Tufflite Polycarbonate
Product Data Sheet

Kingspan®
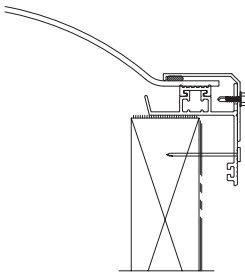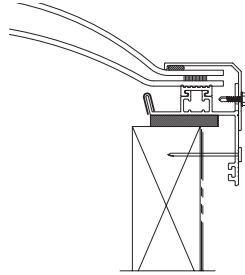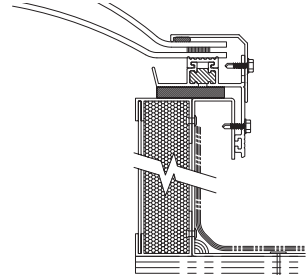Light + Air

Application

The skylight shall be fully factory assembled consisting of a polycarbonate dome with a CC1 classification that is sealed by interior and exterior gaskets. The skylight frame is fabricated from 6063-T5 heliarc welded aluminum which has an integral condensate channel. The aluminum retaining cap fasteners are corrosion resistant. An AAMA Compliant polyurethane thermal break material is utilized in the thermally broken curb frame to prevent thermal losses through the frame and the formation of condensation on its interior surfaces. The thermally broken self flashing frame is fabricated from aluminum with a 2-3/4" roof nailing flange and 1" of insulation inside a PVC frame with a white aluminum liner on the interior. The insulated aluminum self flashing curb has a 2-3/4" roof nailing flange and is available in curb heights from 4".
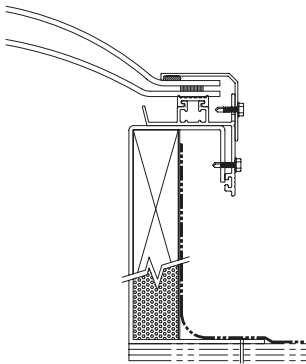
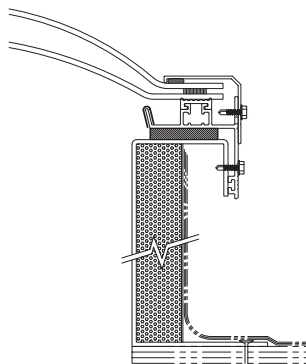**AL** - Aluminum framed skylight. Available as curb mounted or self flashing.

ALB - Aluminum framed skylight with UL/FM Compliant Polyvinyl Chloride (PVC) thermal barrier break. Available as curb mounted only. (*Shown with optional curb seal tape*)
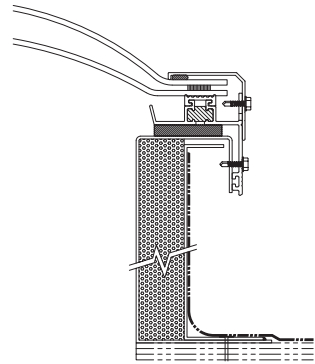
ALT - AAMA Compliant thermally broken aluminum framed skylight. Available as curb mounted or self flashing. (*Self flashing model shown*)

ALI - Aluminum framed skylight with insulated base. Available as self flashing only. (*Shown with optional wood nailer and aluminum double wall*)

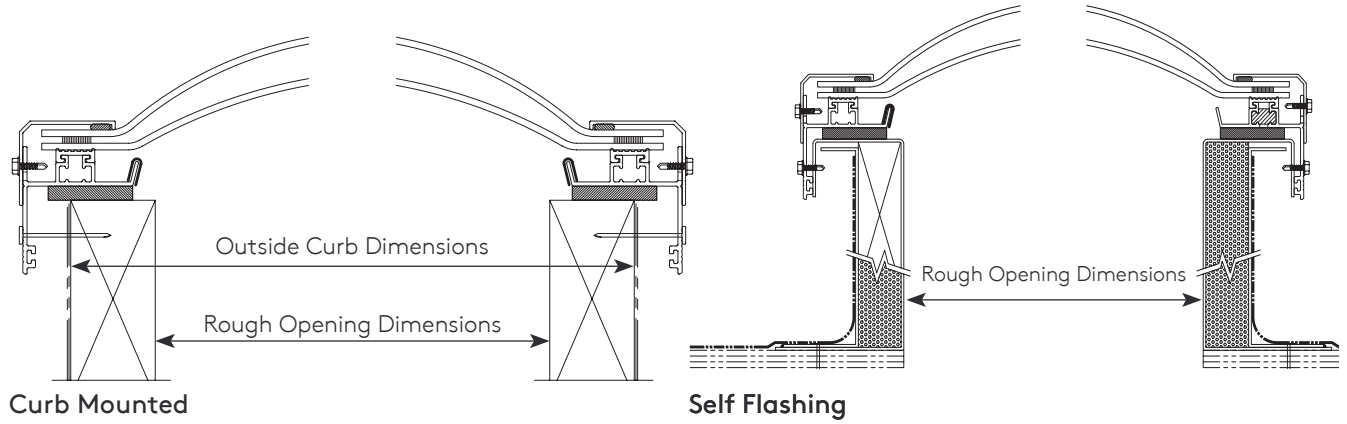**ALIB** - Aluminum framed skylight with UL/FM Compliant Polyvinyl Chloride (PVC) thermal barrier break and insulated base. Available as self flashing only. (*Shown with optional curb seal tape and aluminum double wall*)

ALIT - AAMA Compliant thermally broken aluminum framed skylight with insulated base. Available as self flashing only. (*Shown with optional curb seal tape and aluminum welded double wall*)

Dimensions

Curb Mounted

Self Flashing

Model Size	Rough Opening Dimensions	Outside Curb Dimensions	Model Size	Rough Opening Dimensions	Outside Curb Dimensions	Model Size	Rough Opening Dimensions	Outside Curb Dimensions
1414	14 1/4" x 14 1/4"	17 1/4" x 17 1/4"	1422	14 1/4" x 22 1/4"	17 1/4" x 25 1/4"	3672	36" x 72"	39" x 75"
1919	19" x 19"	22" x 22"	1446	14 1/4" x 46 1/4"	17 1/4" x 49 1/4"	3696	36" x 96"	39" x 99"
2222	22 1/4" x 22 1/4"	25 1/4" x 25 1/4"	2230	22 1/4" x 30 1/4"	25 1/4" x 33 1/4"	36120[1,3]	36" x 120"	39" x 123"
2424	24" x 24"	27" x 27"	2237	22 1/4" x 37"	25 1/4" x 40"	3746	37" x 46 1/4"	40" x 49 1/4"
3030	30 1/4" x 30 1/4"	33 1/4" x 33 1/4"	2246	22 1/4" x 46 1/4"	25 1/4" x 49 1/4"	3775	37" x 75"	40" x 78"
3636	36" x 36"	39" x 39"	2272	22 1/4" x 72"	25 1/4" x 75"	3859	38" x 59"	41" x 62"
3737	37" x 37"	40" x 40"	2296	22 1/4" x 96"	25 1/4" x 99"	4669	46 1/4" x 69 1/2"	49 1/4" x 72 1/2"
4242	42" x 42"	45" x 45"	2448	24" x 48"	27" x 51"	4689	46 1/4" x 89 1/2"	49 1/4" x 92 1/2"
4646	46 1/4" x 46 1/4"	49 1/4" x 49 1/4"	2496	24" x 96"	27" x 99"	4860	48" x 60"	51" x 63"
4848	48" x 48"	51" x 51"	24120[1,3]	24" x 120"	27" x 123"	4872	48" x 72"	51" x 75"
5555[1]	55" x 55"	58" x 58"	3037	30 1/4" x 37"	33 1/4" x 40"	4884	48" x 84"	51" x 87"
6060[1]	60" x 60"	63" x 63"	3046	30 1/4" x 46 1/4"	33 1/4" x 49 1/4"	4896	48" x 96"	51" x 99"
7070[1,2,3]	70 1/4" x 70 1/4"	73 1/4" x 73 1/4"	3069	30 1/4" x 69 1/2"	33 1/4" x 72 1/2"	48120[1,3]	48" x 120"	51" x 123"
7575[1,2,3]	75" x 75"	78" x 78"	3096	30 1/4" x 96"	33 1/4" x 99"	6072[1]	60" x 72"	63" x 75"
8484[1,2,3]	84" x 84"	87" x 87"	3496	34" x 96"	37" x 99"	6096[1,3]	60" x 96"	63" x 99"
9292[1,2,3]	92 1/2" x 92 1/2"	95 1/2" x 95 1/2"	3660	36" x 60"	39" x 63"	60120[1,3]	60" x 120"	63" x 123"

[1] Not available with Infrared Reflective acrylic (IR)
[2] Not available with clear multiwall polycarbonate (C16MMMW)
[3] Only available in heavy duty "ALHD" frame.

Technical Specifications

Combustion Classification	CC1
Factory Mutual (FM)	Passed 4431 2" severe hail test

Example Model Number
4896-ALI-SF-1-WPC-12-INS-WN-MF

Features
1. Extruded 6063-T5 aluminum frame
2. Curb mounted (CM) or Self flashing (SF)
3. Polycarbonate glazing
4. Radial triarch shaped glazing, as standard
5. 2-3/4" nailing flange (*self flashing models only*)
6. UL Listed santoprene thermoplastic gaskets
7. Black butyl retainer cap sealant
8. Polyurethane glazing sealants

Skylight Options
1. Three skylight frame designs:
   a. Extruded aluminum frame (AL)
   b. Extruded aluminum frame with thermal barrier break material (ALB)
   c. AAMA Compliant poured & debridged thermally broken extruded aluminum frame (ALT)
2. EPDM curb seal tape (T)
3. Single (1) or double (2) glazed
4. Standard glazing options:
   a. Clear monolithic polycarbonate (CPC)
   b. Clear prismatic polycarbonate (CPP)
   c. White monolithic polycarbonate (WPC)
   d. White prismatic polycarbonate (WPP)
   Special glazing options *(see size chart for details)*:
   a. Infrared reflective acrylic (IR)
   b. Clear multiwall polycarbonate (C16MMMW)
5. Pyramid (P) or double hip (DH) shaped dome
6. Mill finish frame (MF), as standard (*Custom, or specialized paint available upon request*)

Self Flashing Curb Options
1. Curb heights*:
   a. 9"
   b. 12"
   Custom heights available upon request
2. Insulated curb (INS)
3. Wood nailer (WN)
4. Non-welded double wall (DW)
5. Welded double wall (WDW)
6. Aluminum termination bar (TB)

Accessories
1. Gladiator
   a. External safety cages (SCAGE)
   b. Safety screens (SSCRN)
   c. Security grills (SG)
   d. Structural curbs (SC)

Light Transmittance & Thermal Properties*

Glazing Makeup	VLT	SHGC	U-Factor
Single Glazed - CPC *Clear Polycarbonate/*	92%	0.86	1.01
Single Glazed - CPP *Clear Prismatic Polycarbonate*	92%	0.86	1.01
Single Glazed - WPC *White Polycarbonate*	72%	0.71	1.00
Single Glazed - WPP *White Prismatic Polycarbonate*	70%	0.72	1.00
Double Glazed - CPP/CPP *Clear Prismatic Polycarbonate/ Clear Prismatic Polycarbonate*	85%	0.74	0.72
Double Glazed - CPP/WPP *Clear Prismatic Polycarbonate/ White Prismatic Polycarbonate*	64%	0.62	0.71
Double Glazed - CPC/CPC *Clear Polycarbonate/Clear Polycarbonate*	85%	0.74	0.72
Double Glazed - WPC/CPC *White Polycarbonate/Clear Polycarbonate*	66%	0.65	0.71
Double Glazed - CPC/IR *Clear Polycarbonate/Infrared Reflective Acrylic*	66%	0.34	0.81
Double Glazed - WPC/IR *White Polycarbonate/Infrared Reflective Acrylic*	52%	0.28	0.80
Double Glazed - CPC/C16MMMW *Clear Polycarbonate/Clear Panel*	74%	0.24	0.44
Double Glazed - WPC/C16MMMW *White Polycarbonate/Clear Panel*	58%	0.20	0.44

*Values are estimated and may vary slightly depending on unit size and specification

Warranty
For a period of ten (10) years from the date of purchase, Kingspan Light + Air warrants that Tufflite 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.

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.

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For the product offering in other markets please contact your local sales representative or visit www.kingspan.com/us

Notes

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