

ISOCANALE AAB

DESCRIPTION

STIFERITE ISOCANALE AAB is a high performance insulation board manufactured from CFC or HCFC free closed cell rigid polyiso foam. It is "sandwiched" between an 80µm thick embossed aluminium facer on one side and 80µm thick smooth aluminium facer covered by an anti-bacterial lacquer, based on silver ions, on the other.

MAIN APPLICATIONS

For the construction of air distribution ducts recommended for Hospital and clean rooms.

GUIDELINE FOR DRAFTING OF TECHNICAL SPECIFICATIONS*

Thermal insulation **STIFERITE ISOCANALE AAB** in polyiso rigid foam (PIR) of thickness...(*), covered on with embossed aluminium 80µm thickness and one side with smooth aluminium facer covered by an anti-bacterial lacquer, based on silver ions, on the other, has:

Thermal conductivity: $\lambda_i = 0.022 \text{ W/mK}$ (EN 12667)
 Weight percentage of recycled material: **10.40 – 8.31 %**
 Compressive strength: **minimum value = ... kPa** (EN 826)
 Water vapour diffusion resistance factor: $\mu = \infty$ (EN 12086)
 Water absorption by total immersion: **WL < 1 %** (EN 12087)
 Water absorption by partial immersion: **$W_{sp} < 0.1 \text{ kg/m}^2$** (EN 1609)
 Euroclass reaction to fire: **D** (EN 13823)
 British reaction to fire: **0** (BS 476:parte 6/7)
 Italian reaction to fire: **0-2** (DM 26.06.84)

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	-	-	-	-	-	-	-	
Average initial thermal conductivity [EN 12667]	Value determined at 10 °C	λ_i [W/mK]	0,022									
Declared thermal transmittance	$U_i = \lambda_i / d$	U [W/m ² K]	1.10	0.73	-	-	-	-	-	-	-	
Declared thermal resistance	$R_i = d / \lambda_i$	R [m ² K/W]	0.91	1.36	-	-	-	-	-	-	-	
Foam density	Average value	ρ [Kg/m ³]	48 ± 3									
Nominal thickness [EN 823]		d_N [mm]	production from 20 to 30 mm									
Compressive strength [EN 826]	Value determined at 10% deformation	$\sigma_{10} \text{ o } \sigma_m$ [kPa]	200	200	-	-	-	-	-	-	-	
Specific heat capacity	Value	C_p [J/kg°C]	1302									
Water vapor diffusion resistance factor [EN 12086]	Value	μ (MU)	Endless									

For other characteristics see back →

Other information	To obtain further technical data call green numer 800840012			
Technical data sheet	Stiferite ISOCANALE AAB	Rev. 0 26/08/2012	Author: F. Raggiotto	Verified: L. Tolin

Technical data sheet

ISOCANALE AAB

Characteristics and performances

Characteristics [Standard]	Description	Symbol [Units]	Value									
			Some characteristics depend on the thickness (mm)									
			20	30	-	-	-	-	-	-	-	
Dimensional stability under specified temperature and umidity [EN 1604]	48h (±1) a 70°C (±2) e 90% UR (±5)	DS(TH) [% dimensions]	1	1	-	-	-	-	-	-	-	
		[% thickness]	4	4	-	-	-	-	-	-	-	
	48h (±1) a -20°C (±3)	[% dimensions]	0,5	0,5	-	-	-	-	-	-	-	
		[% thickness]	1	1	-	-	-	-	-	-	-	
Euroclass reaction to fire [EN 13501-1] [EN 11925 -2] [EN 13823 (SBI)]	Vertical and horizontal meetline not protected	Euroclass	D s2 d0		thickness 20 mm							
			C s2 d0		thickness 30 mm							
Euroclass reaction to fire [EN 13501-1] [EN 11925 -2] [EN 13823 (SBI)]	meetline protected	Euroclass	B s2 d0		thickness 20 – 30 mm							
British reaction to fire [BS 476]	[BS476: parte 6:1989]	Class	0									
	[BS476: parte 7:1997]	Class	1									
	[BS476: parte 6/7]	Class	0									
Italian reaction to fire [DM 26.06.84]		Class	0-2									
Water absorption [EN 12087]	Total immersion for 28 days	WL [%]	Less than 1% _w									
Water absorption [EN 1609]	Partial immersion	W _{ip} [kg/m ²]	Less than 0.1									
Weight percentage of recycled material	The variation depends on the thickness	%	10.40 – 8.31									
Test microorganism [JIS Z 2801:2000]	Staphylococcus aureus ATCC 6538P	Reduction [%]	more than 99									

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 ±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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