



SUNLITE®

Multiwall Polycarbonate Sheet



AGRICULTURE



CONSTRUCTION



DIY



SIGN & DISPLAY



ARCHITECTURE



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 centers 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 and glazing
- Ⓒ Skylights and sidelights
- Ⓒ Conservatories
- Ⓒ Covered walkways
- Ⓒ Displays, signage and decorations
- Ⓒ Industrial roofing and glazing
- Ⓒ Residential roofing and glazing
- Ⓒ Covered swimming pools
- Ⓒ Agricultural greenhouses

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® FR	Fire retardant, with better flammability ratings.
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.



Colors*

Structure	Standard Colors						Multi-Layered		Solar Smart				
	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%	60%	35%	30%				30%			
Twin wall 8mm	80%	35%	35%	55%	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%	25%	20%	10%						18%			
V-Structure 25mm	62%			30%									
V-Structure 32mm	61%	20%		20%									
V-Structure 35mm	60%												
V-Structure 40mm	58%												
X-Lite 25mm	60%	25%	15%				10%	5%	20%	20%	20%/16%		42%/35%
X-Lite 32mm	58%	20%	15%				10%	5%	20%	20%	20%/16%		42%/35%
X-Lite 35mm	57%	20%	15%				10%	5%	20%	20%	20%/16%		42%/35%
X-Lite 40mm	57%	20%	15%							20%			
7 Walls 10mm	64%	29%		45%									
7 Walls 16mm	64%	29%		38%									
7 Walls 20mm	62%	29%		38%									
7 Walls 25mm	60%	22%		38%									

*Light transmission values adhere to ASTM D-1003. **Blue, Green and Solar Control are made to order only.

Dimensions

Structure	Thickness (mm)	Area Weight (Kg/m ²)	U-Value (W/m ² *K)	Width (mm) (*USA Only)													
				700	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		✓	✓	✓	✓	✓	✓	✓	✓					✓
	16	2.5	2.1		✓	✓	✓	✓	✓	✓	✓	✓					✓
	25	3.0	1.7		✓	✓	✓	✓	✓	✓	✓	✓					✓
X-Lite	32	3.2	1.6		✓	✓	✓	✓	✓	✓	✓	✓					✓
	35	3.5	1.5		✓	✓	✓	✓	✓	✓	✓	✓					✓
	40	4.1	1.4							✓	✓						✓
	20	2.8	1.85														✓
	25	3.4	1.6														✓
V-Structure	32	3.6	1.5														✓
	35	3.8	1.45														✓
	40	4.0	1.35														✓
	10**	1.9	2.3		✓	✓	✓	✓	✓	✓	✓	✓					✓
	16	2.55	1.75		✓	✓	✓	✓	✓	✓	✓	✓					✓
7 Walls	20	2.9	1.55		✓	✓	✓	✓	✓	✓	✓	✓					✓
	25	3.4	1.39		✓	✓	✓	✓	✓	✓	✓	✓					✓

*Other structures, dimensions and weights are available upon request. Please contact your Palram distributor for more details. **Width of 7 Wall 10mm is 2096mm instead of 2100mm.

Typical Physical Properties

Property	Method*	Conditions	Units	Value	Property	Method*	Conditions	Units	Value
Density	D-792		g/cm ³	1.2	Tensile strength at yield	D-638	10 mm/min	MPa	62
Heat deflection temperature (HDT)	D-648	Load: 1.82 MP	°C	135	Elongation at break	D-638	10 mm/min	%	>90
Service Temperature - Short term			°C	-50 to +120	Impact falling dart	ISO 6603/T		J	40-400
Service Temperature - Long term			°C	-50 to +100	Practical thermal expansion/contraction			mm/m	3
Coefficient of linear thermal expansion	D-696		mm/mm °C	6.5x10 ⁻⁵	* 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® FR)	EN 13501	B, s1, d0	ASTM E-84	Class A

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