

Avery® Technical Bulletin # 1.11

Converting & Applying Floor Graphics

Due to the unique nature of the Floor graphics, particular attention needs to be paid to the application surface, how the finished graphic is applied to the floor, and maintenance of the floor graphic.

NOTE: Failure to follow the guidelines set forth by this Instructional Bulletin may void parts or all of the Avery Floor Marking Warranty.

Recommended Base Films

The following films are recommended and approved for Floor Marking applications:

Screen printed Applications:

- Serilux 70100 E85 B160
- Serilux 72121 E85 B160

Solvent Inkjet Applications

- MPI 8112

Ink Jet Applications

- IPM 2031
- IPM 2501

Recommended Overlaminating Films

- DOL 6100

Processing Procedures

Printing

- Floor graphics can be printed by Screen printing, Solvent digital or Aqueous digital printing, depending on the material used.

Laminating Conditions

- After the desired graphic image is printed on one of the base materials, it is necessary to over laminate the image with DOL 6100 over laminate film. For Ink jet images refer to Technical Bulletin #4.06 for over lamination instructions (the over laminate on ink jet prints must overlap the image by at least 10mm).
- The use of varnishes or clear coats is not recommended and should not be used in lieu of the specially designed over laminate as varnishes do not have sufficient wear resistance and quickly lose any anti-slip properties they may possess.

Application of Floor Graphic

Placement of the Graphic

- For safety, and to maintain the integrity of the graphic, it is important to place the graphic in a moderate traffic area, away from main doorways.
- As with any floor surface, the Floor Marking graphic will become slippery when wet. As a result, it is better to keep the graphic away from areas where it can become wet from rain or snow. If applied in a warehouse setting, fork lifts and tow motors can compromise the integrity of the graphic. The Avery Floor Marking system is suitable for use in warehouses provided the graphic is not applied to high traffic areas of heavy equipment.
- The floor surface to which the graphic is applied should be well secured, level, and free from cracks, chips, and missing and/or loose tiles or grout. The floor surface should also be free of silicone, as the presence of silicone will inhibit anchorage of the graphic to the floor surface.

Preparation of the Floor Surface

NOTE: For additional substrate preparation, please see Instructional Bulletin #1.01.

- Once the location of the graphic has been determined, it is necessary to prepare the surface for applying the graphic. Proper preparation of the floor surface is critical to the durability of the product. The application surface needs to be clean, smooth, and dry.
- Remove dirt and grime with a commercial detergent solution and water. Make sure that the surface is thoroughly cleaned and that no residue remains. It is important to clean not only the area to which the graphic will be applied, but also 20 - 25 cm larger than the Avery Floor Graphic on all edges.

NOTE: Detergents that contain enzymes and soaps should not be used.

- Wipe the floor dry with a lint-free paper towel.

NOTE: Do not allow cleaning solution to air dry.

- If any grease or oil remains, saturate a lint-free paper towel with isopropyl alcohol (IPA) and thoroughly wipe the application area. Immediately following, use a dry lint-free paper towel to dry the IPA.

NOTE: It is important that the alcohol be wiped dry so as not to leave a residue.

- Prior to installation of floor graphics, read and follow all manufacturers' instructions relevant to the chemical preparation of the floor surface. The labels and Material Safety Data Sheets (MSDS) should be read before using any cleaning solution. Be sure to follow all manufacturers' guidelines when using floor-cleaning equipment.

Application of the Avery Floor Markings Graphic

NOTE: For additional application instructions please refer to Instructional Bulletin #1.8.

- Locate the exact position on the floor where the graphic will be located. Make sure that edges of the graphic are not along a tile edge, grout, or floor joint. See Figures 1 and 2.

Figure 1.

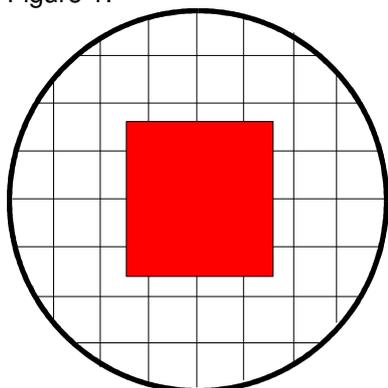
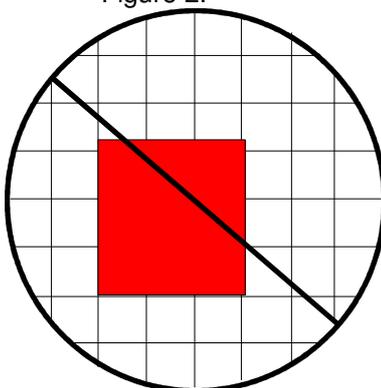


Figure 2.



- Once the location of the graphic is aligned, turn the graphic face down and remove the liner from the graphic. Partial removal of the liner or backslits will facilitate positioning and application. Position the graphic on the floor; **do not** smooth the graphic out with your hands as this results in air entrapment.
- Using a hard plastic squeegee, make one firm stroke down the middle of the graphic. From the middle line, use firm strokes from the middle line to the edge. The strokes should be deliberate and overlapping, always working towards the outer edge of the graphic to avoid air entrapment.
- If the graphic is large, it may be necessary to carefully lift one of the ends of the graphic while squeegeeing from the centerline to the edges. Repeat this procedure on the other end.

Note: Make sure that adhesive contact is minimized; if necessary contact with the adhesive should be made only with clean hands or lint free gloves.

- After the graphic is applied, re-squeegee the edges and corners again.

Note: Rounded corners on the graphic will help prevent pre-mature lifting of the graphic due to tampering and scuffing. Should square corners start to lift, they can be removed to prevent further damage to the image.

- After applying the graphic, it is recommended that the image not be walked on for at least 8 hours. This time allows the adhesive to anchor to the floor, minimizing pre-mature lifting of the corners.
- If applied to a waxed or treated surface, it is recommended that the surface of the floor graphic also be treated no sooner than 24 hours after application. In the case of commercial wood flooring that is either polyurethane coated or acrylic impregnated, it is not necessary to treat the floor graphic. This treatment recommendation is primarily for vinyl composition tile or vinyl inlay tile that is treated with "no-wax" floor polish.

Maintenance of Floor Graphics

- Avery Floor Graphics have been designed to withstand daily cleaning with mild soapy water. Commercial buffers can also be used, but it is recommended that 4-5 coats of the floor polish be manually applied to the graphic the first time before using a buffer. It is also recommended that the graphic not be cleaned in any capacity within the first 24 hours. After the initial treatment of the graphic, treat the graphic as if it were part of the floor.
- For the best performance, it is recommended that water not dwell around the image and that the image not be exposed to oils and solvents for extended periods of time.
- Scuffmarks on the graphic can be removed using soap and water, citrus cleaning, and, as a last resort, a scratch-free cleaning pad.

Removal of the Graphic

NOTE: For additional removal instructions, please refer to Instructional Bulletin #1.7.

- When removing the graphic, start at one of the corners and gently pull the graphic toward you at a 90° angle. It may be necessary to use a putty knife to start the removal process. The graphic should remove cleanly. In the event that there is some adhesive residue on the edge of the graphic, the adhesive can be removed by gently scraping with the putty knife or using a citrus cleaner. Dirty contour edges may also be evident after removal of the graphic; however, normal cleaning of the floor will remove these.
- Depending on where the graphic was placed, the area under graphic may appear darker or discolored compared to the surrounding area. The Avery floor graphics will offer some UV protection to the floor underneath, as a result, the surrounding floor may fade due to light sources, but the floor under the graphic will be protected.
- After the 6-month time frame, it may appear that there is no damage to the graphic and it does not need to be removed.

NOTE: If the graphic is removed after the specified time period, Avery will not be liable for any damage to the floor or any personal injuries incurred.

The above information provides basic information on how to apply pressure-sensitive graphics. The instructions are designed to help ensure success across a broad range of applications. Depending on the size and complexity of applications, a certain amount of expertise is needed.

Professional Application Services

The above information provides basic information on how to apply pressure-sensitive graphics. The instructions are designed to help ensure success across a broad range of applications. Depending on the size and complexity of applications, a certain amount of expertise is needed.

Professional applicators can be hired to ensure proper application of finished graphics. When mounting graphics in remote geographic areas, professional applicators can offer the added benefit of local service.

Consider hiring a professional whenever the application requires:

- Multiple panels to be registered
- Complex surfaces, such as rivet and corrugated trucks
- Harsh environmental conditions (i.e. outdoor applications in high heat climates)
- Remote geographic locations

In case of doubt, please contact your local Avery Graphics representative to ensure the correct procedures are followed.