

SLOVENSKI STANDARD oSIST prEN 15254-3:2018

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Extended application of results from fire resistance tests - Non-loadbearing walls - Part 3: Lightweight partitions

Erweiterter Anwendungsbereich der Ergebnisse von Feuerwiderstandsprüfungen - Nichttragende Wände - Teil 3: Leichte Trennwände

Extension du champ d'application des résultats des essais de résistance au feu -Éléments non-porteurs - Partie 3 : Cloisons légères

Ta slovenski standard je istoveten z: prEN 15254-3

ICS:

13.220.50 Požarna odpornost Fire-resistance of building gradbenih materialov in materials and elements

elementov

91.060.10 Stene. Predelne stene. Walls. Partitions. Facades

Fasade

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English Version

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Erweiterter Anwendungsbereich der Ergebnisse von Feuerwiderstandsprüfungen - Nichttragende Wände -Teil 3: Leichte Trennwände

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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 15254-3:2018) has been prepared by Technical Committee CEN/TC 127 "Fire safety in buildings", the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

1 Scope

This document provides guidance and, where appropriate, defines procedures for variations of certain parameters and factors associated with the design of lightweight partitions which have been tested in accordance with EN 1364-1, and classified according to EN 13501-2.

This document only applies to non-loadbearing lightweight partitions with a single steel framework, provided at both sides with a lining. The lightweight partition can be insulated or not with a mineral wool insulation.

This document does not apply to any other types of non-loadbearing walls considered in EN 1364-1.

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 14195, Metal framing components for gypsum board systems — Definitions, requirements and test methods

EN 13162, Thermal insulating products for buildings — Factory made mineral wool (MW) products — Specification

EN 15725, Extended application reports on the fire performance of construction products and building elements

EN 1363-1, Fire resistance tests — Part 1: General Requirements

EN 1363-2, Fire resistance tests — Part 2: Alternative and additional procedures

EN 1364-1, Fire resistance tests for non-loadbearing elements — Part 1: Walls

EN 13501-2, Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services

3 Terms and definitions

For the purposes of this document the terms and definitions given in EN 1363-1, EN 1363-2, EN 1364-1, EN 15725 and EN 13501-2, together with the following apply.

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

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

3.1

lightweight partition

non-loadbearing wall and comprises a single steel framework, provided at both sides with a lining

Note 1 to entry: The lightweight partition cavity can be insulated or not with a mineral wool insulation.

3.2

fire performance classification

classification of the lightweight partition in accordance with EN 13501-2 with only taking into account the E and/or EI-classification

3.3

lining

total of one or more layers of boards fixed at each side to the steel framework of the lightweight partition

3.4

board

non-combustible product (min. A2 classification according to EN 13501-1) of rectangular shape and cross-section in which the thickness is uniform and substantially smaller than the other dimensions, and where the product is covered by a Technical Specification (e.g. hEN, ETAG, EAD)

3.5

mineral wool insulation

mineral wool as specified in EN 13162

3.6

steel framework

framework comprising steel profiles as specified in EN 14195

3.7

reference test (primary test evidence)

fire resistance test in accordance with EN 1363-1 (or 1363-2 when applicable) and EN 1364-1, on which the extended application is based

3.8

additional test evidence

fire resistance test in accordance with EN 1363-1 (or 1363-2 when applicable) and EN 1364-1, on which the extended application is based

3.9

overrun time

time of fire resistance in minutes beyond the fire performance classification time achieved in the test

3.10

shape of the framework

type of section profile designated by the prefix-letter (e.g. C- or U-shaped) as specified in $EN\ 14195$

4 Principles

4.1 General principles

Extended application is a prediction of the expected fire resistance of lightweight partitions. The fundamental consideration shall be that the lightweight partitions after extension would achieve the required fire performance if it were to be tested according to EN 1364-1.

The extended application of the lightweight partition shall be based on the reference fire test results performed according to EN 1364-1. Extended application reports shall be prepared according to EN 15725.

When performing extended applications for a tested partition changes can occur either in materials and/or in the construction. Both are dealt with in this standard. Table 1 gives an overview about changes which may be made in this extended application standard.

Table 1 — Modifications and Rules for lightweight partition walls

Modification	Rule see clauses		
<u>Linings</u>			
Exchange of linings	6.1.1		
Increase/decrease of the number of layers of boards	6.1.2		
Increase/decrease of the dimensions of the boards	6.1.3		
Vertical/horizontal orientation	6.1.4		
Change of position of layers of the boards	6.1.5		
Steel framework	•		
Change in shape of the steel framework	6.2.2		
Increase/decrease of the thickness of the steel framework	6.2.3		
Increase/decrease of the nominal steel framework depth	6.2.4		
Increase/decrease of the nominal steel framework width	6.2.5		
Increase/decrease of the stud centres	6.2.6		
Mineral wool insulation	•		
Addition of mineral wool	6.3.2		
Removal of mineral wool	6.3.3		
Exchange of mineral wool	6.3.4		
Increase/decrease of the density of the mineral wool	6.3.5		
Increase/decrease of the thickness of the mineral wool	6.3.6		
<u>Lightweight partition (system)</u>			
Increase of height of the lightweight partition	6.4.1		
Increase of width of the lightweight partition	6.4.2		