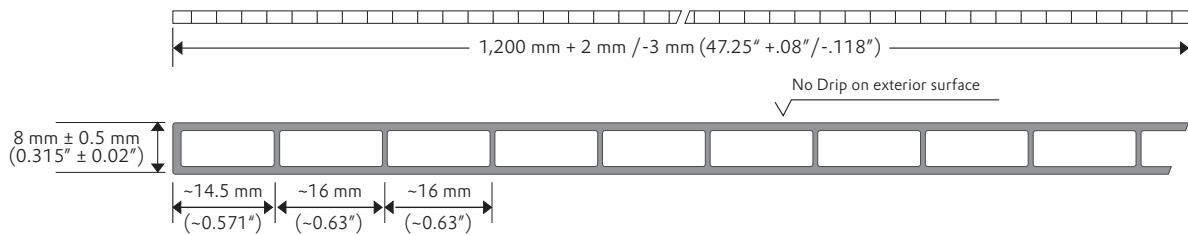


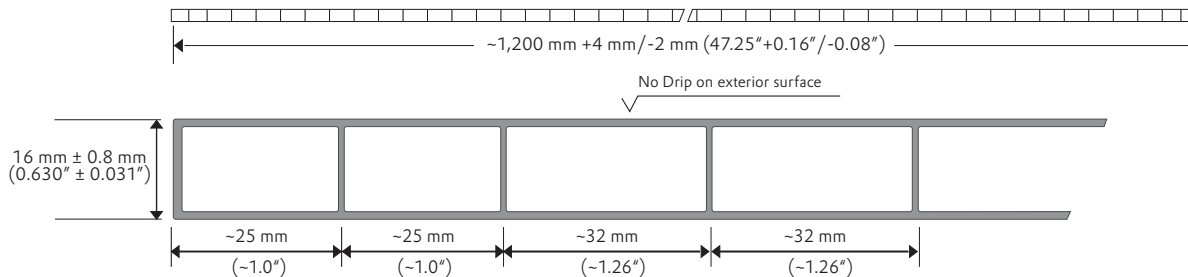
Technical Information

# 8 mm & 16 mm ACRYLITE® Heatstop high impact acrylic double-skin sheet - cool blue white

## 8 mm



## 16 mm



**ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEET** is an IR-(infrared) reflecting, heat-insulating and highly weather-resistant double-skin sheet made of impact-modified Acrylic (polymethyl methacrylate, PMMA) polymer. The Heatstop component is uniformly distributed throughout the entire sheet.

**ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEET** is suitable for sloped, curved and vertical applications including the following:

- Car Washes
- Retail Greenhouses
- Canopies
- Skylights
- Clerestory Glazing
- Barrel Vaults
- Façades & Cladding
- Pool Enclosures
- Patio Covers
- Sunrooms
- Carports

## ADVANTAGES OF ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEET

- Solar energy is reduced up to 75%.
- Transmitted light results in a cool blue white interior sheet color, making a very pleasant and cool environment beneath the glazing.
- The sheet has an exterior gold sheen with reflected light.
- Impact resistance during transportation, handling and installation.
- Hail-resistant with a 10-year warranty for withstanding hailstones with a kinetic energy of 1 joule.
- ACRYLITE® can be recycled in an environmentally friendly manner.

## TECHNICAL DATA (TYPICAL VALUES)

	Light Transmittance D65	Total Energy Transmission Values	Shading Coefficient (SC)
Cool Blue White (WZ011) 8 mm	28%	25%	0.23
Cool Blue White (WZ011) 16 mm	28%	25%	0.23
	8 mm	16 mm	
UV Transmitting	blocking	blocking	
U-value	3.4 W/m <sup>2</sup> K (0.56 BTU/hr·ft <sup>2</sup> ·°F)	2.5 W/m <sup>2</sup> K (0.49 BTU/hr·ft <sup>2</sup> ·°F)	
R-value	1.78 °F/BTU·hr·ft <sup>2</sup>	2.04 °F/BTU·hr·ft <sup>2</sup>	
Coefficient of Heat Expansion (α)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	
Expansion Due to Heat and Moisture	6 mm/m (1/16" /ft)	6 mm/m (1/16" /ft)	
Approximate Area Weight	3.4 Kg/m <sup>2</sup> (0.7 lb/ft <sup>2</sup> )	3.4 Kg/m <sup>2</sup> (0.7 lb/ft <sup>2</sup> )	
Thickness	8 mm (5/16")	16 mm (5/8")	
Rib Spacing	16 mm (5/8")	32 mm (1 1/4")	
Width	1200 mm (47 1/4")	1200 mm (47 1/4")	
Length	up to 10973 mm (36 ft)	up to 5550 mm (28 ft)	
Weighted Sound Reduction Index	23 dB	24 dB	
Maximum Service Temperature	70°C (160 °F)	70°C (160 °F)	
ASTM D-635 (Rate of Burn)	C2 / CC2	C2 / CC2	
ASTM D-1929 (Self Ignition Temp)	830 °F	830 °F	
ASTM D-2843 (Smoke Density Rating)	8.1 %	7.0 %	
CAN/ULC S102.2	< 150 Flame Spread Classification	< 150 Flame Spread Classification	
DIN 4102	normal combustability, B2	normal combustability, B2	
	Minimum permissible cold-forming radius of 48" (150 x thickness)	Minimum permissible cold-forming radius of 96" (150 x thickness)	

Values are approximate.

### WARRANTIES

Non-prorated, full replacement 10 year light transmission and 10 year hail warranties. For details see warranty.

### ENVIRONMENTAL SUSTAINABILITY

**ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEETS'** natural heat insulating qualities can translate into significant energy savings, making them an ideal choice for eco-lighting and building green. The sheets are built to last using environmentally sound manufacturing processes in facilities that have received ISO-14001 environmental certification. In addition, if the time does come for replacement, ACRYLITE® can be recycled in an environmentally friendly manner.

### NO DRIP

The water-dispersing, patented No Drip coating applied on one side of the sheet causes any surface water to form a thin, continuous film. When the sheet is installed with the No Drip coating on the outside of the roof, the coating can support the natural cleaning of the roof by rainwater. When the coating is on the inside, it contributes toward preventing any condensed water from forming droops and thus averts the damage caused by condensation.

## FIRE BEHAVIOR

The fire behavior of ACRYLITE® is rated as C2 or CC2 according to ASTM D-635. ACRYLITE® burns almost entirely without smoke according to DIN4102 and ASTM D-2843 and is easily extinguished. The smoke gases produced by ACRYLITE® are neither acutely toxic according to DIN 53436, nor corrosive according to DIN VDE 0482-267.

## LOAD BEARING CAPACITY

Due to its excellent rigidity, large areas can be glazed quickly and efficiently. Few intermediate supports are required to carry substantial uniformly distributed loads (refer to Support Spacing chart). Reduction of structural members means less shading thus increasing light levels.

## 8 mm SUPPORT SPACING

As a flat glazing supported on all sides, 1200 mm wide 8 mm double-skin sheet requires crosswise supports spaced at 106" (2.7 m) for uniformly distributed loads up to 15.7 lb/ft<sup>2</sup> (750 N/m<sup>2</sup>). For greater loads, the recommended spacing is given in the Support Spacing Chart.

## 8 mm SUPPORT SPACING CHART

**8 mm ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEET** width as delivered 1200 mm (47 1/4")

Load		Support Spacing	
[N/m <sup>2</sup> ]	(lb/ft <sup>2</sup> )	[m]	(in)
750	15.7	2.7	106
1000	20.9	2.2	86
1250	26.1	1.9	74
1500	31.3	1.7	66
1750	35.5	1.6	63
2000	41.8	1.5	59

## 16 mm SUPPORT SPACING

As a flat glazing supported on all sides, 1200 mm wide 16 mm double-skin sheet requires no additional cross members for uniformly distributed loads up to 15.7 lb/ft<sup>2</sup> (750 N/m<sup>2</sup>). For greater loads, the recommended spacing is given in the Support Spacing Chart.

## 16 mm SUPPORT SPACING CHART

**16 mm ACRYLITE® HEATSTOP HIGH IMPACT ACRYLIC DOUBLE-SKIN SHEET** width as delivered 1200 mm (47 1/4")

Load		Support Spacing	
[N/m <sup>2</sup> ]	(lb/ft <sup>2</sup> )	[m]	(in)
750	15.7	Not required	
1000	20.9	4.0	158
1250	26.1	3.1	122
1500	31.3	2.8	110
1750	35.5	2.6	102
2000	41.8	2.5	98
2250	47	2.4	94
2500	52.2	2.2	86
2750	57.4	2.1	82
3000	62.6	2.0	78

Maximum allowable spacing is in the direction parallel to the sheet's ribs. Refer to local building codes to determine the applicability of these values to specific applications. Building codes will indicate the design loads to be used to determine the maximum span lengths or support spacing.

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