

# Series 1100 Skylights

## Product Data Sheet

### Polycarbonate Unit Skylights

Unit skylights are an excellent tool for delivering natural light into large, open spaces like warehouses, distribution centers, and retail sites. These facilities can benefit from access to daylight as it can make interiors feel more welcoming and comfortable while displacing the need for electric lighting during peak daytime energy use hours.

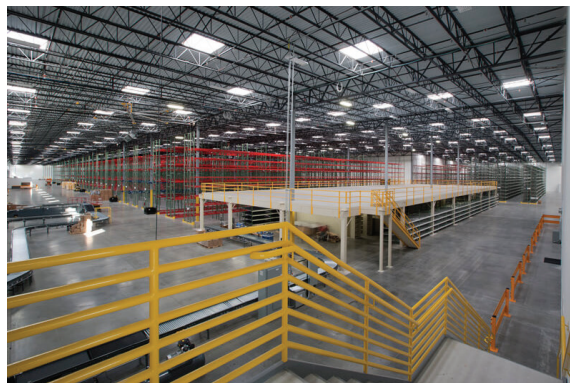
Series 1100 dome skylights feature a uniquely shaped dome that's designed to capture daylight at low angles, extending the system's effectiveness throughout the day. They're available in a variety of standard sizes to fit just about any application, and offer single, double or triple glazed configurations to address climatic needs.

Designed for excellent daylight harvesting and thermal performance in a wide range of climates, Series 1100 skylights are available in thermally broken and non-thermally broken configurations, and are backed by a 10 year warranty, making them a versatile and durable daylighting solution for your next project.

- Unique dome design with multiple ridges provides durability and enhanced daylight collection by allowing light to penetrate at lower angles.
- Prismatic glazing materials allow for even, diffused daylighting, eliminating hot spots and reducing the need for electric lighting.
- Systems are pre-assembled and ready to install.
- Frame is ideal for all roof types and is available in thermally broken and non-thermally broken configurations.
- Advanced weather seal system is designed to prevent water from entering the system.
- Backed by a 10 year warranty against leaks and glazing discoloration, ensuring dependable performance.
- Single and double dome configurations are FM Approved.

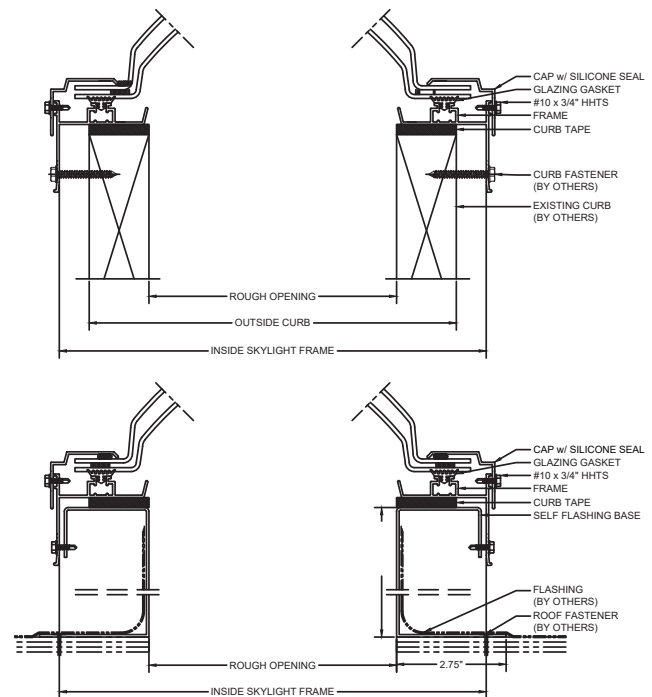
#### Product Specifications

|                         |                                                                                                                                                                                                                                                                                           |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Glazing                 | Monolithic Polycarbonate Outer Dome<br>Prismatic Polycarbonate Inner Dome<br>(see p.3 for glazing options and configurations)                                                                                                                                                             |
| System Width + Length   | 24" to 60" wide - lengths from 36" up to 120"<br>(see chart on p.2 for details)                                                                                                                                                                                                           |
| Maximum Slope           | 6:12                                                                                                                                                                                                                                                                                      |
| Standard Glazing Colors | Clear, White                                                                                                                                                                                                                                                                              |
| Aluminum Finishes       | Mill Finish, AAMA 611 Class 1 Clear and Bronze Anodized<br>AAMA 2603, 2604 Polyvinylidene Fluoride (contact us for details and minimums)                                                                                                                                                  |
| Material Content        | Aluminum: 10% Recycled Content<br>Polycarbonate: All Virgin Material                                                                                                                                                                                                                      |
| Warranty                | 10 Year Material and Workmanship                                                                                                                                                                                                                                                          |
| Material Source         | Kingspan Light + Air N.A. products are manufactured in the USA and most are designed with consideration for Buy America (BAA) and Build America - Buy America (BABA) requirements. BABA Compliance is project-specific. Please contact us to verify the compliance of your configuration. |

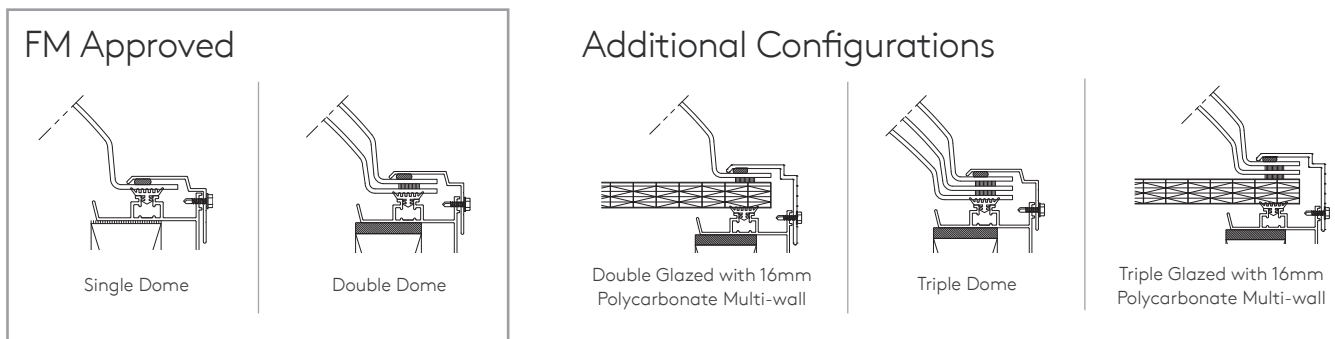


# Application

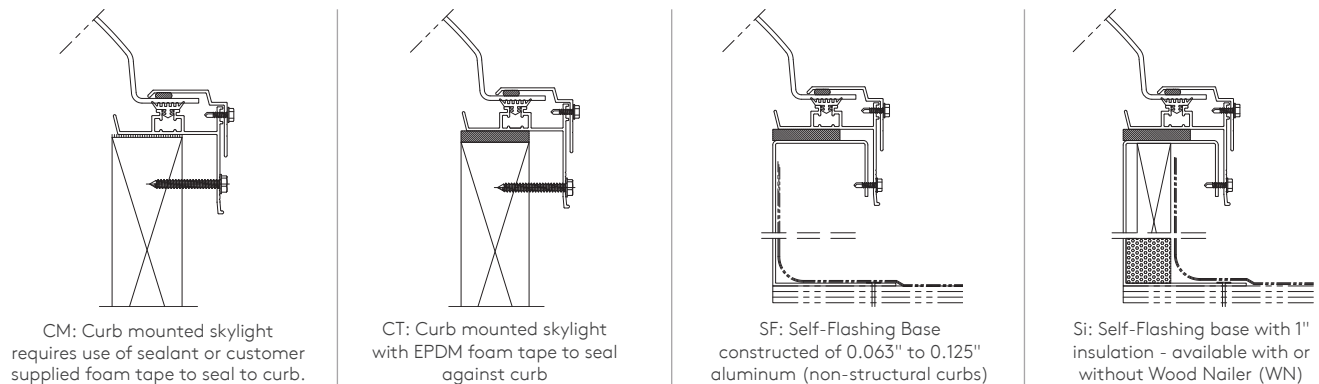
| Series 1100 Model Sizes + Dimensions |            |                          |                         |                       |
|--------------------------------------|------------|--------------------------|-------------------------|-----------------------|
|                                      | Model Size | Rough Opening Dimensions | Outside Curb Dimensions | Inside Skylight Frame |
| Square                               | 3636       | 36" x 36"                | 39" x 39"               | 40 1/2" x 40 1/2"     |
|                                      | 4848       | 48" x 48"                | 51" x 51"               | 52 1/2" x 52 1/2"     |
|                                      | 6060       | 60" x 60"                | 63" x 63"               | 64 1/2" x 64 1/2"     |
| Rectangle                            | 2448       | 24" x 48"                | 27" x 51"               | 28 1/2" x 52 1/2"     |
|                                      | 2496       | 24" x 96"                | 27" x 99"               | 28 1/2" x 100 1/2"    |
|                                      | 24120      | 24" x 120"               | 27" x 123"              | 28 1/2" x 124 1/2"    |
|                                      | 3696       | 36" x 96"                | 39" x 99"               | 40 1/2" x 100 1/2"    |
|                                      | 4872       | 48" x 72"                | 51" x 75"               | 52 1/2" x 76 1/2"     |
|                                      | 4896       | 48" x 96"                | 51" x 99"               | 52 1/2" x 100 1/2"    |
|                                      | 6072       | 60" x 72"                | 63" x 75"               | 64 1/2" x 76 1/2"     |



## Dome Configurations



## Base Options



# Technical Specifications

|                                                                     |                                          |                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ICC-ES Evaluated                                                    | IBC Section 2606.4<br>IBC Section 2405.5 | ESR-4776                                                                                                                                                                                                                     |
| IBC Section 2606.4                                                  | ASTM D1929<br>ASTM D635                  | Self-ignition Temperature: $\geq 650^{\circ}\text{F}$<br>Smoke-developed Index: $\leq 450$<br>Smoke Density Rating: $\leq 75$<br>Combustion Classification: CC1 for Polycarbonate / CC2 for Acrylic                          |
| IBC Section 2405.5<br>AAMA/WDMA/CSA 101/I.S.2/A440                  | ASTM E330<br>ASTM E283<br>ASTM E547      | Performance Grade PG40 - PG65*<br>Air Infiltration: $< 0.07 \text{ cfm/ft}^2$<br>Air Exfiltration: $< 0.05 \text{ cfm/ft}^2$<br>Water Penetration: None @ 15 psf<br>*Size dependent, see individual test reports for details |
| Factory Mutual Approved<br>Single + Double Dome Configurations Only | FM 4431                                  | Wind Uplift: 165 psf<br>Spread of Flame Rating: Class A @ 2:12 pitch                                                                                                                                                         |

## Example Model Number

4896-KT11-Si-2-CPC/WPP-MF-12-WN/TB

| Size Reference |   | Model |   | Base |   | # of Domes |   | Glazing |   | Frame Finish |   | Base Height |   | Base Options |
|----------------|---|-------|---|------|---|------------|---|---------|---|--------------|---|-------------|---|--------------|
| 4896           | - | KT11  | - | Si   | - | 2          | - | CPC/WPP | - | MF           | - | 12          | - | WN/TB        |

### Models

- KS11 – Non-Thermally Broken Series 1100 Skylight
- KT11 – Thermally Broken Series 1100 Skylight

### Base Options

- CM – Curb Mount
- CT – Curb Mount w/Tape
- SF – Self Flashing
- Si – Self Flashing w/Insulation
- LV – Vortex Venting Base (Curb Mount)
- LS – Self Flashing Vortex Venting Base

### Glazing (See Glazing Chart below for configuration examples)

- Outer Dome
  - WPC - White Monolithic Polycarbonate
  - CPC - Clear Monolithic Polycarbonate
  - WPP - White Prismatic Polycarbonate
- Middle and Inner Domes
  - WPP - White Prismatic Polycarbonate
  - CPP - Clear Prismatic Polycarbonate
  - LC - Laminated Clear
  - O16 - White 16mm Multi-wall Polycarbonate

### Frame Finish

- MF – Mill Finish
- CA – Clear Anodized
- BA – Bronze Anodized
- WP - White Paint
- KY – Custom Kynar Finish

### SF Base Height

- 9 - 9"
- 12 - 12"
- Custom up to 24"

### Base Options

- WN – Wood Nailer
- DW – Double Wall
- WDW – Welded Double Wall
- TB – Termination Bar
- IS – Insect Screen [Vortex Base]

| Series 1100 Glazing Chart - NFRC Listed System Values<br>(Additional configurations available - contact us for details) |                  |                 |                 |          |       |      |
|-------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|----------|-------|------|
| Glazing Configuration                                                                                                   | Outer Dome       | Middle Dome     | Inner Dome      | *U-Value | *SHGC | *VLT |
| WPC                                                                                                                     | White Monolithic | -               | -               | 1.25     | 0.67  | 0.63 |
| CPC/CP                                                                                                                  | Clear Monolithic | -               | Clear Prismatic | 0.76     | 0.71  | 0.62 |
| CPC/WPP                                                                                                                 | White Monolithic | -               | White Prismatic | 0.76     | 0.65  | 0.58 |
| CPC/CP/WPP                                                                                                              | Clear Monolithic | Clear Prismatic | White Prismatic | 0.63     | 0.58  | 0.46 |
| WPC/CP/WPP                                                                                                              | White Monolithic | Clear Prismatic | White Prismatic | 0.63     | 0.47  | 0.36 |

\* Please note that these values are based on thermally broken configuration.

### Warranty

For a period of ten (10) years from the date of purchase, Kingspan Light + Air warrants that Series 1100 polycarbonate skylights will be free of defects in material and workmanship and there will be no uncontrolled water leakage through the commercial fixed curb mount or self flashed skylight. This warranty also includes coverage against documented 2" hail stones or smaller as well as cracking or crazing of polycarbonate dome material that would result in a water leak. Exceptions apply, see 10-year warranty document.

# Accessories\*

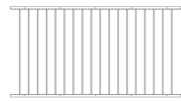
## Series 5100 Security Grills

Size Limitations: 92" model size width, no limit on length

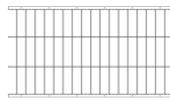
### Configurations

1. SG-1: 5" Parallel line spacing\*
2. SG-2: 5" x 16" Grid spacing\*
3. SG-3: 5" x 5" Grid spacing\*
4. SG-4: 8" x 8" Grid spacing

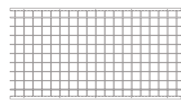
\* As required by security codes in many jurisdictions.



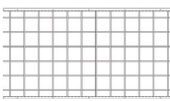
SG-1



SG-2



SG-3



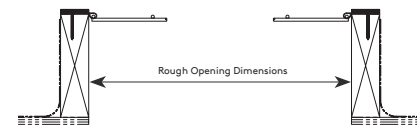
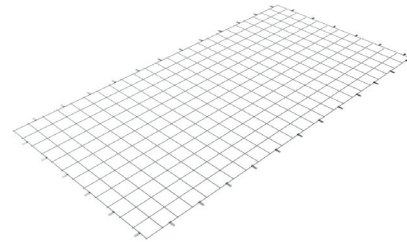
SG-4

## Series 5200 Internal Safety Screens

Size Limitations: 72" model size width, 120" model size length

### Features

1. 0.162"Ø galvanized steel wire mesh
2. 4" Grid pattern
3. Corrosion resistant connecting clips
4. EPDM curb seal tape



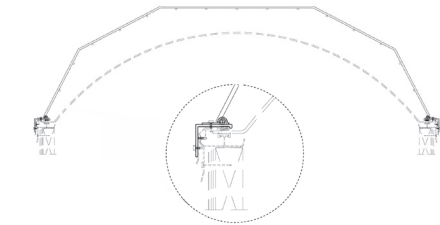
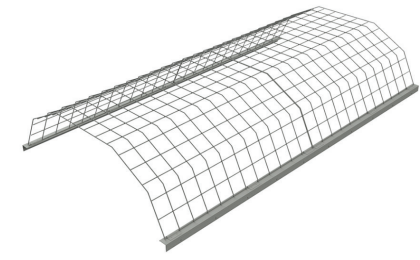
Rough Opening Dimensions

## Series 5300 Safety Cage

Size Limitations: 92" model size width, no limit on length

### Features

1. .225"Ø nominal galvanized steel wire mesh
2. 4" Grid pattern
3. Corrosion resistant connecting clips and angle brackets



\* Contact Kingspan Light + Air for additional information on Series 5100, 5200 and 5300 options and availability. You can also find more information at <https://www.kingspan.com/us/en/products/roof-safety-products/>.

### IMPORTANT SAFETY NOTE:

The owner must take steps to protect personnel who may be in the area of the skylight or smoke vent. The owner should restrict access only to authorized personnel who have been adequately cautioned as to the location of the skylights or smoke vents and informed of the warnings below. Because there is a risk of fall and resulting personal injury, we recommend protective guardrails, internal safety screens or external cages around all skylights and smoke vents, as well as the use of fall restraint systems. We also recommend that skylights and smoke vents are inspected annually for evidence of damage, such as cracks or penetrations. Any damage should be repaired immediately, and the area beneath the skylight or smoke vent should be safeguarded against falling objects.

