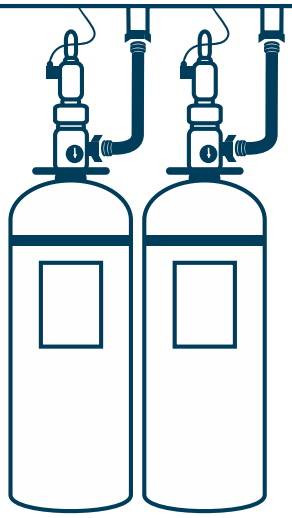
Guidance Note

Fire Industry Association

Leading Excellence in Fire Since 1916

Guidance Document – Attestation of Fixed Gaseous Extinguishing Systems - Design, Installation, Commissioning & Maintenance



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1. INTRODUCTION

The Fire Industry aspires to third party accreditation, particularly pertaining to competence, and this is an admirable goal, however delivery of this requires extensive work in the establishment of training. Verification is often through an Awarding Organisation (AO); for example, for the Fire Industry Association this could be BAFE. However, until AOs are able to deliver this verification, course development and delivery will continue by individual companies and organisations, including OEMs and System Integrators as well as other third parties.

2. SCOPE

Fixed Gaseous Fire Extinguishing Systems (hereafter called "Systems") comprise fire detection and alarm, container banks with pipework and associated equipment, etc. With regard to pipework, we can look to align with the efforts of BAFSA, other FIA Working Groups and this will evolve in due course, but in the interim, it was felt that improvement could be made by offering model attestation certificates, to allow staged verification of a system from inception through delivery and throughout life ownership. In this regard, FIA Working Group Gases compiled a suite of model certificates akin to the Annex G model certificates of BS 5839-1.

It is envisaged that use of these will identify errors and allow early correction along every step of the process, thus providing improved quality of systems. Even when third party competency attestation is available, use of these model certificates will help maintain a very high standard of workmanship.

Many systems may never need to operate in a real-life event but crucially must always be capable of performing – in terms of firefighting efficacy as well as life-safety. BS 6266 reminds us "The extensive use of fire protection systems in electronic installations arises not from a high probability of fire, nor from a significant hazard to life, but from the consequences of fire loss" and we must not lose sight of this protection objective.

The introduction to BS EN 15004-1 states "It has been assumed in the preparation of this part of EN 15004 that the execution of its provisions is entrusted to people appropriately qualified and experienced in the specification, design, installation, testing, approval, inspection, operation and maintenance of systems and equipment." This competence is reiterated in NFPA 2001 clause 7.2.1 which states "The completed system shall be reviewed and tested by personnel that have knowledge and experience of the requirements contained in this standard, of the installed equipment and the manufacturer's design, installation and maintenance manual."

The following model certificates allow individuals, at every stage, to demonstrate that they have diligently executed their duties. In addition, they facilitate an audit of this to be carried out by a colleague, consultant or client's representative.

Whilst perhaps not all-embracing, these certificates have been compiled through collaboration of experts within Working Group Gases which comprises OEMs, system integrators, installers and maintenance professionals. These forms are considered to help

mitigate the most commonly arising errors, to allow early identification and remediation, without

unnecessary cost or inconvenience to the system owner, and ultimately will increase stakeholder confidence in the expected performance of a system. Competency attestation will further complement this.

3. MODEL CERTIFICATES

The following are examples of what is felt to be good practice, to be reviewed and documented, and can even be witnessed if required. They should be appended to the operation and maintenance (O&M) manuals presented to a customer on system handover, and then continually maintained throughout the system's life.

We have thus created model certificates for the following delivery milestones: Click on the link to access the documents

1. Design attestation – fit for application.

2. Mechanical Installation – material & workmanship, including fittings and fixings plus testing and records.

3. Electrical Installation – material & workmanship, including testing and records.

4. An example of a site verification plate which could be attached to the system itself.

5. Room Integrity Testing – a measure of the fitness of the enclosure to achieve the required agent retention time.

6. Commissioning – ready for use.

7. Handover – setting into operation, including the status of how the system is left.

8. Training – to catalogue user training in the safe operation of the system.

9. Maintenance – continued suitability for the application and operation.

10. Agreed variations to Standard(s).

Download the documents here.