

## Ornamental Vinyl Railing

### Standard Railing Components:

2 - 2" x 2½" Top and Bottom Rail  
1 - Aluminum Stiffener (Top Rail)  
9, 14, 19 or 24 - 1" x 1" Pickets  
Aluminum Picket Stiffeners on 42" high  
Commercial Railing  
4 - 2" x 2½" Brackets with Screws  
1 or 2 Rail Feet

### Post Components:

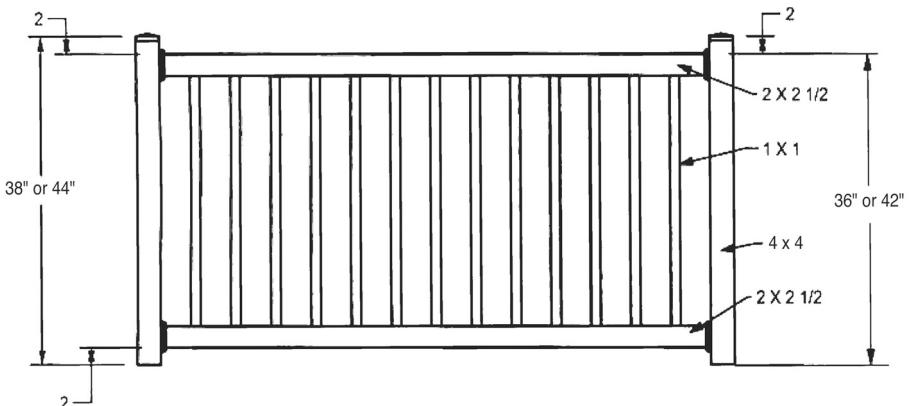
4" x 4" Vinyl Post  
Post Caps (Pyramid, Ball, Gothic, New  
England)  
Surface Posts Mounts for Wood and Concrete

### Options:

36" and 42" Height Stair Railing Sections  
Black Vinyl Glue  
1" x 1.75" Middle Rail for 3-Rail Styles  
Belly or Twisted Pickets  
Round Decorative Rings  
Gates

### A. Post Installation:

1. Locate and mark the post centers. The spacing should not exceed 120".
2. If using surface mounts over wood, clamp the post mount in place at each mark. Adjust the post mount so that it is plumb. Mark for the hole locations and drill holes through the decking material. Install all fasteners and tighten. Check post mount for plumb and adjust if necessary.
3. If installing concrete surface mounts, drill holes using the base as a template and clean dust from the holes. Install all fasteners and tighten. Check post mount for plumb and adjust if necessary.
4. For metal posts: Cut posts to desired height, slide the 4" x 4" vinyl post over the metal post.
5. For wood posts: Cut post to desired height, slide the 4" x 4" vinyl post over the wood post support.
6. If using existing wood posts, check that the posts are securely fastened to the decking material. For new wood posts, secure the wood post to the deck joists with bolts or lag screws, making sure the post is plumb



### B. Level Railing Sections Assembly:

1. Begin by installing the level sections. As the post centers may vary slightly, cut the rails for each section as you go. Complete one section at a time and work your way from the middle towards the fixed ends.
2. Measure the rail by laying the bottom rail between the posts. Center the rail so that there is an equal distance between the end picket holes and the post on each end. Mark the rail at the points where the rail and post meet and subtract 3/16" from both ends for the 2x2½ rail base brackets. Double check the measurements and then cut the rail. Use the bottom rail as a guide and cut the top rail and metal inserts to the same length, making sure the holes for the pickets line up between the top and bottom rails.
3. For the 36" Rail: Measure up 2 inches from the floor surface to locate the bottom rail base brackets. Secure the mounting brackets with screws through the vinyl post. Measure up an additional 31½ inches to locate and install the top rail base brackets (see Figure 1). Repeat for each post.
4. For the 42" Rail: Measure up 2 inches from the floor surface to locate the bottom rail base brackets. Secure the mounting brackets with screws through the vinyl post. Measure up an additional 37½ inches to locate and install the top rail base brackets (see Figure 2). Repeat for each post.
5. The bottom of the bottom rail has 1 or 2 routed holes in it for rail feet (foot blocks).

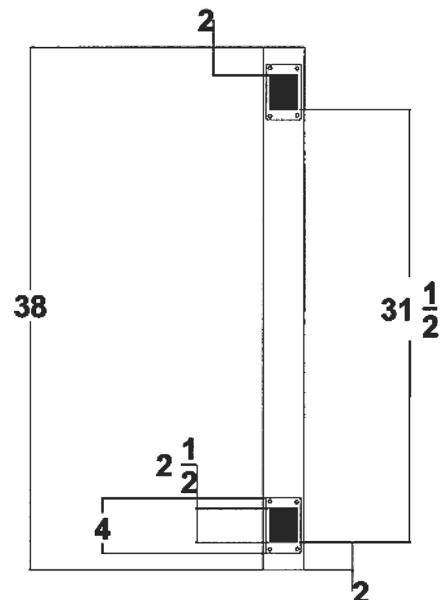


Figure 1:  
36" Rail Base Bracket Installation

These rail feet should be inserted into the bottom rail before permanently attaching the rail to the post. After the bottom rail is secure, screw the rail foot to the deck.

6. Before installing the pickets on 42" high commercial railing jobs, insert the aluminum picket stiffeners inside the pickets as appropriate. With 3-rail systems that are 42" high, insert one picket stiffener in every 4th picket. With 2-rail systems, install the stiffeners in every picket.

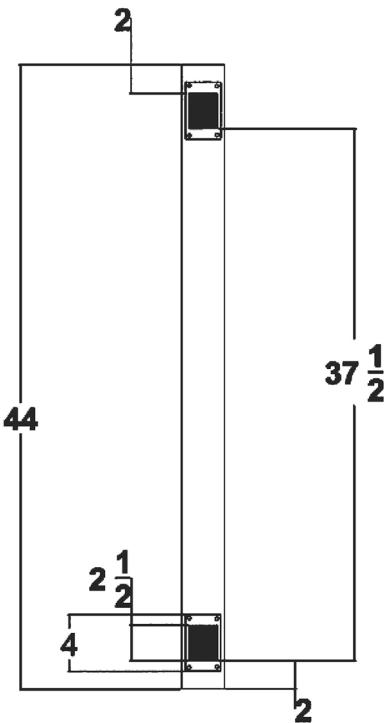


Figure 2:  
42" Rail Base Bracket Installation

7. Slide the trim cover onto each end of the railing. Insert the bottom rail into the bottom rail base bracket. Insert the pickets into the bottom rail. Position the top rail over the pickets. Pull up on the first few pickets and insert them into the top rail holes. Push down on the top rail and position it next to the top rail base bracket. The rail may not easily push into the base bracket until you have inserted several pickets. Work from one post to the other post.
8. Once all pickets are inserted, secure the rails to the rail base brackets with 4 self-drilling screws. If necessary, pre-drill with an 1/8" drill bit. Be careful not to overtighten the screws. Cover the base brackets with the trim covers. Secure the trim cover to the base bracket with a dab of glue on each tab of the trim cover (see figure 3).
9. Repeat this procedure for all level rail sections.

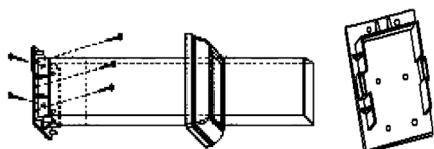


Figure 3:  
Rail Base Bracket and Trim Cover Plate

### C. Stair Railing Assembly:

1. Determine if one rail section will reach from the top to bottom of the stairs, or if multiple sections will be needed. Rail and Pickets are set for a standard 7" rise/11" run, and any other configuration may require a file to enlarge the prerouted holes.
2. Layout post centers and install stair post supports as directed in section A.
3. Lay the bottom rail next to the posts and center. Mark where the rail meets the post and subtract 3/16" from both ends for the brackets. Cut the rail, and then use as a guide to cut the top rail and inserts, making sure the holes for the pickets line up between the top and bottom rails.
4. Layout the top & bottom base brackets as directed in sections B.3 and B.4 for either the 36" or 42" rail. Note: When using surface post mounts, make sure the bracket screws go into the mount.
5. For designs with a middle rail, use BWM 1134 or Swivel Bracket or butt the rail tight to post. For all cases, apply black headed screws (provided) at every 4th picket/middle rail intersection to prevent movement of middle rail.
6. Slide trim covers onto the rail and install as directed in section B.5, taking care to push the top rail down onto the pickets. The rail may not push down easily until several pickets are engaged.
7. Secure rails using screws and cover with trim covers as directed in section B.6.

### D. Post Cap Assembly:

1. To install the caps, place the glue along the edge of the post and push cap down until flush with post top.

### E. Wall or Column Mounting:

1. Railings can be mounted to walls or columns using standard brackets. Brackets should be anchored securely with 6 wood or masonry screws. The spacing between the last picket and the wall or column should be not more than 4".

### F. Heavy Duty Bracket

1. On some applications, like multi-story commercial buildings, the one piece Heavy Duty (HD) Bracket may be preferred for simplicity of installation, and for overall superior strength. The HD Bracket is attached with four 2.5" screws that pass through the recessed face screw sockets and go into the post, wall or column. There is also one side screw socket for attaching the inserted rail to the bracket. With the HD Bracket, the rail can be pushed all the way through the bracket so that it is flush to the post.

### G. Care and Maintenance:

1. To avoid damage to the vinyl railing before installation, keep the railing in the packaging until installation. Do not lean the product against structures for extended periods. Keep product flat and not on hot concrete, metal or asphalt.
2. If the railing gets dirty over time, a simple wash with a garden hose will do wonders. If this does not do a satisfactory job, proceed with the steps in G.3.
3. If dirt is hard to remove, mix a solution of 1/3 cup of Tide or equivalent with 2/3 cup of a household cleaner like Soilax, Spic & Span or equivalent. Mix this with 1 gallon of water. Wash and rinse.

