

Fire test - Large-scale room reference test for surface products

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EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

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Käsitlusala:

This European Standard specifies a test method to evaluate the reaction to fire performance of building products. A fire is simulated which under well-ventilated conditions starts in a corner of a small room with a single open doorway.

Scope:

This European Standard specifies a test method to evaluate the reaction to fire performance of building products. A fire is simulated which under well-ventilated conditions starts in a corner of a small room with a single open doorway.

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Võtmesõnad: area, fire safety, fire tests, flame propagation, fume cupboards, guide books, laboratory equipment, measuring equipment, preparation, pull-off devices, rooms, samples, structural fire protection, surface finishes, surface spread of flame, surfaces, testing, tests

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English Version

Fire test - Large-scale room reference test for surface products

Essais au feu - Essai dans une pièce en vraie grandeur
pour les produits de surface

Brandverhalten von Bauprodukten - Referenzversuch im
Realmaßstab an Oberflächenprodukten in einem Raum

This European Standard was approved by CEN on 13 October 2006.

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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.

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Foreword

This document (EN 14390:2007) 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of an identical text or by endorsement, at the latest by July 2007, and conflicting national standards shall be withdrawn at the latest by July 2007.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This method is intended to describe the fire behaviour of a product under controlled laboratory conditions.

The test method may be used as part of a fire hazard assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a product in a particular end use.

WARNING — So that suitable precautions can be taken to safeguard health, the attention of all concerned in fire tests is drawn to the possibility that toxic or harmful gases can be evolved during combustion of test specimens.

The test procedures involve high temperatures and combustion processes from ignition to a fully developed room fire. Therefore, hazards can exist for burns, ignition of extraneous objects or clothing. The operators should use protective clothing, helmet, face-shield and equipment for avoiding exposure to toxic gases.

Means of extinguishing a fully developed fire should be available.

1 Scope

This European Standard specifies a test method to evaluate the reaction to fire performance of building products. A fire is simulated which under well-ventilated conditions starts in a corner of a small room with a single open doorway.

The method is intended to evaluate the contribution of a surface product to fire growth in a room configuration, using a specified ignition source. It constitutes a reference test for this type of product within the European classification system for reaction to fire performance of construction products.

The method is particularly suitable for construction products which cannot be tested in their end use application in a small or intermediate laboratory scale. The method can also be used to assess the effect of an insulating substrate on the product performance.

A test performed in accordance with the method specified in this European Standard provides data for the early stages of a fire from ignition up to flashover.

The method is not intended to evaluate floor coverings. It may not be suitable for some free-standing products because their integrity, when exposed to fire, could have a decisive influence on their behaviour.

NOTE The term "surface product" as used in the title and scope of this European Standard specifically relates to internal surface linings, assemblies, pipes and pipe insulation products used in buildings.

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 13238, *Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates*

EN 13501-1:2002, *Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests*

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 ISO 13943:2000 and the following apply.

3.1

exposed surface

surface of the product subjected to the heating conditions of the test

3.2

material

single substance or uniformly dispersed mixture

EXAMPLE metal, stone, timber, concrete, mineral fibre or polymers