



Stainer U

Universal adhesive for insulation system

- Quick increase in strength
- Freeze-thaw durable and elastic
- Long open time
- For polystyrene insulation boards (including graphite)
- As basecoat

PRODUCT DESCRIPTION

The **Stainer U** is a grey, high-quality adhesive mixture with fibre reinforcement for fixing polystyrene insulation boards, including graphite boards that can be used as the basecoat in the **Stainer STS** systems. It offers very good adhesion to mineral and ceramic substrates. Increased dispersion content improves elasticity. The **Stainer U** is easy to apply. The product is durable and resistant to weather conditions. The **Stainer U** mineral adhesive and polystyrene basecoat can be applied indoors and outdoors. Conforms to ETA – 21/0304. Declaration of Conformity No. STS-ETA/2021.

SUBSTRATE PREPARATION

The substrate has to be firm, clean, dry, freeze-free, and sound. Check the substrate strengths if it has old dispersion or synthetic-resin coatings. Infirm cement plaster, stucco, aerated concrete, sand-lime blocks, or breeze blocks have to be primed with the **Stainer UG** or **Stainer TG** if the base is very absorptive. Pay particular attention to hollow-sounding plaster, which has to be removed. Walls with microbiological infestation should be cleaned with a mould remover.

PRODUCT PREPARATION AND APPLICATION

Mix the bag contents with about 5 – 6 l of clean water with a low-speed mixer. Mix until elastic, let stand for 5 minutes, and then mix again. Use within 2 hours. The first row of insulation boards should sit on a starter track.

How to fix polystyrene: Remove any dust or particles from the wool before installation. Apply the adhesive to polystyrene boards along the edges and as 3 – 6 patches evenly in the centre so that the bonded surface is not less than 40% of the board area. Make sure the vertical joints are not aligned in adjacent rows. Press the board to the substrate immediately after applying the adhesive and carefully drive into place. Make sure not to put any adhesive on the sides of the board. Any gaps between boards should be filled with polystyrene strips. Never use an adhesive or basecoat for this purpose. Anchoring can start at least 48 hours after the boards are fixed (depending on the weather and substrate absorption).

How to apply basecoat: Basecoat can be applied not sooner than 3 days after the boards are fixed. Apply a thin layer of the adhesive to installed boards and level with a notched trowel. Then embed a tensioned mesh with a 10 - cm overlap, spread a layer of the adhesive, and thoroughly level the surface. The total thickness of the base coat should be from 3 to 5 mm. Use additional strips of mesh of at least 20 x 35 mm in corners of openings at 45 degrees to avoid scratching. The reinforcing mesh must be under the mesh proper. Protect the insulated elevation from direct strong wind, rain, and sun, at least until the last layer dries out. Assume 24 hours of normal air humidity and application temperature for each millimetre of layer thickness.

The optimum working conditions: air, substrate, and product temperature should be between + 5°C and + 25°C. Other temperatures may have a negative impact on product properties. Any design and installation works should follow general construction practices found in ITB's instructions. Conform to OSH regulations.

NOTE: Do not fix hot graphite polystyrene due to its significant deformability at

large temperature differences. Protect it from heating during installation and initial curing. If graphite polystyrene becomes hot, it may debond from the adhesive.

CONSUMPTION

The specific consumption rate depends on the substrate and installation method:

Installation of polystyrene boards	4 – 5 kg/m ²
Basecoat	3 – 4 kg/m ²

TOOL CLEANING

Use water immediately after application.

PACKAGING

25 kg, reinforced paper bags with double polyurethane film. Only completely empty bags can be recycled. Residue material can be considered construction waste.

STORAGE

Protect from moisture and store in a dry place in original packaging on pallets. Seal opened packaging. Shelf life: Twelve months from the manufacture date on the packaging.

SUPERVISION

The product quality is monitored by a laboratory of the Production Facility in accordance with the European Technical Assessment ETA – 21/0304 and applicable in-house quality control procedures.

SAFETY GUIDELINES

Reacts with moist/water and produces strong alkali. Protect the skin and eyes. Contains cement. It may irritate the respiratory tract. Wear protective clothing (gloves, protective glasses). Rinse thoroughly after contact with the skin/eyes. Seek medical attention if necessary.

SPECIFICATIONS

Components: dry cement and sand mix with mineral additives, admixtures, and fibre	
Adhesion to polystyrene	≥ 0.08 N/mm ²
Grain	below 0.5 mm
Water amount	5 – 6 l / 25 kg
Open time	2.5 – 3 h
Application temperature	from + 5°C to + 25°C
Curing time	48 h
Shelf life	12 months

ADDITIONAL INFORMATION

The information above is the product description. It should be considered general guidelines based on our research and practical experience, which does not

take into account requirements related to a specific application. Therefore, it is recommended to test the product first. Product parameters may slightly change within the declared product class, which does not impact the performance and work with the product. The information provided may not be ground for any compensatory claims.

The product that is the subject of this data sheet is a component of a thermal insulation system. Only materials listed in the European Technical Assessment can be used for the thermal insulation system. This applies to all system components, including insulating materials, meshes, and fixtures. The manufacturer declares that the specified performance is ensured if solely those components specified in the system and in the prescribed configuration are used.

This data sheet replaces all previous ones. Reference documentation is available at www.stainer.pl

REFERENCE DOCUMENTS:

The **Stainer U** conforms to:

European Technical Assessment ETA-21/0304

Declaration of Performance: STS-ETA/2021

Manufacturing Quality Control Certificate 1487-CPR-168-02 issued by the Łukasiewicz Research Network, Kraków