

# TENAPORS PRIMA

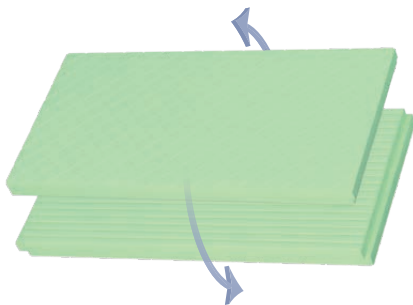
## GENERAL DESCRIPTION

Foamed polystyrene sheets TENAPORS EXTRA PRIMA are an eco-friendly, inexpensive and efficient insulation material used in construction, namely, for thermal insulation of the enclosing structures of buildings. They are particularly advisable for high-humidity locations such as underground structures of buildings (basements, foundations, floors) and supporting structures.

TENAPORS EXTRA PRIMA sheets are produced in a molding press by thermally expanding pre-foamed polystyrene beads. The sheets may be continuously used as a thermal insulation material at ambient temperatures of up to +80°C.

## MAIN PROPERTIES

- Minimal water absorption – the sheets are made with no cut edges so the possibility of water permeation in the material is very unlikely
- High load resistance – the sheets are produced under high pressure by thermally expanding foam polystyrene beads, as a result of which high density sheets are obtained
- Low thermal conductivity – the high density of a sheet makes an optimum mass/volume ratio which ensures the low thermal conductivity coefficient of the material
- Minimal impact of moisture on thermotechnical parameters – the sheet production method ensures constantly low water absorption, preventing deterioration of the thermotechnical properties of the material over the course of time
- Particularly precise dimensions – each sheet is made in a separate moulding press which ensures minimal deviation of dimensions
- Efficient edge jointing – sheets are produced with a half-lap joint which ensures maximum air-tightness of joints and guarantees that no heat loss or moisture migration would occur through the joints



## TECHNICAL DATA

Name	TENAPORS EXTRA PRIMA
EPS type	EPS 100
Compressive stress at 10% deformation (kPa)	100
Sustained load stability at 2% deformation, projected for 50 years (kPa)	30
Flexural strength (kPa)	≥ 150
Thermal conductivity coefficient at 10 °C, $\lambda_D$ (W/mK)	0.036
Sustained water absorption (volume %) at complete immersion in water	≤ 3.5
Reaction to fire	E
Water vapour diffusion resistance factor $\mu$	30–70
Density (kg/m <sup>3</sup> )	20 ± 1
Sheet dimensions (mm)	1200 × 600
Sheet thickness (mm)	30/40/50/60/80/ 100/120/150/200
Type of sheet edges	Half-lap joint
Sheet colour	Green

The use of sheets with a half-lap joint helps to considerably reduce heat loss through thermal insulation joints.

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## PACKAGE

Thickness, mm	m <sup>2</sup> per pack	Number of sheets per pack
30	9.36 m <sup>2</sup>	13
40	7.20 m <sup>2</sup>	10
50	5.76 m <sup>2</sup>	8
60	5.04 m <sup>2</sup>	7
80	3.60 m <sup>2</sup>	5
100	2.88 m <sup>2</sup>	4
120	2.88 m <sup>2</sup>	4
150	2.16 m <sup>2</sup>	3
200	1.44 m <sup>2</sup>	2

## USAGE

TENAPORS EXTRA PRIMA is the best choice of thermal insulation for locations and structures with potentially high level of humidity and high load strength requirements (floors, roofs, flat roofs, underground structures of buildings such as basements and foundations). The thickness of sheets shall be determined during the design process, in compliance with the construction design regulations stipulated in the construction standards and other regulatory documents.

## EXAMPLES OF USAGE OF TENAPORS EXTRA PRIMA

