

Technical Datasheet

IZOZEN[®] FLEXPRO SEAL 100

Two-Component, Flexible, Waterproofing Cement-Based Slurry

Description

IZOZEN[®] FLEXPRO SEAL 100 is a two-component, flexible, brushable waterproofing slurry consisting of a cement-based powder mortar (component A) and an Acrylic resin (component B). After hardening, it forms a seamless, jointless membrane, with the following advantages:

- Crack-bridging ability.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8. It can also withstand negative pressure.
- Vapor permeability.
- Suitability for potable water tanks, as well as food contact surface according to W-347.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.
- Resistance to sewage water (sewage water treatment plants, sewers, etc.).
- Resistance to aging.
- Bonding to slightly wet surfaces without priming.
- Simple and low-cost application.
- Suitable for green roofs, flower beds, etc.
- Also works as a radon barrier.
- Suitable for portable water

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, bricks, cement blocks, terrazzo, gypsum boards, wood, metal, etc. Ideal in cases where high flexibility and strong adhesion of the waterproofing layer are required. Suitable for waterproofing substrates subject to expansion-contraction or vibration and show or are expected to show hairline cracks, such as flat roofs, balconies, above ground water tanks, swimming pools, inverted roofs, etc.

It can also be used for waterproofing basements, internally or externally, against moisture or water under pressure.

Technical data

Form:	Cementitious co-polymers
Colors:	Grey/white/RAL 7621, 5002
Water demand:	1.00-2.00 l/Kit
Application temperature:	from +5°C to +35°C
Mixing Time	3-5 Min

Directions for use

1. Substrate preparation

- The substrate must be clean, free of oil or grease, loose material, dust, etc.
- Water leaks should be plugged with IZOZEN[®] FLEXPRO FASTFIX-100, ultra rapid-setting, cementitious leak-plugging mortar.
- Any cavities on concrete surface should be filled and smoothed out with IZOZEN[®] FLEXPRO DUROCRETE / DUROCRETE-F or a cement mortar improved with IZOZEN[®] FLEXPRO LATEX, after all loose aggregate has been removed and the surface has been well dampened.
- Starter bars and spacers should be cut to a depth of about 3 cm into concrete and holes should be filled, as described above.
- Existing construction joints are opened longwise in a V shape to a depth of about 3 cm and are subsequently filled, as above.
- Corners, like wall-floor junctions, should be filled and smoothly rounded with IZOZEN[®] FLEXPRO DUROCRET / DUROCRETE-F or a cement mortar improved with IZOZEN[®] FLEXPRO LATEX (formation of a fillet, triangular in cross section, with sides of 5-6 cm).
- In case of masonry walls, joints should be first filled carefully, otherwise it is recommended to apply a cement mortar layer first improved with IZOZEN[®] FLEXPRO LATEX.
- For waterproofing basements in old buildings, the existing plaster should be removed to a height of at least 50 cm above water level, before proceeding as above.
- Wherever flat surface formation is required (smoothing, slope creation, etc.) the use of IZOZEN[®] FLEXPRO DUROCRET / DUROCRETE-F or a mortar improved with IZOZEN[®] FLEXPRO LATEX is recommended.

2. Application

The 15 kg bag of component A is added to the 05 Ltr of the liquid component B under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application.

Pot life:	60 Min (+23°C)
Bulk density of dry mortar:	1.40 ± 0.05 Kg/L
Bulk density of fresh mortar:	1.70 ± 0.1 kg/L
Initial tensile adhesion strength:	≥ 0.7 N/mm ²
Tensile adhesion strength after water contact:	≥ 0.6 N/mm ²
Crack-bridging ability at +23°C:	≥ 1.13 mm

Durability against:

- Rain: after approx. 4 hours
- Walking: after approx. 1 day
- Tile fixing: after approx. 1 day
- Water under pressure: after approx. 7 days
- Backfill: after approx. 3 days

Shelf life – Storage

Component A, 06 months from production date if stored in original, unopened packaging,

Component B, 24 Month from date of production

Remarks

- In case of water under pressure, the structure bearing the waterproofing layer (wall, floor, etc.) should be properly designed in order to be sufficiently static to withstand hydrostatic pressure.
- Temperature during application should be between +5°C and +35°C.
- Due to cement content, the component A of IZOZEN® FLEXPRO SEAL 100 reacts with water forming alkaline solutions, thus is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging before use.

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The material is applied by brush in two or more layers, depending on the water load. Layers thicker than 1 mm should be avoided, because the material may crack. Each new coating is applied after the previous one has dried. The freshly coated surface should be protected from high temperatures, rain and frost.

In case IZOZEN® FLEXPRO SEAL 100 needs to be locally reinforced (inside corners where forming fillets is not necessary, at junctions, etc.), the use of a 10 cm wide fiberglass mesh strip (65 g/m²) is recommended.

Consumption

Depending on the water load, minimum consumption and relevant thickness should be as follows:

Water load	Minimum consumption	Minimum thickness
Moisture	1.6 kg/m ²	~ 1 mm
Water without pressure	2.4 kg/m ²	~ 2 mm
Water under pressure	3.0-3.5 kg/m ²	~ 2.5-3.0 mm

Packaging

15 Kg Component A (Powder)

05 Ltr Component B (Liquid)

IZOZEN® Health and Safety Message

- Always wear safety goggles, Mask, Helmet when working with hazardous materials.
- Follow safety procedures at all times when using power tools.
- Make sure your work area is tidy and free of trip hazards.
- Watch where you're walking – don't run in the workplace!
- Always use the appropriate lifting technique when moving heavy objects.
- Keep jewelry and other loose objects away from machinery.
- Don't eat or drink near hazardous materials.
- Report unsafe conditions immediately to your supervisor.
- Wear the correct clothing for the job – no loose clothing or jewelry!
- Take regular breaks and stay hydrated while working.
- Always be aware of your surroundings.
- Always use personal protective equipment when working with chemicals.

FLEXPRO

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 2024