

Installation and Maintenance of LUMASite® sheets

Most varieties of LUMASite® sheets, including Frost-SOS, are acrylic panels reinforced with glass fibers that are cast into the panels during manufacture. Some varieties have a micro-grain gloss finish on both sides. Other varieties have a micro-grain gloss finish on one side, and a cast-in satin finish on the other (these varieties are denoted by an SOS suffix).

Protect the surfaces during fabrication. Sheets up to .125" thickness are readily cut using a power-shear capable of cutting 10 gauge mild steel. Saw-cutting is readily accomplished using abrasive blades of the kind used to cut masonry. Use a relatively slow feed rate. (Although carbide-toothed circular blades can be used for small cutting jobs, the blade will dull quickly and may overheat.)

Use a high-speed twist drill (or hole saw for larger holes) to drill LUMASite® sheets. Clamp the sheet to a firm backing for drilling. Use water if necessary to cool the drill (dip the drill tip into a cup of water). Wear eye protection when using power tools. Wear a dust mask if necessary to avoid breathing the saw dust. Refer to the MSDS for other important safety information.

LUMASite® sheets are ordinarily installed by mechanically fastening them in place. Pre-drill slightly oversize holes for fasteners. Use metal fasteners, with bonded (metal/rubber) washers to fasten panels in place. In vertical applications, hang the panel first (install fasteners adjacent to the top edge, but no closer than ½" from the edge) such that the panel is not resting on the bottom edge. Then install remaining fasteners working from top to bottom. Most sealants, including silicone varieties, work satisfactorily. For outdoor applications, acrylic foam tape is recommended under joints and fastener lines.

LUMASite® sheets are often used (usually in .090" or .125" thickness) as lighting diffuser panels, installed in a T-bar grid. Refer to the Lighting Specification page, which includes guidelines for panel sizes and thicknesses.

Maintenance of LUMASite® sheets after installation primarily involves cleaning the surfaces of the material. Most dirt and soiling are readily removed using a non-abrasive soap and water applied with a sponge or soft brush, then rinsing. Do not use abrasive soaps or polishes. Note that using abrasive cleaners on the surface can change the reflectivity (making a shiny spot on the satin surface, for example), and can otherwise scratch the surfaces.

Note that LUMASite® sheets are acrylic-based materials, and some solvents will damage the surface. Do not use chlorinated solvents, paint removers, lacquer thinner, acetone or methyl ethyl ketone. To remove marker, crayon and some paints from LUMASite® sheets, rubbing alcohol or mineral spirits can be used (with adequate ventilation and awareness of flammability). "Soft Scrub" cleaner can also be used on LUMASite® sheets.