments together.

# **Tie Down Cables and Brackets**

To achieve the wind and seismic ratings, the guard tower must be cabled to the container below. This is done using a corner bracket on each corner as shown.

The brackets are slipped over the posts and attached to the post with nails. Add the eye bolt and nut to each bracket. Each eye bolt then gets a cable and two cable clamps. Thread the cable through the eye bolt and down through holes in the upper shipping container corner blocks.



Double the cable ends near the eye bolt, take out the slack, snug, and fasten as shown. With the cable clamps in place, tighten the nut on the eye bolt to remove any play in the cables.



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# **Roof Assembly**

The next assembly is the roof. This will entail adding the joist stringer assemblies, rafters, sheeting, and rubber roof material.

# **Joist Stringer Assemblies**

There are two joist stringer assemblies with two post brackets and seven rafter brackets already attached. The bracket orientations are symmetrical on these joist stringers.



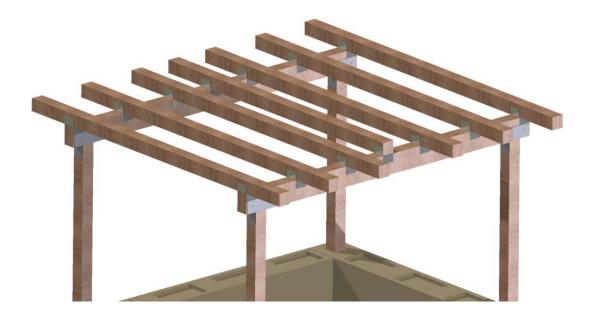
Fasten both joist stringers to the posts. The orientation will be from front to back as shown.



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### **Rafter Installation**

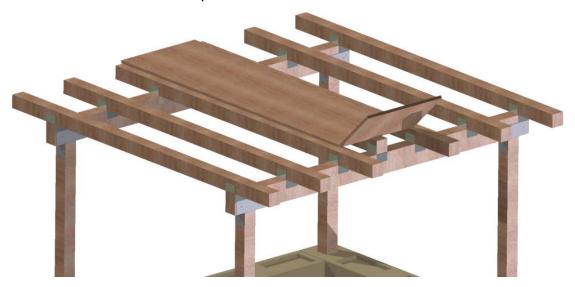
Install the remaining six 4" x 4" x 8' timbers and the shorter 4" x 4" as rafters as shown. The rafters need to extend past the joist stringer assemblies on the ends by **12 3/4".** The shorter 4" x 4" will be flush with the joist at one end. This is where the access panel will be located. Orient the shorter 4" x 4" to give the best access to the roof. In these instructions it will be shown to the right.



# **Roof Sheeting Installation**

There are five roof panels on the Standard Guard Tower. There are four 4' x 4' sheets of 3/4" plywood and one hinged panel 24" wide and 8' long including the 14 1/2" hinged access panel.

The sheeting will stick out about a foot on the front and back of the rafters and will be flush with the rafters on the sides. It is suggested to start with the 24" x 96" panel and locate it as shown centered on the rafters flush with the ends of the rafters. Make sure that the panel has the hinged end located where the middle rafter "falls short". Fasten in place to the rafters.



Add two of the 48" x 48" sheets as shown and fasten to the rafters.

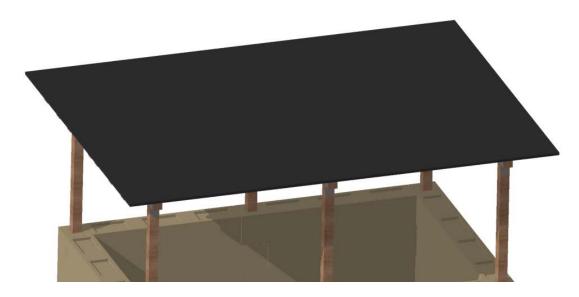


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Add the final two 48" x 48" sheets as shown and fasten to the rafters.



Stretch the rubber roof material over the top, pulling it down and fasten it on the underside of the roof panels. Using a sharp knife slit the material at the side seams of the access panel allowing it to be raised up.



# **Ballast/Fill Material**

The wall sections need to be filled with ballast, which will typically be sand. To add the fill material, remove the caps from the tops of the wall sections and fill with sand or similar fill material. Make sure that the fill material is worked into all corners to assure full ballistic protection. Once the ballast material is in place, the walls provide protection from weapons up to 7.62mm including armor piercing ammo.

The ballast material also makes the guard tower more rigid and able to withstand wind and seismic forces.

One way to speed up the filling of the wall sections is to take a piece of plywood and notch one side to fit the openings. With this tipped up and held in place a loader can slowly pour the fill material into the wall sections and not get a lot of material inside the guard tower.



# **Ladder Assembly**

The ladder kit is a standard part of the Standard Guard Tower package unless the optional stair kit was purchased. It may be desired to assemble and install the ladder kit once the guard tower walls are in place to give easier access for the remaining guard tower assembly.

Lay the ladder kit components out and bolt together using the hardware and tools included.



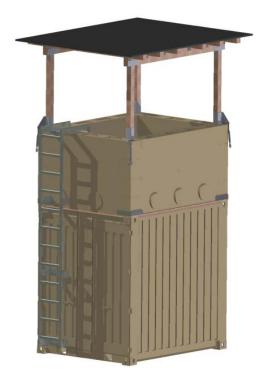


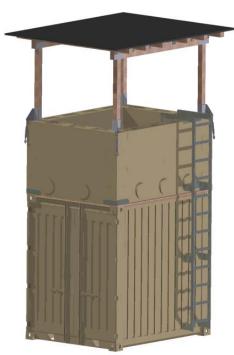
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When the ladder kit is assembled, it can be put in place. The following photo shows a ladder kit being installed during the assembly of a Standard Guard Tower.

It is suggested to install the ladder in front of the left door of the container or to one side or the other. If it is put in front of the left door it will still give access to the container through the right door which opens first. The finished assembly will look something like the image below.







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When the ladder is in place, drill two holes through the Tricon Conex shipping container. The holes may utilize the three slots in the ladder bracket at the bottom of the ladder or you may also drill through that bracket and the container if needed.



Bolt the bottom of the ladder in place to the container using two 5/16" bolts, four flat washers (one on each side of the assembly), and a pair of nuts. This will make the ladder more stable during use.

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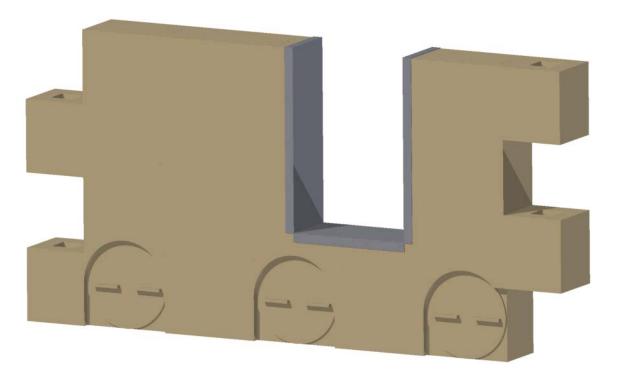
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# **Replacement and Accessory Parts**

Creative Building Products can provide replacement parts for the Standard Guard Tower if needed.

Creative Building Products also offers optional items for the Standard Guard Tower as listed below:

A. Walk Through Wall Section – may be used in conjunction with the optional Stairs or as an opening to make the ladder easier to use.



B. Stair Kit – replaces the standard ladder kit. It is used with the Walk Through Wall Section. The Stair Kit allows easier access to the guard tower.



C. Standard Guard Tower Cover – adds protection from the environment.

Please contact Creative Building Products with the contact information above for pricing on these items.

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# **Additional Comments**

Congratulations on the completion of the installation of your Standard Guard Tower. Your troops, equipment, or supplies are now able to be better protected. Through this installation manual we have provided a more or less step by step method to complete the installation. Understanding these methods is very important for the quickest and most functional implementation.

If you have specific questions regarding the installation of the Standard Guard Tower, you may contact Creative Building Products at the following:

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