Durex® EMC

Acrylic Elastomeric High Build Protective & Decorative Coating

Description

Durex® EMC is a 100% acrylic-based elastomeric high build protective wall coating. Its unique formulation permits bridging of minor cracks which can normally appear in walls. A breathable coating, the Durex® EMC provides an effective weather shield for wall surfaces.

Uses

Durex® EMC can be applied over almost any solid substrate including but not limited to the following:

- Clean concrete and masonry and all other types of cementitious substrates
- Over solid clean substrates, including stucco with cracks
- Exterior and interior surfaces
- Stone, precast, exposed aggregate surfaces
- Ideal for recoating existing stucco surfaces

Features

- High flexibility; up to 300% elongation with 100% recovery
- Retains flexibility at low temperatures to -40°C
- Low dirt pick-up (wall remains cleaner even in high pollution areas)
- Easy to apply
- Excellent adhesion to cementitious substrates
- Permeable; allows wall to breathe and trapped water vapour in wall to evaporate
- Long-term weatherability
- Excellent resistance to ultraviolet rays
- Permanently bridges existing minor cracks

TECHNICAL DATA

PHYSICAL PROPERTIES	
Product Type	Acrylic-based elastomeric coating
Density	1.20 – 1.34 Kg/lt
Viscosity	10,000 to 15,000 cps
ph Level	9.0 to 9.5
Toxicity	Non-toxic
Minimum Film-Forming Temperature	5°C
Shelf Life	3 years
Coverage	4.9 m^2/L (200 ft^2 / gallon) @ 10 mils WFT (5 mils DFT) 46.5 m^2 / pail (500 ft^2 /pail) @ 2 coats (10 mils DFT) **Coverage rate will vary according to the porosity and roughness of the surface being coated. Very rough or porous surfaces may require more than 2 coats to provide the required minimum 10 mils dry film thickness.**

	METHOD	RESULT
Film Thickness		10 mils 2 coats (dry)
Water Vapour Permeance	ASTM E96	858.2 ng/Pa.s.m^2 (15 US Perms) @ 25°C
Flexibility	ASTM D322	180° over 1/8" rod at -20°C no cracking
Curing Time		2 hours tack free (at 20°C); 48 hours full cure (at 20°C)
Adhesion	ASTM D4541	1.53 MPa (221 psi)
Ultimate Tensile Strength	ASTM D412	203 psi @ 25°C; 710 psi @ 0°C
Elongation at Break	ASTM D412	355% @ 25°C; 130% @ 0°C
Dirt Pick-Up Resistance	ASTM D3719	Excellent
Recovery After 24 hrs	ASTM D412	100%
Salt Spray Resistance	ASTM B117	Pass 300 hrs
Reduction of Chloride Penetration	ASTM C1202	98%
Elongation %	ASTM D412	350%
Accelerated Weathering	ASTM G155	Pass 5000 hrs.
Freeze / Thaw resistance	ASTM C67	Pass 50 cycles
Mildew Resistance	ASTM D3273	No Growth
Colour Uniformity	ASTM D1729	Pass 5000 hrs

Packaging

Durex® EMC is packaged in 25 kg pails. Durex® EMC is available in multitude of standard colours and Custom colour matching is available upon request.

Storage

Store Durex® EMC 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**.

Application

Substrate must be dry, solid, clean, and free of weak and powdery surfaces, dust, dirt, oil, grease and other deleterious materials detrimental to a positive bond. (Check with Durabond Products Limited for questionable substrates). Clean substrate surfaces by sandblasting or high-pressure water blasting. Apply a coat of Durex® Dur-X-Cel Primer on all new concrete surfaces and chalky, mineral and/or weak concrete surfaces. Thoroughly stir Durex® EMC within its own pail before each use. Discard all frozen materials, materials which have formed solid lumps at the bottom of the container and materials which do not appear to be of a homogeneous viscosity. Using a 19mm to 30mm (3/4" – 1 1/4") high pile roller, apply the coating with several passes, evenly spreading the coating over the entire substrate surface. Ensure that the final stroke of the roller is always in the same direction and with the same pressure applied to the roller. Carefully organize the work with sufficient available tradesmen in order to complete an entire section from natural break point to natural break point. **AVOID STOP AND START LINES WITHIN ANY ONE SECTION**. Apply Durex® EMC in a minimum number of 2 coats, each coat to a minimum of 0.25 mm (10 mils) wet film thickness. The final total dry film thickness shall be a minimum of 0.25 mm (10 mils). **DO NOT SUBSTITUTE NOR COMPENSATE DUREX® EMC WITH WATER OR OTHER ADDITIVES.**

Limitations

Durex® EMC is not recommended for use:

- When ambient, surface and material temperatures are below 5°C (41°F) during application and curing period
- Over surfaces previously coated with an oil-based paint or high-gloss paint without the use of a primer

Curing/Drying Time

Allow each coat to be tack free prior to applying succeeding coat. Apply a maximum of 2 coats within a 24-hour period. Protect freshly applied coating from inclement weather until coating has fully set and cured.

Clean-up

Clean all tools promptly after each use with clean water. Do not allow the product to dry on tools. Durex® Cleaning Solution CS-100 is available to aid cleaning of soiled areas where the Durex® EMC has dried.

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. 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 Durabond Products Ltd. sales representative.