General technical guide to glass

Glass specification
For any glass supplied by SGP, a project specific specification has not been carried out by us, this responsibility lies solely with the customer. Where the specification is changed by SGP this is due to manufacturing capabilities and is not a substitute for a structural report, any changes must be checked and approved by the customer.

Lead times
During the process of glass bending, failures and/or breakages can sometimes occur, lead times are given in good faith but the postponement of delivery dates indicated by us cannot be ruled out, and should be taken into consideration when placing orders.

We will not accept costs, claimed for, due to late delivery.

Holes
The position of holes is critical in toughened glass
A: The distance between holes must be a minimum of 4 x thickness of the glass
B: Diameter of the holes must be at a minimum, equal to the thickness of the glass.
C: Dimension from corner of the glass to edge of hole must be no less than 4 x thickness of the glass.
D: For a hole that is positioned closer than the recommended distances a saw cut is made to minimize the stress and chance of breakage.
E: Dimension from the edge of glass to edge of the hole must be no less than 1.5 x thickness of the glass.

Tolerance for position will be between +/- 1mm & +/- 3mm depending on glass thickness.

Hole Guidelines for Toughened Glass

Corners
When glass is processed with a polished edge the corners will be sharp, this sharpness can be removed by applying a further process of dubbed or Radius corners.
A preference should be specified at order stage, if no request is made the corners will be sharp or dubbed depending on processes.

Standard (Sharp) Corners:

Dubbed Corners*:
* Please note dubbed corners are a hand process and will be a dull finish.

Radius corners:
Drawings/CAD
For any shaped glass Specialist Glass will require fully dimensioned drawings, ideally in CAD or DXF format.

Templates
Any templates supplied to SGP should be exact finished sizes and any holes or cut outs in the correct position.
All templates sent to SGP should be clearly labelled with customer name and contact and a reference number where applicable.
Where possible SGP will return the templates with the finished product.

Cut outs
If glass has an internal cut out or internal corners then a minimum radius will be applied to said corner/s. The finish will be either 6mm for a ground finish or 13mm for polished finish.
Please state which you require at order stage.

Edgework/Polishing
Our polishing process is applied by either SLE or CNC, there is a marginal difference in finish but both are to a high standard.
Please advise at order if you require a specific finish.
Annealed & annealed laminate bends are polished by hand, the quality of this polish is to the same high standard as a machine polish however it is visually different. If in doubt please speak to a member of our team.

Standard Polish:

CNC Polish:

Misalignment
Edge slip of up to 3mm between glass components is acceptable.

Back painted / Ceramic Glass
Standard clear glass carries a slight green tint; this can affect the colour of any paint or ceramic applied. SGP recommended the use of Low iron glass for these products.
Please provide a RAL number, Dulux or Pantone code.
All colours supplied are ‘closest possible match’ the colour match is not guaranteed.
Colour sample approval is recommended.

Double Glazed Units
Unless specified otherwise our units are manufactured with Aluminum spacer bar.
Colour of spacer must be stated on order, if not specified at order stage a silver bar will be used.
Kommerling butyl is used as a primary sealant and normally increases the nominal width of a unit by up to 1mm.
The units are sealed with a Dow Corning 3362 black silicone with a minimum sight line of 13mm, this may vary as our units are produced by hand.
The compatibility of any sealant to be utilized for installation should be checked. Units are supplied without perimeter taping.
Curved double glazed units should never be glazed under pressure, if in doubt please contact our production team.

Toughening Stamp
All toughened glass produced by Specialist Glass will have a toughened stamp to the face of the glass unless otherwise specified.
A ‘Line’ or ‘Furniture’ stamp can be applied to the polished edge of the glass when the stamp need not be visible, this requirement must be indicated at order stage.

Thermal strength
Annealed Material withstands temperatures of up to 40° C compared to 300° C for toughened material. Likewise Toughened material unaffected by sub-zero temperatures.
Delivery & Transport
Where possible deliveries will be made packed loose on an SGP vehicle or on a wooden A-Frame for forklift unload only. Where vehicle restrictions apply and/or times or special packing may be required please state at quote stage to ensure correct pricing. Any requests for changes to delivery requirements may incur additional charges.

Nickel Sulphide Inclusions
On rare occasions, Toughened glass can break spontaneously, without any applied load, due to small Nickel Sulphide inclusions that may be present in all float glasses. These breakages can occur months or even years after. Carrying out Heat Soak testing to the glass can reduce the risk of spontaneous breakage however this is not 100% guaranteed. Any spontaneous breakages are not covered by SGP warranty.

Handling Glass
When handling the glass ensure that precautions are taken to handle safely, use suitable gloves and protective equipment as required. Care must be taken to ensure the glass is not impacted by any objects whilst being carried, particularly on the edges which are most vulnerable.

Storage
Special care must be taken to protect the glass from impact damage and the glass should be stacked on the edges and on strips of wood or other suitable material which is relatively soft. Spacers should be applied to the surface of the glass to prevent face to face contact. Glass should be stored in dry conditions to avoid water staining before fixing. When fixed or stored the glass must be protected from site contamination.

Maintenance
When installed the glass should be cleaned regularly with Specialist Glass Products Ltd.’s glass and mirror cleaner as per the directions on the container. Sharp or abrasive products should not be used to clean glass. The use of oil based cleaners or applications must be avoided.

Free Issue goods
Where Specialist Glass Products Limited offer free issue Toughening or laminating services this is at the customers own risk. Specifically where laminating customers own glass this process is chargeable at the agreed rates regardless of the outcome, re-fires for unsuccessful laminating will be chargeable. Specialist Glass Products reserve the right to refuse to process free issue glass if we deem it unsuitable in anyway, i.e. Unfinished edges which are at risk of breakage during toughening.

Re-Orders
In the case of re-ordering glass, additional glass items or remakes, batch specific deviations in the glass colour can occur. Specialist Glass will endeavour to use the same glass supplier however this is not always available or guaranteed. Complaints cannot be accepted in such cases.