

Synthetic Paper

Mineral-Reinforced Polyolefin Synthetic Paper

Synthetic paper delivers tear-resistance, water-resistance, and durability in a substrate that prints like paper and converts like film. K&R stocks synthetic paper for menus, maps, tags, and outdoor signage that needs to last.

Applications

- Restaurant menus and beverage lists
- Outdoor and trail maps
- Hang tags and durable retail tags
- Pressure-sensitive labels (high-temperature applications)
- Instruction manuals and user guides for outdoor / industrial use
- Ballots and identification cards
- Outdoor signage and posters

Features & Benefits

Mineral-reinforced polyolefin base — durability, strength, moisture resistance, chemical resistance.

Prints, folds, and finishes like paper but resists water and tearing.

High-temperature stable — qualified for tags and pressure-sensitive label applications.

Excellent printability across toner, indigo, inkjet, screen, offset, and litho.

Matte/matte extra-white finish with high opacity (≥99 %).

Available in roll and sheet form across a wide gauge range.

Print & Process Compatibility

Toner ✓ · HP Indigo ✓ · UV Inkjet ✓ · Solvent Inkjet ✓ · Screen ✓ · Offset ✓ · Litho ✓

AVAILABLE SURFACES, FINISHES & GAUGES

Surface / Finish	Description	Stock Gauges
Matte / Matte (Extra White)	Mineral-reinforced polyolefin synthetic paper with high opacity and whiteness — primary stocked grade.	3.2 – 14 mil
Standard ID	6" inner diameter (roll form).	—
Maximum OD	38" outer diameter.	—
Maximum Width	71 in.	—

TYPICAL PROPERTIES

Property	Typical Value	Test Method
Physical		
Thickness Range	3.2 – 14 mil (subject to ±8 % variation)	Micro-gauge
Yield per Pound (8 mil)	2,985 sq in/lb	ASTM D 3776
Basis Weight (25"×38", 500)	159 lb/ream	ASTM D 3776
Grams per Square Meter	235 g/m ²	ASTM D 3776
Mechanical		
Tensile Strength	MD ≥ 4,000 psi · TD ≥ 2,900 psi	ASTM D 638

Property	Typical Value	Test Method
Tear Strength	MD ≥ 1,600 g/mm · TD ≥ 2,500 g/mm	ASTM D 1922
Elongation at Break	MD ≥ 600 % · TD ≥ 350 %	ASTM D 638
Surface / Optical		
Dyne Level (Sides A / B)	40 – 42	ASTM D 2578
Surface Roughness, Ra (Side A)	20 – 40	JIS B-0601
Surface Roughness, Ra (Side B)	30 – 50	JIS B-0601
Gloss Value (60°, Sides A / B)	2 – 5	ASTM D 523
Opacity	≥ 99 %	ASTM D 1003
Whiteness	≥ 92	ASTM E 313
Thermal		
Heat Shrinkage (248°F x 10 min)	± 1 %	—

Properties reported here are typical of average lots. K&R Plastics, Inc. and its manufacturers make no representation or warranty that the material in any particular shipment will conform exactly to the values given. Unless otherwise noted, all tests run at 23°C (73°F) and 50% relative humidity. Job-specific qualification recommended for production runs — request a sample.