

# Permacolor HORIZon™

## PERMACOLOR

The PERMACOLOR system is a series of pressure-sensitive products used for mounting and protecting in the photographic and graphic industries. Pressure-sensitive PERMACOLOR provides fast, efficient processing through roll lamination techniques without the need for heat or drying.

## PRODUCT DESCRIPTION

Permacolor HORIZon™ is an ultra clear gloss, soft 35µm non-PVC film coated on one side with an ultra-clear permanent adhesive. The film is supplied with its original PET casting sheet in order to protect the face film and comes with an easy to remove liner.

Permacolor HORIZon™

- is extremely durable and warranted, even in horizontal applications. This laminate offers superior protection from UV light, acid rain and high heat to help extend the life of your graphic,
- conforms very well to flat, curved, riveted surfaces,
- has significantly higher abrasion resistance than standard vinyl (PVC) laminates,
- is chlorines and phthalates-free,
- does not influence the pH level of the substrate to which it is applied,
- has a high tack adhesive suitable for laminating both UV, SB, ecosolvent and latex digital prints
- is especially designed for the outdoor protection of super soft, flexible printed media like :
  - JT 5529 P/PM/MBF, JT 5629 PM for the decoration of flat, riveted or corrugated surfaces (cut around deep corrugations is always recommended)
  - WW100 for the decoration of uneven walls such as brick walls.

## PHYSICAL PROPERTIES

	<u>Average values</u>	<u>Test method</u>
<b><u>Adhesive</u></b>		
Quick Tack on glass (N/25 mm)	11	FTM 9
Peel 180° on glass (N/25 mm)		
- after 20 minutes	15	FTM 1 (ASTM D 903-49)
- after 24 hours	17	FTM 1 (ASTM D 903-49)
Dimensional stability	< 0.15 mm	FTM 14
<b><u>Release liner</u></b>		
Clay coated white paper (gr/m <sup>2</sup> )	135	ISO 536
<b><u>Thickness</u></b>		
Film + adhesive (µ)	60	ISO 534 (ASTM D 645)

## HEAT RESISTANCE

Application temperature range : + 5°C to + 40°C

End-use temperature range : - 30°C to + 100°C

*For temperatures outside those quoted above, please consult MACTac.*

## **CHEMICAL RESISTANCE**

Resistant to detergents, acids, oils and diluted (50%) alcohols. Resistant to short contact periods with gasoline. Not recommended for contact with aromatic solvents, non diluted alcohols, ketones.

*For further technical advice, please consult MACTac.*

## **SHELF LIFE**

2 years when stored at 15 to 25°C and ± 50 % relative humidity.

## **EXPECTED DURABILITY**

The expected vertical outdoor durability of the unprocessed product in Central Europe (Zone 1) is up to 7 years. This information is based on successful real life experience and artificial aging according to ISO 4892-2.

Indoor exposure will increase the durability values of the laminating film.

**Note** : *Exposure to severe temperatures, ultra-violet light as well as conditions in Southern European countries, tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure. No durability warranty is given for horizontal exposure. For more information, please refer to Technical Bulletin 7.5: "Outdoor Durability of combined MACTac print media and laminates".*

## **RECOMMENDATIONS**

- Where exposure to chemicals, solvents or high pressure water hoses is envisaged, it is recommended to seal the edges of the prints with varnish or silicone in order to avoid penetration of these liquids.
- In order to reach the best result, it is recommended to apply the Permacolor HORIZon™ laminate (onto the image) with the help of a professional laminator with a top cylinder temperature of about 20-22°C. Keep PET protective sheet during lamination and regulate speed and pressure in order to avoid product stretching. Remove the PET protective sheet after lamination.
- Please regulate the speed and the pressure in order to avoid film deterioration.
- Keep tension in the face film low to reduce stretching of this very conformable product
- When laminating digital prints, please ensure the print is perfectly dry prior to further processing.
- The use of flat bed laminator is not recommended to laminate UV prints as the pressure is not sufficient to avoid silvering.
- Do not allow the laminate face to come in contact with itself for at least 48 hours or it will stick together (block).
- Slight surface mottling may appear in this high gloss film while in the roll form due to the softness of the film itself. This will disappear after one to two days after lamination all by itself. However, if waiting is not an option, a small amount of heat during application will remove the mottling immediately.
- **JT 5529 P/PM/MBF and JT 5629 PM** laminated with **Permacolor HORIZon™** can be rolled up to allow easy transport. The roll should have a diameter above 7 cm and the image should be facing outwards.
- Always test the combination of inks, media and laminating films prior to commercial use.
- **Permacolor HORIZon™ is not recommended for the lamination of one way vision perforated vinyl.**

## **DISCLAIMER**

*All Mactac statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Mactac products are sold with the understanding that the purchaser has independently determined the suitability of such products for its purposes. All Mactac's products are sold subject to Mactac's general terms and conditions of sale, see <http://terms.europe.averydennison.com>*