



## Overview

SUNTUF offers the unique properties of polycarbonate in a durable corrugated structure.

Its mechanical robustness, high light transmission, UV blocking, weather resistance and low weight make it superior to current alternatives.

Coupled with Palram's manufacturing capabilities, SUNTUF is ideal for almost any roofing application, stadia or pergola, rooflight or cladding.

## Main Benefits

- Impact resistant: virtually unbreakable
- Transparent: up to 90% light transmission
- Weather and UV resistant
- Wide service temperature range
- UV blocking - better than sunscreens
- Lightweight
- Good flammability rating - does not emit toxic gases when burning
- Warranted against yellowing, loss of light transmission and hail penetration
- Easy to work with and install

## Typical Applications

### Construction and Industry

- Skylights, rooflights and sidelights
- Architectural structures
- Industrial facilities
- Public buildings
- Canopies and shelters for car parks, swimming pools, walkways etc.
- Partitions

### Do-it-Yourself (DIY)

- Skylights
- Canopies and awnings
- Balconies and verandas
- Carports or garages (parking shelters)
- Domestic swimming pools
- Gazebos or pergolas
- Sunrooms
- Outdoor play or family areas
- Hobby greenhouses

### Agriculture

- Commercial greenhouses
- Garden centers



## Colors

Transparent	Clear, Grey, Bronze, Sky Blue, Transparent Green, <b>Smart Grey</b>
Translucent	White Opal, White Diffuser, <b>Solar Control</b> , Solar Ice, Mist Green, Smooth Cream
Opaque	White, Green, Blue, Red Brick

\*Custom colors are available upon request, subject to minimum quantity.

## Surface Finishes

SUNTUF is offered with smooth finish on both sides as standard. Embossed and Hair-Cell finishes on one side are optional.



## Profile Availability

SUNTUF can ideally integrate with almost any roof type, using Palram's proprietary MetalMatch™ profile matching technology, which allows it to be matched to existing or new corrugation profiles. SUNTUF is also available in over 350 existing profiles, which are listed in the SUNTUF® Profile Catalog. For more details please refer to the [SUNTUF Rooflights international web page](#).

## SUNTUF® Product Range

Product	Description
SUNTUF®	Corrugated polycarbonate sheet with UV protection on one side
SUNTUF® UV2	With UV protection on both sides
SUNTUF® Embossed	Embossed or Hair Cell finish on one sides
SUNTUF® Plus	For greenhouse covering, with anti-condensation treatment
SUNTUF® Solar Control	With effective heat blocking technology
SUNTUF® Smart	Advanced heat blocking with high clarity

Solar Smart  
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## Typical Physical Properties

Property	Method*	Conditions	Units	Value
Density	D-792		g/cm <sup>3</sup>	1,2
Heat deflection temperature (H.D.T)	D-648	Load: 1.82 MPa	°C	135
Service Temperature Range (Short term)			°C	-50 to +120
Service Temperature Range (Long term)			°C	-50 to +100
Coefficient of linear thermal expansion	D-696		cm/cm°C	6.5 x 10 <sup>-5</sup>
Thermal conductivity	C-177		W/m K	0.21
Tensile strength at yield	D-638	10 mm/min	MPa	62
Tensile strength at break	D-638	1 mm/min	MPa	65
Elongation at yield	D-638	10 mm/min	%	6
Elongation at break	D-638	10 mm/min	%	>70
Tensile modulus of elasticity	D-638	1 mm/min	MPa	2,300
Flexural strength mechanical	D-790	1 mm/min	MPa	93
Flexural modulus	D-790	1.3 mm/min	MPa	1,890
Impact falling weight	(ISO 6603/1 E50)	0.8 mm sheet	J	50
Rockwell hardness	D-785		R Scale	118
Light transmission	D-1003	Clear sheet	%	90%
Haze	D-1003	Clear sheet	%	<0.5
Yellowness index	D-1003	Clear sheet	YI	<1

\* ASTM method except where noted otherwise

## Flammability

SUNTUF complies with the most demanding international fire resistance standards in the field of plastics, as indicated in the detailed table herein. The classification is subject to product type, thickness and color.

Standard	Classification*
EN13501	B, s1, d0
UL 723	4.7, 47.0
Los Angeles Building Code	CC2 (Section 2603)
UNI 9177, 9176	Class 2

\* For more detailed information please contact your Palram distributor.

## UV Blocking and Resistance

SUNTUF transmits radiation selectively. It effectively blocks harmful UV radiation. In addition, SUNTUF withstands the adverse effects of UV radiation.