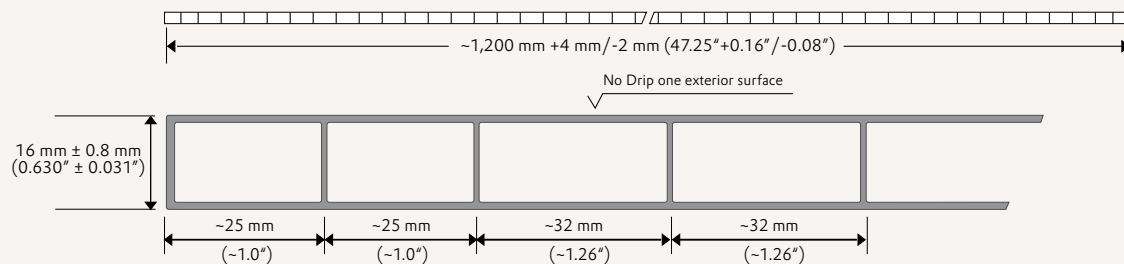


16 mm ACRYLITE® Resist high impact acrylic double-skin sheet



16 mm ACRYLITE® Resist high impact acrylic double-skin sheet is a light transmitting, heat-insulating and weather-resistant sheet made of impact-modified acrylic (polymethyl methacrylate, PMMA) polymer.

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

- Canopies
- Carports
- Clerestory Glazing
- Interior Walls
- Interior Partitions
- Lighting Panels
- Conservatories
- Skylights
- Barrel Vaults
- Facades & Cladding
- Greenhouses
- Pool Enclosures
- Patio Covers
- Sunrooms

Advantages of 16 mm ACRYLITE® Resist high impact acrylic double-skin sheet

- Extraordinary clear sheet is UV-resistant and includes a 30-year warranty against yellowing.
- Is coated with a completely non-toxic biologically neutral Anti Algae Application
- Offers excellent protection against excessive amounts of UV radiation.

- Up to 50% energy savings and minimizes CO² emissions.
- Hail-resistant with a 10-year guarantee for withstanding hailstones with a kinetic energy of 1 joule.
- High light transmission in the PAR and visible spectral energy wavelengths.
- Impact resistance during transportation, handling and installation.
- Available in clear and a range of colors and solar tints.

Warranties

Non-prorated, full replacement 30 year non-yellowing, 10 year light transmission and 10 year hail warranties. For details see warranty.

Environmental Sustainability

ACRYLITE® Resist 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.

Technical Data (Typical values)

	Light Transmittance D65	Total Energy Transmission Values	Shading Coefficient (SC)
Clear (ORS22)	86%	82%	0.94
Light White (WRS22)	74%	73%	0.83
Bronze (8R22)	53%	64%	0.75
Solar Cool White (WRS23)	37%	46%	0.53
UV Transmission	blocking		
U-value	2.5 W/m ² K (0.49 BTU/hr•ft ² •°F)		
R-value	2.04 °F/BTU•hr•ft ²		
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 10973 mm (36 ft)		
Approximate Area Weight	4.5 Kgm ² (0.9 lb/ft ²)		
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.			

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.

Anti Algae Coating

The Anti Algae coating, based on advanced nanotechnology, is a further development of the successful no drip coating. Due to the coating, algae, mosses and pollen lose the ability to adhere to the sheet and may be immediately and completely decomposed by the natural UV radiation from the sun.

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/ft² (750 N/m²). 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® Resist high impact acrylic double-skin sheet width as delivered 1200 mm (47 3/4")			
Load		Support Spacing	
[N/m ²]	(lb/ft ²)	[m]	(in)
750	15.7		
1000	20.9	4.0	157
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

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

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