

PRODUCT INFO SHEET

CE

HEMPFLAX FELT



HEMPFLAX FELT is a non-woven felt made from fibre of the industrial hemp plant and is a 100% natural product. It has many applications - in construction, but also in the automotive industry and in cultivating food crops. HEMPFLAX FELT has unprecedented elasticity and impact sound absorption. The moisture-regulating properties of hemp fibre give this material an exceptionally long service life.

HEMPFLAX produces raw materials, semi-fabricates and finished products on an industrial scale based on environmentally conscious cultivated fibre hemp and flax.

By cultivating its own crops, HEMPFLAX ensures a continuous supply of high quality products. HEMPFLAX is ISO 9001 certified.

APPLICABILITY

HEMPFLAX FELT products are suitable for multiple purposes: as a sub-floor (levelling and soundproofing); as a felt underlay (if condensation is limited); for furniture and interiors (chairs, sofas, mattresses); as a natural fibre reinforcement (hot press moulding and vacuum injection bio-composites); and for crop cultivation (substrate mats and geotextiles).

This material is the wonderful natural alternative to synthetic products and suitable for all common building techniques.

When HEMPFLAX FELT-materials are used in 'vapourpermeable' timber-framed constructions, the unique qualities of this natural product become even more enhanced.

FEATURES

Composition HempFlax Felt		100% hemp fibre	
Thermal conductibility (A)		0,047 W/mK	EN 12 667
Fire class		Euroclass E	EN 13 501-1
Density (kg/m3)		160 - 180	EN 1602
Thermal storage capacity (c)		2200 - 2500 (J/kgK)	EN ISO 10456
Vapour diffusion resistance factor (μ)		1.0	EN 12 086
Dynamic stiffness (s)		84 (MN/m)	EN 29052-1
Air flow resistance		6.0 (kPa.s/m ²)	EN 29 053
Mould formation		class 0, no mould formation established	
Dimensional tolerance:	lengthwidththickness	± 2% ± 1,5% ± 5% of 5 mm max	EN 822 EN 822 EN 823
$\begin{array}{ll} \mbox{Impact sound insulation} & (\Delta L_w)^* \\ \mbox{improvement} & (\Delta L_{lin})^* \end{array}$		19 dB 8 dB	EN-ISO 717-2**

* These results have been tested with 10 mm thick and with 8 mm thick laminate.

The test report can be received by mailing us via construction@hempflax.com ** Measurements carried out in accordance with ISO 10140-3;2010 and

the single number quantities calculated in accordance with ISO 70740-3,2010 and



SOLUTIONS FROM NATURE

Industrial hemp fibre is an annually renewable, natural source of non-toxic, high-quality raw materials. Hemp fibre-based insulation materials have a very long service life. Perfect for a healthy and pleasant living environment with minimal environmental impact.

FACTS

- 1 hectare of agricultural land provides 9 tonnes of hemp straw per year (4x more biomass than a hectare of forest per year!)
- 1 hectare of hemp fibre stores 15 tonnes of CO₂ each harvest.
- Cultivation doesn't require pesticides and enriches the soil.



HEMP FIBRE...

- offers unique heat buffering and phase shifting due to its high heat storage capacity;
- has an endless life cycle;
- can absorb 20% of its weight in moisture and self regulates its uptake and secretion;
- contains no protein content and therefore attracts no pests like insects or rodents;
- consumes 10x less energy during the insulation material production process compared to synthetic and mineral alternatives;
- stores CO₂ during growth, delivering a positive effect on the CO₂-balance;
- contributes to and represents the circular economy philosophy.

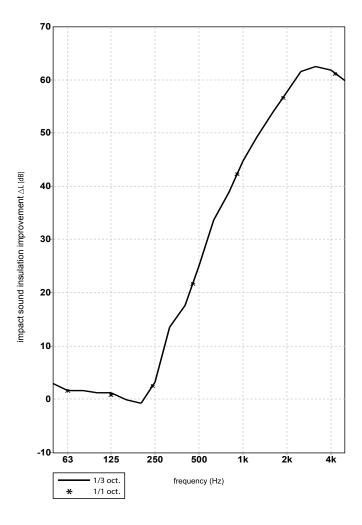
Roll	Thickness (mm)	Weight (gram/m²)	Dimensions (m)	m² / unit	Units / pallet	m² / pallet
	3	550	1.0 x 25 m	25	12	300
	5	650	1.0 x 25 m	25	12	300
	7	1000	1.0 x 15 m	15	12	180
	10	1250	1.0 x 15 m	15	12	180

BENEFITS

HEMPFLAX FELT insulation materials mute sound, regulate humidity, prevents mould and reduces temperature fluctuations. The sheets are simple and pleasant to use, guaranteed free from harmful substances and cause little or no risk of skin and respiratory irritation.

FOOTPRINT

HEMPFLAX truly cares for the environment. We believe in this plant and cultivate our own crops. In doing so, we are extremely economical with raw materials, water and pesticides. We like to keep our carbon footprint as small as possible. Simply because we think it's important.





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