

# Aluminum Railing

## Glass railing installation instructions

**1) Component check:** Determine that all components have arrived undamaged and that they match the packing slip.

**2) Install Posts:** Position and mount all posts utilizing the neoprene pads under the base plate. The sides of the posts with RCB holes should be facing the next post in line. Be sure that the posts in line and plumb. Post spacing should not exceed 5 feet. When choosing your mounting lag screws, be sure to allow for 3" of thread penetration into deck structure. You may need to add some wood blocking at the post locations to accommodate this thread embedment requirement.

**2a. Surface mounting (fig.2):** utilizing the neoprene gasket under the base plate, anchor each post using four 3/8"x 3-3/4" minimum lag bolts with button washers and plastic button caps.

**2b. Fascia mounting (fig.3):** anchor each fascia bracket using four 3/8"x 3-3/4" minimum lag bolts with button washers and plastic button caps. Secure the posts into the brackets with stainless steel tek screws being sure that the top of the posts all line up.

Note: If installing in conjunction with a lightweight concrete or tile/slate surface then a stanchion mount be appropriate. Contact us for these details.

**3) Cut & install Top Rails:** Cut the top rail to length and press it into position on top of the posts making sure it is seated all the way down on top of all posts. Be sure to attach end plates (see step #5) to any open ends and any end that will mount to the structure.

**3a. In-line Splices (fig.6):** Be sure to cut the top rail at 90 degrees and center the joint over a post. Secure the splice plates using four #10 x 3/4" TEK screws to ensure a strong splice.

**3b. Mitered joints (fig.5):** cut each top rail miter at 1/2 the total corner angle (for a 90 degree corner you would cut the top rail at 45 degrees). Add two splice plates to connect and strengthen the miter joint; each splice plate is secured with two #10 x 3/4" TEK. Then secure the top rail to the posts using more #10 stainless steel TEK screws.

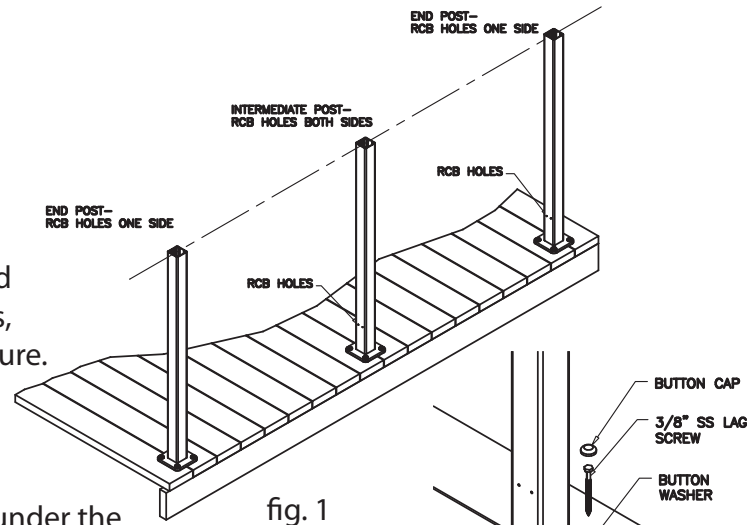


fig. 1

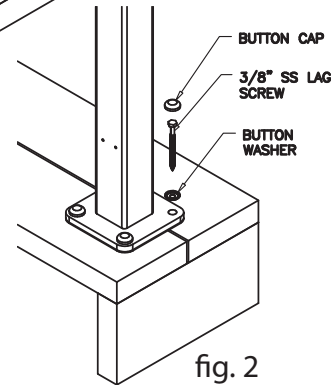


fig. 2

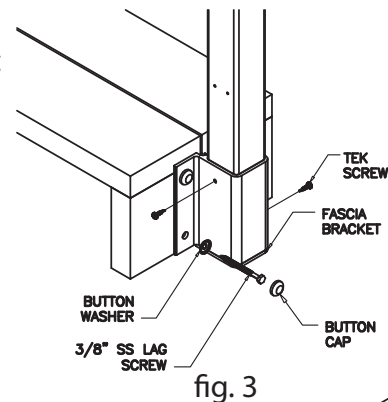


fig. 3

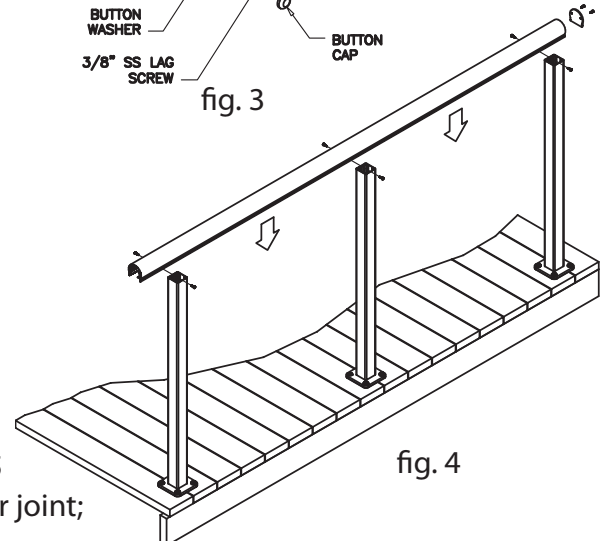


fig. 4

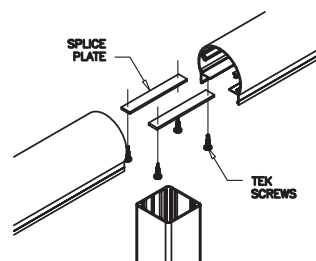


fig. 5

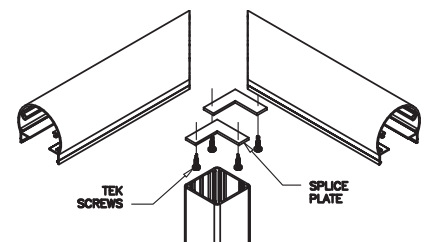


fig. 6

**4) Mount Top Rails:** Fasten the top rail to each post using two #10 x 3/4" TEK screws (four screws for butt splices); screws should penetrate through the top rail flange and into the center of the post face. Screws should be attached to the front and back of each post.

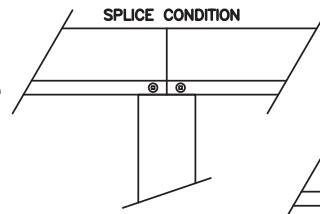


fig. 7

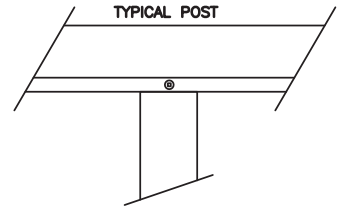


fig. 8

**5) Attach End Plates** (fig.9): install the end plate to all of the exposed top rail ends using two #10 x 3/4" flat head screws.

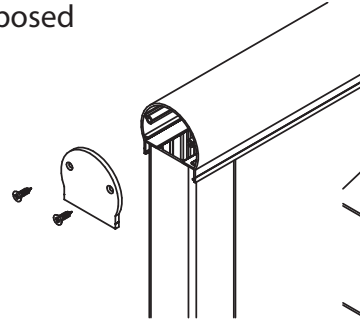


fig. 9

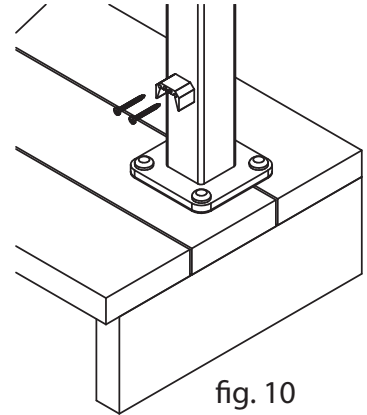


fig. 10

**6) Mount RCBs** (fig.10): Identify the RCB (Rail connection block) pre drilled holes on the installed posts. Install the RCB with two #10 x 1-3/4" pan head Tek screws. The flanges on the Rail Connection Block should be facing down.

**7) Cut Bottom Rails** (fig.11): Measure between each set of posts just above the RCB's. Write down your measurements. Cut the bottom rail for each section no more than 1/16" less then the measurement you recorded . Also at this time cut the vinyl inserts to match the bottom rails. Press in the vinyl insert until it is firmly seated. Note: the bottom rail vinyl is more shallow then the upper vinyl.

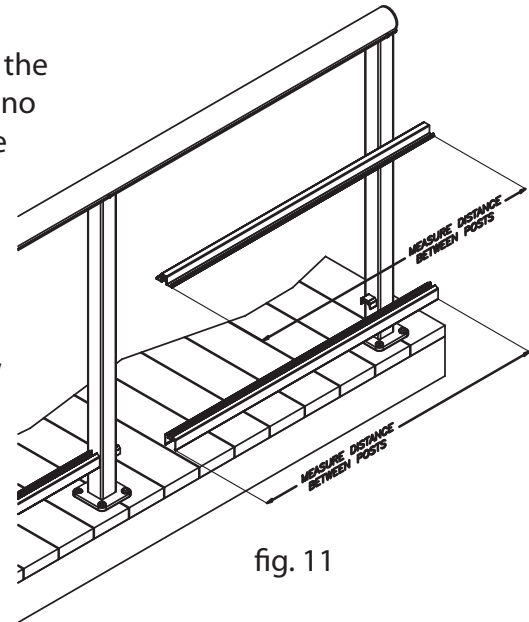


fig. 11

**8) Cut Top Rail Infills** (fig.11): Measure between each set of posts just below the top rail. Write down your measurements. Cut the top rail infill for each section no more than 1/16" less then the measurement you recorded. Also at this time cut the vinyl inserts to match the top rail infills. Press in the vinyl insert until it is firmly seated. Note: the top rail infill vinyl is deeper then the bottom rail vinyl.

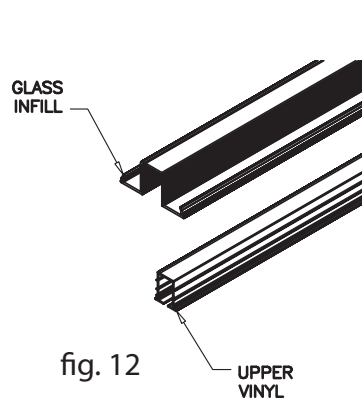


fig. 12

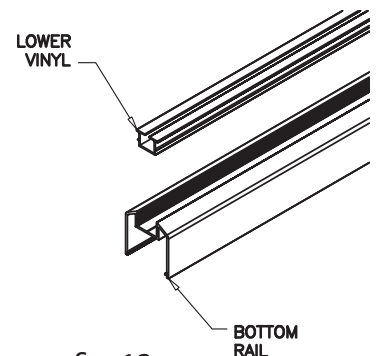
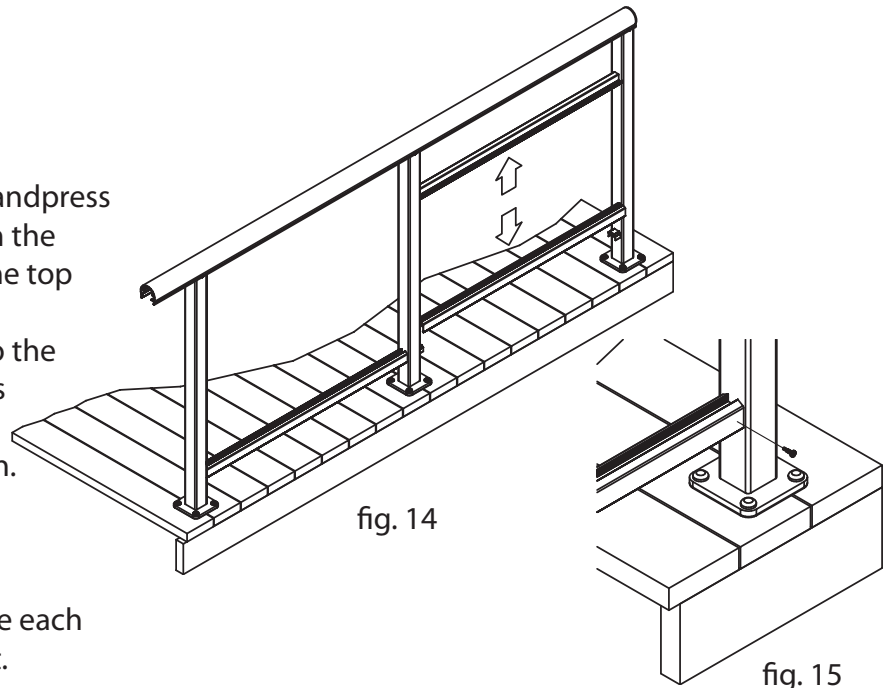


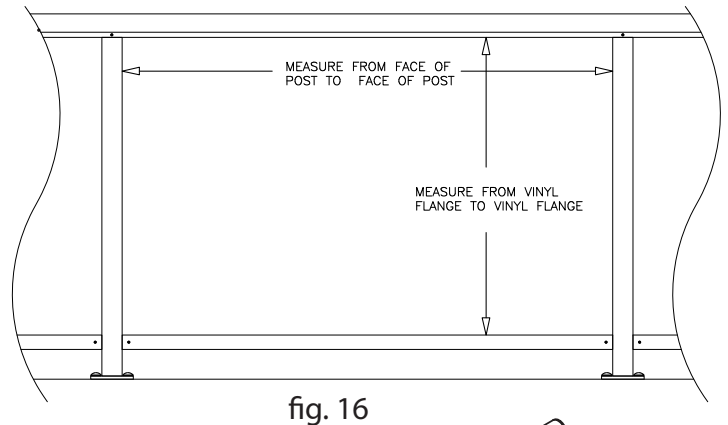
fig. 13

### 9) Install Bottom Rails and Top Rail Infills:

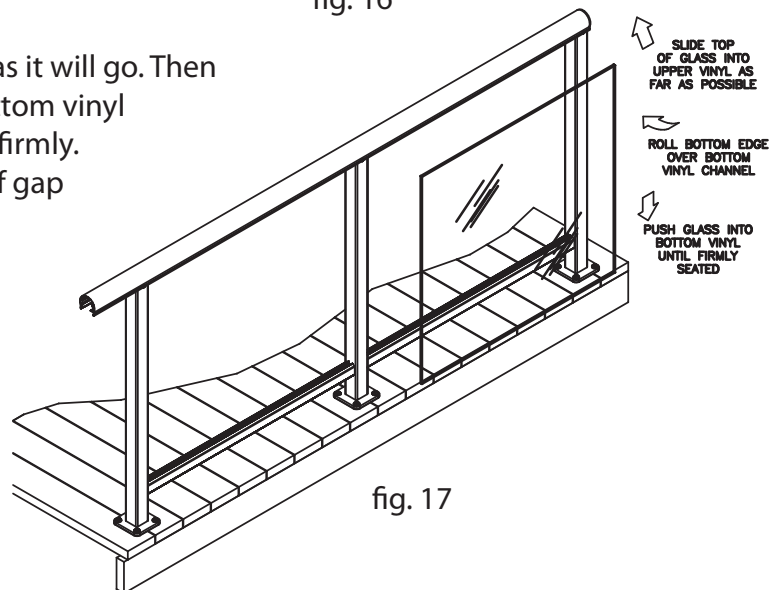
Place the bottom rail with vinyl over the RCB's and press the bottom rail down until seated. Then snap in the top rail infill, with vinyl, into the underside of the top rail. The infill should be flush with the bottom of the top rail. Secure the bottom rail (fig. 15) to the RCB using #10 x 3/4" SS Tek screws. These holes should be pre-drilled with 5/32" drill through the flange of the RCB for ease of screw insertion.



**10) Measure For Glass Panels (fig.16):** Measure each frame opening from face of post to face of post. Write down you measurements, being sure to label or identify each opening. Then take your vertical measurement from vinyl flange to vinyl flange. Write down your measurements. These are the measurements you will need to supply for glass order.



**11) Installing Glass Panels (fig.17):** Glass installation will require a form of lubrication to slide into the vinyl inserts. Soapy water or a glass cleaner is all that is needed. Apply lubricant to top and bottom face of glass, both sides, and then grasping the sides of the glass panel, push the panel into the upper vinyl as far as it will go. Then swing the bottom of the glass panel in line with the bottom vinyl and press the panel into the bottom vinyl until seated firmly. Adjust the glass laterally until you have approx 1 1/2" of gap on both sides. Continuethis process until all panels are installed.



**Glass dimensions:** In the event you are planning to purchase glass panels yourself, the following simple calculations will get you the correct size of glass. Take your vertical dimension and add 3/4", this will allow for proper seating in the vinyls. Then take your horizontal dimensions and subtract 3", this will give you a gap of 1 1/2" on each side of glass panel. It is important that you have the glass manufacturer polish the two sides of each glass panel as they will be exposed.