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Naprave za zagotavljanje potresne varnosti konstrukcij - 1. del: Splošna pravila za načrtovanje

Anti-seismic devices - Part 1: General design rules

Erdbebenvorrichtungen - Teil 1: Allgemeine Bemessungsregeln

Dispositifs anti-sismiques - Règles générales de calcul

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91.120.25

Zaščita pred potresi in
vibracijami

Seismic and vibration
protection

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English Version

Anti-seismic devices - Part 1: General design rules

Dispositifs anti-sismiques

Erdbebenvorrichtungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 340.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 15129-1:2023) has been prepared by Technical Committee CEN/TC 340 “Anti-seismic devices”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 15129:2018.

EN 15129-1:2023 includes the following significant technical changes with respect to EN 15129:2018:

- Editorial revision (new structure of 5.1, removal of former subclause 4.3).

The structure of EN 15129, *Anti-seismic devices*, is as follows:

- Part 1: General Design Rules;
- Part 2: Rigid Connection Devices;
- Part 3: Displacement Dependent Devices;
- Part 4: Velocity Dependent Devices;
- Part 5: Elastomeric Isolators;
- Part 6: Curved and Flat Surface Sliders.

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prEN 15129-1:2023 (E)

1 Scope

This document covers the design of anti-seismic devices that are provided in structures, with the aim of modifying their response to the seismic action. It specifies functional requirements and general design rules of the anti-seismic devices for the seismic and non-seismic design situations, material characteristics, manufacturing and general testing requirements, as well as assessment and verification of constancy of performance, installation and maintenance requirements. This document covers the types of anti-seismic devices as defined in Clause 4.

NOTE Additional information concerning the scope of this document is given in Part 2, Part 3, Part 4, Part 5 and Part 6 of this European Standard.

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.

EN 1337 (all parts), *Structural bearings*

EN 1990, *Eurocode - Basis of structural and geotechnical design*

EN 1991 (all parts), *Eurocode 1: Actions on structures*

EN 1998 (all parts), *Eurocode 8: Design of structures for earthquake resistance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1990, the EN 1991 series and the EN 1998 series apply.

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/>

4 Graphical representation of anti-seismic devices

The anti-seismic devices covered in this European Standard and their identification symbols are given in Table 1.