



## **GUIDELINES FOR SUCCESSFULLY ORDERING NON-RECTANGULAR GLASS**

- The quickest, easiest, and least expensive way to order non-rectangular shaped glass is to fax or email us a drawing. We will review it, and either enter it using our shape catalog or we'll call you to tell you that we'll need a full size pattern.
- Another option – refer to our shape catalog, and place the quote request or order using our shape number and supplying the dimensions.
- We also accept .dxf or .dwg files.
- If we don't have a shape in our catalog that corresponds to your need, we need a full size pattern.
- **THIS IS IMPORTANT.** Whichever method you use to order non-rectangular shaped glass, be sure to tell us if you need the glass size to be a tighter tolerance than our standard tolerances. Sending a full size pattern does NOT automatically improve our dimensional accuracy. See our tolerances listed below.

## **GUIDELINES FOR PREPARING THE PATTERN:**

- 1/The best pattern material is wood of a uniform thickness, or cardboard. The color should contrast with a white background. We can accept craft paper, but it tends to be less accurate. We can't use a glass pattern – it doesn't provide enough contrast for our digital camera.
  - 2/For best accuracy, send a pattern actually cut to the size you need. If you prefer to send a drawing, note whether to use the inside or outside of the line, especially if the line is "thick". Without a note to the contrary, we'll assume the glass was traced, and use the inside edge of the line.
  - 3/**Any lines should contrast strongly with the underlying pattern material.** Black marker or pen lines on cardboard and craftpaper work fine. Pencil does not provide enough contrast.
  - 4/Make the pattern with an "outside looking in" orientation. Be sure to note orientation of any coatings or textured side of rolled pattern glass.
  - 5/Avoid writing dimensions on a full size pattern. We can successfully use a dimensioned drawing, or a pattern, but a combination of the two leads to confusion.
  - 6/Attach a purchase order, or note information on the pattern you would normally include on a purchase order (customer name, job name, customer contact in case we have a question)
- Contact our office by phone, fax, or email to request a pattern pickup, or send the pattern by mail.

Here's what happens when we get a pattern: First, we charge \$25 per pattern (not piece).

**For Monolithic Glass** – We "digitize" all patterns by tacking them to a large white wall with reference points, and then take a picture with a digital camera. The picture file is then imported into CAD software, where we draw a digital line around the perimeter of the pattern. If the order can be cut by scoring and breaking out the glass, the file is sent to our cutting table. We apply a 30% upcharge on each piece. If, due to the nature of the shape, or to the tolerances required, our normal cutting process won't work, we write a program to mill the glass with our CNC machine. We quote/charge extra for this type of order.

**For Insulating Glass Orders** – We digitize the pattern and evaluate it in the CAD software. In some instances, we produce a better product by entering the order using a shape code rather than using the digitized file of the pattern. Shape Code orders have computer generated spacers. A digitized pattern order requires fussy time consuming manual fabrication of the spacer which can lead to more variation in the unit siteline. Digitized pattern orders get a 75% upcharge. Non-digitized orders that are simple shapes (traps, triangles) get a 30% upcharge. Complex shapes (5 sides or more or curved sides) get a 75% upcharge.

- We return your pattern with the completed order.
- We keep a digital file of the pattern for about 6 months, so if God forbid it breaks, we don't need the pattern back. We can retain files for repeat orders if requested.

Here are our monolithic and insulating glass normal size tolerances. Shower door orders are fabricated to “edgework tight” tolerances without special request. Be sure to note the tolerances that you need if they are tighter than these standard tolerances.

### **MONOLITHIC GLASS SIZE TOLERANCES**

| THICKNESS   | CLEAN CUT | EDGEWORK STANDARD | EDGEWORK TIGHT |
|-------------|-----------|-------------------|----------------|
| 3/32"- 1/4" | +/- 1/16" | +/- 1/8"          | +/- 1/16"      |
| 3/8"        | +/- 3/32" | +/- 3/16"         | +1/16" – 1/8"  |
| 1/2"        | +/- 1/8"  | +/- 1/4"          | + 1/16" – 1/8" |
| 3/4"        | +/- 3/16" | +/- 3/8"          | +1/8" – 3/16"  |

"Rule of Thumb"

"+/- 1/2 thickness"

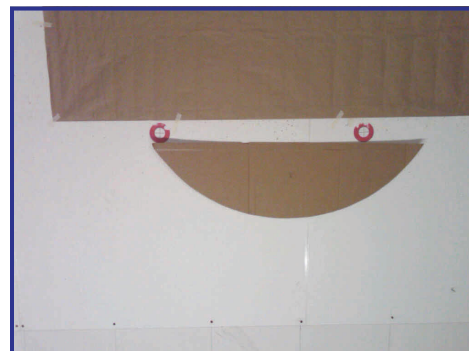
"+/- 1/4 thickness"

### **INSULATING GLASS SIZE TOLERANCES**

| DIMENTIONAL TOLERANCE |               |              |
|-----------------------|---------------|--------------|
| SIZE                  | RECTANGLES    | SHAPES       |
| Up to 30"             | +1/8"/-1/16"  | +3/16"/-1/8" |
| 30" – 60"             | +5/32"/-1/16" | +3/16"/-1/8" |
| 60" – 84"             | +3/16"/-1/16" | +1/4"/-1/8"  |
| Over 84"              | +1/4"/-1/16"  | +3/8"/-1/8"  |



Craft paper ripples and loses dimensional accuracy. Pencil lines don't provide enough contrast.



Pattern that is cut to actual size provides good contrast.