Technical data sheet

Version: February 2026

THERMO HEMP COMBI JUTE

Insulation made of hemp and jute fibers

Description	THERMO HEMP COMBI JUTE								
European Technical Approval	**ETA-05/0037**								
Reference number	130701-041-01								
Components	66 % hemp fibers, 22% jute fibers, 8 % polymeric support fiber based on PET, 4 % soda								
Dimensional variations									
Length and Width (according to EN 822:2013)	length: ± 2 %, width: ± 1,5 %								
Thickness (according to EN 823:2013)	-4 mm and +10 mm / +10 % (corresponds T3 according to EN 13171:2012, table 1)								
Bulk Density (according EN 1602:2013)	≥ 39kg/m^3								
Tensile strength parallel to plate level (according to EN 1608:2013)	≥ 30 kPa								
Energy saving and heat insulation									
Thermal conductivity (according to EN 12667:2001) Declared thermal conductivity $\lambda_{D(23,50)}$	0,038 W/(m•K)								
Mass-related moisture conversion coefficient (conversations by EN ISO 10456:2007+AC:2009)	F_{u1} = 0,11 (dry to 23°C/50% RH)								
	F_{u2} = 0,05 (23°C/50% RH to 23°C/ 80% RH)								
Conversion factors for the moisture content (conversations by DIN EN ISO 10456:2007+AC:2009)	F_{m1} = 1,01 (dry to 23°C/50% RH)								
	F_{m2} = 1,01 (23°C/50% RH to 23°C/ 80% RH)								
Specific thermal capacity c (according to EN 12667:2001)	2300 J/(kg•K)								
Water vapor diffusion resistance number μ (according to EN 12086:2013) Climate condition 23-50/93	1 to 2								
Water absorption (according to EN 1609:1996, Verfahren A)	≤ 4,2 kg/m²								
Soundproofing									
Declared level of airflow resistance (according to EN 29053:1993)	3,0 kPa•s/m2								
Sound absorption (according to EN ISO 354:2003 and EN ISO 11654:1997)	Nominal thickness [mm]	Practical levels of sound absorption α_P Evaluation after EN ISO 11654						Evaluation after EN ISO 11654	
		Octave center frequency [f/Hz]						Rated sound absorption level α_W	Sound absorber class
		125	250	500	1000	2000	4000		
	40	0,20	0,45	0,70	0,85	0,90	0,95	0,7 (H)	C
	160	0,85	1,00	1,00	1,00	1,00	1,00	1,00	A
Fire protection									
Fire class (according to EN 13501-1)	E								
Maximum operating temperature	120 °C								
Hygiene, health, and environmental protection									
Resistance against mold (according to EAD, annex B)	Assessment level 0 (according to EN ISO 846:1997)								
Delivery form	Mat goods								
Thickness [mm]	30 - 220								
Standard dimensions	<u>Timber construction:</u> Width [mm]: 580 Length [mm]: 1200							<u>Drywall construction:</u> Width [mm]: 625 Length [mm]: 1200	
Special dimensions	Custom-made width between 0,4 and 1,2 meters possible, but depends on volume								

This technical data sheet corresponds to the technical status at the time of printing and loses its validity when a new edition is published. It applies in connection with other documents from HempFlax Building Solutions GmbH. When processing, please note our processing instructions. The requirements of national building law must be observed. Liability of HempFlax Building Solutions GmbH is excluded. This also applies to printing errors and subsequent changes to technical information.

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Insulation made of hemp and jute fibers

Description:

- Insulation with the European Technical Approval
- Construction biologically and ecologically certified
- Flexible mats, which are not resistant to compression
- made of durable, robust hemp fibers and recycled jute fibers
- Produced with thermo bonding process and 100 % eco electricity

Characteristics:

- Best thermal insulation through low thermal conductivity
- Best heat protection in the summer through high heat storage capacity
- Good sound insulation properties
- Simple processing with the THERMO NATUR insulating knife or popular electric cutting tools with opposed serrated knives
- Suitable for DIY
- Humidity regulating due to its high moisture absorption capacity
- No nutrient base for rodents and insects

Fields of application:

- Insulation between the rafters
- Insulation on the rafters and between supporting rafters
- Insulation under the rafters
- Insulation of wooden joists in ceilings
- Insulation of the internal and external walls in timer frame, and post and beam constructions
- Insulation of metal studded constructions or partitions
- Internal dry-lining insulation in the refurbishment of masonry / solid constructions
- Exterior insulation behind cladding

General information:

- THERMO HEMP COMBI JUTE is to be stored and processed in dry conditions
- Store upright
- To ensure the installation is achieved without gaps (joints) please oversize the insulation with an extra 10 – 30 mm relative to the void to be insulated
- Ensure a suitable sealed vapor check is applied and that the construction is sealed air tightly immediately after the insulation is installed
- The specified properties and performance can only be assumed if the product is installed according to the processing guidelines of the manufacturer and is protected against precipitation, weathering moisture in the installed state as well as during transport, storage and installations

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