

AV6

DESCRIPTION

STIFERITE AV6 is an height performance insulation board with a rigid polyisocyanurate polyiso foam core, blowing without CFC or HCFC, covered on one side with saturated fiber glass and on one side with embossed aluminium 60µm thickness.

MAIN APPLICATIONS

Under floor insulation
Ventilated wall insulation
Cavity wall insulation where need vapour proof property

GUIDELINE FOR DRAFTING OF TECHNICAL SPECIFICATIONS*

Thermal insulation **STIFERITE AV6** in polyiso rigid foam (PIR) of thickness...(*), covered on one side with saturated fiber glass and on one side with embossed aluminium 60µm thickness, has:

Declared thermal conductivity: $\lambda_D = \dots$ W/mK (EN 13165 Annex A e C)

Compressive strenght: **minimum value = ... kPa (EN 826)**

Water vapour diffusion resistance factor: $\mu = \infty$ (EN 12086)

Water absorptin by total immersion: **WL < 1 % (EN 12087)**

Euroclass reaction to fire: **E (EN 11925-2)**

Eviromental product declaration for 60 mm thickness (ISO 14040 e MSR 1999:2)

Product of Company certified according to UNI EN ISO 9001:2000 specifications, with CE conformity mark on the whole range.

(*) Not stated parameters change according to thickness. For introducing the values corresponding to the used thickness, please use the specifications indicated on this technical sheet.

Characteristics and performances

Isolamento Termico

| Characteristics [Standard] | Description | Symbol [Units] | Value | | | | | | | | | |
|--|-----------------------------|----------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
| | | | Some characteristics depend on the thickness (mm) | | | | | | | | | |
| | | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | - |
| Average initial thermal conductivity [EN 12667] | Value determinad at 10 °C | $\lambda_{90/90,1}$ [W/mK] | 0,024 | | | | | | | | | |
| Declared thermal conductivity [UNI EN 13165 annex A e C] | Value determinad at 10 °C C | λ_D [W/mk] | 0,028 thickness 20 - 70 | | | | | | | | | |
| | | | 0,026 thickness 80 - 120 | | | | | | | | | |
| Declared thermal trasmittance | $U_D = \lambda_D / d$ | U_D [W/m ² K] | 1.40 | 0.93 | 0.70 | 0.56 | 0.47 | 0.40 | 0.33 | 0.29 | 0.26 | - |
| Declared thermal resistance | $R_D = d / \lambda_D$ | R_D [m ² KW] | 0.71 | 1.07 | 1.43 | 1.79 | 2.14 | 2.50 | 3.03 | 3.49 | 3.85 | - |
| For other characteristics see back → | | | | | | | | | | | | |

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| Other information | To obtain further technical data call green numer 800840012 | | | |
| Technical data sheet | Stiferite AV6 | Rev.2 15/10/2008 | Author: F. Raggiotto | Verified: L. Tolin |

Technical data sheet

AV6

Characteristics and performances

| Characteristics [Standard] | Description | Symbol [Units] | Value | | | | | | | | | | |
|--|---|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | | | Some characteristics depend on the thickness (mm) | | | | | | | | | | |
| | | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | - | |
| Compressive strength [EN 826] | Value determined at 10% deformation | $\sigma_{10} \text{ o } \sigma_m$ [kPa] | 160 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | - |
| Dimensional stability under specified temperature and humidity [EN 1604] | 48h (± 1) a 70°C (± 2) e 90% UR (± 5) | DS(TH) [% dimensions] | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - |
| | | [% thickness] | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | - |
| | 48h (± 1) a -20°C (± 3) | [% dimensions] | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | - |
| | | [% thickness] | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - |
| Nominal thickness [EN 823] | | d_N [mm] | production from 20 to 100 mm. Available on order until 120 mm | | | | | | | | | | |
| Board density | Average value with facing characteristics | ρ [Kg/m ³] | 39 | | | | | | | | | | |
| Euroclass reaction to fire [EN 13501-1] [EN 11925 -2] [EN 13823 (SBI)] | Class | Euroclass | E | | | | | | | | | | |
| Specific heat capacity | Value | C_p [J/kg°C] | 1425 | | | | | | | | | | |
| Water vapor diffusion resistance factor [EN 12086] | Value | μ (MU) | Endless | | | | | | | | | | |
| Water absorption [EN 12087] | Total immersion for 28 days | WL [%] | Less than 1% _w | | | | | | | | | | |

Tolerances and notes

| Tolerances [UNI EN 13165] | Thickness | T2 [mm] | <50 ± 2 mm | | from 50 to 75 ± 3 mm | | >75 ± 5 /-2 mm | |
|---------------------------|------------------------------|--|----------------------|-----------------------------------|----------------------------------|-----------------------|-----------------------|--|
| | Dimensions | | < 1000 ± 5 mm | from 1000 to 2000 $\pm 7,5$ mm | from 2000 to 4000 ± 10 mm | > 4000 ± 15 mm | | |
| Notes | stability to the temperature | Stiferite panels are used in a range of continuous temperatures normally included between -40 °C e +110 °C. During short time they can resist also to temperatures till + 200 °C, or corresponding to the temperature of fused bitumen, without particular problems. Long exposures to the temperatures could cause deformations to the foam or to the coats, but without causing sublimation or fusion. Resistance to the torch and some other reactions to fire are characteristics connected with the kind of used panel. | | | | | | |
| | Aspect | Any possible little areas of non-adhesion between coats and foam are originated by the production process and don't prejudice in any way the physical-mechanical properties of the panels. | | | | | | |

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