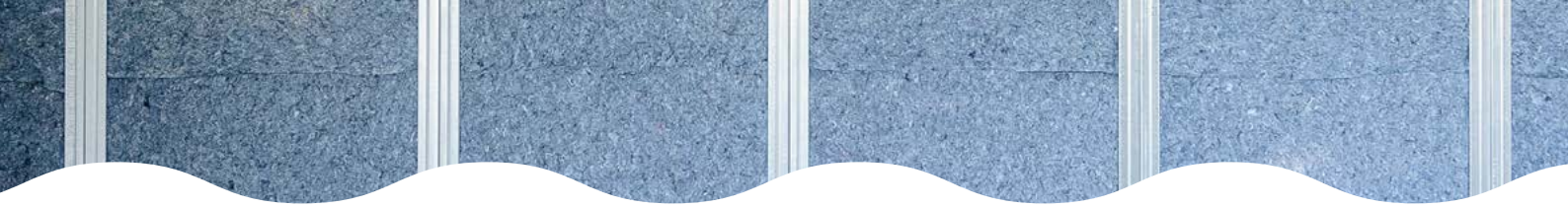
Métisse®

Biobased and recycled





Introduction:

Welcome to the world of **Métisse**, a biobased and recycled insulation solution made from damaged, non-wearable clothing. An environmentally friendly insulation choice with many important benefits.

Product Description

Métisse is a biobased insulation material made from recycled cotton. By using discarded clothing that would otherwise be incinerated or landfilled, Métisse contributes to a circular economy. Each year, Métisse recycles at least **2.5 million cotton garments**, equivalent to **1,500,000 kg of textiles** saved from waste.
This amount increases every year.

Sustainability and Environmental Benefits

- **Biobased:** Métisse is made up of 77% recycled cotton fibers. The lifespan of this natural and renewable material is extended by recycling the cotton. This contributes to a more sustainable construction sector and a healthier planet.
- **CO2 Storage:** Our products store at least 1,450 tons of biogenic CO2 annually, contributing to the reduction of the carbon footprint.
- **Waste Reduction:** By recycling non-wearable clothing, Métisse helps reduce waste. This results in less incineration and a longer product lifecycle.

Métisse®
Biobased and recycled

Technical Properties

Insulation Value

Lambda value = 0,039 W/m K

Thickness in mm	45	50	60	80	100
Rd value	1,15	1,25	1,5	2,05	2,55

120	145	160	180	200
3,05	3,7	4,1	4,6	5,1

Fire Rating

Métisse is fire-resistant at the fiber level due to the use of mineral (boron-free) salts. This treatment also prevents Métisse from molding.

- Fire rating in application: B, s1, d0 (EN 13501-1)
- Métisse fire rating: D, s2, d0 (EN 13501-1)

Sound Insulation

Métisse holds a leading position in sound insulation. Due to the long cotton fibers, Métisse absorbs sound vibrations effectively, contributing to a quieter and more comfortable living environment.

	PMA045	PMA020	RMA020
Sound Absorption aw	**0,95**	**0,5**	**0,5**
Thickness	45mm	20mm	20mm
Density	45kg /m³	45kg /m³	45kg /m³

	PM100	PRT045
Sound Absorption aw	**0,85**	**0,75**
Thickness	100mm	45mm
Density	25kg /m³	20kg /m³

Moisture and Heat Regulation

Métisse offers a comfortable and breathable indoor climate for the end-user due to its excellent moisture and heat-regulating properties. It promotes vapor-open construction, which contributes to breathable buildings.

- Vapor diffusion resistance μ = 2.2
- Moisture absorption capacity WP = 3.73 kg/m²
- Heat storage capacity C = 1600J /kg/.K

Certifications

ACERMI, LCA, BCRG, Insula, Biocourced label, ETA (CE)

Areas of Application

Métisse is suitable for the following applications: renovation projects, new construction, commercial buildings, additional insulation for sloped roofs, partition walls, metal stud walls, timber frame construction, interior walls, ceiling systems, wooden intermediate floors, dormers, machines, and prefab elements.

Handling

Storage

Métisse must be stored in a dry and well-ventilated area. When storing, keep it at least 10 cm (pallet height) above a damp surface.

Cutting

Use a flat knife without serrations to cut Métisse. A serrated knife will damage the long cotton fibers, making the material fray. It is also possible to cut Métisse with a Festool Cordless Insulation Saw ISC 240 Li EB.



Cutting Insulation Knife

Cutting with a Festool Saw

Compression

The thermal insulation (RT) of 20kg/m³ is lightweight and flexible, and can be compressed up to 10% while retaining all its technical properties.

Product Advantages

- Made from recycled clothing (mostly denim)
- Biobased (cotton)
- High heat storage capacity
- Excellent sound insulation
- Vapor-regulating (suitable for vapor-open constructions)
- Natural fibers
- Easy to process
- Flexible yet shape-retaining and strong
- Recyclable
- Comfortable to work with (non-itchy, low dust)
- Fire and mold resistant
- Lightweight

Did you know?

On average, around 235 recycled jeans are used to insulate a typical sloped roof*.

*Based on 50m² and the most commonly used insulation for sloped roofs, PRT145.

Application Examples

Scan the QR code for the most commonly used application areas of Métisse insulation.

Application Examples