

Recommendations for Rolling and Shipping Permacolor Laminated Images

Mactac studies and field surveys with numerous customers using Permacolor® laminates in Roll able Graphic applications, leads Mactac to make the following recommendations for rolling and shipping laminated images:

1. **Prior to rolling graphics:** a 2 - 4 hour wet-out period is strongly recommended for the adhesive system to build to ultimate adhesion. This will significantly improve your success with Roll able Graphics.
2. **For single-side laminated images:**
 - a) Roll laminated side out for shipping and storage.
 - b) An inside roll diameter of 3 - 5 inches, minimum, is recommended for graphics with *less than 10 mil total graphic thickness* (includes imaged media and PermaGard® or ColorGard™ overlaminates).
 - c) For images with a *total thickness of 10 mils or greater* an inside roll diameter of 10 - 12 inches, minimum, is recommended.
3. **For images laminated on both front and back sides:**
 - a) Roll images with the thicker laminate to the outside for shipping and storage. For example: if your image has 5 or 10 mil PermaFlex® on the front and 15 mil PermaFlex® on the back (for additional stiffness), roll the graphic with the 15 mil PermaFlex® side out.
 - b) All double laminated images should be rolled with an inside roll diameter of 10 - 12 inches minimum. Remember that a larger inside diameter is better.
4. **Packaging for shipment:**
 - a) To avoid exposing prints to moisture, package them in a sealed plastic bag during shipment.
 - b) Use a sturdy box to protect the prints from crushing and creasing.
 - c) Roll the graphics up on a core and suspend them in the box. Graphics that lay on their sides may result in flat spots and mattification in the printed graphic can occur.
 - d) Avoid exposing the laminated images from extremes in temperature and humidity.

Please keep in mind that this is a **recommendation**, individual experience should not be discounted. We recognize that different laminators and laminating methods may produce different results. The recommendations above represent our experience as having the “greatest” success in the field.

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