

A GUIDE TO PRODUCT & INSTALLER CERTIFICATION

INTRODUCTION TO THIS GUIDE.....

'Product conformity certification' and **'Installer certification'** schemes give confidence to stakeholders in the quality of manufacture, testing and installation of fire protection products used in buildings. Because not all schemes are the same, this guide has been produced to assist end-users and enforcement authorities to make an informed decision on the suitability of a scheme.

This document is published by the Passive Fire Protection Federation, details of which can be found at the end of this document.

1. ARE YOU SPECIFYING OR APPROVING PRODUCTS THAT ARE UNSAFE IN FIRE.....?

Building Control Officers, Architects and end-users (especially end users responsible for conducting 'fire risk assessments') have a responsibility to ensure that installed fire protection products are adequate for purpose and/or are being maintained that way. They will frequently be presented with a variety of documentary evidence to demonstrate fire performance of products.

Traditionally, evidence in support of products has been in the form of **'fire test reports'** and **'assessment reports'**. The items that one should consider when evaluating these types of documents are listed in "**A Pocket Guide for Fire Test Reports & Assessments**" published by the UK Fire Test Study Group, details of which, including how to obtain a free copy, are given at the end of this document.

However, increasingly use is being made of 'certificates of conformity' of products, or 'certificates of completion' of installations that are issued within the context of **Product Conformity Certification** or **Installer Certification** schemes. The use of certification greatly increases confidence in the quality and reliability of manufacture and installation because it provides the link between the product supplied and/or installed, and the fire classification of that product determined by test and assessment.

2. CERTIFICATION AND APPROVED DOCUMENT B.....

Approved Document B (2006) recommends the use of third party **product certification** and **installer certification** as a means of ensuring compliance with the Building Regulations:

Product certification

*"Confidence that the required level of performance can be achieved will be demonstrated by the use of a system, material, product or structure which is provided under the arrangements of a **products conformity certification scheme**..."*

Installer certification

*"Since the performance of a product, component or structure is dependent upon satisfactory site installation, testing and maintenance, **independent schemes** of*

certification and accreditation of installers and maintenance firms of such will provide confidence in the appropriate standard of workmanship being provided”.

The need to determine the suitability of **Product Certification** and **Installer Certification** schemes is also underlined in AD-B 2006.

*“Building Control Bodies may accept the certification of products, components, materials or structures under such schemes as evidence of compliance with the relevant standard. Similarly, Building Control Bodies may accept the **certification of the installation or maintenance of products, components, materials or structures** under such schemes as evidence of compliance with the relevant standard. Nonetheless, a Building Control Body will wish to establish, in advance of the work, that any such scheme is adequate for the purposes of Building Regulations”*

3. CERTIFICATION AND THE REGULATORY REFORM (FIRE SAFETY) ORDER.....

The need to verify the quality of fire protection products and their installation is included in the guides to fire safety risk assessment published by DCLG in support of the Regulatory Reform (Fire Safety) Order 2005.

“Third-party certification schemes for fire protection products and related services are an effective means of providing the fullest possible assurances, offering a level of quality, reliability and safety that non-certificated products may lack. This does not mean goods and services that are not third-party approved are less reliable, but there is no obvious way in which this can be demonstrated. Third-party quality assurance can offer comfort both as a means of satisfying you that goods and services you have purchased are fit for purpose, and as a means of demonstrating that you have complied with the law”

4. PRODUCT CONFORMITY CERTIFICATION.....

In the UK, almost all product certification can be considered as voluntary, i.e. it is chosen freely to promote performance and quality. However, many blue chip companies, large retailers, public authorities and trade associations etc now require third party certification of passive fire protection products to be installed in buildings either as part of their specification process, or in the case of manufacturers' trade associations, as a condition of membership.

Product certification schemes typically require the following:

- selection of samples from the factory (or the market if appropriate)
- determination of characteristics by testing, inspection, design appraisal or assessment
- process and product review (evaluation)
- decision and licensing (i.e. granting, maintaining, extending, suspending, withdrawing the right to use certificates or marks)
- surveillance by testing, certification and surveillance of factory production control, ongoing audit procedures and evaluation of quality management systems to ensure consistency of production
- labeling that identifies the certification body
- maintenance of a register of certificated products (typically on-line, but may also be in hard copy).

5. INSTALLER CERTIFICATION.....

Installer certification is also voluntary and as with product certification is increasingly required by blue chip companies, large retailers and trade associations. Installer certification uses a combination of approaches to verify quality of installation. Installer certification schemes typically require:

- assessment of the installer company's management systems
- ongoing evaluation of the competency of the installing staff, in terms of practical skill and underpinning knowledge
- ongoing inspection of a proportion of on-site operations.

6. HOW TO EVALUATE CERTIFICATION SCHEMES.....

For both types of certification you should check the items listed below. A check list is provided in Annex A.

6.1 Is the certification independent (third party)?

Currently, the vast majority of certification offered to the market is **third party** i.e. it is run and administered by a **third party organisation** separate from the manufacturer/installer of the product and the purchaser. There are some first party schemes in the building sector; these are those created and administered by the manufacturer/installer of the product. This is self-certification and it is the view of PFPF that this is entirely unacceptable. Only independent **third party certification** gives the required level of quality and safety needed for passive fire protection products. Approved document B also only advises the use of third party certification.

6.2 Is the certification body experienced?

The certification body should have a detailed understanding and demonstrable experience of fire testing, the assessment of products and the evaluation and application of the data with access to applicable and independent fire test facilities, as appropriate. It should also be able to show that it understands the products and installations it evaluates.

If you have not heard of the certifying organisation or are unsure of its competence you should seek reassurance from the PFPF that it is of satisfactory quality.

6.3 Is the certification body accredited?

All UK based third party certification schemes should be accredited by United Kingdom Accreditation Service (UKAS), the agency entrusted by government for ensuring that certification and inspection bodies work to defined standards and quality levels. If it is an overseas certification body, it should be accredited by a body that is a signatory to the International Accreditation Forum (IAF) Multilateral Agreement (MLA) for the relevant certification standards. Check the status of any claimed accreditation; this can be done through the UKAS website.

Product/systems supplied to the market and installer schemes should be third party certified in a scheme meeting the requirements of **ISO Guide 65** or **EN 45011**. Individuals can be certificated to **ISO 17024**, personnel certification; however, it is recommended that installer companies should be certificated to **EN 45011**. Check the standard claimed for accreditation.

6.4 Does the accreditation cover the specific product/installation?

Most certification bodies will use a specific 'technical requirements document' for each product and/or its installation (as applicable).

For **product certification** such documents should at least include the following:

- a) consideration of the necessary fire tests and assessments to be performed
- b) requirements on any non-fire characteristics which may influence the product's performance in fire e.g. durability or weathering aspects, impact safety
- c) 'field of application' of the certification e.g. the rules by which certification of a product based on fire tests/assessments will cover variations in that product such as size or orientation, for example
- d) rules/instructions for installation of the product
- e) a requirement that the company that is certificated holds ISO 9001:2000 certification of its quality management systems (not all schemes)

These documents should be in the public domain enabling scrutiny if required (see 6.6). To satisfy the requirements of the UK market, it is important to ensure that the basis of the certification of fire performance is based on British Standards (BSs) or European Standards (ENs).

6.5 *Is it a requirement of the product to be labelled?*

Find out if the products are to be labelled. If so, are the labels:

- a) Those coming from the certification body?
- b) Required to be applied to all products?
- c) Numbered to enable traceability and thus the link to factory production?

6.6 *Are the certification scheme documents publicly available?*

The technical requirements for certification and their methods of evaluation should be published and publicly available. Examine such documents e.g. by reference to the certification body's website and ensure that they cover the necessary requirements.

6.7 *Does it have industry endorsement?*

The certification scheme and its technical requirements should reflect accepted and agreed industry principles and practice. The appropriate trade association will be able to inform you if it endorses the scheme.

6.8 *CE marking*

The EEA (European Economic Area) operates a system of 'attestation of conformity' of products designed to provide a harmonised means of evaluating products against agreed European technical specifications. Proof of conformity with the European technical specification permits products to be placed on the market and for the manufacturer to label the product with a CE Mark. This 'proof' may or may not require third party certification.

CE marking is not true third party certification; it is a manufacturer's declaration of conformity. It exists solely to facilitate cross border trade within the EEA. Voluntary third party certification schemes provide a higher level of product endorsement. They may provide:

- greater reassurance for safety and fitness for purpose by taking into account the full spread of available test data (which will most likely vary from product to product)
- facility for auditing the product, from the market if necessary
- links between different schemes for different individual products, which may not have European technical specifications ready (e.g. glazing seals, encompassing all components within the certification)

- links to installer certification schemes (expressly excluded by CE marking)
- a basis for application outside the EEA
- links with established custom and practice before CE marking
- links to the latest industry current best practice principles.

Consequently, CE marking on its own should not be taken as evidence of third party certification.

7. Specific extra requirements for Installer certification

7.1 Assessment of the management of the company's records

Does the certification scheme ensure that the installer companies maintain records to ensure that adequate and appropriate product has been purchased/supplied to complete a given contract, and records of its staff used on all contracts? These should obviously be sufficient competent staff resources to deal with the work undertaken.

7.2 Evaluation of the competency of installing staff

Does the certification body have a methodology for initial and ongoing evaluation of the competence of staff employed by installer companies? This should assure that those conducting the application/installation tasks not only have the appropriate level of practical skills to undertake the tasks adequately, but also possess the underpinning knowledge of the products they are using and important aspects for their correct installation, as well as importance and contribution that the installed system will make to the provision of fire safety.

7.3 Ongoing inspection of on-site operations

Does the certification undertake regular or random inspections of site work to ensure a high quality installation?

8. PRODUCTS/INSTALLATIONS NOT COVERED BY CERTIFICATION

Although increasingly used as the way to demonstrate the performance of products and systems, and encouraged by the enforcement authorities, many products and installations are still not certificated. For such products, evidence of adequate performance is given in **Fire Test Reports** and **Assessment Reports**.

The UK Fire Test Study Group publication '**A Pocket Guide for Fire Test Reports & Assessments**' gives information on what to look for in Test and Assessment Reports. The guide is available free of charge from: FTSG (UK) Ltd c/o Bodycote Warringtonfire, Holmesfield Road, Warrington, WA1 2DS. Tel: 01925-655116, Fax: 01925-655419

ABOUT THE PUBLISHERS.....

Passive Fire Protection Federation (PFPF)

PFPF represents the passive fire protection industry within the UK and provides both a focal point and forum for developing and advancing best practice in the passive fire protection. The Federation seeks to advance cost effective fire safety design by encouraging appropriate measures for maintaining the reliability and quality of passive fire protection materials and systems. The Federation therefore encourages the safe use of passive fire protection developed through third party certification for the manufacture and installation of products and systems.

More information on the PFPF including a list of members can be found at www.pfpf.org.uk

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Tournai Hall, Evelyn Woods Road, Aldershot, Hampshire, GU11 2LL, UK

Tel: 01252 357841 Fax: 01252 357831

Email: pfpf@associationhouse.org.uk Web: www.pfpf.org.uk

Annex A – Check list

All the items in the table below should have a 'yes' in the appropriate compliance column

Item to be considered	Product certification		Installer certification	
	Clause	Compliance	Clause	Compliance
Third party certification body?	6.1	Yes/no	6.1	Yes/no
Experienced in the field?	6.2	Yes/no	6.2	Yes/no
Accredited to appropriate standard?	6.3	Yes/no	6.3	Yes/no
Specific scheme documents?		Yes/no		
- Lists fire tests and assessments	6.4 a)	Yes/no		
- Non fire characteristics e.g.:	6.4 b)	Yes/no		
o Durability?		Yes/no		
o Weathering?		Yes/no		
o Impact safety?		Yes/no		
o Others?		Yes/no		
- Field of application	6.4 c)	Yes/no		
- Rules/instruction for installation?	6.4 d)	Yes/no		
	6.4 e)	Yes/no		
- ISO 9001: 2000 accredited?		Yes/no		
Labelling				
- Labels from certification body?	6.5 a)	Yes/no	6.5 a)	Yes/no
- Applied to all products?	6.5 b)	Yes/no	6.5 b)	Yes/no
- Numbering and traceability?	6.5 c)	Yes/no	6.5 c)	Yes/no
Are scheme documents widely available	6.6	Yes/no	6.6	Yes/no
Industry Endorsement?	6.7	Yes/no	6.7	Yes/no
Evaluation of records by installer			7.1	Yes/no
Evaluation of competency of installing staff?			7.2	Yes/no
Ongoing inspection of on-site operations?			7.3	Yes/no