Aluminum Railing Installation a l·ydzl·f

Glass Railing
Spindle Railings
Intimacy Railings and Panels

M.C.M.E.L.

This information in this manual will help you to…

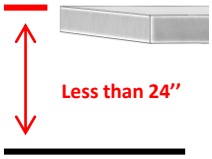
- **Better understand our product line.**
- **Give you guidelines for an easier planning process.**
- **Help make the installation easier..**

Know the regulations before planning your project…

In regards to the height requirements it's best to call your municipal town hall and your insurance company to find out what is required in different situations.

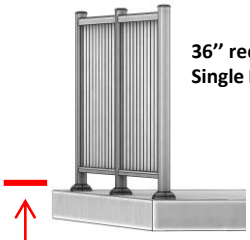
Examples as a general guideline…

No railing required



Less than 24''

36'' required
Single Family

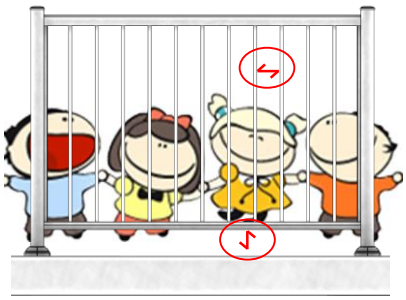


Less than 71''

42'' required
All multi unit or Commercial buildings

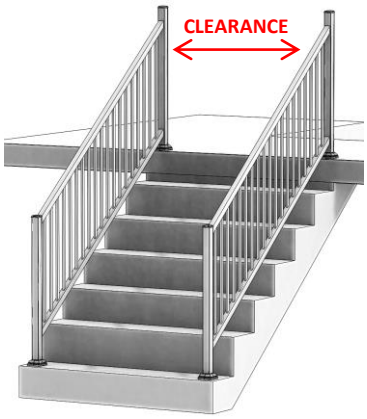
42'' to 48'' required depending on municipal regulation

Along side a swimming pool



Railings for Kindergarten or playground require the spacing of spindles (3'') and the spacing between floor (3'')

This will be a custom order.



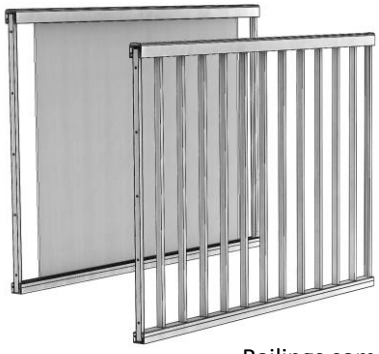
Passage way clearance for stair railings.

Main entrance Min 36''

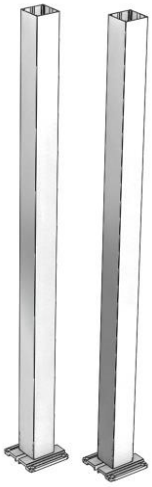
Service entrance Min 30''

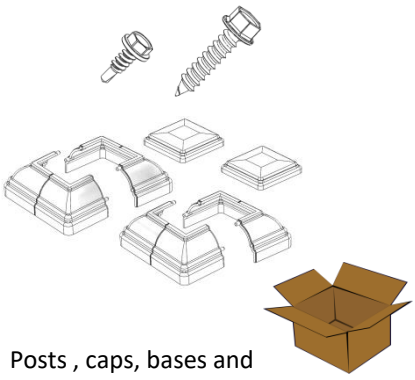
General information for our Railing products and options…

All our railing are cut to length and pre-assembled as per your specifications including all the screws and accessories to ready for installation.



Railings come pre-assembled wrapped in Styrofoam and cellophane.

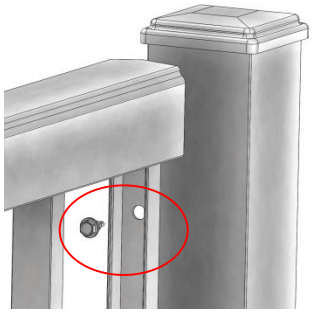




Posts , caps, bases and screws are packed in a box.

Which screws for what application

Railing section assembly



5/16 Hex driver or square required

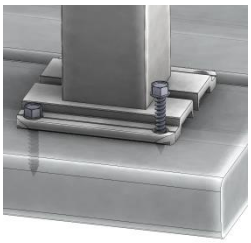
No# 10-16 X 1“
Self drilling screw

Railing Adapter for wood columns

Philips driver required

2 ½ in wood screw (Included)

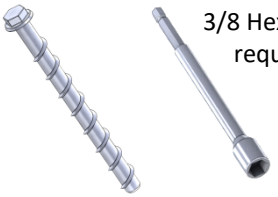
Post in wood or Resin floor



3/8 Hex driver required

5/16 x 4’’ Lag bolt screw

Post in cement floor



3/8 Hex driver required

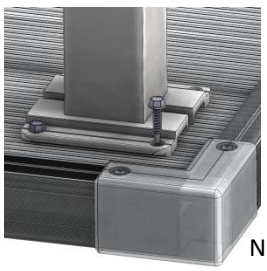
Titen ¼’’ x 2 ¾’’ screw

Post in fiberglass floor

3/8 Hex driver required

No# 14 -1 1/4’’ screw

Post in aluminum floor



3/8 Hex driver required

No# 14 x 1’’ Self drilling screw

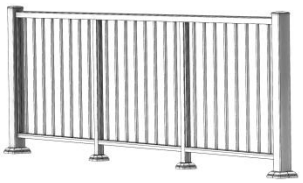
Planning your project…

Railing option configurations.

Standard Configuration

Spindles or Glass

Each section is divide by a post.



Continual Handrail Configuration

Spindles or Glass

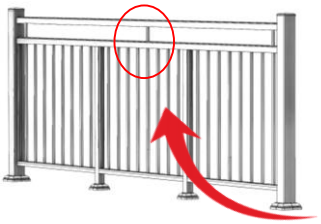
Intermediate posts are installed under the hand rail.

Standard Double Handrail Configuration

Spindles or Glass

Each section has an added handrail on top.

Sections longer than 40'' Will require 2 extended spindles per section.

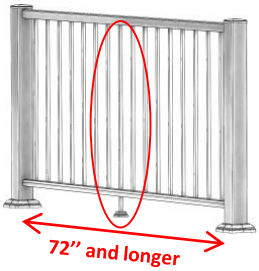


Continual Double Handrail Configuration

Spindles or Glass

Another handrail is added.

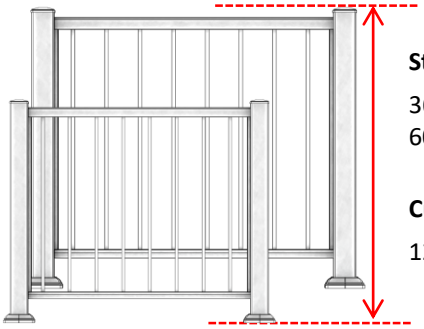
Sections longer than 72'' inches require 1 extended spindle.



Extended spindle support

Sections longer than 72'' inches require 1 extended spindle.

Sections longer than 120'' inches require 2 extended spindles.

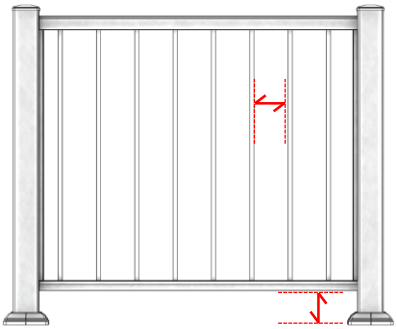


Standard Heights

36'', 42'', 48'' 60''inches

Custom Heights

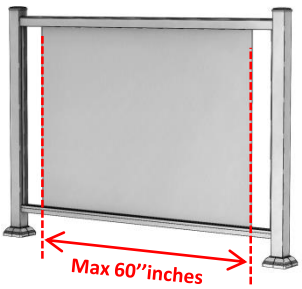
12'' to 84''inches



Spacing

Spindles are spaced at 3 15/16''

Space between the floor and bottom rail should be 3" and must be 4" or less.



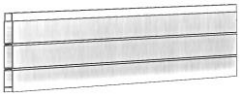
Glass Railing length

Maximum length for glass panel is **60''inches**

Glass thickness 6mm Tempered

Aluminum Panel Railings

All Railings configuration option can be made with aluminum intimacy panels.



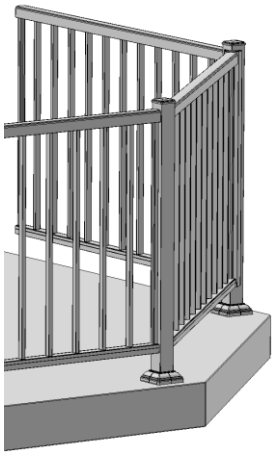
Intimacy Panel

Standard size 72'' x 60''

Custom Sizes also Available

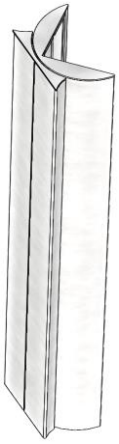
Planning your project…

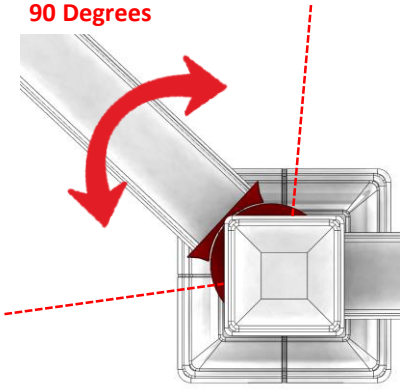
Railing option configurations.

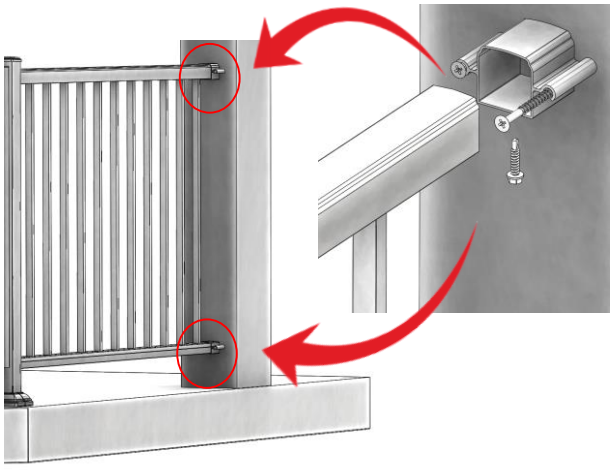


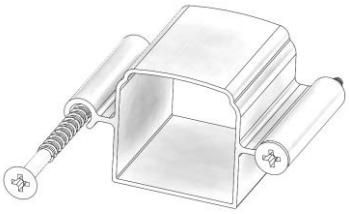
Adapting to angles

For adapting to angles we offer an angle adapter called the half moon allowing 90 degrees of movement left or right.



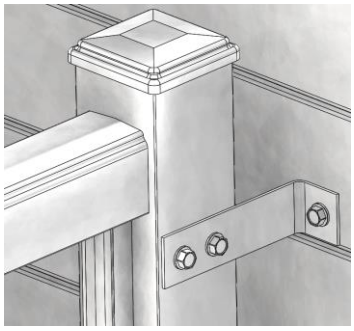






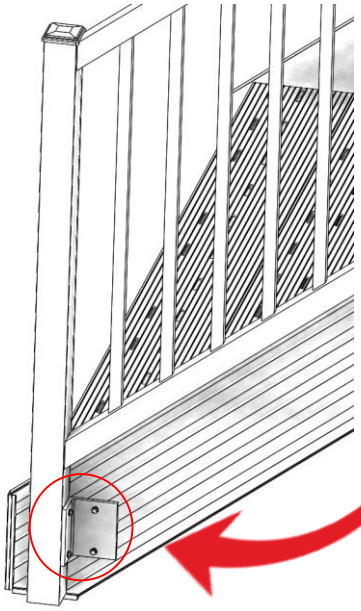
Wall adapter

In situations where it's not always possible to use the attachment bar, we offer a profiled attachment adapter.



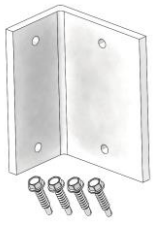
OPTIONAL: Wall angle

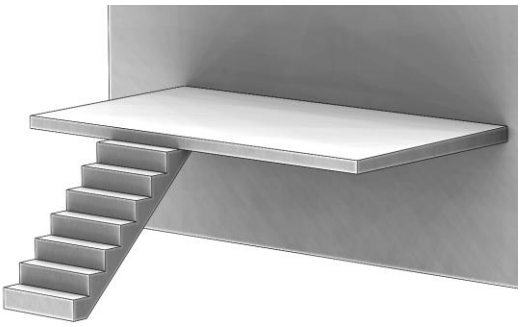
42'' high railings its optional to add an additional wall angle bracket to secure the post in place as an added safety measure.



S-500 Steps

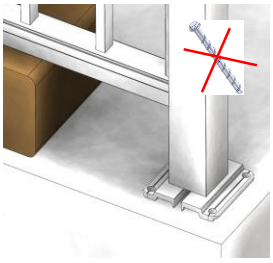
The post is attached to the exterior of the S-500 stringer using a 2''x3''x4'' aluminum angle bracket.





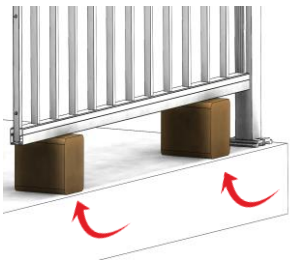
TIPS: Installing your project…

The following tips will apply to your installation.

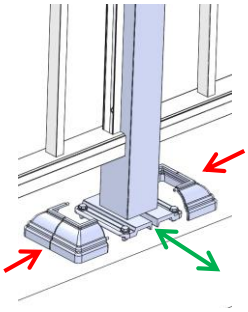


TIP: Assemble all of your sections before bolting the post down to the floor.

This will allow you to reposition the railing if necessary.



TIP: Use 2 wooden Blocks 3'' high as a spacer while assembling the railing.

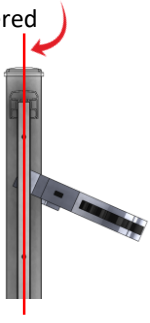


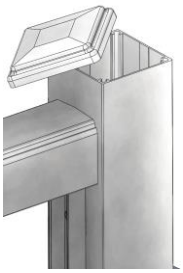
TIP: The base cover is Installed parrallel to the side.

TIP: The post half plate should always be fixed perpendicular to the railing for maximum strength.

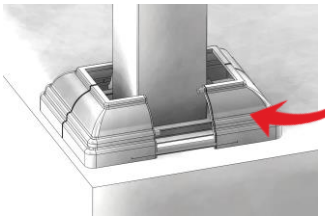
TIP: Use adjustable clamps to properly secure the railing in place.

This will insure the railing is perfectly centered

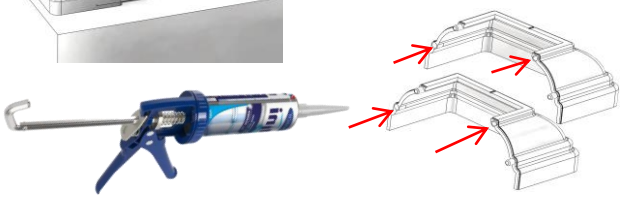


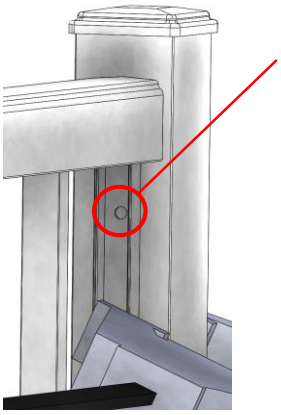


TIP: Use caulking or silicone around the inside of the cap before installing.



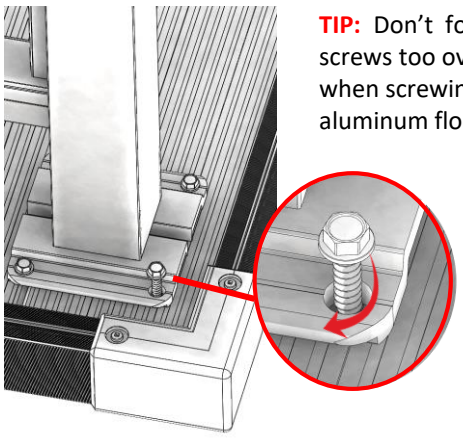
TIP: Use caulking or silicone around the inside the locking holes.





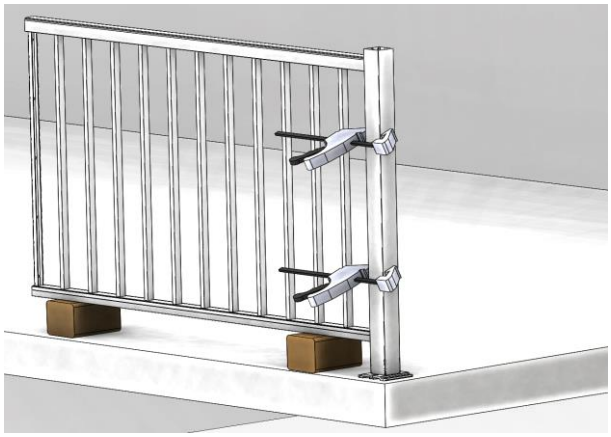
TIP: The holes in the attachment bar are pre- drilled.

Use as many screws as there are holes

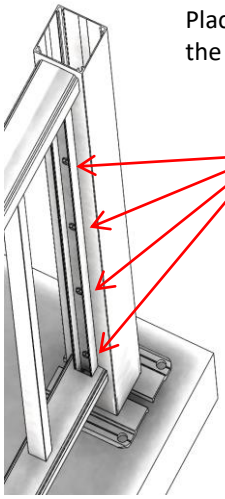


TIP: Don't force the screws too over tighten when screwing into aluminum flooring or steps.

Installing your railing step by step…

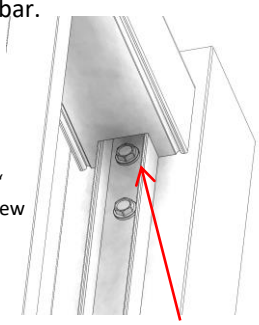


Step 1 Start assembling the railing to the post at the FRONT corner of the balcony.

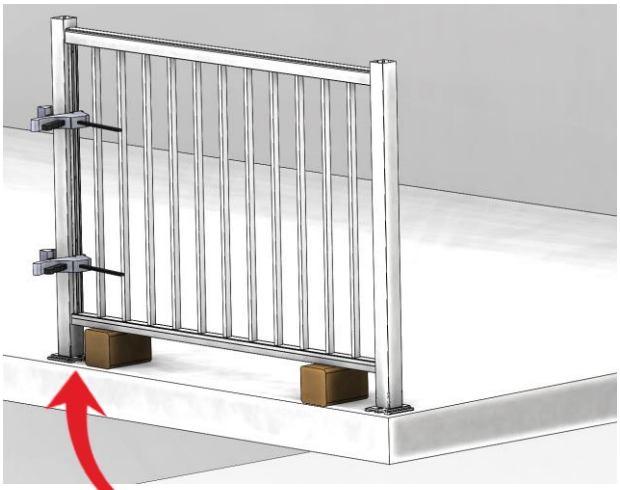


Place 1 screw per hole along the attachment bar.

No# 10-16 X 1"
Self drilling screw

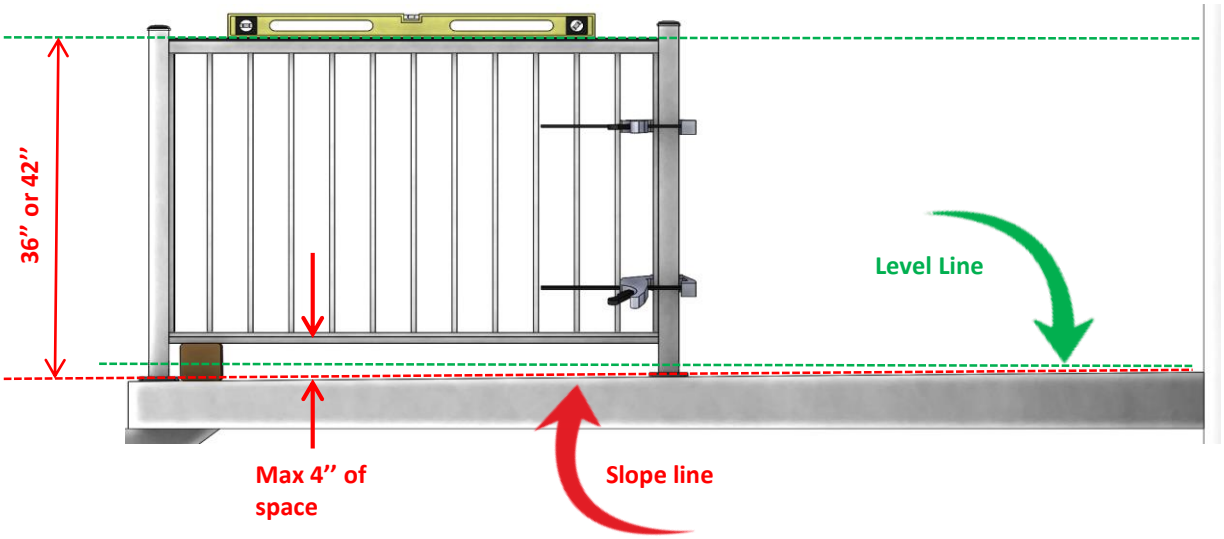


There might not be a hole, but add 1 extra screw at the very top.

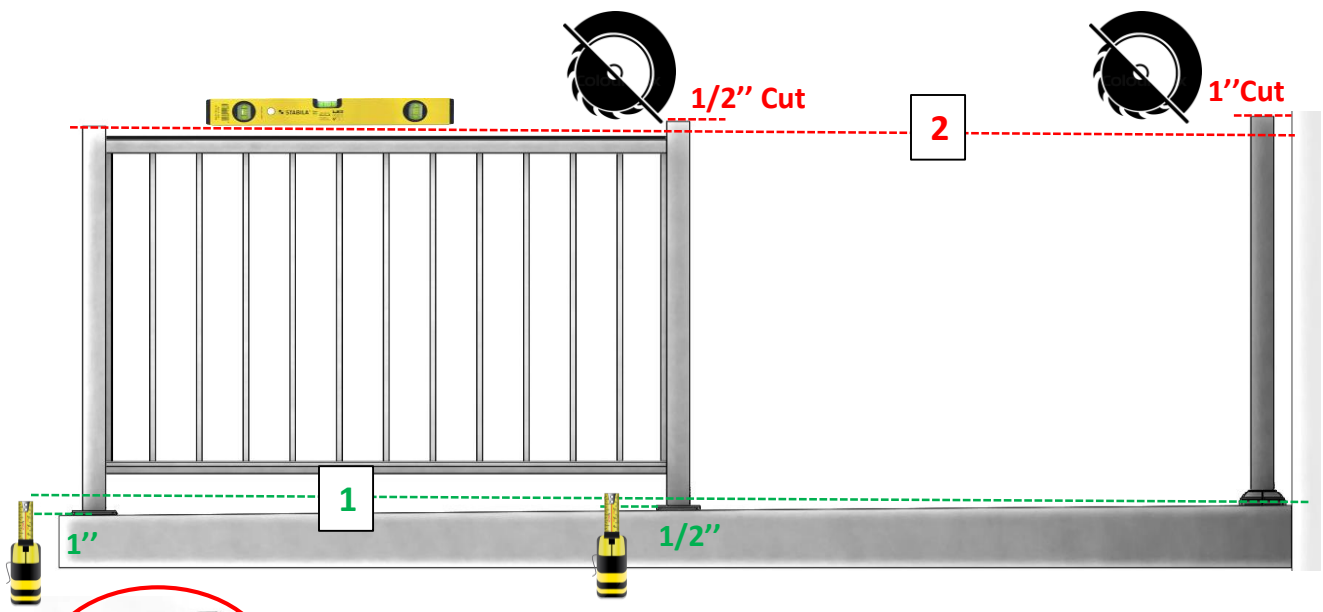


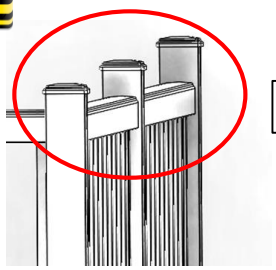
Step 2 Install the post on the opposite side.

Step 3 Due to the slope in the balcony floor, you can start with a block but use a level for the railing



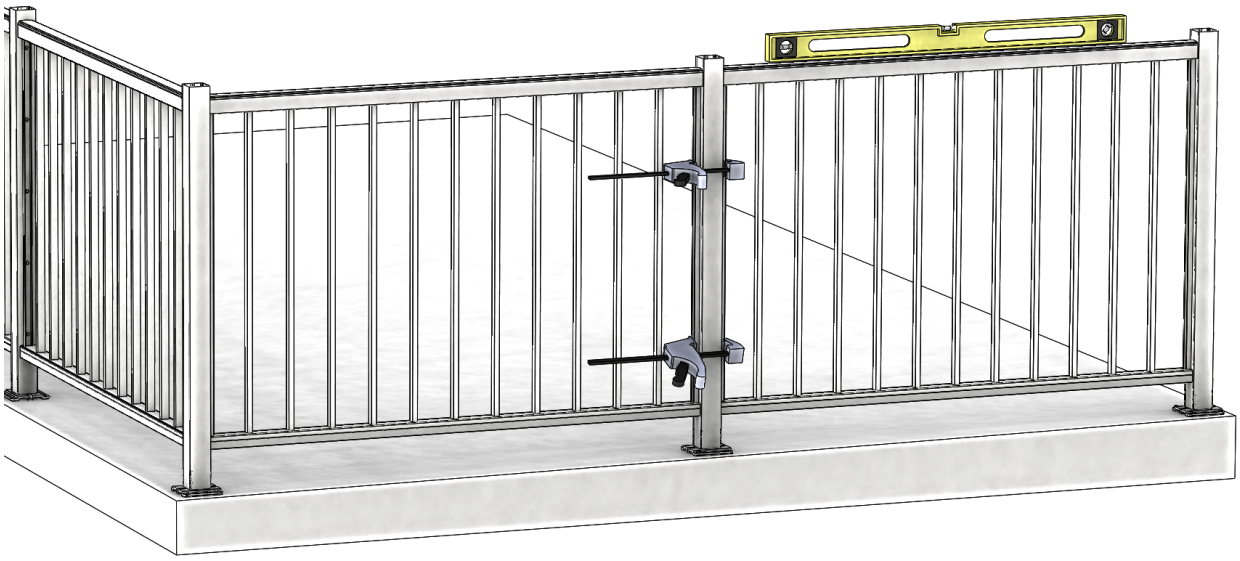
Optional: Installing your railings step by step…



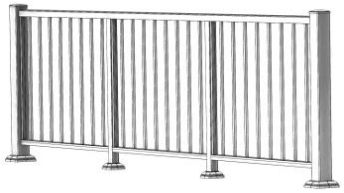


Step 4 Before completing the installation , you may cut the post on the slope side so that they are all the same height.

1. **First measure the slope height at each post.**
2. **Then transfer that measure to the post on the opposing side and cut.**

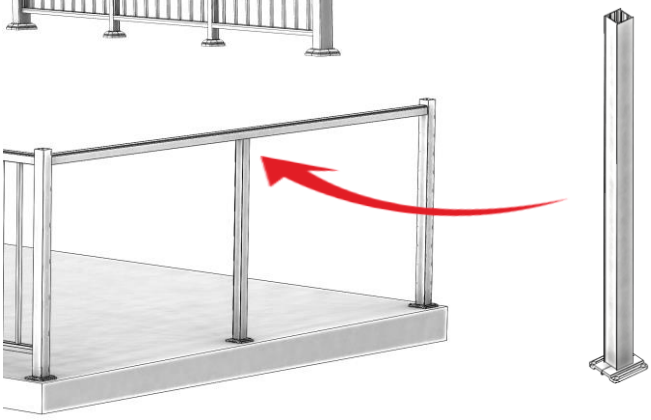


Step 5 Complete the installation of the section using the modified posts.

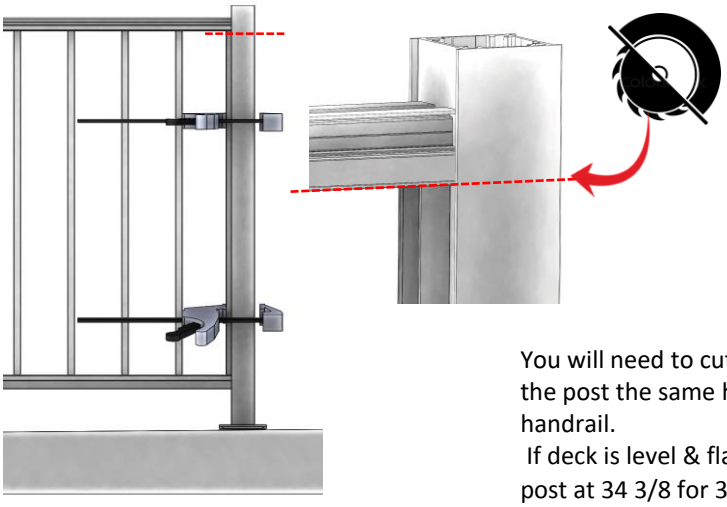


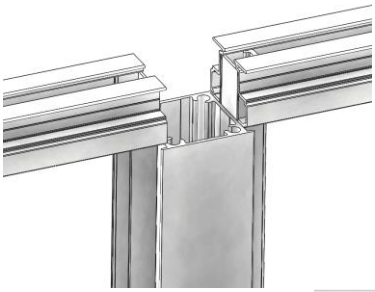
Installing your railings step by step…

Installing a continuous hand rail.



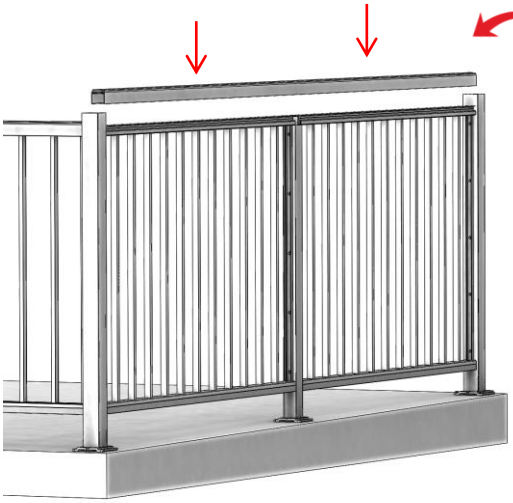
The installation process is basically the same except that the intermediate post will pass beneath the hand rail allowing fore an uninterrupted continuous hand rail





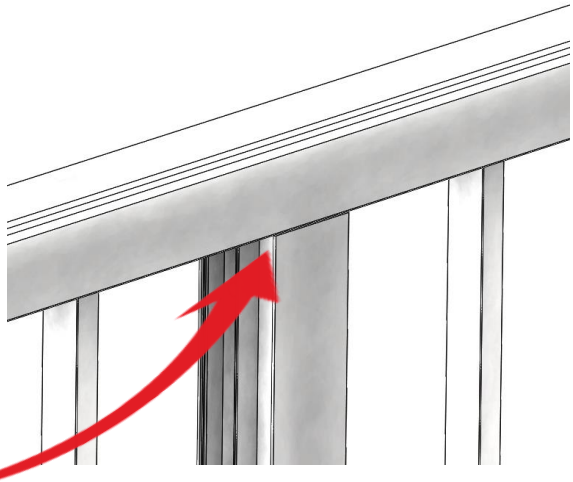
You will need to cut the post so that the top of the post the same height as the underside of the handrail.

If deck is level & flat, plus a 3" bottom space is maintained, cut post at 34 3/8 for 36" high rail and 40 3/8 for 42" rail

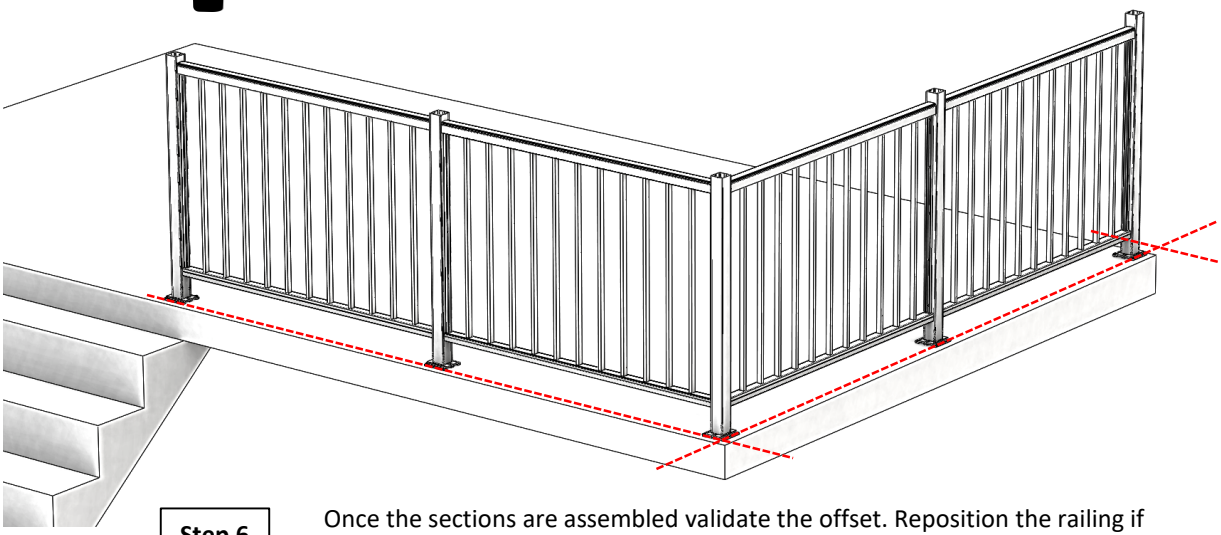


Complete the installation by clipping the continuous handrail over the top of the 2 sections.

The fit should be fairly tight so as not to see through to the other side

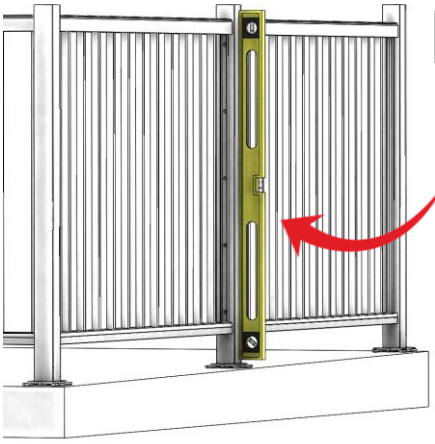


Installing your railings step by step…



Step 6

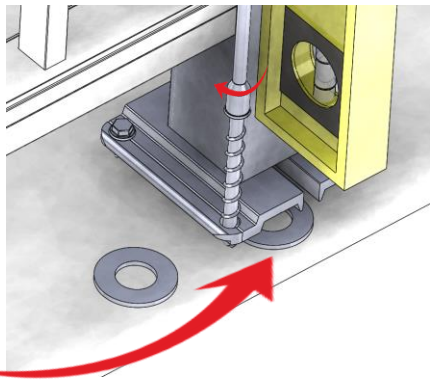
Once the sections are assembled validate the offset. Reposition the railing if necessary then start fixing the posts.

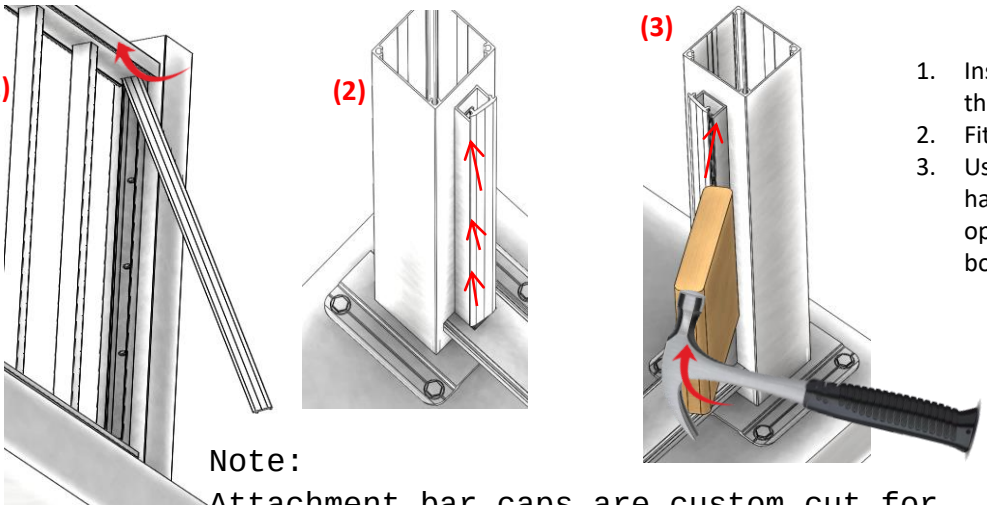


Step 7

Be sure that the post remains level as you tighten the screws down on the base.

Use washers or other material on hand to shim the base plate.





TIP: Installing attachment bar cap

1. Insert the cap into the railing at the top.
2. Fit the clip in on one side.
3. Using a piece of wood and a hammer gently clip in the opposing side from top to the bottom.

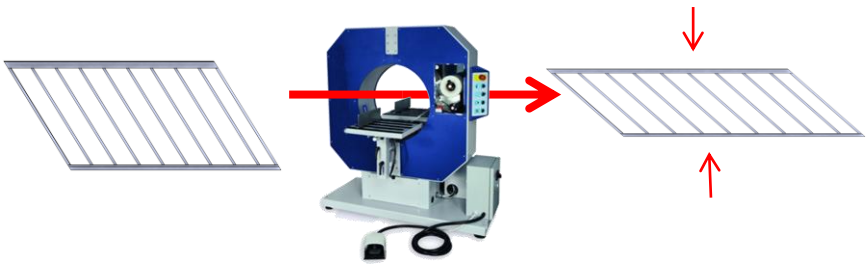
Note:
Attachment bar caps are custom cut for each end of stair sections. Do not mix them up.

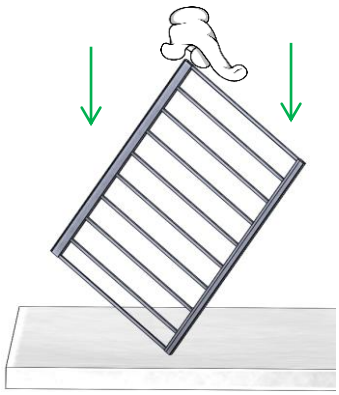
Installing your stair railings step by step…

IMPORTANT NOTE:
When attempting to install your angled railing on the steps, you may come across this issue where the angle on the railing is quite different than the angle of the steps.

SOLUTION: To remedy this issue, stand the railing up on its end and force downwards so the railing assumes its original shape,

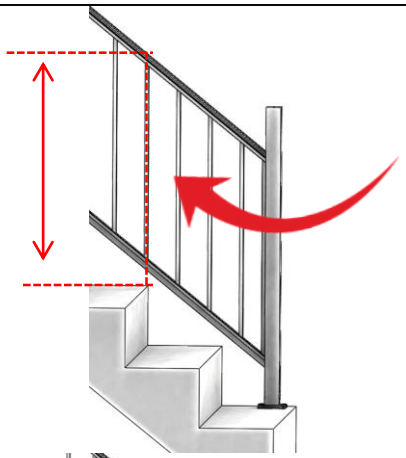
As the railing is passed through the wrapping machine, the pressure of the wrapping will compress the railing therefore changing the angle.



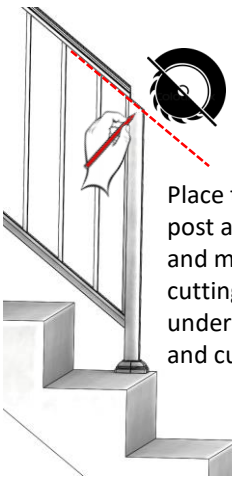


Step 1

Start at the top of the stairs going down.



NOTE: Keep a vertical space of 36” between the top edge of the step and the top of the railing if building according to the code.



Step 2

Place the intermediate post against the railing and mark a diagonal cutting line following the underside of the railing and cut the post.

Step 3

Complete the installation of the last section and post.

Cut the post to the right height.