

Technical Data Sheet

Permaflex FloorGrip

PRODUCT DESCRIPTION

PERMAFLEX Series is a family of thick films that are coated with acrylic pressure-sensitive adhesive on one side. These unique films are particularly suitable to protect digital prints used as floor graphics from abrasion due to pedestrian traffic. They can also be laminated to either one or both sides of photographic prints or transparencies to protect, enhance appearance and provide sufficient rigidity to eliminate the need for mounting to traditional flat substrates in many applications. These laminates also retain enough flexibility to allow images to be used in non-flat configurations such as on cylindrical displays. This feature also permits the laminate to be rolled for easy transport or storage.

Permaflex FloorGrip is a product specifically developed for short term outdoor Floor Graphics applications made with StreetRap as print media. Thanks to its rough structure, Permaflex FloorGrip will bring to the printed image the high slip resistance required in exterior pedestrian walking areas.

Permaflex FloorGrip

- is a 150 µm clear matt polymeric PVC
- helps eliminate glare and provides a very unique highly slip resistant finish.
- is rated as R11 according to DIN 51130 slip resistance test
- not only provides protection from abrasion and moisture, it also helps retard colour fade caused by ultraviolet light exposure.
- when used in combination with StreetRap as print media, conforms well to exterior uneven surfaces like concrete pavement, bitumen....
- does not influence the pH level of substrate to which it is applied.
- has a high tack adhesive compatible with all digital inkjet inks (SB, ecoSB, latex...) even UV inks.

Note : as any flooring material, can be slippery when wet or dirty

PHYSICAL PROPERTIES

	<u>Average values</u>	<u>Test method</u>
<u>Adhesive</u>		
Quick Tack on glass (N/25 mm)	14	FTM 9
Peel 180° on glass (N/25 mm)		
- after 20 minutes	14	FTM 1
- after 24 hours	20	FTM 1
Dimensional stability		
- MD	<0.2 %	FTM 14
- CD	<0.2 %	
Flammability	self-extinguishing	Sample mounted on aluminium
<u>Release liner</u>		
One side siliconized paper (gr/m ²)	135	ISO 536
Film + adhesive (µm)	180	ISO 534 (ASTM D 645)

HEAT RESISTANCE

Application temperature range : + 15°C to + 30°C
End-use temperature range : - 30°C to + 70°C

For temperatures outside those quoted above, please consult MACTac.

SHELF LIFE

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

EXPECTED DURABILITY

The expected durability of the unprocessed product in Central Europe (Zone 1) is

- up to 5 y when used as vertical display indoor
- up to 12 months when used in the production of indoor floor graphics
- up to 3 months when used in the production of outdoor floor graphics

This information is based on successful real life experience and testing in a laboratory Weather-Ometer according to ISO 4892-3.

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".*

On the floor, the graphics can be damaged by vehicles or heavy-duty equipment. MACtac cannot be held responsible for any damage caused in this way. The durability of a floor graphics also depends on the preparation, application, cleaning, usage conditions and also type of flooring.

RECOMMENDATIONS

Permaflex FloorGrip should be maintained clean to keep its slip resistance.

Storage : MACtac recommends that rolls be stored on end or suspended from the core.

Lamination : The use of flat bed laminator is not recommended to laminate UV prints as the pressure is not sufficient to avoid silvering.

Application: Please refer to Technical bulletin 4.16 for tips and tricks on floor graphics applications.

The adhesion of the StreetRap/Permaflex FloorGrip complex will be increased if a primer is coated on to the floor/pavement before application. Always test the primer onto a non visible area.

Transport

- allow the maximum amount of time after lamination, preferably overnight, before rolling for transport,
- roll the largest diameter possible, no less than 15 cm diameter,
- roll with the Permaflex FloorGrip to the outside.

IMPORTANT NOTICE

All MACtac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning MACtac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.

Because of the variety of uses of MACtac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.