# Films and Adhesives



## **Cast Films**

For the most demanding applications a Cast Vinyl, such as the Metamark MD7 Digital Vehicle Wrap, is recommended, being softer and thinner than calendered films. Unlike calendered vinyl, cast vinyl does not have memory and is therefore dimensionally stable and will show virtually no shrinkage if properly applied. Cast vinyls are highly conformable and can be laid over rivets or curved surfaces and compound curves such as door handle indentations. Cast films can be heated to soften though care should be taken not to burn the film.

# **Calendered Vinyls**

Sign vinyls can be one of a number of constructions, each one being suitable for suitable applications. Calendered vinyls are recommended for interior and most exterior applications onto vehicles, buildings and for commercial graphics.

Monomeric Calendered or Intermediate Performance vinyls, like Metamark MD3, and 4 Series, have the simplest construction, and are suitable for short term application to flat surfaces or those with a simple curve, although they may show some shrinkage over time.

Polymeric Calendered or High Performance vinyl such as Metamark MD5, and 7 Series are recommended for medium term graphics as they are more dimensionally stable and can be applied to flat or curved surfaces. Shrinkage will be minimal.

#### **Polyester Films**

Polyester is used as the face film for polish effect materials, some overlaminates, and window tinting films, as they achieve a high gloss finish. Polyesters are non-conformable, do not stretch and should not be applied to compound curves. They are only able to achieve a low adhesion on textured surfaces

## **Adhesive Types**

All Metamark vinyls use a pressure sensitive adhesive. The final bond strength will be formed after 3 to 5 days, depending upon the particular adhesive used and the ambient temperature, so care should be taken with any graphics during the first few days following installation.

Most Metamark vinyls are supplied with solvent-based acrylic adhesives, which allow trouble free 'wet' application. For any product with a water-based (solvent free or emulsion) adhesive, care should be taken when wet applying. In these instances use no more than a fine mist of application fluid and expel any fluid immediately to avoid the adhesive turning milky.

#### **Vinyl Storage**

Rolls of vinyl should be stored on end or suspended on poles in dust free conditions. Unapplied graphics should be stored in a cool dry room away from direct sunlight. If vinyl is wound too tightly, mottling may occur.

Vinyls should ideally be stored at 23°C and 50% R.H. Storage in very high or very low humidity can result in the release paper absorbing moisture so that the vinyl will no longer lay properly flat, although most of Metamark's own brand material has the advantage of a polyethylene coated release paper which avoids such moisture.

Application tape is also very sensitive to humidity levels.

# **Fire Ratings**

The vinyl used in the manufacture of Metamark's self adhesive vinyl products is self extinguishing. The flame resistant characteristics of any panel or artefact made using vinyl is therefore determined by the characteristics of the substrate used.

**Please Note**: The above data is given in good faith to provide an indication of the performance of the product. Purchasers should consider the suitability of each product for its intended use and the purchaser assumes all risks in connection with such use. Seller shall not be liable for damages in excess of the purchase price of the product nor for incidental nor consequential loss.