

# Scotchcal™ ElectroCut™ Graphic Film

## Series 7725SE

### Product Bulletin

#### Product Description

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

Product Line	Window decoration	SC7725 SE-314	dusted crystal, translucent, matte, permanent adhesive
		SC7725 SE-323	frosted rose, translucent, matte, permanent adhesive
		SC7725 SE-324	frosted crystal, translucent, matte, permanent adhesive
		SC7725 SE-326	frosted green, translucent, matte, permanent adhesive
		SC7725 SE-327	frosted blue, translucent, matte, permanent adhesive
		SC7725 SE-331	frosted gold, translucent, matte, permanent adhesive

#### Product Characteristics

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

#### Physical & Application

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

<b>Warranty</b>	This warranty does not apply to film problems caused by defective application.		
	Indoor application	Film applied to the indoor side of exterior wall glass (vertical surface)	
		Northern Europe	Mediterranean area
	dusted films	7 years	5 years
	frosted film	7 years	5 years
	Indoor application	Film applied to the indoor interior decoration (no direct UV light, vertical surface)	
		Northern Europe	Mediterranean area
	dusted films	15 years	15 years
	frosted film	15 years	15 years
	Outdoor application	Film applied to the outdoor side of exterior wall glass (vertical surface)	
		Northern Europe	Mediterranean area
	dusted films	4 years	3 years
	frosted film	4 years	3 years

<b>Durability</b>	Unprocessed film	The durability data are given for unprocessed film and vertical surfaces only!		
	Indoor application	Northern Europe	Mediterranean area	Africa & Gulf area
	dusted films	15 years	15 years	15 years
	frosted film	15 years	15 years	15 years
	Outdoor application	Northern Europe	Mediterranean area	Africa & Gulf area
	dusted films	5 years	4 years	3 years
	frosted film	5 years	4 years	3 years

**Storage**

Shelf life - 2 years from the date on the original box  
- up to 2 years unprocessed, or processed within 1 year and apply within 1 year of processing

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

**Piezo Ink Jet** All variants of films series 7725 SE are piezo inkjet printable. The graphics manufacturer must test, approve and accept all responsibility for satisfactory use.

**Flammability** Flammability standards are different from country to country. Please ask your local 3M contact for details. SC7725 SE-314 and SC7725 SE-324 proved on ESG glass meet the required levels according to the DIN 5510 part 2 test judgment. Both films meet the best classes according to the DIN test 54837 which is S4 for the fire touching, SR2 for the smoke evaporation under fire and the ST2 class for the building of falling drops from the burning material. Achieved level: S4 / SR2 / ST2

## 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. Panaflex™ and Panagraphics™.   |
|                       | - low surface energy substrates or substrates with low surface energy coating.                               |
|                       | - other than flat or simply curved surfaces.   |
|                       | Note: When used on more difficult surfaces stress relief cuts are recommended.                               |
|                       | - painted or unpainted wallboards, gypsum boards and wallpapers.   |
|                       | - stainless steel.   |
|                       | - in between two sheets of glass.  |
|                       | - substrates with tendency of outgasing.   |
|                       | - surfaces that are not clean and smooth.  |
|                       | - surfaces with poor paint to substrate adhesion.  |
| Graphic removal from  | - signs or existing graphics that must remain intact.  |
| Graphics subjected to | - gasoline vapors or spills.   |
| Important Notice      | - 3M Architectural Market Department products are not tested against automotive manufacturer specifications! |
|                       | - non vertical applications will have a significant decrease in durability!                                  |

## 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.

## Converting Information

Based upon cutting evaluations the minimum height for text is 10 mm using upper and lowercase Helvetica Medium. The stroke width should not be lower than 1 mm.

## Electro Cutting

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.

## 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.

## 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.3M.eu/ArchitecturalMarkets](http://www.3M.eu/ArchitecturalMarkets) for getting more:

- additional instruction bulletins
- a complete product overview about materials 3M is offering