

Care & Maintenance

Chemically bonded acrylic joints



To insure maximum longevity of chemically bonded joints, it is important to conduct proper maintenance and not to cause premature degradation.

The preferred method for routine cleaning (removal of finger prints, smudges, etc.) is with lukewarm water, a mild soap or detergent, and a non-abrasive flannel cloth, chamois, or sponge. Care should be taken not to rub dirt or other particulate against the acrylic as this will abrade the surface. Removal of marine growth on the bond wet sides, or aquarium interiors, may be accomplished by using a loose knotted nylon cloth.

Never use household cleaners, scouring compounds, glass cleaners, bathroom cleaners, abrasive pads, wood or metal scrapers, alcohol, or solvents such as acetone, carbon tetrachloride, methyl ethyl ketone, or paint thinners. See 'BONDED CYLINDERS – for bubble/water tube applications' regarding crazing.

Anti-static acrylic polishes and liquids, which are available from Alternative Plastics Ltd., may be utilized to maintain the glossy surfaces of acrylic. These polishes may also be used to remove most minor scratches. Use a soft flannel cloth, or chamois, to apply a thin even coat of the polish to the acrylic. Let the coat of polish dry, then lightly buff with a clean flannel cloth. Do not use household furniture spray or automotive waxes for this purpose.

Deeper scratches can be removed by hand polishing with very fine grit polishing paste specifically made for use with acrylic. Apply the paste with a damp flannel cloth, cross-hatching the area of the scratch. First rub parallel to the scratch, then perpendicular to the scratch, repeat the process until the scratch is gone. Several applications may be necessary to completely remove deeper scratches.

Some repairs may be made to acrylic bonds and viewing panels. Repairs requiring sanding, grinding, filling and re-polishing should only be done by professionals. Improper, or poorly done repairs will cause crazing and degradation, which will lead to fracturing and ultimately to failure.

Since acrylic is a thermoplastic material it can be warped, distorted, or burned by exposure to excessive heat. High temperature sources should not be placed close proximity to acrylic viewing panels, bonds or aquariums. Open flame, space heaters, or photo floodlights should never be allowed to be adjacent to, or in direct contact with acrylic viewing panels or aquariums. Excessive heat and high temperatures over 80°C, must be avoided at all times. Temperatures between 30°C and 80°C will cause problems depending on the application so please consult Alternative Plastics Ltd. if you aim to employ tanks with these service temperatures.