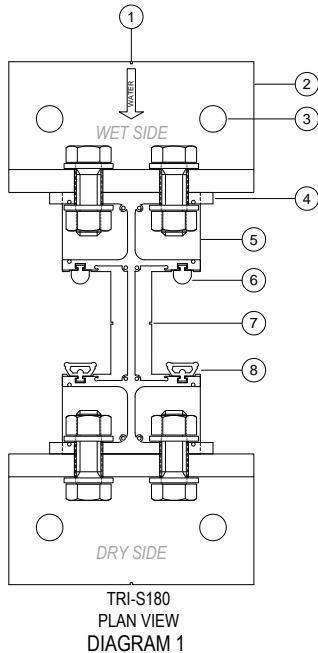


INSTALLATION OF A TRI-S180 INTERMEDIATE POST

TRI-S180 INTERMEDIATE STANCHION POST

The TRI-S180 (DETAIL 4) is an intermediate stanchion post that is used when the total opening width is greater than the allow span of the TRI-B stoplog blade. This post is used to continue a straight line of the barrier run.

It connects to the ground with 4 bolts. The bolts connect to internal threaded epoxy anchors set within the floor, with sizes varying for protection height.



TRI-S180 COMPONENT DIAGRAM

1. CENTERLINE NOTCH
2. BOTTOM ANGLE
3. BOLT HOLE TO GROUND ANCHOR
4. TRI-S180 EXTRUSION
5. BASE PLATE
6. WET-SIDE VERTICAL GASKET
7. CENTERLINE NOTCH
8. DRY-SIDE VERTICAL GASKET

Establishing the location of the TRI-S90 Intermediate Post

In order determine the installation location of the TRI-S180 within the opening; it requires a minimal of one established barrier center line (chalk-line) to reference off of.

REFER TO THE PROJECT'S SHOP DRAWINGS FOR THE LAYOUT TYPE AND DESIGNED CENTERLINE DIMENSIONS/LOCATIONS

1. Once the barrier center line has established and shop drawing referenced to identify reference location for the on-center location for post.
 - a. Place a pencil mark at the identified barrier center-line location and using a framing square carry that mark out on both side of the barrier center-line (about 6" both sides).
 - b. Set the TRI-S180 into position by aligning the notches reference marks made in step 1(a) (DIAGRAM 2)

Positioning Intermediate Post on Layout Lines and Marking Anchor Locations

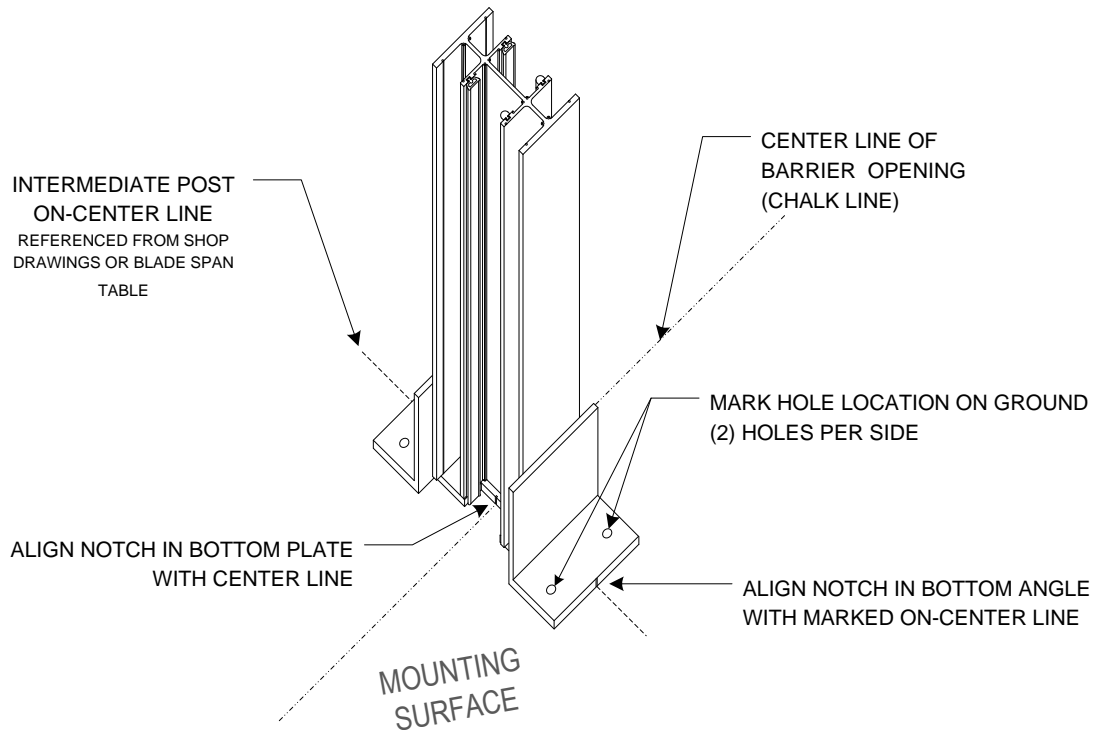
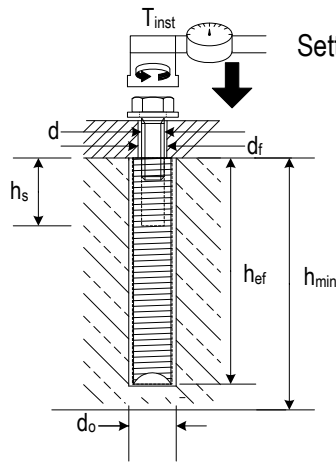


DIAGRAM 2

Installing the TRI-S180 Intermediate Post

1. Place Post into position, aligning the notches on the post with the layout line.(DIAGRAM 7)
 - a. Base Plate notches aligns with the Barrier Center Line (chalk line) and notches on angles with the On-Center Line (made with framing square)
2. Transfer the Bolt Holes locations on the Angles to the Ground
 - a. Recommended Using a Concrete Bit the Size of the Holes (Reference Diagram 3- d_f) to just mark the concrete. This will give an accurate center point.
 - b. Remove Post
3. Using the Drill Bit Size Required for the Hilti HIS-RN Anchor Drill Anchor Holes to Required Depth(Reference Diagram 3 – h_{ef})
4. Clean Out Holes of debris and any water
 - a. The Hilti HIT-RE-500-SD epoxy does not require that concrete be dry prior to use.
5. Install Hilti HIS-RN Anchors with HIT-RE-500-SD
 - a. Reference Manufacturers Installation Instructions (www.hilti.com)
 - b. Allow Epoxy to properly cure prior to use



Setting Details of Hilti HIT-RE 500-SD with HIS-RN Inserts

d	d _i	d _o	h _{ef}	h _{min}	T _{inst}
[inch]	[inch]	[inch]	[inch]	[inch]	[ft-lb]
3/8	1/2	11/16	4 - 3/8	5.9	15
1/2	5/8	7/8	5	6.7	30
5/8	3/4	1 - 1/8	6 - 3/4	9.1	60
3/4	7/8	1 - 1/4	8 - 1/8	10.6	100

DIAGRAM 3

6. Reset Post into position and attach with bolts and washers
 - a. Bolts should be tightened to proper Torque Settings (Reference Diagram 3)
7. Post is now ready to accept StopLog Blades.

Bolt types for Intermediate Post

All Intermediate Posts have 2 types of bolts

When the system is in use Hex Head Bolts with Washers (4 per post) connect the post to the epoxy anchor. The bolts should be tightened to torque settings in Diagram 4

When the system is not in use, a cover or blanking bolt is used. The purpose of the blanking bolt is to protect the internal threading of the epoxy anchor and to provide a more aesthetic finish for the system when not in use.

BOLT TYPES FOR INTERMEDIATE POSTS

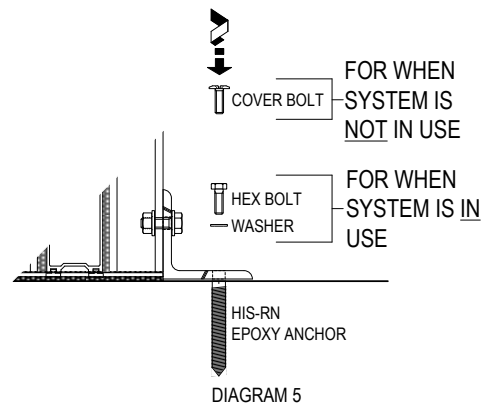


DIAGRAM 5