

RC 221

FIBRE-REINFORCED WATERPROOF MORTAR FOR CONCRETE AND MASONRY

Waterproofing



ADVANTAGES OF RC 221

- ✓ Direct application on masonry, even buried
- ✓ For waterproofing basements, ponds, swimming pools and water buffer basins
- ✓ Manual or mechanical application
- ✓ Can remain uncovered
- ✓ Applicable in a layer thickness up to 20 mm

Description

RC 221 is a ready-to-use, fibre-reinforced waterproofing mortar based on cement, quartz sand, fibres and additives

Application domain

RC 221 is a mortar intended to ensure the waterproofing of concrete and masonry inside and outside, even if buried and under water. For example for ponds, swimming pools, basement walls, retaining walls, water buffer basins, etc.

The mortar can be applied manually or mechanically (spraying).

Substrate

Admissible substrates: masonry, concrete substrates and prestressed concrete products

The substrate must be clean and structurally sound, and must have undergone an appropriate surface preparation in which all loose or poorly adhering parts have been removed. The substrate must also be free of traces of oil, grease, cement residue, post-treatment products, old coatings and any substance that could adversely affect the adhesion of the mortar.

For specific locations (edges, corners between walls/floorboards, walls/walls):

Make rounded baseboards with RC 221. Allow to dry before covering. Skirting boards must be installed before plastering the walls and performing the substrate. They can consist of different parts according to the specific characteristics of the works (stairs, free forms) and the corresponding covering.

Moisten the substrate the day before application. Moisten the substrate before applying the mortar. The substrate must not be soaked.

Application instructions

Mixing of RC 221

Mix RC 221 exclusively with clean potable water, preferably using a low-speed electric mixer (± 500 rpm), a concrete mixer, or the mixing tank of a suitable spray machine. Manual mixing is only recommended for small quantities.

Standard mixing ratio: one 25 kg bag with approximately 4.0 to 4.5 litres of water.

Pour the required amount of water into a clean container, then slowly add the dry powder while beginning to mix. Mix for at least 3 minutes until a homogeneous, lump-free paste is obtained. Let the mixture rest for approximately 2 minutes before use. Apply the mortar within 45 minutes after mixing.

Note: Only prepare the amount of product that can be used within the working time.

Application of RC 221

RC 221 is applied manually with a trowel, mechanically with a spraying machine (wet) or with a SABLON funnel gun in 1 or 2 spray passes. Work in small sections so the scraped finish can be done within the product's open time (45 minutes), especially on surfaces exposed to heat.

Walls in concrete blocks (hollow or solid blocks with reinforcing horizontal and vertical joints, swimming pools and ponds and formwork blocks)

Apply a first bonding/scratch coat with a thickness of 3 to 5 mm. Once the layer starts to harden (after approx. 3 to 4 hours – hard under fingernail but still moist), apply a second RC 221 layer with a thickness of 10 to 20 mm. Once the final layer is applied, level with a screed and float the surface (the floated texture should match the chosen final finish).

Walls in levelled concrete

Mix ratio: one 25 kg bag with approx. 4.0 to 4.5 litres mixing water (90% water + 10% RC ACRYPLAST).

On formwork concrete, spray a bonding/scratch layer of 3 to 5 mm. Flatten thick spots to avoid overloading. Once the scratch coat has partially hardened (after approx. 3 to 4 hours), apply a second layer of RC 221 (max. 10 mm). Scraped finish.

Pond or pool floors

Mix ratio: one 25 kg bag with approx. 4.0 to 4.5 litres mixing water (2/3 water + 1/3 RC ACRYPLAST).

Apply the mortar gradually as the work progresses (mortar should feel tacky). Apply RC 221 in a thickness of 10 to 20 mm. Flatten immediately after spreading and compact firmly.

Consumption

17 kg/m²/cm thickness.

Technical characteristics

PRODUCT DATA

Appearance	Powder
Color	Gray
Dry bulk density	1,7 kg/l

APPLICATION DATA

Mixing ratio	1 bag + 4 – 4.5 liters water
Minimum application temperature	+ 5°C
Maximale application temperature	+ 30°C
Working time	~ 45 minutes

TECHNICAL DATA

Adhesion	ca. 1.2 N/mm ²	
Compressive strength	Ca 45 N/mm ² after 28 days	EN 998-1
Water absorption by capillarity	W2 ≤ 0.2	EN 998-1
Water vapour transmission coefficient	≤ 25	EN 998-1
Thermal conductivity	≤1.25 W/m.K	EN 998-1
Reaction to fire	F	EN 998-1

Safety

Consult the most recent safety data sheet.

Remarks

- The application temperature is between +5°C and +35°C.
- Cure or carefully rewet immediately after application.
- In case of manual application, repetitions should be avoided.
- Avoid direct sunlight when applying outside.
- Do not apply to frozen or thawing surfaces. No frost should act on the product for 24 hours after application.
- Is not suitable for repairing cracking in the substrate. Use RC 730 Betonrep.
- It is prohibited to add hydraulic binder or auxiliary agents.

Cleaning of equipment

Clean all equipment and tools with water immediately after use. Cured material can only be removed by physical scraping.

Storage / Shelf life

18 months after date of manufacture in the original, unopened packaging in a dry, frost-free space.

Packaging

Bags of 25 kg (art. no. 51250) on disposable pallets of 49 bags, protected with plastic stretch film.

Photos



Legal Notes

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