



# Scotchcal™ Graphic Film For Textured Surfaces

## IJ8624

### Product Bulletin

**Product Description** This cast film conforms to moderately textured surfaces like concrete block, brick, industrial stucco and tile similar to those commonly found in sports arena, stadiums, restaurants, retail and other public venues.

**Product Line** Inkjet printing IJ8624 white, opaque, glossy, removable 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	glossy	
Thickness (film)	50 µm (0.05 mm)	
Adhesive type	solvent acrylic; pressure-sensitive	
Adhesive appearance	grey	
Liner	double-sided Polyethylene coated paper	
Adhesion	see notice below	FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH

Application method dry only!

Applied shrinkage < 0.4 mm FTM 14

Application temperature +4°C minimum (air and substrate)

Notice! Adhesion depends on the substrate material, the texture of the wall and the adhesion technique. See test procedure described below in this document.

Surface type flat to simple curved

Substrate type concrete block, brick, industrial stucco and tile

Graphic removal 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.

Notice! Varies with type of substrate; using heat enhances removal of film; may leave adhesive residue; may remove some paint or finish; may damage mortar.

**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.

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

**Flammability** Meets the requirements for flammability class B1 according to DIN 4102, part 1

## Durability

Unprocessed film

The following durability data are given for unprocessed film only!

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.

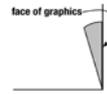
Zone 1 Northern Europe, Italy (north of Rome), Russia

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 without direct exposure to sunlight.

**Vertical outdoor exposure**

**Zone 1**

**Zone 2**

**Zone 3**

white

6 months

6 months

6 months

**Interior application**

**Zone 1**

**Zone 2**

**Zone 3**

interior

5 years

5 years

5 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

- mortar joints deeper or higher than 3.1 mm and square-cut or undercut mortar joints.
- outdoor applications in hot, sunny locations.
- outdoor surfaces exposed to freeze and thaw temperatures.
- painted or unpainted wallboards, gypsum boards and wallpapers.
- smooth surfaces.
- smooth surfaces or windows.

Graphic removal from

- substrates that require clean removal without risk of damage.

Graphics subjected to

- gasoline vapors or spills.

Important Notice

- Non vertical applications will have a significant decrease in durability!
- Be aware that graphics installed outdoors can develop mold or mildew on top of or behind the graphic, which may be a health concern for some individuals, especially during graphic removal.

## Tips for successful textured wall applications

This film is designed to be effective on many of the most common moderate textures found in public stadiums, arenas and similar environments.

Notice

- Due to the wide variation in substrate texture, we encourage you to verify that the film and 3M techniques described in this Bulletin and Instruction Bulletin 5.37 are suitable for each of your applications.

[> Instruction Bulletin 5.37 'Application, Maintenance and Removal of Textured Wall™ Films' <](#)

- Use an installer trained in 3M's techniques and with access to the required 3M tools
- Test each different textured surface you are considering at each location. See the instructions below
- Film is more susceptible to lifting from deep or undercut mortar joints than shallow ones (about 3 cm deep). Instruction Bulletin 5.37 discusses the various types of mortar joints.
- In most cases, minor lifting does not detract from the impact of your customer's message, nor from the overall durability of the graphic.  
Edge lifting, which is usually most noticeable at mortar joints, may be susceptible to picking and tearing if the graphic is at pedestrian level and within reach.
- Water may accumulate behind graphics applied to unsealed substrates, resulting in water bubbles that cause lifting .

<b>Test Application Instructions</b>	3M testing shows that the following test, which uses a small piece of film, is adequate for judging good adhesion to and appearance on textured surfaces. One of the following applicator tools will be needed for this test.
Tools needed	3M™ Textured Surface Applicator TSA-1. Do not attempt this test using a standard squeegee. You will not be successful. Industrial heat gun with an electronic readout, capable of achieving and sustaining > 500°C Approximately 0.5 m <sup>2</sup> of film Heat and burn-resistant gloves
Application	Perform the test in an inconspicuous place on each type of substrate you plan to use for each of the larger graphics Set the gun to > 500°C Work at a speed that allows the film to be heated enough to make it conformable Overheating damages the film; under-heating does not permit conformability Hold the heat gun about 1 inch above and immediately in front of the roller Start at an outside top corner and work straight across to the other side using this technique: Heat the film in front of the roller for about 1 second and then begin following closely with the roller, pushing firmly. Move at a slow, steady pace Roll all the way to the edge Move the roller down about 5 cm and repeat Step 3 until the film is fully applied If the film lifts immediately, the application technique may not have been satisfactory, or the texture is too severe for the film. Do not attempt to go over the sample again; try another one.
Test Time	If possible, leave the film in place for one week, then check for good adhesion and acceptable removal

## Graphics Manufacturing

When to use an overprint clear or overlaminate	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. See instruction bulletin GPO 'graphic protection options' for further information about selection and use of protective overlaminates and printable clears. <a href="#">&gt; Product Bulletin Graphic Protection Options &lt;</a>
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.
Shipping finished graphics	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.

## Converting Information Inkjet Printing

Adequately Dry Graphics	A too high total physical ink amount on the film results in media characteristic changes, inadequate drying, overlaminate 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.
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**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

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.3Mgraphics.com](http://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



Commercial Solutions Division

Hermeslaan 7  
1831 Diegem, Belgium

Responsible for this technical bulletin

3M Deutschland GmbH | Safety & Graphics Laboratory  
Carl-Schurz-Str. 1 | 41453 Neuss, Germany

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