



# SUNTUF®

## Corrugated Polycarbonate Sheet



CONSTRUCTION



ARCHITECTURE



DIY



AGRICULTURE



### Overview

SUNTUF corrugated polycarbonate sheet is an outstanding roofing material that offers superior physical properties.

SUNTUF is favored by professionals for non-corrosive industrial structural roofing and siding, and by home owners for a multitude of DIY applications, due to its high impact strength and wide service temperature range.

The unlimited profile range and high light transmission allow SUNTUF to be integrate as high quality skylight with any roofing profile. SUNTUF is also available in a wide variety of colors and light diffusion options.

### 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 gasses 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 garages, swimming pools, walkways etc.
- Partitions

#### Do-It-Yourself (DIY)

- Skylights
- Canopies and awnings
- Porches 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

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## Colors

<b>Transparent</b>	Clear, Solar Grey, Bronze, Sky Blue, Transparent Green, <b>Smart Grey</b>
<b>Translucent</b>	White Opal, White Diffuser, <b>Solar Control</b> , Solar Ice, Mist Green, Smooth Cream
<b>Opaque</b>	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 profile matching technology, which allows it to be matched to existing or new corrugation profiles. SUNTUF is also available in over 300 existing profiles, which are listed in the SUNTUF® Profile Catalog. For more details please refer to the SUNTUF Rooflights page at [www.palram.co.in](http://www.palram.co.in).



## 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
SUNTUF® Smart	Advanced heat blocking with high clarity

## 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 has a low flammability rating and does not emit toxic gasses when burning.

Standard	Classification*
EN13501	B, s1, d0
NFP 92501, 4, 5	M-1
DIN 4102	B-1
UL 723	4.7, 47.0
Los Angeles Building Code	CC2 (Section 2603)
UNI 9177, 9176	Class 2

\* For additional information please contact your Palram distributor.

## UV Blocking and Resistance

SUNTUF transmits radiation selectively. It shield against harmful UV rays completely. In addition, SUNTUF withstands the detrimental effects of UV radiation.



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