

**TECHNICAL DATA SHEET** 

# **KEIM ARMIERUNGSMASSE-100**

# **1. PRODUCT DESCPRIPTION**

KEIM Armierungsmasse-100 is a mineral, factory-made dry mortar GP according to DIN EN 998-1.

# 2. FIELD OF APPLICATION

For bonding EPS or mineral wool insulation boards. Can be used for medium to thick-layer reinforcement 4 - 15 mm and as a finishing coat in KEIM external thermal insulation composite systems.

For system approvals see: Z-33.4.1-45; Z-33.41-188; Z-33.43-185; Z-33.47-727 (also suitable for use in the plinth area). According to Z-33.47-660 and Z-33.43-942 KEIM Armierungsmasse-100 is approved for reinforcement in the Klassik-Plus system on Gutex wood fibre insulation boards (approx. 5 - 7 mm).

# **3. PRODUCT PROPERTIES**

- excellent application properties
- easy to apply
- high coat thickness possible for increased heat storage capacity
- fiber-reinforced
- highly permeable
- fire behaviour: non-flammable (A1)
- no biocides added

## MATERIAL CHARACTERISTICS:

-	Bulk density:	approx. 1,1 g/cm <sup>3</sup>
-	Maximum grain size:	2.0 mm
CL	ASSIFICATION:	
-	Plaster type:	GP
-	Compressive strength category:	CS III 3,5 -7,5 N/mm <sup>2</sup>
-	Adhesive tensile strength:	> 0,08 N/mm²
-	Fracture pattern Adhesive tensile strength:	A,B,C
-	Standard Adhesive tensile strength DIN EN 1015-12:	DIN EN 1015-12
-	Water absorption class:	W2
-	Standard Water absorption DIN EN 1015-18:	DIN EN 1015-18
-	Water vapour diffusion resistance value (µ-value):	≤ 20

## 4. APPLICATION INSTRUCTIONS

## SUBSTRATE PREPARATION:

The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues and must not be too absorbent. The permanent compatibility of any existing coatings with the adhesive mortar must be examined by an expert.

#### **APPLICATION CONDITIONS:**

Ambient and substrate temperature ≥ 5 °C during application and drying. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

#### PREPARATION OF MATERIAL / MIXING & CONVEYING:

Mix KEIM Armierungsmasse-100 with approx. 6,0 - 7.0 L (specification per bag) of clean water with a power stirrer to a stiff-plastic consistency without lumps and allow to mature briefly. Do not remix already stiffened material with water. KEIM Armierungsmasse-100 can be mixed with a continuous mixer. The water quantity must be adjusted to the processing consistency and the material must be stirred briefly with a power stirrer after a maturing time of a few minutes before hand application. Mortar pumps with variable flow rates are suitable for machine application of the mortar mixed in the continuous mixer (e.g. Speedy P 15). Maximum conveying length should not exceed 40 m. KEIM Armierungsmasse-100 can also be mixed and processed with mixing pumps (e.g. G4). Screw pumps with a flow rate adapted to the application rate should be used. The max. conveying length should not exceed 30 m and the conveying height should not exceed . From 6 m conveying height, the use of a hose with a diameter  $\geq$  35 mm is recommended.

#### **CONSUMPTION:**

approx. 1, 1 kg/m<sup>2</sup> per mm for reinforcement.

approx. 3,5 kg/m<sup>2</sup> zum Kleben der Platten.

These material consumption values are guide values for smooth substrates. Exact consumption values must be determined by means of test areas.

#### **APPLICATION:**

Application method with stainless steel trowel or notched trowel, or mechanically.

#### GLUING:

Apply the system's adhesive mortar to the insulation panels using the bead-and-dot method, ensuring an adhesion of  $\geq$  40 %. General instruction with regard to gluing: Do not apply adhesive to the panel joints. The adhesive mortar may also be applied partially to the substrate. In this case at least 50% of the substrate must be covered with adhesive beads. The adhesive beads must be at least 5 cm wide and at least 1 cm thick in the center and must not exceed the center distance of 10 cm. The insulation panels must be immediately floated into the fresh adhesive mortar to achieve full-surface bonding. In the case of Speedrock II lamellas, the KEIM Armierungsmasse-100 may also be applied to the substrate in the form of a bead, spacing of the adhesive beads max. 10 cm; at least 60 % of the surface must be covered with mortar strips. There is no bonding permitted in the KEIM XPor system!

#### **REINFORCEMENT:**

Apply KEIM Armierungsmasse-100 evenly to the insulation panels by machine or manually with a stainless steel trowel. Embed system-specific reinforcing mesh, overlap 10 cm at the edges and overcoat wet-in-wet with KEIM Armierungsmasse-100. Necessary cuts into the mesh, e.g. at scaffold anchors, are to be covered with an additional strip of mesh. The system-specific KEIM Glasfaser-Gittermatte (glass fiber mesh) should be placed in the upper third and fully embedded. In the corner area of building openings, additionally embed a KEIM Diagonalarmierung. Refer to and observe the specifications for layer thickness from the system approval used.

#### **TOP RENDER:**

When using KEIM Armierungsmasse-100 as finishing plaster, the surface can be felted with a sponge board after sufficient consolidation. Free texturing or washing is also possible.

#### AFTERTREATMENT:

KEIM Armierungsmasse-100 must be protected from drying out too quickly due to sun or wind, or kept moist if necessary.

#### SETTING TIME:

at least 1 day per mm render thickness (depending on temperature and relative humidity). When recoating with mineral diffusion-open textured plasters and layer thicknesses of the reinforcement layer up to approx. 6 mm, recoating with mineral textured plasters can be carried out after 3 days at the earliest, depending on the weather.

#### **CLEANING OF TOOLS:**

Clean immediately with water.

## 5. PACKAGING

Container content	Unit of measure	Quantity on pallet	Type of container
20	kg	36	bag

## SONDERLIEFERFORM (AUF ANFRAGE)

Container content	Unit of measure	Type of container
500	kg	BigBag

### 6. STORAGE

max. storage time	Storage conditions
12 months	cool frost-free dry keep container tightly sealed.

## 7. DISPOSAL

For disposal information refer to section 13 of the safety data sheet.

Waste code: 17 01 01

## **8. SAFETY INSTRUCTIONS**

Please, refer to the Material Safety Data Sheet.

GISCODE:

## 9. GENERAL INFORMATION

Cover surfaces not to be treated, especially glass, ceramics and natural stone. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water.

Mixing with products not part of the system or other foreign additives is not permitted.

# **10. CERTIFICATES & QUALITY SEALS**



The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release the purchaser and processor from the obligation to convince themselves of the suitability of our products for the intended application with due care, which is general practice in trade and crafts. The general rules of construction technology must be observed. We reserve the right to make modifications to improve the product or its application. This edition supersedes all earlier editions.

