

Durex® Dur-A-Hard TG

High-Performance Cementitious Polyurethane Flooring System

Description	Durex® Dur-A-Hard TG High Performance Cementitious Polyurethane Flooring System is a thick-build (6 - 9mm) trowel applied, fast curing, phthalate & solvent-free, cementitious polyurethane flooring system designed to provide a high-build tough and durable, non-slip textured surface for commercial and industrial manufacturing process areas. It is formulated as an extremely resilient, highly thermal shock resistant flooring system for demanding production areas, especially those found in the food and beverage industry.
Uses	Durex® Dur-A-Hard TG High-Performance Cementitious Polyurethane Flooring System is a trowel-applied, odourless, system approved by the Canadian Food Inspection Agency for use in the food and beverage industry. Durex® Dur-A-Hard TG is designed to protect horizontal concrete surfaces against organic and inorganic chemical compounds and/or bacterial growth, abrasion or physical deterioration with excellent thermal shock resistance to withstand rigorous heat steam cleaning up to 120°C.
Ideal For	<ul style="list-style-type: none"> • Heavily deteriorated, high-traffic processing areas subject to extreme abuse • Floors subject to heat steam cleaning and heavy thermal shock cycles • Pharmaceutical laboratories, clean rooms, Hospitals and medical centres • Chemical processing plants and containment dikes • High-demand food processing plants including meat/poultry processing and dairy manufacturing • Hospitals and medical centres • Commercial kitchens and restaurants • Wet areas, loading docks and garbage rooms
Features	<ul style="list-style-type: none"> • CFIA approved; USDA accepted • Zero VOCs, odourless, and non-tainting • Resistant to organic and inorganic chemical compounds and bacterial growth • Chemical and abrasion resistant • Fast curing; reduces downtime • Easy to clean and sterilize • May be applied at low temperatures (5 degrees C) • Seamless, slip-resistant floor topping • Will bond to mild steel and water-resistant plywood • Outstanding thermal shock resistance (up to 120 degrees C)

TECHNICAL DATA

PHYSICAL PROPERTIES

Colour	Please see <i>Durex® Colour Selection Guide</i> for available colour options.
Adhesion to Concrete	>400 psi (concrete fails before loss of bond)
Cure Time @ 21°C	Foot Traffic: 12-14 hours Light Wheel Traffic: 24-36 hours Full Service: 24-48 hours Heavy Duty Traffic: 48 hours
Mix Ratio (by volume)	4 Component Kit Part A (2.0kg), Part B (2.5kg), Part C (23 kg bag) and Part D Colourant (0.5kg)
Coverage	2.2 m ² @ 6 mm (24 ft ² @ 1/4 in) per kit 1.5 m ² @ 9 mm (16 ft ² @ 3/8 in) per kit
Pot Life – working time @ 25°C	15 minutes
Service Temperature	-40°C to 120°C (steam wash)

PERFORMANCE PROPERTIES

	TEST METHOD	RESULTS
Abrasion Resistance	ASTM C501 (CS-17 Wheel)	35 mg loss (1000 g load, 1000 cycles)
Coefficient of Friction	ASTM D2047	0.9
Compressive Strength	ASTM C579	54 MPa (7,852 psi)
Flexural Strength	ASTM C580	19 MPa (2,763 psi)
Impact Resistance @ 125 mils	MIL D3134	Pass
Tensile Strength	ASTM C307	8 MPa (1,164 psi)

Packaging	Durex® Dur-A-Hard TG High-Performance Cementitious Polyurethane Flooring System is packed as a 4-component kit based on mixing ratios; Part A (2.0Kg), Part B (2.5Kg), Part D colorant (0.5kg) and Part C in 23 kg bag mix is a cementitious admixture. 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.
Storage Conditions	Store Durex® Dur-A-Hard TG High-Performance Cementitious Polyurethane Flooring System 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 10 degrees C and below 35 degrees C. KEEP FROM FREEZING.
Surface Preparation	Surfaces to be coated must be shot blasted, clean, dry, structurally sound and free of oils and debris or other materials deleterious to adhesion. Clean surfaces with a wire brush and/or power washer to remove dirt, loose materials and debris. Allow surfaces to thoroughly dry prior to applications. Prime all heavily porous areas. Contact Durabond Technical Services for priming recommendations and instructions.
Edge Termination	All the free edges of Durex® Dur-A-Hard floor whether at the perimeter, along gutter or at drains require extra anchorages to distribute mechanical and thermal stresses. This is best achieved by forming or cutting grooves in the concrete. Grooves should have a depth and width of two times thickness of the Durex® Dur-A-Hard floor.
Moisture Concerns	Moisture content in the slab is to be measured prior to application of flooring system to ensure a long-lasting, durable installation in order to prevent craters and blistering, due to out-gassing of repaired or freshly prepared substrates.
Equipment	Mixing shall be carried out with a clean, rust-free paddle mixer that shall minimize air entrainment, powered by a power drill at 400-500 rpm maximum.
Mixing Instructions	Durex® Dur-A-Hard TG High-Performance Cementitious Polyurethane Flooring System is supplied in a kit based on mix ratio. Combine Part 'A', 'D' and Part 'B' liquid components in a clean plastic container and mix for two minutes. Combine the liquid mixture component with the dry Part 'C' component in a separate large container (20 L pail) and mix for two minutes. Durex® Dur-A-Hard TG High-Performance Cementitious Polyurethane Flooring System must be applied immediately for best working time and results.
Application Method	Apply the mixed product onto prepared floor and spread using pin rake, squeegee or trowel. Spread the material onto the floor at an average desired wet film thickness of 6mm to 9 mm (1/4 to 3/8 inch). Finish the system application using a stainless steel trowel to smooth and level the surface. Back-roll with a nylon roller to smooth the coating. Broadcast a non-slip aggregate into the coating for increased slip resistance; back-roll to encapsulate.
Cleaning	Regular cleaning will maintain these systems in serviceable condition. However, certain textures and service environments require specific procedures. Contact Durabond Technical Services for further information.
Health and Safety	Use under well-ventilated conditions with 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.
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.

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