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Thermal insulation — Heat transfer by radiation — Vocabulary

Isolation thermique — Transfert de chaleur par rayonnement — Vocabulaire

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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 ISO/TC 163, *Thermal performance and energy use in the built environment*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 89, *Thermal performance of buildings and building components*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 9288:1989), which has been technically revised.

The main changes are as follows:

— deleted the unit where two units existed (4.5, 4.6, 4.8, 4.9, 4.10, 5.3, 5.6, 6.2, 6.4);

— added the mean of d and d_{∞} (7.15);

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.

Introduction

This document is intended to be used in conjunction with other vocabularies related to thermal insulation. These include:

— ISO 7345

— ISO 9229

— ISO 9251

— ISO 9346

Thermal insulation — Heat transfer by radiation — Vocabulary

1 Scope

This document defines physical quantities and other terms in the field of thermal insulation relating to heat transfer by radiation.

2 Normative references

There are no normative references in this document.

3 Terms and definitions (General terms)

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
thermal radiation
electromagnetic radiation emitted at the surface of an opaque body or inside an element of a semi-transparent volume

Note 1 to entry: The thermal radiation is governed by the temperature of the emitting body and its radiative characteristics. It is interesting from a thermal viewpoint when the wavelength range falls between 0, l µm and 100 µm (see Figure 1).