
Preskusi požarne odpornosti nenosilnih elementov - 5. del: Prezračevalne rešetke

Fire resistance tests for non-loadbearing elements - Part 5: Air transfer grilles

Feuerwiderstandsprüfungen für nichttragende Bauteile - Teil 5: Lüftungsbausteine

Essais de résistance au feu des éléments non porteurs - Partie 5 : Grilles de transfert

Ta slovenski standard je istoveten z: EN 1364-5:2026

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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

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**Fire resistance tests for non-loadbearing elements - Part 5:
Air transfer grilles**

Essais de résistance au feu des éléments non porteurs -
Partie 5: Grilles de transfert

Feuerwiderstandsprüfungen für nichttragende
Bauteile - Teil 5: Lüftungsbausteine

This European Standard was approved by CEN on 15 June 2026.

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EN 1364-5:2026 (E)**European foreword**

This document (EN 1364-5:2026) 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of an identical text or by endorsement, at the latest by January 2027, and conflicting national standards shall be withdrawn at the latest by January 2027.

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

This document supersedes EN 1364-5:2017.

The EN 1364 series, under the general title *Fire resistance tests for non-loadbearing elements*, consists of the following parts:

- *Part 1: Walls*
- *Part 2: Ceilings*
- *Part 3: Curtain walling - Full configuration (complete assembly)*
- *Part 4: Curtain walling - Part configuration*
- *Part 5: Air transfer grilles*
- *Part 6: Cavity Barriers*

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.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

The purpose of this test is to measure the ability of a representative specimen of an air transfer grille to resist the spread of fire from one side to another.

A representative sample of the air transfer grille is exposed to a specified regime of heating and the performance of the test specimen is monitored on the basis of criteria given in this document. Fire resistance of the test specimen is expressed as the time for which the appropriate criteria have been satisfied. The times so obtained are a measure of the adequacy of the construction in a fire but have no direct relationship with the duration of a real fire.

WARNING 1 — 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 involved during the test. Mechanical and operational hazards might also arise during the construction of the test elements or structures, their testing and disposal of test residues.

WARNING 2 — 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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EN 1364-5:2026 (E)

1 Scope

This document specifies a method for determining the fire resistance of air transfer grilles (ATG).

It is applicable to air transfer grilles intended for installation in building components (typically walls, floors or ceilings). The orientation of the installation of the air transfer grille can be vertical or horizontal.

The closing mechanism of the air transfer grille can come from expansion of material and/or from any mechanical or electrical closing device.

This document is applicable to fire resistant or fire resistant and smoke control air transfer grilles.

An additional test configuration is valid for fire resistant or fire resistant and smoke control air transfer grilles in applications where flame impingement is a risk during open state from start of fire (see Annex A).

This document evaluates the behaviour of the air transfer grille when exposed to the heating curve described in EN 1363-1 and the standard pressure described in EN 1363-1. It is not the intention of this test to provide quantitative information on the rate of leakage of smoke and/or hot gases or on the transmission or generation of fumes under fire conditions. Such phenomena are only noted in describing the general behaviour of test specimens during the test.

The determination of the rate of leakage of smoke at ambient temperature or at 200 °C as an optional requirement for ATG with declared smoke control is specified in EN 1634-3.

This document is not applicable to the determination of the fire resistance of air transfer grilles that are used in ducts because ATG are considered as separating elements. The test method for ATG used in ducts is described in the corresponding duct standards.

This document is not applicable to the determination of the fire resistance of a fire damper or a fire barrier connected to a duct on one or both sides, as an ATG is tested as a fire-separating element on its own. Fire dampers are tested according to EN 1366-2. Non-mechanical fire barriers are tested according to EN 1366-12.

This document is not applicable to the determination of the fire resistance of air transfer grilles in fire doors, shutters and openable windows as specified in EN 1634-1 and EN 1634-2, because the deformation of fire doors, shutters and openable windows in fire conditions differs from the deformation of flexible/rigid walls. Moreover, the location of thermocouples in the door standard is too specific to be handled in this document.

All values given in this document are nominal unless otherwise specified.

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 1363-2, *Fire resistance tests — Part 2: Alternative and additional procedures*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1363-1, EN 1363-2, EN ISO 13943 and the following apply.

3.1

air transfer grille

ATG

device consisting of an active/reactive part which can include a decorative cover as to be used in practice, allowing movement of air at ambient temperature and pressure and providing fire resistance in case of fire

3.2

air transfer grille flow zone

total visible surface area of the air transfer grille which allows air to flow from one side to the other

Note 1 to entry: This includes any air transfer grille frame

3.3

air transfer grille face

total surface area of the air transfer grille in its non-installed state

Note 1 to entry: This includes any air transfer grille frame

3.4

aperture

opening in the supporting construction in which the air transfer grille is installed and sealed off towards the supporting construction

3.5

modular air transfer grille

air transfer grilles that can be fitted together to form a larger ATG unit

3.6

decorative cover

element which is not a part of the air transfer grille but may form part of the assembly achieving the fire resistance performance

3.7

sustained flaming

continuous flaming for a period of time longer than 10 s

3.8

notional floor level

assumed floor level relative to the position of the building element in service

4 Test equipment

See EN 1363-1 and, if applicable, EN 1363-2.

5 Test conditions

5.1 Heating conditions

The heating conditions and the furnace atmosphere shall conform to those given in EN 1363-1 or, if applicable, EN 1363-2.