

Wer auf die Natur setzt, kann auf uns bauen.

## **Technical Data Sheet**

# **CALCEA®**

## Lime Thermal Plaster - interior -

**Spreading rate:** with a plaster application of 40 mm approx. 0.65 m<sup>2</sup> each 1 bag (8kg)

1 bag (8kg) results in 26 l of fresh mortar (for manual processing) (during the mechanical processing resulting variations in the yield.)

Water

consumption: approx. 9 I each bag



### Composition

CALCEA® Lime thermal plaster 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**

- suitable for allergy sufferers
- high insulating value
- excellent processing
- mineral, ecological insulating material
- · high fire protection capacity

#### Application

Ecological lime thermal plaster in accordance with building biology and climate-regulating for the interior of modern and historic buildings, which can be used as a moisture regulating render. 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® lime splatterdashing mortar or CALCEA® 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 CALCEA\* lime spatterdashing mortar (thickness of application: 5 mm).

#### Processing

In case of a manual processing, mix the complete contents of the bag with 7 I 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. When using a plaster machine G4 we recommend a thermal plaster mixing helix, a pump unit T8-1,5 and a tube of 35 mm with a 35 mm spray nozzle. Pre-wet plaster substrate thoroughly. 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° Lime thermal plaster shall only be used in the original state without additives.

#### Finishing plaster

The finishing plastering can be carried out with all CALCEA® Lime plasters and CAREMA® Lime-clay plaster. Make sure that a fabric is inserted.

#### Delivery

In 8kg 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: 0-2 mm

 $\begin{tabular}{lll} Dry raw density: & approx. 0.34 kg/dm^3 \\ Compressive strength 28 days: & $\geq 0.4 \ N/mm^2$ \\ E-Module: & approx. 400 \ N/mm^2 \\ \end{tabular}$ 

Calculated value of thermal

conductivity: approx. 0.08 W/(m·K)

Water steam diffusion resistance

 $\begin{array}{ll} \text{factor } \mu \text{:} & 3,6 \\ \text{Water absorption:} & W_c 0 \end{array}$ 

## 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\* Lime thermal plaster 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).