

# Isobuild Eco Block

Eco-friendly, single-component mineral adhesive&finishing product.

Isobuild Eco Block is suitable for high-performance laying and subsequent finishing of cellular concrete blocks. Ensures long-lasting thermal insulation of load-bearing and non load-bearing structures. EI 180 fire-resistant according to EN 13501-2. Internal, external.



1. Grade EI 180
2. Ideal for laying and finishing
3. Prevents the formation of heat channels

## Rating 5



- ✓ Regional Mineral  $\geq 60\%$
- ✓ Recycled Regional Mineral  $\geq 30\%$
- ✓ CO<sub>2</sub> Emission  $\leq 250$  g/kg
- ✓ VOC Low Emission
- ✓ Recyclable

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## Areas of application

### → Use

Building by bonding of:

- cellular concrete block load-bearing walls
- thermal insulation blocks infill walls
- fire-break walls

Surface finishing of:

- cement-based plasters/renders
- thermal plasters
- concrete and cellular concrete walls

For internal and external use on cellular concrete blocks and panels, concrete and cement-based plasters.

Do not use on flexible or gypsum-based substrates; to lay gypsum-based blocks; for thicknesses greater than 5 mm.

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## Instructions for use

### → Preparation of substrates

The substrate must be compact and clean, i.e. free from dust and grease. Remove any loose debris from the blocks. On hot days or when using highly absorbent materials, dampen the substrate before applying Isobuild Eco Block as a finishing coat.

### → Preparation

Isobuild Eco Block is prepared by mixing 25 kg of powder with the amount of mixing water indicated on the bag. Pour the water into a clean container and gradually add the powder, mixing with a mechanical, low-rev agitator until a creamy, smooth, lump-free mixture forms.

### → Application

Spread the adhesive straight onto the blocks using a specific toothed spreader. Bring the components to be bonded together and press firmly and evenly to ensure they are both well-coated with the adhesive. The end sections of the blocks must also be bonded.

To apply surface finishing, damp the substrate then apply the first coat, smoothing it off completely using a steel, smooth spreader. Apply the second coat until the required thickness is obtained.

### → Cleaning

Isobuild Eco Block can be removed from tools and surfaces with water before the product hardens.

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## Special notes

Dampen the blocks when laying on very hot days or when working in direct sunlight. If a surface film forms, remove the adhesive and replace it with a fresh layer of the product.

When creating finishing surface layers, lay a

glass-fibre reinforcing mesh over large surface areas that are particularly susceptible to thermal shock. On completion, protect from rain for the first 24 hours.

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## Certificates and marks



\* 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

The bonding of cellular concrete blocks must be carried out with a single-component, eco-friendly mineral adhesive&finishing product with GreenBuilding Rating 5, such as Isobuild Eco Block by Kerakoll Spa, to be applied straight to the underlying block using a suitable toothed spreader.

Finish the surfaces of cellular concrete blocks with a single-component, eco-friendly, mineral adhesive&finishing product with GreenBuilding Rating 5, such as Isobuild Eco Block by Kerakoll Spa, that confers thermal properties to the surface akin to those of the underlying block. Coverage will be  $\approx 2 - 3 \text{ kg/m}^2$  for bonding and  $\approx 1.4 \text{ kg/m}^2$  for the finishing coat per mm of thickness.

## Technical Data compliant with Kerakoll Quality Standard

Appearance	White pre-mixed	
Type of mortar	thin coat mortar for masonry (T)	EN 998-2
Apparent volumetric mass	$\approx 1.31 \text{ kg/dm}^3$	UEAtc/CSTB 2435
Mineralogical nature of inert material	silicate - crystalline carbonate	
Grading	$\approx 0 - 800 \mu\text{m}$	
Shelf life	$\approx 12$ months from production in the original sealed packaging, protect from humidity	
Pack	25 kg bags	
Mixing water	$\approx 7.5 \text{ l} / 1 \times 25 \text{ kg bag}$	
Apparent volumetric mass:		
- wet mortar	$\approx 1.65 \text{ kg/dm}^3$	EN 1015-6
- dry, hardened mortar	$\approx 1.29 \text{ kg/dm}^3$	EN 1015-6
pH of the mixture	$\geq 12$	
Temperature range for application	from $+5 \text{ }^\circ\text{C}$ to $+30 \text{ }^\circ\text{C}$	
Correction time on cellular concrete	$\geq 7 \text{ min.}$	
Coverage:		
- when used as mortar	$\approx 2 - 3 \text{ kg/m}^2$	
- as a finishing coat	$\approx 1.4 \text{ kg/m}^2$ per mm of thickness	

Values taken at  $+20 \pm 2 \text{ }^\circ\text{C}$ ,  $65 \pm 5\% \text{ R.H.}$  and no ventilation. Data may vary depending on specific conditions at the building site.

<b>Performance</b>		
<b>VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions</b>		
Conformity	EC 1 plus GEV-Emicode	GEV Certified 8454/11.01.02
<b>HIGH-TECH</b>		
Resistance to fire	EI 180	N. 296636/3443FR, EN 13501-2*
Reaction to fire	class A1	EN 13501-1
Water vapour permeability coefficient ( $\mu$ )	5/20 (table value)	EN 1015-19
Water capillary absorption	$\leq 0.7 \text{ kg (m}^2 \cdot \text{min}0.5)$	EN 1015-18
Compressive strength	M5 category	EN 998-2
Initial shear strength on cellular concrete	0.3 N/mm <sup>2</sup> (table value)	EN 998-2
Chloride content	$\leq 0.05\% \text{ Cl}$	EN 1015-17
Thermal conductivity ( $\lambda_{10, \text{dry}}$ )	0.37 W/(m K) (table value)	EN 1745
Durability (freeze/thaw)	evaluations based on regulations applicable to mortar in the country of use	EN 998-2
Conformity	T type	EN 998-2

Values taken at +20 ± 2 °C, 65 ± 5% 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
- check that blocks are not loose or dust-forming
- do not add water to the product as it starts to set
- do not add lime, gypsum or cement to the mixture

- dampen the substrate on hot days or when working in direct sunlight
- 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](mailto:globalservice@kerakoll.com)



The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in May 2023 (ref. GBR Data Report - 06.23); please note that additions and/or amendments to this information 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 site 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.