

ASTM C1048 TEMPERED GLASS HOLE LOCATION GUIDELINES

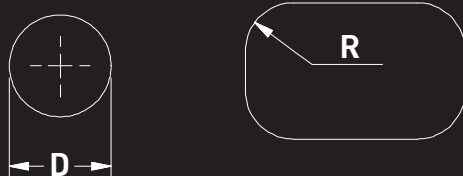
The guidelines for hole location are consistent with procedures stated in section 7.9 of the ASTM Standard Specification C 1048 (Standard Specification for Heat Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass).

7.9.3 - Minimum Dimension of Holes - Circular holes have a minimum diameter of 6.4mm (1/4") or the thickness of the glass, whichever is greater.

In other than circular holes, any corners must have fillets, the radius of which must be equal to or greater than the thickness of the glass.

7.9.4 - Dimensional Tolerance of Holes:

7.9.4.1 Tolerance of hole diameter shall be $\pm 1.6\text{mm}$ (1/16 in.).



$D = 6\text{mm}$ (1/4 in.) or t , whichever is greater
 $R \geq t$

Where:

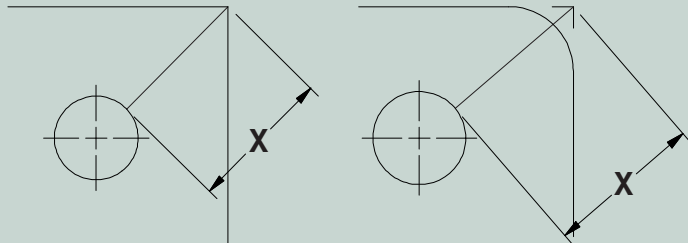
D = Minimum diameter of a hole

R = Radius

t = Glass thickness

GLASS CORNER (X)

Holes that are located near a glass corner must be a minimum of 6.5 times the glass thickness (t) from the edge of the hole to the glass corner when the corner angle is 90° or more.

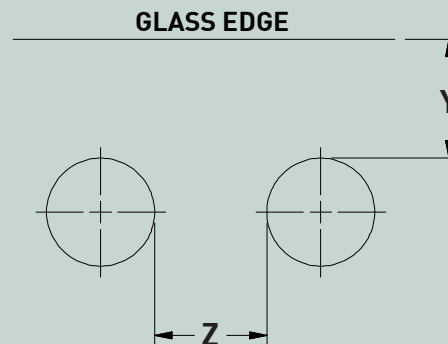


$$X = 6.5t$$

$t = 1/4"$	$X = 1 5/8"$
$t = 3/8"$	$X = 2 7/16"$
$t = 1/2"$	$X = 3 1/4"$

GLASS EDGE (Y)

The closest distance between the edge of a hole and the edge of the glass is 1/4" or two times the glass thickness (t), whichever is greater.



$$Y = 2t$$

$t = 1/4"$	$Y = 1/2"$
$t = 3/8"$	$Y = 3/4"$
$t = 1/2"$	$Y = 1"$

DISTANCE BETWEEN TWO HOLES (Z)

The closest distance between the edges of two holes is 3/8", or two times the thickness (t) of the glass, whichever is greater.

$$Z = 6.5t$$

$t = 1/4"$	$Z = 1/2"$
$t = 3/8"$	$Z = 3/4"$
$t = 1/2"$	$Z = 1"$