# **STRUCTURE**WORKS<sup>®</sup>

# **Umbra SSC Installation Guide**

Read this guide and review shop drawings and notes before beginning installation.

All packages should be opened and inspected for hidden damage upon receipt. <u>Any missing or</u> <u>damaged components should be noted on the delivery receipt with the carrier before accepting the</u> <u>shipment.</u> All items should be repackaged and stored where protected from moisture, dirt, and excessive heat. Do not wrap material so that heat or moisture can become trapped. Ensure that items are level, fully supported, and have airflow between parts. Damage from improper storage is not considered shipping damage and is not covered by product warranties. Handle materials so as to protect materials, coatings, fabric and finishes during transportation and installation to prevent damage or staining.

It is the responsibility of the installer to meet or exceed all code and safety requirements, and to obtain all required building permits. These instructions are only a guide, and may not address every circumstance. The installer should determine and implement appropriate installation techniques for each situation. Structureworks shall not be held liable for improper or unsafe installations.

# **Recommended Tools**

The tools required for installation will vary depending on structure configuration and the hardware used. Review shop drawings to confirm drill bit sizes, socket sizes, and other project specific tools.

- Pencil
- 4' Level
- Ladder (2)
- Framing Square
- Drill

- Caulk Gun
- Impact Driver w/ Phillips Bit
- Adjustable Wrench
- Tape Measure
- Compressed Air

- Hole-Cleaning Brush
- Needle Nose Pliers
- Crane/Lifting Equipment
- Socket Wrench w/ Sockets

# **Required Materials**

Depending on the configuration of the structure, additional materials such as attachment hardware, silicone caulk, and anchoring epoxy may be needed. Review shop drawings for project specific requirements.

# **Cleaning and Maintenance**

Use a combination of Simple Green All-Purpose Cleaner and hot water with a soft bristle brush. Clean after installation and on an annual basis. For more difficult to clean marks, a Mr. Clean Magic Eraser can be used. Structural attachments should be inspected annually.

#### **Installation Sequence**

This installation guide provides a step by step sequence for the installation of the structure. This guide covers only the structure, separate installation guides are provided for accessories and other products used in the installation of the structure. Ensure that you have all required installation guides before beginning the installation.

All structures are made to order and are provided with shop drawings. Shop drawings may contain additional information, details, or job specific instructions. Shop drawings take precedence over this installation guide.

#### Layout

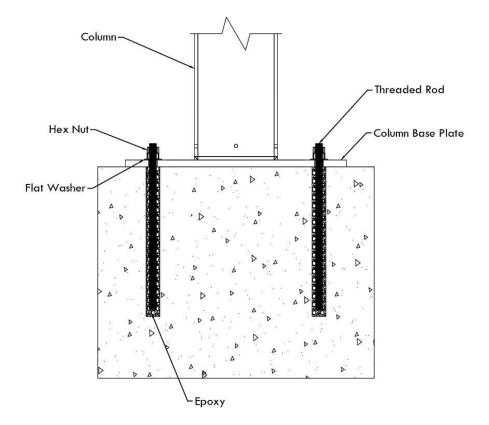
Layout the columns according to the shop drawings. Columns must be located precisely and variations in the height of the mounting surface must be accounted for by leveling each column. The structure will not install correctly if the columns are installed out of square or out of level from one another.

+		+
	Center to Center	
	Column Dimension	7

#### **Prepare for Column Installation**

Drill the holes for the threaded rods and epoxy. The holes should be sized larger than the threaded rod diameter per the epoxy manufacturer's instructions. Clean the hole thoroughly.

Fill the holes with epoxy per the manufacturer's instructions. Insert the threaded rods in a twisting motion to ensure epoxy flows into the threads of the rods. Ensure that the rods are inserted to the proper depth and are plumb.



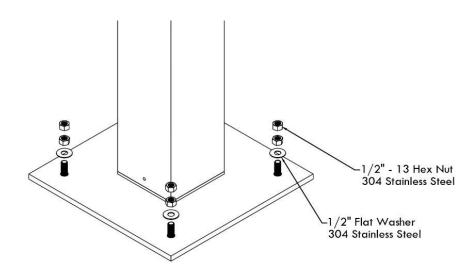
### **Install Columns**

If the structure includes any integrations such as lighting or wiring for fans or heaters, be sure to make any connections or chase any wires and test the connections.

If the mounting surface is uneven, flat washers or non-shrink grout can be used to shim and level the surface.

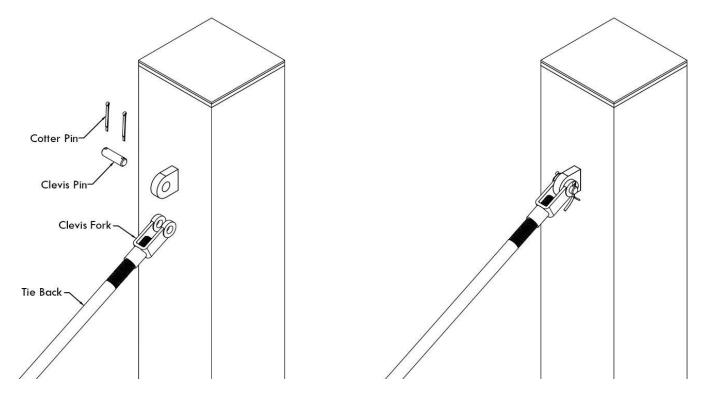
Confirm that the columns are plumb.

Place flat washers and hex nuts onto the threaded rods at the base of the columns and tighten.



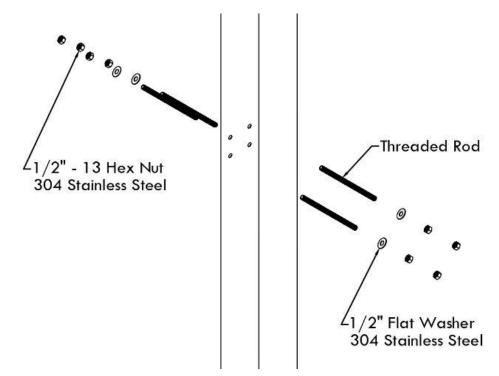
#### **Install Tie Backs**

Install the tie backs by placing the clevis fork around the mounting tab, next place the clevis pin through the clevis fork and mounting tab. Insert two cotter pins to retain the clevis pin. Bend the cotter pin legs so that the cotter pins are permanently secured.



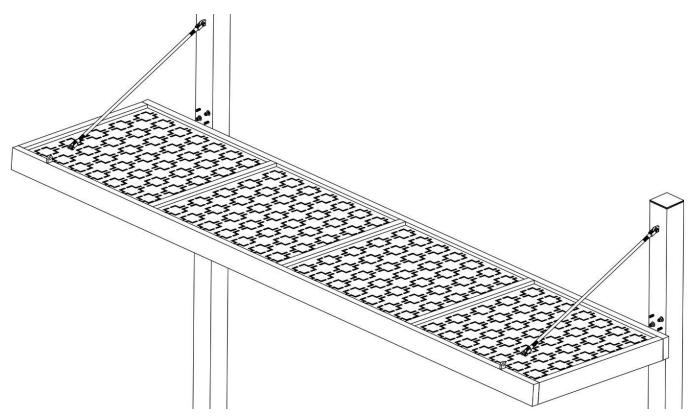
## Prepare for Canopy Installation

On each column, install four threaded rods with flat washers and hex nuts, two for each canopy. Two diagonal threaded rods will be used for each canopy. The hardware on the opposite side of the column should be installed first. Once the canopy is installed, the hardware on the canopy side of the column will be installed.



#### **Install Canopies**

Using a crane or material lift, hoist the canopy into position.

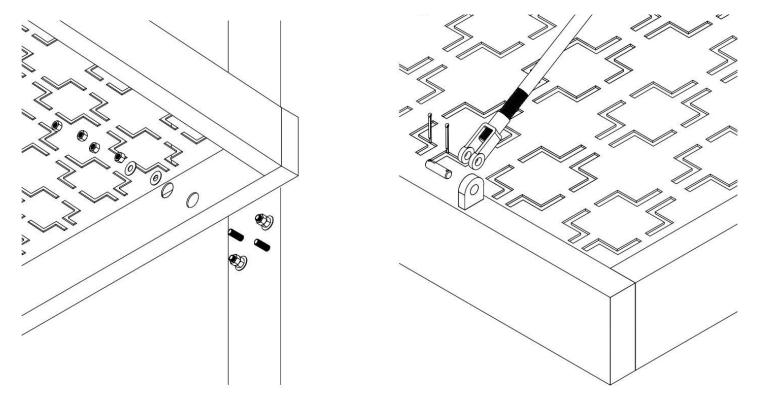


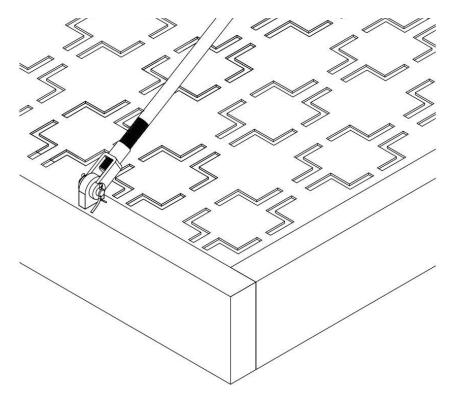
#### **Install Canopies, Continued**

Secure the canopy to each column with flat washers and hex nuts.

Confirm that the canopy is at the correct pitch per the shop drawings. Adjust the length of the tie back as needed.

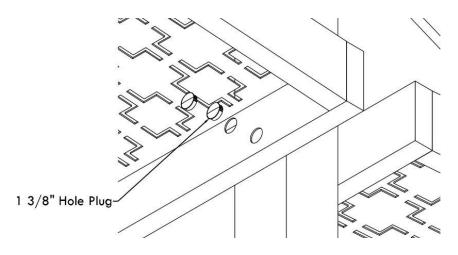
Secure the canopy to each tie back. Place the clevis fork around the mounting tab and place the clevis pin through the clevis fork and mounting tab. Next, insert two cotter pins to retain the clevis pin. Bend the cotter pin legs so that the cotter pins are permanently secured.





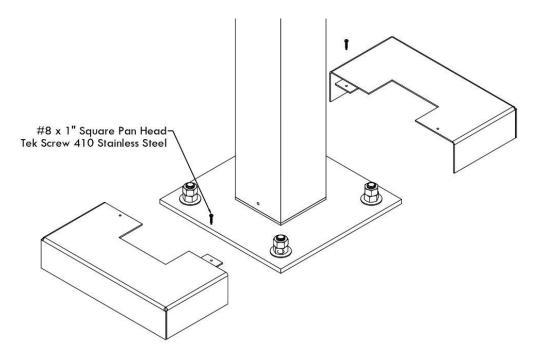
# **Install Hole Plugs**

Install hole plugs into the face of the canopy frame.



#### **Install Base Plate Covers**

Install base plate covers around each column using screws.



### Paint Touch-Up

All structures will require touch up over time and at completion of construction. Use extreme care when handling components. Touch up paint is provided. In the event of scratching or chipping, touch up the painted surface with the included brush. Apply light coats in order to allow the paint to flow and dry with a smooth finish.