

TECHNICAL DATA SHEET

KEMATERM EPS/XPS

Facade insulating panels



PRODUCT DESCRIPTION

White plates from expanded polystyrene EPS, as an outdoor wall heat insulation composite system for the facade of new and existing buildings. Also available in stepped mortise design (EPS-P/XPS-P). Tested in accordance with ETA 004.

Field of use

As an exterior wall heat insulation composite system for the facade of new and existing buildings. In the ground course area, we recommend the use of XPS (XPS-P) boards, with thermal conductivity of $\lambda = 0,035 \text{ W/mK}$ and format of 125 x 60 cm.

Product properties

- Highly heat insulating
- High dimensional accuracy
- Deformation and ageing resistance
- Non-shrinking
- Hardly flammable
- Free of CFCs, HCFCs and HFCs.

PRODUCT DATA

Basic information

Appearance	Expanded polystyrene
Packing	0,25 m³ in film-wrapped packet
Storage and expiration date	Store dry, protect from UV radiation (sun), moisture and mechanical damage.

Technical data

Type of product	EPS
Apparent density	approx. 15-18 kg/m³
Transverse tensile strength	$\geq 150 \text{ kPa}$
Coeff. of thermal conductivity λ_D :	0.040 W/mK
Coeff. of vapour diffusion resistance μ	approx. 60
Size of board	100 x 50 cm
Behaviour in fire	E in accordance with EN 13501-1
	B1, Q3, Tr1 in accordance with Austrian standard ÖNORM B 3800-1

INSTRUCTIONS FOR USE

Consumption

2 boards/m²

Base

The base surface must satisfy the following requirements: clean, dry, free of frost, free of dust, not water-repellent, free of efflorescence, supporting and free of loose parts.

Base preparation

The base must be examined in accordance with the guidelines in the Austrian standards (ÖNORMs) B 2259, B 3346 and B 6410. The evenness of the wall must comply with the Austrian standard ÖNORM DIN 18202.

Installation

Variant 1: Use of the Kema plinth profile with drip mould with same thickness as the insulation layer. If the plinth profile is used, mechanically fasten the profile. Place the boards on this plinth finish and glue, connecting them with a butt joint. Apply glue to the facade insulating board as an edge bead and min. 3 glue points.

Variant 2: Approximately 20 cm above the plinth line, fasten a textile glass mesh strip at least 50 cm wide. Then fasten a batten on the plinth line as a support for the Kema facade insulating board EPS-F. After positioning the insulating board and removing the support batten, fold textile glass mesh strip over bottom edge of the board and fill with Kema glue stopper.

If the base surface is flat, the application to the entire surface can be made with a serrated trowel. This application and working method ensures that small irregularities are bridged and that the boards can be laid neat and flush. After appropriate pressing and aligning, an even and flat surface is obtained.

Gluing:

As a general rule, use only entire insulating boards. Apply glue to the facade insulating board as an edge bead and min. 3 glue points. (gluing of min. 40% must be achieved). Although the use of matching pieces of the same insulating material is permissible, use exclusively inside a surface and not at the corners or edges of the building. Ensure no Kema glue stopper oozes out at the cross joints and horizontal joints of the boards, otherwise thermal bridges will result. At the corner, the boards are indented across the entire width. Facade insulating boards for reveals, lintels and visible undersides are fitted on the facade after the boards have been laid. Do not cut off protruding boards until the laying work has finished and the glue has cured. If no reinforcement layer is applied within 2 weeks, the boards have to be ground over again and the dust removed.

Tool

Doweling:

In addition to gluing, Kema facade insulating boards EPS-F must be dowelled on concrete surfaces, plaster surfaces and if the per square metre weight of glue, insulating material and finish coat exceeds 30 kg/m². applies to doweling on building corners (edges). If the base surface or the structure requires additional mechanical anchoring of the boards, use plastic dowels (at least 3 dowels per board, select Kema dowel type to suit the base surface). Doweling must be performed 24 hours after gluing. The dowels must reach at least 3.5 cm into the supporting brickwork or the core concrete, have a firm grip, and they must not protrude from the surface of the heat insulating board. Cavities around the dowel head must be levelled with Kema glue stopper at least 12 hours before the application of the stopper.

Cleaning of tool

Reinforcement layer

Kema glue stopper is applied to the boards with a 10mm serrated trowel. Insert the Kema textile glass mesh in vertical sheets with an overlap of no less than 10 cm into this fresh layer and, adding more material, make even. Diagonally across corners, at windows and niches etc., embed additional textile glass mesh strips (approximately 30 x 50 cm) beforehand (diagonal reinforcement).

LIMITATIONS

Warnings

- The base surface must not be frozen. The air, material and base temperature during processing and binding must exceed +5°C.

LEGAL BASE

Information and recommendations related to use of KEMA products are presented in good faith and believed to be correct. The later is based on our knowledge and experience with the products. Information is supplied upon the condition that products are stored and used according to the recommendations and the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to Information or the product to which information refers. In no event will KEMA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to the use any product, process, equipment or formulation in conflict with any patent, and KEMA makes no representation or warranty, expressed or implied that the use thereof will not infringe any patent. All orders fall under current sales and supply conditions. The user should always check the latest technical sheet available upon demand.