

# Kerabuild® Eco Ultracem

**Eco-friendly, instant-setting and extra-rapid hardening waterproofing mortar, ideal for use in GreenBuilding. Recyclable as an inert material at the end of its life.**

Kerabuild® Eco Ultracem is a specific mortar to immediately block leaks of water from specific points or across foundations, lift shafts, car parks, basement areas, exterior foundation walls, swimming pools, irrigation channels, drains, baths, drinking water collection tanks and reservoirs, tunnels and bridges.



**GREENBUILDING RATING®**

**Kerabuild® Eco Ultracem**  
 - Category: Inorganic Mineral Products  
 - Class: Protective and Waterproofing Products for Concrete  
 - Rating: Eco 1

	Recycled Mineral ≥ 20%	Recycled Mineral ≥ 30%	≤ 250 g/kg	Indoor Air Quality	Recyclable
					Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

**PRODUCT STRENGTHS**

- Immediate blockage of water leaking in negative pressure, developing high levels of initial mechanical resistances
- Guaranteed for permanent contact with water under pressure
- Excellent plastic consistency obtained simply by mixing with hands

**ECO NOTES**

- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact

**AREAS OF USE**

**Use**  
 Block:

- leaks from specific points or across foundations, hoistway pits, underground car parks and basement areas, exterior foundation walls, swimming pools, irrigation channels, drains, water tanks, drinking water collection tanks and reservoirs, tunnels and bridges where water is in negative hydrostatic thrust

Suitable for concrete.

**Do not use**  
 On gypsum walls, on plasters/renders and flexible substrates.

**INSTRUCTIONS FOR USE**

**Preparation of substrates**  
 The substrate must be perfectly cured, free from hygrometric shrinkage, solid (i.e. free of loose or easily removable debris) and clean. The most suitable cleaning methods are sandblasting or washing with pressurised water. In the presence of concentrated water infiltrations, drill a dove-tail hole at least 6/7 cm deep and as wide as necessary. Block the leak directly. In the presence of widespread infiltration where water has permeated the substrate, create a network of drainage channels that converge in a discharge point. Use Kerabuild® Eco Ultracem to plug the perforated or half pipe channels, running the water off towards the drain that should be left in place for 15 days after waterproofing with Kerabuild® Eco Osmocem eco-friendly, osmotic action, mineral covering.

## INSTRUCTIONS FOR USE

### Preparation

To prepare Kerabuild® Eco Ultracem, mix 5 kg of powder with approximately 1.5 litres of clean water. Wearing a rubber glove, quickly mix the quantity required by hand until a mixture with an even plastic consistency is obtained. This will take roughly 20 seconds. Apply the product as soon the mixture starts to heat up.

### Application

Apply the product in a plastic consistency by pressing it into the gap and smoothing the surface by hand with circular movements until it is fully hardened. Mix only the quantity required for each individual application. Wear protective rubber gloves. Use at a temperature above +5 °C. Do not add binders, inert materials or additives.

### Cleaning

Use plastic containers and spreaders. Residual traces of Kerabuild® Eco Ultracem can be removed by bending the containers and tools to detach the product.

## SPECIAL NOTES

**Angular couplings:** 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 Kerabuild® Eco Ultracem.

**Interventions to block water:** apply infill to block the water in the prepared hole, with the hole reaching at least 1 cm from the level of the wall. Grout the top of the hole with Kerabuild® Eco mineral mortar or Kerabuild® Eco Epobond organic mineral system.

## ABSTRACT

*Block leaks of water in counterthrust in concrete structures, reinforced concrete, surfaces in cement-based plaster/render integral with the substrate, carried out with an eco-friendly, instant-setting and extra-rapid hardening waterproofing mortar, with GreenBuilding Rating Eco 1, such as Kerabuild® Eco Ultracem by Kerakoll Spa, for a minimum thickness of 40 mm and coverage of  $\approx 1.6 \text{ kg/dm}^2$ .*

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Pre-mixed	
Apparent volumetric mass	$\approx 1,04 \text{ kg/dm}^3$	UEAtc
Mineralogical nature of inert material	silicate - crystalline carbonate	
Grading	$\approx 0 - 250 \mu\text{m}$	UNI 10111
Shelf life	$\approx 6$ months in the original packaging in dry environment	
Pack	Bags 5 kg	
Mixing water	$\approx 1,5 \text{ l} / 1 \text{ bag } 5 \text{ kg}$	
Specific weight of the mixture	$\approx 2,06 \text{ kg/dm}^3$	UNI 7121
pH of the mixture	$\geq 12$	
Workability time	$\approx 40 \text{ s}$	
End setting time	$\approx 60 \text{ s}$	EN 196/3
Temperature range for application	from +5 °C to +30 °C	
Minimum infill thickness	$\geq 4 \text{ cm}$	
Coverage	$\approx 1,6 \text{ kg/dm}^2$	

*At a temperature of +23 °C, 50% R.H. and no ventilation.*

## PERFORMANCE

### HIGH-TECH

Resistance to the pressure of water	≥ 7 bar (thickness 4 cm)	DIN 1048
Adhesive bond	≥ 1,6 MPa	EN 1542
Compressive strength:		
- after 10 min.	≥ 10 MPa	EN 12190
- after 24 hrs	≥ 20 MPa	EN 12190
- after 28 days	≥ 25 MPa	EN 12190

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

## WARNING

### - Product for professional use

- abide by any standards and national regulations
- use at temperatures between +5 °C and +30 °C
- wear protective gloves when handling the product
- make sure the substrate is not frozen
- protect surfaces from direct sunlight and wind
- do not add different binders or additives to the mixture
- do not lay on gypsum, metal or wood
- do not apply on dirty or loose surfaces
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service - [globalservice@kerakoll.com](mailto:globalservice@kerakoll.com)

The Eco and Bio classifications refer to the GreenBuilding Rating Manual 2012. This information was last updated in October 2012 (ref. GBR Data Report - 11.12); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://www.kerakoll.com). KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

Kerakoll  
Quality  
System

ISO 9001  
CERTIFIED

**KERAKOLL**  
The GreenBuilding Company

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