

Scotchcal™ Graphic Film

Series 5525 SE / Series 5525C SE

Product Bulletin

Product Description

These polymeric translucent calendered films are perfect for medium term window and backlit applications. The films are for interior and exterior applications.

Product variants with Comply™ adhesive also have air release channels for fast and easy, bubble-free graphic installations.

Product Line	Window decoration	SC5525 SE-324	sandblast finish, translucent, matte, permanent adhesive.
		SC5525C SE-324	sandblast finish, translucent, matte, permanent adhesive with Comply™.
		SC5525 SE-314	haze finish, translucent, matte, permanent adhesive.
		SC5525C SE-314	haze finish, translucent, matte, permanent adhesive with Comply™.

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	matte	
	Thickness (film)	80 µm (0.08 mm)	
	Adhesive type	<ul style="list-style-type: none"> - solvent acrylic; pressure-sensitive - in addition: product variants with Comply™ adhesive have air release channels 	
	Adhesive appearance	clear	
	Liner	kraft paper versions with Comply: double-sided Polyethylene coated paper	
	Adhesion	12 N / 25 mm	FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH
	Application method	wet or dry versions with Comply: dry only!	
	Applied shrinkage	< 0,4 mm	FTM 14
	Application temperature	+10°C minimum (air and substrate)	
	Service temperature	-40°C to +80°C	
	Surface type	flat	
	Substrate type	glass, PMMA, PC* PC*: Polycarbonates might require drying with heat before use	
	Graphic removal	<ul style="list-style-type: none"> - removable without heat and/or chemicals from supported substrates. - no liability is given for ease or speed of removal of any graphic. Pay attention to adequate air and substrate temperature. 	

Warranty	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 4 years	Mediterranean area 3 years	Africa & Gulf area 2 years
	Indoor application	Film applied to the indoor interior decoration (no direct UV light, vertical surface)		
		Northern Europe 5 years	Mediterranean area 5 years	Africa & Gulf area 5 years
	Outdoor application	Film applied to the outdoor side of exterior wall glass (vertical surface)		
		Northern Europe 3 years	Mediterranean area 2 years	Africa & Gulf area 1 year
Durability	Unprocessed film	The durability data are given for unprocessed film and vertical surfaces only!		
	Indoor application	Northern Europe 5 years	Mediterranean area 5 years	Africa & Gulf area 5 year
	Outdoor application	Northern Europe 4 years	Mediterranean area 3 years	Africa & Gulf area 2 years
Storage	Shelf life	<ul style="list-style-type: none">- 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.		
Flammability	Flammability standards are different from country to country. Please ask your local 3M contact for details. DIN 4102 Part 1 - Fire Behavior of Building Materials and Building Components - Building Materials, Requirements and Tests. Achieved level: B1.			

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	<ul style="list-style-type: none"> - flexible substrates incl. Panaflex™ and Panagraphics™ - low surface energy substrates or substrates with low surface energy coating - other than flat surfaces - 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
Graphic removal from	<ul style="list-style-type: none"> - signs or existing graphics that must remain intact
Graphics subjected to	<ul style="list-style-type: none"> - gasoline vapors or spills
Important Notice	<ul style="list-style-type: none"> - 3M Architectural Market Department products are not tested against automotive manufacturer specifications! - Non-vertical applications will have a significant decrease in durability! - versions with Comply™ are not recommended for electrocut graphics. The graphics manufacturer must test, approve and accept all responsibility for satisfactory use.

Special Information

Special Information	Transmission degree according to DIN 5033, part 3 and 7; Ultascan XE, light source diffuse/8°, observer 10°, D65		
	Typical values for unprocessed product. Not for use in custom specification!		
	Translucency values	SC5525 SE-314	87 % ± 2 %
		SC5525 SE-324	69 % ± 2 %
		SC5525C SE-314	81 % ± 2 %
		SC5525C SE-324	73 % ± 2 %
Piezo Ink Jet	All variants of films series 5525 SE are piezo inkjet printable. The graphics manufacturer must test, approve and accept all responsibility for satisfactory use.		

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

Important notice

The SC5525C-314 and SC5525C-324 films are not recommended for electrocut. Due to the nature of the adhesive and the backing paper not all graphic designs and formats are achievable. It is recommended to test the feasibility of the graphic prior to any electrocut production for the two Comply™ versions.

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 for getting more:
- additional instruction bulletins
- a complete product overview about materials 3M is offering



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