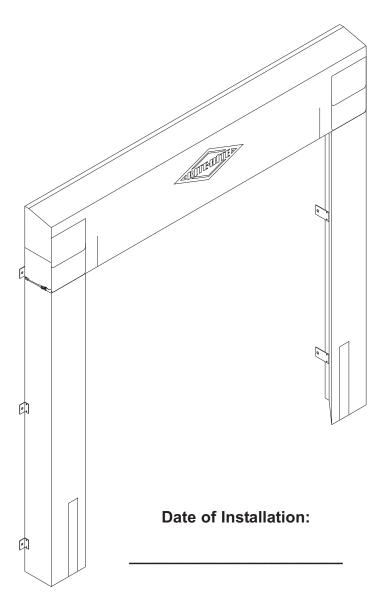
# RITE-HITE® TPC

## **FOAM DOCK SEAL WITH HEAD CURTAIN Installation Instructions & Owner's Manual**





This Manual Covers All Units Shipped 4/08 to Date



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## **General Precautions**

## **MARNING**



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® Dock Seal. For other applications, please contact your local Rite-Hite Sales Representative.

The following installation instructions are complete for all standard applications of the TPC Dock Seal. These instructions assume that the installer is outside the building facing the loading dock position.

Any application of the TPC Dock Seal 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 #TPC00002

## **Care & Maintenance**

No regular maintenance is required to keep the TPC Dock Seal operating efficiently. At times, it may be necessary to remove excess snow buildup from on top of the header.

All dock seal or shelter headers should be inspected periodically for damage and replaced when appropriate. Headers with the optional Firefighter  $^{\text{TM}}$  system feature employ heat dissipating fabric technology. To ensure maximum effectiveness, the Firefighter system should be periodically inspected for damage or tears. The Firefighter header should be replaced in the event the outer Durathon  $^{\text{TM}}$  fabric and/or inner foil layers are damaged and base fabric or header foam is exposed.

## Instructions for Optional Components

Please note that installation instructions for wood blockouts and foam backers are attached separately if these options/features are ordered with the unit.



## SIDE PAD INSTALLATION INSTRUCTIONS

#### Side Pad Installation

#### 1. Mark mounting location for sidepads

Measure the dock door opening. Divide this measurement in half and mark the centerline of the opening at dock level.

From this point, measure out half of the head pad or head curtain width and mark the wall at this location. Do this on both sides of the door opening. The outside edges of each side pad should line up with these marks. See Figure 1.

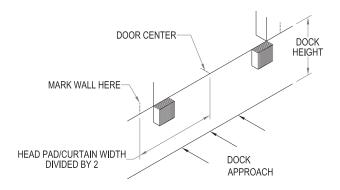


FIGURE 1

Reference the Product Application Form (PAF) or consult the sales representative for the appropriate mounting height. Typically, the bottom of the side pad/side frame is mounted at dock height, but some applications may require mounting them at a different location. (Example: When dock bumpers are mounted above dock height or above the pit floor on vertical leveler)

#### 2. Fasten mounting brackets to side pads

Fasten three 'L' brackets to the outside edge of each side pad using fasteners provided. Also, fasten three brackets to the inside edge of each side pad using fasteners provided. See Figure 2.

**Warning:** Attaching the top and bottom brackets more than 12" from the end of the backer could result in damage to the side pad backer. Locating the brackets as near as possible to the ends of the side pads provides the best support for the backer.

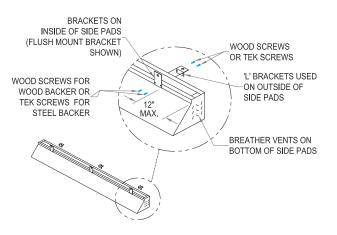
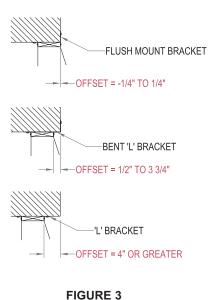


FIGURE 2



## SIDE PAD INSTALLATION INSTRUCTIONS

The bracket type for the inside of the side pads is determined by the offset from the edge of the door opening to the inside edge of the side pad backer. See figure 3 for bracket details.



Position the brackets so they line up with mortar joints on block walls or girters/purlins on metal sided buildings. The top and bottom brackets should not be more than 12" away from each end of the pad, and the middle one should be approximately centered along the height of the sidepad.

#### 3. Fasten side pads to building wall

Fasten each side pad to the building wall and door jamb through the brackets using appropriate fasteners. See "Fastening Methods" section of installation instructions for the recommended fastener type for various building wall types. ... See Figure 4.

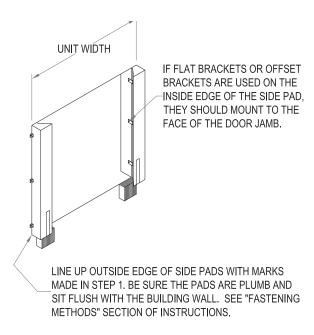


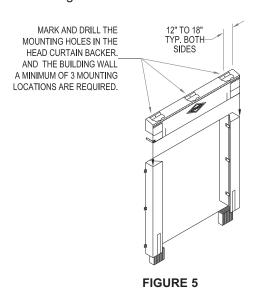
FIGURE 4



## STANDARD PITCH HEAD CURTAIN INSTALLATION

#### 1. Mark and drill mounting holes for head curtain.

Position the head curtain on top of side pads such that the ends of the head curtain line up with the outside edges of the side pads. The head curtain backer should rest on top of the sidepad backers and the curtain should hang in front of the side pads. Mark and drill the mounting holes for the header. (Holes must be drilled through the head curtain backer and into the building wall.) The head curtain should be fastened to the wall in at least 3 locations. See Figure 5.





With the header positioned on top of the side pads, fasten the header to the building wall. See "Fastening Methods" section of installation instructions for the recommended fastener type for various building wall types. See Figure 6.

- 3. Secure head curtain endcaps to side pad backer See Figure 7
- Attach windstraps to head curtain and side pad backer (not applicable on head curtains with full endcaps)

Feed the hook end of the windstrap through the windstrap pocket and attach it to the D-ring located on the back side of the head curtain.

The other end of the windstraps should then be fastened to the sidepad backer using the screws provided. The attachment point at the backer should be at the same elevation as the D-ring on the back of the head curtain. Do not over tighten the screws. The eyelet should swivel freely after installation. See Figure 8.

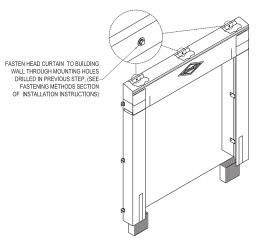


FIGURE 6

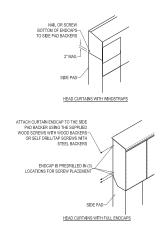
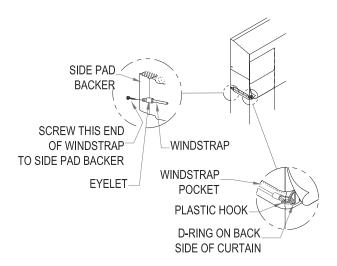


FIGURE 7



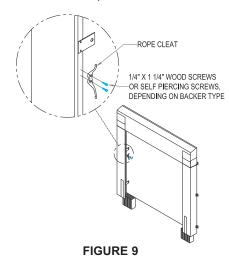
## FLAT TOP HEAD CURTAIN / INTEGRAL HOOD INSTALLATION



#### FIGURE 8

#### Attach rope cleat (only required on units with pull ropes)

Using the screws provided, attach the rope cleat to the inside edge of the left side pad backer. The rope cleat should be positioned approximately 4' up from the bottom of the sidepad. Once the cleat is in place,



the pull ropes from the head curtain are to be tied to the rope cleat. See Figure 9.

#### 6. Seal the perimeter of the unit to the building wall

Use a good grade of silicon caulk, foil backed butyl rubber flashing tape, or equal to seal along the top edge of the head curtain where it meets the wall and down the outside vertical edge of the head curtain and side pads as needed. Be sure to follow the manufacturers recommendations when applying the flashing tape, caulk, or other sealant.

In instances where the gaps between the unit and the building wall exceed 1/2", it is recommended to fill

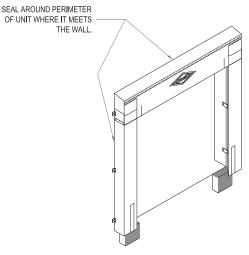


FIGURE 10

these gaps with a foam backer rod or equal before applying sealant. See Figure 10.

#### Flat Top Head Curtain Installation

Follow the same installation methods used for the standard pitch head curtain. The only difference is that the head curtain backer fits between the side pad backers instead of resting on top of them. The top of the head curtain backer should be flush with the top of the side pad backers.

#### **Integral Hood Installation**

#### 1. Secure risers to the building wall

The risers should be positioned directly above and flush with the outboard edge of the side member backer. Each riser needs to be secured to the building wall in a minimum of (2) locations. Refer to "Fastening Methods" section of these instructions for the correct fastening method for the building style the curtain is being installed on. See Figure 11.

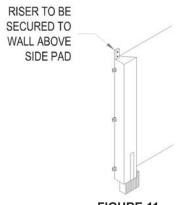


FIGURE 11

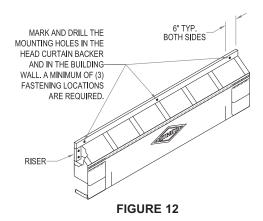
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### INTEGRAL HOOD INSTALLATION

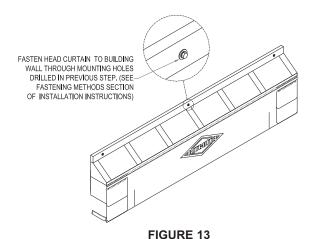
## 2. Mark and drill mounting holes for head curtain backer

Position the head curtain backer on top of the risers as shown. The ends of the backer should be flush with the outside edges of the risers. See Figure 12.



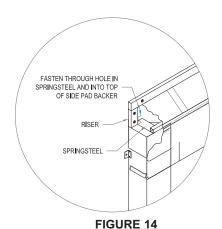
#### 3. Fasten Header to building wall

With the head curtain backer positioned on top of the risers, fasten the header to the building wall through the mounting holes drilled in the previous step. See "Fastening Methods" section of installation instructions for the recommended fastener type for various building wall types. See Figure 13.

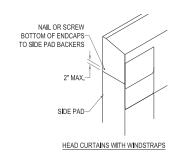


#### 4. Attach spring steel to top of side pad backer.

Attach the 4" wide spring steel to the top of the side pad backer with the supplied screws. The spring steel should be located directly along side the riser. See Figure 14.



Secure endcaps to side pad backer
See Figure 15.



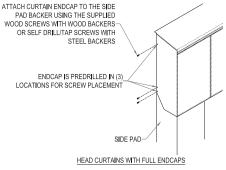


FIGURE 15

## 6. Attach windstraps to head curtain and side pad backer (not applicable with firefighter head curtains with a projection of 13" or less)

Feed the hook end of the windstrap through the windstrap pocket and attach it to the D-ring located on the back side of the head curtain.

The other end of the windstraps should then be fastened to the sidepad backer using the screws provided. The attachment point at the backer should be at the same elevation as the D-ring on the back of the head curtain. Do not over tighten the screws. The eyelet should swivel freely after installation. See Figure 16.



## **INATALLATION INSTRUCTIONS / FASTENING METHODS**

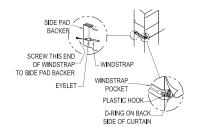


FIGURE 16

## 7. Attach rope cleat (only required on units with pull ropes)

Using the screws provided, attach the rope cleat to the inside edge of the left sidepad backer. The rope cleat should be positioned approximately 4' up from the bottom of the sidepad. Once the cleat is in place, the pull ropes from the head curtain are to be tied to the rope cleat. See Figure 17.

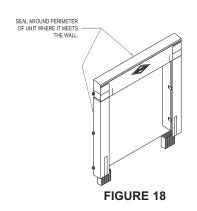


FIGURE 17

## 8. Seal the Perimeter of the unit to the building wall

Use a good grade of silicon caulk, foil backed butyl rubber flashing tape, or equal to seal along the top edge of the head curtain where it meets the wall and down the outside vertical edge of the head curtain and side pads as needed. Be sure to follow the manufacturers recommendations when applying the flashing tape, caulk, or other sealant.

In instances where the gaps between the unit and the building wall exceed 1/2", it is recommended to fill these gaps with a foam backer rod or equal before applying sealant. See Figure 18.



## **Fastening Methods**

#### **Concrete Block or Brick Wall**

#### **Preferred Method**

 Through bolt fastening. Bore a hole through the building wall. Use a ¾" 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.

#### **Alternate Method**

2. Anchor through horizontal mortar joint. Min. of %" anchor diameter. Consult anchor manufacturer's recommended minimum anchor embedment to determine anchor length for your wall/material type. (Acceptable only on foam seals, only if used on horizontal mortar joints and only if the mortar joint is in good condition and can support the members).

#### **Concrete Tilt-Up Walls (Precast)**

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.

Consult anchor manufacturer's recommended minimum anchor embedment to determine anchor length for your wall/material type.

#### **Metal Sided Building**

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.

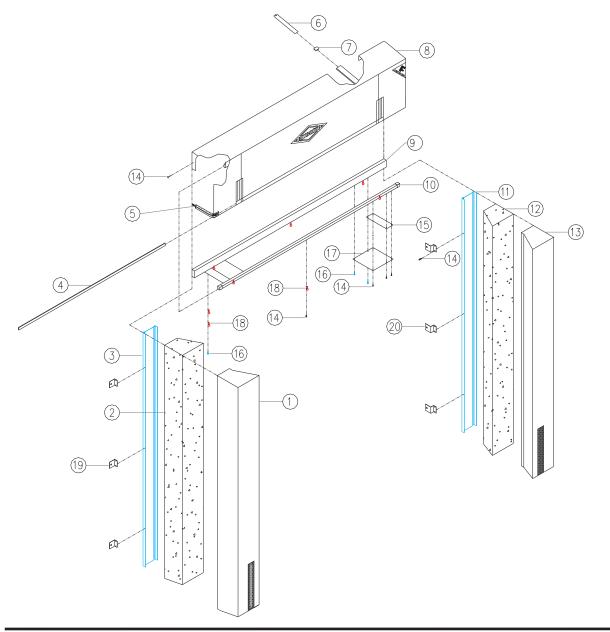


## **EXPLODED VIEW**

This unit shown in exploded view is a standard TPC. Your unit may have options which are not shown in the exploded view, depending on options chosen, and application of the unit.

- 1. Cover, left side pad
- 2. Foam, left side pad
- 3. Side pad backer, left
- 4. Poly stiffener
- 5. Windstrap
- 6. Fiberglass stay
- 7. Vinyl stay cap
- 8. Head curtain cover
- 9. Head curtain backer
- 10. 1 1/4" square tube front bar

- 11. Side pad backer, right
- 12. Foam, right side pad
- 13. Cover, right side pad
- 14. Screw, self drill/tap
- 15. Springsteel stay, 4"
- 16. Screw, HWHMS, #14 x 1 1/4", zinc
- 17. Stay, plastic
- 18. Pull rope rings on hangers
- 19. 'L' style mounting bracket
- 20. Mounting bracket



### TPC FOAM DOCK SEAL WITH HEAD CURTAIN



**NOTES** 



**NOTES** 



## **WARRANTY POLICY**

Rite-Hite warrants that a **TPC Foam Dock Seal** will be free of defects in design, materials, 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 product must have been properly installed, maintained, operated within its rated capacity, 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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