



Adhesive Backing for Hanging Your Arena Mirror

Mirrored acrylic is a reflective film applied to a substrate. When the substrate is affixed to another surface, both of these materials will in time conform to the irregularities of the supporting surface. A non-smooth, non-planar surface will cause localized bending of the mirrored sheet and distortion in the reflected image.

For best results, mirrored sheets should be mounted to a smooth, rigid, sturdy flat backing such as 5/8" or 3/4" plywood. The surface should be coated with a high quality paint or sealant to cover pockets and seal out moisture. The entire surface should then be covered with mastic or another type of pressure sensitive adhesive.

Solvent cementing of a mirror sheet with a hard-coated surface is not readily accomplishable due to the chemical resistance of the coating.

The best option is to drill oversized holes in the mirrored acrylic and hold it to the wall using screw fasteners. Do not over tighten the screw fasteners. Over tightening will cause dimpling and distortion.

Visual distortion is a function of viewing distance and material thickness. A thicker piece of material will be less flexible and therefore maintain better optical integrity. Correct installation and sufficient material thickness can reduce visual distortion but may not completely eliminate it.

Some adhesives may contain solvents such as toluene, ketones and hexane that can attack the backcoat. Adhesives with solvents of 5% or more are not recommended. Since numerous adhesives, cements, and mastics are available, they should be tested on expendable pieces prior to application. All tests should be applied at least 72 hours in advance to determine compatibility to the backcoat, the reflective coating and the acrylic itself. The following companies manufacture adhesives that are suggested for use with plastic mirror:

- Gunther Mirror Mastics, South Bend IN Phone# 800-227-6181
Products: Premier Pro-Mastic
- Palmer Products Corporation, Louisville, KY Phone# 800-431-6151
Products: Mirro-Mastic
- 3M, St. Paul MN Phone# 800-362-3550
Products: Fastbond #4323, 9500 PC Double Coated Polyester Tape , VHB Tape

Again we stress, before using any adhesives, cements, or mastics, please test expendable samples for at least 72 hours to determine suitability.