

TECHNICAL BULLETIN
Fabrication Guidelines

The American Society for Testing and Materials (ASTM) specification C 1048-04 for Heat-Treated Flat Glass, a specification to which we warrant our heat-treated glass, offers guidelines for fabrication and allowable tolerances as summarized below.

Placement of Holes

The minimum distance from the rim of a hole to the nearest edge of the glass must be $\frac{1}{4}$ " or 2 x glass thickness, whichever is greater. Tolerance for location of hole from specified edge is $\pm \frac{1}{16}$ ". Examples for common glass thicknesses are illustrated in figure 1 below.

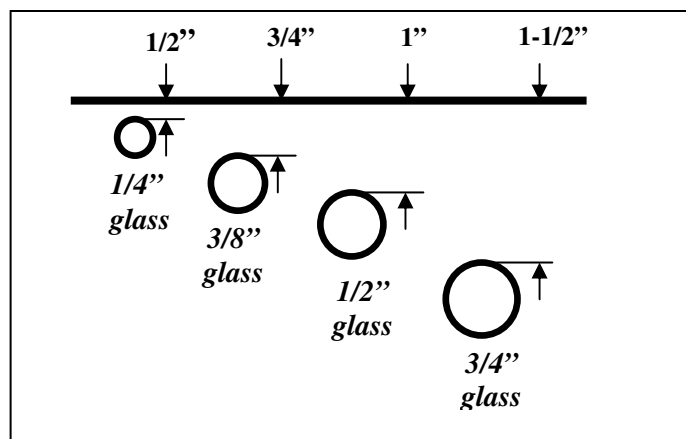


Figure 1 **Hole to Glass Edge Location**

The minimum distance between the rims of adjacent holes must be $\frac{3}{8}$ " or 2 x glass thickness, whichever is greater. Tolerance for dimension between hole centers is $\pm \frac{1}{16}$ ". See figure 2 for distance examples in common glass thicknesses.

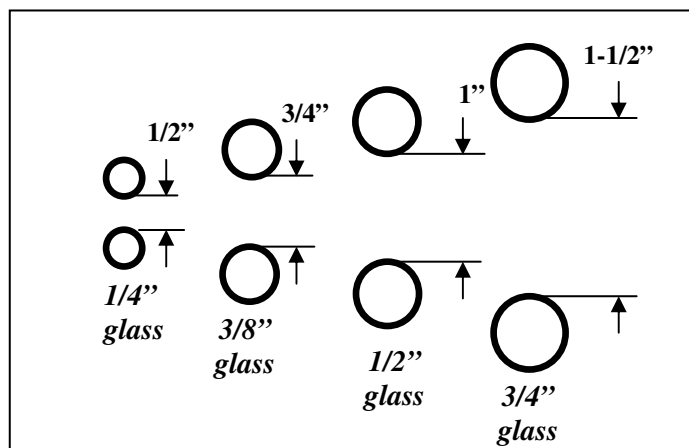


Figure 2 **Hole to Hole Location**

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Fabrication Guidelines (Continued)

Holes in the vicinity of a corner must be positioned so that the nearest edge of the hole is a minimum distance from the corner of 6.5 x the glass thickness.

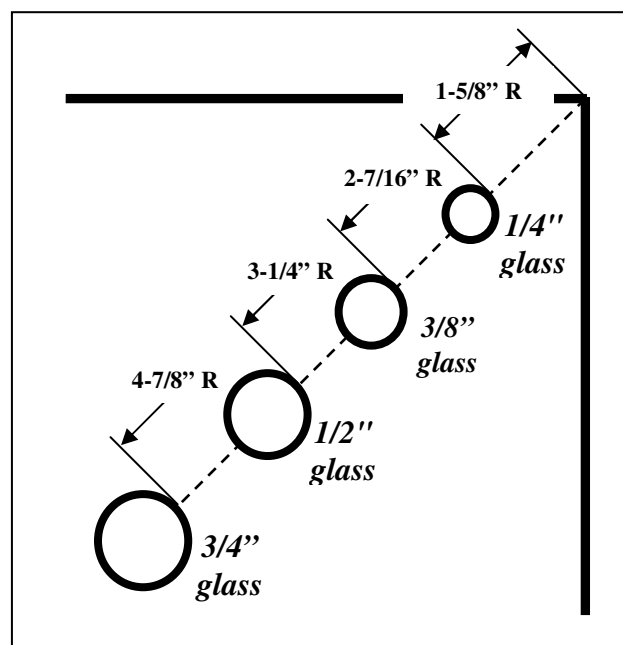


Figure 3 Hole to Corner Location

Circular holes shall have a diameter no less than 1/4" or equal to the glass thickness, whichever is greater. Notches and cutouts must have a radius corner \geq to the glass thickness. Tolerance of hole diameter is $\pm 1/16$ ".

Dimensional tolerances of notches and cutouts is $\pm 1/16$ " for glass thicknesses $< 1/2$ " and $\pm 1/8$ " for glass thicknesses of 1/2" or greater.

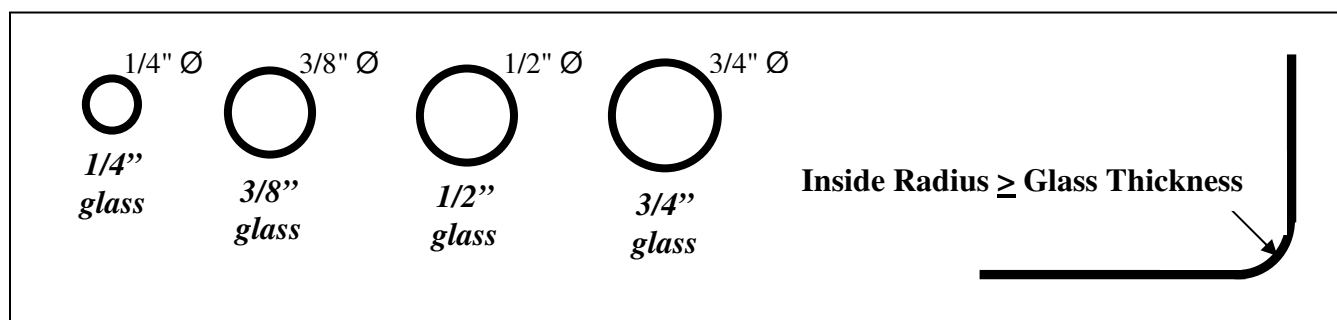


Figure 4

Minimum Hole Diameter and Notch Radius

NOTE: Currently there is much glass and door hardware available on the market that requires fabrication that does not meet the minimum ASTM guidelines. When we are requested to furnish fabrication that does not comply with these guidelines we may attempt to do so with the explicit understanding, by way of this technical bulletin, that the glass, which is otherwise certified to meet the applicable criteria of the ASTM C-1048 specification, will not meet the fabrication guidelines of the specification.

Easy Reference Hole Placement Guidelines for Tempered Glass

