

WDVS Powder Adhesion 3550

WDVS Pulverkleber 3550

**mineral gluing and reinforcing mass
for Brillux ETICS Systems I through VI**

Properties

Mineral gluing and reinforcing powder. High adhesion on mineral substrates and ETICS facade insulation boards, hardwearing, long open time, easy to use, can be applied using machines and highly water vapor permeable. In system build-up hardly inflammable B1 or non-combustible A2 according to DIN 4102.

Field of application

As mineral gluing and reinforcing material for ETICS hard foam, mineral wool and stone lath insulation boards in Brillux ETICS systems I through VI.

Material description

Color: white

Bonding agent basis: standardized mineral bonding agents

Bulk density: approx. 1.45 g/cm³

Packaging:

- 25 kg sacks
- 1,500 kg LOGO S 1600 (silo with flow mixer)
- 750 kg big bag (refill bag for LOGO S 1600)

Use

Addition of water

Approx. 6 liters per 25 kg sack.

Compatibility

Do not mix with other materials.

Mixing

Using a high-power agitator (min. 900 W) and a right-handed spiral or continuous flow mixer, mix ETICS Powder Adhesion 3550 and water until a clot-free, paste-like mortar is obtained. After allowing the mixture to mature for approx. 10 minutes, stir up again briefly. Mortar to be applied manually using a stainless steel smoothing tool or suitable worm conveyor device.

Pot time

Approx. 3 to 4 hours, depending on weather.

Never readjust solidifying material to application consistency or dilute with water again.

Consumption

(on level substrates)

For gluing

Edge-bead-point method:
approx. 4 kg/m²

In the case of machine application (60% surface gluing of pre-coated stone lath insulation boards): approx. 6 to 7 kg/m²
In the case of full-surface gluing of pre-coated stone lath insulation boards (with toothed trowel, e.g. 15 x 15 mm): approx. 5.5 kg/m²

For reinforcement

of ETICS hard foam insulation boards: approx. 4.5 kg/m²
of mineral wool and stone lath insulation boards:
approx. 5 kg/m²

of insulation boards for ceramic coverings (layer thickness:
approx.

6 mm): approx. 9 kg/m²

Determine exact consumption by way of a test application on the object.

Application temperature

Do not use below +5 °C and above +30 °C air and object temperature. Also ensure the temperature is not below/above these limits while the material is setting.

Tool cleaning

Immediately after use (with water)

Drying (+20 °C, 65 % r. m.)

Insulation boards fixed with Powder Adhesion 3550 can be anchored and reinforced, depending on the weather, after approx. 3 days.

Reinforced surfaces are ready for further treatment after a curing time of approx. 3 days.

In the case of lower temperatures and/or higher atmospheric moisture, allow for longer drying time.

Storage

Store at a cool and dry place, protect against moisture.

Declaration

Water pollution classification
WGK 2, according to VwVwS.

Product code
ZP1.

Comply with the specifications in the current safety data sheet.

Gluing

Depending on the insulation boards to be fixed, ETICS Powder Adhesion 3550 can be applied on the insulation board or the substrate.

Surface preparation

The substrate must be clean, solid, dry, stable, load bearing, with good grip and free from any efflorescence, sintered layers and separating agents. On smooth substrates, e.g. pre-fabricated concrete structures, we recommend performing a test application in order to assess the adhesion.

The surface must be pre-treated according to the actual condition and the requirements.

Remove projecting mortar or concrete parts mechanically, level major unevenness of surface using a suitable mortar, e.g. plaster of plaster mortar group PII. Check existing plaster for solidity and hollow areas, check existing coats for their bearing capacity. Remove non-bearing plasters and coatings completely. Substrates are to be primed, if necessary, with Lacryl Deep-Penetrating Primer 595. Also refer to VOB Part C, DIN 18 363, Par. 3.

Application on insulation board

Hard foam insulation boards

Using a stainless steel application tool or machine, apply prepared ETICS Powder Adhesion 3550 on the edge of the back side of the insulation board as a bead on all sides, and at least three points on the back side surface.

The bead must have surface contact (at least 5 cm wide) on all sides. As soon as the material is applied, fix and align the insulation boards immediately. When the board is fixed, the adhesion surface must at least be 40 % or 60 % in the case of a system build-up with ceramic covering.

Mineral wool insulation boards

Using a stainless steel application tool or machine, apply prepared ETICS Powder Adhesion 3550 all around the edge of the back side of the insulation board as a bead on all sides, and at least three points on the back side surface. To ensure sufficient adhesion, press the material in the insulation boards first (press-filling) and apply required quantity of material in a second work step. As soon as the material is applied, fix and align the insulation boards immediately. When the board is fixed, the adhesion surface must at least be 40 %;

at least 60 % in the case of a system build-up with ceramic coverings.

Stone lath insulation boards

Apply prepared ETICS Powder Adhesion 3550 to complete surface pre-coated ETICS Stone Lath Insulation Board 3611 and comb with a toothed trowel 15 x 15 mm.

Application of glue on substrateHard foam insulation boards

Using a suitable worm conveyor, the prepared ETICS Powder Adhesion is applied in vertical serpentine strips to the pre-treated substrate, so that the mortar beads cover at least 60 % of the substrate. The mortar beads should be some 3 to 5 cm wide. The max. distance between the mortar strips is 10 cm. If uneven areas must be leveled, apply thin layer of material, allow to cure, and then apply the amount of material required for fixing the boards. Immediately fix the insulation boards, while the adhesion mortar is still fresh. The quantity of adhesive mortar to be applied depends on the open time of ETICS Powder Adhesion 3500 and the weather and object conditions.

If applied on the whole substrate surface (only recommended in the case of level, smooth substrates), the adhesive mortar is to be "combed" after application using a toothed trowel (10 x 10 mm or 15 x 15 mm).

Stone lath insulation boards

To fix the pre-treated ETICS stone lath boards, apply ETICS Powder Adhesion 3550 on the whole bearing and level substrate manually or using a suitable worm conveyor. Directly before fixing the boards, the mortar must be combed using a toothed trowel. The quantity of adhesive mortar to be applied depends on the open time of ETICS Powder Adhesion 3500 and the weather conditions.

From top to bottom, fix the ETICS Stone Lath Insulation Boards 3611 in alignment, level and without offset in the wet, open glue bed. When fixing the ETICS stone lath insulation boards, the boards must be moved back and forth slightly. Skin forming of the mortar is to be avoided.

Alternatively, the glue can also be applied in serpentine strips. At least 50 % of the surface must be covered by the gluing mortar. Application is done in the same way as in the case of the hard foam insulation boards.

Reinforcement

The reinforcing effect is obtained after sufficient curing of the insulation board glue (after 3 days, at the earliest, at +20 °C, 65 % r.m.) on clean, dry, offset-free and level insulation board surfaces as well as in perpendicular and flush corner areas.

Depending on the situation, ETICS Powder Adhesion 3550 can be applied as a reinforcing material manually or using a machine.

Manual application

For reinforcement, apply the mixed ETICS Powder Adhesion 3550, in a 2 to 3 mm thick layer, on the insulation boards, insulation boards must be fully covered. On ETICS mineral wool and uncoated stone lath insulation boards, apply a thin coat of reinforcing mass first (press-filling), then apply the required amount of material.

Embed ETICS Glass Silk Fiber 3797 in ETICS Powder Adhesion 3550, and cover with a second coat of ETICS Powder Adhesion 3550 (wet in moist). The total dry film thickness of the reinforcing layer should be approx. 3 mm.

If ceramic top coatings are used, first apply a layer of ETICS Powder Adhesion 3550 of a thickness of 4 to 5 mm, then embed ETICS Reinforcement Layer KB 3714 and cover with a second layer.

The total dry film thickness should be approx. 6 mm.

Application using machine

In the case of machine application of ETICS Powder Adhesion 3550, we recommend using the 1.10 m wide webs of ETCIS Glass Silk Fiber 3797 for efficient, horizontal reinforcement. Using a suitable worm conveyor, cover the whole pre-treated surface with a sufficient layer thickness of ETCIS Powder Adhesion 3550, then "comb" using a toothed trowel (10 x 10 mm). Place ETCIS Glass Silk Fiber 3797 in horizontal webs, overlapping by approx. 10 cm, without bubbles and folds, in the fresh reinforcement plaster, press in using a stainless steel smoothing tool and smoothen the surface.

During application and drying, protect the surfaces against direct sunlight, strong wind and moisture impact.

For further information, refer to data sheet "ETICS Glass Silk Fiber 3797" and "ETICS Reinforcement Fiber KB 3714".

Top coat

After the reinforcement layer has cured and dried sufficiently, the top coat can be applied using, depending on the selected Brillux ETICS, Rausan (organically bound plaster), silicone plaster, Silcosil (silicone reinforced plaster), flat facing bricks or ceramic coverings in combination with the corresponding system primer. In the case of top coats with Brillux Light Mineral Plaster, no priming is required. Reinforcement layers penetrating the soil must be protected by Multiflex 3521.

Note

Minor unevenness of the substrate may be leveled out by the glue.

To avoid thermal bridges, ensure a tight joint connection and proper, glue-free execution of the insulation board joints. When using machines for processing, comply with instructions of manufacturer of machine.

Also comply with the information given in the system data sheets 5v01 to 5v06 as well as the data sheets of the other products used.

To ensure an appropriate system build-up, comply with the information given in the general building inspection test certificate. This certificate must be available on site. For a copy, contact Brillux.

Remark

This Data Sheet was prepared taking into account the German laws, Standards, specifications and Codes of practice. All details were translated on the basis of the current German version. The contents do not form part of a legal contract. The user/purchaser is not released from the responsibility of checking that our products are suitable for the proposed use. In addition our general business conditions apply.

When a new version of this Data Sheet appears with updated information the previous version loses its validity.

Brillux
Postbox 1640
48005 Münster
Tel. +49 (0) 2 51 / 71 88 - 0
Fax +49 (0)2 51 / 71 88 - 105
www.brillux.com
www.brillux.de
info@brillux.de