# BALLUSTER CALCULATOR

Based On 4" On Center

*(Check Your Local Building Codes)*

## Round & Square 3/4 Inch

| Linear Feet | Balusters Needed | Connectors Needed |
|---|---|---|
| 10 | 26 (3 Boxes) | 3 Bags |
| 15 | 38 (4 Boxes) | 4 Bags |
| 20 | 50 (5 Boxes) | 5 Bags |
| 25 | 64 (7 Boxes) | 7 Bags |
| 30 | 76 (8 Boxes) | 8 Bags |

***10 Balusters Per Box*
***20 Connectors Per Bag*

## Artisan 1 Inch Architectural

(No Baluster Connectors Needed)

| Linear Feet | Balusters Needed |
|---|---|
| 10 | 24 (5 Boxes) |
| 15 | 35 (7 Boxes) |
| 20 | 48 (10 Boxes) |
| 25 | 60 (12 Boxes) |
| 30 | 70 (14 Boxes) |

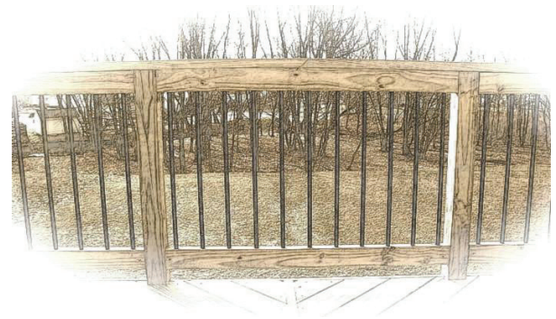
***5 Balusters Per Box*

PRECISION
PRECISION BUILT PRODUCTS

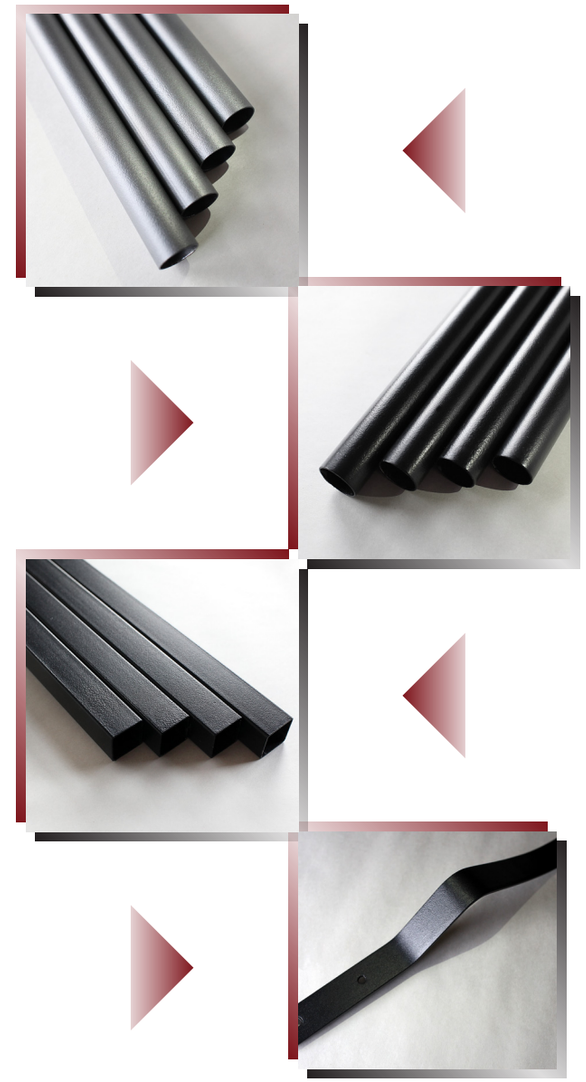
**Precision**
39 Westmoreland Avenue
White Plains, NY 10606

www.precision-built.com

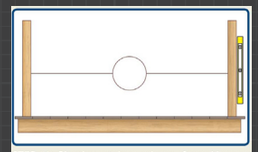
contact@precisiondeckparts.com



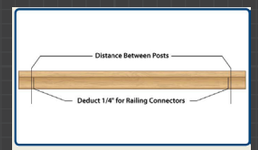
PRECISION
PRECISION BUILT PRODUCTS



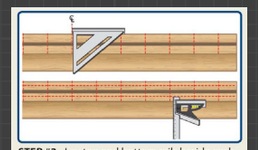
# ROUND AND SQUARE LEVEL RAIL INSTALLATION



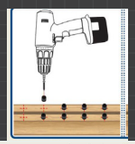
**STEP #1** - Plumb posts/mounting surfaces. Measure inside distance of posts/mounting surfaces.




**STEP #2** - Using step - 1 measurement, deduct 1/2" from total measurement for railing connectors. Cut both top and bottom rails.

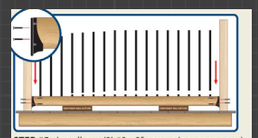


**STEP #3** - Lay top and bottom rails beside each other and flush ends. Find the center of rails and mark **lightly**. Measure out 4-1/2" from both sides of center line and mark **lightly**. End spacing will vary. Set a combination square for center (example: 1-1/2" = 3/4") and mark **lightly**. Where lines intersect will be the center of baluster.

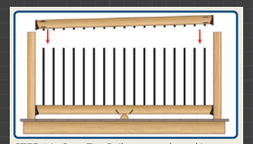


**STEP #4** - There are two options for installing balusters.

Option #1 - Connector Method: Insert screw through connector and install where lines intersect (you may want to mark the center with a nail before drilling).

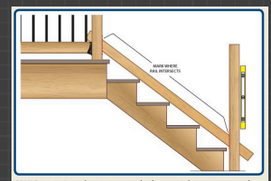


**STEP #5** - Install two (2) #8 x 2" screws (per connector) through railing connector into rail ends. Rest bottom rail on two (2) temporary spacer blocks the required height between deck and bottom of bottom rail. Center railing connectors on post and install four (4) #8 x 2" screws (per connector) through railing connector into posts. Apply a small amount of silicone caulk to diameter of baluster where it meets baluster connector or insertion hole to insure a tight, movement-free installation. Install balusters on bottom rail.

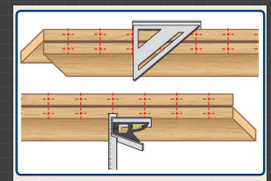


**STEP #6** - Start Top Rail at an angle and insert connectors into balusters or balusters into insertion holes in top rail. Make sure balusters are fully connected. Install four (4) #8 x 2" screws (per connector) through railing connectors into posts.
NOTE: With spans greater than 6' (or required), install a foot block (use cut-off from rail).

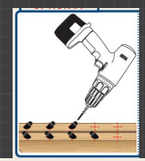
# ROUND AND SQUARE STAIR RAIL INSTALLATION



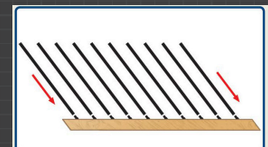

**STEP #1** - Lay bottom rail alongside posts and mark for angle. If posts are plumb top rail should be the same length and angle. Cut top and bottom stair rails at proper angle.



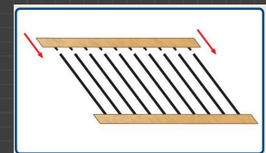
**STEP #2** - Lay top and bottom rails beside each other with the top rail turned upside down. Position rails as shown. Find the center of rails and mark **lightly**. Measure out 5-1/2" from both sides of center line and mark **lightly**. End spacing will vary. Set a combination square for center (example: 1-1/2" = 3/4") and mark **lightly**. Where lines intersect will be center of screw/insertion hole.



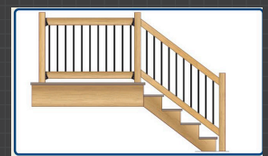
**STEP #3** - There are two options for installing balusters.
Option #1 - Connector Method: Insert screw through connector and install where lines intersect (start screw vertically and tilt screw to proper angle). **Top and bottom baluster connectors will be facing opposite directions.**



**STEP #4** - Make sure connectors are properly lined up. Apply a small amount of silicone caulk to diameter of baluster where it meets baluster connector or insertion hole to insure a tight, movement-free installation. Install balusters on bottom rail.

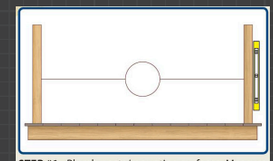


**STEP #5** - Start Top Rail at an angle and insert connectors into balusters or into insertion holes until all balusters are in place. Make sure balusters are fully connected.

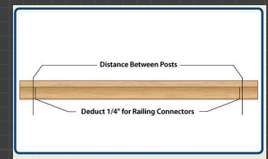


**STEP #6** - Install stair rail assembly.

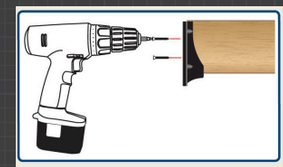
# RAILING CONNECTOR INSTALLATION



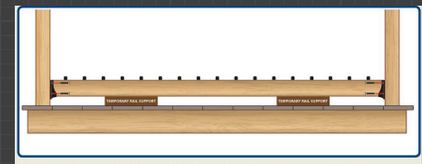
**STEP #1** - Plumb posts/mounting surfaces. Measure inside distance of posts/mounting surfaces.



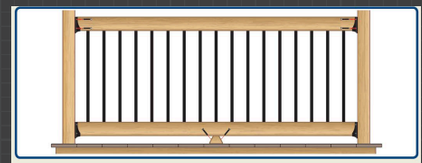

**STEP #2** - Using step - 1 measurement, deduct 1/2" from total measurement for railing connectors (if not using railing connectors, cut to step - 1 measurement). Cut both top and bottom rails.



**STEP #3** - Slide railing connectors on rail ends making sure rail is fully seated in connector. Install two (2) #8 x 2" screws (per connector) through railing connectors into rail ends.



**STEP #4** - Cut two (2) "Spacer Blocks" to be placed between deck & bottom rail. Place bottom rail section between posts. Install four (4) #8 x 2" screws (per connector) through railing connectors into posts

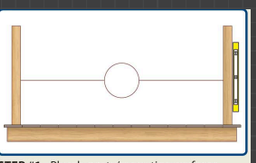


**STEP #5** - Place top rail into position. Install four (4) #8 x 2" screws (per connector) through railing connectors into posts.
NOTE: With spans greater than 6' (or required) install a foot block (use cut-off from rail).

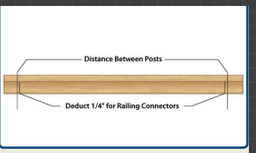
**Following these installation instructions will result in a 36"rail height

**Prior to construction, check with your local regulatory agency in your area. Common railing height is "36. Structural support should come from either the continuation of deck support posts that extend up through the deck floor or railing posts that are bolted to the inside of the rim or outer joist.

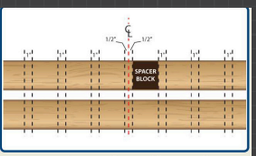
# ARTISAN LEVEL RAIL INSTALLATION



**STEP #1** - Plumb posts/mounting surfaces. Measure inside distance of posts/mounting surfaces.

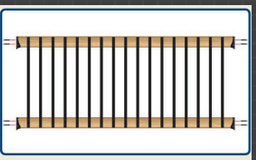



**STEP #2** - Using step - 1 measurement, deduct 1/2" from total measurement for railing connectors (if not using railing connectors, cut to step - 1 measurement). Cut both top and bottom rails.

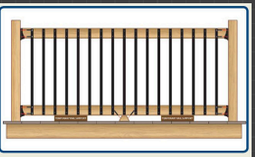



**STEP #3** - Find center of top and bottom rails. From center line, measure and mark 1/2" on both sides of center mark (marking a 1" space). Cut a 3-1/2" spacer block and hold against the outside edge of center 1" space. Repeat process on other side of center and continue across rail. NOTE: 3-1/2" is a "Starting Point" it may be necessary to adjust spacing depending on rail length. Do not exceed 4" gap between balusters.

**STEP #4** - Lay rails on a flat surface & install the two (2) outer balusters (four (4) screws per baluster). This will maintain spacing between rails.



**STEP #5** - Finish installing balusters.
Slide railing connectors on rail ends making sure rail is fully seated in connector.
Install two (2) #8 x 2" screws (per connector) through railing connectors into rail ends.



**STEP #6** - Rest rail section on two (2) temporary spacer blocks the required height between deck and bottom of bottom rail. Center railing connectors on post and install four (4) #8 x 2" screws (per connector) through railing connector into posts. NOTE: With spans greater than 6' (or required), install a foot block (use cut-off from rail).