Guide to Choosing Among Backlit Films

Today many sign shops are reevaluating their practices. As a result, applications such as backlit displays are being given new life. Recent advances in digital printing and media technologies have eliminated some of the production problems that used to be associated with backlit displays, making it easier to produce high-quality, cost-effective graphics for reverse illumination. Those advances, coupled with a boom in demand for promotional graphics, have resulted in a sharp increase in illuminated signage overall.

Below is a snapshot of the various backlit film offerings available from InteliCoat Technologies, as well as advice for choosing among the various options:

Semi Opaque Backlit Films

Semi opaque materials present the ideal form of media for POP displays because they ensure that there is enough translucency for the graphic to look great under the reflective lighting on the retail floor. The best choices for in-store backlit displays are white backlit films or polypropylene media that offer 90 percent opacity because the higher opacity will hold the graphics vivid colors in the bright reflective lighting of a retail environment. Backlit films that feature 40 percent to 50 percent opacity are preferred options in lower light environments.

To meet the wide array of environments, there are a number of semi opaque backlit films ranging in the $1.00 per square foot price range for use with aqueous dye/pigmented printers and inks. Some reverse print films enable print providers to print on the matte side to protect the image on the gloss side, making them ideal for high quality, promotional indoor backlit signage, backlit trade show display and backlit retail displays. Such films feature high color gamut on the viewing side, optimized opacity for maximum color with hot spots and enable the image to look great with the lights on or off. When looking for this type of backlit film, choose a polyester film base for uniform, low-grain background.

If you're looking to produce a durable sign, choose backlit films that have a waterfast coating when used with pigmented ink. In addition to featuring a high color gamut on the viewing side, such backlit films can be used for both frontlit and backlit applications, and enable positive direct print on matte surface for easy file management. When choosing among such media options, look for backlit films that features optimized opacity for maximum color without hot spots. Ideal for high quality indoor and outdoor durable backlit signage, backlit/frontlit trade show displays and retail displays and durable reflective signage, these options are available in approximately $1.00 per square foot price range.

Many of the semi opaque film solutions for solvent and eco-solvent printers present a more cost-effective option within the $.75 per square foot price range. For the production of backlit tradeshow and retail displays, and lightbox graphics and kiosks, there are universal backlit films that allow front print and feature bright white surface for high image resolution. With solvent printers, the image should be back-illuminated to optimize image appearance. The use of a diffuser layer will increase overall density to the image. Lamination with encapsulation is the best way to ensure complete waterfastness for such applications.

Other solvent/eco-solvent backlit films are available in a satin finish to enable maximum transmitted and reflected ink density. Such media solutions allow for front print and feature high image resolution and vivid color. Look for tear-resistant options to ensure maximum durability for the creation of high quality, promotional indoor and outdoor backlit signage. Lamination with encapsulation is the best way to ensure complete waterfastness, and cold pressure laminates are recommended.

Clear Backlit Films

When choosing among clear backlit films for aqueous and pigment printing systems, print providers should look for a slight level of opacity to eliminate the need for edge strips with optical sensing printers. At approximately $.50 per square foot, there are many options available on the market featuring quick-dry capability and high image resolution. Polyester backlit films provide the smoothest base uniformity and highest image resolution. For producing film positives in screen-printing applications, look for backlit films that feature high transmission black density.

As discussed, for solvent/eco-solvent printing, polyester backlit films provide the smoothest base uniformity and highest image resolution at approximately $.80 per square foot. In addition to looking for backlit films that feature, outstanding, high density black, print providers should also consider the water-resistant properties of the film. Such characteristics result in the ideal solution for making not only film positives for screen printing, but also graphic overlays, clear signage as well as window displays, tradeshow media, point-of-sale and kiosk designs.

For more information on backlit films from InteliCoat, call 1-800-628-8604 or email jchagnon@intelicoat.com. You may also view a clip from our Backlit Media and Applications webinar on the InteliCoatTech YouTube channel at http://youtu.be/wBA3rHa7ZQo.