



Scotchcal™ Translucent Mirror Graphic Film with Comply™ adhesive

7755C SE-520

Scotchcal™ Translucent Mirror Graphic Film

7755 SE-520

Product Bulletin

Product Description

These special effect films are unique translucent films that reflect the light to produce a glossy chrome appearance in a finished graphic.

This intermediate to long term film can be applied to any plastic sheet. Film SC7755 SE-520 (without Comply) can be thermoformed on a high temperature Copolyester sheet.

It is designed for use on first or second surface signs in an internally illuminated sign box.

For easier converting the films are delivered with a removable protective top film.

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

Product Line	Illuminated signage	7755 SE-520	silver mirror, translucent, high-gloss, permanent adhesive.
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7755C SE-520	silver mirror, translucent, high-gloss, permanent adhesive with Comply™.
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Product Characteristics

These are typical values for unprocessed products.

Contact your 3M representative for a custom specification.

Physical & Application

Material	PVDF
Surface finish	high-gloss
Thickness (film)	50 µm (0.05 mm)
Adhesive type	solvent acrylic, pressure-sensitive In addition: product variants with Comply™ adhesive have air release channels

Adhesive appearance	clear
Liner	double-sided Polyethylene coated paper
Adhesion	approx. 15 N/25 mm FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH

Application method	wet or dry
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Applied shrinkage	< 0.4 mm FTM 14
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Application temperature	+16°C minimum (air and substrate)
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Service temperature	-29°C to +80°C
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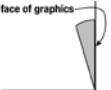
Surface type	flat
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Substrate type	glass, PMMA, PC*, PETG*, ABS
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PC*, PETG*: Might require drying with heat before use

Notice! Thermoforming of film SC7755 SE-520 is recommended on high temperature Copolyester only!

Graphic removal Hard to remove from supported substrates.

Important quality notice	The manufacturing process might produce some visual effects. Slight variations of the grey tone are possible as well as dull milky stripes which might appear over the width of the material. Those type of defects are excluded from any quality complaint.
Storage Shelf life	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™ MCS™ Warranty	In addition, 3M provides a warranty on a finished applied graphic within the framework of 3M™ MCS™ 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 ±10° from vertical.
	Interior: Interior means an application inside a building without direct exposure to elements.
Vertical outdoor exposure	Zone 1 Zone 2 Zone 3 6 years 5 years 3 years
Interior application	Zone 1 Zone 2 Zone 3 interior 12 years 12 years 12 years

Limitations of End Uses

Graphics applied to

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

- flexible substrates incl. 3M™ Panaflex™ Awning and Sign Facing 945GPS and 3M™ Panographics™ III Wide Width Flexible Substrate.
- low surface energy substrates or substrates with low surface energy coating.
- stainless steel.
- substrates with tendency of outgassing.
- 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 are neither recommended nor warranted.
- Thermoforming with high temperatures is not recommended!
- 3M accepts no liability for glass breakage. See instruction bulletin 5.1 for details.
- Printing on film is not recommended.
- The use of these films in multi-layer constructions is not recommended.
- Do not apply any graphic protection to film surface.

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

Electronic Cutting

Sharpness of knife blade

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.

Weight of knife blade

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

Weeding

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

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.

Temperature and relative humidity

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

Roll storage

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

Further information

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

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

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

Converting Information

Thermoforming

There are unique health and safety considerations that must be understood prior to vacuum forming faces using translucent films.

Refer to Instruction Bulletin 5.16 'Thermoforming' for special recommendations, limitations and processing requirements when forming with applied films.

[Instruction Bulletin 5.16 'Thermoforming'](#)

Elongation limit

Forming of applied film on sheets should not exceed 50% elongation.

Forming temperature

Film temperatures of more than 165°C may cause the silver appearance to lose gloss and become dull as the film is stretched. To low temperatures cause the film to wrinkle around the returns.

Diffusion

Without diffusion light sources will be seen through the translucent silver film when illuminated.

Notice!

Do not forget to remove the clear protective top film from the mirror surface before drying/forming.

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

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



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