



Mechanically Attached Vapor Permeable Air Barrier by IMETCO/UPI

Material

IntelliWrap™ MA is a 3-layer mechanically attached water-resistive barrier (WRB) and air barrier from IMETCO®. It is water-tight and vapor permeable, protecting the building enclosure from wind-driven rain while allowing moisture within the building enclosure to escape through the membrane via diffusion. Its permeability and air-tightness make it an ideal membrane for energy-efficient construction.

Properties

IntelliWrap MA is very light-weight and tear-resistant. Its two outer layers are made of a high strength spun-bonded polypropylene (PP) fabric, thermally bonded to a highly vapor permeable, watertight polymeric middle layer. The fabric layer on the lower side protects the WRB against damage (e.g. roughly sawn sheathing). Its matte gray color prevents blinding glare during installation.

Application

IntelliWrap MA is installed outboard of the sheathing prior to the application of the final cladding system. Unroll parallel to the gutter, starting at the bottom. Use staples or nails for fastening. Fixing inside overlapping areas is recommended; secure with counterbattens.

IntelliWrap MA has integrated self-adhesive edges that make installation faster and easier. Simply remove backing strips to expose adhesive and adhere courses together.



Technical Specifications

Roll weight	approx. 24 lb (11 kg)
Roll length	1968 inches
Roll width	59 inches
SF per roll	806.33 sf
Temperature range	-40 °F to +176 °F (-40 °C to +80 °C)
Maximum UV exposure	Always cover as soon as possible. Maximum exposure 6 weeks.

Performance Specifications

Air permeance	Pass < 0.02 l/(s x m²) @ 75 Pa < 0.004 cfm/ft² @ 1.57 psf	ASTM E2178
Water vapor transmission	472 g/m²/24 h 820 g/m²/24 h	ASTM E96-05, Proc. A ASTM E96-05, Proc. B
Vapor permeance	69 perms [grains/h/ft²/in Hg] 120 perms [grains/h/ft²/in Hg]	ASTM E96-05, Proc. A ASTM E96-05, Proc. B
Breaking strength	MD 69.9 lb; CD 67.3 lb	ASTM D5034-95
Elongation at break	MD 44.6 %; CD 74.1 %	ASTM D5034-95
Heat aging	Pass	CCMC 07251003-2008 § 5.1.2.4
UV Exposure	Pass (> 90 % tensile retention after UV exposure)	CCMC 07251003-2008 § 5.1.2.3 (UV exposure according to ASTM G154-06)
Water penetration resistance	642.8 cm 642.8 cm	CAN/CGSB-4.2 #26.3-95 / ISO 811:1981
Water impact penetration resistance	No water passing	AATCC 42-2000
Water penetration resistance (Water Ponding Test)	Pass (> 10 min) Meets requirements of AC308 for Grade D water-resistive barrier	ICC AC308, 4.2.2 (2011) (CCMC MF07102, Section 6.4.5)
Bent test	Pass	ICC AC 38, 3.3.4
Puncture resistance	Pass	TAPPI-T803
Tear resistance	MD 1078 g; CD 1588 g	ASTM D1922-06a
Trapezoid tearing strength	MD 21.6 lb; CD 14.6 lb	ASTM D4533-04
Flame spread	25; NFPA Class A; UBC Class I	ASTM E84-09
Smoke developed	105; NFPA Class A; UBC Class I	ASTM E84-09
Linear dimensional change at elevated temperature 185 °F (85 °C)	Pass (< 3 %)	ASTM D1204-02