Designated according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020

UK Technical Assessment	UKTA-0836-22/6605 of 21/12/2022
Technical Assessment Body issuing the UK Technical Assessment:	British Board of Agrément
Trade name of the construction product:	"THERMO HANF PREMIUM", "THERMO HANF PREMIUM PLUS" and "THERMO HANF COMBI JUTE"
Product family to which the construction product belongs:	Product area code: 04 Insulating material made of hemp or hemp and jute fibres and binding fibres of PET- or PLA-basic
Manufacturer:	HempFlax Building Solutions GmbH Industriestraße 2 D-86720 Nördlingen Germany
Manufacturing plant(s):	HempFlax Building Solutions GmbH Industriestraße 2 D-86720 Nördlingen Germany
This UK Technical Assessment contains:	… pages including 1 Annex, which form an integral part of this UK Technical Assessment
This UK Technical Assessment is issued in accordance with The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 on the basis of:	UKAD 040005-00-1201 Factory-made thermal and/or acoustic insulation products made of vegetable or animal fibres

1. Technical description of the product

This UK Technical Assessment applies to the insulation materials "THERMO HANF PREMIUM" and "THERMO HANF PREMIUM PLUS", which are made of hemp fibres, and "THERMO HANF COMBI JUTE", which is made of hemp and jute fibres. Other trade names for the products are given in Annex A of this Assessment.

In this Assessment, only the names "THERMO HANF PREMIUM", "THERMO HANF PREMIUM PLUS" and "THERMO HANF COMBI JUTE" will be used.

The insulation materials contain polymeric or biopolymeric binding fibres, which are thermally hardened during manufacture.

During the manufacturing process the product is provided with fire protection equipment.

The insulating material, in the form of mats, is made with the following dimensions:

- Nominal thickness: minimum 30 mm to 220 mm maximum
- Nominal length: 1200 mm or 2400 mm
- Nominal widths: 625 mm or 580 mm

For nominal thicknesses of 30 mm to 80 mm the insulating material is also made in rolls.

The insulating material is not coated.

2. Specification of the intended use(s) in accordance with the applicable UK Assessment Document (hereinafter UKAD)

The insulation materials not exposed to compression loads can be used as follows:

- cavity insulation of external and internal walls of timber frame constructions and similar structures;
- internal insulation of external walls between supporting constructions;
- insulation between rafters and timber beams, as well as in cavities of corresponding structures;
- insulation on top storey ceilings which are not subjected to foot traffic but are accessible;
- internal insulation of ceilings or roofs, e.g. insulation beneath the loadbearing construction (e.g. rafters), suspended ceilings;
- cavity insulation between flooring joist battens and similar substructures.

The performance, according to section 3, only applies if the insulation materials are installed according to the manufacturer's installation instructions and if they are protected from precipitation, wetting or weathering in built-in state and during transport, storage and installation.

The design value of the thermal conductivity shall be in accordance with the relevant national provisions.

3. Performance of the product and references to the methods used for its assessment

3.1. Mechanical resistance and stability (BWR 1)

Not relevant.

3.2. Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to Fire	Class E, as per BS EN 13501-1: 2018

3.3. Health, hygiene and the environment (BWR 3)

Essential characteristic	Performance
Resistance to the growth of mould	Evaluation level 0 as per BS EN ISO 846:1997

3.4. Safety and accessibility in use (BWR 4)

Not relevant.

3.5. Protection against noise (BWR 5)

Not relevant.

3.6. Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Thermal conductivity at a reference temperature of 10 °C. Test acc. to BS EN 12667:2001 "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE"	Declared values for a moisture content of the insulation material at 23 °C and 50 % relative humidity: (1) $\lambda_{D(23,50)}$ = 0.041 W.(m·K)$^{-1}$ $\lambda_{D(23,50)}$ = 0.043 W.(m·K)$^{-1}$ $\lambda_{D(23,50)}$ = 0.040 W.(m·K)$^{-1}$
Conversion of humidity. Test acc. to BS EN ISO 10456:2007+AC:2009. Mass-related moisture content at 23 °C/50 % rel. humidity: "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE" Mass-related moisture content at 23 °C/80 % rel. humidity: "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE" Mass-related moisture conversion coefficient (dry to 23 °C/50 % rel. humidity): "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE" Mass-related moisture conversion coefficient (23 °C/50 % rel. humidity to 23 °C/80 % rel. humidity): "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE" Moisture conversion factor (dry to 23 °C/ 50 % rel. humidity): "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE" moisture conversion factor (23 °C/ 50 % rel. humidity to 23 °C/ 80 % rel. humidity): "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE"	 $u_{23,50}$ = 0.07 kg.kg^{-1} $u_{23,50}$ = 0.08 kg.kg^{-1} $u_{23,50}$ = 0.08 kg.kg^{-1} $u_{23,80}$ = 0.15 kg.kg^{-1} $u_{23,80}$ = 0.17 kg.kg^{-1} $u_{23,80}$ = 0.19 kg.kg^{-1} f_{u1} = 0.07 f_{u1} = 0.13 f_{u1} = 0.11 f_{u2} = 0.24 f_{u2} = 0.34 f_{u2} = 0.05 F_{m1} = 1.01 F_{m1} = 1.01 F_{m1} = 1.01 F_{m2} = 1.02 F_{m2} = 1.03 F_{m2} = 1.01
Water vapour diffusion resistance coefficient	μ = 1 to 2 (2)
Dimensional deviations: Length and widths, test acc. to BS EN 822:2013	 length: ± 2 % width: ± 1,5 %

Thickness, test acc. to BS EN 823:2013 Squareness, test acc. to BS EN 824:2013 Flatness, test acc. to BS EN 825:2013	-4 mm / +10 mm or + 10%(3) Relates to class T3 acc. To EN 13171:2012 $S_b \leq 5$ mm/m $S_{max} \leq 6$ mm
Density, test acc. to BS EN 1602:2013 "THERMO HANF PREMIUM" "THERMO HANF PREMIUM PLUS" "THERMO HANF COMBI JUTE"	35 – 48 kg.m^{-3} 35 – 48 kg.m^{-3} 34 – 46 kg.m^{-3}
Dimensional stability at defined temperature and humidity conditions, test acc. to BS EN 1604:2013 (48 h, 70 °C) "THERMO HANF PREMIUM PLUS" Deviation from length and width: Deviation from thickness: "THERMO HANF PREMIUM" "THERMO HANF COMBI JUTE"	 DS(70,-)3 acc. EN 13171:2012 max. ± 3 % max. ± 3 % No performance assessed No performance assessed
Tensile strength parallel to faces, test acc. to BS EN 1608:2013	≥ 30 kPa

[1] The declared value is representative for at least 90 % of the production with a confidence level of 90 % and applies to the density range mentioned in section 3.3.
[2] The most unfavourable value for the construction shall be applied.
[3] Whichever gives the smallest numerical tolerance

3.7. Sustainable use of natural resources (BWR 7)

No performance assessed.

4. Assessment and verification of constancy of performance (hereinafter AVCP) system applied

4.1. System of assessment and verification of constancy of performance

According to UKAD No. 040005-00-1201 and Annex V of the Construction Products Regulation (Regulation (EU) 305/2011) as brought into UK law and amended, the system of assessment and verification of constancy of performance (AVCP) 3 applies.

5. Technical details necessary for the implementation of the AVCP system, as provided for in the applicable UKAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with the British Board of Agrément and made available to the UK Approved Bodies involved in the conformity attestation process.

5.1. UKCA marking for the product/ system must contain the following information:

- Identification number of the Approved Body
- Name/address of the manufacturer of the product/ system
- Marking with intention of clarification of intended use
- Date of marking
- UKTA number.

On behalf of the British Board of Agrément 	
Date of Issue: 21 December 2022	**Hardy Giesler** Chief Executive Officer

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ANNEX 1

Further trade names for "THERMO HANF PREMIUM":

"THERMO CHANVRE PREMIUM", "THERMO HEMP PREMIUM", "Le Chanvre Français", "iSO PREMIUM", "THERMO HANF FLEX", "DÄMM HANF", "DämmHanf100", "stroba HANF PREMIUM", "NATURFASER DÄMMUNG Cannabis", "FIBRE NATURELLE ISOLATION Cannabis", "NATURAL FIBRE ISOLATION Cannabis", "UmweltHANF klassik", "DämmWohl HANF", "DauerHanfmatte" and "Hanf Dämmung".

Further trade names for "THERMO HANF PREMIUM PLUS":

"THERMO CHANVRE PREMIUM PLUS", "THERMO HEMP PREMIUM PLUS", "iSO PREMIUM PLUS", "THERMO HANF FLEX PLUS", "DÄMM HANF PLUS", "DämmHanf100Plus", "stroba HANF PREMIUM PLUS", "NATURFASER DÄMMUNG Cannabis Eco", "FIBRE NATURELLE ISOLATION Cannabis Eco", "NATURAL FIBRE INSULATION Cannabis Eco", "UmweltHANF Eco", "DämmWohl HANF green", "DauerHanfmatte PLUS", "Hanf Dämmung NATUR PLUS" and "NATURAHANF FLEX PRO".

Further trade names for "THERMO HANF COMBI JUTE":

"THERMO CHANVRE COMBI JUTE", "THERMO HEMP COMBI JUTE", "iSO COMBI", "THERMO HANF FLEX COMBI JUTE", "DÄMM HANF COMBI JUTE", "DämmHanf75", "stroba HANF COMBI JUTE", "NATURFASER DÄMMUNG Cannabis Combi", "FIBRE NATURELLE ISOLATION Cannabis Combi", "NATURAL FIBRE INSULATION Cannabis Combi", "UmweltHANF mix", "DämmWohl HANF mix", "DauerHanfmatte MIX", "Hanf Jute Dämmung", "AGEPAN Hemp Flex" and "NATURAHANF FLEX".

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