



3M™ Scotchcal™ Graphic Film Series IJ25

Product Bulletin

Product Description

These monomeric calendered films offer great versatility making them perfect for indoor and outdoor signs and fleet graphics. This printable base film has a highly effective adhesive.

Specifically designed for short term applications, the 100 micron thickness of these films facilitate handling and application, even without the use of an overlamine or application tape.

Furthermore the removable versions: Scotchcal IJ25-10R and IJ25-20R are tested and approved for use in conjunction with the recommended overlamine (3M™ Scotchcal™ Matte Overlamine 3649), as base film to produce graphics for floors.

Product Line

Inkjet Printing	IJ25-10	white, opaque, glossy, permanent adhesive (grey).
	IJ25-10R	white, opaque, glossy, removable adhesive (grey).
	IJ25-10TR	white, opaque, glossy, removable adhesive (clear).
	IJ25-20R	white, opaque, matte, removable adhesive (grey).

Product Characteristics

Physical & Application

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

Material	calendered vinyl (monomeric)
Surface Finish	gloss and matte (see product line)
Thickness (film only)	Up to 100 µm (0.1 mm) IJ25-10; -20: 100µm
Adhesive Type	waterbased acrylic: pressure-sensitive
Adhesive Appearance	See product line
Liner	Kraft paper - Liner 135 g/m2, paper
Adhesion	12 N/25 mm FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH
Removable films of series	8 N/25 mm
Application Method	dry only
Applied Shrinkage	< 0.5 mm FTM 14
Application Temperature	+6°C minimum (air and substrate) <i>For applications nearing the minimum temperature range, please contact your local technical service representative to confirm suitability of application</i>
use for floors: IJ25-10R	+16°C
Service temperature	-40°C to +90°C
Surface type	flat
Substrate type	Metal, paint, rigid PVC, glass, PMMA, PC*, flexible sign making substrates <small>PC*, PETG*: Might require drying with heat before use</small>
Graphic removal	IJ25-10R, IJ25-10TR, IJ25-20R are removable without heat and/or chemicals from supported substrates. This statement is given for removable versions only. No liability is given for ease or speed of removal of any graphic.
Storage	
Shelf life	The shelf life for unprocessed film is 2 years from the date of manufacture (i.e. the date marked on the original packaging). Process within 1 year of manufacture and apply within 1 year of processing.
Storage conditions	+4°C to +38°C, store out of sunlight, in original container in a clean and dry

area.

Durability

Flammability Flammability standards vary from country to country. Ask your local 3M contact for details.

Unprocessed film The following durability data are given for unprocessed film only.

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

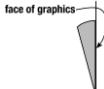
Visit www.3M.co.uk/graphicsolutions for more information about 3M's comprehensive graphic solutions.

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 with direct exposure to the elements.

	Zone 1	Zone 2	Zone 3
Vertical outdoor exposure			
White	3 years	2 years	18 months
Interior application	Zone 1	Zone 2	Zone 3
	3 years	3 years	3 years
Floor Graphic Durability	3 months, interior only		

Limitations of End Uses

Graphics applied to

- flexible substrates including 3M™ Panagraphics™ Flexible Substrate
- 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.
- surfaces that are not clean and smooth.
- surfaces with poor paint to substrate adhesion.

Graphic removal from Graphics subject to **Important Notice**

- signs or existing graphics that must remain intact.
- Petroleum vapours or spills.
- 3M Commercial Graphics Division products are not tested against automotive manufacturer specifications.
- Wet application method is not recommended for this film.
- Non vertical applications will have a significant decrease in durability.

Graphics Manufacturing

When to use an overprint clear or overlamine

Graphic protection can improve the appearance, performance and durability of printed graphics. Any printed graphic exposed to abrasive conditions (including vehicles), harsh cleaners or chemicals

See bulletin: [3M UK Commercial Graphics Overlaminates](#) for further information about selection and use of protective overlaminates and printable clears.

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

Inkjet Printing

Adequately Dry Graphics

The recommended maximum ink coverage for these films is 270%. Excess ink coverage can alter the films' characteristics and affect drying, overlamination and overall graphic performance.

Inadequate drying can result in graphic failure including:

- Curling
- Increased shrinkage
- Adhesion failure
- Poor overlaminate adhesion

These failures are not covered under warranty. We recommend that enough time is allowed during your conversion process to ensure adequate drying of the graphic. Poorly dried film becomes soft and stretchy, and can cause the adhesive to become too aggressive. 3M recommends a minimum drying time of 24 hrs before further processing. Preferably, the graphic should be dried unrolled, laid flat or hung vertically. Where this is not possible, the graphic should be stood up in a loosely wound roll.

Application

See product bulletin: Application Tapes for information about selection and use of suitable application tapes for this product. See instruction bulletin [4.3 3M™ Application Tapes Premasking and Prespacing for Films](#) for information about selection and use of suitable application tapes for this product, please.

Refer to Instruction Bulletin [5.1 Substrate Selection, Preparation and Substrate Specific Application Techniques](#) for substrate preparation techniques.

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 3M Films](#) for general maintenance and cleaning information.

Remarks

Additional Information

This bulletin provides technical information only.

Visit the web site of your local subsidiary at www.3M.co.uk/graphicsolutions

- details about 3M Performance Guarantee
- additional instruction bulletins
- An overview of the 3M Commercial Graphics range of graphic films

Health & Safety

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department on 01344 858000.

Important Notice to Purchaser

The 3M products described in this publication are covered by a 3M warranty and limitation of liability.

3M's warranty provides that if 3M finds that goods are defective in material or workmanship they will be replaced or the price refunded at 3M's option but note that 3M does not accept liability for other direct losses (except for personal injury or death) or consequential losses relating to defective products or from information supplied by 3M.

Purchasers and users of 3M products, and not 3M supplying companies, are always solely responsible for deciding on the suitability of the 3M product for their required or intended use.

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