



Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C-10R and IJ40C-20R

For Inkjet Printing with Solvent, UV and Latex Inks and Screen Printing

1. Product Description

A. Product Features

- 3-mil vinyl films
- Available in gloss and matte finishes
- Pressure-sensitive adhesive with Comply™ Adhesive for fast, easy bubble-free installations
- Removable

B. Suggested Uses

The user is responsible for determining the product's suitability for the intended application. This product should be used on a test-and-approve basis.

- General intermediate signage for outdoors and indoor applications
- Indoor floor and carpet graphics
- Vehicle graphics on flat or simple curved areas

C. Expected Performance Life

Expected Performance Life as a good faith estimate of how long the product may perform satisfactorily based on 3M testing. Note, there is no warranty associated with this estimate.

Most General Signage: 7 years in a vertical exposure with typical usage

Indoor Floor Graphics: 3 months*

Indoor Carpet Graphics: 3 months*

*When protected by 3M overlamine 3648 and used in a horizontal indoor exposure with typical usage.

Note: 3M Product and Instruction Bulletins provide practical recommendations for using this product in a way that maximizes performance, but using other 3M products or procedures with this film does not change the terms of the warranty.

D. Floor Graphics and Carpet Graphics

Floor and carpet graphics are for use on indoor floors only. They require the use of 3M™ Scotchcal™ High Gloss Overlamine 3648, which provides a slip-resistant surface.

When applying graphics to carpet, it is solely the user's responsibility to be aware of and comply with the Americans with Disabilities Act Standards for Accessible Design, which includes but is not limited to:

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be 1/2 in (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge.



CAUTION

Loose or damaged floor or carpet graphics may cause a person to slip or trip and fall.

To reduce the risk of slipping or tripping on floor graphics:

- Use only 3M™ Scotchcal™ High Gloss Overlamine 3648, which has a slip-resistant surface.
- Properly apply only on hard indoor floors or carpets with a pile as described in ADA Standards for Accessible Design, Section 302.
- Immediately remove or replace loose or damaged graphics. Do not attempt to repair or re-adhere.

Failure to heed this Caution may result in personal injury.

A. Wall Graphics

Two-mil cast films are typically the best choice for indoor smooth surface wall graphics, although thicker films may be suitable for intermediate or short term applications. In any case, the user is responsible for determining the product's suitability, including adhesion and, if required, removal characteristics. Due to the wide variability of smooth indoor walls, neither finished graphics nor removal is warranted, even for removable or changeable films. [Instruction Bulletin 5.37](#) provides comprehensive information for the most successful wall graphics film selection and application.

2. Characteristics

A. Physical Characteristics

All values are typical for unprocessed film and are not for use in specifications. Contact your 3M representative for a custom specification.

Characteristic	Value
Material	Vinyl
Color	White opaque
Gloss	Matte: IJ40C-20R Gloss: IJ40C-10R
Film thickness	Without adhesive: 3 mil (0.081 mm) With adhesive: 4.0 mil (0.102 mm)
Adhesive type	Pressure sensitive with air release channels
Adhesive color	Gray
Liner	Polycoated paper

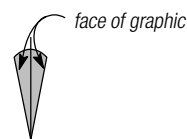
B. Application Characteristics

Characteristic	Value		
Finished graphic application recommendations	<table border="1"> <tr> <td> Most Graphics Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic and painted substrates </td> <td> Indoor Floor Graphics Only Surface type: Smooth, flat Substrate type: Most indoor floors including, tile, sealed concrete, Terrazzo, ceramic and finished wood Low pile, secured floor carpet </td> </tr> </table>	Most Graphics Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic and painted substrates	Indoor Floor Graphics Only Surface type: Smooth, flat Substrate type: Most indoor floors including, tile, sealed concrete, Terrazzo, ceramic and finished wood Low pile, secured floor carpet
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Finished graphic application recommendations	Application temperature: <i>air and substrate</i> 40° to 100°F (4° to 38°C)		
Application method	Dry		
Finished graphic exposure temperature	-30° to +200°F (-34° to +93°C)		
Graphic removal	Removable, may require heat		

3. Definitions

A. Exposure Types

U.S. Vertical Exposure



The face of the graphic is +/- 10° from vertical.

U.S. Horizontal Exposure



The face of the graphic is +/- 5° from horizontal.

4. Warranty Information

A. Warranty Coverage Overview

This film is covered by the 3M Basic Product Warranty. It has been tested and is believed to be a good product when used as recommended in this Product Bulletin. However, there is no assurance or guarantee for the following:

- printability.
- visual appearance.
- fitness for use.
- removability or changeability.
- damage to the substrate.
- durability.

B. 3M Basic Product Warranty

The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose or implied warranty arising out of a course of dealing, custom or usage of trade.

This 3M Product is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin and as further set forth in the [3M Commercial Graphics Warranty Brochure](#).

C. Limited Remedy

3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods. These remedies are exclusive.

D. Additional Limitations

See the [3M Commercial Graphics Warranty Brochure](#) at 3Mgraphics.com, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

5. Limitation of Liability

Except where prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LABOR, NON-3M MATERIAL CHARGES, LOSS OF PROFITS, REVENUE, BUSINESS, OPPORTUNITY, OR GOODWILL) RESULTING FROM OR IN ANY WAY RELATED TO SELLER'S PRODUCTS OR SERVICES. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought including breach of contract, breach of warranty, negligence, strict liability, or any other legal or equitable theory.

6. Graphic Manufacturing

A. All Printing Methods

This film has been optimized to perform well with a variety of inkjet printers and inks as well as screen printing inks and processes. It is the graphic manufacturer's responsibility to determine the film's suitability for use with their printers and inks.

To maximize the film performance:

- Use graphic protection. 3M™ Scotchcal™ Gloss Overlaminates 8508 or Luster Overlaminates 8509 are cost-effective options for use with 3M's intermediate graphic films.
- Thoroughly dry the ink and film or properly cure the ink before applying graphic protection, and before storing or installing a graphic.
- Always use the dry application method.

B. Inkjet Printing Only

- Be aware that using sheeting film on a flat-bed inkjet printer may produce printing defects.
- The typical maximum ink limit is 250%.
- If you are storing sheeted and stacked finished graphics for an extended period of time, leave an unprinted margin (about 1/4 inch) to allow for possible shrinkage before trimming the graphic.

C. Additional Information for Floor and Carpet Graphics

Applying an Overlaminates, Cutting, Application and Removal

See [Instruction Bulletin 5.19](#) for specific information on these tasks.

After applying overlaminates 3648, soften any sharp corners by cutting radii on them. Use a hand cutter or cut with an electronic drum or flatbed plotter. This reduces the risk of corner lifting due to foot scuffing and equipment abrasion.

The film may be scrubbed, cleaned and waxed during routine maintenance of the floor.

7. Shelf Life, Storage and Shipping

A. Shelf Life

Total shelf life: 2 years from the date of manufacture on the original box. If you do process the film, do so within 1 year and apply within 1 year of processing. (Example: If you process at month 6, apply by month 18.) If you do not process the film, apply it within 2 years.

B. Storage Conditions

- 90°F (32°C) maximum
- Out of direct sunlight
- Clean, dry area
- Original container
- Bring the film to print room temperature before using

C. Shipping Finished Graphics

Flat (may be separated by paper), or rolled printed side out on 5 inch (13 cm) or larger core. This helps prevent the liner and, if used, the application tape from popping off.

8. Health and Safety



CAUTION

When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information. To obtain MSDS sheets for 3M products go to 3M.com/MSDS, or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

9. 3M Related Literature

Before starting any job, be sure you have the most current Product and Instruction Bulletins.

The information in 3M Product and Instruction Bulletins is subject to change. [Current Bulletins](#) are available at 3Mgraphics.com. The techniques described in these Bulletins are required when applying a 3M warranted graphic, but are also practical recommendations when using promotional materials for non-warranted graphics. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Bulletin types: PB = Product Bulletin; PB-IB = Product & Instruction Bulletin; IB = Instruction Bulletin

Subject	Type	Bulletin No.
3M Graphic Protection Products <i>overview of all graphic protection products and specific information on most overlaminates</i>	PB	GP-1
Application, substrate selection, preparation and substrate-specific application techniques	IB	5.1
Application, general procedures for indoor and outdoor dry applications	IB	5.5
A Guide to Understanding and Applying Graphics to Common Indoor and Outdoor Wall Surfaces	IB	5.37
Floor Graphics: Make, Overlamine, Apply, Maintain, Remove	IB	5.19
Storage, handling, maintenance, removal	IB	6.5

[3M Commercial Graphics Warranty Brochure](#)

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10. Bulletin Change Summary

Added inkjet printing with latex inks as a possible printing platform. Updated warranty information and section reference for ADA Standards for Accessible Design.



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