



Scotchcal™ Translucent Graphic Film

2330

Product Bulletin

Product Description These calendered films are perfect for intermediate backlit applications.

Product Line Illuminated signage 2330-X X = color code, translucent, semi-matte, permanent adhesive (clear). Wide selection out of large color range.

Product Characteristics These are typical values for unprocessed products. Contact your 3M representative for a custom specification.

Physical & Application

Material	calendered vinyl (polymeric)	
Surface finish	semi-matte	
Thickness (film)	80 µm (0.08 mm)	
Adhesive type	solvent acrylic; pressure-sensitive	
Adhesive appearance	clear	
Liner	Kraft paper	
Adhesion	approx. 18 N/25 mm	FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH

Application method wet or dry

Applied shrinkage < 0.3 mm FTM 14

Application temperature +10°C minimum (air and substrate)

Service temperature -40°C to +90°C

Surface type flat

Substrate type glass, PMMA, PC*, flexible sign making substrates

PC*, PETG*: Might require drying with heat before use

Graphic removal Fair to remove with heat and/or chemicals from supported substrates.

Storage Shelf life No liability is given for ease or speed of removal of any graphic. Pay attention to adequate air and substrate temperature.
2 years from the date on the original box.
Up to 2 years unprocessed, or processed within 1 year of processing.

Storage conditions! +4°C to +40°C, out of sunlight, original container in clean and dry area.

Flammability Flammability standards are different from country to country. Ask your local 3M contact for details, please.

Durability

Unprocessed film

The following durability data are given for unprocessed film only!

3M™ MCST™ Warranty

In addition, 3M provides a warranty on a finished applied graphic within the framework of 3M™ MCST™ warranty program.

Climatic zones

Graphic durability is largely determined by the climate and the angle of exposure. Find below a table showing the durability of a product according to the angle of exposure and the geographical location of the application.

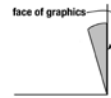
Zone 1 Northern Europe, Italy (north of Rome), Russia

Zone 2 Mediterranean area without North Africa, South Africa

Zone 3 Gulf area, Africa

Exposure types

Vertical:



The face of the graphic is $\pm 10^\circ$ from vertical.

Interior:

Interior means an application inside a building without direct exposure to elements.

Vertical outdoor exposure

colors

Zone 1

6 years

Zone 2

4 years

Zone 3

3 years

Interior application

interior

Zone 1

12 years

Zone 2

12 years

Zone 3

12 years

Limitations of End Uses

3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs to recommend other products.

Graphics applied to

- 2nd surface to 3M™ Panaflex™ Awning and Sign Facing 945GPS and 3M™ Panagraphics™ III Wide Width Flexible Substrate
- application to competitive flexible sign substrates.
- low surface energy substrates or substrates with low surface energy coating.
- other than flat surfaces.
- stainless steel.
- surfaces that are not clean and smooth.

Graphics subjected to Important Notice

- gasoline vapors or spills.
- 3M Commercial Graphics Division products are not tested against automotive manufacturer specifications!
- Non vertical applications will have a significant decrease in durability!
- Thermoforming of applied film is not recommended!
- To avoid color variations all pieces of applied film of one colored area should be processed out of one lot of material.

Graphics Manufacturing

Shipping finished graphics

Flat, or rolled film side out on 130 mm (5 inch) or larger core. These methods help to prevent the liner from wrinkling or application tape, if used, from popping off.

Application

See product bulletin ATR 'application tape recommendations' for information about selection and use of suitable application tapes for this product, please.

[> Product Bulletin Application Tape Recommendations <](#)

Refer to Instruction Bulletin 5.1 'select and prepare substrates for graphic application', for general application information.

[> Instruction Bulletin 5.1 'select and prepare substrates for graphic application' <](#)

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline).

Refer to Instruction Bulletin 6.5 'storage, handling, maintenance and removal of films and sheetings', for general maintenance and cleaning information.

[> Instruction Bulletin 6.5 'Storage, Handling, Maintenance and Removal of Films and Sheetings' <](#)

Remarks

This bulletin provides technical information only.

Important notice

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.

Additional Information

Visit the web site of your local subsidiary at www.3Mgraphics.com for getting more:

- details about 3M™ MCS™ Warranty and 3M Performance Guarantee
- additional instruction bulletins
- a complete product overview about materials 3M is offering



Commercial Graphics

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