

QUICK REFERENCE GUIDE

60min Plasterboard Systems

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Thankyou

Thankyou for purchasing or enquiring about the BOSS Fire Products. We manufacture our products to the highest quality standards, and we appreciate your supporting an Australian Owned company. If you have any feedback or questions relating to the product or it's designed purposes, please contact us on 1300 502 677 or +61 2 9531 8591 or info@bossfire.com.au.



Publication Version

This document may be superseded by newer versions. If you are unsure of whether or not this document is a current publication, please call us on 1300 502 677 or +61 2 9531 8591 or info@bossfire.com.au to confirm.

Introduction

This Quick Reference Guide is a document developed as a first reference for users to be able to determine if any of the below listed products might be suitable for their firestopping building application in Fire Rated Plasterboard Systems.

- **BOSS FireMastic-HPE™**
- **BOSS FyreBox™**
- **BOSS PenoPatch™**
- **BOSS P40-MAK Wrap**
- **BOSS MaxiCollars™**
- **BOSS FireMastic™**

This document must be read in conjunction with the appropriate Technical Data Sheets, Safety Data Sheets and relevant Test or Assessment report relative to the listed system. You must follow adhere to the items outlined in the Important Information section outlined below before specifying, installing or certifying any BOSS Fire products or systems.

Important Information

Fire separation is a critical part of life safety in building design and must be treated carefully. Follow the steps below to help ensure your installation is carried out correctly and compliantly.

1. Always read and understand the appropriate certification relevant to the listed system contained in this guide. Test and Assessment reports are available at bossfire.com.au. If you cannot access a copy of a particular report please contact BOSS Fire® to request a copy. If you do not understand it, then please contact BOSS Fire® for technical clarification on the details contained therein.
2. Ensure the Approved Applications detailed in the Test and/or Assessment report is applicable to your construction details or for further details on 'as-tested' systems contact BOSS Fire® on the details below.
3. All BOSS Products must be installed in accordance with the manufacturer's specifications & certification or be subject of a Performance Solution.
4. This Quick Reference Guide must be read in conjunction with the product test or assessment reports. Always read and understand these documents carefully.
5. Always check your relevant Building Regulations, local laws and AS/NZS Standards to properly understand your obligations.
6. Ensure you have an accredited Certifier or 3rd party compliance inspector to check your proposed system before installation. Pre-approval can help to save significant costs and delays and avoid non-compliance.
7. NOTE: This guide will be updated from time to time, and you must ensure they are reviewing the most recent version at the time of installation. Please visit the BOSS Fire® website (bossfire.com.au) to check for further updates or contact us on the below details.
8. If you don't understand anything contained in this guide and would like clarification, contact BOSS Fire® on the details below.

Contact Details

- **Phone Toll Free (AUS):** 1300 502 677
- **International:** +612 9531 8591
- **Email:** info@bossfire.com.au
- **Website:** bossfire.com.au

FireMastic-HPE™

FireMastic-HPE™ - Introduction

FireMastic-HPE™ is a graphite-based, High Pressure Exerting Fire Rated sealant used to reinstate the fire resistance performance of wall, floor & ceiling systems. Under heat, FireMastic-HPE™ will expand up to 40 times its volume and exerts pressure to the surrounding substrates leading to closure of the penetration. The integrity and insulation are then maintained by the stability of the remaining product char.

APPLICATIONS

- Use for a variety of different services:
 - Lagged Copper Pipes
 - A/C Paircoil Bundles
 - Combustible Pipes:
 - uPVC & DWV Pipes
 - cPVC Sprinkler Pipes
 - PEX water pipes
 - PEX-AL Gas Pipes
 - PP-R Pipes (Aquatherm)
 - Electrical Cable Bundles
 - Power Cables
 - Data & Comms Cables

KEY BENEFITS

- Long life and Paintable
- Fire Rating up to FRL -/240/240
- Easy gunning & tooling
- Lubrizol Compatible Sealant for cPVC Sprinkler Pipes
- Ultra-low VOC
- Packaging made from recycled materials



Table 1. FireMastic-HPE™ – Electrical - Power cables

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Power cable bundle	Bundle of 8 × 2.5 mm ² , 3 Core TPS cables	Sealant to depth of plasterboard in 10 mm annular gap finished flush	90 mm thick – 1 layer of 13 mm plasterboard both sides	-/60/60	CSIRO FSP 1791
Power cable bundle	8 × 2.5 mm ² 3 core power cables.	Sealant to depth of plasterboard in max. 60 mm aperture finished flush		-/60/60	WF FAS 190335
Power cable bundle	16 mm ² 2C+E power cables.	Sealant to depth of plasterboard in 24 mm aperture finished flush	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029
Power cable bundle	16 mm ² 2C+E power cables.	Sealant to depth of plasterboard in Max 3 mm annular gap with additional 15 mm × 15 mm fillet both sides		-/60/60	PF 23031
Power cable bundle	4 × 2.5 mm ² 2C+E TPS cable bundle.	Sealant to depth of plasterboard in 4.5-6mm annular gap with additional 15 mm × 15 mm fillet both sides		-/60/60	PF 23029
Power cable bundle	1- way installation. 4 × 2.5 mm ² 2C+E TPS cable bundle.	Sealant to depth of plasterboard in Max 4 mm annular gap finished flush to penetrated side		-/60/60	PF 23030

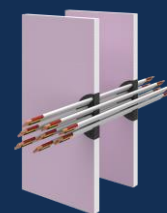


Table 2. FireMastic-HPE™ – Electrical - Comms / Data Cables

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Optical cable	Single core 5 mm OD NBN cable.	20 mm × 20 mm fillet on non-exposed side only OR exposed side only	90 mm thick – 1 layer of 13 mm plasterboard both sides	-/60/60	WF FAS 190335
Fire alarm cable	4 × 1.5mm ² 2C+E fire alarm cable bundle.	Sealant to depth of plasterboard in Max 2.5 mm annular gap finished flush both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23031
Communication cable bundle	2 × Cat6, 2 × COAX, 1 × security cable bundle.	Sealant to depth of plasterboard with Max 5.5 mm annular gap finished flush both sides. Max 26 mm aperture.		-/60/60	PF 23029
Communication cable bundle	2 × Cat6, 2 × COAX, 1 × security cable bundle.	Sealant to depth of plasterboard with Max 6 mm annular gap with additional 15 mm × 15 mm fillet both sides. Max 26 mm aperture.		-/60/60	PF 23029
Communication cable bundle	1-way installation. 2 × Cat6, 2 × COAX, 1 × security cable bundle.	Sealant to depth of plasterboard in Max 7.5 mm annular gap finished flush on penetrated side.		-/60/60	PF 23030

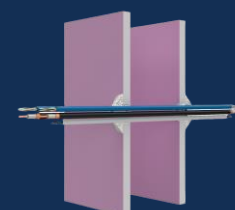


Table 3. FireMastic-HPE™ - Plumbing – cPVC pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
cPVC	Up to 32 mm	Sealant to depth of plasterboard in Max 6.5 mm annular gap with additional 15 mm × 15 mm fillet both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029
cPVC	Up to 40 mm	Sealant to depth of plasterboard in Max 7 mm annular gap with additional 15 mm × 15 mm fillet both sides		-/60/60	PF 23030

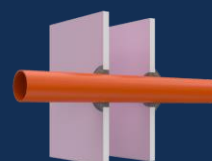


Table 4. FireMastic-HPE™ - Plumbing – uPVC pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
uPVC – NBN Conduit	25 mm	Sealant to depth of plasterboard in 6 mm annular gap with additional 15 mm × 15 mm fillet both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029
uPVC	1-way installation Up to 43 mm	Sealant to depth of plasterboard in 20 mm annular gap finished flush both sides		-/60/60	WF FAS 190335

Table 5. FireMastic-HPE™ - Plumbing – PVC pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
PVC	1-way installation 43 mm	Sealant to depth of plasterboard in 88 mm aperture finished flush	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	WF FAS 190335

Table 6. FireMastic-HPE™ - Plumbing - Plastic Pipes (PP / PP-R / HDPE / ABS / PE)

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
PE	40 × 3.7 mm	Sealant to depth of plasterboard in 20 mm annular gap with additional 10 mm × 10 mm fillet both sides	100 mm thick - 2 layers of 13 mm plasterboard both sides	-/30/30	WF FAS 190335

Table 7. FireMastic-HPE™ - PEX Pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
PEX	Up to 20 mm	Sealant to depth of plasterboard in 20 mm annular gap finished flush both sides	90 mm thick – 1 layer of 13 mm plasterboard both sides	-/60/60	CSIRO FSP 1791
PEX	Up to 20 mm	Sealant to depth of plasterboard in 20 mm annular gap finished flush both sides		-/60/60	WF FAS 190335
PEX	20 mm	150 mm x 150 mm plasterboard pattress secured over penetration on both sides and sealed to depth of plasterboard (26 mm) in annular gap finished flush on both sides. FireMastic-300™ applied to pattress edges		-/60/60	CSIRO FSP 1791
PEX	Up to 25 mm	Sealant to depth of plasterboard in 5.5 mm annular gap finished flush	118 mm thick - 1 layer of 13 mm plasterboard both sides OR 75 mm thick rigid walls, including: <ul style="list-style-type: none"> AAC/Hebel Speedpanel/Korok Concrete Masonry NOTE: Walls less than 118 mm may contain localised thickening using FR Plasterboard or BOSS Batts.	-/45/30	PF 23030
PEX	Up to 25 mm	Sealant to depth of plasterboard in Max 4.5 mm annular gap finished flush. Additional BOSS 32 mm MaxiCollar both sides.		-/60/60	PF 23030
PEX	Up to 20 mm	Sealant to depth of plasterboard in Max 6 mm annular gap finished flush		-/60/60	PF 23029
PEX	1-way installation Up to 20 mm	Sealant to depth of plasterboard in Max 5 mm annular gap finished flush to penetrated side		-/60/60	PF 23030
PE-Xa	1-way installation Up to 20 mm	Sealant to depth of plasterboard in 17.5 mm annular gap finished flush		-/90/90	WF FAS 190335
PE-Xa	1-way installation Up to 20 mm	Sealant to depth of plasterboard in 55 mm annular gap finished flush to penetrated side	118 mm thick – 1 layer of 13mm plasterboard both sides, with additional baffle of 13 mm plasterboard both sides and 12 mm plywood fixed to steel angles inside cavity to penetrated side	-/60/60	WF FAS 190335

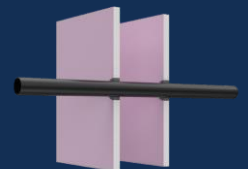


Table 8. FireMastic-HPE™ - Plumbing – PEX/AL/PEX pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
PEX/AL/PEX	Up to 20 mm	Sealant to depth of plasterboard in Max 20 mm annular gap with additional 15 mm x 15 mm fillet both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides OR 75 mm thick rigid walls, including: <ul style="list-style-type: none"> AAC/Hebel Speedpanel/Korok Concrete Masonry NOTE: Walls less than 118 mm may contain localised thickening using FR Plasterboard or BOSS Batts.	-/60/60	PF 23029
PEX/AL/PEX	Up to 20 mm	Sealant to depth of plasterboard in Max 5 mm annular gap both sides finished flush		-/60/60	PF 23029
PEX/AL/PEX	1-way installation Up to 20 mm	Sealant to depth of plasterboard in Max 5.5 mm annular gap both sides finished flush		-/60/60	PF 23031

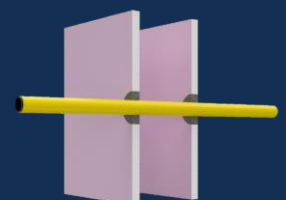


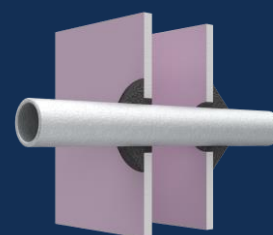
Table 9. FireMastic-HPE™ - HVAC Bundles

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Pair coil / uPVC drain / Cable bundle	1-way installation <ul style="list-style-type: none"> 6.35 mm / 9.52 mm insulated copper pipes with non-rated lagging, Up to 1.5 mm² 2C+E TPS power cable Up to 16 mm PVC flexible outlet pipe. 	Sealed to depth of plasterboard in 80 mm aperture finished flush on penetrated side	90 mm thick – 1 layer of 13mm plasterboard both sides. Second layer of plasterboard 150 mm x 150 mm over penetration	-/60/60	CSIRO FSP 1791
Pair coil / uPVC drain / Cable bundle	1-way installation <ul style="list-style-type: none"> 6.35 mm / 9.52 mm insulated copper pipes with non-rated lagging, Up to 1.5 mm² 2C+E TPS power cable Up to 16 mm PVC flexible outlet pipe. 	Sealed to depth of plasterboard in 80 mm aperture finished flush on penetrated side	90 mm thick – 1 layer of 13 mm plasterboard both sides	-/60/60	CSIRO FSP 1791
Pair coil / uPVC drain / Cable bundle	1-way installation <ul style="list-style-type: none"> Up to 6.35 mm / 9.52 mm insulated copper pipes with non-rated lagging, Up to 1.5 mm² 2C+E TPS power cable Up to 16 mm PVC flexible outlet pipe. 	Sealed to depth of plasterboard in annular gap finished flush on penetrated side		-/60/60	WF FAS 190335
Pair coil / uPVC drain / Cable bundle	<ul style="list-style-type: none"> 10mm/15mm Insulated Copper Pipes 2.5mm² 2Core+E TPS Power Cable 1.5mm² 2C Data Cable 20mm uPVC outlet pipe 	150 mm x 150 mm plasterboard pattress secured over penetration on both sides and sealed to depth of plasterboard (26 mm) in annular gap finished flush on both sides. FireMastic-300™ applied to pattress edges		-/60/60	FSP 1791
Power cables / Data & comms cables / Plastic pipes & Conduits / Pair coil	<ul style="list-style-type: none"> 1 × 15.5 mm + 9.5 mm pair coil with 19 mm + 17.5 mm insulation, 1 × TPS cable, 1 × Instrolex® control cable, 1 × 20 mm uPVC condensate drain. 	Sealed to depth of plasterboard in Max 6.5 mm annular gap with additional 15 mm × 15 mm fillet both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23031



Table 10. FireMastic-HPE™ - Metal Pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Steel	40 mm	Sealant to a depth of plasterboard in Max 8.5 mm annular gap with additional 30 mm × 30 mm fillet both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23031



BOSS FyreBox™

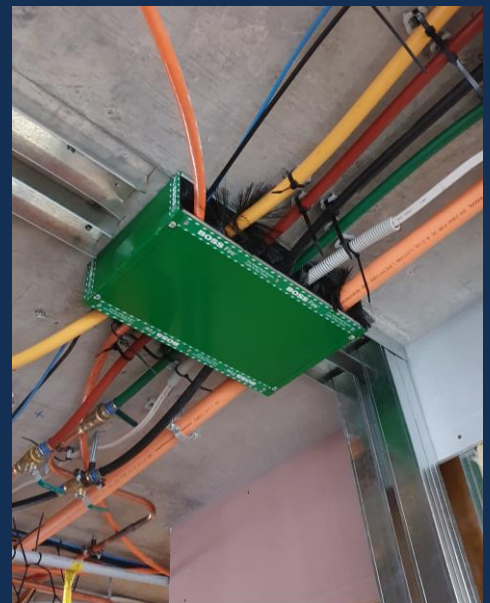
BOSS FyreBox™ - Introduction

The BOSS FyreBox™ is revolutionising firestopping methods for large bundles of mixed services. Designed to allow large bundles of pipes and cables to all pass through one single fire rated enclosure, the BOSS FyreBox™ is the only tested and proven method of firestopping multiple services with such simplicity of installation and ease of compliance. It is commonly used for apartment entry configurations above entry doors to apartments and sole occupancy units. The BOSS FyreBox™ is also suited for service risers, shafts, plant areas and data rooms in a variety of residential, commercial, and industrial buildings.

Take the risk out of your install and ensure compliance every time by choosing the **FyreBox™** the most efficient and price effective system for multi bundled services.

APPLICATIONS

- Steel Sprinkler Pipes
- Copper Gas / Water Pipes
- uPVC & cPVC Pipes
- PEX & PEX-AL Water & Gas Pipes
- Air Conditioning Lagged Copper Pipes / Paircoil
- Lagged & Unlagged PE-RT or PE-RT Kelox Pipes
- Power Cables
- Mains Cables
- uPVC Conduits
- Data / Comms Cables – NBN, CAT6, CAT5E, CAT7
- Coax Cables – CATV / MATV / SMATV
- Security, LAN, Fig 8, Fibre Optic, EWIS & Speaker



KEY BENEFITS

- Up to 4hr Fire Ratings
- Up to Rw50 acoustic performance
- Approved for walls, floors & ceiling systems.
- Wide variety of services and mixed service combinations.
- Saves up to 90% of labour costs.
- Makes AS1851 periodic maintenance inspections simple and reliable.
- Future proofing - Services can be easily added after installation.
- Tested & approved to AS1530.4:2014 and AS4072.1-2005.
- Eliminates compliance risks.
- Large variety of electrical, plumbing & HVAC services certified.
- Drastically lowers total cost of apartment firestopping.



P40-MAK Wrap

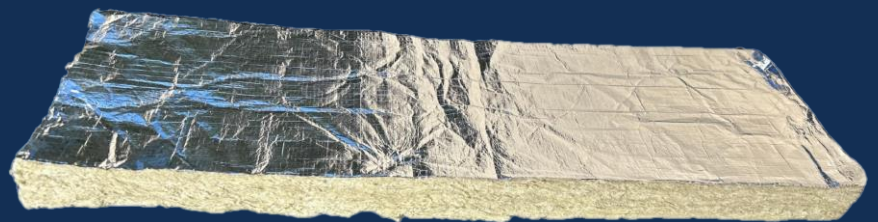
BOSS P40-MAK Wrap – Introduction

The **BOSS P40-MAK Wrap** is designed to provide a simple and effective method for increasing the insulation rating of thermally conductive service penetrations through fire walls and floors.

It consists of medium density mineral fibre insulation, lined on one face with reinforced aluminium foil backing. When used in conjunction with other high performance penetration seals, BOSS P40-MAK Wrap will increase the insulation rating of the installed system up to 240 minutes. BOSS P40-MAK Wrap is lightweight, easy to handle and simple to install.

APPLICATIONS

- Steel, Copper & Iron Pipes
- Insulated Steel, Copper & Iron Pipes
- Mains Power Cables
- TPS & Orange Circular Power Cables
- Data & Comms Cables
- Cable Trays
- Sprinkler Pipes
- Steel Purlins



KEY BENEFITS

- Provides excellent insulation to services penetrating fire walls and doors.
- Lightweight, flexible, and easy to install.
- Provides up to 4hrs insulation with a single layer.
- Cost effective wrapping system.
- Foil backing increases strength and covers exposed fibres.
- Approved to multiple international standards, including AS1540.4:2014 and AS4072.1-2005.

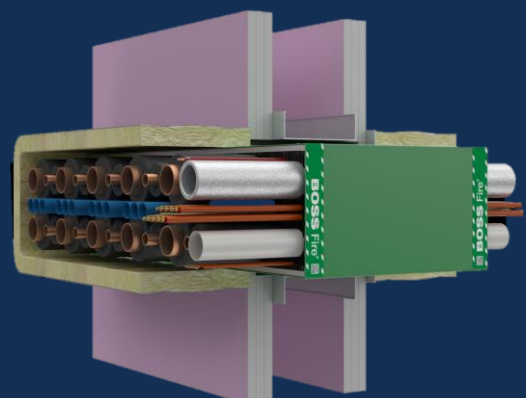
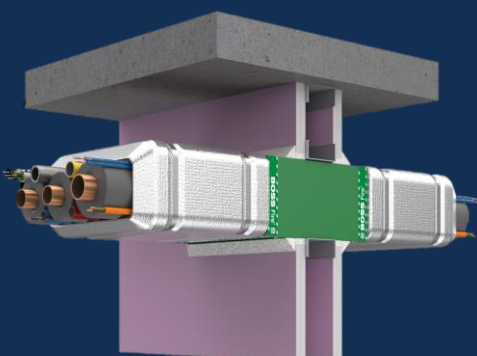
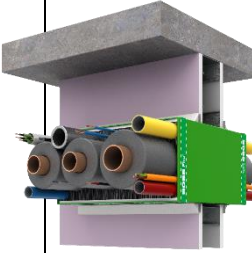
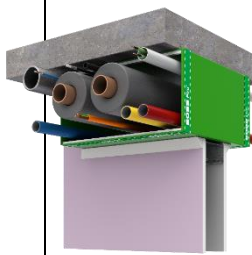
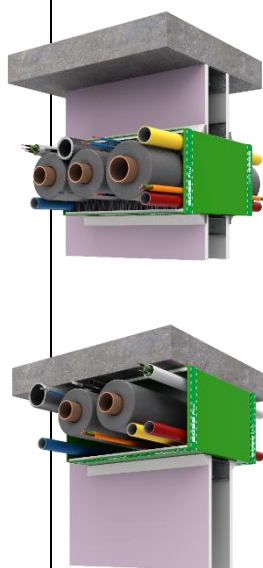


Table 11. Fire Rated Plasterboard Wall Systems with a 60min Fire Rating

Product Description	Wall elements with an established FRL of 60/60/60 or -/60/60.	Service Penetration	FRL With P40-MAK Wrap (300mm)	FRL Without P40-MAK Wrap	Ref.
It is considered that any combination of the below Approved Services, and any number of these Approved Services in the BOSS FyreBox™, will achieve an FRL in accordance with the least performing Approved Element or Approved Service from the below table provided that the FyreBox™ is not overfilled to a point where the metal chassis bends, flexes, or bows from overfilling. The internal Intumescent Sachets & BrushSeals™ must also not be removed or damaged.					
BOSS FyreBox™ With and without P40-MAK Wrap  	Walls (Minimum 100mm Thick): <ul style="list-style-type: none">Steel or Timber Framed Fire Rated Plasterboard Lined WallsShaftliner / Shaftwall Where wall is less than 100mm it may be increased by locally applied lining: <ul style="list-style-type: none">Fire Rated PlasterboardBOSS Batts	Metal Pipes			Branz FC12925 Issue 10
		Paircoil up to 13/19mm insulated copper Pipes with 9mm or 13mm insulation	-/60/60	-/60/60	
		Paircoil up to 13/19mm insulated copper Pipes with min 19mm insulation	-/60/60	-/60/60	
		Copper Pipe up to 25mm OD with minimum 13mm thick non-combustible lagging AS1530.1 or Armaflex FRV, K-Flex lagging or Thermobreak Lagging or similar elastomeric foam rubber such as nitrile, neoprene, or cross-linked polyolefin with density from 25kg/m³ to 75kg/m³ and complying with AS 1530.3, SFI=0 and SDI≤5.	-/60/60	-/60/60	
		Copper Pipe up to 32mm OD with minimum 19mm thick Armaflex FRV, K-Flex lagging or Thermobreak Lagging or similar elastomeric foam rubber such as nitrile, neoprene, or cross-linked polyolefin with density from 25kg/m³ to 75kg/m³ and complying with AS 1530.3, SFI=0 and SDI≤5.	-/60/60	-/60/60	
		Copper Pipe up to 50.8mm OD with minimum 19mm thick Armaflex FRV, K-Flex lagging or Thermobreak Lagging or similar elastomeric foam rubber such as nitrile, neoprene, or cross-linked polyolefin with density from 25kg/m³ to 75kg/m³ and complying with AS 1530.3, SFI=0 and SDI≤5.	-/60/60	-/60/60	
		Copper Pipe up to 50.8mm OD uninsulated	-/60/60	-/60/-	
		Steel Sprinkler Pipe, Steel & Stainless Steel pipes up to 60.3mm OD	-/60/60	-/60/60	
		Combustible Pipes			
		PEX & PEX-AL-PEX Pipes up to 25mm Dia. with or without lagging.	-/60/60	-/60/60	
		PEX & PEX-AL-PEX Pipes up to 32mm Dia. with or without lagging.	-/60/60	-/60/-	
		uPVC Pipe & Conduit up to 56mm OD	-/60/60	-/60/60	
		cPVC Pipe up to 60.3mm OD	-/60/60	-/60/60	
		PE-RT Pipe or PE-RT Kelox pipe up to 32mm OD with or without lagging	-/60/60	-/60/-	
		HDPE pipe up to 32mm	-/60/60	-/60/-	
		PP and PP-R pipes up to 50mm	-/60/60	-/60/-	
		Electrical Cables			
		**Appendix D1 Power Cables (except 630mm²)	-/60/60	-/60/60	
		Multi Core Power Cables: Individual conductor up to 16mm². Total Maximum cross-sectional area not greater than 48mm² per cable.	-/60/60	-/60/60	
		**Appendix D2 Data / Comms Cables also including: CAT5, CAT5E, CAT6, CAT7, COAX, MATV, SMATV, CATV, Fig 8, Fire Alarm, EWIS, LAN, Security, NBN, Fibre Optic & speaker cables.	-/60/60	-/60/60	
		Cables with Aluminium core 185mm² or less	-/60/60	-/60/30	



***In preceding table it refers to Appendix D Cables. Please refer to AS1530.4: 2014 Appendix D. The cables referenced in Appendix D are a standard set of power and communications cables that represent the various cable types available within Australia and New Zealand.*

PenoPatch™

BOSS PenoPatch™ – Introduction

BOSS PenoPatch™ is a low cost, simple method of sealing blank openings, individual cables, small bundles of cables, pipes and conduits in a range of 1hr fire walls. Made with a fire-resistant advanced formula putty with a strong bonding capability, the **BOSS PenoPatch™** simply presses onto the wall around the service and instantly provides up to a 60 minute fire rating.

BOSS PenoPatch™ has been tested and approved to AS1530.4-2014 & AS4072.1-2005. Under fire conditions the product maintains its bond to the substrate. The integrity and insulation are maintained by the stability of the remaining product char.

PRODUCT APPLICATIONS

- Use in a variety of applications:
 - Up to 16mm Dia. Pipes including:
 - Combustible pipes
 - Combustible Conduits
 - PEX Pipe
 - Steel & Copper Pipes
- Data Cables
- Power Cables such as TPS
- Small Cable Bundles
- Blank Openings
- Retrofit applications
- New builds



KEY BENEFITS

- Low Cost
- Fast 30 second installation
- Fire Rated up to 60 mins or FRL -/60/60
- Simple to identify, audit & certify
- Versatile range of applications
- No Mess – No Clean Up
- Ease of Certification
- Suitable for new builds and retrofit applications

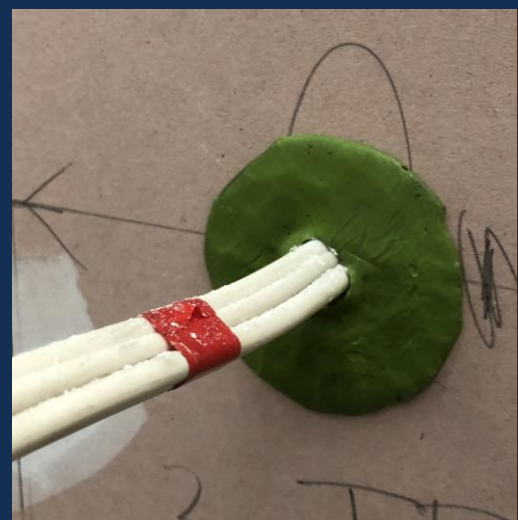


Table 12. BOSS PenoPatch™ Electrical applications – Data & power cables

Service type	Service details	Fire protection details	Wall details	FRL	Supporting evidence
Data cable bundle	Bundle 5 x CAT6 cables with 5 mm annular gap	BOSS PenoPatch™ 60 mm	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/30	WF FAS 190100
Data cable bundle	Bundle of 3 x CAT6 cables in 20 mm aperture	BOSS PenoPatch™ 60 mm		-/60/60	WF FAS 190100
Power cable bundle	Bundle of 3 x 2C+E 2.5 mm² TPS cables	BOSS PenoPatch™ 60 mm		-/60/60	WF FAS 190100

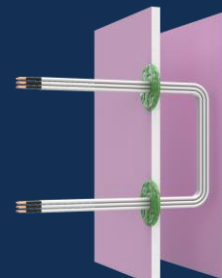
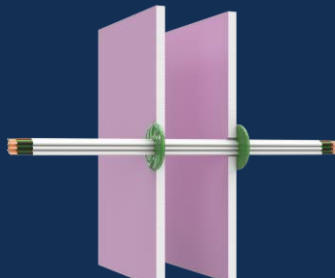
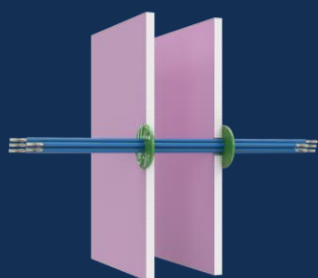


Table 13. BOSS PenoPatch™ Plumbing applications – uPVC and PEX pipes

Service type	Service details	Fire protection details	Wall details	FRL	Supporting evidence
PEX	Up to 16 mm in 25 mm aperture	BOSS PenoPatch™ 60 mm on both sides	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	WF FAS 190100
PEX/AL/PEX	20 mm diameter in 21 mm aperture	BOSS PenoPatch™ 60 mm on the plasterboard with an additional BOSS PenoPatch™ 60 mm wrapped around the service, on both sides.		-/60/45	PF23031

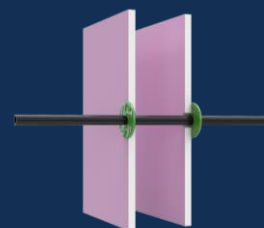


Table 14. BOSS PenoPatch™ Blank or empty aperture

Service type	Service details	Fire protection details	Wall details	FRL	Supporting evidence
Blank or empty aperture	Apertures up to 20 mm diameter	BOSS PenoPatch™ 60mm	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	WF FAS 190100



MaxiCollars™

BOSS MaxiCollars™ – Introduction

BOSS MaxiCollars™ set new standards in the use of retrofit fire rated pipe collars. With a unique design and advanced intumescent technology, MaxiCollars™ provide one of the highest expansion rates available on pipe collars, providing a high-performance fire protection. Coupled with a unique profile of only 30mm or 40mm depth, MaxiCollars™ are the best choice for tight fitting areas or closely installed pipes.

PRODUCT APPLICATIONS

- Applicable walls, floors & ceilings:
 - Fire Rated Plasterboard
 - Concrete & Masonry Walls
 - Concrete floor slabs
 - BOSS Batt
 - AAC / Hebel
 - Speedpanel, Supapanel & Pronto Panel
 - Comflor floor slabs
 - Cross Laminated Timber
- Approved services include:
 - uPVC DWV Pipes & uPVC Conduits
 - cPVC Sprinkler Pipes
 - Lagged Steel, Copper & Iron Pipes with Thermobreak® Pipe Insulation
 - A/C Paircoil Bundles
 - PEX Water & PEX AL Gas Pipes
 - PP & PP-R Pipes (Aquatherm), HDPE & PE Pipes



KEY BENEFITS

- Wide range of FRL approvals
- Only 30mm / 40mm deep allows use in tight areas
- Advanced technology intumescent – High expansion rate
- Approvals for walls floors & ceilings.
- Approved to AS1530.4:2014 & AS4072.1-2005
- MaxiCollars™ have approvals for a wide variety of services:
 - uPVC DWV Pipes & uPVC Conduits
 - cPVC Sprinkler Pipes
 - Lagged Steel, Copper & Iron Pipes with Thermobreak®
 - A/C Paircoil Bundles
 - PEX Water & PEX AL Gas Pipes
 - PP-R Pipes (Aquatherm)
 - HDPE Pipes



Table 15. MaxiCollars™ – Plumbing applications – uPVC and PEX pipes

Service type	Service details	Fire protection details	Wall details	FRL	Supporting evidence
PEX	25 mm diameter	32 mm BOSS MaxiCollar™, with FireMastic-HPE™ sealant installed 13 mm deep into the annular gap of the plasterboard finished flush both sides. Max aperture 32 mm.	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF23030
PEX	25 mm diameter	32 mm BOSS MaxiCollar™, in-filled with FireMastic-HPE™ between the pipe and the collar to the full depth finished flush on both sides. Max 30 mm aperture.		-/60/30	EWFA 49527300
PEX	2 × 20 mm diameter pipes	40 mm BOSS MaxiCollar™, in-filled with FireMastic-HPE™ between the pipe and the collar to the full depth finished flush on both sides. Max 40 mm aperture.		-/60/30	EWFA 49527300
PEX/AL/PEX	25 mm diameter	32 mm BOSS MaxiCollar™, with FireMastic-HPE™ sealant installed 13 mm deep into the annular gap of the plasterboard finished flush both sides. Max aperture 32 mm.		-/60/60	PF23030
uPVC	40 mm diameter	32 mm BOSS MaxiCollar™, with FireMastic-300™ sealant installed 13 mm deep into the annular gap of the plasterboard, finished flush to penetrated side. Max aperture 32 mm.		-/60/60	PF23031
uPVC	40 mm diameter	40 mm BOSS MaxiCollar™ on both sides. Max aperture 50 mm.		-/60/60	EWFA 49527300
uPVC	50 mm diameter	50 mm BOSS MaxiCollar™, with FireMastic-300™ sealant installed between the pipe and the collar to the full depth finished flush on both sides. Max aperture 65 mm.		-/60/60	EWFA 49527300
uPVC	80 mm diameter	80 mm BOSS MaxiCollar™ on both sides. Max aperture 90 mm.		-/60/60	EWFA 49527300
CPVC	60 mm diameter	50 mm BOSS MaxiCollar™ on both sides. Max aperture 60 mm.		-/60/30	EWFA 49527300
PP-R	20 mm diameter	32 mm BOSS MaxiCollar™, with FireMastic-HPE™ sealant installed between the pipe and the collar to the full depth finished flush on both sides. Max aperture 32 mm.		-/60/60	EWFA 49527300
PP-R	32 mm diameter	32 mm BOSS MaxiCollar™, with FireMastic-HPE™ sealant installed between the pipe and the collar to the full depth finished flush on both sides. Max aperture 38 mm.		-/60/60	EWFA 49527300

Table 16. MaxiCollars™ - HVAC Bundles

Service type	Service details	Fire protection details	Wall details	FRL	Supporting evidence
Pair coil / uPVC drain / Cable bundle	<ul style="list-style-type: none"> 10mm/15mm Insulated Copper Pipes 2.5mm² 2Core+E TPS Power Cable 1.5mm² 2C Data Cable 	80 mm BOSS MaxiCollar™, in-filled with FireMastic-HPE™ between the pipe and the collar to the full depth finished flush.	90 mm thick – 1 layer of 13 mm plasterboard both sides	-/60/60	CSIRO FSP 1791

FireMastic-300™

BOSS FireMastic-300™ – Introduction

BOSS **FireMastic-300™** intumescent fire-rated & acoustic acrylic sealant is a one-part acrylic emulsion that is designed to resist the passage of fire, smoke, and sound. **FireMastic-300™** will intumesce and form a char when exposed to the heat of a fire, which will prevent the passage of fire and smoke for up to 5 hours in both integrity and insulation. In normal use it will also maintain the sound reduction index of a structure.

FireMastic-300's superior acoustic properties mean it offers up to a 65dB sound reduction, making it ideal for high performance acoustic installation. FireMastic-300™ is water based, non-sag, fire rated acrylic sealant. It is specifically designed for interior joints with up to 40% movement (+/- 20% either direction) of the original joint width, and non-combustible service penetrations.

PRODUCT APPLICATIONS

- Linear gaps seals in plasterboard walls & ceilings
- Sealing and filling joints in a variety of fire rated wall systems
- Sealing of low movement construction joints
- Sealing the perimeter of intumescent dampers
- Fire Stopping around various services:
 - Steel & Copper Pipes
 - Power & Data Cables
 - Cable Bundles
 - Cable Trays
- Sealant in conjunction with a variety of BOSS Passive Fire Products like FyreBox™ & MaxiCollars™.
- Areas requiring acoustic barriers or sound reduction
- Internal use only, can be painted

KEY BENEFITS

- Industry leading 5-hour fire rating (FRL -/300/300)
- Highly cost-effective solution
- High Intumescent Content
- Up to 65dB sound reduction
- 60mm Steel Sprinkler Pipes – 1 & 2hrs without a wrap.
- Suitable for Linear Gaps, Penetration Seals & Dampers
- Approved in a large variety of substrates; FR Plasterboard, Concrete, AAC, Hebel, Speedpanel, Korok, Timber, CLT, AFS, Dincel, solid and hollow masonry.
- Paintable – Internal Use



Table 17. FireMastic-300™ – Metal pipes

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Metal pipe	DN32 Steel pipe	Sealant installed 13 mm deep in the annular gap with additional 30 mm × 30 mm fillet both sides. Max aperture 46 mm.	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029
Metal pipe	50NB steel pipe	13 mm deep in the annular gap with additional 30 mm (Wall) × 50 mm (pipe) fillet both sides. Max aperture 65 mm.		-/60/60	PF 23029
Metal pipe – Steel, copper or iron pipes	32 mm – 80 mm diameter	Sealant installed 26 mm deep in the annular gap with additional 20 mm × 20 mm fillet both sides. Further to this a length of 300 mm long P40-MAK Wrap is to be installed on both sides.	96 mm thick - 1 layer of 16 mm plasterboard both sides	-/60/60	FAS190346 R1.5
Metal pipe – Steel, copper or iron pipes	32 mm – 80 mm diameter, Thermobreak lagged pipe	MaxiCollar™ with sealant installed in minimum 5 mm wide × 5 mm deep finished flush both sides. Further to this a length of 300 mm long P40-MAK Wrap is to be installed on both sides.		-/60/60	FAS190346 R1.5
Metal pipe – Steel, copper or iron pipes	80 mm – 159 mm diameter	Sealant installed 26 mm deep in the annular gap with additional 20 mm × 20 mm fillet both sides. Further to this a length of 600 mm long P40-MAK Wrap is to be installed on both sides.		-/60/60	FAS190346 R1.5
Metal pipe – Steel, copper or iron pipes	80 mm – 159 mm diameter, Thermobreak lagged pipe	MaxiCollar™ with sealant installed in minimum 5 mm wide × 5 mm deep finished flush both sides. Further to this a length of 600 mm long P40-MAK Wrap is to be installed on both sides.		-/60/60	FAS190346 R1.5

Table 18. FireMastic-300™ – Electrical – Power cables

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Power Cable Bundle	4 × 2.5 mm ² 2C+E TPS cable bundle.	Sealant installed 13 mm deep in the annular gap with additional 15 mm × 15 mm fillet both sides. Max aperture 32 mm.	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029

Table 19. FireMastic-300™ – Electrical – Comms / Data Cables

Service type	Service details	Fire protection details	Wall details	FRL	Ref.
Communication cable bundle	2 × Cat6, 2 × COAX, 1 × security cable bundle.	Sealant installed 13 mm deep in the annular gap with additional 15 mm × 15 mm fillet both sides. Max aperture 26 mm.	118 mm thick - 1 layer of 13 mm plasterboard both sides	-/60/60	PF 23029

Health and Safety

To learn more about the safe handling of BOSS fire products, refer to the relevant products Safety Data Sheet available at bossfire.com.au.

Limitation

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

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

The information contained herein has been developed as a guide only and it does not constitute a guarantee of compliance of all applications. Each project and/or application may have specific requirements and you must investigate these carefully. Ensure that you have read and understood the appropriate certification relative to your needs, and ensure you seek acceptance from the Certifying Authority or compliance inspector before installation. For updates on the range of BOSS Fire® certification please contact BOSS Technical Services. +61 2 9531 8591

Further Information

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