3M™ Scotchcal™ Graphic Film

Product Bulletin IJ35 Revision L, February 2022

IJ35-10 IJ35-20 IJ35C-10 IJ35C-20

Product Description

- For solvent, eco-solvent UV, and latex inkjet printing and screen printing
- 3.2-mil vinyl film

Product Features

- Available in gloss and matte finishes
- Pressure-sensitive adhesive
- Air-release channels (IJ35C-10 and IJ35C-20 only) for fast, easy, bubble-free installations
- Not removable
- Expected performance life of five years (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface)

Recommended Types of Graphics and End Uses

- Short- to long-term indoor and outdoor promotional graphics
- Signs and trade show and point-of-purchase displays
- Exhibits and architectural applications

Graphic Protection

Graphic protection may improve the appearance, performance, and durability of the graphic. Click on the graphic protection options listed in this product bulletin or see the <u>3M Graphics Materials Product Catalog</u> for more information.

() IMPORTANT NOTE

During installation, scratches may occur on films without graphic protection.

- <u>3M™ Scotchcal™ Gloss Overlaminate 8508</u>
- <u>3M™ Scotchcal™ Luster Overlaminate 8509</u>
- <u>3M™ Scotchcal™ Matte Overlaminate 8510</u>

Characteristics

These are the typical values for unprocessed product. Processing may change the values.

Physical Characteristics

Characteristic	Value
Material	Vinyl
Film Color	White, opaque
Thickness	Without adhesive: 3.25 mil (0.081 mm) With adhesive: 4.0 mil (0.102 mm)
Adhesive	Pressure-sensitive, with air release channels (IJ35C series only)
Adhesive Color	Gray
Liner	Poly-coated paper
Flammability	Click to view the ASTM E84 reports or <u>IJ35-10</u> and <u>IJ35-20</u> , or go to the online product catalog at <u>3Mgraphics.com</u> .

Quick Links <u>3M Graphics Warranties</u> <u>Technical Information Selector</u> <u>Safety Data Sheets (SDS)</u> <u>Flammability (ASTM E84 Reports)</u> <u>Videos</u>



Application Characteristics

Characteristic	Value
Finished Graphic Application Recommendation	Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic, and painted surfaces Application temperature: 40°F to 100°F (4°C to 38°C) air and substrate Application method: Dry
Temperature Range After Application	-59°F to +192°F (-50°C to +90°C) (Though not for extended periods of time at the extremes.)
Graphic Removal	Not removable

Factors Affecting Graphic Performance Life

The actual performance life of a graphic is affected by:

- The combination of graphic materials used
- Complete ink drying or curing
- Selection, condition, and preparation of the substrate
- Surface texture
- Application methods
- Angle and direction of sun exposure
- Environmental conditions
- Cleaning or maintenance methods

Graphics Manufacturing



Before using any equipment, always read the manufacturer's instructions for safe operation.

Inkjet Printing

Always read and follow the ink manufacturer's written instructions on usage.

- Sheeted film: When used on a flat-bed inkjet printer, sheeted film may produce printing defects.
- Ink limiting: The recommended maximum ink limit is 250%.
- Storing sheeted or stacked graphics: If you plan to store sheeted and stacked finished graphics for an extended period of times, leave an unprinted margin (about 1/4 in.) to allow for possible shrinkage before trimming the graphic.

Do not exceed the recommended total ink coverage for this product. Having too much total physical ink on the product results in media characteristic changes, incomplete drying, overlaminate lifting, and/or poor graphic performance. For additional details about total ink coverage, refer to the 3M product and instruction bulletins for 3M inks or the <u>3M Performance Guarantee Matrix</u> for OEM inks.

Completely Dry Graphics

() IMPORTANT NOTE

Incomplete drying or curing can result in graphic failure including curling, increased shrinkage, and adhesion failure, which are not covered under any 3M Graphics warranty.

See the ink's 3M product and instruction bulletins for more details.

Screen Printing

Formulations and processing conditions can affect ink durability. Users should refer to their ink's product and instruction bulletins for limitations and proper usage.

Cutting

See <u>3M Instruction Bulletin 4.1</u> for Sheeting, Scoring and Film Cutting details.

Graphic Protection

Graphic protection may improve the appearance, performance, and durability of the graphic. Click on the graphic protection options listed in this product bulletin or see the <u>3M Graphics Materials Product Catalog</u> for more information.

(i) IMPORTANT NOTE

During installation, scratches may occur on films without graphic protection.

Application and Installation

In addition to other 3M bulletins specified in this document, the following bulletins provide details users may need to successfully apply a graphic.

- <u>3M Instruction Bulletin 4.22</u>Lamination Basics for Inkjet Printed Graphics
- <u>3M Instruction Bulletin 5.1</u> Select and Prepare Substrates for Graphic Application
- <u>3M Instruction Bulletin 5.19</u>Application & Maintenance of Floor Graphics
- Complete the Surface Preparation procedure found in 5.19 prior to applying a graphic to a surface.
- <u>3M Instruction Bulletin 5.5</u> Application, General Procedures for Interior and Exterior Dry Application
- <u>3M Instruction Bulletin 6.5</u> Storage, Handling, Maintenance and Removal of Films and Sheetings

Pressure-sensitive Adhesive

This film has a pressure-sensitive adhesive. It bonds to the surface even with light pressure and cannot be repositioned.

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See <u>Instruction Bulletin 6.5</u> for details.

Shelf Life, Storage, and Shipping

Shelf Life

The shelf life is never more than two years from the date of manufacture on the original box.

If you process the film, the shelf life is changed to **one year** from the processing date, but not later than the two year maximum from the manufacturing date.

Storage Conditions

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

Shipping Finished Graphics

Flat, or rolled printed side out on a 6 in. (13 cm) or larger core. This helps prevent the liner, if used, from popping off.

Health and Safety

When handling any chemical products, read the manufacturers' container labels and the safety data sheets (SDS) for important health, safety, and environmental information. To obtain SDS for 3M products go to <u>3M.com/SDS</u>. To request SDS by mail, or in case of an urgent situation, call 1-800-364-3577 or 1-651-737-6501.

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

Warranty Information

Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics product and instruction bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time the film was purchased. Information found at <u>3M.com/graphicswarranties</u> includes:

- <u>3M Graphics Warranties Bulletin</u>
 - This bulletin contains information on limitations, exceptions, and warranty period reductions for 3M Graphics warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this bulletin.
- <u>3M Graphics Warranties Selector</u>
- Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/printer platform.
- <u>U.S. Desert Southwest Region Map</u>
 - Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.

Technical Information

The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment, reviewing all applicable regulations and standards, and reviewing the product label and use instructions. Failure to properly evaluate, select, and use a 3M product in accordance with instructions or to meet all applicable safety regulations may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer

Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Commercial Solutions 3M Center, Building 220-12E-04 St. Paul, MN 55144

1-800-328-3908 3M.com/Graphics © 3M 2022. All rights reserved. 3M and Scotchcal are trademarks of 3M. Used under license in Canada.

All other trademarks are property of their respective owners. Revision L, February 2022 Please recycle.

