

Durex® Dur-A-Quartz Decorative Quartz Trowel System

Decorative Multi-Coloured Quartz Trowel Applied Epoxy Flooring System

Description	Durex® Dur-A-Quartz Decorative Quartz Trowel System is a thick build multi-coloured decorative floor overlayment engineered to create a durable, seamless floor that is aesthetically pleasing. Installed at a nominal thickness of 3-6mm (1/8" – 1/4"), Durex® Dur-A-Quartz Decorative Quartz Trowel System is an attractive, durable flooring system designed to restore damaged concrete or protect new concrete from impact, abrasion, wear, and mild chemicals in a variety of institutional, commercial and industrial environments.
Uses	Durex® Dur-A-Quartz Decorative Quartz Trowel System is used to beautify and protect concrete which will be exposed to mechanical and/or chemical abuse, or to resurface, level, pitch or slope existing floor slabs in decorative applications. The system is to be installed where utmost protection against mechanical abuse is required and where an aesthetically pleasing finish is desired.
Ideal For	<ul style="list-style-type: none"> • Showers, locker rooms and wash-down areas • Commercial areas • Grocery stores • Laboratories • Hallways • Recreational facilities • Public institutions and buildings • Offices
Features	<ul style="list-style-type: none"> • Aesthetically pleasing, multi-coloured finish • Extremely durable • 100% solids, zero VOC resins • Can be hand or power troweled • Moisture insensitive during application and cure • Seamless • Available with integral coving • Will not support growth of fungus or bacteria • Easy to clean and maintain • CFIA approved and USDA accepted

TECHNICAL DATA

PHYSICAL PROPERTIES		
Colour	Please see <i>Durex® Dur-A-Quartz Colour Selector</i> for available colour options.	
Coverage	Primer: (Durex® Epotel TL)	5 m ² /L (200 ft ² /gal) @ 8 mils
	Durex® Dur-A-Quartz Decorative Quartz Trowel Mortar (Durex® Epotel TL + Durex® Coloured Quartz)	1 gallon Epotel TL + 66lbs Quartz: 35 ft ² @ 1/4" : 3.25m ² @ 6mm 70 ft ² @ 1/8" : 6.5m ² @ 3mm 2-3 m ² /L (80-160 ft ² /gal) @ 10-20 mils WFT
	Grout Coat (Durex® Epotel GSC Clear)	1.5-2 m ² /L (80-120 ft ² /gal) @ 15-20 mils WFT
	Top Coat (Durex® Acrutel 50)	7.5m ² /L (300ft ² /US gal) @ 3 mils DFT
Pot Life	25 minutes	
Service Temperature Range	Minimum: 0°C/Maximum: 50°C/Quick Term: 95°C	

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Compressive Strength @ 7 days	ASTM C 579	7,500 psi
Tensile Strength	ASTM C 307	1,100 psi
Flexural Strength	ASTM C 580	2,050 psi
Water Absorption	ASTM C 413	0.1%
Flammability	ASTM D 635	Self-extinguishing
Impact Resistance	MIL D-3134F	16 foot-pounds concrete fractures
Indentation	MIL D-3134F	No indentation
Bond Strength	ACI 503R	350 psi concrete fails
Thermal Coefficient		0.000025 inch
Expansion	ASTM D 696	Per inch per 0°F
Abrasion Resistance CS-17 wheel, 1 kg. load, 1000 rev.	ASTM D 4060	35-45 mg. max weight loss
Thermal Shock Resistance	ASTM C 884	Pass

CHEMICAL RESISTANCE			
R – Recommended for continuous service		L – Limited recommendation, occasional spills	
REAGENT	RATING	REAGENT	RATING
Acetic Acid 5%	L	Lactic Acid 15%	L
Acetone	L	Methyl Ethyl Ketone	L
Bleach	L	Nitric Acid 10%	L
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® Epotel TL and Durex® Epotel GSC are packaged in 56.7L (15 gallon), 18.9L (5 gallon) and 3.78L (1 gallon) kits. Durex® Acrutel 50 is packaged in 18.9L (5 gallon) and 3.78L (1 gallon) units. Durex® Trowel Quartz is available in multiple standard colour blends. Custom colour blends can also be attained at an additional cost. Please refer to Durex® *Colour Selection Guide* for all available colour options.

Storage Conditions

Store Durex® Dur-A-Quartz Decorative Quartz Trowel System in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials as ambient temperatures above 5 degrees C and below 35 degrees C. **KEEP FROM FREEZING.**

Surface Preparation

Concrete substrate must be prepared to ICRI CSP 3. For best results surfaces shall be mechanically abraded and be sound, clean, properly prepared, and free from hydrostatic pressure and high levels of moisture vapour transmission. Do not apply this or any impermeable finish over an on-grade slab with moisture levels above 4% by weight (Durex® Epotel Moisture Block may be used for moisture content up to 6%, always consult your Durabond representative prior to use). Prime area with Durex® Epotel TL.

Application

Durex® Dur-A-Quartz Decorative Quartz Trowel System is installed at a nominal 3mm (1/8”) to 6mm (1/4”) thickness; consisting of a trowel-applied high-density epoxy resin, Durex® Epotel TL, mixed with Durex® Decorative Quartz aggregates. Optional seal coats and aggregates are available for specified texture and finish. Once the impact resistant mortar has been installed, a variety of top coat components can provide a solid or decorative colour scheme in gloss, matte and light dissipative sheens.

- Step 1 PRIMER:** Durex® Epotel TL. Premix components A and B at a 2:1 ratio with a low speed drill equipped with a non-air entraining paddle mixing blade for two minutes. Pour onto substrate in ribbons and apply with squeegee. Cut in with brush, and back roll with a short nap roller. Do not allow material to pond. Durex® Epotel TL shall be applied to a thickness of 8 – 10 mils, but will vary depending upon the condition of the substrate. A light broadcast of silica into wet primer will facilitate next step.
- Step 2 DECORATIVE QUARTZ TROWEL MORTAR:** Premix Durex® Epotel TL components, blending parts A and B with a low speed drill for two minutes. Fill mortar mixer or KOL-type mixer with Durex® Epotel TL liquids and add Durex® Decorative Quartz Aggregate at a ratio of 66 lbs of aggregate per 1 gallon of mixed Durex® Epotel TL (8kg/L). Mix for an additional one to two minutes until all materials are thoroughly wetted. Screed to level, and finish by hand or power trowel. Allow to cure. If using seal coats, grind out ridges of trowel marks as necessary and vacuum debris completely.
- Step 3 GROUT COAT:** Premix Durex® Epotel GSC components then blend coating components A and B for two minutes. Pour onto floor in ribbons, distribute with a notched squeegee, and lightly back roll with a lint free roller to smooth out roller marks, applying the materials at 15-20 mils WFT. Proceed to next step immediately.
- Step 4 FINISH COAT:** Blend Durex® Acrutel 50 catalyst into coating for two minutes. Pour onto floor in ribbons, distribute tightly with a squeegee or a roller. Lightly back roll with a lint free, solvent resistant 3/8” roller to smooth out roller marks, applying materials at 5 mils WFT.

ESTIMATING & APPLICATION GUIDELINES				
SYSTEM	STEP 1	STEP 2	STEP 3	STEP 4
	Primer	Decorative Quartz Epoxy Mortar	Grout Coat	Finish Coat
Product	Epotel TL	Epotel TL + Quartz Aggregate	Epotel GSC	AcruTel 50 (Multiple Sheen Levels Avail.)
Mix Ratio	2A : 1B	Quartz: Resin 8 kg : 1 L 66 lbs : 1 gallon	2A : 1B 2A : 1B	Catalyzed (100:1)
Coverage*	200 ft ² /gal	35 ft ² @ 1/4" (6mm) 70 ft ² @ 1/8" (3mm)	80-120 ft ² /gal	300 ft ² /gal
Pot Life @ 20°C	20 min.	20 min	30 min	24 hours
Cure to Next Step @ 20°C	None	8 hours	8 hours	10-16 hours Full chemical cure 3-5 days
Notes: *Coverage and requirements are dependent upon substrate condition and desired finish and texture. As is the case with all blended aggregates, it is recommended that Color Quartz should be batch mixed prior to use.				

Care & Maintenance

Newly installed floors should be cured a minimum of 48 hours at 20°C (70°F) 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 a 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.

Limitations

Durex® Dur-A-Quartz Decorative Quartz Broadcast System is impermeable. Test all concrete slabs on grade for moisture content. Product should only be installed if moisture content falls within an acceptable range. Minimum application temperature is 8°C (45°F). Below 15°C (62°F), handling characteristics are affected, and cure times are lengthened. Chemical exposure, service temperatures, mechanical abuse, and housekeeping influence service life. The project depending on chemical exposure may require Durex® Chemical Resistant Coatings. For installations exposed to UV and for exterior applications, the finish coat is to be replaced with a UV resistant coating. Please consult your Durabond Technical Representative for further details.

Health and Safety

Read and follow the Safety Data Sheet prior to use. Avoid contact with eyes and prolonged contact with skin. Wear protective clothing and face protection at all times while handling, mixing and applying the products. If contact occurs, flush immediately and seek medical advice if irritation occurs. Harmful if swallowed. Keep product out of reach of children. Read published safety data sheets 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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