



ClearSpan™ Add-A-Bay Shade System



Photo may show a different but similar model.

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WARNING: Cancer and Reproductive Toxicity - P65Warnings.ca.gov

STK#	DIMENSIONS
2020SS	20' W x 20' L x 10' H
2040SS	20' W x 40' L x 10' H
2060SS	20' W x 60' L x 10' H

Revision date: 10.04.07

Visit www.ClearSpan.com for additional products and customer assistance.



YOU MUST READ THIS DOCUMENT BEFORE YOU BEGIN TO ASSEMBLE THE SHELTER.

Thank you for purchasing this ClearSpan™ SunBlocker™ shelter. When properly assembled and maintained, this product will provide years of reliable service. These instructions include helpful hints and important information needed to safely assemble and properly maintain the shelter. Please read these instructions **before** you begin.

If you have any questions during the assembly, contact customer service for assistance.

SAFETY PRECAUTIONS

- Wear eye protection.
- Wear head protection.
- Wear gloves when handling metal tubes.
- Use a portable GFCI (Ground Fault Circuit Interrupter) when working with power tools and cords.
- Do not climb on the shelter or framing during or after construction.
- Do not occupy the shelter during high winds, tornadoes, or hurricanes.
- Provide adequate ventilation if the structure is enclosed.
- Do not store hazardous materials in the shelter.
- Provide proper ingress and egress to prevent entrapment.

ANCHORING INSTRUCTIONS

Prior to assembling this shelter, please read the **MUST READ** document included with the shipment.

⚠ WARNING: The anchor assembly is an integral part of the shelter construction. Improper anchoring may cause shelter instability and failure of the structure to perform as designed.

Failing to anchor the shelter properly *will void the manufacturer's warranty* and may cause serious injury and damage.

LOCATION

Choosing the proper location is an important step before you begin to assemble the structure.

The following suggestions and precautions will help you determine whether your selected location is the best location.

- Never erect the structure under power lines.
- Identify whether underground cables and pipes are present *before* preparing the site or anchoring the structure.
- Location should be away from structures that could cause snow to drift on or around the building.
- Do not position the shelter where large loads such as snow and ice, large tree branches, or other overhead obstacles could fall.

SITE

After choosing a location, proper preparation of the site is essential. Follow the information below.

- *A level site is required.* The site must be level to properly and safely erect and anchor the structure.
- For sites that are not concrete or gravel, placing wood blocks or other suitable supports under each rafter leg or the perimeter base frame helps prevent the pipes from sinking or working into the site. Does not apply to shelters with ground posts.
- Drainage: Water draining off the structure and from areas surrounding the site should drain away from the site to prevent damage to the site, the structure, and contents of the structure.

⚠ WARNING: The individuals assembling this structure are responsible for designing and furnishing all temporary bracing, shoring and support needed during the assembly process. For safety reasons, those who are not familiar with recognized construction methods and techniques must seek the help of a qualified contractor.

ASSEMBLY PROCEDURE

Following the instructions as presented will help ensure the proper assembly of your shelter. Failing to follow these steps may result in an improperly assembled and anchored shelter and will void all warranty and protection the owner is entitled to.

The steps outlining the assembly process are as follows:

1. Verify that all parts are included in the shipment. Notify Customer Service for questions or concerns.
2. Read these instructions, the Must Read document, and all additional documentation included with the shipment **before** you begin assembling the shelter.
3. Gather the tools, bracing, ladders (and lifts), and assistance needed to assemble the shelter.
4. Check the weather **before** you install the roof cover and any panels (if equipped). Do not install covers or panels on a windy or stormy day.
5. Re-evaluate the location and site based on the information and precautions presented in the documentation included with the shipment.
6. Prepare the site (if applicable).
7. Assemble the frame components in the order they are presented in these instructions.
8. Assemble the frame including the struts (if equipped).
9. Consult the MUST READ document and properly anchor the assembled frame.
10. Install, tighten, and secure the end panel and main cover (if equipped). This applies to fabric covers that stretch over the frame assembly. Your shelter may include roof panels or side panels or both.
11. Read the care and maintenance information at the end of these instructions.
12. Complete and return all warranty documentation as instructed.

LIST OF WORDS AND PHRASES

Before you begin, it is important to become familiar with the words and phrases used in this instruction manual.

These words and phrases are common to most ClearSpan™ shelters and identify the different parts of the shelter. (Some are used in this document. Others may not apply to this particular shelter.) These terms describe the shipped parts and can also be found on the materials list/spec sheets included with the shipment. To aid in the assembly, read through the following definitions before you begin to assemble your shelter.

- **Conduit:** An assembly of pipes used to secure the main cover and end panels (if equipped). Purlins and some strut assemblies also consist of connected pipes to form a conduit. Each pipe joint of a conduit assembly is secured with a self-tapping Tek screw.
- **Coupler or Fitting:** A part of the frame assembly where legs, purlins and rafter pipes are inserted and secured. In most instances, 3-way and 4-way couplers are used. In some larger applications, couplers are used to secure the joints of the different rafter sections during the assembly of the rafters. Some shelters do not use couplers.
- **Foot or Rafter Foot:** The part attached to and found at the base of the rafter or leg of the shelter. Depending on the shelter, the foot is an optional purchase. Some shelters do not offer an optional foot. Some use 1-way connectors; others use ground posts.
- **Must Read Document:** This document includes building and shelter anchoring instructions, steps for end wall reinforcement, safety precautions, and notices and warnings. The Must Read document is sent with all shelters and buildings. If you did not receive a Must Read document, contact Customer Service to request one.
- **On-Center:** Term used to describe a measurement taken from the vertical center of the rafter or frame member to the vertical center of another.
- **Purlin:** The pipe assembly that runs perpendicular to the rafters or framework that supports the main cover. Purlins are found on the sides and roof areas of the assembled frame, are evenly spaced, and typically run from the front to the back of the shelter.
- **Plain or Straight Pipe:** A term used to describe a pipe that has the same diameter or width throughout its entire length.
- **Strut:** A strut is usually a length of pipe with two flattened ends and is used for diagonal bracing of the shelter frame. A strut is typically secured to the frame work by special brackets and bolts.
- **Swaged End or Swaged Pipe:** The term “swaged” refers to the tapered end of the pipe or tube. Swaged ends of a pipe can be inserted into couplers and the straight ends of other pipes.
- **Tek Screw:** A self-tapping fastener used to secure pipe joints and to fasten brackets to rafters.

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REQUIRED TOOLS

Space below is reserved for customer notes.

The following list identifies the main tools needed to assemble the shelter. Additional tools and supports may be needed depending on the structure, location, and application.

- Tape measure or measuring device
- Variable speed drill and impact driver (cordless with extra batteries works best)
- Wrench set or ratchet and socket set (recommended)
- Hammers, gloves, and eye protection
- Metal file and metal-cutting saw
- Ladders, work platforms, and other machinery for lifting designed to work safely at the height of the shelter

UNPACK AND IDENTIFY PARTS

The following steps will ensure that you have all the necessary parts before you begin to assemble the shelter. Unpack the contents of the shipment and place where you can easily inventory the parts. Refer to the Bill of Materials/Spec Sheets.

Verify that all parts listed on the Bill of Materials/Spec Sheets are present. If anything is missing or you have questions, consult the Pictorial Parts Guide and all shelter diagrams for clarification, or contact Customer Service.

NOTE: At this time, you do not need to open the plastic bags containing smaller parts such as fasteners or washers.

QUICK START GUIDE

For an overview of this shelter and to see the main connection details, consult the diagrams in the Quick Start Guide located at the back of these instructions.

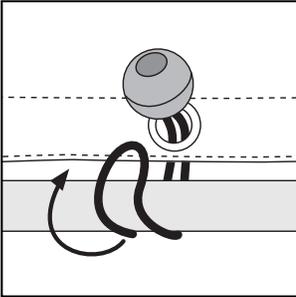


QUICK START GUIDE

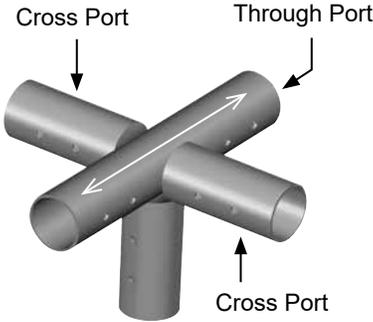
The following graphics and photos will help you identify the different parts and show you how they are used. (Not all parts are shown.)



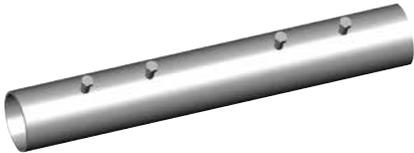
103856
Band Clamp



CC4595
Ball Tie Down



103839
5-Way Coupler



103837
Straight Coupler



2375P120 Plain Pipe
2375P120D Drilled Pipe



103838
Strut



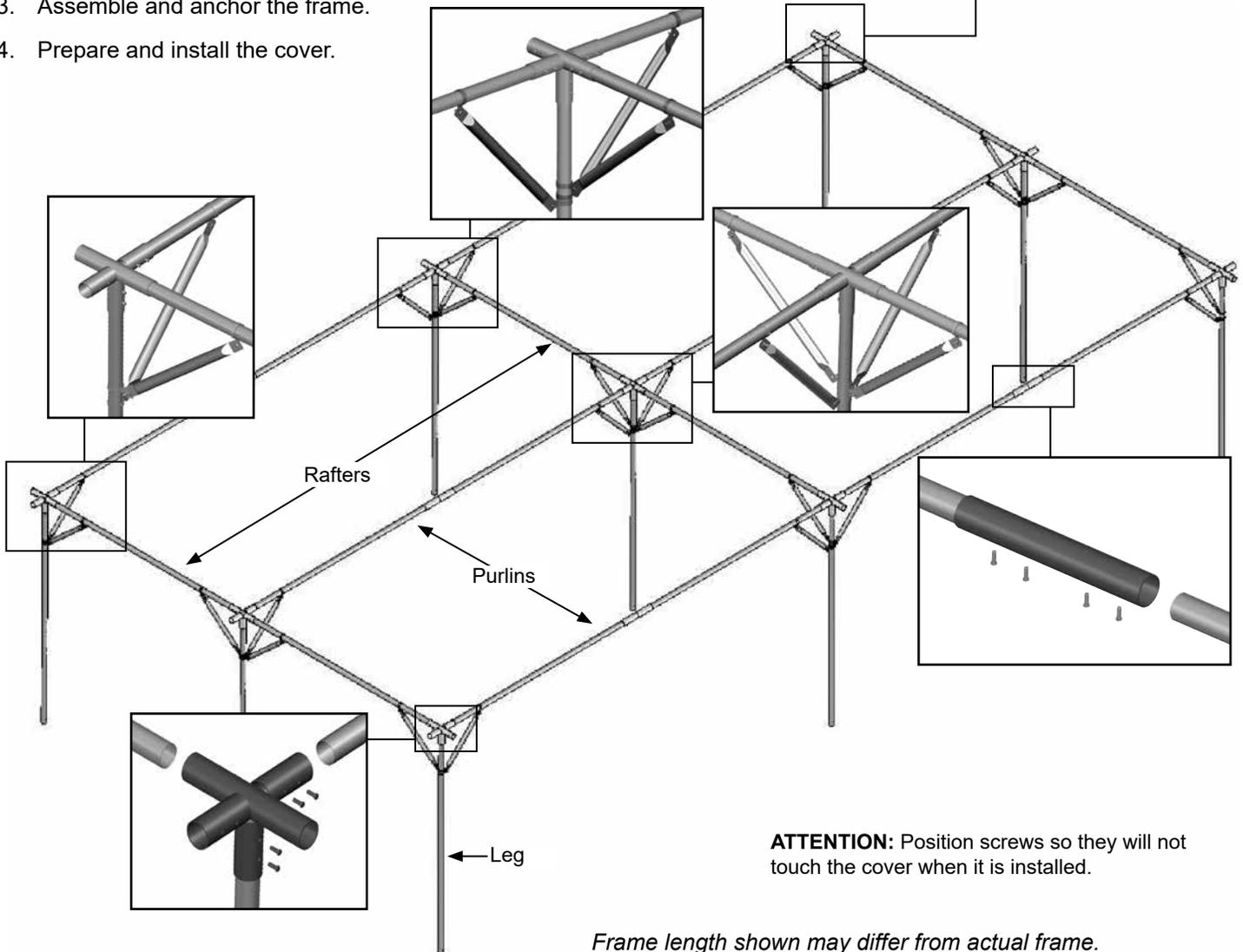
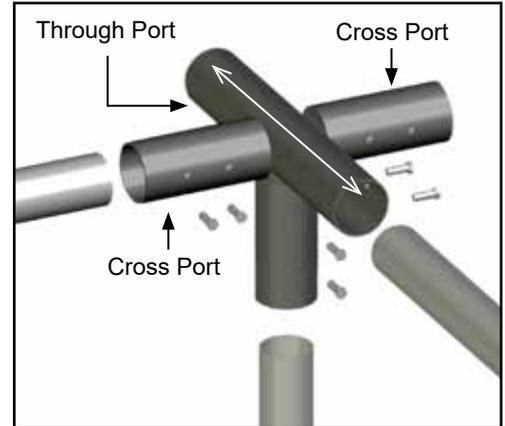
SunBlocker™ Add-A-Bay Shade System

IMPORTANT: Cross ports of the 5-way coupler are divided by the through port of the same coupler. There are two (2) cross ports and one through port for each coupler. See below for details.

OVERVIEW

This section shows the typical shade system frame and its connections. The illustration below helps identify the main parts of the shelter.

1. Locate the required parts for each assembly procedure.
2. Assemble the frame components.
3. Assemble and anchor the frame.
4. Prepare and install the cover.



ATTENTION: Position screws so they will not touch the cover when it is installed.

Frame length shown may differ from actual frame.

LAY OUT THE BUILDING SITE

After the site is prepared, identify the location of the shelter corners to help square the frame after it is assembled.

Taking these steps **before** assembling the shelter saves time and ensures that the structure is positioned as desired. The following procedure is a suggested method. Its use depends on the size of the shelter, shelter application, the footings, and the method used to anchor the shelter.

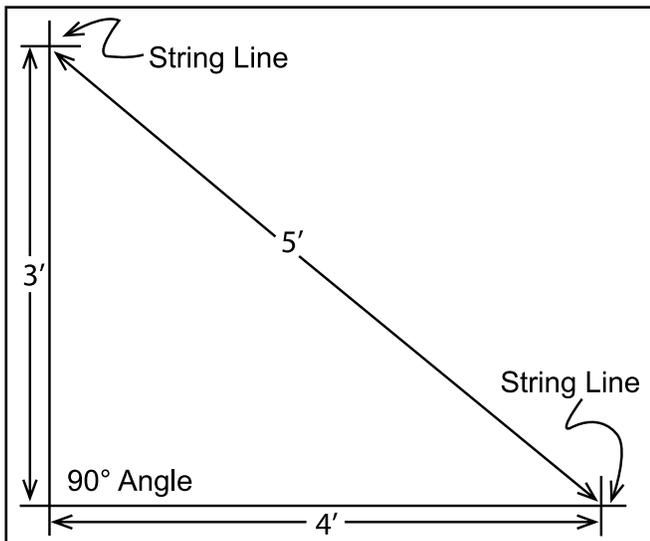
The procedure may not apply to your shelter.

SQUARE THE SITE

1. Identify a corner where a building rafter will be positioned, drive in a stake, and string a line the exact width of the building and stake in place.
2. String a line at least as long as the building from the first stake at 90°.

NOTE: A transit can be used to ensure an accurate 90° angle, or the 3-4-5 rule can be used. Refer to diagram. Using multiples of 3-4-5 such as 6-8-10 or 12-16-20 helps to maintain an accurate 90° angle.

3. After squaring the position of the building and placing a stake at all corners, string a line between the stakes to mark the base of the building.



4. Continue by reading the anchoring information that follows.

ANCHOR THE FRAME

Turnbuckles and ground anchors can be used to anchor this type of shelter. Ground posts and mounting feet can also be used with the above items. Consult a reliable construction professional if you need assistance when anchoring the assembled frame.

⚠️ WARNING: Securing the legs to concrete blocks or wood boards set on the site is not a substitute for properly anchoring the shelter. You must anchor the shelter to the site.

FAILING TO PROPERLY ANCHOR THE SHELTER WILL RESULT IN DAMAGE TO THE SHELTER AND MAY CAUSE PERSONAL INJURY.

CONSULT THE MUST READ DOCUMENT FOR ANCHORING INSTRUCTIONS. FRAME MUST BE ANCHORED TO THE SITE.

Contact Customer Service at 1-800-245-9881 to purchase additional parts to anchor the shelter.

ASSEMBLING THE SUNBLOCKER™ SHADE FRAME COMPONENTS

NOTE: Assistance may be required to assemble the frame.

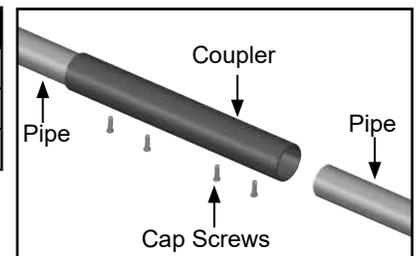
PURLIN ASSEMBLY

Pre-assemble the 20' purlin assemblies using two (2) 10' plain pipes and one (1) coupler. See chart below for number of required assemblies per shelter.

Gather the parts:

- Plain pipe (#2375P120)
- Straight coupler (#103837)
- Cap screw 3/8" x 1" (#FAG355B)

Shelter #	Qty.
2020SS	3
2040SS	6
2060SS	9



1. Connect a pair of 10' pipes using the straight coupler.
2. Secure the pipe in the coupler using 3/8" x 1" cap screws through the threaded holes of the coupler.

NOTE: You can assemble all the 20' purlin assemblies required for your shelter at this time, or assemble them as you go.

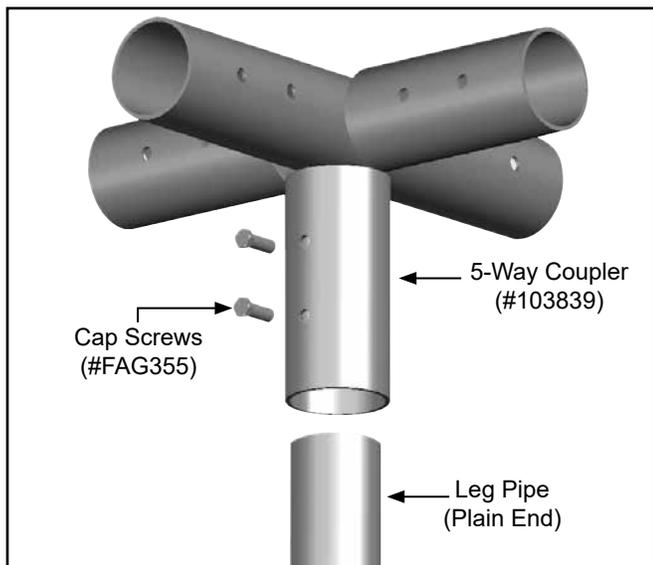
CLEARSPAN™ SUNBLOCKER SYSTEM

LEG ASSEMBLY

Each leg assembly consists of one (1) drilled pipe, one (1) 5-way coupler, and required cap screws or bolts.

Gather the parts:

- Drilled leg pipe (#2375120D) and 5-way coupler (#103839)
 - Cap screw 3/8" x 1" (#FAG355B) and band clamp (#103856)
1. Insert the plain end of a drilled pipe into the bottom (odd) port of a 5-way coupler.
 2. Secure the pipe in the 5-way coupler using 3/8" x 1" cap screws through the threaded holes of the coupler.



NOTE: Install the drilled pipes with the plain end inserted into the 5-way coupler. The drilled end of the pipes are attached to ground posts or mounting feet if used.

3. Assemble the legs until all drilled pipes and 5-way couplers are used.
4. Slide a band clamp onto each leg assembly and position it near the 5-way coupler. Slightly tighten the band clamp or use tape to keep it in place.

NOTE: If mounting feet* are used, attach a foot to each leg assembly using bolts and nuts at this time.

If ground posts* are used, drive the post into the ground so the top of the post is 1' foot above the finished grade. Refer to the MUST READ document sent with the shelter. Use the Quick Start diagrams to properly space the ground posts if used.

*Additional purchase required for mounting feet and ground posts.

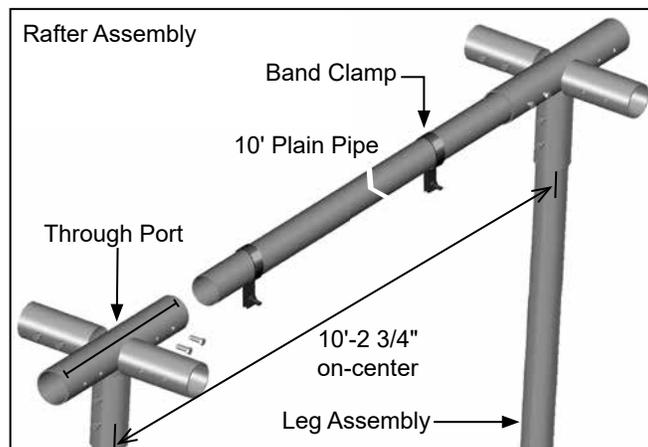
RAFTER ASSEMBLY

The leg assemblies are connected with plain pipes to form the rafters.

NOTE: The basic 10' x 20' shelter has no interior rafters; only the 10' x 40' and 10' x 60' shelters have interior rafters.

Gather the parts:

- Leg assemblies
 - Plain pipe (#2375P120)
 - Cap screw 3/8" x 1" (#FAG355)
 - Strut (#103838) and band clamp (#103856)
1. Select a plain 10' pipe and slide two (2) band clamps onto the pipe. This pipe connects two (2) leg assemblies.
 2. Slide each end of the plain pipe into the through ports of the 5-way couplers as shown below and align the pipe ends with the center of the 5-way coupler.



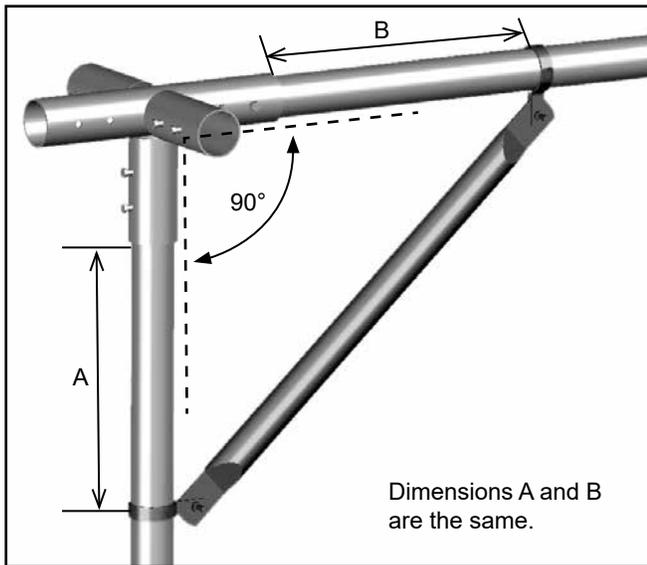
NOTE: Position the 5-way couplers so the *through tube* is aligned with the width of the frame.

3. Verify that the on-center width dimension measured at the 5-way couplers is 10'-2 3/4". Adjust as needed.
4. Secure the plain pipe to the couplers using 3/8" x 1" cap screws through the threaded holes of each coupler.
5. Reposition the band clamps (previously installed on each rafter leg and the 10' rafter pipe) approximately 12" from the 5-way couplers.

NOTE: If the band clamps were not installed, install them now. Use adjustable pliers to squeeze the clamps back into shape after adding them to the pipes.

RAFTER ASSEMBLY (CONTINUED)

- Adjust the leg and plain pipe to be at a 90 degree angle and attach a strut to the band clamps as shown below.



- Repeat the steps to construct the remaining rafter assemblies.

FRAME ASSEMBLY

Connect the rafters using the 20' purlin assemblies and the remaining struts.

Gather the parts:

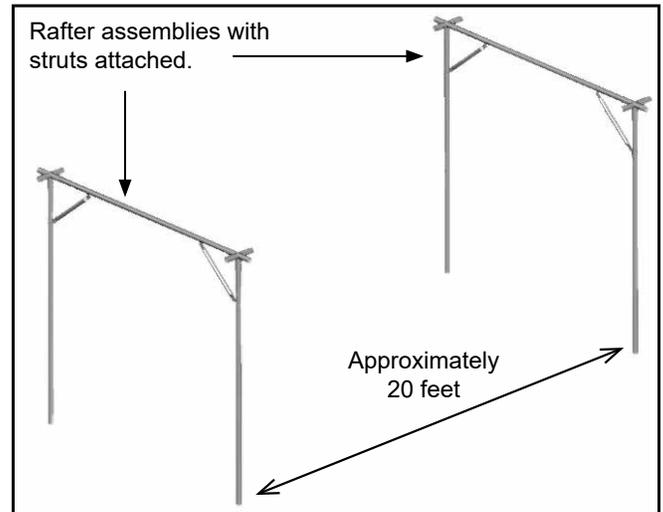
- Rafter assemblies
- 20' purlin assemblies
- 3/8" x 1" cap screws (#FAG355B)
- Strut (#103838) and band clamp (#103856)

Complete these steps:

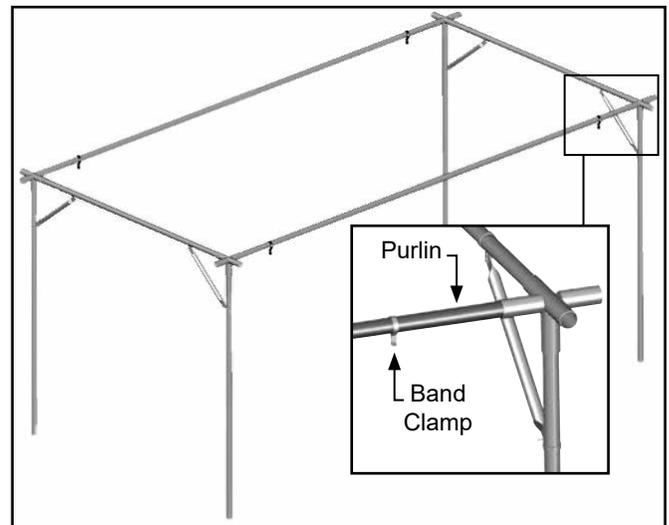
- With assistance, stand the first rafter assembly and hold or brace the assembly in place. If ground posts are used, set the rafter assembly in position on the ground post and secure each leg to the ground post.

NOTE: Before securing the rafter legs to the ground posts (if used), refer to the diagram for your shelter in the Quick Start section to determine where to attach the diagonal struts. Slide additional band clamps onto the legs of each rafter assembly as needed.

- Position a second rafter assembly (as shown) and brace or secure it in place at approximately 20' from the first rafter.



- Slide a band clamp onto each end of two (2) 20' purlin assemblies and insert the ends of each purlin into the cross ports of the 5-way couplers of each rafter assembly.
- Thread the 3/8" x 1" cap screws into the holes of the couplers, verify that the on-center length dimension is 20' 3", and tighten the bolts to secure the purlins in place.



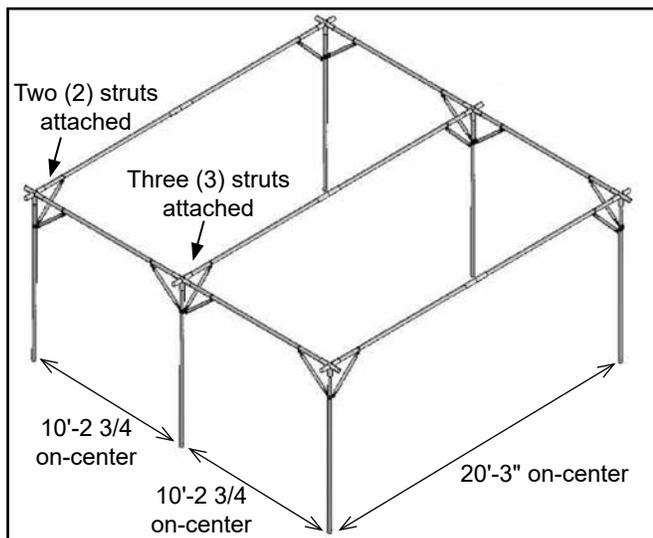
- Use the diagrams above and in the Quick Start section and repeat the above steps as needed to assemble the remainder of the frame.

CLEARSPAN™ SUNBLOCKER SYSTEM

FRAME ASSEMBLY (CONTINUED)

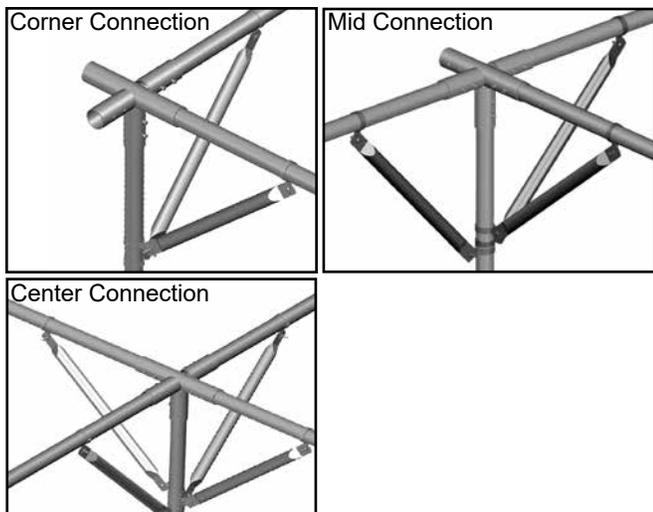
Space below is reserved for customer notes.

- Review the diagrams in the Quick Start section for your shelter to determine the locations of the remaining diagonal struts.



Frame length shown may differ from actual frame.

- Install the diagonal struts. Each corner connection uses two (2) struts, each mid connections (if present) uses three (3) struts, and each center connection (if present) uses four (4) struts. Refer to Quick Start Guide for location and additional details.



- With the struts in position, tighten the band clamps.
- Once the frame assembly is complete, verify that all frame bolts are tight, *anchor the frame*, and install the cover.

INSTALL THE MAIN FRAME COVER

After the frame is properly assembled and anchored, install the main cover.

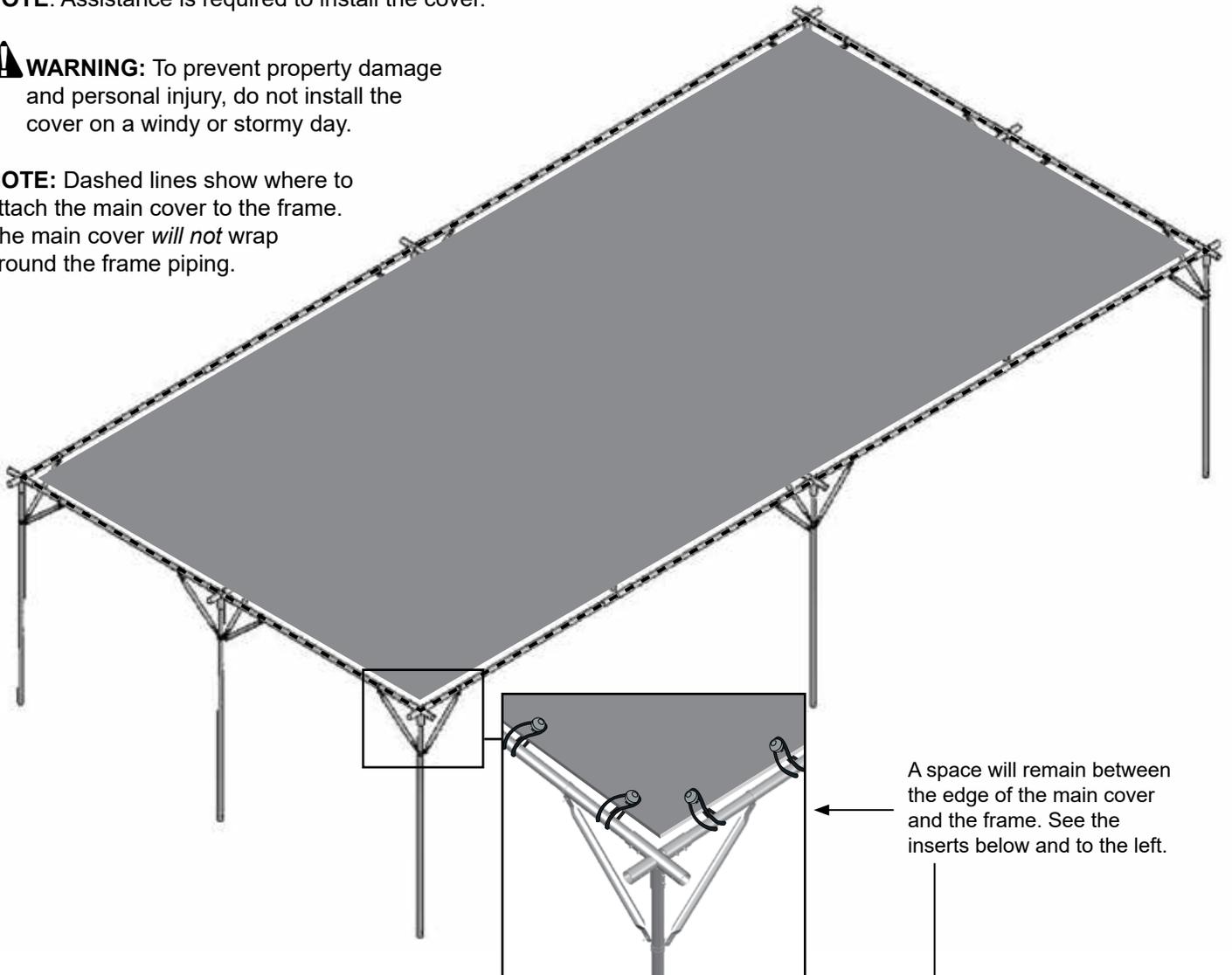
Gather the parts:

- Snugger ball tie downs (#CC4595)
- Main cover

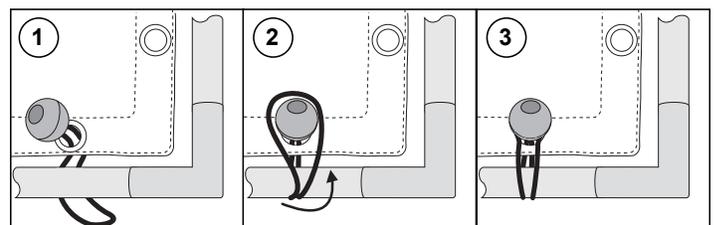
NOTE: Assistance is required to install the cover.

⚠ WARNING: To prevent property damage and personal injury, do not install the cover on a windy or stormy day.

NOTE: Dashed lines show where to attach the main cover to the frame. The main cover *will not* wrap around the frame piping.



1. Locate the main cover, unfold it along the assembled frame, and drape it over the frame and into position.
2. Take the snugger ball tie downs, feed the stretch cord through a grommet, and attach the main cover to the assembled frame. Use one snugger ball for each grommet.
3. Continue with the shelter care and maintenance information that follows.



CLEARSPAN™ SUNBLOCKER SYSTEM

SUNBLOCKER SHADE SYSTEM CARE AND MAINTENANCE

Space below is reserved for customer notes.

Proper care and maintenance of your shelter is important. Check the following items periodically to properly maintain your shelter:

- Regularly check the shade cover to see that it remains tight and in proper repair.
- Check connections and all fasteners to verify that they remain tight.
- Do not climb or stand on the shelter at anytime.
- Remove debris and objects that may accumulate on the shelter. Use tools that will not damage the cover when removing debris.
- Remove snow to prevent excess accumulation. Use tools that will not damage the cover when removing snow.
- Check the contents of the shelter to verify that nothing is touching the cover that could cause damage.
- Check the anchoring system to ensure that all components are tight and in good repair.
- If the shelter is moved, inspect all parts and connections before reassembling.
- Perform inspections at least twice a month and replace damaged or missing parts as needed.

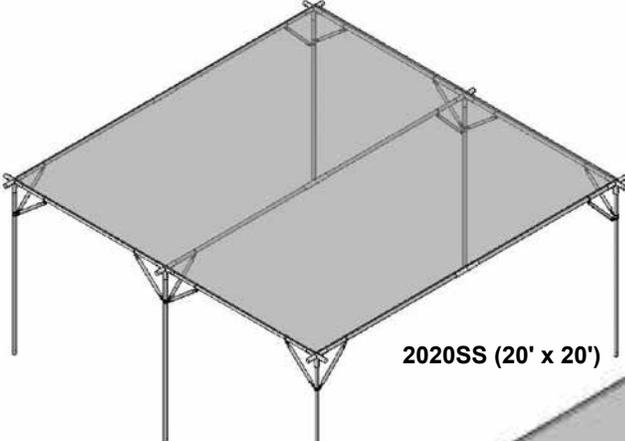
For replacement or missing parts, call 1-800-245-9881 for assistance.

NOTE: With the exception of Truss Arch buildings, ClearSpan™ shelters and greenhouses do not have any tested loading criteria.

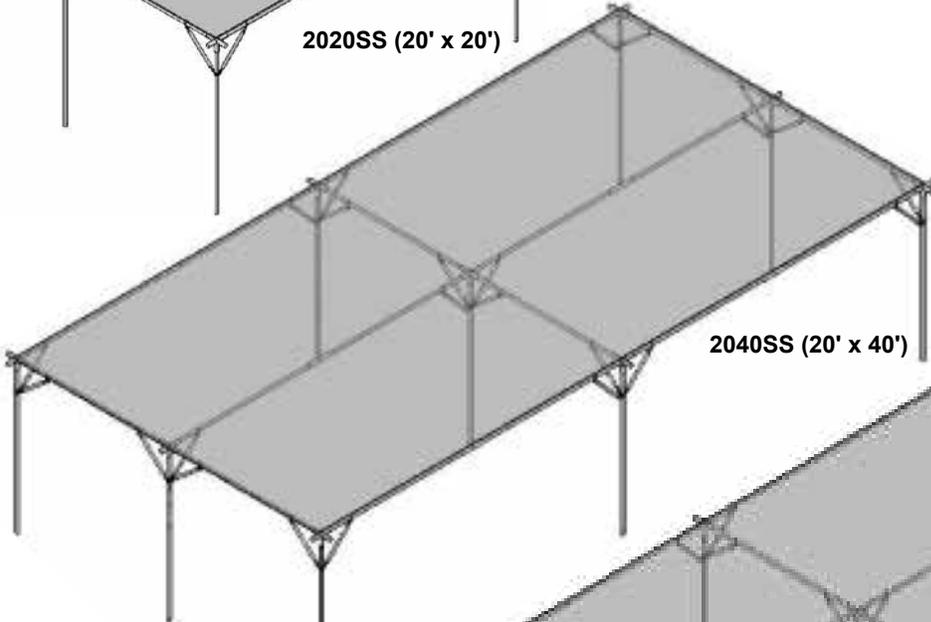


QUICK START GUIDE

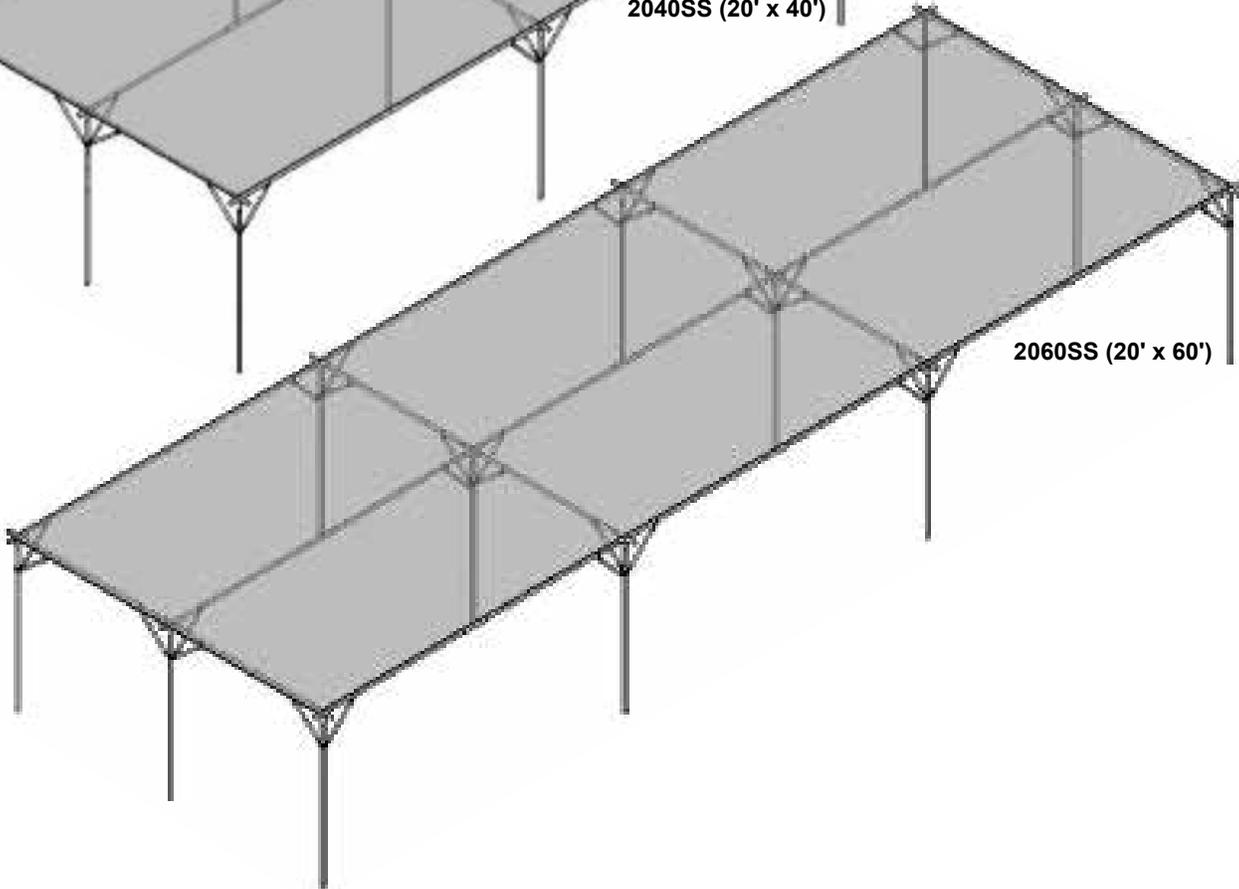
20' Wide SunBlocker™ Shade System



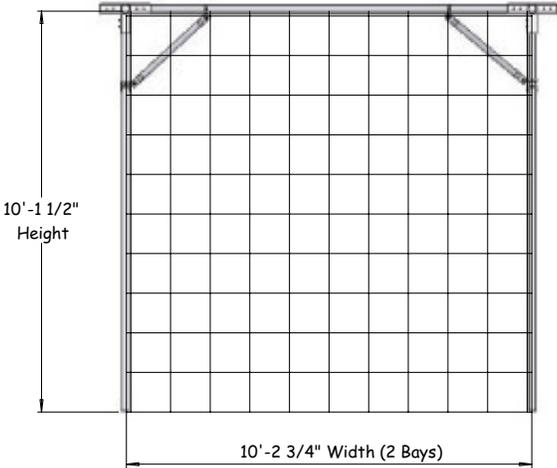
2020SS (20' x 20')



2040SS (20' x 40')

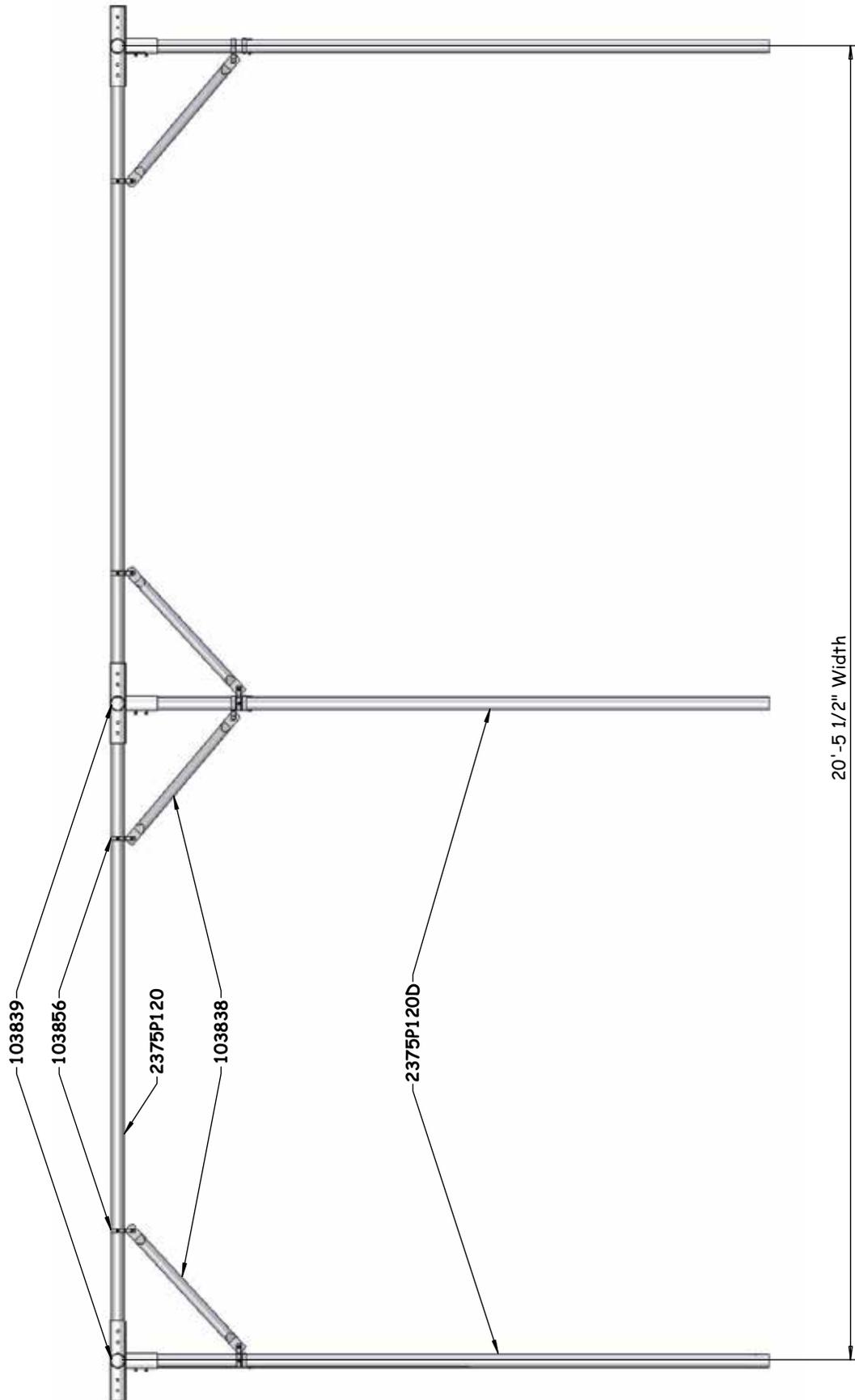


2060SS (20' x 60')

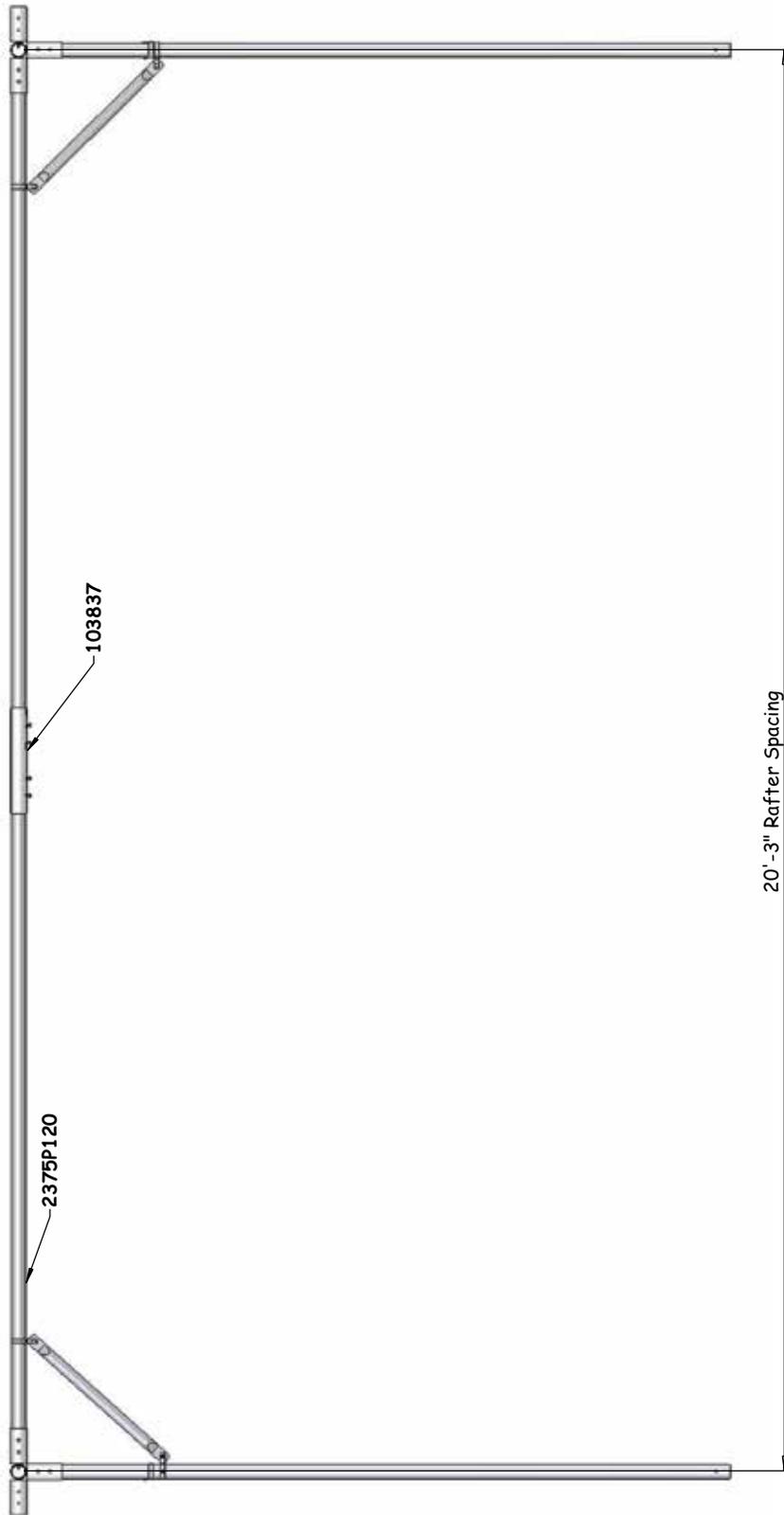


FRONT
Grid Represents 12" Squares

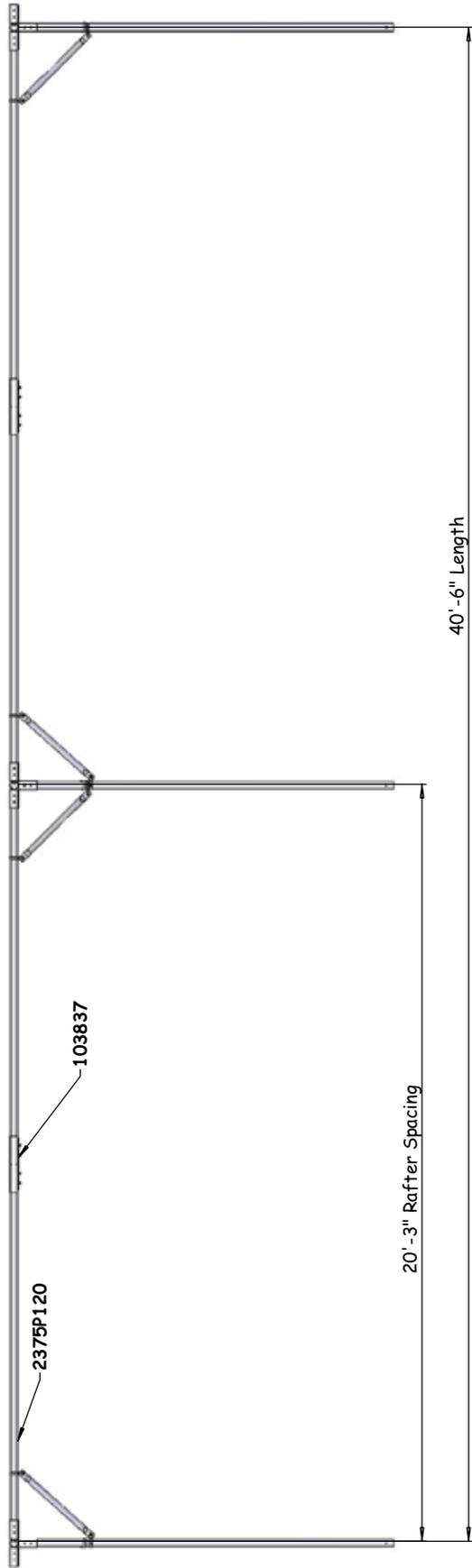
FRONT PROFILE



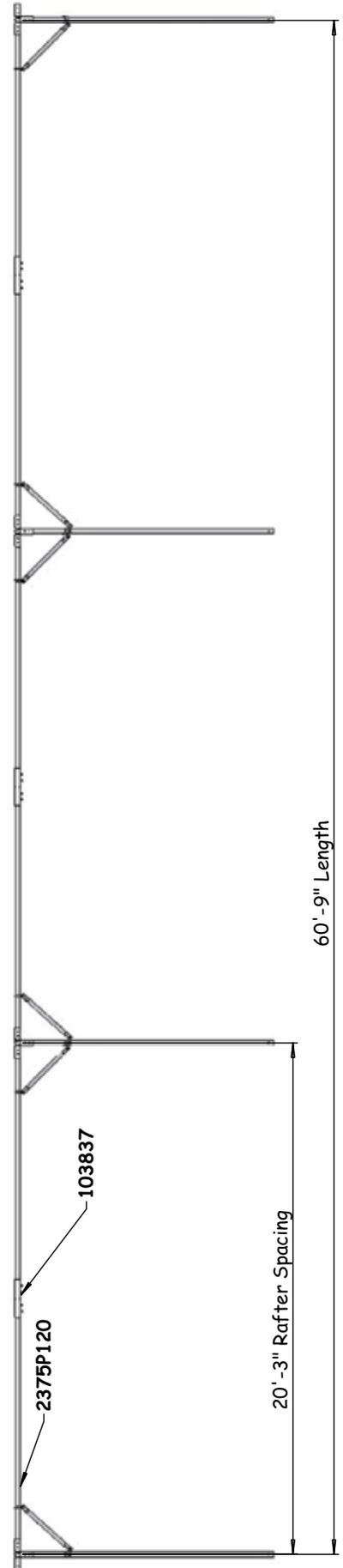
SIDE PROFILE - 2020SS



SIDE PROFILE - 2040SS



SIDE PROFILE - 2060SS



CONNECTIONS

