

Durex® Dur-A-Quartz HD Broadcast System

Decorative High-Build Multi-Coloured Quartz 6mm Thick Epoxy Flooring System

Description	Durex® Dur-A-Quartz HD Broadcast System is a thick build multi-coloured decorative floor overlayment that combines a durable trowel applied based layer with a broadcasted multi-coloured decorative quartz topping to create a durable, seamless floor that is aesthetically pleasing. Installed at a nominal thickness of 6mm (1/4"), Durex® Dur-A-Quartz HD Broadcast 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 HD Broadcast 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"> . Multi-Layered, Troweled base and broadcasted finish . Consistent, easy to apply broadcasted finish . Extremely durable . 100% solids, zero VOC resins . 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	<table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Primer: (Durex® Epotel TL)</td> <td>5 m²/L (200 ft²/gal) @ 8 mils</td> </tr> <tr> <td>Trowel Mortar (Durex® Epotel TL + Durex® Duracrete Aggregate)</td> <td>1 gallon Epotel TL + 66lbs Aggregate: 35 ft² @ 1/4" : 3.25m² @ 6mm 70 ft² @ 1/8" : 6.5m² @ 3mm 2-3 m²/L (80-160 ft²/gal) @ 10-20 mils WFT</td> </tr> <tr> <td>Decorative Quartz Broadcast: (Durex® Epotel TL + Durex® Decorative Quartz Aggregate)</td> <td>Epotel TL: 0.9 m²/L (54 ft²/gal) @ 30 mils Decorative Quartz: Full saturation to excess broadcast + 7.4 kg/m² (1.5 lb/ft²)</td> </tr> <tr> <td>Top Coat (Durex® Epotel 1000)</td> <td>2-3 m²/L (80-160 ft²/gal) @ 10-20 mils WFT</td> </tr> <tr> <td>Optional Top Coat (Durex® Acrutel 100) <i>Finish: Gloss/Semi-Gloss/Satin/Matte</i></td> <td>7.5m²/L (300ft²/US gal) @ 3 mils DFT</td> </tr> </table>	Primer: (Durex® Epotel TL)	5 m ² /L (200 ft ² /gal) @ 8 mils	Trowel Mortar (Durex® Epotel TL + Durex® Duracrete Aggregate)	1 gallon Epotel TL + 66lbs Aggregate: 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	Decorative Quartz Broadcast: (Durex® Epotel TL + Durex® Decorative Quartz Aggregate)	Epotel TL: 0.9 m ² /L (54 ft ² /gal) @ 30 mils Decorative Quartz: Full saturation to excess broadcast + 7.4 kg/m ² (1.5 lb/ft ²)	Top Coat (Durex® Epotel 1000)	2-3 m ² /L (80-160 ft ² /gal) @ 10-20 mils WFT	Optional Top Coat (Durex® Acrutel 100) <i>Finish: Gloss/Semi-Gloss/Satin/Matte</i>	7.5m ² /L (300ft ² /US gal) @ 3 mils DFT
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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	11,000 psi
Tensile Strength	ASTM C 307	1,100 psi
Flexural Strength	ASTM C 580	4,050 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 Expansion	ASTM D 696	0.000025 inch Per inch per 0°F
Abrasion Resistance CS-17 wheel, 1 kg. load, 1000 rev.	ASTM D 4060	35-45 mg. max weight loss

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® products are packaged in 18.9L (5 gallon) and 3.78L (1 gallon) kits. Durex® Broadcast 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 HD Broadcast 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 3-4. Where a waterproofing system is required, use Uraflex 360 membrane as per Durabond application guidelines. 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 HD Broadcast 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 **EPOXY 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® Duracrete Aggregate at a ratio of 66 lb. of aggregate per 1 gallon of mixed Durex® Epotel TL. Mix for an additional one to two minutes until all materials are thoroughly wetted. Scream to level, and finish by hand or power trowel to a minimum uniform thickness of 3mm (1/8"). Refer to Duracrete Trowel system data sheet for material estimation guideline. Key cuts required for all terminations, drains and protrusions. Allow to cure. Lightly grind out ridges or trowel marks as necessary and vacuum debris completely when cured.

Step 3 **GROUT COAT:** Premix Durex® Epotel TL 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 **DECORATIVE QUARTZ BROADCAST:** While primer is still wet and tacky, premix Durex® Epotel TL components, blending parts A and B with a low speed drill for two minutes. Once mixed, apply Durex® Epotel TL at a thickness of 30 mils. Immediately broadcast Durex® Decorative Quartz Aggregate to excess (roughly 1.5 lbs per square foot). Allow to cure. Sweep and vacuum up loose aggregate. When necessary lightly abrade quartz to obtain a smooth surface.

DOUBLE BROADCAST (OPTIONAL): For superior coverage, the Decorative Broadcast Quartz Step can be installed in two stages. Apply in 2 coats at 15 mils per coat, broadcasting quartz to excess at approximately 0.75 lbs per square foot. Sweep and vacuum up loose aggregate between coats and before the topcoat. When necessary lightly abrade quartz to obtain a smooth surface.

Step 5 **FINISH COAT:** Premix Durex® Epotel 1000 (or recommended) components, then blend coating components A and B for two minutes. Pour onto floor in ribbons, distribute with a squeegee, and lightly back roll with a lint free roller to smooth out roller marks. Application thickness will dictate surface profile. 10 mils will yield a coarse finish, 20 mils will yield a smoother finish. Optional topcoats available. Contact a Durabond Technical Representative for details.

OPTIONAL TOP COAT: Durex® Acrutel 100 can be used as an optional protective topcoat. Available in Gloss, Semi-Gloss, Satin or Matte and with an optional fine anti-slip additive (Shark Grip). Refer to Durex® Acrutel 100 data sheet for details.

OPTIONAL MEMBRANE: Durex® Uraflex 360, polyurethane based waterproofing membrane can be used as an optional waterproofing membrane on suspended slab applications. Must be applied in 2 coats, the second coat being a thin coat that is broadcasted to sand in excess to facilitate epoxy mortar step. Contact a Durabond representative for instructions and refer to Durex® Uraflex 360 data sheet for details.

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 prior to handling, storage and application.

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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