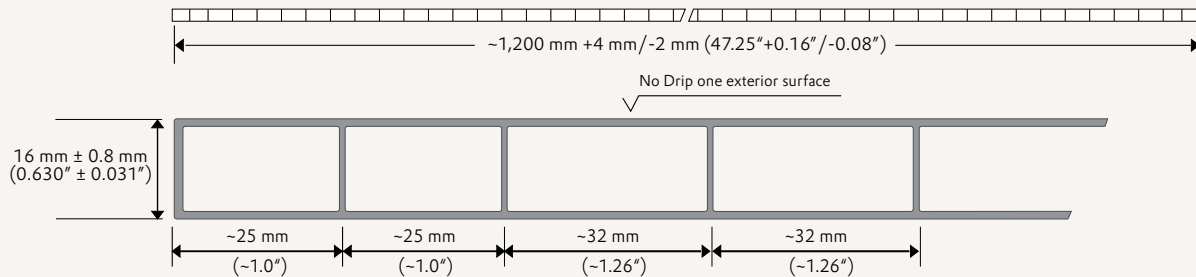


# 16 mm ACRYLITE® Heatstop high impact acrylic double-skin sheet - cool blue white



ACRYLITE® Heatstop high impact acrylic sheet is an IR- (infrared) reflecting, heat-insulating and highly weather resistant double-skin sheet made of high impact acrylic (polymethyl methacrylate, PMMA). The Heatstop component is uniformly distributed throughout the entire sheet.

16 mm ACRYLITE® Heatstop high impact double-skin sheet is suitable for sloped, curved and vertical applications including the following:

- Canopies
- Carports
- Patio Covers
- Pool Enclosures
- Sunrooms
- Skylights
- Clestory Glazing
- Retail Greenhouses

## Advantages of 16 mm ACRYLITE® Heatstop high impact acrylic double-skin sheet:

- Solar energy is reduced up to 75%.
- Transmitted light results in a cool blue 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 guarantee for withstanding hailstones with a kinetic energy of 1 joule
- ACRYLITE® can be recycled in an environmentally friendly manner.

Thanks to its special technology, the ACRYLITE® Heatstop high impact acrylic double-skin sheet effectively reduces the sun's heat radiation. The color impression may change depending on viewing angle and lighting conditions.

## Warranties

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

## Technical Data (Typical values)

	Light Transmittance D65	Total Energy Transmission Values	Shading Coefficient (SC)
Cool Blue White (WZ007)	28%	25%	0.23
UV Transmission	blocking		
U-value	2.5 W/m <sup>2</sup> K (0.49 BTU/hr•ft <sup>2</sup> •°F)		
R-value	2.04 °F/BTU•hr•ft <sup>2</sup>		
Coefficient of Heat Expansion (α)	0.09 mm/m °C (0.00005 in/in/°F)		
Expansion Due to Heat and Moisture	6 mm/m (1/16"/ft)		
Thickness	16 mm (5/8")		
Rib Spacing	32 mm (1 1/4")		
Width	1200 mm (47 1/4")		
Length	up to 5550 mm (28 ft)		
Approximate Area Weight	4.5 Kgm <sup>2</sup> (0.9 lb/ft <sup>2</sup> )		
Weighted Sound Reduction Index	24 dB		
Maximum Service Temperature	70°C (160 °F)		
ASTM D-635 (Rate of Burn)	C2 / CC2		
ASTM D-1929 (Self Ignition Temp)	830 °F		
ASTM D-2843 (Smoke Density Rating)	7.0 %		
CAN/ULC S102.2	< 150 Flame Spread Classification		
DIN 4102	normal combustability, B2		
Minimum permissible cold-forming radius of 96" (150 x thickness)			
Values are approximate.			

## 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 drops and thus averts the damage caused by condensation.

## Fire Behaviour

- 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 data chart). Reduction of structural members means less shading thus increasing light levels.

## Support Spacing

As 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. 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.

## 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		
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

ACRYLITE® is a registered trademark of Evonik Cyro LLC in the Americas. These same products are manufactured and marketed under the PLEXIGLAS® trade name on the European, Asian, African and Australian continents.

Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment).

### Important Notice:

This information and all technical and other advice are based on Evonik's present knowledge and experience. However, Evonik assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights. Evonik reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. EVONIK DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SHALL HAVE NO LIABILITY FOR, MERCHANTABILITY OF THE PRODUCT OR ITS FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE), OR OTHERWISE. EVONIK SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. It is the customer's sole responsibility to arrange for inspection and testing of all products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

June 2014

**Evonik Cyro LLC**  
299 Jefferson Road  
Parsippany, NJ 07054  
USA  
**PHONE** +1 800 631-5384

[www.acrylite.net](http://www.acrylite.net)  
[www.evonik.com](http://www.evonik.com)

**Evonik Cyro Canada Inc.**  
180 Attwell Drive, Suite 101  
Toronto, Ontario M9W 6A9  
Canada  
**PHONE** +1 888 233-4527

[www.acrylitebuildingproducts.com](http://www.acrylitebuildingproducts.com)