



# 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.



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## Colors\*

Structure	Standard Colors						Multi-Layered		Solar Smart™ Selective Solar Control Technology				LT = Light Transmission ST = Solar Transmission	
	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 20mm	60%	25%	15%				10%	5%	20%	20%	20%/16%		42%/35%	
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 <sup>2</sup> )	U-Value (W/m <sup>2</sup> ·°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		✓	✓	✓	✓					✓			✓
Triple Wall	10	1.7	2.9		✓	✓	✓	✓					✓			✓
	8	1.7	3.0										✓			✓
	10	2.0	2.7										✓			✓
	16	2.7	2.3		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
X-Lite	16	2.5	2.1		✓	✓		✓	✓	✓	✓					✓
	20	2.8	1.85		✓	✓		✓	✓	✓	✓					✓
	25	3.0	1.7		✓	✓		✓	✓	✓	✓					✓
	32	3.2	1.6		✓	✓		✓	✓	✓	✓					✓
	35	3.5	1.5		✓	✓		✓	✓	✓	✓					✓
V-Structure	40	4.1	1.4					✓	✓	✓						✓
	20	2.8	1.85										✓			
	25	3.4	1.6											✓		
	32	3.6	1.5												✓	
7 Walls	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 <sup>3</sup>	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 6603/1		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 <sup>-5</sup>					

## 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.



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