

# TECHNICAL DATA SHEET

## GF 209 METROMARK®

### 3.5 MIL MATTE WHITE OPAQUE TRANSIT VINYL CLEAR REMOVABLE ADHESIVE

GF 209 Metromark® is a 3.5 mil matte white polymeric flexible opaque vinyl film coated with a removable acrylic pressure-sensitive adhesive on a 90# layflat liner printed with the Metromark® logo. This film is designed to accept latex, solvent-based inkjet and UV curable inks common to wide format digital printing systems, and can be sheeted for screen printing. GF 209 is designed for temporary applications including product markings, point of purchase decals, transportation advertising systems, and tri-vision indoor/outdoor billboard displays. GF 209 will conform to simple curves and has excellent hiding characteristics for multi-layered graphics. The adhesive formulation allows for install on glass and OEM painted metal with a surface temperature of 20°F.

PRODUCT NAME	209
<b>FILM</b>	
Film Type	White Polymeric Vinyl
Film Thickness (mils / $\mu\text{m}$ )	3.5 / 89 (+/- 10%)
Film Weight (gsm)	130
Gloss (60°)	$\leq 20$
Opacity (%)	99
Tensile Strength (psi)	MD $\geq 3500$ / CD $\geq 2500$
Elongation (%)	MD $\geq 90$ / CD $\geq 200$
Dimensional Stability (FTM 14)	MD $\leq 0.30$ mm / CD $\leq 0.20$ mm
<b>ADHESIVE</b>	
Adhesive Type	Emulsion
Adhesive Thickness (mils/ $\mu\text{m}$ )	0.8-1.0 / 20-25
Adhesive Color	Clear
Peel Strength on Stainless Steel (lbs/in) / (N/25mm) 15 min	1.5 / 6.6
Peel Strength on Stainless Steel (lbs/in) / (N/25mm) 24 hrs	2.3 / 10
<b>LINER</b>	
Liner Weight (#/gsm)	90 / 145
Liner Type	White 2-Sided PE Coated Kraft, backside logo liner
Liner Thickness (mils/ $\mu\text{m}$ )	6.7 / 170
Release Force @ 300" / min (g/2")	40-70
<b>PERFORMANCE GUIDANCE</b>	
Application Temperature	$\geq +20$ °F
Service Temperature	-40 °F to 180 °F
Shelf Life	1 year
Storage Temp / Rel. Humidity	70 °F / 50%
Outdoor Durability	up to 5 years
Removability	1 year
<b>RATINGS &amp; CERTIFICATIONS</b>	
Flammability	ASTM E84 Class 1 or A (Rating Standard Test Method for Surface Burning Characteristics of Building Materials)

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PRODUCT SNAPSHOT	APPLICATIONS	INK TYPE
<b>APPLICATION</b> <ul style="list-style-type: none"> <li><input type="radio"/> WET APPLY</li> <li><input checked="" type="radio"/> DRY APPLY</li> <li><input type="radio"/> LAMINATING</li> <li><input type="radio"/> MOUNTING</li> <li><input checked="" type="radio"/> DIE CUTTABLE</li> <li><input type="radio"/> HOT STAMP</li> <li><input type="radio"/> THERMAL DIE</li> <li><input checked="" type="radio"/> FLATBED CUTTABLE</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> POP/RETAIL</li> <li><input checked="" type="radio"/> WALL</li> <li><input checked="" type="radio"/> WRAP</li> <li><input checked="" type="radio"/> WINDOW</li> <li><input type="radio"/> FLOOR</li> <li><input type="radio"/> TRANSLUCENT</li> <li><input checked="" type="radio"/> TRANSIT</li> <li><input checked="" type="radio"/> GENERAL SIGNAGE</li> <li><input checked="" type="radio"/> OUTDOOR (LONG TERM)</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> SOLVENT</li> <li><input checked="" type="radio"/> ECO-SOLVENT</li> <li><input checked="" type="radio"/> LATEX</li> <li><input checked="" type="radio"/> UV CURABLE</li> <li><input checked="" type="radio"/> SCREEN</li> <li><input checked="" type="radio"/> OFFSET (UV CURABLE)</li> <li><input checked="" type="radio"/> OFFSET (CONVENTIONAL)*</li> </ul>
<b>SUBSTRATES</b> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> OEM PAINTED METAL</li> <li><input checked="" type="radio"/> PAINTED ALUMINUM</li> <li><input checked="" type="radio"/> STAINLESS STEEL</li> <li><input checked="" type="radio"/> FIBERGLASS</li> </ul>		<p>* Topcoated version is available for conventional offset printing.</p>

### FAQS

Is GF 209 MetroMark® Transit Approved?	Yes. MetroMark® is an approved and specified material for multiple transit-related applications including King/Queen/Tail bus advertisements, opaque removable graphics, and layered poster graphics.
Can GF 209 be used as a wrap film?	MetroMark® is conformable film that can go around simple curved surfaces. The adhesive system is strong enough to hold your graphic in place, but robust enough to remove cleanly.
Can you put GF 209 over the top of existing graphics?	Yes. GF 209 is opaque and can be layered on top of existing graphics. These films can be used for one, two and three sheet subway advertising posters, architectural signage, commercial-retail signage, industrial identification decals, safety decals, point-of-purchase graphics and other decals requiring extended life. Keep in mind, adhesive vinyl products can bond with other vinyl materials and might not allow MetroMark® to be removed cleanly from other graphics.
Should MetroMark® be laminated?	Although it is not necessary to laminate MetroMark®, you may choose to do so depending upon what type of abrasion and or cleaning detergents the graphics will encounter. GF 100 series overlaminates are recommended in those situations.