



## TECHNICAL DATA SHEET

# KEIM AQUAROYAL®-ARMIERUNGSMÖRTEL

## 1. PRODUCT DESCRIPTION

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KEIM AquaROYAL-Armierungsmörtel is a mineral reinforcing mortar with hydroactive properties in the system structure of the closed AquaROYAL plaster and paint system. KEIM AquaROYAL-Armierungsmörtel is a factory-made dry mortar GP according to DIN EN 998-1.

## 2. FIELD OF APPLICATION

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KEIM AquaROYAL-Armierungsmörtel dient als dickschichtiger Armierungsmörtel für AquaROYAL-Systeme Systemzulassungen siehe: Z-33.43-185; Z-33.4.1-45; Z-33.47-727; Z-33.41-188.

In accordance with Z-33.47-660 and Z-33.43-942, it is approved for use in the AquaROYAL system on Gutex soft wood fibre insulation boards.

## 3. PRODUCT PROPERTIES

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- excellent application properties
- fiber-reinforced
- high coat thickness possible for increased heat storage capacity
- hydroactive effect for non-toxic algae prevention
- 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

### CLASSIFICATION:

- Classification according to: DIN EN 998-1
- Plaster type: GP
- Compressive strength category: CS III 3,5 -7,5 N/mm<sup>2</sup>
- Adhesive tensile strength:  $\geq 0,08$  N/mm<sup>2</sup>
- Fracture pattern Adhesive tensile strength: A,B,C
- Test standard Adhesive tensile strength: DIN EN 1015-12
- Water absorption class: W2
- Test standard Water absorption: DIN EN 1015-18
- Water vapour diffusion resistance value ( $\mu$ -value):  $\leq 20$

## 4. APPLICATION INSTRUCTIONS

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### SUBSTRATE PREPARATION:

The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues and must not be too absorbent.

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### APPLICATION CONDITIONS:

Ambient and substrate temperature  $\geq 5$  °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 AquaROYAL-Armierungsmörtel with approx. 5,5 - 6.5 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 AquaROYAL-Armierungsmörtel 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 AquaROYAL-Armierungsmörtel 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 10 m. From 6 m conveying height, the use of a hose with a diameter  $\geq 35$  mm is recommended.

### APPLICATION:

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

### REINFORCEMENT:

Single-layer reinforcement:

Apply KEIM AquaROYAL-Armierungsmörtel evenly to the insulation panels by machine or manually with a stainless steel trowel. Embed system-specific reinforcing mesh, overlap 10 cm at the joints and overcoat wet-in-wet with KEIM AquaROYAL-Armierungsmörtel. 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.

Two-layer reinforcement:

Protect surfaces from wind and rain by suitable measures during and after application.

### AFTERTREATMENT:

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

### FINISHING:

With AquaROYAL mineral plaster

### SETTING TIME:

at least 1 day per mm render thickness (depending on temperature and relative humidity).

### CONSUMPTION:

approx. 8 kg/m<sup>2</sup> for reinforcement.

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

### CLEANING OF TOOLS:

Clean immediately with water.

## 5. PACKAGING

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

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### 6. STORAGE

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

### 7. DISPOSAL

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

#### EC WASTE CODE:

Waste code: 17 01 01

### 8. SAFETY INSTRUCTIONS

Please, refer to the Material Safety Data Sheet. Safety instructions DE-UZ 140: Wear protective gloves / protective clothes / eye protection/ face protection. In case of contact with eyes: Rinse cautiously with water for several minutes. Remove any contact lenses if possible. Continue to rinse. Get immediate medical advice/attention. / Keep children away from fresh render. / Protect your skin by wearing long clothing. / Avoid prolonged skin contact with fresh plaster, there is a risk of serious skin damage. / Always comply with work safety instructions.

### 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.