

DATA SHEET

2022/01

EPS 031 GRAPHITE FAÇADE

- external thermal insulation applied using the ETICS method
- thermal insulation of areas where a reduced thermal insulation layer thickness is required
- thermal insulation of sandwich panels
- thermal insulation beneath load-bearing structures
- thermal insulation of lintels and window reveals
- thermal insulation of balcony loggias
- EPS 031 GRAPHITE FAÇADE expanded polystyrene boards are intended for thermal insulation applications which require high thermal insulation performance

Product description

EPS 031 GRAPHITE FAÇADE thermal insulation expanded polystyrene boards are manufactured from expandable polystyrene and are intended for the thermal insulation of walls, including façade insulation, in accordance with the requirements of the harmonised standard EN 13163:2012+A1:2015, Thermal insulation products for buildings — — Factory-made expanded polystyrene (EPS) products.

TECHNICAL PARAMETERS

EPS-EN 13163-T1-L2-W2-Sb5-P5-BS115-DS(N)2-DS(70,-)2- TR100

	Class/Level	Requirements/ Tolerances
Thickness	T1	± 1 [mm]
Length	L2	± 2 [mm]
Width	W2	± 2 [mm]
Squareness over length and width	Sb5	± 5/1000 [mm/mm]
Flatness	P5	± 5 [mm]
Flexural strength levels	B115	115 [kPa]
Compressive stress at 10% relative deformation	-	-
Dimensional stability classes under constant normal laboratory conditions ¹	DS(N)2	± 0.2 [%]
Dimensional stability levels under specified temperature and humidity conditions ²	DS(70,-)2	<2 %
Tensile strength perpendicular to faces levels	TR100	> 100 [kPa]
Declared thermal conductivity coefficient	[-]	< 0.031 [W/(mK)]
Reaction to fire	E	-

¹ test at 23°C and 50% relative humidity

² test at 70°C for 48 hours

Thickness	Thermal resistance	Number of boards per pack [pcs]	Pack volume (plain-edge boards) [m ³]	Board area (plain-edge boards) [m ²]	Pack volume (rebated-edge boards) [m ³]	Board area (rebated-edge boards) [m ²]
10	0.25	60	0.3	30	-	-
20	0.55	30	0.3	15	-	-
30	0.90	20	0.3	10	-	-
40	1.20	15	0.3	7.5	-	-
50	1.50	12	0.3	6	0.287	5.73
60	1.85	10	0.3	5	0.287	4.78
70	2.15	8	0.28	4	0.267	3.82
80	2.50	7	0.28	3.5	0.268	3.34
90	2.80	6	0.27	3	0.258	2.87
100	3.15	6	0.3	3	0.287	2.87
110	3.45	5	0.275	2.5	0.263	2.39
120	3.80	5	0.3	2.5	0.287	2.39
130	4.10	4	0.26	2	0.248	1.91
140	4.45	4	0.28	2	0.268	1.91
150	4.75	4	0.3	2	0.287	1.91
160	5.05	3	0.24	1.5	0.229	1.43
170	5.40	3	0.255	1.5	0.244	1.43
180	5.70	3	0.27	1.5	0.258	1.43
190	6.05	3	0.285	1.5	0.272	1.43
200	6.35	3	0.3	1.5	0.287	1.43
210	6.65	2	0.21	1	0.201	0.96
220	6.95	2	0.22	1	0.210	0.96
230	7.25	2	0.23	1	0.220	0.96
240	7.60	2	0.24	1	0.229	0.96
250	7.90	2	0.25	1	0.239	0.96
260	8.25	2	0.26	1	0.248	0.96
270	8.55	2	0.27	1	0.258	0.96
280	8.90	2	0.28	1	0.268	0.96
290	9.20	2	0.29	1	0.277	0.96
300	9.55	2	0.3	1	0.287	0.96

THERMAL RESISTANCE AND PACKAGING

Standard board dimensions:

- nominal length: 1000 mm
- nominal width: 500 mm
- nominal thickness: 10-300 mm

Edge finish:

- straight edges
- rebated edges for boards with a thickness of 50 mm and above

INSTALLATION

For the application of EPS boards, use materials suitable for direct contact with expanded polystyrene. Polyurethane adhesives, cement-based adhesives, bituminous compounds (based on water dispersion), or other adhesives may be used for installation. Carry out mechanical fixing with installation anchors no earlier than 24 hours after the boards have been bonded. After completion of the EPS boards fixing to the wall, apply a reinforced basecoat or install cladding in order to protect the board surface against weather conditions, for example sunlight, which causes the boards to "yellow". If this occurs, sand the boards before any further work is carried out.

NOTE: substances that have a destructive effect on expanded polystyrene, such as organic solvents (acetone, benzene and nitro thinner), must not be used in contact with EPS boards.

TRANSPORT / STORAGE

Store and transport EPS boards in a manner that protects them against mechanical damage and the effects of weather conditions, such as prolonged exposure to sunlight and rainfall.

MANUFACTURER

Hufgard Optolith Bauprodukte Polska Sp. z o.o.
ul. Rzęsawska 40/42
42-209 Częstochowa
Numer KRS: 0000147022
NIP: 5731017383
REGON: 150076320