Sunlite

Multiwall Polycarbonate Sheet

Overview

Sunlite's cellular polycarbonate structure yields a lightweight sheet with high impact strength and superior thermal insulation. High light transmission makes Sunlite ideal for varied roofing, wall cladding, and glazing applications.

Sunlite has a wide product range: from anti-condensation treatment for greenhouses and garden centres to SolarSmart sheets that create cool climatic conditions.

Interior designers and advertisers take advantage of Sunlite's special appearance and add a unique touch to their designs.

Main Benefits

- High thermal insulation
- Lightweight and impact resistant
- High light transmission
- Excellent structural durability
- Weather and UV resistance
- Blocks virtually all UV radiation
- Easy to handle and install
- High fire performance rating

Typical Applications

- Architectural roofing & glazing
- Skylights and sidelights
- Conservatories
- Covered walkways
- Display, signage and decorations
- Industrial roofing and glazing
- Residential roofing and glazing
- Covered swimming pools
- Agricultural greenhouses

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Colours

Structure	Standard Colors						Multi-Layered		SolarSmart Selective Solar Control Technology				
	Clear	Bronze	White Opal	White Diffuser	Green**	Blue**	Bronze/Opal	Solar Guard (Solar Control/Opal)	Solar Ice	Solar Control*	CL	SLT	Smart Green
Twin wall 4mm	82%	35%	30%		35%	30%				30%			
Twin wall 4.5mm	82%	35%	30%		35%	30%				30%			
Twin wall 6mm	80%	35%	20%		35%	30%				30%			
Twin wall 8mm	80%	35%	35%		35%	30%				25%	45%/34%	60%/55%	
Twin wall 10mm	79%	35%	30%		35%	30%				25%		60%/55%	
Triple wall 8mm	76%	35%	48%		35%	30%				25%			
Triple wall 10mm	76%	35%	48%		35%	30%				25%			
Triple wall 16mm	76%	35%		48%	35%	30%							
X-Lite 16mm	60%	25%		38%	35%						30%/25%		
V-Structure 20mm	63%												
X-Lite 25mm	60%	25%	15%				10%	5%	20%		20%/16%		42%/35%
X-Lite 32mm	58%	20%	15%				10%	5%	20%		20%/16%		42%/35%
X-Lite 35mm	57%	20%	15%				10%	5%	20%		20%/16%		42%/35%
X-Lite 40mm	57%	20%	15%										

LT = Light Transmission
ST = Solar Transmission

*ASTM D-1003 **Blue, Green and Solar Control sheets are made to order only. **For BBA product specifications, please contact your UK agent or refer to BBA website.

Dimensions

Structure	Thickness (mm)	Area Weight (Kg/m²)	U-Value (W/m² °K)	Width (mm) (*USA Only) 980	1050	1200	1220*	1250	1600	1800	1830	2085	2090	2095	2100
Twin Wall	4	0.8	3.8	✔	✔	✔	✔				✔				✔
	4.5	1.0	3.7	✔	✔	✔					✔				✔
	6	1.3	3.5	✔	✔	✔	✔				✔				✔
	8	1.5	3.3	✔	✔	✔	✔				✔				✔
	10	1.7	2.9	✔	✔	✔	✔				✔				✔
Triple Wall	8	1.7	3.0								✔				✔
	10	2.0	2.7								✔				✔
	16	2.5	2.3	✔	✔	✔	✔	✔	✔	✔	✔				✔
X-Lite	16	2.5	2.1	✔	✔		✔	✔	✔	✔					✔
	25	3.0	1.7	✔	✔		✔	✔	✔	✔					✔
	32	3.2	1.6	✔	✔		✔	✔	✔	✔					✔
	35	3.5	1.5	✔	✔			✔	✔	✔					✔
	40	4.1	1.4						✔	✔					✔
V-Structure	20	2.8	1.85									✔			
	25	3.4	1.6										✔		
	32	3.6	1.5											✔	
	35	3.8	1.45											✔	
	40	4.0	1.35						✔	✔					✔

*Other structures and dimensions are available upon request. Please contact your Palram distributor for more details.

SUNLITE® Product Range

Product	Description
SUNLITE®	Standard sheet with UV protection on one side.
SUNLITE® UV2	UV protection on both sides.
SUNLITE® ML	Multi-layered color combinations for special designs.
SUNLITE® Plus	With anti-condensation, for greenhouses.
SUNLITE® Solar Control	Solar metallic reflective heat blocking sheet.
SUNLITE® SLT	Heat blocking and anti-condensation for garden centers.
SUNLITE® CL	Heat blocking sheet for architectural applications
SUNLITE® Smart	See-through sheet with advanced heat-blocking.

Typical Physical Properties

Property	Method*	Conditions	Units	Value
Density	D-792		g/cm³	1.2
Heat deflection temperature (HDT)	D-648	Load: 1.82 MP	℃	135
Service Temperature - Short term			℃	-50 to +120
Service Temperature - Long term			℃	-50 to +100
Coefficient of linear thermal eaxpansion	D-696		mm/mm ℃	$6.5x10^{-5}$
Tensile strength at yield	D-638	10 mm/min	MPa	62
Elongation at break	D-638	10 mm/min	%	>90
Impact falling dart	ISO 6603/1		J	40-400
Practical thermal expansion/contraction			mm/m	3

* ASTM except where noted otherwise.

Flammability

Method	Classification*	Method	Classification*	Method	Classification*	Method	Classification*
BS 476/7	Class 1	ASTM D-635	CC-1 (SUNLITE® SL)	EN 13501	B, s1, d0	ASTM E-84	Class A

* Depends on sheet type. For more information please contact your Palram distributor.

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