Durex® Dur-A-Hard HB

High-Build, Multi-Layered Broadcasted Self-Leveling Cementitious Polyurethane Flooring System

Description

Durex® Dur-A-Hard HB High-Build Self-Leveling Broadcasted Cementitious Polyurethane Flooring System is a pourable, phthalate & solvent-free, cementitious polyurethane floor system designed to provide a high build, tough and durable, non-slip textured surface for wet and dry production areas predominately in the food and beverage industry. It consists of a layer of Dur-A-Hard HB which is then broadcasted to refusal with silica aggregates for additional strength. It is then top coated with Durex® Dur-A-Hard Topcoat, Durex® Uraflex 100 or a recommended top coat to seal in the broadcasted aggregates at to give additional surface performance.

Uses

Durex® Dur-A-Hard HB Self-Leveling Broadcasted Cementitious Polyurethane Flooring System is a broadcasted to refusal, odourless, 1/4" self-leveling flooring system approved for use in the food and beverage industry for heavy duty areas. Durex® Dur-A-Hard HB Self-Leveling Broadcasted Cementitious Polyurethane Flooring System is designed to protect concrete floor surfaces against organic and inorganic chemical compounds and bacterial growth, and withstands thermal shock under extreme cold and heat steam treatments. It is designed to be installed for high demand flooring areas.

Ideal For

- Pharmaceutical laboratories and clean rooms
- Chemical processing plants and containment storage rooms
- Production processes exposed to aggressive chemicals
- Food processing plants with high demand areas, including meat/poultry processing and dairy manufacturing
- Hight Demand Commercial kitchens
- Wet areas, loading docks, garbage rooms and high impact areas

Features

- CFIA approved; USDA accepted
- Zero VOCs, odorless, and non-tainting
- Resistant to organic and inorganic chemical compounds and bacterial growth
- Chemical and abrasion resistant
- Thermal shock resistant and Wide Service Temperature Range (-20°C to 120°C)
- Easy to apply, easy to clean and sterilize
- May be applied at low temperatures (5°C)
- Seamless waterproof slip-resistant floor topping
- Will bond to mild steel and water-resistant plywood.
- Anti-Microbial

TECHNICAL DATA

PHYSICAL PROPERTIES	
Colour	Please see *Durex® Colour Selection Guide* 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 Traffic: 24-36 hours Full Service: 48 hours Full Cure: 240 hours
Mix Ratio (by volume)	*Refer to TDS Sheets of Dur-A-Hard HB, Dur-A-Hard Topcoat and Uraflex 100*
Coverage (per kit)	2.1 m^2 @ 4.5 mm (22.5 ft^2 @ 5/16 in) / 1.4 m^2 @ 6 mm (16 ft^2 @ ¼ in)
Pot Life – working time @ 21°C	20 minutes ***Note***: Pot life is shorter at higher temperatures. Do not use below 5°C or above 30°C.
Service Temperature	-20°C to 120°C (steam wash)

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Abrasion Resistance **CS17 Wheel 1000 GM** **Load 1000 Cycles**	ASTM C501	35 mg loss
Coefficient of Friction **Standard Slip-Resistant**	ASTM D2047	0.9
Compressive Strength	ASTM C579	56 MPa (8,200 psi)
Flexural Strength	ASTM C580	20 MPa (2,908 psi)
Impact Resistance @ 125 mils	MIL D3134	Pass
Tensile Strength	ASTM C307	9.3 MPa (1,400 psi)

Packaging

Durex® Dur-A-Hard HB Self-Leveling Broadcasted Cementitious Polyurethane Flooring System is packed as a 4-component kit based on mixing ratios; Part A (2.5Kg), Part B (2.5Kg), Part D colorant and Part C in 16 kg bag mix is a cementitious admixture. This product is available in limited 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® Dur-A-Hard HB Self-Leveling Broadcasted 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 25 degrees C. **KEEP FROM FREEZING**. Durex® Dur-A-Hard SL has a shelf life of 6 months.

Surface Preparation

Surfaces to be coated must be prepared to ICRI CSP 3, be clean, dry, structurally sound and free of oils and debris or other materials deleterious to adhesion. Deficiencies in the substrate to be repaired as required, please consult Durabond. Primer may be required depending on the substrate porosity and contamination. Consult Durabond.

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 flooring material.

Moisture Concerns

Moisture content in the slab is to be measured prior to application of flooring system to prevent craters and blistering, due to out-gassing of repaired or freshly prepared substrates.

Mixing 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 HB Self-Leveling Broadcasted Cementitious Polyurethane Flooring System is supplied in a kit based on mix ratio. Combine Part A, Part 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 HB must be applied immediately for best working time and results. Please refer to chosen top coat TDS sheet for mixing instructions.

Application Method

Apply the mixed product onto prepared floor and spread using pin rake and/or squeegee. Substrate and ambient temperature must be between 4 degrees C and 25 degrees C during application and curing. Spread the material onto the floor at an average wet film thickness of 4.5 mm to 6mm. Immediately Spike Roll to release entrapped air. Broadcast 20-30 mesh silica sand aggregate (or as chosen) into wet coating to refusal. Once cured, vacuum excess silica sand. Apply Durex® topcoat (Durex® Dur-A-Hard Topcoat, Durex® Uraflex 100 or recommended topcoat) at a thickness of 10 mils DFT or as required.

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 and recommendations.

Health and Safety

Read respective SDS Sheets prior to handling, storage and usage of materials. Refer to SDS sheets for all health and safety information. Protective clothing and eyewear must be used at all times. 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 Technical Coatings Ltd. sales representative.