The Wagner PanelGrip System utilizes a unique locking mechanism of high-strength aluminum and PVC isolators combined with a specially designed aluminum Shoe Moulding. When assembled with 3/8" or 5/8" tempered monolithic glass or 3/4", 5/8" or 3/4" tempered laminated glass, PanelGrip enables the installer to fabricate a structural Glass Railing System with significant reductions in labor and freight costs.

The PanelGrip System was tested per ASTM E935, Standard Test Methods for Performance of Permanent Railing Systems and Rails for Buildings. This test report and installation instructions may be downloaded at www.panelgrip.com.

- **Reduce Labor Costs Up To 80%**
  No sealing of shoe, no setting blocks, no plumbing of glass, no multiple pours of cement, no waiting for cement to cure; no messy clean-up.

- **Reduce Freight Costs Up To 30%**
  PanelGrip shoe is almost 30% lighter than standard shoe yet meets structural load requirements for railings.

- **Broader Grip Range Of Any Dry Glaze Option**
  Made for nominal 5/8" or 3/4" tempered monolithic glass or 5/8", 3/4" or 5/8" tempered laminated glass, but will work for any panel between .355" and .548", or .719" and .872".

- **Other Grip Ranges are available upon request**

- **No Special Tools Required**
  All you need is an Allen wrench for installation or removal.

- **No Mess**
  No mixing and pouring of expansion cement. No running of cement on incline.

### How to Use PanelGrip – Go to www.panelgrip.com for full install instructions.

a. **PanelGrip** is self-centering and self-plumbing. You must take the time to properly plumb the **PanelGrip Shoe Moulding** such that it is installed plumb to +/- 1/8" at an extended height of 42".

b. After plumbing, clear the **PanelGrip Shoe Moulding** of all debris.

c. Place the **PanelGrip Plastic Isolator** into the **Shoe Moulding**.

d. Space **Plastic Isolators** a maximum of 14" on center with a maximum of 4" in from the left and right edges of each panel – 4 isolators per 4 foot panel.

e. Place the panel atop the **Plastic Isolators** in the **Shoe Moulding**. PanelGrip will work with nominal 3/4" or 3/4" tempered monolithic glass or 3/4", 5/8" or 3/4" tempered laminated glass – actual dimension between .355" and .548", or .719" and .872". **Warning:** With Multi-Panel Railings, do not line up the edge of a panel with the end of the shoe – place the panels so that they span **PanelGrip Shoe Moulding** butt joints to assist in alignment.

f. Have someone hold the panel in place while you insert the aluminum **PanelGrip** mechanism into place on the opposite side of the glass in alignment with the **Plastic Isolators**. Make sure that the plastic pad on the **PanelGrip** is facing the glass.

g. Using a 3/16" hex head wrench, tighten the cap screw on the **PanelGrip** mechanism. While tightening, the plastic pad will break away from the aluminum as the unit expands.

h. Confirm alignment and make adjustments prior to final tightening which will compress and lock the panel into place. Remember, PanelGrip is self-centering and self-plumbing. You must take the time to properly plumb the **PanelGrip Shoe Moulding** such that it is installed plumb to +/- 1/8" at an extended height of 42".

i. Once you have confirmed plumb, use the 3/16" hex head wrench to make the **PanelGrip Cap Screw** snug-tight, then continue tightening to 10-15 ft/lbs of torque.

j. Repeat on all other **PanelGrip** units to secure the panel in position.

k. Prior to installing gasket and/or cladding, confirm 10-15 ft/lbs of torque in all mechanisms.

l. Should you need to remove a panel, this can be done simply by loosening the **PanelGrip Cap Screw** until loose.

**Note:** The **Cap Screw** included in the **PanelGrip** contains a pressure-sensitive locking compound that insures the screw remains tight over time and through cyclic loading. Each insertion and removal cycle diminishes its locking capacity. Individual results will vary but four cycles is the typical life span of the compound.

PanelGrip® is a registered trademark of R & B WAGNER, INC. All specifications subject to change without notice. Information furnished by THE WAGNER COMPANIES is believed to be accurate and reliable. However, no responsibility or liability by THE WAGNER COMPANIES for its use, nor for infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise.

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**PanelGrip® Shoe Moulding**

Aluminum, 6005-T5 Alloy, 10’ and 20’ Lengths

Available with two hole configurations, PanelGrip Shoe Moulding is produced from extruded aluminum. Shoe Moulding may be anodized, painted or clad to match the cap railing or area decor.

The shoe is the key to the structural integrity of any glass railing system. Proper attachment is extremely important. This system is designed for use with tempered monolithic glass or tempered laminated glass.

**Hole Configurations:**
- 12” on center beginning 6” from the end:
  - Countersunk Holes are drilled for 3⁄4” flat head socket screws for attachment to tapped steel substrate.
  - Counterbored Holes are for 3⁄8” × 4” Wedge-Bolt® anchors for attachment to concrete.

**Tolerances:** +/− 1⁄4”

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**PanelGrip® Shoel Moulding**

Aluminum, 6005-T5 Alloy, 10’ and 20’ Lengths

For mounting Glass Railing Systems with PanelGrip® Dry Glaze or wet glaze.

<table>
<thead>
<tr>
<th>Hole Configuration</th>
<th>1”</th>
<th>2½”</th>
<th>4½”</th>
<th>½”</th>
<th>5.98</th>
<th>20’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countersunk Holes</td>
<td>1”</td>
<td>2½”</td>
<td>4½”</td>
<td>½”</td>
<td>5.98</td>
<td>10’</td>
</tr>
<tr>
<td>Counterbored Holes</td>
<td>1¼”</td>
<td>2¼”</td>
<td>4½”</td>
<td>¼”</td>
<td>6.24</td>
<td>20’</td>
</tr>
<tr>
<td></td>
<td>1¼”</td>
<td>2¼”</td>
<td>4½”</td>
<td>¼”</td>
<td>6.24</td>
<td>10’</td>
</tr>
</tbody>
</table>

* .355” to .548” grip range
* .719” to .872” grip range

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**PanalGrip® Plastic Isolator with Aluminum PanelGrip Assembly**

For use with
- ½” monolithic tempered glass (469” to 531”)
- ¾” monolithic tempered glass (719” to 781”)
- ¾” laminated glass (420” to 458”)
- ¾” laminated glass (498” to 548”)
- ¾” laminated glass (770” to 872”)

**Recommended Tools**

- Concrete Drilling:
  - ¾” Heavy-Duty Rotary Hammer
  - ¾” × 12” Masonry Bit

- Setting Wedge-Bolt:
  - Impact Wrench or Ratchet
  - ¾” Drive, ¾”, Deep Socket, 6 pt Socket

- Setting Cap Screw:
  - ¾” Drive, ¾” Hex Bit

To view Cap Rail, Glass Mount Brackets and other accessories, go to www.glassrailing.com.

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**Flat Head Cap Screws**

Flat head socket for mounting to tapped steel substrates. 10 per package Stainless

½” × 13 × 1½” FHS5013

**Wedge-Bolt – Orange Tip**

Zinc Plated Steel

¾” × 4” WB7216

Insert the Wedge-Bolt through the base shoe 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. Go to www.panelgrip.com for complete instructions on proper use of the Wedge-Bolt.