

Fire and Security Products and Services

Making LPCB Approval work for you



Not all fire and security products and services on the market can be trusted in the event of a fire or attempted break-in.

Performance claims for fire and security products and services that are not backed up by third-party approval can be misleading.

Third-party approval is independent confirmation that products and services have met – and will continue to meet – appropriate standards. LPCB (Loss Prevention Certification Board) has been working with industry, specifiers and government since 1868 to set the standards needed to ensure that fire and security products and services perform effectively.

LPCB offers third-party approval to European, International, British and its own Loss Prevention Standards (LPS). The LPSs are freely available at www.redbooklive.com. LPCB is part of BRE Global, which is accredited by the United Kingdom Accreditation Service (UKAS).



The LPCB Mark of Approval – a Mark you can trust

In addition to LPCB approval, BRE Global also offers approval to Management Systems standards (ISO 9001, ISO 14001 and OHSAS 18001).

LPCB approval offers wide ranging benefits, both to those specifying fire and security products and services, and to those manufacturing and supplying them.

Specifying LPCB approved products and services:

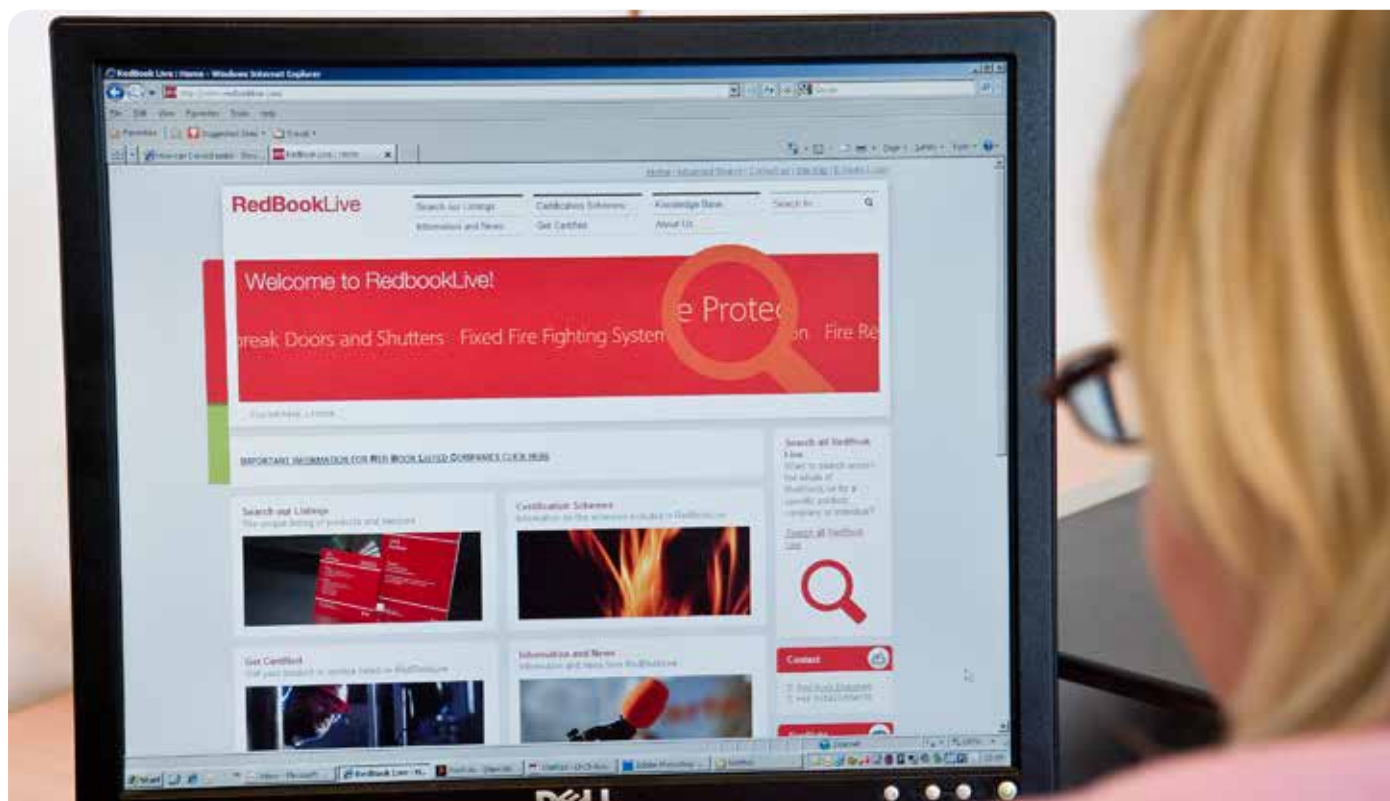
- **Reduces risk**
Specifying from the Red Book demonstrates due-diligence.
- **Avoids costly mistakes**
LPCB approved products and services can be trusted to perform as specified.
- **Saves time**
Using the Red Book cuts time spent on searching for and assessing products and services.

LPCB approval helps manufacturers to:

- **Increase global sales**
LPCB approval is recognised and specified worldwide.
- **Increase the value of products and services**
LPCB approved products and services are valued for their ability to perform as specified.
- **Reduce liability**
Gaining LPCB approval demonstrates due-diligence.

List of approved fire and security products – the Red Book

Fire and security products and services approved by LPCB are listed in the world-renowned “Red Book”. These listings can be downloaded free of charge from www.RedBookLive.com, via Apple, Android and Windows Apps for smartphones and tablets and also via an updatable memory stick.



Fire resisting systems and fire protection construction products

Correctly specifying and installing fire resisting systems and fire protection construction products – often called passive fire protection products – is fundamental to fire safety in buildings.

The products, systems and services approved by LPCB include:

- Steel protection systems
 - Board and cementitious coverings
 - Intumescent paints
 - Fire retardant coatings
- Cladding and rainscreen systems
- Partitions, cavity barriers and penetration seals
- Fire doors, shutters and glazing
- Floors, ceilings, wall linings and enclosures
- Fire resisting ductwork and fire dampers
- Components and construction products for use in the rail transport sector, surface and sub-surface transport applications
- Products for use in marine applications
- Companies installing passive fire protection systems and fire protection construction products



Key Standards for Fire Protection Construction Products and Systems Installation

Key Standards	Description
LPS 1056	Test and evaluation requirements for the LPCB approval and listing of fire doorsets, lift landing doors and shutters
LPS 1107	Requirements, tests and methods of assessment of passive fire protection systems for structural systems
BS 476: Part 21 or EN 13381: Part 4 and Part 8	Structural steel fire protection
LPS 1132	Requirements and tests for LPCB approval of wall and floor penetration and linear gap seals
LPS 1158	Requirements and tests for fire resistant glazing systems
LPS 1162	Requirements and tests for LPCB certification of fire dampers
LPS 1181 Part 1	Requirements and tests for built-up cladding and sandwich panel systems for use as the external envelope of buildings
LPS 1181 Part 2	Requirements and tests for sandwich panels and built-up systems for use as internal constructions in buildings
LPS 1195 Part 1	Fire test and evaluation requirements for the LPCB approval and listing of temporary buildings for use on construction sites
BS 476 Parts 6 & 7, BS 476: Part 4 or EN 13501: Part 1	Requirements and tests for materials and products having reaction to fire classifications to: BS 476 Part 4, EN 13501 Part 1 (A1, A2 or B) or class 0 as defined in UK Building Regulations Approved Document B
LPS 1197	Requirements for the LPCB approval and listing of companies inspecting, repairing and maintaining fire and security doors, doorsets, shutters and active smoke/fire barriers
LPS 1207	Fire requirements for the LPCB approval and listing of protective covering materials
LPS 1208	LPCB fire resistance requirements for elements of construction used to provide compartmentation
LPS 1215	Requirements for the LPCB approval and listing of scaffold cladding materials
LPS 1263	Requirements for the LPCB approval and listing of the fire performance of grease filters used in commercial kitchen extract systems
LPS 1271	Requirements for the LPCB approval and listing of companies installing fire and security doors, doorsets, shutters and active smoke/fire barriers
LPS 1500	Requirements for the LPCB approval and listing companies installing construction elements used to provide compartmentation in buildings
LPS 1501	Fire test and performance requirements for innovative methods of building construction
LPS 1505	Requirements and tests for the LPCB approval and listing of roofing systems – protection against fire from outside the building
LPS 1531	Requirements for the LPCB approval and listing of companies installing or applying passive fire protection products
LPS 1581	Requirements and tests for LPCB approval of non-load bearing external cladding systems applied to the masonry face of a building
LPS 1582	Requirements and tests for LPCB approval of non-load bearing external cladding systems fixed to and supported by a structural steel frame
BS 476: Part 24	Fire resistant ducts
BD2569	LPCB/BWF approval scheme for fire performance for timber escape stairs
EN 12101: Part 3	Powered smoke and heat exhaust ventilation

Fire detection and alarm products, systems and cables

Fire detection and alarm products and systems that are correctly designed, manufactured, installed and maintained can help provide early warning of fire that can help save lives.

Fire detection and alarm products, systems and cables, approved by LPCB include:

- Smoke, heat and multi-sensor detectors
- CO detectors
- Flame, beam and aspirating detectors
- Manual call points
- Sounders, loudspeakers and visual alarm devices
- Input/output devices and short circuit isolators
- Control and indicating equipment and power supply equipment
- Voice alarm control and indicating equipment
- Fire extinguishing panels
- Fire cables
- Installers of fire detection and alarm systems
- Wireless detectors

To maximise protection specifiers should ensure that:

- Products are tested and approved to an appropriate standard
- Fire detection and alarm systems are tested and approved for system compatibility
- Companies are approved to take single point responsibility for the design, installation and commissioning of fire detection and alarm systems



Key Standards for Fire Detection and Alarm Systems, Fire Performance of Cables and Systems Installation

Key Standards	Description
EN 54	Series of standards for fire detection and alarm systems and individual components
EN 14604	Domestic smoke alarm devices
EN 50291	Domestic carbon monoxide detectors
LPS 1014	Requirements for certificated fire detection and alarm firms
LPS 1020	Requirements for alarm receiving centres
LPS 1054	Requirements and testing procedures for the LPCB and testing of component compatibility for fire detection and alarm systems
LPS 1257	Requirements and testing procedures for radio linked fire detection and fire alarm equipment
LPS 1259	Alternative specification for control and indicating equipment for use in countries not bound by CEN/CENELEC internal regulations
LPS 1265	Requirements and testing procedures for the LPCB approval and listing of carbon monoxide fire detectors using electrochemical cells
LPS 1274	Testing procedures for the LPCB approval and listing of carbon monoxide / heat multisensor detectors using electrochemical cells
LPS 1277	Requirements for the LPCB approval and listing of alarm transmission systems and equipment
LPS 1279	Testing procedures for the LPCB approval and listing of point multisensor fire detectors using optical or ionization smoke sensors and electrochemical cell CO sensors and optically heat sensors
LPS 1280	Testing procedures for the LPCB approvals and listing of duct smoke detectors using point smoke detectors
LPS 1282	Requirements and testing procedures for combined domestic smoke and carbon monoxide detectors
LPS 1653	Requirements and testing procedures for the LPCB approval and listing of fire detection and alarm network systems installed in one or more buildings on a single site
BS 5839 Part 1	Design and installation code of practice – clause 26.2 (d & e) requirements for cables for fire detection and alarm systems for buildings
BS 6387	Performance requirements for cables required to maintain circuit integrity under fire conditions
BS 7629: Part 1	Insulated cables with limited circuit integrity
BS 7846	Electric cables. Thermosetting insulated, armoured, fire resistant cables of rated voltage 600/1000V having low emission of smoke and corrosive gases when affected by fire specification
BS 8434: Part 2	Methods of test for assessment of the fire integrity of electric cables. Test for unprotected small cables for use in emergency circuits. BS EN 50200 with a 930 deg flame and with water spray
EN 50200	Fire resistance of unprotected small cables for use in emergency circuit
EN 60702: Part 1	Mineral insulated cables

Fire suppression products, systems and services

For over a hundred years sprinklers have protected people and property all over the world. Application of sprinkler installation codes which have been developed over the years have ensured high levels of fire protection.

The fire suppression products, systems and services approved by LPCB include:

- Automatic sprinkler, watermist, waterspray and deluge systems
- Fixed fire fighting systems (gaseous and kitchen systems)
- Portable fire extinguishing equipment and hose reels
- Companies approved for the design, installation, service and maintenance of sprinkler systems and fixed fire fighting systems

The standards used by LPCB for approving and listing components have been developed to ensure that the components are suitable for use in systems installed to the LPC Sprinkler Rules (incorporating EN 12845). Components may also be suitable for use in installations designed to NFPA and other international and national sprinkler installation codes.



Key Standards for Fire Suppression Products and System Installation

Key Standards	Description
EN 12259 Series	Fixed fire fighting systems – components for sprinkler and water spray systems
EN 12094 Series	Fixed fire fighting systems – components for gas extinguishing systems
EN 3	Portable fire extinguishers
LPS 1036	Quality schedule for the certification of automatic fire sprinklers
LPS 1039	Requirements and testing methods for automatic sprinklers
LPS 1040	Requirements and testing procedures for the LPCB approval and listing of wet alarm valve sets
LPS 1041	Requirements and testing procedures for the LPCB approvals and listing of dry pipe valve sets
LPS 1045	Requirements and testing procedures for the LPCB approval and listing of direct reading flow meters
LPS 1048	Requirements for the approval of sprinkler system contractors in the UK and Eire
LPS 1131	Requirements and testing methods for pumps for automatic sprinkler installation pump sets
LPS 1148	Requirements for contractors engaged in the design, installation commissioning and servicing of automatic sprinkler systems.
LPS 1185	Requirements and testing methods for remote monitored gear operated butterfly stop valves
LPS 1186	Requirements and test methods for check valves
LPS 1194	Requirements and testing methods for pipe hangers
LPS 1204	Requirements for firms engaged in the design, installation and commissioning of igas extinguishing systems
LPS 1219	Requirements and testing procedures for the LPCB approval and listing of pipe couplings
LPS 1223	Requirements and testing procedures for the LPCB certification and listing of fixed fire extinguishing systems for catering equipment
LPS 1230	Requirements for fire testing of fixed gaseous fire extinguishing systems
LPS 1236	Requirements for control panels for diesel engine driven pumps used in automatic sprinkler installations
LPS 1237	Requirements for control panels for electric motor driven pumps used in automatic sprinkler installations
LPS 1239	Requirements and testing procedures for the LPCB approval and listing of diesel engines for sprinkler pump sets
LPS 1240	Requirements for LPCB approved fire sprinkler pump sets used in automatic sprinkler installations
LPS 1254	Requirements for suction tanks for automatic pumps
LPS 1258	Requirements and test methods for automatic sprinkler glass bulbs with a narrow operating temperature band
LPS 1260	Plastic pipe and fittings for use in automatic sprinkler systems
LPS 1261	Requirements for testing flexible hoses for sprinkler systems
LPS 1276	Requirements for the LPCB certification and listing of above ground suction tanks for sprinkler systems
LPS 1283	Requirements and test methods for the approval of Watermist systems for use in commercial low hazard occupancies
LPS 1301	Requirements for the approval of sprinkler installers in the UK and Ireland for residential and domestic sprinkler systems

Security protection products and systems

The correct specification of approved security products and systems is critical to protecting people and property from the losses associated with crime and terrorism.

Security protection products approved by LPCB include:

- Access covers and latches
- Alarm transmission equipment
- Cabinets and enclosures
- Cladding and roofing systems
- Doors and shutters
- Fences and walls
- Grilles and barsets
- Intruder detection
- Locks and padlocks
- Safes and strongrooms
- Sheds and tool stores
- Vehicle barriers
- Windows and rooflights

LPCB works closely with insurers, government, police, designers, manufacturers, contractors and end users to develop methods of assessing the performance and reliability of security products to ensure their fitness for purpose. Loss Prevention Standard, LPS 1175, is one of the key security standards in use.

LPCB also issue approvals against a number of British (BS), European (EN) and Publicly Available Standards (PAS).



Security Protection – Key Standards for Physical and Electronic Security Products and Systems

Key Standards	Description
CWA 16221	Vehicle security barriers Performance requirements, test methods and guidance on application
EN 179	Building hardware. Emergency exit devices operated by a lever handle or push pad, for use on escape routes. Requirements and test methods.
EN 356	Glass in building Security glazing Testing and classification of resistance against manual attack
EN 1125	Building hardware. Panic exit devices operated by a horizontal bar, for use on escape routes. Requirements and test methods.
EN 1143 Parts 1 & 2	Secure storage units – Requirements, classification and methods of test for resistance to burglary
EN 1303	Building hardware. Cylinders for locks. Requirements and test methods.
EN 1627 to EN 1630	Pedestrian doorsets, windows, curtain walling, grilles and shutters – burglar resistance
EN 12209	Building hardware. Locks and latches. Mechanically operated locks, latches and locking plates. Requirements and test methods.
EN 14450	Secure storage units – Requirements, classification and methods of test for resistance to burglary – secure safe cabinets
EN 50131 Series	Intruder detection equipment
LPS 1175	Requirements and testing procedures for the LPCB approval and listing of intruder resistant building components, strongpoints, security enclosures and freestanding barriers
LPS 1183	Requirements and testing procedures for the LPCB approval and listing of safe storage units
LPS 1214	Specification for testing and classifying physical protection devices for personal computers and similar equipment
LPS 1224	Requirements for secure database registers
LPS 1225	Requirements for the LPCB approvals and listing of asset marking systems
LPS 1228	Specifications for testing and classifying the burglary resistance of office furniture – lightweight containers
LPS 1242	Requirements and testing procedures for the LPCB approval and listing of cylinders for locks
LPS 1270	Requirements and testing procedures for the LPCB approval and listing of intruder resistant security glazing units
LPS 1271	Requirements for the LPCB approval and listing of companies installing fire and security doorsets and shutters and smoke barriers
LPS 1277	Requirements for LPCB Approval and Listing of Alarm Transmission Equipment
LPS 1650	Requirements and testing procedures for the LPCB approval and listing of 'theft resistant' electronic products
LPS 1654	Requirements and testing procedures for the LPCB approval and listing of padlocks
PAS 24	Enhanced security performance requirements for doorsets and windows in the UK. External doorsets and windows intended to offer a level of security suitable for dwellings and other buildings exposed to comparable risk
PAS 68	Impact test specification for vehicle security barriers

European Directives

For products to be placed on the European market, manufacturers must comply with the regulatory requirements of a number of European Directives.

To demonstrate compliance with these Directives, a manufacturer must make a Declaration of Performance/Conformity based on an evaluation of the product and affix the relevant mark.

For some products the manufacturer will need to use the services of a Notified Certification Body or Notified Test Laboratory, to demonstrate that the assessment of the product has been carried out – in whole or in part – by a body independent of the manufacturer. Other products can be marked on the basis of a self declaration of performance by the manufacturer.

The relevant mark shows that a product meets minimum regulatory standards of health and safety as laid down in the Directive. It is not a quality mark and does not necessarily relate to the functional performance of the product.

BRE Global issues Certificates of Constancy of Performance/Certificates of Conformity to manufacturers for the purpose of the CE marking of their products. Unless these products also meet LPCB approval requirements, they are not eligible for Red Book listing, or to be marked as LPCB approved.

BRE Global Ltd is a Notified Body for:



Construction Products Regulation
305/2011



Pressure Equipment Directive -
97/23/EC



Marine Equipment Directive -
96/98/EC



Transport Pressure Equipment
Directive (TPED) - 2010/35/EU



BRE Global

A member of the BRE Group, BRE Global Limited is owned by the BRE Trust, a registered charity that works to advance knowledge, innovation and communication in all built environment issues. The profits made by the Group are passed to the Trust to promote its charitable objectives.

BRE Global is an independent, third-party approvals body offering testing, inspection and certification of fire, security and sustainability products and services to an international market. Its product testing and approvals are carried out by recognised experts in its world renowned testing laboratories

BRE Global also offers cutting-edge research, training, standards writing and other associated services. The company is the custodian of a number of leading brands including:

- LPCB, which is responsible for the approval of fire and security products and services listed in the Red Book.
- BREEAM, the world's leading environmental assessment method for buildings. BREEAM sets the standard for best practice in sustainable design and has become the de-facto measure of a building's environmental performance.

Further information visit www.bre.co.uk/certification



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Other BRE Group companies and activities

BRE

BRE is a unique, research-based consultancy and testing organisation, offering expertise in almost every aspect of the built environment. BRE helps clients to create better, safer and more sustainable products, buildings, communities and businesses, and supports the innovation needed to achieve this.

www.bre.co.uk

BRE Ventures

BRE Ventures uses the BRE Group's expertise to take to market new ideas needing development, testing or certification, and to generate income for inventors and all those involved with the commercialisation process.

www.bre.co.uk/innovationden

BRE Training

BRE Training is a training provider and assessment centre for programmes leading to national vocational qualifications with CPD, and for other courses focusing on Energy, Sustainability, Fire, Regulation/Legislation, Security, Innovation, Health and safety, Intelligent buildings, Specification and Design.

www.bre.co.uk/training

Sustainability Plan (S-Plan)

Through its S-Plan, the BRE Group of companies has set challenging targets to improve the environmental performance of its businesses.

www.bre.co.uk/splan

Part of the BRE Trust

The BRE Trust uses profits made by BRE Group to fund new research and education programmes, that will help it meet its goal of 'building a better world'.

The BRE Trust is a registered charity in England & Wales:
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