

EFIGREEN ACIER

EFIGREEN ACIER is a rigid polyisocyanurate foam (PIR) thermal insulation panel for the building, coated with a facing on each of its sides.

User application

EFIGREEN ACIER is intended for the thermal insulation of waterproofed roofs as non-bearing thermal insulation panel, support for self-protected waterproofing system, semi loose-laid mechanically fastened or fully adhered on one layer of expanded perlite (fibered) :

- Alone for buildings under the Labor Code and whose low floor of the last level is less than 8 m from the ground and for some public access buildings.
- Associated with (fibered) expanded perlite panels FESCO or rock wool in other premises.

Composition

		EFIGREEN ACIER
Rigid polyurethane foam		Rigid polyisocyanurate foam
Facing		Embossed aluminium foil 50 µm

Packaging

		EFIGREEN ACIER
Dimensions	Length x width	30 to 100 mm : 2500 mm x 1200 mm / 1200 mm x 1000 mm 120 mm : 1200 mm x 1000 mm
	Thicknesses	Refer to ACERMI* certificate
	Finishing	Straight edge panel
Marking		Each package is CE labelled
Packaging		Size 2500 x 1200: panels are conditioned on a wrapped pallet Size 1200 x 1000: panels are packed on a wrapped pallet
Storage		On flat support, away from weather Any colour changes of the foam does not affect product performances
* ACERMI: French association for certification of insulation materials		

Characteristics - CE marking

EFIGREEN ACIER is a rigid insulation panel for building and complies with EN 13165 "Factory made rigid polyurethane foam (PU) products".

Essential characteristics	Performances	Harmonised Technical Specification
Thermal conductivity – λ_D (W/(m.K))	0,023	EN 13165 : 2012 + A1:2015
Thickness – d (mm)	30-162	
Thermal resistance – R_D (m ² .K/W)	1,30-7,05	
Thickness tolerance	T2	
Reaction to fire	D-s2, d0 30-55 mm C-s2, d0 60-100 mm D-s2, d0 104-162 mm	
Durability of reaction to fire against heat exposure, weathering, ageing/ degradation	(a)	
Thermal resistance durability against heat exposition, weather conditions, aging/ and damage		
Durability characteristics	NPD	
Dimensional stability	NPD	
Deformation under specified compressive load and temperature conditions	NPD	
Determination of thermal resistance and thermal conductivity values after ageing	(b)	
Compressive strength	CS (10\Y) 150	
Tensile strength	NPD	
Durability of compressive strength against ageing, degradation		
Compressive creep	NPD	
Water permeability		
Short term water absorption	WS(P)0,2	
Long term water absorption	NPD	
Flatness after partial immersion	NPD	
Water vapour transmission	NPD	
Acoustic absorption	NPD	
Release of dangerous substances inside buildings	(c)	
Continuous glowing combustion	(c)	

(a) No fire reaction properties variation for the polyurethane products with time.

(b) Any variation in thermal conductivity and thermal resistance is treated and taken into account in the declared values. (Annex C for thermal conductivity and dimensional stability for the thickness).

(c) European test methods are on-going.

Additional characteristics	Performances	Test method
Useful dimensions Length x width	2500 ± 5 mm x 1200 mm ± 3 mm 1200 mm ± 2 mm x 1000 ± 2 mm	EN 13165 : 2012 + A1:2015
Thickness	30 to 120 ± 2 mm	
Squareness	≤ 3 mm	
Flatness	Gap ≤ 5 mm	

Characteristics (off CE marking)

Characteristics	Performances	Test method
Compressibility classification at 80°C under 40 kPa	C	UEAtc guideline § 4.51 (CSTB 2662-v2)
Curving under thermal gradient	≤ 3 mm	UEAtc guideline § 4.32 (CSTB 2662-v2)
Dimensional variation in the free state of deformation at 23°C after stabilization at 80°C	≤ 0,5 %	UEAtc guideline § 4.31 (CSTB 2662-v2)
ACERMI certificate	n° 03 / 006 / 109	

Installation

EFIGREEN ACIER panels are laid as non-bearing thermal insulation panels, support for waterproofing systems, in compliance with Technical Approval (DTA) n° 5/15-2438:

- Loose-laid under heavy protection,
- Self-protected, semi loose-laid with mechanical fasteners
- Self-protected fully adhered on a upper layer of expanded perlite (fibered) or rock wool bitumen surfaced.

Special indications

Hygiene, health and environment:

EFIGREEN ACIER 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 (FDDES 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.