

## **Fire resistance tests for service installations - Part 6: Raised access floors and hollow floors**

Fire resistance tests for service installations - Part 6:  
Raised access and hollow core floors

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1366-6:2005 sisaldab Euroopa standardi EN 1366-6:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1366-6:2005 consists of the English text of the European standard EN 1366-6:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This Part of EN 1366 specifies a method for determining the fire resistance of raised access floors and hollow floors when subjected to a fire from within the plenum beneath the floor.</p>	<p><b>Scope:</b></p> <p>This Part of EN 1366 specifies a method for determining the fire resistance of raised access floors and hollow floors when subjected to a fire from within the plenum beneath the floor.</p>
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**Võtmesõnad:** channels, electric conduits, fire protection, flame propagation, materials, physical, seals, stoppers, temperature, testing, testing conditions, thermal insulation, thermocouples, trunking, walls, ventilation, ventilation ducts, ventilations

ICS 13.220.50

English version

## Fire resistance tests for service installations - Part 6: Raised access and hollow core floors

Sécurité contre l'incendie - Essais de résistance au feu des installations de service - Partie 6 : Planchers surélevés et planchers creux

Feuerwiderstandsprüfungen für Installationen - Teil 6: Doppel- und Hohlböden

This European Standard was approved by CEN on 9 July 2004.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 1366-6:2004) has been prepared by Technical Committee CEN/TC 127 "Fire safety in buildings", 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This European Standard has been prepared under a Mandate given to CEN by the European and the European Free Trade Association, and supports essential requirements of the Construction Products Directive.

EN 1366 '*Fire resistance tests for service installations*' consists of the following:

- Part 1: Ducts,
- Part 2: Fire dampers,
- Part 3: Penetration seals,
- Part 4: Linear joint seals,
- Part 5: Service ducts and shafts,
- Part 6: Raised access and hollow core floors,
- Part 7: Conveyor systems and their closures,
- Part 8: Smoke extraction ducts ,
- Part 9: Single compartment smoke extraction ducts ,
- Part 10: Smoke control dampers,
- Part 11: Fire protective systems for essential services .

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

In this standard a representative sample of a raised or hollow floor is exposed to a specified regime of heating and loading. The performance of the test specimen is monitored on the basis of criteria described in EN 1363-1. The fire resistance of the tested construction is expressed as the time for which the appropriate criteria have been satisfied.

### Caution

The attention of all persons concerned with managing and carrying out this fire resistance test, EN 1366-6, 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 can be evolved during the test. Mechanical and operation hazards can also arise during the construction of the test elements or structures, their testing and 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.

## 1 Scope

This Part of EN 1366 specifies a method for determining the fire resistance of raised access floors and hollow floors when subjected to a fire from within the plenum beneath the floor. The fire exposure applied to the test specimen may be either:

- a) standard time temperature curve;
- b) 'reduced' time temperature curve which follows the standard time/temperature curve only up to 500 °C. After this temperature has been reached the temperature within the furnace is maintained at 500 °C.

This document does not determine the fire resistance of the sub-floor on which the raised or hollow floor is constructed; this is given in EN 1365-2.

## 2 Normative references

The following referenced documents are indispensable for the application 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 1363-1:1999, *Fire resistance tests — Part 1: General requirements*.

EN 12825:2001, *Raised access floors*.

EN 13213:2001, *Hollow floors*.

EN ISO 13943:2000, *Fire safety — Vocabulary (ISO 13943:2000)*.

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1363-1:1999, EN 12825:2001, EN 13213:2001 and EN ISO 13943:2000 and the following apply.

### 3.1

#### **raised access floor**

factory made flooring system comprising panels supported on an under-structure of pedestals and/or stringers or other components as applicable, providing a load bearing structure for the fitting out of a building (EN 12825)

NOTE The under-structure is part of the raised access floor.

### 3.2

#### **stringer**

horizontal component connecting pedestals that may support a panel

### 3.3

#### **hollow floor**

loadbearing layer supported by a special understructure (which may include pedestals) in order to provide a space between the loadbearing layer and the base floor for installation of e.g. telecommunication services, electrical supplies, heating or air conditioning

### 3.4

#### **sub-floor**

horizontal element of building construction which is loadbearing and separating (constructional floor)