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STN	**Tepelnoizolačné výrobky na používanie v stavebníctve Stanovenie odolnosti pri namáhaní zmrazovacími cyklami (ISO 16546: 2020)**	**STN EN ISO 16546** 72 7060

Thermal insulating products for building applications - Determination of freeze-thaw resistance (ISO 16546:2020)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/20

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16546

July 2020

ICS 91.100.60

English Version

Thermal insulating products for building applications - Determination of freeze-thaw resistance (ISO 16546:2020)

Produits isolants thermiques destinés aux applications du bâtiment - Détermination de la résistance aux effets du gel-dégel (ISO 16546:2020)

Wärmedämmstoffe für das Bauwesen - Bestimmung des Verhaltens bei Frost-Tau-Wechselbeanspruchung (ISO 16546:2020)

This European Standard was approved by CEN on 21 June 2020.

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European foreword

This document (EN ISO 16546:2020) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 88 “Thermal insulating materials and products” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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The text of ISO 16546:2020 has been approved by CEN as EN ISO 16546:2020 without any modification.

INTERNATIONAL STANDARD

ISO 16546

Second edition
2020-06

Thermal insulating products for building applications — Determination of freeze-thaw resistance

Produits isolants thermiques destinés aux applications du bâtiment — Détermination de la résistance aux effets du gel-dégel

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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 www.iso.org/directives).

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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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 88, *Thermal insulating materials and products,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16546:2012), which has been technically revised. The main changes compared to the previous edition are as follows:

— Revision of Clause 4, the test is performed by an automatic process only;

— Revision of Clause 7 with a more detailed procedure.

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 www.iso.org/members.html.

INTERNATIONAL STANDARD **ISO 16546:2020(E)**

Thermal insulating products for building applications — Determination of freeze-thaw resistance

1 Scope

This document specifies the equipment and test method for determining the effects of successive cycling from dry conditions at –20 °C to wet conditions at 20 °C on the mechanical properties and moisture content of thermal insulating products.

This document is intended to simulate the freeze–thaw effects on thermal insulating products which are frequently exposed to water and low temperature conditions, e.g. inverted roofs and unprotected ground insulation.

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 29469, *Thermal insulating products for building applications — Determination of compression behaviour*

ISO 16535, *Thermal insulating products for building applications — Determination of long-term water absorption by immersion*

ISO 16536, *Thermal insulating products for building applications — Determination of long-term water absorption by diffusion*

