

HIGH PERFORMANCE AIR & MOISTURE BARRIERS

#### **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 energyefficient 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) based on the results of ASTM E2357 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 equivalant 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. 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 or DELTA®-ADHESIVE LVC as primer.



### **Technical Data**

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/m²/24 h	ASTM E96-05, Proc. A	
	343 g/m²/24 h	ASTM E96-05, Proc. B	
Vapor permeance	31 perms [grains/h/ft²/in Hg]	ASTM E96-05, Proc. A	
	50 perms [grains/h/ft²/in Hg]	ASTM E96-05, Proc. B	
Air Leakage of Air Barrier Assemblies	< 0.2 L/(s•m²) @ 75 Pa (0.04 cfm/ft2 @ 1.57 lb/ft²) as per ABAA and NBC 2010 requirements	ASTM 2357-11	
Breaking	MD 71 lb	ASTM D5034-95	
strength	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 ag- ing (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 ressistance hydrostatic pres- sure	Pass (55 cm > 5 hours) 60 minute Grade D building paper equivalent	AATCC 127-1985	

## **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 watertight seal.





## **Technical Data**

Technical Data			
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 (333.1N)	ASTM E154-99(10)	
Low temperature flexibility	Pass	ASTM D1970-01	
Crack bridging ability	Pass -15 °F (-26 °C)	ASTM C1305-06	
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 l/(s x m <sup>2</sup> ) @ 75 Pa)	ASTM E2178	
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) 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) 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®-THAN 310 ml (10.9 lf oz) / cartridge DELTA®-TILEXX 310 ml (10.9 lf oz) / cartridge DELTA®-HF PRIMER 1.3 gal. (5 L) / pail or DELTA®-ADHESIVE LVC 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 <a href="https://www.dorken.com">www.dorken.com</a>.