

**Information For
Drawings &
Templates**



**highland
glass** THE CLEAR
CHOICE

Submitting a Custom Template

Drawings

Drawings are an easy way for customers to convey their requirements to Highland Glass, and receive a product exactly to their specifications. The better the drawing is at doing this, the less room there is for error. It is in everybody's best interest to get these requirements across without ambiguity and without Highland Glass having to assume or to decipher the customer's meaning. Highland Glass processes thousands of pieces of glass at a time, each of which have their own, sometimes unique, requirements. As each customer's requirements differ, it is all the more important that a drawing is details, accurate and free from guess-work. Highland Glass on principal, doesn't assume hole sizes, radii, hardware or any other specification based on previous orders, please don't assume that we will automatically provide the same specification on each order as this more often than not, leads to confusion and errors.

Drawings need to give us all the relevant information including:

- Glass type.
- Glass thickness.
- Quantities of each panel.
- Dimensions of all edges – the drawing needs to show if dimensions are square dimensions or from a sloped edge.
- Square corners.
- Any out of square edges including showing the degree of how much it is out of square.
- Edgework.
- If a cut-out needs to be polished (minimum internal radii needs to be considered.)
- Which side of the glass the pattern is positioned on (for patterned glass.)
- Pattern direction.
- Hole diameters.
- Hole or cut-out placement dimensions – it is easier if dimensions are relative to a square corner or edge.
- Hinge type – attach a hinge cut-out drawing.
- Hinge placement dimensions – if on the drawing, then doors will line up with side panels.
- GPO dimensions if not a standard 100W x 60H – show if GPO is vertical.
- Angle measurements are not all that useful – it is more practical to show how much out of square an edge is.

Template Scanning

Templates are used for panels that have no square corners or are an irregular shape, or those with holes and cut-outs that are not for common fixings such as shower screen hardware or GPO's. Templates are scanned for panels where accuracy is required as larger panels with unique or complex shapes become impossible to measure accurately by hand and are best done with a computer. Alternatively, a DXF file from a customer's own drawing would bypass any need to scan a template as our machines can use the DXF file directly.

Some considerations:

- The cleaner cut the edges and holes, the better the scan, and hence, the more accurate your panel will be. The scanner works by passing a laser and determining the difference in contrast between the template and the black felt on the scanner table
- If at all possible, use 6mm to 12mm MDF. Thinner panels seem to bow and need to be weighted down on scanning table. Using MDF makes for cleaner edges and holes.
- Plywood is a poor second – the splinters from the wood often make a poor quality edge and as such does not scan accurately. Additionally, due to dark coloured woods in ply, the scanner can start following a dark line it has discovered in the wood instead of the actual edge.
- Corflute templates will have ragged holes and edges due to its cellular construction, this means it does not scan as well as MDF. Additionally corflute's flimsy design makes it likely to be damaged in transit.
- Glass templates do not scan well, the laser bounces easily off the material and the machine can have a hard time reading the edges and shapes.
- Cardboard and paper templates are not acceptable template material.
- Please make sure there are no joints in your template, the template provided should come as one clean piece with only the markings required for this job. If the size of the panel make providing a single piece impossible, please provide as many minimal separate pieces as possible, ensuring each one is clean and clearly labelled where the joint should be.
- Many templates come with a nominal smaller hole as a pilot to indicate a larger hole. This is okay, provided the pilot hole is 12mm or larger to reduce any read errors on its position.
- All templates should show the customer's name, order reference, glass type, quantity, edgework and the number and diameter of any holes. If edges are not sawn straight and the glass is meant to be cut straight, this needs to be marked on the template, otherwise it will be machined as it has been cut.
- Please keep the template free from grit, dirt, screws or nails as the template is used to check for errors and discrepancies against glass panels, this can lead to accidental scratches or marks.