

# Durex Acrotel-AC

## Anti-Carbonation Structural Concrete Coating

- Description** Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is a single-component, solvent-based, acrylic-modified, high-performance, protective coating. It is designed to protect concrete structures against moisture intrusion and carbon dioxide diffusion, preventing the carbonation of concrete and risk of corrosion attack on the reinforcing steel.
- Uses** Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is a brush-and-roller-applied barrier coating formulated to be used as a one-coat protective coating on vertical and horizontal applications over exterior above-grade structural walls and supports. Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is designed to bridge hairline cracks throughout a wide range of temperatures and to protect steel-reinforced concrete against CO<sub>2</sub> (carbonation) intrusion.
- Ideal For**
- Steel-reinforced concrete abutments
  - Retaining walls and support structures
  - Civil structures, bridges and walkway overpasses
  - Ramps and sidewalks
- Features**
- Resistant to carbon dioxide diffusion
  - Low VOCs and low odour
  - Resistant to ultraviolet radiation and weathering
  - Long lasting
  - Excellent dirt pick-up resistance
  - Excellent colour retention
  - Skins over in 60 minutes, and tack-free in 2-4 hours
  - Easy to apply, and easy to clean
  - Low temperature application (up to -10°C)

### TECHNICAL DATA

PHYSICAL PROPERTIES	
<b>Colour</b>	Please see <i>Durex® Colour Selection Guide</i> for available colour options.
<b>Resin Type</b>	Acrylic copolymer
<b>Coverage</b>	8 m <sup>2</sup> /L (320 ft <sup>2</sup> /gal) @ 5 mils WFT (36 DFT)
<b>Cure Time @ 23°C (75°F), 55% RH</b>	To touch: 1 hour To recoat: 2 hours
<b>Reducer/Clean-up</b>	Mineral spirit
<b>Carbon Dioxide Diffusion</b>	R-Diffusion-Equivalent Air Layer Thickness (m): 339 m @ 6 mils DFT
<b>Pr EN 1032-6</b>	Sc-Diffusion-Equivalent Concrete Thickness (cm): 70 cm @ 6 mils DFT
<b>Diffusion Resistant Coefficient</b>	µ-Diffusion Resistance: 220,000 µ @ 6 mils DFT
<b>Water Vapour Transmission</b>	2 gm/m <sup>2</sup> /day

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
<b>Percent Solids</b>	ASTM D7232-06	52 ± 2% (vol.)
<b>Viscosity (Brookfield) 23°C (75°F)</b>	ASTM D2196	8-12 cp
<b>V.O.C.</b>	ASTM D3960	< 350g/L
<b>Specific Gravity</b>	ASTM D333	1.15 ± 0.05 g/L 9.1 ± 0.1 lb/gal
<b>Sheen (60°)</b>	ASTM D3679	Flat

<b>Packaging</b>	Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) pails. This product is available in multiple standard colours. Custom colour matching can also be attained at an additional cost. Please refer to the <i>Durex® Colour Selection Guide</i> for all available colour options.
<b>Storage Conditions</b>	Store Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions.
<b>Surface Preparation</b>	Surfaces to be coated shall be clean, dry, structurally sound and free of debris or other materials deleterious to adhesion. New concrete and masonry mortar shall be allowed to cure for a minimum of 28 days before coating. Clean surface with a wire brush and/or power washer to remove dirt, loose materials and debris. For best results, mechanically abrade surfaces. Allow surfaces to thoroughly dry prior to applications.
<b>Application</b>	THOROUGHLY MIX PRIOR TO USE. DO NOT DILUTE WITH SOLVENT OR OTHER ADDITIVES. Prepare a test patch to verify the effectiveness of the cleaning process, and to check product adhesion to the surface. Do not proceed with application prior to, during or after inclement weather conditions, or if adverse weather is anticipated within 24 hours after application. Apply materials at ambient temperatures above minus 10 degrees C. Apply by using a 6.4 mm (1/4 in.) pile solvent-resistant roller or airless sprayer. Apply a uniform coating with several passes to ensure complete coverage. Carefully organize the work with sufficient tradesmen to complete an entire section at natural break points. Avoid stop and start lines within any one section. Apply Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating in one (1) coat or multiple coats at a minimum thickness of 12 mils (300 microns) wet for a total Dry Film Thickness of 6 mils (150 microns). Ensure that the final stroke of the roller is always in the same direction and with the same pressure applied to the roller.
<b>Clean Up</b>	Wash tools and equipment immediately after use with mineral spirits.
<b>Limitations</b>	Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is not recommended for use where vapour permeance of the building/structure is required. Durex® Acrotel-AC Anti-Carbonation Structural Concrete Coating is for use on concrete structures. For anti-carbonation protection of buildings and dwellings use Durex® Acrotel EC-A Elastomeric Anti-Carbonation Protective Coating.
<b>Health and Safety</b>	Take suitable fire precautions. Use under well-ventilated conditions with appropriate respirator approved for organic vapours and rubber gloves when handling the product. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Do not induce vomiting. Drink 1-2 glasses of water or milk. Keep product out of reach of children. Read published Material Safety Data Sheet for additional information.
<b>Warranty</b>	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.
<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 Durabond Technical Coatings Ltd sales representative.

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