

High performance Epoxy resin waterproof grout

Uses

Free-flow epoxy grout for use in waterproofing pile-caps to ensure complete integrity of the waterproofing system. Also for applications where the building is being constructed on gas – contaminated land.

Advantages

- Non-shrink and hence ensures complete surface contact and bond
- Fully waterproof and compatible with Proofex membranes
- High compressive, tensile and flexural strengths
- Fast, convenient installation with rapid strength gain

Description

Proofex WG is a three-component system consisting of base resin, liquid hardener and specially graded inert fillers. It is suitable for thicknesses from 20-100 mm.

Design criteria

Example of Proofex WG applied to circular pile-caps



- 1 Proofex WG
- 2 *Proofex Engage
- 3 *Proofex LM

*Also available from Fosroc.

Where methane is present, the building needs to be constructed in accordance with Building Research Establishment Report 212.

Fosroc offers a comprehensive range of high performance, high quality construction products.

Technical support

Fosroc offers a technical support package to specifiers and contractors as well as technical advice from staff with unrivalled experience in the industry.

Properties

The following results are typical for the hardened grout at 20°C.

Test method for	Typical results
Density:	2025 kg/m³
Compressive strength (B 6319, Part 2: 1983) - 6 hours (24°C):	36 N/mm ²
1 day:	89 N/mm ²
3 days:	93 N/mm ²
7 days:	100 N/mm ²
Tensile strength (BS 6319, Part 7: 1985) 7 days:	14 N/mm ²
Flexural strength (BS 6319, Part 3: 1990) 7 days:	32 N/mm
Secant modulus (BS 6319, Part 6: 1984)	13 kN/mm ²

Chemical resistance

Proofex WG is resistant to oil, grease, fats, most chemicals, mild acids and alkalis, fresh and sea water. Consult Fosroc's Customer Service Department when exposure to solvents or concentrated chemicals is anticipated.

Pot life

Ambient temperature affects the time for which bulk material will remain fluid.

Typical values in minutes are:

	10°C	20°C	30°C
Proofex WG:	60	30	15

Exotherm

All epoxy systems will develop a temperature rise on mixing. Its extent will be a function of the volume to surface ratio, the ambient temperature as well as the mass and thermal conductivity of the surrounding materials. Contact Fosroc for specific data on each product.

Specification clauses

Supplier specification

All epoxy resin grouting where shown on the drawings, must be carried out using Proofex WG as manufactured by Fosroc and used in accordance with the manufacturer's data sheet.

Performance specification

All epoxy resin grouting where shown on the drawings, must be carried out with a factory packed product manufactured by a registered firm. The grout must be compatible with the chosen waterproof membrane. The hardened grout must have a compressive strength which exceeds

Fosroc® Proofex WG

99 N/mm² at 7 days, a tensile strength which exceeds 13 N/mm² at 7 days and a flexural strength which exceeds 31 N/mm² at 7 days.

The storage, handling and placement of the grout must be in strict accordance with the manufacturer's instructions.

Application instructions

Preparation

Concrete surfaces

All surfaces must be free from oil, grease, free-standing water or any loosely adherent material. Concrete surfaces should be cut back to a sound base. All dust must be removed and bolt holes or fixing pockets blown clean of any dirt or debris.

Steel surfaces

All steel surfaces should be shot blasted free of rust and flaky mill scale. Cleaned surfaces may be protected by the application of Nitoprime 28.

Formwork

The formwork should be constructed to be leakproof as Proofex WG is a free-flowing grout.

Mixing

Pour all the contents of the hardener pack into the base container. Mix using a slow speed power drill and paddle until homogeneous.

Pour all the resultant liquid into a container with a capacity of 15 to 25 litres. Add all the filler provided for each product. Mix using a slow speed power drill and paddle for 2 minutes or until a uniform colour is achieved in the grout.

Placing

The mixed grout should be poured steadily from one side only to eliminate the entrapment of air.

Continuous grout flow is essential.

Sufficient grout must be available prior to starting.

The time taken to pour a batch should be regulated to the time taken to prepare the next batch.

Cleaning

All tools and equipment should be cleaned immediately after use with Fosroc Solvent 102. Spillages should be absorbed with sand or sawdust and disposed in accordance with local regulations.

Limitations

Temperature

During application

The cure rate will be slower near 5°C, and application should not be attempted when the temperature is 5°C and falling. Where application temperature exceeds 20°C note the pot life given previously.

In service

The cured grout, which is completely resistant to frost and sub-zero temperatures, is suitable for use up to 45°C.

Estimating

Supply

Proofex WG: 16 litre packs containing liquid, base and hardener

Storage

Proofex WG has a shelf life of 12 months if kept in dry conditions at 20°C.

Precautions

Health and safety

Fire

Fosroc Solvent 102 is flammable. In the event of fire extinguish with CO₂ or foam.

Flash point

Fosroc Solvent 102:	33°C
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For additional information see relevant Product Safety Data Sheet.

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