

Durex® Dur-A-Quartz Decorative Quartz Broadcast System

Decorative Multi-Coloured Quartz Broadcasted Epoxy Flooring System

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| Description | Durex® Dur-A-Quartz Decorative Quartz Broadcast System is a high build, heavy duty, decorative, multi-coloured fine aggregate epoxy flooring system that is top coated with a clear protective sealer, designed to protect concrete floors from heavy wear, impact, abrasion and mild chemicals while yielding an aesthetically pleasing finish. Installed at 5/32” (4 mm), the Durex® Dur-A-Quartz Decorative Quartz Broadcast System offers excellent abrasion resistance for demanding floor areas. |
| Uses | Durex® Dur-A-Quartz Decorative Quartz Broadcast System is used as decorative and protective epoxy flooring system for areas that will be exposed to high traffic, heavy mechanical abuse and mild chemical attack. It is best used for institutional, commercial, and higher-end industrial flooring applications where high abrasion resistance and durability is required. |
| 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"> • High performance, aesthetically pleasing, durable finish • Easy and quick to install • Long term service life • Thin, lightweight seamless flooring system, easily upturned to create curbs and containment areas • 100% solids, zero VOC • Will not support growth of fungus or bacteria • Excellent abrasion and slip resistance • Easy to clean and to 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 Multi-Prime)</td> <td>5 m²/L (200 ft²/gal) @ 8 mils</td> </tr> <tr> <td>Decorative Quartz Broadcast: (Durex® Epotel GSX + Durex® Decorative Quartz Aggregate)</td> <td>Epotel GSX: 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>Finish Coat: (Durex® Epotel 1000)</td> <td>2-3 m²/L (80-160 ft²/gal) @ 10-20 mils WFT</td> </tr> </table> | Primer: (Durex® Epotel Multi-Prime) | 5 m ² /L (200 ft ² /gal) @ 8 mils | Decorative Quartz Broadcast: (Durex® Epotel GSX + Durex® Decorative Quartz Aggregate) | Epotel GSX: 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) | Finish Coat: (Durex® Epotel 1000) | 2-3 m ² /L (80-160 ft ² /gal) @ 10-20 mils WFT |
| Primer: (Durex® Epotel Multi-Prime) | 5 m ² /L (200 ft ² /gal) @ 8 mils | | | | | | |
| Decorative Quartz Broadcast: (Durex® Epotel GSX + Durex® Decorative Quartz Aggregate) | Epotel GSX: 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) | | | | | | |
| Finish Coat: (Durex® Epotel 1000) | 2-3 m ² /L (80-160 ft ² /gal) @ 10-20 mils WFT | | | | | | |
| Mix Ratio | As per TDS Sheet of individual product | | | | | | |
| Pot Life | As per TDS Sheet of individual product | | | | | | |
| Service Temperature Range | Minimum: 0°C/Maximum: 50°C/Quick Term: 95°C | | | | | | |

| PERFORMANCE PROPERTIES | TEST METHOD | RESULTS |
|----------------------------------------------|-----------------------------|-----------------------------------------|
| Compressive Strength | ASTM C579 | 8,000 psi (55 MPa) |
| Tensile Strength | ASTM C307 | 1,300 psi (9.1 MPa) |
| Flammability | ASTM D635 | Self Extinguishing |
| Water Absorption | ASTM C1585 | 0.1% |
| Flexural Strength | ASTM C580 | 2,200 psi (15.0 MPa) |
| Bond Strength | ASTM D7234 | 400 PSI (3.6 MPa) – failure at concrete |
| Thermal Coefficient of Lin. Expansion | ASTM C531 | 14x10 ⁻⁶ in/in per degree |
| Flexural Strength | ASTM D790-86 | 2,000 psi (14 MPa) |
| Abrasion Resistance | ASTM D4060-90 (CS-17 wheel) | 0.05 gm loss max |
| Shore D Hardness | ASTM D2240 | 85 |
| Impact Resistance | ASTM D2794 | 120 in./lbs |

| 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® Dur-A-Quartz Decorative Quartz Broadcast System is packaged separately per individual product. Durex® Epotel Multi-Prime and Durex® Epotel GSX are packaged in 1 gallon (3.78 L), 3 gallon (11.34 L) and 5 gallon (18.9 L) kits. Durex® Decorative Broadcast Quartz is packaged in 50 lb bags. This product is available in multiple standard colours. Custom colour matching 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 Broadcast System in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials at ambient temperatures above 10 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 Multi-Prime. If cove base is specified, it should be installed first. Prime area with Durex® Epotel Multi Prime.

Application

Durex® Dur-A-Quartz Decorative Quartz Broadcast System is installed at a nominal 2-3 mm (80-120 mils) thickness; consisting of a 100% solids epoxy primer, Durex® Epotel Multi-Prime; a high-quality epoxy binder, Durex® Epotel GSC Clear; Durex® Decorative Quartz Aggregate broadcasted to excess; Durex® Epotel UR Clear top coat. A variety of top coat components can provide a solid or decorative colour scheme in gloss, matte and light-dissipative sheens. These finishes will improve resistance to chemical attack and wear. Contact a Durabond Technical Representative for further information.

Step 1 PRIMER: Durex® Epotel Multi-Prime. 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 Multi-Prime shall be applied to a thickness of 8 mils, but will vary depending upon the condition of the substrate.

Step 2 DECORATIVE QUARTZ BROADCAST: While primer is still wet and tacky, premix Durex® Epotel GSC Clear components, blending parts A and B with a low speed drill for two minutes. Once mixed, apply Durex® Epotel GSC Clear 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 3 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 coarser finish (Finish #2), 20 mils will yield a smoother finish (Finish #3). 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, Satin or Matte and with an optional fine anti-slip additive (Shark Grip). Refer to Durex® Acrutel 100 data sheet for details.

| ESTIMATING & APPLICATION GUIDELINES | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------|
| SYSTEM | STEP 1 Primer | STEP 2 Decorative Quartz Broadcast | STEP 3 Top Coat |
| Product | Durex® Epotel Multi-Prime | Durex® Epotel GSX + Durex® Decorative Quartz Aggregate | Durex® Epotel 1000 |
| Mix Ratio | 2A : 1B | Resin: 2A:1B Quartz: 1-2 lb/ft ² | 2A : 1B |
| Coverage* | 200 ft ² /gal @ 8-10 mils WFT | 54 ft ² /gallon @ 30 mils WFT + 1.5 lb/ft ² Decorative Quartz | 80-160 ft ² /gal @ 10-20 mils WFT |
| Pot Life @ 70°F | 25 min. | 20 min | 25 min |
| Cure to Next Step @ 20°C | None | 5-8 hours | 5-8 hours |
| 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 Colour Quartz should be batch mixed prior to use. * Optional Topcoats can be added for sheen control, abrasion and UV resistance. Contact Durabond for further information. | | | |

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 10°C (50°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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