

# EFIMUR

**EFIMUR** is a rigid polyurethane foam, thermal insulation panel for the building, coated with a facing on each of its sides.

## User application

**EFIMUR** is intended for the internal thermal insulation of vertical walls of new or old buildings. The wall is thermally insulated with panels **EFIMUR** associated with wall lining on metal frame, in compliance with Code of practice DTU 25.41 which allows the incorporation of networks.

## Composition

		EFIMUR
Rigid polyurethane foam		Beige colour
Facing		Multilayer

## Packaging

		EFIMUR
Dimensions	Length x width Thickness	2800 mm x 1200 mm Refer to ACERMI* certificate Tongued and grooved panel on its 4 sides
Marking		Each package is CE labelled
Packaging		Panels are packed on non-stackable wrapped pallet
Storage		On flat support, away from weather Any colour changes of the foam do not affect product performances

\* ACERMI: French association for certification of insulation materials

## Characteristics - CE marking

**EFIMUR** 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
Thermal conductivity – $\lambda_D$ (W/(m.K))	<b>0,028</b>	<b>0,025</b>	<b>0,023</b>	<b>0,022</b>	<b>EN 13165: 2012 + A1:2015</b>
Thickness – d (mm)	<b>20</b>	<b>25</b>	<b>30-35</b>	<b>40-160</b>	
Thermal resistance – $R_D$ (m <sup>2</sup> .K/W)	<b>0,70</b>	<b>1,00</b>	<b>1,30-1,50</b>	<b>1,85-7,40</b>	
Thickness tolerance	<b>T2</b>				
Reaction to fire	<b>NPD</b>				
Durability of reaction to fire against heat exposure, weathering, ageing/ degradation	<b>(a)</b>				
Thermal resistance durability against heat exposition, weather conditions, aging/ and damage	<b>(b)</b>				
Durability characteristics	<b>DS(70,90)2</b>				
Dimensional stability	<b>NPD</b>				
Deformation under specified compressive load and temperature conditions	<b>(b)</b>				
Determination of thermal resistance and thermal conductivity values after ageing	<b>NPD</b>				
Compressive strength	<b>NPD</b>				
Tensile strength	<b>NPD</b>				
Durability of reaction to fire against heat exposure, weathering, ageing/ degradation	<b>NPD</b>				
Compressive creep	<b>WS(P)0,2</b>				
Water permeability	<b>NPD</b>				
Short term water absorption	<b>NPD</b>				
Long term water absorption	<b>NPD</b>				
Flatness after partial immersion	<b>NPD</b>				
Water vapour transmission	<b>NPD</b>				
Acoustic absorption	<b>(c)</b>				
Release of dangerous substances inside buildings	<b>(c)</b>				
Continuous glowing combustion	<b>(c)</b>				

(a): Polyurethane fire resistance does not degrade with time.

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

(c): European test methods are ongoing.

Additional characteristics	Performances	Test method
Useful dimensions (Length x width)	<b>2800 mm ± 10 mm X 1190 mm ± 7,5 mm</b>	<b>EN 13165: 2012 + A1:2015</b>
Squareness	<b>≤ 5 mm/m</b>	
Flatness	<b>gap ≤ 10 mm</b>	



## Characteristics (off CE marking)

Characteristics	Performances	Test method
Water vapour transmission of the facing	Sd > 60 m	EN 1931
Air permeability of the facing under 50 Pa	0,00 m <sup>3</sup> /(m <sup>2</sup> .h)	EN 12114
<b>ACERMI certificate</b>	<b>13 / 006 / 871</b>	
Class of volatile substances emission in the indoor air		<b>A+</b>

## Installation

**EFIMUR** panels are intended for the internal thermal insulation of vertical walls (brick, concrete blocks, concrete) with a lining wall in compliance with DTU 25.41. The thermal insulation system is made of:

- **EFIMUR** panels laid against the wall behind the metal frame,
- A metal frame made of:
  - channels (U 28/47/28) + simple (C 50/46/50) or doubled (C 35/46/35) studs without fasteners on the support according to DTU 25.41 § 6.4.1 or,
  - ceiling perimeter (U 28/20/28) + furring channels (C 15/48/15) + **EFICLIC** as intermediate fasteners on the support
  - optionally a semi-rigid mineral wool as thermo-acoustic insulation ( $\lambda=0,038$  W/(m.K), installed between the studs or furring channels.
- Plasterboards.

The dimensions of the lining wall (width, assembly, center distance between studs or furring channels) is made according to the imposed height between floor and ceiling. The use of **EFICLIC** allows to make a lining wall with furring channel spaced of 60 cm, whose the height can reach:

- 2,70 m with 1 **EFICLIC** fastened at mid-height,
- 3 m with 1 **EFICLIC** every meter.

The facing of **EFIMUR** panels are airtight, so they may be used as airtightness of the vertical wall after treatment of joints between panels (with **AIR'STICK** adhesive) and horizontal junctions with floor and ceiling (with **AIR SOPRASEAL'INT** sealant and strips of **SOPRAVAP KRAFT**).

Networks are incorporated inside the technical space between studs.

## Special indications

### Hygiene, health and environment:

**EFIMUR** 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: CCC/YY/HH/MM/N/ACERMI  
Calendar day / Year / Hour / Minute / Production site marker/number of ACERMI certificate.

### QSE integrated system:

The product is manufactured and applied under an integrated management of the **Quality (ISO 9001), Environment (ISO 14001) and Health-Security (OHSAS 18001) certified.**