



Cleaning and Usage Instructions for injection molded refractors

Acrylic and polycarbonate components are naturally dirt resistant due to their typically hard and smooth surfaces.

Cleaning is recommended whenever dirt is plainly visible on the product, or every three years, whichever occurs first.



CLEANING INSTRUCTIONS

There are several ways to clean acrylic or polycarbonate optical components

1. For normal cleaning of loose dirt and dust, use an anti-static wipe cloth.
2. Use a clean, lint-free cloth and a mild soap solution. Rinse with warm water and let air dry or blow dry with a clean (preferably destaticized) air supply. This will work to remove fingerprints.
3. To clean excessive dirt or caked on dirt, please use ultrasonic cleaning. This requires specialized equipment and is most useful when cleaning a large quantity of components.
4. You can use most products that are designed to be used for cleaning glass windows or acrylic bathtubs.

DO NOT USE THE FOLLOWING PRODUCTS:

- 1) Acrylic polishes
- 2) Any products which contain the chemicals Methanol, Isopropyl, Acetone or MEK

USAGE INSTRUCTIONS

1. Optical components should be handled with the same care as highly polished aluminum reflectors.
2. Handling using clean cotton gloves.
3. Please note the following issues when installing optical components during building construction.
 - a. Use the same precautions you would use for glass or aluminum reflectors.
 - i. You may see a surface accumulation of concrete/drywall dust, atomized floor waxes and floor sealants.
 - ii. If left exposed to construction debris or high levels of dirt and dust, deposits will accumulate on the surfaces. Clean the component according to the Cleaning Instructions above.
 - iii. Paint is not easily removed from any prismatic surface (glass or plastic). Refractor, and other optical injection molded components, are not resistant to spray paints.
 - iv. It is recommended that you clean the parts after short term exposure to high concentrations of these materials
 - v. It is recommended that you clean the Refractor after the general construction site clean up is completed.

WHERE NOT TO INSTALL AN ACRYLIC OR POLYCARBONATE OPTICAL COMPONENT:

- a. Environments in which oils or oily dirt will condense on the surface.
 - i. This is a problem with all optical components, including glass. Oil wets the optical surface and changes the designed optical properties of the surface. This is especially true for prismatic surfaces.
- b. Environments in which chlorinated hydrocarbons, chlorinated alcohol or acids can condense on the surface (such as cutting oils used in machine shops).
 - i. Acrylic or polycarbonate may be attacked by these chemicals resulting in stress cracking and/or discoloration.
- c. In applications so hot that the maximum operating temperature on the component exceeds the recommended maximum use temperature of the material.

