

## TERMOFLEX® CLASSIC

classic external integrated insulation system based on expanded polystyrene (EPS) for thermal insulation of facades and walls



### Scope of use

TERMOFLEX® CLASSIC is a classic insulation system made with facade polystyrene (EPS) cut in plates of different thicknesses depending on the specific conditions and requirements. All its components are practically tested and cautiously selected to complement each other in an optimal way to be applied as a system. This ensures durability, efficiency and smooth operation in the climatic conditions, encountered in the local latitudes.

The system is extremely resistant to aging, weathering and splitting. A proper installation ensures longer life of outer walls, its hydrophobic properties and mechanical resistance.

TERMOFLEX® CLASSIC has excellent thermal insulation characteristics in all seasons and protects premises against overcooling in winter and overheating in summer, saving up to 60-70% of heating and cooling expenditures. It is vapor permeable and promotes healthy indoor environment, allowing the construction to "breathe", thus effectively preventing accumulation of condensates and mold, both in the construction and the premises.

The ENERGY IN COLORS tinting system offers an array of opportunities for individual shaping of finishing coat of the thermal insulation by color and structure, offering a choice of over 2080 colors and five structure types of decorative plaster.

TERMOFLEX® CLASSIC – EXTRA is tested and certified according to current European standards. It was awarded the Gold Medal at the International Plovdiv Trade Fair in 2008.



## Areas of application

TERMOFLEX® CLASSIC is recommended in cases where fast and economical insulating effect and cost savings for heating and cooling are aimed. Especially recommended for use in areas with large temperature variations, long winters and high humidity.

## Properties

cost-efficient	resistant to pollution and aging
reduced heating and cooling costs	resistant to UV-rays
vapor permeable, allowing "breathing" of the construction	excellent durability and color stability
resistant to mechanical force	quick and easy installation
integrated protection against fungi, mold and mildew	certified system, with 15 years warranty

## Components

### THERMO INSULATION MATERIAL with thickness up to 25 cm

- **TERMOFLEX® EPS**  
(facade thermal insulation boards from EPS for thermal insulation of buildings)

### FIXING OF THE THERMO INSULATION PLATES

- **TERMOFLEX® ADHESIVE MORTAR FOR EPS/XPS**  
(adhesive mortar solution for bonding thermal-insulation expanded (EPS) and extruded (XPS) polystyrene boards on different bases, when thermo insulating buildings)
- **PLASTIC ANCHORS**  
(hammer in anchors for mechanical montage of thermal insulating plates made of EPS or XPS)

### ARMING PLASTER

- **REINFORCEMENT FIBERGLASS MESH**  
(alkali proof fiber glass mesh for producing an armed mortar coat in an thermal insulation system and retrofitting of cracks on facade surfaces)
- **TERMOFLEX® REINFORCING MORTAR FOR EPS & XPS**  
(construction reinforcing mortar for bonding and plastering thermo-insulation boards from expanded (EPS) and extruded (XPS) polystyrene when thermo insulating buildings)

### PRIMER COVERING

- **TERMOFLEX® COLOUR PRIMER**  
(coloured steam permeable primer, which penetrates within the base and improves adhesion prior to plaster application and facade painting)

## FINISH COVERING

- **TERMOFLEX® PRO**  
 (ready to use colored paste-like plaster for thin film protective and decorative coatings with dragged or scratched surface)

## ADDITIONAL COMPONENTS

- **CORNER PROFILES, CORNER PROFILES WITH DRIP CAP, LUTING PROFILES AND ACCESSORIES FOR THERMAL INSULATION SYSTEM**  
 (for watertight shaping and arming the edges of thermal insulation systems in the area of edges, corners, around windows, doors etc. and their contact with other elements)
- **ACCESSORIES FOR SET OFF AND CLOSING PROFILES**  
 (accessories for precise and reliable shaping of the set off and its integrating into a thermal insulation system)

## Instructions for Use

For more information and detailed description of all necessary operations, which should be performed refer to “Technological instruction for constructing thermal insulation systems TERMOFLEX® and TERAPOR®.

### Attention!

**The installation of the thermal insulation should be performed at dry weather at temperature of the base and environment from +5°C to +30°C and air humidity below 65%.**

## Classification

Complies with the requirements of European and Bulgarian standards and measures up to:

European Standard	Type	Testing protocols
ETAG 004	-	ETA-15/0730-18.12.2015
EN 13501-1	B s1 d1 (Euro class)	№ 1871-CPD-RtF-016
<b>Production control certificate:</b>		№ 1020-CPR-060042369

## Technical data

Testing protocols are issued by Notified Body (NB 1020) for compliance evaluation with Technical and Test Institute for Construction, Czech Republic and Notified Body (NB 1871) Center for Testing and European Certification, Bulgaria.

Parameter	Measure	Testing method ETAG 004	Testing result	Requirements according to ETAG 004
Reaction to fire	-	-	Euro class B s1 d1	EN 13501-1
Water absorption after 1 hour and base coat: - TERMOFLEX® REINFORCING MORTAR FOR EPS & XPS - TERMOFLEX® PRO - TERMOFLEX® DRY MINERAL PLASTER	kg/m <sup>2</sup>	cl.5.1.3.1	0,05 0,49 0,21	≤ 1
Water absorption after 24 hours and base coat: - TERMOFLEX® REINFORCING MORTAR FOR EPS & XPS - TERMOFLEX® PRO - TERMOFLEX® DRY MINERAL PLASTER	kg/m <sup>2</sup>	cl.5.1.3.1	0,38 0,86 0,86	≤ 0,5
Freeze-thaw behavior	-	cl.5.1.3.2.1	pass	None of the following defects occurred: - blistering or peeling - failure or cracking - detachment of the render
Bond strength after freeze/thaw cycles - TERMOFLEX® PRO - TERMOFLEX® DRY MINERAL PLASTER	N/mm <sup>2</sup>	cl.5.1.3.2.2	0,21 0,15	≥ 0,08
Impact resistance	-	cl.5.1.3.3	Category III	-
Water vapour permeability - Equivalent air thickness: - TERMOFLEX® PRO - TERMOFLEX® DRY MINERAL PLASTER	m	cl.5.1.3.4	0,33 0,14	≤ 2
Release of dangerous substances	-	cl.5.1.3.5	No performance assessed.	
Bond strength between base coat (TERMOFLEX® REINFORCING MORTAR FOR EPS & XPS) and insulation product - After hydrothermal cycles on rig - On test sample at age of 28 days	N/mm <sup>2</sup>	cl.5.1.4.1.1	0,16 0,13	≥ 0,08

Parameter	Measure	Testing method ETAG 004	Testing result	Requirements according to ETAG 004
Bond strength between adhesive and substrate - No complementary conditioning - 2 days immersion in water + 2 h drying - 2 days immersion in water + 7 days drying	N/mm <sup>2</sup>	cl.5.1.4.1.2	0,66 0,35 0,93	≥ 0,25 ≥ 0,08 ≥ 0,25
Bond strength between adhesive and insulation product - No complementary conditioning - 2 days immersion in water + 2 h drying - 2 days immersion in water + 7 days drying	N/mm <sup>2</sup>	cl.5.1.4.1.3	0,14 0,13 0,15	≥ 0,08 ≥ 0,03 ≥ 0,08
Wind load resistance - Not placed at the panel joint - Placed at the panel joint	kN	cl.5.1.4.3	0,47 0,43	> 0,45 > 0,40
Bond strength after ageing	N/mm <sup>2</sup>	cl.5.1.7.1.2	0,16	≥ 0,08

The information contained in the current document is based on our knowledge and recent technical achievements and experience that we have at the time of the last version. The technical recommendations concerning application that we offer in order to facilitate buyers and those working with our products are non-binding and are neither grounds for legal contract relations, or for additional obligations resulting from the purchase contract. They do not dispense buyers from the necessity to verify products application according to the instructions for every specific use. We as manufacturers guarantee the quality of the product, but cannot influence the circumstances and methods of its use. Application of the product should be performed by qualified personnel.