



## Extruded polystyrene TECHNONICOL CARBON SOLID 500

### Product description

XPS TECHNONICOL CARBON SOLID 500 is a thermal insulation material with uniformly distributed closed cells, which does not swell, shrink or absorb water. It is chemically resistant and is not a subject to putrefaction. The high strength of the material allows receiving equal and simultaneously rigid base that essentially increases the durability of the whole thermal insulation system. It contains nanoscale carbon particles, which allow significantly increasing the thermal efficiency of the material.



Record high compressive stress performance of the material at deformation makes TECHNONICOL CARBON SOLID 500 the best choice for the most important and complicated projects. Can be supplied with flat or L-shaped edges.

### Area of application

Extruded polystyrene TECHNONICOL CARBON SOLID 500 is a high-performance material widely used in buildings and constructions while arranging the thermal insulation of basements, operated roofs and loaded floors. Also used for thermal insulation of foundations of transportation facilities.

### Storage

TECHNONICOL XPS slabs should be stored under a shelter in order to protect them against precipitations and sunlight. It could also be stored outdoors, but only in a special package for protection against external atmospheric impacts. The slabs must be stored on pallets, supports or bars. Shelf life if all storage requirements are met: 24 months from the date of production.

### Main characteristics

Properties	Test method	Value
Thermal conductivity $\lambda_D$ , W/m <sup>2</sup> *K	ASTM C177 (EN 12667)	0.028-0.034
Compressive stress at 10% deformation, kPa	ASTM D1621 (EN 826)	≥500
Long term water absorption by immersion WL(T) 0.7, %	ASTM C272 (EN 12087)	≤0.7
Reaction to fire – ignitability, Euroclass	EN ISO 11925-2	F
Length, mm	EN 822	1180-1500 (±8) 1500-4000 (±10)
Width, mm	EN 822	580-650 (±8)
Thickness, mm	EN 823	40, 50, 60, 100 (-2; +3)

### Thermal resistance (ASTM C177)

Thickness, mm	40	50	60	100
R <sub>D</sub> , m <sup>2</sup> *K/W	1.176	1.471	1.765	2.941