SENAFORM EPS THERMAL INSULATION BOARD / TDS

DEFINITION

It is an expanded polystyrene board used in thermal insulation of walls, columns, and beams, with high-pressure resistance, coated with special mineral and binding mortar, patterned with special ink on some models.

UTILIZATION AREAS

Senaform EPS thermal insulation board is used as a thermal insulation material in the inner and outer walls of buildings.

PRODUCT ADVANTAGES

• Has high-pressure resistance.
• Protects buildings from adverse atmospheric effects, preventing corrosion and extending their service life.
• Capable to endure short and long term mechanical loads that might be encountered under normal conditions in a building.
• Shock-resistant.
• Has infinite life. No impairment on its insulating quality over time
• Has low thermal conductivity.
• Thickness does not reduce over time, remains constant.
•Very light, easy to carry.
• Easy to handle.
• Eco-friendly.

PERFORMANCE CHART

	SENAPOR THERMAL INSULATION BOARD	STANDARD
TOLERANCE OF LENGTH	± 2 mm	TS EN 822
TOLERANCE OF WIDTH	± 2 mm	TS EN 822
TOLERANCE OF THICKNESS	± 2 mm	TS EN 823
SQUARE TOLERANCE	± 2 mm	TS EN 824
PLANARITY TOLERANCE	± 2 mm	TS EN 825
THERMAL CONDUCTIVITY	0,041 W/(Mk)	TS EN 12667
FIRE CLASS	E	TS EN 13501-1

These values were obtained under laboratory conditions. The values in the table may vary according to the surface and ambient conditions.

STANDARDS OF REFERENCE Certifications / Standards TS EN 13163

QUALITY CERTIFICATES TS EN 13163, CE

OPERATING PROCEDURE
Application Surfaces
Interior Walls-Final plaster applied surfaces
Exterior Walls-Rough cast applied surfaces

Surface Preparation
• Application surfaces should be clean, sturdy, and dust-free; oil, dirt or anti-adhesion materials should be removed from the surface, and materials such as mortar and cement residues should be scraped.
• Old plasters, blisters, and cracks on the facade should be scraped and repaired to obtain a solid surface.
• Curvature exceeding 2 cm on the surface should be treated prior to the sheathing.
• Surface to be sheathed should be damp-free, and the floor diameters and inner/outer wall plasters should be dried.
• There should be no moisture spreading upward on the surface; required waterproofing must be ensured, and this application should extend up to 30 cm above the soil.
• The sheathing application should be started at least 4 weeks after the rough plaster application.
• Rain gutters, like cables, on the facade should be placed on the system about 6-7 cm away from it.

Method of Use
• The Senaform EPS thermal insulation board should be cautiously placed with adhesive mortar or foam on the back.
• To ensure the surface smoothness and the full contact of Senaform EPS Thermal Insulation Board with a wall, the board should be gently slid to affix to the the wall and aligned with a gauge.
• Senaform EPS Thermal Insulation Boards should be tiled by shifted laying method. Shifted laying should be implemented at the corner joints of the building.
• Unintentional gaps, if any, between Senaform EPS Thermal Insulation Boards should be filled with the pieces cut from the same material. It should be ensured that the adhesive does not overflow from the edges of the board joints, and the overflowing adhesive should be removed to obtain clean board edges.
• The corners of the gaps of the surface such as windows and doors should not align with the board joints, and thermal insulation boards should be placed as a whole at the corners and threaded. Thus, the risk of possible cracks at the corners is avoided.
• Mechanical fixation of the thermal insulation boards to the surface on the outer facades after chemical bonding is also vital for the long-term performance. Doweling should be started at least 24 hours after the adhesion of the thermal insulation boards. Dowel types should be identified according to the used insulation material and surface properties. It is recommended to use dowels with small-cap at overlappings.

Application Recommendations

• It should not be applied on frozen or melting surfaces and the surfaces possibly to freeze in 24 hours.

• In hot weather, the material should not be exposed to direct sunlight.

• Do not apply on hot surfaces with extreme wind or direct sunlight, and if there is an obligation to apply in these environments, the surface and the environment should be made ready for application before the start.

• Do not apply in rainy weather conditions, and protect the application surface from rain for 24 hours.

The surface and ambient temperature during the application should be between +5°C and +30°C.

APPLICATION INSTRUCTIONS

Application Equipment

• Notched steel trowel (for EPS adhered by notching method)

• After the application, the mortar on the equipment used should be cleaned through water before it dries.

TECHNICAL SPECIFICATIONS

Chemical Structure: Expanded polystyrene board coated with mineral and special binding mortar, painted with special ink on some models

Color: Variable

CONSUMPTION

The recommended consumption for a 1 m2 application is 1.0 m2. This figure may change depending on the surface and ambient conditions.

PACKAGING

BOARD SIZE (50 X 120 CM)	BOARD SIZE (50 X 200 CM)	BOARD SIZE (16 X 100 CM)	NUMBER OF BOARD IN A PACK
SENAFORM EPS 2 CM			10
SENAFORM EPS 4 CM			10
		SENAFORM EPS 1 CM	16
	SENAFORM EPS 4 CM		6

STORAGE CONDITIONS

It should be stored in its original package in a dry (at max. 60% relative humidity) and cool (+ 5°C to +25°C) spaces. It should not be exposed to direct sunlight. It should be stored in cool, ventilated spaces, separate from flammable materials such as solvents and thinner.

SAFETY RECOMMENDATIONS

Please refer to the Material Safety Data Sheet (MSDS) for an easy and safe application of the product.