



NSAI
Standards

Irish Standard
I.S. EN 54-7:2000

Fire Detection and fire alarm systems - Part 7: Smoke detectors - Point detectors using scattered light, transmitted light or ionization

I.S. EN 54-7:2000

Incorporating amendments/corrigenda issued since publication:

EN 54-7:2000/A1:2002

EN 54-7:2000/A2:2006

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

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Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 13.220.20

English Version

**Fire detection and fire alarm systems - Part 7: Smoke detectors
- Point detectors using scattered light, transmitted light or
ionization**

Systèmes de détection et d'alarme incendie - Partie 7 :
DéTECTEURS de fumée - DéTECTEURS ponctuels fonctionnant
suivant le principe de la diffusion de la lumière, de la
transmission de la lumière ou de l'ionisation

Brandmeldeanlagen - Teil 7: Rauchmelder - Punktförmige
Melder nach dem Streulicht-, Durchlicht- oder
Ionisationsprinzip

This amendment A2 modifies the European Standard EN 54-7:2000; it was approved by CEN on 29 May 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Add the following to the Contents list between Annex M and Annex ZA:

"Annex N (normative) Additional requirements and test methods for smoke detectors with more than one smoke sensor"

Foreword

This document (EN 54-7:2000/A2:2006) has been prepared by Technical Committee CEN/TC 72 “Fire detection and fire alarm systems”, 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 2007, and conflicting national standards shall be withdrawn at the latest by July 2009.

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 EU Directive(s).

For relationships with the EU Construction Products Directive, see informative annex ZA, which is an integral part of this document.

Amendment 2 to this standard adds additional requirements for smoke detectors with more than one smoke sensor.

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 amendment is intended to introduce additional requirements for smoke detectors with more than one smoke sensor.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 54-7:2000/A1

June 2002

ICS 13.220.20

English version

**Fire detection and fire alarm systems - Part 7: Smoke detectors
- Point detectors using scattered light, transmitted light or
ionization**

Systèmes de détection et d'alarme incendie - Partie 7
DéTECTEURS de fumée - DéTECTEURS ponctuels fonctionnant
suivant le principe de la diffusion de la lumière, de la
transmission de la lumière ou de l'ionisation

Brandmeldeanlagen - Teil 7: Rauchmelder - Punktförmige
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Ionisationsprinzip

This amendment A1 modifies the European Standard EN 54-7:2000; it was approved by CEN on 5 April 2002.

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This amendment 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 Management Centre has the same status as the official versions.

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Foreword

This document EN 54-7:2000/A1:2002 has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 54-7:2000 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2002, and conflicting national standards shall be withdrawn at the latest by June 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports the essential requirements of the EU Construction Products Directive (89/106/EEC).

For relationships with the EU Construction Products Directive, see informative annex ZA, which is an integral part of this document.

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

EN 54-7:2000/A1:2002 (E)

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At the end of the existing table of contents, insert the following new entries:

Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives

Bibliography

New annex ZA and Bibliography

After the existing annex M, add annex ZA and Bibliography as follows:

ICS 13.220.20

Supersedes EN 54-7:1982, EN 54-7:1982/A1:1988,
EN 54-9:1982

English version

Fire detection and fire alarm systems - Part 7: Smoke detectors
- Point detectors using scattered light, transmitted light or
ionization

Systèmes de détection et d'alarme incendie - Partie 7:
DéTECTEURS DE FUMÉE - DéTECTEURS PONCTUELS FONCTIONNANT
suivant le principe de la diffusion de la lumière, de la
transmission de la lumière ou de l'ionisation

Brandmeldeanlagen - Teil 7: Rauchmelder - Punktförmige
Melder nach dem Streulicht-, Durchlicht- oder
Ionisationsprinzip

This European Standard was approved by CEN on 2 June 2000.

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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 Management Centre has the same status as the official versions.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

This European Standard replaces EN 54-7:1982, EN 54-7:1982/A1:1988, EN 54-9:1982.

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 June 2001, and conflicting national standards shall be withdrawn at the latest by June 2003. For products which have complied with the relevant national standard before the date of withdrawal (dow), as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until June 2006.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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

This standard has been prepared in cooperation with the CEA (Comité Européen des Assurances) and with EURALARM (Association of European Manufacturers of Fire and Intruder Alarm Systems).

The significant differences from EN 54-7:1982+A1:1988 include:

- changes in the title of the EN 54 series and in the title of this Part;
- the incorporation of the full descriptions of the test fires for fire sensitivity into the standard;

NOTE These descriptions were previously given in Part 9 of the standard.
- the introduction of requirements for the limitation of the effects of *drift compensation* on the response to slowly developing fires;
- the introduction of requirements for protection against ingress of foreign bodies;
- changes in the environmental test procedures to use IEC tests where possible, to harmonise with test procedures applied to other types of detectors and to include EMC immunity tests;
- the requirement for an integral alarm indication.

EN 54-9:1982 and its amendments will all be withdrawn on publication of this revision.

Information on the relationship between this European Standard and other standards of the EN 54 series is given in annex A of EN 54-1:1996.

1 Scope

This European Standard specifies requirements, test methods and performance criteria for point smoke detectors that operate using scattered light, transmitted light or ionization, for use in fire detection and fire alarm systems for buildings (see EN 54-1:1996).

For other types of smoke detector, or smoke detectors working on different principles, this standard should only be used for guidance. Smoke detectors with special characteristics and developed for specific risks are not covered by this standard.

NOTE Certain types of detector contain radioactive materials. The national requirements for radiation protection differ from country to country and they are not specified in this standard.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

<u>ISO/IEC Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Fire detection and fire alarm systems - Part 1: Introduction.	EN 54-1	1996
-	-	Alarm Systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems + A1:1998.	EN 50130-4	1995
IEC 60068-1	1988	Environmental testing - Part 1: General and guidance, + A1:1992.	EN 60068-1	1994
IEC 60068-2-1	1990	Environmental testing - Part 2: Tests - Tests A: Cold, + A1:1993, A2:1994.	EN 60068-2-1	1993
IEC 60068-2-3	1969	Basic environmental testing procedures - Part 2: Tests - Test Ca: Damp heat, steady state, + A1:1984.	HD 323.2.3 S2	1987

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