

EFISARKING

EFISARKING is a rigid polyurethane thermal insulation panel with multilayer facing on its two faces used for buildings.

User application

EFISARKING is used for external thermal insulation of sloped roof according to the method called "Sarking" used on traditional wooden frames for residential, commercial or public-access (ERP) buildings. The use of this method is restricted to local with low and medium hygrometry of buildings in plain climate (altitude less than 900 m)

Composition

		EFISARKING
Rigid polyurethane foam		Cream color
Upper and lower facing		Multilayer complex with a reflective facing

Packaging

		EFISARKING
Dimensions	Length x width Thickness	2410 mm x 1200 mm Refer to ACERMI* certificate Tongue and grooved, length direction with machining centered
Marking		Each package is CE labelled
Packaging		On pallet, under retracted wrapping
Storage		On flat support, away from weather Any changes in color of the foam does not affect product performance
* ACERMI: French association for certification of insulation materials		

Characteristics - CE marking

EFISARKING is a rigid insulation panel for buildings and complies with EN 13165: Factory made rigid polyurethane foam (PU) products.

Essential characteristics	Performances	Harmonised Technical Specification
Reaction to fire	F	EN 13165 : 2012
Thermal conductivity - λ (W/(m.K))	$\lambda = 0,022$	
Thickness - d (mm)	$d_{min} = 40$ $d_{max} = 160$	
Thermal resistance - R (m ² .K/W)	$R_{min} = 1,85$ $R_{max} = 7,40$	
Classes for thickness tolerances	T2	
Dimensional stability under specified temperature and humidity	DS (70,90) 2	
Compressive strength (kPa)	CS (10/Y) 175	
Tensile strength perpendicular to faces (kPa)	NPD	
Water absorption	WS (P)	
Flatness after partial immersion	NPD	
Water vapour transmission	NPD	
Compressive creep	CC (2/1,5/10) 50	
Deformation under specified compressive load and temperature conditions	NPD	
Acoustic absorption index	NPD	
Direct airborne sound insulation index	NPD	
Release of dangerous substances inside buildings	[1]	
Continuous glowing combustion	[2]	

[1] : Thermal insulation products should not release regulated hazardous substances exceeding maximum permitted levels specified in the european or national regulations. European test methods are being developed.

[2] : A test method is being developed and, when available, the standard will be changed.

Additional characteristics	Performances	Test method
Useful dimensions : Length width	2400 mm \pm 10 mm 1190 mm \pm 7,5 mm	EN 13165 : 2012
Squareness	≤ 5 mm/m	
Flatness	≤ 10 mm	

Characteristics (outside CE marking)

Characteristics	Performances	Test method
Facing emissivity	< 10 %	Total hemispherical emissivity (LNE)
Water vapour transmission of the facing	Sd > 150 m	EN 1931
ACERMI certificate	n° 12 / 006 / 749	
Class of volatile substances emission in the indoor air	A+	

Installation

Panels **EFISARKING**, used for external thermal insulation of sloped roof, are installed in compliance with SOPREMA guidelines "EFISARKING – Roof thermal insulation in plain climate".

The fixing of counter-battens is done by using screws:

- simple thread **EFIVIS SF**, laid perpendicular to the slope, for insulation thickness up to 160 mm,
- double thread **EFIVIS DF**, alternately placed at an angle of 60° / 120° relative to the slope, for insulation thickness up to 160 mm.

The following tab shows the required length of screws **EFIVIS** depending of the insulation thickness, substrate and counter-battens.

		Insulation thickness EFISARKING (mm)					
		80	86	115	130	160	172
		R=3,70 m ² .K/W	R=4,00 m ² .K/W	R=5,30 m ² .K/W	R=6,00 m ² .K/W	R=7,40m ² .K/W	R=7,90 m ² .K/W
Counter-battens, height 27 mm							
Planking thickness (mm)	Without				EFIVIS SF 220 mm		EFIVIS DF 300 mm
	10						
	12			EFIVIS SF 220 mm	EFIVIS SF 240 mm		
	14						
	18		EFIVIS SF 200 mm				
	26			EFIVIS SF 240 mm		EFIVIS SF 280 mm	
Counter-battens, height 40 mm							
Planking thickness (mm)	Without			EFIVIS SF 220 mm	EFIVIS SF 240 mm		EFIVIS DF 300 mm
	10						
	12		EFIVIS SF 200 mm				
	14						
	18			EFIVIS SF 240 mm	EFIVIS SF 280 mm		EFIVIS DF 330 mm
	26			EFIVIS SF 220 mm		EFIVIS DF 300 mm	

* Nature and characteristics of the planking forming ceiling are defined according to the requirements of the fire regulations applicable to the construction and mechanical design criteria.

The density of fasteners depends on the roof slope, applied loads (own weight of the cover and snow load) and the height of the counter-batten.

The bridging of joints panels and special details are done with a strip **EFIBANDE BUTYLE**. This is a waterproofing strip made from butyle adhesive mass and a complex of aluminum reinforced with a polyester film. The roll are of 20 m length and 75 mm width.

Special indications

Hygiene, health and environment:

EFISARKING is not classified as dangerous according to French and European regulations.

For further information, please refer to relevant Safety Data Sheet, including precautions to take in case dusts or machining operations.

About product losses or batch remains: non-hazardous waste, not inert - reuse, incineration in Authorized Installation or stockpiled in an installation for Storage of Non-Hazardous Waste (ISDND: Dumps of class II).

The product has an Environmental and Health Declaration Sheet (FDES in french) for some thicknesses.

Traceability:

Product traceability is ensured through a manufacturing code present on the packaging :
CCC/YY/HH/MM/N/ACERMI
Calendar day / Year / Hour / Minute / Production site marker/number of ACERMI certificate

QSE integrated system:

SOPREMA has always attached the highest importance to the quality of its products, to the respect of environment and men.

For this reason, we apply an integrated management of the **Quality (ISO 9001), Environment (ISO 14001) and Health-Security (OHSAS 18001)** certified.