

# Stainer ST

# Polystyrene adhesive

- Coverage 8–12 m2 per cartridge
- · Quick and clean application
- Application temperature: -5 to +30°C

#### PRODUCT DESCRIPTION

**Stainer ST** is a low-pressure, single-component polyurethane adhesive with a gun applicator. It is intended for installing EPS and XPS boards in the ETICS approach and XPS and EPS boards for foundation and ground floor, basement, etc. thermal insulation.

#### **APPLICATION**

Stainer ST is designed to install white EPS and XPS boards in external wall insulation following the ETICS approach, polystyrene tiles, wall panels, window sills, and fill gaps in thermal insulation. The adhesive can be applied in foundation thermal insulation with XPS or EPS boards. The polyurethane adhesive sticks well to a variety of substrates: concrete, ceramic, wooden, PVC, polystyrene, plaster, bituminous, bitumen felt, and asphalt waterproofing membrane. The adhesive for polyurethane can also be used to install plasterboard on concrete substrates. The product is sufficiently cured to continue board sanding and anchoring and foundation works within 2 hours. It is fully cured in 24 hours.

#### SUBSTRATE PREPARATION

The substrate should be clean, dry, and free of dust, dirt, oil, grease, residue paint, and other contaminants (especially adhesion barriers) that may be detrimental to the adhesive properties of the product. Verify the integrity of the existing coats, renders, and bituminous layers and remove any loose materials. Before installing polystyrene boards in low temperatures, clean the substrate of frost, dry any water marks; heat the adhesive container to room temperature (for instance, by submerging it in warm water) and shake it well (for about 30 sec) to mix the product thoroughly. Install the cartridge in an application gun and use in working orientation, upside down. Adjust the adhesive flow with the needle setting or pressure on the gun trigger. Secure the application gun and leave the can on for future use in the case of a pause over 15 minutes. It is advisable to verify the adherence to bituminous substrates of unknown parameters by installing a board with the adhesive on a prepared area of the substrate and performing a bond strength test after approx. 2 hours. Any bituminous substrate has to be cured, well bonded, and with no internal moisture.

For ETICS projects, you need to first install starter tracks before installing polystyrene boards. For foundation insulation, the insulation boards need to sit on spot footing and should be propped for the duration of adhesive curing.

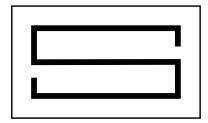
Water-repellent insulation boards should be sanded off with sand paper, for example, before installation.

#### INSTRUCTIONS FOR USE INSTRUCTIONS FOR USE

## Polystyrene board installation – ETICS:

The polystyrene adhesive is applied in 3-cm thick lines along the edge of the board, 2 cm from the edge and one line through the centre of the boards. The bonded surface area should not be smaller than 40%. To avoid trapping air in the central part of the board, leave 5-cm gaps in adhesive lines on the opposite edges as shown below.

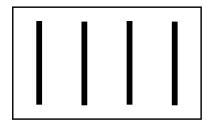




The joint thickness after board is pressed should be 8 or 15 mm. Wait 3 minutes (at  $20^{\circ}$ C) or 5 minutes (at  $-5^{\circ}$ C) after application and then press the board to the wall and adjust its position with a straight edge. The boards can be readjusted up to 4 minutes after installation. After 2 hours, they can be further worked (sanded and anchored). Fill in gaps and joints with the adhesive. Clean the application gun after work with a cleaning agent. Do not apply the adhesive in intensive sunlight or during precipitation.

#### Foundation thermal insulation:

Apply the adhesive in 4 vertical lines 3 cm thick about 20-30 cm apart, 3 cm from the edge (apply more lines of the adhesive if the board is wider than 100 cm). The general idea is presented below:



Wait 3 minutes (at  $20^{\circ}$ C) or 5 minutes (at  $-5^{\circ}$ C) after application and then press the board to the wall and adjust its position with a straight edge.

The boards can be readjusted up to 4 minutes after installation. Use props on corners for about 10–15 minutes before the adhesive is cured. After 2 hours, the boards can be further worked. Use additional mechanical fixtures in the plinths area and along building edges.

Fill in gaps and joints with the adhesive. Clean the application gun after work with a cleaning agent, e.g. for polyurethane foams. Do not apply the adhesive in intensive sunlight or during precipitation. Do not use the product in applications in contact with water, such as waterproofing or high water table.

The insulation boards should have straight edges. Prepared substrates should be flat, level, clean, and free of dust. The maximum wall warping must not exceed  $-4\ \text{mm}$  and  $+2\ \text{mm}$ . Warp should be measured with a 2-m straight edge and 1-mm accuracy. Excessively rough walls should be levelled with a surface filler.

#### **STORAGE**

Store the product vertically in a sealed container (to prevent valve clogging) in a well-ventilated room at + 5°C to + 35°C (room temperature recommended) away from direct sunlight and other sources of heat or ignition. If the product is stored under different conditions, its shelf life may be reduced by up to 3 months. Shelf life: 12 months. Expiry date on the bottom of the container.



### **SPECIFICATION**

 $\begin{array}{ll} \mbox{Colour} & \mbox{Bright yellow} \\ \mbox{Application temperature} & -5^{\circ}\mbox{C to } + 30^{\circ}\mbox{C} \\ \mbox{Can temperature} & \mbox{Optimum} + 20^{\circ}\mbox{C} \\ \end{array}$ 

Work time approx. 4 min (23°C, RH 50%)

Anchoring After 2 h Full cure time 24 h

 $\begin{array}{lll} \mbox{Solvent (before curing)} & \mbox{Foam cleaning agent} \\ \mbox{Coverage per 750 ml container} & -\mbox{ETICS: up to 8 m}^2 \\ \mbox{- foundations: up to 12 m}^2 \end{array}$ 

Coverage depends on temperature, air humidity, application method, and

workmanship

The manufacturer has no control over the improper use of the material, use for purposes or in conditions different than those specified above. If uncertain, test adhesion or consult the manufacturer.

Correct and effective use of the product is beyond our control, therefore the warranty covers the product quality only. Neither the manufacturer nor its authorised representative are liable for any loss due to the improper use or storage of the product.