

WAGNER RAIL SYSTEM

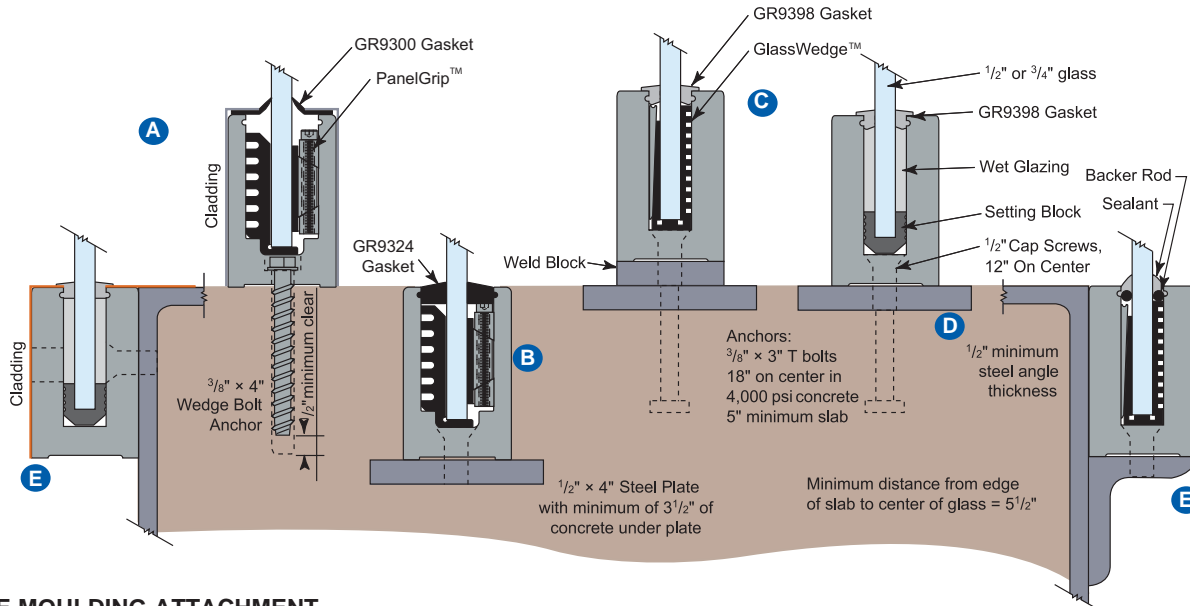
GLASS RAILING

CABLE RAILING

SPIRAL STAIRS BALCONIES

ALUMINUM RAILINGS

BRASS / SS FITTINGS



**SHOE MOULDING ATTACHMENT**

Attachment of the aluminum shoe moulding is critical to the success of any glass railing installation. The details above depict six typical attachment methods. Other methods of attachment are possible but their integrity would need to be determined by the installer in cooperation with their own engineer.

*Note: To avoid corrosion, aluminum should be kept from directly contacting steel Portland based cement and grout by painting with a heavy coat of an appropriate primer. For exterior applications, provide weep holes as needed.*

**A – ATTACHMENT TO CONCRETE**

The **Shoe Mouldings** may be attached directly to concrete – 4,000 psi minimum – using a  $\frac{3}{8}$ " x 4" **Wedge-Bolt, Orange Tip, Anchor**.

- Use the pre-drilled holes in the shoe moulding as a template to drill holes in the concrete. The **Wedge-Bolt, Orange Tip, Anchor** allows the use of a standard  $\frac{3}{8}$ " x 12" masonry bit.
- Holes must be drilled a minimum of  $\frac{1}{2}$ " deeper than the required embedment.
- Vacuum all loose debris and thread in the **Wedge-Bolt Anchor**.
- Insert the **Wedge-Bolt** through the base **Shoe Moulding** and into the drilled hole. Use downward pressure and begin to turn the **Wedge-Bolt** clockwise thereby engaging the first few threads.
- Continue tightening until firmly seated against the **Shoe Moulding**. An impact wrench is recommended to facilitate tightening to a torque of 40 ft/lbs.

**B – EMBEDDED IN CONCRETE**

When design parameters require a hidden floor attachment, a poured in place **Shoe Moulding** may be appropriate. With this attachment method, the glass will appear to rise directly out of the floor.

**C – WELD BLOCK WITH STEEL SUBSTRATE**

If a structurally sound steel substrate is present and you wish to avoid drilling and matching **Shoe Moulding** holes with substrate holes, steel **Weld Blocks** may be used.

- **Weld Blocks** are mechanically attached to the base of the **Shoe Moulding** with  $\frac{1}{2}$ "-13 x  $\frac{1}{4}$ " **Cap Screws**.
- The assembly is then placed and aligned in the field and welded to the steel substrate.
- Custom sized **Cladding** is available to cover your **Weld Block** attachment.

**D – ATTACHMENT TO EMBEDDED STEEL**

- A  $\frac{1}{2}$ " x 4" steel strip is drilled and tapped for  $\frac{1}{2}$ "-13, 12" on center; and  $\frac{3}{8}$ " x 3" T bolt anchors are welded to the underside of the steel strip, 18" on center.
- Prior to placing in wet concrete, insert **Nylon Allen Screws** to protect threaded holes and cover the **Cap Screw** socket heads with duct tape to keep out the concrete.
- When cured, remove the **Nylon Allen Screws** and secure the **Shoe Moulding** with  $\frac{1}{2}$ "-13 x  $\frac{1}{4}$ " **Cap Screws**.

**E – FASCIA MOUNT**

- The **Shoe Moulding** may be side mounted to a steel angle or substrate as shown.
- **Wagner** can pre-drill **Shoe Moulding** for fascia mounting as required.

**ATTACHMENT LOCATIONS:**

- Lengths less than 1'-6", two attachment minimum.
- Lengths between 1'-6" and 2'-6", three attachment minimum.
- Lengths over 2'-6", space attachments 12" on center.
- The first hole should be located 3" from the end of the shoe moulding on lengths less than 2'-6" and 6" from the end on lengths over 2'-6".
- Drill additional holes in shoe moulding as required.
- For exterior applications, the heads of the attachments should be covered with silicone.

Recommended Tools:	
<b>Concrete Drilling:</b> <ul style="list-style-type: none"> <li>• <math>\frac{1}{8}</math>" Heavy-Duty Rotary Hammer</li> <li>• <math>\frac{3}{8}</math>" x 12" Masonry Bit</li> </ul>	<b>Setting Wedge-Bolt®:</b> <ul style="list-style-type: none"> <li>• Impact Wrench or Ratchet</li> <li>• <math>\frac{3}{8}</math>" Drive, <math>\frac{9}{16}</math>", Deep Socket, 8 pt Socket</li> </ul> <b>Setting Cap Screw:</b> <ul style="list-style-type: none"> <li>• <math>\frac{3}{8}</math>" Drive, <math>\frac{3}{8}</math>" Hex Bit</li> </ul>