



SGBP 2018-1722

QUICSEAL 111

(formerly QUICSEAL 111S)

Crystal-Proof

Description

QUICSEAL 111 Crystal-Proof is a unique chemical treatment for the waterproofing and protection of concrete.

Manufactured in the form of a dry powder compound, QUICSEAL 111 Crystal-Proof consists of Portland cement, very fine treated silica sand and various proprietary chemicals.

In the presence of moisture, the active chemicals in QUICSEAL 111 penetrate concrete and react chemically with free lime to produce insoluble crystals.

This crystalline growth reduces porosity by blocking capillaries, thus improving the waterproofing properties of the treated surface.

Uses

Waterproofing to:

- Bathrooms, Kitchens, Yards, Balconies & Gutters
- Tunnels
- Manholes

Advantages

- Easy to apply & cost effective
- Can be applied on green concrete
- Effective treatment for hydrostatic conditions
- Breathable
- Does not require protection during backfilling or during placement of steel reinforcement.

Surface Preparation

Concrete surface to be treated must be clean and free of laitance, dirt, paint coating and other foreign matter, which may inhibit adhesion. Horizontal surfaces should preferably have a rough wood float or broom finish.

Remove existing coatings, smooth surfaces or laitance by acid etching, sandblasting or water blasting.

Structural defects such as cracks, faulty construction joints and honeycombing should be routed out to sound concrete and repaired with QUICSEAL 516 WATERPLUG.

On porous substrates, QUICSEAL 111 Primer is recommended to consolidate the substrate prior to application of QUICSEAL 111.

Application

Slurry coat

Mix 25 kg of QUICSEAL 111 with 6.5 litres of clean water to a creamy consistency and allow the mix to rest for 15 minutes to allow for chemical reaction. It should then adhere to the brush without dripping.

Prior to the application of QUICSEAL 111, saturate concrete surface with water to promote reaction.

Apply QUICSEAL 111 slurry coat with a semi-stiff bristle brush or broom (for large horizontal applications). Ensure that slurry is worked well into openings, rough surfaces, joints and routed out areas and finish with final strokes in one direction.

Moisten surface before applying second coat. Apply 2nd coat at right angles to the previous coat with a cure time of 2 hours in-between coats.

Dry Shake for newly cast screed and concrete

The sprinkling is broadcast in two applications, perpendicular to each other to achieve a more uniform coverage.

For the first broadcast, sprinkle 50% of the required quantity QUICSEAL 111 onto a freshly spread and floated screed/concrete surface after the water sheen has disappeared.

Allow sufficient time for the QUICSEAL 111 to be moistened by the water from the screed/concrete or colour tone to turn darker before towelling.

Broadcast the remaining QUICSEAL 111 at right angle to the first and towel to the desired finish

Finishing

When the last coat has stiffened, float it to desired texture with a sponge or wood float.

Curing and Protection

Proper curing procedures are important to ensure the durability and quality of the coating. To prevent surface cracking, curing must begin as soon as the QUICSEAL 111 coating has reached initial set using CURE-SHIELD WB curing compound.

Apply QUICSEAL 507 evenly by spray, roller or brush at a rate of 4 - 5 m² per litre

Curing and Protection

Alternatively, keep QUICSEAL 111 treatments moist and cured for a minimum of 48 hours by spraying the treated surfaces with a fine mist of water three times a day for 2 - 3 days (under most conditions). In warmer climates, more frequent spraying may be required.

Packing & Coverage

Pack Size	: 25 kg
Coverage for	:
a) slurry coat	: 2.2 – 2.4kg/ m ² in 2 coats
b) dry shake	: 1.2 – 1.6 kg/m ² in 2 broadcasts

Technical Data

Water/ powder ratio	26%
Wet density	1.7
Colour	Grey
Moisture Content	< 5%
Alkalinity (Na ₂ O + 0.62 k ₂ O)	< 5%
Chloride Content	< 5%
Water absorption at 28 days	< 6%
Compressive Strength (N/mm ²) at 28 days	> 20
Setting time (EN 196)	
Initial	> 30min
Final	≤ 12 hours
Particle size (300µm retained):	< 10%

Storage

12 months in its original unopened packing in a cool ventilated place below 30°C. Do not store in direct sunlight.

Precautions

Do not use QUICSEAL 111 over previous coated surface without proper surface preparation.

Do not apply QUICSEAL 111 over expansion joints or chronic moving cracks.

Freshly applied QUICSEAL 111 treatment must be protected from extreme weather conditions such as rain, strong winds, high temperatures and freezing temperatures (below 45°C) for a period of not less than 48 hours after application.

Health & Safety

QUICSEAL 111 may contain chemicals that may cause irritation to the eyes and skin. Goggles, face-mask, rubber gloves and long sleeves should be worn when using the product.

Important Notes

The information set forth herein is furnished in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for use by persons having technical skill and at their own discretion and risk. Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of QUICSEAL products as of the date of publication of this document. QUICSEAL makes no other warranties and assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact QUICSEAL

Reference No. QS111/040920

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