BS 8414-2:2020

BSI Standards Publication

Fire performance of external cladding systems

Part 2: Test method for non-loadbearing external cladding systems fixed to, and supported by, a structural steel frame

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Contents

Summary of pages
This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 16, an inside back cover and a back cover.

Foreword

Publishing information

This part of BS 8414 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 April 2020. It was prepared by Technical Committee FSH/21, *Reaction to fire tests*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 8414-2:2020 supersedes BS 8414-2:2015+A1:2017, which is withdrawn.

Relationship with other publications

BS 8414 is published in two parts:

- Part 1: *Test method for non-loadbearing external cladding systems fixed to, and supported by, a masonry substrate*; and
- Part 2: *Test method for non-loadbearing external cladding systems fixed to, and supported by, a structural steel frame*.

Information about this document

This part of BS 8414 was developed from BRE Fire Note 9 [1].

This is a full revision of the standard, and introduces the following principal changes:

- clarification of the scope;
- amendments to Clause **6**; and
- expansion and clarification of Clause **9** and Clause **10**.

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Hazard warnings

WARNING. This part of BS 8414 calls for the use of substances and/or procedures that might be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Use of this document

It has been assumed in the preparation of this part of BS 8414 that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

The provisions of this standard are presented in roman (i.e. upright) type. Its methods are expressed as a set of instructions, a description, or in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations

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

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

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1 Scope

This part of BS 8414 provides a test method for determining the fire performance characteristics of non-loadbearing external cladding systems when fixed to, and supported by, a structural steel frame and exposed to an external fire under controlled conditions. The peak fire exposure is intended to be representative of an external fire source or a fully developed (post-flashover) fire in a room venting from an aperture that exposes the cladding to the effects of external flames.

This part of BS 8414 is solely intended to give an indication of fire spread across or within an external cladding system. The purpose of the test is to provide data to enable evaluation of the fire performance of the components when combined to form a complete cladding system.

This part of BS 8414 does not apply to non-loadbearing external rainscreen overcladding systems or external wall insulation systems applied to the face of a building, the fire testing of which is covered in BS 8414-1.

This part of BS 8414 does not cover the performance of glass or its supporting frame intended for glazed window openings.

This part of BS 8414 does not apply to glazed curtain walling systems.

This part of BS 8414 does not test the total configuration of a construction incorporating additional windows, doors, balconies or ancillary penetrations.

This part of BS 8414 does not cover exposure to radiant heat from a fire in an adjacent building.

NOTE 1 Performance criteria and classification methodology for the external fire performance can be found in references such as Report BR 135 [2].

NOTE 2 Further information on the application of results from BS 8414-2 is given in BS 9414.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document.[1)] For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 60584-1:2013, *Thermocouples – Part 1:EMF specifications and tolerances*

BS EN ISO 13943, *Fire safety – Vocabulary*[2)]

3 Terms and definitions

For the purposes of this part of BS 8414, the terms and definitions given in BS EN ISO 13943 and the following apply.

3.1 cavity barrier

any construction provided to seal a cavity against the penetration of fire and smoke or to restrict its movement within the cavity

3.2 collapse

any part of the cladding system which falls away and becomes detached

1) Documents that are referred to solely in an informative manner are listed in the Bibliography.
2) This standard also gives an informative reference to BS EN ISO 13943:2017.

