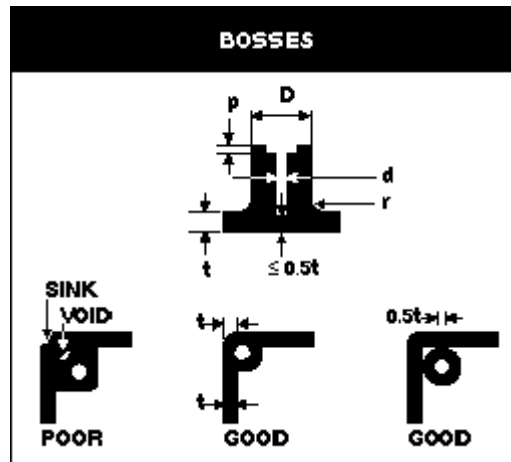


Part Design & Assembly Mechanical Attachments

Mechanical Methods

Mechanical methods include techniques such as screw fastening, riveting, or snap-fits which employ a fastener or physical means of part assembly. These techniques are used for applications requiring non-destructive disassembly or rapid assembly with low capital investment. Unlike other fastening methods, these techniques are readily used for joining all materials, including metals. Plexiglas acrylic resins may be joined with themselves or other materials, providing appropriate design considerations have been taken.



Accumulation of material, not only in walls, but at joints and corners should be avoided by coring out. Good practice aims at minimizing risk of sink marks, voids and deformation in the design process.

Plexiglas® acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See MSDS for Health & Safety Considerations.

We manufacture and market PMMA resin and sheet products under the brand name Plexiglas® in North and Latin America, and under the brand name Altuglas® in Asia Pacific, Europe, Africa and the Middle East. Altuglas® and Plexiglas®, Solarkote®, are registered trademarks of Arkema.

Screw Attachment Design Guidelines For Plexiglas Acrylic Resins

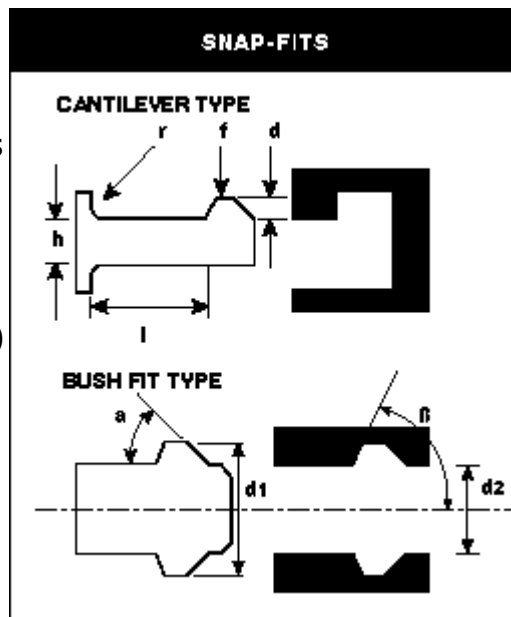
	Plexiglas V-Series	Plexiglas MI7	Plexiglas DR
Pilot hole (d)	> or = 0.90 x screw OD	> or = 0.90 x screw OD	> or = 0.85 x screw OD
Boss diameter (D)	> or = 2.5 d	> or = 2.5 d	> or = 2.0 d
Screw guide (p)	> or = 2mm	> or = 2mm	> or = 2mm
Base radius (r)	> 0.6t	> 0.6t	> 0.6t
Preferred screw type	BT thread cutting	BT thread cutting	BT thread cutting

Snap-fit assemblies must be designed within the elastic limitations of the materials employed. The following formulas may be used to estimate the percent deformation of Plexiglas acrylic resin for a given design.

For Cantilever: $e = d / (0.67 \times l^2 / h)$

For Bush Fit: $e = (d1 - d2) / d1 \times 100$
 β angle range for a dismountable system = 40-50°

β angle range for a non-dismountable system > or = 50°
 a angle should be between 20° and 30°



Snap Fits Design Guidelines For Plexiglas Acrylic Resins

Plexiglas® acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See MSDS for Health & Safety Considerations.

We manufacture and market PMMA resin and sheet products under the brand name Plexiglas® in North and Latin America, and under the brand name Altuglas® in Asia Pacific, Europe, Africa and the Middle East. Altuglas® and Plexiglas®, Solarkote®, are registered trademarks of Arkema.

Plexiglas V-Series Plexiglas MI7 Plexiglas DR

Permissible Deformation (e)	2%	3-4%	4-5%
-----------------------------	----	------	------

PLEXIGLAS[®]
BY ARKEMA

SOLARKOTE[®]
BY ARKEMA

Plexiglas[®] acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See MSDS for Health & Safety Considerations.

We manufacture and market PMMA resin and sheet products under the brand name Plexiglas[®] in North and Latin America, and under the brand name Altuglas[®] in Asia Pacific, Europe, Africa and the Middle East. Altuglas[®] and Plexiglas[®], Solarkote[®], are registered trademarks of Arkema.