POLYVANTIS

PRODUCT DATASHEET

LEXAN™ CORRUGATED SHEET

DESCRIPTION

LEXAN™ Corrugated Sheet has different range of profiled glazing sheets extruded from Lexan polycarbonate resin. Some of the products in the range are designed to match specific profiled metal sheets used in industrial roofing and wall cladding. The standard products range are designed for general roof and side glazing applications such as public swimming pools, sports stadia and greenhouses. The complete corrugated sheet range offers high impact strength across a wide temperature range, excellent optical properties, lightweight and good long-term weather resistance.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm³	1.20
Water absorption, saturation, 23°C	ISO 62	%	0.35
Moisture Absorption, 23°C / 50% RH	ISO 62	%	0.15
MECHANICAL			
Tensile Stress, yield 50 mm/min	ISO 527	MPa	63
Tensile Strain, yield 50 mm/min	ISO 527	%	6
Tensile Strain, break 50 mm/min	ISO 527	%	120
Tensile modulus 1 mm/min	ISO 527	MPa	2350
Flexural Stress, yield 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	ISO 180/1U	kJ/m²	NB
Izod Impact, notched 80*10*3 +23°C	ISO 180/1A	kJ/m²	70
Charpy Impact, notched, 23°C	ISO 179/2C	kJ/m²	35
THERMAL			
Thermal conductivity	ISO 8302	W/m-°C	0.2
CTE, 23°C to 80°C, flow	ISO 11359-2	1/°C	$7x\ 10^{-5}$
Ball Pressure Test, 125°C +/- 2°C	IEC 60695-10-2	-	Pass
Vikat Softening Temp, Rate B/120	ISO 306	°C	145
Relative Temp Index, Elec	UL 746B	°C	130
Relative Temp Index, Mech w/impact	UL 746B	°C	130
Relative Temp Index, Mech w/o impact	UL 746B	°C	130
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	$>10^{15}$
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	17

* These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product. Variation within normal tolerances is possible for various colors. If minimum certifiable properties are required, please contact your local POLYVANTIS, Specialty Film & Sheet representative. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. All samples are prepared according to ISO 294.

UV RESISTANCE

The Corrugated sheet range features a proprietary two-side surface protection against the degrading effects of ultra-violet radiation in natural sunlight.

WARRANTY

POLYVANTIS offers a limited warranty on all standard Corrugated Sheet products, covering loss of light transmission, loss of impact strength due to weathering within ten (10) years of the date of sale. See warranty for exact details.

FIRE TEST PERFORMANCE

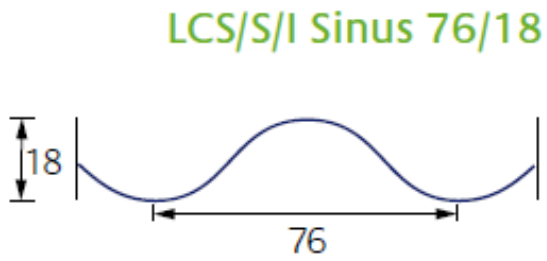
LEXAN™ Corrugated Sheet has good fire performance against many national fire codes dependent on thickness and colour; please check with the local sales office for details.

SITE SAFETY

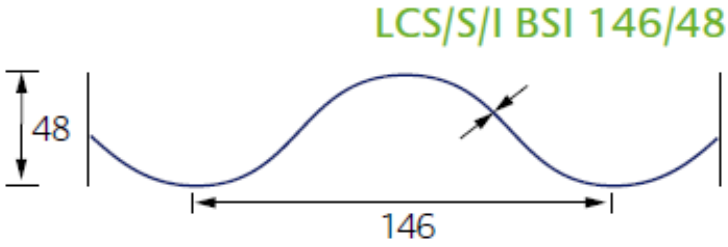
Despite the high strength of polycarbonates, sensible precautions should be taken when working with LEXAN™ Corrugated Sheets. In particular, crawl boards should be used during installation. Do not walk directly on sheets.

PRODUCT PROFILES

Corrugated Sinus Profile – 76/18



Corrugated BSI Profile – 146/48



Dimensions in (mm)/Drawing not to scale/All dimensions determined from an unloaded sheet at 25°C.

PRODUCT AVAILABILITY*

LEXAN™ CORRUGATED SINUS profile sheet:

Std.Thin gauge in mm	0.8-1-1.2
Standard Sizes*	1260mm x 6100mm
Texture	Polish/Polish
Standard Colors	Clear code 112

LEXAN™ CORRUGATED BSI profile sheet:

Std.Thin gauge in mm	1.5-2
Standard Sizes*	1050mm x 6100mm
Texture	One side 18N Texture, one side Polish
Standard Colors	Clear code 112

*LEXAN™ corrugated sheet can be supplied by prior arrangements in non - standard widths, lengths, and color. Such arrangements may affect prices, terms and/or other conditions of sales and are subject to minimum order quantities. For more specific details, please refer Baroda Product Guide.

POLYVANTIS

Polycarbonate products are sold globally under the trademark LEXAN™ Film & Sheet, owned by SABIC or its subsidiaries or affiliates.

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Internal

LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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