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## 5830 Venting Unit Skylight | Product Data Sheet

Frame	Glazing Make-Up	U-Factor	SHGC	VT
5830				

**Overview** **General** 5830 unit skylight series is made up of a welded PVC interior frame with condensation gutter and a fully welded aluminum exterior perimeter cap. Glazing is captured between these two elements and sealed with adhesive glazing tape. Weep holes direct condensation collected in the gutter system to the exterior of the skylight curb.

**Thermal Performance** **NFRC Rated** Certified by National Accreditation & Management Institute and rated by the National Fenestration Rating Council (NFRC) for thermal performance. Ratings are as shown above per glazing make-up.

**Overview** Certified by National Accreditation & Management Institute to North American Fenestration Standard/Specification (NAFS) [AAMA/WDMA/CSA 101/I.S.2/A440] for air and water penetration and structural loading - as required by the International Building Code, section 2405.5 Unit Skylights.

Glass glazed skylights that exceed the MST shown are validated per ASTM E1300 thus compliant per IBC Section 104.11.

**Structural Performance**

Glass glazed skylight(s) are labeled with the following certified product rating:

- MST: SKG-PG15 74" x 50"
- Design Pressure (Download): 135 psf
- Negative Design (Uplift): 15 psf
- Water Resistance: 6.0 psf

**Structural Design Water Penetration**

Highload / Snowload glass glazed skylight(s) are labeled with the following certified product rating:

- Design Pressure (Download): 560 psf
- Negative Design (Uplift): 15 psf
- Water Resistance: 6.0 psf

Plastic glazed skylight(s) are labeled with the following certified product rating:

- MST: SKP-C30 50" x 50"
- Design Pressure (Download): 30 psf
- Negative Design (Uplift): 30 psf
- Water Resistance: 6.0 psf

**Air Infiltration** Air infiltration per. Air leakage shall not exceed 0.06 cfm/sq. ft. of assembly surface when tested with a pressure of 6.24 psf.

**General**

Framing shall be installed and glazed by experienced workmen in accordance with the approved shop drawings, manufacturer's instructions and glazing standards.

**Primary Materials & Installation**

**Aluminum**

Aluminum extruded components shall be alloy 6063-T5 or 6063-T6, of sufficient thickness for this application, and as required per structural calculations; ASTM B 221. Aluminum sheet and plate shall be alloy 5052-H32 per ASTM B 209.

**Glass Glazing**

Dual seal silicone insulated glass units. Certified in accordance to IGCC/IGMA program. Glass thickness as required by the span and loads.

Laminated glass (if included) shall include a minimum interlayer thickness of 0.030"

		<ul style="list-style-type: none"> <li>Compliant to IBC 2405.2 and 2405.3 Screening.</li> <li>Compliant to UFC 4-010-01 criteria for Conventional Construction Standoff Distance per ASTM F 2248</li> <li>Saflex white laminated glass (if included) has a measured haze value greater than 90% per ASTM D1003.</li> </ul>
	Acrylic Dome Glazing	<ul style="list-style-type: none"> <li>Impact modified acrylic resin</li> <li>ICC-ES listings as CC2 approved plastic complying with Section 2606.4 of the IBC</li> <li>ANSI Z97.1 Safety Glazing Requirements</li> <li>Underwriters Laboratories (UL) listings as UL 94HB and UL746 Compliant</li> <li>Miami-Dade County Product Notice of Acceptance-Plastics</li> <li>ASTM D-4802 B-1 Plastics</li> <li>Plaskolite Optix White Acrylic Sheet has a measured haze value greater than 90%.</li> </ul>
	Copolyester Dome Glazing	<ul style="list-style-type: none"> <li>Rate of Burn, per ASTM D 635: CC1 classification</li> <li>ICC-ES listings as CC1 approved plastic complying with Section 2606.4 of the IBC</li> <li>ANSI Z97.1 Safety Glazing Requirements</li> <li>Miami-Dade County Product Notice of Acceptance-Plastics</li> <li>Light-transmitting plastic in accordance with Section 2608 of the IBC</li> <li>Weathering data in accordance to ICC-ES AC16</li> <li>Compliant to UFC 4-010-01 criteria for Conventional Construction Standoff Distance per ASTM F 2248</li> </ul>
	Polycarbonate Multi-wall Sheet	<ul style="list-style-type: none"> <li>Fire rating: Class A per ASTM E-84. Class CCI per ASTM D-635. Maximum Flame Spread/Smoke Development: 0/85</li> <li>Impact resistance, when tested in accordance with ASTM D 5420 (Drop Dart): &gt;72 foot-pounds (271.16 N m) for 1/4-inch (6 mm) thick material.</li> <li>Weather resistance, when tested for 1500 hours in accordance with ASTM G 53 and QUV 313B</li> <li>Coating integrity: Intact after testing period.</li> <li>Compliant to IBC 2405.2 and 2405.3 Screening.</li> <li>Compliant to UFC 4-010-01 criteria for Conventional Construction Standoff Distance per ASTM F 2248</li> </ul>
Operating Hardware	Manual	Truth Manual Chain Drive – Hand Crank or Pole Operated
	Electric	Solar Smart solar charged chain drive operator with RF Remote
Finishes	Exterior	Class II color anodic finish per AA_M12C22A32/A34 complying with AAMA 611. Mechanical finish non-specular as fabricated. Chemical finish etched medium matte. Anodic coating architectural Class II integrally colored or electrolytically deposited color coating 0.4 mil or thicker.
Primary Materials Cleaning and Maintenance	Compatible Sealants	Neutral-Cure silicone is required. Sealants containing Acetoxy (often listed as a base element in chemicals such as methyltriacetoxysilane) should NOT be used with IG units.
	General	Periodic cleaning and rinsing of all surfaces warm water with mild soap, using a dish soap such as Joy® or Palmolive® is recommended. Warm water is important to prevent thermal shock and glass breakage. Avoid cleaning in the hot sun.
Warranty	Summary	Glass and/or Lexan polycarbonate glazed units are warranted against manufacturer’s defects for a period of ten (10) years from date of purchase, thermoformed plastic glazing for five (5) years. Solar Smart operators (if used) warranted for two (2) years.
	Minimum Pitch	A minimum pitch of 2/12 is required for all glass glazing.
Cleaning and Maintenance	Stipulations	Replacement units will be remanufactured in the same size and type as the original units only and does not include removal of defective unit or installation of replacement unit.