

Forward

This BAFSA Information File has been produced to explain to specifiers, regulators, insurers and others the benefits of specifying Third Party Certificated contractors involved with the design and installation of automatic fire sprinkler systems.

There are currently two British standards for the design and installation of automatic sprinkler systems installed in the United Kingdom; LPC Rules for Automatic Sprinkler Installations Incorporating BS EN 12845: 2009 and BS9251: 2005.

As LPC Rules/BS EN 12845's primary objective is property protection of commercial and industrial premises with BS9251 being specific to domestic and residential occupancies for Life Safety protection, there are separate third party certification schemes explicit for each of the sprinkler design standards.

Both sprinkler system design standards, strongly recommend the use of third party "listed" or "approved" contractors for the design and installation of sprinkler systems.

This document therefore, also endeavours to clarify the selection of, and to give guidance as to finding suitable contractors for each of the two design standards who are members of a third party certification scheme accredited by The United Kingdom Accreditation Service (UKAS).

Introduction

The concept of a third party certification scheme is to provide confidence to regulators, specifiers, industry and the public at large that the manufacturer, contractor, etc. has been subject to assessment of their competence against recognised industry or product standards and has satisfied these requirements.

In the UK third Party Certification (although widely recommended by many regulators and endorsed by Part B of the Building Regulations and guidance documents issued to support the current fire safety regulatory regime) is not mandatory with the exception of 'Gas Safe' certification for those involved in the installation of gas appliances (formally known as 'Corgi').

CE marking of products is progressively becoming mandatory although it is based on self declaration certification (which involves "notified" test facilities and certification bodies in assessing the manufacturer and their product). As this is written there are many and various products which cannot be subject to CE marking as applicable EN standards are not yet available to industry.

We can therefore clarify that third party certification is a voluntary process which reputable companies decide is a way of them demonstrating their competence and abilities to their clients.

The independent third party is confirming that the certificated company/organisation is competent and suitable to undertake a certain type of work within recognised scope parameters.

In order to ensure that third party certification issued by such certification bodies is meaningful and can be proven to be truly independent, reputable third party certification bodies (and testing facilities) apply to UKAS for accreditation to enable them to be subject to competence assessment in order to demonstrate to industry that they are competent to undertake such work in industry and will conduct themselves in a manner to remain independent and impartial of their clients to avoid "conflict of interest". Once accredited the certification body is required to undergo annual surveillance audits (including on-site witness visits of the CB conducting assessments of the contractors/manufacturers) and 5 yearly re-assessment to ensure they continue to operate in compliance with the requirements of accreditation standards applicable to the type of work they undertake and the industry technical standards and their own scheme commitments.

What Sprinklers will do:

- Detect a fire
- Extinguish or control the fire
- Raise the alarm locally
- IMMEDIATELY PROTECT Life and Property
- And do so 24 hours a day, 365 days a year.

Therefore by choosing a third party certificated contractor with certification from a UKAS Accredited certification body they have the confidence that in addition to the contractor having been competence assessed in their activities by the certification body, the certification body are themselves subject to assessment of their competence and abilities by UKAS.

Experienced Sprinkler Contractor

As there are two sprinkler system design standards it is not unusual to find that a particular contractor will have more experience of one standard than the other.

Historically, the Commercial and Industrial standard LPC Rules/BS EN 12845 has the longest established credentials and not surprisingly most recognised sprinkler contractors are those that predominantly work to this standard. However, it should be understood that the design principles and working practises involved with LPC/BS EN 12845 systems are fundamentally different to those for BS9251 sprinkler systems and it does not necessarily follow that a well-established LPC/12845 contractor will be fully conversant with BS9251 requirements. Conversely, a BS9251 contractor may not be suitably qualified to undertake the design and installation of a LPC/12845 system.

Consequently, it is of the utmost importance that any selected contractor employed to undertake the work is fully conversant with the design practises of the correct relevant standard and can demonstrate competency within that particular scope of work.

Third Party Certification Schemes

On successful completion of a contract, a contractor who is a member of a third party certification scheme is able to issue a “Certificate of Conformity” thus verifying compliance with the defined installation standards.

Contractors who are members of a third party scheme are regularly audited to various degrees depending on their standing within the scheme and usually have to be quality assessed to ISO 9001: 2008. Design personnel have to demonstrate full competence in their field of work to the satisfaction of the scheme operator.

Currently, there are two accredited bodies that

operate such certification schemes for sprinkler installations.

The Loss Prevention Certification Board operates the LPS 1048 scheme for commercial automatic sprinkler installations and the LPS 1301 scheme specifically for Residential & Domestic sprinkler installations.

Warrington Certification Ltd operates separate FIRAS schemes for commercial & industrial sprinkler installations and Residential & Domestic sprinkler installations.

Both are members of UKAS.

Loss Prevention Certification Board (LPS 1048)

This is the longest running scheme primarily concerned with sprinkler contractors and systems for commercial & Industrial premises protected to LPC Rules/BS EN 12845.

LPCB also allow certain “self-certificating” contractors within the scheme to design, install and certificate systems to BS9251 although they operate a separate scheme (LPS1301) specifically for that scope of work.

Under the LPS 1048 scheme, contractors are listed and approved based on their evaluated level of competency and usual scope of work. Design personnel are required to demonstrate their competence by undertaking and passing a design review examination for the appropriate approval level.

Approved Level 1 – Pre-calculated installations only excluding all base build contracts and under supervision by LPCB for each and every contract.

Note: A base build contract is defined as one that includes the water supplies.

Approved Level 2 – Can self-certificate Level-1 pre-calculated installations without supervision and undertake base build contracts but under supervision by LPCB for each and every base build contract.

Approved Level 3 – Can self-certificate all pre-calculated installations without supervision and undertake FHC contracts but under supervision by LPCB for each and every FHC contract

Approved Level 4 – Can self-certificate all pre-calculated and FHC installations without

supervision. Can also undertake and self-certificate Residential & Domestic installations to BS9251.

Note: Self-certificating status is still dependant on regular periodic technical audits being carried out on design personnel and randomly selected contracts at least twice a year.

Full listings and information on LPS 1048 contractors can be found on the Internet at www.redbooklive.com.

Loss Prevention Certification Board (LPS 1301)

Launched in 2008, LPS 1301 covers installers of systems for Residential & Domestic premises under BS 9251. At the time of writing no companies are listed under this scheme.

Warrington Certification Ltd (FIRAS Commercial & Industrial Sprinkler Systems)

Under the FIRAS Commercial & Industrial Scheme, contractors are also listed and approved based on their evaluated level of competency and usual scope of work but in comparison with LPS 1048 there are only three defined scope levels compared to its four. However, more emphasis is placed on as to whether a contractor is considered as “approved” or a “certificated” within the defined scope. To move from “approved” status to “certificated” status is not just dependant on design personnel successfully passing a design review, but is also reliant on successfully working under a supervisory regime for a minimum specified period. The three defined scopes of work are as follows:

PC – Pre-calculated installations excluding water supplies.

Approved status: under supervision by FIRAS for each and every contract.

Certificated status: self-certificating without supervision.

PCW - Pre-calculated installations including water supplies.

Approved status: under supervision by FIRAS for each and every contract.

Certificated status: self-certificating without supervision.

FHC – Full hydraulically calculated installations including water supplies.

Approved status: under supervision by FIRAS for each and every contract.

Certificated status: self-certificating without supervision.

Note: As with LPS 1048, self-certificating status is still dependant on regular periodic technical audits being carried out on design personnel and randomly selected contracts at least twice a year.

Full listings and information on FIRAS Commercial & Industrial sprinkler contractors can be found on the Internet at www.warringtonfire.net.

Warrington Certification Ltd (FIRAS Residential & Domestic Sprinkler Systems)

This is the longest running scheme specifically covering installers of systems for Residential & domestic premises under BS 9251. At the time of writing, this is the only scheme widely supported by the sprinkler industry.

As there is less variation in the design requirement of a sprinkler system for Residential & Domestic premises, there are no separately defined scopes of work or distinction placed between “approved” or “Certificated” contractors within the scheme.

Under the FIRAS R&D Scheme, contractors are required to have successfully completed FIRAS recognised training courses in the design, installation and maintenance of Residential & Domestic sprinkler systems. It is mandatory that this training is successfully undertaken and “Qualification Certificates” are verified by FIRAS before certification may be granted. There are a number of providers of suitable training courses. Those courses which have been endorsed by BAFSA are regularly listed on its web site at: <http://www.bafsa.org.uk/training.php>. It is essential that the acceptability of a qualification related to a particular training course is verified with the relevant Certification Body in advance.

On application to join the scheme, contractors also have to undertake a pre-certification inspection audit of their office premises and quality assessed, although not necessarily to ISO 9001: 2008. A full design review and site inspections of completed contracts is also carried out. Subject to satisfactory verification of training qualifications, inspection of the office premise,

