

FyreBox

Multi-Service Cable Transit

Protecting clusters of electrical, data, comms cables, cable trays, conduit and metal pipes from fire and smoke

Tested to AS1530.4 (2014)



Technical Data Sheet

Proven Passive Protection

Available from



www.potters.co.nz
0800 POTTERS | info@potters.co.nz
Auckland, Wellington + Christchurch

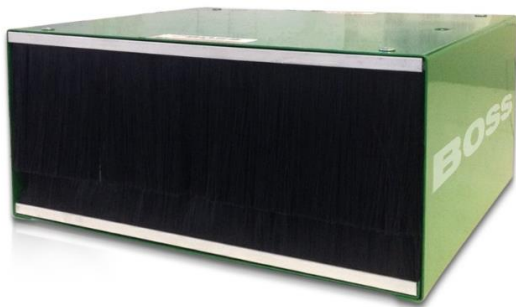


KEY BENEFITS

- Provides all typical apartment services 2hrs protection from fire and smoke
- Lowers installation cost of apartment firestopping
- Requires just a single firestop installer to guarantee compliance across all services
- Simple installation method, saves times and cost
- Makes AS1851 periodic maintenance inspections simple and reliable
- Services can be easily added or removed after installation, without removing the FyreBox or compromising existing services
- Saves space in tight areas, such as above doorways at apartment entries
- See MORE BENEFITS below



INTRODUCTION



The new generation of the BOSS FyreBox is now tested and approved for over 120 minutes on the full range of mixed services used in high rise apartment construction.

Designed to allow multiple services to all pass through one single, fire rated enclosure, the BOSS FyreBox is the only tested and proven method of protecting the full range of apartment services through a 2hr single aperture. Services that can be installed clustered together include:

- Steel sprinkler pipe up to 38mm
- Copper pipe up to 25mm
- uPVC / NBN conduit up to 25mm
- Multiple PEX pipes for water supply and return
- PEX-AL gas pipe
- Copper insulated paircoil up to 9.5mm/16mm
- Mains cables up to 10mm²
- TPS multicore power cables up to 2.5mm²
- Security cable
- EWIS cable
- Intercom
- CAT6 data cable
- MATV coax cable

HOW DOES IT WORK?

The BOSS FyreBox Multi-Service Cable Transit consists of an advanced intumescent and high performance fire seal, coupled with BOSS' unique design of smoke rated brushes to provide an industry-leading level of protection.

The BOSS FyreBox benefits from the same advanced intumescent technology as the best-in-category BOSS FireMastic HPE intumescent sealant.

BENEFITS

- ✓ Tested & approved to AS1530.4
- ✓ Made in Australia
- ✓ Eliminates risk of sub-contractor installation errors on firestop measures
- ✓ Turnkey solution provides proven result for fire stopping all service types
- ✓ Provides an organised penetration system for all services
- ✓ Quick and easy to install – provides flexible pipe and cable routing
- ✓ Can be re-used repeatedly for additions and alterations to service penetrations
- ✓ Each unit is suitable for both cast-in or retro-fit applications
- ✓ Can easily be identified and located as a building's approved path for services penetrating a fire rated wall
- ✓ Locally designed and manufactured, with full after sales and technical support available

APPLICATION

Suitable for any building or apartment block where all services penetrate a fire rated wall.

- Telecom
- Security
- Intercom
- NBN
- Steel Sprinkler Pipe
- Copper Gas / Water Pipe
- PEX and PEX-AL Pipe
- Emergency Warning and Intercommunication System (EWIS) Cable
- Air Conditioning Lagged Copper Pipes and Cable
- Power Cables

CERTIFICATION

FRL: -/120/120

Standard: Tested to AS1530.4 (2014)

Wall Structures

The BOSS FyreBox is tested and approved to AS1530.4 (2014) on the following substrates:

- plasterboard walls
- AAC, Masonry, and Block walls of a minimum 124mm thickness



Exova Test – Non Fire Side



FyreBox 150mm and 300mm after successfully passing a 120minute AS1530.4 Fire Resistance test at Exova Melbourne. The images show the intumescent seals inside the FyreBox expand and completely seal around the services passing through the box

INSTALLATION

Slab Mount

1. Measure and mark the location of the proposed Fire Wall and mark the position where the FyreBox to be mounted on the underside of the slab/soffit. Ensure that the FyreBox is centred at the Fire Wall, ie - ensure the centreline of FyreBox straddles the centreline of the Fire Wall. (Figure 1)



Figure 1

2. Ensure there is adequate space on both sides of the Fire Wall, immediately in front and behind the FyreBox, to install cable or pipe hangers to the underside of the slab. It is important that all penetrating services are supported independently of the FyreBox.

3. Remove the bottom lid from the FyreBox and install the body of the FyreBox onto the soffit, using suitable all-steel fasteners through the clearance holes provided in the body. Ideal fasteners are 6.5mm masonry anchors that do not contain plastics or alloys and are suitably rated for fire stopping installations. (Figure 2)

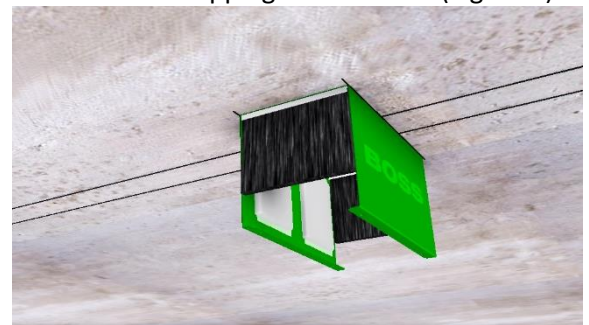


Figure 2

INSTALLATION FOR SLAB MOUNT (CONT)

4. Install the services through the FyreBox, ensuring that each service sits at least 20mm above the lid flanges. This will allow adequate room to install the lid later in the process (Figure 3). The optional Service Support Trapeze is available to help with heavy services or a fully-loaded FyreBox. To install the trapeze, simply insert the threaded hanging rods through the bar and screw into the threaded fixings in the top of the FyreBox. This will help maintain clearance from the bottom to allow for easy lid installation.

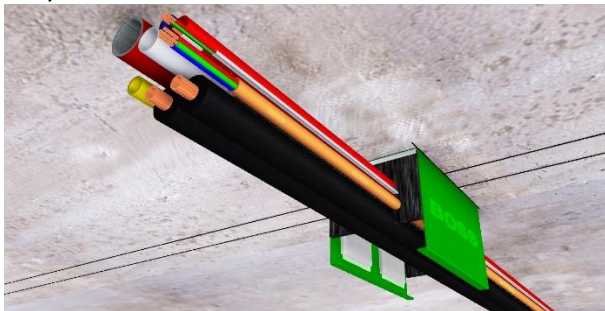


Figure 3

5. Install the lid by resting it on the flanges and sliding it into place. The Smoke Brushes will shape themselves around the penetrating services and when closed, the Smoke Brushes can easily be tucked into place by hand. Secure the lid using the four thumb screws provided. (Figure 4)

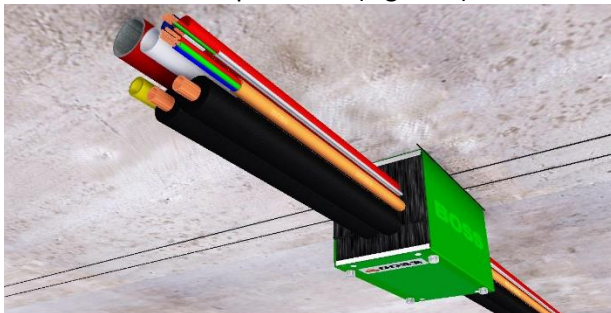


Figure 4

6. Install wall framing around the FyreBox. (Figure 5) The FyreBox does not need to be attached to the wall framing.



Figure 5

7. Complete the wall lining installation. (Figure 6)



Figure 6

8. Mask the wall and FyreBox if an aesthetic finish is required. Seal between the wall surfaces and perimeter of the FyreBox with a bead of **BOSS FireMastic-300** sealant. This bead does not need to be any larger than 20mm. (Figure 7)



Figure 7

9. The insulation rating of the penetrating services can be increased to 120 minutes by wrapping the services with **BOSS P40 MAK-Wrap** on both sides of the wall and securing with steel cable ties or wire. In this case, one layer of P40 MAK-Wrap is required, butted up to the Smoke Brushes. The P40 MAK-Wrap does not need to penetrate the FyreBox enclosure, and should extend along the services 300mm from the end of the FyreBox. (Figure 8)



Figure 8

INSTALLATION

Mid Wall

1. Identify the proposed installation position of the FyreBox, ensuring that the location does not interfere with stud and noggings positions.
2. Cut an aperture in the wall sheeting, slightly larger than the width and height of the FyreBox. Insert the FyreBox into the aperture to a central position, so that FyreBox protrudes the wall equally on both sides.
3. Seal the gap between the wall and the FyreBox with **BOSS FireMastic-300** fire rated sealant.
4. Install the flanged angle support bracket to the perimeter of the FyreBox, and only attach the flange to the wall via suitable all-steel fasteners. Do not screw fasteners into the FyreBox, as protruding screws may interfere with or damage the services.
5. Install services through the centre of the aperture in the FyreBox, carefully sliding them through the Smoke Brushes on the face of the FyreBox. Once the services are installed, the Smoke Brushes can be neaten and tucked into the FyreBox by hand.
6. To insulate the services, a 300mm wide blanket of **BOSS P40 MAK-Wrap** can be applied to the services by wrapping a single layer around the FyreBox and pipes and cables. This will provide up to 120min insulation on approved services.
7. Complete the wrapping of **BOSS P40 MAK-Wrap** by securing it with 2 x steel cables ties or binding wire. Cover with Aluminium Foil tape for a neat appearance.

HEALTH AND SAFETY

To learn more about the safe handling of the BOSS FyreBox Multi-Service Cable Transit, contact BOSS Fire at info@bossfire.com.au or 1300 502 677

LIMITATION

BOSS Fire & Safety Pty Ltd has provided the above technical information in good faith and to be best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Fire & Safety's attention relating to the fire resistance or performance of the product described, BOSS Fire & Safety reserve the right to amend this report.

BOSS Fire & Safety strive to constantly improve and developed products so this information may change without notice.

FURTHER TECHNICAL INFORMATION

For additional technical information on the performance of the BOSS FyreBox Multi-Service Cable Transit please contact our Technical Services team on:

Phone 1300 502 677
 Fax 1300 602 677
 Direct +612 9531 8591
 Email info@bossfire.com.au
 Web www.bossfire.com.au

ORDERING INFORMATION

Part ID	Description	Box Qty
BFB-300	BOSS FyreBox 300 x 150 x 270(depth) mm	1
BFB-150	BOSS FyreBox 150 x 150 x 270(depth) mm	1

Available from



www.potters.co.nz
 0800 POTTERS | info@potters.co.nz
 Auckland, Wellington + Christchurch

