



Controltac™ Graphic Film

162-10; IJ162-10

Product Bulletin

Product Description

3M™ Controltac™ Graphic Film 162-10 / IJ162-10 is a polymeric calendered film that can be used, in combination with the designated protecting overlaminates, to produce outstanding resistant graphics for floors.

3M™ Controltac™ minimizes the initial contact area of the adhesive and allows the applicator to reposition the film during application.

This allows easier installation of large format graphics in a wide temperature range.

Product Line	Screen printing	162-10	white, opaque, semi-matte, removable adhesive (grey).
	Inkjet printing	IJ162-10	white, opaque, semi-matte, removable adhesive (grey).

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	semi-matte	
Thickness (film)	100 µm (0.1 mm)	
Adhesive type	solvent acrylic, pressure-sensitive, repositionable	
Adhesive appearance	grey, except for transparent versions	
Liner	double-sided Polyethylene coated paper	
Adhesion	approx. 7 N/25 mm	FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH

Application method	dry only!	
Applied shrinkage	< 1.0 mm	FTM 14

Application temperature	+10°C	for flat surfaces (minimum air and substrate)
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Service temperature	0°C to +65°C	
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Surface type	flat	
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Substrate type	ceramic, finished wood, marble, sealed concrete, terrazzo, waxed vinyl	
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Graphic removal	Removable without heat and/or chemicals from supported substrates.	
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No liability is given for ease or speed of removal of any graphic. Pay attention to adequate air and substrate temperature.

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.
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Storage conditions	+4°C to +40°C, out of sunlight, original container in clean and dry area.	
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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 Interior: Interior means an application inside a building without direct exposure to sunlight.

Interior application	Zone 1	Zone 2	Zone 3
interior	3 years	3 years	3 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

- exterior applications.
- purposes other than graphics for floors/pavements.
- substrates other than recommended.
- areas with vehicle traffic except for light slow moving traffic.
- loose, broken or unsound flooring material.

Graphics subjected to

- gasoline vapors or spills.

Important Notice

- 3M Commercial Solutions products are not tested against automotive manufacturer specifications!
- Film has to be protected with the recommended protective overlamine to provide the needed skid resistance.
- Place the floor graphic far enough away from entryways that they stay dry.

Graphics Manufacturing

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 must include graphic protection in order to be warranted.

When to use an overprint clear or overlamine See instruction bulletin GPO 'graphic protection options' for further information about selection and use of protective overlaminates and printable clears.

Graphic for Floors To create a graphic for floors this film has to be protected with the recommended overlamine. No printable clear available!

[> Product Bulletin Graphic Protection Options <](#)

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

A too high total physical ink amount on the film results in media characteristic changes, inadequate drying, overlamine lifting, and/or poor graphic performance. The maximum recommended total ink coverage for this film is 270%.

Inadequate drying can result in graphic failure including curling, increased shrinkage and adhesion failure, which are not covered under warranty. Build enough time into your process to ensure adequate drying of the graphic.
Poorly dried film becomes soft and stretchy, and the adhesive becomes too aggressive. 3M recommends at least a minimum drying time of 24 hrs before further processing. Dry the graphic unrolled or at least as a loose wound roll standing upright.

Converting Information

Formulations and processing conditions can affect ink durability. Refer to the 3M Product and Instruction Bulletins for your ink for limitations and proper usage. Graphic protection can improve the appearance, performance and durability of your graphic.

Screen Printing

Abrasion and Loss of Gloss

A clear coat also prevents chalking on unprinted films. Use equipment designed to handle high viscosity materials and make sure the coating is evenly applied to the specifications given in the clear's Instruction Bulletin.

Abrasion damage and loss of gloss are not covered by any 3M warranty. This is considered normal wear and tear.

To create a graphic for floors this film has to be protected with the recommended overlamine. No printable

Application

The use of an application tape is neither recommended nor needed.

Avoid Lifting

Cut radiuses on any sharp corners of the graphic after lamination. Do not apply finished graphic to the edge of tiles. Keep always a distance of a few centimeter to the joints (not edge of graphic to edge of tile).

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

This bulletin provides technical information only.

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



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