



## ClearSpan™ House-Attached Carport



*Photo may show a different but similar model.*

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STK#	DIMENSIONS
105589	11' W x 11'4" H x 12' L
105590	11' W x 11'4" H x 16' L
105591	11' W x 11'4" H x 20' L
105592	11' W x 11'4" H x 24' L



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

Thank you for purchasing this ClearSpan™ 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. 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. The following site characteristics will help ensure the integrity of the structure.

- A level site is required. The site must be level to properly and safely erect and anchor the structure. If the site is not level, construct footings to provide a secure base to assemble the structure. Pre-cast concrete blocks, pressure-treated wood posts, or poured footings are all acceptable when properly used.
- 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.

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. Lay out the site (if this has not been completed). Customer is responsible for providing a secure support structure for this frame assembly.
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 for anchoring comments and instructions.
10. Assemble and install the cable assemblies (if equipped). These are typically found on larger shelters. Your shelter may include struts or other methods of bracing attached during the frame assembly procedure. Some shelters do not require cables or struts.
11. Install, tighten, and secure the end panel (if equipped) and main cover. This applies to fabric covers that stretch over the frame assembly. *Your shelter may include roof panels or side panels or both.*
12. Read the care and maintenance information at the end of these instructions.

## 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.
- **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.

## CLEARSPAN™ CARPORTS

### 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
- Chalk line (optional)
- Marker to mark locations on the pipes
- Variable speed drill and impact driver (cordless with extra batteries works best)
- Right angled drill (recommended) and drill bit
- Metal-cutting tool for pipe
- Wrench, ratchet and socket (recommended)
- Hammers and gloves
- Tin snips or similar cutting tool
- 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.

1. Unpack the contents of the shipment and place where you can easily inventory the parts. Refer to the Bill of Materials/Spec Sheets.
2. 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 the fasteners (if used).

### QUICK START GUIDE

For a quick overview of this shelter and its components, consult the Quick Start Guide at the back of these instructions.

# ClearSpan

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



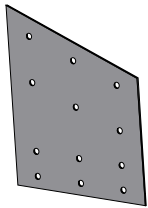
FA4482B  
Tek Screw



100441  
Nut Setter



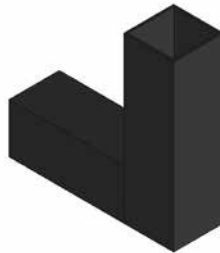
102921B  
Neo-bonded  
Galvanized Washer



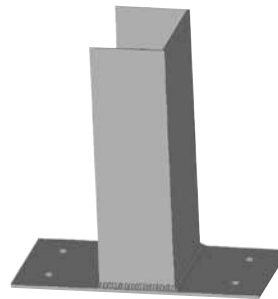
105087  
Connection Plate



QH1070  
Pipe Strap



104625  
2-Way Pipe Fitting



105088  
1-Way Connector



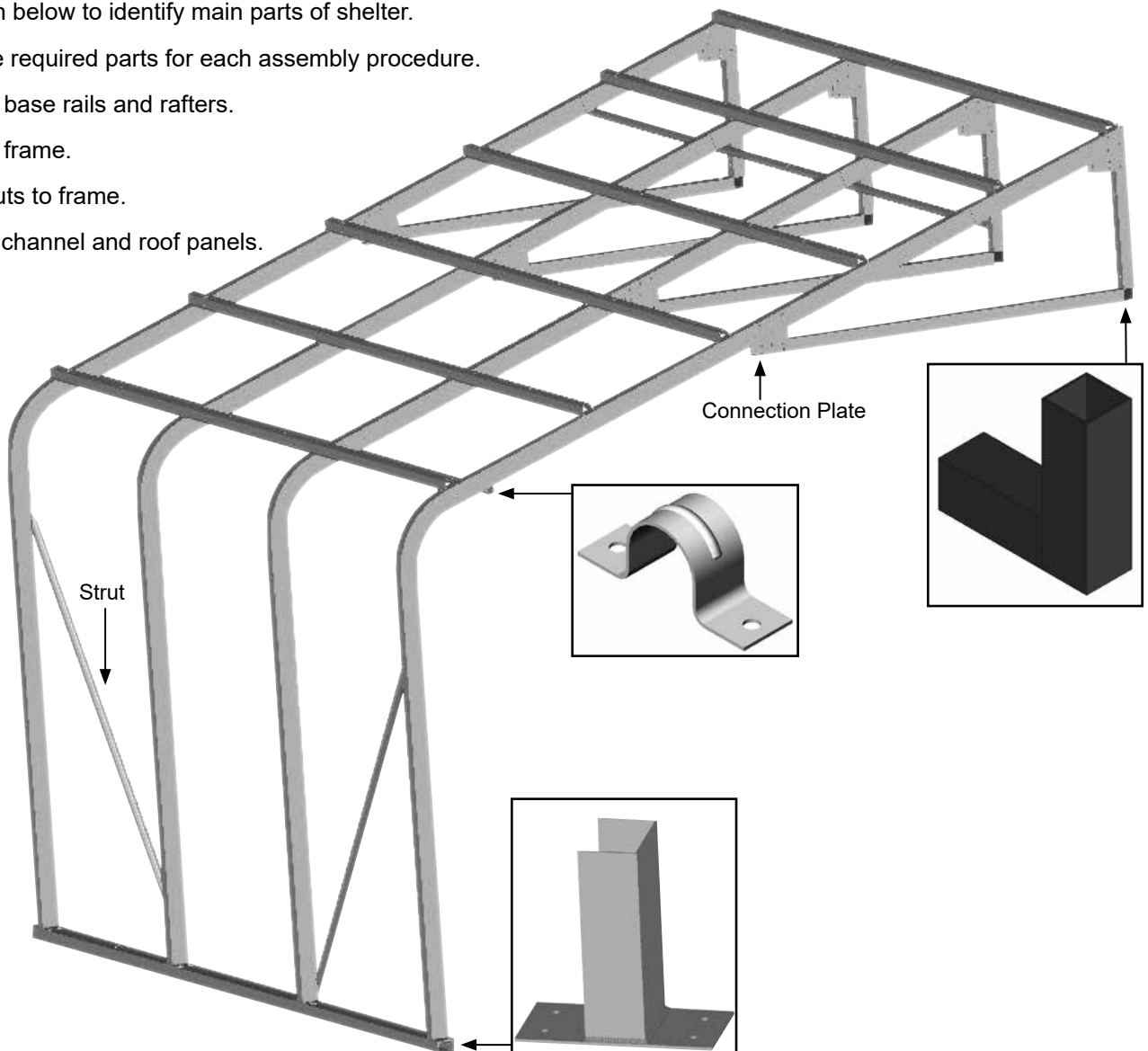
Frame shown may differ from actual frame.

## House-Attached Carport 11' Wide

### OVERVIEW

This section is an overview of the process for assembling your house-attached carport. For details, please see section, Assembling the Carport Roof Frame Components. See illustration below to identify main parts of shelter.

1. Locate the required parts for each assembly procedure.
2. Assemble base rails and rafters.
3. Assemble frame.
4. Attach struts to frame.
5. Install hat channel and roof panels.





**ASSEMBLE RAFTERS**

Each rafter consists of three (3) large 2" x 3" rectangular pipes, two (2) additional 2" x 2" square tubes, and related mounting plates and pipe straps.

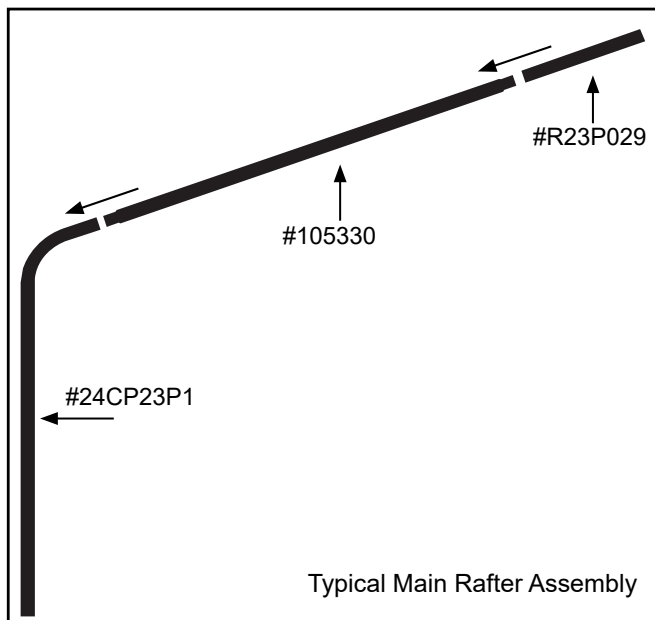
**NOTE:** Assistance may be required to assemble the carport frame.

Gather the parts:

- Rafter pipe ( #R23P029)
- Rafter pipe (#24CP23P1)
- Rafter pipe (#105330)
- Mounting pipe (#105561)
- Support tube (#S20P066)
- Pipe strap (#QH1070)
- 2-Way pipe fitting (#104625)
- Connection plate (#105087)
- Tek screws and nut setter (3/8" x 2-9/16 magnetic)

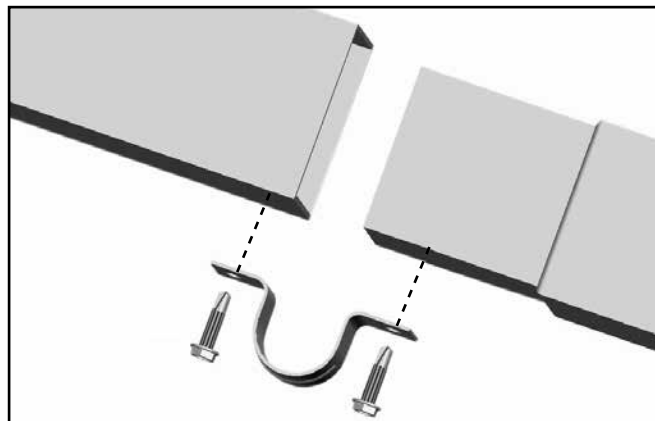
The following steps describe one way to assemble the individual rafters. Consult the Front Profile rafter diagram in the Quick Start section to view an assembled rafter.

1. Position the 2" x 3" rectangular tubes as shown.

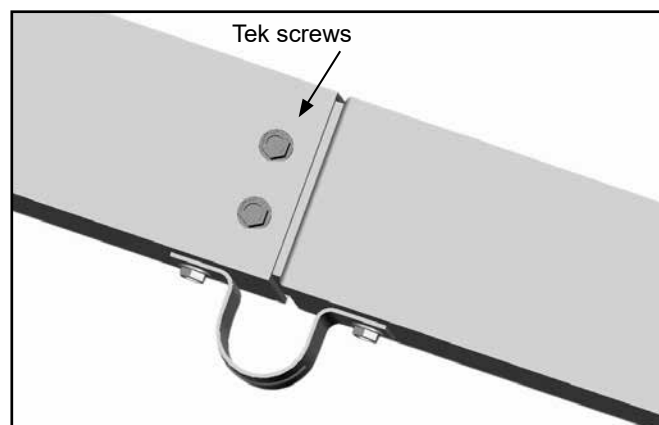


2. Insert the swaged ends into the plain ends of the pipes to assemble the main rafter.

3. After connecting the separate pipes, locate two (2) pipe straps (#QH1070) and install these as shown.



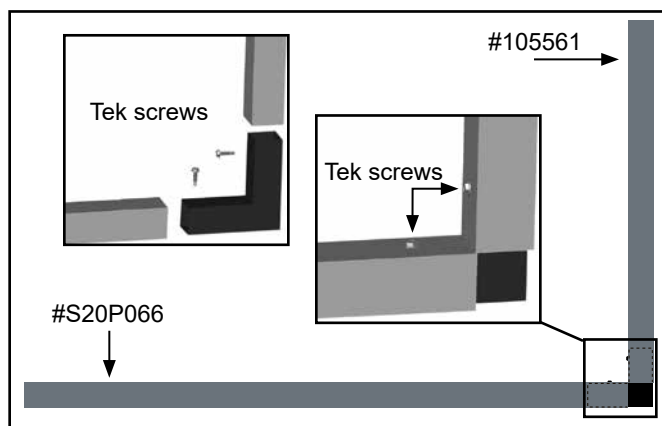
**ATTENTION:** The pipe straps are installed on the underside of the rafter with one Tek screw on each side of the pipe splice as shown below.



4. Install two additional Tek screws at each pipe joint in the location identified above.

**NOTE:** DO NOT TIGHTEN THE PIPE STRAPS AT THIS TIME. These are tightened after the purlins are installed.

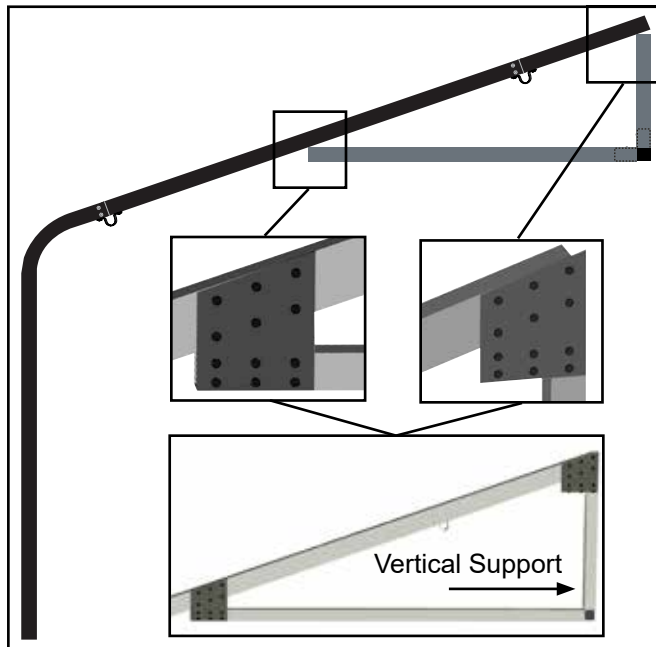
5. Locate the two (2) square tubing pipes (#105561 and #S20P066) and connect these using the 2-Way pipe fitting (#104625) as shown. Secure each pipe using a Tek screw.



## CLEARSPAN™ CARPORTS

### ASSEMBLE RAFTERS (Continued)

6. After assembling the rafter support and mounting tube, attach the assembly to the rafter using four (4) connection plates (#105087) as described below.



7. Position two (2) connection plates on the assembled rafter as shown and secure using Tek screws.

**NOTE:** The upper edge of each connection plate is installed flush with the top of the rafter. The upper connection plate is also installed flush with the outside edge of the vertical support.

8. After attaching the first two plates to the rafter, turn the rafter over and repeat the steps to attach two (2) additional connection plates to the remaining side of the rafter.
9. Repeat the procedures to assemble the remaining rafters and related support bracing.
10. After all rafters are assembled, complete the base rail assembly.

### ASSEMBLE BASE RAILS

This procedure describes one way to assemble the base rail and to attach the heavy-duty 1-Way connectors, used to secure the rafter legs, to the base rail.

Gather the parts:

- Square tubing (See chart below)
- Tek screws and nut setter (3/8" x 2-9/16 magnetic)

The base rails consist of 2" x 3" square tubing (plain and swaged) and run the length of the building.

Each shelter length has a different configuration of 2" x 3" square tubes for the base rails. The tubing requirements *for each base rail* for the different shelter lengths are listed below. (S = Swaged, P = Plain)

Shelter Length	Tubing Requirement (per base rail)
12'	1 @ 123"S & 30"P
16'	1 @ 123"S & 78"P
20'	1 @ 123"S & 126"P
24'	2 @ 123"S & 54"P

### ASSEMBLE BASE RAILS

1. Locate the shelter in the table above and determine the required tubing for the two base rails.

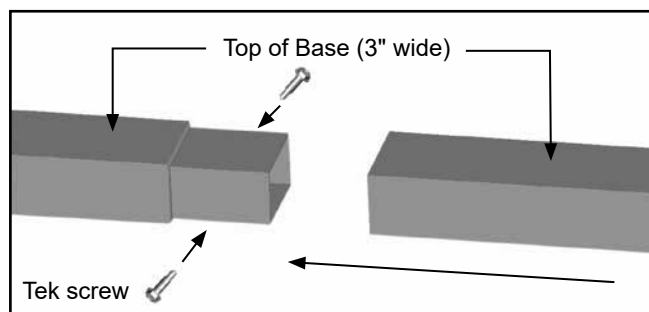
**Example:** For a shelter that is 24' long, one base rail requires two (2) 123" swaged tubes (R23S123) and one (1) 54" plain tube (R23P054).

2. Insert the swaged end of each tube into the plain end of a tube until the base rail is assembled.

**NOTE:** Use a hammer and wood block to lightly tap and seat the tubes together.

3. Repeat the procedure as needed for the remaining base rail.
4. Install one Tek screw at each splice on *each side* of the rail to secure the two tubes.

DO NOT install the Tek screws on the top or bottom surface of the base rail.





**ASSEMBLE BASE RAILS (Continued)**

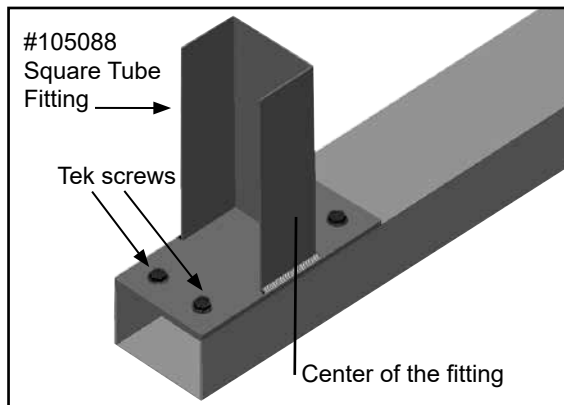
**ATTACH 105088 1-WAY CONNECTOR (RAFTER FEET)**

Gather the parts:

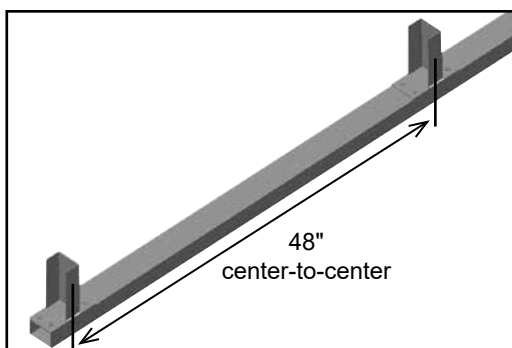
- Assembled base rails
- 1-Way connector (#105088)
- Tek screws and nut setter (3/8" x 2-9/16 magnetic)
- Tape measure and marker

**NOTE:** Before attaching the 105088 connectors, verify that Tek screws are not installed on the top or bottom of the base rail. Installing Tek screws in these locations may interfere with the installation of the #105088 connectors for the rafters.

1. Using Tek screws, attach the first square tube fitting (#105088) to the top of the base rail flush with the end of the base rail as shown.



2. From the *center* of the installed square tube fitting (#105088), measure and mark 48" increments along the length of the base rail. These marks represent the 48" on-center rafter positions.
3. Center a square tube fitting (#105088) on each mark and secure the fitting to the rail using Tek screws.
4. Repeat the steps for the remaining base rail.



**NOTE:** Rafter spacing is measured center-to-center.

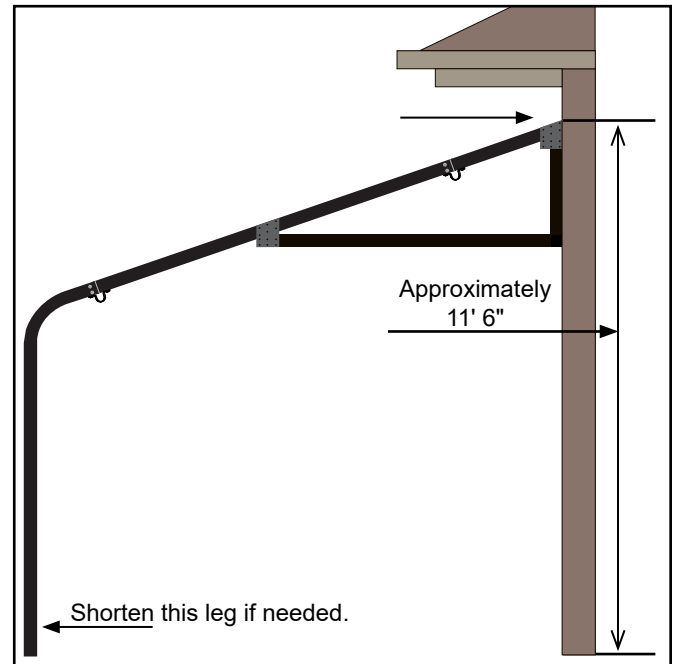
5. After the base rails are assembled, continue with the **FRAME ASSEMBLY**.

**FRAME ASSEMBLY**

At this point, all rafters are assembled and all 1-Way connectors are attached to the assembled base rails.

**Special Notes:**

- The height of the rafter at the point where the frame is attached to a permanent structure such as a house or garage is approximately 11' 6".



To complete the assembly of the frame, it is necessary to secure the corrugated cover material to the frame at a point that may be under the eave of the building.

A right-angled drill works best when the distance between the top of the shelter and the underside of the eave is too small for a typical drill.

- Additionally, if the eave height is too low for the shelter, the legs of the rafters can be shortened to allow the vertical mounting tube to be properly secured to the structure.

Consult a reliable contractor for assistance if needed.

- The material that covers the exterior of the structure that the shelter will be attached to determines what fasteners are needed to secure the shelter frame.

For example, a brick or concrete exterior will require different fasteners than an exterior covered in wood.

For this reason, *no fasteners are included with the shipment*. Contact Customer Service, or consult a contractor if needed to properly secure the shelter to the building.

**SITE COMMENT:** For proper assembly of the frame, a level site is required for the base rail.

## CLEARSPAN™ CARPORTS

### FRAME ASSEMBLY (Continued)

#### ASSEMBLE AND PRE-MARK THE PURLINS

Before assembling the frame, mark the purlins. This speeds the assembly process and eliminates the need to measure each purlin as it is installed. In addition, pre-marking the purlins ensures that an accurate spacing of the rafter assemblies is achieved and maintained during assembly.

Gather the Parts:

- 1.315" x 75" swaged pipe (#131S075)
- 1.315" x XX.X" plain pipe (#131P0XXX)
- Permanent marker and tape measure

**NOTE:** The purlins are part of the assembled frame. There are two (2) purlins that run perpendicular to the rafter assemblies. Each purlin consists of 1.315" x 75" (131S075) swaged pipes and one (1) 1.315" x XX.X" (#131P0XXX) plain pipe to complete each purlin run.

The X's represent the length in inches of the last pipe in the purlin run needed to reach the end of the frame.

Complete the steps that follow:

**NOTE:** The 131P0XXX pipe is a plain pipe (no swaged end). It is used to end each purlin run.

1. Select the required pipe sections for one purlin run and connect these by inserting the swaged ends of the pipes into the plain ends until the entire purlin is assembled.

**NOTE:** Assemble the purlins in a location that is accessible during the assembly of the frame, but will not interfere with the process of lifting and setting the rafters.

2. Verify that each pipe joint is properly seated.

**NOTE:** These pipes are separated during the assembly procedure. Do not fasten them together at this time.

3. For the 48" (on-center) rafter spacing, measure 48-3/4" (forty-eight and three-quarters inches) from one end of the assembled purlin and mark the distance on the pipe. Begin at the end of a long, swaged pipe.
4. From the location marked in the previous step, measure 48" and make another mark.
5. Continue marking the purlin in 48" intervals until all rafter on-center locations are marked. These marks help to maintain the 48" on-center rafter spacing of the frame during assembly.

6. Repeat this procedure until all assembled purlins are marked.
7. After assembling all rafters and pre-marking the purlins, continue with assembling the frame.

#### SETTING RAFTERS

The following steps describe one way to assemble the frame.

**⚠ WARNING:** Rafters are heavy and awkward to handle. Use caution and adequate assistance when setting the rafters in position.

Gather the parts:

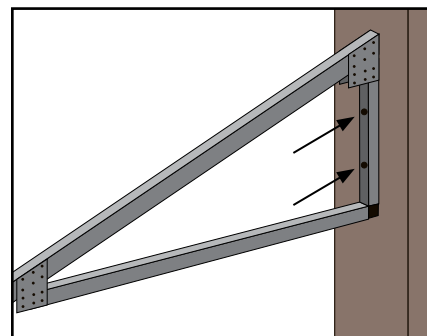
- Rafter and base rail assemblies
  - Assembled and pre-marked purlins
  - Tek screws and nut setter (3/8" x 2-9/16 magnetic)
1. Position the base rail parallel with the structure that the shelter will be attached to.
  2. Lift one rafter into position and set the leg on the first 1-Way connector at one end of the base rail.

Move the base rail as needed so the upper end of the rafter rests against the structure that the frame will be attached to.

Brace the first rafter in place so that it will not fall or move.

**⚠ WARNING:** TO PREVENT DAMAGE OR INJURY, DO NOT LEAVE THE RAFTER UNATTENDED.

3. Secure the rafter leg to the 1-Way connector on the base rail using two Tek screws. See the diagram in Step 5.
4. With the first rafter secured to the base rail, anchor the upper portion of the rafter to the permanent structure using the appropriate fasteners.

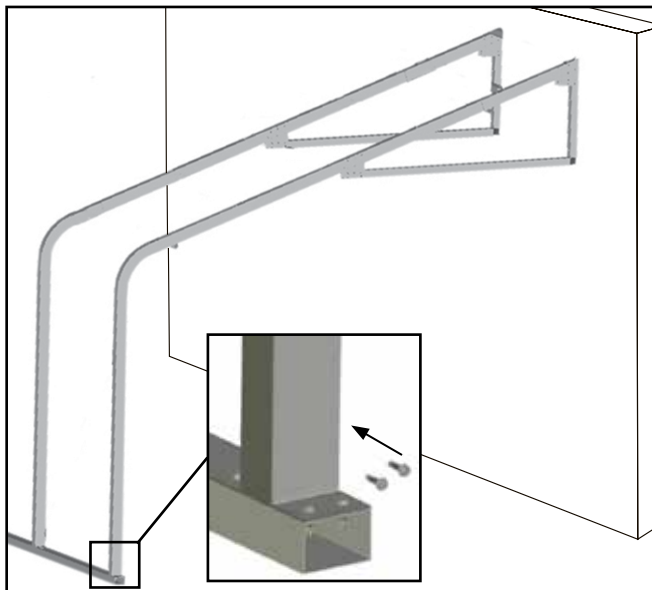


**ATTENTION:** Fasteners to secure the frame to the permanent structure are not included. Contact Customer Service or a reliable contractor for the proper fasteners based on the exterior material of the permanent structure.

**FRAME ASSEMBLY (Continued)**

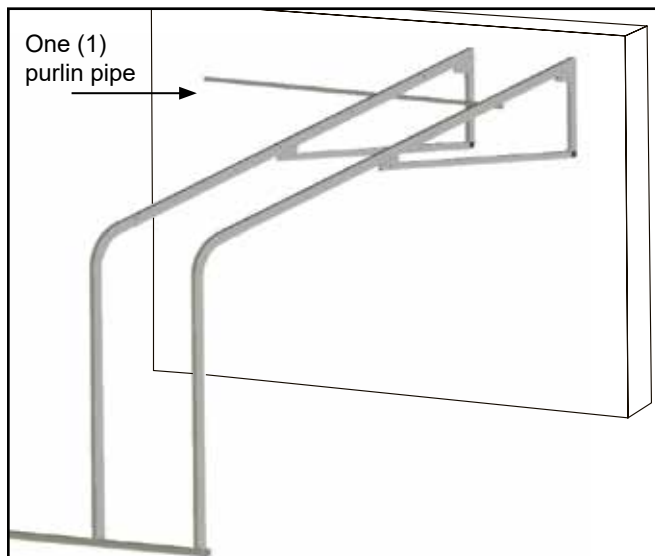
**SETTING RAFTERS**

5. After anchoring the first rafter to the permanent structure, set the second rafter in place.



**ATTENTION:** Install Tek screws through the rafter leg and into the 105088 connector. *Tek screws must secure the rafter to the 105088 connector.*

6. Take one, swaged section of one purlin and slide it through the upper pipe straps on the two rafters.



7. Secure the second rafter to the 1-Way connector on the base rail as shown in Step 5 and align the mark on the purlin with the center of the second rafter.

**NOTE:** The end of the purlin at the first rafter extends about 1/2" through the pipe strap at that location.

Do not allow the purlin pipe to extend beyond the edge of the rafter.

Diagram A shows pipe strap and purlin at the first rafter.

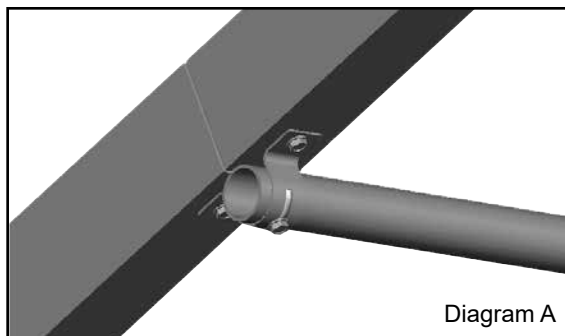


Diagram A

Diagram B shows the purlin at the second rafter. The pipe strap has been removed so the mark on the purlin can be shown.

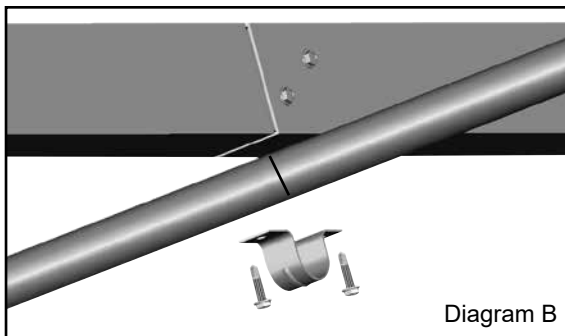
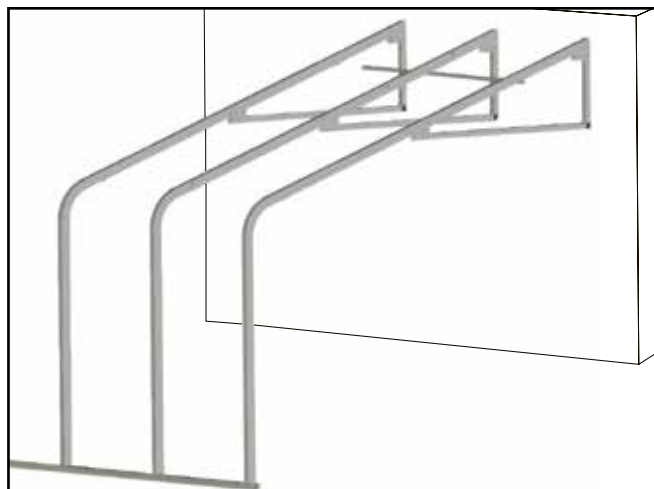


Diagram B

8. With the purlin in position, secure the upper pipe strap to the first rafter and install a Tek screw through the pipe strap and through the purlin. See Diagram A.
9. Verify that the rafter spacing is 48" on-center, which should be in line with the mark on the purlin, and tighten the upper pipe strap on the second rafter and install a Tek screw through the pipe strap to secure the purlin in the strap.
10. Repeat Step 4 to anchor the second rafter to the permanent structure.
11. Set the next rafter in position as shown below.



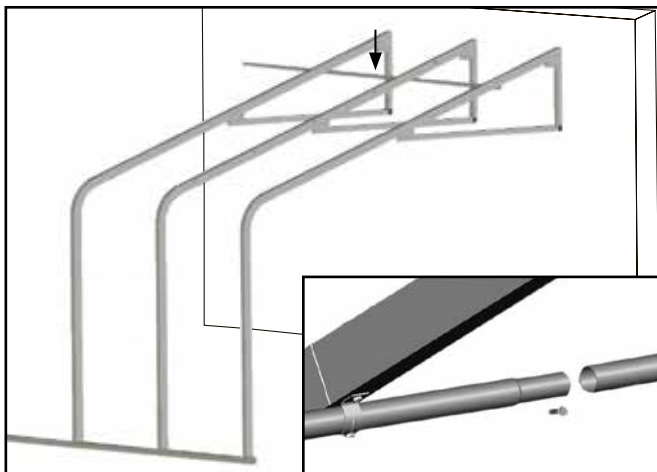
12. Secure the rafter to the 1-Way connector on the base rail.

## CLEARSPAN™ CARPORTS

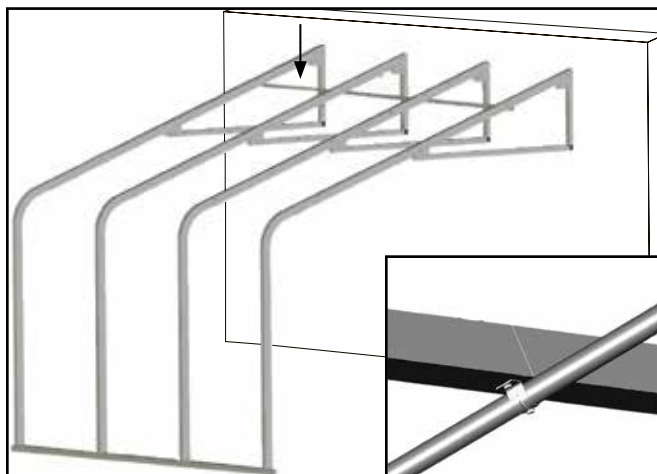
### FRAME ASSEMBLY (Continued)

#### SETTING RAFTERS

13. Select another swaged section of the same purlin assembly, slide it through the upper pipe strap, and connect it to the previously installed purlin.



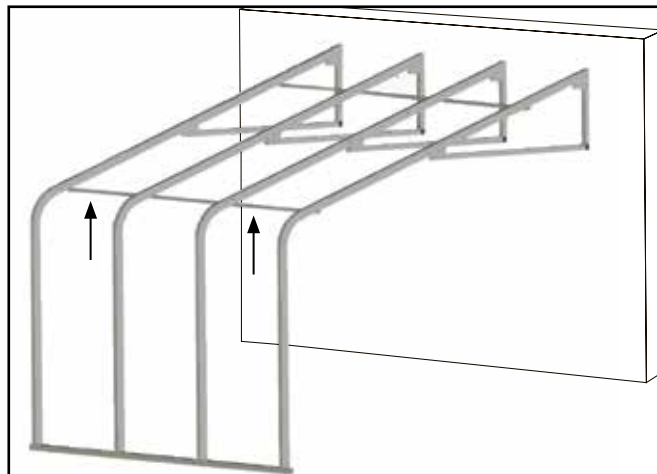
14. Align the center of the rafter with the mark on the purlin and tighten the pipe strap as described.
15. Secure the purlin to the pipe strap using another Tek screw and anchor the rafter to the permanent structure as described in Step 4.
16. Continue adding rafters and upper purlin sections until all rafters and the upper purlin are in place.



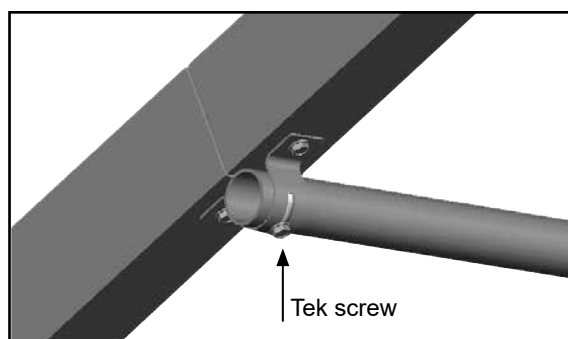
Frame shown above may be a different length than the actual frame.

17. After all rafters are secured to the bottom rail and to the permanent structure, take the remaining purlin and slide it into the lower pipe straps.

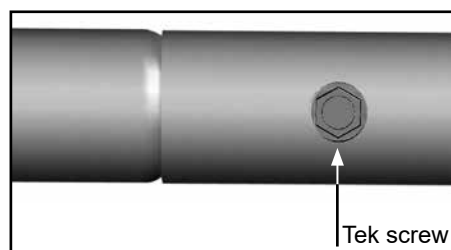
18. Align the marks on the purlin with the center of each rafter and tighten the pipe straps.



19. Return to each pipe strap and verify that all Tek screws are tight and that a Tek screw has been installed to secure the purlin to the pipe strap.



20. Return to each purlin pipe splice and secure the splice with a Tek screw.



**ATTENTION:** All pipe splices are secured with Tek screws.

21. Verify that all Tek screws are installed and tight and that all fasteners used to secure the frame to the permanent structure are properly installed and tight.
22. Continue by installing the diagonal struts.

**FRAME ASSEMBLY (Continued)**

**ATTACH THE DIAGONAL STRUTS**

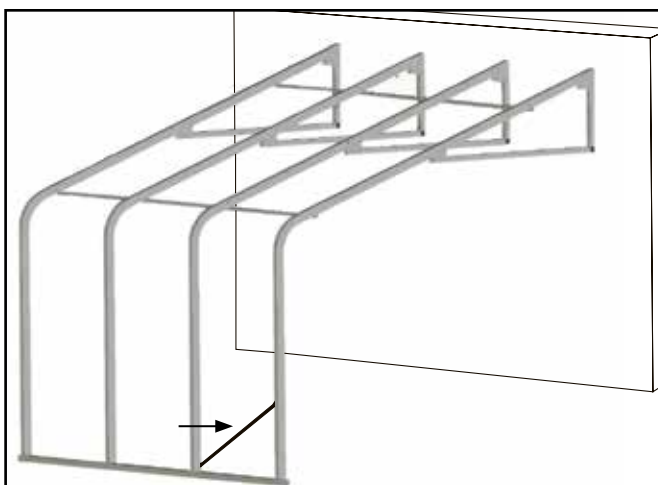
The diagonal struts are attached to the inside of the assembled frame at each end regardless of the frame length. Consult the Side Profiles in the Quick Start Guide to view these locations.

Gather the parts:

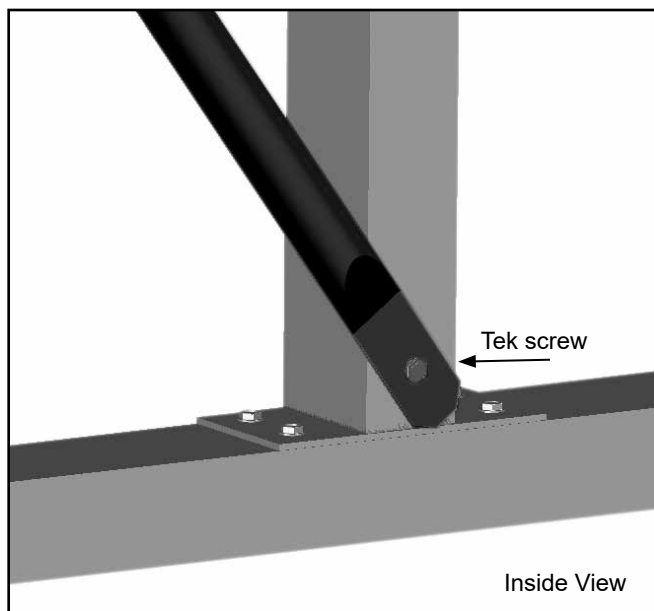
- 7' Struts (#QH1308)
- Tek screws and nut setter (3/8" x 2-9/16 magnetic)

Complete these steps:

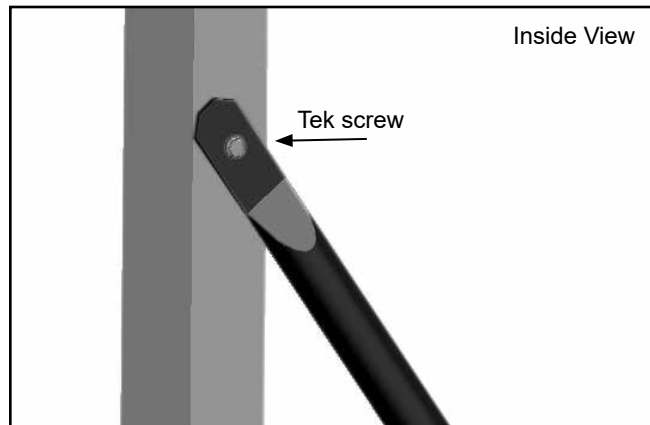
1. Locate one (1) strut and position it as shown below.



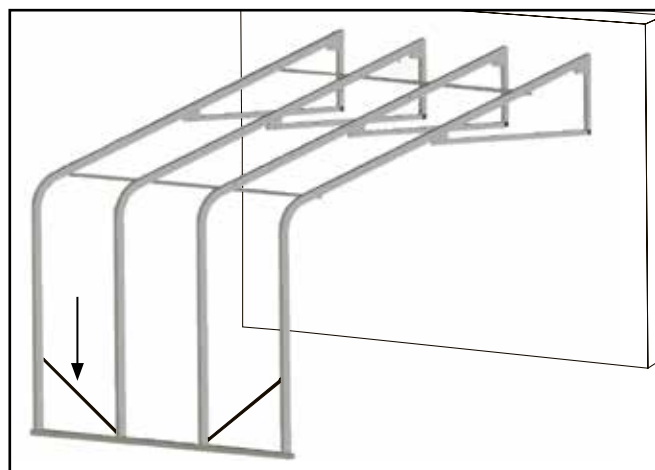
2. Secure the strut to the base of the interior rafter using a Tek screw.



3. Move to the top of the strut and secure it to the inside of the end rafter as shown below.



4. Repeat the steps to install the final 7' strut.



5. Continue by installing the hat channel and roof panels.

## CLEARSPAN™ CARPORTS

### INSTALL ROOF PANEL HAT CHANNEL

The final procedure to complete the assembly of the shelter includes the installation of the hat channel and the corrugated cover material.

There are six (6) runs of hat channel. These runs are evenly spaced and are installed on top of the rafters. They span from one end rafter to the other. Each hat channel section is secured to the tops of the rafters using Tek screws.

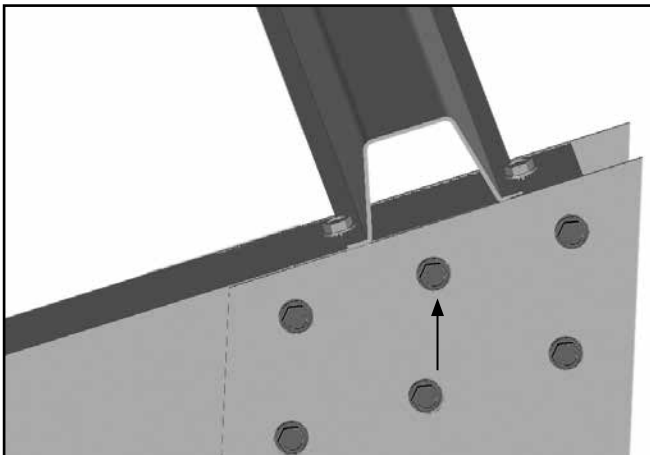
Gather the parts:

- Hat channel (#105352)
- Tek screws and nut setter 3/8" x 2-9/16 magnetic
- Permanent marker and tape measure

Tools required: Tape measure, marker, chalk line (optional), wrench (or ratchet with socket), and right-angled drill (recommended) to pre-drill holes for Tek screws when the eave is close to the top of the assembled frame.

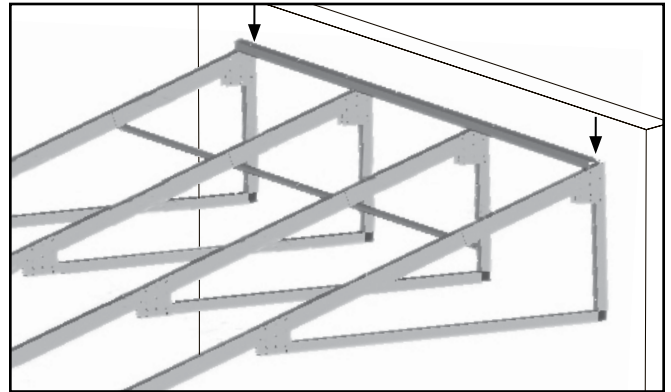
This procedure describes one way to attach the hat channel to the frame.

1. Take one section of hat channel and align it at the top of the frame as shown below.



Center of the hat channel is aligned with the center Tek screw of the mounting plate as shown above.

2. Move to the other end of the frame and align the remaining end of the first run of hat channel with the same Tek screw in the mounting plate.



The hat channel must run evenly across the frame for the corrugated panels to install correctly.

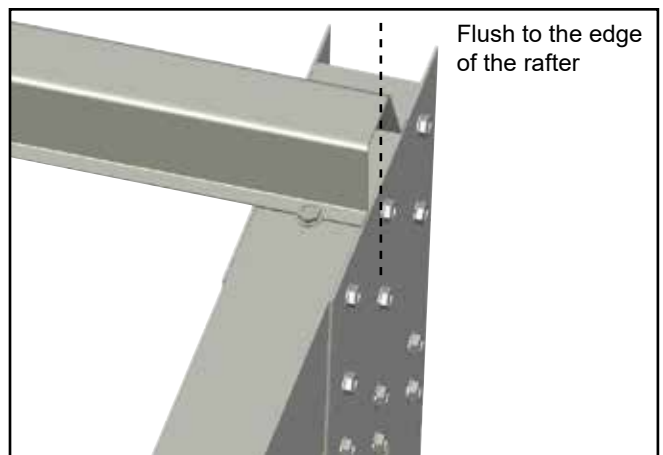
**ATTENTION:** Some frame lengths require more than a single length of hat channel for each hat channel run.

Use the following information as a guide when installing the hat channel.

- Shelter #105589:** 1 full section of hat channel per run.
- Shelter #105590:** 1 and 1/2 sections per run. (Cut 3 full pieces of hat channel in half to be used with the full sections for each run.)
- Shelter #105591:** 2 full sections overlapped per run.
- Shelter #105592:** 2 full sections overlapped per run.

3. Using Tek screws, secure the upper run of hat channel to each rafter.

**NOTE:** For longer shelters where two pieces of hat channel are used for each run, overlap the hat channel sections by a minimum of six (6) inches *before* securing these to the frame.

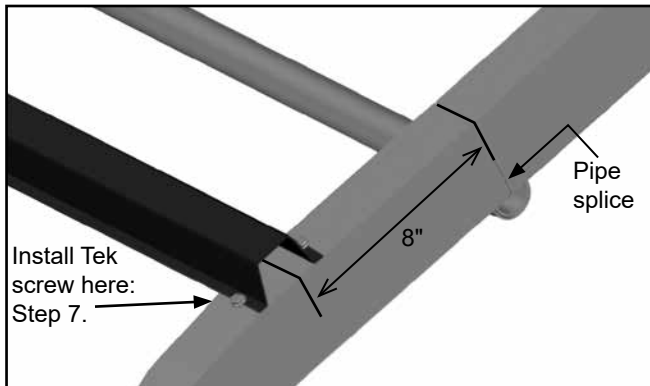


**ATTENTION:** For the 105589 shelter, the hat channel may extend beyond the edge, or it can be trimmed flush.



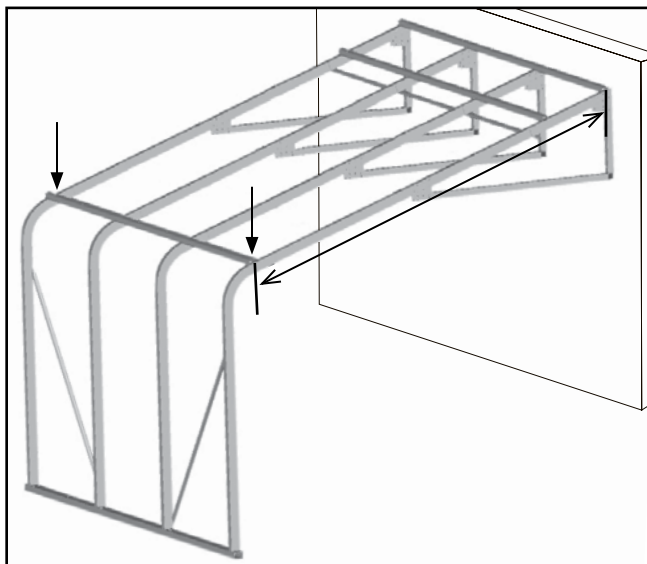
**INSTALL ROOF PANEL HAT CHANNEL (Continued)**

4. Move to the lower section of the frame and measure approximately 8" from the pipe splice of the rafter toward the rafter curve and mark the location.



**NOTE:** The location of this run of hat channel must be between the rafter pipe splice and the curve of the rafter. Do not install it in a location that will not allow the corrugated panels to install flat on the hat channel.

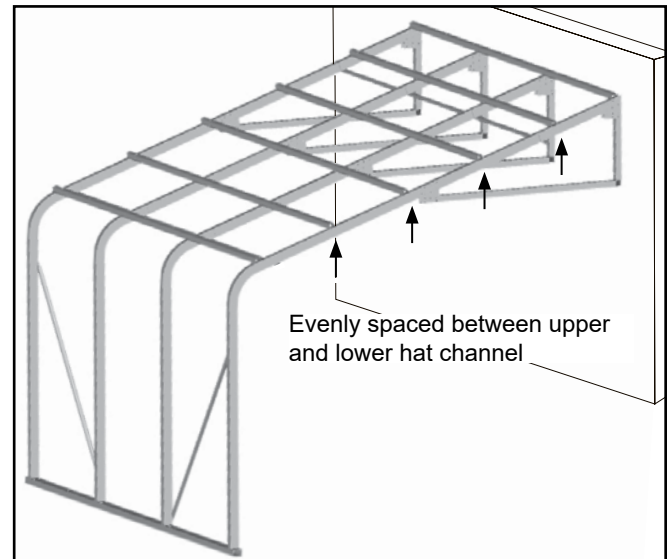
5. Repeat Step 4 to mark the other end rafter in the same location. Use a chalk line to mark locations if needed.
6. Take the next section of hat channel and center it over the mark on the rafter. (See previous diagram.)
7. Secure it to the lower end of the frame using a single Tek screw. (See the arrow above.)
8. Move to the other end of the frame, align the hat channel with the center line, and secure that end of the hat channel to the rafter.



9. Verify that the center-to-center measurement between the upper hat channel and the lower hat channel is identical for both end rafters and secure the channel to the top of the frame.

**NOTE:** Use two Tek screws at each rafter to secure each run of hat channel.

10. Take the remaining runs of hat channel and evenly space these between the upper and lower sections of hat channel.



Frame shown above may differ in length from actual frame.

11. Return to each run of hat channel and verify that all runs are attached to each rafter.
12. Return to each pipe splice and verify that each is secured using Tek screws.
13. Verify that the entire frame assembly is properly secured to the permanent structure.
14. Continue by installing the corrugated roof panels and the finish profile.

## CLEARSPAN™ CARPORTS

### INSTALL THE CORRUGATED ROOF PANELS

The following steps describe one way to install the corrugated roof panels.

Gather the Parts:

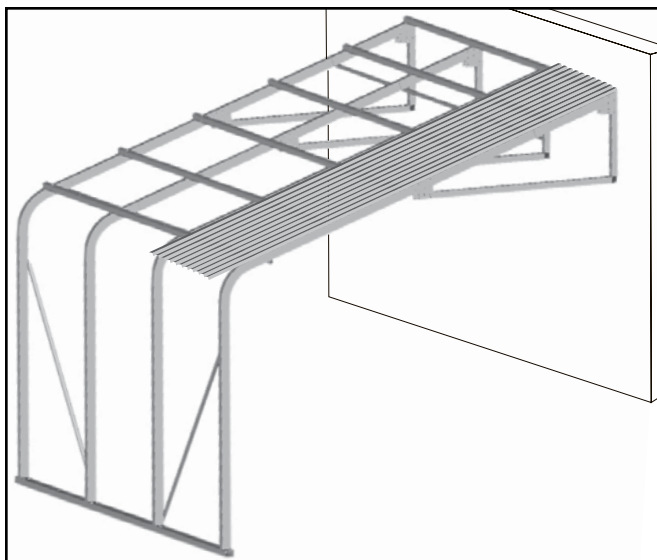
- Corrugated polycarbonate panels (#104621G)
- Wall profile (#105521)
- Neo-bonded galvanized washers (#102921B)
- Tek screws and nut setter (3/8" x 2-9/16 magnetic)

**NOTE:** The roof panels are installed with their ribs running *parallel with the rafters*. This allows for proper drainage and helps when removing debris.

All roof panels are secured to the hat channel using Tek screws and neo-bonded washers.

A Tek screw is install along each roof panel edge and in the center of each panel on *every hat channel run*.

1. Take one corrugated roof panel and position it evenly on the frame.



The edge of the panel will align with the outside edge of the rafter when the panel is correctly positioned.

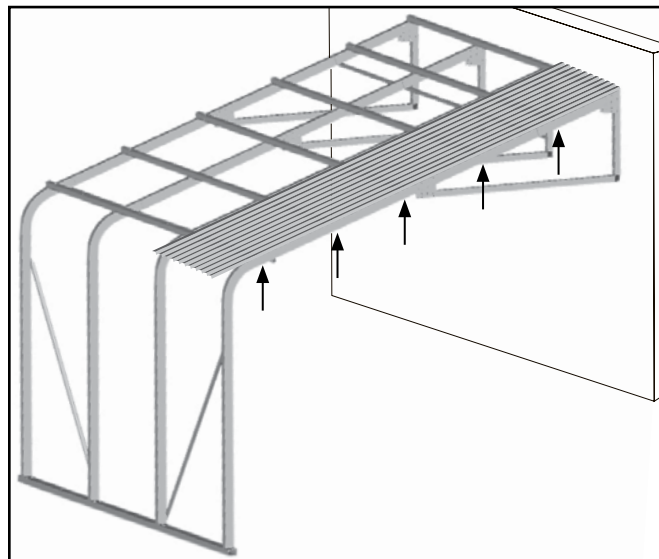
The top of the panel can be set flush with the permanent structure or it can remain an inch or so away to allow for variations in the structure. Corrugated wall profile is installed last to finish the top edge.

2. Beginning at any of the mid runs of hat channel, take a neo-bonded washer and a Tek screw and secure the panel to the hat channel.

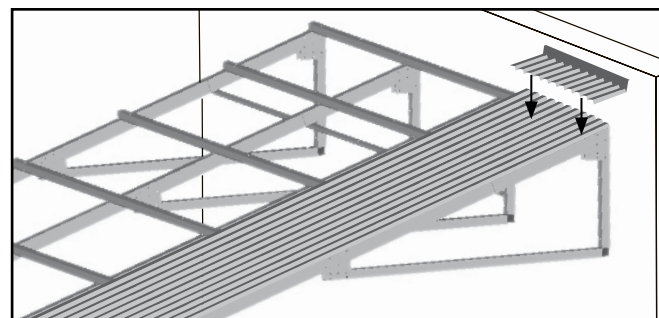
**NOTE:** Use a chalk line to mark the location of the center of the hat channel (if desired). This helps to keep the screws aligned. Install all Tek screws and washers in the valleys of the panels.

DO NOT SECURE THE PANEL TO THE UPPER RUN OF HAT CHANNEL AT THIS TIME.

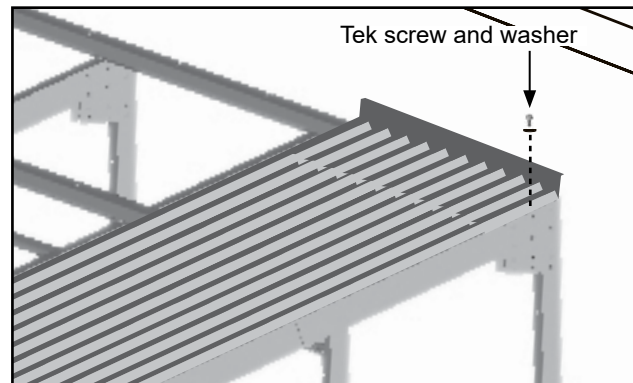
3. Continue to secure the panel along the outside edge until a screw has been installed in each run of hat channel *except* the upper run.



4. Move to the middle of each hat channel run for the first panel, except the upper hat channel, and install another Tek screw and washer.
5. With the first panel secured along the edge and in the middle, take the first section of wall profile (#105521) and place it against the permanent structure and on top of the first roof panel.

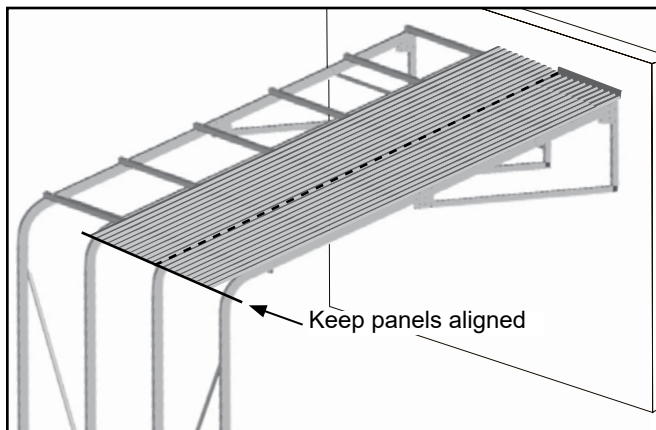


6. Beginning at the outside edge, install a Tek screw and washer through the wall profile, through the first roof panel, and into the upper run of hat channel.



**INSTALL THE CORRUGATED ROOF PANELS**

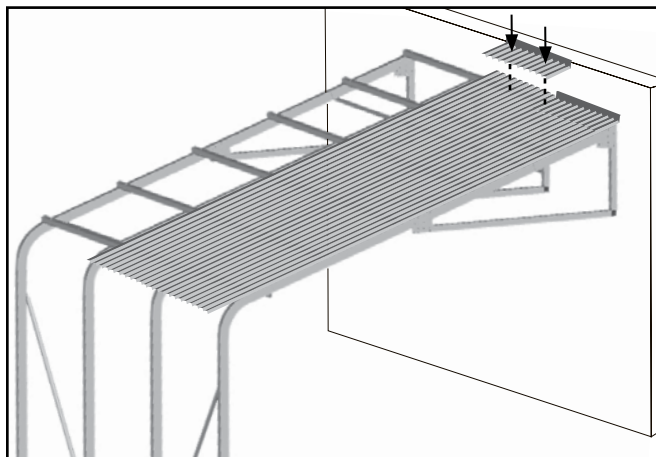
7. Secure the middle of the panel to the upper hat channel.
8. Take a second long roof panel and place it on the frame. The long edge adjacent to the first panel will overlap the *first rib* of that panel. See black dashed line below. **DO NOT OVERLAP MORE THAN ONE RIB OF THE ADJACENT PANEL.**



**NOTE:** The top of the second long panel is slid between the first panel and the 5" wall profile. When installed correctly, the small 5" wall profile will overlap both of the long panels.

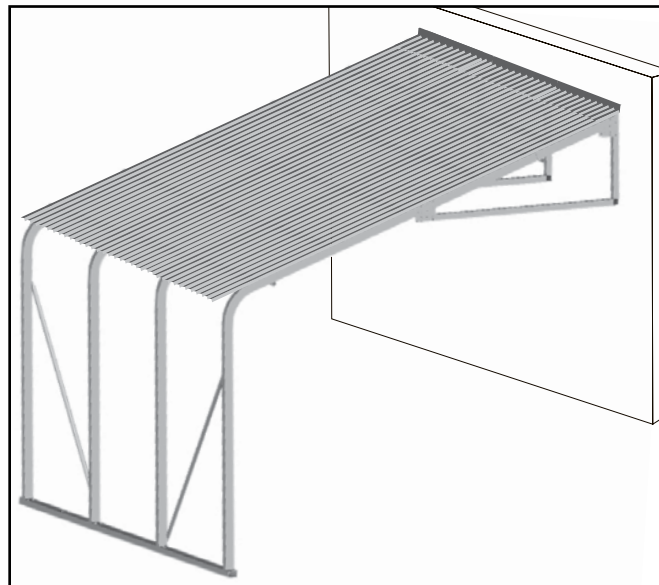
*Keep the lower edges of the long panels aligned.*

9. Install Tek screws and washers through the first and second panels at each hat channel run along the edge *except for the upper hat channel run*. See the black dashed line in the previous diagram.
10. Select a second 5" wall profile section, place it in position as shown below, and secure using Tek screws and washers. Use the arrows below as guides.



**NOTE:** The Tek screw at the top of the panel and closest to the first panel will secure the two long panels and the two short wall profile sections to the upper hat channel run.

11. Continue to attach long panels and the 5" wall profile sections to the frame until all panels are in place.



**IMPORTANT:** The 5" wall profile sections *will always* overlap the tops of all long corrugated panels.

12. Read the care and maintenance information that follows.

## CLEARSPAN™ CARPORTS

### CARE AND MAINTENANCE

Space below is reserved for customer notes.

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

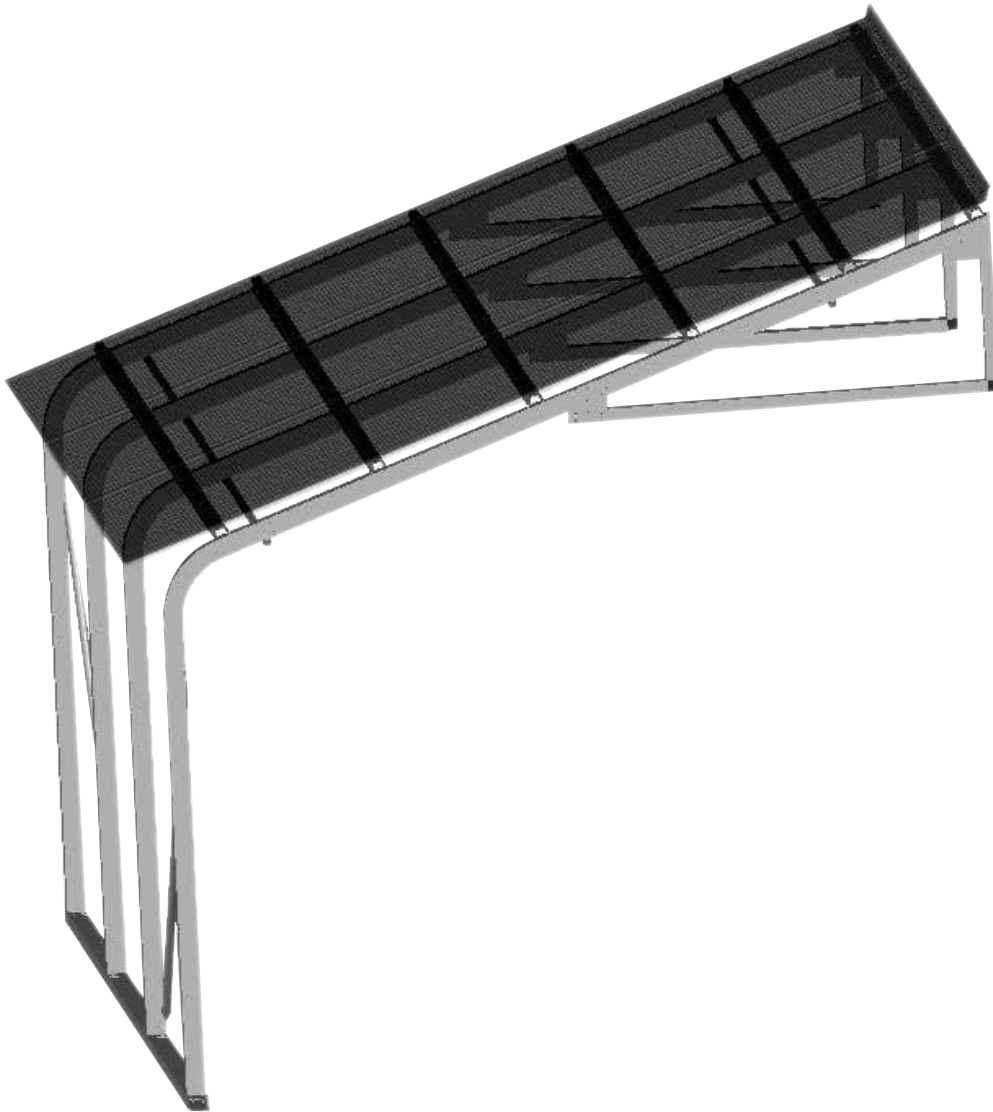
- Regularly check the roof panels to see that they remain tight and in proper repair.
- Check connections and all fasteners to verify that they remain tight.
- Verify that the anchor system used to secure the assembled frame to the site is in good repair and that all connections and fasteners are tight.
- Do not climb or stand on the shelter at anytime.
- Remove debris and objects that can accumulate on the shelter. Use tools that will not damage the roof panels when removing debris.
- Remove snow to prevent excess accumulation. Use tools that will not damage the roof panels when removing snow.
- Check the contents of the shelter to verify that nothing is touching the roof panels that could cause damage.
- If the shelter is moved, inspect all parts and connections before using.
- 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.



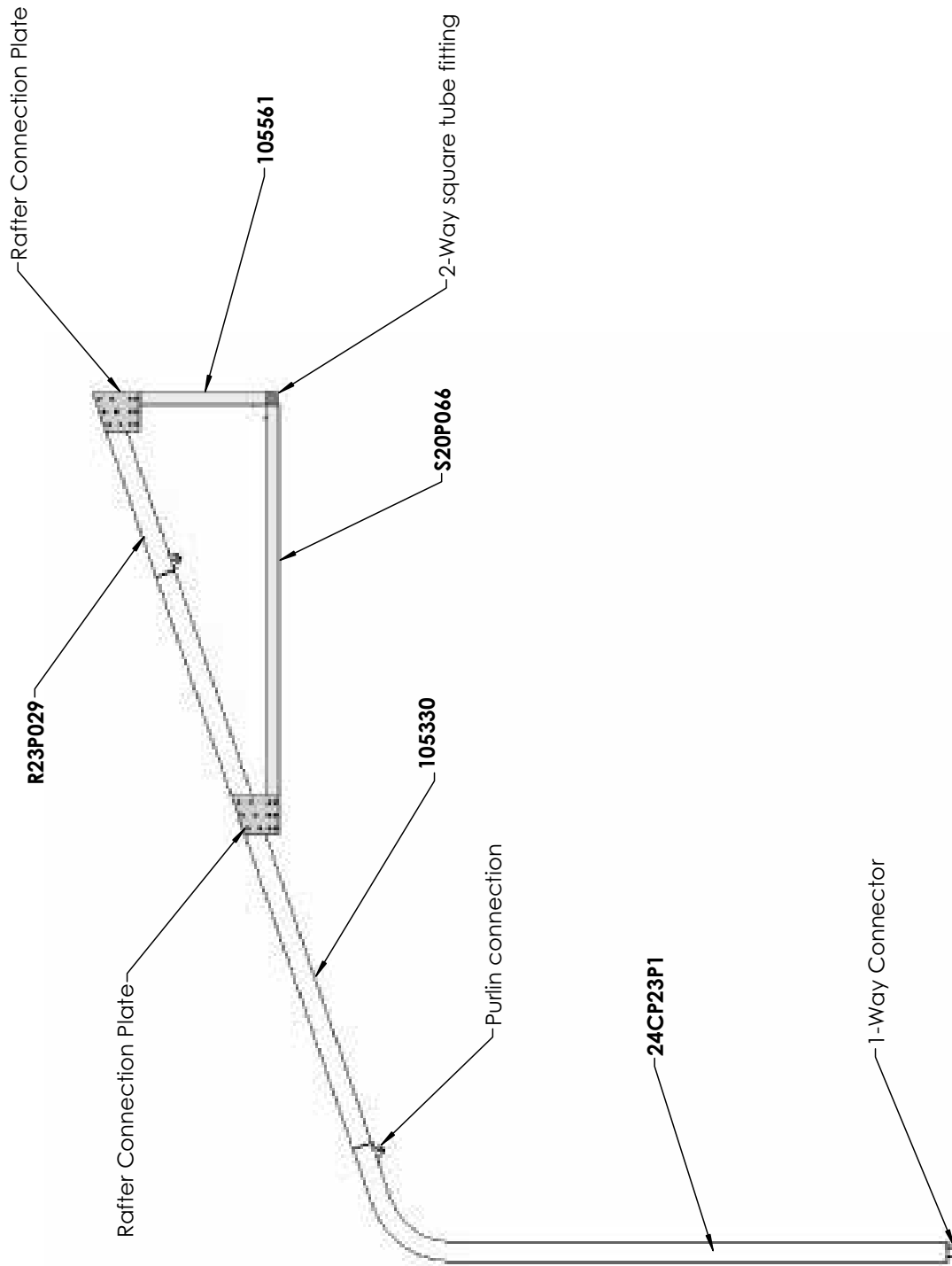
**QUICK START GUIDE**

11' Wide House-Attached Carport



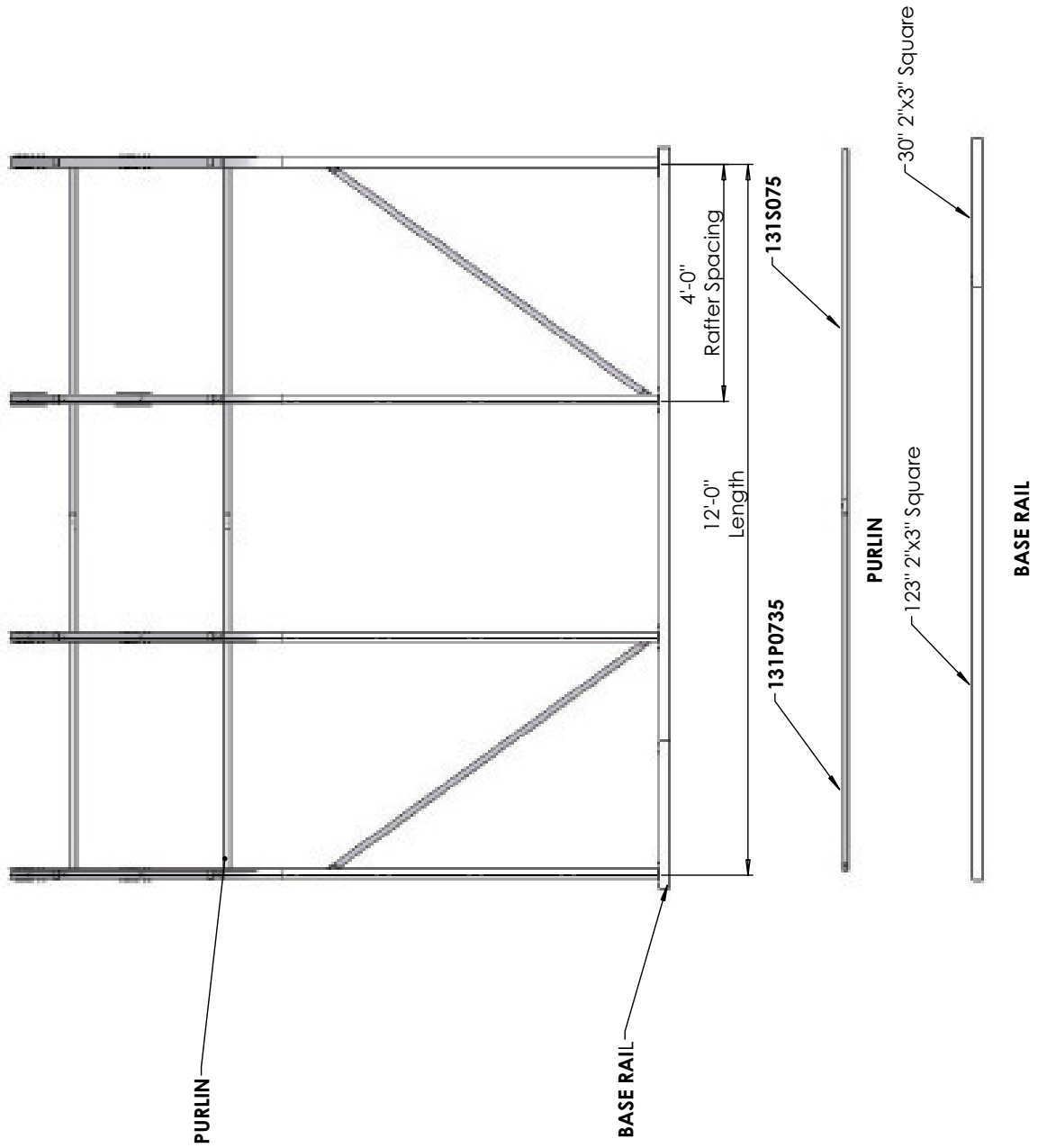
Frame shown may differ in length from actual frame.

# FRONT PROFILE

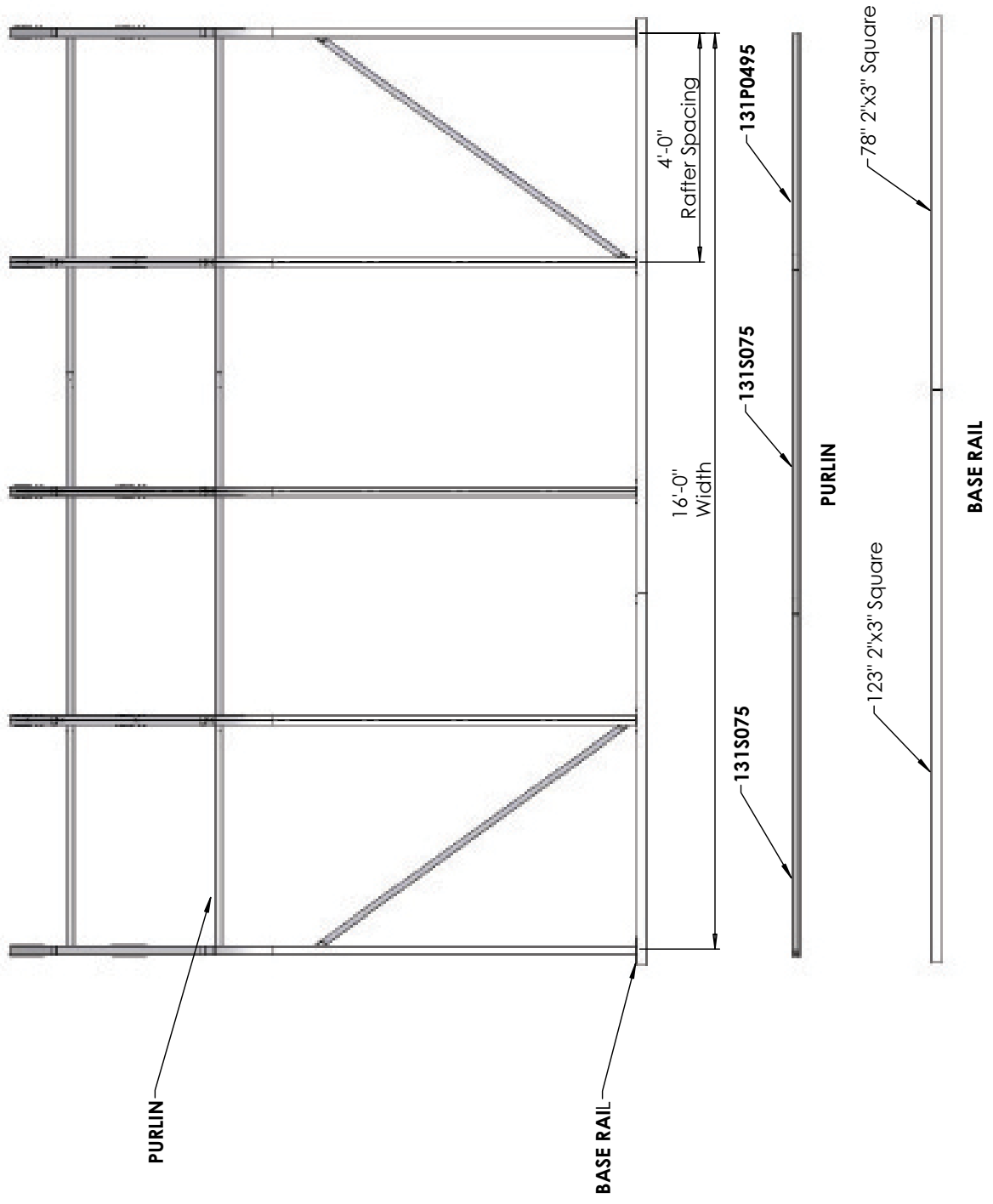




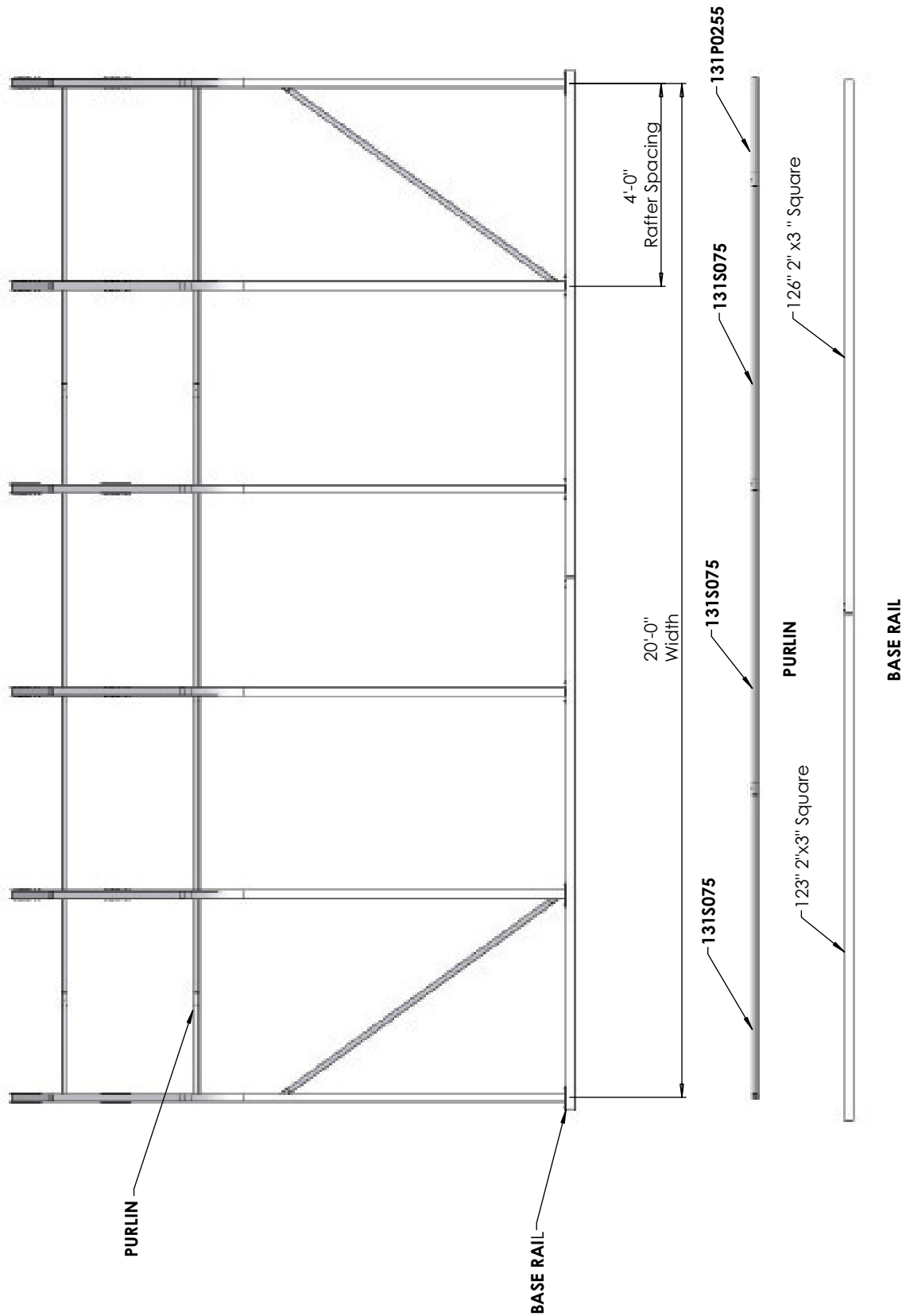
# SIDE PROFILE - 105589



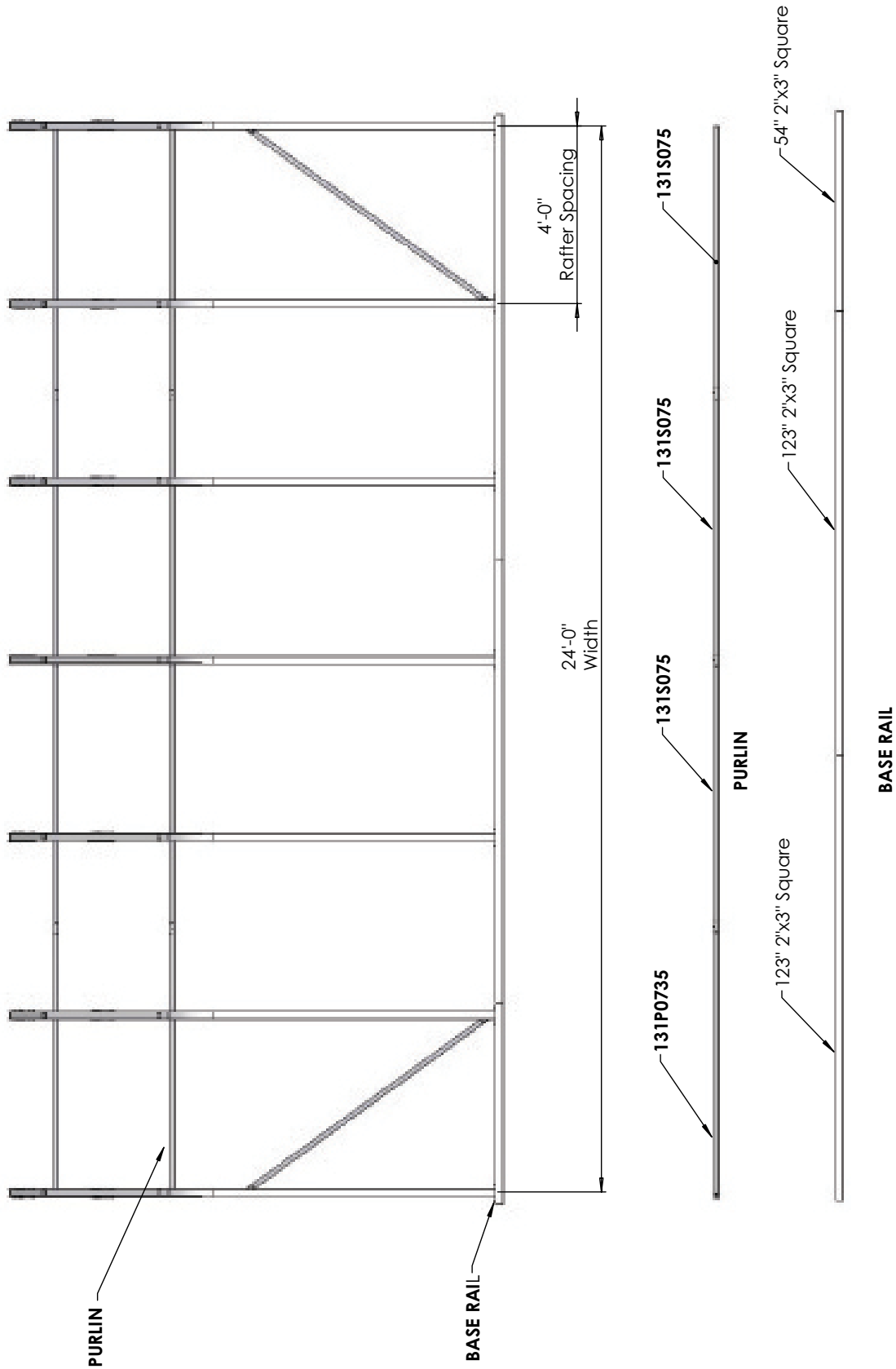
# SIDE PROFILE - 105590



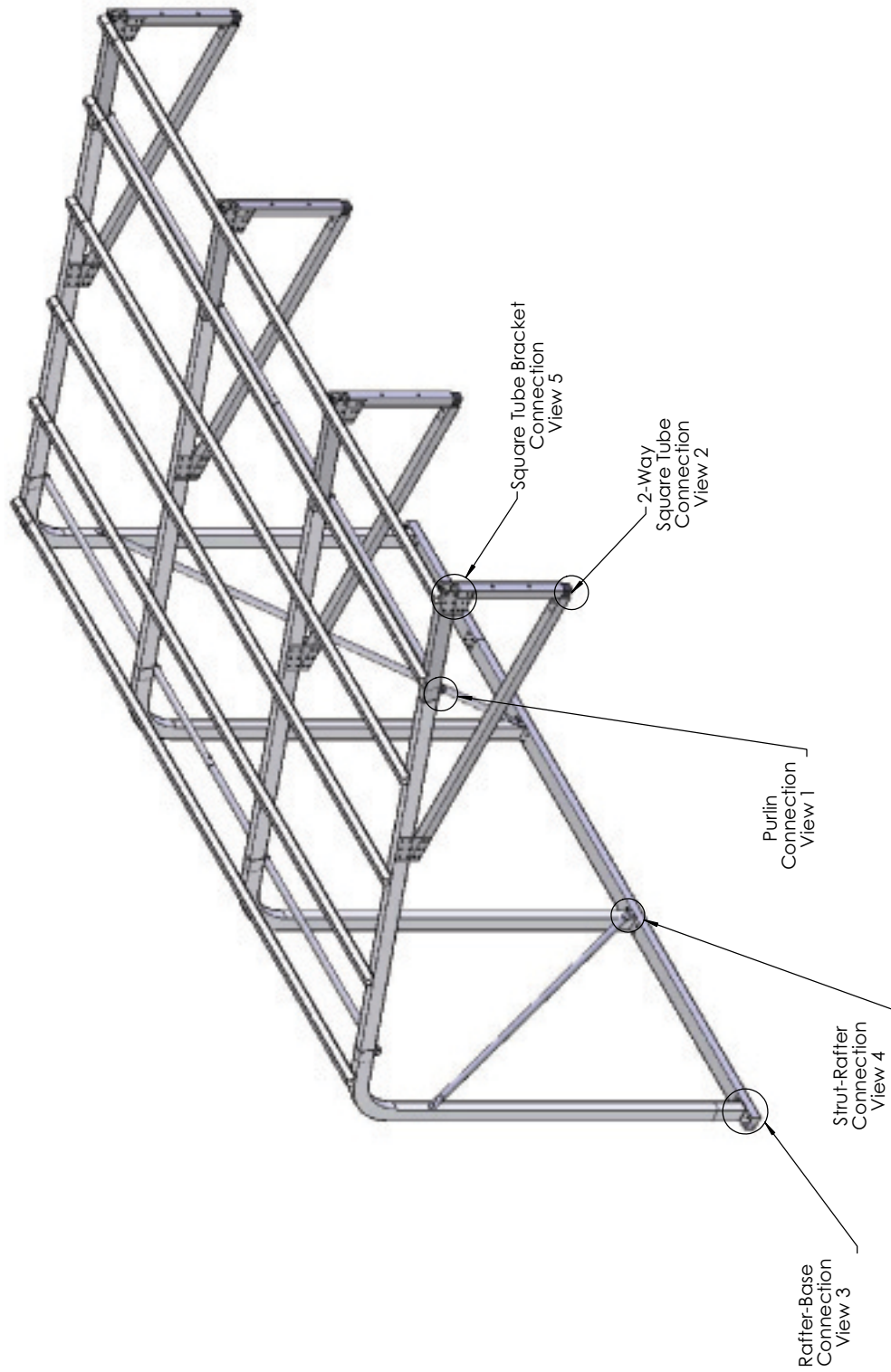
# SIDE PROFILE - 105591



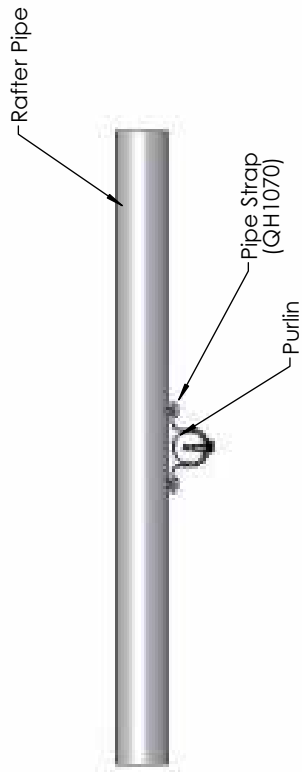
# SIDE PROFILE - 105592



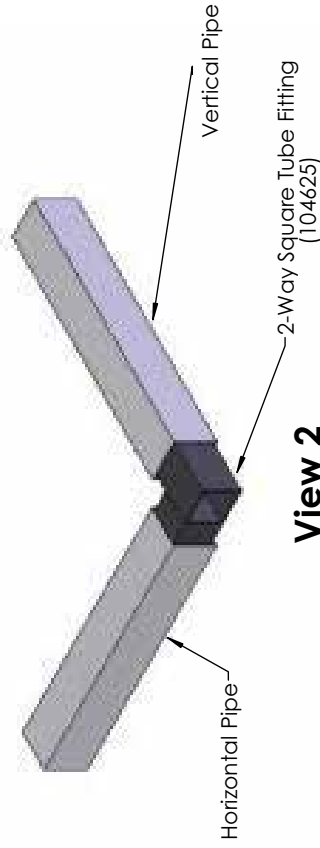
# CONNECTIONS



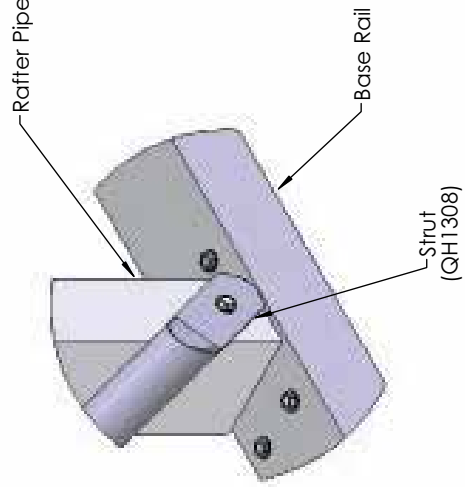
# CONNECTION - DETAILS



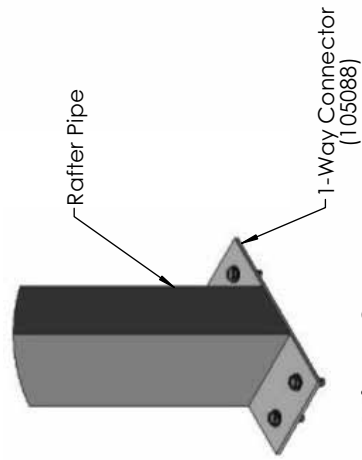
**View 1**  
Purlin  
Connection



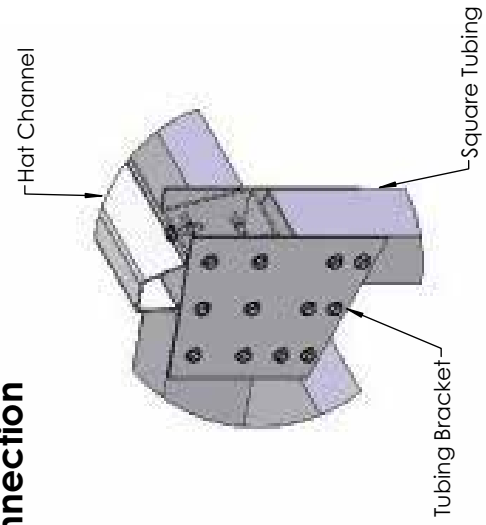
**View 2**  
2-Way Square Tube  
Connection



**View 4**  
Strut Rafter  
Connection



**View 3**  
Rafter-Race  
Connection



**View 5**  
Square Tube Bracket  
Connection





Space below is reserved for customer notes.