Avery® Technical Bulletin # 4.07
Tips for Creating Digitally Imaged Banners

There are many factors that must be considered when determining the most suitable substrate for a banner application. Graphic design, environment, desired life expectancy, size and installation method are commonly the most important factors to consider. It is very important to understand the impact that these factors have on each other and how they are affected by the characteristics of the substrates.

Considerations for Material Selection

Graphic Design
- If the graphic design is intended for viewing at close range and requires the highest detail the MPI Ultra Smooth banner material is ideal because of its smooth surface.
- If the design is intended for viewing from a distance and less detail is acceptable, the MPI Heavy Duty banner is recommended.

Environment

Before selecting a banner substrate the banner location must be taken into consideration:

- MPI Ultra Smooth is ideal for standard sized indoor banners and is also appropriate for short-term outdoor banners.
- MPI Heavy Duty banner is appropriate for most other outdoor banners.

Some environmental factors that will impact the life of a banner are:

- wind
- extreme temperatures
- airborne pollutants

Durability
Reference Data Sheets for durability of MPI Ultra Smooth and MPI Heavy Duty banners.

Graphic Size & Installation Method
When choosing a banner material it is important to consider both the size of the banner and method of installation. These factors should be considered simultaneously because the method of installation may improve or even detract from the strength of the substrate.

- The larger the banner the stronger it needs to be.
- The longer the banner is to perform, especially outdoors, the more attention must be paid to the method of installation. The MPI Ultra Smooth banner has a scrim layer, which may not withstand extreme installation methods such as excessive tensioning or being stretched over long distances.

Printing Recommendations

NOTE: Do not exceed total ink coverage of 300%. Too much ink may affect media characteristics, drying, overlaminate performance and overall graphic performance.

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Finishing

Grommets
Grommets can be used with both banner products and can provide two functions – they provide a method for hanging or to add strength to unfinished or hemmed edges.

Hems
Hemming the edges of a banner by stitching or using double-sided tape increases the strength and overall integrity of a finished banner, thus providing better exterior durability.

When designing a banner, the overall size should include a margin of material that can be used to create a hem on all four sides. The hem can also contain grommets and/or a pocket for a pole.

Hemming Banner Using Double-Sided Tape

NOTE - If a pole pocket is being created this side of the banner must be completed last. If a pole pocket is not needed, follow the procedure as described below:
1. Select a tape width equal to the width of the hem (25-50mm)
2. Make necessary cuts in corners to reduce the bulk caused by overlapping of adjacent hems.
3. To ensure proper adhesion, make sure the back side of the banner is clean. Use isopropyl alcohol to remove dirt and other contaminates.
4. Apply the double-sided tape along the outer edges of the banner material (make sure the edge of the tape is flush with the edge of the banner material).
5. Remove the liner paper from the double-sided tape.
6. Fold over the hem just to the width of the tape.
7. Use a squeegee or rubber roller to apply pressure to the taped area. Be sure to squeeze out all of the air bubbles.

Creating a Pole Pocket

1. Apply the double-sided tape flush with the outer edge of the material. If necessary, use multiple layers of tape to hold the pocket securely in place.
2. Remove the liner from the tape and fold over the pocket. Be sure to leave sufficient space for the pole.
3. Use a squeegee or rubber roller to apply pressure to the taped area. Be sure to squeeze out all of the air bubbles.

Wind Slits

Wind slits are not recommended for MPI Ultra Smooth or MPI Heavy Duty banner material. Wind slits have unfinished edges that create weak spots in the banner. As a result, constant flexing as wind passes through the slit, as well as cold temperatures, may cause the material to tear and fray prematurely. Banners should be designed to include enough strength in the construction and supporting fixtures to withstand higher wind speeds without the need for wind slits.

Cleaning & Maintenance

For cleaning the banner, use a cleaning solution with a pH range of 3 to 11 (within mild acid or mild alkaline limits). The cleaning solution should also be non-abrasive and free of strong solvents. Reference Technical Bulletin #1.01 for recommended cleaning solutions.

Storage and Shelf Life

Banner materials need to be stored in a controlled environment 22° ±3° C and 50 ±5% R.H. free from excessive airborne dust and direct sunlight.

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NOTE: Avery Dennison's MPI Ultra Smooth and MPI Heavy Duty banners have been designed around what we see as the industry's most common banner applications. While these products are well suited for the vast majority of banner projects, they will not necessarily meet the demands of all applications. Each of these products has their own set of unique features and benefits and may be better suited for different applications. Ultimately, it is the responsibility of the end user to determine the most appropriate substrate for each use.

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

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