

## FloroQuartz BC Epoxy Quartz Slip Resistant Flooring

### Product Description:

FloroQuartz BC is a highly decorative and durable aggregate-filled epoxy quartz flooring system. It provides a slip and impact resistant surface with exceptional strength and wear characteristics.

### Typical Uses, Applications:

Ideally suited for commercial, industrial and institutional applications, such as:

- Food preparation areas
- Light Manufacturing Facilities
- Laboratories
- Meat & Produce Departments
- Bakeries

### Product Advantages:

- More cost effective and longer lasting than vinyl.
- Seamless and sanitary floor covering.
- A variety of aggregate colours may be blended to match any décor.
- Chemical resistant
- Highly durable

### Packaging:

- Floropoxy System 4700 Primer – Clear  
15.14 ltr Over Pack
- Floropoxy System 4805 - Clear  
15.14 ltr Over Pack
- Coloured Quartz Aggregate –  
15 kg Bags

### Storage:

All containers should be stored at 15° C to 30° C and be kept tightly sealed and out of direct sunlight.

### Coverage:

- Primer: Floropoxy 4700: 3.8m<sup>2</sup>/ltr
- 1<sup>st</sup> Basecoat: Floropoxy 4805 Clear: 3.8m<sup>2</sup>/ltr
- Colored Quartz Broadcast: approx. 2 kg/m<sup>2</sup>
- 2<sup>nd</sup> Basecoat: Floropoxy 4805 Clear: 2.4m<sup>2</sup>/ltr
- Colored Quartz Broadcast: approx. 2kg/m<sup>2</sup>
- 1<sup>st</sup> Grout: Floropoxy 4805 Clear: 2.4m<sup>2</sup>/ltr
- 2<sup>nd</sup> Grout: Floropoxy 4805 Clear: 3.8m<sup>2</sup>/ltr

Cured Physical Properties		
Property	Test Method	Results
Compressive Strength (Resins & Aggregates)	ASTM C579	86 N/mm <sup>2</sup>
Flexural Strength	ASTM C580	31 N/mm
Flexural Modules of Elasticity	ASTM C580	13,800 N/mm <sup>2</sup>
Indentation	MIL-D-3134F	No Indentation
Impact Resistance	ASTM D4226	>1,800 mmkg
Shore Hardness, D	ASTM D2240	85 – 90
Percent Elongation	ASTM D2370	6%
Water Absorption	ASTM C413	0.1%
Bond Strength (Concrete failure)	ACI Comm. #503 pg. 1139-41	>3 N/mm <sup>2</sup>
Abrasion Resistance, CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	60 mg max loss
Heat Resistance Limitation (Continuous exposure)		60° C
Coefficient of Friction	ASTM D2047	0.6
Flammability	ASTM D635	Self-extinguishing
Thermal Coefficient of Linear Expansion	ASTM C531	1.5x10 <sup>-2</sup> mm/mm/°C

## **Optional Finish Coat(s) for enhanced chemical and abrasion resistance**

Florothane CR250 or Florothane MCUltra 100

Consult your Florock Technical Representative for further details.

### **Surface Preparation:**

New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the Moisture Vapour Transmission (MVT) test and the water drop test and that all surface defects have been repaired. Refer to the Florock "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

*Note: Floropoxy should not be applied when the floor temperature is above 32° C or below 13° C, or when within 3° C of the dew point.*

### **FloroQuartz Application:**

#### **Option 1**

Double broadcast method applied on smooth, bare concrete

### **Primer Application:**

Once surface preparation is complete, apply Floropoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a 3mm V notched squeegee, spread at an approximate rate of 3.8m<sup>2</sup>/ltr. Backroll with a 10mm nap roller immediately after spreading. Allow primer to cure before applying the basecoat.

*Note: The cure time will vary with conditions. Allow a minimum of 6 hours and a maximum of 24 hours.*

### **2. 1<sup>st</sup> Broadcast Application:**

Mix Floropoxy 4805 in a clean, dry container. Blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix thoroughly

for 3 to 5 minutes using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire contents onto floor immediately. Using a 3mm notched squeegee, spread at an approximate rate of 3.8m<sup>2</sup>/ltr. Backroll with a 10mm nap roller immediately after spreading. Gently broadcast quartz into first wet basecoat at the rate of 2kg/m<sup>2</sup>. Spiked shoes or equivalent should be worn by operative to walk on wet basecoat when rolling and broadcasting. Continue broadcasting quartz until all liquid is filled and there are no apparent wet spots. Allow sufficient cure time so that material is cured hard enough to walk on without leaving an impression in the coating. Sweep or blow off excess quartz. Scrape or stone any high areas until smooth. Vacuum clean.

### **3. 2<sup>nd</sup> Broadcast Application:**

Repeat procedure outlined in step 2, except this time slightly more resin will be consumed as the surface is now rough. Spread Floropoxy 4805 at 2.4m<sup>2</sup>/ltr.

### **4. 1<sup>st</sup> Grout Coat Application:**

Grout with Floropoxy 4805. Blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during working time. Apply using a flat cement finishing trowel or a flat squeegee and backroll at an approximate rate of 2.4m<sup>2</sup>/ltr, depending upon desired texture.

### **5. 2<sup>nd</sup> Grout Coat Application:**

Repeat procedure outlined in step 4, except this time less resin will be consumed as the surface is now smoother. Spread Floropoxy 4805 at 3.8m<sup>2</sup>/ltr

### **6. Optional Finish Coat(s):**

After the final grout coat has cured, apply one or more clear finish coats of Florock Florothane CR250 or MC Ultra 100 to enhance chemical and abrasion resistance properties. Allow 24-36 hours cure time before opening floor to light foot traffic.

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### FloroQuartz Application:

#### Option 2

#### 5mm - Resinous Quartz Screed/Broadcast

Applied on irregular, bare concrete surface flooring.

*Note: Floropoxy should not be applied when the floor temperature is above 32° C or below 13° C, or when within 3° C of the dew point.*

#### 1. Primer Application:

Once surface preparation is complete, apply Floropoxy 4700 primer to the concrete floor. In a clean, dry container, blend Floropoxy Primer. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a 3mm V notched squeegee or 10mm nap roller, apply basecoat at a rate of 2.4-3.8 m<sup>2</sup>/ltr. Backroll with a 10mm nap roller immediately after spreading.

Allow primer to cure before applying the basecoat.

*Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.*

#### 2. Resinous Quartz Screed Application:

Mix 3.78 ltrs of blended resin with 22kgs of coloured quartz aggregate. Each mix of resinous screed will cover 3m<sup>2</sup>. Mix only the amount that can be used during working time. Mix well using a low speed mechanical mixer for 3 to 5 minutes. Immediately pour screed mixture onto floor using

a flat cement trowel and then spike roll. Once the screed is placed, broadcast coloured quartz to excess at a rate of 2kgs/m<sup>2</sup>. Following curing, sweep off any loose aggregate.

**3. Grout Coat Application:** Grout with Floropoxy 4805. Blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during working time. Apply using a flat cement trowel or flat squeegee and backroll at an approximate rate of 2m<sup>2</sup>/ltr, depending upon desired texture.

**4. Optional 2<sup>nd</sup> Grout Coat Application:** Repeat procedures outlined in step 3.

**5. Optional Finish Coat(s):** After the final grout coat has cured, apply one or more clear finish coats of Florock Florothane CR250 or MC Ultra 100 to enhance chemical and abrasion resistance properties. Allow 24-36 hours cure time before opening floor to light foot traffic.

#### Instructions for Use over Existing Coatings:

Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed. Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants. After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with solvent free wipes to ensure good adhesion of the new system.

*Note: When coating over existing coatings, a test patch is recommended to evaluate compatibility.*

**Maintenance:** Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type mild detergent. Florock floors never need to be waxed.

**Please read material safety data before using product.**

**Disclaimer:**

All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability whatsoever of a product for an intended use shall be solely up to the User.