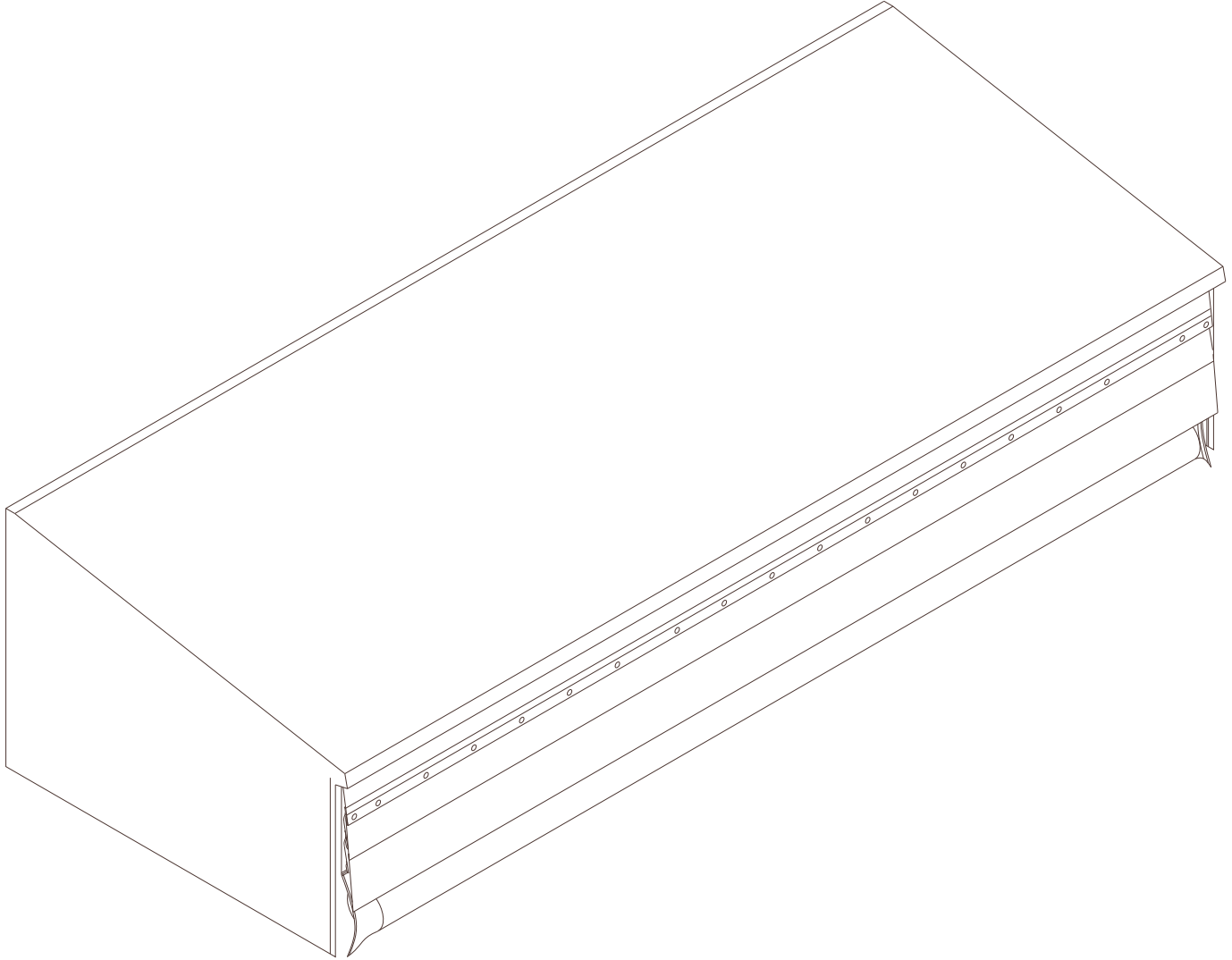


RITE-HITE®

RAINGUARD™

RG-3000 Trailer Top Seal

Installation Instructions & Owner's Manual



Date of Installation:



This Manual Covers All Units Shipped 8/04 to Date

NOTES


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General Precautions

 **WARNING**



Post safety warning and barricade work area, at dock level and ground level to prevent unauthorized use of the dock position while service work is being performed.

Introduction

Thank you for purchasing a Rite-Hite RainGuard. For other applications, please contact your local Rite-Hite Sales Representative.

The following installation instructions are complete for all applications of the RG-3000 Trailer Top Seal that are normally available. These instructions assume that the installer is outside the building facing the loading dock position.

Any application of the RG-3000 that is outside of the normal application guidelines should be referred to Order Engineering for installation instructions.

Preparation

Remove all of the contents from the containers and check for damage. If any of the contents show signs of damage, contact Rite-Hite or your local sales representative.


Illustrations


Illustrations for this document are contained on drawing #RG30-0003

Care & Maintenance

No regular maintenance is required to keep the RainGuard operating efficiently. At times, it may be necessary to remove excess snow buildup from on top of the header. It is also required that the dock approach be clear of snow, wheel chocks, and any other debris that may effectively raise the trailer height.

Installation Instructions RG-3000 Trailer Top Seal

 **WARNING**

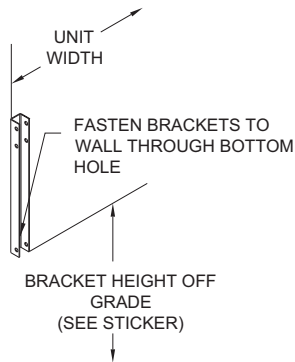


Post safety warning and barricade work area, at dock level and ground level to prevent unauthorized use of the dock position while service work is being performed.

If a forklift or other lifting device will be used during the installation of this unit, it may be easier to do some of the assembly on the ground and then lift the complete assembly into place. If this type of installation procedure will be used, follow the instructions under the "Optional Installation Procedure" section. If a forklift or other lifting device will not be used, follow the instructions under the "Standard Installation Procedure" section.

STANDARD INSTALLATION INSTRUCTIONS

1. Install Channel Brackets



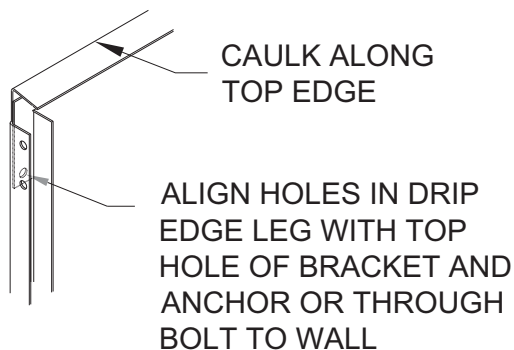
STEP 1

Measure and mark the building wall for the width of the RainGuard unit. It should be centered over the existing unit, new equipment unit, or door opening on stand alone units. The width can be determined by measuring the top bar or the front bar. The location of the holes in the mounting brackets is 3/4" in from the outside edges of the frame width.

Measure and mark the building wall for the vertical height of the brackets. Refer to sticker on channel brackets for proper mounting height. (Typically, the bottom edge of the brackets should be mounted at 13'-6" off grade.)

Fasten bottom of brackets to wall through existing hole in bottom of bracket. See fastening Methods section.

2. Attach wall trim to brackets



STEP 2

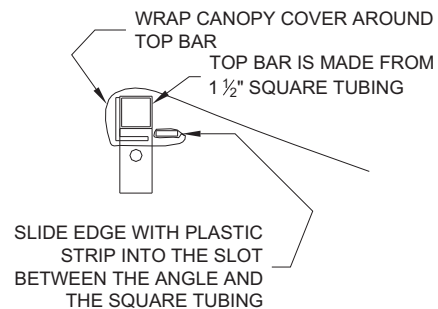
Position the wall trim on top of the channel brackets such that the holes in the legs on the trim align with the top mounting holes of the channel brackets. Fasten the trim and the top of the brackets to the

wall simultaneously. See Fastening Methods section.

At this time, drill the holes in the wall corresponding to the 5 holes across the back of the wall trim. Do not put fasteners in these holes at this time.

Caulk along the top edge of the trim angle between the angle and the wall.

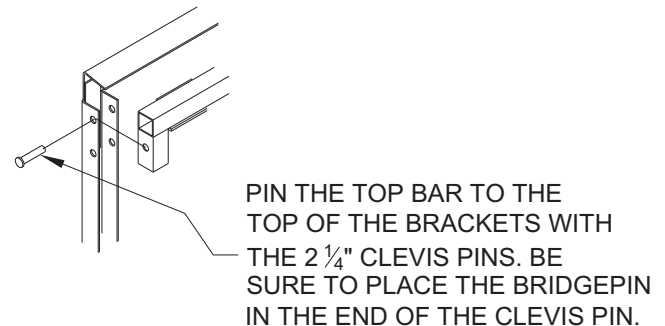
3. Attach canopy cover to top bar



STEP 3

Drape the back edge of the canopy cover over the top face of the top bar. The back edge can be determined by looking at either of the endcaps. The back edge of the endcap does not have a pocket in it. The flap with the plastic strip in it should be wrapped around the back and bottom sides of the top bar. The edge with the plastic strip should then be inserted into the slot along the bottom edge of the bar. The opening to this slot should face away from the building wall.

4. Pin top bar in place

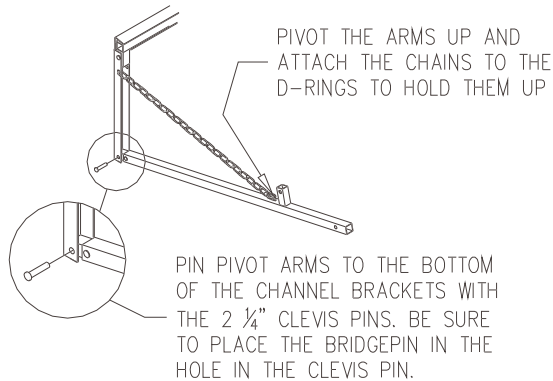


STEP 4

INSTALLATION INSTRUCTIONS

Position top bar (with cover attached) on top of the channel brackets and under the wall trim angle. The legs at each end of the top bar should face down and fit between the legs of the channel brackets. Pin the top bar to the channel brackets using the 2 1/4" clevis pins provided. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from sliding out.

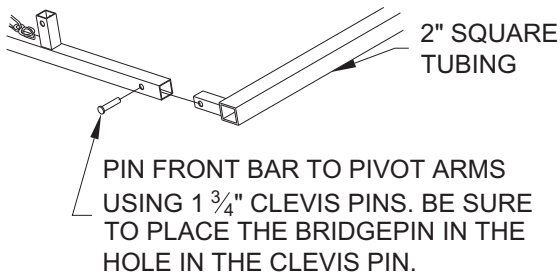
5. Attach Pivot Arms



STEP 5

Attach one pivot arm to the bottom of each channel bracket. Use the 2 1/4" clevis pin to hold the pivot arm in place. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from sliding out.

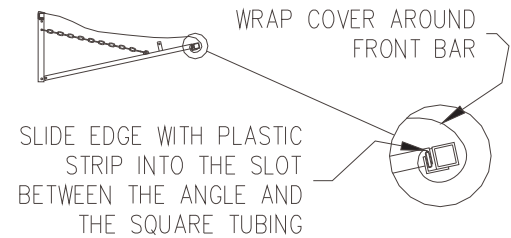
Once each pivot arm is pinned in place, pivot the end away from the wall upwards. Hook the chain onto the D-ring located on top of the pivot arm. The other end of the chain should be attached to one of the middle holes on the channel brackets.



STEP 6

6. Attach front bar

Slide the legs on each end of the front bar into the corresponding end of the pivot arms. The opening to the slot along the length of the back side of the front bar should be facing up. Pin the front bar in place with the 1 3/4" clevis pins. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from pulling out.



STEP 7

7. Position canopy cover around front bar

Pull the front edge of the canopy cover over top and around the front bar. Slide the edge with the plastic strip into the slot on the back side of the front bar. Make sure it is seated in the slot along the entire length of the front bar.

8. Fasten top bar to building wall

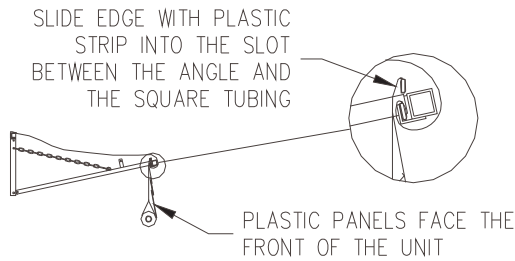
Using the holes that were drilled in the wall along the top, fasten the top bar and the wall trim to the wall. Use all 5 holes. See Fastening Methods section for more information.



STEP 8

INSTALLATION INSTRUCTIONS

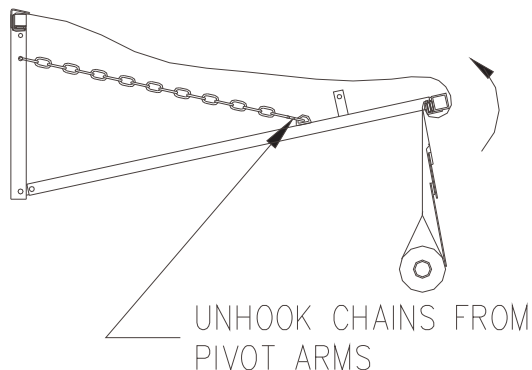
9. Attach seal assembly to front bar



STEP 9

Slide the edge with the plastic strip in it into the slot on the back side of the front bar. This strip should be positioned in front of the strip for the canopy cover. Make sure both the strip from the canopy cover and the strip at the top of the seal assembly are seated in the channel.

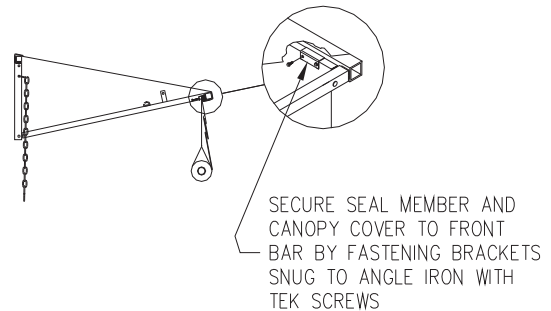
10. Unhook chains from the pivot arms



STEP 10

Pivot the front bar up to release the tension on the chains that are attached to the pivot arms. Unhook the chains from the D-rings on the pivot arms and lower the front bar back down to put the tension on the canopy cover.

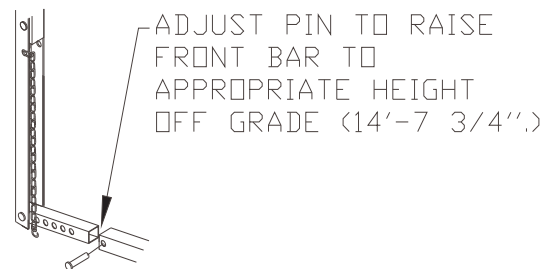
11. Fasten seal member and canopy cover to front bar



STEP 11

Using the tek screws and 4 brackets provided, fasten the seal member and the canopy cover to the front bar. This is done by running the tek screws through the brackets, covers, angle on the back of the front bar, and into the plastic strips that are sitting in the slot. This should be done in 4 places spaced evenly along the width of the unit.

12. Adjust front bar height if necessary

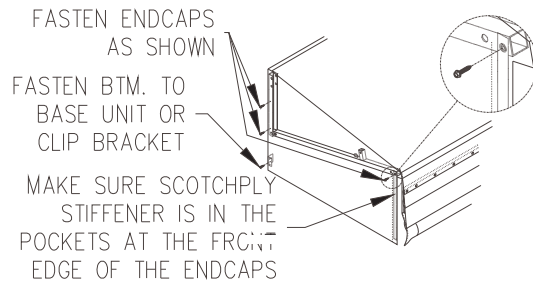


STEP 12

Measure to see if the top of the front bar is at the appropriate height off grade (14'-7 3/4"). The pivot arm extension will ship already pinned in the first hole at standard mounting height. If the bar height off grade is not correct, adjust the pivot arm extension by removing the clevis pin and sliding the arm up to the appropriate hole. Each hole raises the front bar height approximately 2 1/4".

INSTALLATION INSTRUCTIONS

13. Fasten endcaps to framing

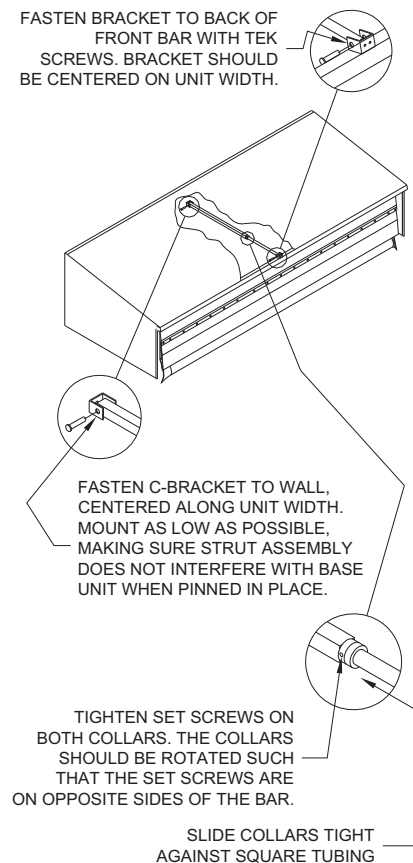


STEP 13

Put the stiffeners in the pockets on the front of the endcaps with the hole to the top. Using the tek screws and washers provided, fasten these stiffeners to the framing.

Also, using the tek screws provided, fasten the back edge of each endcap to the channel bracket in 2 places. Fasten bottom edge of endcap to base unit backer or clip brackets.

14. If applicable, install center strut.



STEP 14

The installation of the center strut consists of 4 steps.

1. Fasten C-bracket to the back of the front bar with two tek screws, making sure it is centered along the width of the unit, and also making sure that it is plumb.
2. Pin the strut assembly (including wall bracket) to the front bracket. Extend the other end of the strut to the wall to mark the location for the other bracket. This bracket should be mounted as low on the wall as possible without interfering with the base unit.
3. Once the wall bracket is in place, pin the strut in place with the 2 1/4" clevis pins provided. Make sure it is pinned to both brackets. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from pulling out.
4. Slide the slip collars tight against the square tubing and tighten the set screws in each slip collar.

OPTIONAL INSTALLATION INSTRUCTIONS

If a forklift or other lifting device will be used during the installation of this unit, it may be easier to do some of the assembly on the ground and then lift the complete assembly into place. If this type of installation procedure will be used, follow the instructions in this section, otherwise, follow the standard installation procedure.

Install channel brackets and wall trim on the wall as described in steps 1 and 2 in the "Standard Installation Procedure" section on the previous pages.

Attach cover to front bar and back bar by wrapping the cover over the top and around each bar and then sliding the plastic strips into the slots provided. See steps 3 and 7 in the "Standard Installation Procedure" section on the previous pages. The slot on the top bar should face away from the wall. The slot on the front bar should face up.

Pin the front bar and pivot arms together using the 1 3/4" clevis pins. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from pulling out. Refer to exploded diagram or step 6 in the "Standard Installation Procedure" section for the orientation of pivot arms in relation to the front bar.

Pin the top bar onto the studs located on top of the pivot arms. This can be done by sliding the legs of the top bar over the studs.

Lift the assembly into place with the lift. Pin the ends of the pivot arms to the bottom of the channel brackets using the 2 1/4" clevis pins. Be sure to place the bridge pin through the hole in the end of the clevis pin to prevent the clevis pin from pulling out.

Hook the chains onto the D-rings on the pivot arms to temporarily hold the framing in place.

Move the top bar from the studs on the pivot arms into its location on top of the channel brackets and pin in place. Make sure cover is properly wrapped around the top bar.

Continue with step 8 in the "Standard Installation Procedure" section.

Fastening Methods

Concrete Block or Brick Wall

1. Through bolt fastening is required. Bore a hole through the building wall. Use a 3/8" diameter threaded rod with a washer, nut, and jam nut on each end - it will be necessary to install a back-up plate inside the building wall when the wall will not support the bolt.
2. Use a minimum of (2) fasteners in each channel bracket and a minimum of (5) fasteners across the width of the top bar.

Concrete Tilt-Up Walls (Precast)

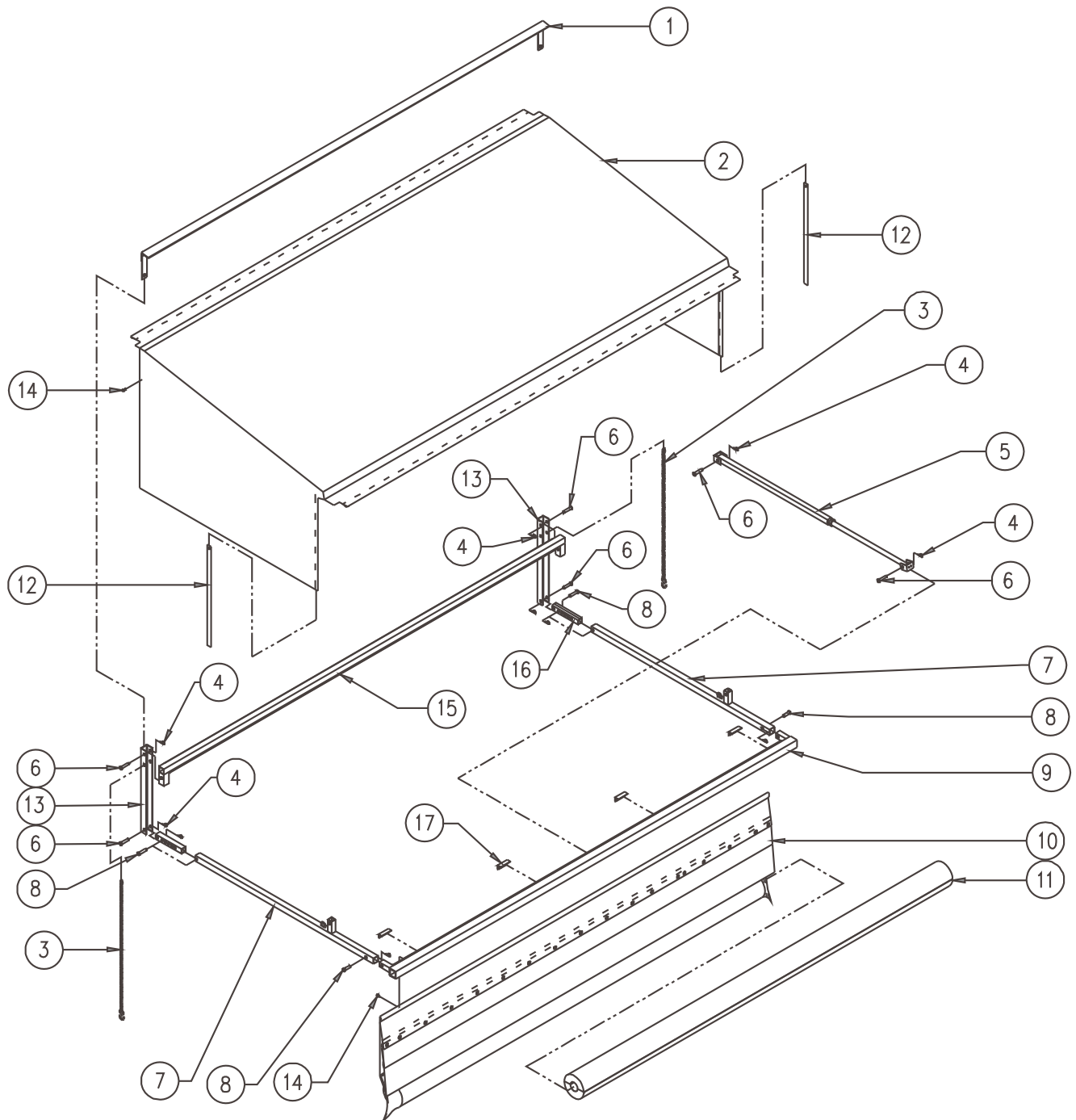
1. Use 3/8" lag bolts with expansion shields, 3/8" one piece anchor bolts with expansion collar, or equivalent fastener. If building wall is too thin to effectively hold the lag bolt or anchor bolt, the through bolt method of attachment is required.

*See anchor manufacturer's recommendation for minimum anchor embedment to determine appropriate anchor length.

Metal Side Building

1. Through bolt method of attachment is required for this building style. It will be necessary to install a back-up plate that is fastened directly to structural members when it is not possible to fasten directly to structural building members. Use a 3/8" diameter bolt with a washer and lock nut to fasten the unit to the structural members of the building or to the back-up plates. If necessary, use a 3/8" diameter threaded rod with a washer and lock nut on each end.

EXPLODED VIEW



1. Wall Trim
2. Canopy Cover
3. Installation Chain
4. Bridge pin, 3/8 - 7/16 x 0.0915W
5. Center Support (optional)
6. Clevis Pin, 1/2" x 2 1/4"
7. Pivot Arm
8. Clevis Pin, 1/2" x 1 3/4"
9. Front Bar

10. Seal Assembly
11. Foam Cylinder w/ Weight Pipe
12. Fiberglass Stiffener
13. Mounting Bracket
14. Screw, HWH, Drill/Tap, 1/4" - 14 x 1 1/4"
15. Top Bar
16. Pivot Arm Extension
17. Front Bar Bracket

NOTES

NOTES

WARRANTY STATEMENT

Rite-Hite warrants that a **RainGuard™ RG-3000 Trailer Top Seal(s)** will be free of defects in design, materials, and and workmanship for a period of 365 days from the date of shipment. All claims for breach of this warranty must be made within 30 days after the defect is or can, with reasonable care, be detected and in no event more than 395 days after shipment. In order to be entitled to the benefits of this warranty, the products must have been properly installed, maintained, operated within their rated capacities, and not otherwise abused.

Rite-Hite expressly disclaims all implied warranties including the implied warranties of merchantability and fitness.

In the event of any defects covered by this warranty, Rite-Hite will remedy such defects by repairing or replacing any defective parts, bearing only the cost of the parts and transportation of those parts. This shall be the exclusive remedy for all claims whether based on contracts, negligence, or strict liability.

Rite-Hite shall not in any event be liable for any loss of use of any equipment or incidental or consequential damages of any kind.

**“Our mission is to improve industrial
safety, security and productivity worldwide through
quality and innovation.”**



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