

Avery® Instructional Bulletin 1.7

Conversion, Application and Removal of MPI 6121 Street Graphics

1.0 Scope

This bulletin provides procedures for converting, applying and effective cleaning and removal of MPI 6121 Street Graphics decals from horizontal substrates.

2.0 Converting of Material

- To print the MPI 6121 Street Graphics product it is recommend to use the MPI 1005 printer profile.
- For UV curable inkjet printed graphics it maybe necessary vary the grade/tack of application tape depending on the ink coverage and density, for full coverage graphics a low medium tack application tape will be suitable and for light coverage or unprinted areas a low tack application tape will be suitable. Avoid leaving the application tape on the printed graphic for extended periods of time before installation as this may reduce the removal performance of the application tape.
- This material is not recommended for cut letter or intricate cut graphics. As the material is designed to crack and fracture, weeding will be difficult at serifs and in intricate designs.

NOTE: Documentation of application date, material lot number, and application conditions (temperature, etc.) is required to support warranty claims in the event of decal failure.

3.0 Surface Preparation

- The use of MPI 6121 is not recommended for surfaces in poor repair (loose stone), stained by automotive fluids (oil, coolant, etc.) or locations prone standing water and storm drainage.
- The application surface must be free of loose dust, dirt and stone.
- The surface must be completely dry. Check all cracks, pits, and crevices for any remaining moisture.
- If possible use a high pressure washer to clean the area in advance allowing enough time for the entire area to dry.
- It is required to use a push broom on the potential application area. Using short brush strokes, brush the substrate from three different directions to ensure the area is dust free. A push broom in concert with a leaf blower will aid substrate preparation time.

4.0 Application Tools

- Squeegee
- Heat gun or weed burner (torch with flame spreader attached)
- Razor knife
- Rivet brush
- Hard-bristled outdoor push broom
- High tack duct or cloth tape

5.0 Temperature

- Ambient air temperature - Ideal conditions are 21°C (70°C) or greater.
- Surface temperature - Ideal conditions are 21°C (70°C) or greater, but graphic can be applied with temperatures as low as 14°C (55°C).

NOTE: The markings can be applied if the ambient air and substrate surface temperature are between the minimum and maximum application temperature specified in the appropriate Product Data Bulletin. During cold temperature months, it is recommended to use a heat gun on the surface of the graphic after application. This will accelerate the ultimate adhesion of the film.

6.0 Registration

- Use a permanent marker or masking tape, to mark the decal location on the application surface. It is not recommended to use a chalk line as the dust will contribute to poor graphic adhesion.
- When overlapping multi-part decals, the actual overlap should be at least 6mm width and less than 13mm.

7.0 Key Application Tips before Proceeding

- Surfaces must be completely clean and dry free and in good repair. This is a critical first step toward successful decal application.
- Follow the guidelines toward minimum and maximum application temperatures and required service conditions before and after application.
- Do not use application fluid or the “wet method” during installation.
- The decal must be squeegeed and brushed before and after application tape removal. Allow graphic to dwell for 5 minutes before removing the application tape (longer for colder days). During application tape removal, decals are exposed to potential edge lifting. In order to eliminate this, re-squeegee the decal (especially the edges). Wrap a squeegee sleeve or soft clean rag around the squeegee to prevent potential damage to the decal. Use of a heat gun or torch around the edges to increase ultimate adhesion.
- The decal must be re-squeegeed or brushed along the cut edge to prevent potential edge lifting.

8.0 Application Procedures

The following instructions show a step by step procedure for installing large application taped graphics. The method used is the Top Hinge Method also use of the no hinge method can be performed at the discretion and expertise level of the applicator. For questions regarding application procedures or instructional videos on proper application techniques contact Avery Graphics Customer Technical Support Department.

8.1 Application procedure large application taped marking top hinge method - Avery® Graphics films

1. Using previously marked registration masks position the marking on the application surface using a weight to hold it in place.
2. Once the decal has been properly registered, apply a tape hinge along the top edge of the decal, a high tack duct or cloth tape will be necessary on asphalt and concrete surfaces.
3. Cut through the masking tape along the sides of the decal.
4. Flip the marking up over the hinge and remove the liner. Always remove the liner from the marking.
5. Hold the decal away from the application surface with one hand and squeegee from the top centre downward and outward until the entire decal is applied. Use firm, short, overlapping strokes. This will help prevent wrinkling of the film. Remove the masking tape hinge (if one was used). Re-squeegee the top edge to which the tape hinge was applied using overlapping, upward strokes. After squeegeeing, use of a rivet brush or scrub brush on the application tape to work the material into the highly dimensional portions of the application surface.
6. After allowing the decal to dwell for 5 minutes remove the application tape from the decal by peeling back on corner of the mask and pulling it back at a 180° angle.
7. Re-squeegee the entire decal using very firm squeegee pressure, including all edges. A heat gun can be used around the edges of the graphic to help adhere the edges.

9.0 Graphic Removal Process

9.1 Removal using Avery 400 Supertack

- The use of Avery 400 Supertack has proved to be an effective method for removal.
- Apply Supertack over the top of the installed decal and allow to dwell for 20-30 minutes allowing the adhesion to reach sufficient levels
- Remove the Supertack carefully ensuring that the decal removes with the Supertack leaving little or none on the substrate.
- The use or multiple sheets may be required depending on the size of the decal.

9.2 Removal using a high pressure washer

- A pressure washer with a 2000 psi or greater rating is recommend for graphics removal.
- The recommend nozzle for graphic removal is a 25° or 35° nozzle, for superior removal performance and for difficult areas a rotating ball bearing nozzle is highly recommended.
- The safety requirements of the pressure washer must not be compromised during graphic removal.
- Prior to graphic removal make sure the surface of the graphic is free of debris and loose material that can become a flying hazard during the removal process. Also determine direction of the spray, prior to graphic removal, and remove all potential hazards.
- Note depending on the integrity of the substrate, loose stone and material may break free as a result of the water pressure.
- Allow the pressure washer build to operating pressure before starting the removal process. Consult the manufacturer's operating manual before use.
- Working from an edge of the graphic; it is suggested to spray the graphic from a distance of 3 to 5 inches from the surface at an angle away from the body (A shorter distance maybe required depending on the application of the graphic).
- Note: Take care to spray in a direction away from co-workers, children, pets, property, and other potential hazards, as flying particles may occur.
- Using a short sweeping motion, work your way across the graphic until the entire graphic is removed.
- After removal of the graphic, collect all the remnants of the graphic and dispose of properly. The use of a temporary barrier to spray the graphic towards greatly reduces site clean up time.
- Depending on the roughness and type of substrate, there may be a small amount of adhesive residue as well as graphic material remaining

9.3 Removal using external specialist contractor

- Alternatively a specialist graffiti removal/cleaning company can be contracted to remove the decal. They may use any of the above removal methods or by using a chemical removal method.

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
- Harsh environmental conditions (i.e. outdoor applications in high heat climates)
- Remote geographic locations

Avery Dennison makes no representations or warranties with respect to this product and the installer assumes all risks and liabilities associated with the preparation of the surface, application and removal of the material. Avery Dennison recommends that you comply with all applicable safety standards, including the use of proper personal protective equipment.

For further information, contact your local Avery Graphics representative.

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