

# Smoke Sealing Solutions for Service Enclosures in Exit Routes



**Retro-fit Solutions** 

### About us

Lorient has an international reputation for designing and manufacturing a wide range of innovative door sealing solutions for the containment of fire, smoke, sound and energy.

With 35 years of accumulated knowledge we pride ourselves on offering products that are designed to save lives, preserve property and enhance quality of life. We recognise our responsibility to create well-designed products that will perform; products which are durable and reliable, and which genuinely improve the buildings they protect. By doing so, we can play our part in improving life safety, amenity and reducing building damage and loss.



## Sealing requirements in exit routes

It is an unfortunate fact that there are many service enclosures installed within exit routes of buildings that are commonly identified as having inadequate or inappropriate smoke seals.

In many instances this widespread problem is identified during an annual fire audit, routine maintenance inspection or initial construction installation certification.

These enclosures often contain equipment such as electrical meters, distribution panels, switchboards, telecommunication / data racks, motors and other electrical equipment.

In the event of a fire it is critical that these enclosures contain smoke to ensure egress routes remain clear and tenable.

These enclosures can now be quickly and economically upgraded with a seal that is designed to limit the spread of fire and associated smoke generation.





Right image: shows LAS1602BB seal before and after exposure to elevated temperature

Middle image: supplied with kind permission of FDIS

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## Regulatory Requirements

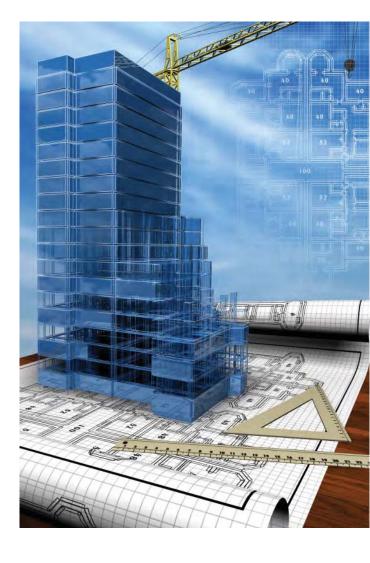
Section D of the Building Code of Australia (BCA) regulates the requirements for 'Access and Egress' in buildings.

Section D.2 details the requirements for 'Construction of exits' to ensure paths of travel within a building continue to provide safe evacuation during an emergency.

Section D2.7 provides further guidance for 'Installations in exits and paths of travel' and written to maximise the safety of evacuating occupants by limiting the types of service that can be located in exits and paths of travel. It requires that:

- (a) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp.
- (b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit.
- (c) Gas or other fuel services must not be installed in a required exit.
- (d) Services or equipment comprising -
  - (i) Electricity meters, distribution boards or ducts; or
  - (ii) Central telecommunications distribution boards or equipment; or
  - (iii) Electrical motors or other motors serving equipment in the building, May be installed in—
  - (iv) a required exit, except for fire-isolated exits specified in (a); or
  - (v) in any corridor, hallway, lobby or the like leading to a required exit, if the services or equipment are enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure.

Ensuring an enclosure's construction is fire protective and non-combustible is achieved relatively easily via selection of materials such as fire resistant mineral board or formed



sheet steel. However ensuring that access doors and cabinet enclosures are effectively smoke sealed in an appropriate manner is more challenging.

Lorient offer a range of sealing solutions that are specifically designed for this application that contain smoke over a range of temperatures as well as limiting the spread of fire. These seals incorporate a flexible smoke sealing gasket as well as an integral intumescent fire sealing strip that expands in volume as its temperature reaches 160°C.

## **Approvals**

These seals are fire tested in accordance with AS1530.4: 2005 for up to 4 hours and approved for use on proprietary brands of fire door, and have supporting smoke leakage data when subjected to temperatures of 200°C.



## Lorient LAS1602BB









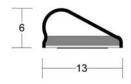




The **Lorient LAS1602BB** is a simple combined sealing solution. These advanced co-extruded seals comprise a high performance intumescent backing strip that incorporates a flexible bulb shaped smoke gasket.

The seal is simply applied in continuous lengths to the enclosure rebate and is retained in place with its own aggressive self-adhesive backing.

Being thin and flexible the strip is easily cut to length on site with scissors, allowing assemblies to be quickly upgraded.





## Key features of LAS1602BB

- All in-one combined smoke / fire sealing solution
- Simple primary or retro-fit installation
- Water resistant high performance intumescent material
- Smoke protection over a full range of temperatures including those associated with fire.
- Ideal for access panels, service and electrical enclosures.

#### Sizes

 1m and 2.1m lengths (lengths can be trimmed on-site to suit door dimension).

#### Colours

Black.





## Lorient LAS1602AF









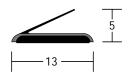






The Lorient LAS1602AF is a simple combined sealing solution. These advanced co-extruded seals comprise a high performance intumescent sealing strip that incorporates a high performance intumescent backing strip, incorporating a flexible sealing fin.

The seal is simply applied in continuous lengths to the door frame rebate, and is retained in place with its own aggressive self-adhesive backing. Being thin and flexible the strip is easily cut to length on site with scissors, allowing assemblies to be quickly upgraded.





## Key features of LAS1602AF

- All in-one combined smoke / fire sealing solution
- Simple primary or retro-fit installation
- Water resistant high performance intumescent material
- Smoke protection over a full range of temperatures including those associated with fire
- Ideal for access panels, service and electrical enclosures.

#### Sizes

- 1m, 2.1m, 2.75m
- 50m rolls (lengths can be trimmed on-site to suit door dimension).

#### Colours

Black.

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#### www.lorient.com.au

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in /company/lorient

Lorient Pty Ltd

+61 (02) 9907 6221 +61 (02) 99076152 Fax: email: sales@lorient.com.au

www.lorient.com.au

Acoustic, Smoke & Fire Containment Systems



Lorient Pty Ltd Unit D15, 1 Campbell Parade Manly Vale NSW 2093 Australia