



ClearSpan™ Commodity Building Cover Installation Guide



IMPORTANT INFORMATION! READ THIS DOCUMENT ***BEFORE*** YOU BEGIN FRAME ASSEMBLY AND MAIN COVER INSTALLATION.

©2022 ClearSpan™
All Rights Reserved. Reproduction
is prohibited without permission.



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

COMMODITY BUILDING COVER INSTALLATION



READ THIS DOCUMENT BEFORE YOU BEGIN

The installation of the main covers is another step toward the completion of your building. To ensure that covers are installed safely and properly, read this information.

SAFETY PRECAUTIONS

- Wear approved eye and head safety gear.
- Wear gloves when handling metal tubes and strapping.
- Do not climb on the shelter or framing during or after construction or during the cover installation.
- Do not attempt to install the covers during windy conditions. A light breeze can easily lift a cover during installation which may cause property and cover damage and personal injury. **Exercise caution at all times during the installation.**
- Covers are heavy. Use proper lifts and adequate assistance during cover preparation and installation.

⚠ WARNING: The individuals installing the covers are responsible for furnishing all equipment and tools needed to complete the process. For safety reasons, those who are not familiar with the use of lifts and recognized construction methods and techniques *must seek the help of a qualified contractor.*

SITE

Before cover installation begins, determine where you will prepare the cover. Use these guidelines to prepare for the cover installation:

- Cover preparation area is typically at the base of the assembled frame along one side.
- Determine along which side of the frame you will prepare cover. Cover installation begins on one side of frame; then cover is pulled over or onto the frame.
- Cover preparation area must be accessible, free of overhead obstacles and power lines, level (if possible), and free of ground debris that could damage cover and interfere with cover preparation.

FRAME PREPARATION

For a typical commodity truss building, frame is fully assembled and end panels installed *before* covers are prepared and installed. Use the following guidelines to verify frame is ready for cover installation:

- Verify all ratchets and winches (if equipped) are mounted and tested for proper operation.
- Check all mounting bolts to ensure they are tight.
- Inspect the end truss upper chord mounting bolts and cover or tape as needed to protect the end panel and bonnet portion of the main cover.
- Ensure no loose cable ends can catch or damage covers as they are pulled over frame. Tape cable ends if needed.
- Tape *all upper chord truss splices* using duct tape to prevent cover damage. Inspect frame for sharp edges and cover or smooth these if found.
- Inspect the truss foundation and anchor system (if equipped) to verify that the cover will not catch on these during the installation.
- If an end wall is present, inspect the framing for sharp edges and clamps at the point where it is secured to the end truss. Cover these as needed to protect the main cover bonnet (if applicable).
- After frame assembly, verify that installed keder rails are aligned. Loosen and align as needed.
- Verify keder rail is **installed on truss according to the truss prints**, and that edges have been filed smooth to prevent cover damage.

REQUIRED EQUIPMENT AND TOOLS

In addition to basic hand tools, the following items are required to properly and safely install a keder cover:

- Scissors, utility knife, or similar tools to notch cover pockets and cut strap and rope (if equipped) to length.
- Lifts adequate to reach height of frame and that extend over frame from the outside.
- Ropes (supplied by customer) or straps for pulling covers onto frame.
- Liquid soap to aid in sliding pipe assemblies into the cover pockets. (May not be needed.)
- Duct tape to tape over the pipe splices and Tek screws.
- Power driver and drive bit to install self-tapping screws.
- Wire pulling lubricant (required); purchase locally.

INSTRUCTION NOTES

Standard commodity buildings include two (2) covers. Read carefully to identify the covers sent with the building. Consult information below and throughout this guide to prepare for cover installation.

COVER TERMINATION AND COMPONENT INSTALLATION NOTE

In most instances, it is best to install all cover termination components *before installing the covers*. Consult the diagrams at the back of this guide to see the typical cover termination for the commodity building. If applicable, the termination option for your cover and building was determined at the time the building and foundation were designed.

Typical termination components include a combination of these items: buffer tubes, H-Channel, fabric lock, and installation hardware and fasteners. Install the components for the cover termination before you install the covers.

END FRAME AND END PANEL INSTALLATION NOTE

For the standard commodity building, the installation of end frame and end panel must occur *before* the main cover is installed. Consult the main building drawing packet and all additional documentation to determine when to install the end frame and end panel. Contact your project manager (if applicable) for clarification and review all installation documentation included with the building if you have questions.

Consult the end panel installation guide to install the end panel.

MAIN COVER INSTALLATION TIPS

- Pull cover slowly and evenly over the assembled frame.
- Verify that the cover does not catch on any cable or frame members during the installation.
- Reposition straps as needed throughout the process.
- The assistant in the lift is responsible for ensuring that the keder rope glides freely in the keder rail. ***DO NOT FORCE THE COVER AS IT GLIDES IN THE KEDER RAIL.***

⚠ WARNING: Never leave a cover unsecured. Sudden changes in the weather can lift a cover from the frame and may cause personal injury or property damage.

CAUTION: Use caution when pulling a cover. Keder strip and cover can be damaged if too much force is applied. ***Position an assistant inside the frame on a lift to help guide the keder rope into the keder rail and to signal to the ground assistants when to continue and when to stop. Cover should slide easily in keder channel.***

⚠ Keep hands, fingers, and loose clothing away from keder channel as cover panel is pulled.

ASSEMBLY NOTE: Install Tek screws using a clutched drill driver running approximately 750 RPM while applying approximately 50 lbs of force.

Do not use an impact driver!

IMPORTANT! USE 115646 TEK SCREWS FOR KEDER RAIL INSTALLATION

Use the Tek screws equipped with rubber washers to attach keder rail to upper chord of trusses as instructed. Do not use these screws for any other connections or to install any other components.

CLEARSPAN™ COMMODITY BUILDINGS

FINAL CHECK LIST BEFORE COVER INSTALLATION

1. Inspect frame and prepare for cover installation.
2. Determine where cover will be staged and clear site around the assembled frame.
3. Check weather and wind conditions.
4. Gather the necessary assistants, equipment, and tools.
5. Place cover and cover pipes in position along the side of the frame where cover panel will be prepared.

⚠ WARNING: To prevent injury and property damage, do not attempt to install cover on windy or stormy days.

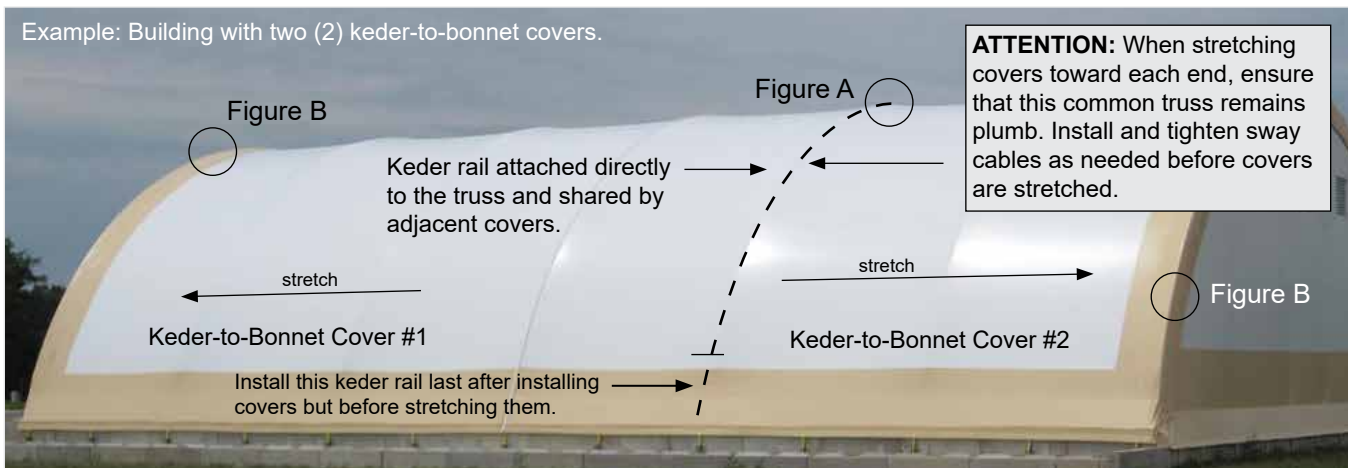
GETTING STARTED

1. Consult the photos and diagrams throughout the following pages to get a basic view of how a main cover is installed.
2. Read the individual sections for details that help describe the steps to install a specific cover type.
3. Verify that all tools, parts, weather conditions, and assistants are accounted for, considered, and checked *before* you begin.



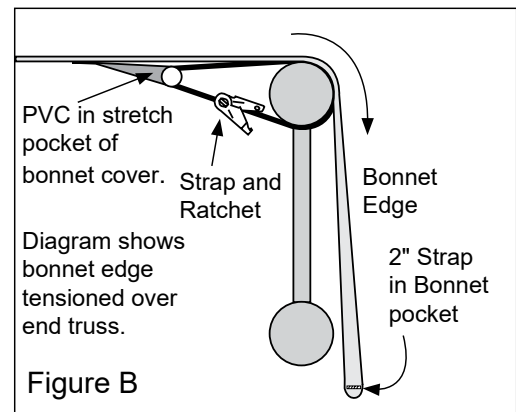
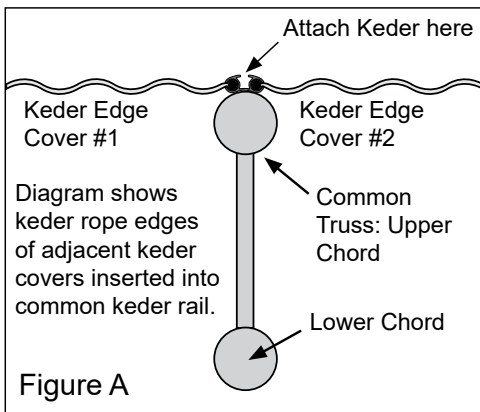
KEDER-TO-BONNET COVER INSTALLATION — GENERAL INFORMATION

Consult *Truss Cover Layout* diagrams and *Cover Type tables* for details. Once required keder rail is attached and cover is prepared for installation as instructed earlier, continue with the installation of keder-to-bonnet cover.



In this example, keder rail is attached to the common truss between Cover #1 and Cover #2. Cover #1 is installed and temporarily secured loosely to the frame. Next, Cover #2 is pulled onto the frame and loosely secured. Finally, remaining keder rail is attached.

CUT-AWAY SIDE VIEWS



ATTENTION: Attach keder rail to trusses where two (2) keder covers meet. In the diagrams on the next page, the letter dashed line identifies the truss where keder rail is attached. Basic sku number to identify cover and corresponding letters are used to determine cover location on the assembled frame.

These cover layout diagrams are specific to the standard line of commodity buildings. Unless instructed to do so, *do not use them for any other buildings*. Dimension below each diagram identify length of building.

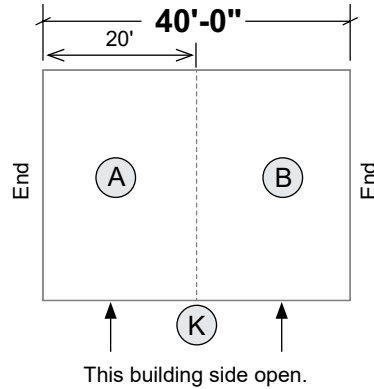
IMPORTANT! Before pulling any keder cover, ensure that all keder rails are aligned. Lubricate all keder channels using wire pulling lubricate (not included—purchase locally). Keder rope must slide easily in keder channel. *Do not attempt to pull a keder cover into a channel without first lubricating that channel!* The transition between keder rails attached to a truss must be smooth and without obstructions. Inspect these areas and adjust rails as needed to prevent damage to keder covers.

CLEARSPAN™ COMMODITY BUILDINGS

TRUSS COVERS — IDENTIFICATION CHARTS AND LAYOUT DIAGRAMS

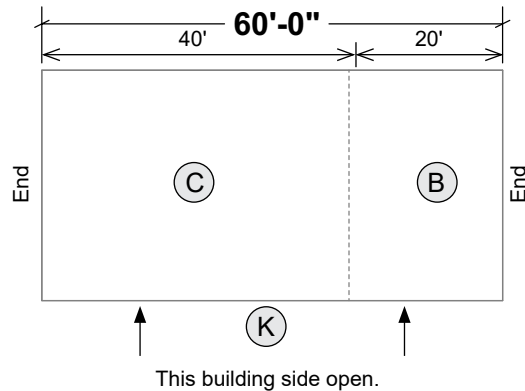
The following instructions describe the installation of commodity building truss covers. In standard length commodity buildings, a combination of two (2) panels is used to cover the assembled frame. Use the diagrams and charts below to determine what cover panels have been shipped with your shelter and where to install those on the frame. **Always consult the *Truss Cover Layout* diagrams before you begin. Diagrams may not apply to custom or longer buildings. Do not use them for any other buildings unless instructed to do so.**

COMMODITY BUILDING WIDTH: 38'			
COVER PANEL SKU #	BUILDING LENGTH		
	40'	60'	80'
(A) QCC038RKA20L01_	X		
(B) QCC038RKA20R01_	X	X	
(C) QCC038RKA40L01_		X	X
(D) QCC038RKA40R01_			X
(K) INSTALLED KEDER RAIL ABOVE OPEN SIDE.			
Dashed line shows location of keder rail between covers.			

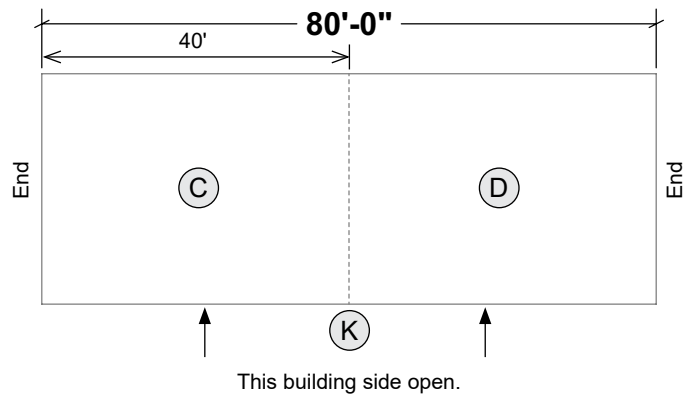


ATTENTION: Point of view is looking at the open end of the building for all diagrams.

COMMODITY BUILDING WIDTH: 48'			
COVER PANEL SKU #	BUILDING LENGTH		
	40'	60'	80'
(A) QCC048RKA20L01_	X		
(B) QCC048RKA20R01_	X	X	
(C) QCC048RKA40L01_		X	X
(D) QCC048RKA40R01_			X
(K) INSTALLED KEDER RAIL ABOVE OPEN SIDE.			
Dashed line shows location of keder rail between covers.			



COMMODITY BUILDING WIDTH: 58'			
COVER PANEL SKU #	BUILDING LENGTH		
	40'	60'	80'
(A) QCC058RKA20L01_	X		
(B) QCC058RKA20R01_	X	X	
(C) QCC058RKA40L01_		X	X
(D) QCC058RKA40R01_			X
(K) INSTALLED KEDER RAIL ABOVE OPEN SIDE.			
Dashed line shows location of keder rail between covers.			



*General cover descriptions may not apply to actual covers on custom buildings.

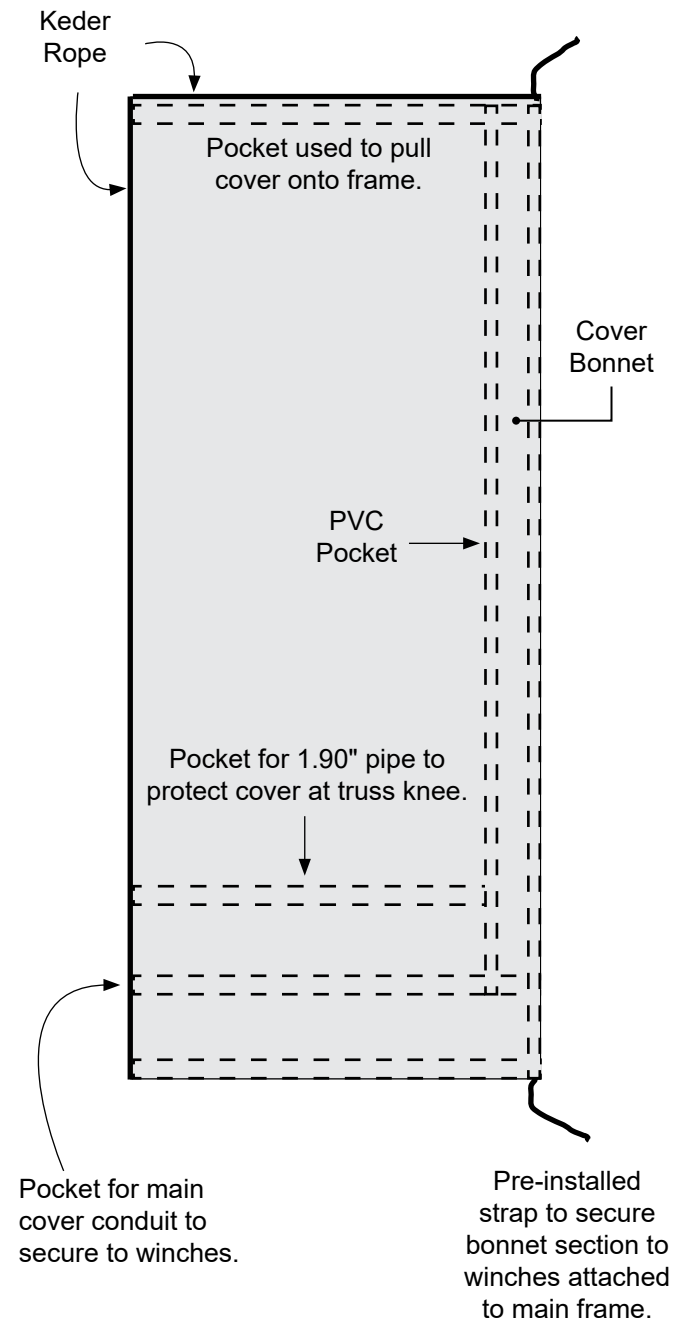
COVER INSTALLATION OVERVIEW

The steps that follow describe the installation of two keder-to-bonnet covers with no cover between them.

ATTENTION: Verify that keder rail is attached to the top of the common truss. **Consult diagrams to determine keder rail and cover locations. Consult the Erecting a Truss guide for additional details to attach keder rail.**

1. Position cover so that pre-installed bonnet strap will be situated at the installed end panel once the cover is unrolled. Position cover pockets toward the frame.
 2. Determine which pipe pockets of the cover are used for securing the cover to the frame.
 3. Assemble and insert pipes into cover pockets.
 4. Tie straps to the cover pipe that will be used to pull cover onto frame. Toss straps over the frame and thread each strap through a shackle attached to the frame or to winches (if needed).
 5. Move to the remaining cover conduit and temporarily secure the conduit to the frame to hold cover in position.
 6. Locate the keder rails attach to the common truss for covers and lubricate both keder channels before pulling cover.
 7. Tie the free end of the straps to the lifts, feed the keder cord into the keder rail, and carefully pull the cover onto frame. Loosely secure cover sides.
 8. Slide the lubricated keder rail or rails (depending on cover length) over the keder rope along the top edge of the installed cover panel *at the awning position*.
 9. Attach the keder rail to the awning frame according to the keder rail installation steps described in the main frame assembly guide. Use Tek screws with washers.
 10. Assemble and insert PVC conduit into the PVC stretch pocket, install end strap and ratchet combos around upper chord of truss, and stretch cover toward the end truss.
- NOTE:** Ensure that keder/common truss remains plumb. Ensure that upper and lower truss chords remain plumb. **Do not overtighten!**
11. Tighten winches to secure main cover conduit.
 12. Repeat to install next cover.
 13. Terminate cover end and trim excess cover material.
 14. Secure main cover bonnet. *Each cover includes a bonnet that wraps over the end truss. Secure bonnet strap using winches.*

TYPICAL COVER DIAGRAM SHOWING POCKETS



NOTE: Position pockets to the underside (or frame side) of the cover during installation.

CLEARSPAN™ COMMODITY BUILDINGS

HOW TO INSTALL KEDER RAIL — GENERAL INFORMATION

Keder rails are typically attached to truss during truss assembly and before lifting and setting trusses to assemble the frame. Consult building and cover diagrams and the **Erecting Truss Frame** guide to determine which truss to attach keder rails to. You must install keder rail before installing any keder cover. **Install a Tek screw with rubber washer in each predrilled hole in the keder rail. Return to the Erecting Truss Frame guide to install keder rails if equipped.**

Do not use an impact driver to install Tek screws.

Use a clamp to align the individual keder rails where they meet to ensure a smooth transition.

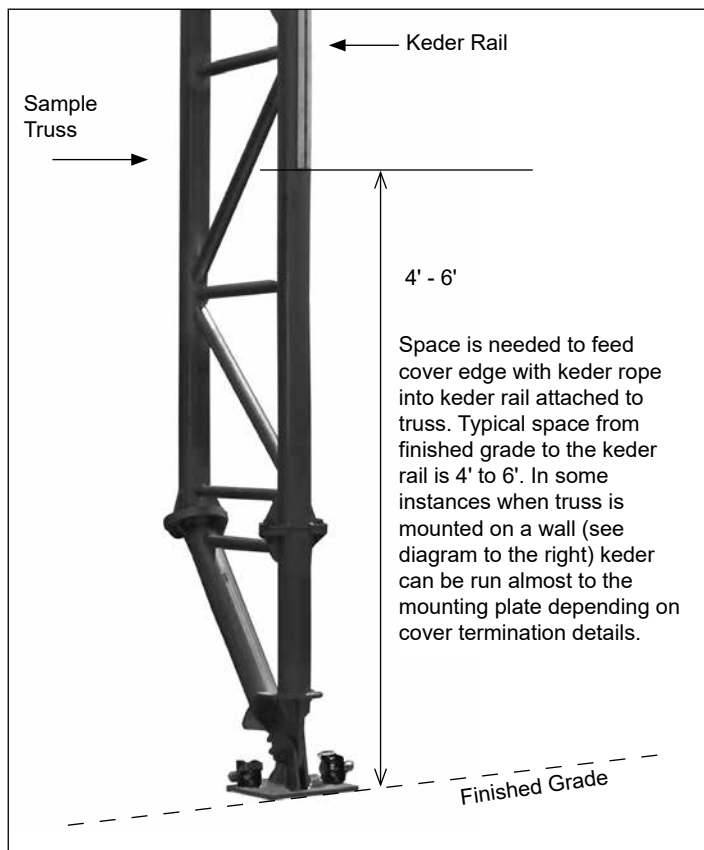
File and smooth edges to prevent cover damage.

ATTENTION: Do not install any keder rail without first preparing rail as shown in the **Erecting Truss Arch Frame** guide.

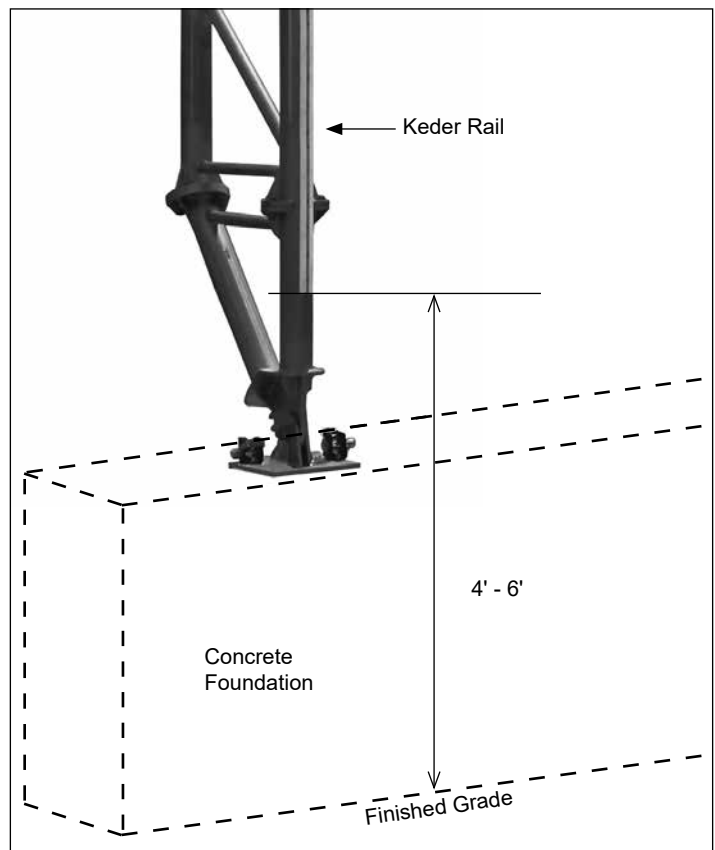
TAPE ALL SPLICE JOINTS AS SHOWN IN THE ERECTING TRUSS ARCH FRAME GUIDE.

Keder rails that are not attached to truss chord do not require tape on mounting surface.

The examples below show where to begin the keder rail runs based on how the trusses are set and secured. Attach keder rails to the assembled truss **before** setting the truss in place during frame assembly. Install the last section of keder rail between the keder rail attached to the truss and the termination point of the cover.



EXAMPLE #1 (Truss Mounted at Finished Grade)



EXAMPLE #2 (Truss Mounted on Wall)

HOW TO STAGE COVER FOR INSTALLATION — READ THIS SECTION BEFORE YOU BEGIN

Once the frame and site are prepared for cover installation and the keder rail (if required) has been attached, prepare the covers. The following series of steps explains how to prepare one cover. **After the first cover is installed, repeat the steps as needed for the remaining cover.**

Unpack the first main cover. Consult the *Truss Cover Layout* page to confirm its position on the frame. Position cover along the frame in the appropriate location. Use adequate help and lifts to move the cover into position. If the site is muddy, spread plastic (customer-supplied) on the ground to protect the cover during preparation if desired. **Consult this guide to confirm how the cover is pulled onto the frame.**

ATTENTION: Verify that the stretch pocket (PVC) is aligned with the end truss it is to be attached to. Align the keder cord (Keder-to-Bonnet) with the installed keder rail typically attached to the top of an interior truss. **Consult the cover layout diagrams and tables presented earlier in this guide if needed.**



Photo above shows plastic (customer-supplied) on the ground to protect cover during preparation and installation.



Photo shows moving the cover prior to preparation and installation.



Cover is set into position next to the frame. Customer-supplied plastic film is shown on the site to protect the cover and to keep it clean during preparation.



Photo above shows the cover as it is unrolled to prepare for installation. Cover is heavy. Assistants are required.

CLEARSPAN™ COMMODITY BUILDINGS

HOW TO PREPARE COVER CONDUIT — READ THIS SECTION BEFORE YOU BEGIN



STEP 1: Place the pipe in a position near the cover end that allows pipe assembly as it is slid into the cover pocket.



STEP 2: Insert pipe end into the pocket as shown. Verify you have selected the correct cover pocket. **Check labels or diagrams.**



STEP 3: Slide the first pipe into the pocket until the tapered end is near the pocket and add the next section of pipe.



STEP 4: Install two Tek screws to secure the pipe joint.



STEP 5: Wipe Tek screws and pipe splice with a clean towel or rag to remove metal. Wrap with duct tape.

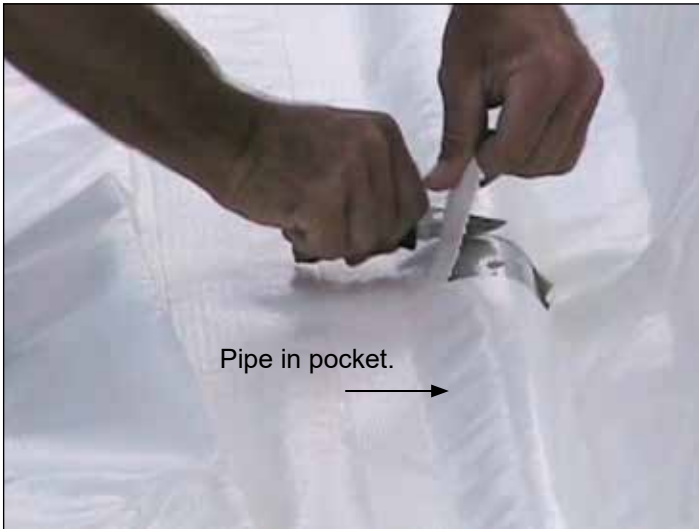
STEP 6: Repeat steps until entire pipe is assembled and inserted into cover pocket.

ATTENTION: Design of actual cover may differ from what is shown in these photos.

During cover installation, pipe extends outside the pocket at the ends. Once cover is in place, pipe is either removed or cut to length depending on location.

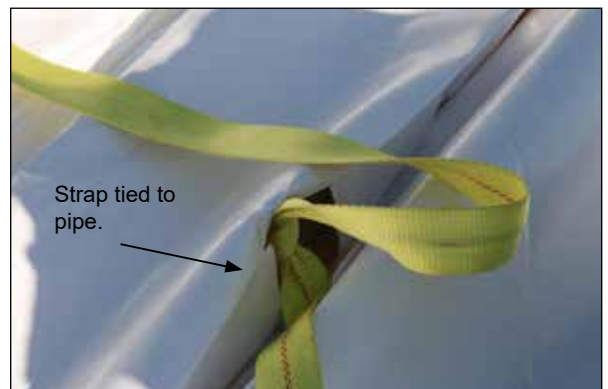


HOW TO TIE PULL STRAPS TO CONDUIT — READ THIS SECTION BEFORE YOU BEGIN



STEP 1: Determine where to attach straps used to pull cover onto the frame. Remove a section of pipe pocket in those locations to access pipe. **DO NOT CUT THROUGH COVER!** Straps are typically evenly spaced along the pipe. Quantity depends on cover length and available assistants.

ATTENTION: Do not cut through cover. *Cut the pipe pocket material as shown above.*



STEP 2: With the pocket material removed, tie straps or ropes to the pipe. Long covers require additional straps to safely pull the cover into position. Tie straps to each end and between the ends at evenly spaced intervals and toss the straps or ropes over the frame to the other side. Three (3) straps per 40' of cover are typically sufficient depending on the site and weather conditions.

Use common sense when pulling covers! Use additional straps if needed.

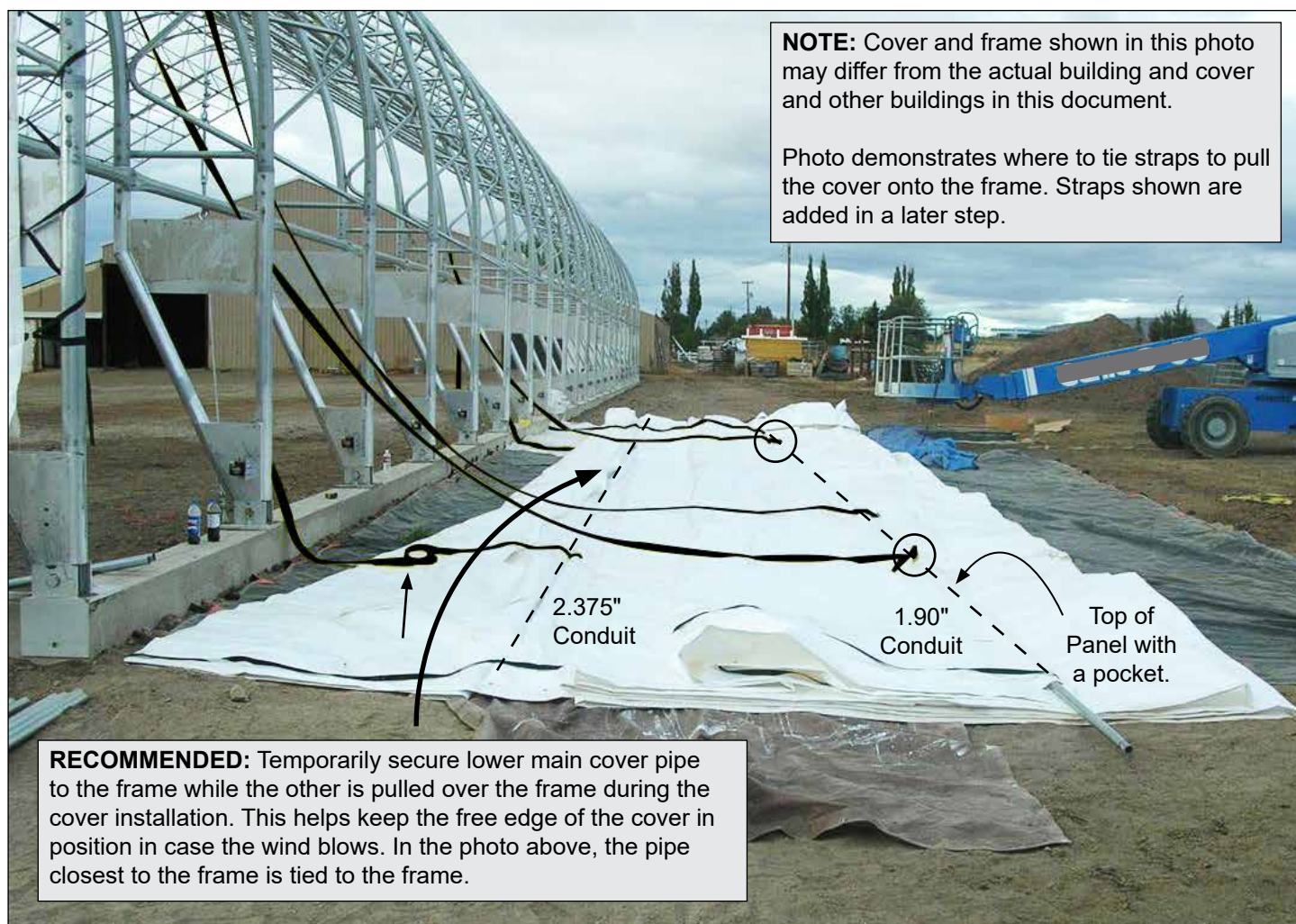
CLEARSPAN™ COMMODITY BUILDINGS

HOW TO SECURE COVER FOR INSTALLATION — READ THIS SECTION BEFORE YOU BEGIN

Reposition the cover and pipes as needed to prepare for cover installation. Verify that the cover will unfold as desired when it is pulled onto the frame. **Check also that the cover is in the desired position — bonnet aligned with end truss and keder edge aligned with the installed keder rail. Consult *Truss Cover Layout* if needed.**

Covers are heavy and difficult to reposition once they are pulled onto the frame. To prevent possible cover damage and injury, follow the steps as presented in the next sections.

The cover is pulled onto the frame using straps or ropes tied to the cover pipe. Pull the cover so the pockets remain *on the underside of the cover* once it is in place.

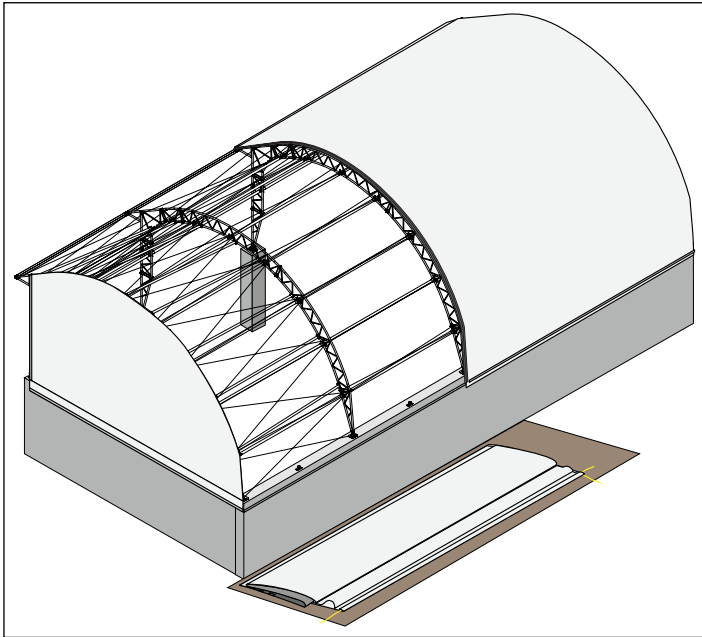


Dashed lines represent the positions of the 2.375" cover pipes that have been inserted into the pocket at each edge of the cover. **Do not use the bonnet strap to lift or pull the cover. The strap will pull out of the bonnet pocket.**

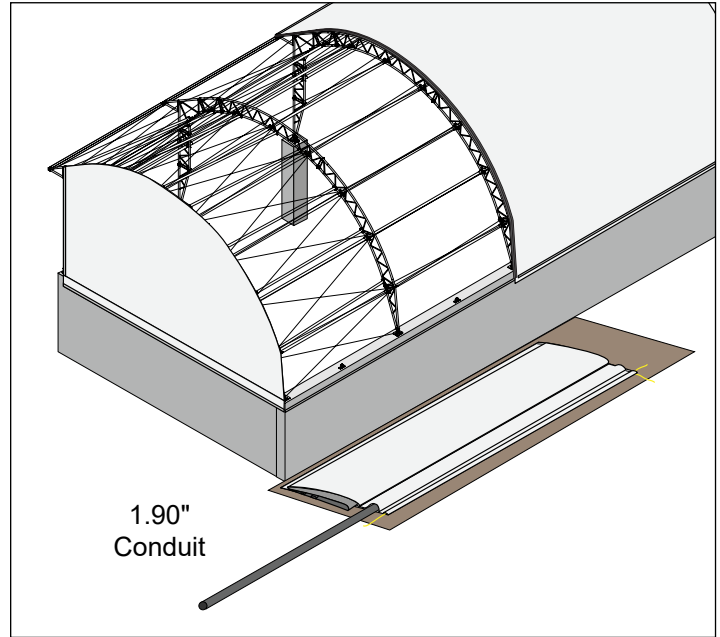
KEDER-TO-BONNET COVER INSTALLATION

Complete these basic steps to install one main cover.

⚠ WARNING: To prevent injury and property damage, do not attempt to install cover on windy or stormy days.

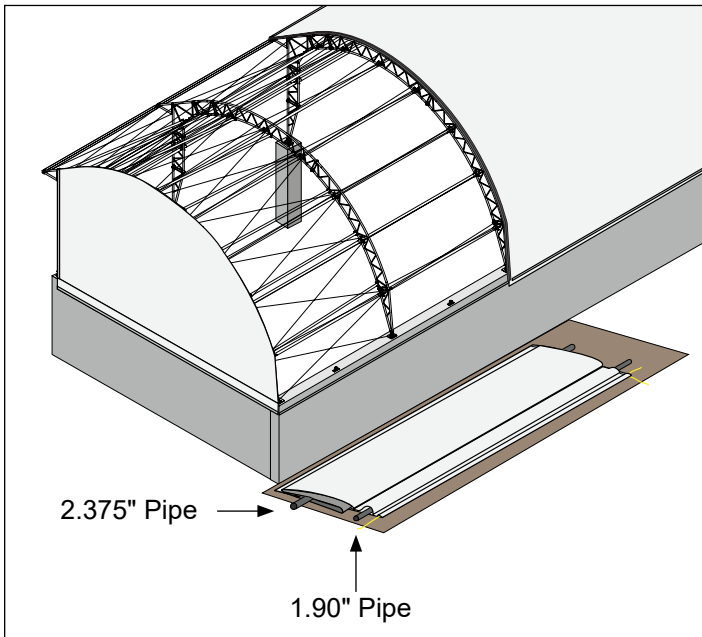


1. Position cover along frame as shown so pockets will be against the frame when cover is pulled.

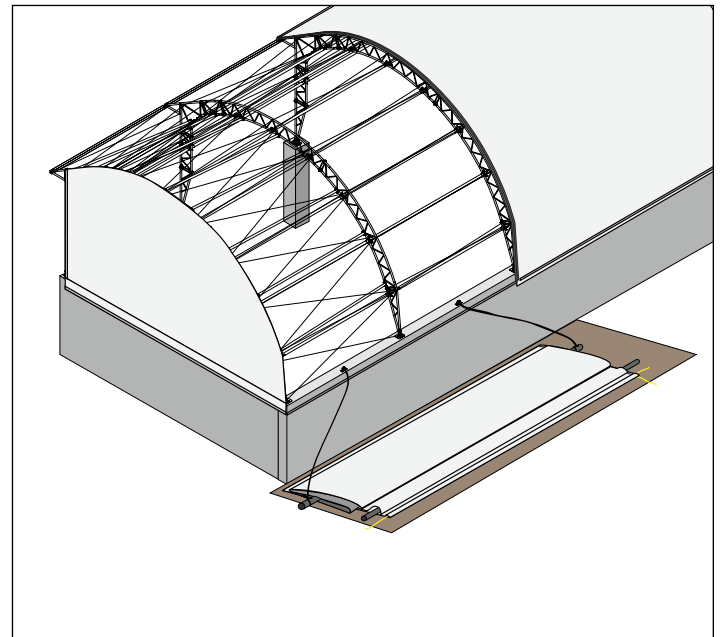


2. Assemble a 1.90" (190S099) conduit and insert it into the pulling pocket. This conduit is removed and used in a different pocket after cover is pulled.

NOTE: Secure splices as previous described using two Tek screws at each pipe splice. **Do not tape.**

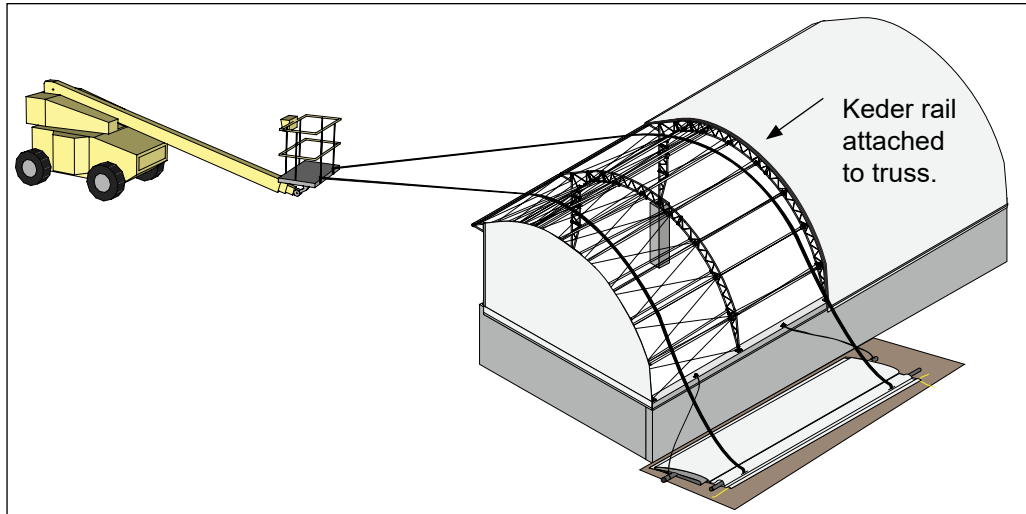


3. Assemble a 2.375" (2375S124) conduit and slide it into the main pocket at the lower end of the cover. This is the second pocket from the bottom of the panel. See the diagram on page 7.

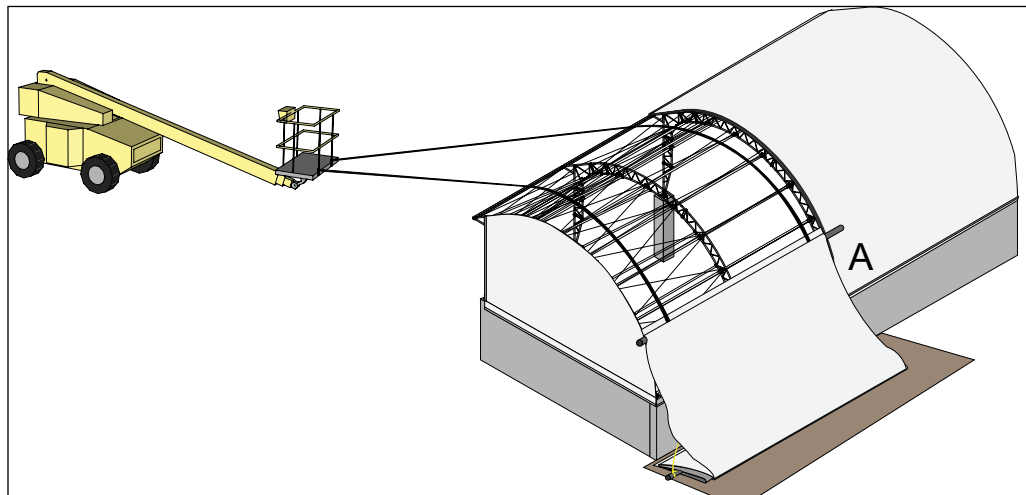


4. Attach the conduit to the building using short straps to prevent cover from blowing off frame during installation.

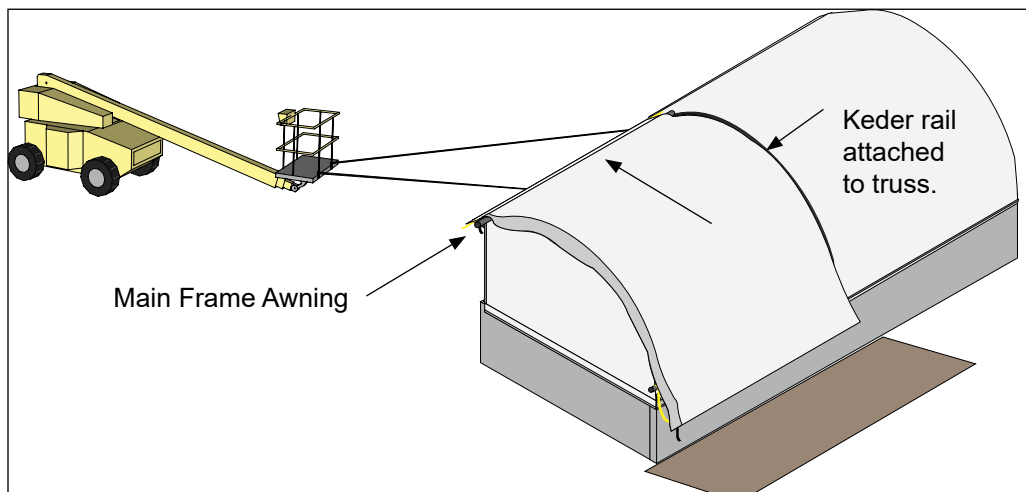
KEDER-TO-BONNET COVER INSTALLATION — continued



5. Attach pull straps to the 1.90" conduit inside the pull pocket and toss free ends over frame. Secure to pull vehicle if available. If needed, run pull straps through a shackle anchored to the main frame awning to keep straps in position, or to change the travel direction of the pull vehicle.

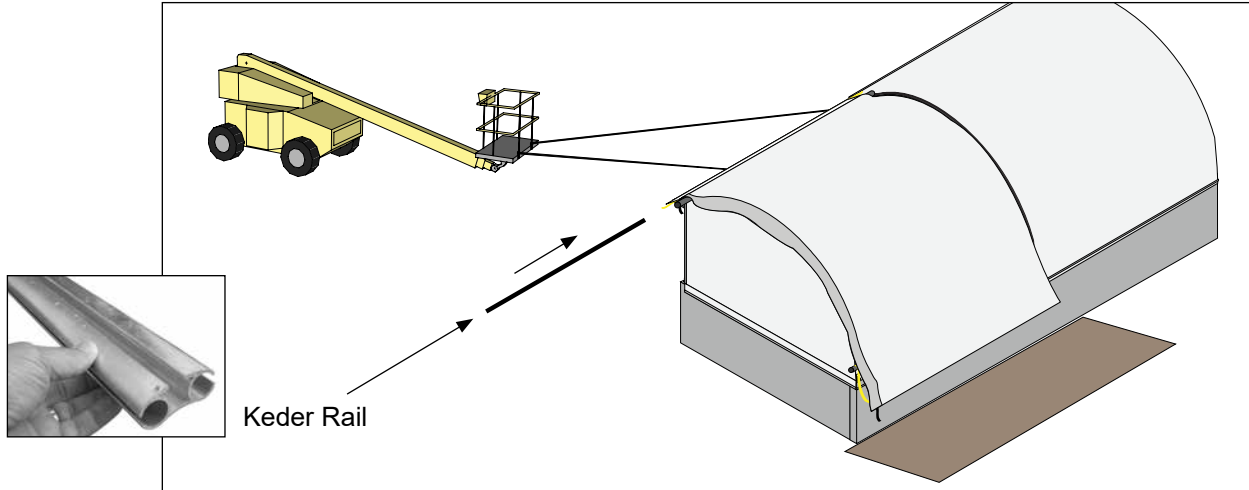


6. Slide keder rope into keder channel (A) and carefully pull cover onto frame. **Do not allow any part of the cover to catch on frame or frame components.** Cover should glide easily into lubricated keder rail.

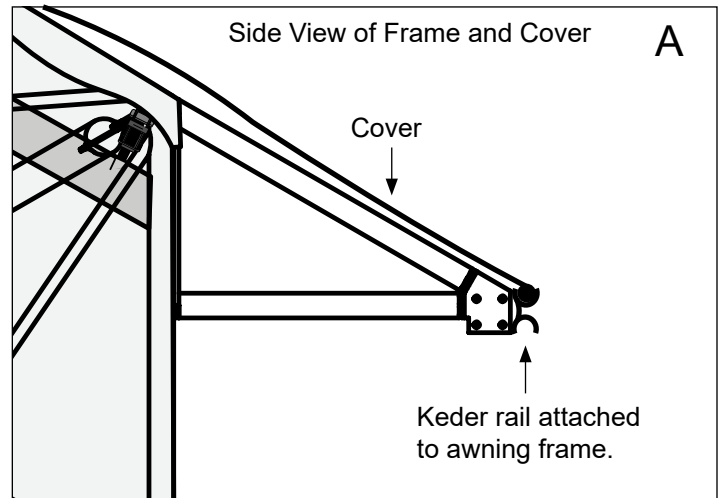
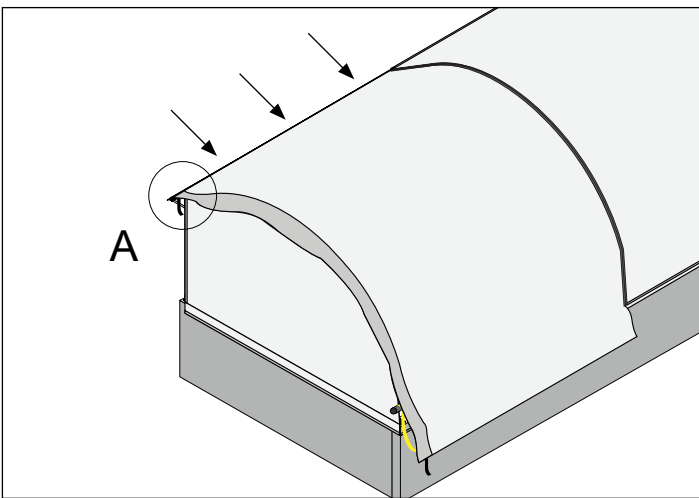


7. Continue pulling cover until top edge (with keder rope) is aligned with 4" x 4" tubes of the main frame awning lateral brace.

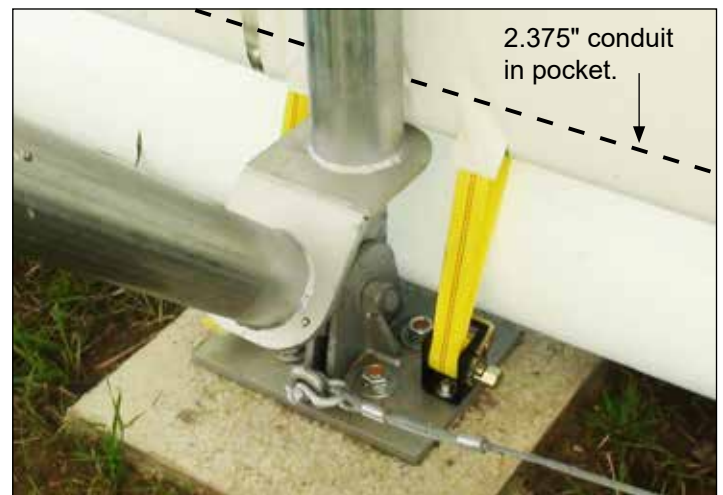
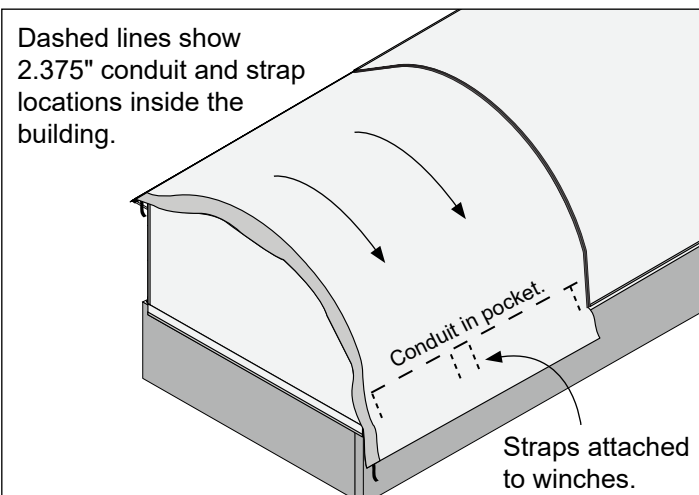
KEDER-TO-BONNET COVER INSTALLATION — continued



8. Take section (or sections) of keder rail and slide the rail(s) onto the keder rope at the awning position.

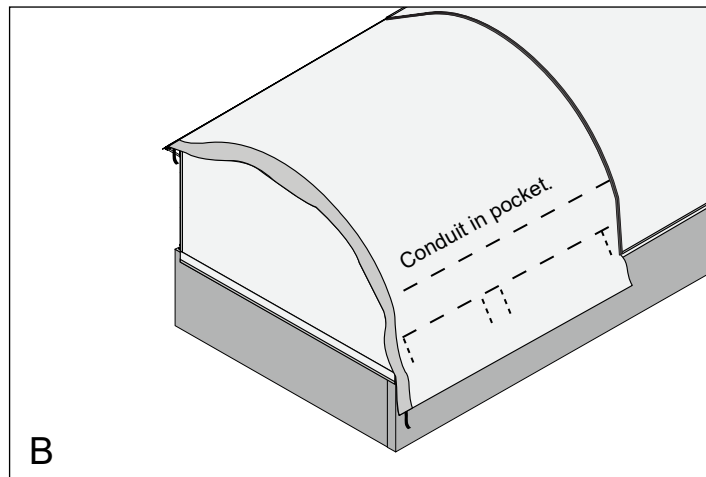
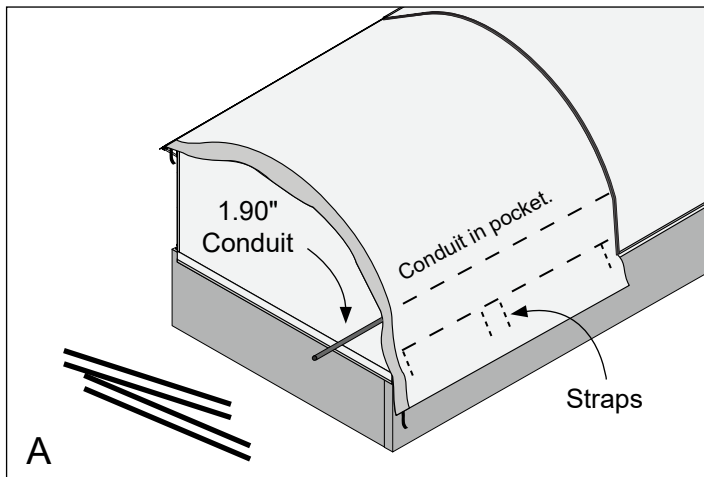


9. Remove straps and 1.90" conduit used to pull cover. Position keder rail(s) against awning tube and secure to frame using Tek screws equipped with rubber seals. (Cut keder rail to length as needed for finished look.)



10. After attaching the keder rail(s) to the frame, move to the main conduit inside the building. Install the 2" strap around the conduit at each winch location for the cover. Slightly tighten the winches to pull cover into place. **Do not fully tighten until cover is stretched toward the end truss as shown in the next steps.**

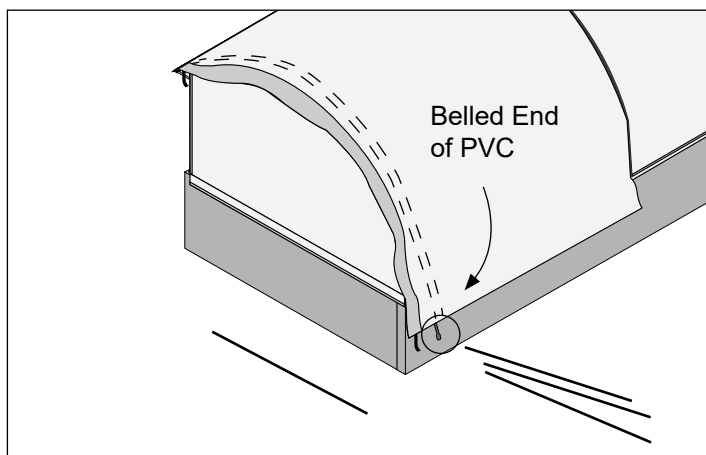
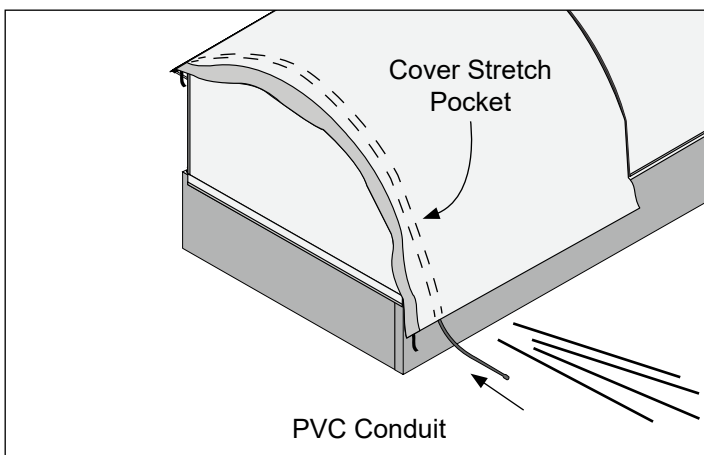
KEDER-TO-BONNET COVER INSTALLATION — continued



- Take the 1.90" pipe used for cover installation and install 112159 cap on the plain end of one pipe. Lift bonnet flap and slide capped end into the pocket *above main pocket* (A & B). Continue adding pipe and securing each pipe splice using tech screws and duct tape until end of conduit is a few inches from the keder rail attached to frame.

Cut the pipe to length so it is a few inches from the stretch pocket of the cover. See next step.

ATTENTION: Cut pipe to length as needed and install remaining end cap. *This conduit protects the cover at the truss where it bends and meets the vertical leg. If there is not a truss between the end truss and where the cover connects to the keder rail, the 1.90" pipe conduit is not needed. Conduit will run from keder rail to a few inches short of the PVC pocket. See next step.*



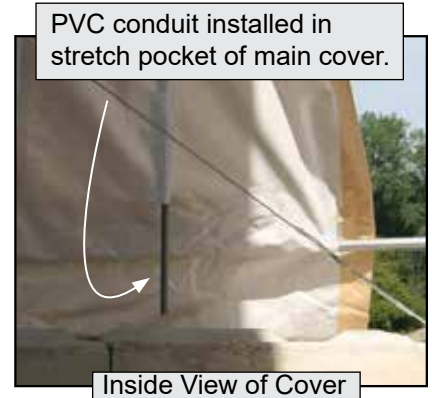
- Locate the 1" PVC (10' sticks) and PVC glue. Stage the PVC outside the building near the free end of the bonnet.

- From outside the building, slide the plain end of the first PVC section into the main cover stretch pocket until belled end is near the pocket opening.

See next page for additional details.

KEDER-TO-BONNET COVER INSTALLATION — continued

14. Apply PVC glue inside the belled end and insert the plain end of the next section of PVC into the belled end of the first.

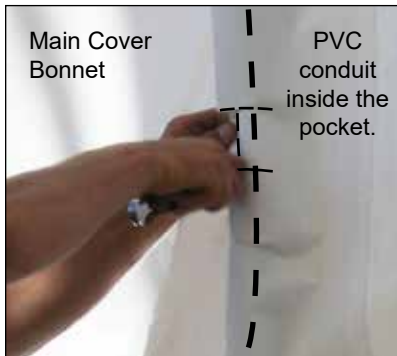


15. Continue this pattern until the entire conduit is assembled and pushed through and extending to the other end of the stretch pocket at the awning position. **Conduit end should not push against main cover at awning position.**

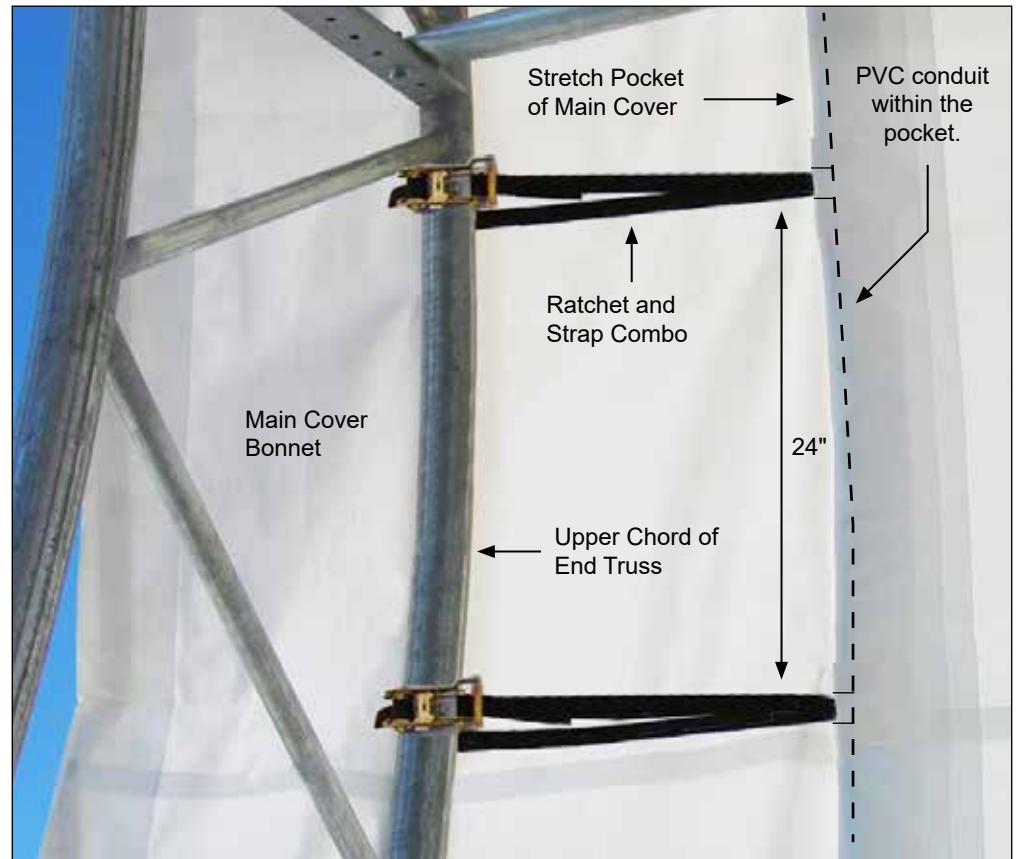
16. Cut the final PVC section to length. *Ensure that the PVC conduit will not rub through the main cover in any place.*

17. With the PVC assembly in place, *make cuts in the pocket material (see photo below left) and attach the strap and ratchet combos (111399). Make cuts only as needed to insert the 1" strap around PVC and back to ratchet. Install ratchets between the end truss upper chord and the PVC conduit inside the stretch pocket.*

NOTE: Space the strap and ratchet combos every 24" along the stretch pocket of the main cover beginning 12" from end of PVC pocket. These photos show one sample building and the strap and ratchet combos used to stretch and secure the main cover at each end of the building.



Photos show the end truss as seen from inside the building looking at stretch pocket and strap and ratchet combos.



ATTENTION: If winches are too tight, cover will not stretch properly. Loosen—DO NOT REMOVE—the side winches as needed. Reposition straps if needed.

Do not over tighten strap and ratchet combos. Doing so may pull the common interior truss where keder rail is installed out of square, or damage the keder rail and chord, or both.

View the common truss from the ground and verify that the upper and lower chords remain aligned.

CLEARSPAN™ COMMODITY BUILDINGS

KEDER-TO-BONNET COVER INSTALLATION — continued

18. After installing all ratchet and strap combos for the cover, return to each one and tighten to stretch the main cover toward the end truss.

ATTENTION: Monitor the results as ratchets are tightened. Alternate between the main cover conduit winches as needed to achieve the desired appearance. In most instances, it is best to slightly tighten the winches first to remove wrinkles, then fully tighten the ratchet and straps. Finally, check the winches again and tighten if needed.

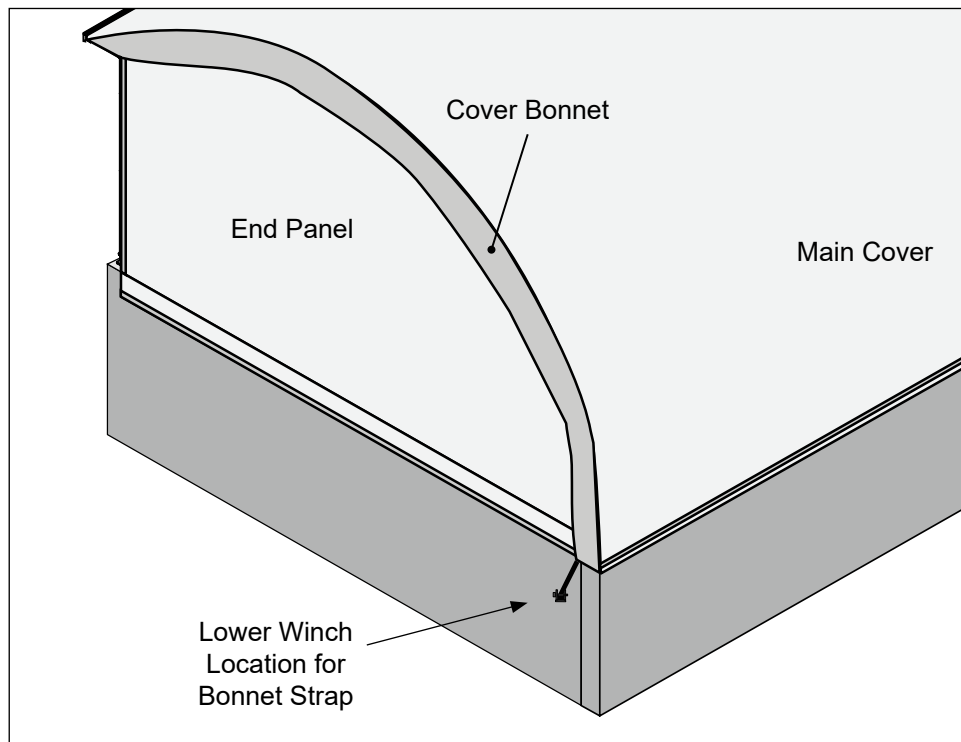


ATTENTION: Additional photos showing main cover stretch pocket for PVC. Examples shown above may differ from actual building and cover. Installation of main cover is the same.

19. Continue with the next procedure.

SECURE BONNET OF MAIN COVER

Winches to secure the main cover bonnets can be installed anywhere near the bonnet strap as allowed by the foundation design and other building factors. Winches to secure the upper bonnet strap are typically attached to the underside of the awning frame. Consult the main building technical drawings for additional details.



110155 ALUMINUM BAR STOCK

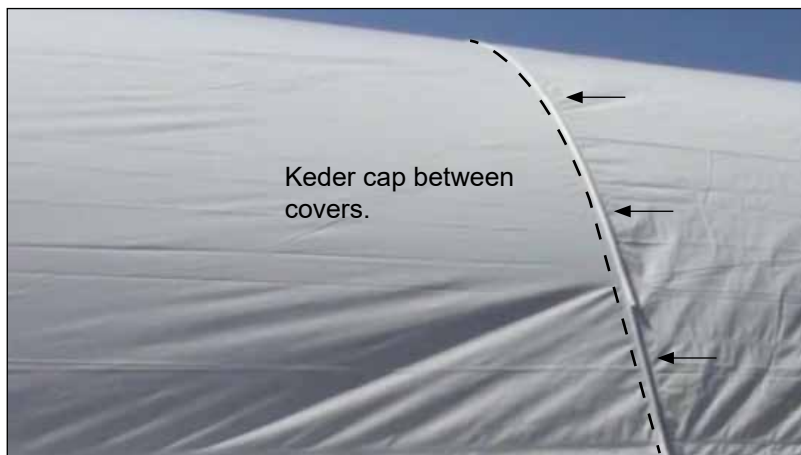
Additional flat aluminum (110155) is included to use to secure the cover at the awning as needed. Use the 110155 bar to create a finished appearance in places where cover terminates around foundation and main frame components.

Secure it to the frame using Tek screws. Purchase additional fasteners locally for wood or concrete applications.

CLEARSPAN™ COMMODITY BUILDINGS

INSTALL KEDER CAP (11661S02)

Attach keder cap (11661S02) to the keder rail along the awning and to the keder rail attached to the truss between the covers. If needed, use a soft-faced mallet to seat the cap into the keder rail. Keder cap typically ships as a single roll, which is cut-to-fit during installation.



COVER TERMINATION

The diagrams on the following pages show the typical commodity building cover termination. Consult the main building drawings and documentation for additional cover termination details for your building. *May not apply to all buildings.* Contact your project manager for additional details (if applicable). Foundation types may differ.

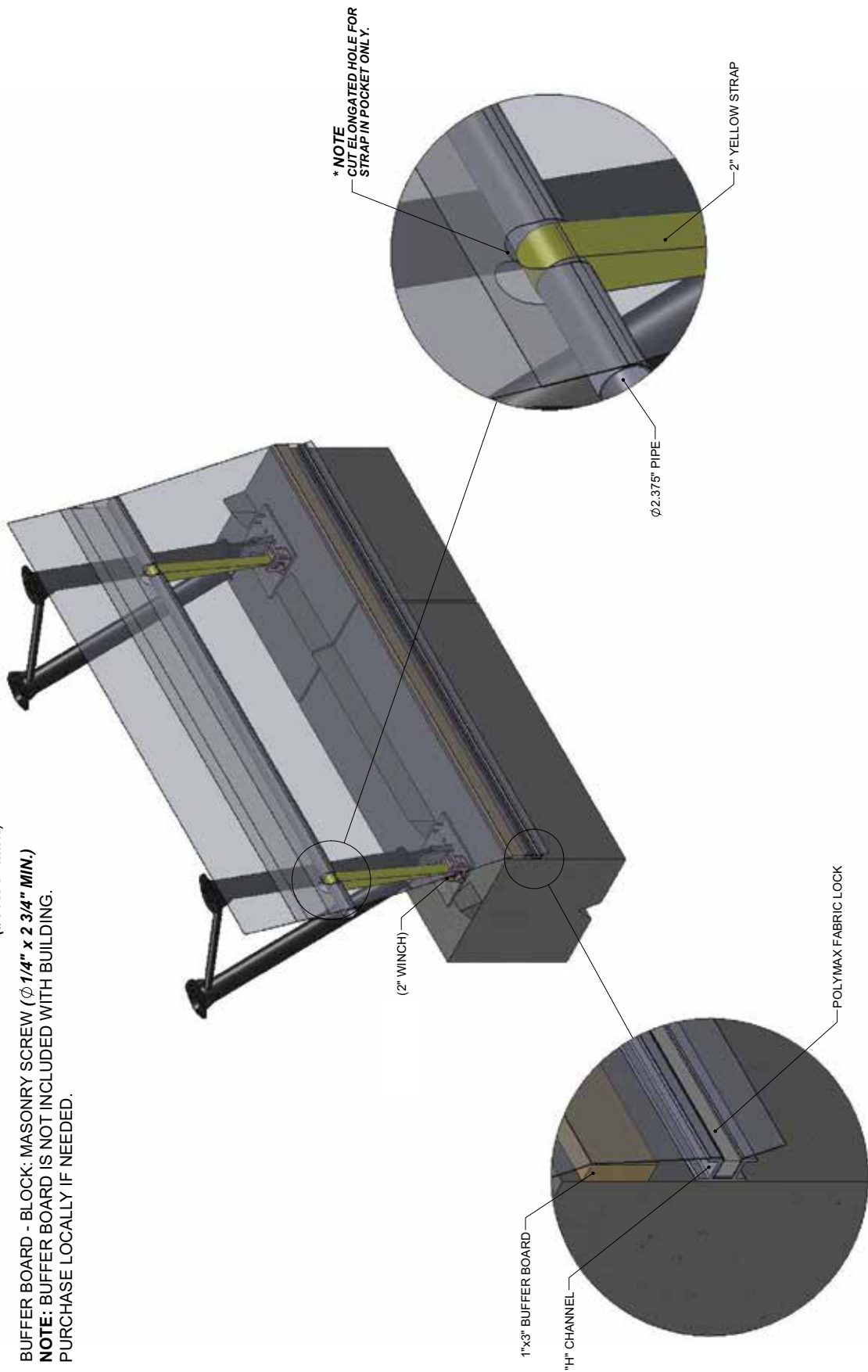
After terminating the cover, use a utility knife or similar tool to remove excess panel that remains *below the termination point*. Allow a few inches to remain in case you need to tighten the cover to remove wrinkles.

Termination Style: Ground Flap with Pound-In Strip

CONNECTION HARDWARE

- "H" CHANNEL - BACKER TUBE: SELF TAPPING SCREW (#14 x 1" MIN.)
- BUFFER BOARD - BLOCK: MASONRY SCREW (ϕ 1/4" x 2 3/4" MIN.)
NOTE: BUFFER BOARD IS NOT INCLUDED WITH BUILDING.
PURCHASE LOCALLY IF NEEDED.

- COVER TERMINATION DETAILS
BLOCK WALL W/ POUND IN STRIP



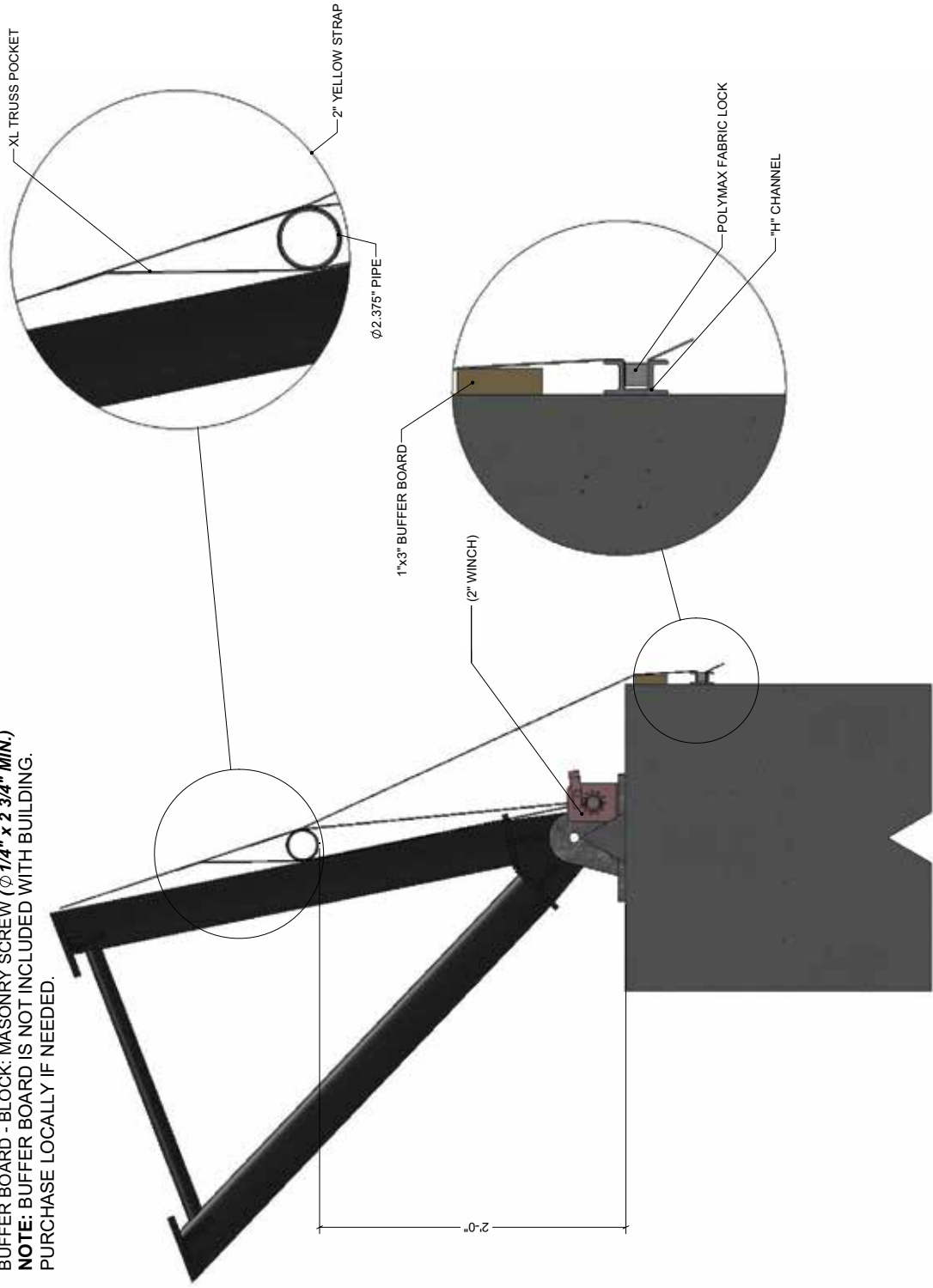
Termination Style: Ground Flap with Pound-In Strip (continued)

CONNECTION HARDWARE

- "H" CHANNEL - BACKER TUBE: SELF TAPPING SCREW (#14 x 1" MIN.)
- BUFFER BOARD - BLOCK: MASONRY SCREW (ϕ 1/4" x 2 3/4" MIN.)
NOTE: BUFFER BOARD IS NOT INCLUDED WITH BUILDING. PURCHASE LOCALLY IF NEEDED.

COVER TERMINATION DETAILS

- BLOCK WALL W/ POUND IN STRIP

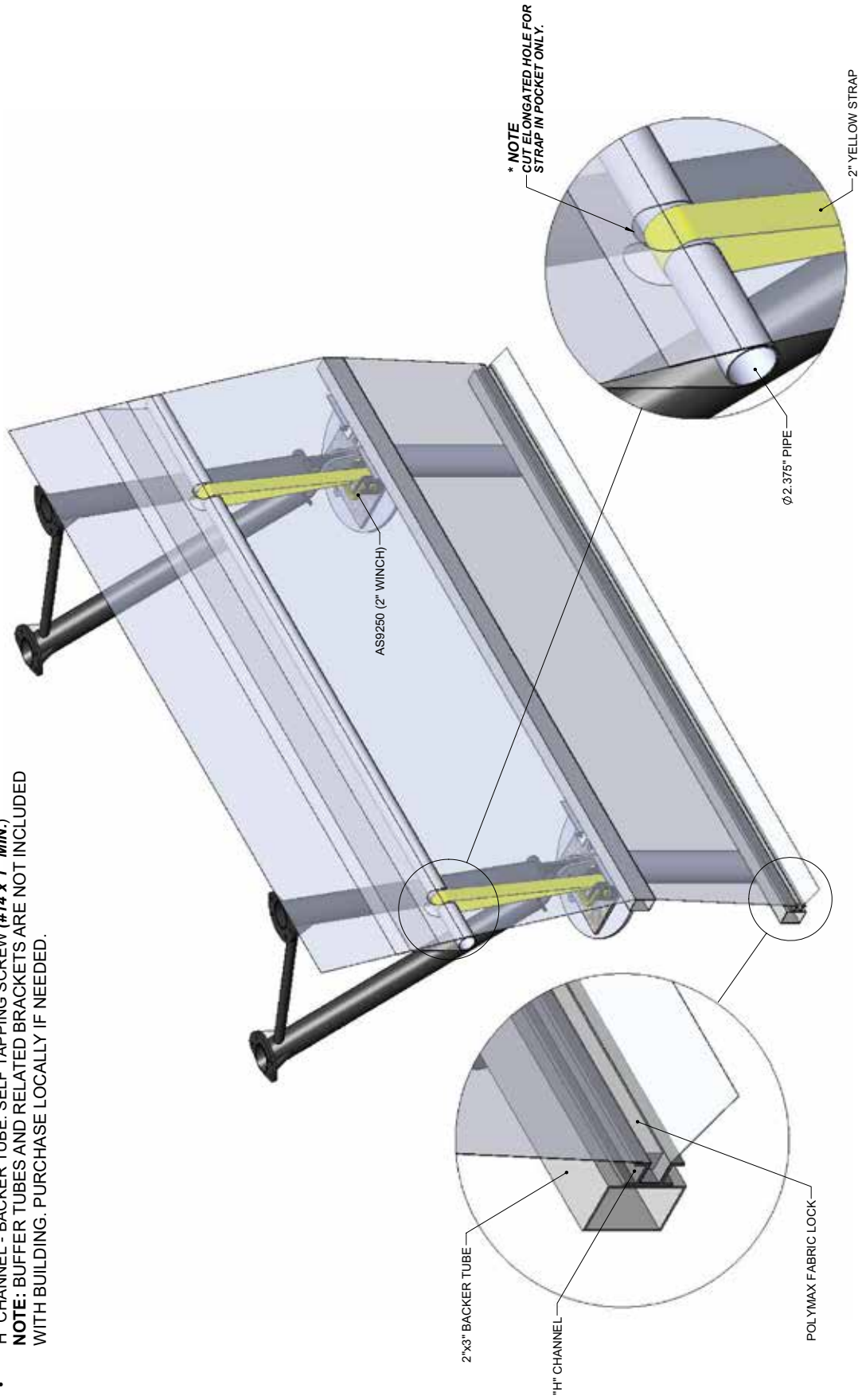


Termination Style: Ground Flap with Helical Buffers and Pound-In Strip

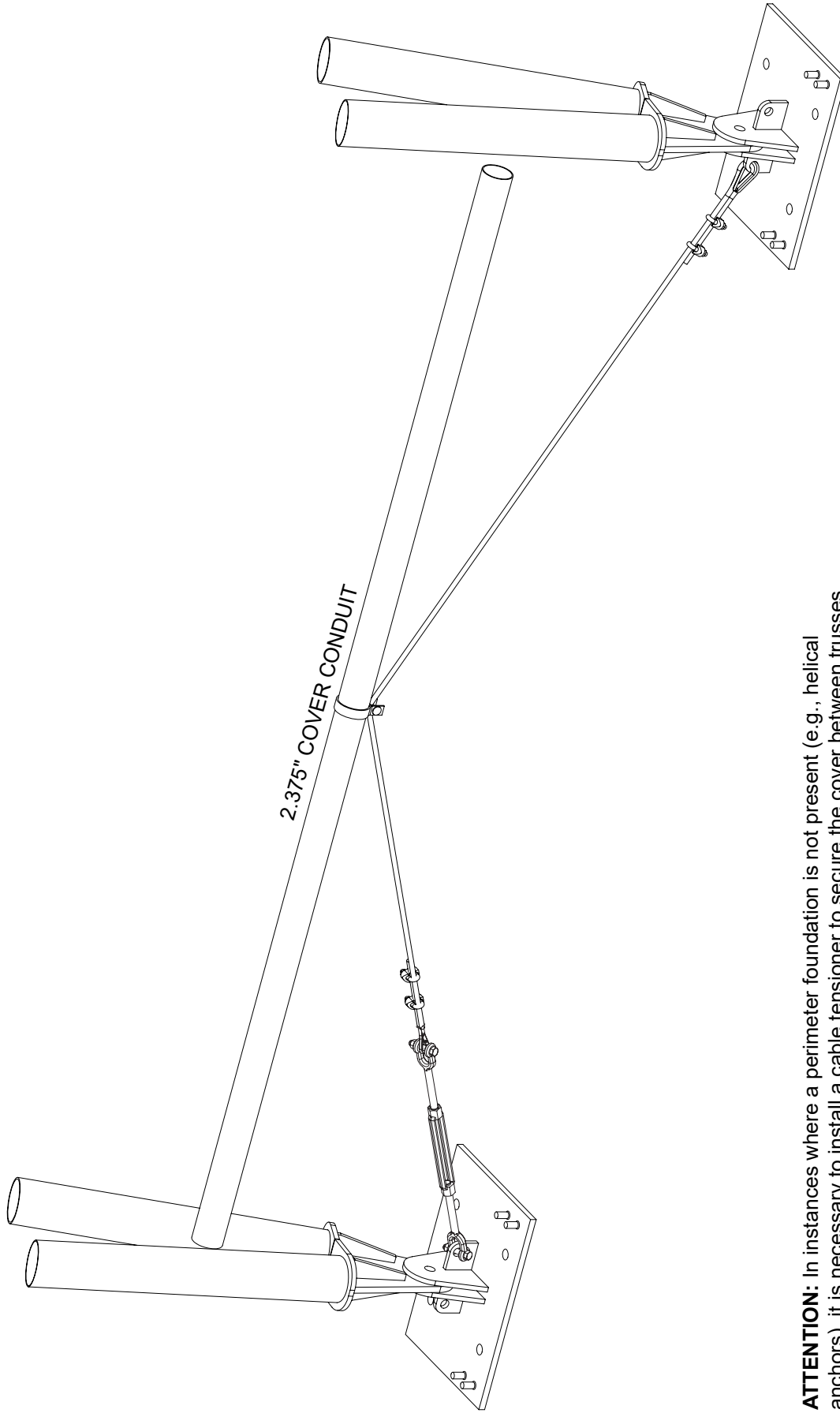
RHH (ROUND) HELICAL (EXTEND) W/POUND IN STRIP

CONNECTION HARDWARE

- BUFFER TUBE - BASE PLATE TABS: SELF TAPPING SCREW (#14 x 1" MIN.)
- "H" CHANNEL - BACKER TUBE: SELF TAPPING SCREW (#14 x 1" MIN.)
NOTE: BUFFER TUBES AND RELATED BRACKETS ARE NOT INCLUDED WITH BUILDING. PURCHASE LOCALLY IF NEEDED.



Mid-Bay Cable Tensioning



ATTENTION: In instances where a perimeter foundation is not present (e.g., helical anchors), it is necessary to install a cable tensioner to secure the cover between trusses. Use this diagram to secure the truss cover if this example applies to your building. Suggested parts for the cable tensioners include: 3/16" cable, 3/16" cable clamps, band clamp for the cover pipe, and a jaw-to-jaw turnbuckle. **Components for tensioners are not included and are supplied by the customer if needed.**

