

TMS

TMS is a rigid polyurethane (PUR) thermal insulation panel with embossed aluminium facing on its two faces used for buildings.

User application

TMS is used for floors thermal insulation:

- under hydraulic screed or under sealed tiles, in compliance with standard NF DTU 52.10 or under fluid screed covered by a valid Technical Approval.
- under hydraulic floor heating in compliance with standard NF DTU 65.14 or under electric radiant floor heating in compliance with CSTB guidelines n° 3606-V3,
- under slab on grad in compliance to standard NF P 11-213-1 (DTU 13.3),
- under carried slab in compliance with Eurocode 2 and the standard NF P18-201 (DTU 21).

Composition

		TMS
Rigid polyisocyanurate foam		Cream color
Upper and lower facing		Multilayer marked by a grid in steps of 10 cm

Packaging

		TMS
Dimensions	Length x width Thickness	1200 mm x 1000 mm Refer to ACERMI* certificate Tongue and grooved, length direction with machining centered
Marking		Each package is CE labelled
Packaging		Panels are packed on non-stackable wrapped pallet
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

TMS 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))	0,023	0,025	0,023	0,022	
Thickness - d (mm)	d=21	d=25	d _{min} =30	d _{min} =40	
Thermal resistance - R (m ² .K/W)	R=0,75	R=1,00	R _{min} =1,30 d _{max} =35 R _{max} =1,50	R _{min} =1,85 d _{max} =120 R _{max} =5,55	
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	NPD				
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 x width	1190 mm ± 7,5 mm x 990 mm ± 7,5 mm	EN 13165 : 2012
Thickness	30 to 120 mm ± 2 mm	
Squareness	≤ 5 mm/m	
Flatness	Gap ≤ 10 mm	

Characteristics (outside CE marking)

Characteristics	Performances	Test method
Floor classification	SC1a ₂ Ch (25 to 120 mm) SC1b ₁ (40 to 100 mm)	DTU 52.10
Critical strength in service	25 to 120 mm : R _{cs,mini} =105 kPa ds _{min} =1,3% - ds _{max} =1,6%	DTU 13.3
Deformation in service	Module ES=4,34 MPa	EN ISO 10140-3
Impact insulation class (under hydraulic screed)	ΔLw = 18 dB for Th = 56 mm ΔLw = 19 dB for Th = 120 mm	
ACERMI certificate	n° 08 / 006 / 481	
Release of dangerous substances inside buildings	A +	

Installation

Conditions for using of TMS panels

- as insulation under hydraulic screed (DTU 26.2) or under fluid screed (covered by a Technical Approval): 1 or 2 thicknesses of panel ranging 25 and 120 mm each or 1 thickness of 25 to 120 mm associated with thin acoustical underlayer (SCAM) classified at least SC(1 or 2)_{a2} or b₂,
- under sealed tiles (DTU 52.10): thickness of 25 to 120 mm,
- under hydraulic floor heating (DTU 65.14) or under electric radiant floor heating (CSTB guidelines n° 3606-V3), 1 or 2 thicknesses of 25 to 120 mm associated with thin acoustical underlayer (SCAM) classified at least SC1a₂A,
- under slab on grad (DTU 13.3): 1 thickness of 25 to 120 mm for individual house, thickness up to 80 mm for other buildings
- under carried slab (DTU 21 and Eurocode 2): 1 thickness of 25 to 120 mm.

Installation

TMS panels are laid on the substrate in compliance with DTU, Technical guidelines or Technical Approvals of the underlying works and the conditions of using described above.

Special indications

Hygiene, health and environment:

TMS 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.