

Release G, Effective July 2011 (Replaces F, April 11) See Bulletin Change Summary at end of document

Transit Ad Graphic Film 1J36-20

For Inkjet and Screen Printing with Solvent and UV Inks

1. Product Description

Film IJ36-20 is a 3.4-mil matte vinyl film with a changeable, pressure-sensitive adhesive. Use it where a good quality film is needed for short-term king and queen board promotional graphics on transit vehicles or box trucks and point-of-purchase displays. It is designed for inkjet or screen printing with solvent or UV inks.

2. Characteristics

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

A. Physical Characteristics

Characteristic	Value
Material	Vinyl
Color	White opaque
Gloss	Matte
Film thickness	Without adhesive: 3.4 mil (0.86 mm) With adhesive: 4.0 mil (0.102 mm)
Adhesive type	Pressure-sensitive
Adhesive color	Gray
Liner	Polycoated paper

B. Application Characteristics

Finished graphic application recommendations	Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic and painted substrates
	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	Changeable; may require heat when removing at cool or cold ambient temperatures

3. Warranty and Durability

A. 3M Basic Product Warranty

This product has been tested and is believed to be a good product when used as recommended in this Bulletin. The film is covered by the 3M Basic Product Warranty and is guaranteed to be free of physical and manufacturing defects. There is no warranty for printability, visual appearance, fitness for use or durability. See the 3M Graphics Market Center Warranty Brochure for the complete warranty and remedy details.

B. Expected Performance Life

1 year in a vertical exposure may be expected with typical usage.

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.

C. Warranty and Limited Remedy

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: all 3M products are 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. 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. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor or non-3M materials charges.

See the <u>3M Commercial Graphics Warranty Brochure</u> at 3Mgraphics.com, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

D. Definitions

Vertical Exposure



face of graphic The face of the graphic is $\pm 10^{\circ}$ from vertical.

4. Fabrication

A. All Printing Methods

B. Inkjet Printing Only

This film has been optimized to perform well with a variety of piezo 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. 3MTM ScotchcalTM Gloss Overlaminate 8508 or Luster Overlaminate 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.
- 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.

5. Shelf Life, Storage and Shipping

A. Shelf Life

Total shelf life: 2 years from the date of manufacture on the original box. If you <u>do process</u> 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 <u>do not process</u> 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.

6. Health and Safety



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.

7. 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. <u>Current Bulletins</u> 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	Туре	Bulletin No.
3M Graphic Protection Products overview of all graphic protection products and specific information on most overlaminates		GP-1
Application, substrate selection, preparation and substrate-specific application techniques		5.1
Application, general procedures for indoor and outdoor dry applications		5.5
Storage, handling, maintenance, removal		6.5
3M Commercial Graphics Warranty Brochure go to www.3Mgraphics.com,/Warranties		

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8. Bulletin Change Summary

Added $3M^{\text{TM}}$ Scotchcal $^{\text{TM}}$ Gloss Overlaminate 8508 as a possible overlaminate to use. Added example to Shelf Life.



Commercial Graphics Division

3M Center, Building 220-12E-04 PO Box 33220 St. Paul, MN 55144-3220 USA General Info. 1-800-374-6772 Technical Info. 1-800-328-3908 Fax 1-651-736-4233 3M Canada

P.O. Box 5757 London, Ontario Canada N6A 4T1 1-800-265-1840 Fax 519-452-6245 3M México, S.A. de C.V

Av. Santa Fe No. 55 Col. Santa Fe, Del. Alvaro Obregón México, D.F. 01210 52-55-52-70-04-00 Fax 52-55-52-70-22-77 3M Puerto Rico, Inc.

Puerto Rico Industrial Park 350 Chardon Avenue, Suite 1100 San Juan PR 00918 787-620-3000 Fax 787-620-3018

www.3Mgraphics.com

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