

## Loss Prevention Standard

### LPS 1505: Issue 1.1

Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.

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 for training, assessment and a licence; a fee will normally be charged. BRE Global Ltd. will not unreasonably 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 unauthorised use or distribution



Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 1 of 9

<b>CONTENTS</b>	<b>PAGE</b>
<b>PARTICIPATING ORGANISATIONS</b>	<b>2</b>
<b>REVISION OF LOSS PREVENTION STANDARDS</b>	<b>3</b>
<b>FOREWORD</b>	<b>4</b>
<b>1 SCOPE</b>	<b>5</b>
<b>2 DEFINITIONS</b>	<b>5</b>
<b>3 REQUIREMENTS</b>	<b>6</b>
<b>3.1 Product Specification</b>	
3.1.1 General	6
3.1.2 Data	6
<b>3.2 Construction Requirements</b>	<b>6</b>
<b>3.3 Test Requirements</b>	<b>7</b>
3.3.1 Test standard	7
3.3.2 Minimum test programme	7
3.3.3 Field of application	7
<b>4 CLASSIFICATION AND DESIGNATION</b>	<b>7</b>
<b>5 MARKING, LABELLING AND PACKAGING</b>	<b>8</b>
<b>6 PUBLICATIONS REFERRED TO</b>	<b>8</b>
Table of amendments issued since publication	9

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 2 of 9

## **PARTICIPATING ORGANISATIONS**

This standard was approved by the BRE Global Governing Body and Expert Group D. The following organisations participated in the preparation of this standard:-

Association for Specialist Fire Protection (ASFP)  
 Association of British Insurers (ABI)  
 Association of Insurance Surveyors  
 BAA plc  
 British Automatic Fire Sprinkler Association (BAFSA)  
 British Property Federation (BPF)  
 British Rigid Urethane Foam Manufactures Association (BRUFMA)  
 Chief Fire Officers' Association (CFOA)  
 Construction Industry Council (CIC)  
 Construction Products Association  
 Co-op Banking  
 Door & Hardware Federation  
 Engineered Panels in Construction (EPIC)  
 Fire Industry Association (FIA)  
 Glass & Glazing federation (GGF)  
 Heating, Ventilation & Air Conditioning Manufacturers Association (HEVAC)  
 Home Builders Federation (HBF)  
 Homes & Communities Agency (HCA)  
 International Association for Cold Storage construction (IACSC)  
 Intumescent Fire Seals Association (IFSA)  
 Lend Lease  
 London Underground Ltd  
 Modular & Portable Building Association (MPBA)  
 Mineral Wool Insulation Manufacturer Association (MIMA)  
 National Access & Scaffolding Confederation (NASC)  
 NHBC  
 RIBA  
 RICS  
 Risktech Ltd  
 Sustainability + Architecture  
 Sustainable by Design

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 3 of 9

## **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](http://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 9)

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 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 4 of 9

## FOREWORD

This Standard identifies the evaluation and / or testing practices undertaken by LPCB for the purposes of approval and listing of products and services. LPCB listing and approval of products and services is based on evidence acceptable to LPCB:-

- that the product or service meets the standard;
- that the manufacturer or service provider has staff, processes and systems in place to ensure that the product or service delivered meets the standard

and on:-

- periodic audits of the manufacturer or service provider including testing as appropriate;
- compliance with the contract for LPCB listing and approval including agreement to rectify faults as appropriate;

The responsibility for ensuring compliance with the technical and managerial process and requirements for the product or service lies with the manufacturer, service provider or supplier.

## 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](mailto: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](mailto: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](http://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 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 5 of 9

## 1. SCOPE

This document specifies the LPCB test requirements for classifying roofing systems when exposed to an external fire, and installed in accordance with the manufacturers' instructions and typical site applications.

This standard does not cover roofing systems exposed to an internal fire.

## 2. DEFINITIONS

For the purpose of this document, the following terms shall be defined as follows:

### 2.1 Roofing products

Any material, composite or assembly about which information is required which can be fitted onto or forms a part of a roof system.

### 2.2 Roofing system

Fabrication of materials and/or composites - A roofing system is made up from a number of products – usually comprising of a roof covering, thermal insulation and roof deck.

Sandwich panels etc. are also included.

### 2.3 Approved test facility

A facility which has been approved by an International Accreditation Forum Member such as UKAS to carry out the stated test.

### 2.4 Classification of roofing systems

Roofing systems which have been tested to the methodology of BS476 Part 3: 2004, Fire tests on building materials and structures – Part 3: Classification and method of test for external fire exposure to roofs, may be classified and approved to this standard.

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 6 of 9

### **3. REQUIREMENTS**

#### **3.1 Product Specification**

##### **3.1.1 General**

Prior to examination and testing, the applicant shall supply LPCB with comprehensive information regarding the system, its installation and its maintenance.

All documents shall be controlled.

##### **3.1.2 Data**

The applicant shall provide at least the following detailed information relating to the system, across the range of sizes and specifications for which approval is sought.

- a) A statement if the system is for sloping or flat roof applications
- b) General assembly drawings, including size, type and pitch of any fixings.
- c) Component drawings.
- d) Material specifications.
- e) Details of range of finishes/insulation, thickness and type of substrates.
- f) Information regarding fixing techniques for alternative supporting constructions.
- g) Any other relevant information.
- h) Installation instructions.
- i) Maintenance instructions.

All drawings should include tolerances. If options are allowed such as alternative materials etc, information on these shall also be included.

#### **3.2 Construction Requirements**

- 3.2.1 The construction of roofing products shall be verified by audit at the manufacturer's site or other suitable installation site, the construction and scope of approved systems shall be clearly defined in any sales, specification and installation documentation.

#### **3.3 Test Requirements**

##### **3.3.1 Test standard**

The systems shall be tested in accordance with:

BS 476-3:2004 – Fire tests on building materials and structures Part 3: Classification and method of test for external fire exposure to roofs.

Historical test data to BS 476: Part 3:1958 may also be acceptable as supporting data but cannot be used as sole evidence for application to the scheme.

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 7 of 9

### 3.3.2 Minimum test programme

The test programme will be decided by LPCB in consultation with the manufacturer. The test programme is to be developed for each application on the basis of the full scope of approval requested and taking full account of all variations of the system and the elements detailed in Scheme Document SD198.

For purposes of LPCB approval and listing, any roof covering system must demonstrate that it can achieve an acceptable fire exposure rating over the application range envisaged by the client.

### 3.3.3 Field of Application

The field of application will be based upon the system tested. Guidance is given in scheme document SD198.

## 4. CLASSIFICATION AND DESIGNATION

Roofing systems shall be classified in accordance with section 4 of BS476-3:2004. Approval and listing will only be considered under this scheme for those products and systems achieving the following classifications:

EXT FAA EXT FAB

EXT SAA EXT SAB

Where,

EXT F – for systems tested in the flat or horizontal orientation.

EXT S – for systems tested at an incline

Fire penetration (first letter)

A. Those specimens that have not been penetrated within 1 hour.

Spread of flame (second letter)

A. Those specimens on which there is no spread of flame.

B. Those specimens on which the spread of flame is less or equal to 533mm, with averaged results rounded up or down to the nearest whole number, as normally practised.

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 8 of 9

## 5. MARKING, LABELLING AND PACKAGING

The manufacturer shall provide appropriate marking, labelling and packaging for the safe transport and subsequent use of the system as well as a clear designation of the manufacturer, their contact address, the system model identification and any other safety requirements.

## 6. PUBLICATIONS REFERRED TO

- |               |  |
|---------------|--|
| BS 476-3:2004 | Fire tests on building materials and structures – Part 3: Classification and method of test for external fire exposure to roofs, incorporating Amendments A1 and A2. |
| SD 198        | Scheme Document for LPCB Approval of passive fire protection products.   |

Issue 1.1	LOSS PREVENTION STANDARD	LPS 1505
Date: Jan. 2014	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building.	Page 9 of 9

Amendments Issued Since Publication

DOCUMENT NO.	AMENDMENT DETAILS	SIGNATURE	DATE
LPS 1505-1.1	<ol style="list-style-type: none"> <li>1. New front cover</li> <li>2. Title added to header</li> <li>3. Notes amended on Page 4</li> <li>4. Repagination</li> <li>5. Update to copyright information</li> </ol>	DC	Jan. 2014