



ECAP L 250

Prefabricated thermal insulating boards

in EPS class 250

Packaging and storage:	<ul style="list-style-type: none"> ➢ Board with straight edge 600 mm. x 1200 mm. (0,72 sqm) ➢ Standard thicknesses: mm. 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 – 120 – 150 – 180 - 200 (in addition there is the smoothing mortar thickness which is approximately 3 mm.) ➢ Pallet: box on pallet 120x120x120 (h) cm. ➢ Keep in a cool and dry place, sheltered from frost and water.
Composition:	<ul style="list-style-type: none"> ➢ Thermal insulating board in EPS class 100 (various thicknesses). ➢ Cement based smoothing mortar (approx. thickness 3 mm.) ➢ Alkali-resistant, dimensionally stable fibreglass mesh 160 gr./m² covered by the smoothing mortar and with prearranged overlaps. ➢ Punched holes for the insertion of the anchors.
Fields of application:	<ul style="list-style-type: none"> ➢ External thermal insulation. ➢ Internal thermal insulation for walls and ceilings. ➢ Thermal insulation of prefabricated building. ➢ Refurbishing and renovation of façades. ➢ Elimination of construction and general thermal bridges. ➢ Protection of the façades from rain.
Surface preparation and application:	See the “Ecap manual of use and application”.
Warnings:	<ul style="list-style-type: none"> ➢ Do not apply under the direct sunlight or with temperatures higher than +35°C. If the gluing and the smoothing mortar is made under the direct sunlight, the necessary precautions must be taken (e.g. the meshes covering the scaffolding or other). ➢ Do not apply under the rain, at the temperature lower than +5°C or with the risk of frost. ➢ Apply with relative humidity between 45% and 80%. Do not apply with relative humidity too low. ➢ For the detailed methods of use and application consult the “application Manual”, or contact the Edilteco Technical Department.

Technical characteristics of the components:

Thermal insulating board in EPs class 250

Description	Codification according to UNI EN 13163	Unit of measurement	Value	Norm
• Length	L2	mm	± 2	EN 822
• Width	W2	mm	± 2	EN 822
• Thickness	T2	mm	± 1	EN 823
• Orthogonally	S2	mm/mm	± 2/1000	EN 824
• Planarity	P4	mm	± 5	EN 825
• Dimensional stability ⁽¹⁾	DS(N)2	%	± 0,5	EN 1603
• Stressing to compression ⁽²⁾	CS(10)100	kPa	>=250	EN 826
• Flexural strength	BS 150	kPa	>=350	EN 12089

• Thermal conductivity declared to 10°C	λ_D	W/(m·K)	0,033	EN 12667
• Coefficient of linear thermal expansion		K ⁻¹	65·10 ⁻⁶	
• Limit temperature of use		°C	75	
• Fire reactivity		Class	1 E	UNI 8457 EN 11925/2
• Factor of resistance to the water vapour diffusion	MU	μ	40-100	EN 12086
• Permeability to water vapour		mg/(Pa·h·m)	da 0,007 a 0,018	EN 12086
• Water absorption by total immersion and for a long period	WL(T)2	%	<=2	EN 12087
• Water absorption by partial immersion and for a long period	W _{ip}	Kg/m ²	<=0,5	EN 12087
• Water absorption by capillarity		%	none	
• Specific thermal capacity		J/(kg·K)	1450	UNI EN 12524

(1): in normal conditions of laboratory

(2): to 10% of deformation

Cement based smoothing mortar

Description	Unit of measurement	Value
• Specific weight	Kg/m ³	1400
• Grain-size	mm	0,6
Factor of resistance to the water vapour diffusion	μ	Approx. 50
• Thermal conductivity declared to 10°C	W/(m·K)	0,80
• S _d value for each 3 mm of thickness		0,15

Alkali-resistant fibreglass mesh

Description	Unit of measurement	Value
• Weight (dressed air mass) ±5%	gr/m ²	155
• Tensile strength	N/mm	approx. 46 (equivalent to 2300 N/S cm)
Residual tensile strength of the mesh after 3 days		> 50% of the initial value > 20 N/mm (equivalent to 1000 N/S cm)

All the indications provided in this technical data sheet are purely approximate and not binding for legal purpose. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on building sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installation.

The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all methods and instructions for use generally referable to "workmanlike" execution.

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