

Durex® Granitech

Self-Leveling Granite Epoxy Flooring System

- Description** Durex® Granitech is a unique liquid-applied decorative epoxy floor system. It is easily installed as a three-step system to produce a tough durable multi-coloured granite-like finish. Durex® Granitech incorporates a coloured epoxy-based primer, a thixotropic multi-coloured coating system with a clear abrasion-resistant topcoat sealer to yield a long-wearing decorative granite-look floor.
- Uses** Durex® Granitech is used as a decorative flooring system to produce a long-term, low-maintenance floor for high-traffic retail, commercial, residential and institutional applications. The finish topcoat is available in smooth or fine texture to provide sure footing and anti-slip properties. Decorative flakes can be broadcasted for additional aesthetics as desired.
- Ideal For**
- Replaces terrazzo, marble and other decorative flooring products
 - Decorative flooring applications subject to high traffic
 - Offices and high-end buildings
 - Variety of commercial and retail applications.
- Features**
- Fast and easy installation for a granite-like decorative appearance
 - Very low odour
 - Economical and durable floor with excellent colour retention properties
 - Resistant to contaminants such as salt and light chemicals
 - Will not support growth of fungus or bacteria

TECHNICAL DATA

PERFORMANCE CHARACTERISTICS

| 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 |
| Water Absorption | ASTM C413 | 0.1% |
| Flammability | ASTM D635 | Self-extinguishing |
| Impact Resistance | ASTM D2794 | 16 ft/lb (Concrete fractures) |
| Indentation | MIL D-3134F | No indentation |
| Bond Strength | ACI 503R | 350 psi (Substrate failure) |
| Coefficient of Friction | ASTM D1894-61T | 0.4 |
| Thermal Coefficient of Expansion | ASTM D696 | 0.000046 per inch per -18°C |
| Abrasion Resistance CS-17 wheel, 1 kg. load, 1000 rev. | ASTM D4060 | 0.1 mg. max weight loss |
| Thermal Shock Resistance | ASTM C884 | Pass |

CHEMICAL RESISTANCE

R – Recommended for continuous 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® Granitech is available in pre-packaged, ready-to-mix 8.5 kg kits. 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

Store Durex® Granitech materials and accessory products 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

Durex® Granitech is to be applied over prepared concrete substrates. Substrate must be sound, clean, properly prepared by shot-blasted to achieve a surface profile consistent with ICRI CSP 3, be free from hydrostatic pressure and high levels of moisture vapour transmission. Do not apply this over an on-grade slab with high moisture levels or any impermeable finish. Flooring joints to be properly prepared and filled. Please consult Durabond Technical Services for further information.

Application

Durex® Granitech consists of a special aggregate mixed with a clear 100%-solids epoxy resin and is to be applied at a nominal 3 mm to 1.5 mm (1/8 to 1/16 inch) thickness. Prime surfaces with Durex® Epotel 100 Multi-Prime pigmented to a matching colour and topcoat-cured flooring with a clear topcoat for specified finish, performance characteristics and texture. Durex® Granitech must be applied on flat surfaces. Surface must be level to within 4 mm per 2.5 m to install.

Termination strips to be installed where required after substrate has been properly prepared. Termination strips must be used to separate different colours and to facilitate large application areas, room transitions and design features.

Step 1 PRIMER: Floor to be primed with Durex® Epotel Multi-Prime tinted in accordance with the Durex® Granitech colour. Premix components, then add Part A and Part B and mix with a low-speed drill for two minutes. Pour onto substrate in ribbons and apply with a squeegee. Cut in with brush and back-roll with a short nap roller. Do not allow primer to puddle. Application rate should be 8 mils or 200 sq.ft. per gallon, but will vary depending on the condition of the substrate. Allow primer to cure. Sand and solvent-wipe primed surface exposed for periods greater than 24 hours. Extremely rough and/or porous substrates may require two coats of primer. Please consult Durabond Technical Services for further information.

Step 2 DECORATIVE COATING: Premix liquid components of Durex® Granitech, then blend Part A and Part B and mix with a low-speed drill for 90 seconds. Immediately pour in aggregate component into the mixture and fully mix at a slow rate for another 60-90 seconds. Immediately pour mix onto the floor surface in ribbons and level with a Cam-Rake gauged at 1/16" or 1/8" and de-aerate with a fine spiked roller. Broadcast silica as required for a textured surface while mix is still wet. Decorative flakes (standard and metallic) can be broadcasted as desired for an additional aesthetic effect.

Step 3 TOPCOAT: A variety of Durex® topcoats are available in smooth, or with a fine grit and in various gloss levels to provide protection against UV exposure, wear and chemical attack. Premix specified components then blend coating components A and B for two minutes. Spread topcoat onto floor in ribbons, roll out material with a 13mm lint-free phenolic core roller, and lightly back-roll with a lint-free roller to smooth out roller marks. Consult with a Durabond Technical Representative for further assistance.

| ESTIMATING & APPLICATION GUIDELINES | | | |
|---|-------------------------------|---|---|
| SYSTEM | STEP 1 Primer | STEP 2 Decorative Coating | STEP 3 Protective Coat |
| Product | Durex® Epotel 100 Multi-Prime | Durex® Granitech | Durex® Acrutel 50 or Durex® Durathane 90 |
| Mix Ratio | 2A : 1B | Pre-Packaged Kits | TBD |
| Coverage* | 200 ft ² /gal | 30 ft ² /gallon @ 1/8 in. to 60 ft ² /gallon @ 1/16 in. | 300 ft ² /gal x 2 coats |
| Pot Life @ 70°F | 20 min. | 30 min | Varies |
| Cure to Next Step @ 20°C | 6-8 hours | 10-16 hours | Refer to data sheets 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 Quart should be batch mixed prior to use. | | | |

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| Care & Maintenance | Allow Durex® Granitech to cure a minimum of 48 hours at 20 degrees C before use. Gentle cleaning practices are suggested within the first week of use. Good housekeeping and spill removal practices will prolong the service life of the floor. Stains should be removed as soon as possible. |
| Limitations | Substrate must be sound, clean, properly prepared, level to within 3 mm over 3 m 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 while in the planning and estimating stages. Product should only be installed if moisture content falls within acceptable range. Please consult Durabond Technical Services for further information. |
| Health and Safety | Use under well-ventilated conditions with appropriate respirator approved for organic vapours 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. Do not induce vomiting. Drink 1-2 glasses of water or milk. 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. |



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