



SLOVENSKI STANDARD
oSIST prEN 14135:2024
01-maj-2024

Prevleke - Ugotavljanje zmožnosti za požarno zaščito

Covering - Determination of fire protection ability

Brandschutzbekleidungen - Bestimmung der Brandschutzwirkung

Revêtements - Détermination de la capacité de protection contre l'incendie

Ta slovenski standard je istoveten z: prEN 14135

ICS:

13.220.50	Požarna odpornost gradbenih materialov in elementov	Fire-resistance of building materials and elements
91.060.99	Drugi stavbni elementi	Other elements of buildings

oSIST prEN 14135:2024

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prEN 14135

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ICS 13.220.50

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English Version

Covering - Determination of fire protection ability

Revêtements - Détermination de la capacité de
protection contre l'incendie

Brandschutzbekleidungen - Bestimmung der
Brandschutzwirkung

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 127.

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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prEN 14135:2024 (E)**European foreword**

This document (prEN 14135:2024) 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 will supersede EN 14135:2004.

prEN 14135:2024 includes the following significant technical changes with respect to EN 14135:2004:

- the criteria for K_2 ;
- an additional evaluation method;
- a vertical test has been included.

This document is used in conjunction with EN 1363-1.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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Introduction

This document has been prepared to provide a method of test for assessing a coverings ability to protect underlying materials against fire. This document is applicable to all coverings, including but not limited to renderings, boards with and without air gaps and installed with various support systems.

WARNING — The attention of all persons concerned with managing and carrying out this test is drawn to the fact that fire testing can be hazardous and that there is a possibility that toxic and/or harmful smoke and gases are evolved during the test. Operational hazards can also arise during the testing of specimens and the disposal of test residues.

An assessment of all potential hazards and risks to health should be made and safety precautions should be identified and provided. Written safety instructions should be issued. Appropriate training should be given to relevant personnel. Laboratory personnel should ensure that they follow written safety instructions at all times.

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prEN 14135:2024 (E)**1 Scope**

This document specifies a method for determining the ability of a covering to protect underlying materials against damage during a specified fire exposure.

The document is not used for the evaluation of fire resistance classifications (e.g. EI, EW, E,...) or reaction to fire classifications (according to EN 13501-1).

The fire protection ability is nullified by the presence of combustible materials in the cavity behind the covering. The applicability of the results is limited according to the quantity and position of such combustible materials within that cavity.

NOTE The amount of combustible materials permissible in the cavity is generally laid down in national regulations.

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 1363-1, *Fire resistance tests - Part 1: General requirements*

EN ISO 13943, *Fire safety - Vocabulary (ISO 13943)*

EN 60584-1, *Thermocouples - Part 1: EMF specifications and tolerances*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1363-1 and EN ISO 13943 and the following apply.

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

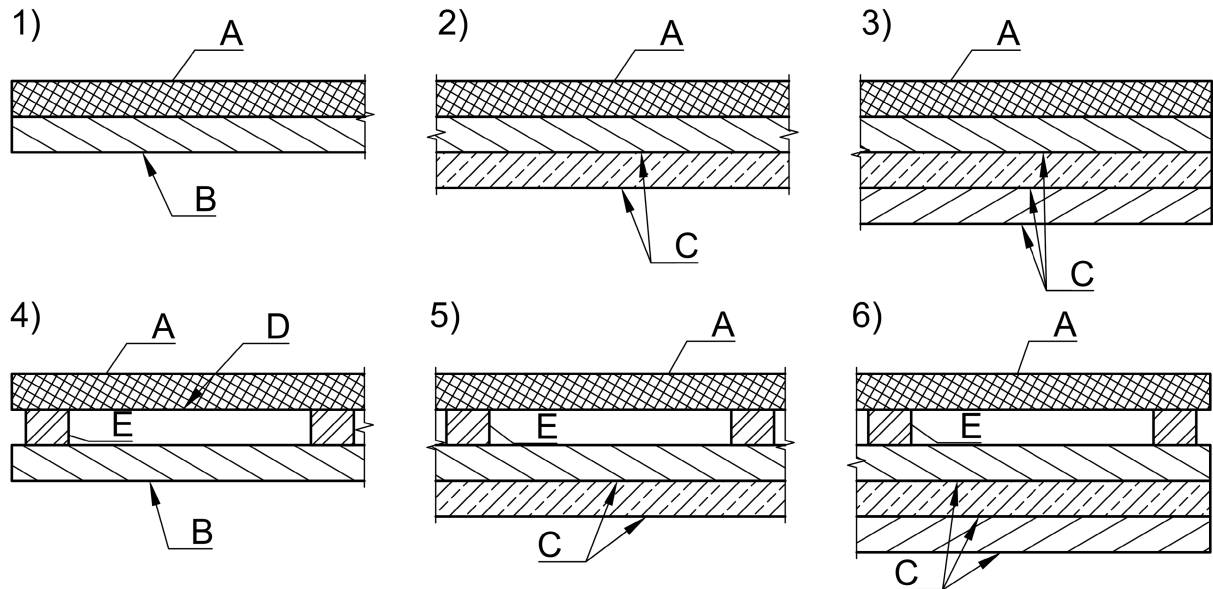
— IEC Electropedia: available at <https://www.electropedia.org/>

— ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1**covering****covering test specimen**

material(s) or product(s) including installation method, which is intended to protect an underlying substrate against damage behind the covering, during a specified fire exposure

Note 1 to entry: A covering could be single layer or multilayer, with or without an airgap, see Figure 1.

**Key**

- | | |
|---|-------------------------|
| 1) single layer covering | A Substrate |
| 2) multilayer covering with 2 layers | B Single layer covering |
| 3) multilayer covering with 3 layers | C Multilayer covering |
| 4) single layer covering with a support system and an air gap | D Air gap |
| 5) multilayer covering with a support system and an air gap | E Support system |
| 6) multilayer covering with a support system and an air gap | |

Figure 1 — Covering examples**3.2****substrate underlying material**

material which is used behind a covering which need protection against ignition, charring and other damage

Note 1 to entry: For multi-layered products the inner layer can function as substrate, see Figure 1.

3.3**damaged substrate**

substrate which has burnt or charred

Note 1 to entry: Discoloration and soot deposits are not regarded as damage.

3.4**burnt substrate**

substrate which has been destroyed by combustion or pyrolysis

Note 1 to entry: The substrate is considered to be burnt if the surface is scratched with a hard material e.g. a metal key and the surface is decomposed.

prEN 14135:2024 (E)**3.5****charred substrate**

substrate which has formed carbonaceous residue resulting from pyrolysis or combustion

Note 1 to entry: The substrate is considered to have charred if the surface is scratched with a hard material e.g. a metal key and the surface is decomposed.

3.6**discoloured substrate**

substrate which has changed colour but not burned or charred

3.7**shrunken substrate**

substrate which has decreased in dimensions

3.8**melted substrate**

substrate which has changed state due to influence of heat

3.9**directly fixed covering**

covering directly fixed to the substrate without a separate substructure

3.10**coverings with an air gap**

covering fixed to the substrate with a separate substructure (e.g. battens), generating an air gap or a covering with a separate system (e.g. grid) for holding the covering (suspended ceilings)

3.11**collapse**

the covering cannot fall down of the covering or part of the covering exposing the substrate directly to the fire

Note 1 to entry: A collapse has not occurred when the outer layers of a multilayer construction break or fall down.

3.12**supporting construction**

construction that may be required for the testing of some building elements into which the test specimen is assembled

3.13**integrated installation**

element that is installed within the covering and has different thermal insulation properties than the covering

Note 1 to entry: The integrated installations are part of the covering. Integrated installation can pass through the covering, See Figure 2.

Note 2 to entry: Examples include lamps, fire alarms, speakers, sprinklers, ventilation outlet.