Durex. Duracrete SL

Self-Leveling Epoxy Surfacing System

Description

Durex® Duracrete SL Self-Leveling Epoxy Surfacing System is a pigmented, self-leveling epoxy surfacing designed to renovate worn concrete floors or protect new concrete against heavy wear and chemical spills. Durex® Duracrete SL Self-Leveling Epoxy Surfacing can be installed as a self-sealing system, broadcast with silica and resealed to produce a solid-coloured texture system, or broadcast with multicoloured quartz aggregates and sealed with a clear sealer to produce a decorative surface.

Uses

Durex® Duracrete SL Self-Leveling Epoxy Surfacing offers long-term, low-maintenance service for heavy industrial, commercial and institutional flooring applications. It is easily textured to provide sure footing in areas subject to spills and wash-downs.

Ideal For

- . Clean rooms
- · Areas that produce light manufacturing and assembly
- · Warehouses, workshops, mechanical rooms and laboratories
- · Variety of commercial and retail applications

Features

- · Economical and durable flooring system
- · Excellent colour retention
- · Fast and easy installation
- · Excellent abrasion and wear resistant
- · Will not support growth of fungus or bacteria
- · CFIA approved and USDA compliant for use in federally inspected meat and poultry plants

TECHNICAL DATA

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Compressive Strength @ 7 days	ASTM C579	11,500 psi
Tensile Strength	ASTM C307	2,250 psi
Flexural Strength	ASTM C580	4,500 psi
Bond Strength	ACI 503R	350 psi concrete fails
Thermal Coefficient of Expansion	ASTM D696	0.000046 inch per inch per 0°F
Abrasion Resistance CS-17 wheel, 1 kg. load, 1000 rev.	ASTM D4060	0.1 gm. maximum weight loss
Thermal Shock Resistance	ASTM C884	Passes
Water Absorption	ASTM C413	0.1%
Flammability	ASTM D635	Self-extinguishing
Impact Resistance	MIL D-3134F	16 foot-pounds concrete fractures
Indentation	MIL D-3134F	No indentation
Coverage Rate		1.5 Kg/m²/mm

CHEMICAL RESISTANCE				
R – Recommended for contin	nuous service	L – Limited recommendation, occasional spills		
REAGENT	RATING	REAGENT	RATING	
Acetic Acid 5%	L	Lactic Acid 15%	R	
Acetone	L	Methyl Ethyl Ketone	L	
Bleach	L	Nitric Acid 10%	R	
Citric Acid 20%	L	Skydrol	R	
Crude Oil	R	Sodium Hydroxide 50%	R	
Diesel Fuel	R	Sulfuric Acid 50%	R	
Ethylene Glycol	R	Toluene	L	
Fatty Acids	L	Urea	R	
Gasoline	R	Vinegar	L	
Hydrochloric Acid 15%	R	Xylene	L	

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions. Product data is revised as needed to reflect the most recent technology and field experience. Consult Durabond for current printing date of literature.

Packaging

Durex® Duracrete SL Self-Leveling Epoxy Surfacing System is packaged as follows: Durex® Duracrete SL Aggregate is packaged in 22.7 kg (50 lbs) bags. Durex® Epotel TL is packaged as a kit (Part A and Part 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

For improved performance, Durex® Duracrete SL should be sealed and kept 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

Concrete must be shot-blasted and prepared to ICRI CSP 3. Do not apply this or any impermeable finish over an ongrade slab with high moisture or relative humidity levels. Consult Durabond for complete details.

Application

Durex® Duracrete SL Self-Leveling Epoxy Surfacing is installed at a nominal 60 mils to 80 mils (1.5 - 2mm) thickness consisting of a 100% solids epoxy primer; a self-leveling epoxy-silica mixture, and optional aggregates and seal coats for specified finish and texture.

- Step 1 Use of Durex® Epotel Multi-Prime is recommended for rough or porous substrates. Special primers can be substituted depending on project conditions (contact Durabond for details). Premix components, then mix Primer A and B with a low-speed drill equipped with for two minutes. Pour onto substrate in ribbons and apply with squeegee. Cut in with brush, and back-roll with a short nap roller. Application rate should be 7 to 9 mils or 180 to 225 sq. ft. per gallon, but will vary depending upon the condition of the substrate. A light broadcast of silica into the wet primer will facilitate the next step. Allow to tack. Proceed to next step within 24 hour window or sanding and solvent wiping will be necessary for inter-coat adhesion.
- Step 2 Premix components, blend Durex® Epotel TL Parts A and B with a low-speed drill for two minutes. Add Durex® Duracrete SL Aggregate, blending for an additional minute ensuring the aggregate is fully wetted out. Pour onto floor surface in ribbons and level with a squeegee or cam rake, deaerating with a spike roller. If using a broadcast for a textured surface, proceed to next step immediately.
- Step 3 Premix components then blend coating components A and B with a low-speed mixing drill for two minutes. Pour onto floor in ribbons, distribute with a notched squeegee, and lightly back-roll with a lint-free 3/8" roller to smooth out roller marks.

SYSTEM	STEP ONE (OPTIONAL)	STEP TWO	STEP THREE (OPTIONAL)
	Primer (optional)	Slurry	Finish Coat (optional)
Duracrete SL	Durex® Epotel Multi-Prime	Durex® Duracrete SL	Durex® Polyuretel
Mix Ratio	2A : 1B	5 gal Epotel SL mix with: 50 lbs Duracrete SL Aggregate	2A:1B
Coverage***	180-225 ft²/gal	200 ft ² @ 60 mils (1.5mm) 150 ft ² @ 80 mils (2mm)	160 ft²/gal @ 10 mils DFT (2 coats)
Pot Life	20 min.	25 min.	15 minutes
Cure to Next Step @ 20°C	4-8 hours	8-12 hours	8-12 hours Full chemical cure 3-5 days

Other clear coatings can be used to add resistance to chemicals, UV, or to provide various floss levels.

** Duracrete SL Aggregates is a blend of fine silicas. Level of filler can be adjusted for workability. Less filler will reduce coverage.

** Coverage and requirements are dependent upon substrate conditions and desired finish and texture As is the case with all blended aggregates, it is recommended that Decorative Broadcast Quartz should be premixed prior to use.

Care & Maintenance

Newly installed floors should be cured a minimum of 48 hours at 20°C to 23°C before wash-downs. Only warm water should be used to clean within the first week. If the use of a detergent is absolutely necessary during the first week, use non-chlorine cleaner dissolved in water. Sanitizing detergents containing chlorine or hypochlorite must not be used for at least 7 days.

Good housekeeping practices and regulated spill removal will prolong the service life of the floor. While polymer flooring often requires less maintenance than other finishes, cleaning and stain removal must be performed. Stains should be removed as soon as possible, but only after determining the cause of the stain and selecting the proper method of stain removal.



Limitations

Substrate must be sound, clean, properly prepared and free from hydrostatic pressure and high levels of moisture vapour transmission. As is the case with any impermeable floor coating, any concrete slab on grade to receive this product should be tested for moisture content. Product should only be installed if moisture content falls within acceptable range. Please consult Durabond for additional information.

Health and Safety

Use under well-ventilated conditions with appropriate respirator approved for silica fume 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. 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.

