# POLYSCREED QUARTZ

**Coloured Quartz Power Troweled Resin Screed** 



Polyscreed Quartz is a hard wearing coloured quartz screeding system which provides exceptional abrasion / wear and chemical resistance. Polyscreed Quartz exhibits outstanding resistance to chalking and weathering.

Polyscreed Quartz displays attractive aesthetics with an exposed aggregate or Terrazzo type look together with performance which renders it ideal for demanding industrial or commercial flooring environments.

# **UNIQUE PRODUCT BENEFITS**

- High chemical resistance.
- Excellent scratch and mar resistance.
- Seamless flooring system which is easy to maintain with a hygienic finish.
- Rapid installation. Non-dusting.
- Excellent stain resistance in the food environment.
- Decorative floor finish with custom colours.

# **TECHNICAL DETAILS**

Compressive Strength	>55 MPa	
Tensile Strength	>15 MPa	BS6319
Flexural Strength	>18 MPa	
Concrete Adhesion	>1.5 MPa (Concrete failure)	ASTM D7234
Impact Resistance	1 kg >1.8 m 2 kg >1.5 m	ISO6272-1: 2011
Hardness	80	Shore D
Slip Resistance	Dry >70 Wet >25	TRRL Pendulum Slip Test
Water Uptake (Permeability)	Nil	Karsten Test
Application	Broadcast, Electric Power Trowel	
Profile	Smooth, seamless, non-slip	
Finish	Satin	
Dry Film Thickness	3 to 4 mm	
Application Temp	5 to 30 °C	
Service Temp	60 °C max (dry)	
Foot Traffic	12 to 16 hrs	
Heavy Traffic	24 hrs	
Full Cure	5 days	
Chemical Resistance	Consult our technical department for details	

# **PRODUCT COLOUR RANGE:**



\*Product colours may differ from the ones shown above. For a full colour chart or for samples, contact your nearest Technical Finishes branch. UV exposure causes yellowing, most prominent in light colours.

# Leading manufactures of specialist epoxy and polyurethane flooring systems, specialised construction and corrosion protection products.

#### Distribution facilities nationwide

Western Cape +27 (0)21 535 4455 Eastern Cape +27 (0)41 451 3944 Gauteng +27 (0)11 822 7242 KwaZulu-Natal +27 (0)31 705 7733



(O) in info@technicalfinishes.com • www.technicalfinishes.com

# SYSTEM DETAILS AND COVERAGES

Solidkote UP Epoxy Primer	15 L will cover 60 m² @ 250 um (4 - 6 m² / L)
Scatter Quartz Aggregate	300 g / m²
Polyscreed Quartz Slurry	21 L will cover 17.5 m <sup>2</sup> @ 1.2 mm
Polyscreed Coloured Quartz Aggregate	Spread rate @ 4 kg / m <sup>2</sup>
Polyscreed Quartz Sealkote	15 L will cover 75 m <sup>2</sup> @ 200 um
Solidkote UV Satin	40 m <sup>2</sup> / 5 L @ 125 um Wet Film Thickness

# **APPLICATIONS:**

- Food process areas
- Industrial kitchens
- Retail outlets
- Malls and Supermarkets
- Restaurants, Canteens
- Healthcare or Hospitals
- Commercial office spaces
- Schools and walkways

# SUBSTRATE REQUIREMENTS

Concrete substrates must have a minimum compressive strength of 20 to 25 MPa, a minimum tensile pull-off strength of 1.5 MPa and be free of oil, fat, grease, dust, and loose friable materials. The substrate should be dry to 75% RH (BS 8204) and free from rising damp or ground water. The surface finish of the concrete should be class 2 (AS 3610).

Note: Any filling of blowholes/voids and surface levelling of substrate can be achieved using appropriate products within Technical Finishes Construction Range (please speak to one of our technical sales representatives).

#### PREPARATION

Remove all previous coatings, unbonded concrete and laitance mechanically through diamond grinding, abrasive blasting or scarifying to obtain a sound and porous surface



Concrete Substrate

(sandpaper texture). Sweep dust and loose debris followed by vacuuming, to obtain a dry and dust-free surface.

#### PRIMING

Ensure application conditions of 5 to 30 °C and that the concrete moisture content is below 5%.

Prime with Solidkote UP Primer. Into the wet primer layer, apply general scatter quartz (0.7 mm silica) at a rate of 300 g per square metre.

Allow primer to cure for at least 8 hours prior to application of Polyscreed Quartz. The primer must show a visibly complete seal of the substrate.

### **INSTALLATION:**

Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

#### Mixing of Polyscreed Quartz Slurry

Mix Part 1 thoroughly with a mechanical mixer.

Add the Part 2 into Part 1 and stir using a mechanical mixer for 2 minutes. Ensure the mixing paddle scrapes the sides of the mixing vessel.

Then slowly add the Part 3 (Aggregate) and mix for at least three minutes. The mix should not be kept in the container as it will start to cure rapidly.

#### Placing

Pour out the Polyscreed Quartz Slurry mix onto the demarcated area in a long ribbon and spread the mix

# Leading manufactures of specialist epoxy and polyurethane flooring systems, specialised construction and corrosion protection products.

#### **Distribution facilities nationwide**

Western Cape +27 (0)21 535 4455 **Eastern Cape** +27 (0)41 451 3944

Gauteng +27 (0)11 822 7242

KwaZulu-Natal +27 (0)31 705 7733



info@technicalfinishes.com • www.technicalfinishes.com lin

(O)

(each kit will achieve 17,5m<sup>2</sup> at 1,2 mm depth). A steel hand trowel may be used on the edges to assist with placing in smaller areas. Polyscreed Quartz Aggregate (predetermined colour combination) is then broadcast into the freshly laid, wet slurry at a rate of 4 kg aggregate / m<sup>2</sup> to effect a full / saturated blind of the slurry thus ensuring full coverage of the surface. Once the Polyscreed Quartz Aggregate has been applied and allowed to settle (3 - 5 minutes), use a leaf blower to blow any excess, unwetted colour quartz to one side and collect excess for later use.

With the aid of spike shoes, power float the surface using a medium duty electric power float fitted with plastic or Teflon blades until a uniform and compacted surface is achieved. Areas where resin might come through (will appear wet) will need additional aggregate applied and then power floated again.

Care must be taken to float over spike shoe marks. Once a satisfactory finish is achieved, the screed is then left over night to cure. Ensure that airborne contamination does not settle on the surface during the curing period.

#### **DE-NIBBING & SEALING**

Inspect the floor for any sharp or high points and use a steel trowel to remove. Any residual coloured quartz aggregate must be vacuumed from the surface to ensure that the newly laid screed is sufficiently clean and dirt free. Seal the floor using Polyscreed Sealkote to ensure the screed porosity is reduced to a minimum. Buff the surface down using a red pad on a polisher. Solidkote UV Satin is applied in a thin coat, this sealer will produce a satin, silky smooth finish. Allow 3 to 5 hours between coats.

#### MAINTENANCE

Regular cleaning extends the service life of the Polyscreed Quartz system. Maintenance is to be carried out using Liquid Action which complies with SANS 1344 Medium Duty Solvent Detergent (2112/P3325/10/ID). Please refer to full cleaning regime for Polyscreed polyurethane flooring systems.

### **HEALTH AND SAFETY**

Please read Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

#### WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will guarantee such workmanship and application. It is vital that the application is done in accordance to our specification.

# Leading manufactures of specialist epoxy and polyurethane flooring systems, specialised construction and corrosion protection products.

#### Distribution facilities nationwide

Western Cape +27 (0)21 535 4455 Eastern Cape +27 (0)41 451 3944

Gauteng +27 (0)11 822 7242 KwaZulu-Natal +27 (0)31 705 7733



(in info@technicalfinishes.com • www.technicalfinishes.com