# INTERNATIONAL STANDARD

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## Thermal insulation products — Hemp fiber mat and board — Specification

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 3, *Thermal insulation products, components and systems*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Thermal insulation products — Hemp fiber mat and board — Specification

### 1 Scope

This document specifies requirements for factory-made products of hemp fibre, which are used for the thermal insulation of buildings. This document applies to material containing more than 50 % (by mass) natural hemp fibre, with or without the other natural fibre and the balance being polymeric material. The products are delivered as a mat or board with or without facings.

This document describes product characteristics and testing methods, marking, labelling and packaging.

Products covered in this document are also used in prefabricated thermal insulation systems and composite panels. The performance of systems incorporating these products is not covered.

The use of moth proof agent residues is outside the scope of this document.

This document does not address the health and safety aspects associated with its use. It is the responsibility of the user of this document to establish appropriate health and safety practices.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 354, Acoustics — Measurement of sound absorption in a reverberation room

ISO 8301, Thermal insulation — Determination of steady-state thermal resistance and related properties — Heat flow meter apparatus

ISO 8302, Thermal insulation — Determination of steady-state thermal resistance and related properties — Guarded hot plate apparatus

ISO 9229, Thermal insulation — Vocabulary

ISO 11654, Acoustics — Sound absorbers for use in buildings — Rating of sound absorption

ISO 11925-2, Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test

ISO 12460-1, Wood-based panels — Determination of formaldehyde release — Part 1: Formaldehyde emission by the 1-cubic-metre chamber method

ISO 12570, Hygrothermal performance of building materials and products — Determination of moisture content by drying at elevated temperature

 $ISO\ 12576-1, Thermal\ insulation -- Insulating\ materials\ and\ products\ for\ buildings\ -- Conformity\ control\ systems\ -- Part\ 1:\ Factory-made\ products$ 

ISO 29465, Thermal insulating products for building applications — Determination of length and width

ISO 29466, Thermal insulating products for building applications — Determination of thickness

ISO 29470, Thermal insulating products for building applications — Determination of the apparent density