

SVT code: 968 Product identification code: CZ0004-007

Specification code: EPS-EN 13 163-T2-L3-W3-S5-P10-BS250-CS(10)200-DS (N)2-DS(70,-)1-DLT(1)5-WL(T)5

## Isover EPS 200

Stabilized expanded polystyrene boards

#### **TECHNICAL SPECIFICATION**

EPS (expanded polystyrene) is a light and solid organic foam widely used in the European construction industry, especially as thermal insulation. In the last 50 years, white insulation boards have acquired a strong position in construction thanks to their excellent properties. Isover EPS insulation boards are manufactured using the latest technology without the use of CFC and HCFC (known as Freon). The use of modern technologies ensures consistent quality and minimum energy consumption during production, resulting in an excellent price/performance ratio. All Isover EPS boards are rated as self-extinguishing with improved fire safety.\*

#### APPLICATION

Isover EPS 200 insulation boards are designed especially for thermal insulation with normal requirements for compressive load, such as floors, flat roofs, etc. The boards are suitable for insulating layers of energy-saving buildings (lower energy and passive houses) with standard insulation thickness of 200 to 500 mm.

#### PACKAGING, TRANSPORT, WAREHOUSING

Isover EPS insulation boards with dimensions of 1000  $\times$  500 mm and 1000  $\times$  1000 mm are wrapped in PE foil in packages of a max. height of 500 mm. Non-standard sizes such as 1000  $\times$  2000 mm or 1000  $\times$  2500 mm are strapped. The boards must be transported and stored under conditions preventing damage. Do not store for prolonged periods in direct sunlight. The boards are marked on the sides with three colour stripes – yellow, black, black.

#### EDGES

Standard boards have straight edges; rabbet edges are available at special surcharge (up to max. thickness of 240 mm, the coverage size will be reduced by the rabbet dimension, i.e. 15 mm).

#### DIMENSIONS AND PACKAGING

Thickness	Length × width [mm]	Volume per package			Declared thermal resistance	
[mm]		[pcs]	[m²]	[m³]	<b>R</b> <sub>p</sub> [m <sup>2</sup> ·K·W <sup>-1</sup> ]	
20	1000 × 500	25	12.5	0.250	0.55	
30	1000 × 500	16	8.0	0.240	0.85	
40	1000 × 500	12	6.0	0.240	1.15	
50	1000 × 500	10	5.0	0.250	1.45	
60	1000 × 500	8	4.0	0.240	1.75	
80	1000 × 500	6	3.0	0.240	2.35	
100	1000 × 500	5	2.5	0.250	2.90	
120	1000 × 500	4	2.0	0.240	3.50	
140	1000 × 500	3	1.5	0.210	4.10	

Subject to prior agreement, the products may be supplied in different thicknesses and sizes.



#### BENEFITS

- Very good thermal insulation performance.
- Excellent mechanical properties.
- Minimum weight.
- Easy workability.
- Long life span.
- Environment and health friendly.
- Permanent moisture resistance.
- Biological neutrality.
- Economical.



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### **TECHNICAL PARAMETERS**

Length tolerance[%, mm]EN 822±3 mmClass of length tolerancesL3Width tolerance[%, mm]EN 822±3 mmClass of width tolerancesW3Thickness tolerance[%, mm]EN 823±2 mmClass of thickness tolerancesT2Deviation from squareness of the edge[mmm']EN 824±5Class of squareness on length and widthS5Deviation from flatness S <sub>aux</sub> [mmm']EN 82510Class of flatnessP10Deviation from flatness S <sub>aux</sub> [mm']EN 82510Class of flatnessP10Relative change in length A <sub>c</sub> , in width A <sub>c</sub> , in thickness A <sub>c</sub> ,[%]EN 18040.2Class of flatnessP10Themal Echnical properties[%][%]EN 8250.034Class of dimensional stability under constant normal laboratory conditionsDs(N)2Declared value of thermal conductivity A <sub>0</sub> [W, m <sup>1</sup> K <sup>2</sup> ]ČSN 73 0540-30.034Specific heat capacity c <sub>a</sub> [KPa]EN 826200Level of compressive stress at 10% deformation deformation for GoldorCS(10200Long-term compressive stress at 2 % deformation for Bending strength o <sub>0</sub> [KPa]EN 12089250Level of compressive stress at 10% deformation by total immersionS10(0)Fire safety properties**["C]EN 13501+1A1E"Here of fong-term water absorption by total immersionW1(T)SWaitum temperature for use Hydrothermal properties["C]EN 13501+1A1E"Level of fong-term water absorption <b< th=""><th></th><th></th><th></th><th></th><th></th><th></th></b<>						
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Reaction to fire class[-]EN 13501-1+A1E**Maximum temperature for use[°C]80(C)Hydrothermal propertiesLong term water absorption by total immersion $W_{tt}$ [%]EN 120875Level of long-term water absorption by total immersion $W_{tt}$ WL(T)5Water vapour diffusion resistance factor $\mu$ [-]EN 13163+A140-100Value for water vapour diffusion resistance factor $\mu$ MU100Other properties	Bending strength $\sigma_b$	[kPa]	EN 12089	250	Level of bending strength	BS250
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	Water vapour diffusion resistance factor $\mu$	[-]	EN 13163+A1	40-100		MU100
Density [kg·m³] EN 1602 28-30***	Other properties					
	Density	[kg·m <sup>-3</sup> ]	EN 1602	28-30***		

Declared values were set under the following conditions: (reference temperature 10 °C, humidity u<sub>dy</sub> reached by drying) according to EN ISO 10456. Valid for typical use in construction with risk of condensation. In the case of construction without any risk of condensation, it is possible to use the declared value of thermal 2) conductivity.

3) For smaller loads the deformation can be linearly interpolated to zero.

Self-extinguishing properties of EPS are ensured using a polymer-based flame retardant. The insulation boards do not contain HBCDD.
\*\* Fire safety of buildings has to be classified for complete structures and systems, the EPS is not used without fire-resistant coatings.
\*\*\* The specific density is indicative only and is especially intended for the statics and fire load calculation.

Note: The specific application must meet general requirements of Saint-Gobain Construction Products CZ, Ltd., Isover division, technical materials, valid technical norms, and the specific project.

#### **RELATED DOCUMENTS**

- Declaration of Performance CZ0004-007
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001, ISO 50001
- Technical information Isover EPS HBCD free

1/5/2025 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.