



## PLEXIGLAS® *proTerra* Coextruded

### Product

PLEXIGLAS® *proTerra* is a double-sided coextruded, clear or opaque sheet material made of acrylic glass (polymethyl methacrylate, PMMA). The sheets contain approx. 90 % recycled PLEXIGLAS® raw material.

The sheets consist of three inseparably connected layers. For colored sheets, the color of the middle, thick layer is adjusted to the color impression of the top layers. Nevertheless, there can be minimal variations in the edge impression due to production.

### Properties

In addition to the well-known and proven properties of PLEXIGLAS®, such as

- excellent surface brilliance,
- extremely high weather resistance,
- easy processability,
- high surface hardness,
- low weight – half the weight of glass,
- 100 % recyclability, and
- 11 times more break-proof than glass,

PLEXIGLAS® *proTerra* features the following special characteristics:

- consists of approx. 90 % recycled raw material

### Applications

Due to the high proportion of recycled raw material, PLEXIGLAS® *proTerra* is especially suitable for applications in trade fair constructions and shopfitting, display construction and furniture or interior design, which have special requirements regarding recycled products.



Schematic structure of a coextruded sheet using the example of the variety 9M806 RC

### Processing

PLEXIGLAS® *proTerra* can be processed exactly like standard PLEXIGLAS®. The following processing guidelines for PLEXIGLAS® are available:

- Machining of PLEXIGLAS® (No. 311-1)
- Forming PLEXIGLAS® (No. 311-2)
- Joining PLEXIGLAS® (No. 311-3)
- Surface treatment of PLEXIGLAS® (No. 311-4)
- Tips for processing PLEXIGLAS® solid sheets (No. 311-5)

## Standard property values

Properties (colorless, 3 mm thickness)	Unit	Standard	Value
<b>Mechanical and thermal properties</b>			
Bulk density	g/cm <sup>3</sup>	ISO 1183	1.19
Modulus of elasticity Et (short-term value)	MPa	ISO 527	3300
Impact strength (Charpy)	kJ/m <sup>2</sup>	ISO 179	15
Linear expansion coefficient (0–50° C)	1/K mm/m°C	DIN 53752	7 • 10 <sup>-5</sup> 0.07
Scratch resistance according to friction wheel method (100 U; 5,4 N; CS-10 F)	% haze	ISO 9352	20...30
<b>Electrical properties</b>			
Surface resistance	Ohm	DIN VDE 0303	5 • 10 <sup>13</sup>
Limit charging	V/cm	–	5,000–10,000
<b>Fire behavior</b>			
Building material class	–	DIN 4102	B2, normal flammability
Fire class	–	DIN EN 13501	class E
Flue gas amount	–	DIN 4102	extremely low
Flue gas toxicity	–	DIN 53436	none
Flue gas corrosiveness	–	DIN VDE 0482-267	none

**Delivery forms:** PLEXIGLAS® *proTerra* sheets are produced in 3050x2050 mm format and are available in various thicknesses. Detailed information can be found in the PLEXIGLAS® sales range. We would be happy to

provide you with information about other dimensions (e.g. excess lengths), sizes/cut-to-size, thicknesses and other conditions on request.

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® = registered trademark

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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