



SLOVENSKI STANDARD

SIST EN 15512:2021/oprA1:2021

01-julij-2021

Stabilni jekleni sistemi za skladiščenje - Sistemi za nastavljive regale za palete - Načela dimenzioniranja - Dopolnilo A1

Steel static storage systems - Adjustable pallet racking systems - Principles for structural design

Ortsfeste Regalsysteme aus Stahl - Verstellbare Palettenregale - Grundlagen der statischen Bemessung

Systèmes de stockage statiques en acier - Systèmes de rayonnages à palettes réglables - Principes applicables au calcul des structures

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Ta slovenski standard je istoveten z: EN 15512:2020/prA1

ICS:

53.080

Skladiščna oprema

Storage equipment

SIST EN 15512:2021/oprA1:2021

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 15512:2020
prA1

May 2021

ICS 53.080

English Version

Steel static storage systems - Adjustable pallet racking systems - Principles for structural design

Systèmes de stockage statiques en acier - Systèmes de rayonnages à palettes réglables - Principes applicables au calcul des structures

Ortsfeste Regalsysteme aus Stahl - Verstellbare Palettenregale - Grundlagen der statischen Bemessung

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 344.

This draft amendment A1, if approved, will modify the European Standard EN 15512:2020. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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.

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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

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

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European foreword

This document (EN 15512:2020/prA1:2021) has been prepared by Technical Committee CEN/TC 344 “Steel static storage systems”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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EN 15512:2020/prA1:2021 (E)

1 Modification to 9.1.3.3 "Slab deformation limits bolted frames"

Replace the NOTE in Table 5 with the following

"

NOTE 1/350 out of plumb is related to class 400, 1/500 and 1/750 for class 300 and 1/1 000 for class 100 and class 200.

".

2 Modification to 9.2.2.1 "General"

Replace Table 6 with the following

"

Table 6 — Method of analysis

Method of analysis		Material behaviour	Geometric behaviour	Global imperfections according to 9.3.2	Initial bow imperfection according to EN 1993-1-1 / EN 1993-1-3	Member check
0a	Approximate	Linear	first order	○		according to 10
0b			first order with amplification	○		according to 10
1a	Finite Element Analysis ^a	Linear	first order	○		according to 10
1b			first order with amplification	○		according to 10
2a		Linear or non linear	second order	○		according to 10
2b				○	○	according to 10, χ needs to account for TFB only

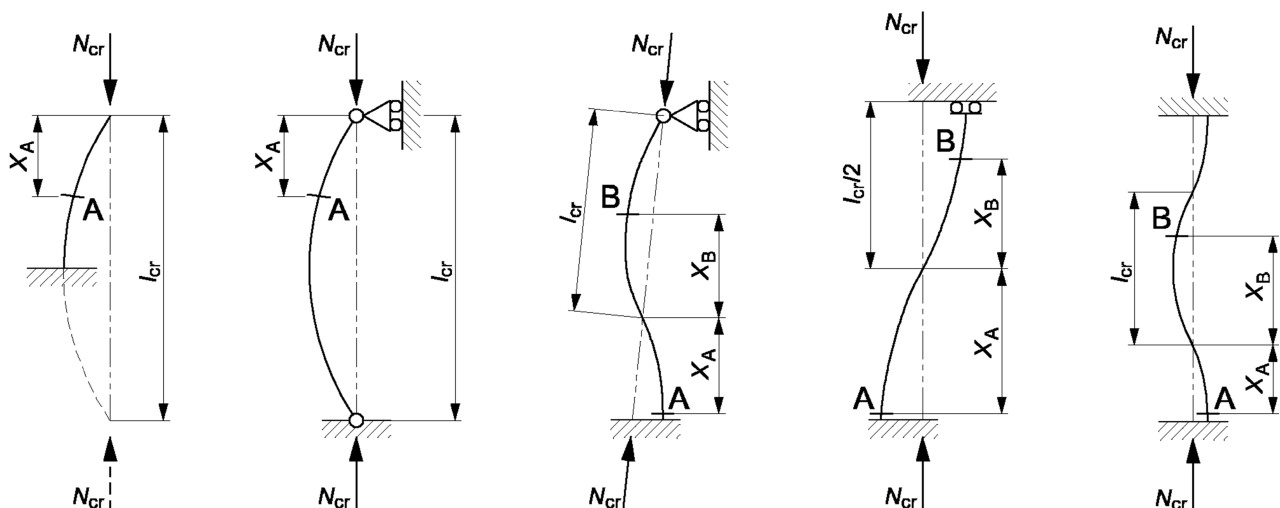
^a Without warping effect.

".

3 Modification to E.4.3 "Bending and axial compression – buckling resistance of member"

Replace Figure E.2 with the following

"



NOTE In these examples cross-sections A and B (marked with transverse line) are the subjects of the design check.

Figure E.2 — Buckling length l_{cr} and definition of $\chi_s (= \chi_A \text{ or } \chi_B)$

".

4 Modification to N.1 "Dutch national legislative deviations"

Replace subclause N.1 with the following

"

N.1 Dutch national legislative deviations

Provision to Eurocodes

In the Netherlands racking and shelving and therefore adjustable pallet racking is, apart from work equipment, also to be considered as "structure other than a building" according to the 2012 Building Decree (Stb. 2011: 416, 676; Stb. 2012: 125, 256, 441, 643; Stb. 2013: 75, 244, 462; Stb. 2014: 51, 211, 232, 233; 333, 342, 358, 539; Stb 2015: 92, 249, 425, Stb 2016: 383, 384, Stb. 2017: 268, 324, 494, Stb. 2019: 155, Stb. 2020: 84). In 2021 or later, this Decree will be transformed into the Environmental structures decree (Stb. 2018, 291). The structural safety of adjustable pallet racking considering its specified use, shall comply with NEN-EN 15512 and the additional requirements given in this A-Deviation.

The requirements and verification methods given by NEN-EN 15512 and the additional requirements given in this A-Deviation have an equivalent provision to NEN-EN 1990+A1+A1/C2:2019, NEN-EN 1990:2019/NB:2019, NEN-EN 1993-1-1+C2+A1:2016 and NEN-EN 1993-1-1+C2+A1/NB:2016.

Non-normative provisions

Where it is indicated that the specifier shall or may include provisions in the specifications, where testing is used in the design and/or other changes or additions not defined by this standard, the approval of the local authority is required.

Design Working Life

In deviation from clause 6.1.2 a design working life of at least fifteen years shall be used for industrial buildings and at least fifty years in case of shopping buildings. It is not permitted to split the design working life in different time periods. Reduction of the loads because of a shorter reference period than 50 years is not permitted