



LORIENT

Regulatory Reform (Fire Safety) Order 2005

Common sense solutions
for acoustic, smoke
and fire containment



LORIENT

Lorient Polyproducts Ltd
Endeavour House
Fairfax Road
Heathfield Ind Est
Newton Abbot
Devon TQ12 6UD
UK

What is the RRO?

The Regulatory Reform (Fire Safety) Order 2005 came into effect on 1st October 2006. This new law for England and Wales transfers the responsibility for Fire Safety from the fire authorities to whoever has day-to-day control of building premises.

This person must take steps to reduce the risk from fire; consider how to contain a fire should one break out and then also ensure people can safely escape.

Where does it apply?

The order applies to virtually all premises and covers nearly every type of building, structure and open space. For example it applies to:

- Premises that provide care, including care homes and hospitals
- Community halls, places of worship and other community premises
- The shared areas of properties occupied by several households
- Pubs, clubs and restaurants
- Schools and sports centres
- Tents and marquees
- Hotels and hostels
- Factories and warehouses

It does not apply to people's private homes, including individual flats in a block or a house.

Who is responsible for meeting the Order?

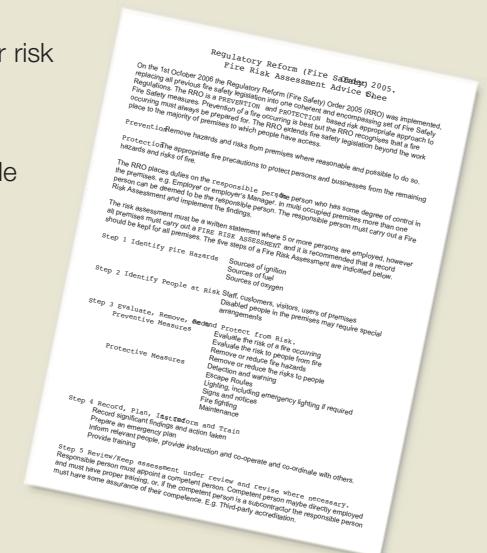
Under the Order, anyone who has control of premises or anyone who has a degree of control over certain areas or systems may be considered a 'responsible person'. For example, it could be:

- Employer with control of a workplace, failing that or in addition;
- Person with overall management of a building,
- Owner of premises (i.e. empty buildings),
- Landlords (multi-occupied buildings).

What action must be taken?

A building manager must know the building well; know how it is to be used; assess, identify and where appropriate reduce fire risk; organise maintenance and above all, monitor and train the building users. A fire Risk Assessment must be undertaken including;

- Identification of those at particular risk
- Elimination / reduction of risk
- Dealing with remaining risk
- Addressing explosive or flammable substances
- Creating an emergency plan
- Record and review the fire Risk Assessment to ensure it is up-to-date



Complete Solutions for Approved Documents E, B and M

Fire doors and all passive fire protection products play a unique role in the fire safety of a building and therefore in reducing risk to those in other compartments. Properly maintained doors form an essential element of the fire safety plan for every building.

The Lorient solution is to fit a seal system which, properly located and secured, prevents the passage of sound, smoke and fire – meeting the demands of the new and changing regulations that place even more requirements than ever on doors.

- **Approved Document E** to the Building Regulations (England and Wales) calls for doors in multiple occupancy residential buildings (such as apartments, hotels and halls of residence) to provide a minimum acoustic performance of 29dB Rw. In schools, the requirement is a minimum of 30dB Rw, and in some cases 35dB Rw.
- Many of these doors also need to provide smoke and fire protection, as detailed in **Approved Document B**, and BS5588.
- **Approved Document M** relates to access for all, and requires doors to be easy to operate. Door seals must provide a minimal resistance to opening and closing forces.



Threedom®

The Lorient range centres on a unique collection of seals, which can provide the highest standard of protection against acoustics (Doc E); smoke at all temperatures and fire (Doc B); while offering low frictional resistance for ease of operation (Doc M). Lorient products are designed with all the above requirements in mind and are tested for durability; many achieving over 1,000,000 cycles on full size door assemblies without failure. Lorient's complete solutions provide an integrated approach meeting the requirements of Approved Documents E, B and M; offering complete peace of mind – **Threedom®**.

Basic principles of good sealing require a continuous seal. Interrupting a door seal at hinges, locks or other ironmongery can seriously reduce its effectiveness and may mean that regulatory requirements will not be met. Studies of sound and smoke behaviour clearly show that it is **not sufficient to seal only the tops and sides of doors.**

Both cold smoke and sound will transfer to an adjacent compartment through the gap at the threshold. Lorient can supply a range of threshold seals which will provide protection against sound, and when coupled with an effective perimeter seal will meet the requirements of Approved Document E.



Threedom® Sealing Solutions

The following two pages present a number of integrated sealing solutions for single swing, 30 minute applications that:

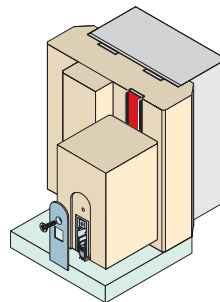
- Exceed the Approved Document E requirements achieving 31dB Rw or above (where stated)
- Successfully meet the fire and smoke sealing requirements of Approved Document B
- Provide less friction for even easier door operation – Approved Document M, courtesy of their unique design
- Tested for durability – 1 million cycles on a full sized door assembly

LP1504DS & IS8010 si FD30S Single Leaf/Single Swing

Lorient product references	Location
LP1504DS (or LP1504 Finesse™)	Head, latch stiles, hinge stiles
IS8010 si	Threshold
LP2004 (x2)	Back of frame

Acoustic performance for system shown:

Rw = 31dB STC = 31dB

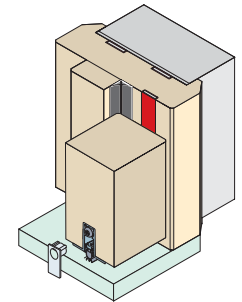


LP1504 & IS1212 & IS8005 si FD30S Single Leaf/Single Swing

Lorient product references	Location
LP1504 (or LP1004) plus Batwing® IS1212	Head, latch stiles, hinge stiles
IS8005 si	Threshold
LP2004 (x2)	Back of frame

Acoustic performance for system shown:

Rw = 31dB STC = 31dB

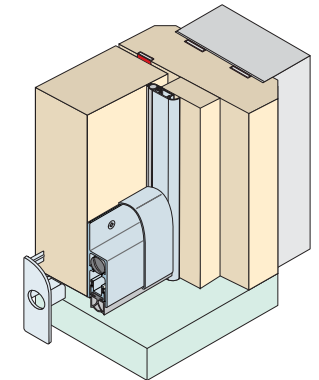


LP1504 & IS7020 si & IS8091 si FD30S Single Leaf/Single Swing

Lorient product references	Location
LP1504 plus IS7020 si	Head, latch stiles, hinge stiles
IS8091 si	Threshold
LP2004 (x2)	Back of frame

Acoustic performance for system shown:

Rw = 31dB STC = 31dB

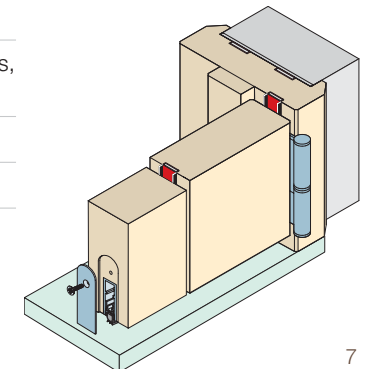


LP1504DS x 2 & IS8010 si FD30S Double Leaf/Single Swing

Lorient product references	Location
LP1504DS (or LP1504 Finesse™)	Head, hinge stiles, meeting stiles
IS8010 si	Threshold
LP2004 (x2)	Back of frame

Acoustic performance for system shown:

Rw = 32dB STC = 32dB



Simple Upgrading Solutions

Perimeter Seals



The DS seal – offers the ultimate in acoustic, smoke and fire protection

- Unique dual fins provide continuous acoustic and smoke protection at ironmongery points – vital for life safety and essential for meeting the acoustic requirements of Approved Document E
- Co-extruded elastomeric fins provide low frictional resistance
- Successfully tested for acoustic, smoke and fire containment
- Third party accreditation; BBA and CERTIFIRE (CF330/CF341)



Curved Fin Batwing®

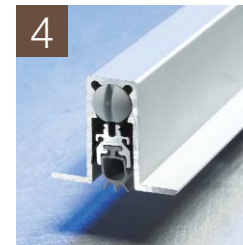
- Subtle curved fin design minimises open/close resistance
- Can be fitted without removing the door
- Offers a proven acoustic performance to meet the requirements of Document E, when used with a recommended threshold seal
- Effective smoke seal up to 200°C
- CERTIFIRE approved (CF136)



IS7020 si Perimeter Seal

- Acoustic and smoke seal designed to be fitted to an existing door stop
- Tamper-proof seal with snap-on cover plate to conceal fixings
- Offers a proven acoustic performance to meet the requirements of Document E
- CERTIFIRE approved (CF136)

Threshold Seals / Door Bottoms



IS8005 si Automatic Threshold Seal

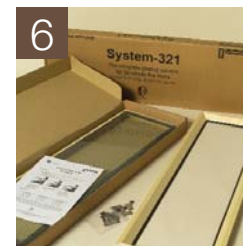
- Slimline automatic threshold seal which lifts clear of the floor as soon as the door is opened by a few millimetres
- High efficiency mechanism results in lower operating forces
- Internal fins provide additional acoustic and smoke sealing properties
- CERTIFIRE approved (CF136)



IS8080 si Automatic Threshold Seal

- Face-fixed automatic threshold seal which lifts the seal clear of the floor as soon as the door is opened by a few millimetres
- High efficiency mechanism results in lower operating forces
- Successfully tested for acoustic and smoke containment
- Can be fitted without removing the door

Glazing



System-321

- The complete safe and efficient glazing solution for 30-minute doors, featuring a patented clip-together glazing system
- All components provided in one box
- Successfully fire tested in accordance with BS 476: Pt.22: 1987 and BS EN 1634-1: 2000
- CERTIFIRE approved (CF325)

For further information about our range of products, please visit www.lorientuk.com or contact our Technical Services Department on 01626 834252.

Rest Assured

Although the new Fire Safety Order stops short of making third party certification mandatory, it clearly states that **'Third-party certification schemes for fire protection products and related services are an effective means of providing the fullest possible assurances, offering a level of quality, reliability and safety that non-certificated products may lack.'**

Why leave it to chance?

It is not to be ignored!

Every year, some 500 people are killed and 14,000 injured in fires, many of the casualties being attributable to breathing in the toxic products of combustion from a remote fire. Fire and smoke also cause extensive damage to building fabric and contents. It has been estimated that the total value of fire related losses is some 2.52 billion per annum*.

*source: Department of Communities and Local Government, 2004

Ignoring your responsibilities could result in prosecution

Lorient products are supported with a **complete library of test evidence** to prove their exceptional performance. With **British Board of Agrément** and **CERTIFIRE** too, fitness-for-purpose and durability are assured. The Lorient commitment to these independent approvals demonstrates ongoing responsibility and accountability for the performance of the company's products, undertaken at the highest possible level.



If a fire occurs, and results in a casualty, the premise of the new law is that **you are guilty until you prove yourself innocent!** You will be asked to offer sufficient evidence that you have fulfilled your obligations effectively. Provided that you can do this, you will not be held accountable. If you can't then you can be prosecuted.

Further RRO Information

A series of guides is available to assist those preparing fire Risk Assessments. The guides, available from www.communities.gov.uk/fire/firesafety/firesafetylaw/ have been written for people with limited training and experience in undertaking a Risk Assessment. If you are unsure of how to complete it, you should contact a trained professional.

Ask the experts

Lorient provides a dedicated technical helpline that offers advice at the end of the 'phone, as well as product samples and copies of test reports. Alternatively, please refer to our comprehensive website, where information on all our featured solutions, plus much more, can be found.

For common sense solutions, please call our Technical Services helpline on: 01626 834252 or go to www.lorientuk.com

