Durex Epotel UR

Abrasion-Resistant High-Build Epoxy Floor Coating

Description

Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating is a two-component, 100% solids, solvent-free, liquid-applied, modified epoxy floor coating system. It is formulated with greater elongation and crack-bridging properties for increased flexibility, but capable of withstanding higher impact loads, while maintaining abrasion and chemical resistance.

Uses

Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating is roller- or squeegee-applied and may be used as an abrasion-resistant protective sealer topcoat and/or protective binder coating with broadcast aggregate in commercial and industrial floor applications.

Ideal For

- · Loading docks and other warehouse or production floor areas subject to forklift traffic
- Mechanical and service rooms
- Food processing plants
- · Pharmaceutical plants and laboratories
- · Department store and supermarket floors
- · Industrial manufacturing facilities
- · Parking decks, slab-on grade, and heavy-duty traffic surfaces

Features

- 100% solids, zero VOCs, odourless
- · CFIA approved, USDA accepted
- Fast setting, easy to apply, self-leveling properties
- · Adheres to damp concrete
- Chalk resistant
- · Tough, durable, abrasion and impact resistant
- · Blush-resistant high-gloss finish

TECHNICAL DATA

PHYSICAL PROPERTIES	
Colour	Clear & Pigmented
Resin Type	Epoxy/Urethane Hybrid
Coverage Rate	4 m ² /L (160 ft ² /gal) @ 10 mils DFT per coat (2 coats required)
Mix Ratio	2:1 (Part A : Part B) by volume
Cure Time @ 23°C (75°F)	To touch: 4 hours Light traffic: 12 hours Fully cured: 7 days
Pot Life (Working time @ 23°C)	20-25 minutes
V.O.C.	Zero

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	100%
Viscosity (Brookfield) 25°C (75°F)	ASTM D2196 Part A + B	1,700-1,600 cps (pigmented) 800-700 cps (clear)
Specific Gravity	ASTM D333	CLEAR: 1.12 +/- 0.01 g/L PIGMENTED: 1.48 +/- 0.01 g/L
Compressive Strength	ASTM 695-85	40.5 MPa (5,860 psi)
Tensile Strength	ASTM 638-M	9.6 MPa (1,350 psi)
Tear Strength	ASTM D624	998 lb/in (6.9 MPa)
Elongation	ASTM D638-86	20%
Abrasion Resistance	ASTM D4060-90	25 mg
Shore D Hardness	ASTM D2240	75
Chemical Resistance	Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating has the ability to resist damage by chemical reactivity or solvent action, including discolouration.	

Packaging

Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating is packaged as a kit (Part A & B) in 56.7 L (15 gal), 18.9 L (5 gal) and 3.78 L (1 gal) units. This product is available in multiple standard colours. Custom colour matching can also be attained at an additional cost. Please refer to the *Durex® Colour Selection Guide* for all available colour options.

Storage Conditions

Store Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials in ambient temperatures above 5 degrees C and below 35 degrees C. **KEEP FROM FREEZING**.

Surface Preparation

Surfaces to be coated shall be shot-blasted free of laitance, dust, debris or other materials deleterious to adhesion. New concrete and masonry mortar shall be allowed to cure for a minimum of 28 days and to achieve a compressive strength of at least 25 MPa (3,625 psi) before coating. Power wash and allow surfaces to thoroughly dry prior to applications. Maintain temperature in work areas to receive floor coating at a minimum of 15 degrees C for at least 24 hours before, during and after applications, and until coatings have fully cured. Maintain a dust-free environment for the duration of work. Erect suitable barriers to prevent through traffic or other trades from entering working area during installation of floor coating and protect adjacent surfaces from damage.

Mixing Instructions

Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating is supplied as a kit based on mixing ratio. Mixing shall be carried out in clean, rust-free containers, and mixed by a power drill at 400-500 rpm maximum. Mix two (2) parts by volume of Part 'A' resin with one (1) part by volume of Part 'B' catalyst. Mix for at least two (2) minutes. Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating must be applied immediately for best working time and results.

Application

Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating may be applied as a one-coat application or multiple-coat high-build system. Prepare a test patch to verify product adhesion to prepared surfaces.

Smooth Topcoat System: 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. Ensure that the final stroke of the roller is always in the same direction and with the same pressure applied to the roller. Apply by squeegee at a coverage rate of 4 m²/L followed by back-rolling. Apply material along perimeter edges with 75 mm (3 inch) to 100 mm (4 inch) wide synthetic brush, followed by a lint-free 12 mm (1/2 inch) pile roller. Maintain a wet edge to prevent overlap marks and gloss differences.

Partial Saturation: Apply by squeegee at a coverage rate of 2 m^2/L immediately followed by application of silica sand (#18, 20, 30, or 42 mesh) broadcast into wet coating to partial saturation and back-roll to encapsulate aggregate. Allow coating system to fully cure.

Full Saturation: Apply by squeegee at a coverage rate of 35 mil DFT immediately followed by application of silica sand (#24 mesh) broadcast into wet coating. Allow coating to cure 8 hours, sweep off loose aggregate, and allow system to fully cure. Seal floor with top coating of Durex® Epotel UR Abrasion-Resistant High-Build Epoxy Floor Coating applied at a coverage rate of 15 mil DFT and allow to fully cure.

Clean-Up

Clean tools and equipment immediately with solvent reducers.

Maintenance

Regular cleaning will maintain these systems in serviceable condition. However, certain textures and service environments require specific procedures. Contact a Durabond Technical Representative for further information.

Health and Safety

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 eyes 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.

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 Technical Coatings Ltd sales representative.

