Incorporating corrigendum June 2014



**BSI Standards Publication** 

# Fire resistance tests for nonloadbearing elements

Part 4: Curtain walling — Part configuration



BS EN 1364-4:2014 BRITISH STANDARD

#### **National foreword**

This British Standard is the UK implementation of EN 1364-4:2014. It supersedes BS EN 1364-4:2007 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee FSH/22, Fire resistance tests to Subcommittee FSH/22/-/7, Non loadbearing separating elements.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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30 June 2014	Implementation of CEN correction notice 18 March 2014: Updated key in Figure 2

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

# Fire resistance tests for non-loadbearing elements - Part 4: Curtain walling - Part configuration

Essais de résistance au feu des éléments non-porteurs -Partie 4: Façades rideaux - Configuration partielle Feuerwiderstandsprüfungen für nichttragende Bauteile -Teil 4: Vorhangfassaden - Teilausführung

This European Standard was approved by CEN on 9 November 2013.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

This document (EN 1364-4:2014) 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 August 2014, and conflicting national standards shall be withdrawn at the latest by August 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1364 -4:2007.

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 89/106/EEC.

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

## Introduction

#### **WARNING**

The attention of all persons concerned with managing and carrying out this fire resistance 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 can be developed during the test. Mechanical and operational 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 European Standard specifies a method for determining the fire resistance of parts of curtain walling and of the perimeter seal. It examines the fire resistance to internal and external fire exposure of:

- the spandrel panel, i.e. downstand, upstand or a combination thereof, or
- the perimeter seal, or
- the fixing of the framing system (anchoring) used to attach the curtain walling to the floor element, or
- combinations thereof.

Results from tests according to this standard form the basis for classification of curtain walling type A (see 3.3 for definition).

For curtain walling type B (see 3.4 for definition) results may be used to determine fire resistance of parts of a curtain walling to increase the field of application when previously tested to EN 1364-3. For intended classification EW and for corner/faceted specimens EN 1364-3 should be used.

This European Standard does not cover double skin façades, over-cladding systems and ventilated façade systems on external walls. It does not deal with the reaction to fire behaviour of curtain walling.

This standard is intended to be read in conjunction with EN 1363-1 and EN 1363-2 as well as EN 1364-3 for curtain walling type B.

NOTE Annex A gives informative guidance on the principles of testing parts of curtain walling and the test method.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 1363-2, Fire resistance tests - Part 2: Alternative and additional procedures

EN 1364-3, Fire resistance tests for non-loadbearing elements - Part 3: Curtain walling - Full configuration (complete assembly)

EN 13119, Curtain walling - Terminology

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

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

EN 13830, Curtain walling - Product standard

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