

PRODUCT DATASHEET

WLSUV SOLID SHEET

DESCRIPTION

WLSUV Solid sheet is a transparent polycarbonate sheet with proprietary UV protection on both sides offering excellent weathering properties. With its excellent impact resistance, it is an ideal candidate for a wide variety of building and construction applications. WLSUV sheet can be easily cold formed into gentle curves which makes it a good material choice for skylights, covered walkways, barrel vaults etc. WLSUV sheet is thermoformable and can be shaped into the desired geometry whilst retaining the UV resistant coating specially developed for weather resistant applications.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm ³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
IMPACT			
Charpy impact, notched 23°C, 3.0 mm	ISO 179/1eA	kJ/m ²	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m ²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m ²	70
THERMAL			
Vicat softening temperature, B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75-2	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	7x10 ⁻⁵
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	>10 ¹⁵
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18

*These are typical properties and are not intended for specification purposes.

LIGHT TRANSMISSION

Transparent WLSUV sheets have excellent light transmission, between 84 and 87%. For buildings in hot climates or with south facing aspects, WLSUV is available in translucent bronze and opal white. WLSUV is essential opaque to all wave lengths below 385 nanometers. This useful shielding property can help prevent discoloration of sensitive materials placed under or behind WLSUV sheet.

UV PROTECTION

WLSUV sheet has proprietary UV protected surfaces, giving excellent durability to outdoor weathering.

PRODUCT AVAILABILITY

WLSUV sheet is manufactured in the standard sizes listed below.

Product code:	WLSUV Sheet
Standard gauge:	3-4-5-6-8-9.5mm
Standard size:	1250 X 2050 (3-4mm) 2050 X 3050 (3-9.5mm)
Masking:	Top & Bottom side: nTRL/WHITE
Colors:	Clear 112, Bronze 5109, Opal WH7D287O & WH4D348O

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