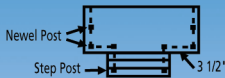


HOW TO INSTALL:

FOR MOUNTING RAILS, POSTS, FLANGES AND CONNECTORS ON FLAT SURFACE:

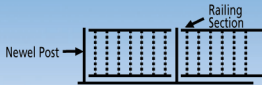
1. Locate Corner & End Posts

Draw a line 3 1/2" from edges of floor and steps. Where lines intersect (corners, top of steps, etc.) mark for center of corner posts.



2. Space In-Line Posts

For best appearance, space posts at uniform distances. To minimize rail cutting, space to utilize full rail sections. (Where possible, locate posts on-center the length of the rails plus the width of the posts that you have selected.)

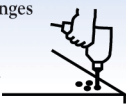


3. Install Floor Flanges or Posts with Flanges

a. On wood surface

(Use LS100 Lag Screws)

Mark location of holes on wood surface. Drill 1/8" pilot holes or tap screw heads with a hammer to start. Tighten using adjustable or socket wrench.



b. On concrete, stone or brick surface

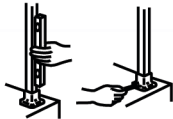
(Use MA100 Masonry Anchors)

Mark location of holes on mounting surface. Drill 1/4" holes into masonry surface to a depth of 1 5/8". Attach nut (only to the point where the nut will protect the threads) and strike with a hammer until anchor has expanded and seated properly. Tighten nuts snugly using adjustable or socket wrench.



FOR SEPARATE POST & FLOOR FLANGE INSTALLATION:

Insert Post into Floor Flange and tighten with set screws in Floor Flange. Using a level, make sure posts are plumb.

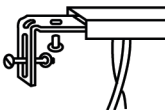


4. Measuring and cutting rails

Place rails against or between posts. If cutting is necessary, mark rail to fit between posts and cut using a hacksaw. For balanced spindle spacing, an equal amount should be cut from each end.

5. Attach Connectors to Rails and Mount to Posts

Slide connectors into grooves inside top and bottom rails until vertical section of connector is flush with end of top/bottom rail. Tighten hex head fastener until top surface of rail section is slightly dimpled. Posts are predrilled to accept connectors. Position rail to desired height and mount to posts with bolts provided. (NOTE: For "in-line" rails, one bolt is used for adjoining rail sections.)



NOTE: FOR RAIL SECTIONS OVER 4FT. LENGTH.

One ST100 Stub Support is recommended.

IF MOUNTING ONE END OF RAIL TO A WALL OR OTHER SURFACE: Mount connector/rail assembly using MA100 Masonry Anchors (if a masonry surface) or LS100 Lag Screws (if a wood surface). See 3a or 3b above.

IF MOUNTING ONE END OF RAIL TO A VILLAGE IRONSMITH COLUMN: Mark location of the connector tab hole on the side of the column, drill and mount with bolts or screws provided with the connector kits.

TO PITCH AND MOUNT RAIL SECTIONS FOR USE ON INCLINES:

1. Mount posts in proper locations as shown above.
2. Place rail section with bottom rail on the ground. Hold in place with both feet on bottom rail. Apply pressure downward and toward one end of rail. The correct angle is obtained when posts and rail spindles are parallel.
3. Butt ends of top and bottom rail against edges of posts. Mark top and bottom rails for correct length and angle. Cut top and bottom rails to the proper length and angle using a hacksaw.
4. Mount the rail sections to posts following Step 5 above, and bend the connector tabs to the proper angle using pliers and/or a hammer.



CAUTION: Pitched railing must be cut at the angle of the spindles to eliminate gaps at the post connection.

TO INSTALL COLUMNS:

(All columns are 8 ft. in height.)

1. Measure distance from surface to overhang. If less than 8 feet, cut off excess length from bottom of column.
2. Mark location of column verticals on surface. Secure bottom of column using (V500) Column Sockets or (FF100) Floor Flanges and either LS100 Lag Screws or MA100 Masonry Anchors. (See section 3 above.)
3. Secure the top of the column to the overhang using LS100 Lag Screws through the top strip of the column into the overhang.

TO MOUNT (LT200) LAMBS TONGUES TO ENDS OF RAIL RUNS

1. Remove top connector bolt from post.
2. Re-insert bolt through slot in tab of Lambs Tongue.
3. Position on post, check alignment of railing, and re-insert bolt through post and rail connector. Tighten nut with adjustable wrench.

