

This bulletin combines Instruction Bulletin 5.26 and 5.19

Quick Links

[3M Graphics Warranties](#)
[Technical Information Selector](#)
[Safety Data Sheets \(SDS\)](#)
[Flammability \(ASTM E84 Reports\)](#)
[Videos](#)

Some of these links lead to web-based resources that are not product-specific.

Health and Safety

CAUTION

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 sheets for 3M products go to 3M.com/SDS, 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.

CAUTION

State Volatile Organic Compound (VOC) regulations may prohibit the use of certain chemicals with VOCs in graphic arts coatings and printing operations. For example, the California South Coast Air Quality Management District prohibits use of certain solventbased solutions without a permit and other California AQMDs prohibit use of certain solutions without a permit or regulatory exemption. Check with your State environmental authorities to determine whether use of this solution may be restricted or prohibited.

Compatible Products

Screen Printing

- [3M™ Controltac™ Graphic Film Series 160](#)
- [3M™ Controltac™ Print Film 40C-10R, 40C-20R and 40C-114R](#)
- [3M™ Scotchcal™ Graphic Film 3662](#)

Piezo Inkjet Printing

- [3M™ Controltac™ Graphic Film Series IJ160-10](#)
- [3M™ Controltac™ Print Film 40C-10R, 40C-20R and 40C-114R](#) Graphic Protection (required)
- [3M™ Scotchcal™ Luster Overlamine 3645](#) (interior use only)
- [3M™ Scotchcal™ Matte Overlamine 3647](#) (interior and exterior use)
- [3M™ Envision™ Matte Overlamine 8050M](#) (interior use only)
- [3M™ Scotchcal™ Luster Overlamine 8509](#) (interior use only)

Lamination

Lamination is a required step in the production of finished and warranted floor graphics. This process provides durable, scuff-resistant protection to the graphics. Refer to [Instruction Bulletin 4.22](#) for additional information.

Warranted Application Surfaces

WARNING

The safety and performance of these films are warranted or assured only on the surfaces listed below. Any other surface must be approved in writing by 3M Commercial Graphics Technical Service prior to application.

Application and Maintenance of Floor Graphics

Approved Floor Application Surfaces

- Waxed vinyl
- Sealed concrete
- Marble
- Ceramic tile
- Sealed wood
- Terrazzo
- Unsealed concrete outdoors (3662 only)

Condition of Floor Application Surfaces

In general, the floor surface must be secure and in good condition.

- Avoid installing floor graphics over loose tile.
- Avoid installing floor graphics over uneven tile.
- Be sure the floor finish is well bonded to the floor surface. Floor finishes that are not well-bonded to the surface may separate or release, resulting in premature lifting of the graphic. In addition, the floor finish may come off with the graphic when the graphic is removed, requiring the reapplication of the floor finish. Some types of floor finishes include concrete sealer, wood sealer, paint, and wax.
- Properly clean the floor surface, including removing any silicone coatings, except in grout line area of tile.
- The floor surface application temperature range is 50° to 100°F (10° to 38°C).

Location of Floor Graphics

CAUTION

Any floor surface, including floor graphics, that is wet due to rain, snow or other contaminants may become slippery. To avoid personal injury due to slipping:

- Place floor graphics far enough away from entryways that they stay dry.
- Use doormats to reduce moisture at entryways.
- Clean up water, spills or other contaminants immediately.

Floor graphics may be damaged by pallets or heavy equipment, such as forklifts, as well as by dragging heavy items across the top of the graphic. If possible, locate floor graphics out of the main stream flow of pallet or heavy equipment traffic. Minor edge chipping is unavoidable.

Application and Maintenance of Floor Graphics

Surface Preparation

All floor surfaces must be cleaned prior to applying floor graphics, including surfaces that are sealed, waxed or painted. To clean the floor, use the following procedure.

Surface Cleaning

1. Spray the floor area where the graphic will be applied. Use a solution of 20 drops of detergent per pint (400 ml) of water. Do not use soaps or enzyme detergents.
2. Clean an area that is 6 to 8 inches (15 to 20 cm) larger than the graphic.
3. Wipe the floor clean and then dry it with a lint-free paper towel, such as 3M™ Perfect-It™ Wipe, or the equivalent. Be sure you remove all soil and grit.
4. Remove any oil or grease by wiping the floor with a clean, lint-free paper towel that has been moistened with rubbing alcohol that contains no lotions. To avoid leaving a residue, wipe the surface completely dry with a lint-free paper towel before the alcohol evaporates.

Seaming

Use butt seams when the graphic has more than one panel. Overlapped seams are not recommended or warranted.

Cutting

The following are common cutting methods. See [3M Instruction Bulletin 4.1](#) for details.

- Bandsawing
- Hot kiss cutting
- Drum-type electronic cutting
- Flat-bed electronic cutting
- Guillotine
- Hand cut
- Cold and hot steel-rule die cutting

Graphic Application

General Application Technique

- Use a 3M™ Applicator PA-1.
- Use firm pressure and overlapping strokes.
- Always stroke across the shortest, edge-to-edge distance.

Application Procedure

IMPORTANT NOTE

We recommend cutting a radius on any sharp corners after lamination. This helps prevent premature lifting of the graphic after application.

1. This graphic is positionable and does not require a premasking or prespacing tape.
2. Position the graphic on the clean floor.
 - Avoid aligning the edges of the graphic on grout lines of tile.
 - Do not smooth the graphics with your hands because this entraps air.
3. Peel back one half of the liner to expose the adhesive. Carefully cut off that part of the liner while holding the graphic away from the surface.
4. Make one stroke across the center of the graphic.
5. Continue stroking edge-to-edge across the shortest distance until that half of the graphic is applied.
6. Lift the other end of the graphic and remove the remaining liner.
7. Continue stroking edge-to-edge across the shortest distance until that half of the graphic is applied.

Finishing the Application

The application is not finished until you re-squeegee the edges and the corners. This ensures a good edge seal.

Using the applicator, re-squeegee the outer 4 to 6 inches all around the graphic, using firm, overlapping strokes. This works the adhesive into the application surface to provide better bonding.

Wax the Graphic Soon After Application

If you apply the graphic to a floor that is routinely maintained using buffing or scrubbing equipment, wax the graphic as soon as possible after applying it to the floor. This protects the graphic from premature wear due to routine floor maintenance. Following the application and waxing, if used, keep the graphic and surrounding floor surface clean and dry for at least four hours; do not scrub or buff the area during that time.

Maintenance and Cleaning

CAUTION

To reduce the risk of tripping, remove and replace the entire graphic if there is any lifting from the floor surface.

Routine Maintenance

Use routine floor maintenance procedures and equipment to maintain the graphic.

1. Select a floor finish or wax that meets or exceeds the 0.5 Static Coefficient of Friction value using the ASTM D 2047 test procedure.
2. Clean the graphic prior to waxing it.
3. Follow the manufacturers' recommendations for applying the floor finish or wax.
4. Do not use buffing equipment over graphics unless they are waxed regularly.

If high-speed, propane-type buffers are used, we recommend that you apply four to six coats of wax to the graphic before buffing it. The multiple coatings of wax reduce the chance of the edge of the graphic wearing prematurely during buffing.

Application and Maintenance of Floor Graphics

Removal

1. Remove the graphic by lifting one edge and pulling it off at a sharp angle with smooth, even tension. A scraper, such as a putty knife, may be used to lift the edge, if needed.
2. The floor wax under the graphic may also be removed in this process; therefore, the area may have to be rewaxed.

Technical Information

Technical information and data, recommendations and other statements provided by 3M are based on information, tests or experience that 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. The typical values shown should not be used for the purpose of specification limits. If you have questions about this Product, contact the Technical Service helpline at 1-800-328-3908.

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 following applicable Bulletins provide information and processes you need to properly make the graphics described in this Bulletin. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Warranty and Limited Remedy

The information contained and techniques described herein are believed to be reliable, but 3M makes no warranties, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. 3M shall not be liable for any loss or damages, whether direct, indirect, special, incidental or consequential, in any way related to the techniques or information described herein.

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