Durex AirStop

Flexible Copolymer Water Resistive (WRB) / Air Barrier

Description Durex® Air Stop Water Resistive Barrier Barrier/Air Barrier is a waterborne coating with multi-function features that can be spray or trowel-applied.

Uses Durex® Air Stop is intended to be used as a Water Resistive Barrier/Air Barrier within the building envelope. When used in combination with Durex® Barrier Seam Tape, Durex® Air Stop provides the continuity of the WRB/Air barrier around window and door rough openings and functions as well as a tie-in membrane over window flanges and door jambs, providing easier application and lowering installation costs than other conventional products (i.e. butyl flashing tapes or plastic sill pans).
Durex® Air Stop could be applied to most common surfaces such as concrete, brick, concrete block, glass-mat coated gypsum, cement board, Plywood and Oriented Strand Board (OSB) and integrated into various Durex® EIF Systems for both new and retrofit construction

Features
- Highly flexible, bridges crack which may form in the substrate
- Vapour permeable, minimizes risk of condensation in the wall from water vapour diffusion
- Liquid application assures a monolithic, seamless membrane
- Water resistive (WRB) air barrier membrane & tie-In membrane
- Exceptional adhesion to Oriented Strand Board sheathing (OSB), Plywood, expanded and extruded polystyrene
- Self-seals around nails, forming a tight, seamless barrier against water and air leakage

Limitations Durex® Air Stop is to be applied when surface and ambient temperatures are above 2ºC (35ºF) and below 40ºC (105ºF)
during application. Durex® Air Stop should not be applied to surfaces with standing water or frost.

TECHNICAL DATA

PHYSICAL PROPERTIES	
Product Type	Water-based copolymer
Appearance	Red viscous material in its liquid state
Specific Gravity	1.36
ph Level	8.5
Application Temperature	Above 2°C (35°C)
Coverage	30-35m² (320-370ft²)/pail @ 0.75 mm (0.030") WFT

PERFORMANCE PROPERTIES	METHOD	RESULT
Bond Strength	ASTM C297	0.44 MPa (64 psi) glass matt gypsum 1.85 MPa (268 psi) on concrete
Tensile Strength	ASTM D412	1.10 MPa (160 psi)
Elongation	ASTM D412	450% elongation at break
Joint Disruption Resistance	CCMC E.1-16	PASS 2mm & 4mm Joints (deflection up to L/180)
Nail Sealability	ASTM D1970	PASS @ 1.4mm(0.055") & 1.0mm(0.040") & 0.75mm(0.030") WFT
Air Leakage	CAN/ULC S741 (Standard for Air Barrier Materials)	PASS requirement <0.002 L/(s.m²) @ 75 Pa Actual 0.0015L/(s.m²) @ 75 Pa @ 0.57mm (0.023") DFT * The results listed above are based on averages, including a margin of error, considering that Durex® Air Stop may be applied to various substrates with or without irregularities.
Air Leakage	ASTM E-2178-13 (Standard Test Method for Air Permeance of Building Materials)	PASS requirement <0.002 L/(s.m²) @ 75 Pa Actual 0.0015L/(s.m²) @ 75 Pa @ 0.57mm (0.023") DFT * The results listed above are based on averages, including a margin of error, considering that Durex® Air Stop may be applied to various substrates with or without irregularities.
Water Vapour Permeance	ASTM E-96	
Coefficient of Water Absorption	CCMC 5.5.1	0.0001 kg/m².s$^{1/2}$ @ 0.75mm (0.030")

Thickness	Method A	Method B
@ 1.4mm (0.055") WFT	115 ng/Pa.s.m² (2 perms)	331 ng/Pa.s.m² (5.8 perms)
@ 1.0mm (0.040") WFT	136 ng/Pa.s.m² (2.4 perms)	344 ng/Pa.s.m² (6 perms)
@ 0.75mm (0.030") WFT	185 ng/Pa.s.m² (3.2 perms)	505 ng/Pa.s.m² (8.8 perms)

Note: coverage may vary depending on type, absorption, porosity and roughness of substrate (ie. OSB, Plywood, cinder Blocks etc..)

Application

Substrate must be dry, clean, sound and free of weak and powdery surfaces, dust, dirt, oil, grease and other deleterious materials, which may be detrimental to Durex® Air Stop during or after curing. (Consult Durabond Products Limited for questionable substrates). Durex® Air Stop may be applied by trowel or spray. Allow material to dry at air and surface temperature of 2ºC (35ºF) or higher.

Equipment recommended for spray application:
Airless Paint Sprayer: Titan Speed flow 1200 SF or Titan Impact 1140 or Graco GMAX II 5900 or Graco TexSpray Mark IV
•• Max GPM: 1.1
•• Max PSI: 3,300
•• Motor: 2.2 hp
Recommended Spray Tip: TR2 tip 519/213 or Graco XHD325
•• Use 500s series for wider spray widths and 200s or 300s series for narrower gaps, such as joints, as a general guidance. Refer to sprayer manufacturer for specific sprayer and tip details. Other sprayer models matching the equipment throughput and pressure range can be used.
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throughout and pressure range can be used.
It is recommended that spray applicators and those working in the spray area wear eye protection such as safety glasses with side shields or googles. Gloves are recommended for prolonged exposures.

Applications to Fenestration Rough Openings: Extend Durex® Air Stop and Durex® Barrier Seam Tape a minimum of 3" onto the sheathing face, completely covering the sheathing board edge. Then, extend Durex® Air Stop and Durex® Barrier Seam Tape a minimum of 3" back onto the rough opening substrate. It is recommended that Durex® Air Stop and Durex® Barrier Seam Tape cover a distance back onto the rough opening equal to what is covered by traditional flashing materials.
Penetrations & Counter-flashings: Apply Durex® Air Stop and Durex® Barrier Seam Tape a minimum of 2" onto the sheathing face and a minimum of 2" onto the penetration substrate or primary flashing substrate.

Curing/Drying Time

Curing time will differ depending on specific application conditions. Relative humidity, temperature and airflow will affect curing time. Average conditions and standard thickness will achieve tack free film in 1 to 3 hours and full cure within 7 days. **DO NOT SUBSTITUTE NOR COMPENSATE DUREX® Air Stop WITH OTHER ADDITIVES.**

Clean-up

Durex® Air Stop is a water-based emulsion and does not require the use of solvents for cleaning up. Use light soap and water to clean uncured material. Cured material is best removed with xylol or by mechanical means.

Storage

Keep Durex® Air Stop containers tightly sealed and store stacked off the ground with ambient temperatures above 2ºC (35ºF). **KEEP FROM FREEZING.**

Health and Safety

For information and advice on the safe handling, storage and disposal of chemical products, refer to the most recent SDS sheet containing physical, environmental, toxic and other safety/materials handling data. For Industrial use only. Keep out of reach of children.

Warranty

Durabond Products Limited fully warrants their products when used and applied in strict accordance with the printed instructions on product mixing and product application. In any case Durabond's responsibility shall not exceed either the refund of the purchase price or the replacement of the purchased product.

Technical Services

Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your sales representative.