# **Durex** Dur-A-Flake

## **Decorative Seamless Chip Flake Epoxy Floor System**

## Description

Durex® Dur-A-Flake is a decorative multi-coloured chip flake, seamless epoxy floor system. It is easily installed as a system to produce a tough durable multi-coloured granite-like finish. Durex® Dur-A-Flake incorporates a coloured epoxy-based primer, a body coat with multi-coloured paint chip flakes, a clear grout coat and a clear abrasion resistant topcoat sealer to yield a long wearing decorative floor. Installed at 50 mils (1.5 mm), the Durex® Dur-A-Flake offers excellent performance for a variety of floor areas.

#### Uses

Durex® Dur-A-Flake is used as a decorative flooring system to product 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.

#### **Ideal For**

- · Decorative flooring applications subject to high traffic
- · Variety of commercial and retail applications
- Institutional floors
- . Health Care facilities
- Laboratories
- · Residential applications, especially residential garages

#### **Features**

- . Fast and easy installation for a decorative appearance
- · Very low odour
- . Economical and durable floor with excellent colour retention properties
- · Resistant to contaminants such as salt and light chemicals
- . CFIA accepted
- · Will not support growth of fungus or bacteria
- . Customizable finishing sheen
- · Impermeable and waterproof
- . 8 standard colour blends
- · Customizable colours and blends available

## **TECHNICAL DATA**

PHYSICAL PROPERTIES				
Colour	Please see Durex. Dur-A-Quartz Colour Selector for available colour options.			
Coverage	Primer: (Durex® Epotel GSC)	5 m <sup>2</sup> /L (200 ft <sup>2</sup> /gal) @ 8 mils WFT		
	Decorative Flake Broadcast: (Durex* Epotel GSC + Durex* Decorative Chip Flakes)	Epotel GSC: 2.5 m²/L (100 ft²/gal) @ 15 mils Decorative Flakes: Full saturation to excess broadcast. Approx. 1 m²/kg (5 ft²/ lb)		
	Grout Coat:(Durex <sub>*</sub> Epotel GSC Clear)	4 m <sup>2</sup> /L (160 ft <sup>2</sup> /gal) @ 10 mils WFT		
	Top Coat: (Durex. Epotel GSC Clear)	8 m²/L (320 ft²/gal) @ 5 mils WFT		
Mix Ratio	2:1 by volume			
Pot Life	25 minutes (Epotel GSC)			
Service Temperature Range	Minimum: 0°C/Maximum: 50°C/Quick Term: 95°C			

TEST	METHOD	RESULTS
Compressive Strength @ 7 days	ASTM C 579	11,500 psi
Tensile Strength	ASTM C 307	3,00 psi
Flexural Strength	ASTM C 580	10,500 psi
Bond Strength	ACI 503R	350 psi concrete fails
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® Dur-A-Flake System is separately per individual product. Durex® Epotel 100 GSC is packaged in 1 gallon (3.78 L), 5 gallon (18.9 L) and 15 gallon (56.7 L) kits. Durex® Chip Flakes are packaged in 50 lb boxes or sold individually per pound. Durex® Chip Flakes is available in 8 standard blends as well as solid colours. Virtually unlimited 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-Flake products 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 25 degrees C. **KEEP FROM FREEZING**.

#### **Surface Preparation**

Substrate must be prepared to ICRI CSP 2-3. For best results surface is to be shot blasted 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 high moisture level.

## **Application**

Durex® Dur-A-Flake is installed at a nominal 1.5 mm thickness; consisting of a 100% solids epoxy primer, Durex® Epotel GSC; a high-quality epoxy binder, Durex® Epotel GSC; Durex® Chip Flakes broadcasted to excess; Durex® Epotel 100 GSC Clear grout and top coat. A variety of top coat options are available. They can be provided in gloss, satin and matte sheens as well as UV resistant coatings for exterior applications. Some finishes will improve resistance to chemical attack and wear. Contact a Durabond Technical Representative for further information.

- Step 1 PRIMER: Durex® Epotel 100 GSC. Premix components A and B at a 2:1 ratio with a low speed drill equipped with a 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 100 Epotel GSC shall be applied to a thickness of 8 mils, but will vary depending upon the condition of the substrate.
- Step 2 DECORATIVE FLAKE: Premix Durex\* Epotel 100 GSC components, blending parts A and B with a low speed drill for two minutes. Once mixed, apply Durex\* Epotel 100 GSC at a thickness of 15 mils. Immediately broadcast Durex\* Chip Flakes to excess (roughly 5 lbs per square foot). Allow to cure. Sweep and vacuum up loose aggregate. When necessary lightly abrade Durex\* chip flakes to obtain a smooth surface.
- Step 3 GROUT COAT: Premix Durex® Epotel GSC Clear (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, 15 20 mils will yield a smoother finish. Optional grout coats available. Contact a Durabond Technical Representative for details.
- Step 4 TOP COAT: Premix Durex\* Epotel GSC Clear (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. Apply at 5 mils WFT. A variety of optional topcoats available. Contact a Durabond Technical Representative for details. Durex\* Acrutel 50 can be used for sheen control. Available in Gloss, Semi-Gloss, Satin or Matte and with an optional fine anti-slip additive (Shark Grip). Refer to Durex\* Acrutel 50 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 practises 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-Flake is to be installed by approved applicators. Durex® Dur-A-Flake is an impermeable system. Test all concrete slab on grades for moisture content. Product should only be installed if moisture content falls within an acceptable range. Substrate temperature must be 3°C (5.5°F) above the measured dew point before application. Minimum application temperature is 8°C (45°F). Low temperature coatings are available for colder applications. 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. Consult your Durabond Technical Representative for further details.

## **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. Keep product out of reach of children. Read published Material Safety Data Sheet for additional information.

#### Warrantv

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.

