

*ROTO-VENT FOR*  
*SERIES 401, 402, 403 STOREFRONT*  
*INSTALLATION INSTRUCTIONS*



Part NO. Y002

February 2013

WHERE WINDOWS ARE JUST THE BEGINNING®



# TABLE OF CONTENTS

## SECTION

|     |                               |              |
|-----|-------------------------------|--------------|
| I   | GENERAL NOTES                 | PAGE 1       |
| II  | PARTS IDENTIFICATION          | PAGE 2       |
| III | APPLICATION BY SYSTEM         | PAGES 3 & 4  |
| IV  | LOCATING & DRILLING TEMPLATE  | PAGES 5 & 6  |
| V   | PART PREPARATION & ATTACHMENT | PAGES 7 - 11 |
| VI  | SIZING FORMULAS               | PAGE 12      |
| VII | TUBE REPLACEMENT              | PAGE 13      |

## SECTION I — GENERAL NOTES

The rotating ventilator is fabricated from 3 1/2" PVC tubing. The ventilating slots are 5 1/2" x 1" and the number of slots vary with the length of the tube. The ends of the rotating ventilator are sealed against air and water infiltration by an injection molded end cap with felt washers installed. A full length aluminum lift handle facilitates operation of the vent, and is finished to match the system. When in the closed position, no PVC is visible from the interior. Screen cloth is rolled and inserted inside the PVC tube to prevent insect penetration to the interior. Stainless Steel screen material is used to ensure a tight fit of the screen inside the vent tube and for longevity of the product.

### Minimizing Condensation

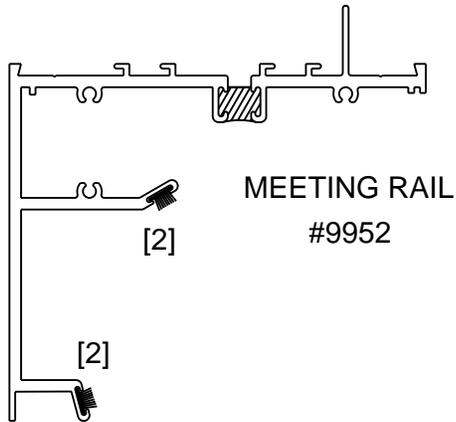
NOTE: Please reference EFCO's "Understanding Condensation" brochure which can be obtained through your EFCO representative.

Condensation will form on any surface when unfavorable conditions (interior temperature and relative humidity and exterior temperature) are present. When the formation of excessive condensation is a concern, it is highly recommended that a design professional is utilized to perform an analysis of the shop drawings to recommend the best installation methods. Please contact EFCO representative for information on EFCO's Thermal Analysis Services.

Many current installation practices lead to an increase in the possibility of the formation of condensation. Though not all inclusive, the list of examples below illustrates conditions under which condensation is likely to occur:

1. Bridging system thermal break with non-thermally broken metal flashing or lintels that are exposed to the exterior.
2. System exposure to cold air cavities.
3. Interior relative humidity levels not maintained at recommended levels, see EFCO's "Understanding Condensation" brochure.
4. Inadequate separation between system and surrounding condition at perimeter.
5. Product combinations during the shop drawing stage that result in bridging thermal breaks of one or all products involved.

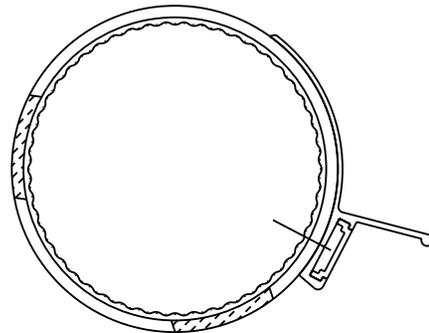
# SECTION II - PARTS IDENTIFICATION



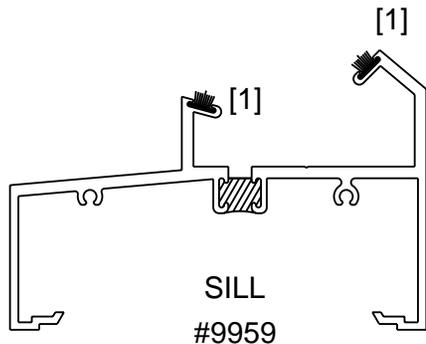
MEETING RAIL  
#9952



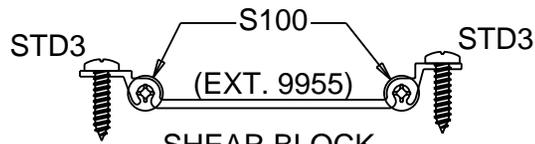
[1]  
RETAINER  
#9953



VENT TUBE ASSEMBLY  
700-10  
(43-019, 43-020, 43-021)



SILL  
#9959

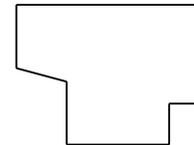


SHEAR BLOCK  
K159  
PACKAGE INCLUDES (1) STT7  
USED AT LOWER SHEAR BLOCK

## SETTING BLOCKS



H162  
(S-401)



H190(60-229)  
(S-402  
& S-403)

## JAMB FASTENERS (SCREW SPLINE)



S108  
#8x1" HEX WASHER HEAD S.M.S.

## RETAINER FASTENERS



STK0  
#8 x 3/4" P.H. TEK



[1]  
WW78(60-233)  
PILE WEATHERING

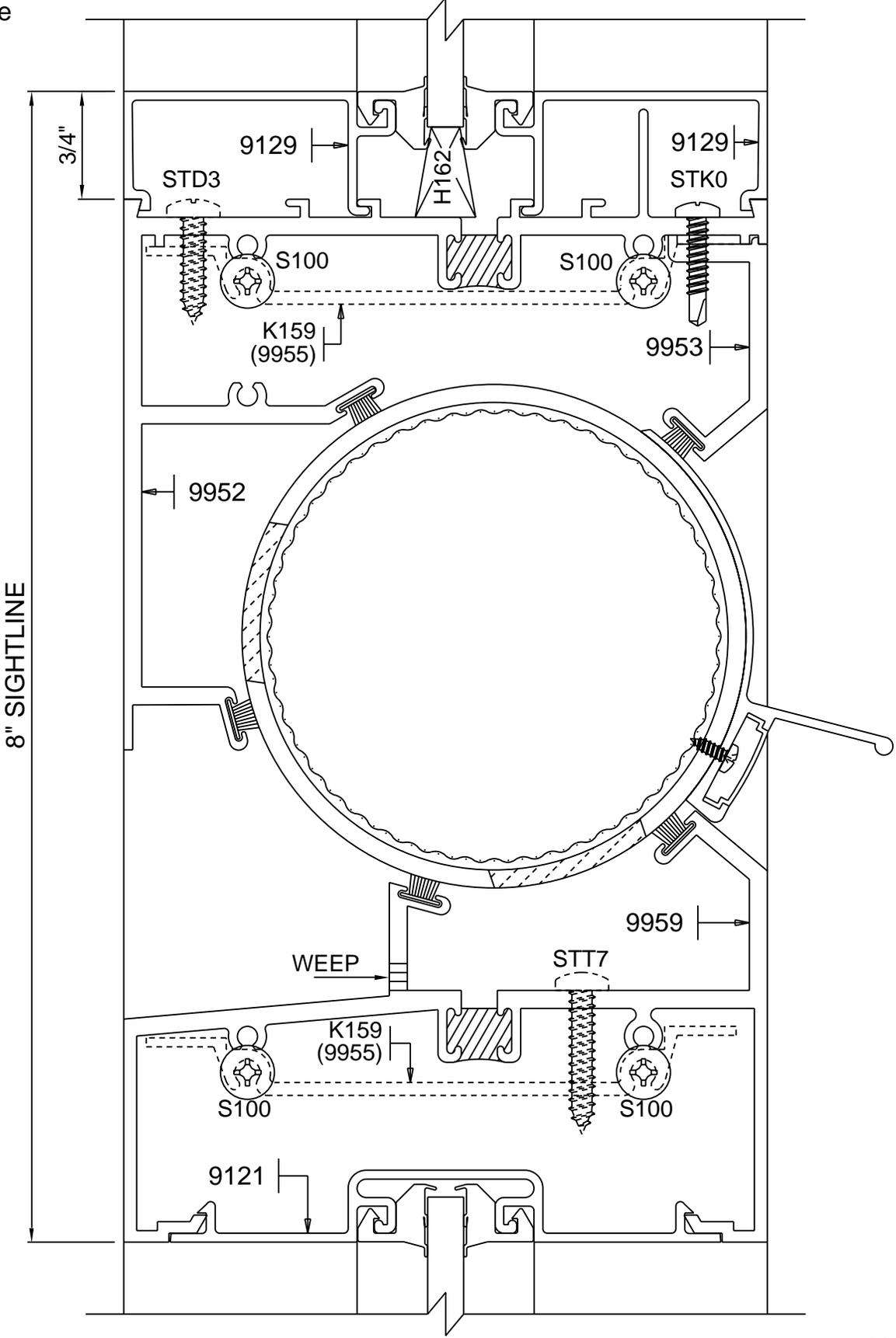


[2]  
WF08(60-232)  
PILE WEATHERING

# SECTION III - APPLICATION BY SYSTEM

Shear block attachment shown.  
Screw spline is similar.

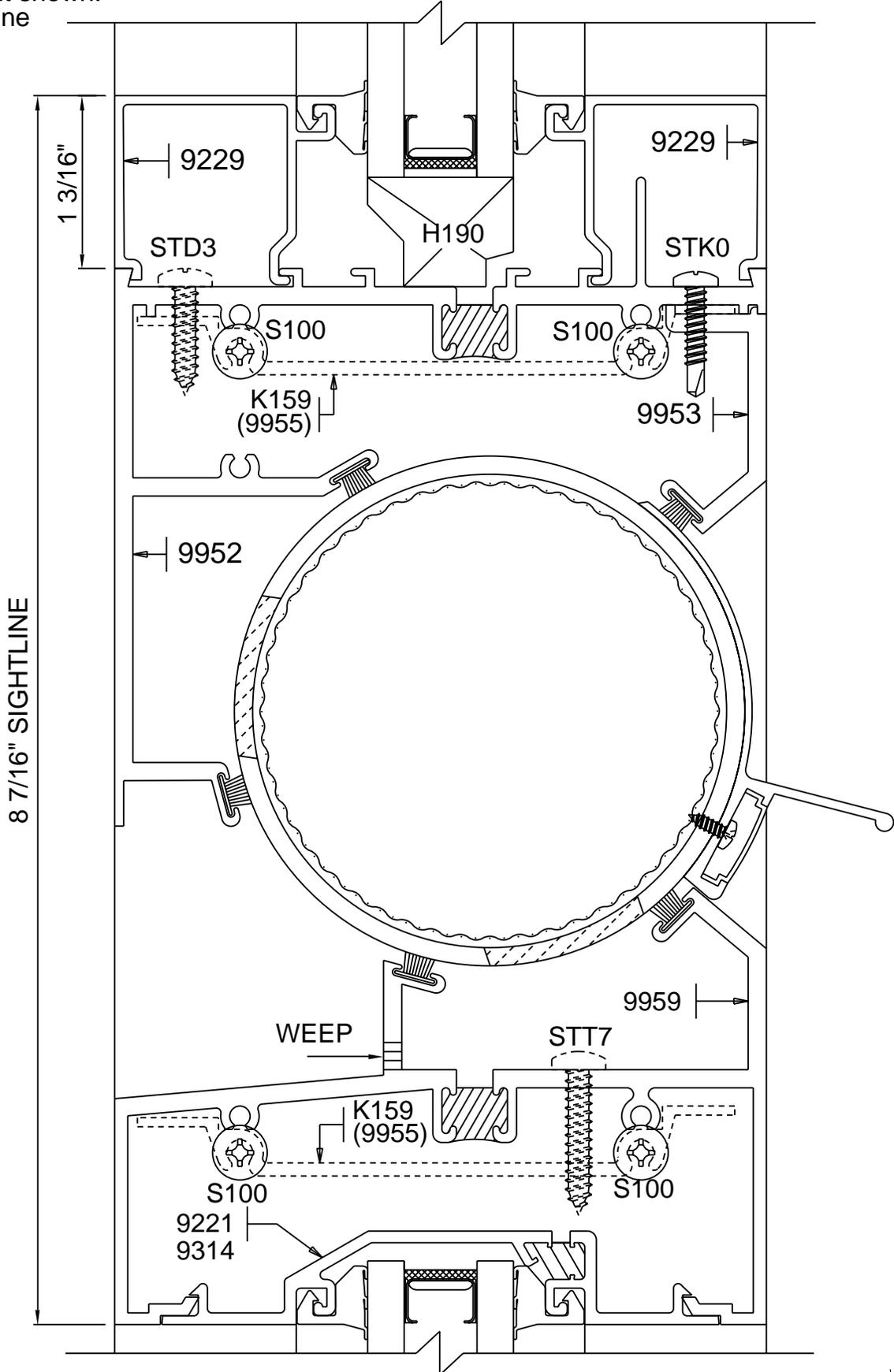
## S401 APPLICATION



# SECTION III - APPLICATION BY SYSTEM

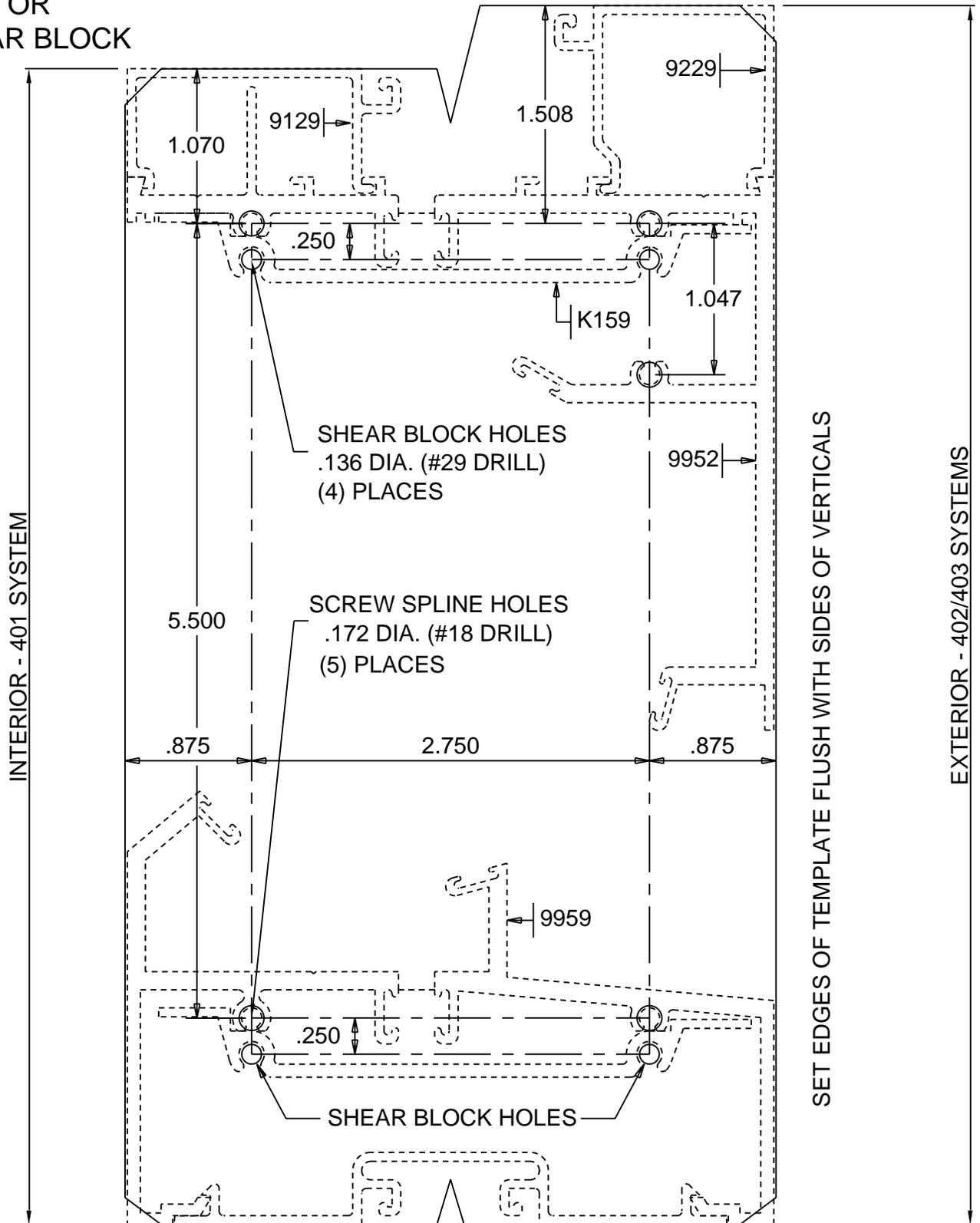
## S402/403 APPLICATION

Shear block attachment shown.  
Screw spline is similar.



# SECTION IV - LOCATING & DRILLING TEMPLATE

SCREW SPLINE  
OR  
SHEAR BLOCK

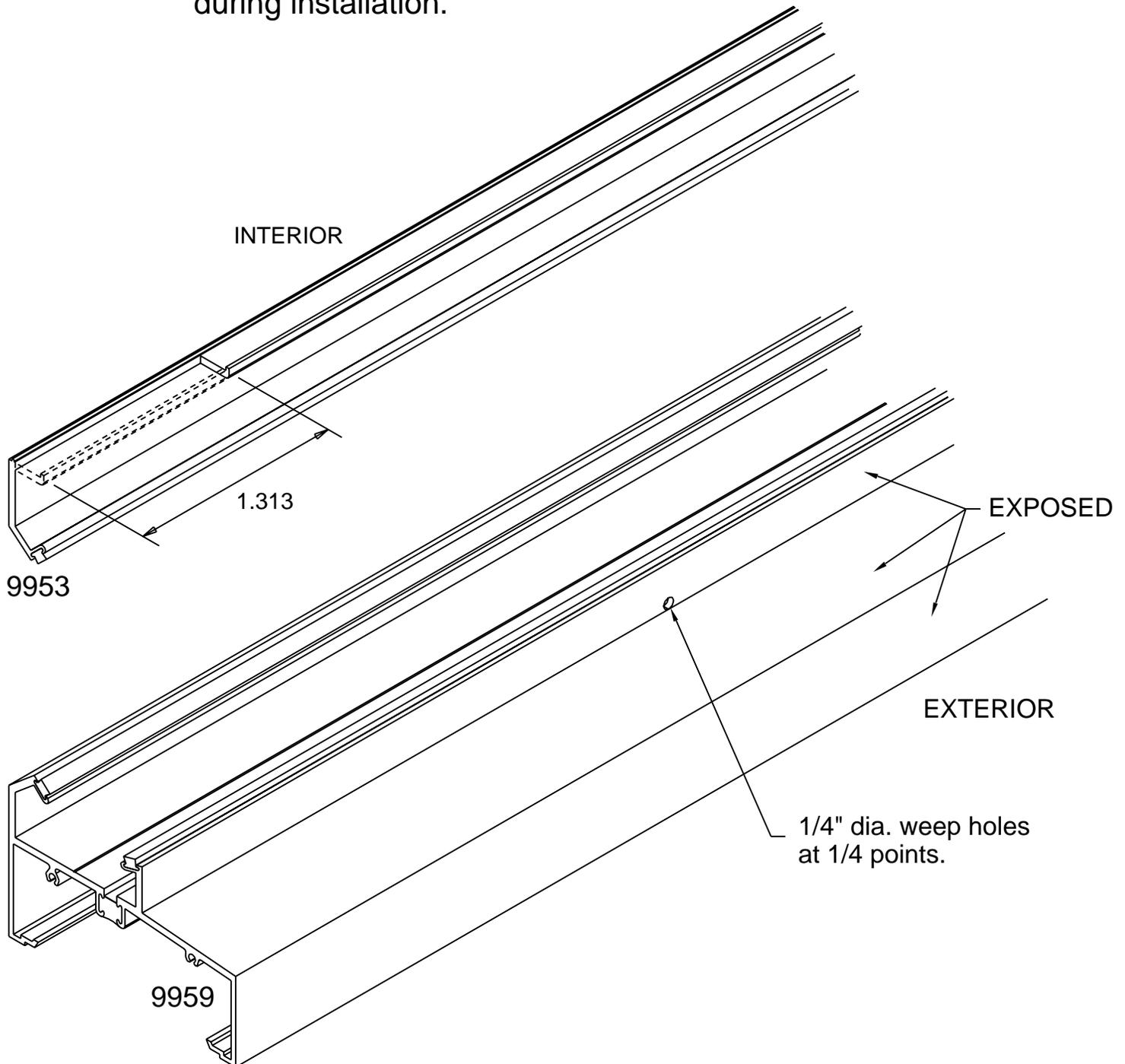


CUT OUT AND USE FOR LOCATING HOLES



# SECTION V - PART PREPARATION & ATTACHMENT

STEP 1) Notch the ends of the tube retainer to clear the shear block during installation.

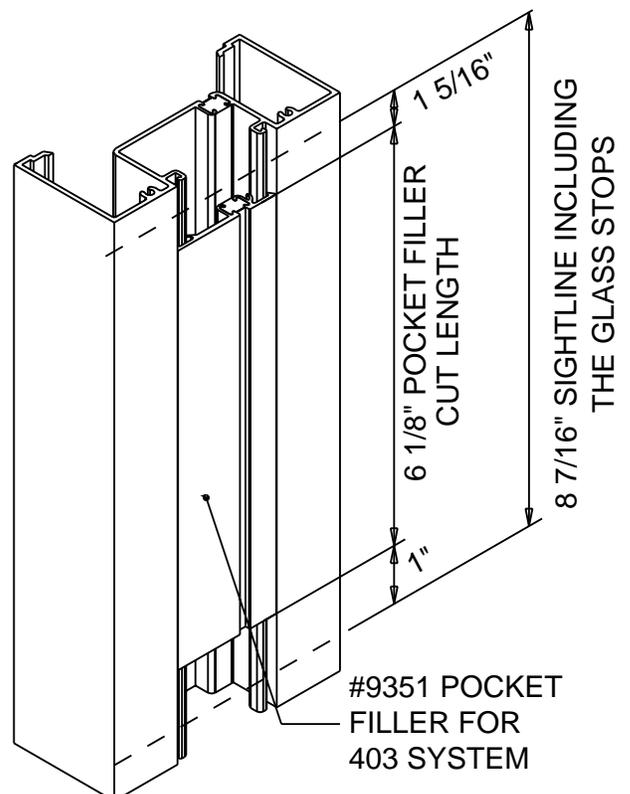
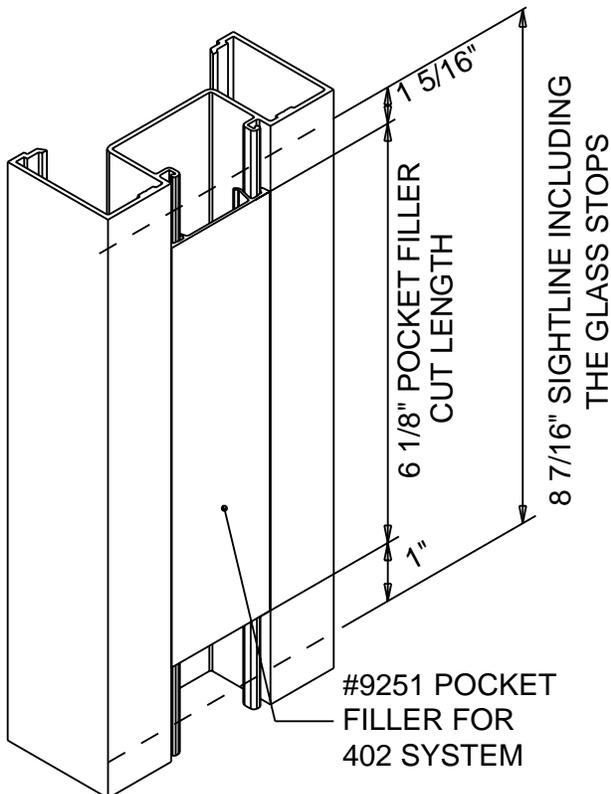
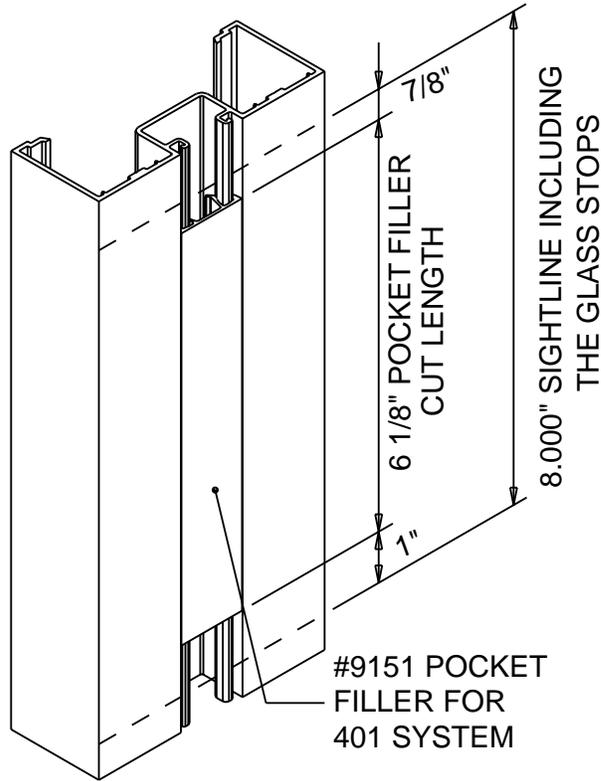


STEP 2) Drill 1/4" diameter weep holes flush with the interior surface of the sill member. Locate weep holes at quarter points. Take care to protect the exposed surface of the sill member when drilling the weep holes.

# SECTION V - PART PREPARATION & ATTACHMENT

CONT.

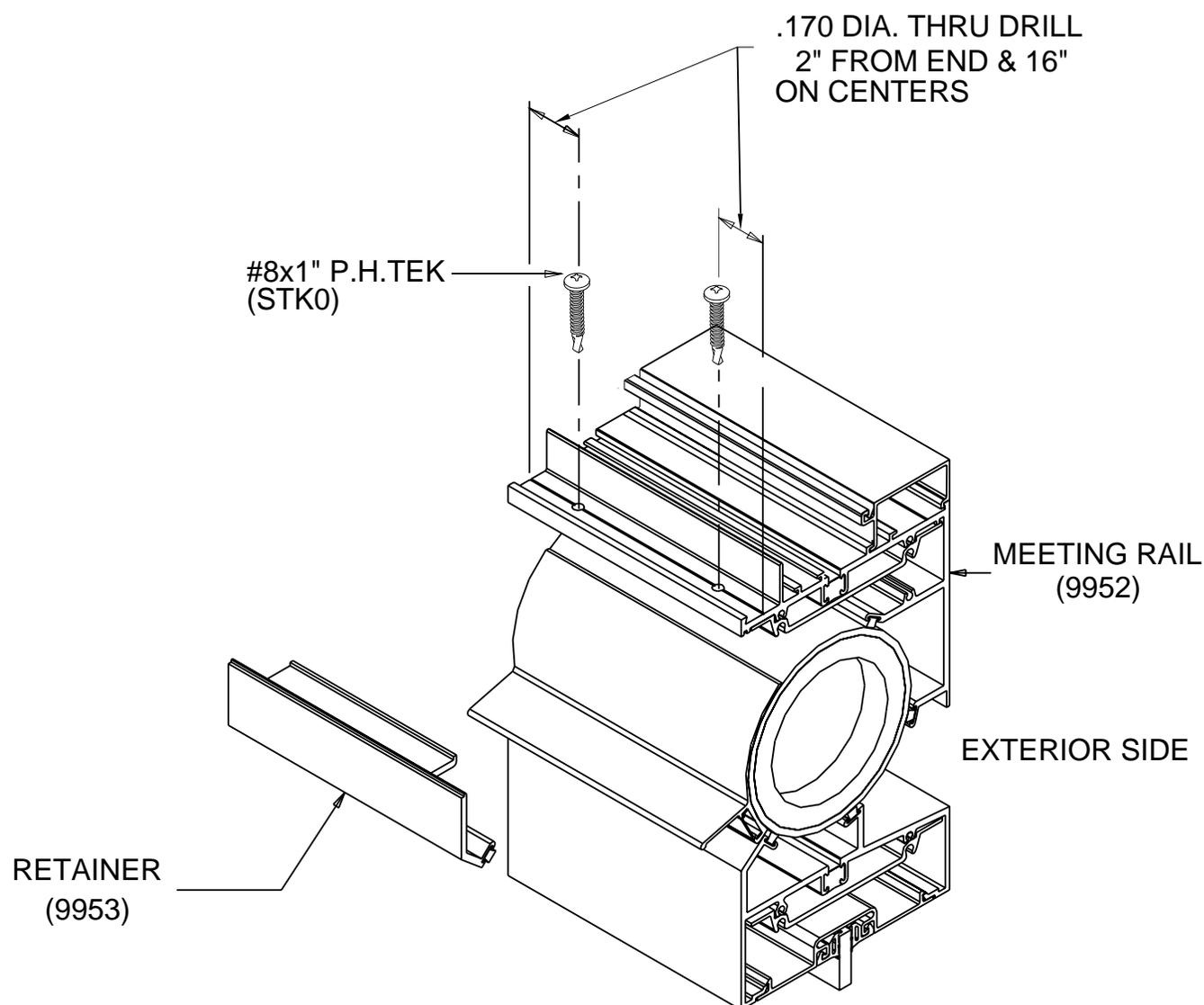
STEP 3) Select the correct pocket filler for the system being used. The cut length for all pocket fillers is  $6 \frac{1}{8}$ ". Locate the pocket filler 1" from the bottom of the roto-vent sill member's location.



# SECTION V - PART PREPARATION & ATTACHMENT

CONT.

- STEP 4) Pre-drill the meeting rail with a #18 drill (.170 dia.) 2" from the ends and 16" on center. The TEK screws (STK0) will be used to attach the tube retainer after the unit is installed.

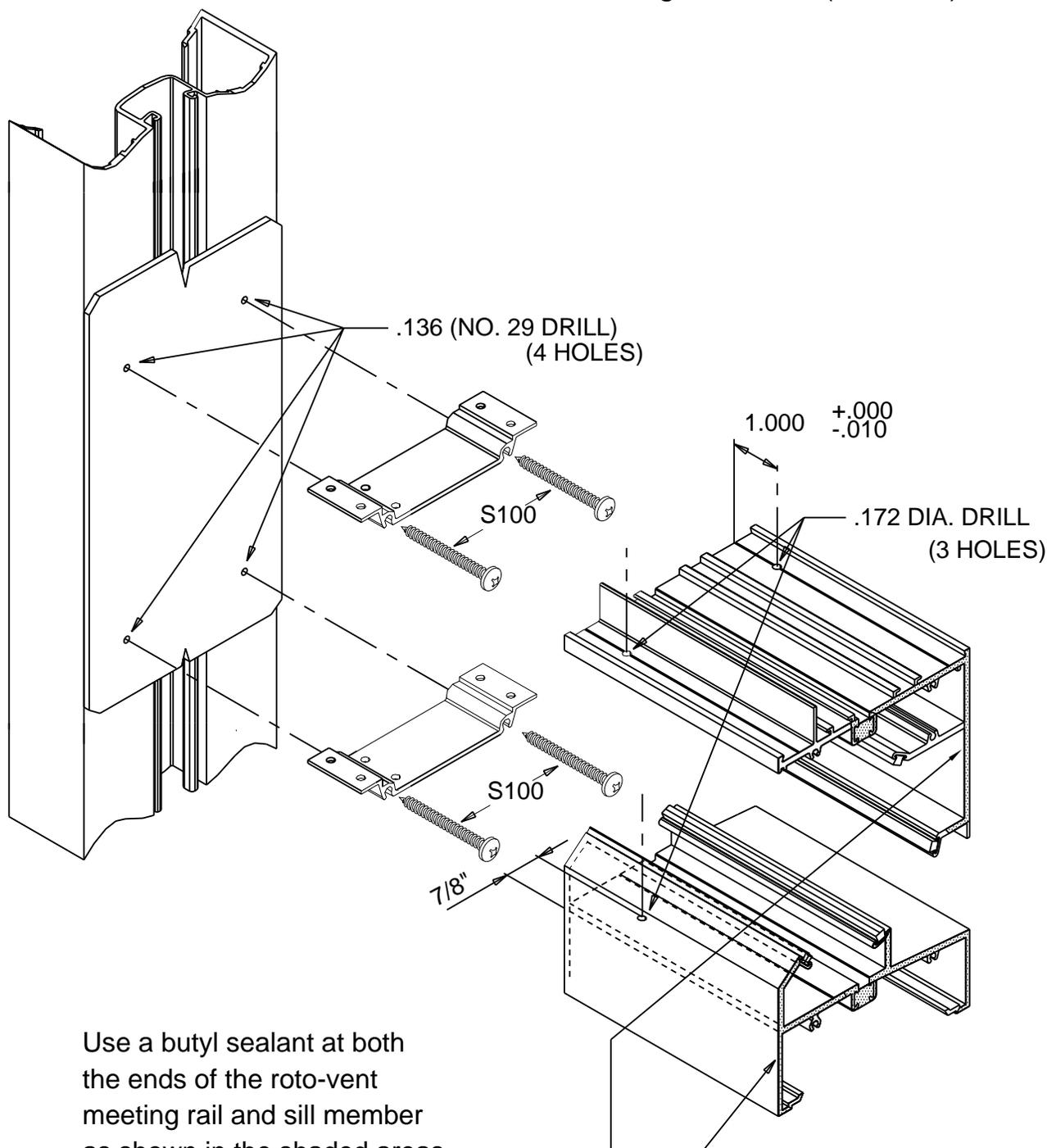


# SECTION V - PART PREPARATION & ATTACHMENT

CONT.

## SHEAR BLOCK ATTACHMENT METHOD

- STEP 5) Determine the location of the roto-vent. Mark the layout of the shear block attachment screws using the template provided with these instructions.
- STEP 6) Drill through the meeting rail accurately at 1" from the ends and in the locating groove using a #18 drill (.170 dia.).
- STEP 7) Drill through the sill member accurately at 1" from the ends and locating the holes 7/8" from the inside surface using a #18 drill (.170 dia.).

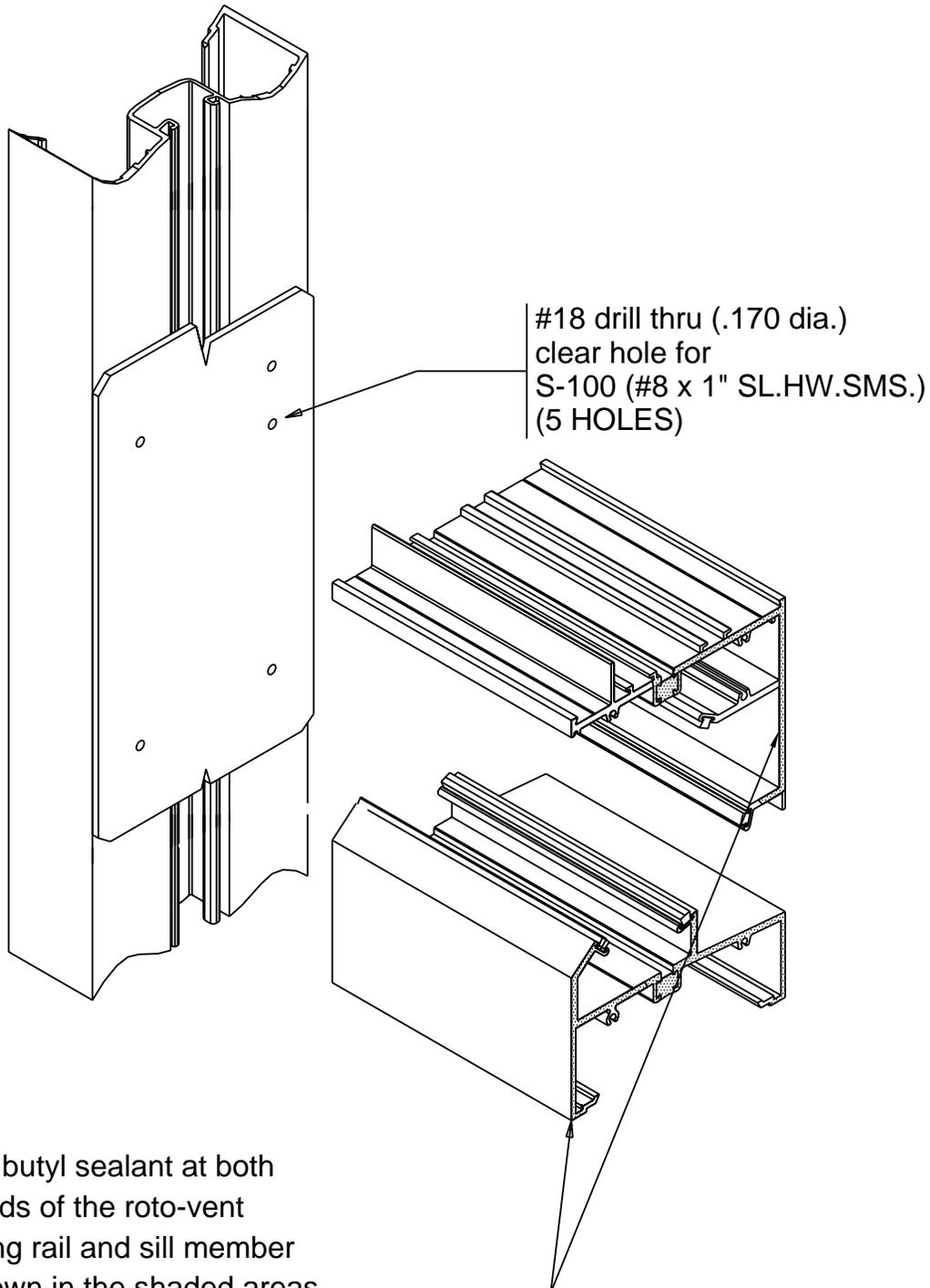


# SECTION V - PART PREPARATION & ATTACHMENT

CONT.

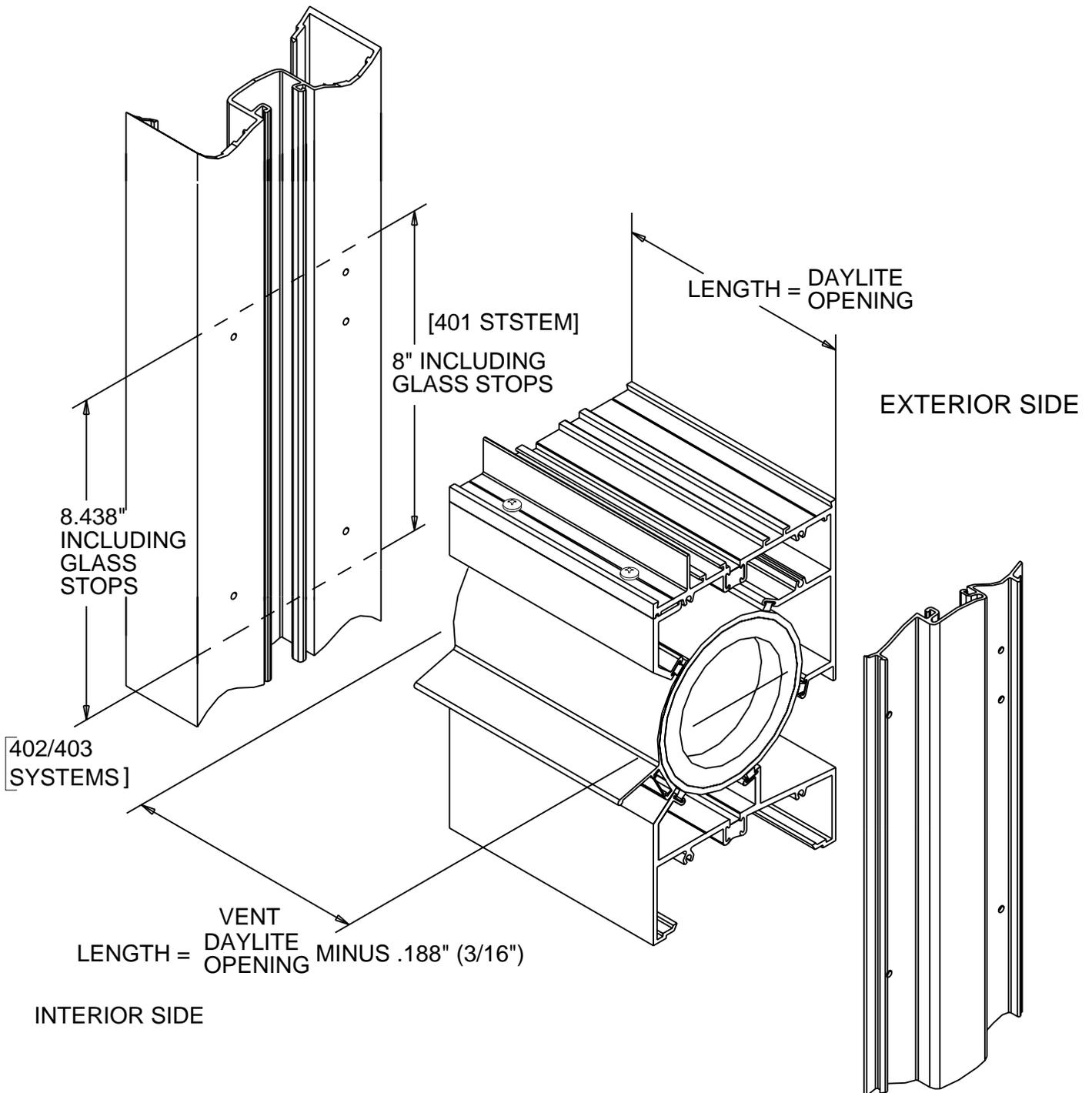
## SCREW SPLINE ATTACHMENT METHOD

- STEP 5) Determine the location of the roto-vent. Mark the layout of the screw spline attachment screws using the template provided with these instructions.
- STEP 6) Drill through the open back verticals with a #18 drill (.170 dia.).



# SECTION VI - SIZING FORMULAS

The overall length of the roto-vent assembly equals daylite opening, in all systems. The height of the roto-vent is different between 401 and 402/403. This is due to the different heights of the glass stops. Refer to the illustration below and pages #3 and #4 for the correct dimensions per system.



# SECTION VII - TUBE REPLACEMENT

Follow steps 1 through 4 below for roto-vent tube replacement.  
Order the replacement tube completely fabricated from the factory.  
The length of the replacement tube is daylight opening minus 3/16".

