QUICSEAL 531FR

Product Name

Fiber-Reinforced Paver-Crete

Description

QUICSEAL 531FR is a two component, pre-packed high performance, fiber-reinforced, acrylic polymer modified cement based mortar designed for all types of resurfacing, patching and repairing of concrete surface.

Part A comprises of a polymer emulsion developed from the latest latex technology. Part B comprises of a blend of special cement, specially graded fillers and additives.

Typical Uses

QUICSEAL 531FR is ideal in the following areas:-

- As general resurfacing, patching and repairing of concrete surface with high cycling and human traffic
- Topping of new and old concrete floors to increase skid and wear resistance.
- Resurfacing, patching and repairing of worn out or damaged concrete floors
- Suitable for aprons, footpaths, cycling and jogging tracks

Advantages

- Pre-packed and pre-weighted – easy to mix and apply
- Excellent water resistance qualities
- Excellent bond strength to substrates
- Excellent abrasion and impact resistance
- High flexural and tensile strength
- Can be applied onto damp substrates (no free water on substrate)

Surface Preparation

The substrate must be clean and sound, free of dust, loose particles. Laitance, oil, grease must be removed from concrete surfaces by scabbling, grit blasting or other means.

Defective and unsound substrate has to be removed and repaired prior to application of QUICSEAL 531FR.

Existing substrate expansion joint is to be continued through the new topping and any moving cracks should be isolated with a movement joint.

Directions for Use

Priming

Prime the surface with QUICSEAL 113 (approx. 0.1 to 0.2 kg per m^2) or QUICSEAL 307 (approx. 0.3 to 0.6 kg per m^2). Please refer to the respective product technical data for more information.

Mixing

Pour Part A (liquid) into a clean container. Slowly add Part B (powder) into the container containing Part A and mix with a low speed mechanical mixer until a homogeneous and lump-free mix is obtained.

Application

Immediately after mixing, apply well-mixed QUICSEAL 531FR with a metal trowel to the primed surface at thickness of minimum 3 mm to maximum 6 mm in one layer.

For placement of more than 1 layer, sufficient curing time interval of 6-12 hours is recommended for each subsequent layer, after the previous layer completely cures and hardens.

For surfaces requiring anti-skid finish, QUICSEAL 531FR can be broom swept to a desired texture approximately 3-5 minutes after application.

Curing

Consistent with cementitious toppings, it is essential to allow QUICSEAL 531FR to cure naturally in ambient conditions. Where rapid drying conditions exist, such as high temperature, direct sunlight, and strong wind, QUICSEAL 531FR should be protected with polythene sheet or QUICSEAL 507 Cure-shield WB to reduce premature water loss.

Allow a minimum curing time interval of 12 hours before opening up the area to bicycle traffic.

Packaging

QUICSEAL 531FR Fiber Reinforced Paver-Crete is available in 30 kg set consisting of Part A emulsion and Part B powder.

Colour availability

Black

Coverage

1.8kg per m^2 per mm thickness.

Storage

Store in a sheltered, cool, dry place, protected from rain and sunlight and extreme temperatures.

QUICSEAL 531FR has a shelf life of 12 months when stored as stated in its original packing.

Technical Data

Tested at Part A liquid : Part B powder ratio = 1 : 4 or 25% by weight

Tests	Test Standards	Test Results
Accelerated Weathering – UV exposure a) 500 hours b) 1000 hours	ASTM G154:2012a	No cracking, softening, debonding, peeling and blistering
Colour Fastness a) 500 hours b) 1000 hours	BS EN 20105-A03: 1995*	Grey scale 5
Compressive Strength – after UV exposure for 1000 hours	ASTM C109/109M: 2016a	67.8N/mm^2
Flexural Strength – after UV exposure for 1000 hours	ASTM C348: 2014	15.1N/mm^2
Tensile Strength – after UV exposure for 1000 hours	ASTM C307: 2003 (2012)	7.0N/mm^2
Shear Bond Strength – after UV exposure for 1000 hours a) with primer QUICSEAL 113 b) with primer QUICSEAL 307	ASTM C482: 2002 (2014)	 3.0N/mm^2 2.6N/mm^2
Skid Resistance	ASTM E303: 1993 (2013)	55BPN
Taber Abrasion	ASTM D4060: 2014	0.3g
Adhesion to Substrate (after 3 days air cure) a) With primer QUICSEAL 113 b) With primer QUICSEAL 307	ASTM D4541: 2002 (Method A, Type I Tester)	 1.9N/mm^2 2.4N/mm^2

Health & Safety

Avoid eye and unnecessary skin contact, as the product is alkaline
In case of eye contact, flush with plenty of clean water and seek medical help immediately.

Reference No. QS531FR/110419