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# LPCB Red Book



# 2

## Part: 1

### Passive fire protection

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## Introduction

BRE Global Ltd, based in the UK near London, is an independent third party organisation offering certification of fire, security and sustainability products and services to an international market. LPCB is the certification brand used for fire and security products and services. The LPCB mark is accepted worldwide. We have representative offices in China, India and Dubai. We are owned by the BRE Trust, a not-for-profit organisation.

LPCB listings can be accessed, free of charge, at [www.redbooklive.com](http://www.redbooklive.com) or via apps from Apple, Google and Windows.

BRE Global Ltd is also a Notified Certification Body and Notified Test Laboratory for:-

- Construction Products Regulation
- Pressure Equipment Directive
- Marine Equipment Directive
- Transport Pressure Equipment Directive

BRE Global additionally carries out:

- Fire Investigation
- Fire Risk Assessment
- Fire Safety Engineering
- Research
- Training

## LPCB Listings

Listings are given in sections which list related groups of products and services such as suppression, security and so on. Each section also summarises the technical basis for the certification of each product or service. The Red Book listings should always be used in conjunction with rules, regulations and design specifications required by the relevant Authority having jurisdiction.

Listings comprise:

Volume 1:

- Fire detection and alarm products, systems, and cables
- Manual fire extinguishing equipment
- Automatic sprinkler, water spray and deluge systems
- Fixed fire fighting products and systems
- Watermist systems
- Related installers

**Volume 2: (This Volume)**

- **Passive fire protection products**
- **Security protection products**
- **Fire doors and shutters**
- **Smoke and fire ventilation systems**
- **Security Assessments - SABRE**
- **Related installers**
- **Management Systems**
- **Construction products**

Listings are given in the name of the manufacturer or service provider, in alphabetical order. They can be downloaded free of charge from our website at [www.redbooklive.com](http://www.redbooklive.com) and also via an App that is available free from Apple iStore (for iPhone and iPad), from Google Play, (for Android phones and tablets) and Windows Store (for Windows 8 phones).

## Updates

Certification of products and services are updated regularly. To ensure that you are using the most up to date information please refer to <<<<<www.redbooklive.com>>>>> or download the App.



## What is Third Party Certification?

A frequent concern of stakeholders is in knowing whether a product will perform in accordance with the stated specifications. These concerns can involve such product attributes as safety, health or environmental impacts, durability, compatibility, suitability for intended purposes or for stated conditions, and other similar considerations. These issues can all be addressed through product certification.

Third party certification is a conformity assessment process, carried out by a body that is independent of both supplier and customer organisations. It provides confirmation that products and services have met and will continue to meet the requirements of specified standards and other normative documents.

LPCB third party product certification schemes are quality assurance schemes and comprise initial type testing and technical evaluation, assessment and surveillance of the manufacturer's quality system and factory production procedures, regular audit testing, labelling and listing.

Similarly, LPCB schemes for suppliers of services (installers) are also quality assurance schemes comprising a technical assessment of an installer's capability, assessment and surveillance of the installer's quality system and production procedures, regular inspection of completed installations and listing.

## Benefits of Third Party Certification

For specifiers, regulators, insurers, manufacturers and installers, the benefits of an LPCB approval are:

### For specifiers and regulators:

- Risk reduction - specifying LPCB approved products and services demonstrates due-diligence and best endeavour and mitigates against possible accusations of negligence.
- Avoidance of costly mistakes - you can trust LPCB approved products and services to conform each and every time.
- Time - using Red Book Live to search for and assess products and services can save you time.

### For manufacturers and installers:

- Increased global sales - LPCB approval is recognised and specified widely throughout the world. In some territories LPCB approval is a mandatory requirement.
- Added value of the product or service - LPCB approved products and services are recognised as providing added value given their ability to conform each and every time.
- Reduced liability - LPCB approved products and services demonstrate due-diligence which can reduce liability for both you and your customers.

## What does LPCB Certification offer?

LPCB certification is carried out against Loss Prevention Standards (LPS's). These LPS's include reference to BS, EN or ISO standards as appropriate. LPCB certification are level 5 schemes as detailed in ISO/ IEC 17067 with the added requirement to have a quality system certificated to ISO 9001.

## VOLUME 2 LIST OF APPROVED PRODUCTS AND SERVICES

The technical requirements of LPCB schemes are given in the Loss Prevention Standards (LPSs). These documents are drafted by LPCB technical experts in conjunction with appropriate external experts. They are then peer reviewed by representatives from trade bodies, regulators, insurers, specifiers, manufacturers and other suppliers. Finally these documents are approved for use by the BRE Global Governing Body; the Body that oversees all of the certification activities of BRE Global.

### **Product schemes comprise:**

- Initial type testing and evaluation of product.
- Approval and surveillance of the manufacturer's (or supplier's) quality management system to ISO 9001
- Assessment and surveillance of the manufacturer's (or supplier) factory production control system (FPC).
- Periodic audit testing of the product from either the factory or marketplace.
- Labelling or marking as appropriate.
- Listing on Red Book Live

### **Installer schemes comprise:**

- Technical assessment of the installation contractor's capability.
- Approval and surveillance of the contractor's quality management system to ISO 9001 or assessment against the requirements of the relevant Loss Prevention Standard where ISO 9001 is not appropriate.
- Regular surveillance inspections of on-going installations.
- The issue of Certificates of Conformity by the installer to demonstrate compliance for each installation.
- Listing in the Red Book.

### **The LPCB Mark - the Mark you can trust**

After certification of a product or service the manufacturer or service provider may place the LPCB certification mark, as shown below, on the product, packaging and literature etc.



Where LPCB holds accreditation through the United Kingdom Accreditation Service (UKAS), the certified company may include the UKAS symbol (the Crown and Tick) alongside the LPCB mark for certain applications e.g. promotional literature or material and stationery, as shown below.



(Full details of LPCB accreditation can be found on the UKAS website at [www.ukas.com](http://www.ukas.com))

Where for reasons of space or cost the use of the above full mark is not practical, then the following simplified mark may be applied directly to the product (for some schemes only). The LPCB scheme rules define how and where the marks can be used.



The products listed in Volume 2: Part 5 - Construction Products, are approved under our BRE Global Certification brand - the certification mark for this brand is:-



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*Part*

*1*

*PASSIVE FIRE  
PROTECTION*

# **PART 1: PASSIVE FIRE PROTECTION**

## **INTRODUCTION**

Passive fire protection is a combination of design, assembly and material choice. This will include:

- Protection of structural elements
- Materials that do not contribute to fire growth
- Limited toxicity of combustion products
- Walls and floors that provide compartments to resist the spread of fire
- Provision of a building envelope to resist fire entering from outside

In addition to careful design and product selection, it is recommended that all products are installed by LPCB approved contractors who have demonstrated their competence.

Listings in this section include:

### **Products**

- Partitions
- Structural steel protection
- Fire stopping/penetration seals
- Products used in transport applications
- Walls and roofs/roofing - the building envelope
- Protective sheeting
- Temporary buildings for use on site
- Timber stairs

These products are approved in accordance with various standards, the details of which are given at the front of each section.

### **Installation contractors**

Contractors are approved in accordance with:

*LPS 1500: Requirements for the approval and listing of companies installing construction elements used to provide compartmentation in buildings.*

*LPS 1531: Requirements for the approval and listing of companies installing or applying passive fire protection products.*

A fundamental aspect of fire safety in buildings is the specification and installation of 'built in' or passive fire protection products and systems. It has long been recognised that the performance of a product can be severely undermined by poor installation or application leading to failure in the event of a fire. This has led to the recent development of LPS 1500 *Requirements for the LPCB approval and listing of companies installing construction elements used to provide compartmentation in buildings* and LPS 1531 *Requirements for the approval and listing of companies installing or applying passive fire protection products*. Both these schemes help to ensure that companies installing passive fire protection :

- Have sufficient training and expertise to install the products or systems using the correct techniques.
- Use products where it can be demonstrated that they will meet the required fire performance.
- Have access to up to date installation instructions for the installed systems.
- Carry out and record in process inspection checks prior to, during and after the product or system installation.
- Issue LPCB Certificates of Conformity for each installation.

LPS 1500 was developed specifically for companies installing fire resisting compartmentation systems approved by LPCB to LPS 1208.

LPS 1531 is an installer scheme that covers all the major product areas of passive fire protection.

## **PART 1: SECTION 1.1**

### LPS 1500 APPROVED INSTALLER OF FIRE RESISTING COMPARTMENTATION SYSTEM

The companies listed in this section are approved installers of fire resisting compartmentation systems approved by LPCB to LPS 1208.

LPS 1208 Approved products for use in the following elements of construction may be installed under this scheme.

- Loadbearing compartment walls and partitions
- Non-load bearing compartment walls and partitions
- External walls
- Curtain walls
- Cavity barriers
- Roofs where fire resistance is required (loadbearing and non-loadbearing)
- Loadbearing compartment floors
- Insulated panels used for enclosing production and storage areas in food factories.

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#### **ACT Construction (UK) Limited**

Unit 25C, Anniesland Business Park, Netherton Road, Glasgow G13 1EU, United Kingdom

Tel: 0141 959 9200 • Fax: 0141 959 9400

E-mail: [ken@act-construction.co.uk](mailto:ken@act-construction.co.uk) • Website: [www.act-construction.co.uk](http://www.act-construction.co.uk)

**Certificate No. 1237PIa to LPS 1500: Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

---

#### **Cold Clad Limited**

Sarnia House, Green Lane, Newtown Trading Estate, Tewkesbury, Gloucestershire GL20 8HD, United Kingdom

Tel: 01684 438190 • Fax: 01684 217610

E-mail: [info@coldclad.com](mailto:info@coldclad.com) • Website: [www.coldclad.com](http://www.coldclad.com)

**Certificate No. 1169PIb to LPS 1500: Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

---

#### **Composite Panel Services Limited**

Unit 3, Pennington Street, Hull, East Yorks HU8 7LE, United Kingdom

Tel: 01482 620277 • Fax: 01482 587121

E-mail: [andrewmiller@cps-hull.co.uk](mailto:andrewmiller@cps-hull.co.uk) • Website: [www.cps-hull.co.uk](http://www.cps-hull.co.uk)

**Certificate No. 1170PIb to LPS 1500 Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

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#### **G & A Fire Protection Ltd**

Unit 2, Valley Way, Market Harborough LE16 7PS, United Kingdom

Tel: +44 (0) 1858 432222

E-mail: [info@ga-group.com](mailto:info@ga-group.com) • Website: [www.ga-group.com](http://www.ga-group.com)

**Certificate No. 889PIb to LPS 1500: Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

**HIL Installations Limited**

Unit 10 Coopers Point, Coopers Lane, Knowsley L33 7UB, United Kingdom

Tel: 01510 546 2111

E-mail: [sales@hil-installations.com](mailto:sales@hil-installations.com)

**Certificate No. 1575PI to LPS 1500 Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

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**MITIE Fire Protection**

Unit 19 Roman Way, Coleshill, Birmingham B46 1HQ, United Kingdom

Tel: +44 (0)1827 311456

E-mail: [stuart.holmes@mitie.com](mailto:stuart.holmes@mitie.com) • Website: [www.mitie.com](http://www.mitie.com)

**Certificate No. 769a to LPS 1500: Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

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**P&M Group Ltd trading as ISD**

Unit A, 125 Business Park, Llanthony Road, Gloucester, Glos GL2 5JQ, United Kingdom

Tel: +44 (0) 1452 520649 • Fax: +44 (0) 1452 301910

E-mail: [sales@isd-solutions.co.uk](mailto:sales@isd-solutions.co.uk) • Website: [www.isd-solutions.co.uk](http://www.isd-solutions.co.uk)

**Certificate No. 1008PIa to LPS 1500 Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208.

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**Stancold plc**

Portview Road, Avonmouth, Bristol BS11 9LQ, United Kingdom

Tel: +44 (0)117 316 7000 • Fax: +44 (0)117 316 7001

E-mail: [sales@stancold.co.uk](mailto:sales@stancold.co.uk) • Website: [www.stancold.co.uk](http://www.stancold.co.uk)

**Certificate No. 1257PI to LPS 1500: Issue 2**

Company assessed and approved for installation of fire resisting compartmentation systems approved by LPCB to LPS 1208

## **PART 1: SECTION 1.2**

### LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

The companies listed in this section are approved to install passive fire protection products for the Appendix areas indicated in their entry.

Appendix areas:

1. Penetration, cavity barrier and linear gap seals
2. Fire rated board and cladding to structural elements
3. Intumescent coatings to structural elements
4. Fire rated spray materials
5. Fire rated ductwork systems
6. Fire resisting dampers
7. Fire resistant compartment wall systems
8. Offsite application of intumescent coatings to structural elements

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#### **A2O Limited**

The Old Barn, Pump House Farm, Ongar Road, Kelvedon Hatch, Essex CM15 0LA, United Kingdom

Tel: 01277369555

E-mail: [William.Carter@a2ogroup.co.uk](mailto:William.Carter@a2ogroup.co.uk) • Website: [www.a2ocladding.co.uk](http://www.a2ocladding.co.uk)

**Certificate No. 1520PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals
- Appendix 2 - Fire rated board and cladding to structural elements

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#### **Abbey Thermal Insulation Ltd**

23-24 Riverside House, Lower Southend Road, Wickford, Essex SS11 8BB, United Kingdom

Tel: +44 (0) 1268 572116 • Fax: +44 (0) 1268 572117

E-mail: [robert.stubbs@abbeythermal.com](mailto:robert.stubbs@abbeythermal.com)

**Certificate No. 1014PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

- Appendix 1 - Penetration, cavity barrier and linear gap seals.
- Appendix 2 - Fire rated board and cladding to structural elements.
- Appendix 3 - Intumescent coatings to structural elements.
- Appendix 5 - Fire rated ductwork systems.

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#### **Abbot Fire Group Limited**

Abbots Barn, Radclive Road, Gawcott, Buckingham MK18 4AA, United Kingdom

Tel: +44 (0)1280 824111

E-mail: [admin@abbotfiregroup.co.uk](mailto:admin@abbotfiregroup.co.uk)

**Certificate No. 586PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barriers and linear gap seals

**Adaptive Fire Protection Limited**

136 Boden Street, Glasgow G40 3PX, United Kingdom

Tel: 0141 556 7720

E-mail: [steven.elliott@adaptivepltd.com](mailto:steven.elliott@adaptivepltd.com)

**Certificate No. 1316PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

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**AFA (NI) Ltd**

Unit 13 McKibbin House, East Bank Road, Carryduff, Belfast BT8 8BD, United Kingdom

Tel: 08290 815090

E-mail: [Firestopped@aol.com](mailto:Firestopped@aol.com)

**Certificate No. 1487PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

- Appendix 3 - Intumescent coatings to structural elements

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**Aran Services Ltd**

Units 1-6 The Old Station, Higham, Bury St. Edmunds, Suffolk IP28 6NE, United Kingdom

Tel: 01284 812520 • Fax: 01284 811166

E-mail: [richard.spearman@aranservices.co.uk](mailto:richard.spearman@aranservices.co.uk) • Website: [www.aranservices.co.uk](http://www.aranservices.co.uk)

**Certificate No. 1413PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

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**ASM Engineering Ltd**

74 Wilbury Way, Hitchin, Hertfordshire SG4 0TP, United Kingdom

Tel: 01462 477360

E-mail: [office@asmeng.co.uk](mailto:office@asmeng.co.uk) • Website: [www.asmeng.co.uk](http://www.asmeng.co.uk)

**Certificate No. 1546PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 5 - Fire rated ductwork systems

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**Avert Fire (UK) Ltd**

P O Box 248, Dawes lane, Scunthorpe DN16 1DW, United Kingdom

Tel: +44 (0)1724 853712 • Fax: +44 (0)1724 278848

E-mail: [admin@avertfire.co.uk](mailto:admin@avertfire.co.uk) • Website: [www.avertfire.co.uk](http://www.avertfire.co.uk)

**Certificate No. 850PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 7 - Fire resistant compartment wall systems

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## **PART 1: SECTION 1.2**

LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

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### **Bellwood Interiors Limited**

Bellwood House, No 17 - Barton Industrial Estate, Faldo Road, Barton-Le-Clay, Bedfordshire MK45 4RP, United Kingdom

*Tel: 01582 882278*

*E-mail: sales@bellwoodinteriors.com • Website: bellwoodinteriors.com*

**Certificate No. 1425PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 7 - Fire resistant compartment wall systems

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### **Buildzone UK Limited**

2nd Floor, Hampton House, Middleton, Manchester M24 1GT, United Kingdom

*Tel: 0843 212 0031*

*E-mail: Jamie.rother@buildzoneuk.com*

*Jamie.rother@buildzoneuk.com • Website: www.buildzoneuk.com*

**Certificate No. 1399PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **Castle Hill Fire Protection Limited**

Castle Hill House, High Street, Huntingdon, Cambridgeshire PE29 3TE, United Kingdom

*Tel: 01480 400632*

*E-mail: andy.stubbs@chfire.co.uk • Website: www.castlehillfireprotection.co.uk*

**Certificate No. 1274PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 3 - Intumescent coatings to structural elements

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### **Checkmate Fire Solutions Ltd**

Cambridge House, Cambridge Road, Harlow, Essex CM20 2EQ, United Kingdom

*Tel: +44 (0) 1279 850021*

*E-mail: info@checkmatefire.com • Website: www.checkmatefire.com*

**Certificate No. 860PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 3 - Intumescent coatings to structural elements

Appendix 7 - Fire resistant compartment wall systems



**Checkmate Fire Solutions Ltd**

2nd Floor, Rosemount House, Rosemount Estate, Huddersfield Road, Elland, West Yorkshire HX5 0EE,  
United Kingdom

Tel: +44 (0) 1422 376436

E-mail: [info@checkmatefire.com](mailto:info@checkmatefire.com) • Website: [www.checkmatefire.com](http://www.checkmatefire.com)

**Certificate No. 860PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals
  - Appendix 2 - Fire rated board and cladding to structural elements
  - Appendix 3 - Intumescent coatings to structural elements
  - Appendix 7 - Fire resistant compartment wall systems
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**City Gate Construction (Scotland) Limited**

24 MacDowall Street, Paisley, Scotland PA3 2NB, United Kingdom

Tel: 01415616500

E-mail: [Ronnie@citygateglobe.com](mailto:Ronnie@citygateglobe.com) • Website: [www.citygateconstruction.co.uk](http://www.citygateconstruction.co.uk)

**Certificate No. 1493PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals
- 

**Clark & Fenn Skanska Limited**

1st Floor, Hollywood House, Church Street, Woking, Surrey GU21 6HJ, United Kingdom

Tel: +44 (0) 1923 722700 • Fax: + 44 (0) 1923 725984

E-mail: [Derek.Bennett@skanska.co.uk](mailto:Derek.Bennett@skanska.co.uk) • Website: [www.skanska.co.uk/services/ceilings-and-plasterwork](http://www.skanska.co.uk/services/ceilings-and-plasterwork)

**Certificate No. 1180PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals
- 

**Clear Line Maintenance Ltd**

Rawson Spring Way, Sheffield, S6 1PG, United Kingdom

Tel: 01142 315444

E-mail: [Hannah.harrison@clear-line.co.uk](mailto:Hannah.harrison@clear-line.co.uk) • Website: [www.clear-line.co.uk](http://www.clear-line.co.uk)

**Certificate No. 1446PI to LPS 1531 Issue 1**

- Appendix 1 - Penetration, cavity barrier and linear gap seals
- 

**Cleshar Contract Services Ltd**

Heather Park House, North Circular road, Stonebridge, London NW10 7NN, United Kingdom

Tel: +44 (0) 20 8733 8888 • Fax: +44 (0) 20 8733 8899

E-mail: [chris.carter@cleshar.co.uk](mailto:chris.carter@cleshar.co.uk) • Website: [www.cleshar.co.uk](http://www.cleshar.co.uk)

**Certificate No. 1525PI to LPS 1531: Issue 1**

## **PART 1: SECTION 1.2**

### **LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals

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#### **Cold Clad Limited**

Sarnia House, Green Lane, Newtown Trading Estate, Tewkesbury, Gloucestershire GL20 8HD, United Kingdom

*Tel: 01684 438190 • Fax: 01684 217610*

*E-mail: info@coldclad.com • Website: www.coldclad.com*

**Certificate No. 1169PIa to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 3 - Intumescent coatings to structural elements

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#### **Composite Panel Services Limited**

Unit 3, Pennington Street, Hull, East Yorks HU8 7LE, United Kingdom

*Tel: 01482 620277 • Fax: 01482 587121*

*E-mail: andrewmiller@cps-hull.co.uk • Website: www.cps-hull.co.uk*

**Certificate No. 1170PIa to LPS 1531 Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 7 - Fire resistant compartment wall systems

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#### **Core Drilling Specialists Ltd**

Core Drilling House, Unit 9, Inchcross Industrial Estate, Bathgate, EH48 2HR, United Kingdom

*Tel: 01506 637840*

*E-mail: admin@coredrilling.co.uk • Website: www.coredrilling.co.uk*

**Certificate No. 1447PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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#### **Corecut Fire Protection (a division of Corecut Limited)**

Bankhead, Broxburn, West Lothian EH52 6PP, United Kingdom

*Tel: +44 (0) 1506 854710 • Fax: +44 (0) 1506 853068*

*E-mail: office@corecut.co.uk • Website: www.corecut.co.uk*

**Certificate No. 1028PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 3 - Intumescent coatings to structural elements.

**CVD Fire Protection Ltd**

Lawmuir Road, Law, Carluke, South Lanarkshire ML8 5JB, United Kingdom

Tel: +44 (0) 845 450 1601 • Fax: +44 (0) 845 450 1602

E-mail: [info@cvdfire.co.uk](mailto:info@cvdfire.co.uk) • Website: [www.cvdfire.co.uk](http://www.cvdfire.co.uk)

**Certificate No. 1009PI to LPS 1531 Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 3 - Intumescent coatings to structural elements

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**DC Fire Protection Limited**

Unit 18, Enterprise Road, Raunds, Northants NN9 6JE, United Kingdom

Tel: 01933633747

E-mail: [info@dcfireprotectionltd.org.uk](mailto:info@dcfireprotectionltd.org.uk) • Website: [www.dcfireprotectionltd.com](http://www.dcfireprotectionltd.com)

**Certificate No. 1394PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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**DCK Construction Ltd**

8 Oakleigh, 630 High Road, Woodford Green, Essex IG8 0PU, United Kingdom

Tel: 07478 618 733

E-mail: [john@dckconstruction.co.uk](mailto:john@dckconstruction.co.uk) • Website: [www.dckconstruction.co.uk](http://www.dckconstruction.co.uk)

**Certificate No. 1521PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

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**Divide UK Limited**

Carwood Park, Selby Road, Garforth, Leeds LS15 4LG, United Kingdom

Tel: 0113 385 4761

E-mail: [Lee.smith@divideuk.com](mailto:Lee.smith@divideuk.com) • Website: <http://www.divideuk.com>

**Certificate No. 1486PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

- Appendix 2 - Fire rated board and cladding to structural elements

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**E&S Heating & Ventilation Ltd**

Diplocks Way, Hailsham, East Sussex BN27 3JF, United Kingdom

Tel: +44 (0) 1323 845492 • Fax: +44 (0) 1323 440577

E-mail: [emmacollins@esgroup.co.uk](mailto:emmacollins@esgroup.co.uk) • Website: [www.esgroup.co.uk](http://www.esgroup.co.uk)

**Certificate No. 1013PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 5 - Fire rated ductwork systems.

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## **PART 1: SECTION 1.2**

LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

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### **Fire Protection Limited**

Flamebar House, South Road, Templefields, Harlow, Essex CM20 2AR, United Kingdom  
Tel: +44 (0)1279 634 230 • Fax: +44 (0)1279 634 231  
E-mail: [info@fireprotection.co.uk](mailto:info@fireprotection.co.uk) • Website: [www.fireprotection.co.uk](http://www.fireprotection.co.uk)

**Certificate No. 277b to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope:

Appendix 5 - Fire rated ductwork systems.

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### **Fire Risk Management Associates**

Townsend Farm, 11 High Street, Upwood, Cambridgeshire PE26 2QE, United Kingdom  
Tel: +44 (0) 1487 479363  
E-mail: [joe.ruane@frmald.com](mailto:joe.ruane@frmald.com) • Website: [www.frmald.co.uk](http://www.frmald.co.uk)

**Certificate No. 1412PIa to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear seal gaps

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### **Fireclad Ltd**

120 Old Broad Street, London EC2N 1AR, United Kingdom  
Tel: 0207 628 6500  
E-mail: [info@fireclad.com](mailto:info@fireclad.com) • Website: [www.fireclad.com](http://www.fireclad.com)

**Certificate No. 1563PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:  
- Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **Fourway Communication Limited**

Delamare Road, Cheshunt, Herts, EN8 9SH, United Kingdom  
Tel: 01992 629182  
E-mail: [daniello.aspeling@fourway.co.uk](mailto:daniello.aspeling@fourway.co.uk)

**Certificate No. 1392PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **G & A Fire Protection Ltd**

Unit 2, Valley Way, Market Harborough LE16 7PS, United Kingdom  
Tel: +44 (0) 1858 432222  
E-mail: [info@ga-group.com](mailto:info@ga-group.com) • Website: [www.ga-group.com](http://www.ga-group.com)

**Certificate No. 889PIa to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals  
Appendix 2 - Fire rated board and cladding to structural elements  
Appendix 3 - Intumescent coatings to structural elements

**Gardner & Co (Kent) Ltd**

1 - 5 Bermondsey Street, London SE1 2ER, United Kingdom

Tel: 020 7403 5894 • Fax: 020 7378 0316

E-mail: [enquiries@gardnerco.net](mailto:enquiries@gardnerco.net) • Website: [www.gardnerco.net](http://www.gardnerco.net)

**Certificate No. 1040PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 5 - Fire rated ductwork systems.

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**Gardner FRD Ltd**

4 Sterling House, Sunderland Quay, Rochester, ME2 4HN, United Kingdom

Tel: 0207 403 5894

E-mail: [mark.duguid@gardnerco.net](mailto:mark.duguid@gardnerco.net)

**Certificate No. 1473PI to LPS 1531 : Issue 1**

Appendix 5 - Fire rated duct systems

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**GBS Fire Protection Limited**

Unit 16 Manor Way Business Centre, Marsh Way, London, Essex RM138UG, United Kingdom

Tel: 07544 304471

E-mail: [info@gsbfirepro.co.uk](mailto:info@gsbfirepro.co.uk) • Website: [www.gsbfirepro.co.uk](http://www.gsbfirepro.co.uk)

**Certificate No. 1437PI to LPS 1531 - Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 3 - Intumescent coatings to structural elements

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**Geoffrey Robinson Limited**

Macklin Avenue, Cowpen Industrial Estate, Billingham TS23 4ET, United Kingdom

Tel: 01642370500 • Fax: 01642370600

E-mail: [enquiry@geoffreyrobinson.co.uk](mailto:enquiry@geoffreyrobinson.co.uk) • Website: [www.geoffreyrobinson.co.uk](http://www.geoffreyrobinson.co.uk)

**Certificate No. 1556PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

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**Giffen Group**

Lyon Way, St Albans, Hertfordshire AL4 0LQ, United Kingdom

Tel: +44 (0)1727 869126

E-mail: [steve.bluff@giffengroup.co.uk](mailto:steve.bluff@giffengroup.co.uk) • Website: [www.giffengroup.co.uk](http://www.giffengroup.co.uk)

**Certificate No. 979PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity, barriers and linear gap seals.

## **PART 1: SECTION 1.2**

LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

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### **Gunfire Trading Divison of Gunite (Eastern) Limited**

Endeavour House, Compass Point, St Ives, Cambridgeshire PE27 5JL, United Kingdom

Tel: +44 (0)1480 466880 • Fax: +44 (0)1480 467151

E-mail: [christine.morris@gunfire.org.uk](mailto:christine.morris@gunfire.org.uk) • Website: [www.gunite.co.uk](http://www.gunite.co.uk)

**Certificate No. 848PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 3 - Intumescent coatings to structural elements.

Appendix 4 - Fire rated spray materials

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### **Holemasters Fire Protections Ltd**

114 Main Street, Chapelhall, Airdrie, Lanarkshire ML6 8SB, United Kingdom

Tel: 0845 467 1500 • Fax: 0845 467 1700

E-mail: [david@holemasters-scotland.co.uk](mailto:david@holemasters-scotland.co.uk) • Website: [www.holemasters-scotland.co.uk](http://www.holemasters-scotland.co.uk)

**Certificate No. 1314PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

- Appendix 2 - Fire rated board and cladding to structural elements

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### **Hollmark Ltd**

Unit 2 Falcon Park, Lucklyn Lane, Basildon, Essex SS14 3AL, United Kingdom

Tel: 01277 626101

E-mail: [Kate@hollmark.co.uk](mailto:Kate@hollmark.co.uk) • Website: [www.hollmark.co.uk](http://www.hollmark.co.uk)

**Certificate No. 1535PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **JPM Fire Protection Limited**

12 Bull Lane, Dagenham, Essex RM10 7HA, United Kingdom

Tel: 020 8595 1166 • Fax: 020 8592 8439

E-mail: [Elicia.martinjpmfireproltd@aol.co.uk](mailto:Elicia.martinjpmfireproltd@aol.co.uk)

**Certificate No. 1190PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **JTL Fire Limited**

Unit 11 LDL Business Park, Station Road West, Ash Vale, Surrey GU12 5RT, United Kingdom

Tel: 01252 545741

E-mail: [enquiries@jtlfire.co.uk](mailto:enquiries@jtlfire.co.uk) • Website: [www.jtlfire.co.uk](http://www.jtlfire.co.uk)

**Certificate No. 1416PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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Appendix 3 - Intumescent coatings to structural elements

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**LE-Partitions Limited**

43 Shepherds Walk, Cricklewood, London NW2 7BS, United Kingdom

Tel: 07957 637986

E-mail: [mreece@le-partitions.com](mailto:mreece@le-partitions.com)

**Certificate No. 1197PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 7 - Fire resistant compartment wall systems

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**LFCDA Limited**

Unit 3a, Forest Industrial Park, Forest Road, Redbridge, London IG6 3HL, United Kingdom

Tel: 0800 999 4416

E-mail: [info@lfcda.co.uk](mailto:info@lfcda.co.uk) • Website: [www.lfcda.co.uk](http://www.lfcda.co.uk)

**Certificate No. 1146PI to LPS 1531 Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barrier and linear gap seals.

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**Loftus Construction Solutions Limited**

Arquen House, Spicer Sreet, St Albans, Herts AL3 4PQ, United Kingdom

Tel: 0203 488 0498

E-mail: [Paul@loftusconstruction.co.uk](mailto:Paul@loftusconstruction.co.uk) • Website: [www.loftusconstruction.co.uk](http://www.loftusconstruction.co.uk)

**Certificate No. 1398PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals
  - Appendix 3 - Intumescent coatings to structural elements
- 

**Lynco/Lynco Facades Ltd**

Unit 2, Plasketts Close, Killybeggs Business Park, Antrim, N. Ireland BT41 4LY, United Kingdom

Tel: 0289 4477800

E-mail: [info@lyncoltd.com](mailto:info@lyncoltd.com) • Website: [www.lyncoltd.com](http://www.lyncoltd.com)

**Certificate No. 1317PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

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**Map Ventilation Limited**

Hanwiz House, Milner Way, Ossett, Wakefield WF5 9JG, United Kingdom

Tel: 01924 278175 • Fax: 01924 278126

E-mail: [info@mapventilation.co.uk](mailto:info@mapventilation.co.uk) • Website: [www.mapventilation.co.uk](http://www.mapventilation.co.uk)

**Certificate No. 1065PI to LPS 1531 Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

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## **PART 1: SECTION 1.2**

### LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

Appendix 5 - Fire rated ductwork systems

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#### **Middlesex Firestopping Limited**

Darwin House, Bourne End Business Park, Cores End Road, Bourne End, Buckinghamshire SL8 5AS, United Kingdom

*Tel: 01895 238818 • Fax: 01895 231018*

*E-mail: info@middlesexfirestoppingltd.co.uk • Website: www.middlesexfirestoppingltd.co.uk*

**Certificate No. 1344PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:  
Appendix 1 - Penetration, cavity barrier and linear gap seals

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#### **MTM Passive Fire Protection Ltd**

103 Taunton Road, Bridgewater, , Somerset TA6 6BD, United Kingdom

*Tel: 074025212963*

*E-mail: Carol.kennedy@m-t-m.co • Website: www.m-t-m.co*

**Certificate No. 1560PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:  
- Appendix 1 - Penetration, cavity barrier and linear gap seals

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#### **Nene Valley Fire and Acoustic Limited**

Unit 11 Leyland Trading Estate, Irthlingborough, Northamptonshire NN8 1RS, United Kingdom

*Tel: +44 (0) 1933 650650 • Fax: +44 (0) 1933 650001*

*E-mail: enquiries@nenevalleyfire.com • Website: www.nenevalleyfireandacoustic.com*

**Certificate No. 1021PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barrier and linear gap seals.

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#### **Neo Property Solutions Limited**

Neo Court, Knowsthorpe Lane, Cross Green Industrial Estate, Leeds, West Yorkshire LS9 0PF, United Kingdom

*Tel: 08434554455*

**Certificate No. 1539PIa to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:  
- Appendix 1 - Penetration, cavity barrier and linear gap seals

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#### **Oakleaf Contracts (Europe) Ltd**

Unit 2, Kilcronagh Business Park, Kilcronagh Road, Cookstown, Co. Tyrone, Northern Ireland BT80 9HG, United Kingdom

*Tel: 028 867 69000*

*E-mail: reception@oakleafcontracts.com • Website: www.oakleaf-contracts.com*

**Certificate No. 1453PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barriers and linear gap seals



**O'Mahony Contractors Ltd**

60 Middle Road, Higher Denham, Buckinghamshire UB9 5EQ, United Kingdom

Tel: 01895 833553 • Fax: 01895 835003

E-mail: gary@omahonycontractors.com • Website: www.omahonycontractors.com

**Certificate No. 914PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 7 - Fire resistant compartment wall systems

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**P&M Group Ltd trading as ISD**

Unit A, 125 Business Park, Llanthony Road, Gloucester, Glos GL2 5JQ, United Kingdom

Tel: +44 (0) 1452 520649 • Fax: +44 (0) 1452 301910

E-mail: sales@isd-solutions.co.uk • Website: www.isd-solutions.co.uk

**Certificate No. 1008PIb to LPS 1531 Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 2 - Fire rated board and cladding to structural elements.

Appendix 7 - Fire resistant compartment wall systems.

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**PFP Fire Systems Ireland Limited**

DO Centre, Block B, Maynooth Business Centre, Straffan Road, Maynooth, Co Kildare, Ireland

Tel: +353 (1) 541 3763

E-mail: cbarry@pfp-ireland.ie • Website: www.pfp-ireland.ie

**Certificate No. 1407PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

- Appendix 3 - Intumescent coatings to structural elements

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**Prestige Fire Door Services Limited**

28 Waterfront Business Park, Fleet, Hampshire GU51 3QT, United Kingdom

Tel: +44 (0)1252 645534 • Fax: +44 (0)1252 678742

E-mail: sales@prestigefiredoorservices.com • Website: www.prestigefiredoorservices.com

**Certificate No. 1066PIa to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 7 - Fire resistant compartment wall systems

## **PART 1: SECTION 1.2**

LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

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### **R Lewis & Co. (UK) Ltd**

Unit 7 and 8, Parklands Industrial Estate, East Moors Road, Cardiff CF24 5JP, United Kingdom

Tel: +44 (0) 2920 215716

E-mail: [craig@rlewisfire.com](mailto:craig@rlewisfire.com) • Website: [www.rlewisandcoukLtd.com](http://www.rlewisandcoukLtd.com)

**Certificate No. 1006Plc to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 3 - Intumescent coatings to structural elements.

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### **R1 Fire Pro Limited**

Suite 6, BRUK, Milner Road, Chilton Ind Est, Sudbury, Suffolk CO10 2XG, United Kingdom

Tel: 01440 709050

E-mail: [sales@r1fire.co.uk](mailto:sales@r1fire.co.uk) • Website: [www.r1fire.co.uk](http://www.r1fire.co.uk)

**Certificate No. 1233PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 3 - Intumescent coatings to structural elements

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### **RA Fire Protection Limited**

Unit B5, The Business Centre, Bow Bridge Close, Rotherham, S60 1BY, United Kingdom

Tel: 01709 830366

E-mail: [john@rafireprotection.co.uk](mailto:john@rafireprotection.co.uk)

**Certificate No. 1382PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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### **Regal Fire & Seal**

38 Forest Grove, Belfast BT8 6AR, United Kingdom

Tel: 02890 293242 • Fax: 02890 293242

E-mail: [regalfireandseal@btinternet.com](mailto:regalfireandseal@btinternet.com) • Website: [www.regalfireandseal.co.uk](http://www.regalfireandseal.co.uk)

**Certificate No. 1315PI to LPS 1531: Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 3 - Intumescent coatings to structural elements

Appendix 4 - Fire rated spray materials

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### **Stancold plc**

Portview Road, Avonmouth, Bristol BS11 9LQ, United Kingdom

Tel: +44 (0)117 316 7000 • Fax: +44 (0)117 316 7001

E-mail: [sales@stancold.co.uk](mailto:sales@stancold.co.uk) • Website: [www.stancold.co.uk](http://www.stancold.co.uk)

**Certificate No. 1257Pla to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barrier and linear gap seals

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**Stopfire Ltd**

Units 22, 23, 24 & 32 Dryden Road, Loanhead, Midlothian EH20 9LZ, United Kingdom

Tel: +44(0)131 448 0555 • Fax: +44(0)131 448 0556

E-mail: [mail@stopfire.net](mailto:mail@stopfire.net) • Website: [www.stopfireltd.com](http://www.stopfireltd.com)

**Certificate No. 862PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals

Appendix 2 - Fire rated board and cladding to structural elements

Appendix 3 - Intumescent coatings to structural elements

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**Thermal Engineering Contracts Ltd**

38 Whitehouse Street, Leeds LS10 1AD, United Kingdom

Tel: +44(0) 1132 430254 • Fax: +44(0) 5603 430284

E-mail: [info@tecl.uk.com](mailto:info@tecl.uk.com) • Website: [www.tecl.uk.com](http://www.tecl.uk.com)

**Certificate No. 963PI to LPS 1531: Issue 1**

Company assessed and approved for installation of passive fire protection products under the following scope.

Appendix 1 - Penetration, cavity barriers and linear gap seals.

Appendix 2 - Fire rated board and cladding to structural elements.

Appendix 3 - Intumescent coatings to structural elements

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**Total Protection (Fire & Sealing) Solutions Ltd**

The Coach House, West Hanningfield Road, Baddow Park, Chelmsford, Essex CM2 7SY, United Kingdom

Tel: 01277 841415 • Fax: 01277 829716

E-mail: [Ross@totalprotection.co.uk](mailto:Ross@totalprotection.co.uk) • Website: [www.totalprotection.co.uk](http://www.totalprotection.co.uk)

**Certificate No. 1375PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

Appendix 1 - Penetration, cavity barrier and linear gap seals

Appendix 3 - Intumescent coatings to structural elements

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**Winchmore Brickwork Ltd**

The Town House, 28 Little Park Gardens, Enfield, London EN2 6PG, United Kingdom

Tel: 0208 3670444

E-mail: [reception@winchmorebrickwork.co.uk](mailto:reception@winchmorebrickwork.co.uk) • Website: [www.winchmorebrickwork.co.uk](http://www.winchmorebrickwork.co.uk)

**Certificate No. 1544PI to LPS 1531 Issue 1**

Company assessed and approved for installing or applying passive fire protection products under the following scope:

- Appendix 1 - Penetration, cavity barrier and linear gap seals

## **PART 1: SECTION 1.2**

LPS 1531 APPROVED INSTALLER OF PASSIVE FIRE PROTECTION PRODUCTS

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### **Yuanda (UK) Co Ltd**

12th Floor, 125 Old Broad Street, London EC2N 1AR, United Kingdom

Tel: +44 (0)207 562 7703

E-mail: [Luis.goncalves@yuanda-europe.com](mailto:Luis.goncalves@yuanda-europe.com) • Website: [www.yuanda-europe.com](http://www.yuanda-europe.com)

**Certificate No. 1501PI to LPS 1531: Issue 1**

Appendix 1 - Penetration, cavity barriers and linear gap seals

Well maintained ductwork is essential to the good maintenance of buildings. It is crucial in reducing the fire risk within ductwork, in particular kitchen extract systems where grease and cooking oils, if allowed to build up, can present a significant hazard.

Using a company certified to the LPS 2084 standard will give clients the assurance that the cleaning and maintenance of their ductwork systems has been carried out to industry recognised standards and provide evidence of compliance with the law. This evidence will be crucial when seeking out buildings insurance.

LPS 2084 *Requirements for the LPCB approval and listing of companies carrying out inspection, cleaning and maintenance of ductwork systems* defines the requirements for these works.

Using a company certified to LPS 2084 will give clients the assurance that the cleaning and maintenance of their ductwork systems has been carried out correctly.

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**Bright Hygiene**

Unit 7, Sarbit Industrial Park, Cambridge Road, Harlow, Essex CM20 2EU, United Kingdom

Tel: 0800 093 7840

E-mail: [fran@brighthygiene.co.uk](mailto:fran@brighthygiene.co.uk) • Website: <http://www.brighthygiene.co.uk/>

Certificate No. 1507PI to LPS 2084 - Issue 1

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**Ductbusters Limited**

Mortimer Hall, 1 Birmingham Road, Kidderminster, Worcestershire DY10 2BX, United Kingdom

Tel: 0121 559 1555

E-mail: [enquiries@ductbusters.co.uk](mailto:enquiries@ductbusters.co.uk) • Website: [www.ductbusters.co.uk](http://www.ductbusters.co.uk)

Certificate No. 1445PI to LPS 2084: Issue 1

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**Ductclean (UK) Limited**

1 Woodfield Road, Welwyn Garden City, Hertfordshire AL7 1JQ, United Kingdom

Tel: 0870 1129196 • Fax: 0870 112 9197

E-mail: [jamie.carraher@dcukfm.com](mailto:jamie.carraher@dcukfm.com) • Website: [www.ductclean.co.uk](http://www.ductclean.co.uk)

Certificate No. 1276PIa to LPS 2084 - Issue 1

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**Overclean Limited**

2 Flightway, Dunkeswell, Honiton, Devon EX14 4RD, United Kingdom

Tel: 01404 41333

E-mail: [enquiries@overclean.co.uk](mailto:enquiries@overclean.co.uk) • Website: [www.overclean.co.uk](http://www.overclean.co.uk)

Certificate No. 1431PI to LPS 2084 - Issue 1

## **PART 1: SECTION 1.3**

LPS 2084 INSPECTION CLEANING AND MAINTENANCE OF DUCTWORK SYSTEMS

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### **Perfect Service Solutions Ltd**

Unit 55, John Player Building, Sirling Enterprise Park, Stirling, , Scotland FK7 7RP, United Kingdom

*Tel: 0800 0197 794*

*E-mail: [hello@perfectservicesolutions.co.uk](mailto:hello@perfectservicesolutions.co.uk) • Website: [www.perfectservicesolutions.co.uk](http://www.perfectservicesolutions.co.uk)*

**Certificate No. 1474PI to LPS 2084 : Issue 1**

This section includes the reaction to fire and fire resistance approval schemes for construction systems including building envelope, roofing and partitions.

This section includes:

Section 2.1	LPS 1181 Series
Section 2.1.1	LPS 1181 Lining materials
Section 2.1.2	LPS 1181-1 Cladding products used for the external envelope of buildings.
Section 2.1.3	LPS 1181-2 Sandwich panels or built-up panel systems used internally in a building.
Section 2.1.4	LPS 1181-3 (Draft) Cladding used in POD construction
Section 2.2	LPS 1208 Composite construction elements
Section 2.3	LPS 1581 External cladding systems on a masonry substrate
Section 2.3.1	LPS 1581 External thermal insulated cladding (ETICS)
Section 2.3.2	LPS 1581 Rain screen cladding systems (RSC)
Section 2.4	LPS 1582 External cladding systems supported by a structural steel frame
Section 2.4.1	LPS 1582 External thermal insulated cladding (ETICS)
Section 2.4.2	LPS 1582 Rain screen cladding system (RSC)
Section 2.5	Roofing products
Section 2.5.1	Protection against fire outside of the building
Section 2.5.2	Protection against fire from inside the building
Section 2.6	Reaction to Fire (RTF) classifications for Materials and Products

# **PART 1: SECTION 2.1**

## LPS 1181 SERIES

The LPS 1181 series of fire growth standards cover the requirements for LPCB approval and listing of construction product systems. These standards evaluate the fire performance of sandwich panels, built-up cladding systems and other construction product systems to ensure they will not significantly contribute to fire growth in their defined end use applications as detailed in the following listings.

The use and application of the LPS 1181 standards are as follows:

- The LPS 1181 series of standards cover sandwich panels and built up cladding systems including jointing and fixing methods, sealants, gaskets and flashings.
- The LPS 1181 series of standards are used by the insurance industry for property protection purposes.
- The requirements of the Building Regulations are **not** addressed by the LPS 1181 series of standards.
- The Building Regulations define the life safety requirements for buildings.
- Approved Document B (produced by Communities and Local Government) provides guidance on meeting the requirements of the Building Regulations for fire safety and utilises the test data from the applicable BS 476 series and/or the EN 13501 series of standards.

The LPS 1181 series currently consists of the following parts:

LPS 1181: Part 1 *Requirements and tests for built-up cladding and sandwich panel systems for use as the external envelope of buildings* - See Section 2.1.2

LPS 1181: Part 2 *Requirements and tests for sandwich panels and built-up systems for use as internal constructions in buildings* - See Section 2.1.3

LPS 1181: Part 3 (Draft) *Requirements and tests for factory produced room modules (PODS) and building system modules* - See Section 2.1.4

Within the LPS 1181 series of standards there are a number of classifications and these are summarised as follows:

- Cladding systems used for the external envelope of buildings are tested to LPS 1181 part 1. Those products that pass the test are graded into 2 classes: -
  - o Grade EXT-A\*\* - A product that satisfies both the requirements of LPS 1181: Part 1 and also demonstrates fire resistance through a fire resistance test as specified in LPS 1208 (see section 2.2). Such products meet the requirements for separating elements used for compartmentation. (\*\* represents in minutes, the LPCB grading of insulation achieved during the fire resistance tests).
  - o EXT B - A product that satisfies the requirements of LPS 1181 part 1 only.
- Sandwich panels and built-up systems used internally in a building for the construction of cold stores, factory clean rooms, space separation etc are tested in the large-scale test in LPS 1181 part 2. Those products that pass the test are graded into 3 classes: -
  - o INT 1 - A product that achieves a minimum fire resistance performance of integrity = 60 minutes and insulation = 60 minutes and passes the requirements of the LPS 1181 part 2 large-scale test with an enhanced thermal exposure.
  - o INT 2 - A product that achieves a minimum fire resistance performance of integrity = 30 minutes and insulation = 30 minutes and passes the requirements of LPS 1181 part 2 large-scale test with a crib ignition source.
  - o INT 3 - A product that passes the requirements of LPS 1181 part 2 large-scale test with a crib ignition source but has no fire resistance.

A guide to example applications with the potential inception risks and associated LPS 1181 classes (part 1 and 2) can be found in appendices 1, 3 and 4 of "Technical briefing: Fire performance of sandwich panel



systems” published by the Association of British Insurers in May 2003.

It is the responsibility of end users, whether they be specifiers, regulators, insurers, architects etc, to satisfy themselves that any performance claims made by the manufacturers are valid by reference to a relevant certificate, listing and/or test reports and that the product satisfies all the necessary regulatory and design requirements. This responsibility also extends to ensuring that the systems are installed correctly and in accordance with the manufacturer’s instructions.

## **PART 1: SECTION 2.1.2**

### LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

LPS 1181: Part 1 *Requirements and tests for built-up cladding and sandwich panel systems for use as the external envelope of buildings.*

This standard determines the contribution to fire growth of built-up cladding and sandwich panel systems used as the external envelope of buildings.

The test is a large scale test comprising ignition of a wood crib within an open-ended enclosure, supported on a steel frame, from the sandwich panels or built-up cladding system. It evaluates the panels, the jointing methods and the supporting system including fixings, which gives an assessment of the true fire performance of the system which cannot be determined from traditional small scale reaction to fire tests, such as surface spread of flame or fire propagation tests.

Products that have passed the test and have achieved LPCB approval are graded under the following designations:-

Grade EXT-A\*\* - A product that satisfies both the requirements of LPS 1181: Part 1 and also demonstrates fire resistance through a fire resistance test as specified in LPS 1208 (see section 2.2). Such products meet the requirements for separating elements used for compartmentation. (\*\* represents in minutes, the LPCB grading of insulation achieved during the fire resistance tests).

Grade EXT-B - A product that satisfies the requirements of LPS 1181: Part 1 only.

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### **A Steadman & Son (a Division of SIG Trading Limited)**

Warnell, Welton, Carlisle, Cumbria CA5 7HH, United Kingdom

Tel: +44 (0)16974 78277 • Fax: +44 (0)16974 78530

E-mail: [info@steadmans.co.uk](mailto:info@steadmans.co.uk) • Website: [www.steadmans.co.uk](http://www.steadmans.co.uk)

Certificate No: 635a to LPS 1181 Part 1 Issue 1

#### ***Composite wall and ceiling panel***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
AS35/1000 PIR (roof panel)	635a/08
AS35/1000 PIR (wall panel)	635a/09
ASMR (wall panel)	635a/10

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

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### **ArcelorMittal Construction Belgium NV**

Lammerdries 8, Industrieterrein Geel West Z4, B-2440 Geel, Belgium

Tel: +32 14563943 • Fax: +32 14563952

E-mail: [alexander.haesen@arcelormittal.com](mailto:alexander.haesen@arcelormittal.com) • Website: [www.arcelormittal-construction.com/arvalbenelux](http://www.arcelormittal-construction.com/arvalbenelux)

Certificate No: 939a to LPS 1181 Part 1: Issue 1.2

#### ***Composite Panels***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Promisol S 1000 wall panel	939a/05
Ondatherm roof panel	939a/06
Promisol S 1000 wall panel	939a/07
Ondatherm 1001 TS roof panel	939a/08
Ondatherm 1001 TS/Archisol	939a/09

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## PART 1: SECTION 2.1.2

### LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

#### Assan Panel Sanayi ve Ticaret A.S.

Yayla Mahallesi D-100, Karayolu Ruya Sokak No 2, Tuzla 34940, Istanbul, Turkey

Tel: +90 216 581 17 00 • Fax: +90 216 446 38 55

E-mail: [assanpanel@kibarholding.com](mailto:assanpanel@kibarholding.com) • Website: [www.assanpanel.com.tr](http://www.assanpanel.com.tr)

Certificate No: 1367a to LPS 1181 Part 1: Issue 1

Product Name	Specification Thickness (mm)	Specification Wall Panel Orientation (H/V) (Note 1)	Fire Resistance Integrity/Insulation	LPS 1181-1 Grade	Core Material	LPCB Ref. No.
CS Cold Store Panel (wall)	80 - 150	V	-	EXT-B	PIR	1367a/01
CS Cold Store Panel (ceiling)	80 - 150	-	-	EXT-B	PIR	1367a/02

**Note:**

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation.
2. A bead of CP606 (Manufacturer Hilti) is applied into both female sections of the joint before assembly.

#### Brucha Ges.m.b.H

Rusterstrasse 33, A-3451, Michelhausen, Austria

Tel: +43 (2275) 5878 1800 • Fax: +43 (2275) 5875 1804

E-mail: [office@brucha.at](mailto:office@brucha.at) • Website: [www.brucha.com](http://www.brucha.com)

Certificate No: 900a to LPS 1181 Part 1: Issue 1

Product Name	LPCB Ref. No.
WP-F (wall and roof panels)	900a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### CA Group Limited

Evenwood Industrial Estate, Copeland Road, Evenwood, Co. Durham DL14 9SF, United Kingdom

Tel: +44 (0)1388 834242 • Fax: +44(0)1 388 830964

E-mail: [technical@cagroup.ltd.uk](mailto:technical@cagroup.ltd.uk) • Website: [www.cagroup.ltd.uk](http://www.cagroup.ltd.uk)

Certificate No: 443a to LPS 1181 Part 1: Issue 1.2

Product Name	LPCB Ref. No.
Twin-Therm® Roof	443a/10
Twin-Therm® Wall	
River-Therm® Roof	443a/14
River-Therm® Wall	
Twin-Therm® Wall including SolarWall® or Prime Rainscreen	443a/15
Twin-Therm® FW15 FireWall	443a/17
Twin-Therm® FW15 FireWall including SolarWall® or Prime Rainscreen	443a/18
Twin-Therm® FW120 FireWall	443a/23
Twin-Therm® FW120 FireWall including SolarWall® or Prime Rainscreen	443a/24

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 2.1.2**

LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

### **Euroclad Group Limited**

Wentloog Corporate Park, Wentloog Road, Cardiff CF3 2ER, United Kingdom

Tel: +44 (0)2920 790722 • Fax: +44 (0)2920 793149

E-mail: [sales@euroclad.com](mailto:sales@euroclad.com) • Website: [www.euroclad.com](http://www.euroclad.com)

**Certificate No: 879a to LPS 1181 Part 1: Issue 1.2**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Elite 1 (Roof System)	879a/05
Elite 2 (Roof System)	879a/06
Elite 3 (Roof System)	879a/07
Elite 4 (Roof System)	879a/08
Elite 51 (Wall System)	879a/09
Elite 52 (Wall System)	879a/10
Elite 53 (Wall System)	879a/11
Elite 54 (Wall System)	879a/12
Elite 55 (Wall System)	879a/13
Elite 56 (Wall System)	879a/14
Elite 57 (Wall System)	879a/15
Elite 58 (Wall System)	879a/16
Elite 60 (Wall System)	879a/17
Elite 50 (Wall System)	879a/18

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 545b to LPS 1181 Part 1: Issue 1**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Europanel F5 (wall panel)	545b/01
Europanel S5 (wall panel)	545b/03
Europanel G12, G30 & G50	545b/04
Rockspan Extra (wall panel)	545b/05
Rockspan Lite (wall panel)	545b/06
Rockspan Ultima (wall panel)	545b/07
Rainspan Argeton	545b/08
Rainspan ACM	545b/09
Rainspan Parklex	545b/10
Rainspan Rockpanel	545b/11
Rainspan Corium	545b/12
Rainspan Norclad	545b/13
Rainspan Aerolite Granite	545b/15
Rainspan Aerolite Stonework	
Rainspan Ultralite	
Rainspan Urban Glass	545b/16

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Hemsec Manufacturing Limited**

Stoney Lane, Rainhill, Prescot, Merseyside L35 9LL, United Kingdom

Tel: +44 (0)151 426 7171 • Fax: +44 (0)151 493 1331

E-mail: [sales@hemsec.com](mailto:sales@hemsec.com) • Website: [www.hemsec.com](http://www.hemsec.com)

**Certificate No: 558b to LPS 1181 Part 1 Issue 1**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
HPT External/Carrier (wall panels)	558b/01
HPT External/Carrier (roof panels)	558b/02
HPT External/Carrier (wall panels)	558b/03
HPT External/Carrier (roof panels)	558b/04

## PART 1: SECTION 2.1.2

### LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

Product Name	LPCB Ref. No.
Hemsec SIP (wall panel)	558b/05 558b/06

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### Joris IDE N.V.

Hille 174, B-8750, Zwevezele, Belgium

Tel: +44 (0)1928 571 444 • Fax: +44 (0)1928 571 488

E-mail: [division.export@joriside.co.uk](mailto:division.export@joriside.co.uk) • Website: [www.joriside.co.uk](http://www.joriside.co.uk)

Certificate No: 700a to LPS 1181 Part 1: Issue 2

Product Name	LPCB Ref. No.
Isotherm Built up system (wall panels)	700a/06
Isotherm Built up system (roof panels)	700a/07
JI ROOF 1+2 1000 (roof and wall panels)	700a/09
JI ROOF 1+2 1000 (wall panel)	700a/10
JI ROOF 1+2 1000 with Tile system (roof panels)	700a/11
JI WALL SF 1060/1000/900/600 (wall panels)	700a/12 700a/13 700a/14
JI ONDUWALL 1000 (wall panel)	700a/16
JI ONDUWALL 1000 (wall panels)	700a/17
JI ROOF 2 1000 (wall panels)	700a/18
JI ROOF 2 1000 (roof panels)	700a/19
JI ROOF 2 1000 (wall panels)	700a/20

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### Kingspan Insulation

Pembridge, Leominster, Herefordshire HR6 9LA, United Kingdom

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E-mail: [info@kingspaninsulation.co.uk](mailto:info@kingspaninsulation.co.uk) • Website: [www.kingspaninsulation.co.uk](http://www.kingspaninsulation.co.uk)

Certificate No: 388-1b to LPS 1181: Part 1

Product Name	Specification Thickness (system) (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade	Core Material	LPCB Ref. No.
Roofing systems incorporating Thermo roof TR26 LPC/FM zero ODP Insulation (also available as Thermataper TT46 for cut-to-fall roofing systems)	65 to 155	-	-	EXT- B	HCFC- free PIR	388- 1b/01
Roofing systems incorporating Thermo roof TR27 LPC/FM zero ODP Insulation (also available as Thermataper TT47 for cut-to-fall roofing systems)	65 to 155	-	-	EXT- B	HCFC- free PIR	388- 1b/02

#### Notes:

- LPCB Ref 388-1b/01 Thermo roof TR26/ LPC/FM Mechanically Fixed Insulated metal deck system is approved to LPS 1181-1 as a built up roof system of the following configuration:
  - Corus D35 Roof Decking (0.7mm thick) or equivalent; deck panel lap joints stitched at 400mm centres.
  - With or without Corus Kalzip/Icopal Monofilament 250µm or equivalent approved Vapour Control Layer (VCL); loose laid on top of the deck.
  - Kingspan TR26/TT46 LPC/FM foil faced Insulation layer of rigid polyisocyanurate (PIR) boards supplied in 2.4m x 1.2m sheets (approved at 30mm to 120mm thick) the boards through fixed to deck using 140mm long SFS drill point roof fasteners at 3.8 fixings per m<sup>2</sup> with a 70mm diameter metal plate washer.
  - Weather sealed using Protan SE membrane (1.2mm x 1000mm) having a 120mm lap joint with a 40mm hot air weld, or equivalent woven polyester reinforced PVC water proof membrane, mechanically fixed to the roof system using RP75 x 100mm telescopic tube washers and 4.8 x 60mm screw fixed to the metal deck at 150mm centres. The membrane must be restrained around the edges of the deck with an edge restraint bar stitched at 400mm centres.

## **PART 1: SECTION 2.1.2**

### **LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS**

- The roof system was tested in combination with LPCB approved PIR core wall panels.
2. LPCB Ref 388-1b/02 Thermaroom TR27 LPC/FM Mechanically Fixed Insulated metal deck system is approved to LPS 1181-1 as a built up roof system of the following configuration:
- Corus D35 Roof Decking (0.7mm thick) or equivalent; deck panel lap joints stitched at 400mm centres.
  - With or without Corus Kalzip/Icopal Monofilament 250µm or equivalent approved Vapour Control Layer (VCL); loose laid on top of the deck.
  - Kingspan TR27/TT47 LPC/FM glass tissue faced Insulation layer of rigid polyisocyanurate (PIR) boards supplied in 2.4m x 1.2m sheets (approved at 30mm to 120mm thick) the boards through fixed to deck using 140mm long SFS drill point roof fasteners at 3.8 fixings per m<sup>2</sup> with a 70mm diameter metal plate washer.
  - Weather sealed using Protan SE membrane (1.2mm x 1000mm) having a 120mm lap joint with a 40mm hot air weld, or equivalent woven polyester reinforced PVC water proof membrane, mechanically fixed to the roof system using RP75 x 100mm telescopic tube washers and 4.8 x 60mm screw fixed to the metal deck at 150mm centres. The membrane must be restrained around the edges of the deck with an edge restraint bar stitched at 400mm centres.
  - The roof system was tested in combination with LPCB approved PIR core wall panels.
3. LPCB Ref. 388-1b/01 and 388-1b/02 certification is also valid for insulation boards manufactured at Kingspan Insulation Ltd, Castleblayney, County Monaghan, Ireland (LPCB FPC reference number 388-4QMS)

### **Kingspan Ltd**

Carrickmacross Road, Kingscourt, Co. Cavan, Ireland

Tel: +353 42 969 8572 • Fax: +353 42 969 8576/77

E-mail: [info.irl@kingspanpanels.com](mailto:info.irl@kingspanpanels.com) • Website: [www.kingspanpanels.com](http://www.kingspanpanels.com)

**Certificate No: 186a to LPS 1181-1 Issue 1**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Kingspan KS1000 RW (wall panel)	186a/38
Kingspan KS1000 SF (wall panel)	186a/39
Kingspan KS1000 RW/FW30 (wall panel)	186a/40
Kingspan KS1000 SF/FW30 (wall panel)	186a/41
Kingspan KS1000 RW (roof and wall panel)	186a/42
Kingspan KS1000 SF (roof and wall panel)	186a/43
Kingspan KS1000 LI (wall panel)	186a/44
Kingspan KS1000 LI (roof panel)	186a/45
Kingspan KS1000 BU (roof and wall panel)	186a/46
Kingspan KS1000 TS (roof panel)	186a/47
Kingspan Insulated Roof Gutter (Boundary and Valley)	186a/71
Kingspan Benchmark Ceramic Tile System	260a/34
Kingspan KS600-1200 MR, FL, FL-S, EB, WV, MM, CX, PL, Benchmark Evolution, Optimo & KS1000 TL, Benchmark Louvre DW & Benchmark Curve DW (wall panel)	260a/35
Kingspan KS600-1000 Benchmark Render DW (wall panel)	260a/36
Kingspan KS600-1000 FX (wall panel)	260a/37
Kingspan KS500 Zip & KS1000 Zip (roof panel)	260a/49
Kingspan Benchmark Ceramic Granite System	260a/50
Kingspan Benchmark Wood Composite System	260a/53
Thermabrick Façade System	260a/54
Kingspan Benchmark Metallic ACM Tray	260a/58
Kingspan Benchmark Ceramic Granite System	260a/59
Kingspan KS600-1000 MR, FL, FL-S, EB, WV, MM, CX, PL, Benchmark Evolution, Optimo & KS1000 TL, Benchmark Louvre DW & Benchmark Curve DW (wall panel)	260a/60
Kingspan KS600-1000 LS - MR, FL, EB, WV, MM or CX, profile options (wall panel)	260a/61
Kingspan KS2000 TS (roof panel)	260a/62
Kingspan KS2000 RW (roof panel)	260a/63
Kingspan Benchmark Trespa System	260a/64
KS1000SRW (wall and roof panel)	260a/67
KS1000SRW (wall panel)	260a/68
Kingspan KS1000 RT Rooftile (roof panel)	260a/69
Kingspan KS1000 DR (wall panel)	260a/70
Kingspan KS1000 TD (roof panel)	260a/72
Kingspan KS1000 EP Energi (wall and roof panel)	260a/74
	260a/77
	260a/79
	260a/10
	260a/16
	260a/29
	260a/30

## PART 1: SECTION 2.1.2

### LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

Product Name	LPCB Ref. No.
Benchmark Topspan (roof panel)	279a/31
Kingspan KS1000 DR (roof panel)	279a/34
Kingspan KS1000 DR (wall panel)	279a/36
BENCHMARK Kreate (wall panel)	279a/37
	279a/38
Kingspan KS1000 FC (wall and roof panel)	279a/39
Kingspan KS1000 FC (wall panel)	279a/40
	279a/41
Kingspan KS1000 LP (roof panel)	279a/65
Kingspan KS1000 CR (roof panel)	279a/66
Kingspan KS600 - 1200 CS (wall panel)	279c/15
Kingspan KS600 - 1200 CS (ceiling panel)	279c/16

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### Certificate No: 186f to LPS 1181 Part 1: Issue 1.2

Product Name	LPCB Ref. No.
Kingspan QuadCore KS1000RW (roof panel)	186f/01
Kingspan QuadCore KS600 - 1200 AWP, MR, FL, FL-S, EB, WV, MM, CX, PL, Optimo, Benchmark Evolution, KS1000 TL, Benchmark Louvre DW, Benchmark Curve DW (wall panel)	186f/02
Kingspan QuadCore KS600 - 1200AB (roof/ceiling panel)	186f/03
Kingspan QuadCore KS1000RW (wall panel)	186f/04
	186f/05
	186f/06

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Kingspan Ltd.

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#### Certificate No: 260a to LPS 1181-1 Issue 1

Product Name	LPCB Ref. No.
Kingspan Benchmark Ceramic Tile System	260a/34
	260a/35
Kingspan KS600-1200 MR, FL, FL-S, EB, WV, MM, CX, PL, Benchmark Evolution, Optimo & KS1000 TL, Benchmark Louvre DW & Benchmark Curve DW (wall panel)	260a/36
	260a/37
Kingspan KS1000 RW (wall panel)	260a/38
	260a/39
Kingspan KS1000 SF (wall panel)	260a/40
	260a/41
Kingspan KS1000 SF/FW30 (wall panel)	260a/41
Kingspan KS1000 RW (roof and wall panel)	260a/42
Kingspan KS1000 SF (roof and wall panel)	260a/43
Kingspan KD1000 LJ (wall panel)	260a/44
Kingspan KS100 LJ (roof panel)	260a/45
Kingspan KS1000 BU (roof and wall panel)	260a/46
Kingspan KS1000 TS (roof panel)	260a/47
Kingspan KS600 - 1000 Benchmark Render DW (wall panel)	260a/49
	260a/50
Kingspan KS600 - 1000 FX (wall panel)	260a/53
Kingspan KS500 Zip & KS1000 Zip (roof panel)	260a/54
Kingspan Benchmark Ceramic Granite System	260a/58
Kingspan Benchmark Wood Composite System	260a/59
Thermabrick Façade System	260a/60

## PART 1: SECTION 2.1.2

### LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

Product Name	LPCB Ref. No.
Kingspan Benchmark Metallic ACM Tray	260a/61
Kingspan Benchmark Ceramic Granite System	260a/62
Kingspan KS600-1000 MR, FL, FL-S, EB, WV, MM, CX, PL, Benchmark Evolution, Optimo & KS1000 TL (wall panel)	260a/63
Kingspan KS600 - 1000 LS - MR, FL, EB, WV, MM or CX profile options (wall panel)	260a/64
Kingspan KS2000 TS (roof panel)	260a/67
Kingspan KS2000 RW (roof panel)	260a/68
Kingspan Benchmark Trespa System	260a/69
Kingspan Insulated Roof Gutter System (Boundary and Valley)	260a/70
KS1000SRW (wall and roof panel)	260a/71
KS1000SRW (wall panel)	260a/72
Kingspan KS1000 DR (wall panel)	260a/74
Kingspan KS1000 RT Rooftile (roof panel)	279a/116
Kingspan KS1000 TD (wall panel)	279a/10
Kingspan KS1000 EP Energi (wall and roof panel)	279a/29
Benchmark Topspan (roof panel)	279a/30
Kingspan KS1000 DR (roof panel)	279a/31
Kingspan KS1000 DR (wall panel)	279a/34
BENCHMARK Create (wall panel)	279a/36
	279a/37
	279a/38
Kingspan KS1000 FC (wall and roof panel)	279a/39
Kingspan KS1000 FC (wall panel)	279a/40
Kingspan KS1000 FC (wall panel)	279a/41
Kingspan KS1000 LP (roof panel)	279a/65
Kingspan KS1000 CR (roof panel)	279a/66
Kingspan KS600 - 1200 CS (wall panel)	279c/15
Kingspan KS600 - 1200 CS (ceiling panel)	279c/16

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### Certificate No: 260f to LPS 1181 Part 1: Issue 1.2

Product Name	LPCB Ref. No.
Kingspan QuadCore KS1000RW (roof panel)	260f/01
Kingspan QuadCore KS600 - 1200 AWP, MR, FL, FL-S, EB, WV, MM, CX, PL, Optimo, Benchmark Evolution, KS1000 TL, Benchmark Louvre DW, Benchmark Curve DW (wall panel)	260f/02
Kingspan QuadCore KS600 - 1200AB (roof/ceiling panel)	260f/03
Kingspan QuadCore KS1000RW (wall panel)	260f/04
	260f/05
	260f/06

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## Modular Panel Systems Limited

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#### Certificate No: 750b to LPS 1181: Part 1

Product Name	Specification Thickness (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade	Core Material	LPCB Ref. No.
PIR ExoClad (wall and ceiling panel)	50	-	-	EXT-B	PIR	750b/01
PIR ExoClad (wall panel)	50	120	16	EXT-A15	PIR	750b/02

Notes:

1. The joints of the ExoClad panels 750b/01 should be stitched with 6.3mm x 22mm long self tapping screws @ 250mm centres on the external overlap and stitched with 4.8mm dia x 10mm stainless steel rivets @ 250mm centres on the internal face.



# PART 1: SECTION 2.1.2

## LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

- Wall panels to be orientated vertically only.
- Exoclad wall panels 750b/02, panel joints external overlap stitched with stainless steel rivets and screwed at 100 mm centres. The internal joint is stitched at 100mm centres and protected with a 250mm wide by 50mm deep insulated cover strip stitched at 100mm centres.

### Quinn Therm Limited

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Certificate No: 893a to LPS1181: Part 1

Product Name	Specification Thickness (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade	Core Material	LPCB Ref. No.
QRFR Fully adhered Insulating metal deck roof system	85 - 185	-	-	EXT-B	PIR	893a/01
QRFR Mechanically Fixed metal deck roof system	85 - 185	-	-	EXT-B	PIR	893a/02

#### Notes:

- LPCB Ref 893a/01 QRFR Fully adhered Insulating metal deck roof system is approved to LPS 1181-1 as a built-up roof system of the following configuration:
  - Steadmans AS34 single skin roof profile deck (0.7mm thick); deck panel lap joints stitched at 250mm centres.
  - Multifold 250µm Vapour Control Layer (VCL) laid on top of the deck, with the VCL cut back to within 75mm from the edge of the deck perimeter and further protected by flashing installed to form an 'upstand' around the perimeter of the roof system.
  - 150mm thick Quinnterm QRFR glass fibre tissue faced Insulation layer of rigid polyisocyanurate (PIR) boards supplied in 2.4m x 1.2m sheets (tested at 150mm thick, but available and approved between 50mm to 150mm thick), the boards being through fixed to the steelwork using 6.3 x 175mm fastec CR10 fluoro carbon coated screws, with discs, at six fixings per m<sup>2</sup>
  - Weather sealed using a Sika-Trocal SGK 1.2 to 1.5mm by 1100mm wide, water proof membrane adhered to the Quinnterm Insulation using Sika-Trocal C300 adhesive at a rate of 250 g/m<sup>2</sup>.
  - The 150mm insulation roof system tested incorporated a 150 x 200mm external edge flashing and a 300 x 300mm internal roof/wall 1.6mm galvanised steel flashing.
  - The roof system was tested in combination with LPCB approved PIR core wall panels.
- LPCB Ref 893a/02 QRFR Mechanically fixed Insulating metal deck roof system is approved to LPS 1181-1 as a built-up roof system of the following configuration:
  - Steadmans AS34 single skin roof profile deck (0.7mm thick); deck panel lap joints stitched at 300mm centres.
  - Multifold 250µm Vapour Control Layer (VCL) laid on top of the deck, with the VCL cut back to within 75mm from the edge of the deck perimeter and further protected by flashing installed to form an 'upstand' around the perimeter of the roof system.
  - 150mm thick Quinnterm QRFR foil faced Insulation layer of rigid polyisocyanurate (PIR) boards supplied in 2.4m x 1.2m sheets (tested at 150mm thick, but available and approved between 50mm to 150mm thick), the boards being through fixed to the steelwork using 6.3 x 175mm fastec CR10 fluoro carbon coated screws in a 500mm x 500mm square pattern.
  - Weather sealed using a Sika-Trocal Type S 1.5 (1.5mm x 1100mm) water proof membrane mechanically fixed to the roof system using Trocal Metal Discs and Fasteners secured in place by the 6.3 x 175mm fastec CR10 fluoro carbon coated screws mentioned above.
  - The 150mm insulation roof system tested incorporated a 150 x 200mm external edge flashing and a 300 x 300mm internal roof/wall 1.6mm galvanised steel flashing.
  - The roof system was tested in combination with LPCB approved PIR core wall panels.

### Rockwool Limited

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Certificate No: 022g to LPS1181: Part 1: Issue 1.1

Product Name	Specification System Thickness (mm) (1)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade <sup>(2)</sup>	Core Material	LPCB Ref. No.
Hardrock Dual Density Roof Board System	100 - 135	60	60	EXT-A60	Stone wool	022g/01

# PART 1: SECTION 2.1.2

## LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS

Product Name	Specification System Thickness (mm) (1)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade (2)	Core Material	LPCB Ref. No.
Hardrock Dual Density Roofing Board System	210	120	120	EXT-A120	Stone wool	
	100 - 210	-	-	EXT-B	Stone wool	
	140 - 205	90	90	EXT-A90	Stone wool	
Hardrock Dual Density SPA Roofing Board System	210	120	120	EXT-A120	Stone wool	022g/02
	100 - 135	60	60	EXT-A60	Stone wool	
	100 - 210	-	-	EXT-B	Stone wool	
	140 - 205	90	90	EXT-A90	Stone wool	
DuoRock Roofing Board System	100 - 210	60	60	EXT-A60	Stone wool	022g/03
	100 - 210	-	-	EXT-B	Stone wool	
Hardrock Multi-fix Dual Density Roofing Board System	150	90	90	EXT-A90	Stone Wool	022g/04
	210	120	120	EXT-A120	Stone Wool	
	100 - 135	60	60	EXT-A60	Stone Wool	
	100 - 210	-	-	EXT-B	Stone Wool	
	140 - 205	90	90	EXT-A90	Stone Wool	

### Notes:

- Roof board system LPCB Ref No. 022g/01, 022g/03 & 022g/04 Mechanically fastened Sarnafil single ply type S327 (1.2mm thickness) external weather proof membrane (or alternative membrane less than 3.5 kg/m<sup>2</sup> e.g. PVC, Chlorinated PE, Butyl Rubber with wedged seams).  
Comprising of two layers of Rockwool roofing board with staggered joints (100mm minimum stagger for fire resistance up to 90 minutes and 300mm stagger for 2 hours fire resistance), vapour control layer and 0.7mm thickness 35mm deep profile steel metal deck.
- Roof board system LPCB Ref No. 022g/02; Sarnafil single ply external weather proof membrane type G410 (1.2mm thickness), fully adhered to Hardrock Dual Density SPA Roofing Board System with Sarnafil Adhesive (or Rockwool approved alternative, adhesive/membrane combination, with a membrane material less than 3.5 kg/m<sup>2</sup> e.g. PVC, Chlorinated PE, Butyl Rubber with welded seams); comprising of two layers of Rockwool roofing board with staggered joints (100mm minimum stagger for fire resistance up to 90 minutes and 300mm stagger for 2 hours fire resistance), vapour control layer and 0.7mm thickness 35mm deep profile steel metal deck.
- Roof Board System LPCB Ref No. 022g/01, 022g/02, 022g/03 & 022g/04 Hardrock Dual Density, Hardrock Dual Density SPA, DuoRock and Hardrock Multi-fix Dual Density roofing boards are also available and approved in cut-to-fall tapered options the relevant minimum & maximum system thickness and staggered joints shall apply as detailed above.
- For EXT-A fire resistance grading, the test construction was tested unloaded. However, deflection of the roof did not exceed the allowable limits set out in BS 476: Part 20:1987 for loadbearing horizontal elements.
- Decking side laps were stitched at 450mm centres. The built up roofing system was tested with Eurobond Stone wool core sandwich wall panels.
- Hardrock Multi-fix Dual Density roof board system 022g/04 at a thickness of 150mm is unfaced and for the purpose of extending the thickness within the Multi-Fix system.

## Tata Steel UK Limited, Panels and Profiles

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Certificate No: 460a to LPS 1181 Part Issue 1

Product Name	LPCB Ref. No.
Trimapanel Formawall wall panel	460a/13
Trisobuild FR15	460a/14
Trisobuild FR30	
Trisobuild FR60	
Trisobuild VW / HW	
Trisobuild R / RL	460a/15

## **PART 1: SECTION 2.1.2**

### **LPS 1181-1 CLADDING PRODUCTS USED FOR THE EXTERNAL ENVELOPE OF BUILDINGS**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Trinsul wall and roof system	460a/19
Trinsul wall system	
Structural Liner Tray Roof	460a/20
Structural Liner Tray Wall	
Structural Flat Metal Roof Deck	460a/21
Trisobuil SA1	460a/23
Trisobuil SA1+	
Hybrid Acoustic roof system	460a/24
Hybrid Acoustic wall system	
Trisomet (wall panel)	460a/27
Trimapanel, Formawall wall panel	460a/28
Trisomet (roof and wall panel)	460a/29
Celtic 30 (roof panel)	460a/30
Trisomet (roof panel)	
Trisobuild FR15	460a/31

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#### **Trimo d.o.o.**

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**Certificate No: 650b to LPS 1181 Part 1 Issue 1**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
FTV (wall panel)	650b/01
SNV (ceiling panel)	650b/02

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## **PART 1: SECTION 2.1.3**

### **LPS 1181-2 SANDWICH PANELS OR BUILT-UP PANEL SYSTEMS USED INTERNALLY IN A BUILDING**

LPS 1181:Part 2 *Requirements and tests for sandwich panels and built-up systems for use as internal constructions in buildings*

This standard determines the contribution to fire growth of sandwich panels and built-up cladding systems used internally within a building. Systems listed in this section are typically used for the construction of food factory clean rooms, cold store rooms/refrigerated spaces or room separation, other internal structure applications may also be applicable where insulated (acoustic or temperature controlled) spaces are specified. The structures are either self-supporting or supported by an external structure.

The test is a large scale test comprising setting fire to an open-ended enclosure (approximately the size of a large domestic garage) from the sandwich panels or built-up cladding system. It evaluates the panels, the jointing methods and the supporting system including fixings, which gives an assessment of the true fire performance of the system which cannot be determined from traditional small scale reaction to fire tests, such as surface spread of flame or fire propagation tests.

Products that have passed the test and have achieved LPCB approval are graded under the following designations:

Requirements for internal applications				
GRADE	Fire resistance		Wall and ceiling lining test Thermal exposure	
	Integrity (minutes)	Insulation (minutes)	Level	Source
INT-1	60	60	Enhanced	Gas burner
INT-2	30	30	Standard	Timber crib
INT-3			Standard	Timber crib

### **Brucha Ges.m.b.H**

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Certificate No: 900b to LPS1181-2

Product Name	Specification Thickness (mm)	Maximum Unsupported Panel Span (m)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade	Core Material	LPCB Ref. No.
WP-F (wall panel)	60, 80, 100, 120, 150 & 200	3.0	-	-	INT-3	Mineral Wool	900b/01
WP-F (ceiling panel)	60, 80, 100, 120, 150 & 200	3.5	-	-	INT-3	Mineral Wool	900b/02

Notes:

- LPCB ref 900b/01 WP-F Wall panels to be installed with no external supports & the long edge joint in the vertical orientation only.
- LPCB ref 900b/01 & 900b/02 Wall and ceiling panel joints to be stitched on the internal face with 3.2 mm blind rivets at nominally 300mm centres.
- LPCB ref 900b/02 WP-F Ceiling panels are supported by a hanger system consisting of.
  - A length of wire rope (4.0mm 6 x 7N 1AX) passed over and supported from a suitable load bearing frame.
  - An M10 turnbuckle with the rope secured using a 'U bolt and clamp.
  - A length of M10 studding is passing through a hole which is drilled in the panel and secured on the internal surface with an 80mm diameter washer and domed head nut, this is further protected with a 0.55mm thick steel box (130mm-square x 30mm-deep with 130mm x 30mm-flanges), lined with

## PART 1: SECTION 2.1.3

### LPS 1181-2 SANDWICH PANELS OR BUILT-UP PANEL SYSTEMS USED INTERNALLY IN A BUILDING

Promatect board and fixed using 3.2mm blind rivets.

- The turn buckle is then adjusted to accommodate the weight of the panels.

#### Euroclad Group Limited

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Certificate No: 545c to LPC 1181 Part 2 Issue 2

Product Name	LPCB Ref. No.
Firemaster Wall Lite	545c/01
Firemaster Wall Extra	545c/02
Firemaster Ceiling Panel	545c/03
Firemaster Wall Ultima	545c/05

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#### Kingspan Ltd

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Certificate No: 186d to LPS 1181 Part 2: Issue 2

Product Name	Specification Thickness (mm)	Specification Wall Panel Orientation (H/V) (Note 1)	Kingspan Model Specification Ref (Note 2)	Fire Resistance Integrity/Insulation (min)	LPS 1181-2 Grade	Core Material (Note 2)	LPCB Ref. No.
Kingspan IPN QuadCore KS600-1200CS (wall and ceiling panels)	80 - 200	V	36 Rev 0	-/-	INT-3	Hybrid insulation	279e/01
Kingspan IPN QuadCore KS600-1200CS (wall panel)	100-200	V	36 Rev 0	45/39	INT-2	Hybrid insulation	279e/02
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	175 - 200	-	36 Rev 0	95/65	INT-2	Hybrid insulation	279e/03
Kingspan IPN QuadCore KS600-1200CS (wall panel)	100 - 200	V	36 Rev 0	128/30	INT-2	Hybrid insulation	279e/04
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	125 - 200	-	36 Rev 0	57/49	INT-2	Hybrid insulation	279e/05
Kingspan IPN QuadCore KS600-1200CS (wall panel)	175 - 200	V	36 Rev 0	211/65	INT-2	Hybrid insulation	279e/06

## **PART 1: SECTION 2.1.3**

### **LPS 1181-2 SANDWICH PANELS OR BUILT-UP PANEL SYSTEMS USED INTERNALLY IN A BUILDING**

**Notes;**

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation
2. The Kingspan Model Specification documents contain full system details including panel fixing requirement, joint seals and stitching details as applicable. Reference must be made to the appropriate Model Specification to define the specific installation requirements. Copies of Model specifications are available on request please contact the Kingspan Envirocare Department - refer to model specificatio LPCB 36 Rev 0 for full details.

#### **Kingspan Ltd.**

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**Certificate No: 260d to LPS 1181 Part 2: Issue 2**

<b>Product Name</b>	<b>Specification Thickness (mm)</b>	<b>Specification Wall Panel Orientation (H/V) (Note 1)</b>	<b>Kingspan Model Specification Ref (Note 2)</b>	<b>Fire Resistance Integrity/Insulation (min)</b>	<b>LPS 1181-2 Grade</b>	<b>Core Material (Note 2)</b>	<b>LPCB Ref. No.</b>
Kingspan IPN QuadCore KS600-1200CS (wall panel)	100 - 200	V	36 Rev 0	45/39	INT-2	Hybrid insulation	279/02
Kingspan IPN QuadCore KS600-1200CS (wall and ceiling panels)	80 - 200	V	36 Rev 0	-/-	INT-3	Hybrid insulation	279e/01
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	175 - 200	-	36 Rev 0	95/65	INT-2	Hybrid insulation	279e/03
Kingspan IPN QuadCore KS600-1200CS (wall panel)	100 - 200	V	36 Rev 0	128/80	INT-2	Hybrid insulation	279e/04
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	125 - 200	-	36 Rev 0	57/49	INT-2	Hybrid insulation	279e/05
Kingspan IPN QuadCore KS600-1200CS (wall panel)	175 - 200	V	36 Rev 0	211/65	INT-2	Hybrid insulation	279e/06

**Notes;**

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation
2. The Kingspan Model Specification documents contain full system details including panel fixing requirement, joint seals and stitching details as applicable. Reference must be made to the appropriate Model Specification to define the specific installation requirements. Copies of Model specifications are available on request please contact the Kingspan Envirocare Department - refer to model specificatio LPCB 36 Rev 0 for full details.

## PART 1: SECTION 2.1.3

### LPS 1181-2 SANDWICH PANELS OR BUILT-UP PANEL SYSTEMS USED INTERNALLY IN A BUILDING

#### M J Quinn Limited

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Certificate No: 1499a to LPS 1181 Part 2 Issue 2.1

#### Sandwich Panel Systems

Product Name	LPCB Ref. No.
QRV PIR Coldstore (wall and ceiling panels) system	1499a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### Paneltex Limited

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Certificate No: 993a to LPS 1181 Part 2: Issue 2.0

Product Name	Specification Thickness (mm)	Maximum system size	Fire resistance (minutes) Integrity/Insulation	Grade	Core Material	LPCB Ref. No.
Paneltex Fireproof Coldstore (wall and ceiling panel system)	122 - 165	See Note 2	- / -	INT-3	PIR	993a/01
Paneltex Fireproof Coldstore (wall panel system)	122 - 165	See note 3	34 / 34 (note 3)	INT-2	PIR	993a/02

#### Notes:

- LPCB Ref 993a/01 Paneltex Fireproof Coldstore wall and ceiling panel systems to be installed with no external supports, the wall panels have the long edge joint in the horizontal orientation.
- LPCB Ref 993a/01 The maximum internal length, width and height of the Paneltex Fireproof Coldstore system shall not exceed 14.827m x 3.968m x 3.600m.
- LPCB Ref 993a/02 For fire resistance applications (INT-2) the maximum wall height shall not exceed 3.000m; the maximum panel length is as per note 2. The wall system was tested with an imposed load of 65kg/m (1.297kN per linear metre), loading on the walls shall not exceed this load.

#### Trimo d.o.o.

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Certificate No: 650d to LPS 1181 Part 2 Issue 2

Product Name	LPCB Ref. No.
Trimoterm FTV (wall panel)	650d/01
Trimoterm FTV (ceiling panel)	650d/02
Trimoterm FTV-HL (wall panel)	650d/03
Qbiss One Power T (wall panel)	650d/04

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 2.1.4**

### **LPS 1181-3 (DRAFT) CLADDING USED IN POD CONSTRUCTION**

LPS 1181: Part 3 (Draft) *Requirements and tests for factory produced room modules (PODS) and building system modules*

'PODS' are prefabricated units forming a room containing all structural elements and linings and may include services and fittings. This section covers PODS constructed of sandwich panels walls and/or ceilings.

For units listed in this section, the wall and ceiling construction has been tested to LPS 1181:Part 3 (Draft). The testing does not assess the structural performance of the POD under test nor the effect of doors or windows within the structure.

#### **Portakabin Ltd**

New lane, Huntington, York YO32 9PT, United Kingdom

Tel: 01904 611655 • Fax: 01904 611644

E-mail: sales@portakabin.co.uk • Website: www.portakabin.co.uk

**Certificate No: 592a(2) to LPS1181 Part 3**

<b>Product Name</b>	<b>Specification Sandwich panel thickness only</b>	<b>Fire Resistance (min) Integrity</b>	<b>Fire Resistance (min) Insulation</b>	<b>Grade</b>	<b>Core Material</b>	<b>LPCB Ref. No.</b>
ULTIMA Building System Building Module (wall)	76mm & 89mm thick	60	15	A	PUR	592a/03
ULTIMA Building System Building Module (ceiling)	47mm thick	60	60	A	PUR	592a/04
ULTIMA Building System Building Module (roof)	110mm thick	-	-	B	PUR	592a/05

#### **Notes:**

1. LPCB Ref. No. 592a/03, 592a/04 & 592a/05 Test specimen conformed to LPS1181 size requirements, except width was only 3.6m, the maximum width possible for the module.
2. LPCB Ref. No. 592a/03 Wall panels laid with long joints in the vertical orientation.
3. LPCB Ref. No. 592a/04 The test specimen for the ceiling fire resistance test was a combined ceiling and floor construction
4. LPCB Ref. No. 592a/03 Wall inner surface lining 1x layer 12.5mm thick Gyproc Fireline Duplex, Lafarge GTEC Fire V or Knauf Fireshield Plasterboard with Renolit Minster PVC innerface lining.
5. LPCB Ref. No. 592a/04 & 592a/05 Inner surface: interior polyester steel.
6. LPCB Ref. No. 592a/03, 592a/04 & 592a/05 No assessment has been made of the structural performance of the module, or of the inclusion of windows and doors. Therefore there has been no evaluation of the performance should the fire break through a window or door.
7. LPCB Ref. No. 592a/03, 592a/04 & 592a/05 Test Specimen short wall was 89mm thick and the long walls were 76mm thick.



LPS 1208: *LPCB test and performance requirements for walls, cavity barriers, floors and roofs* defines the test and performance requirements to satisfy the fire resistance requirements for compartmentation given in the *LPC Design Guide for Fire Protection of Buildings: 2000*.

Products for use in the following elements of construction fall within the scope of LPS 1208:

- Loadbearing compartment walls
- Non-loadbearing compartment walls and partitions
- External walls
- Curtain walls
- Cavity barriers
- Roofs where fire resistance is required (loadbearing and non-loadbearing)
- Loadbearing compartment floors
- Insulated panels used for enclosing production and storage areas in food factories

Note: Unless otherwise stated in individual listings, elements of construction have not been approved for load bearing capacity.

### CA Group Limited

Evenwood Industrial Estate, Copeland Road, Evenwood, Co. Durham DL14 9SF, United Kingdom

Tel: +44 (0)1388 834242 • Fax: +44(0)1 388 830964

E-mail: [technical@cagroup.ltd.uk](mailto:technical@cagroup.ltd.uk) • Website: [www.cagroup.ltd.uk](http://www.cagroup.ltd.uk)

**Certificate No: 443b to LPS 1208: Issue 2**

Product Name	LPCB Ref. No.
Twin-Therm® FW120 FireWall	443b/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Euroclad Group Limited

Wentloog Corporate Park, Wentloog Road, Cardiff CF3 2ER, United Kingdom

Tel: +44 (0)2920 790722 • Fax: +44 (0)2920 793149

E-mail: [sales@euroclad.com](mailto:sales@euroclad.com) • Website: [www.euroclad.com](http://www.euroclad.com)

**Certificate No: 879b to LPS 1208: Issue 2.2**

Product Name	LPCB Ref. No.
Elite 51 (Wall System)	879b/09
Elite 52 (Wall System)	879b/10
Elite 53 (Wall System)	879b/11
Elite 54 (Wall System)	879b/12
Elite 55 (Wall System)	879b/13
Elite 56 (Wall System)	879b/14
Elite 57 (Wall System)	879b/15
Elite 58 (Wall System)	879b/16
Elite 60 (Wall System)	879b/17
Elite 50 (Wall System)	879b/18

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 545a to LPS 1208: Issue 2**

## **PART 1: SECTION 2.2**

### **LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Firemaster Wall Extra	545a/01
Firemaster Ceiling Panel	545a/02
Firemaster Wall Lite	545a/03
Europanel F5 (wall panel)	545a/05
Europanel G12, G30 & G50 (wall panel)	545a/06
Europanel S5 (wall panel)	545a/07
Rockspan Extra (wall panel)	545a/08
Rockspan Lite (wall panel)	545a/09
Rockspan Ultima (wall panel)	545a/10
Firemaster Ultima (wall panel)	545a/11
Firemaster Ceiling Panel	545a/12
Rainspan Argeton	545a/13
Rainspan - ACM	545a/14
Rainspan - Parklex	545a/15
Rainspan - Rockpanel	545a/16
Rainspan Corium	545a/17
Rainspan Norclad	545a/18
Rainspan - Aerolite Stonework	545a/20
Rainspan Aerolite Granite	
Rainspan Ultralite	
Rainspan Urban Glass	545a/21
Europanel F5 (wall panel)	545a/22

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Hemsec Manufacturing Limited**

Stoney Lane, Rainhill, Prescot, Merseyside L35 9LL, United Kingdom

Tel: +44 (0)151 426 7171 • Fax: +44 (0)151 493 1331

E-mail: [sales@hemsec.com](mailto:sales@hemsec.com) • Website: [www.hemsec.com](http://www.hemsec.com)

Certificate No: 558a to LPS 1208 Issue 2

### **HPT Control 30 HPT Control 60 wall and ceiling panels Hemsec SIPs (wall panel)**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Hemsec SIP (wall panel)	558a/11
	558a/13
HPT Control 30 (wall panel)	558a/16
HPT Control 60 (wall panel)	
HPT Control 30 (ceiling panel)	558a/17
HPT Control 60 (ceiling panel)	

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the product name in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Isocab France SAS**

Z.I. de Grande Synthe, 3 Rue Charles Fourier, CS 30142, F-59792 Grande, Synthe Cedex, France

Tel: +33 (0)3 28 29 24 40 • Fax: +33 (0)3 28 29 24 50

E-mail: [Info@Isocabfrance.fr](mailto:Info@Isocabfrance.fr) • Website: [www.isocab.com](http://www.isocab.com)

Certificate No: 1295a to LPS 1208: Issue 2.2

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Isocab Industrial Agro-alimentaire (IND) ceiling panel system	1295a/01
Isocab Industrial Agro-alimentaire (IND) wall panel system	1295a/02
	1295a/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Isoclad Limited**

10 Alder Road, West Chirton North Industrial Estate, North Shields, Tyne & Wear NE29 8SD, United Kingdom

Tel: +44 (0)191 258 5052 • Fax: +44 (0)191 259 5742

E-mail: sales@isoclad.co.uk • Website: www.isoclad.co.uk

**Certificate No: 142a to LPS 1208 Issue 2**

Product Name	LPCB Ref. No.
Firestop 10 (Wall Panel)	142a/01
Firestop 12 (Wall Panel)	142a/02
Firestop 12c (Ceiling Panel)	142a/03
Isoclad PIR (Wall Panel)	142a/05
Isoclad PIR (Ceiling Panel)	142a/06
Isoclad PIR 40 (Wall Panel)	142a/07
Firestop 12 (Ceiling Panel)	142a/08
Securiclad SR4 (Wall Panel)	142a/09
Securiclad SR4 (Ceiling Panel)	142a/10

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Joris IDE N.V.**

Hille 174, B-8750, Zwevezele, Belgium

Tel: +44 (0)1928 571 444 • Fax: +44 (0)1928 571 488

E-mail: division.export@joriside.co.uk • Website: www.joriside.co.uk

**Certificate No: 700d to LPS 1208: Issue 2.2**

Product Name	LPCB Ref. No.
JI Wall 1150 Insulated Wall Panel	700d/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 700e to LPS 1208 Issue 2**

**JI Vulcasteel Roof 1000**

Product Name	LPCB Ref. No.
JI Vulcasteel roof 1000	700e/01
	700e/02
	700e/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Kingspan Ltd**

Carrickmacross Road, Kingscourt, Co. Cavan, Ireland

Tel: +353 42 969 8572 • Fax: +353 42 969 8576/77

E-mail: info.irl@kingspanpanels.com • Website: www.kingspanpanels.com

**Certificate No: 186b to LPS 1208: Issue 2**

# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Product Name	Specification Thickness (mm)	Maximum Unsupported Span (m)	Wall Panel Orientation (H/V) (note 1)	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
Kingspan Ecosafe KS1100CS (wall panel)	100, 125, 150, 175, 200 & 220	4.00	V	195 / 31	FR30	PIR	279b/05
Kingspan Ecosafe KS1100CS (ceiling panel)	100, 125, 150, 175, 200 & 220	4.00	V	35 / 32	FR30	PIR	
Kingspan Ecosafe KS1100CS (ceiling panel)	100, 125, 150, 175, 200 & 220	3.40	-	58 / 32	FR30	PIR	279b/06
Kingspan Ecosafe KS1100CS (wall panel)	175, 200 & 220	3.00	V	240 / 64	FR60	PIR	279b/07
Kingspan Ecosafe KS1100CS (ceiling panel)	175, 200 & 220	3.30	-	148 / 67	FR60	PIR	279b/08
Kingspan Ecosafe KS1100CS (ceiling panel)	175, 200 & 220	4.00	V	69 / 61	FR60	PIR	279b/09

### Notes

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation.
2. LPCB Ref No. 279b/05, 279b/06, 279b/07, 279b/08 & 279b/09 - Refer to model specification LPCB 11 Rev M for full details.

### Certificate No: 186c to LPS 1208 Issue 2

Product Name	LPCB Ref. No.
Kingspan IPN QuadCore KS1100CS (wall panel)	279d/01
Kingspan IPN QuadCore KS1100CS (ceiling panel)	279d/02
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/03
Kingspan IPN QuadCore KS1100CS (ceiling panel)	279d/04
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/05
	279d/06
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	279d/07
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/08
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	279d/09

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## Kingspan Ltd.

Greenfield Business Park No. 2, Greenfield, Holywell, Flintshire CH8 7HU, United Kingdom

Tel: +44 (0)1352 716100 • Fax: +44 (0)1352 716161

E-mail: [info@kingspanpanels.com](mailto:info@kingspanpanels.com) • Website: [www.kingspanpanels.com](http://www.kingspanpanels.com)

### Certificate No: 260b to LPS 1208: Issue 2

Product Name	Specification Thickness (mm)	Maximum Unsupported Span (m)	Wall Panel Orientation (H/V) (note 1)	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
Kingspan Ecosafe KS1100CS (wall panel)	100, 125, 150, 175, 200 & 220	4.00	V	195 / 31	FR30	PIR	279b/05
Kingspan Ecosafe KS1100CS (ceiling panel)	100, 125, 150, 175, 200 & 220	4.00	V	35 / 32	FR30	PIR	
Kingspan Ecosafe KS1100CS (ceiling panel)	100, 125, 150, 175, 200 & 220	3.40	-	58 / 32	FR30	PIR	279b/06

# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Product Name	Specification Thickness (mm)	Maximum Unsupported Span (m)	Wall Panel Orientation (H/V) (note 1)	Fire Reistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
Kingspan Ecosafe KS1100CS (wall panel)	175, 200 & 220	3.00	V	240 / 64	FR60	PIR	279b/07
Kingspan Ecosafe KS1100CS (ceiling panel)	175, 200 & 220	3.30	-	148 / 67	FR60	PIR	279b/08
Kingspan Ecosafe KS1100CS (wall panel)	175, 200 & 220	4.00	V	69 / 61	FR60	PIR	279b/09

### Notes:

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation.
2. LPCB Ref No 279b/05, 279b/06, 279b/07, 279b/08 & 279b/09 - Refer to model specification LPCB 11 Rev M for full details.

### Certificate No: 260c to LPS 1208 Issue 2

Product Name	LPCB Ref. No.
Kingspan IPN QuadCore Kingspan IPN QuadCore KS1100CS (wall panel)	279d/01
Kingspan IPN QuadCore KS1100CS (ceiling panel)	279d/02
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/03
Kingspan IPN QuadCore KS1100CS (ceiling panel)	279d/04
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/05
	279d/06
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	279d/07
Kingspan IPN QuadCore KS600-1200CS (wall panel)	279d/08
Kingspan IPN QuadCore KS600-1200CS (ceiling panel)	279d/09

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the product name in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## Kingspan Yapi Elemanlari A.S.

Yumurtalik Serbest Bolgesi 3 No'lu Parsel, Ceyhan-Adana, Turkey 01920, Turkey

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### Certificate No: 1278a to LPS 1208: Issue 2.2

Product Name	LPCB Ref. No.
KS110CTF (Wall Panel)	1278a/01
	1278a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## Modular Panel Systems Limited

Mohill, Co.Leitrim, Ireland

Tel: +353 719631162 • Fax: +353 719651979

E-mail: [info@modular.ie](mailto:info@modular.ie) • Website: [www.modular.ie](http://www.modular.ie)

### Certificate No: 750a to LPS 1208 Issue 2.1

# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Product Name	Specification Thickness (mm)	Max Unsupported Span	Wall Panel Orientation (H/V)(Note 1)	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
Enviro Panel PIR (wall panel)	100	3.0	V	43 / 15	FR15	PIR	750a/01
	150	3.0	V	60 / 48	FR30	PIR	
	200	3.0	V	60 / 48	FR30	PIR	
Enviro Panel Mineral Wool (wall panel)	100	7.5	V	121 / 44	FR30	Mineral Wool	750a/02
	150	3.0	- / -	121 / 68	FR60	Mineral Wool	750a/03
Enviro Panel Mineral Wool (ceiling panel)	150	3.0	- / -	121 / 68	FR60	Mineral Wool	750a/03
Enviro Panel PIR (wall panel)	100	3.0	V	30 / 15	FR15	PIR	750a/04
	150	3.0	V	60 / 30	FR30	PIR	
	200	3.0	V	60 / 30	FR30	PIR	
Enviro Panel Mineral Wool (wall panel)	100	7.5	V	120 / 30	FR30	Mineral Wool	750a/05
	150	3.0	- / -	120 / 60	FR60	Mineral Wool	
	150	7.5	V	120 / 60	FR60	Mineral Wool	
Enviro Panel Mineral Wool (ceiling panel)	150	3.0	- / -	120 / 60	FR60	Mineral Wool	750a/06
Enviro Panel Mineral Wool (wall panel)	150	7.5	V	120 / 60	FR60	Mineral Wool	750a/07

### Notes:

1. Wall panels orientation, Horizontal or Vertical (H/V) relates to the long joint orientation.
2. LPCB Ref. 750a/01, 750a/03, 750a/04 & 750a/06 - A strip of Pyrostrip graphite self-adhesive tape, 10mm wide x 2mm thick, shall be applied between the overlap in the steel skins of adjacent panels, the joints of the Enviro panels shall then be stitched with 4.8mm dia x 10mm stainless steel rivets @ 300mm centres on both the exposed and internal face.
3. LPCB Ref. 750a/02, 750a/05 & 750a/07 - A strip of Pyrostrip graphite self-adhesive tape, 10mm wide x 2mm thick, shall be applied between the overlap in the steel skins of adjacent panels, the joints of the Enviro panels shall then be stitched with 3.2mm dia x 12mm stainless steel rivets @ 300mm centres on both the external and internal face.
4. LPCB Ref. 750a/01, 750a/02 & 750a/03 PIR and Mineral wool panels are supplied with a castellated joint panel edge profile.
5. LPCB Ref. 750a/04, 750a/05 & 750a/06 PIR and Mineral wool panels are supplied with a flat, butt joint panel edge profile.
6. LPCB Ref. 750a/07 Mineral wool wall panels are supplied with a castellated joint or a flat, butt joint panel edge profile.

### Paneltex Limited

Kingston International Business Park, Somerden Road, Kingston-upon-Hull HU9 5PE, United Kingdom

Tel: 01482 787236 • Fax: 01482 787238

E-mail: sales@paneltex.co.uk • Website: www.paneltex.co.uk

Certificate No: 993b to LPS 1208: Issue 2

Product Name	Specification Thickness (mm)	Maximum unsupported span (m)	Fire Resistance (minutes) Integrity / Insulation (EN 1365-1)	Load bearing capacity under test conditions	Grade	Core Material	LPCB Ref. No.
Paneltex Fireproof Coldstore (wall panel system)	122 - 165	See note 1	34 / 34	65kg/m (1.297kN per linear metre)	FR30	PIR	993b/01

### Note:

1. LPCB Ref 993b/01 Paneltex Fireproof Coldstore wall panels have the inner liner long edge joint in the horizontal orientation, the panels are factory manufactured to required height and length. The maximum wall height shall not exceed 3.000m.

**Paroc Panel System Oy Ab**

FIN-21600, Parainen, Finland

Tel: +358 46 876 8000 • Fax: +358 46 876 8702

E-mail: [panelinfo@paroc.com](mailto:panelinfo@paroc.com) • Website: [www.paroc.com](http://www.paroc.com)

Certificate No: 381a to LPS 1208: Issue 2.2

**AST F, AST S & AST T Wall Panels and AST E Ceiling Panels**

Product Name	LPCB Ref. No.
PAROC AST F (Wall Panel)	381a/01
PAROC AST S (Wall Panel)	381a/02
PAROC AST-E (Ceiling Panel)	381a/04
PAROC AST T (Wall Panel)	381a/05

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Promat Fire Protection L.L.C**

PO Box 123945, Plot No. 597-921, Dubai Investment Park 2, Dubai, United Arab Emirates

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E-mail: [info@promatfp.ae](mailto:info@promatfp.ae) • Website: [www.promatfp.ae](http://www.promatfp.ae)

Certificate No: 1387a to LPS 1208 Non-loadbearing compartment walls and partitions

**PROMATECT®-H**

Product Name	LPCB Ref. No.
PROMATECT®-H	1387a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

Certificate No: 1388a to LPS 1208 Issue 2

**PROMATECT®-L500**

Product Name	LPCB Ref. No.
PROMATECT®-L500	1388a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Ruukki Construction Oy**

Panuntie 11, 00620 Helsinki, Finland

Tel: +358 20 592 7521 • Fax: +358 20 592 7708

E-mail: [simo.heikkila@ruukki.com](mailto:simo.heikkila@ruukki.com) • Website: [www.ruukki.com](http://www.ruukki.com)

Certificate No: 660a to LPS 1208: Issue 2

Product Name	LPCB Ref. No.
SPA E	660a/03

**Notes:**

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation.
2. The following Company manufacture the product listed on this certificate. This Company is audited by the LPCB to ensure the product certification requirements are met.

# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Ruukki Construction Oy  
Makelantie 9,  
62900 Alajarvi,  
Finland

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Ruukki Polska Sp. z.o.o

ul Jaktorowska 13, 96-300 Żyrardów, Poland

Tel: + 44(0)121 704 7300/07876 809611 • Fax: + 44(0)121 711 9712

E-mail: [steve.darlington@ruukki.com](mailto:steve.darlington@ruukki.com) • Website: [www.ruukki.com/gbr](http://www.ruukki.com/gbr)

Certificate No: 1052b to LPS 1208

Product Name	Specification Thickness (mm)	Max Unsupported Span (m)	Wall panel orientation (H/V) (note 1)	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
SP2D W (wall panel)	100 - 220	4.0	H	68/67	FR60	Mineral wool	1052b/01
SP2D WE (wall panel)	100 - 220	4.0	V	120/120	FR120	Mineral wool	1052b/02
	100 - 220	4.0	V	60/60	FR60	Mineral wool	
	100 - 220	4.0	V	90/90	FR90	Mineral wool	
	100 - 220	7.5	V	30/15	FR15	Mineral wool	
	100 - 220	7.5	V	30/30	FR30	Mineral wool	
	100 - 220	7.5	V	30/30	FR30	Mineral wool	
SPB W (wall panel)	100 - 220	7.5	H	120/120	FR120	Mineral wool	1052b/03
	100 - 220	7.5	H	30/15	FR15	Mineral wool	
	100 - 220	7.5	H	30/30	FR30	Mineral wool	
	100 - 220	7.5	H	60/60	FR60	Mineral wool	
	100 - 220	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	160 - 220	7.5	H	180/180	FR180	Mineral wool	
	180 - 220	7.5	H	240/240	FR240	Mineral wool	
SPB WB (wall panel)	100 - 220	7.5	H	120/120	FR120	Mineral wool	1052b/04
	100 - 220	7.5	H	30/15	FR15	Mineral wool	
	100 - 220	7.5	H	30/15	FR30	Mineral wool	
	100 - 220	7.5	H	60/60	FR60	Mineral wool	
	100 - 220	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	160 - 220	7.5	H	180/180	FR180	Mineral wool	
	180 - 220	7.5	H	240/240	FR240	Mineral wool	
SPB WI (wall panel)	100 - 140	7.5	H	120/120	FR120	Mineral wool	1052b/05
	100 - 140	7.5	H	30/15	FR15	Mineral wool	
	100 - 140	7.5	H	30/30	FR30	Mineral wool	



# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Product Name	Specification Thickness (mm)	Max Unsupported Span (m)	Wall panel orientation (H/V) (note 1)	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
SPB WIB (wall panel)	100 - 140	7.5	H	60/60	FR60	Mineral wool	1052b/06
	100 - 140	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	100 - 140	7.5	H	120/120	FR120	Mineral wool	
	100 - 140	7.5	H	30/15	FR15	Mineral wool	
	100 - 140	7.5	H	30/30	FR30	Mineral wool	
	100 - 140	7.5	H	60/60	FR60	Mineral wool	
SPB WE (wall panel)	100 - 140	7.5	H	90/90	FR90	Mineral wool	1052b/07
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	100 - 220	7.5	H	120/120	FR120	Mineral wool	
	100 - 220	7.5	H	30/30	FR30	Mineral wool	
	100 - 220	7.5	H	90/90	FR90	Mineral wool	
	100 - 220	7.5	H/V	60/60	FR60	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
SPB WEB (wall panel)	100 - 220	7.5	H	120/120	FR120	Mineral wool	1052b/08
	100 - 220	7.5	H	30/30	FR30	Mineral wool	
	100 - 220	7.5	H	60/60	FR60	Mineral wool	
	100 - 220	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	100 - 220	7.5	H	120/120	FR120	Mineral wool	
	100 - 220	7.5	H	30/30	FR30	Mineral wool	
SPB WEI (wall panel)	100 - 140	7.5	H	120/120	FR120	Mineral wool	1052b/09
	100 - 140	7.5	H	30/30	FR30	Mineral wool	
	100 - 140	7.5	H	60/60	FR60	Mineral wool	
	100 - 140	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	100 - 140	7.5	H	120/120	FR120	Mineral wool	
	100 - 140	7.5	H	30/30	FR30	Mineral wool	
SPB WEIB (wall panel)	100 - 140	7.5	H	120/120	FR120	Mineral wool	1052b/10
	100 - 140	7.5	H	30/30	FR30	Mineral wool	
	100 - 140	7.5	H	60/60	FR60	Mineral wool	
	100 - 140	7.5	H	90/90	FR90	Mineral wool	
	120 - 220	7.4	H	180/180	FR180	Mineral wool	
	100 - 140	7.5	H	120/120	FR120	Mineral wool	
	100 - 140	7.5	H	30/30	FR30	Mineral wool	

Note:

1. Wall panel orientation, Horizontal or Vertical (H/V), relates to the long joint orientation.
2. LPCB Ref No. 1052b/02, 03, 04, 05, 06, 07, 08, 09 & /10 a bond of sealant Butylene-X or EPDM gaskets (Black or Green) is applied to the joint prior to installation.
3. LPCB Ref. No 1052b/01 a bead of sealant Sikalastomer 710 (or equivalent) is applied to the joint prior to installation.

# PART 1: SECTION 2.2

## LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

Certificate No: 1052b to LPS 1208

Product Name	Specification Thickness (mm)	Max Unsupported Span (m)	Load bearing capacity under test conditions (kN/m <sup>2</sup> )	Fire Resistance (min) Integrity / Insulation	Grade	Core Material	LPCB Ref. No.
SPC W (roof panel)	140/100 240/200	2.0	0.31	182/70	FR60	Mineral wool	1052b/11

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Certificate No: 957a to LPS1208: Issue 2

Product Name	Specification Thickness	Max Unsupported span (m)	Wall panel orientation (h/V) (note 1)	Fire Resistance(min) integrity/insulation Span (m)	Grade	Core Material	LPCB Ref. No.
Isowall (wall panel)	100	7.5	V	30 / 30	FR30	Mineral Wool	957a/01
	100	4.9	V	60 / 60	FR60	Mineral Wool	
	100	4.0	V	90 / 90	FR90	Mineral Wool	
	125	7.5	V	30 / 30	FR30	Mineral Wool	
	125	4.9	V	60 / 60	FR60	Mineral Wool	
	125	4.0	V	90 / 90	FR90	Mineral Wool	
	150	7.5	V	30 / 30	FR30	Mineral Wool	
	150	7.5	V	60 / 60	FR60	Mineral Wool	
	150	6.9	V	90 / 90	FR90	Mineral Wool	
	150	5.2	V	120 / 120	FR120	Mineral Wool	
	150	3.0	V	265 / 208	FR180	Mineral Wool	

**Note:**

1. Wall panel orientation, Horizontal or Vertical (H/V) relates to the long joint orientation.

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Certificate No: 650a to LPS 1208: Issue 2

Product Name	LPCB Ref. No.
FTV Wall Panel	650a/01
FTV-H Wall Panel	650a/02
SNV Roof Panel	650a/03
FTV-HL Wall Panel	650a/04

## ***PART 1: SECTION 2.2***

### LPS 1208 COMPOSITE CONSTRUCTION ELEMENTS

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Qbiss One Wall Panel	650a/05
FTV Ceiling Panel	650a/06
SNV Wall Panel	650a/07

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 2.3**

### LPS 1581 EXTERNAL CLADDING SYSTEMS ON A MASONRY SUBSTRATE

*LPS 1581 Requirements and tests for LPCB approval of non-load bearing External Thermal Insulated Cladding Systems with rendered finishes (ETICS) or Rain Screen Cladding systems (RSC) applied to the masonry face of a building.*

LPS 1581 *Requirements and tests for LPCB approval of non-load bearing External Thermal Insulated Cladding Systems with rendered finishes (ETICS) or Rain Screen Cladding systems (RSC) applied to the masonry face of a building*

The test method used is BS 8414-1:2002 *Test method for non-load bearing external cladding systems applied to the face of the building* and is representative of an external fire source or fully developed (post-flashover) fire in a room venting through an opening such as a window aperture that exposes the external surfaces of the cladding system to the effects of the impinging flames. The test method determines external and potential internal (within the ETICS system) fire spread and, where a void exists, the extent of fire spread through the void.

External Thermal Insulated Composite Systems (ETICS) are systems which are applied to a masonry or concrete leaf, typically comprising of a number of layers including an insulation layer, a reinforcing mesh and external render or pre-formed slips or similar finish.

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Certificate No: 1432a to LPS 1581 Issue 2

### ***Outsulation & Outsulation Plus and Outsulation Rail***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Outsulation & Outsulation Plus	1432a/01
Outsulation Rail	1432a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 2.3.2**

### LPS 1581 RAIN SCREEN CLADDING SYSTEMS (RSC) ON MASONRY SUBSTRATES

*LPS 1581 Requirements and tests for LPCB approval of non-load bearing External Thermal Insulated Cladding Systems with rendered finishes (ETICS) or Rain Screen Cladding systems (RSC) applied to the masonry face of a building*

The test method used is BS 8414-1:2002 *Test method for non-load bearing external cladding systems applied to the face of the building* and is representative of an external fire source or fully developed (post-flashover) fire in a room venting through an opening such as a window aperture that exposes the external surfaces of the cladding system to the effects of the impinging flames. The test method determines external and potential internal fire spread and, where a void exists, the extent of fire spread through the void.

Rain Screen Cladding (RSC) systems are often used for the refurbishment of existing buildings where the insulation component is typically fixed to the original masonry face of the building. The external face of the cladding system is fixed to a supporting rail, so that the external face is spaced away from the insulation layer to form a cavity which may be drained.

## **PART 1: SECTION 2.4**

### LPS 1582 EXTERNAL CLADDING SYSTEMS SUPPORTED BY A STRUCTURAL STEEL FRAME

LPS 1582 *Requirements and tests for LPCB approval of non-load bearing external cladding systems fixed to and supported by a structural steel frame.*

## **PART 1: SECTION 2.4.1**

### **LPS 1582 EXTERNAL THERMAL INSULATED CLADDING (ETICS) SUPPORTED BY A STRUCTURAL STEEL FRAME**

LPS 1582 *Requirements and tests for LPCB approval of non-load bearing external cladding systems fixed to and supported by a structural steel frame.*

This standard is applicable to non-load bearing external cladding systems, such as curtain walling, glazed elements, infill panels and insulated composite panel systems fixed to and supported by a structural steel frame.

The test method used is BS 8414-2: 2005 *Test method for non-load bearing external cladding systems fixed to and supported by a structural steel frame*, and is intended to represent the action of a fully developed (post flashover) fire in a room venting through an opening such as a window aperture, or an external fire source that exposes the external surfaces of the cladding system to the effects of the impinging flames. The test method determines external and potential internal and fire spread and, where a void exists, the extent of fire spread through the void.

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Certificate No: 1432b to LPS 1582 Issue 1

#### ***Outsulation & Outsulation Plus and Outsulation Rail***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Outsulation & Outsulation Plus	1432b/01
Outsulation Rail	1432b/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)



*LPS 1582 Requirements and tests for LPCB approval of non-load bearing external cladding systems fixed to and supported by a structural steel frame.*

This standard is applicable to non-load bearing external rain screen cladding systems fixed to and supported by a structural steel frame.

The test method used is BS 8414-2: 2005 *Test method for non-load bearing external cladding systems fixed to and supported by a structural steel frame*, and is intended to represent the action of a fully developed (post flashover) fire in a room venting through an opening such as a window aperture, or an external fire source that exposes the external surfaces of the cladding system to the effects of the impinging flames. The test method determines external and potential internal and fire spread and, where a void exists, the extent of fire spread through the void.

## ***PART 1: SECTION 2.5***

### **ROOFING PRODUCTS**

The products listed in this section are used as roofing systems where there is a risk of fire as follows;

Section 2.5.1 - Protection against fire from outside the building.

Section 2.5.2 - Protection against fire from inside the building.

## **PART 1: SECTION 2.5.1**

### PROTECTION AGAINST FIRE FROM OUTSIDE THE BUILDING

The products listed in this section are used as roofing systems that offer protection where there is a risk of fire from outside of the building. The products have been tested against either BS 476:Part 3 *Fire tests on building materials & structures - external fire exposure roof test* or ENV 1187:2002 *Test methods for external fire exposure to roofs*, in order to ensure that roof covering and its supporting deck act as a protective barrier against fire from the outside of a building. It should be noted that BS 476: Part 3:1958 has been withdrawn, but is still referred to in Approved Document B of the UK Building Regulations. ENV 1187:2002 has been issued as a Draft for Development publication and is of a provisional nature as agreement could not be reached on the publication of an EN.

Work is currently being undertaken to develop a Loss Prevention Standard for this product group.

## **PART 1: SECTION 2.5.2**

### PROTECTION AGAINST FIRE FROM INSIDE THE BUILDING

The products listed in this section are built-up roofing systems which offer protection against the risk of fire from within the building. The products have been tested to:

- BS 476:Part 21 *Fire tests on building materials & structures. Methods for determination of the fire resistance of loadbearing elements of construction*
- or
- BS 476:Part 22 *Fire tests on building materials & structures. Methods for determination of the fire resistance of non-loadbearing elements*
- or
- EN 1364:Part 2 *Fire resistance tests for non-loadbearing elements. Ceilings*
- or
- EN 1365:Part 2 *Fire resistance tests for loadbearing elements. Floors & roofs* and meet the requirements of LPS 1208 for fire resistance (For roof sandwich panels, see Section 2.2.)

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**Certificate No: 022a to BS 476: Part 21: Method 7 (see note 1)**

Product Name	Specification System Thickness (mm) (1)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Core Material	LPCB Ref. No.
Hardrock Dual Density Roofing Board System	210	120	120	Stone Wool	022a/01
	100 - 135	60	60	Stone Wool	
	140 - 205	90	90	Stone Wool	
Hardrock Dual Density SPA Roofing Board System	210	120	120	Stone Wool	022a/02
	100 - 135	60	60	Stone Wool	
	140 - 205	90	90	Stone Wool	
DuoRock Roofing Board System	100 - 210	60	60	Stone Wool	022a/03
Hardrock Multi-fix Dual Density Roofing Board System	150	90	90	Stone Wool	022a/04
	210	120	120	Stone Wool	
	100 - 135	60	60	Stone Wool	
	140 - 205	90	120	Stone Wool	

#### **Notes:**

1. Roof board system LPCB Ref No. 022a/01, LPCB Ref No. 022a/03 & and LPCB Ref No. 022a/04 : Mechanically fastened Sarnafil single ply type S327 (1.2mm thickness), external weather proof membrane (or alternative membrane less than 3.5kg/m<sup>2</sup> e.g.. PVC, Chlorinated PE, Butyl Rubber with welded seams); Comprising of two layers of Rockwool roofing board with staggered joints (100mm minimum stagger for fire resistance up to 90 minutes and 300mm stagger for 2 hours fire resistance), vapour control layer and 0.7mm thickness 35mm deep profile steel metal deck.
2. Roof board system LPCB Ref No. 022a/02; Sarnafil single ply external weather proof membrane type G410 (1.2mm thickness), fully adhered to Hardrock Dual Density SPA Roofing Board System with Sarnafil Adhesive (or Rockwool approved alternative, adhesive/membrane combination, with a membrane material less than 3.5kg/m<sup>2</sup> e.g. PVC, Chlorinated PE, Butyl Rubber with welded seams); comprising of two layers of Rockwool roofing board with staggered joints (100mm minimum stagger for fire resistance up to 90 minutes and 300mm stagger for 2 hours fire resistance), vapour control layer and 0.7mm thickness 35mm deep profile steel metal deck.
3. The test construction was tested unloaded. However, deflection of the roof did not exceed the allowable limits set out in BS 476: Part 20: 1987 for loadbearing horizontal elements. Decking side laps were stitched at 450mm centres.

## ***PART 1: SECTION 2.5.2***

### PROTECTION AGAINST FIRE FROM INSIDE THE BUILDING

4. Roof board System LPCB Ref 022a/01, 022a/02 & 022a/03 Hardrock Dual Density Roofing Board System, Hardrock Dual Density SPA Roofing Board System and DuoRock Roofing Board System are also available and approved in cut-to-fall tapered options, the relevant minimum & maximum and maximum system thickness and staggered joints shall apply as detailed above.
5. Hardrock Multi-fix Dual Density roof board system 022a/04 at a thickness of 150mm is unfaced and for the purpose of extending the thickness within the Multi-Fix system.

## **PART 1: SECTION 2.6**

### REACTION TO FIRE (RTF) CLASSIFICATIONS FOR MATERIALS AND PRODUCTS

The materials and products listed in this section are LPCB approved and classified to one of the following Reaction to Fire (RTF) classification systems:

- Non-combustible to BS 476-4 Fire tests on building materials and structures. Non-combustibility test for materials.
- Class O as defined in Approved Document B - Fire Safety, The Building Regulations 2000.
- EN 13501-1 Fire classification of construction products and building elements. Classification using test data from reaction to fire tests. Note: LPCB approvals under this standard are limited to materials or products resulting in a classification of A1, A2 or B. Products under A2 or B will also be classified in relation to the additional classifications of s and d (eg s3, d2).

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Certificate No: 022e to SD 198 (Appendix B14) / EN 13501-1

#### **Rockwool Non-combustible Insulation Materials**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Cladding Roll - Aluminium foil faced	022e/01
Cladding Roll - Unfaced	
Cladding Roll - White tissue faced	
Cavity Batts - Unfaced	022e/02
Rainscreen Duo-slabs - Unfaced	022e/03
Ranscreen Duo-slabs - Black tissue faced	
Flaexi Batts - Unfaced	022e/04
Hardrock Dual Density Roofing Boards - Black tissue faced	022e/05
Hardrock Dual Density Roofing Boards - Unfaced	
Hardrock Dual Density Roofing Boards - White tissue faced	
DuoRock Roofing Boards - Black tissue faced	022e/06
DuoRock Roofing Boards - Unfaced	
DuoRock Roofing Boards - White tissue faced	
Rockwool Hardrock Dual Density Multi-Fix-Cream glass fibre tissue faced	022e/07

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

The following products have been approved to LPS 1132 *Requirements and tests for LPCB approval of wall & floor penetration & linear gap seals* to help ensure fire resisting compartment walls and floors are not compromised by the installation of building services that pass between fire resisting compartments.

The design requirements for these products are described in more detail in Section 4.6 of the *LPC Design Guide for the Fire Protection of Buildings: 2000*.

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Certificate No: 1457a to LPS 1132 Issue 4

#### Suresnap cast in fire collars

Product Name	LPCB Ref. No.
Suresnap cast in fire collars - H65S	1457a/01
Suresnap cast in fire collars - H100S	1457a/02
Suresnap cast in fire collars - H110S	1457a/03
Suresnap cast in fire collars - H150S	1457a/04

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

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Certificate No: 873a to LPS 1132 Issue 4.2

#### Fire Sleeve Pipe Wraps

Product Name	LPCB Ref. No.
Fire Sleeve Pipe Wraps	873a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

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Certificate No: 628a to LPS 1132: Issue 4

# **PART 1: SECTION 3**

## **LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS**

<b>Product Name</b>	<b>Use</b>	<b>Element of Construction</b>	<b>Fire Resistance (min) Integrity</b>	<b>Fire Resistance (min) Insulation</b>	<b>LPCB Ref. No.</b>
RGB 2, 4, 6, 8 & RGB 180, 240 & 360	Cables	Concrete or masonry Floor	240	120	628a/01
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	240	60	
	Steel pipes	Concrete or masonry Wall	240	60	
RGO 2, 4, 6, 8 & RGO 180, 240 & 360	Cables	Concrete or masonry Floor	240	120	628a/02
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	240	60	
	Steel pipes	Concrete or masonry Wall	240	60	
RGP 50, 70, 100, 150, 200 & 300	Cables	Concrete or masonry Floor	360	120	628a/03
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	360	120	
	Steel pipes	Concrete or masonry Wall	240	60	
RGPO 50, 70, 100, 150, 200 & 300	Cables	Concrete or masonry Floor	360	120	628a/04
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	360	120	
	Steel pipe	Concrete or masonry Wall	240	60	

Note:

Please refer to manufacturer's product data for maximum aperture sizes and installation details.

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**Certificate No: 022b(4) to LPS 1132: Issue 4**



# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Maximum Joint Width (mm)	Configuration: Fire Side Depth of Sealant (mm)	Configuration: Backing Material	Configuration: Non-fire Side Depth of Sealant	Fire Resistance (mm) Integrity (E)	Fire Resistance (mm) Insulation (I)	LPCB Ref. No.
FirePro™ Acoustic Intumescent Sealant	floor	230	AC/AC	50	25	Ethafoam Ø 50mm		155	105	022b/05
	floor	230	Softwood/AC	25	12	Ethafoam Ø 30mm		51	44	
	floor	230	Hardwood/AC	50	25	Ethafoam Ø 50mm		47	47	
	floor	230	Steel/AC	50	25	Ethafoam Ø 50mm		72	62	
	floor	250	AC/AC	30	15	Ethafoam Ø 40mm		243	65	
	floor	250	AC/AC	15	10	Ethafoam Ø 25mm		243	29	
	floor	250	AC/AC	20		Polyethylene Ø 20mm	10	155	47	
	floor	250	AC/AC	50		Polyethylene Ø 50 x 25mm	25	240	92	
	floor	250	AC/AC	10		Polyethylene Ø 10mm	6	240	207	
	floor	250	AC/AC	25		Polyethylene Ø 25mm	15	240	73	
	floor	250	Hardwood/AC	15	10	Ethafoam Ø 15mm		53	53	
	floor	250	Steel/AC	15	10	Ethafoam Ø 25mm		243	29	
	wall	150	AC/AC	30	30	Polyethylene 15 x 15	30	265	265	
	wall	150	AC/AC	15	15	Polyethylene 10 x 10	15	265	230	
	wall	150	AC/AC	10	10	Polyethylene 10 x 15	10	265	265	
	wall	150	AC/AC	10	10	Polyethylene 10 x 15		200	166	
	wall	150	AC/AC	15	15	Polyethylene 15 x 15		227	227	
	wall	150	AC/AC	30	30	Polyethylene 30 x 15		240	233	
	wall	200	AC/AC	50	25	Ethafoam Ø 50mm		245	82	
	wall	200	Hardwood/AC	50	25	Ethafoam Ø 50mm		96	93	
	wall	200	Softwood/AC	25	12	Ethafoam Ø 30mm		55	54	
	wall	200	Steel/AC	50	25	Ethafoam Ø 50mm		77	39	
	wall	215	AC/AC	30	15	Ethafoam Ø 40mm		243	44	
	wall	215	AC/AC	15	10	Ethafoam Ø 25mm		243	29	
	wall	215	Hardwood/AC	15	10	Ethafoam Ø 25mm		40	29	
	wall	215	Steel/AC	15	10	Ethafoam Ø 25mm		243	16	
	wall	250	AC/AC	20		Polyethylene Ø 20mm	10	240	122	
	wall	250	AC/AC	40		Polyethylene Ø 40mm	20	240	95	
	wall	250	AC/AC	10		Polyethylene Ø 10mm	10	240	240	
	wall	250	AC/AC	25		Polyethylene Ø 25mm	20	240	126	

Note:

AC - Aerated Concrete.

Ethafoam - Open cell polyethylene foam rod

Please refer to Rockwool installation instructions for further details

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### **Rockwool FirePro Ablative Coated Batt - Pipe Penetration**

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (layers & Thickness)	Seal Detail	Penetration Type	O/D wall thickness range (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
Rockwool FirePro Ablative Coated Batt	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve	ABS	27 / 2.5 to 110 / 12	120 / 60	022b/06

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (layers & Thickness)	Seal Detail	Penetration Type	O/D wall thickness range (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	PVC	19 / 1.9 to 55 / 2.2	90 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	PVC	>55 / 2.2 to 110 / 8.9	60 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	PVC	110 / < 3.6	120 / 30	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	HDPE	110 / 4.2 to 160 / 6.2	90 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	PP	>22 / 1.2 to 160 / 10	60 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Rockwool Insulated Fire Sleeve <sup>(7)</sup>	PP	22 / 1.2	120 / 120	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 60mm	Unlagged <sup>(8)</sup>	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	120 / 0	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 6mm	Unlagged <sup>(8)</sup>	Cast Iron	17.1 / 2.3 to 108 / 7.1	120 / 0	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Unlagged <sup>(8)</sup>	Copper	15.0 / 0.7 to 108 / 1.5	120 / 0	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 <sup>(9)</sup> pipe section or Fire Tube/Conlit pipe sections	Steel / Stainless Steel	88.9 / 4.0 to 164 / 6.4	120 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 <sup>(9)</sup> pipe section or Fire Tube/Conlit pipe sections	Copper	15.0 / 0.5 to 108 / 1.5	120 / 60	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (layers & Thickness)	Seal Detail	Penetration Type	O/D wall thickness range (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 <sup>(9)</sup> pipe section or Fire Tube conlit pip sections	Cast Iron	12.1 / 2.3 to 108 / 7.1	120 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 <sup>(9)</sup> pipe section or Fire Tube/Conlit pipe sections	Copper	50 / 1.8	120 / 120	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 1000mm long x 20mm thick Rocklap 800 pipe section Insulation	Copper	15.00 / 0.5 to 108 / 1.0	120 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	Lagged with 1000mm long x 20mm thick Rocklap 800 pipe section Insulation	Copper	108 / 3.0	120 / 90	
	Wall	150	Block work or Concrete Wall	1200 x 600	1 x 60mm	Lagged with 500mm long x 40 thick Rockwool 800 <sup>(9)</sup> insulation or Lagged with Fire Tube/Conlit pipe sections	Steel / Stainless Steel	88.9 / 4.0 to 170 / 8.0	120 / 120	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm	Unlagged <sup>(6)</sup>	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	240 / 0	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm	Unlagged	Cast Iron	17.1 / 2.3 to 108 / 7.1	240 / 0	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm	Unlagged <sup>(6)</sup>	Copper	15.0 / 0.7 to 108 / 1.5	240 / 0	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 <sup>(9)</sup> pipe section or Fire Tube/Conlit pipe sections	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	180 / 120	
	Wall	150	240min block work or Concrete wall	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Cast Iron	17.1 / 2.3 to 108 / 7.1	240 / 120	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube/Conlit pipe sections	Copper	15.0 / 0.7 to 108 / 1.5	240 / 60 <sup>(6)</sup>	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (layers & Thickness)	Seal Detail	Penetration Type	O/D wall thickness range (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
	Wall	200	240min Block work or Concrete wall	1200 x 600	2 x 50mm (with 100mm air gap)	Unlagged <sup>(6)</sup>	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	240 / 0	
	Wall	215	240min Block work or Concrete wall	1200 x 600	2 x 60mm (with 85 mm air gap)	Unlagged <sup>(6)</sup>	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	240 / 0	
	Wall	200	240min Block work or Concrete Wall	1200 x 600	2 x 50mm (with 100 mm air gap)	Unlagged	Cast Iron	17.1 / 2.3 to 1008 / 7.1	240 / 0	
	Wall	215	240min Block work or Concrete Wall	1200 c 600	2 x 60mm (with 85 mm air gap)	Unlagged	Cast Iron	17.1 / 2.3 to 108 / 7.1	240 / 0	
	Wall	200	240min Block work or Concrete wall	1200 x 600	2 x 50mm (with 100mm air gap)	Unlagged <sup>(6)</sup>	Copper	15.0 / 0.7 to 108 / 1.5	240 / 0	
	Wall	215	240min Block work or Concrete Wall	1200 x 600	2 x 60mm (with 85 mm air gap)	Unlagged	Copper	15.0 / 0.7 to 108 / 1.5	240 / 0	
	Wall	200	240min Block work or Concrete wall	1200 x 600	2 x 50mm (with 100mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube/Conlit pipe sections	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	180 / 120	
	Wall	215	240min Block work or Concrete Wall	1200 x 600	2 x 60mm (with 85mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	180 / 120	
	Wall	200	240min Block work or Concrete Wall	1200 x 600	2 x 50mm (with 100mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Cast Iron	17.1 / 2.3 to 108 / 7.1	180 / 60	
	Wall	215	240min Block work or Concrete Wall	1200 x 600	2 x 50mm (with 100mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Cast Iron	17.1 / 2.3 to 108 / 7.1	180 / 60	
	Wall	200	240min Block work or Concrete wall	1200 x 600	2 x 50mm (with 100mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube/Conlit pipe sections	Copper	15.0 / 0.7 to 108 / 1.5	240 / 60 <sup>(6)</sup>	
	Wall	215	240min Block work or Concrete Wall	1200 x 600	2 x 60mm (with 85mm air gap)	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Copper	15.0 / 0.7 to 108 / 1.5	240 / 60	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Unlagged <sup>(6)</sup>	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	240 / 0	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Unlagged	Cast Iron	17.1 / 2.3 to 108 / 7.1	240 / 0	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Unlagged <sup>(6)</sup>	Copper	15.0 / 0.7 to 108 / 1.5	240 / 0	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (layers & Thickness)	Seal Detail	Penetration Type	O/D wall thickness range (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube/Conlit pipe sections	Steel / Stainless Steel	17.1 / 2.3 to 168.3 / 7.1	240 / 120	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube Conlit pipe sections	Cast Iron	17.1 / 2.3 to 108 / 7.1	240 / 120	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	Lagged with 500mm long x 40mm thick Rocklap 800 pipe section or Fire Tube/Conlit pipe sections	Copper	15.0 / 0.7 to 108 / 1.5	240 / 120	

### Notes:

- The Fire Performance of the system will be dependant on the seal detail and Pipe type/ diameter. References should be made to manufacturer's literature and Chiltern International Fire Ltd Assessment Report: Chilt/A08152 rev D for further information.
- For Lightweight flexible wall constructions the partition must be a minimum overall thickness of 130mm and be faced on each side with two layers of type F 15mm thick fire rated plasterboard or equivalent
- For Rigid wall constructions comprising of 150mm, 200mm or 215mm thick lightweight aerated concrete or block work shall have a minimum density of 750kg/m<sup>3</sup>.
- For Rigid floor constructions comprising of 150mm lightweight aerated concrete shall have a minimum density of 800kg/m<sup>3</sup>.
- Rockwool FirePro Ablative Coated batt has a density of 180kg/m<sup>3</sup> comprising of a rock fibre core coated on both faces with 0.6 - 0.8mm thick (1mm max) Rockwool FirePro Ablative coating, friction fitted centrally within the thickness of the wall and sealed to the construction on both faces with a 30mm x 30mm fillet of Rockwool Acoustic Intumescent Sealant.
- 120 minutes insulation performance can be achieved using 50mm thick Fire Tube/Conlit seals.
- Rockwool Insulated Fire sleeves must be fitted on all plastic pipes (30mm thick for pipe Ø up to 110mm and 35mm thick for pipe Ø above 110mm) as they pass by the Rockwool Ablative coated batt and protrude from each face by 45mm. The sleeve shall be sealed into position with a 15mm x 15mm fillet of Rockwool Acoustic Intumescent sealant on each face.
- Unlagged metal pipes must be sealed with Rockwool Acoustic and Intumescent sealant on both sides of the penetration.
- Rocklap 800 pipe section may be interchanged with Rocklap H & V pipe section and Rockwool Process Pipe section.

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### Rockwool FirePro Ablative coated Batt - Cable Penetrations

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (Layers & Thickness)	Seal Details	Sheathed Cables / Unsheathed Cables Type <sup>(6)</sup>	Cable Diameter (mm)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
Rockwool FirePro Ablative Coated Batt	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction	1200 x 1200	1 x 60mm	2mm Conlit bandage	All Sheathed Cable types	< 78	90 / 60	022b/06
	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	2mm Conlit bandage	All Sheathed Cable types	< 78	120 / 60	
	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction	1200 x 1200	1 x 60mm	4mm Conlit bandage	All Sheathed Cable types	<21	90 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	4mm conlit bandage	All Sheathed Cable types	< 21	120 / 60	

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## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (Layers & Thickness)	Seal Details	Sheathed Cables / Unsheathed Cables Type <sup>(6)</sup>	Cable Diameter (mm)	Fire Resisitance Integrity / Insulation	LPCB Ref. No.
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 600	1 x 60mm	4mm Conlit bandage	PVC Sheathed Cable types	50	120 / 60	
	Wall	150	Block work/Concrete wall or 120min Lightweight flexible supporting construction	1200 x 1200	1 x 60mm	4mm Conlit bandage	PVC Sheathed Cable types	50	90 / 60	
	Wall	150	240min Block work or Concrete Wall	1200 x 1200	1 x 60mm	2mm Conlit bandage	All Sheathed Cable types	< 78	90 / 60	
	Wall	150	240min Block work or Concrete Wall	1200 x 600	1 x 60mm	2mm Conlit bandage	All Sheathed Cable Types	< 78	120 / 60	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	4mm Conlit bandage	All Sheathed Cable types	< 21	120 / 60	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	6mm Conlit bandage <sup>(7)</sup>	All Sheathed Cable types	< 21	240 / 120	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	4mm Conlit bandage	All Sheathed Cable types	22 to 50	60 / 60	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	6mm Conlit bandage <sup>(7)</sup>	All Sheathed Cable types	22 to 50	240 / 60	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	6mm Conlit bandage <sup>(7)</sup>	All Sheathed Cable types	51 to 80	120 / 60	
	Wall	150	240min Block work or Concrete wall	1200 x 600	1 x 60mm or 2 x 50mm (100mm air gap)	Rockwool Acoustic Intumescent Sealant fillet	All Sheathed Cable types	< 21	120 / 60	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	6mm Conlit bandage <sup>(7)</sup>	All Sheathed Cable types	< 21	240 / 60	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 6mm	4mm Conlit bandage	All Sheathed cables (excluding telecoms cables)	< 21	240 / 60	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 6mm	4mm Conlit bandage	Sheathed telecoms cables	< 21	120 / 60	
	Floor	150	240min Concrete Floor	1200 x 600	1 x 60mm	4mm Conlit bandage	PVC Unsheathed cable types	10 to 24	240 / 30	
	Wall	150	240min Concrete or Block work Wall	1200 x 600	1 x 60mm	4mm Conlit bandage	PVC Unsheathed cable types	10 to 24	120 / 30	
	Wall	150	120min lightweight flexible supporting construction	1200 x 600	1 x 60mm	4mm Conlit bandage	PVC Unsheathed cable types	10 to 24	120 / 30	

### Notes :

- The Fire Performance of the system will be dependant on the seal detail and cable type/ diameter. References should be made to manufacturer's literature and Chiltern International Fire Ltd Assessment Report: Chilt/A08152 rev D for further information.
- For Lightweight flexible wall constructions the partition must be a minimum overall thickness of 130mm and be faced on each side with two layers of type F 15mm thick fire rated plasterboard or equivalent
- For Rigid wall constructions comprising of 150mm, 200mm or 215mm thick lightweight aerated concrete or block work shall have a minimum density of 750kg/m<sup>2</sup>
- For Rigid floor constructions comprising of 150mm lightweight aerated concrete shall have a minimum density of 800kg/m<sup>3</sup>.
- Rockwool Ablative Coated batt has a density of 180kg/m<sup>3</sup> comprising of a rock fibre core coated on both faces with 0.6 - 0.8mm thick (1mm max) Rockwool FirePro Ablative coating, friction fitted centrally within the thickness of the wall and sealed to the construction on both faces with a 30mm x 30mm fillet of Rockwool Acoustic Intumescent Sealant.
- All Cables shall be supported by steel ladders up to 340mm wide x 80mm deep or steel trays (perforated and un-perforated) up to 460mm wide x 25mm deep at all performance periods.
- An Integrity performance of 240 minutes can be achieved if a 6 x 1mm layer Conlit 'bandage' is used which extends 300mm from each face of the Rockwool Ablative Coated batt.

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## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

- Cables may be individual or bundled where they penetrate the Rockwool FirePro Ablative Coated Batt system. Cable bundles are limited dependant on size and type of cables and sealing method, reference must be made to Chiltern International Fire Ltd Assessment Report: Chilt/A08152 rev D for details.
- Seal length extends 325mm from each face of the Ablative Coated Batt for cables > 50mm diameter.

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### Rockwool Ablative Coated Batt - Blank Seals

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture Size (mm)	Coated Batt (Layers & Thickness)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
Rockwool FirePro Ablative Coated Batt	Wall	150	Lightweight block work wall Note 2	600 x 600	1 x 50mm	240 / 30	022b/06
	Floor	150	Lightweight aerated concrete floor Note 3	600 x 600	1 x 50mm	240 / 120	
	Wall	215	Masonry wall Note 2	1200 x 600	1 x 50mm (with 100mm air gap)	240 / 30	
	Wall	215	Masonry wall Note 2	1200 x 600	2 x 50mm (with 100mm air gap)	240 / 240	
	Wall	130 (minimum)	120 minute plasterboard partition	1200 x 600	1 x 60mm	120 / 120	
	Wall	130 (minimum)	120 minute plasterboard partition	1200 x 600	1 x 60mm	90 / 90	
	Wall	Note 4	Drywall masonry, aerated concrete.or concrete	Note 5	1 x 60	120 / 60	

#### Notes:

- Rockwool Ablative Coated batt has a density of 180kg/m<sup>3</sup> comprising of a rock fibre core coated on both faces with 0.6 - 0.8mm thick (1mm max) Rockwool FirePro Ablative coating, friction fitted centrally within the thickness of the wall and sealed to the construction on both faces with a 30mm x 30mm fillet of Rockwool Acoustic Intumescent Sealant.
- For Rigid wall constructions comprising of 150mm or 215mm thick lightweight aerated concrete or block work shall have a minimum density of 750kg/m<sup>3</sup>.
- For Rigid floor constructions comprising of 150mm lightweight aerated concrete shall have a minimum density of 800kg/m<sup>3</sup>.
- The thickness of the wall system will be determined on the construction, but shall be capable of providing at least the same fires resistance of the seal. For the drywall the aperture will be lined with boards identical to the faces of the wall.
- The batts (1200mm x 600mm) may be installed in a gap of maximum size 2400mm high by 2400mm wide within the supporting construction the batts may be formed from either 1200 x 600mm boards vertically joined or two staggered rows of boards with vertical and horizontal joints. The height, width or area may be increased by 20% for a reduced period of 60 minutes integrity

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### Rockwool Ablative Coated Batt - Head of wall Joint Seals

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Use	Coated Batt (Layers & Thickness) (1)	Fire Resistance Integrity / Insulation	LPCB Ref. No.
Rockwool FirePro Ablative Coated Batt	Head of masonry wall to soffit of concrete floor	Note 3	Lightweight block work wall / drywall	Note 2	1 x 60mm	60 / 60	022b/06
	Head of masonry wall to soffit of a steel beam flange (min 100mm wide)	Note 3	Lightweight block work wall / drywall	Note 2	1 x 60mm	60 / 0	

Notes:

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## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

1. Rockwool Ablative Coated batt has a density of 180kg/m<sup>3</sup> comprising of a rock fibre core coated on both faces with two layers of 0.8mm thick Rockwool FirePro Ablative coating, joints are butted to each other and sealed with a layer of FirePro mastic, and sealed around the perimeter of the opening with a bead of FirePro mastic to each face.
2. The batts (1200mm x 600mm) may be installed in a gap of maximum size 1200mm high by 20000mm wide, the batts may be formed from either 1200 x 600mm boards vertically joined or two staggered rows of boards with vertical and horizontal joints.
3. The thickness of the wall system will be determined on the construction, but shall be capable of providing at least the same fire resistance of the seal. For the drywall the aperture will be lined with boards identical to the faces of the wall.

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### Rockwool FirePro Ablative Coated Batt - Dampers

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture size (mm)	Coated batt  (Layers & Thickness) (1)	Damper Type	Damper Size	Fire Resistance Integrity / Insulation	LPCB Ref. No.
Rockwool FirePro Ablative Coated Batt	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction (2)	Width/height of Batt between damper and supporting construction to be in the range of 150 - 450 mm (± 5% fitting tolerance)	1 x 60mm (3)	Actionair SmokeShield PTC™ multi-blade, galvansed steel, circular fire damper	100 - 300mm diameter x 1.2mm-thick casing	120 / 0	022b/06
	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction (2)	Width/height of Batt between damper and supporting construction to be in the range of 150 - 700 mm (± 5% fitting tolerance)	1 x 60mm (3)	Actionair SmokeShield PTC™ multi-blade, galvansed steel, circular fire damper	301 - 355mm diameter x 1.2mm-thick casing	120 / 0	
	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction (2)	Width/height of Batt between damper and supporting construction to be in the range of 150 - 450 mm (± 5% fitting tolerance)	1 x 60mm (3)	Actionair SmokeShield PTC™ multi-blade, galvansed steel, rectangular or oval fire damper	100mm x 100mm - 300mm x 300mm x 1.2mm-thick casing	120 / 0	
	Wall	150	Block work / Concrete Wall or 120min Lightweight flexible supporting construction (2)	Width/height of Batt between damper and supporting construction to be in the range of 150 - 700 mm (± 5% fitting tolerance)	1 x 60mm (3)	Actionair SmokeShield PTC™ multi-blade, galvansed steel, rectangular or oval fire damper	301mm x 301mm - 1000mm x 1000mm x 1.2mm-thick casing	120 / 0	



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Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Aperture size (mm)	Coated batt  (Layers & Thickness) (1)	Damper Type	Damper Size	Fire Resistance Integrity / Insulation	LPCB Ref. No.
	Floor	150	Lightweight aerated concrete floor, nominal density 580kg/m <sup>3</sup> (4)	Width of Batt between damper and supporting construction to be a maximum of 700 mm (± 5% fitting tolerance) (5)	1 x 60mm (3)	Actionair SmokeShield PTC™ multi-blade, galvanised steel, rectangular or oval fire damper	Up to 1000mm x 1000 x 1.2mm-thick casing	120 / 0	

**Notes:**

- Rockwool Ablative Coated batt has a density of 180kg/m<sup>3</sup> comprising of a rock fibre core coated on both faces with a layer 0.8-1.0mm-thick Rockwool FirePro Ablative coating, joints are butted to each other and sealed with a layer of FirePro mastic, and sealed around the perimeter of the opening with a bead of FirePro mastic to each face.
- For Lightweight flexible wall constructions the partition must be a minimum overall thickness of 120mm and be faced on each side with two layers of type 5 Lafarge Gtec 12.5mm thick fire rated plasterboard or equivalent. The voids between the studs are insulated with a layer of 50mm-thick Rockwool RW3 insulation, having a density of 60kg/m<sup>3</sup>.
- The 60mm thick Rockwool Ablative Coated Batt is cut to size to fit tightly against the damper casing on all four sides, and rested against the plate tack-welded to the damper casing. An additional 20mm-thick pattress of Rockwool Ablative Coated Batt is fitted around the perimeter of the damper on the unexposed side, prior to the steel installation angle being riveted to the stub duct. The edges between the Ablative Coated Batt and supporting construction sealed with a 15mm (nominal radius) bead, of Rockwool Acoustic Intumescent sealant.
- The damper is supported within the Batt using two lengths of 41mm x 41mm Unistrut, 1.5mm-thick. The Unistrut spans the aperture and is bolted to the underside of the concrete floor using 10mm studding passing through the floor.
- Around the perimeter of the aperture lengths of 75mm x 50mm x 6mm-thick steel angle were bolted to the under-side of the concrete slab using M10 steel wedge anchors and M10 studding so that an angle overhangs the opening by between 5mm and 25mm, providing a ledge to support the Ablative Coated Batt.
- The Actionair Smoke/Shield PTC™ multi-blade, galvanised steel casing fire damper has been tested in a Rockwool FirePro Ablative Coated Batt penetration sealing system to the requirements of BS EN 1366-2: 1999 and ISO 10294-1: 1996 only.

**Certificate No: 022b(1) to LPS 1132: Issue 4**

Product Name	Cavity Width (mm)	Slab Size (mm)	Fire Resistance (min/grity)	Fire Resistance (min) Insulation	LPCB Ref. No.
Rockwool Firepro™ SP Firestop Slab	50 - 400	900 x 650 x 75	60	60	022b/01
	50 - 400	900 x 650 x 90	120	120	022b/02

**Notes:**

- This product is suitable for sealing gaps between a concrete or composite concrete/metal floors and an adjacent masonry, cladding/panel system with non-combustible core or curtain wall, or between the leaves of a masonry cavity wall.
- For cavity widths of 250mm or more, joints between adjacent lengths of firestops should be sealed on the top surface with aluminium foil tape.
- Refer to manufacturer's technical literature for fixing details.

**Certificate No: 022b(2) to LPS 1132: Issue 4**

Product Name	Product Type(s)	Wall Width (mm)	Firestop Width (mm)	Application	Fire Resistance (min) Integrity/Insulation	LPCB Ref. No.
Rockwool FirePro™ Linear and Trapezoidal Firestop Systems	Trapezoidal Firestop 2B & Linear Firestop 2A	100	100	Profiled metal deck over block work wall, deck profiles running across the wall line	120/120	022b/03

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Product Type(s)	Wall Width (mm)	Firestop Width (mm)	Application	Fire Resistance (min) Integrity/Insulation	LPCB Ref. No.
	Trapezoidal Firestop 2B & Linear	150	150	Profiled metal deck over blockwork wall, deck profiles running across the wall line	180/180	
	Firestop 2A Trapezoidal Firestop 2B & Linear	200	200	Profiled metal deck over blockwork wall, deck profiles running across the wall line	240/240	
	Firestop 2A Trapezoidal Firestop 2B & Linear	100	100	Profiled metal deck over blockwork wall, deck profiles running across the wall line	120/120	
	Firestop 2A Trapezoidal Firestop 2B & Linear	150	150	Profiled metal deck over blockwork wall, deck profiles running across the wall line	180/180	
	Firestop 2A Trapezoidal Firestop 2B & Linear	200	200	Profiled metal deck over blockwork wall, deck profiles running across the wall line	240/240	
	Firestop 2A Trapezoidal Firestop 2B & Linear	100	100	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	120/120	
	Firestop 2A Trapezoidal Firestop 2B & Linear	150	150	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	180/180	
	Firestop 2A Trapezoidal Firestop 2B & Linear	200	200	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	240/240	
	Firestop 2A Trapezoidal Firestop 2B & Linear	100	100	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	120/120	
	Firestop 2A Trapezoidal Firestop 2B & Linear	150	150	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	180/180	
	Firestop 2A Trapezoidal Firestop 2B & Linear	200	200	Profiled metal deck over blockwork wall, single deck profile running in line, but asymmetrical with wall line	240/240	
	Firestop 2A Trapezoidal Firestop 2B & Linear	100	100	Profiled metal deck over blockwork wall, trapezoidal deck profiles running across wall line	120/120	
	Firestop 2A Trapezoidal Firestop 2B & Linear	150	150	Profiled metal deck over blockwork wall, trapezoidal deck profiles running across wall line	180/180	
	Firestop 2A Trapezoidal Firestop 2B & Linear	200	200	Profiled metal deck over blockwork wall, trapezoidal deck profiles running across wall line	240/240	
	Firestop 2A Linear	100	100	Profiled metal composite deck over blockwork, Dovetail deck profiles running across wall line	120/120	
	Firestop 2A & Dovetail Infil Strips	150	150	Profiled metal composite deck over blockwork, Dovetail deck profiles running across wall line	180/180	
	Firestop 2A & Dovetail Infil Strips	200	200	Profiled metal composite deck over blockwork, Dovetail deck profiles running across wall line	240/240	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Product Type(s)	Wall Width (mm)	Firestop Width (mm)	Application	Fire Resistance (min) Integrity/Insulation	LPCB Ref. No.
	Trapezoidal Firestop 2B & Linear Firestop 2A	100	100	Profiled metal composite deck over blockwork, Trapezoidal deck profiles running in line with wall line	120/120	
	Trapezoidal Firestop 2B & Linear Firestop 2A	150	150	Profiled metal composite deck over blockwork, Trapezoidal deck profiles running in line with wall line	180/180	
	Trapezoidal Firestop 2B & Linear Firestop 2A	200	200	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	240/240	
	Trapezoidal Firestop 2B	100	100	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	120/120	
	Trapezoidal Firestop 2B	150	150	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	180/180	
RockwoolFirePro™ Linear and Trapezoidal Firestop Systems	Trapezoidal Firestop 2B	200	200	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	240/240	
Rockwool FirePro™ Linear and Trapezoidal Firestop Systems	Trapezoidal Firestop 2B	100	100	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	120/120	
	Trapezoidal Firestop 2B	150	150	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	180/180	
	Trapezoidal Firestop 2B	200	200	Profiled metal composite deck supported by steel universal beam. Fire resistance times quoted cannot exceed fire resistance of protected beams	240/240	
	Linear Firestop 2A	100	100	Plain concrete deck over blockwork wall	120/120	
	Linear Firestop 2A	150	150	Plain concrete deck over blockwork wall	180/180	
	Linear Firestop 2A	200	200	Plain concrete deck over blockwork wall	240/240	
	Linear Firestop 2A	100	100	Plain concrete deck over blockwork wall, principle of multi-layering fire stops. The head of wall void can be filled by layering two or three firestops provided that the layers thickness does not exceed wall width and the compression/tightness of fit note above is followed	120/120	
	Linear Firestop 2A	150	150	Plain concrete deck over blockwork wall, principle of multi-layering fire stops. The head of wall void can be filled by layering two or three firestops provided that the layers thickness does not exceed wall width and the compression/tightness of fit note above is followed	180/180	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Product Type(s)	Wall Width (mm)	Firestop Width (mm)	Application	Fire Resistance (min) Integrity/Insulation	LPCB Ref. No.
	Linear Firestop 2A	200	200	Plain concrete deck over blockwork wall, principle of multi-layering fire stops. The head of wall void can be filled by layering two or three firestops provided that the layers thickness does not exceed wall width and the compression/tightness of fit note above is followed	240/240	
	Trapezoidal Firestop 2B & Linear Firestop 2A	100	100	Profiled concrete deck over blockwork. Deck profiles running in either direction	120/120	
	Trapezoidal Firestop 2B & Linear Firestop 2A	150	150	Profiled concrete deck over blockwork. Deck profiles running in either direction	180/180	
	Trapezoidal Firestop 2B & Linear Firestop 2A	200	200	Profiled concrete deck over blockwork. Deck profiles running in either direction	240/240	

### Notes:

- When the Firepro Linear and Trapezoidal Firestop Seals are being installed they must be a tight and an accurate fit, closely following the profile of the gap. The Firepro Linear Firestop 2A material must be compressed by at least 5%.
- Gaps between the top of the wall and the soffit of the deck/floor of sizes, other than the tested depth of 25mm, may be sealed providing that the Firepro Linear Firestop 2A is compressed by at least 5%. If more than one layer is used, the layers should be installed simultaneously to ensure that the full width of the gap is uniformly filled.
- The maximum gap size covered by this approval between the top of the wall and the soffit of the deck/floor is the thickness of the wall.
- Where the deck voids run parallel but outside the line of the blockwork wall, Firestop 2A should be fixed to the deck above at maximum 350mm centres.
- Care should be taken that any joints between lengths of Firepro Linear Firestop material should be fitted tightly together with no gaps.
- Therefore this certificate applies to gaps over walls constructed of dense aggregate concrete, lightweight aggregate concrete, clay bricks or concrete blocks, which have a density greater than 400kg/m<sup>3</sup>.
- This certificate applies to any trapezoidal or dovetail steel deck providing the cavity of the trapezoidal or dovetail steel deck can be adequately filled with the Rockwool Firepro Linear Firestop system.
- When the gap being sealed and is located between a structural steel beam and a profiled steel deck, with or without concrete, the beam should be fire protected with a suitable board system.
- It is assumed that the steel deck will remain horizontal or bow downwards in the event of a fire. If there is a possibility that the configuration of the steel deck and wall or beam being considered is such that an upward deformation of the deck is likely, then a reduced fire performance of the seal can be expected.
- Refer to manufacturer's technical literature for fixing details.

### Certificate No: 022b(3) to LPS 1132: Issue 4

Product Name	Application	Cavity Width (mm)	Barrier Size (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	LPCB Ref. No.
Rockwool Firepro™ TCB Cavity Barrier	Masonry/timber frame and masonry cavity walls	50 - 55	65 X 65	60	30	022b/04
	Masonry/timber frame and masonry cavity walls	56 - 65	75 x 75	60	30	
	Masonry/timber frame and masonry cavity walls	66 - 75	85 x 85	60	30	
	Masonry/timber frame and masonry cavity walls	76 - 80	90 x 90	60	30	

# PART 1: SECTION 3

## LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS

Product Name	Application	Cavity Width (mm)	Barrier Size (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	LPCB Ref. No.
	Masonry/timber frame and masonry cavity walls	81 - 90	100 x 100	60	30	
	Masonry/timber frame and masonry cavity walls	91 - 100	110 x 110	60	30	
	Masonry/timber frame and masonry cavity walls	101 - 110	120 x 120	60	30	
	Masonry/timber frame and masonry cavity walls	111 - 120	130 x 130	60	30	
	Masonry/timber frame and masonry cavity walls	121 - 130	140 x 140	60	30	
	Masonry/timber frame and masonry cavity walls	131 - 140	150 x 150	60	30	
	Timber frame	50 - 55	65 x 65	30	30	
	Timber frame	56 - 65	75 x 75	30	30	
	Timber frame	66 - 75	85 x 85	30	30	
	Timber frame	76 - 80	90 x 90	30	30	
	Timber frame	81 - 90	100 x 100	30	30	
	Timber frame	91 - 100	110 x 110	30	30	
	Timber frame	101 - 110	120 x 120	30	30	
	Timber frame	111 - 120	130 x 130	30	30	
	Timber frame	121 - 130	140 x 140	30	30	
	Timber frame	131 - 140	150 x 150	30	30	
	Timber frame	50 - 55	75 x 75	60	30	
	Timber frame	56 - 65	75 x 75	60	30	
	Timber frame	66 - 75	85 x 85	60	30	
	Timber frame	76 - 80	90 x 90	60	30	
	Timber frame	81 - 90	100 x 100	60	30	
	Timber frame	91 - 100	110 x 110	60	30	
	Timber frame	101 - 110	120 x 120	60	30	
	Timber frame	111 - 120	130 x 130	60	30	
	Timber frame	121 - 130	140 x 140	60	30	
	Timber frame	131 - 140	150 x 150	60	30	
	Timber frame	81 - 90	100 x 100	60	60	
	Timber frame	91 - 100	110 x 110	60	60	
	Timber frame	101 - 110	120 x 120	60	60	
	Timber frame	111 - 120	130 x 130	60	60	
	Timber frame	121 - 130	140 x 140	60	60	

Notes:

## ***PART 1: SECTION 3***

### **LPS 1132 WALL & FLOOR PENETRATION AND LINEAR GAP SEALS**

1. Rockwool Firepro™ TCB Cavity Barrier is designed for use between the leaves of a masonry cavity wall, timber frame construction, or between a timber frame inner leaf and masonry outer leaf.
2. Barriers can be installed vertically or horizontally.
3. Refer to manufacturer's technical literature for fixing details.

The protection of the structural integrity of a building is important for life safety of the occupants, fire fighters and for the cost-effective repair of the building post fire. When a building is involved in a fire, structural steelwork and concrete members can resist the damaging effects of the high temperatures generated if suitably protected.

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Certificate No: 1192n to SD198 (Appendix B15)/AS 4100

Product Name	LPCB Ref. No.
STEELGUARD 751 / STEELGUARD 851	1192n/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## PART 1: SECTION 4.1

### LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

This section covers structural steel fire protection with use of board or cementitious coverings approved to LPS 1107 *Requirements, Tests and Methods of Assessment of Passive Fire Protection Systems for Structural Steelwork*.

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Certificate No: 762c to LPS 1107: Issue 1

Product Name	LPCB Ref. No.
CAFCO® 300 PROMASPRAY ® P300	762c/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

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Certificate No: 022d(1) to LPS 1107: Issue 1

#### *Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 150°C, using a Rockwool FirePro™ Glue adhesive-fix method*

Product Name	Fixed Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire	25	65	19	-	-	-	-	022d/02
	30	101	24	-	-	-	-	
	40	250	38	20	-	-	-	
	50	250	56	27	18	-	-	
	60	250	84	36	23	-	-	
	70	250	129	47	29	-	-	
	75	250	164	54	32	18	-	
	80	250	216	61	36	19	-	
	90	250	250	79	43	23	-	
	100	250	250	104	53	26	18	

Certificate No: 022d(1) to LPS 1107: Issue 1

#### *Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 200°C, using a Rockwool FirePro™ Glue adhesive-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	130	26	-	-	-	-	022d/02



# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
	30	250	34	18	-	-	-	
	40	250	55	27	17	-	-	
	50	250	89	37	24	-	-	
	60	250	150	51	31	17	-	
	70	250	250	69	39	21	-	
	75	250	250	80	44	23	-	
	80	250	250	94	49	25	-	
	90	250	250	130	61	30	20	
	100	250	250	189	76	35	23	

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 250°C, using a Rockwool FirePro™ Glue adhesive-fix method**

Product Name	Fire Tube wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	250	38	20	-	-	-	022d/02
	30	250	50	25	17	-	-	
	40	250	83	38	24	-	-	
	50	250	138	53	33	19	-	
	60	250	248	73	43	23	-	
	70	250	250	100	55	29	19	
	75	250	250	117	62	32	21	
	80	250	250	138	69	35	23	
	90	250	250	196	87	41	27	
	100	250	250	250	109	48	31	

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 300°C, using a Rockwool FirePro™ Glue adhesive-fix method**

Product Name	Fire Tube wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	250	48	25	-	-	-	022d/02
	30	250	65	31	20	-	-	
	40	250	112	47	29	-	-	
	50	250	198	66	40	22	-	
	60	250	250	92	52	28	19	
	70	250	250	129	67	34	23	
	75	250	250	153	76	38	25	
	80	250	250	182	85	41	27	
	90	250	250	250	108	49	32	
	100	250	250	250	137	58	37	

# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 350°C, using a Rockwool FirePro™ Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	250	64	30	19	-	-	022d/02
40FirePro™ Fire Tube	30	250	89	38	24	-	-	
	40	250	168	58	35	19	-	
FirePro™ Fire Tube	50	250	250	84	48	26	17	
	60	250	250	122	63	32	22	
	70	250	250	178	83	40	26	
	75	250	250	219	94	44	29	
	80	250	250	250	107	48	31	
	90	250	250	250	139	58	36	
	100	250	250	250	182	69	42	

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 400°C, using a Rockwool FirePro™ Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	250	91	37	24	-	-	022d/02
	30	250	130	48	29	-	-	
	40	250	250	74	43	23	-	
	50	250	250	111	59	31	21	
	60	250	250	165	79	39	26	
	70	250	250	250	105	48	31	
	75	250	250	250	120	53	34	
	80	250	250	250	137	58	37	
	90	250	250	250	182	70	43	022d/01
	100	250	250	250	246	84	50	

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 550°C, using a Rockwool FirePro™ Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
FirePro™ Fire Tube	25	250	250	83	44	23	-	022d/02
	30	250	250	111	56	28	19	
	40	250	250	193	84	40	26	
	50	250	250	250	121	53	34	

# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
	60	250	250	250	172	68	42	
	70	250	250	250	245	85	52	
	75	250	250	250	250	95	57	
	80	250	250	250	250	106	62	
	90	250	250	250	250	129	73	
	100	250	250	250	250	158	86	

Certificate No: 022d(1) to LPS 1107: Issue 1

### *Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 150°C, using a Pin-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	54	-	-	-	-	-	022d/02
	30	80	-	-	-	-	-	
	40	196	-	-	-	-	-	
	50	250	48	-	-	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

### *Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 200°C, using a Pin-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	96	-	-	-	-	-	022d/02
	30	168	-	-	-	-	-	
	40	250	47	-	-	-	-	
	50	250	74	-	-	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

### *Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 250°C, using a Pin-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	176	-	-	-	-	-	022d/02
	30	250	42	-	-	-	-	
	40	250	67	-	-	-	-	

# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
	50	250	105	45	-	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

### Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 300°C, using a Pin-fix method

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	250	-	-	-	-	-	022d/02
	30	250	51	-	-	-	-	
	40	250	83	-	-	-	-	
	50	250	132	53	-	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

### Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 350°C, using a Pin-fix method

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	250	48	-	-	-	-	022d/02
	30	250	63	-	-	-	-	
	40	250	107	45	-	-	-	
	50	250	182	63	-	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

### Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 400°C, using a Pin-fix method

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	250	61	-	-	-	-	022d/02
	30	250	82	-	-	-	-	
	40	250	144	54	-	-	-	
	50	250	250	77	45	-	-	

**PART 1: SECTION 4.1****LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS**

Certificate No: 022d(1) to LPS 1107: Issue 1

**Limiting section factors for Rockwool FirePro™ Fire Tube when protecting structural steelwork at a design temperature of 550°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
FirePro™ Fire Tube	25	250	149	50	-	-	-	022d/02
	30	250	220	64	-	-	-	
	40	250	250	98	54	-	-	
	50	250	250	145	74	-	-	

Certificate No: 022d(1) to LPS 1107: Issue 1

**Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 150°C, using a Rockwool Conlit Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	65	19	-	-	-	-	022d/02
	30	101	24	-	-	-	-	
	40	250	38	20	-	-	-	
	50	250	56	27	18	-	-	
	60	250	84	36	23	-	-	
	70	250	129	47	29	-	-	
	75	250	164	54	32	18	-	
	80	250	216	61	36	19	-	
	90	250	250	79	43	23	-	
	100	250	250	104	53	26	18	

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**Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 200°C, using a Rockwool Conlit Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.	
Conlit Fire Tube	25	130	26	-	-	-	-	022d/02	
	30	250	34	18	-	-	-		
	40	250	55	27	17	-	-		022d/04
	50	250	89	37	24	-	-		
	60	250	150	51	31	17	-		022d/02
	70	250	250	69	39	21	-		
	75	250	250	80	44	23	-		
	80	250	250	94	49	25	-		
	90	250	250	130	61	30	20		
	100	250	250	189	76	36	23		

# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Certificate No: 022d(1) to LPS 1107: Issue 1

### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 250°C, using a Rockwool Conlit Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
Conlit Fire Tube	25	250	38	20	-	-	-	022d/02
	30	250	50	25	17	-	-	
	40	250	83	38	24	-	-	
	50	250	138	53	33	19	-	
	60	250	248	73	43	23	-	
	70	250	250	100	55	29	19	
	75	250	250	117	62	32	21	
	80	250	250	138	69	35	23	
	90	250	250	196	87	41	27	
	100	250	250	250	109	48	31	

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### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 300°C, using a Rockwool Conlit Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
Conlit Fire Tube	25	250	48	25	-	-	-	022d/02
	30	250	65	31	20	-	-	
	40	250	112	47	29	-	-	
	50	250	198	66	40	22	-	
	60	250	250	92	52	28	19	
	70	250	250	129	67	34	23	
	75	250	250	153	76	38	25	
	80	250	250	182	85	41	27	
	90	250	250	250	108	49	32	
	100	250	250	250	137	58	37	

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### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 350°C, using a Rockwool Conlit Glue adhesive-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
Conlit Fire Tube	25	250	64	30	19	-	-	022d/02
	30	250	89	38	24	-	-	

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## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
	40	250	168	58	35	19	-	
	50	250	250	84	48	26	17	
	60	250	250	122	63	32	22	
	70	250	250	178	83	40	26	
	75	250	250	219	94	44	29	
	80	250	250	250	107	48	31	
	90	250	250	250	139	58	36	
	100	250	250	250	182	69	42	

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### *Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 550°C, using a Rockwool Conlit Glue adhesive-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
Conlit Fire Tube	25	250	250	83	44	23	-	022d/02
	30	250	250	111	56	28	19	
	40	250	250	193	84	40	26	
	50	250	250	250	121	53	34	
	60	250	250	250	172	68	42	
	70	250	250	250	245	85	52	
	75	250	250	250	250	95	57	
	80	250	250	250	250	106	62	
	90	250	250	250	250	129	73	
	100	250	250	250	250	158	86	022d/03

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### *Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 150°C, using a Pin-fix method*

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 30min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 60min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 90min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 120min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 180min)	Limiting section factor (m <sup>-1</sup> for a fire resistance period of 240min)	LPCB Ref. No.
Conlit Fire Tube	25	54	-	-	-	-	-	022d/02
	30	80	-	-	-	-	-	
	40	196	-	-	-	-	-	
	50	250	48	-	-	-	-	

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## **PART 1: SECTION 4.1**

### **LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS**

#### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 200°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	96	-	-	-	-	-	022d/02
	30	168	-	-	-	-	-	
	40	250	47	-	-	-	-	
	50	250	74	-	-	-	-	

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#### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 250°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	176	-	-	-	-	-	022d/02
	30	250	42	-	-	-	-	
	40	250	67	-	-	-	-	
	50	250	105	45	-	-	-	

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#### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 300°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	250	-	-	-	-	-	022d/02
	30	250	51	-	-	-	-	
	40	250	83	-	-	-	-	
	50	250	132	53	-	-	-	

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# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 350°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	250	48	-	-	-	-	022d/02
	30	250	63	-	-	-	-	
	40	250	107	45	-	-	-	
	50	250	182	63	-	-	-	

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### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 400°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	250	61	-	-	-	-	022d/02
	30	250	82	-	-	-	-	
	40	250	144	54	-	-	-	
	50	250	250	77	45	-	-	

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### **Limiting section factors for Rockwool Conlit Fire Tube when protecting structural steelwork at a design temperature of 550°C, using a Pin-fix method**

Product Name	Fire Tube Wall Thickness (mm)	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 30min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 60min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 90min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 120min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 180min	Limiting section factor (m <sup>-1</sup> ) for a fire resistance period of 240min	LPCB Ref. No.
Conlit Fire Tube	25	250	149	50	-	-	-	022d/02
	30	250	220	64	-	-	-	
	40	250	250	98	54	-	-	
	50	250	250	145	74	-	-	

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Product Name	Exposure	Additional Information	LPCB Ref. No.
Rockwool FirePro™ BeamClad	Internal and semi exposed	Thickness range 25mm to 110mm. Fire resistance 30-240min (see tables below). Faced and unfaced boards are available, refer to manufacturer's technical literature for fixing details.	022d/01

# PART 1: SECTION 4.1

## LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

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### 3 Sided Protection of Steel Beams, Supporting Concrete/Composite Decks Using The Clip Fix Or Stud Welded Pins/Dry Joint System (critical failure temperature 620°C)

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	260	95	022d/01
	30	260	260	260	124	
	35	260	260	260	159	
	40	260	260	260	200	
	45	260	260	260	251	
	50	260	260	260	260	
	55	260	260	260	260	
	60	260	260	260	260	

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### 3 Sided Protection Of Steel Beams, Supporting Concrete/Composite Decks Using The Bonded Noggin/Dry Joint System (critical failure temperature 620°C)

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	196	73	022d/01
	30	260	260	260	93	
	35	260	260	260	116	
	40	260	260	260	143	
	45	260	260	260	173	
	50	260	260	260	209	
	55	260	260	260	252	
	60	260	260	260	260	

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### 3 Sided Protection Of Steel Beams, Supporting Concrete/Composite Decks Using The Bonded Noggin Or Stud Welded Pins/Glued Joint System (critical failure temperature 620°C)

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	Performance Hp/A 180min	Performance Hp/A 240min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	260	168	52	-	022d/01
	30	260	260	260	235	65	-	
	35	260	260	260	260	80	45	
	40	260	260	260	260	95	53	
	45	260	260	260	260	113	62	
	50	260	260	260	260	132	70	
	55	260	260	260	260	154	80	
	60	260	260	260	260	178	90	
	65	260	260	260	260	206	100	
	70	260	260	260	260	237	112	
	75	260	260	260	260	260	124	
	80	260	260	260	260	260	136	
	85	260	260	260	260	260	150	
	90	260	260	260	260	260	165	
	95	260	260	260	260	260	181	
100	260	260	260	260	260	199		
110	260	260	260	260	260	238		

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## PART 1: SECTION 4.1

### LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

#### 4 Sided Protection Of Steel Beams And Columns Using The Clip Fix Or Stud Welded Pins/Dry Joint System (critical failure temperature 550°C)

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	148	65	022d/01
BeamClad	30	260	260	260	84	
	35	260	260	260	104	
	40	260	260	260	128	
	45	260	260	260	155	
	50	260	260	260	187	
	55	260	260	260	225	
	60	260	260	260	260	

Certificate No: 022d to LPS 1107: Issue 1

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	146	65	022d/01
	30	260	260	202	83	
	35	260	260	260	103	
	40	260	260	260	126	
	45	260	260	260	153	
	50	260	260	260	184	
	55	260	260	260	221	
	60	260	260	260	260	

Certificate No: 022d to LPS 1107: Issue 1

#### 4 Sided Protection Of Steel Beams Using The Bonded Noggin Or Stud Welded Pins/Glued Joint System (critical failure temperature 550°C)

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	Performance Hp/A 180min	Performance Hp/A 240min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	260	98	40	-	022d/01
	30	260	260	260	130	50	-	
	35	260	260	260	168	61	-	
	40	260	260	260	216	73	43	
	45	260	260	260	260	85	50	
	50	260	260	260	260	99	57	
	55	260	260	260	260	114	65	
	65	260	260	260	260	131	73	
	65	260	260	260	260	150	81	
	70	260	260	260	260	170	90	
	75	260	260	260	260	193	99	
	80	260	260	260	260	219	109	
	85	260	260	260	260	248	120	
	90	260	260	260	260	260	131	
	95	260	260	260	260	260	144	
	100	260	260	260	260	260	157	
	110	260	260	260	260	260	186	

Certificate No: 022d to LPS 1107: Issue 1

## **PART 1: SECTION 4.1**

LPS 1107 STRUCTURAL STEEL FIRE PROTECTION - BOARD AND CEMENTITIOUS COVERINGS

### **4 Sided Protection Of Steel Columns Using The Bonded Noggin Or Stud Welded Pins/Glued Joint System (critical failure temperature 550°C)**

Product Name	Board Thickness (mm)	Performance Hp/A 30min	Performance Hp/A 60min	Performance Hp/A 90min	Performance Hp/A 120min	Performance Hp/A 180min	Performance Hp/A 240min	LPCB Ref. No.
Rockwool FirePro™ BeamClad	25	260	260	149	65	-	-	022d/01
	30	260	260	207	83	-	-	
	35	260	260	260	104	45	-	
	40	260	260	260	128	54	-	
	45	260	260	260	155	62	-	
	50	260	260	260	187	72	44	
	55	260	260	260	225	82	50	
	60	260	260	260	260	92	55	
	65	260	260	260	260	104	61	
	70	260	260	260	260	116	68	
	75	260	260	260	260	129	74	
	80	260	260	260	260	143	81	
	85	260	260	260	260	159	88	
	90	260	260	260	260	176	96	
	95	260	260	260	260	194	103	
	100	260	260	260	260	214	124	
	110	260	260	260	260	260	129	

The protection of the structural integrity of a building is important for life safety of the occupants, fire fighters and for the cost-effective repair of the building post fire. When a building is involved in a fire, structural steelwork can resist the damaging effects of the high temperatures generated if suitably protected.

This section covers structural steel fire protection with use of intumescent thin film coatings approved to SD075 *Fire Protection for Structural Steelwork (Intumescent Systems)* (BS 476: Parts 20 & 21).

### International Paint Limited

Stoneygate Lane, Felling, Gateshead, Tyne & Wear NE10 0JY, United Kingdom

Tel: +44 (0) 191 469 6111 • Fax:

E-mail: [Neil.Wheat@akzonobel.com](mailto:Neil.Wheat@akzonobel.com) • Website: [www.international-pc.com](http://www.international-pc.com)

Certificate No: 1109a(1) to SD198 Appendix B15 / BS 476: Part 21

#### Interchar 1190

Product Name	Steel Section	Steel Section factor range (Hp/A)	DFT dry film thickness range (mm)	Critical Temperature Range ( ° C)	Fire Resistance period (mins)	Appendix No.	LPCB Ref. No.
Interchar 1190	I- and H- section beams, 3 sided exposure	30 - 320	0.770 - 4.366	350, 400, 450, 500, 550, 600, 620, 650 & 700	15, 30, 45, 60, 75, 90, 105 & 120	1	1111a/01 1307a/01 1372a/01
	I- and H- section columns, 4 sided exposure	30 - 365	0.586 - 7.620	350, 400, 450, 500, 550, 600, 650 & 700	15, 30, 45, 60, 75, 90, 105 & 120	2	
	Rectangular and Circular hollow section columns, 4 sided exposure	30 - 225	1.211 - 8.641	350, 400, 450, 500, 520, 550, 600, 650 & 700	15, 30, 45, 60, 75, 90, 105 & 120	3	

#### Notes:

- Please refer to the relevant appendix number referenced in the table above to view the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance Period.
- LPCB Ref. 1111a/01, 1307a/01 & 1372a/01 - Interchar 1190 Intumescent dry film thickness excludes the primer and top coat (where applicable) thickness. Interchar 1190 is airless spray applied in multiple coats until the desired thickness is achieved.
- Results from analysis of I or H -Sections are directly applicable to angles, channels and T-Sections for the same section factor, whether they are used as individual elements or as a bracing.
- The results of the analysis for I and H -Section columns can be applied to I and H -Section beams exposed on all four sides up to the maximum dry film thickness of 4.366mm
- Approved Manufacturers

The following Companies manufacture the product listed on this certificate

These Companies are audited by the LPCB to ensure the product certification requirements are met:

#### International Paint Limited (LPCB Ref. 1111)

Holmedalen 3  
424 22 Angered  
Sweden

#### AkzoNobel Saudi Arabia Ltd (LPCB Ref. 1307)

(International Paint)  
Second Industrial City  
Abquiq Road  
Makkah Street  
PO Box 37, Dammam 31411  
Kingdom of Saudi Arabia

#### ICI Dulux Pty Ltd, (LPCB Ref. 1372)

Marine & Protective Coatings  
1 Paint Place

# PART 1: SECTION 4.2

## STRUCTURAL STEEL FIRE PROTECTION - INTUMESCENT THIN FILM COATINGS

Dickens Road, Box 565  
Umbongitwini 4120  
Durban  
South Africa

A copy of the certificate, confirming the relationship between DFT dry film thickness, critical temperature and fire resistance period, must be viewed online by clicking on the product name in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1109a(2) to SD198 (Appendix B15)/BS 476: Part 21**

### Interchar 1260

Product Name	LPCB Ref. No.
Interchar 1260	1111a/02 / 1307a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### PPG Coatings Europe BV

Oceanenweg 2, 1047 BB, Amsterdam, The Netherlands  
Tel: +31 20 407 5050 • Fax: +31 20 407 5059  
E-mail: [macooper@ppg.com](mailto:macooper@ppg.com) • Website: [www.ppgpmc.com](http://www.ppgpmc.com)

**Certificate No: 1192a to SD198 Appendix B15 / EN 1363-1:1999**

### STEELGUARD™701 / STEELGUARD™801

Product Name	Steel Section	Steel Section factor range (Hp/A)	DFT dry film thickness range (mm)	Critical Temperature Range ( ° C)	FireResistance Period(mins)	Appendix No.	LPCB Ref. No.
STEELGUARD™701 / STEELGUARD™801	Circular steel solid rods	40 - 215	0.24 - 4.82	350, 400, 450, 500, 550, 600, 650, 700 & 750	30, 60, 90 & 120	1	1192a/01

A copy of the certificate, confirming the relationship between DFT dry film thickness, critical temperature and fire resistance period must be viewed online by clicking on the product name in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1192b to SD198 (Appendix B15) / EN 13381-8: 2010**

### STEELGUARD™701 / STEELGUARD™801

Product Name	Steel Section	Steel Section Factor Range (Hp/A)	DFT Dry Film Thickness Range (mm)	Critical Temperature Range ( ° C)	Fire Resistance Period (mins)	Appendix No.	LPCB Ref. No.
STEELGUARD™701 / STEELGUARD™801	I & H Section Beams, 3 Sided Exposure	60 - 315	0.257 - 0.501	350, 400, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45, 60, 90 & 120	1	1192b/01
	I & H Section Columns, 4 Sided Exposure	70 - 310	0.232 - 1.046	350, 400, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45, 60 & 90	2	

# PART 1: SECTION 4.2

## STRUCTURAL STEEL FIRE PROTECTION - INTUMESCENT THIN FILM COATINGS

Product Name	Steel Section	Steel Section Factor Range (Hp/A)	DFT Dry Film Thickness Range (mm)	Critical Temperature Range (° C)	Fire Resistance Period (mins)	Appendix No.	LPCB Ref. No.
	I & H Section Beams, 4 Sided Exposure	70 - 310	0.232 - 1.487	350, 400, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45, 60 & 90	3	
	Circular Hollow Section Columns	50 - 220	0.581 - 2.218	350, 400, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45 & 60	4	
	Rectangular / Square Hollow Section Columns, 4 Sided Exposure	50 - 235	0.629 - 2.284	350, 400, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45 & 60	5	

### Notes:

- Please refer to the relevant appendix number referenced in the table above to view the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance Period.
- LPCB Ref No. 1192b/01 - STEELGUARD™ 701 / STEELGUARD™ 801 is approved for use with Amercoat 71, a two part, epoxy-based primer, applied to the steel at a normal dry film thickness of 50µm (microns) prior to application of the STEELGUARD™ 701 / STEELGUARD™ 801. The primer and intumescent coating are applied using airless paint spray equipment.

A copy of the certificate and required appendix confirming the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance period must be viewed online by clicking on the links on the associated entry on [www.redbooklive.com](http://www.redbooklive.com)

Certificate No: 1192d to SD198 (Appendix B15)/EN 13381-8:2010

### STEELGUARD™ 702 / STEELGUARD™ 802

Product Name	Steel Section	Steel Section Factor range (Hp/A)	DFT Dry Film Thickness Range (mm)	Critical Temperature Range (° C)	Fire Resistance Period (mins)	Appendix No.	LPCB Ref. No.
STEELGUARD™ 702 / STEELGUARD™ 802	Circular Hollow Section Columns	50 - 235	0.717 - 3.822	350, 400, 450, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45, 60 & 90	1	1192d/01
	Rectangular/Square Hollow Section Columns	50 - 215	0.722 - 3.595	350, 400, 450, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 700	15, 20, 30, 45, 60 & 90	2	

### Notes:

- Please refer to the relevant appendix number referenced in the table above to view the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance Period.
- LPCB Ref. No. 1192d/01 - STEELGUARD™ 702 / STEELGUARD™ 802 is approved for use with Amercoat 71P, a two part polyimide cured epoxy-based primer, applied to the steel at a normal dry film thickness of 100µm (microns) prior to application of the STEELGUARD™ 702 / STEELGUARD™ 802. The primer and intumescent coating are applied using airless paint spray equipment.

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the product name in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

Certificate No: 1192j to SD 198 (Appendix B15)/EN 13381-8

# PART 1: SECTION 4.2

## STRUCTURAL STEEL FIRE PROTECTION - INTUMESCENT THIN FILM COATINGS

Product Name	Steel Section	Steel Section Factor range(Hp/A)	DFT DryFilm Thickness Range (mm)	Critical Temperature Range (° C)	Fire Resistance Period (mins)	Appendix No.	LPCB Ref. No.
STEELGUARD™ 601	I- & H- Section Beams,3 sided exposure	65 - 325	0.269 - 1.537	350, 400, 450, 500, 550, 600, 650, 700	15, 20, 30, 45, 60 & 90	1	1192j/01
	I- & H- Section Columns,4 sided exposure	70 - 345	0.269 - 2.032	350, 400, 450, 500, 550, 600, 650, 700	15, 20, 30, 45, 60 & 90	2	

### Notes:

- Please refer to the relevant appendix number referenced in the table above to view the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance Period.
- LPCB Ref. No. 1192j/01- STEELGUARD 601 is approved for use with Amercoat 71, a two part, epoxy-based primer, applied to the steel at a normal dry film thickness of 50µm (microns) prior to application of the STEELGUARD 601. The primer and intumescent coating are applied using airless paint spray equipment.
- Results from analysis of I or H -sections are directly applicable to angles, channels and T- sections for the same section factor, whether used as individual elements or as bracing.
- The results of the analysis for columns can be applied to I- and H- section beams exposed on all four sides up to the maximum dry film thickness of 1.537 mm.

### Approved Manufacturers

The following Companies manufacture the product listed on this certificate. These Companies are audited by the LPCB to ensure the product certification requirements are met.

PPG Coatings Europe BV  
Oceaanweg 2  
1047 BB Amsterdam  
The Netherlands

PPG Deco Polska sp.z.o.o. (LPCB no 1253)  
Lewkowlec Branch  
63-400 Ostrow Wlkp  
Lewkowlec 68  
Poland

### Certificate No: 1192k to SD 198 (Appendix B15)/ISO 834: Part 10

Product Name	Steel Section	Steel Section Factor range (Hp/A)	DFT Dry Film Thickness Range (mm)	Critical Temperature Range (° C)	Fire Resistance Period (mins)	Appendix No.	LPCB Ref. No.
STEELGUARD™ 751 / STEELGUARD™ 851	I- section beams, 3 sided exposure	65 - 325	0.690 4.528	350, 400, 450, 500, 538, 550, 593, 600, 650, 700 & 750	15, 30, 45, 60, 75, 90, 105 & 120	1	1192k/01
	I- section columns, 4 sided exposure	65 - 355	1.415 5.575	350, 400, 450, 500, 538, 550, 593, 600, 650, 700 & 750	15, 30, 45, 60, 75, 90, 105 & 120	2	
	Circular hollow section columns with all round exposure	45 - 230	2.035 7.218	350, 400, 450, 500, 538, 550, 593, 600, 650, 700 & 750	15, 30, 45, 60, 75, 90, 105 & 120	3	
	Rectangular hollow section columns 4 sided exposure	45 - 245	2.096 7.150	350, 400, 450, 500, 538, 550, 593, 600, 650, 700 & 750	15, 30, 45, 60, 75, 90, 105 & 120	4	
	Rectangular hollow section beams 3 sided exposure	45 - 245	0.673 3.696	350, 400, 450, 500, 538, 550, 593, 600, 650, 700 & 750	15, 30, 45, 60, 75, 90, 105 & 120	5	

### Notes:



## **PART 1: SECTION 4.2**

### **STRUCTURAL STEEL FIRE PROTECTION - INTUMESCENT THIN FILM COATINGS**

1. Please refer to the relevant appendix number referenced in the table above to view the relationship between DFT dry film thickness, Critical Temperature and Fire Resistance Period.
2. LPCB Ref. No. 1192k/01 - STEELGUARD 751 / STEELGUARD 851 thicknesses shown in table is intumescent only. The intumescent coating are applied using airless paint spray equipment.
3. Results from analysis of I- or H- sections are directly applicable to angles, channels and T- sections for the same section factor, whether used as individual elements or as bracing.
4. The results of the analysis for columns can be applied to beams exposed on all four sides up to a maximum dry film thickness of 4.528mm for I- and H- sections and 3.696mm for rectangular hollow sections.

#### Approved Manufacturers

The following Companies manufacture the product listed on this certificate. These Companies are audited by the LPCB to ensure the product certification requirements are met.

PPG Coatings SPRL / BVBA  
(LPCB No 1249)  
Tweemontstraat 104  
BE-2100 Deurne  
Antwerp  
Belgium

**Certificate No: 1192m to SD198 (Appendix B15) / BS476-21: 1987**

#### **STEELGUARD™ 651**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
STEELGUARD™ 651	1192m/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1192l to SD198 (Appendix B15) / EN 13381-8**

#### **STEELGUARD™ 651**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
STEELGUARD™ 651	1192l/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1192c to SD198 (Appendix B15) / BS 476-21: 1987**

#### **STEELGUARD™701 / STEELGUARD™801**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
STEELGUARD™701 / STEELGUARD™801	1192c/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 4.3**

### STRUCTURAL CONCRETE MEMBERS FIRE PROTECTION

The products listed in section are assessed against the requirements of Scheme Document SD198 which details the requirements of the approval and certification process, and prEN 13381-3 (DPC 12/30259154 DC dated 15/05/2012) which specifies a test and assessment method for determining the contribution of fire protection systems to the fire resistance of structural concrete members, for instance slabs, floors, roofs and walls and which can include integral beams and columns. The concrete can be lightweight, normal weight or heavyweight concrete and of all strength classes (e.g. 20/25 to 50/60 for normal strength concrete and for high strength concrete 55/67 to 90/105). The test method, test results and the assessment method are not applicable to structural hollow concrete members and therefore the LPCB approvals in this section do not apply to such applications.

The member shall contain steel reinforcing bars.

The approval is applicable to all fire protection materials used for the protection of concrete members and includes sprayed materials, coatings, cladding protection systems and multi-layer or composite fire protection materials, with or without a gap between the fire protection material and the concrete member.

## ***PART 1: SECTION 5***

### PROTECTIVE COVERING MATERIALS & SCAFFOLD CLADDING

This section includes LPS 1207 *Fire requirements for protective covering materials* which are used during the construction of new buildings and renovation of existing buildings, and LPS 1215 *Requirements for the LPCB Approval and Listing of Scaffold cladding materials*.

## ***PART 1: SECTION 5.1***

### LPS 1207 PROTECTIVE COVERING MATERIALS

During the construction of new buildings and renovation of existing buildings, it is common to use sheeting made from plastic or similar materials to provide protection against the weather, dust and other materials produced by work in adjacent areas. If a material complies with LPS 1207 *Fire requirements for protective covering materials* it will not add significantly to the fire risk. This standard is referred to in *The Joint Code of Practice on the Protection from Fire of Construction Sites & Buildings Undergoing Renovation, 8th Edition* published by the FPA in association with RISC Authority

**Bainbridge International Limited**

Unit 8, Flanders Park, Flanders Road, Hedge End, Southampton, Hampshire SO30 2FZ, United Kingdom

Tel: 01489 776050 • Fax: 01489 776055

E-mail: [info@bainbridgeint.co.uk](mailto:info@bainbridgeint.co.uk) • Website: [www.coverguard.com](http://www.coverguard.com)

Certificate No: 1058a to LPS 1207 Issue 3

**Wall Cover Guard, Floor Cover Guard**

Product Name	LPCB Ref. No.
Wall Cover Guard CG 0636TF/CG0672TF	1058a/01
Floor Cover Guard CG1036DP/CG1072DP CG1336DP/CG1372DP CG2536DP/CG2572DP CG4036DP/CG4072DP	1058a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Core Industrial Plastics Limited**

Unit 15, A1 Ferrybridge Business Park, Fishergate, Knottingley, West Yorkshire WF11 8NA, United Kingdom

Tel: +44 (0)1977 676072 • Fax: +44 (0)1977 676069

E-mail: [sales@coreplastics.co.uk](mailto:sales@coreplastics.co.uk)

Certificate No: 803a to LPS 1207: Issue 3

**Total Board-Flame Retardant Protection Board**

Product Name	LPCB Ref. No.
Total Board-Flame Retardant Protection Board	803a/01 803a/02 803a/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Coveris Flexibles (Gainsborough) UK Limited**

Brackenborough Road, Louth, Lincolnshire LN11 0AX, United Kingdom

Tel: +44 (0)1507 617800 • Fax: +44 (0)1507 601681

E-mail: [Sean.Bramall@coveris.com](mailto:Sean.Bramall@coveris.com)

Certificate No: 499a to LPS 1207: Issue 3

Product Name	LPCB Ref. No.
Tuffreal Flame Retardant	499a/08 499a/09 499a/10 499a/11

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 5.1.1**

### **LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING**

#### **Distriplast Flandre SAS**

BP 20106, F 53944, Dunkerque Cedex 2, France  
Tel: +33 3 28 29 2480 • Fax: +33 3 28 29 24 93  
Website: [www.distriplast.com](http://www.distriplast.com)

Certificate No: 1353a to LPS 1207: Issue 3

Product Name	LPCB Ref. No.
FT BLL2 Diplast FR	1353a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Don & Low Ltd, Nonwovens**

Glamis Road, Forfar, Angus DD8 1EY, United Kingdom  
Tel: +44 (0)1307 452600 • Fax: +44 (0)1307 452635  
E-mail: [nonwovens@donlow.co.uk](mailto:nonwovens@donlow.co.uk) • Website: [www.donlow.com](http://www.donlow.com)

Certificate No: 726a to LPS 1207: Issue 3

#### **Daltex Flame Retardant Spunbound (A100E5TFR)**

Product Name	LPCB Ref. No.
Daltex Flame Retardant Spunbound (A100E5TFR)	726a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **DS SMITH CORREX (Trading as a division of DS Smith Plastics Limited)**

Madleaze Industrial Estate, Bristol Road, Gloucester GL1 5SG, United Kingdom  
Tel: +44 (0)1452 316500 • Fax: +44 (0)1452 300436  
E-mail: [sales@kayplast.com](mailto:sales@kayplast.com) • Website: [www.dssmithcorrex.com](http://www.dssmithcorrex.com)

Certificate No: 227a to LPS 1207 Issue 3

Product Name	LPCB Ref. No.
Correx®	227a/01 227a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Florprotec Limited**

Relay Park, Relay Drive, Tamworth B77 5PR, United Kingdom  
Tel: +44 (0)1827 831440 • Fax: +44 (0)1827 831441  
E-mail: [sales@florprotec.co.uk](mailto:sales@florprotec.co.uk) • Website: [www.floorprotection.co.uk](http://www.floorprotection.co.uk)

Certificate No: 871a to LPS 1207: Issue 2.1

Product Name	Thickness	Weight (g/m <sup>2</sup> )	LPCB Ref. No.
CPP-FR	0.16 ± 10%	84 ± 5%	871a/01

# PART 1: SECTION 5.1.1

## LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING

### Notes

1. LPCB Ref. No. 871a/01 covers white base sheet material, with or without additional printed areas, with a printed product marking band as required by LPS 1207 Issue 2 clause 4.

**Certificate No: 726a-x2 to LPS 1207: Issue 3**

### **Florprotec® Breatha-Flor**

Product Name	LPCB Ref. No.
Florprotec® Breatha-Flor	726a-x2/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Icopal Limited**

BMI House, 2 Pitfield, Kiln Farm, Milton Keynes MK11 3LW, United Kingdom

Tel: +44 (0)161 865 4444 • Fax: +44 (0)161 865 8433

E-mail: [info@icopal.com](mailto:info@icopal.com) • Website: [www.icopal.co.uk](http://www.icopal.co.uk)

**Certificate No: 572c to LPS 1207 Issue 3**

Product Name	LPCB Ref. No.
Monarflex Super T Plus Firesmart	572c/03
Monarflex Stripe Firesmart	572c/04

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Industrial Textiles & Plastics Ltd**

Stillington Road, Easingwold, York YO61 3FA, United Kingdom

Tel: +44 (0)1347 825200 • Fax: +44 (0)1347 825222

E-mail: [info@itpltd.com](mailto:info@itpltd.com) • Website: [www.itpltd.com](http://www.itpltd.com)

**Certificate No: 1351a to LPS 1207 Issue 3**

### **Powerclad**

Product Name	LPCB Ref. No.
Powerclad PMFR	1351a/01
Powerclad SDFR	1351a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 965a to LPS 1207: Issue 3**

Product Name	LPCB Ref. No.
Powerclad PMFR	965a/01
Powerclad SDFR	965a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 5.1.1**

### LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING

#### **IPB N.V.**

Steenovenstraat 30, B-8790 Waregem, Belgium  
Tel: + 32 (0)56 60 79 19 • Fax: + 32 (0)56 61 08 85  
E-mail: david.stofferis@iplast.be • Website: www.iplast.be

Certificate No: 365a to LPS 1207 Issue 3

#### **Biplex**

Product Name	LPCB Ref. No.
Biplex White	365a/01
Biplex Black	365a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Karton S.p.A.**

Viale Europa 7, 33077 Sacile (PN), Italy  
Tel: +39 0434 788811 • Fax: +39 0434 788822  
E-mail: piera.bressan@karton.it • Website: www.karton.it

Certificate No: 1234a to LPS 1207:Issue 3

#### **CartonPlast Flame Retardant Board, White**

Product Name	LPCB Ref. No.
CartonPlast Flame Retardant Board, White	1234a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Northern Ireland Plastics Limited**

39 Shrigley Road, Killyleagh, Co. Down, Northern Ireland BT30 9SR, United Kingdom  
Tel: +44 (0)2844 828753/4 • Fax: +44 (0)2844 828809  
E-mail: info@niplastics.com

Certificate No: 341a to LPS 1207 Issue 3

Product Name	LPCB Ref. No.
Corriboard Twin Wall (White)	341a/01
Corriboard Twin Wall (Black)	341a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Ockwells Limited**

Unit 6, Transigo, Gables Way, Thatcham, Berkshire RG19 4ZA, United Kingdom  
Tel: +44 (0)1635 876336 • Fax: +44 (0)1635 876338  
E-mail: sales@ockwell.co.uk • Website: www.ockwells.co.uk

Certificate No: 742a-x1 to LPS 1207: Issue 3

Product Name	LPCB Ref. No.
Ockwells Twinshield	742a-x1/01



# PART 1: SECTION 5.1.1

## LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 341a-x1 to LPS 1207 Issue 3**

Product Name	LPCB Ref. No.
Ockwells Twinshield (White)	341a-x1/01
Oclwells Twinshield (Black)	341a-x1/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 227a-x1 to LPS 1207 Issue 3.0**

Product Name	LPCB Ref. No.
TwinShield	227a-x1/01
	227a-x1/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 726a-x1 to LPS 1207: Issue3**

### **FloorShield FR**

Product Name	LPCB Ref. No.
FloorShield FR	726a-x1/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **Ondaplast SpA**

Via Crocetta, 3310, Longiano (FC) 47020, Italy

Tel: +39 0547 56616 • Fax: +39 0547 54087

E-mail: [renzo.rossi@ondaplast.com](mailto:renzo.rossi@ondaplast.com) • Website: [www.ondaplast.com](http://www.ondaplast.com)

**Certificate No: 742a to LPS 1207: Issue 3**

Product Name	LPCB Ref. No.
RE-FLAM twin wall flame retardant sheet, natural colour	742a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **Protec International Limited**

Construction House, Adlington Industrial Estate, Adlington, Cheshire SK10 4NL, United Kingdom

Tel: +44 (0)1625 855666 • Fax: +44 (0)1625 855601

E-mail: [enquiries@protection.co.uk](mailto:enquiries@protection.co.uk) • Website: [www.protection.co.uk](http://www.protection.co.uk)

**Certificate No: 843a to LPS 1207: Issue 3**

Product Name	LPCB Ref. No.
CushionGard FR	843a/01
Bath Protector FR	843a/03
Bidet Protector FR	
Door Protector Sheet FR	
Edge Protector FR	
Hob & Oven Protector FR	

## **PART 1: SECTION 5.1.1**

### **LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Proplex - Translucent Proplex FR HD Sink Protector FR Stair Protector FR WC Protector FR WC Protector FR (Concealed Cistern) Window and Door Sill Protector FR Bubble Wrap	843a/04
Proplex - Black	843a/05
Breather Shield FR	843a/07
Door Sleeve FR	894a/02
FR Polythene - Heavy, Medium and Light Duty	

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **RPC bpi Indupac Greenock (trading as a division of British Polythene Limited)**

96 Port Glasgow Road, Greenock, Scotland PA15 2UL, United Kingdom

Tel: +44 (0)1475 501100 • Fax: +44 (0)1475 743256

Website: [www.bpipoly.com](http://www.bpipoly.com)

**Certificate No: 521a to LPS 1207 Issue 3**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Visqueen Door Sleeves Visqueen Flame Retardant Polythene Protection Visqueen Megafilm	521a/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Sansetsu (UK) Limited**

16- 17 Brunleys Road, Kiln Farm, Milton Keynes MK11 3EW, United Kingdom

Tel: 01908 264750 • Fax: 01908 563868

E-mail: [danny.winters@sansetsu.co.uk](mailto:danny.winters@sansetsu.co.uk) • Website: [www.sansetsu.co.uk](http://www.sansetsu.co.uk)

**Certificate No: 1200a to LPS 1207: Issue 3**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Sancell Premium 10 FR	1200a/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### **Sealed Air Limited**

Telford Way, Kettering, Northants NN16 8UN, United Kingdom

Tel: 01536 315 700 • Fax: 01536 315 702

E-mail: [kettering.orders@sealedair.com](mailto:kettering.orders@sealedair.com) • Website: [www.sealedair.com](http://www.sealedair.com)

**Certificate No: 505b to LPS 1207: Issue 3**

<b>Product Name</b>	<b>Thickness (mm)</b>	<b>Weight (g/m<sup>2</sup>)</b>	<b>Base material colour</b>	<b>Assessed for additional print (logos, advertising etc) (see note 1)</b>	<b>LPCB Ref. No.</b>
EMFR	4mm Bubble	60 ± 2	White	No	505b/03

# PART 1: SECTION 5.1.1

## LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING

**Note:**

1. All approved product shall be suitably marked in accordance with the requirement of LPS 1207: Issue 3, clause 5. Additional print refers to, for example, distributor, contractor or contract logos or pictures, product use and additional site safety information or advertising, and is applied in addition to the required approval marking of clause 5.

### Solicom SA

Grand-Rue 26A, L-8372 Hobscheid, Luxembourg

Tel: +352 26957256 • Fax: +352 26958056

E-mail: [info@solicom-verisafe.com](mailto:info@solicom-verisafe.com) • Website: [www.solicom-verisafe.com](http://www.solicom-verisafe.com)

**Certificate No: 789a to LPS 1207 Issue 3**

Product Name	LPCB Ref. No.
Verisafe 200	789a/01
Verisafe B1 280	789a/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Swiftec Group

Castlepoint, Castle Way, Ellon, Aberdeenshire AB41 9RG, United Kingdom

Tel: +44 (0)1358 720888 • Fax: +44 (0)1358 720880

E-mail: [info@swiftecgroup.com](mailto:info@swiftecgroup.com) • Website: [www.swiftecgroup.com](http://www.swiftecgroup.com)

**Certificate No: 1205e to LPS 1207: Issue 3**

Product Name	LPCB Ref. No.
Antinox® 2/250 FR	1205e/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1205c to LPS 1207: Issue 3.0**

Product Name	LPCB Ref. No.
Antimar® 125 mu FR Orange Polythene Sheeting	1205c/01
Antimar® 125 mu FR White Polythene Sheeting	
Antimar® 50 mu FR White Polythene Sheeting	
Dustban® 125 mu Screening	
Dustban® 75 mu Screening	
Dustban® 75mu Flame Retardant Door Sleeves	

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 1205a to LPS 1207: Issue 3**

### Antimar® Airtech FR Breathable Fleece

Product Name	LPCB Ref. No.
Antimar® Airtech FR Breathable Fleece	1205a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

## **PART 1: SECTION 5.1.1**

### **LPS 1207 PROTECTIVE COVERING MATERIALS - SHEETING**

#### **Tufcoat Limited**

3 Garden Close, Langage Business Park, Plymouth PL7 5EU, United Kingdom

Tel: +44(0) 1752 227 333 • Fax: +44(0) 1752 261 642

E-mail: [info@tufcoat.co.uk](mailto:info@tufcoat.co.uk) • Website: [www.tufcoat.co.uk](http://www.tufcoat.co.uk)

Certificate No: 1212a to LPS 1207 Issue 3.1

#### ***Tufcoat 300µm Environmental Shrink-Wrap***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Tufcoat 300µm Environmental Shrink-Wrap	1212a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Ultrimax Coatings Limited**

Clayfield Industrial Estate, Tickhill Road, Doncaster DN4 8QG, United Kingdom

Tel: 01302 856 666 • Fax: 01302 571 510

E-mail: [braden.smith@ultrimaxcoatings.co.uk](mailto:braden.smith@ultrimaxcoatings.co.uk) • Website: [www.ultrimaxstore.com](http://www.ultrimaxstore.com)

Certificate No: 521a-x1 to LPS 1207 Issue 3

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Tuffalo	521a-x1/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**PART 1: SECTION 5.1.2**

LPS 1207 PROTECTIVE COVERING MATERIALS - PRE-FORMED

## **PART 1: SECTION 5.2**

### **LPS 1215 SCAFFOLD CLADDING MATERIALS**

Scaffold cladding materials such as sheeting and netting are often used externally during construction, refurbishment or demolition of buildings to provide protection. Historically, there have been a number of significant losses associated with fires involving scaffolding. Scaffold cladding materials should not add to the fire risk if they comply with LPS 1215 *Requirements for the LPCB approval and listing of scaffold cladding materials*. This standard is referred to in *The Joint Code of Practice on the Protection from Fire of Construction Sites & Buildings Undergoing Renovation, 8th Edition* published by the FPA in association with RISC Authority

Note: LPS 1215:Issue 3 does not cover other features required of scaffold materials, such as resistance to wind, rain penetration, resistance to tearing or impact damage.

#### **Beacon Group International Limited trading as Leach's**

Beacon Park, 226-228 Holme Lacy Road, Hereford HR2 6BQ, United Kingdom

Tel: +44 0 1432 817 648

E-mail: [Russell@leachs.com](mailto:Russell@leachs.com)

Certificate No: 1502a to LPS 1215 Issue 4.0

#### **Scaffold Cladding Materials**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
BIG BEN Superclad Standard Flame Retardant	1502a/01
BIG BEN Superclad Premium Flame Retardant	1502a/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Icopal Limited**

BMI House, 2 Pitfield, Kiln Farm, Milton Keynes MK11 3LW, United Kingdom

Tel: +44 (0)161 865 4444 • Fax: +44 (0)161 865 8433

E-mail: [info@icopal.com](mailto:info@icopal.com) • Website: [www.icopal.co.uk](http://www.icopal.co.uk)

Certificate No: 572d to LPS 1215: Issue 4

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Monarflex Temporary Roof Cover Flamesafe	572d/02
Monarflex Stripe Firesmart	572d/05
Monarflex Scaffband Flamesafe	572d/06
Monarflex Super T Plus Firesmart	572d/07
Monarflex Monarsound Flamesafe	572d/08

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

#### **Industrial Textiles & Plastics Ltd**

Stillington Road, Easingwold, York YO61 3FA, United Kingdom

Tel: +44 (0)1347 825200 • Fax: +44 (0)1347 825222

E-mail: [info@itpltd.com](mailto:info@itpltd.com) • Website: [www.itpltd.com](http://www.itpltd.com)

Certificate No: 1351b to LPS 1215 Issue 4

#### **Powerclad**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Powerclad PMFR	1351b/01
Powerclad SDFR	1351b/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

**Certificate No: 965b to LPS 1215: Issue 4**

Product Name	LPCB Ref. No.
Powerclad PMFR	965b/01
Powerclad KR 1215 FR	965b/03
Powerclad SDFR	965b/04

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Protec International Limited

Construction House, Adlington Industrial Estate, Adlington, Cheshire SK10 4NL, United Kingdom  
Tel: +44 (0)1625 855666 • Fax: +44 (0)1625 855601  
E-mail: [enquiries@protection.co.uk](mailto:enquiries@protection.co.uk) • Website: [www.protection.co.uk](http://www.protection.co.uk)

**Certificate No: 843c to LPS 1215: Issue 4**

Product Name	LPCB Ref. No.
Proscaff Premium FR	843c/01

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Solicom SA

Grand-Rue 26A, L-8372 Hobscheid, Luxembourg  
Tel: +352 26957256 • Fax: +352 26958056  
E-mail: [info@solicom-verisafe.com](mailto:info@solicom-verisafe.com) • Website: [www.solicom-verisafe.com](http://www.solicom-verisafe.com)

**Certificate No: 789b to LPS 1215 Issue 4**

Product Name	LPCB Ref. No.
Verisafe 320	789b/01
Verisafe B1 280	789b/03

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

### Tufcoat Limited

3 Garden Close, Langage Business Park, Plymouth PL7 5EU, United Kingdom  
Tel: +44(0) 1752 227 333 • Fax: +44(0) 1752 261 642  
E-mail: [info@tufcoat.co.uk](mailto:info@tufcoat.co.uk) • Website: [www.tufcoat.co.uk](http://www.tufcoat.co.uk)

**Certificate No: 1212b to LPS 1215 Issue 4.1**

#### **Tufcoat 300µm Environmental Shrink-Wrap**

Product Name	LPCB Ref. No.
Tufcoat 300µm Environmental Shrink-Wrap	1212b/02

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)

# PART 1: SECTION 6

## CAVITY FIRE BARRIERS

The materials listed in this section can be used to sub-divide such voids as service shafts, roof and floor spaces and restrict the spread of fire. In the absence of a specific test standard for cavity barriers these products meet the performance requirements of BS 476:Part 22:1987 *Methods for determination of the fire resistance of non-loadbearing elements of construction* or EN 1364-1 *Fire resistance tests for non-loadbearing elements, walls* or 1364-2 *Fire resistance tests for non-loadbearing elements, ceilings* as set down in Approved Document B. The *LPC Design Guide for the Fire Protection of Buildings: 2000* covers the design issues in Section 4.5.

The assessment methodology used in LPS 1208 also applies to the performance assessment for these products.

### Culimeta-Saveguard Limited

Tame Valley Mill, Wainwright Street, Dukinfield, Cheshire SK16 5NB, United Kingdom

Tel: +44 (0)161 344 2484 • Fax: +44 (0)161 344 2486

E-mail: sales@culimeta-saveguard.com

Certificate No: 552a to LPS 1208: Issue 2

Product Name	Specification high x wide (mm)	Orientation V-Vertical Resistance (min) Integrity	Layer of fabric	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	LPCB Ref. No.
FIREHALT 120/60	3000 x 3000	V	Double	120	60	552a/01
FIREHALT 120/30	3000 x 3000	V	Single	120	30	552a/02
FIREHALT 60/30	6000 x 20000	V	Single	60	30	552a/03
FIREHALT 30/30	6000 x 20000	V	Single	30	30	552a/04
VALBARR 120/60	3000 x 3000	V	Double	120	60	552a/05
VALBARR 120/30	3000 x 3000	V	Single	120	30	552a/06
VALBARR 60/30	6000 x 20000	V	Single	60	30	552a/07
VALBARR 30/30	6000 x 20000	V	Single	30	30	552a/08

#### Notes:

1. The barriers can only be installed vertically;
2. The barriers joints between individual runs in a barrier must be fixed with 2 rows of 10mm staples at 100mm staggered vertical centres and can only be installed vertically;
3. LPCB Ref no's 552a/01, 552a/05 are provided in a double layer configuration to provide a compartmentation performance of 120 minutes integrity and 60 minutes insulation;
4. LPCB Ref no's 552a/01, 552a/05 the two layers of fabric may be jointed together by means of hot melt, thermos softening adhesive spots such that it can be supplied as a single fabric component;
5. The barrier should be clamped into a concrete aperture using galvanised mild steel stud sections of dimensions 25mm by 25mm by 0.5mm thick, to the head and galvanised mild steel angle sections of dimensions 25mm by 25mm by 0.5mm thick to the remaining three edges. The stud fixing by steel Rawlbolts, M6 10P, centres 250mm.
6. Approved Manufacturers

The following Companies manufacture the product listed on this certificate. These Companies are audited by the LPCB to ensure the product certification requirements are met.

**Culimeta-Saveguard Ltd**  
(LPCB Ref. No 552)

Dukinfield  
Cheshire  
SK16 5NB  
United Kingdom



**Rockwool Limited**

Wern Tarw, Pencoed, Bridgend, Mid Glamorgan CF35 6NY, United Kingdom

Tel: +44 (0)1656 862621 • Fax: +44 (0)1656 862302

E-mail: [info@rockwool.co.uk](mailto:info@rockwool.co.uk) • Website: [www.rockwool.co.uk](http://www.rockwool.co.uk)

Certificate No: 022c to LPS 1208: Issue 2

Product Name	Product	Specification	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grading	LPCB Ref. No.
Rockwool Firepro™ Fire Barrier System	½ hour Cavity Barrier	1 layer 50mm thick	60	15	FR15	022c/01
	½ hour Fire Barrier	1 layer 60mm Fire Barrier foil faced overlapped joints	60	30	FR30	
	1 hour Fire Barrier	2 layers 50mm Fire Barrier staggered vertical joints	60	60	FR60	
	1½ Hour Fire Barrier	2 layers 50mm Fire Barrier staggered vertical joints	90	90	FR90	
	2 hour Fire Barrier	2 layers 60mm Fire Barrier foil faced separated by 40mm air gap	120	120	FR120	

**Notes:**

1. This product is supplied in 1m widths, with a length of 4m for 50mm thick Fire Barrier and 3.5m for 60mm thick Fire Barrier.
2. The maximum allowable drop is 6m without a support frame. Where the additional section is joined the barrier should be overlapped by at least 100mm and stitched.
3. Refer to manufacturer's technical literature for fixing details.

Certificate No: 022c to LPS1208: Issue 2

**Rockwool Firepro Fire Barrier Slab**

Product Name	Cavity Width (mm)	Slab Size (mm)	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	Grade	LPCB Ref. No.
Rockwool Firepro™ Fire Barrier Slab	Up to 1000	1000 x 600 x 100	240	60	FR60	022c/02

**Notes:**

1. Where the slab is penetrated by services, the fire resistance is reduced to 90 minutes integrity and 60 minutes insulation. The size of the penetrations should not exceed steel pipes having a diameter of 33.5mm external diameter, or steel cable trays 305mm wide x 50mm high x 0.9mm thick. Rockwool Acoustic and Fire Sealant should also be applied to all butt edges to form a tight bond when a penetration passes through the slab. The Acoustic and Fire Sealant should be tapered from 16mm deep at the face of the slab to nothing at a distance of 40mm to both faces.
2. Refer to manufacturer's technical literature for fixing details.

## **PART 1: SECTION 8**

### **PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS**

The products listed in this section have been assessed for use in rail transport applications in which the means of escape from a fire is limited as a result of:

- Difficulties in escaping from moving vehicles.
- The location of the fire (sub surface tunnels, viaducts, termini).
- Restricted egress from tunnels and sub surface termini.

Under such circumstances, it is essential that the materials used in the construction and furnishings of vehicles and sub surface constructions have the appropriate fire performance in terms of fire resistance and reaction to fire, including spread of flame, smoke and toxic fume emission.

This scheme provides independent third party approval for fire performance of products which have been tested and, where appropriate, classified in accordance with standards and codes of practice recognised by the transport industry or produced by the relevant transport bodies such as London Underground Limited (LUL), International Maritime Organisation (IMO) etc.

Products gaining LPCB approval under this scheme are primarily for use in transport applications such as rolling stock, shipping, motor vehicles and within transport infrastructure such as underground tunnels and transport termini.

#### **MCT Brattberg AB**

SE 37192 Karlskrona, Sweden

Tel: +46 (0) 455 375200 • Fax: +46 (0) 455 375290

E-mail: [info@mctbrattberg.com](mailto:info@mctbrattberg.com) • Website: [www.mctbrattberg.com](http://www.mctbrattberg.com)

#### **UK Office:**

MCT Brattberg Ltd, Commerce Street, Carrs Industrial Estate, Haslingden BB4 5JT, United Kingdom

Tel: +44 (0)1706 244890 • Fax: +44 (0)1706 244891

E-mail: [info@mctbrattberg.co.uk](mailto:info@mctbrattberg.co.uk) • Website: [www.mctbrattberg.co.uk](http://www.mctbrattberg.co.uk)

**Certificate No: 628a to LPS 1132: Issue 4**

<b>Product Name</b>	<b>Use</b>	<b>Element of Construction</b>	<b>Fire Resistance (min) Integrity</b>	<b>Fire Resistance (min) Insulation</b>	<b>LPCB Ref. No.</b>
RGB 2, 4, 6, 8 & RGB 180, 240 & 360	Cables	Concrete or masonry Floor	240	120	628a/01
	Steel pipe	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	240	60	
	Steel pipes	Concrete or masonry Wall	240	60	
RGO 2, 4, 6, 8 & RGO 180, 240 & 360	Cables	Concrete or masonry Floor	240	120	628a/02
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	240	60	

**PART 1: SECTION 8****PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS**

Product Name	Use	Element of Construction	Fire Resistance (min) Integrity	Fire Resistance (min) Insulation	LPCB Ref. No.
RGP 50, 70, 100, 150, 200 & 300	Steel pipes	Concrete or masonry Wall	240	60	628a/03
	Cables	Concrete or masonry Floor	360	120	
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	360	120	
RGPO 50, 70, 100, 150, 200 & 300	Steel pipes	Concrete or masonry Wall	240	60	628a/04
	Cables	Concrete or masonry Floor	360	120	
	Steel pipes	Concrete or masonry Floor	240	60	
	Cables	Concrete or masonry Wall	360	120	
	Steel pipes	Concrete or masonry Wall	240	60	

Note:

1. Please refer to manufacturer's product data for maximum aperture sizes and installation details.

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Certificate No: 022f to BS 476: Part 24: 1987

**FirePro™ Fire Duct Systems**

Product Name	Duct Type	Condition	Maximum Duct Size (ht x wt) (mm)	Insulation Thickness (mm)	Fire Resistance Integrity (min)	Fire Resistance Insulation (min)	LPCB Ref. No.
FirePro™ Fire Duct Systems	Ventilation vertical orientation	Fire Outside	1000 x 1000	25	30	30	022f/01
	Ventilation vertical orientation	Fire Outside	1000 x 1000	30	60	60	
	Ventilation vertical orientation	Fire Outside	1500 x 1500	50	90	90	
	Ventilation vertical orientation	Fire Outside	1500 x 1500	70	120	120	
	Ventilation vertical orientation	Fire Outside	1525 dia.	25	30	30	
	Ventilation vertical orientation	Fire Outside	1525 dia.	30	60	60	

# **PART 1: SECTION 8**

## **PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS**

<b>Product Name</b>	<b>Duct Type</b>	<b>Condition</b>	<b>Maximum Duct Size (ht x wt) (mm)</b>	<b>Insulation Thickness (mm)</b>	<b>Fire Resistance Integrity (min)</b>	<b>Fire Resistance Insulation (min)</b>	<b>LPCB Ref. No.</b>
	Ventilation vertical orientation	Fire Outside	1525 dia.	50	90	90	
	Ventilation vertical orientation	Fire Outside	1525 dia.	70	120	120	
	Ventilation horizontal orientation	Fire Outside	1000 x 1000	25	30	30	
	Ventilation horizontal orientation	Fire Outside	1500 x 1500	40	60	60	
	Ventilation horizontal orientation	Fire Outside	1200 x 1200	70	90	90	
	Ventilation horizontal orientation	Fire Outside	1000 x 1000	90	120	120	
	Ventilation horizontal orientation	Fire Outside	1525 dia.	25	30	30	
	Ventilation horizontal orientation	Fire Outside	1525 dia.	40	60	60	
	Ventilation horizontal orientation	Fire Outside	1525 dia.	70	90	90	
	Ventilation horizontal orientation	Fire Outside	1525 dia.	90	120	120	
	Ventilation vertical orientation	Fire Inside	1000 x 1000	25	30	30	
	Ventilation vertical orientation	Fire Inside	1000 x 1000	30	60	60	
	Ventilation vertical orientation	Fire Inside	1500 x 1500	50	90	90	
	Ventilation vertical orientation	Fire Inside	1500 x 1500	70	120	120	
	Ventilation vertical orientation	Fire Inside	1525 dia.	25	30	30	
	Ventilation vertical orientation	Fire Inside	1525 dia.	30	60	60	
	Ventilation vertical orientation	Fire Inside	1525 dia.	50	90	90	
	Ventilation vertical orientation	Fire Inside	1525 dia.	70	120	120	
	Ventilation horizontal orientation	Fire Inside	1000 x 1000	25	30	30	
	Ventilation horizontal orientation	Fire Inside	1500 x 1500	40	60	60	
	Ventilation horizontal orientation	Fire Inside	1200 x 1200	70	90	90	
	Ventilation horizontal orientation	Fire Inside	1000 x 1000	90	120	120	
	Ventilation horizontal orientation	Fire Inside	1525 dia.	25	30	30	

# PART 1: SECTION 8

## PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS

Product Name	Duct Type	Condition	Maximum Duct Size (ht x wt) (mm)	Insulation Thickness (mm)	Fire Resistance Integrity (min)	Fire Resistance Insulation (min)	LPCB Ref. No.
	Ventilation horizontal orientation	Fire Inside	1525 dia.	40	60	60	
	Ventilation horizontal orientation	Fire Inside	1525 dia.	70	90	90	
	Ventilation horizontal orientation	Fire Inside	1525 dia.	90	120	120	
	Smoke Outlet vertical orientation	Fire Outside	1000 x 1000	25	30	30	
	Smoke Outlet vertical orientation	Fire Outside	1000 x 1000	30	60	60	
	Smoke Outlet vertical orientation	Fire Outside	1500 x 1500	50	90	90	
	Smoke Outlet vertical orientation	Fire Outside	1500 x 1500	70	120	120	
	Smoke Outlet vertical orientation	Fire Outside	1525 dia.	25	30	30	
	Smoke Outlet vertical orientation	Fire Outside	1525 dia.	30	60	60	
	Smoke Outlet vertical orientation	Fire Outside	1525 dia.	50	90	90	
	Smoke Outlet vertical orientation	Fire Outside	1525 dia.	70	120	120	
	Smoke Outlet horizontal orientation	Fire Outside	1000 x 1000	25	30	30	
	Smoke Outlet horizontal orientation	Fire Outside	1500 x 1500	40	60	60	
	Smoke Outlet horizontal orientation	Fire Outside	1200 x 1200	70	90	90	
	Smoke Outlet horizontal orientation	Fire Outside	1000 x 1000	90	120	120	
	Smoke Outlet horizontal orientation	Fire Outside	1525 dia.	25	30	30	
	Smoke Outlet horizontal orientation	Fire Outside	1525 dia.	40	60	60	
	Smoke Outlet horizontal orientation	Fire Outside	1525 dia.	70	90	90	

# PART 1: SECTION 8

## PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS

Product Name	Duct Type	Condition	Maximum Duct Size (ht x wt) (mm)	Insulation Thickness (mm)	Fire Resistance Integrity (min)	Fire Resistance Insulation (min)	LPCB Ref. No.
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Outside	1525 dia.	90	120	120	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1000 x 1000	25	30	30	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1000 x 1000	30	60	60	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1500 x 1500	50	90	90	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1500 x 1500	70	120	120	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1525 dia.	25	30	30	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1525 dia.	30	60	60	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1525 dia.	50	90	90	
Smoke Outlet vertical orientation	Smoke Outlet	Fire Inside	1525 dia.	70	120	120	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1000 x 1000	25	30	30	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1500 x 1500	40	60	60	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1200 x 1200	70	90	90	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1000 x 1000	90	120	120	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1525 dia.	25	30	30	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1525 dia.	40	60	60	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1525 dia.	70	90	90	
Smoke Outlet horizontal orientation	Smoke Outlet	Fire Inside	1525 dia.	90	120	120	
Kitchen Extract	Kitchen Extract	Fire Outside	1500 x 1500	40	30	30	

# PART 1: SECTION 8

## PRODUCTS ASSESSED FOR USE IN SURFACE AND SUB SURFACE TRANSPORT APPLICATIONS

Product Name	Duct Type	Condition	Maximum Duct Size (ht x wt) (mm)	Insulation Thickness (mm)	Fire Resistance Integrity (min)	Fire Resistance Insulation (min)	LPCB Ref. No.
	Kitchen Extract	Fire Outside	1000 x 1000	90	60	60	

Certificate No: 22b to LPS 1132: Issue 4

### *FirePro™ Acoustic Intumescent sealant*

Product Name	Element of Construction Orientation	Element of Construction Thickness (mm)	Element of Construction Material	Maximum Joint Width (mm)	Configuration: Fire Side Depth of Sealant (mm)	Configuration: Backing Material	Configuration: Non-fire Side Depth of Sealant (mm)	Fire Resistance (min) Integrity (E)	Fire Resistance (min) Insulation (I)	LPCB Ref. No.
FirePro™ Acoustic Intumescent Sealant	floor	230	AC/AC	50	25	Ethafoam Ø 50mm		155	105	022b/05
	floor	230	Softwood/AC	25	12	Ethafoam Ø 30mm		51	44	
	floor	230	Hardwood/AC	50	25	Ethafoam Ø 50mm		47	47	
	floor	230	Steel/AC	50	25	Ethafoam Ø 50mm		72	62	
	floor	250	AC/AC	30	15	Ethafoam Ø 40mm		243	65	
	floor	250	AC/AC	15	10	Ethafoam Ø 25mm		243	29	
	floor	250	AC/AC	20		Polyethylene Ø 20mm	10	155	47	
	floor	250	AC/AC	50		Polyethylene Ø 50 x 25mm	25	240	92	
	floor	250	AC/AC	10		Polyethylene Ø 10mm	6	240	207	
	floor	250	AC/AC	25		Polyethylene Ø 25mm	15	240	73	
	floor	250	Hardwood/AC	15	10	Ethafoam Ø 15mm		53	53	
	floor	250	Steel/AC	15	10	Ethafoam Ø 25mm		243	29	
	wall	150	AC/AC	30	30	Polyethylene 30 x 15	30	265	265	
	wall	150	AC/AC	15	15	Polyethylene 15 x 15	15	265	230	
	wall	150	AC/AC	10	10	Polyethylene 10 x 15	10	265	265	
	wall	150	AC/AC	10	10	Polyethylene 10 x 15		200	166	
	wall	150	AC/AC	15	15	Polyethylene 15 x 15		227	227	
	wall	150	AC/AC	30	30	Polyethylene 30 x 15		240	233	
	wall	200	AC/AC	50	25	Ethafoam Ø 50mm		245	82	
	wall	200	Hardwood/AC	50	25	Ethafoam Ø 50mm		96	93	
	wall	200	Softwood/AC	25	12	Ethafoam Ø 30mm		55	54	
	wall	200	Steel/AC	50	25	Ethafoam Ø 50mm		77	39	
	wall	215	AC/AC	30	15	Ethafoam Ø 40mm		243	44	
	wall	215	AC/AC	15	10	Ethafoam Ø 25mm		243	29	
	wall	215	Hardwood/AC	15	10	Ethafoam Ø 25mm		40	29	
	wall	215	Steel/AC	15	10	Ethafoam Ø 25mm		243	16	
	wall	250	AC/AC	20		Polyethylene Ø 20mm	10	240	122	
	wall	250	AC/AC	40		Polyethylene Ø 40mm	20	240	95	
	wall	250	AC/AC	10		Polyethylene Ø 10mm	10	240	240	
	wall	250	AC/AC	25		Polyethylene Ø 25mm	20	240	126	

Note:

AC – Aerated Concrete.

Ethafoam – Open cell polyethylene foam rod

Please refer to Rockwool installation instructions for further details

## **PART 1: SECTION 9**

### **FIRE PROTECTED TIMBER STAIRS**

The timber escape stairs listed in this section are assessed against the requirements of Scheme Document SD 198 which details the requirements of the approval and certification process, and BD2569 Fire Performance of Escape Stairs Guidance Document which details the method of test and assessment for escape stairs based on a realistic fire scenario. The procedure consists of a fire test to evaluate the reaction-to-fire performance of the stair assembly and a subsequent load test to evaluate the structural performance of the stair assembly following a fire incident. The scheme applies only to stairs used in:

- Single occupancy dwellings
- Communal areas in blocks of flats
- Areas where people may congregate as defined in Table 1 of BS 6399-13.

This approval scheme is run in partnership with the British Woodworking Federation (BWF).

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Certificate No: 1023a to SD198 (Appendix B11)/BD2569

#### ***Jeld-Wen Fire Protected Stair***

<b>Product Name</b>	<b>LPCB Ref. No.</b>
Jeld-Wen Fire Protected Stair	1023a/02
	1023a/08

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)



The products listed in this section are approved to:-

LPS 1158: Requirements and tests for fire resistant glazing systems

This Standard details the requirements for the certification of fire resisting glazing.

Fire resisting glazing systems consist of one or more transparent or translucent panes with a suitable method of mounting, with e.g. frames, seals and fixing materials, capable of satisfying the appropriate fire resistance criteria.

It is applicable to both insulating and non-insulating glass/glazing systems having fire resistances of Up to 240 minutes in either horizontal and/or vertical orientations.

The applicable test standards are:-

- BS 476: Part 20
- EN 1364 Part 1

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**Certificate No: 1406a to LPS 1158**

<b>Product Name</b>	<b>LPCB Ref. No.</b>
ALUFIRE EI30	1406a/01
ALUFIRE EI60	1406a/02
ALUFIRE EI120	1406a/03
ALUFIRE Vision Line EI30	1406a/04
ALUFIRE Vision Line EI60	1406a/05

A copy of the certificate, confirming the full scope of approval including notes relating to the superscript references in the above table, may be viewed online by clicking on the certificate link in the associated entry on [www.RedBookLive.com](http://www.RedBookLive.com)