

# Durex® VCA 3.0 Insulation Adhesive

## Polymer-based Cementitious Insulation Adhesive

- Description** Durex® VCA 3.0 Insulation Adhesive is a two-component polymer base cementitious insulation adhesive used with most Durex® Moisture Managed EIF Systems. A water based acrylic liquid component is mixed with a specially formulated dry cementitious powder containing coarse sand aggregates to create a cavity between the insulation board and the substrate.
- Uses** Durex® VCA 3.0 Insulation Adhesive is especially suited for adhering expanded polystyrene insulation (EPS) and extruded polystyrene insulation (XPS) to a variety of surfaces such as concrete, brick, concrete block, cement board, glass fibre faced gypsum sheathings, gypsum board, plywood and a few others.
- Advantages**
- Superior adhesion to various inorganic substrates
  - Combines the flexibility of synthetics and the strength of cement
  - Coarse aggregate creates cavity between the insulation board and the substrate to allow for drainage of incidental moisture
  - Superior adhesion to cured Durex® Green Guard, Blue Shield, Flexcrete and Dur-A-Mastic 100.
  - Allow for excellent quality control on job site
- Limitations**
- Ambient, surface and material temperatures must be above 5°C (41°F) during application and curing period
  - Must be used only to adhere expanded polystyrene insulation (EPS) and extruded polystyrene insulation (XPS)
  - Must always be applied in vertical channels to facilitate positive drainage

### TECHNICAL DATA

#### PHYSICAL PROPERTIES

<b>Product type</b>	Water based acrylic, sand-filled mixture
<b>Appearance</b>	White semi-solid ready mixed paste
<b>Viscosity</b>	Pourable paste
<b>pH Level</b>	9.0 to 9.5
<b>Toxicity</b>	Non-toxic
<b>Coverage</b>	Each unit of Durex® VCA 3.0 Insulation Adhesive will provide approximately 11-13 m <sup>2</sup> (120-140 ft <sup>2</sup> ) coverage

	METHOD	RESULT
<b>Tensile strength</b>	ASTM C190-85	0.35 MPa (50 psi) without mesh
	ASTM C190-85	16.55 MPa (2400 psi) with mesh
<b>Elongation</b>		9.4%
<b>Flexural strength</b>	ASTM C293-70	8.28 MPa (1200 psi)
<b>Air Leakage</b>	ASTM E283-91	0.0174 L/s.m <sup>2</sup> @ 1.5 mm thick
		0.0022 L/s.m <sup>2</sup> @ 3.0 mm thick
		Class 3 air barrier
<b>Water Vapour Permeance</b>	ASTM E96-95	385.56 ng/Pa.s.m <sup>2</sup> @ 25°C

- Mixing Procedure** Thoroughly mix Durex® VCA 3.0 Insulation Adhesive Liquid before each use. Discard all materials which have formed solid lumps at the bottom of the container and materials which do not appear to be of a homogeneous viscosity. Discard all frozen materials. Discard all material which has begun to harden. Mix 1 pail of Durex® VCA 3.0 Insulation Adhesive Liquid with one bag Durex® VCA 3.0 Insulation Adhesive Powder. Pour Durex® VCA 3.0 Insulation Adhesive Liquid into an empty clean mixing container. While under slow mixing action add the Durex® VCA 3.0 Insulation Adhesive in the required mixing proportions. Mix well until the mixture is free of lumps. Do not overmix or use excessive mixing speed. Let mixed material stand for a few minutes until it begins initial stiffening. Mix only enough materials which can be used within 45 minutes. Retemper and use. Discard all materials which have begun to stiffen for a second time. **DO NOT SUBSTITUTE NOR COMPENSATE DUREX® VCA 3.0 INSULATION ADHESIVE LIQUID WITH WATER OR OTHER ADDITIVES.**

- Application** Using a 12.7 mm (1/2") dispersion trowel apply the adhesive to the insulation boards to form vertical ribbons. Use sufficient pressure such that the board's surface is visible between the ribbons. Immediately after applying the insulation adhesive, before initial set begins, firmly press the insulation board into place. Begin installation at one end, from a baseline, to form an uninterrupted surface. Install the insulation board to the substrate in running bond pattern and with joints offset with respect to joints in the substrate by a minimum of 150 mm (6") and with the pre-

machined vertical channels in alignment. Interlock board joints at all corners.

<b>Clean up</b>	Clean all tools promptly after each use with clean water. Do not allow mixes to dry on tools.
<b>Storage</b>	Store Durex® VCA 3.0 Insulation Adhesive Liquid & Powder in a dry, vented, waterproof location, stacked off the ground with ambient temperatures above 5°C (41°F). Keep materials dry, protected from rapid temperature changes, dampness and moisture and away from direct sunlight. <b>KEEP FROM FREEZING.</b>
<b>Packaging</b>	Durex® VCA 3.0 Insulation Adhesive Liquid is available in 18.9 litre pails. Durex® VCA 3.0 Insulation Adhesive Powder is available in 22.7 kg. bags.
<b>Health and Safety</b>	For information and advice on the safe handling, storage and disposal of chemical products, refer to the most recent MSDS sheet containing physical, environmental, toxic and other safety/materials handling data. For Industrial use only. Keep out of reach of children.
<b>Warranty</b>	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
<b>Technical Services</b>	Technical support is available upon request at <a href="mailto:info@durabond.com">info@durabond.com</a> . For the latest version of this data sheet, please visit our website at <a href="http://www.durabond.com">www.durabond.com</a> , call toll free at 1-877-DURABOND (387-2266) or speak with your sales representative.

# DURabond

**HEAD OFFICE**  
55 Underwriters Road  
Scarborough, ON M1R 3B4  
T 416.759.4474 F 416.759.4470

**MISSISSAUGA**  
6178 Netherhart Road  
Mississauga, ON L5T 1B7  
T 905.565.9283 F 905.565.9365

**EDMONTON**  
14345 120<sup>th</sup> Avenue  
Edmonton, AB T5L 2R8  
T 780.451.6364 F 780.453.9056

[INFO@DURABOND.COM](mailto:INFO@DURABOND.COM)

[WWW.DURABOND.COM](http://WWW.DURABOND.COM)

1.877.DURABOND (387.2266)

V2.01