fibranXPS

# Extruded polystyrene

| TECHNICAL DATA FIBRAN*xps* | | Designation code according to EN 13164 | Measurement units | 300 - L | 400 - L | 500 - L | 600 - L | 700 - L | 300 - I | MAESTRO | ETICS GF | ETICS BT | FABRIC | standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shape of edge profile | | | | L | L | L | L | L | I | D | L | L | I | |
| Surface | | | | smooth surface | | | | | | | waffled surface | rough surface with channels | rough surface | |
| Board's dimensions | | | mm | 1250 /600 | 1250-2500 /600 | 1250 /600 | 1250 /600 | 1250 /600 | 1250 /600 | 2500 /600 | 1250 /600 | 2500 /600 | upon request | EN 822 |
| Thickness tolerance | | Ti | | T1 | T1 | T1 | T1 | T1 | T1 | T1 | T3 | T3 | T3 | EN 823 |
| Declared compressive strength at 10% deformation | | CS(10\Y)i | kPa | 300 | 400 | 500 | 600 | 700 | 300[1] | 250-300 | 200-300 | 200-300 | 300-700 | EN 826 |
| Declared thermal conductivity (after 25 years) | 20 mm < d < 30 mm | $\lambda_D$ | W/mK | 0,033 | | | | | 0,033 | | 0,033 | | 0,033 | EN 12667 |
| | 40 mm < d < 200 mm | | | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | 0,035 | |
| Thermal conductivity (after 90 days) | | λ | | 0,032 | 0,032 | 0,033 | 0,033 | 0,033 | 0,032 | 0,032 | 0,032 | 0,032 | 0,032 | |
| Long term water absorption by total immersion | smooth surface | WL(T)0,7 | vol.% | 0,3 | 0,3 | 0,4 | 0,4 | 0,4 | 0,3 | 0,3 | | | | EN 12087 |
| | rough surface | WL(T)1,5 | | | | | | | | | ≤1,5 | ≤1,5 | ≤1,5 | |
| Water absorption by diffusion | | WD(V)3 | vol.% | 1,5 | 1,5 | 1,2 | 1,2 | 1,2 | 1,5 | 1,5 | | | | EN 12088 |
| Water vapour diffusion resistance factor | | MUi | - | 150-50 | 150-50 | 150-50 | 150-50 | 150-50 | 150-50 | 100-50 | 50 | 50 | 50 | EN 12086 |
| Declared value of dimensional stability at a temperature of 70°C and of 90% humidity | | DS(TH)5 | % | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | EN 1604 |
| Declared level of deformation at a compressive load of 40 kPa and a temperature of 70°C | | DLT(2)5 | % | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | EN 1605 |
| Compressive modulus of elasticity E | | - | MPa | 20 | 25 | 30 | 35 | 40 | 20 | 15 | 15 | 15 | 15 | EN 826 |
| Shear strength τ | | - | MPa | | | | | | | | 0,15 | 0,15 | 0,15 | EN 12090 |
| Shear modulus G | | - | MPa | | | | | | | | 2,6 | 2,6 | 2,6 | EN 12090 |
| Tensile strength perpendicular to the faces $\sigma_{mt}$ | | TR400 | kPa | | | | | | | | >400 | >400 | >400 | EN 1607 |
| Linear coefficient of thermal expansion $\alpha_{+20-+70°c}$ | | - | mm/mK | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | 0,075 | |
| Freeze-thaw resistance | | FT2 | | 0,5 | 0,5 | 0,6 | 0,6 | 0,6 | 0,5 | 0,5 | | | | EN 12091 |
| Temperature range of use | | - | °C | from -50 to +75 | | | | | | | | | | |
| Reaction to fire | | - | Class | E | | | | | | | | | | EN 13501-1 |
| | | | | B1 | | | | | | | | | | DIN 4102 |

FIBRAN*xps* ***is an environmental friendly material***

[1] Compressive strength of 200 kPa in the case of 20 mm thick boards
Compressive strength of 250 kPa in the case of 30 mm thick boards