

CEN-CENELEC guidance – Core rules for drafting hEN for construction products

1 Introduction

This document sets out the core rules for drafting candidate harmonised standards (hEN) for construction products in the framework of Regulation (EU) 305/2011 (Construction Products Regulation – CPR) to meet the European Commission's criteria for citation in the OJEU.

By following these core rules and principles of drafting candidate hENs, the probability of achieving a HAS assessment 'compliant' and consequently citation in the OJEU is higher.

This document applies to all new candidate hENs and for new WIs revising/amending existent hENs.

Standardised content not dealing with the implementation of the CPR shall not be included in the harmonised standard, but there is the possibility to be published in a non-harmonised standard. It is optional to divide the content in two different parts but the part dealing with the regulation shall be a self-standing document. The non-harmonised standard could cover non-mandated information, including installation, description or design provisions.

Examples are included in *grey italics* and were taken from different harmonised standards supposed to be in line with the CPR provisions.

2 General rules

The basis for the development of candidate hEN is the mandate/ latest accepted TC answer to the mandate or standardization request. The TC secretary shall provide these documents to the convenor/secretary of the working groups.

The candidate hEN for construction products shall only contain:

- the essential characteristics covered in the mandate/ latest accepted TC answer to the mandate or standardization request;
- the assessment methods (e.g. test methods, calculation, tabulated values) to determine the performance of the construction product in relation to these essential characteristics.

The following aspects should not be included in hENs:

- Construction Products Directive (CPD) terminology (e.g. evaluation of conformity, initial type testing, essential requirements, attestation of conformity, declaration of conformity, etc);
- Reference to national regulations/requirements;
- Expressions as 'requirements', 'product requirements', 'when declared', 'the manufacturer shall declare', 'obligations', 'results shall be declared', 'shall conform', etc;
- Installation, design, maintenance instructions and safety provisions;
- Marking, labelling and packaging clause.

3 Clauses in the hEN

Foreword

There is a predefined text for the foreword.

EXAMPLE

This document has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

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 February 2019, and conflicting national standards shall be withdrawn at the latest by August 2022.

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

This document supersedes EN 54-7:2000.

This document has been prepared under a standardization request given to CEN/CENELEC by the European Commission and the European Free Trade Association.

For relationship with EU Regulation, see informative Annex ZA, which is an integral part of this document.

The main changes with respect to the previous edition are listed below:

- applying the latest EN 50130-4:2011, EMC for immunity tests*
- introducing the open type smoke detector and related test methods;*
- removing Annex N, additional provisions and test methods for smoke detectors with more than one smoke sensor.*

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Only if it is relevant.

1 Scope

The scope shall be written according to CEN-CENELEC Internal Regulation Part 3 (IR-3).

It shall identify which product(s), component(s), material(s), form(s), kits (as relevant) are covered and the intended use(s).

It should identify the products that are excluded.

It should also mention that it covers assessment methods and the way of expressing the performance.

The scope shall be in line with the mandate/latest accepted TC answer to the mandate or standardisation request (if available).

The scope shall not exclude products that are already legally placed on the market.

2 Normative references

The normative references shall always be dated, including CEN, CENELEC, ISO and IEC standards. The normative reference shall also be dated in the normative text of the draft standard.

NOTE: Following CEN-CENELEC Internal Regulations – Part 3, no distinction shall be made between harmonized and non-harmonized standards as far as normative references are concerned. However, normative references shall be dated in order to follow the EC request for dating normative references for harmonized standards.

It shall not include standards removed from the Official Journal due to formal objection, standards that are outdated or withdrawn, non-European standards (except for ISO/IEC standards) and standards that are not publicly available. Hence, it is recommended that a careful verification is done on the normative references in Clause 2 and text of the standard to ensure that they are not withdrawn/outdated.

3 Terms, definitions, symbols, units and abbreviated terms

The terms and definitions from CPR should not be repeated in Clause 3 of the candidate hEN.

4 Characteristics

All the essential characteristics of the construction product shall be included in this clause. Exceptionally the essential characteristics shall be excluded if there is no assessment method.

The essential characteristics covered in the candidate hEN shall be identical with the list of essential characteristics in the mandate/latest accepted TC answer to the mandate or, if available, standardisation request.

Non-mandated characteristics shall not be included in the candidate hEN.

For each essential characteristic (sub-clause), there shall be a reference to the assessment method used and the way of expressing the performance of the essential characteristic.

The performance shall be expressed as a level (numerical value), threshold level, class or description according to the definitions of the CPR¹ for them. This means:

Level (CPR article 2.6): “‘level’ means the result of the assessment of the performance of a construction product in relation to its essential characteristics, expressed as a numerical value”.

- Example: “The results shall be expressed in MPa”

Description: not defined in the CPR.

- Example:
Declaration of the type of mortar related to bond strength, e.g. “Thin layer”.

Class (CPR article 2.7): “‘class’ means a range of levels, delimited by a minimum and a maximum value, of performance of a construction product;”

- Example:

¹ [Regulation EU 305/2011](#) Article 2

For products covered by standard EN 1304 'Clay roofing tiles and fittings — Product definitions and specifications' and intended for external use, a new classification in relation to their essential characteristic 'frost resistance' is established as follows:

Class 1 (150 cycles): minimum 150 cycles. If after 150 cycles none of the tiles shows any of the damage described as unacceptable according to EN 539-2:2013, Table 1.

Class 2 (90 cycles): 90 – 149 cycles. If after 90 cycles none of the tiles shows any of the damage described as unacceptable according to EN 539-2:2013, Table 1.

Class 3 (30 cycles): 30 – 89 cycles. If after 30 cycles none of the tiles shows any of the damage described as unacceptable according to EN 539-2:2013, Table 1.

Threshold level (CPR article 2.8): “‘threshold level’ means a minimum or maximum performance level of an essential characteristic of a construction product;”

- Example:

Characteristic	Threshold level	Test method
Bond strength expressed as: - Initial shear adhesion strength	$\geq 1 \text{ N/mm}^2$	EN 12004-2:2017, 8.4

'Pass/fail' shall not be used to express the performance of essential characteristics.

Classes and threshold levels may be used under the following conditions:

1. Classes/threshold levels included in a delegated regulation published in the OJEU as a result of the delegated act process developed by the EC and scrutiny of the European Parliament and Council, e.g. Commission Delegated Regulation (EU) 2016/364;
2. Classes/threshold levels included in the relevant standardisation request;
3. Classes/threshold levels included in previous cited version of the harmonised standard;

Harmonised standards cannot include any classification/threshold level not included in at least one of the previous documents, but TC can [request](#) the launch of the delegated act development to establish a classification/threshold level. However, TCs should be aware that establishing new classes/thresholds of performance or changing existing classes/thresholds via delegated act is a challenging and lengthy process, i.e. it could take a couple of years to be published in the OJEU.

The inclusion of a classification without testing (without assessment) as the way to express the performance for a certain essential characteristic requires a delegated act.

Additional guidance is provided in the document: [Delegated acts procedure](#)

The essential characteristic release of dangerous substances follows the same principles. In case it is not possible to assess and declare the performance related to this essential characteristic, the complete clause shall be removed.

Additional guidance is provided in the document: [Dangerous substances assessment and declaration](#)

EXAMPLES

4.1 Reaction to fire

The reaction to fire indicates the behaviour of a construction product in the event of fire. When tested in accordance to the test methods given in 5.1, the test results are expressed as a class in line with the classification published in the Official Journal of the European Union on this specific matter.

NOTE 1 The applicable document at the time this standard was drafted is Commission Delegated Regulation (EU) 2016/364.

NOTE 2 the performance of the product regarding reaction to fire, can be classified without the need to carry out the assessment if the specific conditions set out in Commission Delegated Regulation (EU) 2017/1228 are satisfied.

4.2 Resistance to wind loads

The resistance to wind loads of an external blind is characterized by its ability to withstand specified loads simulating the action of wind in positive or negative pressure.

When tested according to 5.2, in extended or retracted position, the resistance to wind loads is expressed according to Table 1.

4.3 Bending strength

When assessing bending strength this shall be determined according to 5.3. The performance of bending strength shall be expressed in MPa.

5 Testing, assessment and sampling methods

The additional information required to assess the performance is included in this clause. Subclauses of clause 4 shall refer to the relevant subclauses of this clause.

This clause shall not define who perform the assessment, it shall be neutral.

In some standards, assessment methods pertaining to essential characteristics can be described in the relevant subclauses of clause 4.

6 Assessment and verification of constancy of performance

The content of this clause shall follow the document: [Guidance document on AVCP clauses](#)

Deviations from the guidance document are not recommended e.g. references to ISO 9000 series is not allowed.

Annex(es) (normative) (where relevant)

Annexes can include additional information required to perform the assessment and declaration, e.g. assessment methods.

Annex ZA (exclusively for Regulation (EU) 305/2011)

The content of this annex shall use the template provided in document: [Annex ZA template](#)

Deviations from the template are not allowed.

Additionally, the essential characteristics in table ZA.1 shall be identical with the essential characteristics listed in the mandate/ latest accepted TC answer to the mandate or standardization request.

Bibliography

Only supporting documents not required to follow the provisions in the standard can be included in this clause.