

Perspex[®] Frost Technical Data Sheet

1. Introduction

The properties of Perspex[®] Frost sheet are identical to normal Perspex[®] cast acrylic sheet. The surface finish of Perspex[®] Frost sheet is produced during the casting of the sheet and is not post applied. The matt surface is found on both sides of the product.

2. Masking

Perspex[®] Frost sheet is supplied with double-sided, non-thermoformable masking.

The masking is **not** suitable for shape-in place forming, but it can be left in place to provide protection during simple fabrication operations such as cutting or drilling before the sheet is thermoformed.

3. Fabrication Details

Most fabrication techniques (e.g. cutting and routing) may be used with this product. However, the following should be considered when working with Perspex[®] Frost sheet:

Thermoforming

Because the composition of Perspex[®] Frost is similar to that of standard Perspex[®], similar thermoforming conditions can be used when moulding Perspex[®] Frost sheet.

Sheet temperatures during forming are recommended in the range 150–170°C. In highly-stretched areas, such as corners with small radii, the surface of the sheet may appear slightly less matt than less stretched areas.

Cementing

When gluing the matt surface of a sheet then the use of a polymerisation or gap-filling cement such as Tensol[®] 70 is recommended.

4. Cleaning

Always use a non-abrasive cloth.

Warm soapy water should be the first choice for cleaning Perspex[®] Frost.



5. Table of Properties

Values quoted for the properties of Perspex[®] Frost sheet are the results of tests on representative samples and do not constitute specifications.

Property	Test Method	Unit	Value
General Density Rockwell Hardness Water Absorption Flammability	ISO 1183 ISO 2039-2 ISO 62 BS 476 Part 7 DIN 4102 NFP 92-507 UL94 ISO 11925-2	g cm ⁻³ M scale % Class - - -	1.19 102 0.2 3 B2 M4 HB E
Thermal Properties Vicat Softening Point Coefficient of Thermal Expansion (Linear)	ISO 306 A ASTM D696	°C x 10 ⁻⁵ . K ⁻¹	> 110 7.7
Mechanical Properties Tensile Strength Elongation at Break Flexural Strength Flexural Modulus Impact Strength – Charpy (unnotched)	ISO 527 (5 mm/min) ISO 527 (5 mm/min) ISO 178 (2 mm/min) ISO 178 (2 mm/min) ISO 179	MPa % MPa MPa kJ M ⁻²	75 4 116 3210 12
Electrical Properties Surface Resistivity Electrical Strength	IEC 93 IEC 243	Ω.m-2 kV.mm-1	> 10 ¹⁴ 15

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Perspex[®] Frost Acrylic Sheet

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