



BSI Standards Publication

Classification of environmental conditions

Part 2-6: Environmental conditions appearing in
nature — Earthquake vibration and shock

National foreword

This British Standard is the UK implementation of EN IEC 60721-2-6:2022. It is identical to IEC 60721-2-6:2022, incorporating corrigendum October 2023. It supersedes BS 7527-2.6:1991, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/104, Environmental conditions, classification and testing.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Date	Text affected
31 January 2024	Implementation of IEC corrigendum October 2023: Clause 7, Figures 2 and 4 corrected

English Version

**Classification of environmental conditions - Part 2-6:
Environmental conditions appearing in nature - Earthquake
vibration and shock
(IEC 60721-2-6:2022)**

Classification des conditions d'environnement. Partie 2-6:
Conditions d'environnement présentes dans la nature -
Vibrations et chocs sismiques
(IEC 60721-2-6:2022)

Klassifizierung von Umgebungsbedingungen - Teil 2-6:
Natürliche Einflüsse - Seismische Einflüsse
(IEC 60721-2-6:2022)

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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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

European foreword

The text of document 104/946/FDIS, future edition 2 of IEC 60721-2-6, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60721-2-6:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-10-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-01-19

This document supersedes HD 478.2.6 S1:1993 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 60721-2-6:2022 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60721-1 NOTE Approved as EN 60721-1

Annex A
(normative)

**Normative references to international publications
with their corresponding European publications**

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-3-3	2019	Environmental testing - Part 3-3: Supporting documentation and guidance - Seismic test methods for equipment	EN IEC 60068-3-3	2019
ISO 2041	-	Mechanical vibration, shock and condition monitoring - Vocabulary	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –**Part 2-6: Environmental conditions appearing in nature –
Earthquake vibration and shock****FOREWORD**

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IEC 60721-2-6 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test. It is an International Standard.

This second edition cancels and replaces the first edition published in 1990. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the main aim of this revision is to classify in a limited number of classes the seismic activity level of the zone where the equipment could be installed;
- b) the correlation between intensity scales, magnitude scales and peak ground acceleration is deleted due to the scientific uncertainty to define such a correlation in a rigorous way;
- c) updated scales are given both for intensity and for magnitude;

- d) the earthquake zone map, which was not usable in practice, is replaced by an annex giving information about how to retrieve consistent peak ground acceleration distribution all over the world;
- e) with regard to identification of the peak ground seismic acceleration of the zone, where the equipment could be installed, the user is made aware that national standards and laws can apply.

The text of this International Standard is based on the following documents:

Draft	Report on voting
104/946/FDIS	104/952/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 60721 series, published under the general title *Classification of environmental conditions*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This part of IEC 60721 is one of a series dealing with the following subjects:

- environmental parameters and their severities (IEC 60721-1);
- environmental conditions appearing in nature (IEC 60721-2);
- classification of groups of environmental parameters and their severities (IEC 60721-3).

This part of IEC 60721 is intended to be used as background material when selecting appropriate severities of parameters relating to earthquakes for product application. Severities given in IEC 60721-1 [1]¹ should be applied.

More detailed information can be obtained from specialist documentation and from technical literature, some of which is given in the bibliography.

¹ Numbers in square brackets refer to the Bibliography.