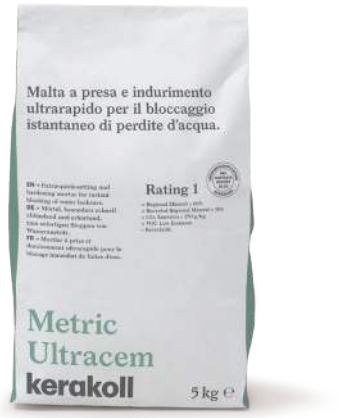
Code: E1326 2024/01 EN

Metric Ultracem



Extra-quick-setting and hardening mortar for instant blocking of water leaks.

Metric Ultracem is a specific mortar to immediately block specific or diffusive water leakage on concrete structures.

1. **Immediate blockage of water leaking in negative pressure**
2. **Developing high levels of mechanical resistance in a very short time**
3. **For permanent contact with water under pressure**
4. **Excellent plastic consistency obtained simply by mixing with hands**

Rating 1

GREENBUILDING RATING
REF. GBR DATA REPORT 10.23
APPROVED

- × Regional Mineral ≥ 60%
- × Recycled Regional Mineral ≥ 30%
- × CO_2 Emission ≤ 250 g/kg
- × VOC Low Emission
- ✓ Recyclable

kerakoll

Areas of application

→ Intended use:
Blocking of specific or diffusive water leakage under negative pressure on concrete elements:
- foundations, lift shafts, basement areas and underground car parks
- foundation walls and swimming pools
- canals, drains, tanks, manifolds, siphons and water reservoirs
- bridges, viaducts, tunnels and dams

Instructions for use

→ Preparation of substrates
The substrate must be perfectly cured, free from hygrometric shrinkage, consistent, free of loose or easily removable debris, and free from parting compounds, oil, grease or paint.
The most suitable substrate preparing methods are sandblasting, shot peening or washing using pressurised water.

→ Preparation
Prepare Metric Ultracem by quickly mixing by hand the powder with the amount of water indicated on the packaging until a mixture with a plastic consistency is obtained. Always wear protective rubber gloves. Mixing time is about 20 seconds; as the temperature of the mixture increases, mixture must be applied immediately. Mix only the quantity required for each individual application.

→ Application
- Localised water leakage: drill a dove-tail hole at least 6 – 7 cm deep and as wide as necessary, apply Metric Ultracem by pressing the product in a plastic consistency into the gap and smoothing the surface by hand with circular movements until it is fully hardened.
- Diffusive water leakage by permeation from the substrate: create a network of drainage channels leading to a drain. Use Metric Ultracem to plug the perforated pipes or half pipe channels, running the water off towards the drain that should be left in place for 15 days after waterproofing with Metric Osmotic waterproofing covering.
- Water infiltration at corners (wall-floor or wall-wall) can be stopped by creating a drain between the two surfaces and appropriately rounding off the entire length of the joint using Metric Ultracem.

→ Cleaning
Use plastic containers and spreaders. Residual traces of hardened Metric Ultracem can be removed by bending the containers and the tools, to detach the product.

Certificates and marks

S-P-11324 EPD environdec.com

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

* *Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).*

Abstract

Supply and laying of an extra-quick-setting and hardening mortar, such as Metric Ultracem by Kerakoll, for the immediate blocking of water leakage under negative thrust on concrete structures. GreenBuilding Rating 1.

Technical Data compliant with Kerakoll Quality Standard		
Appearance	Powder	
Apparent volumetric mass	≈ 1.04 kg/dm³	UEAtc
Mineralogical nature of inert material	silicate - carbonate	
Grading	≈ 0 – 0.3 mm	UNI 10111
Shelf life	≈ 6 months from production in the original sealed packaging, protect from humidity	
Pack	Bags 5 kg	
Mixing water	≈ 1.5 l / 1 bag 5 kg	
Density of the mixture	≈ 2.06 kg/dm³	UNI 7121
pH of the mixture	≥ 12	
Pot life	≈ 40 s	
Start/End of setting	≈ 60 s	EN 196/3
Temperature range for application	from +5 °C to +35 °C	
Minimum thickness	≥ 4 cm	
Coverage	≈ 1.6 kg/dm³	

Values taken at +21 °C, 60% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

Performance			
HIGH-TECH			
Performance characteristic	**Test Method**	**Performance requirements of standard EN 1504-3, Class R4**	**Metric Ultracem performance**
Resistance to the pressure of water	DIN 1048	None	> 7 bar (thickness 4 cm)
Adhesive bond	EN 1542	None	> 1.6 MPa
Compressive strength	EN 12190	None	> 10 MPa (10 min)
			> 20 MPa (24 hrs)
			> 25 MPa (28 days)

Warning

→ Product for professional use
→ abide by any standards and national regulations
→ store the product away from any sources of humidity and out of direct sunlight
→ use at temperatures between +5 °C and +35 °C
→ do not add binders or additives to the mixture
→ do not apply to dirty, loose and flaking surfaces
→ do not apply on gypsum, metal or wood
→ following application, protect from direct sunlight and wind
→ allow the product to cure during the first 24 hours
→ if necessary, ask for the safety data sheet
→ for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com

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