

Aesthetics, Durability & Brand Longevity: The Powers of Lamination

Want to enhance the visual appearance and the durability of your industrial graphics? Chances are, you don't need to look any further than lamination.



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What Is Lamination?

By definition, a laminate is a clear, thin layer applied over the top of printed materials or graphics. Take a look at your driver's license or think back to one of your college or high school art projects. Those materials are typically covered with hard laminates. For industrial graphics, thinner laminates made of polyester (or sometimes polycarbonate, vinyl or other materials) are used.

Laminates (often called "overlaminates" by graphics production companies) are applied during the decal manufacturing process, following the application of ink, and are adhered with a pressure-sensitive adhesive. Proper application of the laminate requires a clean room to prevent dust and other contaminants from getting trapped under the surface, as well as specific equipment and highly trained operators skilled in adjusting the tension during application.

Overlaminates for industrial graphics come in a wide array of textures, glosses and clarity levels—each with a specific purpose—and they're critical to the longevity of your brand identity and messages.

Why Laminate?

Manufacturers generally choose to laminate their decals for two key reasons: visual enhancement and durability.

First, overlaminates add depth to your graphics and provide a consistent finish. You can choose satin, luster, gloss or high-gloss laminates—or select a matte or ultra-matte finish that can reduce glare and improve the visibility of your message in certain lighting conditions. Other finish options include textured vinyl that simulates polycarbonate, dry erase with write-on/write-off capabilities, and custom overlaminates with eye-catching effects like the appearance of heirloom leather, frost, wood grain, brushed metal and more. Overlaminates may provide gloss or sheen that helps colors pop. You can even use overlaminates to match a molded plastic product on a piece of equipment, creating the illusion that the decal is actually part of the product.

Second, overlaminates add unmatched durability to your graphics. They are often made of polyester because it's an easy substrate in which to embed UV inhibitors—thereby protecting your decals from the damage caused by sunlight and extending the life of your outdoor graphics. Not all overlaminates are created equal in this regard, though. Be wary of poor quality or extremely thin overlaminates, which tend to be less resistant to the effects of the sun and may crack.

Overlaminates also help your graphics withstand wear and tear, as well as exposure to people and the elements. Laminated decals are more resistant to tearing, fingerprints, scratches, scuffing, indentations and graffiti, and they protect from moisture, heat, chemicals, cleaning agents and abrasives—translating into longer-lasting graphics that maintain their original look and feel, keeping your replacement costs down.

To Laminate or Not to Laminate?

To determine if lamination is right for your graphics, consider your applications and requirements:

- Are your decals meeting your longevity expectations?
- Are your graphics fading in the sun or prone to damage from people or weather conditions?
- Do your decals require abrasion- or chemical-resistance?
- Would a different finish or a special texture make your message more readable or help it capture more attention? Or, simply, add more style?

Once you've answered these questions, talk to the experts at your industrial graphics supplier. They can help you conduct a needs analysis to identify which of your decals are best suited for lamination—and which of the many different laminates available are right for your applications and requirements.

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Also, keep in mind there are alternatives to lamination that may meet your needs in certain situations. Graphics made of polycarbonates or thicker polyester substrates that are sub-surface printed, for example, are quite durable and can be manufactured with UV inhibitors. Another option is the application of a clear coat layer, which is similar to an ink layer. Applied as a liquid, it can add texture to your graphics and help prevent UV damage, but won't protect against abrasion or add durability.

Remember, too, some materials should never be laminated. Laminating embossed or etched products, for example, causes air pockets between the lamination and the flat surface. That's not only undesirable in appearance, but also creates areas more susceptible to damage.

A Final Word on Lamination

Once you've determined which of your decals would benefit from lamination, it's critical to specify them appropriately. Don't assume everyone purchasing or procuring decals knows about laminates and the many different finish and texture options available. That's why you should always note the need for lamination on your blueprints, drawings or specification forms—as well as any special requirements such as UV protection for outdoor longevity, abrasion resistance, glare reduction or desired aesthetics.

Choosing the right overlamine has important ramifications for your graphics' (and, as a result, your finished product's) visual appearance and durability, keeping message impact high and replacement costs low. Just as important is lamination's effect on brand longevity—helping ensure your messages reach your audiences more effectively today and maintaining your graphics' original look and feel well into the future.

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