## WARNING

- To avoid serious eye and hand injuries or blindness, always wear safety glasses and gloves.

### TOOLS

- Measuring Tape
- Pencil or Marker
- Handsaw
- Hacksaw
- Drill with 5/32" drill bit
- Screwdriver
- Level
- 9/16" Socket Wrench

### GENERAL INFORMATION

Before starting this project, be sure to consult your local building department for codes and regulations for guardrail installations. Your new railings have been evaluated and quality tested to ensure that they comply with the International Residential Code (IRC) requirements. This product is not to be used for commercial installations. This product is not to be used in access ramps for the disabled. This product is not to be used in marine fueling stations. This product is to be used only in exterior applications for residential construction.

### INSTALLATION INSTRUCTIONS:

1. **Posts**
   
   A. Install treated wood posts in accordance with building code requirements. See Sizing Chart for Post locations.
   
   B. Cut upper wood posts to 36" above the deck surface. Cut the lower wood posts to 41" above the stair tread.
   
   C. Slide the Genova 4" x 38" Post Covers over the upper posts and a Genova 4" x 50" Post Covers over the lower posts. Cut the 4" x 50" Post Cover to 42" if it sits on the stair tread.
   
   D. Install shims between the wood post and the Post Cover on all four sides. Strips of plywood or a solid weather resistant material is recommended as shim stock.

### Parts Needed To Assemble Rail Section:

- 4" x 4" x 38" Post Cover
- 4" x 4" x 50" Stair Rail Post Cover
- 4" x 4" Treated Wood Post
- 4" Post Trim Base
- Genova Vinyl Sealant
- Post Tops - Gothic, Ball, Bevel, or New England

### Optional Parts Available:

- Bracket Kits to make two shorter sections from one section
- Round Handrail Cover
- Handrail Bracket Kit
- Universal Rail Adapter Kit

### SIZING CHART

Based upon a 7"x11" step system

<table>
<thead>
<tr>
<th># of Steps</th>
<th>Center Dimension ± ¼&quot;</th>
<th>Stair Kit Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>22-1/8&quot;</td>
<td>6 ft.</td>
</tr>
<tr>
<td>3</td>
<td>29-1/8&quot;</td>
<td>6 ft.</td>
</tr>
<tr>
<td>4</td>
<td>43-1/8&quot;</td>
<td>6 ft.</td>
</tr>
<tr>
<td>5</td>
<td>50-1/8&quot;</td>
<td>6 ft.</td>
</tr>
<tr>
<td>6</td>
<td>64-1/8&quot;</td>
<td>6 ft.</td>
</tr>
<tr>
<td>7</td>
<td>76-1/4&quot;</td>
<td>8 ft.</td>
</tr>
<tr>
<td>8</td>
<td>83-7/8&quot;</td>
<td>8 ft.</td>
</tr>
</tbody>
</table>

![Figure A.1](6 ft. Section)

![Figure A.2](8 ft. Section)
E. Slide the 4” Post Trim Base over the Post Cover and push it down so it is flush with the deck.

2. Mounting Brackets
A. To determine the location of the Mounting Brackets lay a straight edge across the nose of the stairs and against the side of the Post Covers and mark with a pencil. (Figure B.1) Transfer the pencil marks to the side of the top post facing down the stairs and to the side of the bottom post facing up the stairs.
B. Mark the upper and lower Stair Rail Posts at ¼” and at 29-9/16” above this mark (Figure B.2). These marks locate the bottom edge of the Stair Rail Adapters. Center the Stair Rail Adapters with the webbed side against the post and pre-drill 5/32” holes for the mounting screws.
C. Deluxe Square Only—The 2 square adapters go on the bottom of the Posts. The ‘A’ Colonial Adapter attaches to the top of the upper Post and the ‘B’ Colonial Adapter attaches to the top of the lower Post.
D. Mate the Mounting Brackets to the Stair Rail Adapters using the locating pins on the flat side of the Adapters. Attach the Mounting Brackets and Stair Rail Adapter at the appropriate post locations with one 3” and one 4” Lag Screw (Figure C).

3. Rails
A. Measure the distance between the ‘INSERT TO HERE’ windows in the top Mounting Brackets (hook the measuring tape onto one window and measure the distance to the opposing window). Subtract 1/8” from the measurement and cut (if necessary) the Aluminum P-Channel Rail Inserts to this length.
B. Cut the 2’ x 4’ Vinyl Rails 1-1/4” shorter than the Aluminum Inserts. When cutting the rails observe the ‘Top Rail—Cut This End Only’ sticker and the ‘Bottom Rail Cut This End Only’ sticker. These stickers must both be oriented toward the top of the stairs.
C. Deluxe Square Sections Only—Cut the Colonial Rail Cover to the same length as the top Vinyl Rail. Apply a generous bead of Genova Vinyl Sealant down the center and on the sides of the trough portion of the Colonial Rail Cover. Insert the 2’ x 4’ Vinyl Rail in the trough so the Baluster holes are visible (opposite and away from the Colonial Rail Cover). Square up the ends and clamp the pieces together. Wipe off any excess Sealant. Allow the Sealant to set approximately 30 minutes before continuing.

4. Section Assembly
A. Insert the Aluminum P-Channels into the Vinyl Rails. The long leg of the Aluminum P-Channel must point toward the routed baluster holes. (Figure D)
B. Slide the Mounting Bracket Covers over the ends of the Vinyl Rails with the notched ends on the bottom and facing toward the Balusters. If necessary, split the cover and glue together after installation.
C. Orient the Bottom Rail so the long leg of the Aluminum P-Channel Insert is on the same side as the steps and insert it into the Mounting Brackets.
D. Center the assembly in the Brackets. The Aluminum Insert should extend 5/8” beyond the Vinyl Rail at each end.
E. Locate the scribe lines between the elongated holes on the sides of the Mounting Brackets. Drill 5/32” diameter holes through the long legs of the Aluminum Rail Insert at these locations (2 per bracket). Secure the Aluminum Rail Insert to the Mounting Brackets. Using #10 x 3/4” Pan Head Sheet Metal Screws in each of the holes. (Figure E) CAUTION: Do not over tighten the screws.
F. Push the Glass Blusters into the routed holes.
G. Orient the Top Rail so the long leg of the Aluminum P-Channel Insert is on the same side as the steps. Insert one end into the Mounting Bracket and work across to the opposite Mounting Bracket, aligning the Balusters with the routed holes.
H. Center the Top Rail in the Brackets and repeat step E to attach the Top Rail to the Brackets.
I. Slide the Mounting Bracket Covers over the Mounting Brackets until they snap in place.
J. Apply Genova Vinyl Sealant to the inside flat surfaces of the Post Tops and attach them to the Post Covers.

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