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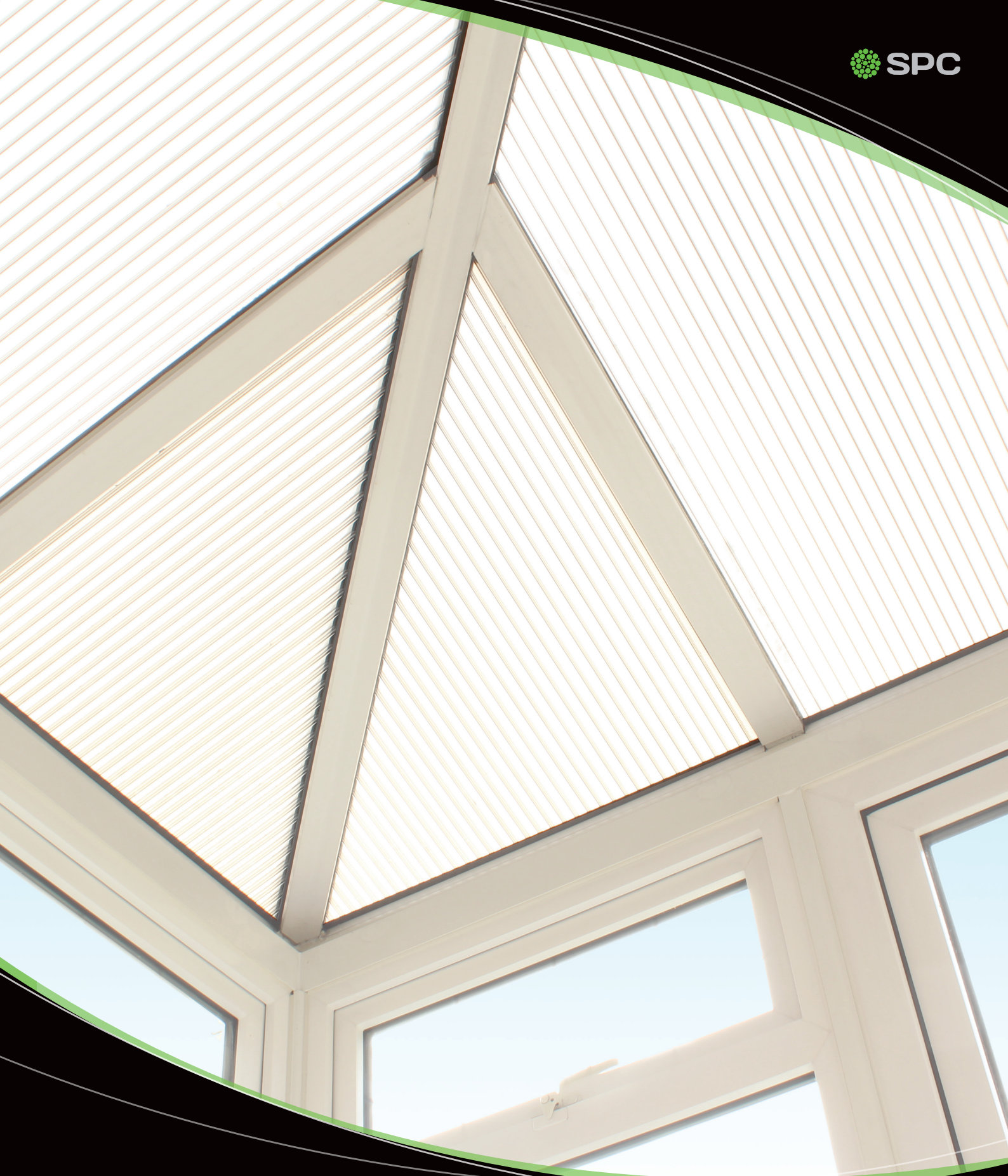
Polycasa offers an extensive range of plastic sheets to distribution and industrial partners, with an industry leading selection of polymers, thicknesses, sizes, colours, patterns, and coatings.



**Brands from Polycasa:**



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# Product Guide



[www.polycasa.com](http://www.polycasa.com)



SPC IS A RANGE OF POLYCARBONATE SHEETS — AS CLEAR AS GLASS BUT STRONGER AND MORE RESISTANT TO IMPACT.

In fact, SPC is virtually unbreakable. Light, strong, weatherproof, and insulating against heat and cold, this material has a long working life and carries a 10 year warranty against yellowing. So, it’s no wonder SPC is seen as an attractive sheet for use as roofing, cladding and glazing in construction, agriculture, industry and DIY.



PRODUCT IDENTIFICATION

Polycasa® SPC is the brand name for extruded multi-wall polycarbonate sheets.

It offers solutions for both indoor and outdoor applications, and is a lightweight sheet which is easy to transport, handle and install.

SPC sheets offer excellent aesthetic and optical properties. Standard colours are clear, opal and bronze.

CHARACTERISTICS

- High impact resistance.
- Weather resistant.
- High heat and sound insulation.
- Long life span.
- Excellent light transmission up to 86% (6 mm).
- Large dimensions.
- Excellent resistance to chemicals.
- Transparent.
- UV protection: co-extruded 1 side or 2 side.
- 10 year warranty.
- Excellent fire safety – EN 13501 standard (Euroclass).
- Temperature resistant: between -40°C +130°C.
- High resistance to mechanical loading.
- Light-weight.
- Easy to install using ordinary tools.
- Superb thermal insulation — saves energy.
- Computer checked colours and material properties.

APPLICATIONS

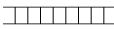











- Roofing and glazing.
  - Skylights.
  - Vaults.
  - Suspended ceilings.
  - Conservatories.
  - Advertising panels.
- Cladding.
  - Shelters.
  - Partitions.
  - Swimming pool enclosures.
  - Boxes.
  - Winter gardens.

CERTIFICATIONS\*



KPF Erkelenz tested  
\*Sheets are manufactured to EN 16153 :2013

TECHNICAL INFORMATION

		SPC 4 / 2 w	SPC 6 / 2 w	SPC 8 / 2 w	SPC 8 / 4 w	SPC 10 / 2 w	SPC 10 / 4 w
Design of the flutes							
Thickness	mm	4	6	8	8	10	10
	tolerance	+/- 0.5 mm					
Light transmission	clear sheet	86%	86%	81%	70%	84%	67%
U value	watts/(m².K)	3.9	3.5	3.2	2.8	3.0	2.5
Weight	g/m²	900	1300	1500	1500	1700	1700
	tolerance g/m²	+/- 45	+/- 65	+/- 75	+/- 75	+/- 85	+/- 85
Standard widths	mm	2100					
	tolerance	-2 / + 6 mm					
Standard lengths*	mm	6000 and 7000 mm					
	tolerance	-0 / + 0.40 % (24 - 28 mm)					
		SPC 16 / 3 w	SPC 16 / 5 w	SPC 16 / 7 w	SPC 16 Diamond	SPC 20 Diamond	SPC 25 Diamond
Design of the flutes							
Thickness	mm	16	16	16	16	20	25
	tolerance	+/- 0.5 mm					
Light transmission	clear sheet	73%	62%	54%	59%	62%	64%
U value	watts/(m².K)	2.3	2.0	1.9	1.8	1.7	1.5
Weight	g/m²	2700	2500	2650	2500	3000	3300
	tolerance g/m²	+/- 135	+/- 125	+/- 133	+/- 125	+/- 150	+/- 165
Standard widths	mm	980 / 1200 / 2100	980 / 2100	980 / 2100	980 / 1200 / 2100	2100	980 / 2100
	tolerance	-2 / + 6 mm					
Standard lengths*	mm	6000 and 7000 mm					
	tolerance	-0 / + 0.40 % (24 - 28 mm)					
GENERAL							
Property				Method	Unit	POLYCASA SPC	
Density				ISO 1183	g/cm³	1.2	
Rockwell hardness				D-785	M scale	-	
OPTICAL							
Property				Method	Unit	POLYCASA SPC	
Light transmission				DIN 5036 T3	%	86	
Refractive index				ISO 489	n D <sub>20</sub>	1.585	
MECHANICAL							
Property				Method	Unit	POLYCASA SPC	
Flexural modulus				ISO 489	MPa	-	
Flexural strength				ISO 178	MPa	>95	
Tensile modulus				ISO 527	MPa	2200	
Tensile strength				ISO 527	MPa	60	
Elongation				ISO 527	%	80	
THERMAL							
Property				Method	Unit	POLYCASA SPC	
Vicat temperature (VST/B 50)				ISO 306	°C	145	
Heat deflection temperature (A)				ISO R75	°C	135	
Specific heat capacity				-	J/gK	1.17	
Coefficient of linear thermal expansion				DIN 53328	K <sup>-1</sup> x10 <sup>-5</sup>	6.5	
Thermal conductivity				DIN 52612	W/mK	0.2	
Degradation temperature					°C	>280	
Max. service temperature continuous use					°C	115	
Max. service temperature short term use					°C	130	
Sheet forming temperature range					°C	180-210	
IMPACT STRENGTHS							
Property				Method	Unit	POLYCASA SPC	
Izod (notched)				ISO 180	KJ/m²	-	
Charpy (notched)				ISO 179	KJ/m²	>10	
Charpy (unnotched)				ISO 179	KJ/m²	NB	
ELECTRICAL							
Property				Method	Unit	POLYCASA SPC	
Dielectric constant 50 HZ				DIN 53483		3.0	
Volume resistivity				DIN 53482	Ω.cm	10 <sup>15</sup>	
Surface resistivity				DIN 53482	Ω	10 <sup>15</sup>	
Dielectric strength				DIN 53481	kV/mm	>30	
Dissipation factor (50 HZ)				DIN 53483		8x10/4w	

\*Other lengths are available upon request subject to production criteria.