

Robair Groep PIR Kanaal

DESCRIPTION

Robair Groep PIR Ducts is an height performance insulation board with a rigid polyisocyanurate polyiso foam core, blowing without CFC or HCFC, covered on both side with embossed aluminium 80µm thickness.

MAIN APPLICATIONS

For the construction of air distribution ducts

GUIDELINE FOR DRAFTING OF TECHNICAL SPECIFICATIONS*

Thermal insulation Robair Groep PIR Ducts in polyiso rigid foam (PIR) of thickness 25 mm, covered on both sides with embossed aluminium 80µm thickness, has:

- Declared thermal conductivity: $\lambda_D = 0.024$ 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: 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)							
			25	-	-	-	-	-	-	-
Average initial thermal conductivity [EN 12667]	Value determinad at 10 °C	$\lambda_{90/90,1}$ [W/mK]	0,022							
Declared thermal conductivity [UNI EN 13165 annex A e C]	Value determinad at 10 °C C	λ_D [W/mk]	0,024							
Declared thermal trasmittance	$U_D = \lambda_D / d$	U_D [W/m ² K]	1.00	-	-	-	-	-	-	-
Declared thermal resistance	$R_D = d / \lambda_D$	R_D [m ² K/W]	1.04	-	-	-	-	-	-	-
Nominal thickness [EN 823]		d_N [mm]	production from 25 mm							

For other characteristics see back ->

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Characteristics and performances

Characteristics [Standard]	Description	Symbol [Units]	Value										
			Some characteristics depend on the thickness (mm)										
Dimensional stability under specified temperature and umidity [EN 1604]	48h (±1) a 70°C (±2) e 90% UR (±5)	DS(TH)	25	-	-	-	-	-	-	-	-	-	-
		[% dimensions]	1	-	-	-	-	-	-	-	-	-	-
		[% thickness]	4	-	-	-	-	-	-	-	-	-	-
		[% dimensions]	0,5	-	-	-	-	-	-	-	-	-	-
Compressive strenght [EN 826]	Value determinad at 10% deformation	$\sigma_{10} \sigma_m$	200	-	-	-	-	-	-	-	-	-	
		[kPa]											
Foam density	Average value	ρ [Kg/m ³]										45	
Euroclass reaction to fire [EN 13501-1] [EN 11925 -2] [EN 13823 (SBI)]	Vertical and horizontal meetline not protected	Euroclass											
			C s2 d0									thickness 25 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	
Specific heat capacity	Value	Cp [J/kg°C]										1302	
Water vapor diffusion resistance factor [EN 12086]	Value	μ (MU)										Endless	
Water absorption [EN 12087]	Total immersion for 28 days	WL [%]										Less then 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 ±7,5 mm	from 2000 to 4000 ±10 mm	> 4000 ±15 mm
Notes	stability to the temperature		<p>Robair Groep PIR Ducts 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.</p> <p>Long exposures to the temperatures could cause deformations to the foam or to the coats, but without causing sublimation or fusion.</p> <p>Resistance to the torch and some other reactions to fire are characteristics connected with the kind of used panel.</p> <p>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.</p>			
	Aspect					