



PERFORMANCE GUIDE

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Approved by J. S.

PRODUCT: MACal[®] 8300PRO
Intermediate Vinyl Series

PRODUCT DESCRIPTION:

MACal 8300Pro is an intermediate film with up to 5 years outdoor life. This 2.8-mil cadmium free vinyl is available in wide variety of **high gloss**, plus two **matte** colors. The film is coated with a durable, permanent acrylic, pressure sensitive adhesive. An 83# white kraft liner offers excellent stability and layflat with an orange backprinting. The product has good dimensional stability and excellent cutting and weedability. The product is designed for general purpose and promotional signage on flat to moderately curved surfaces.

<u>PHYSICAL PROPERTIES:</u>	<u>TYPICAL VALUES*</u>	<u>TEST METHOD</u>
Thickness, inches (mm) Film plus adhesive	0.037 (0.095)	ASTM D-645
Peel Adhesion, lb./in. (N/25 mm) 180° on Stainless Steel - 20 min. - 24 hours - 1 wk.	3.2 (14) 4.1 (18) 4.4 (19)	FTM-1
Face Material Data, 72°F (23°C) Tensile strength lb./in. (N/15mm) Elongation % at break	≥9.5 (25) ≥150	DIN 53455-5
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	<0.3	FTM - 14 10" x 10" sample mounted on aluminum
Temperature Ranges, Application: End Use:	50° to 104°F (+10° to 40°C) -40° to 158°F (-40° to 70°C)	
Flammability	Self extinguishing	ISO 3795
Solvent and Chemical Resistance: Water, detergent, and alcohol: Oil, gasoline:	unaffected. slightly affected, lifting at edges.	

DURABILITY:

Indoors and up to 5 years outdoors. This use-life estimate is based upon accelerated age studies. Please note that exposure to severe temperatures, ultra-violet light and also tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure.

SHELF LIFE:

Two years when stored at 60°F - 75°F (15°C - 25°C) and 50% relative humidity.

PROCESSING:

- 1) Application of MACal 8300Pro is made easier if **MACTac** pre-spacing tape is used. Where exposures to chemical and solvent spills are likely to occur, edge sealing of decals with varnish or clear coat will prevent edge lift. Correct varnishing of decals gives greater protection and longer end-use life against any prolonged effect of weathering, abrasion or other corrosive effects such as frequent cleaning.
- 2) The transfer of the cut vinyl should be performed by removing the liner from the pressure sensitive material, not by lifting the application tape and the graphic off the liner.
- 3) Adjustment of cutter depth is important: if the cut is too deep this could result in paper liner splitting.
- 4) The compatibility of paints and lacquers should be tested by the end user, prior to use.

- 1) **The user is responsible for determining the product's suitability, including adhesion and if needed, removal characteristics when used in applications other than listed specifically in this Performance Guide.**
- 2) **If there are any questions about applications, please contact your MACTac sales representative to discuss your requirements for recommendations.**
- 3) **If this is a printed Performance Guide it is an uncontrolled document. Please check the MACTac website for the latest, most up-to-date version.**

** Values given are typical and are not necessarily for use in specification.*

CALL 1-800-401-5005 for additional product information

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