

Austrotherm

Facade insulation board EPS - F 70

Product	Factory block-foamed and expanded polystyrene particle cell board (EPS-F according to ÖNORM B 6000, ÖNORM EN 13163 and the GPH quality guidelines (polystyrene quality seal) for the heat insulation of facades.																												
Composition	Expanded polystyrene granulate.																												
Properties	Highly heat insulating, high dimensional accuracy, deformation and ageing resistance, non-shrinking, hardly flammable.																												
Application	As an exterior wall heat insulation composite system for the facade of new and existing buildings. In the ground course area, we recommend the use of XPS-R boards.																												
Technical data	<table border="0"> <tr> <td>Name:</td> <td>EPS-F (according to ÖNORM B 6000 and ÖNORM EN 13163)</td> </tr> <tr> <td>Apparent density:</td> <td>15 - 18 kg/m³</td> </tr> <tr> <td>Compressive stress (at 10% compression):</td> <td>70 kPa (7 t/m²)</td> </tr> <tr> <td>Compression strength:</td> <td>0,07- 0.12 N/mm²</td> </tr> <tr> <td>Tensile strength:</td> <td>0,20-0,30 N/mm²</td> </tr> <tr> <td>Thermal conductivity λ_R:</td> <td>0.040 W/mK 0.29 [BTU in /ft².hr. °F]</td> </tr> <tr> <td>μ value:</td> <td>40</td> </tr> <tr> <td>Supplied thicknesses:</td> <td>2 -20 cm</td> </tr> <tr> <td>Format:</td> <td>100 x 50 cm</td> </tr> <tr> <td>Material consumption:</td> <td>2 boards/m²</td> </tr> <tr> <td colspan="2">Behaviour in fire according to ÖNORM (Austrian standard) B 3800 Pt 1:</td> </tr> <tr> <td>Combustibility grade:</td> <td>B1 – hardly flammable</td> </tr> <tr> <td>Smoking grade:</td> <td>Q3</td> </tr> <tr> <td>Drop formation category:</td> <td>Tr1</td> </tr> </table>	Name:	EPS-F (according to ÖNORM B 6000 and ÖNORM EN 13163)	Apparent density:	15 - 18 kg/m ³	Compressive stress (at 10% compression):	70 kPa (7 t/m ²)	Compression strength:	0,07- 0.12 N/mm ²	Tensile strength:	0,20-0,30 N/mm ²	Thermal conductivity λ_R :	0.040 W/mK 0.29 [BTU in /ft ² .hr. °F]	μ value:	40	Supplied thicknesses:	2 -20 cm	Format:	100 x 50 cm	Material consumption:	2 boards/m ²	Behaviour in fire according to ÖNORM (Austrian standard) B 3800 Pt 1:		Combustibility grade:	B1 – hardly flammable	Smoking grade:	Q3	Drop formation category:	Tr1
Name:	EPS-F (according to ÖNORM B 6000 and ÖNORM EN 13163)																												
Apparent density:	15 - 18 kg/m ³																												
Compressive stress (at 10% compression):	70 kPa (7 t/m ²)																												
Compression strength:	0,07- 0.12 N/mm ²																												
Tensile strength:	0,20-0,30 N/mm ²																												
Thermal conductivity λ_R :	0.040 W/mK 0.29 [BTU in /ft ² .hr. °F]																												
μ value:	40																												
Supplied thicknesses:	2 -20 cm																												
Format:	100 x 50 cm																												
Material consumption:	2 boards/m ²																												
Behaviour in fire according to ÖNORM (Austrian standard) B 3800 Pt 1:																													
Combustibility grade:	B1 – hardly flammable																												
Smoking grade:	Q3																												
Drop formation category:	Tr1																												
Classification according to the Chemical Substances Act	Not subject to labelling requirements																												
Storage	When storing the product, always protect against ultraviolet radiation (sun), the weather and mechanical damage.																												
Quality assurance	Internal quality assurance is provided by the manufacturer's plant, external checks are carried out by approved test institutes according to ÖNORM B 6000 and ÖNORM EN 13163.																												

Written and oral application technology recommendations provided by us to assist the seller/processor are based on our experience and reflect the current state of the art in science and practical application know-how. However, it is understood that these recommendations are non-binding. They do not create any legal relationship or any ancillary obligations in connection with the sale contract. They do not release the buyer from its obligation to verify the fitness of our products for the intended purpose or use by itself.

Thermal insulation board EPS-F 70

Thermal resistance (R) On the basis of ASTM C-518

Thermal conductivity $\lambda_R = 0.29$ [BTU in /ft².hr. °F]

Calculate of thermal resistance R [ft².hr. °F /BTU] :

$$R = d / \lambda_R$$

R - Thermal resistance R [ft².hr. °F /BTU]

d - Thickness of material [in]

λ_R - Thermal conductivity [BTU in /ft².hr. °F]

Thermal resistance of polystyrene EPS-F 70

Thickness of EPS-F 70 [in cm]	R [ft ² .hr. °F /BTU]
2 cm	2.8
5 cm	6.8
8 cm	10.9
10 cm	13.6
12 cm	16.3
15 cm	20.3
18 cm	24.5
20 cm	27.2
25 cm	34.00
30 cm	40.7

Written and oral application technology recommendations provided by us to assist the seller/processor are based on our experience and reflect the current state of the art in science and practical application know-how. However, it is understood that these recommendations are non-binding. They do not create any legal relationship or any ancillary obligations in connection with the sale contract. They do not release the buyer from its obligation to verify the fitness of our products for the intended purpose or use by itself.

