

# Glass Railing Install 36"

Square & Deluxe Square

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

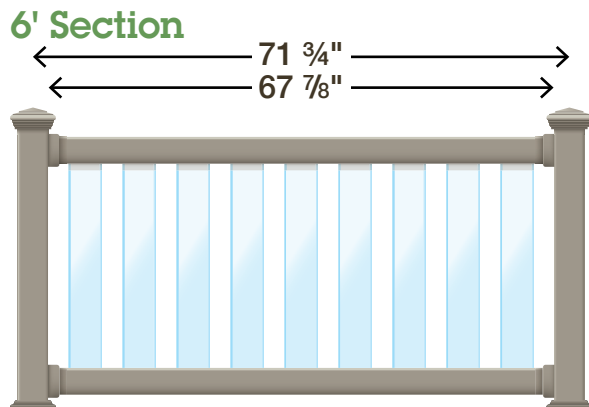


Figure A.1

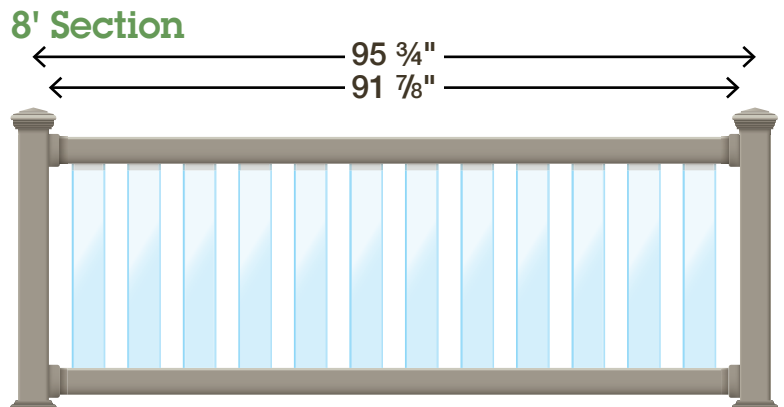


Figure A.2

## Tools

Measuring Tape	Pencil/Marker	Handsaw
Hacksaw	Drill w/ 1/8" & 5/32" Drill Bits	Screwdriver
Level	7/16" Socket Wrench	Rope

## Components

6' Square	8' Square	6' Deluxe Square	8' Deluxe Square	
2	2	2	2	2' x 4' Vinyl Rails
		1	1	Colonial Rail Cover
2	2	2	2	Aluminum P-Channel (Top Rail Insert)
9	12	9	12	Glass Balusters
4	4	4	4	Mounting Brackets
4	4	4	4	Mounting Bracket Covers
8	8	8	8	3/8" x 2" Lag Screws (attach brackets to posts)
8	8	8	8	#10 x 3/4" Pan Head Sheet Metal Screws (attach aluminium inserts to brackets)

## Parts Need 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:** Bracket kits (to make two shorter sections from one section), Round Handrail Cover, Handrail Bracket Kit, Universal Rail Adapter Kit

## Before You Start...

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 and AC-174 entitled, "Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems" (Guards and Handrails), and have been assigned ICC Evaluation Service Reports #ESR-1904. 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.

### 1 - Posts

#### 1.1

Install wood posts in accordance with building code requirements.

- 6' section on 71  $\frac{3}{4}$ " centers ( $\pm \frac{1}{4}$ " )
- 8' section on 95  $\frac{3}{4}$ " centers ( $\pm \frac{1}{4}$ " )

#### 1.2

Cut wood posts to 36" above the deck surface.

#### 1.3

Slide the Genova 4" x 38" Post Cover over the treated wood posts.

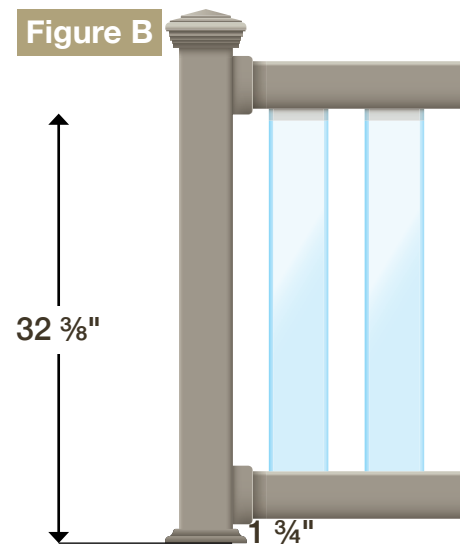
#### 1.4

Install shims between the wood posts and the Post Cover, on all four sides. Strips of plywood or a solid/rigid weather resistant material is recommended as shim stock.

#### 1.5

Slide the 4" PostTrim Base over the Post Cover and push it down so it is flush with the deck.

Figure B



### 2 - Mounting Brackets

#### 2.1

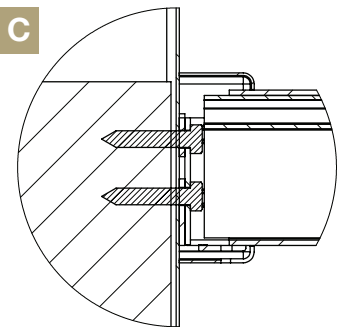
Determine the location of the Mounting Brackets:

- The bottom side of the Bottom Brackets should be 1  $\frac{3}{4}$ " from the deck surface. (See Figure B)
- The bottom side of the Upper Brackets should be 32  $\frac{3}{8}$ " from the deck surface. (See Figure B)
- All Brackets should be level and plumb on the vertical centerline of the vinyl covered posts

#### 2.2

Attach the Mounting Brackets to the Posts using two 3/8" x 2" Lag Screws per Bracket. Pre-drill holes with 5/32" drill bit. (Figure C)

Figure C



### 3 - Rails

#### 3.1

Measure the distance between the "INSERT TO HERE" windows in the Mounting Brackets (hook the measuring tape onto one window and measure the distance to the opposite window). Subtract  $\frac{3}{8}$ " from the measurement and cut, if necessary, the Aluminum P-Channel Rail Inserts to this length.

#### 3.2

Cut the 2" x 4" Vinyl Rails 1-1/4" shorter than the Aluminum Inserts. Cut equal amounts from each end to maintain symmetric Baluster spacing. Do not cut

through a routed hole. If necessary, cut more from one end and less from the other to maintain the desired overall length.

### 3.3

**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" Rail in the trough so the routed Baluster holes are visible (opposite and away from the Colonial Rail Cover.) Square up the ends and clamp both pieces together. Wipe off any excess Sealant. Allow the Sealant to set approximately 30 minutes before continuing.

## 4 - Section Assembly

### 4.1

Insert the Aluminum P-Channel Rail Inserts into the Vinyl Rails. The long leg of the Aluminum P-Channel Rail Inserts must point toward the baluster holes. (See Figure D)

### 4.2

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.)

### 4.3

Orient the Bottom Rail so the long leg of the Aluminum P-Channel is on the same side as the deck and insert it into the Mounting Brackets.

### 4.4

Center the assembly in the Brackets. The Aluminum Insert should extend 5/8" beyond the Vinyl Rail at each end.

### 4.5

Locate the scribe lines between elongated holes on the sides of the Mounting Brackets. Drill 5/32" diameter holes through the long legs of the Aluminum Rail Inserts, 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. (See Figure E)

**CAUTION: Do not over tighten the screws.**

### 4.6

Push the Glass Balusters into the routed holes.

### 4.7

Orient the Top Rail so the long leg of the Aluminum P-Channel Rail Insert is on the same side as the deck. Insert one end into the Mounting Bracket and work across to the opposite Mounting Bracket, aligning the Balusters with the routed holes.

### 4.8

Center the Top Rail in the Brackets and repeat step E to attach the Top Rail to the Brackets.

### 4.9

Snap the Mounting Bracket Covers over the Mounting Brackets until they snap in place.

### 4.10

Apply Genova Vinyl Sealant to the inside flat surfaces of the PostTops and attach them to the Post Covers.

Figure D

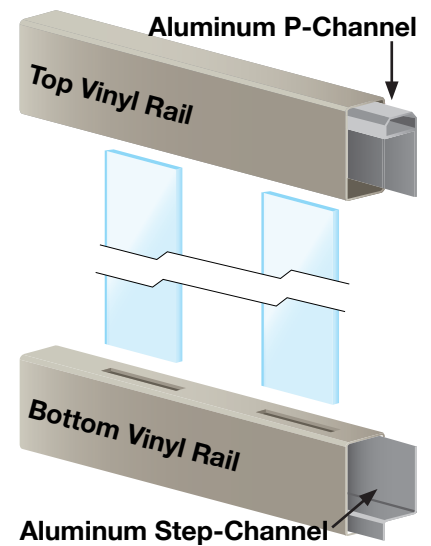


Figure E

