

# Tips for Creating Digitally Printed Banners

## Introduction

This bulletin provides recommendations for printing and finishing of materials from the Avery Saturn and the Avery Jupiter Banner products.

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.

Please be sure to read, understand, and practice proper safety and operating procedures recommended by your printer manufacturer. Once the image has been printed to Avery® materials, additional graphics protection can be obtained by overlaminating or liquid laminating to provide abrasion, chemical and weathering resistance.

## Considerations for material selection

### Graphic design

If the graphic design is intended for viewing at close range and requires the highest detail, it's advised to use a banner with a smooth surface, for example the Avery Saturn 4000 Ultra Smooth.

The larger the viewing area, the less important the actual surface structure will be.

### Environment

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

For instance, MPI 4000 Ultra Smooth is ideal for standard sized indoor banner which require a short viewing distance, and is also suitable for short-term outdoor banner applications.

Also Avery Jupiter banner series is suitable for medium term outdoor application, and when a long-lasting banner is needed, the use of the Avery Saturn series is recommended.

There are some important factors which can negatively influence the expected durability of a banner:

- wind
- extreme temperatures
- airborne pollutants
- positioning (a sign facing directly into the sun has more UV exposure)



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### Durability

Please find below an overview of the expected outdoor durabilities for the different unprinted banner products:

Avery Jupiter Series	Indoor	Outdoor	Avery Saturn Series	Indoor	Outdoor
3110 Frontlit	4 years	3 years	4000 Ultra Smooth	5 years	6 months
3160 Frontlit	4 years	3 years	4100 Frontlit	5 years	4 years
3210 Backlit	4 years	3 years	4150 Frontlit	5 years	4 years
3310 Mesh	4 years	12 months	4160 Frontlit	5 years	4 years
3320 Mesh Liner	4 years	12 months	4200 Backlit	5 years	4 years
3410 Blockout	4 years	3 years	4300 Mesh	5 years	18 months
			4400 Blockout	5 years	4 years

The mentioned durabilities are based on Middle European exposure conditions, and are valid for unprinted materials only. Of course the different available inks have different durabilities.

### Printing

Both Avery Jupiter Series and Avery Saturn Series product are compatible with most common printers using solvent or second generation eco-solvent inks. In addition, the Avery Jupiter 3160 Frontlit and Avery Jupiter 3210 Backlit banners are also compatible with Avery 1200 Banner Film and Avery 4500 Translucent Film. Please find more details about the conversion of these signage products and the banner materials in Technical Bulletin 3.4.

In order to obtain a constant result, it is recommended to use ICC profiles. There are a limited number of profiles available from the Avery website ([www.europe.averygraphics.com](http://www.europe.averygraphics.com)), but in most cases the use of a general banner ICC profile as available in the RIP software will do.

When printing on mesh products, one should bear in mind the fact that the products do not have a liner, and that small amounts of ink can go through the mesh. Please check before printing, the compatibility of the printer to be used and the mesh products.

### Finishing

In general the statement can be made, that both Avery Jupiter and Avery Saturn banner products are compatible with conventional banner finishing methods, such as stitching, grommeting or thermal/high frequency welding.

The mesh products are not suitable for thermal seaming.

To transport the finished graphics to the installation location, it is recommended the banner should be wound-printed side/Signage Film<sup>\*1</sup> applied side facing out and placed in a tube. Hard creases such as folding of a finished banner should be avoided so as not to damage the graphic and/or print receptive surface. Hard creases may not flatten out during installation. The banner should be secured from all four corners during installation for best results.

<sup>\*1</sup> Avery Jupiter 3160 Frontlit is compatible with Avery 1200 Banner Film; Avery Jupiter 3210 Backlit is compatible with 4500 Translucent Film



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It is not recommended to create wind slits in the banner materials. Wind slits have unfinished edges and 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 and maintenance**

For cleaning the banners, use a cleaning solution with a pH range of 3 to 11 (within mild acid or mild alkaline limits), as more aggressive cleaning agents can negatively influence the print and/or the banner itself.

The cleaning agent solution should also be non-abrasive and free of strong solvents.

