

Tudor Glass

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Cutting oversize convex portrait 'bubble' glass

Prepared - 5/12/2005
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General info

- Convex glass should be cut on the inside (concave) surface.
- Cut with a standard glass wheel cutter. An oil filled cutter, or dipping the wheel in some 3-in-1 oil, will help keep the score fresh and 'open', to enable an easier run of the cut (score).

With the frame present

This is perhaps the easiest and quickest way to cut a convex portrait glass.

Positioning the frame on the corner of a cutting bench or table gives the ability to cut around at least half the frame in one go. In some cases, you might need to prop up the frame to on a few phone books to have the glass clear the bench surface.

With the frame rebate up, place the oversize glass onto the back of the frame and centre to the mould mark on / over the rebate.

* Hold the frame steady with one hand. Starting at a certain point, cut around the inside surface, keeping the cutter about 4mm inside the rebate 'tight' size. This is to allow clearance inside the rebate, and you should be aware that due to the convex shape, and that the glass is being cut on the inside, when the excess glass is removed the natural shape of the break towards the outer surface makes the glass slightly bigger than that of the inner surface (where you are cutting).



If you cut say $\frac{1}{2}$ to $\frac{3}{4}$ the way around, simply pick up the frame and glass carefully, and turn 180° , so you can finish the score.

Once scored, you should run the cut as soon as possible. Remove the glass from the frame, and place on a bench edge. Starting anywhere on the score (best on longer edge for leverage) hold an index finger under the score and use a thumb to start the run. Go either direction, and turn the glass as you run around, until you rejoin where you started.

With the run completed, you now need to reverse or 'break' the cut through completely. Again at a long edge, gently apply pressure upwards, opposite to running the cut. You'll hear a dull 'snap' when the cut breaks through. Ensure this is done all round the frame, and with 2 hands on opposite sides, you should be able to pop the excess 'ring' of glass straight off the main piece. It can pop off because the shape of the cut on the convex has no place to hold a shape cut, as it does for example on a flat glass.

With the portrait glass cut, take a diamond pad or sandpaper (~ 120g) and rub the sharp edges to reduce the risk of injury while handling / fitting.

From a tracing

Establish where the line on the paper is in relation to the glass. Often the line is taken from the rebate and needs to be cut 2mm or so inside the line for clearance.

Place the glass convex up and centred as desired on the paper tracing. With a fine point texta marker, make a line around where it is to be cut, then turn glass over and cut to the instructions at the * (asterisk) above. Remember to cut a couple of mm inside the line so the break comes out to the right cleared size.

With and original portrait / backing, or a template cut to shape

As with a tracing instructions, except you have a mdf or poster board type template that is the actual size of the glass required. Ensure the template has clearance of at least 2mm all round inside the rebate. Place the template inside the convex side of the glass and centre, mark tightly around with a fine texta, and cut to the instructions at the * (asterisk) in the instructions above. Cut a couple of mm inside the line, so when it breaks out it will be the template size.