

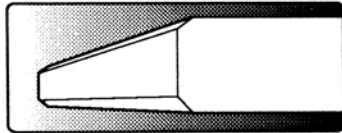
GLASSource

GLASS FABRICATION SPECIFICATIONS & GUIDELINES

From prototype to production, GLASSource can handle all your glass and mirror needs!

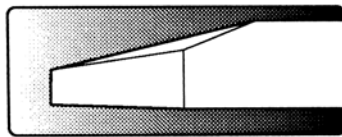
We specialize in new or custom tooling requests for those uniquely shaped products, plus, we carry a complete inventory and what we don't have is just a phone call away.

That's hassle free service! Whatever your glass needs count on GLASSource!



Flat Polished Edge

Available in 1/8", 3/16", 1/4", 3/8", 1/2" and 3/4" glass.
For squares, rectangles, circles and patterns.

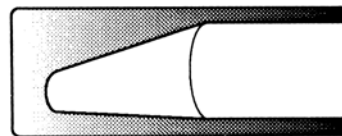


Beveled Edge (up to 1 1/2" on patterns, up to 2" straight line)
Available in 3/16", 1/4", 3/8", 1/2" and 3/4" glass.
For squares, rectangles, circles and patterns.



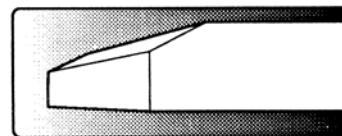
Waterfall Edge

Available in 1/2" and 3/4" glass.
For squares, rectangles, circles and patterns.



Pencil Polish Edge

Available in 3/16", 1/4", 3/8", 1/2" and 3/4" glass.
For squares, rectangles, circles and patterns.



Chamfer Edge

Available in 1/4", 3/8", 1/2" and 3/4" glass.
For squares and rectangles.



O.G. Edge

Available in 1/2" and 3/4" glass.
For squares, rectangles, circles and patterns.



Mitre

Available in 1/4", 3/8", 1/2" and 3/4" glass.
For squares and rectangles.

Fabrication Services... Circle and Unique Shapes from 6 to 90 inches
Rectangle • Squares • Clipped Corners • Radius Corners • Inverted Radius Corners
Custom Beveling per Template • Holes • Tempering

PHONE
1-800-842-3205

FAX
1-616-842-2157

GLASSource

GLASS SPECIFICATIONS

Float glass is the finest glass commercially available today. It is made in a continuous ribbon close to one mile in length and according to government specifications (#DD-G-451d) contains certain flaws; such as bubbles, seeds, scratches, distortions, etc. The specification says that if a flaw on heavy glass (3/8" or thicker) cannot be seen in normal room lighting from a distance of eleven feet then it is considered to be perfect. *All glass has natural green tint which becomes more noticeable with thicker or larger glass.*

TEMPLATES & EXACT FIT SIZES

There is a nominal charge for glass held to closer than standard tolerances (see chart). Please specify when placing order.

Standard Tolerances

thick	rectangles	circles & shapes
3/16	±3/32	±1/8
1/4	±3/32	±1/8
3/8	±1/8	±3/16
1/2	±1/8	±3/16
5/8	±3/16	±1/4
3/4	±3/8	±3/8

Glass Weight

thickness	weight per sq. ft.
1/4"	3.3 lbs.
3/8"	5 lbs.
1/2"	7 lbs.
3/4"	10 lbs.
1"	14 lbs.

PLEASE NOTE:

- Shapes and Patterns may have extra setup charges.
- Tempering charges require a 3 sq. ft. min. per piece.
- Requests for "no logo" taken, but not guaranteed!
- Large quantities may be eligible for discounts. See your sales representative for details.

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Tempering
Min. 4" x 10" Max 71" x 168" Thickness 1/8" - 3/4" Restrictions as to hole fabrication and size apply. Call for details
Beveling
Can bevel down to 2" x 2" Can go up to 120" in length Shapes or straightline beveling Anything under 6" - \$10 setup
Edgework
Flat polish - 4" minimum Pencil Polish - 5" minimum CNC shape edging Can go up to 120" in length
Cut-Outs
Single plug cutout (2" x 4") Double plug cutout (4" x 4") Cutout/corner notches Pass-thru notches CNC cutouts <i>Holes, cutouts & notches will have some roughness and chipping unless ordered as a "finished edge."</i>
Holes, etc.
Price varies by glass thickness. Sizes available: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4", 13/16", 1", 1 3/16", 1 3/8", 1 1/2", 2", 3", 4" <i>Custom hole sizes available. Sink cutouts any size or shape also available on a custom order basis.</i>
V-groove/Plategroove
Per Quote

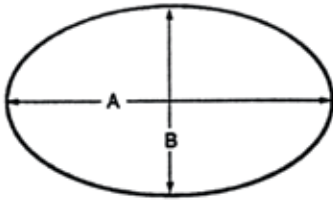
We can make any size hole (*not listed*) over 1 1/4" diameter in hexagon, circle, oval or free form shape with ground or polished edges; however, a CNC setup charge will be applied.

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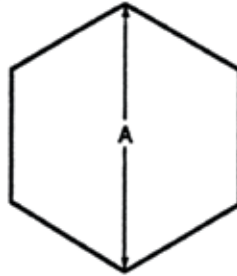
GLAS*Source*

Example
2" Clip Corner

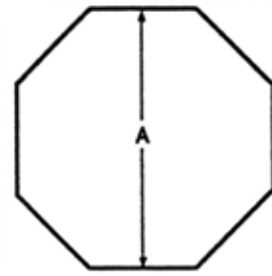
"clip corners" are always measured from the corners, *not* the diagonal length!



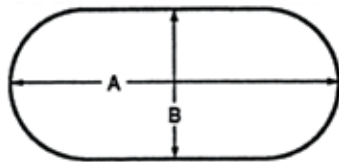
Elliptical Oval
Dim.A _____
Dim.B _____
Pattern Required



Hexagon
Dim.A _____



Octagon
Dim.A _____



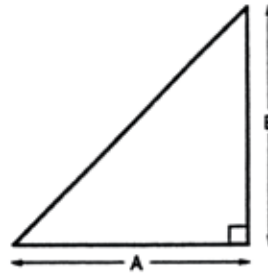
Race Track Oval
Dim.A _____
Dim.B _____



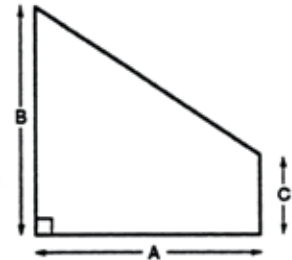
Boat Shape Oval
Pattern Required



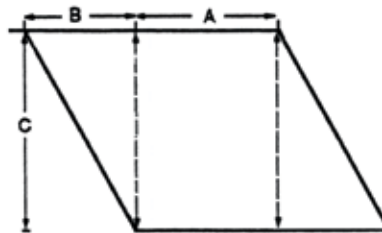
Super Ellipse
Pattern Required



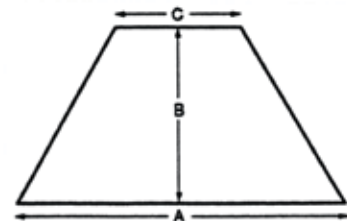
Right Triangle
Dim.A _____
Dim.B _____



Trapezoid
Dim.A _____ Base
Dim.B _____ Height
Dim.C _____ Top



Parallelogram
Dim.A _____ Top A
Dim.B _____ Top B
Dim.C _____ Height



Isosceles Trapezoid
Dim.A _____ Base
Dim.B _____ Height
Dim.C _____ Top

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GLASSource Tempered Safety Glass Products

In order for tempered glass to meet federal specifications certain guidelines must be met; including but not limited to holes, sizes, location, inside/outside corner, corner radius, glass thickness limitations, and edgework types. See www.GLASSource.net for a full explanation of tempered specifications and limitations.

LIMITED EXPRESS WARRANTIES – GLASSource warrants to its original purchaser only, subject to the following conditions and restrictions for the period of time set forth for each product:

TEMPERED GLASS – GLASSource warrants for a period of one year from the date of GLASSource’s sale that its tempered glass will meet, at the time of sale, specifications as defined by ASTM Standards Specification for heat Treated Glass C 1048-90, Kind FT, Condition A and ANSI Z97.1-2004, CPSC 16 CFR 1201 Category II.

CAUTION: GLASSource tempered glass must not be modified or receive any fabrication such as grinding, drilling, sand blasting, etc., subsequent to tempering. Such modification or additional fabrication may seriously weaken the glass or impair its tempered characteristics and also **VOIDS** any GLASSource warranty provisions.

It is recommended that tempered glass not be exposed to temperatures at or in excess of 400 degrees F for any sustained period of time. Such exposure can result in loss of temper, causing glass to fail to meet the above specifications and may further result in glass breakage.

- 1) **EXPRESS WARRANTIES**– GLASSource hereinafter warrants its products to its original purchaser only, subject to the following conditions and restrictions for the period of time set forth for each product.
 - a) **FULLY TEMPERED GLASS** – GLASSource warrants that it is fully tempered as defined by Federal Specification ASTM C 1048-90 ANSI Z97.1-2004 and CPSC16 CFR 1201 Category II.
 - b) This warranty shall be void under any of the following circumstances: If the glazing installation does not conform to the industry standards according to GANA/FGMA glazing manual; If the material has been abused or has not been stored and/or installed in a good workmanlike manner; or if the material is installed outside of the continental limits of the United States.
- 2) **LIMIT ON REMEDIES IN THE EVENT OF FAILURE** –
In the event any GLASSource product fails to perform as warranted. GLASSource’s sole responsibility and PURCHASER’S sole and exclusive remedy under any warranty, contract, negligence or other claim of liability shall be limited to a refund of GLASSource original selling price or, at GLASSource option, replacement of the product without charge F.O.B. the shipping point nearest the product’s installation. In no event shall GLASSource be liable for: cost incurred in the removal of failed products, the installation of replacement products, or for any incidental or consequential damages incurred as non-personal injury losses. In the event a product is warranted, only for the remainder of the warranty period applicable to original product will remain.
- 3) **UNWARRANTED PRODUCTS** - The only products covered by GLASSource warranties are set forth in Part 1 above. Products not expressly warranted by GLASSource (including glass breakage), are not covered by any warranty, either express or implied.
- 4) **DISCLAIMER OR IMPLIED WARRANTIES FOR ALL GLASSource PRODUCTS** – GLASSource disclaims all implied warranties, including the implied warranties of merchantability of fitness for a particular purpose. No distributor, GLASSource representative, agent or employee has the authority to alter or change a GLASSource product warranty either orally or in writing.
- 5) **NON-WAIVER** – Waiver by GLASSource of a breach of any of the terms and conditions of this sale shall not be construed as a waiver of any other breach.
- 6) **ADDITIONAL INFORMATION** – If you wish to obtain additional information or resolve questions concerning interpretation of any warranties of GLASSource, please contact us.

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