

Technical Bulletin 4.6

Guidelines on surface preparation, conversion and application of Mactac Floor Graphics

The present Technical Bulletin provides detailed information on how to prepare, convert and apply Mactac floor graphics products for indoor applications.

For specific information on a product's properties please consult its corresponding technical datasheet.

The Mactac floor graphics portfolio consists of a series of highly embossed over laminations and printable media that provide the desired anti-slip properties necessary for any floor application. The series comes with different adhesives and different performances to better serve the wide range of floor substrates.

For more information about the anti-slip certification please consult the Technical Bulletin 4.7.

REQUIRED TOOLS

To ensure proper application of the film, you will need the following tools:

- Mactac Fluids to clean the surfaces prior to application when appropriate.
- Hygrometer to measure the level of humidity of the substrate prior to application.
- Marking pencil for positioning.
- Felt squeegee or soft plastic squeegee with velvet strip in order to avoid damaging the film.
- Heat gun to ease removal.
- Cutter with new blades and cutting guiding ruler.
- Mactac gloves for personal safety and to protect the film.
- Lint-free cloth for cleaning.
- Suitable brush and vacuum cleaner to remove loose coarse dust.

CONVERSION

It is recommended to round off the corners of Floor Marking decals by a radius of at least 5 mm: sharp corners make graphics more vulnerable to damage or delamination.

Allow the printed Floor Marking to dry for the required amount of time (recommendations depending your ink type) prior to overlamination.

Mactac LUV 6300, LUV 6301 and Permafex FloorGrip can be laminated onto the printed film with a laminator at 25 - 30° C. Laminating can be done with moderate pressure (3.5 – 7kg/cm²) and speed (< 2.5 m/min.) and low web tension. Laminating by hand or roller is not recommended.

Floor Markings can be cut on flatbed plotters, using a sharp, 45° angled knife. We recommend to strip the waste quickly after cutting. Designs for cutting that include sharp angled or fine details should be avoided. To avoid delamination the floor graphics should ideally be laying flat for at least 1 hour prior to further processing. For transportation it is recommended to prepare rolls with a diameter of 15 cm or more: the overlaminating film shall be wound outside.

SURFACE PREPARATION

Proper cleaning and preparation of the substrate prior to application is critical for successful graphics. Even if they appear clean, all surfaces must be cleaned prior to application following the instructions below:

- Make sure the humidity level of the wall is acceptable (below 65% relative humidity).
- Clean away dust or any other residues with a brush (supported by a vacuum cleaner), a moisturized towel and a lint-free cloth.
- Use Mactac Cleaner to clean away grease, glue or any other residues from a previous application, or use detergent when appropriate.
- Dry the surface using a lint-free cloth or a clean paper towel that does not leave any small pieces behind before the Mactac Cleaner has evaporated.
- Molds, corrugations, edges and corners must be cleaned thoroughly with a moisturized lint-free cloth and may take longer to dry.

Prior to application, please ensure that the substrate is moisture free and that all surfaces have been thoroughly cleaned and completely dry.

APPLICATION

The Mactac floor graphic portfolio can be used on most floors. It is strongly recommended to always perform a test to assess suitability of floors for sufficient adhesion performance prior to application.

Application on the following floors is not recommended and are excluded from any guarantee or warranty;

- Waxy, rough or porous ceramic tiles or wooden floors
- Textile mats and carpets
- Rubber matting
- Soft PVC matting
- Marble - (slight dis-)colouration of the marble might occur as a result of its porous composition.
- Very irregular floor surfaces (including cement or concrete floors).

The application temperature should be between 10 °C and 30 °C.

The standard procedures for decal application can be followed:

- Peel the backing paper away from the film + overlamine construction and not the film from the backing paper.
- Apply the decal with a hard plastic squeegee or roller or similar tool with firm, overlapping strokes. After completion of the application, check and re-squeegee the edges of the decal. When the final graphic is made out of more than one sheet of Avery Dennison Floor Marking, it is recommended to apply these side by side (no overlap) without a gap. Allow at least 30 minutes for the adhesion to build up sufficiently prior to use the decal as a walkway: essential here is the thorough re-squeegeeing of the decal edges
- Treat the newly applied film with care. It takes about 24 hours for the adhesion to fully build up.

For JT 8300 WM-RT Dot Floor, the standard procedures for application are as followed:

- Put the **directly printed** graphic upside down and partially remove the liner for about 3 cm.
- Fold the liner backwards, so about 3 cm of the film with adhesive coated side is exposed.
- Position the film correctly and apply pressure with your hand to fixate the film at the edges.
- Apply the decal with a hard plastic squeegee with firm, overlapping strokes from the centre towards the edges.
- Slowly remove the rest of the liner with one hand while continuing to apply strokes on the newly exposed adhesive-coated film onto the substrate.
- After completion of the application, check and re-squeegee the edges of the decal.

Note: For larger decals the hinge method can be applied.

REMOVAL AFTER USE

Start the removal at a corner and continue at 90° angle. The use of a heat gun to heat the film to a temperature of 50-60°C (subject to the heat resistance of the specific substrate the film is applied on) will improve the removable performance. Dirty contour edges on the floor may appear after decal removal: these can be removed through the normal cleaning procedures for the floor to which the decal was applied.

If new decals have to be applied, the above procedure has to be repeated from the very beginning. In some cases colour differences between the floor covered by the floor graphic and the surrounding area could occur as a result of further discoloration of the surrounding floor area.