



Fire Industry Association

Thames House, 29 Thames Street
Kingston upon Thames, Surrey, KT1 1PH
Phone: +44 (0) 8549 5855
Website: www.fia.uk.com

CE marking under the Construction Products Directive and the proposed Construction Products Regulation

1. Introduction

The CPD aims to break down technical barriers to trade in construction products between Member States in the European Economic Area (EEA). To achieve this the CPD provides for the following four main elements:

- a system of harmonised technical specifications
- an agreed system of attestation of conformity for each product family
- a framework of notified bodies
- the CE marking of products.

Note that the Directive does not aim to harmonise regulations. Member States and public and private sector procurers are free to set their own requirements on the performance of works and therefore products. What the CPD harmonises are the methods of test, the methods of declaration of product performance values, and the method of conformity assessment. Choice of required values for the chosen intended users is left to the regulators in each Member State.

From 1 April 2001 it has been possible for the first products to be placed on the UK and European markets with CE marking based on a harmonised European Standard. By 2006 the number of CE marked construction product types increased to over 600.

This includes, fire detection and alarm products and fixed suppression systems, fire doors and fire resistant products.

In 2005 the European Commission embarked on a review of the CPD. The result of this review is a proposal for a Construction Products Regulation to replace the Directive. This regulation is currently going through the legislative process in Europe and has the potential to radically change CE marking in the UK

This publication aims to explain the implications of CE marking under the Construction Products Directive (CPD) for manufacturers, specifiers, certification and test bodies and regulatory/enforcement authorities and compare this with the requirements of the proposed Construction Products Regulation (CPR).

Fact File No 0037

2. Legal Basis – National Implementation

CPD	CPR
<p style="text-align: center;">CPD</p> <p>Council Directive 89/106EC Framework document implemented by a number of Council decisions and interpreted in National Regulations (Construction Products Regulations 1991 http://www.opsi.gov.uk/si/si1991/Uksi_19911620_en_1.htm) Member States implement the intent of the directive and can interpret how its implemented</p>	<p style="text-align: center;">CPR</p> <p>Number to be confirmed</p> <p>Member States implement the text of the Regulation with no leeway for interpretation</p>
<p style="text-align: center;">Essential Safety Requirements</p> <ul style="list-style-type: none"> • ESR 1 – Mechanical Resistance and Stability • ESR 2 – Safety in case of Fire • ESR 3 – Hygiene, Health and the Environment • ESR 4 – Safety in Use • ESR 5 – Protection against Noise • ESR 6 – Energy Economy and Heat Retention 	<p style="text-align: center;">Basic Works Requirements</p> <ul style="list-style-type: none"> • BWR 1 – Mechanical Resistance and Stability • BWR 2 – Safety in case of Fire • BWR 3 – Hygiene, Health and the Environment • BWR 4 – Safety in Use • BWR 5 – Protection against Noise • BWR 6 – Energy Economy and Heat Retention • BWR 7 – Sustainable use of natural resources

3. Harmonised technical specifications

Technical specifications are harmonised European product standards (hENs) produced by CEN/CENELEC or European Technical Approvals (ETAs) produced by the European Organisation for Technical Approvals (EOTA).

CPD	CPR
Cover all the performance characteristics required by regulations in any Member State.	Cover all the performance characteristics required by regulations in any Member State.
The preferred route under the CPD is for harmonised standards to be written wherever possible.	The preferred route under the CPR is for harmonised standards to be written wherever possible.
ETAs may be written according to Guidelines (i.e. ETAGs) if several manufacturers of a particular product in several countries express an interest. If few manufacturers in only one or two countries express an interest, then ETAs may be issued without guidelines. These are called "Article 9.2 ETAs". ETAs have a validity period of 5 years. Can be issued even if there is a hEN.	In order to allow manufacturers and importers of construction products to draw up a declaration of performance for construction products which are not fully covered or not covered by a harmonised standard, it is necessary to provide for a European Technical Assessment. ETAs have a validity period of 5 years.
<p style="text-align: center;">Annex ZA</p> All harmonised product standards under the CPD include an Informative Annex (termed Annex ZA) the first part of which (ZA.1) lists the regulated requirements and the clauses in the standard in which they are addressed. Some of these clauses may in turn refer to separate supporting standards such as test standards.	<p style="text-align: center;">Annex ZA</p> All harmonised product standards under the CPR will include an Informative Annex (termed Annex ZA) the first part of which (ZA.1) lists the regulated requirements and the clauses in the standard in which they are addressed. Some of these clauses may in turn refer to separate supporting standards such as test standards.
<p style="text-align: center;">Simplified procedures</p> None	<p style="text-align: center;">Simplified procedures</p> Micro-enterprises which manufacture construction products may replace the applicable system for assessment of the declared performance of construction product by a STD. The STD shall demonstrate the compliance of the construction product with the applicable requirements – if attestation Level 1+/1/2 this must be endorsed by Notified body. <i>This is still under discussion</i>

4. System of attestation of conformity for each product family

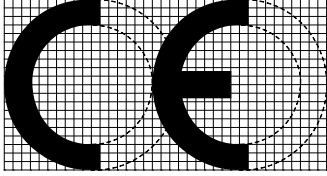
CPD	CPR
<p><i>System 1+</i> Product conformity certification with audit testing.</p> <p><i>System 1</i> Product conformity certification without audit testing. (Fire detection and alarm and fixed firefighting products)</p> <p><i>System 2+</i> Factory production control (fpc) certification with continuous surveillance.</p> <p><i>System 2</i> Factory production control (fpc) certification without surveillance.</p> <p><i>System 3</i> Initial type testing.</p> <p><i>System 4</i> Manufacturers tasks only.</p>	<p><i>System 1+</i> Product conformity certification with audit testing.</p> <p><i>System 1</i> Product conformity certification without audit testing. (Fire detection and alarm and fixed firefighting products)</p> <p><i>System 2+</i> Factory production control (fpc) certification with continuous surveillance.</p> <p><i>System 3</i> Initial type testing.</p> <p><i>System 4</i> Manufacturers tasks only.</p>

5. The CE marking of products

CE marking is a "passport" enabling a product to be legally placed on the market in any Member State. However, as explained below, this does not necessarily mean that the product will be suitable for all end uses in all Member States. An example of CE marking is given in Figure 1. A full list of current standards for which CE marking applies is given in Annex A.

CPD	CPR
<p>Mandatory in most Member States Optional in UK for products sold in UK only (manufacturer may use other means to show conformity) Mandatory for Exported/Imported products Applied if there is an hEN or ETA</p>	<p>Mandatory in all Member States The rules for applying are still being discussed but proposed mandatory CE-marking when there is a harmonised standard or a European Technical Assessment and either a Commission Decision on a threshold level or at least one essential characteristic to be declared or some kind of provision at national or European level concerning a Basic Work Requirement which is relevant for the product.</p>
<p>When Applied if there is an hEN or ETA Manufacturer has made a declaration of performance</p>	<p>When The rules for applying are still being discussed but proposed mandatory CE-marking when there is a harmonised standard or a European Technical Assessment and either a Commission Decision on a threshold level or at least one essential characteristic to be declared or some kind of provision at national or European level concerning a Basic Work Requirement which is relevant for the product. Manufacturer has made a declaration of performance</p>
<p>Responsibility for marking The manufacturer or his agent or authorised representative established within the EEA.</p>	<p>Responsibility for marking The manufacturer or the importer</p>
<p>Quality Marks The CE marking is not a quality mark. It simply shows that the product addresses the regulatory requirements. Hence, quality marks are allowed to appear alongside the CE marking, provided their purpose cannot be confused.</p>	<p>Quality Marks The CE marking should be the only marking of conformity of the construction product with the declared performance and with applicable requirements relating to Community harmonisation legislation. However, other markings may be used, provided that they help to improve the protection of users of construction products and are not covered by Community harmonisation legislation.</p>

Figure 1. Typical CE marking label

 01234
Any Co Ltd, P.O. Box 21, B1050 06 01234 - CPD – 001
EN 54-23 Fire alarm devices - Visual alarm device (VAD) intended for use in and around buildings Duration of operation: Pass Provision for external conductors: Pass Flammability of materials: Pass Enclosure protection: Pass Access: Pass Manufacturer's adjustments: Pass On-site adjustment of behaviour: Pass Requirements for software controlled devices: Pass Coverage volume: Pass Variation of light output: Pass Minimum and maximum light intensity: Pass Light colour: Red (or White) Light pattern / frequency of flashing: Pass / xx Hz Marking and data: Pass Synchronization: Pass Durability: Temperature resistance: Pass Humidity resistance: Pass Shock and vibration resistance: Pass Corrosion resistance: Pass Electrical stability: Pass

6. Transitional arrangements and incorporation into national regulations

Figure 3 TRANSITIONAL ARRANGEMENTS FOR STANDARDS

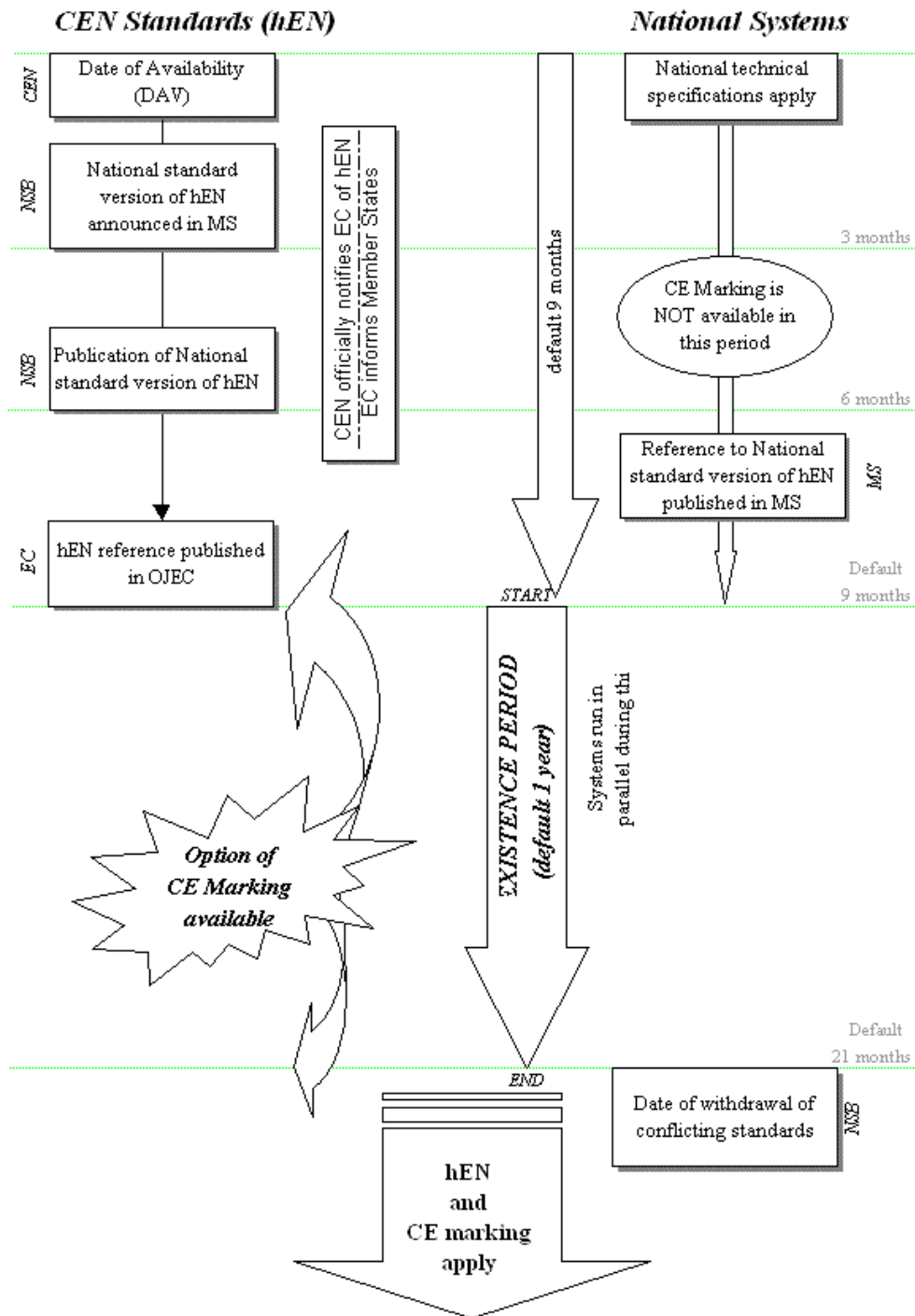
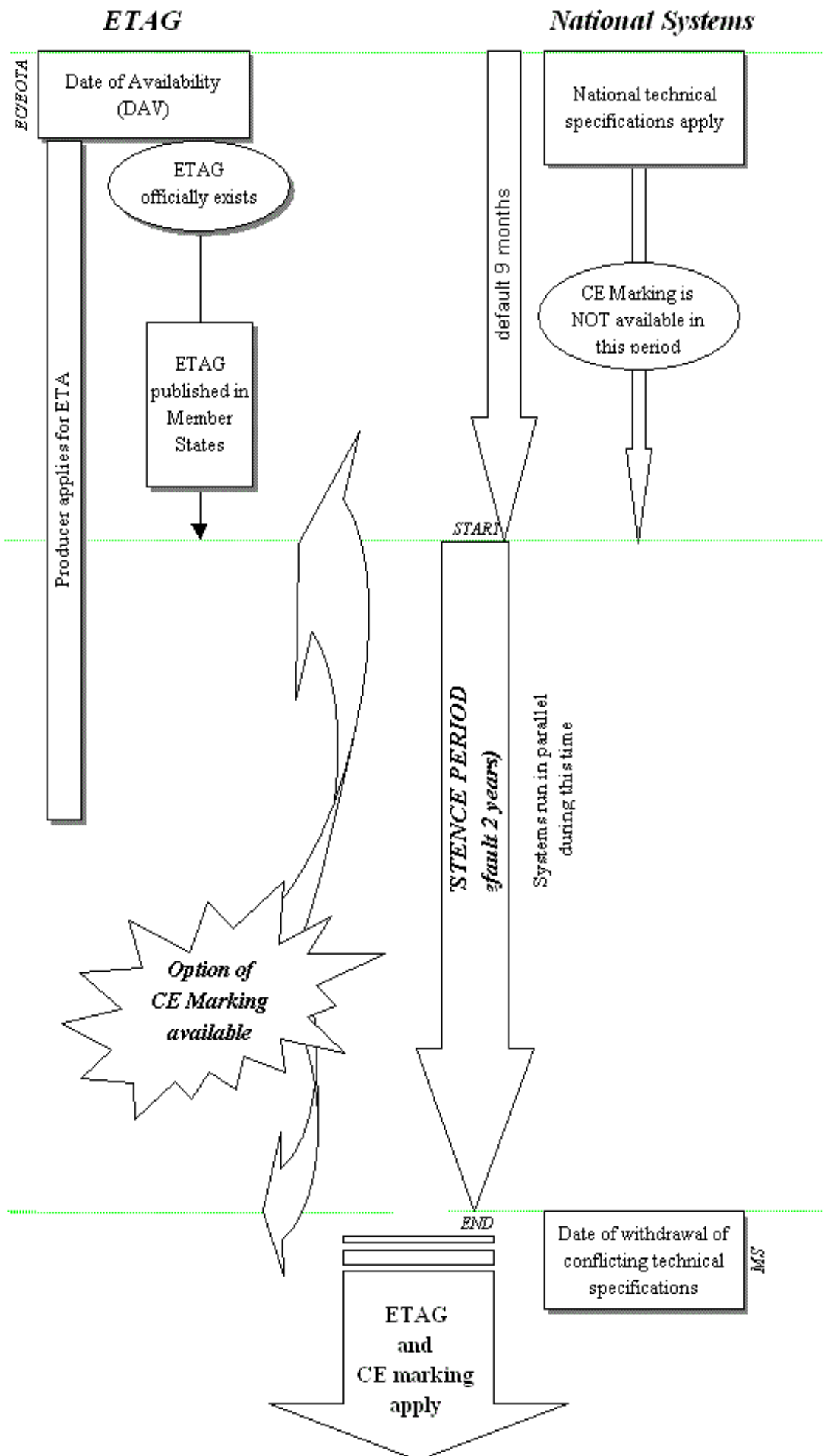


Figure 4 TRANSITIONAL ARRANGEMENTS FOR ETAGs



7. Summary of implications for practitioners

7.1

Manufacturers and their trade associations will need to be aware of progress on the technical specifications which apply to their products and will need to familiarise themselves with the technical content. For standards, the basis for CE marking is set out in Annex Z or for ETAGs in Chapter 8. As FD&A and fixed firefighting products are attestation system 1 which requires involvement of a certification or test body, the manufacturer will need to commission a notified body to carry out the work. CE marking will be essential if manufacturers wish to export to countries in which CE marking is compulsory. Manufacturers who wish to export will need to determine, for the country of destination, the performance values required by the regulations of that country for the chosen intended use. CE marking provides a presumption of conformity and therefore is recommended to all manufacturers as the best means of proving conformity for products intended for the UK market only.

When the CPR eventually comes into force CE marking will be the only means of proving compliance.

7.2

Enforcement Authorities (Trading Standards (England, Wales, Scotland) and Environmental Health Officers (Northern Ireland)), will need to be aware of the significance of CE marking and the provisions of the UK implementing regulations namely "The Construction Products Regulations (1991)", and its associated Joint Circular, and "The Construction Products (Amendment) Regulations (1994)".

7.3

Building Control Bodies, specifiers, and other practitioners will need to keep abreast of the introduction of product standards and ETAs, and amendments to Building Regulations and their supporting documents. These will include not only Approved Documents (England and Wales), Technical Standards (Scotland) and Technical Booklets (Northern Ireland), but also BS Codes of Practice and other linked documentation.

7.4

Attestation bodies will need to check progress on standards and ETAGs with a view to provisional notification for those whose introduction is some way off or full notification for those whose introduction is imminent. Membership of the UK Mirror Group for Notified Bodies will assist in this process. DTLR guidance gives the criteria and procedures for notification. In advance of the introduction of standards/ETAGs attestation bodies may wish to establish links with relevant manufacturers.

8. Further sources of information

British Board of Agreement (BBA)

UK spokesbody on EOTA:
Tel: 01923 6655412
Email: jblaisdale@bba.star.co.uk

FBE Management Limited

CPD Enquiries:
Tel: 01923 664311
Email: cpdinfo@bre.co.uk

British Standards Institution (BSI)

Customer Services:
Tel: 020 8996 9001
Email: info@bsi-global.com

Construction Products Association (CPA)

Enquiries:
Tel: 020 7323 3770
Email: jtebbit@constprod.org.uk

Communities and Local Government (Communities and Local Government)

CPD Enquiries:
Email: roger.wells@communities.gsi.gov.uk (for EOTA services) - Tel: 020 7944 5736 or
peter.emechete@communities.gsi.gov.uk (for services other than EOTA) Tel: 020 7944 5727

Local Authorities Coordinators of Regulatory Services (LACORS)

Enquiries:
Tel: 020 7840 7211
Email: Alison@lacors.gov.uk

Institution of Chartered Surveyors (RICS)

Ian Macpherson:
Tel: 01483 532249
Email: ianmcphsn@zetnet.co.uk

Annex A

Harmonised EN	CE Marking required from
EN 12094-1 Fixed firefighting systems - Components for gas extinguishing systems - Part 1: Requirements and test methods for electrical automatic control and delay devices	2006-04-30
EN 12094-2 Fixed firefighting systems - Components for gas extinguishing systems - Part 2: Requirements and test methods for non-electrical automatic control and delay devices	2006-04-30
EN 12094-3 Fixed firefighting systems - Components for gas extinguishing systems - Part 3: Requirements and test methods for manual triggering and stop devices	2005-09-30
EN 12094-4 Fixed firefighting systems - Components for gas extinguishing systems - Part 4: Requirements and test methods for container valve assemblies and their actuators	2007-07-31
EN 12094-5 Fixed firefighting systems - Components for gas extinguishing systems - Part 5: Requirements and test methods for high and low pressure selector valves and their actuators	2009-04-30
EN 12094-6 Fixed firefighting systems - Components for gas extinguishing systems - Part 6: Requirements and test methods for non-electrical disable devices	2009-04-30
EN 12094-7 Fixed firefighting systems - Components for gas extinguishing systems - Part 7: Requirements and test methods for nozzles for CO2 systems	2005-07-31
EN 12094-8 Fixed firefighting systems - Components for gas extinguishing systems - Part 8: Requirements and test methods for connectors	2009-04-30
EN 12094-9 Fixed firefighting systems - Components for gas extinguishing systems - Part 9: Requirements and test methods for special fire detectors	2005-09-30
EN 12094-10 Fixed firefighting systems - Components for gas extinguishing systems - Part 10: Requirements and test methods for pressure gauges and pressure switches	2006-04-30
EN 12094-11 Fixed firefighting systems - Components for gas extinguishing systems - Part 11: Requirements and test methods for mechanical weighing devices	2005-09-30
EN 12094-12 Fixed firefighting systems - Components for gas extinguishing systems - Part 12: Requirements and test methods for pneumatic alarm devices	2005-09-30
EN 12094-13 Fixed firefighting systems - Components for gas extinguishing systems - Part 13: Requirements and test methods for check valves and non-return valves	2002-12-31
EN 12259-1 Fixed firefighting systems - Components for sprinkler and water spray systems - Part 1: Sprinklers	2006-02-28
EN 12259-2 Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies	2002-12-31 A2 2007-08-31
EN 12259-3 Fixed firefighting systems - Components for automatic sprinkler and water spray systems - Part 3: Dry alarm valve assemblies	2002-12-31 A2 2007-08-31

EN 12259-4 Fixed firefighting systems - Components for sprinkler and water spray systems - Part 4: Water motor alarms	2002-12-31
12259-5 Fixed firefighting systems - Components for sprinkler and water spray systems - Part 5: Water flow detectors	2005-09-01
EN 54-2 Fire detection and fire alarm systems - Part 2: Control and indicating equipment	2009-08-31
EN 54-3 Fire detection and fire alarm systems - Part 3: Fire alarm devices - Sounders	
EN 54-4 Fire detection and fire alarm systems - Part 4: Power supply equipment	2009-08-31
EN 54-5 Fire detection and fire alarm systems - Part 5: Heat detectors - Point detectors	2005-06-30
EN 54-7 Fire detection and fire alarm systems - Part 7: Smoke detectors - Point detectors using scattered light, transmitted light or ionization	2005-06-30
EN 54-10 Fire detection and fire alarm systems - Part 10: Flame detectors - Point detectors	2007-08-31
EN 54-11 Fire detection and fire alarm systems - Part 11: Manual call points	2008-09-30
EN 54-12 Fire detection and fire alarm systems - Part 12: Smoke detectors - Line detectors using an optical light beam	2005-12-31
EN 54-16 Fire detection and fire alarm systems - Part 16: Voice alarm control and indicating equipment	2011-03-31
EN 54-17 Fire detection and fire alarm systems - Part 17: Short-circuit isolators	2008-12-31
EN 54-18 Fire detection and fire alarm systems - Part 18: Input/output devices	2008-12-31
54-20 Fire detection and fire alarm systems - Part 20: Aspirating smoke detectors	2009-06-30
EN 54-21 Fire detection and fire alarm systems - Part 21: Alarm transmission and fault warning routing equipment	2009-05-31
EN 54-24 Fire detection and fire alarm systems - Part 24: Components of voice alarm systems - Loudspeakers	2011-04-30
EN 54-25 Fire detection and fire alarm systems - Part 25: Components using radio links	2011-03-31

Annex B

Acronym	
CPD	Construction Products Directive
CPR	Construction Products Regulation
EEA	European Economic Area
hEN	Harmonised European Standard
BWR	Basic Works Requirements
ESR	Essential Safety Requirements
ETA	European Technical Approval
ETAG	European Technical Approval Guideline
EOTA	European Organisation for Technical Approvals
fpc	Factory production control

DISCLAIMER

The information set out in this document is believed to be correct in the light of information currently available but it is not guaranteed and neither the Fire Industry Association nor its officers can accept any responsibility in respect of the contents or any events arising from use of the information contained within this document.

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