



## TECHNICAL DATA SHEET

### STZ CLASSIC ADHESIVE & BASE COAT

Cementitious Adhesive and Base Coat for External Thermal Insulation Composite Systems (ETICS)

Complies with EN 998-1:2016



## PRODUCT DESCRIPTION

**STZ CLASSIC Adhesive & Base Coat** is a cement-based dry mortar designed for bonding and reinforcing façade thermal insulation boards within External Thermal Insulation Composite Systems (ETICS).

The product is suitable for bonding insulation boards made of Expanded Polystyrene (EPS), Extruded Polystyrene (XPS) and Mineral Wool, as well as for the application of a reinforced base coat incorporating alkali-resistant glass fibre reinforcing mesh.

Its balanced formulation provides excellent adhesion to mineral substrates, good workability and reliable resistance to weathering after curing.

## COMPOSITION

The product consists of carefully selected raw materials, including:

- Portland cement
- Graded quartz sand
- Mineral additives
- Organic binders



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## **APPLICATIONS**

**STZ CLASSIC Adhesive & Base Coat** is intended for:

- Bonding façade insulation boards made of:
    - Expanded Polystyrene (**EPS**)
    - Extruded Polystyrene (**XPS**)
    - Mineral Wool
  - Application of reinforced base coats with alkali-resistant glass fibre reinforcing mesh
  - Skim coating and levelling of sound mineral substrates
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## **Suitable Substrates**

The product is suitable for application on:

- Concrete
  - Cement-lime renders
  - Cement renders
  - Other sound mineral substrates with adequate load-bearing capacity
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## **Recommended Applications**

Suitable for:

- External Thermal Insulation Composite Systems (ETICS)
- Residential buildings
- Commercial buildings
- Public buildings
- New construction
- Renovation and refurbishment projects



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#### TECHNICAL CHARACTERISTICS & PERFORMANCE

| Essential Characteristic                    | Performance                                                           | Test Method              | Harmonised Technical Specification |
|---------------------------------------------|-----------------------------------------------------------------------|--------------------------|------------------------------------|
| Bulk density of fresh mortar                | <b>1,510 kg/m<sup>3</sup></b>                                         | EN 1015-6:2001 + A1:2007 | EN 998-1:2016                      |
| Compressive strength                        | <b>5.1 N/mm<sup>2</sup></b> (Category <b>CS III</b> )                 | EN 1015-11:2020          | EN 998-1:2016                      |
| Water absorption by capillary action        | <b>0.11 kg/m<sup>2</sup>·min<sup>0.5</sup></b> (Category <b>Wc2</b> ) | EN 1015-18:2003          | EN 998-1:2016                      |
| Thermal conductivity ( $\lambda_{10,dry}$ ) | <b>0.65 W/m·K</b>                                                     | EN 1745:2020             | EN 998-1:2016                      |

#### PRODUCT DATA

| Property                      | Value                               |
|-------------------------------|-------------------------------------|
| Mixing water (25 kg bag)      | 4.5–6.0 L                           |
| Minimum application thickness | 2–3 mm                              |
| Consumption for bonding       | Approximately 4–5 kg/m <sup>2</sup> |
| Colour                        | Grey                                |
| Packaging                     | 25 kg paper bag                     |

#### PERFORMANCE FEATURES

- Excellent adhesion to mineral substrates
- Good workability and easy application
- Suitable for bonding EPS, XPS and mineral wool insulation boards
- Suitable for reinforced base coats with alkali-resistant glass fibre mesh
- Good water vapour permeability
- Weather-resistant after curing
- Frost-resistant after complete hardening



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#### **TESTED IN ACCORDANCE WITH**

- EN 998-1:2016 – Specification for mortar for masonry – Rendering and plastering mortar
- EN 1015-6 – Determination of bulk density of fresh mortar
- EN 1015-11 – Determination of flexural and compressive strength of hardened mortar
- EN 1015-18 – Determination of water absorption coefficient due to capillary action
- EN 1745 – Thermal performance of masonry products and masonry

#### **SUBSTRATE PREPARATION**

The substrate shall be:

- Sound and structurally stable;
- Dry and fully cured;
- Clean and free from dust;
- Free from grease, oil, paint, release agents and other contaminants;
- Free from loose or poorly bonded material.

Surface irregularities shall be repaired and levelled prior to application.

Highly absorbent substrates should be primed with a suitable primer before applying the adhesive.

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#### **Suitable Substrates**

The product is suitable for application on:

- Concrete
- Cement-lime renders
- Cement renders
- Other sound mineral substrates with adequate load-bearing capacity

The substrate shall comply with the requirements of the selected ETICS system.

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## **MIXING**

Pour 4.5–6.0 litres of clean water into a suitable mixing container.

Gradually add the contents of one 25 kg bag while continuously mixing with a low-speed electric mixer (approximately 400–600 rpm).

Mix for approximately 3 minutes until a smooth, homogeneous and lump-free mortar is obtained.

Allow the mortar to mature for approximately 5 minutes, then remix briefly before application.

Use clean water only.

Do not add cement, sand or other additives.

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## **Mixing Ratio**

- 25 kg dry mortar
- 4.5–6.0 litres of clean water

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## **Pot Life**

The prepared mortar remains workable for approximately 2–4 hours, depending on ambient temperature, substrate temperature and relative humidity.

Higher temperatures and wind reduce the pot life.

Lower temperatures and higher humidity extend the working time.

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## Recommendations

For optimum performance:

- Prepare only the quantity of mortar that can be used within the pot life.
- Always use clean mixing equipment.
- Do not retemper mortar that has already started to harden.
- Protect freshly mixed mortar from direct sunlight during application.

## APPLICATION

### Bonding of Insulation Boards

Apply the adhesive using the perimeter-and-dabs method.

Apply a continuous strip of adhesive approximately 5 cm wide around the perimeter of the insulation board and apply three to six adhesive dabs evenly across the centre of the board.

After pressing the board firmly onto the substrate, the adhesive shall provide a minimum contact area of 40%.

On sufficiently even substrates, the adhesive may be applied over the entire surface using a suitable notched trowel.

Substrate irregularities of up to 10 mm may be compensated by adjusting the adhesive layer thickness.

Install the insulation boards:

- from the bottom upwards;
- tightly butted together;
- without open joints.

Mechanical fixing with insulation anchors (dowels) shall be carried out no earlier than 24 hours after bonding.



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### **APPLICATION OF THE REINFORCED BASE COAT**

After the adhesive layer has sufficiently cured, apply an even coat of mortar over the insulation boards.

Embed an alkali-resistant glass fibre reinforcing mesh into the fresh mortar, ensuring a minimum overlap of 100 mm between adjacent mesh strips.

After the first coat has partially hardened, apply a second levelling coat to achieve complete coverage of the reinforcing mesh and obtain a smooth, even surface ready for subsequent finishing.

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### **RECOMMENDED TOOLS**

- Low-speed electric mixer
- Clean mixing bucket
- Stainless steel finishing trowel
- Notched trowel
- Straightedge
- Finishing spatula
- Bricklaying trowel

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### **GENERAL RECOMMENDATIONS**

Carry out the installation in accordance with applicable construction standards, the ETICS manufacturer's installation instructions and good construction practice.

Do **not** apply the product:

- below +5°C;
- above +30°C;
- in direct sunlight;
- during rainfall;
- under strong wind conditions;
- onto frozen substrates.



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Protect the façade from rain, frost and direct sunlight until the mortar has fully cured.

Allow the reinforced base coat to cure for at least 2–3 days before applying primers, decorative renders or other finishing systems.

Use clean water only.

Do not add cement, sand or any other additives.

If a surface skin has formed on the applied mortar, remove the affected material and apply a fresh coat before continuing the application.

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### CLEANING

Clean all tools and equipment with water immediately after use.

Hardened material can only be removed mechanically.

### SHELF LIFE

12 months from the date of manufacture when stored in the original, unopened packaging under recommended storage conditions.

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### STORAGE CONDITIONS

Store the product:

- in dry and well-ventilated premises;
- on wooden pallets;
- in the original, unopened packaging;
- protected from moisture and adverse weather conditions.

Do not expose the product to frost or excessive humidity during storage.



## PACKAGING

25 kg paper bags

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## MANUFACTURER

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## IMPORTANT NOTICE

The information contained in this Technical Data Sheet is based on laboratory testing, practical experience and the current state of technical knowledge.

The stated technical values are typical laboratory values obtained under controlled conditions and may vary depending on ambient temperature, relative humidity, substrate type, substrate condition, application method and site conditions.

Before application, the user shall verify that the product is suitable for the intended use and that the substrate complies with the requirements of the selected ETICS system.

Application shall be carried out in accordance with the manufacturer's recommendations, the applicable European and national standards, the ETICS system supplier's instructions and good construction practice.

This Technical Data Sheet provides technical guidance on the product and its application. It does not release the user from the responsibility of carrying out preliminary tests where specific project conditions require verification.

The manufacturer reserves the right to modify product specifications without prior notice as part of its continuous product development programme.