

OPERABLE SKYLIGHTS



SOLAR INNOVATIONS®
ARCHITECTURAL GLAZING SYSTEMS

Truly innovative solutions.

Operable Skylights provide the benefits of increased natural light and ventilation. With a variety of operation possibilities, including Venting, Retractable, and 80°-90° Operable, the design possibilities are endless; each skylight is designed and built completely custom to fit any project. Solar Innovations® thermally enhanced systems and high performance glazing options mean that the SI6400 & SI6500 skylights are built to last, in virtually any climate or application.

FEATURES

PANELS:

- Custom configurations available
- Motorized and manual options available depending on system, operable intention, engineering approval
- LEED friendly system including recycled content
- Designed and manufactured in the U.S.A.

PERFORMANCE:

- Water performance up to 15psf
- Thermally enhanced utilizing thermal strut or thermal fill & debridge

GLAZING:

- Designed to accommodate almost any glazing infill including, glass, acrylic, polycarbonate, insulated metal panels

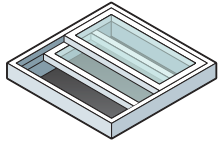
OPTIONS

FINISHES:

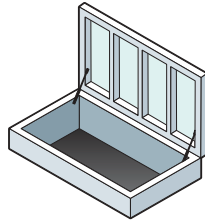
- Standard finishes
 - AAMA 2603: Bronze, White
 - AAMA 611 Class I Anodized: Clear, Dark Bronze
- Designer finishes
 - AAMA 2603: Hartford Green, Black Natural Clay, Sandstone
- Custom finishes
 - Powder coat finish: AAMA 2604 - 2605
 - Fluoropolymer (50% or 70%): AAMA 2604 - 2605
 - Wood veneer, metal cladding, foiling options
 - Dual color or dual finish options

ACCESSORIES:

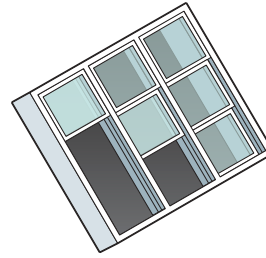
- Fixed mesh insect screen options



Retractable
2°-10° pitch recommended.
Manual or piston motor operation depending on configuration.

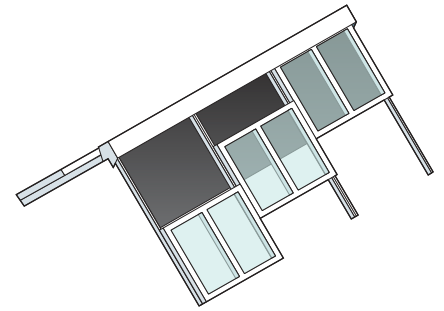


80°-90° Operable
Manual, air-filled piston assist.



On-slope Retractable

Tube motor and cable operation..



Ridge Retractable

FINISH OPTIONS

Paint AAMA 2603 (5 year warranty). Finishes available while in stock.



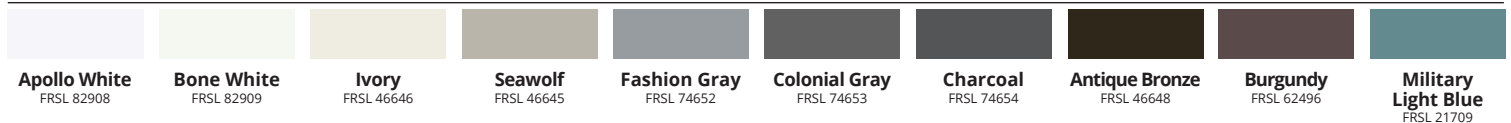
Anodized Additional cost



Powder Coat Solids STANDARD - AAMA 2605 (10 year; up to 20 year warranty). Scratch & fade resistant; contains no VOCs.*

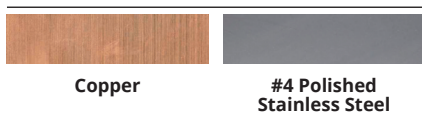


Powder Coat Solids PREMIUM - AAMA 2605 (10 year; up to 20 year warranty). Scratch & fade resistant; contains no VOCs.*



Visit <https://www.ifscoatings.com/content/assets/Uploads/brochures/IFS-Architectural-Digital-Color-Card.pdf> for additional metallic and anodic finishes.

Metal Clad STANDARD* (EXTERIOR ONLY)



Metal Clad PREMIUM*



Decoral Finishes (Powder Coat)*



Wood/Glulam STANDARD*



Wood/Glulam PREMIUM*



*Lead times subject to availability. ** Special order.

Note: Depending upon color selection, additional charges and increased lead times may apply. Extended warranties and service plans are available for an additional charge. Examples are shown as accurate as photography and printing processes allow. Final finish selection should be made from a physical sample; contact Solar Innovations® for samples. Product and finish options are subject to vendor availability. Solar Innovations® reserves the right to discontinue any option at any time without notice. Additional options, including custom color match, are available; contact Solar Innovations® for details.

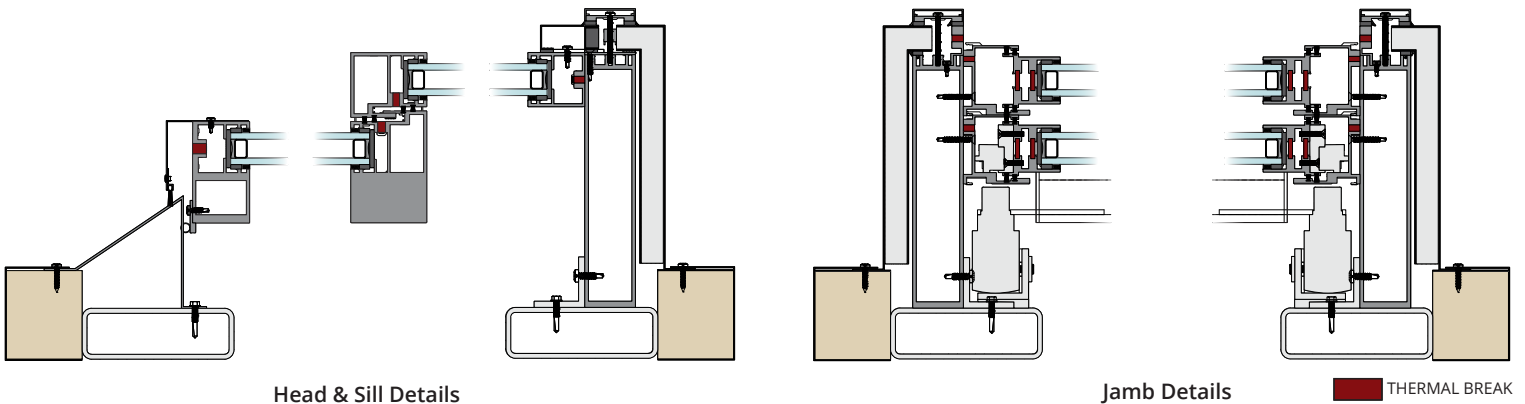
RETRACTABLE SKYLIGHTS



PRODUCT OVERVIEW

With over 15 years of development, Retractable Skylights are a convenient alternative method of ventilation. Solar Innovations® Retractable Skylights are a superior thermally enhanced system, limiting environmental temperature transfers, and are able to utilize high performance insulated glass to control air and moisture effectively, allowing them to be used in pool enclosures and other high-moisture environments. Retractable Skylights provide clear, unobstructed views and increased airflow for any glass structure or existing construction.

G3 MULTI PANEL DETAILS



PANELS

- Minimum panel width on slope: 42"; smaller panels may be available upon engineering approval
- Panel size up to 5' x 7'; larger panel options may be available depending on application

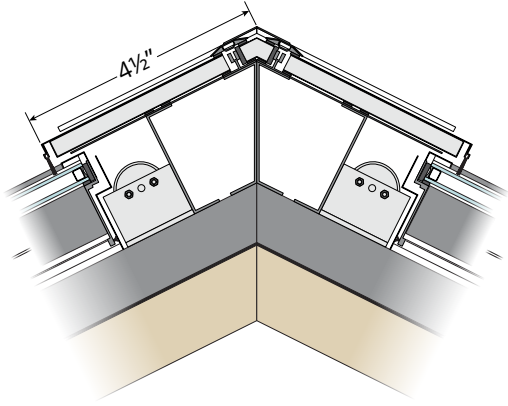
GLAZING

- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill from ¼" to 1¾"

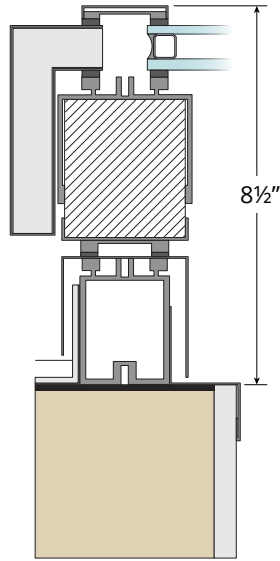
PERFORMANCE

- Water performance up to 6.89psf (G3 only), depending on sill choice and configuration
- Structural tested up to a design pressure of 45psf (G3 only)

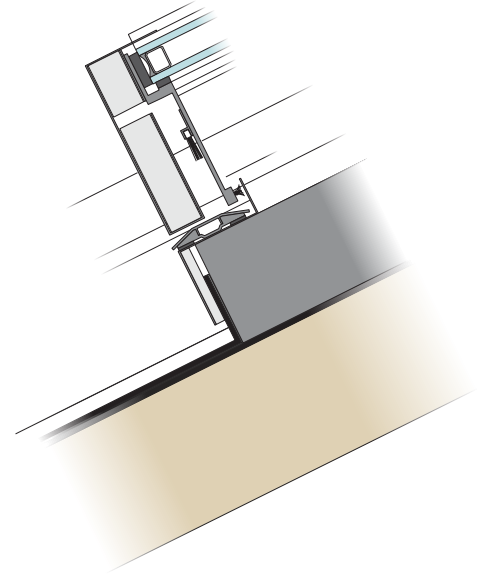
SINGLE PANEL OPTIONS



Ridge
Tube motor and cable operation.

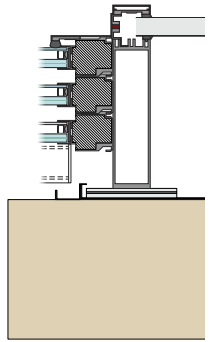
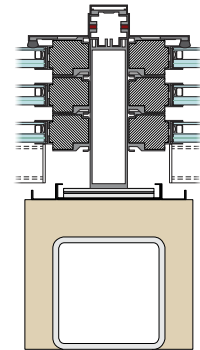
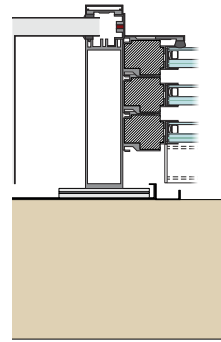
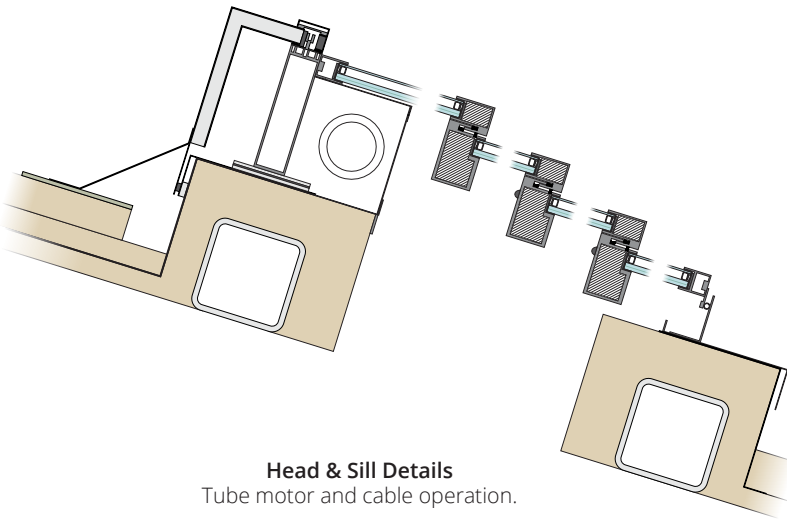


Roller Assembly



Sill

G2 MULTI-PANEL OPTIONS



Jamb Details

 THERMAL BREAK



80°-90° OPERABLE SKYLIGHTS



PRODUCT OVERVIEW

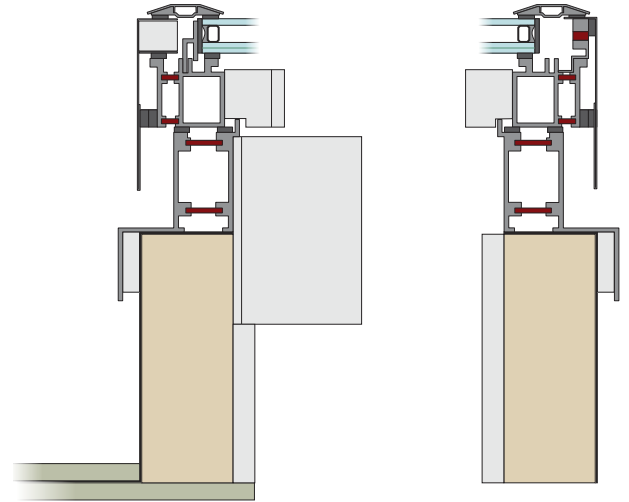
A 80°-90° Operable Skylight lifts the glazed unit, or "lid," 80°-90° from the plane of the curb. This type of skylight offers several applications and functions, the main being ventilation. A typical ridge vent or standard operable skylight only opens a few degrees, while the 80°-90° Operable Skylight fully opens, allowing for optimum amounts of ventilation.

At times, large equipment has to be moved into a room, but the building doors are not large enough, or a building may require easy access to the rooftop; in either of these situations, a 80°-90° Operable Skylight is an ideal solution. For those who enjoy stargazing, this skylight can also provide unobstructed views of the night sky.

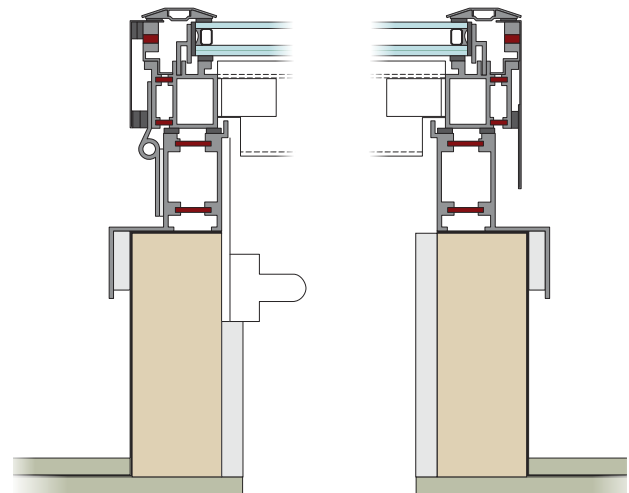
Air & Structure Impact Testing


Type	Panel Size	Air Infiltration At 1.57psf (25mph)	Water Penetration	Design Pressure	Uniform Load
G2 80°-90° Aluminum 2-Lite	66 ^{11/16} " H x 86 ^{5/16} " W	0.05 L/s/m ²	15psf	±40psf	±80psf

HEAD & SILL DETAILS



JAMB DETAILS



 THERMAL BREAK

PANELS

- Minimum panel width: approx. 2' - 2' 6"; smaller panels may be available upon engineering approval
- Panel size up to 3'6" x 8'

GLAZING

- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill from ¼" to 1½"

PERFORMANCE

- Water performance up to 15psf, depending on sill choice and configuration
- Structural tested up to a design pressure of 40psf

VENTING SKYLIGHTS



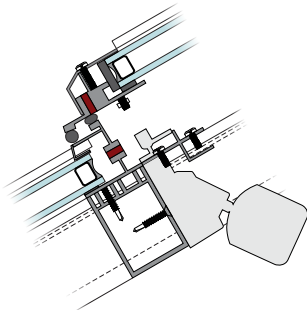
PRODUCT OVERVIEW

Solar Innovations® venting skylights bring the warmth of the sun to light up a room while also providing a means for heat to escape. These units can be operated manually or can be motorized and equipped with rain sensors for automatic operation. Breathe in the benefits of fresh air and reap the benefits of energy savings with our venting skylights.

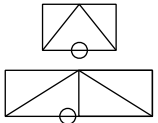
Air & Structure Impact Testing					
Type	Panel Size	Air Infiltration At 1.57psf (25mph)	Water Penetration	Design Pressure	Uniform Load
G2 80°-90° Aluminum 2-Lite	72" H x 120" W	0.05 L/s/m ²	15psf	±40psf	±80psf

MOTOR DETAILS

WLS
(Not in moist environment)

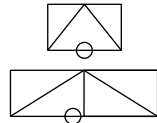
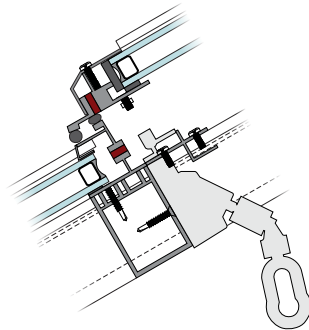


Motor location



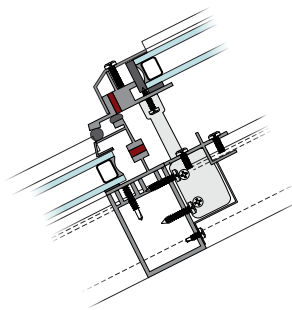
Maximum sash weight: 80 lbs.

Manual with Pole
(Some moisture resistance)



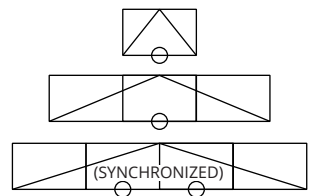
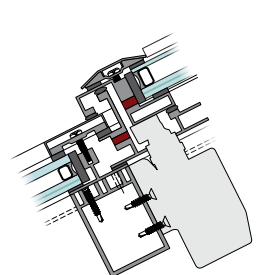
Maximum sash weight: 140 lbs.

Marvel
(Limited moisture resistance)



Maximum sash weight: 90 lbs.

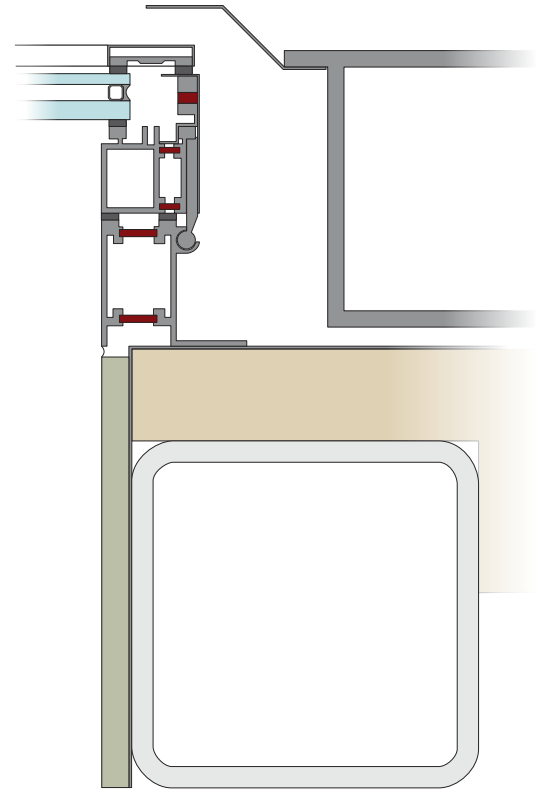
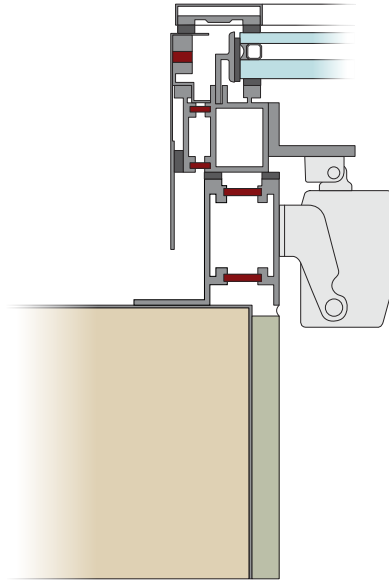
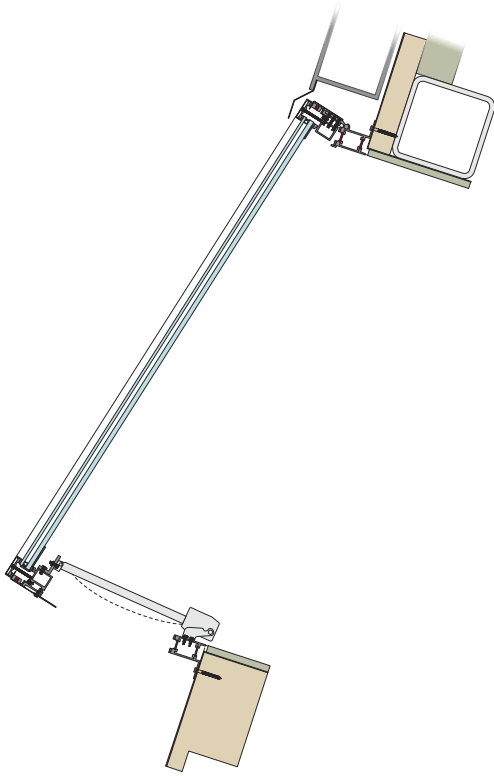
WindowMaster
(Highest moisture resistance)



Maximum sash weight: 90-450 lbs. dependent on model

 THERMAL BREAK

WINDOWMASTER DETAILS



 THERMAL BREAK

PANELS

- Minimum panel width: approx. 2' - 2' 6"; smaller panels may be available upon engineering approval
- Panel size up to 66¹¹/₁₆" x 86⁵/₁₆"

GLAZING

- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill from ³/₁₆" to 1¹/₈"

PERFORMANCE

- Water performance up to 15psf, depending on sill choice and configuration
- Structural tested up to a design pressure of 40psf

GLASS SPECIFICATIONS

	Overall Unit Thickness	U-Value	R-Value	Solar Heat Gain Coefficient	Visible Light Transmission	Reflectance Out	Reflectance In	UV Transmittance
DOUBLE GLAZED Outside Lite/Inside Lite								
Clear/Clear	1"	0.46	2.17	0.78	82%	15%	15%	58%
180/Clear	1"	0.26	3.85	0.64	79%	15%	15%	29%
272/Clear	1"	0.25	4.00	0.41	72%	11%	12%	16%
366/Clear	1"	0.24	4.17	0.27	65%	11%	12%	5%
340/Clear	1"	0.25	4.00	0.18	39%	11%	13%	2%
180/i89	1"	0.21	4.76	0.62	77%	15%	14%	27%
272/i89	1"	0.20	5.00	0.41	70%	11%	11%	16%
366/i89	1"	0.20	5.00	0.27	63%	11%	11%	5%
340/i89	1"	0.20	5.00	0.17	38%	11%	12%	2%
Gray/Clear	1"	0.45	2.22	0.60	57%	9%	13%	32%
Gray/180	1"	0.26	3.85	0.49	53%	9%	14%	17%
Gray/272	1"	0.25	4.00	0.38	50%	8%	9%	10%
Bronze/Clear	1"	0.45	2.22	0.62	61%	10%	13%	31%
Bronze/180	1"	0.26	3.85	0.61	59%	10%	14%	17%
Bronze/272	1"	0.25	4.00	0.39	54%	8%	10%	10%
TRIPLED GLAZED Outside Lite/Middle Lite/Inside Lite								
180/Clear/180	1½"	0.15	6.67	0.56	70%	20%	20%	13%
272/Clear/180	1½"	0.15	6.67	0.37	63%	15%	18%	8%
366/Clear/180	1½"	0.15	6.67	0.25	57%	14%	18%	2%
340/Clear/180	1½"	0.15	6.67	0.16	34%	13%	19%	1%



Learn More

To find out more about the features and options of our **Operable Skylights**, visit our website at solarinnovations.com/operable-skylights