

Commercial Skylight Cleaning, Maintenance, and Storage

A. General

Your new skylight is engineered to be virtually trouble free. A good routine of maintenance will help maintain the aesthetic quality and functional integrity found in every unit. Along with occasional cleaning, regularly check all sealant, gasketing, and flashing for possible failure, or erosion and check retainer screws for loosening that may introduce water infiltration. Skylights are designed to function without the use of large quantities of wet sealants and/or caulking material. Some systems do, however, require the use of a sealant in specific areas. Should your skylight develop leaks, contact Customer Service team prior to applying any sealants (1-800-888-3589). Factory trained personnel can direct you in isolating the problem area. Use only approved gasketing available through your nearest sales representative. Maintenance checks should include inspecting and, if necessary, clearing all weep holes. Tighten any screws or fasteners (with hard tools only) that are intended to hold glazing frames in place and clear any collected debris that may have accumulated across the exterior of the top or head of skylights. If your unit includes exterior gutter systems, they should be kept free of all debris. It is a good idea to periodically check all glazing for scratches or abrasions. If at any time a fracture is discovered in a glazing line, replace it immediately.

B. Cleaning and Maintenance

GLASS

Limit cleaning solutions to soap, or ammonia, and warm water. Use care when washing with industrial solvents containing elements such as carbon tetrachloride since they would mar or dull the surface. Avoid abrasive agents and bristle brushes. Sponges, soft cloths, and chamois are recommended. (Soil may be removed from glass by any conventional method.)

ACRYLIC/POLYCARBONATE

Thoroughly pre-rinse with warm water to loosen and wash away surface residue, grit and grime. Use a thoroughly diluted mild dish soap or detergent and water. Apply with a soft cloth or moist non-abrasive sponge applying only light pressure. Rinse with lukewarm clean water and dry by blotting with a damp cloth or chamois. Do not leave cleaners sitting on polycarbonate domes for periods of time rinse off immediately. **CAUTION:** Abrasives will scratch the surface of acrylic! Never use instruments such as a putty knife or razor blade to remove spots from glazing. Never use solvents such as ammonia or ammonia-based cleaners (some glass window cleaning fluids), gasoline, acetone, carbon tetrachloride, or lacquer thinner, since they can attack the acrylic/polycarbonate surface. Do not clean the acrylic or polycarbonate abrasive cleaners or high alkaline cleaners (high pH). Do not clean the acrylic or polycarbonate in direct sunlight. Aliphatic naphtha (no aromatic content) or kerosene may be used to remove grease, oil and roofing cements from acrylic products. Paint can often be removed from acrylic by applying a paste consisting of wallpaper paste and a 10-20% solution of caustic soda or trisodium phosphate and water, followed by a thorough rinsing with warm water. **CAUTION:** Caustic soda and trisodium phosphate attack the skin very quickly. Extreme care should be exercised when working with these materials. To be remove paint from polycarbonate, thoroughly pre-rinse with warm water, Using Naphtha VM&P grade, Isopropyl Alcohol or Butyl Cellosolve™, gently rub the area with a soft, non-abrasive cloth. Do not apply solvent cleaners under direct sunlight

or during high temperatures. Immediately rinse thoroughly with lukewarm clean water. To prevent water spots, thoroughly dry the glazing with a dry soft cloth. The edges of coated polycarbonate sheet are not protected with an abrasion and chemical resistant hard coating. Do not allow cleaning solutions and solvents to pool along the edges for any length of time. Always rinse edges thoroughly with generous amounts of lukewarm clean water. To remove protective film from dome, use 30:70 mixture of alcohol to water.

ALUMINUM

Mild hand soap and warm water may be safely applied to any of the aluminum finishes. Avoid indiscriminate use of steel wool, strong acids, and abrasive cleaners. When used properly, industrial cleaners may be used safely and are highly effective. Test the cleaning solution to be used on an unobtrusive section of the finish. Use the same concentration and technique that will be used for the entire job. Let the cleaner remain in place for the same time. Allow it to dry and inspect for stains. Test lacquered and painted finishes for softening and possible dissolution. Avoid exposing glazing materials to solvents, brushes, steam, and abrasives when using any aluminum cleaning procedures. Avoid using cleaners in extreme heat or cold. For best results, outdoor cleaning should be done on mild cloudy days or in the shade. Water-based cleaners should be thoroughly rinsed with water, after which this part of the area should be allowed to dry or be wiped dry. Cleaners containing wax, oil or silicones are removed with a dry cloth. Be sure to remove all traces of cleaner from cracks and corners.

MILD SOAPS AND NON-ETCHING CLEANERS that can be applied with bare hands may be used for cleaning aluminum finishes. Detergents too strong for the hands, such as some automatic dishwasher detergents, should be spot tested first. Some of these can bleach paint and discolor non-finished and anodized aluminum. Non-etching cleaners remove soil without attacking the metal or its finish. Some mixtures may irritate the skin on contact. Rubber gloves or a long-handled fiber brush should be used. After cleaning, the aluminum should be thoroughly washed with clear water and dried.

SOLVENT CLEANERS are more effective on stains and soils than cleaners in the first group. Solvent and emulsion cleaners may be used without difficulty on bare, anodized, conversion coated and porcelainized aluminum. When used on painted (and lacquered) finishes, solvent and emulsion cleaners can remove many of the paints and clear organic coatings (lacquers) used with aluminum. Both mild cleaners and the solvent-emulsion cleaners will remove dirt and some stains. They will not, however, restore the appearance of aluminum that has weathered nor remove heavy grime encrustation. For these conditions a more aggressive cleaner is required.

ABRASIVE CLEANERS will restore weathered aluminum and remove most stains and grime. These cleaners are manufactured and sold under various generic descriptions including polish, cleaner, cleaner-polish, wax-cleaner, wax polish, metal brightener, scouring powder and the like. Their effectiveness on various soiled and darkened aluminum depends on their formulation and vigor of application. Abrasive cleaners contain abrasives to which water, oil, wax, silicones, soap and an acid or alkalis may be added, either in singles or in combination. The abrasives remove the dirt and surface oxidation; the soaps, acids and/or alkalis clean. Traces of wax, oil, or silicones remain behind after the compound has been applied and removed. They provide luster and a moderate amount of protection. Abrasive cleaners containing fine grit or polishing agents may be used with care on all aluminum finishes. Care is necessary because even the finest polishing agent is an abrasive and prolonged rubbing may dull a bright specular finish in time. For the ultimate in specular finishes, the metal must be buffed. Household cleaners often contain coarse abrasives. They should never be used on any surface other than porcelain without caution. Cleaners containing moderately coarse grit may be used freely on porcelain finishes only. All other finishes require considerable caution. Moderate abrasives can dull a bright finish in a relatively short time. Cleaners in this group are often used to remove heavy soils and oxides prior to final cleaning and polishing with a fine grit cleaner. When this is done the abrasive cleaner must be thoroughly removed before the fine polish is applied, otherwise, a few grit particles that remain on the surface will produce noticeable scratches.

SMOKE VENTS

Smoke vent fusible links should last indefinitely when installed in applications that are within the design specifications. However, there are many industry standards and local codes that govern the frequency in which fusible links are to be changed out in order to meet industry and governmental best practices for a given application.

In the event the smoke vents need to be opened for inspection by authorized fire personnel, it is recommended there also be qualified personnel onsite to assist. Two people are required to properly latch the units after opening to help prevent possible personal injury.

C. Handling & Storage

Handling

Glass panes are extremely heavy. The use of glazier's suction cups is highly recommended. Acrylic domes are comparatively much lighter; however, they are very fragile if racked or twisted. A minimum of two people should be utilized to carry any domes larger than about 3'0" square.

Storage

GLASS: Glass, like all glazing, should remain in its packing crate until ready to install. Cover the crates with good quality plastic or tarpaulin to protect them. Raise the crate to allow free air movement. Store glass in a vertical position. Avoid exposing glass to extreme temperatures and harsh industrial solvents.

ACRYLIC/POLYCARBONATE: Due to the nature of the material to "expand" and "contract", special care should be used to avoid extreme temperatures. Avoid exposing acrylic to extreme heat. Acrylic will begin to soften at 260 degrees to 275 degrees. Avoid stacking domes on hot asphalt surfaces or in direct sunlight as this will produce a magnification effect where the top domes act as "focusing dishes" to concentrate heat to the lower domes resulting in deformation. Use material as soon as possible. Do not expose masked acrylic to high temperatures, or it will become very difficult to remove the masking. Do not place plastic glazing or plastic glazed skylight units directly on roof surfaces or other similar surfaces unless elevated to allow air flow under units. **Failure to do so will result in distortion of glazing.**

REMOVAL OF MASKING FROM ACRYLIC AND POLYCARBONATE: You can remove the paper masking with a cardboard tube by rolling the masking around it. All masked sheets should be kept away from heat and sunlight, and masking should be removed soon after receipt. If the adhesive has hardened, moistening it with aliphatic naphtha, hexane or kerosene will help soften it. Do not use gasoline or sharp-edged objects such as razor blades, etc.

ALUMINUM: All aluminum should be placed on edge and separated to allow free air movement. Ideally, all aluminum should be installed within a few days. If longer storage periods are foreseen, a protective plastic or tarpaulin should be used. The protective cover should not touch the aluminum and provide a sufficient air space above the surface of the aluminum to encourage free air movement. The tarpaulin must be free of fungicides containing heavy metals or chlorides. Aluminum that comes packaged in ordinary paper or cardboard should

NOTE: These procedures are suggestions only. Since actual procedure and use is beyond our control, these suggestions should not be interpreted as having any guarantee of results. VELUX reserves the right to alter any of this information without prior notice, and will take no responsibility for unsatisfactory results from improper use of applicable products.