KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 polystyrene panels are designated by the following code according to PN-EN Standard EN 13163:2012

EPS - EN 13163 T(1)-L(2)-W(2)-S(2)-P(5)-BS115-CS(10)70-D-S(N)2-DS(70,-)1-TR100

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 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 walls in old and new buildings. Panels are available in seamed and no-seamd versions.

PURPOSE

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 polystyrene panels are produced according to European Standard EN 13163:2012. The main purpose is:

- exterior thermal insulation made using ETICS the „light wet" method
- exterior thermal insulation made using ETICS the „light dry" method
- Thermal insulation:
  - on skeleton wall surface
  - in closed gap of tri-layer wall
  - in ventilated gap of tri-layer wall
  - of balcony loggias
  - of tie beams, window reveals and lintels
  - floors under a subfloor
  - ventilated and not ventilated flat roofs
  - floors in underfloor heating systems
- filling of expansion joints
- warming up tie beams, lintels and thermal bridges
- base for layerd panels for walls and roofs with bituminous cladding

GUIDELINES FOR FASTENING KNAUF THERM PRO FACADE/ROOF/FLOOR EPS 70 λ 38

Before commencing installation of KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ panels, check the condition of the substrate. The substrate must be load-berring, clean and degreased. Loose fragments poorly bound to the substrate should be removed before gluing polystyrene panels. The substrate for KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 should be primed with KNAUF Tieffengrund.

Universal KNAUF FIBER-REINFORCED GLUE or KNAUF STYROPHORM GLUE is recommended for gluing of KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38.

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We recommend using KNAUF FIBER-REINFORCED GLUE and KNAUF REINFORCING MESH to make the reinforced layer. Shielding facade meshes should be used during work. Protect KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 panels glued to the facade against the direct sunlight and weather, with facade meshes on scaffolding.

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 has elevated resistance to UV radiation, however long-term, direct exposure to UV radiation may cause a yellowish tarnish on a panel's surface. This tarnish must be removed before applying of the reinforcing layer.

When KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 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

λ_D Thermal conductivity coefficient W/(mK)	≤ 0.038
Edge shape	rectangular / seamed
Dimensions	1000 x 500 mm max. dimensions 4000 x 1200 mm
Compressive stress CS at 10% deformation	CS(10)70(≥ 70)
Self-extinguishing capacity	SELF-EXTINGUISHING
Class of reaction to fire	E
Bending strength (kPa)	BS 115 (≥ 115)
Tensile strength (force applied perpendicularly to face surfaces) [kPa]	TR 100 (≥ 100)

PACKAGING, STORAGE, TRANSPORT

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 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, code according to Standard, and declared technical parameters.

KNAUF Therm PRO Facade/Roof/Floor EPS 70 λ 38 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[m²*K/W]	Package volume [m³]	Covered area [m²]
10	56	0,25	0,28	28
20	30	0,50	0,3	15
30	20	0,75	0,3	10
40	15	1,00	0,3	7,5
50	12	1,25	0,3	6
60	10	1,50	0,3	5
70	8	1,75	0,28	4
80	7	2,00	0,28	3,5
90	6	2,25	0,27	3
100	6	2,50	0,3	3
110	5	2,75	0,275	2,5
120	5	3,05	0,3	2,5
130	4	3,25	0,26	2
140	4	3,55	0,28	2
150	4	3,80	0,3	2
160	3	4,05	0,24	1,5
170	3	4,30	0,255	1,5
180	3	4,55	0,27	1,5
190	3	4,85	0,285	1,5
200	3	5,10	0,3	1,5
210	2	5,30	0,21	1
220	2	5,55	0,22	1
230	2	5,80	0,23	1
240	2	6,10	0,24	1
250	2	6,35	0,25	1
260	2	6,55	0,26	1
270	2	6,85	0,27	1
280	2	7,15	0,28	1
290	2	7,35	0,29	1
300	2	7,60	0,3	1

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