



NSAI
Standards

Irish Standard
I.S. EN ISO 9229:2020

Thermal insulation - Vocabulary (ISO 9229:2020)

I.S. EN ISO 9229:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN ISO 9229:2020

Published:

2020-06-17

*This document was published
under the authority of the NSAI
and comes into effect on:*

2020-07-05

ICS number:

01.040.27

27.220

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 9229:2020 is the adopted Irish version of the European Document EN ISO 9229:2020, Thermal insulation - Vocabulary (ISO 9229:2020)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN ISO 9229

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2020

ICS 01.040.27; 27.220

Supersedes EN ISO 9229:2007

English Version

Thermal insulation - Vocabulary (ISO 9229:2020)

Isolation thermique - Vocabulaire (ISO 9229:2020)

Wärmedämmung - Begriffe (ISO 9229:2020)

This European Standard was approved by CEN on 9 June 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 9229:2020 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 9229:2020) 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 December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 9229:2007.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 9229:2020 has been approved by CEN as EN ISO 9229:2020 without any modification.

This page is intentionally left blank

INTERNATIONAL STANDARD

**ISO
9229**

Third edition
2020-06

Thermal insulation — Vocabulary

Isolation thermique — Vocabulaire



Reference number
ISO 9229:2020(E)

© ISO 2020

ISO 9229:2020(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Thermal insulation materials.....	1
3.2 Thermal insulation products.....	5
3.3 Form of supply.....	7
3.4 Thermal insulation, systems and applications.....	11
3.5 Thermal insulation components.....	13
3.6 Common terms.....	14
3.7 Testing and certification terms.....	16
Annex A (informative) Thermal insulation concept	18
Bibliography	19

ISO 9229:2020(E)

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 88, *Thermal insulating materials and products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 9229:2007), which has been technically revised.

The main changes compared to the previous edition are as follows:

- revised ETICS definition;
- thorough review of cross-references with numerous new additions and corrections;
- double term entries have been either given their own terminology entries or identified as preferred and accepted terms;
- circular definitions have been corrected;
- pipe section superordinate concept changed as parent term and subordinate terms expanded to 1) concentric pipe section, 2) precision v-groove pipe section, 3) cut pipe section, 4) moulded pipe section;
- vapour barrier and vapour retarder definitions have been revised and clarified.

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.

Thermal insulation — Vocabulary

1 Scope

This document provides a vocabulary of terms used in the field of thermal insulation that covers materials, products, components and applications. Some of the terms can have a different meaning when used in other industries or applications.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 Thermal insulation materials

3.1.1

thermal insulation material

substance that is intended to reduce heat transfer and that derives its insulation properties from its chemical nature, its physical structure or both

3.1.2

cellular plastic

thermal insulation material (3.1.1) made from plastic, in which the density is reduced by the presence of numerous small cavities (cells), which may be interconnecting or not, dispersed throughout the material

3.1.2.1

expanded polystyrene

EPS

rigid *cellular plastic* (3.1.2) *thermal insulation material* (3.1.1) manufactured by moulding beads of expandable polystyrene or one of its co-polymers and that has a substantially closed-cell structure, filled with air

3.1.2.2

extruded polystyrene foam

XPS

rigid *cellular plastic* (3.1.2) *thermal insulation material* (3.1.1) made from polystyrene or one of its co-polymers, which has a closed-cell structure and is produced through an extrusion process

3.1.2.3

flexible elastomeric foam

FEF

pliable *thermal insulation product* (3.2.1) made of natural or synthetic rubber, or a mixture of the two, and containing other polymers and other chemicals that may be modified by organic or inorganic additives

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-