

Loss Prevention Standard

LPS 1036: Issue 2.2

Quality schedule for the certification of automatic fire sprinklers

This standard specifies the requirements and testing methods for dry pipe valve sets used in dry pipe automatic sprinkler systems, and additional requirements for dry pipe valves, trim, water motor alarms and accelerators/exhausters.

This Loss Prevention Standard is the property of BRE Global Ltd. and is made publicly available for information purposes only. Its use for testing, assessment, certification or approval must be in accordance with LPCB internal procedures and requires interpretation by BRE Global Ltd, LPCB and BRE experts. Any party wishing to use or reproduce this Loss Prevention Standard to offer testing, assessment, certification or approval must apply to BRE Global Ltd for training, assessment and a licence; a fee will normally be charged. BRE Global Ltd. will not un-reasonably refuse such applications. BRE Global Ltd accepts no responsibility for any un-authorised use or distribution by others of this Loss Prevention Standard and may take legal action to prevent such un-authorised use or distribution

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 1 of 7

CONTENTS	Page
PARTICIPATING ORGANISATIONS	2
REVISION OF LOSS PREVENTION STANDARDS	2
NOTES	3
1. INTRODUCTION	4
2. SCOPE	4
3. DEFINITIONS	4
4. REQUIREMENTS	4
PUBLICATIONS REFERRED TO.	6
Table of amendments issued since publication	7

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 2 of 7

PARTICIPATING ORGANISATIONS

This standard was prepared by Technical Panel C of the Loss Prevention Certification Board. The following organisations participated:

British Automatic Sprinkler Association Limited
Association of British Insurers/Lloyds
Association of County Councils
Confederation of British Industry
Property Services Agency

REVISION OF LOSS PREVENTION STANDARDS

Loss Prevention Standards will be revised by issue of revised editions or amendments. Details will be posted on our website at www.redbooklive.com

Technical or other changes which affect the requirements for the approval or certification of the product or service will result in a new issue. Minor or administrative changes (e.g. corrections of spelling and typographical errors, changes to address and copyright details, the addition of notes for clarification etc.) may be made as amendments (see amendments table on page 7)

The issue number will be given in decimal format with the integer part giving the issue number and the fractional part giving the number of amendments (e.g. Issue 3.2 indicates that the document is at Issue 3 with 2 amendments).

USERS OF LOSS PREVENTION STANDARDS SHOULD ENSURE THAT THEY POSSESS THE LATEST ISSUE AND ALL AMENDMENTS

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 3 of 7

NOTES

Compliance with this LPS does not of itself confer immunity from legal obligations. Users of LPSs should ensure that they possess the latest issue and all amendments.

LPCB welcomes comments of a technical or editorial nature and these should be addressed to “the Technical Director” at enquiries@breglobal.co.uk.

The BRE Trust, a registered charity, owns BRE and BRE Global. BRE Global and LPCB (part of BRE Global) test, assess, certificate and list products and services within the fire and security sectors. For further information on our services please contact BRE Global, Watford, Herts. WD25 9XX or e-mail to enquiries@breglobal.co.uk

Listed products and services appear in the LPCB “List of Approved Products and Services” which may be viewed on our website: www.redbooklive.com or by downloading the LPCB Red Book App from the App Store (for iPhone and iPad), from Google Play (for Android devices) or from the Windows Store (for Windows 8 Phones and Tablets from 2014).

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 4 of 7

QUALITY SCHEDULE FOR THE CERTIFICATION OF AUTOMATIC FIRE SPRINKLERS

1 INTRODUCTION

This document is one of a series of Loss Prevention Certification Board (LPCB) documents detailing requirements for the ensured and continued quality of certified products.

2 SCOPE

This document stipulates LPCB quality requirements for LPCB Certificated firms which manufacture LPCB certificated and approved automatic fire sprinklers.

3 DEFINITIONS

3.1 Firm

For the purpose of this document 'Firm' means an individual, body corporate or body incorporate, applying for or holding LPCB certification or approval of one or more products detailed in clause 2, Scope.

3.2 Automatic Fire Sprinkler

A device sealing an aperture in a pipe of a sprinkler installation that discharges water automatically in a predetermined pattern over a specified area when it operates at a predetermined temperature.

4 REQUIREMENTS

4.1 Quality System

The Firm shall operate an LPCB Certificated Quality System to at least ISO 9002/BS 5750 : Part 2, incorporating the requirements of this document.

4.2 Specification

Automatic sprinklers shall be in compliance with LPS 1039 : Requirements and Testing Methods for Automatic Sprinklers.

4.3 Equipment Modifications

Any modification to LPCB approved or certificated fire sprinklers shall be approved by the LPCB before the modification is implemented in production.

For the purpose of this requirement, a 'modification' is any change which may affect the performance of the sprinkler to the requirements of LPS 1039.

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 5 of 7

4.4 Access to Sub-Contractors

Where a sub-contractor is used by a Firm, the Firm shall ensure that his authorised representatives and, on request, the representatives of the LPCB shall have access to:

- a) The sub-contractor's premises to carry out surveillance and any necessary evaluations.
- b) Documentation to demonstrate compliance with this standard.
- c) The sub-contractor's records in compliance with BS 5750 : Part 2 : 4.15, Quality Records.

4.5 Records

BS 5750 : Part 2 : Clause 4.15 requires that records shall be maintained. In respect of LPCB certificated and approved sprinklers, records shall be maintained for a period of 10 years.

4.6 Corrective Action

BS 5750 : Part 2 : Clause 4.13 requires that corrective action procedures shall be maintained. Additionally, the Firm shall implement and maintain records of:

- a) Customer complaints.
- b) Product failures in service.
- c) Actions taken in respect of a) and b) above.

Actions shall include the recall of suspect products and a notification to the customer and LPCB that the goods are suspect, as appropriate.

4.7 Production Testing and Inspection of Sprinklers and Sprinkler Components During Manufacture

4.7.1 **Pressure Testing**

All assembled sprinklers shall be production pressure tested. Assembled sprinklers which have passed the hydrostatic pressure test shall be capable of satisfying the requirements of the Leak Resistance Test in 7.2 of LPS 1039, and shall be free from leakage when they are subjected to hydrostatic service pressure in the range 0-15 bar and pneumatic service pressure in the range 0-10 bar.

4.7.2 **Cull Test for Glass Bulb Sprinklers**

All assembled glass bulb sprinklers shall be subjected to a test and/or inspection which ensures the identification and rejection of sprinklers with defective bulbs.

A defective bulb is one which would not allow the sprinkler to operate properly when heated in fire conditions.

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 6 of 7

It shall be possible to demonstrate to the LPCB that the test and/or inspection is effective in culling sprinklers with defective bulbs.

4.7.3 Visual Inspection

All finished sprinklers shall be visually inspected in accordance with an inspection list.

4.7.4 Sampling Scheme

Sprinklers shall be subject to additional production tests according to a sampling plan.

These additional tests shall include the following, as described in LPS 1039:

- Section 7.3 Functional test.
- Section 7.4 Release temperature tests for glass bulbs and fusible sprinklers.
- Section 7.8 Strength of release element.
- Section 7.9 Service load measurement.

The sample size shall be agreed between the Firm and LPCB.

PUBLICATIONS REFERRED TO

ISO 9001/BS 5750 : Part 2 : 1987	Specification for production and installation.
LPS 1039 : Issue 3	Requirements and Testing Methods for Automatic Sprinklers.

Issue: 2.2	LOSS PREVENTION STANDARD	LPS 1036
Date: Jan.2014	Quality schedule for the certification of automatic fire sprinklers	Page 7 of 7

Amendments Issued Since Publication

DOCUMENT NO	AMENDMENT DETAILS	SIGNATURE	DATE
LPS 1036-	Copyright and address changes	CJA	06/11/01
LPS 1036-2	Further copyright change	CJA	29/07/02
LPS 1036-2.1	Further copyright change	CJA	16/09/05
LPS 1036-2.2	Change of the front cover Header updated Table of Contents amended and moved to Page 1 'Revision of Loss Prevention Standards' added to Page 2 Web address updated on Page 2 'Notes' added to Page 3 List of 'Publications referred to' moved to page 6. Amendment details moved to last page Formatting: Font change to 'Arial' throughout Repagination Change to copyright information. Update to references to ISO standards		Jan.2014