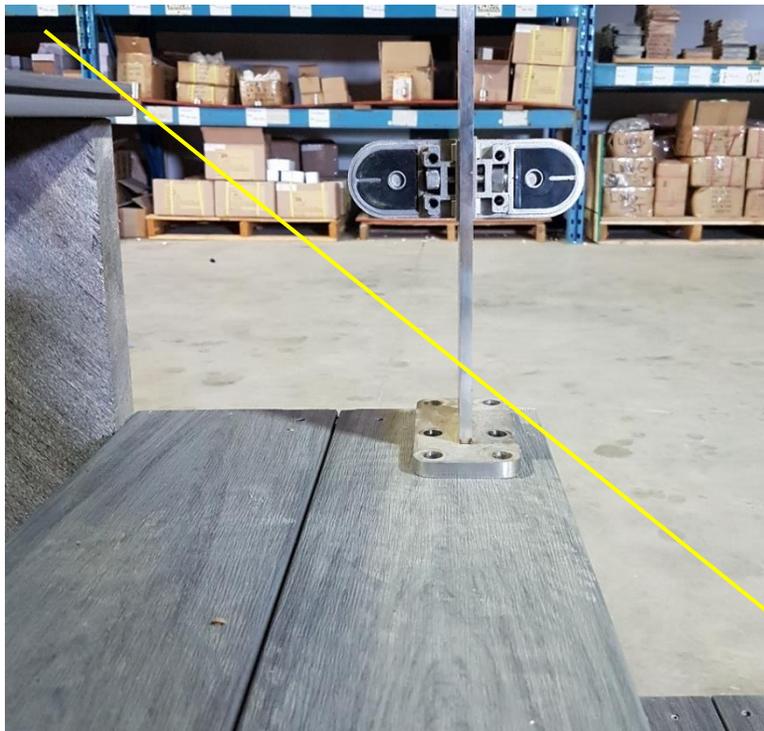


Invisirail Stair Glass Templating Instructions

- a) Cardboard is typically provided with orders to use for templating. Alternatively, you can use hardboard, plywood or similar material to use for templating.
- b) Helpful tools for templating:
 - o Box cutter / knife to cut cardboard OR saw to cut hardboard, plywood
 - o A long, rigid straight edge (i.e. drywall square)
 - o Pen or marker
 - o Bubble level (to ensure posts are plumb)

Additional tools that are not necessary but may be helpful:

- o Clamps to hold template material onto posts/connectors
 - o ½" drill bit to drill out holes in template for connector pins (if using hardboard or plywood)
 - o String line to help align the top/bottom edge of multiple panels down a long staircase
- 1) Install posts & connectors
 - o Do not install close to risers, but rather as close to step nosing as you can. As shown below, the clamp will be clear of the bottom edge of glass (yellow line).



- Below you'll see that the post is positioned too close to the riser which will not allow the bottom edge of the glass to be parallel to stair nosing line.



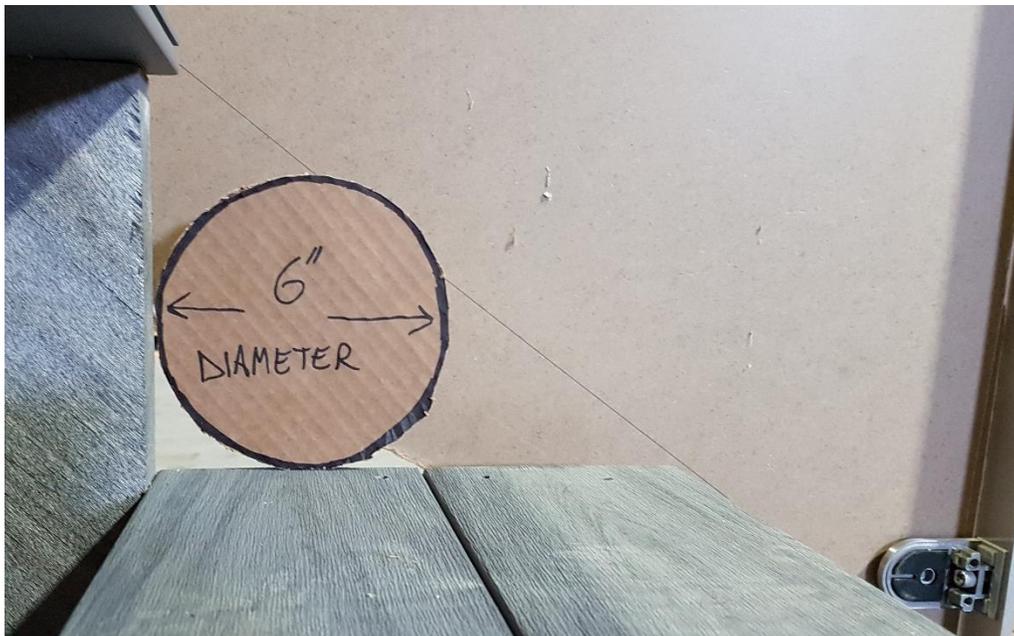
- Refer to layout drawing to confirm post configuration at top of stairs
- Ensure posts are plumb
- Ensure posts are no more than 60" O/C (horizontal) apart
- Posts should be installed to allow for (near) equal sections of glass or whatever configuration is most aesthetically pleasing.
- For square posts (without predrilled holes for connectors), Install the connectors in similar positions as the posts used for the main deck area. Small changes can be made to these positions, as the holes & notches in the glass will be positioned wherever you indicate.

- 2) Clamp or hold template material in behind connectors & posts. It may be helpful to rest the bottom edge of the template material on stair nosing. Trace a line indicating the inside post edge. Trim such that template fits in between the (plumb) posts.





- 3) Draw line for bottom edge of glass. If the bottom edge of the template is resting on the nosing, draw a line parallel to nosing such that bottom edge of glass will sit above stair nosing. You should ensure that the bottom edge of the glass meets code and does not allow a 6" diameter ball to fit through the steps/rail.



- 4) Using a straight edge or string line draw a line connecting tops of posts, which will represent the top edge of the glass. For a stair section with multiple panels, this may be easiest to do using a string line. In most cases this top edge should be parallel to the bottom edge of glass.



- 5) Trim top and bottom of template.



- 6) Trace the connectors onto the template. The finished edge of the glass panel will line up with the back edge of the black rubber pad (indicated in the below pic).



7) At this point you can either:

- Trim the sides of the template such that the material represents the exact shape & size of the glass panel required. Doing this will allow you to install the template in the clamps as if it were the glass panel to confirm an exact fit.

OR

- Do not trim the sides of the template, indicate that it has been cut "inside to inside post" and that it does NOT represent the exact size of glass required. Invisirail will ensure enough material is trimmed off of the sides to allow the glass to fit in the clamps.





8) Label the top edge of the template by annotating the template material.

- 9) If handrail will be installed with the *glass mounted* handrail brackets, please indicate where those holes for the brackets should be located.
- Refer to handrail brackets if sent with shipment
 - Ensure location will allow for handrail to be installed at a height that passes local building code. Typically, handrail should measure 34"-38" vertically above the nosing line.



- 10) If there are multiple stair panels down the staircase, please indicate where the templates are located on the stairs (i.e. upper panel, middle panel, lower panel, etc.)

11) Custom glass panels will be made to the exact specifications of the template(s), except for the following:

- Corners are made with a ½" radius to avoid sharp edges.



- Some holes or notches may be omitted from panel. Every panel should have at least 2 details (either 1 hole or 1 notch per side).

12) Please ensure that templates are not damaged, warped etc. before being sent to Invisirail. Try to minimize the number of bends in the template if possible.

13) If there are any problems with the templates provided (i.e. severely warped, curved edges, lack of info) Invisirail will notify you to resolve. In extreme cases Invisirail may request for new template(s) to be sent.

14) Please write the following info on the template:

- Store name (where initial Invisirail order was purchased from)
- PO number / sales order number if available
- Date templates were made or sent out
- Contact info for installer who cut the templates (name, phone number, email if applicable)
- Panel identification (i.e. upper panel 1/2, lower panel 2/2, etc.)

Please send templates to:

Invisirail
6050 Owen Road Unit #1
Uxbridge, ON L9P1Z6
Canada

Customers outside of Canada will need to fill out a commercial invoice to ship across the border. If you need assistance, please email sales@livbp.com or call toll-free 1-888-681-9733.

After the glass is manufactured, Invisirail will confirm its shape and size matches the provided template. The template will ship with the glass to the customer.

If at any point during your installation you require assistance, please contact us:

Invisirail
1-905-852-3733
Toll Free: 1-888-681-9733
sales@invisirail.com