

# SAFE-HIT<sup>®</sup>

## GLARESCREEN SYSTEM

(DROP-IN ANCHOR SYSTEM)

### PLACEMENT MANUAL

The following instructions are meant to familiarize workers with proper placement procedures for Safe-Hit Glarescreen Systems on concrete barrier wall. Worker safety and the proper use of tools and equipment are emphasized during assembly and placement. It is your responsibility to wear appropriate work gloves, safety goggles, safety toe shoes, hearing protection, and back protection at all times.

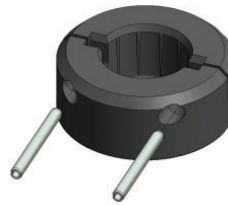
Modification of the design or any components of the Safe-Hit Glarescreen System could reduce performance, void product warranty, and create liability exposure for the contractor or local authority.

**Note: Consult OSHA respiratory standards for crystalline silica exposure.**

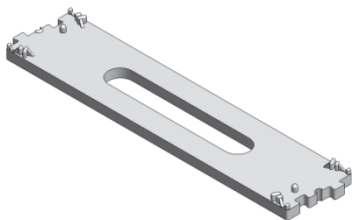
#### System Components:



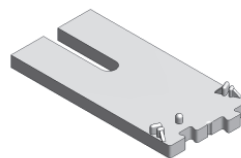
Blade



Base & Retaining Pins



24" Base Rail Segment



11" Base Rail Segment



Hardware

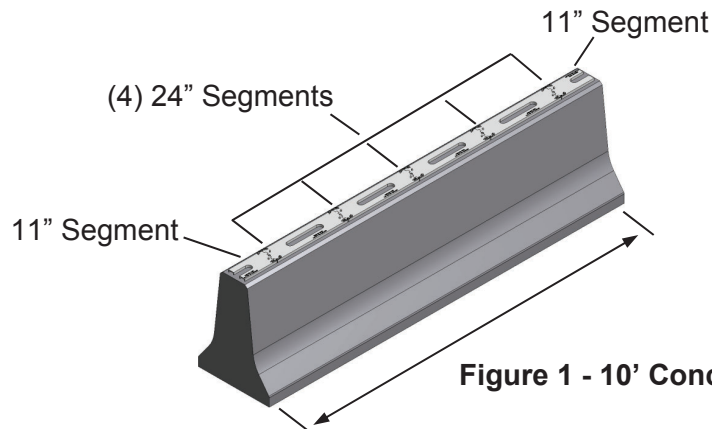
Glarescreen System components are packaged according to the length of the concrete barrier wall. Glarescreen for 12' portable concrete barrier walls are packaged 120 linear feet per box. Glarescreen for 10' and 20' portable concrete barrier walls and permanent concrete barrier walls are packaged 100 linear feet per box. For convenience, smaller packages of 10 linear feet per box and 12 linear feet per box are also available.

Transporting components in original shipping containers to the job site on a flatbed truck is recommended.

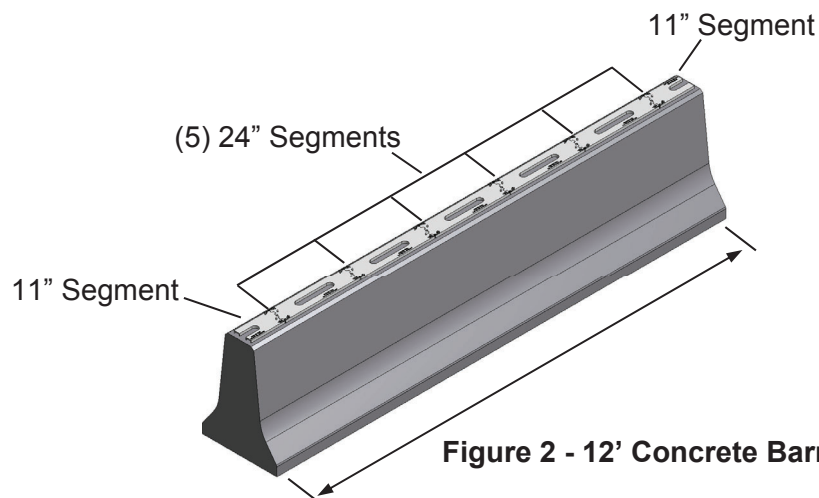
**Recommended tools:**

Permanent Marker	Tape Measure
Rotary Hammer Drill	Carbide Tipped Masonry Drill Bit (1/2" x 6")
Electrical Power Source (110V)	Compressed Air or Blowout Blub
Hammer (2 1/2 lb.)	Anchor Setting Tool (included with kit)
Ratchet Socket Wrench (1/2" drive)	9/16" Socket
Torque Wrench	Chop or Hack Saw
Extension Cord	Retainer Pin Pilot Punch (1/4")

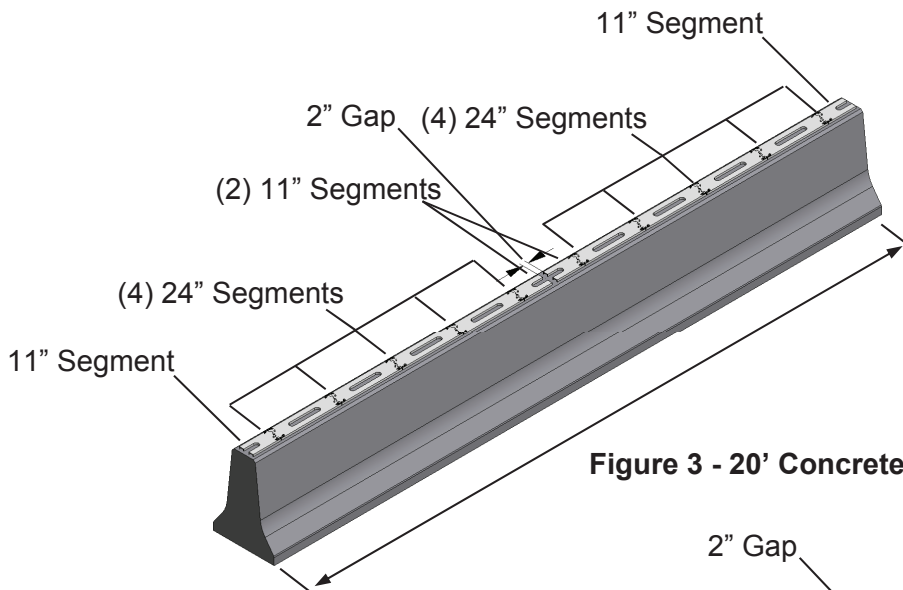
1. Place 11" and 24" Base Rail Segments on the concrete barrier wall and use as a template for drilling anchor holes. Base Rail Segments should be assembled according to the concrete barrier wall length (Figures 1 – 4).



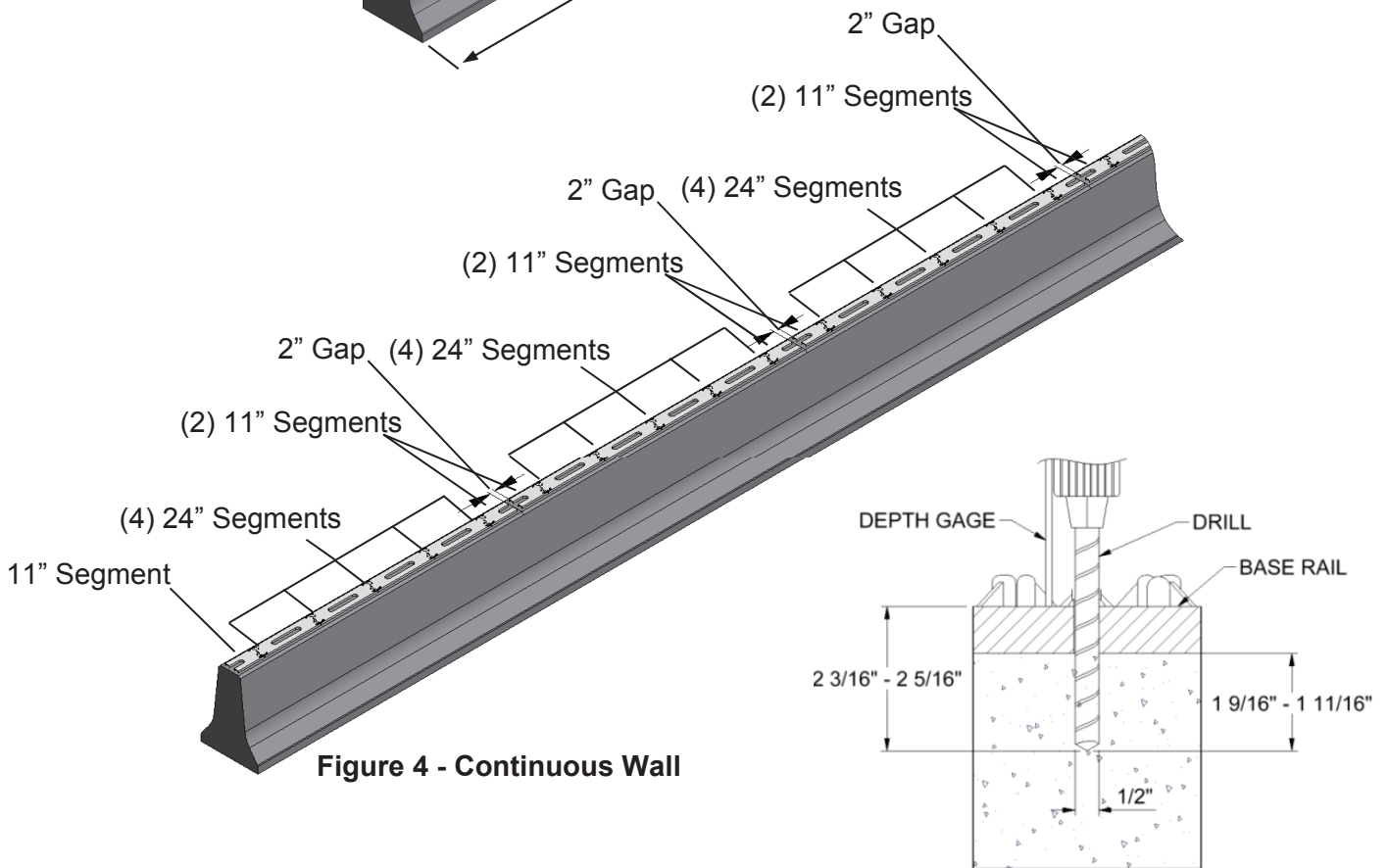
**Figure 1 - 10' Concrete Barrier Wall**



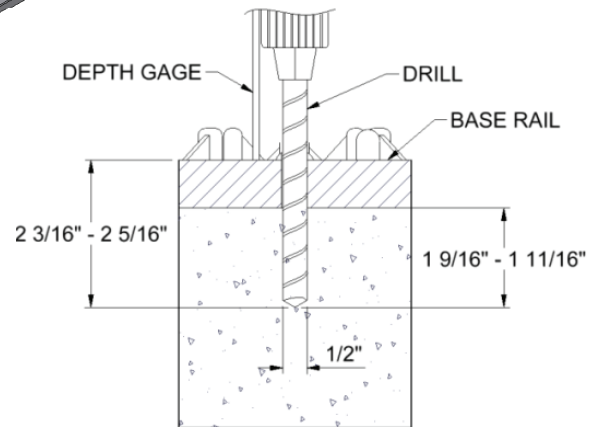
**Figure 2 - 12' Concrete Barrier Wall**



**Figure 3 - 20' Concrete Barrier Wall**



**Figure 4 - Continuous Wall**

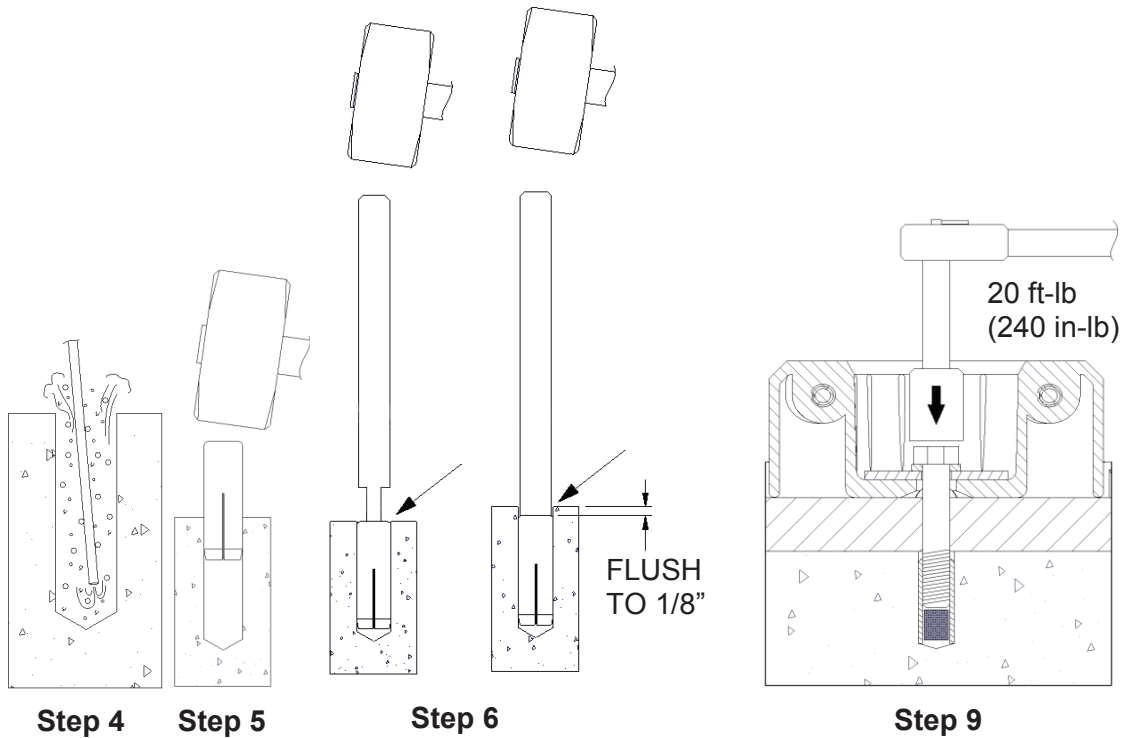


**Step 2 & 3**

**Note:** It is important to leave a 2" gap between Base Rail sections every 10' so the Base Rail can expand and contract due to temperature variations.

**Note:** Do not span barrier wall joints with Base Rail. Base Rail segments may be cut, as required, to fit around obstructions and wall joints.

2. Set the rotary hammer drill depth gauge to 2-3/16" - 2-5/16" so the top of the anchor will be flush to 1/8" below the top of the concrete barrier wall after placement.
3. Drill holes with rotary hammer drill through the Base Rail to a depth of 1-9/16" - 1-11/16" in the barrier wall. After drilling the first hole of a section, insert the setting tool in the hole to secure Base Rail and prevent movement during the remainder of the drilling process.



4. Remove Base Rail sections from the barrier wall and clean the holes with compressed air or a blow-out bulb.
5. Place one (1) drop-in Anchor into each hole then tap into place with a hammer.
6. Place the setting tool on the Anchor and hit it with a hammer until the setting tool lip contacts the top of the Anchor. Ensure that the Anchor does not protrude above the surface of the barrier wall.



**Important:** Use the manual anchor setting tool provided with the Anchors. Anchor setting tools that attach to motorized drill equipment are strictly prohibited. Motorized tools lack the driving force to properly set Anchors.

**Note:** IT IS IMPORTANT THAT THE ANCHORS BE COMPLETELY SET.

7. Reposition the Base Rail Segments on the barrier wall and align the holes with each Anchor.
8. Place the Base on base rail studs and align the slot in the base with the appropriate Blade guide notches. The Blades can be positioned at two different angles depending on the application. Secure the Base with the 3/8 x 1 3/4" bolt with lock washer and flat washer (p. 5 and 6).
9. Tighten the bolt to 20 ft-lb (240 in-lb) using a torque wrench.
10. Insert Blade into Base and ensure the bottom of the Blade is correctly oriented on the Base Rail and the blade alignment boss (2 places). Tap the top of the Blade with a hammer to set the Blade firmly into Base.
11. Drive the Blade Retaining Pins into the Base and through the Blade using a hammer.
12. Apply reflective material to Blades as specified by the highway authority if applicable.

