POLYVANTIS

PRODUCT DATASHEET

LEXAN™ THERMOCLICK™

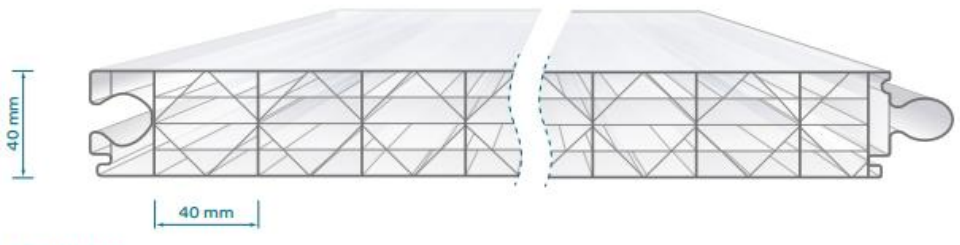
DESCRIPTION

LEXAN™ THERMOCLICK™ sheet LTC404X4000, is an impact resistant, energy-saving multi-wall sheet with profiled tongue and groove connection, including a groove for double sided tie on the inside. This inter-connecting system eliminates the need for vertical profiles, thereby saving costs and enhancing aesthetics

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Tensile stress at yield 50mm/min	ISO 527	MPa	>60
Tensile stress at break 50mm/min	ISO 527	MPa	70
Tensile strain at yield 50mm/min	ISO 527	%	6
Tensile strain at break 50mm/min	ISO 527	%	120
Tensile modulus 2mm/min	ISO 527	MPa	2300
Flexural stress at yield 2mm/min	ISO 178	MPa	90
Flexural stress at break 2mm/min	ISO 178	MPa	2300
Hardness H358/30 95	ISO 2039/1	MPa	95
THERMAL			
Vicat softening temperature, B/120	ISO 306	°C	145
HTD/Ae, 1.8 MPa edgew. 120*1*04/sp=100	ISO 75-2	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-80°C	ISO 11359-2	1/°C	$7x10^{-5}$
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	$>10^{15}$

*These are typical properties of polycarbonate resin and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local POLYVANTIS representative or the POLYVANTIS Quality Services Department.

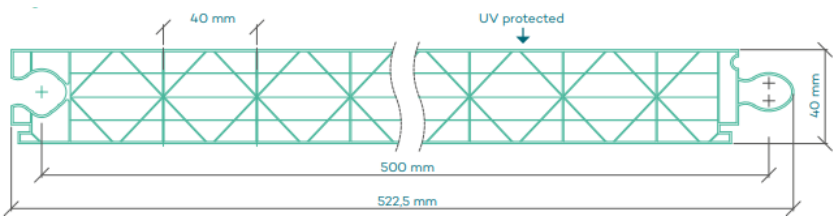


LTC404X4000

LEXAN™ THERMOCLICK™ SHEET
LTC404X4000 OFFERS:

oUnique four wall with X-structure
oUV protected outer surface
oGood light transmission and light diffusion characteristics
oExtremely high stiffness
oExcellent thermal insulation of 1.27 W/m2 K
oHigh impact strength
o10 year limited warranty on breakage & weathering
oEasy and fast installation

PROPERTY Profile	Value	Test method
Panel width ctc	500 mm ±2.5 mm	MPa
Standard Length	≤ 6 meter -0 +20 mm	MPa
	> 6 meter -0 +30 mm	%
Panel total thickness	ISO 40 mm ±0.8 mm	%
Weight	4 kg/m2 ±5%	MPa
Hail Impact	diam. 20 mm v = 21m/sec	MPa
Temperature resistance	-40 up to +100°C	MPa
Fire rating	B, S1, d0	EN 13501
U-Value	1.27 W/m2 K	ISO 10077 (EN673)
Sound insulation	21dB	EN ISO 10140-22010
Coefficient of linear thermal expansion	$7x10^{-5}$	ISO 11359-2



Color name	LT(1) %	Direct ST(1) %	Total ST(2) %	Solar Heat Gain Coefficient(3)	Shading coefficient(4)
Clear-112	59	56	64	0.64	0.73
Opal white – WH7A092X	50	48	57	0.57	0.66

(1) Light Transmission (LT) and Direct Solar Transmission (Direct ST) acc. EN 410 as measured on 600 mm ™ 600 mm samples
(2) Total Solar Transmission (Total ST) acc. EN 410 is the total solar energy that enters the interior of a building
(3) Solar heat gain coefficient or g-value is the total solar energy that enters the interior of a building, divided by 100
(4) Shading coefficient or b-value is the ratio of the total solar energy that enters the interior of a building with a given material and the total solar energy that enters the interior of a building with a standard 3 mm glass panel

THERMAL INSULATION

The multi-wall structure of LEXAN™ THERMOCLICK™ sheet offers potential advantages where thermal insulation is a major consideration. The amount of energy transmitted through the material per square meter and per degree temperature difference, referred to as U-Value, is only 1.27 W/ m2 K.

TEMPERATURE REISTANCE

LEXAN THERMOCLICK sheet is characterized by its excellent retention of impact strength and stiffness at elevated temperatures, even over an extended period. LEXAN THERMOCLICK sheet has a continuous use temperature rating of -40°C up to +100°C.

FIRE PERFORMANCE

LEXAN THERMOCLICK sheet has good fire performance in accordance with many national fire standards. More detailed information is available from POLYVANTIS's service center or your local authorized dealer

POLYVANTIS

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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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