FASZINATION KALK ...



# Wer auf die Natur setzt, kann auf uns bauen.

IUG – İnstitut für .t und Gesundheit, fuld

Allergiker-freundliches Produkt Suitable for allergy sufferers

### ... SEIT JAHRTAUSENDEN BEWÄHRT®

# **Technical Data Sheet**

# Lime Insulating Render - exterior -

Spreading rate:

**CALCEA®** 

with a plaster application of 40 mm approx. 0.65 m<sup>2</sup> each bag (8kg)
1 bag (8kg) results in approx. 26 l of fresh mortar
(for manual processing)
(during the mechanical processing resulting variations in the yield.)

### Water consumption:

## **n:** approx. 9 l each bag

#### Composition

CALCEA<sup>®</sup> Lime insulating render consists of natural hydraulic lime acc. to EN 459-1, staked lime acc. to EN 459-1, Puzzolan lime and of a high-temperature insulating mineral light-weight additive.

#### Properties

- high insulating value, adjusted hydrophobic
- excellent processing
- mineral, ecological insulating material
- moisture-regulating
- suitable for allergy sufferers

#### Application

Ecological lime insulating plaster in accordance with building biology and climate-regulating for the interior of modern and historic buildings. Can be processed manually or with machine.

#### **Plaster substrate**

The plaster substrate must be dry, clean and free from loosely attached particles. Carry out plaster substrate test according to VOB/C and DIN 18350. Smooth substrates and concrete surfaces must be pre-treated with a suitable bonding bridge.

Such as CALCEA<sup>®</sup> lime splatterdashing mortar or CALCEA<sup>®</sup> Lime contact mortar. In case of old buildings, the existing old plaster must be removed down to the masonry. Remove loose plaster- and mortal residue. In case of framework, an additional plaster support (Welnet, Distanet) must be applied onto the framework wall. In case of new buildings, the plaster substrate must be coated with a rough cast of lime bonding plaster (thickness of application: 5 mm).

#### Processing

In case of a manual processing, mix the complete contents of the bag with 9 l of water in the compulsory mixer. Make sure that the mixing time will not exceed 5 min. The use of the UMP 1 of the Deutsche Fördertechnik is recommended for the machine processing of this plaster. As an alternative, any plastering machine customary in the trade can be used together the respective insulating plaster equipment. A special mixing helix for the PFT-G4 is available from us. Pre-wet surface dedicated for rendering according to its absorbency. Apply plaster with a creamy consistency up to a thickness of 10 cm in several layers (maximum thickness of each layer 4 cm) and trowel up with an H-bar. The stability of the plaster very much depends on the characteristics of the substrate and its absorbent properties. The minimum waiting period between the individual layers must be followed depending on the plaster substrate and its absorbent properties: For brickwork: 4-6 hours; for natural stones: 6-8 hours, for concrete: up to 14 hours.

Thoroughly roughen plaster between the different layers.

#### **Special notes**

Protect fresh plaster against fast drying-up. In case of strong sun radiation or strongly absorbing masonry, treat plaster with water afterwards. The air and surface temperature must be at least 5 ° C and maximum 25 ° C. CALCEA<sup>®</sup> Lime insulating render shall only be used in the original state without additives.

#### **Finishing plaster**

CALCEA<sup>®</sup> Lime insulating render should fully covered with CALCEA<sup>®</sup> Lime bonding and reinforcing mortar with reinforcing mesh. Afterwards two coating layers of CALCEA<sup>®</sup> Lime paint or CALCEA<sup>®</sup> Lime slurries should be applied.

Further processing: Process top coat in order to ensure nine cylcles of drying and moisturing.

Delivery 8 kg bag

#### Storage

Dry, if possible on wooden shelves and protected against draft. Storage time shall not exceed 6 months.

#### Technical data

Mortar group:	CS I acc. to EN 998-1
Fire Class:	A1
Grain size:	0-3 mm
Dry raw density:	approx. 0.31 kg/dm <sup>3</sup>
Compressive strength 28 days:	≥ 0,4 N/mm <sup>2</sup>
E-Module:	approx. 290 N/mm <sup>2</sup>
Calculated value of thermal	
conductivity:	approx. 0.08 W/(m⋅K)
Water steam diffusion resistance	
factor μ:	6,2
Water absorption:	W <sub>c</sub> 1

#### Safety instructions

Mortal will react very alkaline with water, thus:

Protect skin and eyes, rinse thoroughly with water in case of contact, immediately contact doctor in case of eye contact.

#### **Quality-monitored production**

CALCEA<sup>®</sup> Lime insulating render is continuously tested in our plant laboratory within the scope of our in-house monitoring with respect to the fulfilment of composition and properties. This will ensure a uniform quality of the product.

The information supplied in this technical data sheet is based on the know-how gained by our development department and on the collected experience from the field. A liability for the exact validity of the individual data cannot be derived there from, however, because differing processing requirements or processing methods are outside of our scope of influence. With respect to the quality of our products, we refer to the warranty given within the scope of our General terms and conditions. Our field service consultants will be ready to assist you in case of any further questions with respect to the application. We reserve the right to changes improving our products. Version 24-08-2021 (Substitutes all prior versions).