

RC MULTIFLEX 2M

MULTIFUNCTIONAL FLEXIBLE SEALING SYSTEM FOR BOTH INDOOR AND OUTDOOR APPLICATIONS

Waterproofing | Concrete repair



ADVANTAGES OF RC MULTIFLEX 2M

- ✓ Combines the properties of sealing slurries and bitumen-thick coatings
- ✓ Waterproofing of infrastructure and civil engineering works in accordance with standard EN 1504 - 2
- ✓ High adhesion strength
- ✓ Extremely flexible, elastic and crack bridging
- ✓ Mineral & Solvent-free
- ✓ Ready to use
- ✓ Easy to apply, both manually with a brush or spatula and by spraying mechanically

Description

RC MULTIFLEX 2M is an elastic hydraulic two-component mortar for performing various waterproofing works and protecting various structures. When applied, the product forms an adhesive, elastic impermeable film.

Area of application

Waterproofing works such as:

- Curative building waterproofing of existing buildings in accordance with WTA
- Base and floor wall sealing
- New building waterproofing
- Bonding of perimeter insulation boards
- Bonding of old bitumen
- Reservoirs, drip trays
- Balconies, terraces (excluding roof terraces), bonded systems under tiles or mortar screeds
- Shuttering of lift shafts, car parks, buried areas
- Waterproofing for bonded systems under tiles

Properties

- Forms an adhesive, elastic impermeable and crack-bridging film.
- Effective curing on solid surfaces, even partially wet
- Highly resistant to UV radiation and frost/thaw cycles
- Adheres to various types of surfaces (concrete, masonry, brick, plasterboard, plastic, metal, ceramic, polystyrene, wood, etc.)
- Resistant to all natural aggressive substances occurring in soil
- Solvent-free and environmentally friendly
- Bitumen-free
- Can be applied by brush, stainless steel trowel or by spraying with worm pump

Substrate

The surface must be sound and level. Remove dirt, oil, paint and other materials. Level the surface by removing any irregularities and mortar residues. Penetrating pipes must be clean: roughen PVC pipes with sandpaper and clean metal pipes thoroughly.

For repairing voids, gravel nests, other local damages and for creating a coving joint, use [RC 221](#). Ensure all irregularities are smoothed out to create an optimal bonding surface.

Porous substrates or surfaces affected by salts should be treated with [RC SALSPER](#).

Application instructions

Preparation of the product

Take the bucket of liquid and shake it vigorously before pouring into a sufficiently large mixing vessel. Using a mechanical mixer at low speed (300-500 rpm), gradually mix the powder with the liquid until an elastic, homogeneous paste is obtained. Mix for approx. 3 minutes. Scrape off any adhering powder residue on the inner edge of the bucket and mix well with the paste.

During mixing, always keep the mixer at the bottom of the mixing bucket to avoid air entrapment.

Product placement

RC MULTIFLEX 2M must always be applied in two coats of 1.0 to 1.5 mm each. The second coat may be applied after a minimum of 2 hours, and only once the previous coat has sufficiently dried and cured. The working time is limited to a maximum of 20 minutes after mixing. Uniform and complete coverage of the surface is essential to ensure correct system performance.

Reinforcement net

To improve the elastic performance, in the case of application in positive pressure (for example, hairline cracks with dynamic behaviour, in swimming pools on the roof and structures that may be subject to cracks), it is advisable to apply a reinforcement net in the first layer. Press it down with a metal spatula until it is fully embedded. The edges of adjacent sheets must overlap each other by 10 cm.

Foundation walls

When waterproofing the foundation walls, allow RC MULTIFLEX 2M to cure for at least 16 hours after application before refilling.

Water reservoir / basins

When waterproofing structures intended to contain water, observe a curing phase of at least 3 days. After 7 days of drying, the water reservoir may be filled.

Finish

Once completely dry, RC MULTIFLEX 2M can be finished with a vapour-open render like [RC Calcoliss 300](#) or a vapour-permeable paint system like [RC Siloxcoat](#).

Before applying any type of protective coating or finish (ceramic tiling, protective screed, plaster, cement-based levelling compound, plastic drainage, etc.), allow at least 16 hours of drying. At low temperatures around +5°C, wait nearly 24 hours.

When installing wall or floor tiles, they should be bonded using C2-class tile adhesive, preferably with S1 or S2 deformability class.

Equipment

Suitable mixing equipment, layer thickness trowel, roller, sticky trowel, block brush, top cup gun.

The product can also be applied using a Jetpro 100 type worm pump with an external compressor type Europro 40 supplying 450 litres and a fully automatic gun that seals both air and material with an opening of 4-6 mm.

Consumption

1.5 to 1.7 kg /m² / layer of 1mm. Depending on surface roughness. Apply in 2 layers.

Determine exact consumption quantity on a sufficiently large test surface.

Technical information

Characteristics	Values
Aspect	Component A: grey powder / Component B: white liquid
Lifespan (+20°C)	20 minutes
Processing temperature (+20°C)	+5°C to +30°C
Density paste	> 1,7 kg/l

Specification	Test method	Performance requirements EN 1504-2	Specified performance (*)	Gecertificeerde prestaties (**)
Adhesion during degradation tests:	EN 1542	≥ 0.8 MPa	≥ 0.8 MPa	0,89 MPa
Resistance to accelerated aging:	EN 1062-11	no swelling	-	fulfilled requirement
Capillary absorption and water permeability:	EN 1062-3	≤ 0.1 kg*m ⁻² *h ^{-0.5}	≤ 0.1 kg*m ⁻² *h ^{-0.5}	≤ 0.1 kg*m ⁻² *h ^{-0.5}
Vapor permeability:	EN 7783-2	Class 1 - $s_d < 5$ m	Class 1 - $s_d < 5$ m	$s_d = 3,2$ m
CO ₂ permeability:	EN 1062-6	$s_d > 50$ m	-	$s_d > 102$ m
Fire reaction:	EN 13501-1		-	Euroclass F

Specification	Certifying body	Test method	Certified performance (**)
Impermeability under negative pressure (concrete structure water/concrete: 0.7)	SA (Switzerland)	EN 12390-8	8 Bar: no entry

Security

Further information regarding safety during transport, storage, waste disposal, and ecological aspects can be found in our latest safety data sheets.

Remarks

- Do not apply to surfaces soaked with water (see application).
- Do not add water to the mix, RC MULTIFLEX 2M is a ready-made product.
- Do not apply RC MULTIFLEX 2M in temperatures higher than +30°C and lower than +5°C or in expected freezing temperatures within 24 hours.
- Protect the wet mortar from the rain, direct sunlight, frost and condensation.
- The maximum layer thickness of RC MULTIFLEX 2M is 1,5 mm per layer.
- Check the compatibility with the substrate by means of prior tests.
- Do not mix mortar that has already begun to harden with water or add to fresh mortar.
- Walkable areas must be protected from abrasion.
- A finish layer with solvent-based paint may damage RC MULTIFLEX 2M.

Cleaning of equipment

Clean tools with water before the mortar hardens.

Dried material can only be removed mechanically.

Storage / Shelf life

12 months after the date of manufacture in the original, unopened packaging, to protect against moisture, frost and temperatures above 40°C.

Waste

Larger product residues should be disposed of in the original packaging in accordance with applicable regulations. Completely empty packaging must be recycled. Must not be disposed of together with household waste. Do not throw into the sink. Do not discharge into the sewage system.

Packaging

Set of 20 kg: 15 kg powder + 5 kg liquid

Specifications

Specification	Test method	Certifying body	Values (g/l)
VOC value	Directive 42/2004/EC ISO 11890-2 ASTM D 6886-12	Eurofins 392-2017-00479601	< 1 g/l

The cited data is obtained in a laboratory at + 20 ° C and 60% RH.

* Performance thresholds guaranteed by Reynchemie

** Performance values certified by accredited third parties

	Reynchemie nv Industrieweg 25, 8800 Roeselare (B) 0001-1370-CPR-1939 EN 1504-2:2004 RC MULTIFLEX 2M Products and systems for the protection and repair of concrete structures Part 2: Surface protection systems for concrete Reaction to fire: Class F Water vapour permeability: Class I Carbon dioxide permeability: $S_d \geq 50 \text{ m}$ Capillary absorption and permeability to water: $< 0.1 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$ Adhesion: $\geq 0.8 \text{ N/mm}^2$ Thermal compatibility: • Part 1: Un/freezing cycles: NPD Crack bridging properties (method A): Class A4 Performance after exposure to the action of artificial atmospheric agents: Test passed Methods of conditioning before testing (7 days at 70° C): NPD Linear shrinkage: NPD Coefficient of thermal expansion: NPD Cross cut: NPD Slip resistance: NPD Antistatic behavior: NPD Adhesion on wet concrete: NPD Hazardous substances: See SDS
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	Reynchemie nv Industrieweg 25, 8800 Roeselare (B) 24 - DoP- 0050 EN 14891:2012 RC MULTIFLEX 2M Normal liquid-applied, two component, water impermeable product CM01P, for all external installations and swimming pools, beneath ceramic tiling (bonded with a C2 adhesive in accordance with EN 12004)
Initial tensile adhesion strength	$\geq 0,5 \text{ N/mm}^2$
Tensile adhesion strength after water contact	$\geq 0,5 \text{ N/mm}^2$
Tensile adhesion strength after heat ageing	$\geq 0,5 \text{ N/mm}^2$
Tensile adhesion strength after freeze-thaw cycles	$\geq 0,5 \text{ N/mm}^2$
Tensile adhesion strength after contact with lime water	$\geq 0,5 \text{ N/mm}^2$
Tensile adhesion strength after contact with chlorinated water	$\geq 0,5 \text{ N/mm}^2$
Waterproofing	No penetration and $\leq 20\text{g}$ weight gain
Crack bridging ability under standard conditions (+23 °C)	$\geq 0,75 \text{ mm}$
Crack bridging ability at low temperature (-5 °C)	$\geq 0,75 \text{ mm}$
Dangerous substances:	See SDS

Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Reynchemie products, are given in good faith based on Reynchemie current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Reynchemie recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Reynchemie reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.