Aluminum Railing
Cable installation instructions

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

2) Install Posts (fig.1)**:** Identify each type of drilled cable posts and position per layout provided. Utilize neoprene pads under all base plates. Position all terminal posts, these post should be at the end of each cable run. (the Threaded Terminal posts have 9/32" holes on both sides of post) Then position all your toggel post, these should be at the start of each cable run. (the toggle posts have 9/32" holes on one side of post) Once you have established all of the end posts, position all the intermediate post being sure all your posts are inline with one another and are plumb.
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. Post spacing should not exceed 5 feet on center.

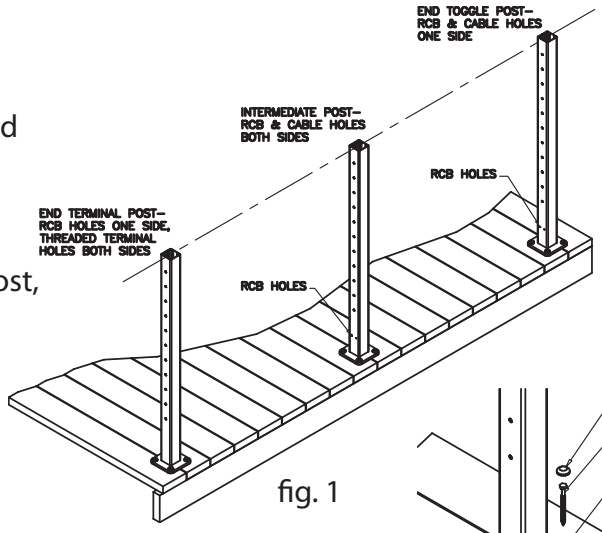

fig. 1

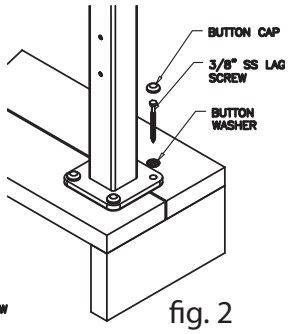

fig. 2

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.

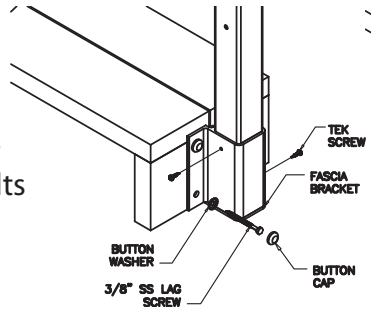

fig. 3

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 ends that will mount to the structure.

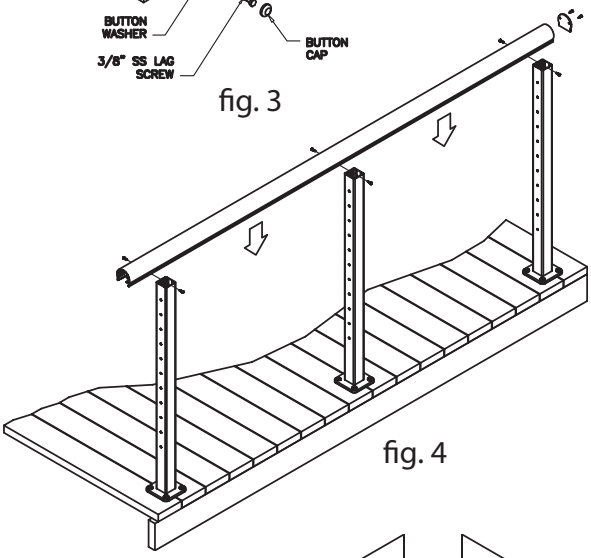
fig. 4

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 plate 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 one splice plate to connect and strenghen the miter joint; each splice plate is secured with four #10 x 3/4"TEK
The secure the top rai to the posts using more #10 stailess steel TEK screws.

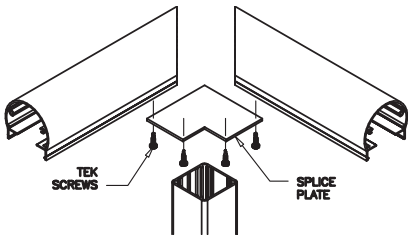

fig. 5

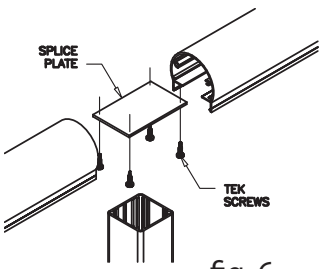

fig. 6

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.

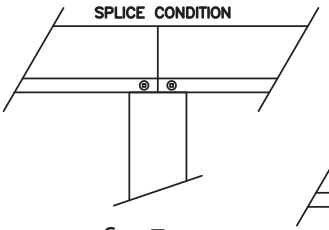

fig. 7

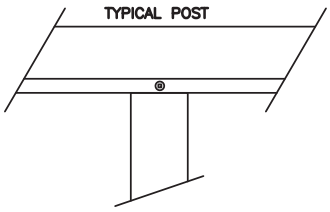

fig. 8

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.

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 shoud be facing down.

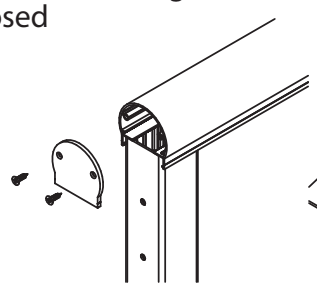

fig. 9

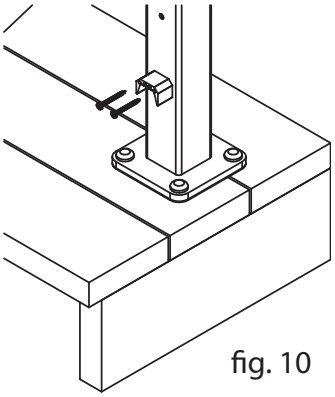

fig. 10

7) Cut Bottom Rails (fig.11)**:** Measure between each set of posts just above the RCB's. Write down your measurments. Cut the bottom rail for each section no more than 1/16" less then the measurement you recorded . Do not install the bottom rails to the the frame at this time.

8) Cut Top Rail Infills (fig.11)**:** Measure between each set of posts just below the top rail. Write down your measurments. Cut the to rail infill for each section no more than 1/16" less then the measurement you recorded. Do not snap in the top rail infills to the top rail at this time.

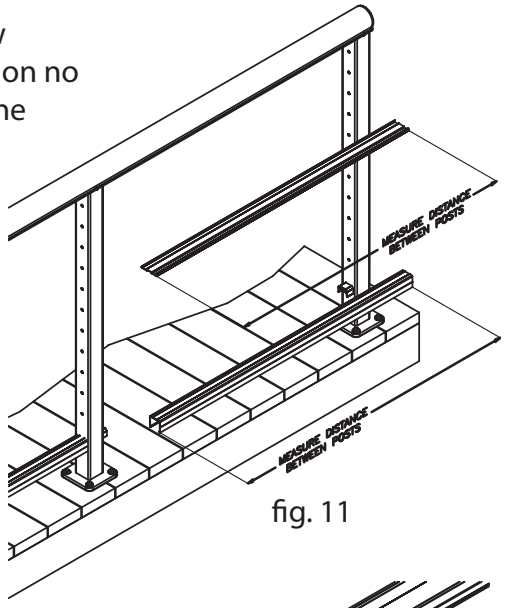

fig. 11

9) Locate & Drill Picket installatioin Holes: Post with a span of 3 feet or greater will require a cable spreader picket. Determine the position of the pickets to obtail equally spaced sections between your posts. Drill 1/4" diameter holes in the top rail infill and bottom rails at all picket locations. Note there is a built-in screw chase in the picket extrusion located on the inside edge of the picket, not the center of the picket (see fig. 12a); therefore you'll need to offset the 1/4" hole accordingly.

10) Attach Pickets To Top Rail Infills (fig. 12)**:** Orient the picket to be sure the hole spacing is in line with the posts hole spacing. Utilizing the #10 x 3/4" SS pan head Tek screws provided, assemble the sreader picket panel by first screwing through the top rail infill into the picket.

fig. 12a

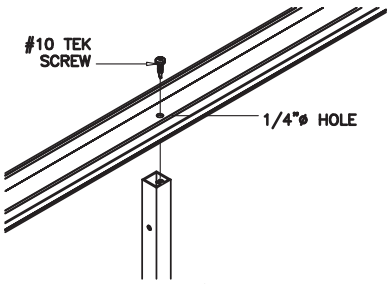

fig. 12

11) Attach Pickets To Bottom Rail (fig. 13)**:**Utilizing the #10 x 3/4" SS pan head Tek screws provided, attach the sreader picket by screwing up through the underside of the bottom rail. Continue this process untill all sections have been assembled.

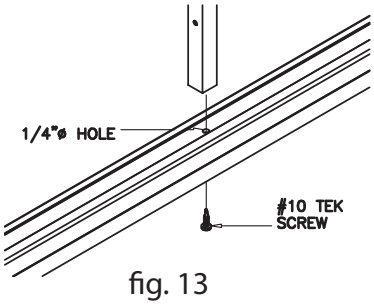

fig. 13

12) Install Assembled spreader Panels
(fig. 14)**:**
Taking the assembled spreader panel, place the bottom rail onto the RCB's and roll the top of the panel in line with the top rail. (There should be no more than 1/4" gap between the top of the panel and the bottom of the top rail) Lift and snap the panel into the top rail. The infill should be flush with the underside of the top rail. Once the picket panel is firmly in place, secure the bottom rail 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. The cables are now ready to be installed.

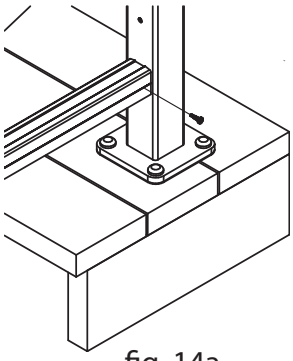

fig. 14a

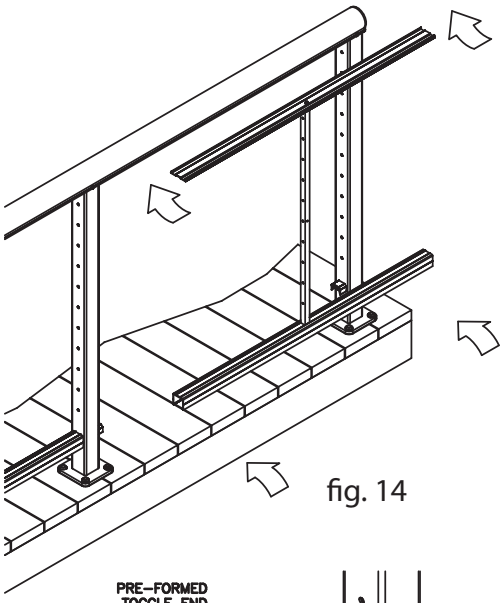

fig. 14

13) Install The Cable (horizontal runs only — not stairs):

13a. Identify the correct length cable assemblies for each run of railing.

13b. To start, pinch the toggle and cable in-line with each other and thread into the toggle hole. Toggle assembly with snap back into preformed position and lock into post.**(**fig. 15 & 15a)

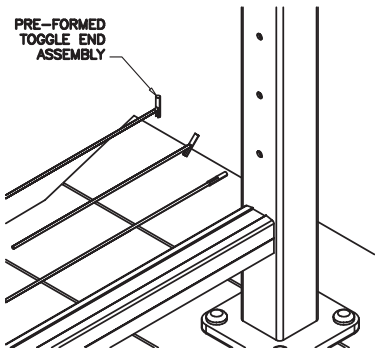

fig. 15

13c. Lace the bare end of the cable through all of the intermediate posts and pickets and continue through the terminal post.

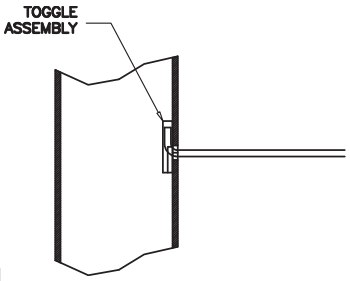

fig. 15a

13d. Place a loose threaded terminal into its corresponding terminal hole with approx. 1/4" thread exposed

13e. Determine the final cut length for the cable by pulling the cable hand tight up against the threaded terminal and mark the cable where it would terminate inside the open shaft end of the threaded terminal.

13f. Cut the cable and crimp the threaded terminal onto the cable. (Use field crimping tool)

13f. Re-thread the now crimped threaded terminal back through the post. (There should only be approx. 1/4" of exposed thread) place a flat washer and hex nut onto threaded terminal.

13g. Use a 7/16" wrench to tighten the hex nut until the cables are tight. Secure the shaft of the threaded terminal with pliers while tightening the nuts.

13h. Remove the excess threads leaving enough thread to screw on decorative acorn nut.

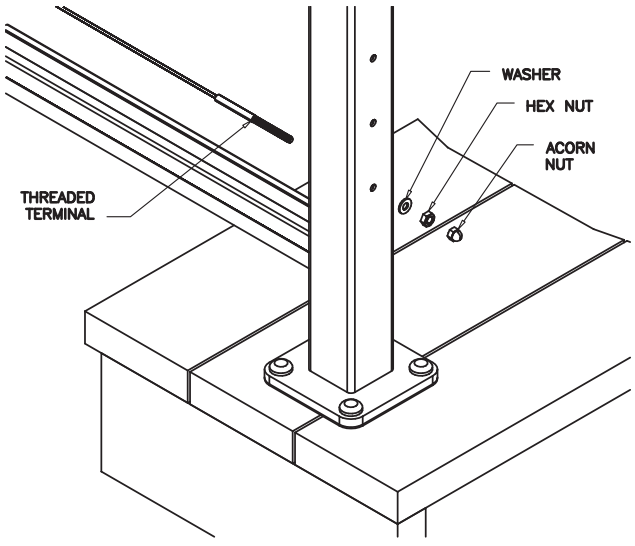

fig. 16

13i. Install the decorative acorn nuts and snug up with 7/16" wrench. Continue until all cable runs are complete.