



Panagraphics™ III

Intermediate Wide Flexible Substrate

Description

3M™ Panagraphics™ III Intermediate Wide Flexible Substrate is a translucent dimensionally stable substrate, with white pigmented front and back surfaces. Panagraphics™ III is distinguishable from other brands of flexible materials by the identification printed on the back side.

3M™ Panagraphics™ III can be decorated with

- 3M™ Scotchcal Translucent Intermediate Film series 2330
- direct Piezo Ink Jet Ink series 1500, 4000
- direct Piezo Ink Jet series 2500UV.

Application and End Uses

Panagraphics™ III substrate is intended for making durable, flexible signs when used with the listed compatible products in the following applications.

- Interior and exterior, day and night graphics for use in many types of backlit signs.

Limitations of End Uses

The following uses and applications are specifically NOT warranted:

- Second surface film decoration
- Removing existing graphics and reusing
- Graphics and materials used in non-vertical exposure

Product Data

These values are typical and are not intended for use in specifications. You may submit a request for a custom specification to your 3M representatives.

Physical Property	Metric Units
Service temperature range	-30° to +70° C
Light transmission (Opacity)	20 %
Weight	650g/m ²
Gloss (using 60° gloss meter)	30
Whiteness index (reflective)	W.I. (E313) = 140
Tensile strength (minimum)	
Tear weft	15 kg /cm
Tear warp	13,3 kg /cm
Tensile weft / warp	26,6 kg /cm

Characteristics

Characteristic	Description
Substrate	Polyester scrim embedded in a white-pigmented vinyl
Thickness	0,48 to 0,55 mm
Roll sizes	Various widths up to 420cm x 50 m <i>contact your sales representative for details</i>

Effective Performance Life

Since graphic durability is largely determined by climate, the performance of Panagraphics™ III will vary accordingly to the geographic location of the application. When the signs are processed and used according to 3M recommendations, they should have the performance life shown in the table below. The actual performance depends on:

- Application methods
- Exposure conditions
- Cleaning methods

Vertical Exposure

Zone 1: Northern & Central Europe

Zone 2: Mediterranean Europe

Zone 3: Northern Africa and Middle East.

Please contact 3M Technical Service for the list of the countries per zone.

Panagraphics™ III decorated with			
3M™ MCS™ Warranty	Zone 1	Zone 2	Zone 3
SC2330 not protected SC2330 protected with SC8519 / SC8520	3 years	2 years	1 year
Piezo Ink Jet series 1500 / 4000 not protected Piezo Ink Jet series 1500 / 4000 protected with SC8519 / SC 8520	3 years	2 years	1 year
Piezo Ink Jet series 2500 UV always protected with SC8519/SC8520	2 years	1 year	6 mths

Fabrication

This bulletin does not contain detailed instructions on the application of selected Scotchcal™ films to 3M™ Panagraphics™ III substrate. Please refer to Instruction Bulletins for details. To receive the Bulletins visit the web site: www.scotchprint.com

Seaming

Seaming of Panagraphics™ III is possible using 3M™ Seaming Tape. Recommendations on seaming procedures can be obtained from your 3M sales representatives. The blow-out warranty on the seam must be provided by the seam manufacturer and is subject to its approval.

Application

When the temperature is below 8°C do not install a Panagraphics™ III sign face (e.g. attach finished sign faces to cabinets, framing etc.) where folding, crimping, creasing or forming the material to sharp corners is necessary. At low temperatures, the films applied to the substrate become less flexible and may crack if handled roughly.

- 3M recommends attaching and tensioning this substrate in a cabinet at a temperature of 8°C or above, whether the work is being done in a fabricator's shop or in the field.
- Artificially warm the decorated substrate to at least 8°C before attaching or tensioning the sign face in a cabinet or frame.
- Check and re-tension large sign faces, as needed when the temperature warms up to more than 15°C. A large sign face is one that is more than 25 m² and has a height that exceeds 3,3 m or a width that exceeds 7,5 m.

Maintenance and Cleaning

Use only mild detergents and water for cleaning. Clean the finished graphic annually. Clean the graphic more often in unusually dirty environments.

Shelf Life, Storage and Shipping

This substrate may be stored for up to 12 months undecorated and up to an additional six months decorated under the following conditions:

- Away from direct sunlight
- In a cool, dry environment

Caution Statements

Follow the guidelines if the graphics have already been applied to the substrate:

- Select a core that is at least 7,6 cm in diameter for graphics with single film layer.
- Select a core that is at least 15 cm for graphics with multiple film layers.
- Roll the material with the graphics facing out to help prevent damage

- Do not use masking tape, to secure the roll. It may stain the substrate.
- Always ensure enough drying time in your process when Piezo Ink Jet printing is involved.

Important Notice

This bulletin provides technical information only. All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Health Safety

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department.

3M Related Literature

Listed below is related 3M Technical Literature which may be of interest.

- Application Instructions:(4,1; 5.1; 5.5; 5.21; 5.30;)
- Cleaning, Maintenance and removal: (6.1; 6.5;)

Important Notice

Many state and local jurisdictions have adopted various building codes that require materials to meet flammability standards, including materials used for interior and exterior awning, banner and sign face applications. The user is responsible for determining and complying with all applicable standards. For information on flammability requirements contact your local building code officials. For information on the results of flammability testing contact your 3M sales representatives or local technical service.

For Further Assistance

For help on specific questions relating to 3M Commercial Graphics products, please contact your local 3M Technical service person or contact:

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