

HIGHLY FLEXIBLE TWO COMPONENTS ACRYLIC MODIFIED CEMENTITIOUS WATERPROOF COATING - JK CEMENT PROFIX WPC11

Product Description: Profix WPC11 is Two-components, highly flexible cementitious elastomeric waterproof coat with excellent crack-bridging capability. Profix WPC11 can be applied by trowel or roller or spray for waterproofing of balconies, terraces, bathrooms and swimming pools.

AREA of USE : Profix WPC11 is suitable in below areas.

- Water channels, faces of dams, swimming pools, basins, storage tanks, etc.
- For protection of concrete structures and cementitious surfaces.
- Waterproofing of concrete water tanks, dams containing potable water.
- Waterproofing bathrooms, showers, balconies, terraces, swimming pools before laying tiles.
- Waterproofing plasterboard, cementitious surfaces, lightweight cement blocks, new or repaired structures.
- Protection of concrete surfaces which may meet sea water, de-icing salts, such as sodium or calcium chloride, and sulphates.

ADVANTAGES

- Withstand positive and negative hydrostatic pressures.
- High performance: crack-bridging capacity of >2 mm.
- Excellent mechanical properties.
- Compliance with EN 1504-2 and EN 14891.
- Excellent elongation
- Fluid consistency for easy application.
- Good adhesion to porous and non-porous substrates.
- Resistant to UV rays.
- Compatible with ceramic, mosaic and natural stone coverings.
- Low VOC content of < 1 g/L.
- Formaldehyde : Nil
- Does not contain Asbestos, Chromated Copper, Arsenate and Lead.

TECHNICAL CHARACTERISTICS : Profix WPC11 is a two-components waterproofing compound based on cementitious binders, fine aggregates, special chemical additives and liquid synthetic polymers. It consists of Part A Powder and Part B Liquid synthetic polymer. When the two components are mixed properly, a blend with a plastic consistency is obtained. It can be applied by brush and by roller or by spraying on both horizontal and vertical surfaces at a thickness of approximately 2 mm in two coats, 1 mm thick each layer. Profix WPC11 is waterproof and resistant to the penetration of carbon dioxide, Sulphur dioxide and sulphuric anhydride, and soluble salts such as chlorides and sulphates, which are present in seawater or in the ground. WPC11 has excellent bonding properties on all cementitious, ceramic and marble surfaces.

TECHNICAL INFORMATION :

Indication	Component A	Component B
Consistency	powder	liquid
Color	Unique light brown	White
Density (g/cm ³)	1.4	-
Density (g/cm ³)	-	1.0

APPLICATION DATA OF PRODUCT AFTER MIXING (at +20°C - 50% R.H.)

Color of mix	Unique light brown	
Mixing ratio (2:1)	Component A : 2	Component B: 1
Consistency of mix	Fluid, applicable by brush/spray	
Density of mix (kg/m ³):	1500 ± 200 as per ASTM D 1475	
Application temperature range:	From +5°C to +45°C	
Pot life of mix:	1 hour	
EMICODE:	EC1 Plus - very low emission	

FINAL PERFORMANCE (thickness 2.0 mm)

Performance characteristic	Test method	Declared Value as per Requirements according to EN 1504-2 coating (C) principles PI, MC and IR
Adhesion to concrete (mPa) by pull off: after 28 days at +20°C, 50% R.H.	EN 1542	≥ 1.5
Elongation at break - after 28 days at +20°C and 50% R.H. (%):	DIN 53504 modified	≥120
Static crack-bridging at +20°C expressed as maximum crack width - after 28 days at +20°C and 50% R.H. (mm):	EN 1062-7	from class A1 (0.1 mm) to class A5 (2.5 mm) from class B1 to class B4.2
Impermeability to water (capillary absorption)(kg/m ² -h)	EN 1062-3	< 0.1
Permeability to carbon dioxide (CO) - diffusion in equivalent air layer thickness S (m)	EN 1062-6	> 50



Requirements according to EN 14891

Water impermeability	EN 14891-A.7	no penetration and ≤ 20 g weight gain
Crack-bridging ability under standard condition (mm):	EN 14891 - A.8.2	≥ 0.75
Initial Tensile adhesion strength (mPa)	EN 14891-A.6.2	≥ 0.5
Tensile Adhesion after water contact (mPa)	EN 14891-A.6.3 or A.6.4	≥ 0.5
Tensile Adhesion strength after application of heat aging (mPa)	EN 14891-A.6.5	≥ 0.5
Tensile Adhesion strength after contact with lime water	EN 14891-A.6.9	≥ 0.5
Tensile Adhesion strength after contact with chlorinated water (mPa)	EN 14891-A.6.8	≥ 0.5

APPLICATION PROCEDURE:

PREPARATION OF THE SUBSTRATE

The surface must be cleaned and damp with clean water. Remove all loosely adhering cementitious particles, dust, laitance, grease, oil and removing compounds by washing down with high-pressure water or using sandblasting. In the kitchen, washrooms, toilets and other wet areas all openings must be sealed properly. All cracks larger than 1mm should be filled with Profix CRM11.

MIXING :

Pour 80% of component B (liquid) into a suitable, clean container. Then slowly add component A (powder) while stirring with a mechanical mixer. Carefully mix Profix WPC11 for 3-5 minutes, making sure that no powder remains stuck to the sides or the bottom of the container. Add the remaining 20% of Part B (Liquid) and continue stirring until a perfectly homogeneous mix is obtained. Use a low-speed mixer speed drill (300-400rpm) for this operation to avoid too much air entering the mix. Do not prepare the mix by hand. Do not add water to dilute the mix.

APPLICATION :

Profix WPC11 can be applied with brush, trowel, spray or long-haired roller to a 1 mm wet film thickness per coat. It must be applied on at least two even coats. Wait until the first coat is dry before applying the second coat, approximately 4-5 hours at 23°C and 50% relative humidity. Note that low temperatures and/or high humidity can extend dry times. When used for waterproofing terraces, balconies, basins and swimming pools, and for protecting substrates which have hairline cracks or elements which are particularly stressed, we recommend to embed alkali-resistant glass fiber mesh in the first layer of fresh Profix WPC11, as a reinforcement. After the mesh has been laid, finish the surface with a flat trowel and apply a second layer of Profix WPC11 when the first one has set (after 4-5 hours).

RECOMMENDATIONS FOR APPLICATIONS :

Do not apply Profix WPC11 at temperatures lower than +5°C. | Do not add cement, aggregates or water to Profix WPC11. Protect from rain and water spillage for the first 24 hours after application. | Do not apply on cementitious substrates not sufficiently cured.

PRECAUTIONS TO BE TAKEN DURING AND AFTER APPLICATION: No special precautions need to be taken when the temperature is around +30°C. During hot weather above +30°C, it is advisable to keep the product out of direct sunlight before use (powder and liquid). After application, and in particularly dry, hot or windy weather, we recommend that the surface is protected from rapid evaporation with sheets.

CLEANING: Profix WPC11 must be removed from tools and equipment with clean water immediately after use before material is drying.

YIELD : 20 Liters / 30 kg kit

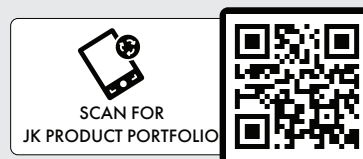
COVERAGE : Application by trowel or roller : Approx. 1.6 kg/m² per mm of thickness.

Spray gun application : Approx. 2.2 kg/m² per mm of thickness.

PACKAGING : Units of 30 kg set:
Component A: 20 kg Paper bags.
Component B: 10 Liter Plastic Jerry Can

STORAGE & MATERIAL HANDLING: Profix WPC11 can be kept for 12 months minimum in the original unopened pails in dry shaded places and at temperatures of 5-35 °C. Once opened, use as soon as possible. Store Profix WPC11 in a dry place and at a temperature of at least +5 to +35°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION: Care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention.



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