



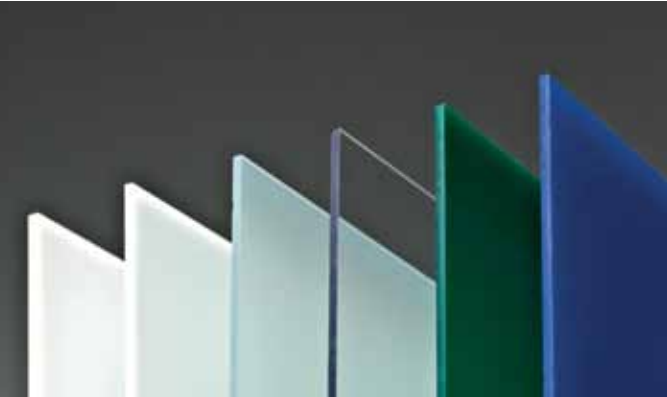
# Product Guide

POLYCASA PETG

POLYCASA PETG IS A TOUGH, CLEAR MATERIAL THAT OFFERS MANY SOLUTIONS FOR BOTH INDOOR AND OUTDOOR APPLICATIONS.

This extruded sheet offers possibilities for designers and fabricators, from simple shapes to the most complex designs (where it doesn’t lose any of its toughness). PETG is easy to mould, and does not require predrying before use (in contrast to other common materials), which reduces processing costs and time required.

Plus, the high impact performance allows use of a thinner gauge sheet than with other common materials — another way of lowering material costs.



PRODUCT IDENTIFICATION

Polycasa PETG is the brand name for extruded Polyethyleneterephthalate Glycol (PETG) copolyester sheet from Polycasa.

As a result of the extrusion process, Polycasa can offer, in addition to clear and opal versions, a variety of colours and designs to suit a wide range of requirements.

CHARACTERISTICS

- Good optical properties.
- Brilliant surface.
- Easy to fabricate.
- Its biggest advantage compared to other plastics is in vacuum forming.
- Exceptional low temperature performance.
- Very good chemical resistance.
- Very high impact properties.
- Low water absorption.
- Easy to recycle.

Polycasa PETG meets all current food contact legislation and can be used in contact with unwrapped food.

Our UV Grade is not intended for food contact and is therefore not covered by this warranty.

APPLICATIONS

- Bus shelters.
- Poster glazing.
- Machine guards.
- Medical appliance packaging.
- Displays & signs for external use.
- Refrigerators and cold storeroom equipment.
- Bicycle safety helmets.
- Food containers.
- Lenticular lenses.
- Graphic arts.
- Lighting controllers for hazardous areas.
- Motorcycle windshields.

PRODUCT RANGE

- Available with UVP or anti-reflex features.
- Standard sheet thickness range from 0.8 to 10 mm. (12 and 15 mm are also available but subject to special order.)
- Available in standard clear colour, and a range of different opal shades.
- Patterns; Prismatic, Haircell and Impala patterns and also colours are available on request.
- A range of special colours with or without UV protection can be produced, subject to special conditions.
- Standard sheet dimensions are from 0.8 to 1.5 mm, 2050 x 1250 (width) mm; from 1.5 to maximum thickness 3050 x 2050 mm or 2050 mm x 1250.
- Overlength and special sizes on request.

Please contact your local customer service centre for a complete product overview.

For details see back of brochure.

TECHNICAL INFORMATION

GENERAL			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Density	D1505	g/cm³	1.27
Rockwell Hardness	D-785	Rscale	105

OPTICAL			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Light Transmission	5036	%	88
Refractive Index	53491		1.57
Haze	D1003	%	<1

MECHANICAL			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Flexural Modulus	53452	MPa	2075
Flexural Strength	53452	MPa	70
Tensile Modulus	53455	MPa	2200
Tensile Strength	53455	MPa	50
Elongation	53455	%	54

THERMAL			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Vicat Temp (B)	53460	°C	82
Heat Deflection Temp. (A/B)	53461	°C	72/68
Specific Heat Capacity	D-2766	J/gK	1.1
Coefficient of linear thermal expansion	53752	K <sup>-1</sup> x10 <sup>-5</sup>	6.8
Thermal Conductivity	52612	W/mK	0.20
Degradation temperature		°C	>280
Max service temperature		°C	70
Sheet forming temp. range		°C	120-160

IMPACT STRENGTHS			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Izod (notched)	ISO 180	kJ/m²	11.5
Charpy (notched)	53453	kJ/m²	10
Charpy (unnotched)	53453	kJ/m2	NB

ELECTRICAL			
Property	Method	Units	POLYCASA PETG + POLYCASA PETG UV
Dielectric constant 100 HZ	IEC 250		2.6
Volume Resistivity	D257	Ω.cm	>10 <sup>15</sup>
Surface Resistivity	D257	Ω	>10 <sup>16</sup>
Dielectric Strength	D149	kV/mm	16
Dissipation Factor (50 HZ)	IEC 250		0.01

For further information on the wide range of Polycasa products please contact us as follows;

**UK and Ireland**

**T:** 00 44 28 67 74 11 11

**France, Italy, Greece and Cyprus**

**T:** 00 33 385 73 68 19

**Germany, Austria, Switzerland**

**T:** 00 49 61 31 63 11 82

**Spain and Portugal**

**T:** 00 34 93 565 12 30

**Central and Eastern Europe**

**T:** 00 421 41 707 14 20 – 24

**Benelux, Scandinavia and all other countries**

**T:** 00 32 14 57 67 11

**HEAD OFFICE**

**Polycasa**

Leukaard 1  
BE 2440 Geel  
Belgium

**T:** 00 32 14 57 67 06

**F:** 00 32 14 58 96 21

**E:** [info@polycasa.com](mailto:info@polycasa.com)

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

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:**



While we have made every effort to ensure the accuracy of the information it is provided on an "as is" basis and without liability, particularly including (but not limited to) liability with regard to any up to date status, completeness or correctness of the information or any liability for the merchantability of products, their fitness for any particular purpose, or the infringement of third party rights. Colours of the products are for indication purposes only and may not represent the colour of the actual product. Any opinions provided in the Product Guide are not statements or representations of fact and they are not intended to form part of any offer or contract. © Polycasa Group, 2013, all rights reserved.