Earth Additive for bastard mortar

EB-EA_25, EB-EA_1000

Description
Earth additive,
added to a bastard mortar.
Made from unpolluted,
undisturbed soil.

Circularity
100% secondary resources
  added to a third party bastard mortar
  which contains 0% secondary resources
100% Closed Loop Recycling
100% Reusable

Manufacturer
BC materials in Brussels, Belgium

Product

Composition

— Loess loam from excavated urban sites (mineral waste stream)

Loess loam

Physical properties of Earth Additive	Density	1,15 kg/m³	
	Particle size <2mm	≥99,5%	DIN18946
	Oversize particles 2mm - 4mm	≤0,5%	DIN18946
	VOC-emissions	VOC-free	EN16516
Physical properties of bastard mortar M10 with Earth Additive	Density	1,6 kg/m³	EN1015-6
	Strength class	M4,5	EN1015-11
	Particle size <2mm	≥99,5%	EN1015-1
	Oversize particles 2mm - 4mm	≤0,5%	EN1015-1
	Linear shrinkage	0,5%	DIN18946
	Compressive strength	4,5 N/mm²	EN1015-11
	Initial shear strength	0,1 N/mm²	EN1052-3
	Thermal conductivity λ	0,8 W/m²K	NBN-EN1745
	Fire Reaction	A1 (Non-flammable)	DIN18946 NBN-EN998-2
	Global Warming Potential	See TS EB-CEB	DIN18946 EN15804:A2
	Environmental Impact (LCA)	See TS EB-CEB	DIN18946 EN15804:A2

Shelf life

Can be kept indefinitely when dry.

Packaging

Earth Additive only: Slightly humid :
25kg paperbag with plastic film
1000kg bigbag

Usage

10mm joints without mortar loss in halfblock masonry.
This is the usage of **bastard mortar M10 with Earth Additive :**

MEB_b:	28 kg/m²	100kg = 2,4m²	
MEB_c:	42 kg/m²	100kg = 4,5m²	
MEB_o:	22 kg/m²	100kg = 3,6m²	
CEB_90:	17 kg/m²	100kg = 5,9m²	
CEB_140:	26,4 kg/m²	100kg = 3,8m²	*
CEB_190:	35,8 kg/m²	100kg = 2,8m²	*

This is the usage of the part **Earth Additive :**

MEB_b:	7 kg/m²	25kg = 2,4m²	
MEB_c:	10,5 kg/m²	25kg = 4,5m²	
MEB_o:	5,5 kg/m²	25kg = 3,6m²	
CEB_90:	4,25 kg/m²	25kg = 5,9m²	
CEB_140:	6,6 kg/m²	25kg = 3,8m²	*
CEB_190:	8,95 kg/m²	25kg = 2,8m²	*

*: possible mortar loss inside hand grip holes not included

Field of application

Earth masonry mortar for 10 mm joints in (non-)loadbearing earth block masonry.
Suitable for damp rooms, do not apply in areas in direct contact with water.
See our Léém Earth Block Guide for more information on design and execution guidelines.

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Characteristics of bastard mortar with Earth Additive

Partly circular material in origin: Valorization of a "waste" stream
Partly circular material in destination: reversible masonry
Partly made of undisturbed, unpolluted soil
Limited moisture and heat regulating
Limited vapor-open
Anti-static
Colorstable
Non-flammable
Airtight

Execution

Storage	Store in a dry place, lifted from the ground.
Conditions	Upon execution, the temperature of the air and substrate should be minimum 5°C.
Application	Proportioned with M10 bastard mortar such as Diamur 265B by weight as follows: **3 bastard mortar M10 : 1 Earth Additive : ±0,6 water** This corresponds to adding +15% water to the dry mixture of bastard mortar M10 + Earth Additive. The rules of craftsmanship are carefully followed when masoning. Prewet earth blocks before applying mortar. Please check Léém Earth Block Guide for conception and execution guidelines.
Drying time	Under normal conditions (20°C and 60% relative humidity), the masoned wall will dry in 14 days.
Tools	Tub, mortar mixer, planetary mixer, concrete mixer.
Disposal	Before disposing of Léém Additive residues, remember to recover and reuse them on site, or let them dry and save them for future repairs. When used correctly, Léém Additive is harmless to humans and the environment. After having dried out, residues can be disposed of with household waste or non-hazardous inert waste.

Legislation

Conformity	Complies with Brussels Soil Ordinance and Decree March 29, 2018. Complies with Flemish Soil Decree and its implementation rules (VLAREMA and VLAREBO). Tested on 40+ parameters of pollution: Non-polluted resources: No PCB, asbestos, PFC, lead, flame retardants, phthalates, isocyanates, PFAS, ...