



# Ecap Grey T

PREFABRICATED THERMAL INSULATING BOARD  
IN EPS CLASS 100 TREATED WITH GRAPHITE

<b>PRODUCT</b>	Prefabricated thermal insulating board in EPS class 100, treated with graphite.					
<b>PACKING AND STORAGE</b>	Board with straight edge 600 mm. x 1200 mm. (0,72mq) • Standard thicknesses: mm. 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 – 120 – 150 – 180 – 200 (in addition to the smoothing mortar thickness which is approximately 3 mm.) • Pallet: box on pallet of 120x120x120 cm. • Storable in a cool and dry place away from frost and water					
<b>COMPOSITION</b>	Thermal insulating board in EPS class 100 treated with graphite (various thicknesses). • Cement based smoothing mortar (thickness: approx. 3 mm.) • Alkali-resistant, dimensionally stable fiberglass mesh 160 gr./m <sup>2</sup> covered by the smoothing mortar with prearranged overlaps. • Punched holes for the insertion of the dowels.					
<b>FIELDS OF APPLICATION</b>	• External thermal insulation. • Internal thermal insulation for walls and ceilings. • Thermal insulation of prefabricated buildings. • Refurbishing and renovation of façades. • Elimination of construction and general thermal bridges. • Protection of the façades from rain.					
<b>APPLICATIONS</b>	See the "Application Manual".					
<b>WARNINGS</b>	Do not apply under the direct sunlight or with temperatures higher than +35°C. If the gluing and the smoothing mortar are done 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 a 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 Engineering Department.					
<b>TECHNICAL CHARACTERISTICS OF THE COMPONENTS</b>	Thermal insulating EPS panels - Euroclass 100	Description	EN13163 Codification	Measurement unit	Value	Norm
		• Length	L2	mm	± 2	EN 822
		• Width	W2	mm	± 2	EN 822
		• Thickness	T2	mm	± 1	EN 823
		• Orthogonality	S2	mm/mm	± 2/1000	EN 824
		• Planarity	P4	mm	± 5	EN 825
		• Dimensional stability <sup>(1)</sup>	DS(N)2	%	± 0,2	EN 1603
		• Compressive strenght <sup>(2)</sup>	CS(10)70	kPa	>=70 <sup>(*)</sup> - >=100 <sup>(**)</sup>	EN 826
		• Flexural resistance	BS 115	kPa	>=115 <sup>(*)</sup> - >=150 <sup>(**)</sup>	EN 12089
		• Thermal conductivity declared to 10°C	λ <sub>D</sub>	W/(m.K)	0,031	EN 12667
• Factor of linear thermal expansion		K <sup>-1</sup>	65*10 <sup>-6</sup>			
• Limit temperature of use		°C	75			

Thermal insulating EPS panels - Euroclass 100	• Fire reactivity		Class	1 E	UNI 8457 EN 11925/2
	• Factor of resistance to water vapour diffusion	MU	$\mu$	approx. 50	EN 12086
	• Permeability to water vapour		mg/(Pa.h.m)	from 0,018 to 0,036 <sup>(1)</sup> - from 0,010 to 0,024 <sup>(2)</sup>	EN 12086
	• Water absorption for a long term partial immersion	WL(T)2	%	$\leq 2$	EN 12087
	• Water absorption for a long term full immersion	Wlp	Kg/m <sup>2</sup>	$\leq 0,5$	EN 12087
	• Water absorption per capillarity		%	nothing	
	• Specific thermal capacity		J/(kg.K)	1450	UNI EN 12524
		<sup>(1)</sup> : under normal laboratory conditions <sup>(2)</sup> : to the 10% of deformation	<sup>(1)</sup> : thicknesses mm 60-70-80-90-100-120-150-180-200 <sup>(2)</sup> : thicknesses mm 30-40-50		
cement based smoothing mortar	Description		Measurement unit	Value	
	• Specific gravity		Kg/m <sup>3</sup>	1400	
	• Grain size		mm	0,6	
	• Factor of resistance to the water vapour diffusion		$\mu$	approx. 50	
	• Thermal conductivity declared to 10°C		W/(m.K)	0,80	
	• S <sub>d</sub> value for each 3 mm of thickness			0,15	
Alkali-resistant fibreglass mesh	Description		Measurement unit	Value	
	• Weight $\pm 5\%$		gr/m <sup>2</sup>	155	
	• Tensile strength		N/mm	approx. 46 (equivalent to 2300 N/S cm)	
	• Residual tensile strength 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 purposes. 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 the methods and instructions for use generally referable to "workmanlike" execution. Edilteco S.p.A. reserves the right to change the contents of this technical data sheet on its final judgement. The spreading of this data sheet, through any media, supersedes and cancels the validity of any other technical data sheet previously published.

EN rev. 03-2014