

TECHNICAL DATA SHEET

DELTA®-VENT SA

Self-Adhered Water-resistive Barrier & Air Barrier

MATERIAL

DELTA®-VENT SA is a 3-layer self-adhered water-resistive barrier (WRB) and air barrier. Its two outer layers are made of a high strength spun-bonded polypropylene (PP) fabric. They are thermally bonded to a highly vapor permeable, watertight polymeric middle layer. DELTA®-VENT SA maintains high vapor permeability and has a full surface coating of a high tack adhesive for bonding to common substrates. It has a split release liner for ease of application. The matte gray color of DELTA®-VENT SA prevents blinding glare during installation.

PROPERTIES

DELTA®-VENT SA is a vapor permeable WRB, allowing moisture within the building enclosure to escape through the membrane via diffusion. Its permeability and air-tightness make it an ideal air and water-resistive barrier membrane for energy-efficient construction. DELTA®-VENT SA not only passes, but also dramatically exceeds the most stringent requirements of the Air Barrier Association of America (ABAA) and of the National Building Code of Canada (NBC 2010 and NBC 2015) based on the results of ASTM E2357 and CAN/ULC-S742 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies. Full adhesion maximizes air tightness and minimizes fastener penetrations. The product is watertight and protects the building enclosure from wind-driven rain. DELTA®-VENT SA is very light-weight and tear-resistant. This membrane withstands the rigors of jobsites, as well as tough wind and weather. DELTA®-VENT SA is equivalent to a 60 minute Grade D building paper.

APPLICATION

DELTA®-VENT SA is installed outboard of the sheathing prior to the application of the final cladding system. Do not use sealants, flashings, products or chemicals that contain surfactants on DELTA® water-resistive and air barrier membranes because they can adversely affect the water hold-out properties of any PP spunbond-based water-resistive barrier. Such products may include asphaltic materials, various chemicals, acid-based silicones, cleaning compounds, and certain formulations of liquid flashings, e.g. specific STP-based materials. Always confirm compatibility with the manufacturer's published technical data sheets and with the manufacturer's technical department. DELTA® Accessories complement the WRB / Air Barrier installation. It may be adhered to concrete, masonry, OSB, plywood, or exterior grade drywall.

Where required, use DELTA®-HF PRIMER

DELTA®-ADHESIVE LVC or DELTA®-ADHESIVE (cold weather) as primer.



Technical Data

Product name	DELTA®-VENT SA	
Color	gray	
Adhesive coating	Full surface coating with vapor permeable pressure-sensitive adhesive	
Water vapor transmission	214 g/m ² /24 h	ASTM E96-05, Proc. A
	343 g/m ² /24 h	ASTM E96-05, Proc. B
Vapor permeance	31 perms [grains/h/ft ² /in Hg]	ASTM E96-05, Proc. A
	50 perms [grains/h/ft ² /in Hg]	ASTM E96-05, Proc. B
Air Leakage of Air Barrier Assemblies	< 0.2 L/(s·m ²) @ 75 Pa (0.04 cfm/ft ² @ 1.57 lb/ft ²) as per ABAA	ASTM 2357-11
Air Leakage of Air Barrier Assemblies	Class A1 Meets the recommendations of NBC 2010, NBC 2015 and ABAA requirements.	CAN/ULC-S742-11
Breaking strength	MD 71 lb	ASTM D5034-95
	CD 65.4 lb	
Elongation at break	MD 27.8 %	ASTM D5034-95
	CD 60.1 %	
90° Peel adhesion	Pass	AAMA 711-5.3 (ASTM D3330)
Accelerated aging (U.V)	Pass	AAMA 711-5.4
Elevated temperature	Pass (Level 3)	AAMA 711-5.5 (ASTM D3330)
Thermal cycling	Pass	AAMA 711-5.6
Adhesion after water immersion	Pass	AAMA 711-5.8
Bent test	Pass	AC-38 3.3.4
Nail Sealability	Pass	ASTM D1970-01
Water resistance hydrostatic pressure	Pass (55 cm > 5 hours) 60 minute Grade D building paper equivalent	AATCC 127-1985
Linear dimensional change at elevated temperature 185 °F (85 °C)	MD -1.4%	ASTM D1204-08
	CD +0.1%	
Resistance to puncture	78.6 lbs (333.1 N)	ASTM E154-99 (10)
Low temperature flexibility	Pass	ASTM D1970-01
Crack bridging ability	Pass -15 °F (-26 °C)	ASTM C1305-06

LOCKED TIGHT ADHESIVE EDGE

DELTA®-VENT SA has a special edge running along the front side of one long edge. It has a release liner that, when removed, exposes a high tack adhesive. This adhesive bonds tightly and permanently with the next overlapping course of DELTA®-VENT SA, creating a secure and very air and water-tight seal.



Technical Data

Flame spread	14	ASTM E84-09
	NFPA Class A; IBC Class A	
Smoke developed	47	ASTM E84-09
	NFPA Class A; IBC Class A	
Air permeance	Pass ($< 0.02 \text{ l}/(\text{s} \times \text{m}^2) @ 75 \text{ Pa}$)	ASTM E2178 CAN/ULC-S741-08
Application temperature	Minimum 40 °F (5 °C)	
Service temperature	-40 °F to +176 °F (-40 °C to +80 °C) W / Primer	
	-13 °F to +176 °F (-25 °C to +80 °C) W/O primer	
Roll weight	approx. 40 lb (18 kg)	
Roll size	4' 11" (1.5 m), 19.5" (50 cm), 9.75" (25 cm) x 115' (35 m)	
Maximum UV (sunlight) exposure	Always cover as soon as possible. Maximum exposure 50 days.	
DELTA® Accessories	DELTA®-MULTI BAND 2" x 82' (60 mm x 25m) DELTA®-FLEXX-BAND 4" x 33' (100 mm x 10 m) 6" x 33' (15 cm x 10 m) 9" x 33' (22 cm x 10 m) 12" x 33' (30 cm x 10 m) DELTA®-FLASHING 6" x 75' (150 mm x 22.8 m) DELTA®-FLASHING 9" x 75' (230 mm x 22.8 m) DELTA®-FAS CORNER DELTA®-TILEXX 310 ml (10.9 fl oz) / cartridge DELTA®-HF PRIMER 1.3 gal. (5 L) / pail or DELTA®-ADHESIVE LVC 4.72 gal. (17.9 L) / pail DELTA®-ADHESIVE 4.72 gal. (17.9 L) / pail	

DELTA® products support sustainable and energy-efficient building practices, including efforts toward achieving LEED® certification (LEED® for New Construction & Major Renovations, LEED® for Core and Shell, LEED® for Existing Buildings and LEED® for Homes).

For technical support, call our technical support team at 1-888-4DELTA4 (1-888-433-5824) extension 326, or visit www.dorken.com.

