



Overview

A high-performance impact resistant polycarbonate roofing sheet engineered for professional and residential projects.

SUNTUF Beehive generates diffused light with reduced glare for enhanced comfort.

Hail proof polycarbonate that combines superior strength and durability.

An excellent choice for DIY skylights, carport roofing, and other home improvement projects.

Add modern aesthetics and style to your roofing project while extending its lifespan.

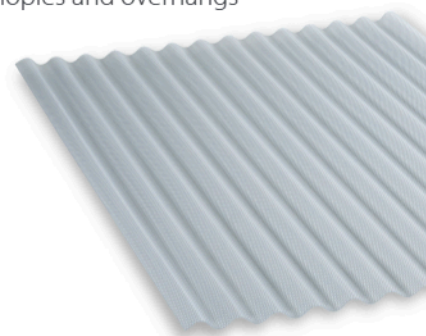
www.thepolycarbonatestore.co.uk

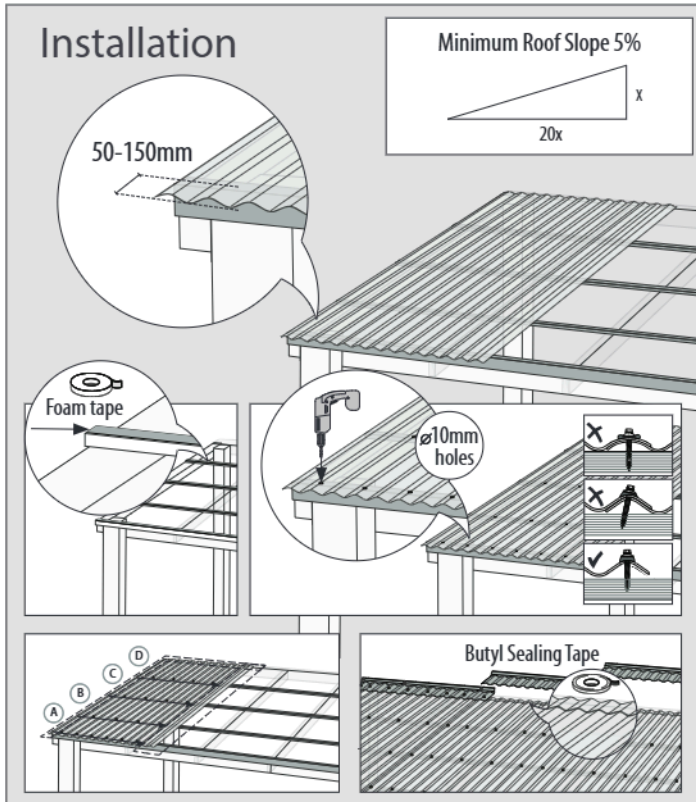
Main Benefits

- Hail & impact resistant
- Superior Strength & durability
- Improved absorption of rain noise
- Modern aesthetics
- Lightweight & easy to install
- UV Protection
- 100% diffused light
- Balance shade & daylight
- High wind and snow load resistance
- Meets the highest fire-retardant standards

Typical Applications

- Pergolas and gazebos
- Patio enclosures
- Sunrooms
- Carports
- Covered walkways
- Canopies and overhangs





Typical Physical Properties

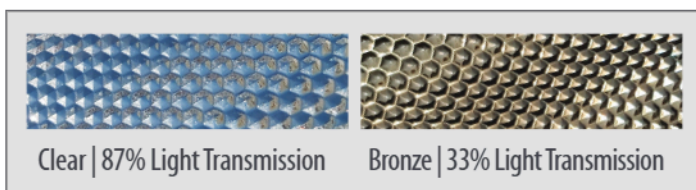
Property	Method*	Conditions	Units	Value
Density	D-792		g/cm ³	1,2
Heat deflection temperature (H.D.T)	D-648	Load: 1.82 MPa	°C	135
Service Temperature Range (Short term)			°C	-50 to +120
Service Temperature Range (Long term)			°C	-50 to +100
Coefficient of linear thermal expansion	D-696		cm/cm°C	6.5 x 10 ⁻⁵
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)	2.8 mm sheet	J	75
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



Load / Span Data

Load (kg/m ²)	Maximum Roof Span (mm) 2.8 mm Thickness
50	1400
75	1300
100	1200
125	1175
150	1150
175	1125
200	1100



Product Availability

Textures	Prismatic-honeycomb
Thickness	2.8 mm
Width	1045 mm
Profile	76/18 Iron/Sinus

Flammability

SUNTUF® Beehive 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
AS/NZS 1530.3	Approved
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 more detailed information please contact your Palram distributor.