

## KNAUF Therm PRO Roof/Floor EPS 100 $\lambda$ 36



KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 polystyrene panels are designated by the following code according to PN-EN Standard EN 13163:2012+A1:2015

**EPS - EN 13163 T(1)-L(2)-W(2)-S(2)-P(5)-BS115-CS(10)100-DS.(N)2-DS(70,-)1-TR150**

KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 polystyrene panels are manufactured by a double foaming polystyrene method. Thanks to this method product has excellent insulation properties and better performance. Panels are designated for thermal insulation of roofs and floors in old and new buildings. Panels are available in seamed and no-seamed versions.

### PURPOSE

KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 polystyrene panels are produced according to European Standard EN 13163:2012+A1:2015. The main purpose is:

- Thermal insulation of floors over primer prefabricated panels
- Thermal insulation of floors under floor coating
- Thermal insulation of floors placed on a ground
- Thermal insulation of floors in underfloor heating systems
- Thermal insulation of flat roofs (ventilated and not ventilated)
- Layered wall and roof panels with bituminous cladding
- Thermal insulation of plinths in External Thermal Insulation Composite System (ETICS)

### GUIDELINES FOR FASTENING KNAUF THERM PRO ROOF/FLOOR EPS 100 $\lambda$ 36

When fasten polystyrene panels KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 follow producers and construction project guidelines. Before commencing installation of KNAUF Therm PRO Facade/Roof/Floor EPS 70  $\lambda$  panels, check the condition of the substrate. The ground must be flat and dry.

When KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 is placed directly on the ground they need waterproofing insulation such as bituminous mastics, PE foils, base felt. In intermediate floors, we recommend a dividing layer of PE foil. On a ceiling and a wall joint, use dilatation tapes.

We start assembling panels in a corner. Install the first row at the wall pressed to dilatation tape. Subsequent rows had to overlap to avoid crossing the intersections. After laying, thermal isolation panels had to be covered with a PE foil of at least 0,2mm. The foil will protect panels from moisture and prevent screed from getting into lower layers. In the case of a floor water-heating system, heating pipes should be fixed with special clips on panels previously covered with a PE foil. Increase screed thickness by the outer diameter of heating pipes.

**ATTENTION**

Protect panels against direct contact with substances damaging polystyrene, e.g. organic solvents (acetone, nitroglycerin, benzene, etc.)

**TECHNICAL DATA**

$\lambda_D$ Thermal conductivity coefficient W/(mK)	$\leq 0.036$
Edge shape	rectangular / seamed
Dimensions	1000 x 500 mm max. dimensions 4000 x 1200 mm
Compressive stress CS at 10% deformation	CS(10)100( $\geq 100$ )
Self-extinguishing capacity	SELF-EXTINGUISHING
Class of reaction to fire	E
Bending strength (kPa)	BS 150 ( $\geq 150$ )

**PACKAGING, STORAGE, TRANSPORT**

KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 polystyrene panels are solely delivered in the manufacturer's, original packaging. A product's packaging contains information concerning: product name, name of manufacturer, production date, European Standard no. EN 13163:2012+A1:2015, code according to Standard, and declared technical parameters.

KNAUF Therm PRO Roof/Floor EPS 100  $\lambda$  36 should be stored in a manner that protects them against mechanical damage and the weather conditions.

Packaging		Thermal resistance	Standard format 1000*500 [mm]	
Panel thickness [mm]	Number of panels per package [pcs.]	$R_D$ [m <sup>2</sup> *K/W]	Package volume [m <sup>3</sup> ]	Covered area [m <sup>2</sup> ]
10	56	0,25	0,28	28
20	30	0,50	0,3	15
30	20	0,80	0,3	10
40	15	1,05	0,3	7,5
50	12	1,35	0,3	6
60	10	1,60	0,3	5
70	8	1,85	0,28	4
80	7	2,15	0,28	3,5
90	6	2,40	0,27	3
100	6	2,65	0,3	3
110	5	2,95	0,275	2,5
120	5	3,20	0,3	2,5
130	4	3,50	0,26	2
140	4	3,70	0,28	2
150	4	4,00	0,3	2
160	3	4,30	0,24	1,5
170	3	4,55	0,255	1,5
180	3	4,85	0,27	1,5
190	3	5,10	0,285	1,5
200	3	5,35	0,3	1,5
210	2	5,65	0,21	1
220	2	5,90	0,22	1
230	2	6,20	0,23	1
240	2	6,45	0,24	1
250	2	6,70	0,25	1
260	2	7,00	0,26	1
270	2	7,25	0,27	1
280	2	7,50	0,28	1
290	2	7,80	0,29	1
300	2	8,05	0,3	1