



Scotchcal™ ElectroCut™ Graphic Film

7725

Product Bulletin

Product Description

These cast films are designed to create unique, special effect applications. The dusted crystal film has the uniform appearance of etched glass, the frosted crystal ones have the appearance of sand-blasted glass.

Product Line	Window decoration	7725-314	dusted crystal, translucent, matte, permanent adhesive.
		7725-323	frosted rose, translucent, matte, permanent adhesive.
		7725-324	frosted crystal, translucent, matte, permanent adhesive.
		7725-326	frosted green, translucent, matte, permanent adhesive.
		7725-327	frosted blue, translucent, matte, permanent adhesive.
		7725-331	frosted gold, translucent, matte, permanent adhesive.

Product Characteristics

Physical & Application

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

Material	cast vinyl	
Surface finish	matte	
Thickness (film)	50 µm (0.05 mm)	
	frosted	90 µm (0.09 mm)
Adhesive type	solvent acrylic, pressure-sensitive	
Adhesive appearance	white	
Liner	transparent synthetic	
Adhesion	approx. 17 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	for flat surfaces (minimum air and substrate)
Service temperature	-29°C to +80°C	
Surface type	flat	
Substrate type	aluminum, glass, PMMA, PC*, ABS, paint	
	*Might require drying with heat before use	
Graphic removal	Hard to remove from supported substrates.	

Storage Shelf life Use within two years from the date of manufacture on the sealed original box.
Use within one year after opening the box.

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™ Performance Guarantee and MCST™ Warranty

In addition, 3M provides a guarantee/warranty on a finished applied graphic within the framework of 3M™ Performance Guarantee and/or 3M™ MCST™ warranty programs.

Visit www.3mgraphics.com for getting more details about 3M's comprehensive graphic solutions.

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.

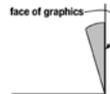
Zone 1 Northern Europe, Italy (north of Rome), Russia

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 sunlight.

Vertical outdoor exposure

Zone 1

Zone 2

Zone 3

7 years

5 years

3 years

Interior application

Zone 1

Zone 2

Zone 3

interior

15 years

15 years

15 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

- flexible substrates incl. 3M™ Panaflex™ Awning and Sign Facing 945GPS and 3M™ Panagraphics™ III Wide Width Flexible Substrate.
- low surface energy substrates or substrates with low surface energy coating.
- painted or unpainted wallboards, gypsum boards and wallpapers.
- stainless steel.
- substrates with tendency of outgassing.
- surfaces that are not clean and smooth.
- surfaces with poor paint to substrate adhesion.
- other than flat or simply curved surfaces.
- Note: When used on more difficult surfaces stress relief cuts are recommended.
- in between two sheets of glass

Graphic removal from

- signs or existing graphics that must remain intact.

Graphics subjected to Important Notice

- gasoline vapors or spills.
- 3M Commercial Solutions products are not tested against automotive manufacturer specifications!
- Non vertical applications will have a significant decrease in durability!

Graphics Manufacturing

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.

Shipping finished graphics

Converting Information Electronic Cutting

Based upon cutting evaluations the minimum height for text is 25 mm using upper and lowercase Helvetica Medium. The stroke width should not be lower than 1 mm.

The variable characteristics of electronically controlled cutting equipment require users to verify their specific requirements.

Sharpness of knife blade Dull blades impart a serrated look to the edge of the cut film.

Weight of knife blade The ideal weight slightly scores the liner. Too little weight does not cut completely through the film and the adhesive. Excessive weight cuts the liner and causes the blade to drag, accelerating wear and creating a serrated cut edge on the film.

Weeding The excess film should be weed (removed) as soon after cutting as practical. This is to minimize the effect of possible adhesive flow.

Temperature and relative humidity Temperature and relative humidity are minor considerations, but avoid extreme or rapid fluctuating conditions.

Roll storage Store the film in the same environment as the cutting equipment.

Further information For more details refer to our instruction bulletin 4.1 'Sheeting, Scoring, Film Cutting', please.

[>Instruction Bulletin 4.1'Sheeting, Scoring, Film cutting'<](#)

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.

Safety Risk of glass breakage due to thermal expansion.

When glass is exposed to direct sunlight, it absorbs heat. If covered by a colored or non-transparent film, glass will absorb more heat.

Heat absorption can create thermal stress, resulting in glass breakage (also called thermal cracking), which can cause personal injury and property damage.

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 Solutions Division

Hermeslaan 7
1831 Diegem, Belgium

Responsible for this technical bulletin

3M Deutschland GmbH | Safety & Graphics Laboratory
Carl-Schurz-Str. 1 | 41453 Neuss, Germany

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