

780 Skylight

Operable / Fixed Skylight Milgard Aluminum Window

780
SERIES
ALUMINUM



The 780 Series Skylight has been specifically designed to provide maximum thermal efficiency by incorporating a special polyurethane barrier between the inside and outside frame components. This thermal break combined with an inner-frame of extruded PVC plus insulating glass options and weather tight seals make the 780 Series a high performance skylight for use in any climate condition.

Milgard's Aluminum windows, doors, and skylights carry a Full Lifetime Warranty to the original single family homeowner covering both materials and labor. The Milgard Full Lifetime Warranty is fully transferrable up to 10 years. For complete warranty details visit milgard.com

Commercial, apartment, multi-family, and co-housing projects are covered by a 10-year warranty from date of manufacture, covering materials and labor, including the glazing unit.

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CONFIGURATIONS

Standard 780 Skylights are available in 2', 3' and 4' widths and in even feet up to 6' in length (maximum 16 Sq. Ft.). Operable versions are hinged on the top side. Maximum height on operable is 4'.

COMPONENTS

FRAME

Aluminum exterior frame components are made from 6063-T5 alloy with a structural wall thickness of .062". The 780 Series utilizes a thermal break for added insulation value. The poured-in polyurethane insulator is approximately 1/4" wide at the most narrow point and is used in all frame members. The exterior frame has a bronze anodized finishes with a standard .4" mil coating thickness.

The 780 Series is designed for clean lines and high visual appeal with maximum glass exposure. Its' precisely mitered corners provide strength and a detailed appearance with equal margins on all sides. Wide screw spacing on the mechanically joined corners ensure a rigid connection with a consistent dimension. All exterior corners are caulked with butyl-sealant for added protection from the weather.

The inner-frame is constructed of exterior grade, extruded white PVC which adds significantly to the insulation value to reduce energy consumption and condensation. This inner-frame is mitered and welded for an attractive interior appearance and added structural strength.

INSTALLATION/COVER FIN

The exterior frame measures 4 5/32" in height, of which 2 5/16" sit above the curb mount. The bottom 1 13/16" serve as a flashing leg. The flashing leg becomes the installation fin in fixed Skylight versions. See Section F for installation instructions.

NOTE: Roof curb flashing is provided by installer.

WEEP SYSTEM

A flashing leg extends around the perimeter of the frame, protecting the hidden weep holes, which run from the condensation drip leg through to the exterior. The weep is located in the base (low end) of the skylight.

CONDENSATION TRAP

A leg extends around the edge of the interior frame to serve as a condensation trap where moisture can collect and evaporate. This interior condensation trap is weeped to the outside for complete drainage.

GLAZING MATERIAL

An extruded vinyl glazing boot surrounds all edges of the 1" overall insulating glass units, which is then compressed into a close tolerance hollow in the exterior aluminum frame. The vinyl boot cushions the glass and provides a weather tight seal.

GLASS

Glass options utilize 1/8" tempered glass for the top lite, and 7/32" laminated safety glass in the bottom panel in 1" overall glazing. Skylights are available in clear, tinted, reflective, obscure, low-emissivity, and polished wire glass. (See Glass Section for types and description.)

OPERABLE CONFIGURATION

The 780 Series is designed to allow the exterior frame containing the glazing to hinge, creating an opening Skylight. Stainless steel hinges and a waterproof, flexible operator arm provide maximum durability. Operable versions come standard with an interior wood liner (1" x 4") and an integral insect screen.

OPERATOR

Both the manual and motor driven operators utilize a high-gear reduction, high-output torque drive, that generates a maximum sash liftweight of 80 pounds (maximum vent size: 16 square feet). The operator arm is a hardened steel chain designed for minimum deflection. The operator may be detached at the vent for outside access.

ELECTRIC:

Available with either a hand-held remote control or mounted switch to activate a 24 volt electric motor, which operates through a transformer on a standard 110V circuit. Both models are standard with a rain sensor, which automatically closes the Skylight with moisture contact.

NOTE: Rain sensor external plate must be cleaned annually to assure reliable operation. Electric models must be installed by a qualified electrician.

MANUAL

Standard configurations are supplied with a hexball or hook & loop drive system and a telescoping operator pole 6' - 10' in length.

SCREEN (OPENING VERSIONS ONLY)

Screen frames are aluminum, finished with three coats of color matched baked polyester for long term durability. Tension springs are integrated in the screen frame for a secure fit and easy installation from inside. The screen material is an attractive, low maintenance gray fiberglass mesh.

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OPTIONS

MANUAL/OPERABLE

Operable using remote wall mounted control

GLASS

Refer to Glass Section

TEST STANDARDS

See Test Data Section

INSTALLATION

The 780 Series Skylight fits over a raised curb in the roof rather than inside a rough opening like most windows. This curb should rise a minimum of 4" from roofing material and be constructed so its outside dimensions are 1 1/2" wider in total than the nominal size of the Skylight. The curb top must be angled to provide a minimum 2/12" (5 degree) pitch for adequate drainage. Roof/curb flashing must be used; supplied by others. Skylight must be caulked at curb to eliminate air leaks.

FIXED

The Skylight must be oriented with weep holes on the lowest side. Screws are furnished for attachment to the curb through pre-punched installation holes. Wood shims should be used at each installation hole to square the Skylight and provide "backing" for secure screw attachment. High quality exterior sealant must be used around the entire perimeter of the curbed top at the time of installation.

OPERABLE

Install Skylights so weep holes are located on the lowest side. High quality exterior sealant must be used around the entire perimeter of the curb top at the time of installation. Attach Skylight from the interior, using screws or nails through the integral wood liner into the curb. Wood shims, supplied by the installer, should be used at fastener locations and placed between the wood skylight liner and the inside of the curb.

NOTE: Roof flashing, shims and sealant for the curb are provided by the installer.

CAUTION: The use of petroleum based fuels or solvents as release agents in stucco wall installations or glass cleaning will chemically attack materials used in seals and other components, and voids the Milgard Full Lifetime Warranty. The use of wax based release agents is recommended.

Expanding foam for insulation purposes should not be used. Non-expanding foam or loose packed batt insulation is recommended.

Milgard's Full Lifetime Warranty does not extend to the 780 Operable Skylight's electric motor or the basic drive unit. These parts are separately covered by a warranty from the manufacturer of these sub components. Full details are provided with each Skylight and are available from Milgard upon request.

780 Aluminum Assembly Drawing

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