



SLOVENSKI STANDARD
SIST-TS CEN/TS 17991:2024

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Statistično preverjanje delnih faktorjev za stavbe v skladu z Evrokodom EN 1993-1-1, Priloga E

Statistical verification of partial factors for buildings according to Eurocode EN 1993-1-1 Annex E

Statistischer Nachweis von Sicherheitsfaktoren für den Hochbau nach Eurocode EN 1993-1-1 Anhang E

Vérification statistique des coefficients partiels de sécurité pour la construction de bâtiments selon Eurocode 1993-1-1 Annexe E

Ta slovenski standard je istoveten z: CEN/TS 17991:2023

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ICS:

91.010.30	Tehnični vidiki	Technical aspects
91.080.13	Jeklene konstrukcije	Steel structures

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English Version

**Statistical verification of partial factors for buildings
according to Eurocode EN 1993-1-1 Annex E**

Vérification statistique des coefficients partiels de
sécurité pour la construction de bâtiments selon
Eurocode 1993-1-1 Annexe E

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Hochbau nach Eurocode EN 1993-1-1 Anhang E

This Technical Specification (CEN/TS) was approved by CEN on 22 October 2023 for provisional application.

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Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Statistical verification of partial factors for buildings - Requirements on the statistical distribution of mechanical properties and products dimensions	5
4.1 General	5
4.2 Practical procedure and permissible deviations	6
4.3 Methodology of statistical verification	6
5 Other methods for the verification of partial factors for buildings	6
6 Procedures for the different steel products	6
6.1 General	6
6.2 Hot-rolled sections	7
6.2.1 General	7
6.2.2 Mechanical and geometrical requirements for statistical verification	7
6.2.3 Non-statistical verification	8
6.3 Hot rolled plates rolled on a reversing mill	8
6.3.1 General	8
6.3.2 Mechanical requirements for statistical verification for fixed thickness tolerance classes according to EN 10029 and non-statistical verification for hot rolled plates rolled on a reversing mill	8
6.4 Sheets/plates cut from hot-rolled wide strip	9
6.4.1 General	9
6.4.2 Mechanical and geometrical requirements for statistical verification	9
6.4.3 Non-statistical verification for sheets/plates cut from hot-rolled wide strip	10
6.5 Hot finished and cold formed welded hollow sections	10
7 Sampling and testing	11
7.1 Location of samples and orientation of test pieces for mechanical tests	11
7.2 Sampling period and population	11
7.3 Tensile test	11
Annex A (informative) Matrix of possible combinations of $X_{5\%}$ and $X_{0,12\%}$ criteria for sections	12
Bibliography	14

European foreword

This document (CEN/TS 17991:2023) has been prepared by Technical Committee CEN/TC 459/SC 3 “Structural steels other than reinforcements”, the secretariat of which is held by DIN.

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CEN/TS 17991:2023 (E)

1 Scope

This document provides requirements for the statistical distribution of material properties and dimensional parameters of structural steel products, allowing the proof of consistency of the safety approach of the properties of the product standards compared to those of the design standards for the design of steel buildings. It also describes the evaluation procedures for the verification of the compliance of structural steels with these requirements.

This document applies for the following structural steel products intended for buildings: hot rolled and welded I- and H-sections, hot rolled plates rolled on a reversing mill, sheets/plates cut from hot-rolled wide strip and hot finished and cold formed welded structural hollow sections.

It is intended to be used as a background document to support the assessment of the partial factors for steel constructions (as detailed in EN 1993-1-1).

This document can be used for neither product ordering nor certification.

NOTE The background of statistical requirements on mechanical properties and geometrical parameters is detailed in EN 1993-1-1:2022, Annex E.

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 10024, *Hot rolled taper flange I sections — Tolerances on shape and dimensions*

EN 10029, *Hot-rolled steel plates 3 mm thick or above — Tolerances on dimensions and shape*

EN 10034, *Structural steel I and H sections — Tolerances on shape and dimensions*

EN 10025 (all parts), *Hot rolled products of structural steels*

EN 10051, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels — Tolerances on dimensions and shape*

EN 10149 (all parts), *Hot rolled flat products made of high yield strength steels for cold forming*

EN 10210 (all parts), *Hot finished structural hollow sections of non-alloy and fine grain steels*

EN 10219 (all parts), *Cold formed welded structural hollow sections of non-alloy and fine grain steels*

EN 10365, *Hot rolled steel channels, I and H sections — Dimensions and masses*

3 Terms and definitions

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

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

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