

POR-APBP-2W
POR-APBP-1W
POR-APBP-90
POR-APBP-HF

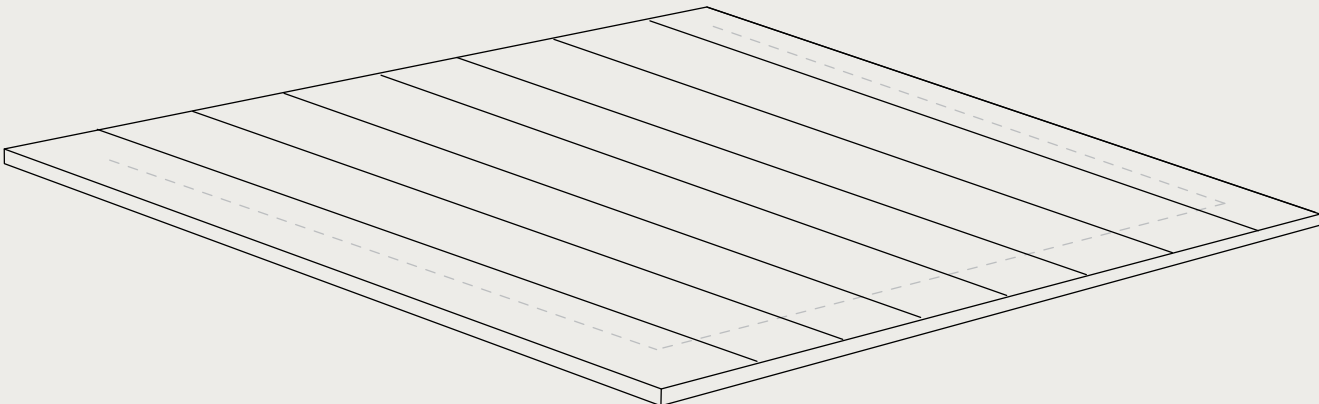
Glass Railing Installation Guide

Portia Aluminum Post System

GLASSWAREHOUSE

Before You Start

- Review local and regional building codes regarding glass fencing construction and requirements.
- Confirm that you have the correct fixings and hardware for your project to match your substrate and build to code. We recommend TapCon 5/16" x 4" Concrete Anchors or 5/16" x 4" Lag Screws for Wood Decking for your Aluminum Railing Posts and #12 x 1" flat phillips sheet metal screws (if installing handrail).
- If cutting Aluminum Post Handrail, be sure to have proper eyewear and safety protection and use a drop saw with metal cutting blade to get a perfect edge.

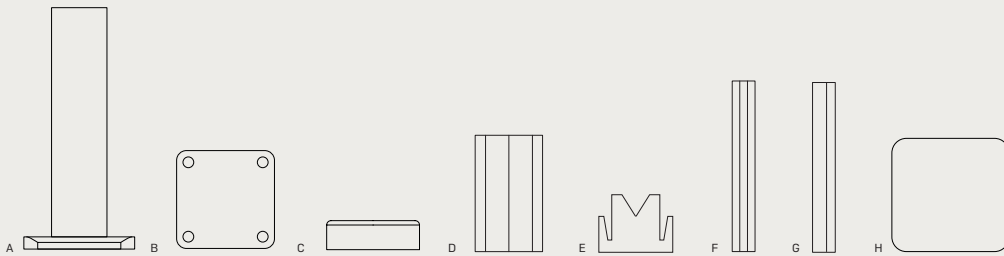


Aluminium Posts Installation Guide

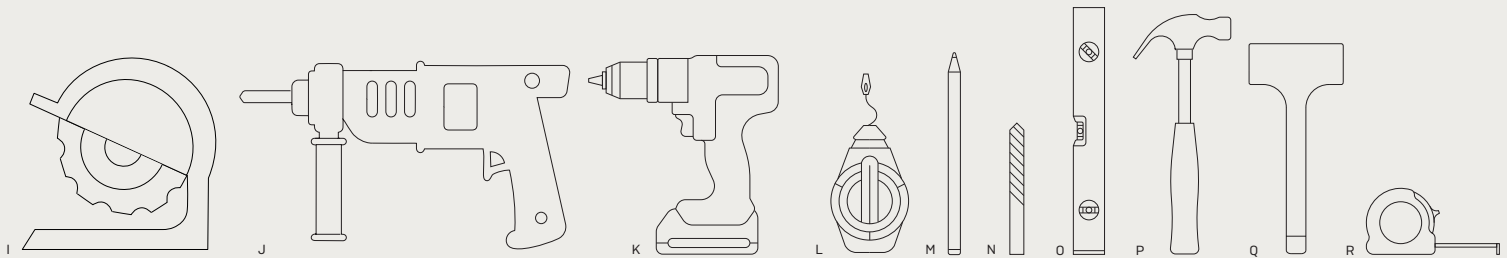
SAFETY REQUIREMENTS

Before installing, check with your local City Building Codes for glass railing.

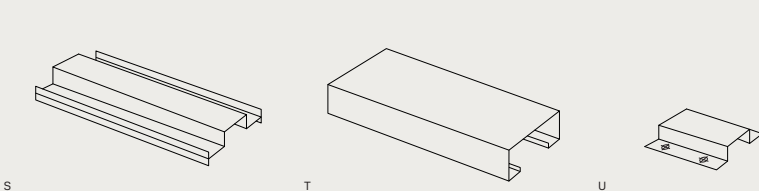
INCLUDED IN EACH AL POST BOX



TOOLS REQUIRED



A. TO PURCHASE SEPARATELY (HANDRAIL KIT)



B. TO PURCHASE SEPARATELY (ALL KITS)

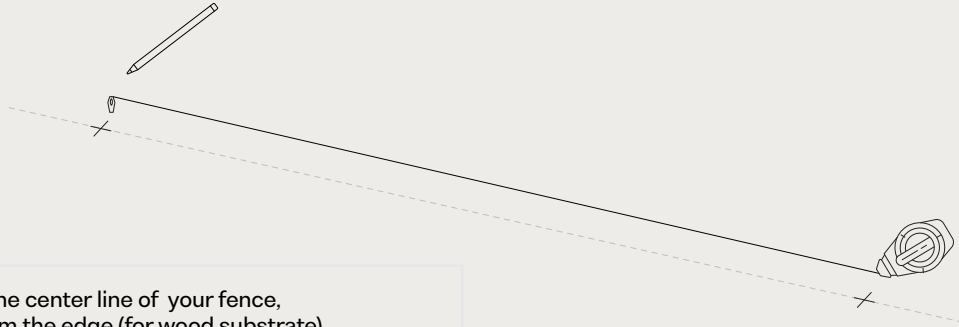


- A** Aluminium Posts
- B** Levelling Shims
- C** Base Cover Plate
- D** Infill Glass Support
- E** Plastic Setting Wedge
- F** Primary Glass Rubber

- G** Secondary Glass Rubber
- H** Post Cap
- I** Drop Saw
- J** Hammer Drill
- K** Power Drill
- L** Chalk/String Line

- M** Marker
- N** Drill Bits
- O** Level
- P** Hammer
- Q** Rubber Mallet
- R** Measuring Tape

- S** Bottom of Handrail
- T** Top of Handrail
- U** Template for Drilling
- V** Rubber Gasket Install Tool



Important: To find the center line of your fence, measure in 2.25" from the edge (for wood substrate) or measure in 4.5" (for concrete substrate). Refer to Engineering doc for your state which will contain your exact requirements in 'Before You Start' section.

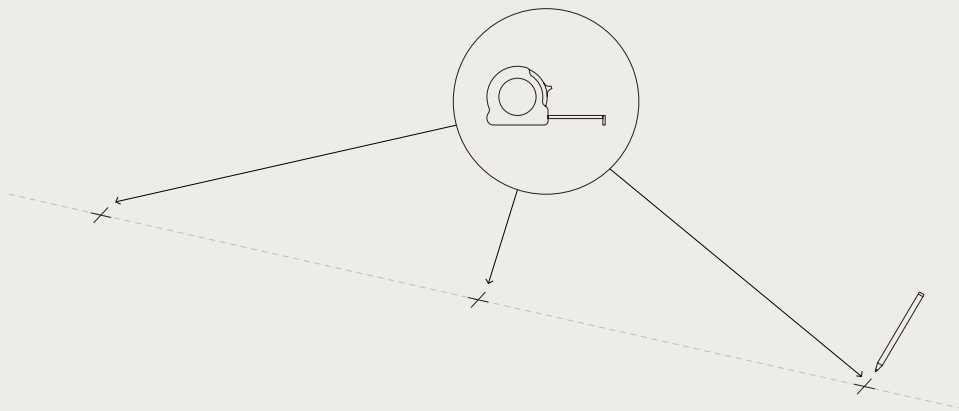


01

Mark the outline of your fence using a string line.

This marked line will be the center line of your Aluminium Post. At this point, refer to the Engineering document to confirm that your Posts and inset measurements are

compliant with product regulations and with local and regional building codes.



02

Measure and mark the center point for each post.

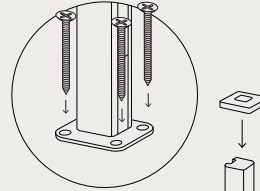
For Post Spacings please refer to the Plan from the Glass Warehouse Glass Railing Designer, or if you

haven't used the Designer, add 1/2" to the width of your glass panel to get your post centers.

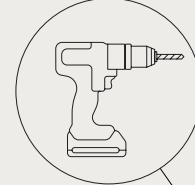
CORNER PIECE
POR-APBP-90



MIDDLE PIECE
POR-APBP-2W



END PIECE
POR-APBP-1W



Important: If using hardwood for substrate, you will need to drill pilot holes for your fixings.



Important: It is crucial to level all posts AND install base plates cover before moving to the next step.

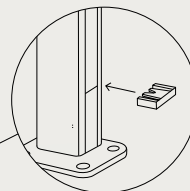
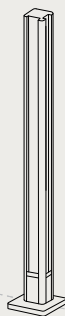


03

Fix your posts on the pre-marked position with the appropriate fixings for your substrate. Please refer to your engineering.

Once your post has been fastened, you'll be able to see if it requires levelling. If so, use levelling shims supplied under the base plate to adjust level of posts.

Then fully tighten once level is achieved using plastic shims and ensure your posts are level in both directions and install base cover plate.



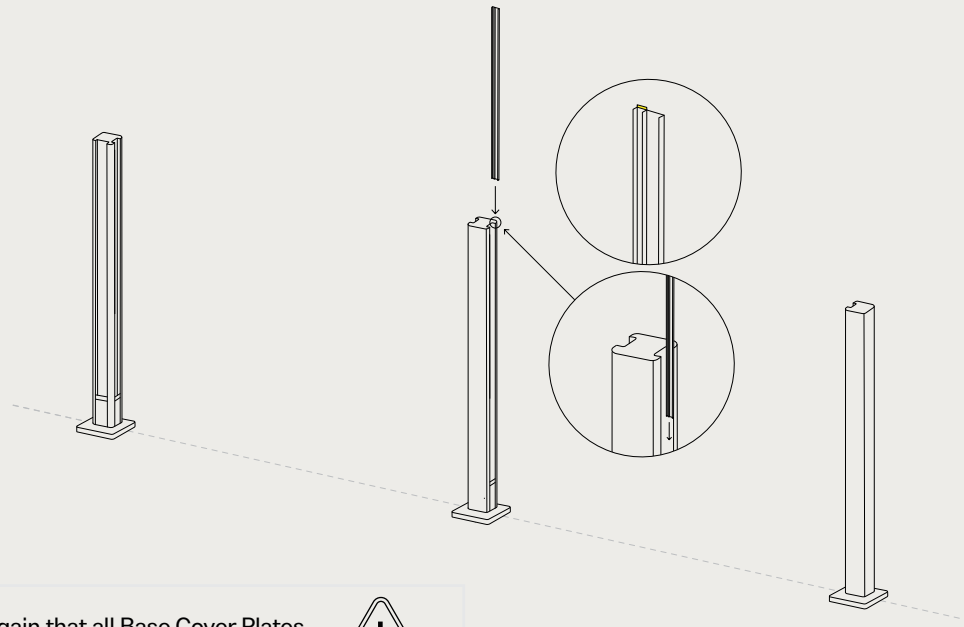
Important: Glass is to have no contact with any hard or aluminium surface without setting wedge or other soft setting material.



04

Place Plastic Setting Wedge on top of Glass Support inside each post.

Note that some posts may need more than one Glass Setting Wedge to be placed.



Important: Check again that all Base Cover Plates have been installed before performing this step.

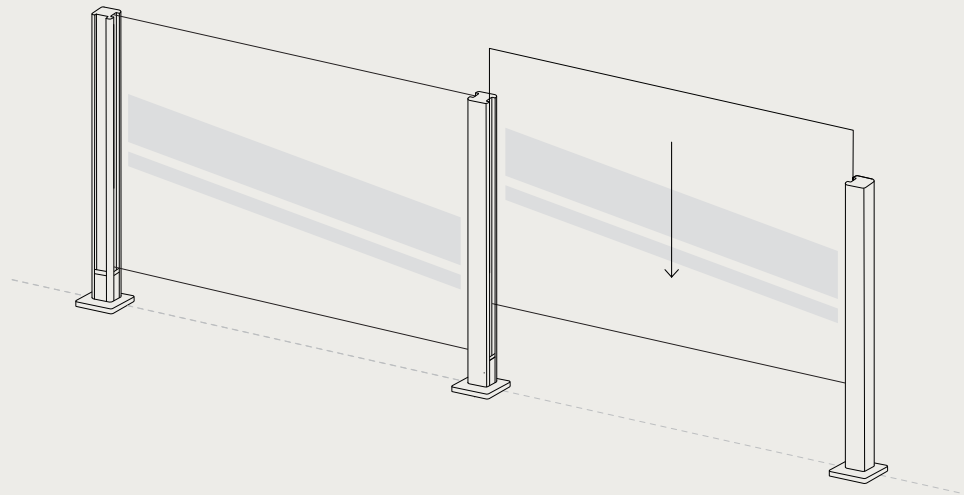


05

Slide the rubber with yellow strip into postslot, this is the outside edge of the railing.

The thinner side gets installed into the post while the thicker side is on the outside of the post. The secondary rubber will need to be installed after

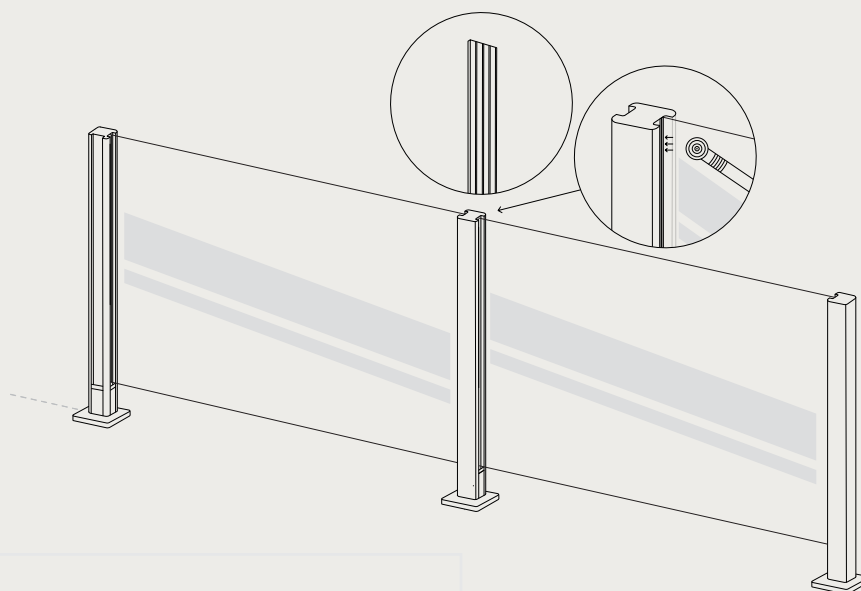
glass is installed and will need full access from inside the railing line.



06

Carefully lower glass into posts using 2 persons to lower glass into place evenly.

Make sure glass is level with the top of the post. If not, please adjust the height of Plastic Setting Wedges accordingly.



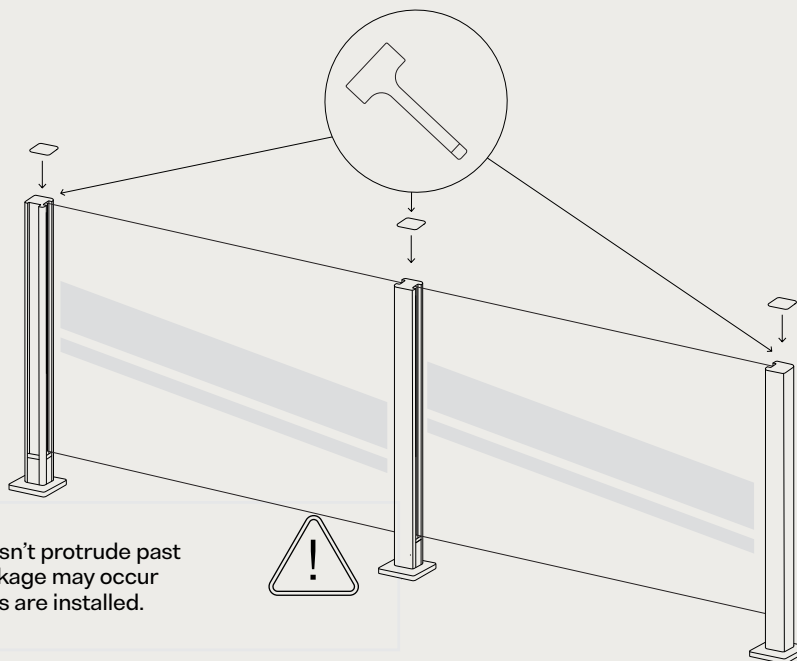
Handy Tip: Spray soapy water on glass before installing secondary rubber to ease installation.

07

Insert secondary rubber between glass & inside slot.

The side with 3 teeth goes against the glass. Primarily insert at the top and using the Rubber Insert

Tool to pressure roll the rubber down the post into secure position.

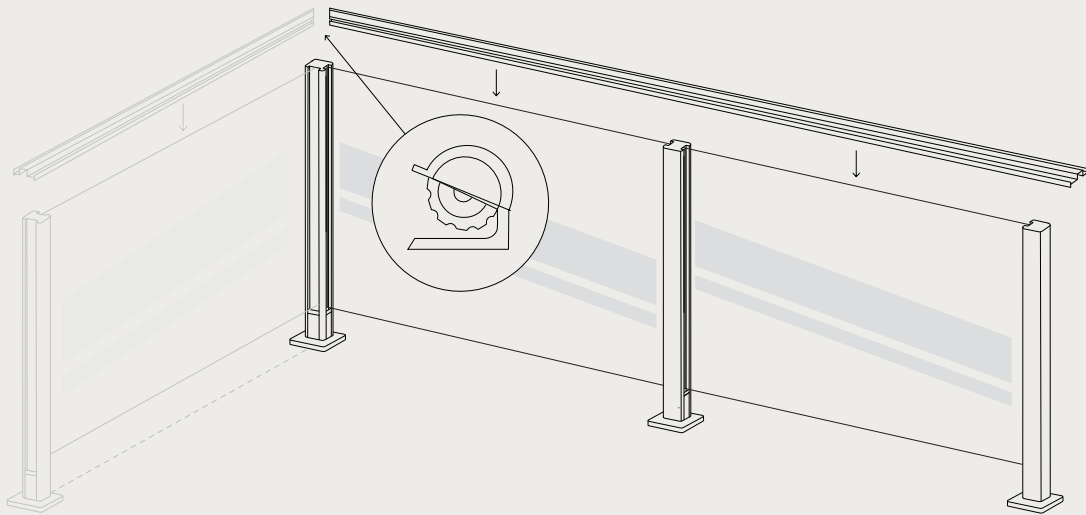


Caution: Ensure glass doesn't protrude past the top of the post as breakage may occur when Handrail or Post Caps are installed.

08

If handrail is not required, insert post cap by knocking in all sides evenly with a rubber mallet until it is secured in place.

If handrail is required please move to Step 09.



Important: If you have a corner in your fence layout, you will need to miter the corners of your handrail.



Important: If you are finishing a handrail section on an end post, you will need to add an extra 1" to your handrail measurement to allow for the end cap to be installed.

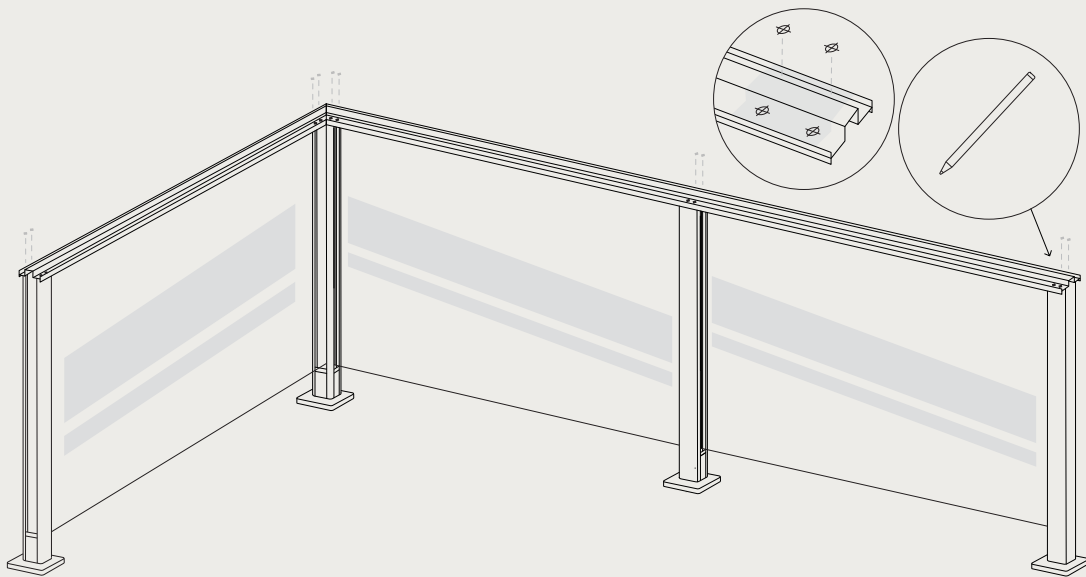


09

Cut Handrail to the required length of your railing.

Handrail joins Part A & B need to be positioned in the center of a post. If a join in the handrail is required, Part A must join in center of post to allow for fixing

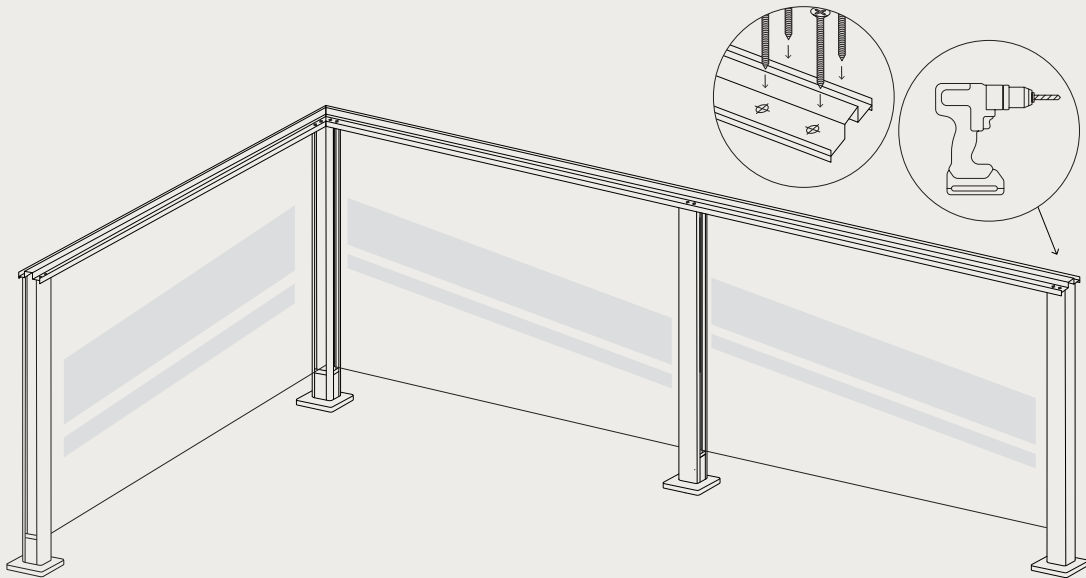
on both sides of the join. As with all projects, measure twice and cut once.



10

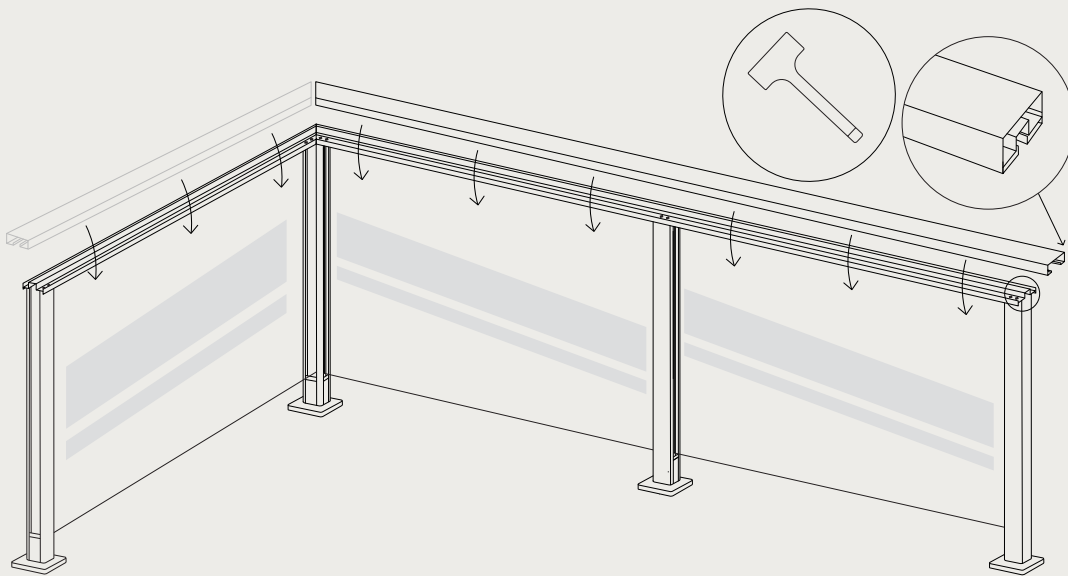
Take Handrail Part A and place on top of post, making sure your desired length is correct.

Using the template provided, place over the center of each post and mark the 4 fixing holes on the Part A extrusion.



11

Pre-drill using a 1/8" drill bit then fasten using #12 1" flat phillips sheet metal screws to fasten handrail to posts.



Important: If you are finishing a handrail section on an end post, you will need to add an extra 1" to your handrail measurement to allow for the end cap to be installed.

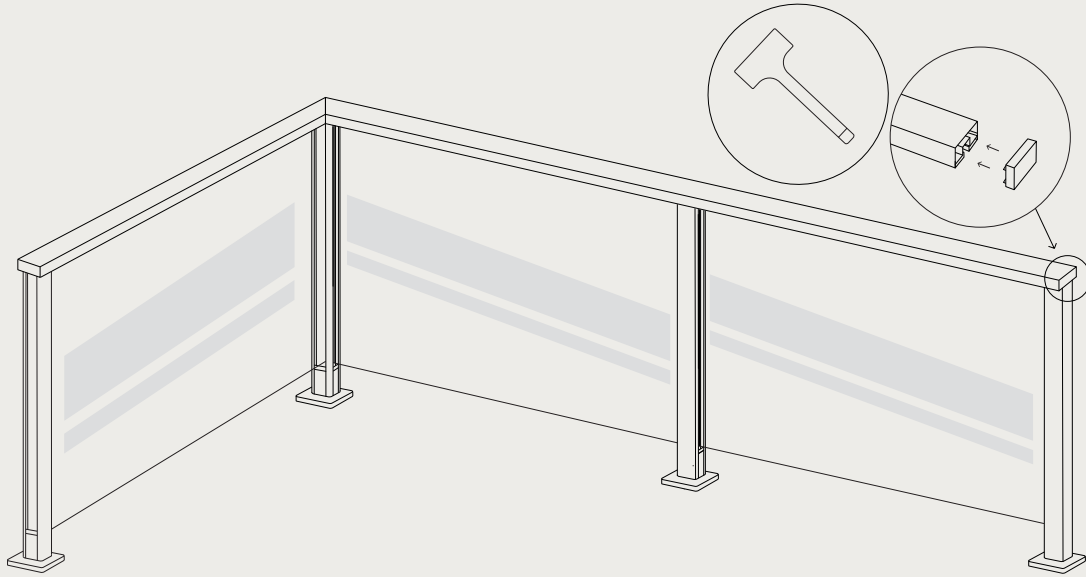


12

Take Part B, and snap into place using generous pressure. Start at one end and continue to the other end.

We recommend using a rubber mallet to snap part B into place. Important: Once installed, part B will be

difficult to move. Make sure part B is in the correct location before snapping into place.



13

**Insert Handrail End Caps on any outstanding end posts.
This completes your Aluminum Post Glass Railing.**

Care & Maintenance

EnduroShield makes cleaning easier and less frequent; however it is recommended that you continue to clean the surfaces regularly.

Maintaining the Treated Surface

For best results simply drying the glass with a squeegee or towel after each use will help keep the glass clean and reduce mineral spots forming. The glass needs to be cleaned every few weeks using a damp microfiber cloth and a mild detergent to break down soaps, oils, and conditioners on the glass. General glass cleaners are also suitable, however most of these are finishing agents rather than cleaners, and are an added expense that is not required.

Hard Water Maintenance

In hard water areas, or areas where water drops dry and leave a noticeable dust mark, a build of minerals may occur on the protective treatment. While these may not be removed as easily with the mild detergent, mild acids will often remove the marks quickly. As needed white vinegar should be used to wipe down the glass. Keep in mind the vinegar may be diluted with water, however dilution reduces the effectiveness.

Spray vinegar onto the glass and allow to soak for several minutes. This should dissolve any mineral deposits that have built up on the glass surface. A damp microfiber cloth should then be used to wipe over the surface. For extreme hard water areas we recommended using undiluted vinegar every week or so as a cleaning option to reduce this build up on the surface, rather than allowing the build up to continue over a long period of time.

Caution: Prohibited Products *Note these may damage the treatment and void any warranty

- Avoid the use of any abrasives or polishes including water spot removers, toothpaste, polishes, rough, or gritty substances
- Avoid the use of acids or alkalis that you would not want in contact with your skin for an extended period of time
- Avoid products such as Comet, Ajax, Jiff or Cerium Oxide which polish back the actual substrate
- Avoid the use of any harsh or chemical cleaners, with correct maintenance these are never required

