

# Durex® VCA 3.0 Insulation Adhesive

## Polymer-based Cementitious Insulation Adhesive

- Description** Durex® VCA 3.0 Insulation Adhesive is a two-component polymer-based cementitious insulation adhesive used with most Durex® Moisture-Managed EIFS 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.
- Features**
- 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.
  - Allows for excellent quality control on job site

### 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

#### PERFORMANCE PROPERTIES

PERFORMANCE PROPERTIES	METHOD	RESULT					
<b>Tensile Strength</b>	ASTM C190	0.35 MPa (50 psi) without mesh					
	ASTM C190	16.55 MPa (2400 psi) with mesh					
<b>Elongation</b>	ASTM D412	25.0%					
<b>Flexural Strength</b>	ASTM C293	8.28 MPa (1200 psi)					
<b>Air Leakage</b>	ASTM E283	0.0022 L/s.m <sup>2</sup> @ 3.0 mm thick					
<b>Water Vapour Permeance</b>	ASTM E96	590 ng/Pa.s.m <sup>2</sup> (10.3 perms)					
<b>Adhesion (axial pull)</b>	ASTM D1623	<b>Cement Board</b>					
		Dry State	Pass	<b>Concrete</b>	Pass	<b>Glass Mat Gypsum</b>	Pass
		2h- dry	Pass	Pass	Pass		
		7 d- dry	Pass	Pass	Pass		

**Packaging** Durex® VCA 3.0 Insulation Adhesive Liquid is available in 18.9 litre pails and is combined with Durex® VCA 3.0 Insulation Adhesive Powder is available in 22.7 kg. bags.

**Storage** 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. **KEEP FROM FREEZING. DISCARD ANY FROZEN MATERIALS.**

**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. Re-temper 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.
- 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
- Clean-up** Clean all tools promptly after each use with clean water. Do not allow mixes to dry on tools.
- 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 warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.
- Technical Services** Technical support is available upon request at [info@durabond.com](mailto:info@durabond.com). For the latest version of this data sheet, please visit our website at [www.durabond.com](http://www.durabond.com), call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Products Ltd. sales representative.

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