

Palglas Difuzant Opal

FIȘĂ TEHNICĂ

PALGLAS®

Flat Extruded Acrylic Sheet



Construction



Glazing



Advertising



Fabrication

Overview

PALGLAS offers unsurpassed light transmission, matching that of glass while offering half its weight. Inherently UV resistant, PALGLAS is the ultimate choice in high traffic acoustic barriers, resisting gasses emitted from vehicles. Its high clarity and formability offer designers a world of options, from small fabricated items to transparent furniture.

Main Benefits

- Up to 92% light transmission
- Inherently UV resistant
- Stronger than glass and less than half its weight
- High gloss appearance
- Can be formed and fabricated
- Easy to mount
- Good chemical resistance
- Good thermal insulation

Typical Applications

- High traffic acoustic barriers
- Lightweight high clarity glazing
- Attractive fabricated items
- Transparent furniture
- Light fixtures
- Illuminated and 3D signage



Standard Specifications*

Colors	Transparent/Clear Translucent/White Opal
Thickness - Standard (mm)	2 - 10
Thickness - Special (mm)	1.5, 1.8, 12 - 20
Width x Length (mm)	1250 x 2050 mm 1220 x 2440 mm 2050 x 3050 mm

* Other colors and dimensions are available upon request, subject to minimum quantity.

Forming and Fabrication

PALGLAS can be fabricated, machined and thermoformed. Please note: predrying is strongly recommended for best results when thermoforming. PALGLAS is easily hot line bent and shaped into a wide variety of forms. PALGLAS can be bonded to itself and other materials. Additional details on how to work with PALGLAS is available upon request.

Installation and Maintenance

Large PALGLAS sheets should always be installed using a framing system. PALGLAS thermal expansion is eight times that of glass and three times that of metal, this important factor must be taken into account when glazing. The polyethylene protective masking must be removed immediately after installation. PALGLAS can easily be cleaned with a soft cloth or sponge, using a mild soap or detergent. Rinse and dry with a soft 100% cotton cloth or moist cellulose sponge to prevent water spotting. Ask your Palram representative to assist you in selecting PALGLAS sheet with dimensions that are suitable for your applications.

Inasmuch as PALRAM Industries has no control over the use to which others may put the material, it does not guarantee that the results as those described herein will be obtained. Each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning suggested uses of the materials described herein are not to be construed as constituting a license under any PALRAM Industries patent covering such use or as recommendations for use of a material. PALRAM Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local PALRAM Industries supplier to ensure that you have obtained the most up to date information.

Typical Physical Properties

Property	ASTM Method	Conditions	Units	Value
Density	(D-792)		g/cm ³	1.19
HDT (Heat deflection temperature)	(D-648)	Load 1.82MP	°C	91
Service temperature range			°C	-40 to +80
Coefficient of linear thermal expansion	(D-698)		cm/cm °C	7.0 x 10 ⁻⁵
Thermal conductivity	(C-177)		/	0.19
Tensile strength at break	(D-638)	1mm/min.	MPa	70
Elongation at break	(D-638)	10mm/min.	%	4
Tensile modulus of elasticity	(D-638)	1mm/min.	%	3,200
Flexural strength	(D-790)	1 mm/min.	MPa	110
Flexural modulus	(D-790)	1 mm/min.	MPa	3,200
Izod impact strength notched	(D-256)	23°C	J	16
Rockwell hardness	(D-785)		R scale	123R
Light transmission	(D-1003)	Clear sheet	%	92
Haze	(D-1003)	Clear sheet	%	<1
Yellowness index	(D-1003)	Clear sheet		<1.5

Resistance to Chemicals

PALGLAS is resistant to a wide range of chemicals at room temperature. Detailed information is available upon request.

Weather and UV Resistance

PALGLAS is inherently UV resistant and its wide service temperature range, -40 °C to 80 °C, makes it suitable for outdoor applications. A limited warranty against yellowing is available.



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