FirePillow-240™

Temporary or permanent fire barriers for copper pipes & cable trays and electrical cables
Approved to AS1530.4: 2014 & AS4072.1-2005

Technical Data Sheet

Edition 3
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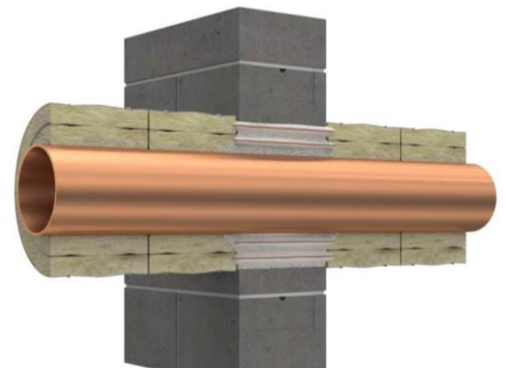## *Offering up to 3 hours fire protection….*

KEY BENEFITS

- Low cost solution to maintain fire wall and floor integrity
- Offers up to 3 hour fire rating
- Easy to carry, transport and store
- Non-toxic
- Cost effective
- Simple to install
- Reusable – allow for opening and re-opening of penetrations
- Complies to AS1530.4: 2014 & AS4072.1-2005
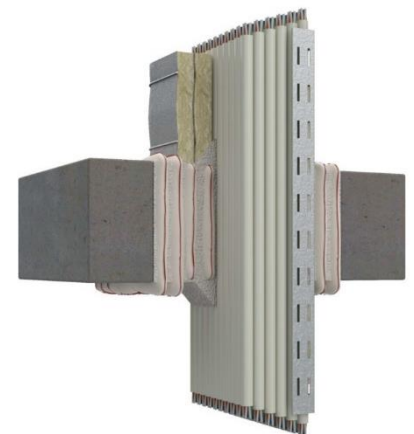- Can be used in conjunction with pre-existing certified pillow systems

INTRODUCTION

The BOSS FirePillow-240™ covers a wide variety of applications. Fire Pillows are treated fabric bags containing fire retardant granulated rockwool, securing penetrations in fire rated construction against the spread of fire. They are best suited to environments where metallic pipes, electrical, power & telecommunications cables & cable trays penetrate concrete floor slabs & concrete or masonry walls in service risers, shafts, plant areas and car parks.

APPLICATION

FirePillow-240™ are designed to fire rate wall and floor penetrations which may incorporate cables, cable trays & metal pipes, where up to 3 hours integrity and 3 hours insulation are required. Refer to Performance Specifications section on page 3 for further information. FirePillow-240 are compliant with AS1530.4-2014 and AS4072.1-2005.

BOSS FirePillows-240™ are suitable for use in any building which has single or multiple services penetrating fire rated compartment walls and floors.

Typical installations are:

- Retail stores and shopping centres
- Residential apartments
- Commercial buildings
- Telecommunications / data centres
- Power stations / substations
- Factories / industrial applications
- Office fit-outs

BOSS FirePillows-240™ are available in the following sizes:

Size	Part ID	Dimensions	Box Qty
Small	FP-100	200 x 100 x 40mm	125
Medium	FP-200	200 x 200 x 40mm	50
Large	FP-300	300 x 200 x 40mm	30

For detailed performance information refer to Section - Performance Specification beginning on page 3.

PERFORMANCE SPECIFICATIONS

FirePillows-240™ have extensive approvals including AS1530.4-2014, and AS4072.1-2005 offering up to 3 hours protection in conjunction with other BOSS firestopping products such as FireMastic-300™, P40-MAK Wrap and Thermal Defence Wrap. Please refer to the further tables contained in this document for summary specific performance information relevant to each various application. Please also reference the relevant certification reports.

IMPORTANT:

In order to ensure performance and compliance, passive firestopping products must be installed in accordance with the test evidence, manufacturer's specifications or be the subject of a performance solution.

Each project and/or application may have specific requirements and you should investigate these carefully.

Ensure that you read and understand the appropriate certification and how it relates to your specific construction details, and ensure you seek acceptance from the Certifying Authority or compliance inspector before installation.

Ensure your installation is carried out in accordance with the test certification, manufacturer's instructions, and in accordance with the relevant local building regulations, National Construction Code or Building Code.

For updates on the range of BOSS Fire® certification please contact BOSS Technical Services. +612 9531 8591 OR info@bossfire.com.au

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TABLE 1 – BLANK OPENINGS

Service Penetration	Substrate	System Description	Seal Size	FRL	Specific Dimensions	Certification Reference
Blank Openings						
None	Min 140mm Thick Concrete Block wall & Masonry Wall	FirePillows-240™ & FireMastic-300™	Nominal 600mm wide (or greater) x 400mm High	-/180/180	FireMastic300™ between pillows, and between pillows & separating element.	FAS 190042.2
None	Min 150mm Thick Concrete Floor Slab	FirePillows-240™ & FireMastic-300™	Nominal 600mm wide (or greater) x 400mm High	-/180/180	FireMastic300™ used to fix pillows, between pillows, and between pillows & separating element.	FAS 190042.2

The table above only relates to BOSS Fire® solutions using the FirePillows-240™ product. For other BOSS Fire® products that offer certified blank opening systems please consult the BOSS Fire website - bossfire.com

TABLE 2 – POWER CABLE PENETRATIONS (INCL CABLE TRAYS)

Service Penetration	Substrate	System Description	Seal Size	FRL	Specific Dimensions	Certification Reference
Power Cables & Cable Trays						
D1 Group A cable configuration for evaluation of PVC Insulated power cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 140mm Thick Concrete Block wall & Masonry Wall	FirePillows-240™, FireMastic-300™ & P40-MAK Wrap – 300mm Both Sides – 2 Layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*	FireMastic300™ between pillows, and between pillows & separating element. Plus depth of gap around service & 20mm x 20mm fillet around service both sides.	FAS 190042.2
D1 Group A cable configuration for evaluation of PVC Insulated power cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 150mm Thick Concrete Floor Slab	FirePillows-240™, FireMastic-300™ & P40-MAK Wrap – 300mm Both Sides – 2 Layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*	FireMastic300™ between pillows, and between pillows & separating element. Plus depth of gap around service & 20mm x 20mm fillet around service both sides.	FAS 190042.2
***For 180 minute insulation requirements, a Radiation Guard can be used. Contact the technical team at BOSS Fire for more information.**						
Power Cables: -TPS Power Cable 2C+E 2.5mm² -Up to 3 x 6mm² 3C+E Power Cables -Up to 8 x 16mm² 3C+E Power Cables	Min 100mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap – 600mm Both Sides – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/90/90	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
Power Cables: -TPS Power Cable 2C+E 2.5mm² -Up to 3 x 6mm² 3C+E Power Cables -Up to 8 x 16mm² 3C+E Power Cables	Min 116mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap – 600mm Both Sides – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
** Rigid Wall Types include: Concrete, Masonry, Speedpanel, Korok, AAC/ Hebel, Pronto Panel & Supa Panel. ***** Build Up can include: BOSS Batt or FR Plasterboard minimum 100mm wall overlap from the edge of service.**						
Cables for standard configuration EN1366-3: 2009 including: Power Cables: • A1 – PVC/PVC 5mm x 1.5mm² - Approx. Dia 14mm • A1 – EPR/PO 5mm x 1.5mm² - Approx. Dia 11.2-14.4mm • A1 – XLPE/EVA 5mm x 1.5mm² - Approx. Dia 13mm • B – PVC/PVC 1mm x 95mm² - Approx. Dia 18-21mm • D1 – PVC/PVC 4mm x 185mm² - Approx. Dia 52mm • D2 – EPR/PO 4mm x 185mm² - Approx. Dia 64-80mm • D3 – XLPE/EVA 4mm x 185mm² - Approx. Dia 58mm	Min 150mm Thick Concrete Floor Slab	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap –Top Side Only – 2 Layers: 1st Layer 600mm 2nd Layer 300mm	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on top side only.	FAS 200332 R1

The table above only relates to BOSS Fire® solutions using the FirePillows-240™ product. For other BOSS Fire® products that offer certified electrical cable penetration systems please consult the BOSS Fire website - bossfire.com
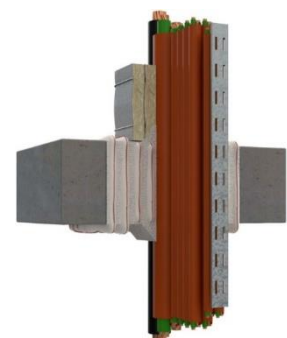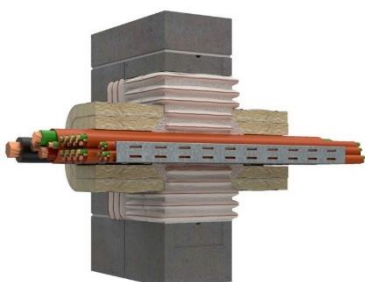
TABLE 3 – TELECOMMUNICATION CABLES PENETRATIONS (INCL CABLE TRAYS)

Service Penetration	Substrate	System Description	Seal Size	FRL	Specific Dimensions	Certification Reference
Telecommunications Cables & Cable Trays						
D2 Group B cable configuration for evaluation of large bundles of telecommunications cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 140mm Thick Concrete Block wall & Masonry Wall	FirePillows-240™, FireMastic-300™ & P40-MAK Wrap – 300mm Both Sides – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*	FireMastic300™ between pillows, and between pillows & separating element. Plus depth of gap around service & 20mm x 20mm fillet around service both sides.	FAS 190042.2
D2 Group B cable configuration for evaluation of large bundles of telecommunications cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 150mm Thick Concrete Floor Slab	FirePillows-240™, FireMastic-300™ & P40-MAK Wrap – 300mm Top Side Only – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*	FireMastic300™ between pillows, and between pillows & separating element. Plus depth of gap around service & 20mm x 20mm fillet around service both sides.	FAS 190042.2
***For 180 minute insulation requirements, a Radiation Guard can be used. Contact the technical team at BOSS Fire for more information.**						
D2 Group B cable configuration for evaluation of large bundles of telecommunications cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 100mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap – 600mm Both Sides – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/90/90	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
D2 Group B cable configuration for evaluation of large bundles of telecommunications cables (including cable trays) as per AS1530.4-2014 Appendix D	Min 116mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap – 600mm Both Sides – 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
** Rigid Wall Types include: Concrete, Masonry, Speedpanel, Korok, AAC/ Hebel, Pronto Panel & Supa panel. ***** Build up can include: BOSS Batt or FR Plasterboard minimum 100mm wall overlap from the edge of service.**						
Cables for standard configuration EN1366-3: 2009 including: Telecommunications Cables: G1 – PVC/- 1mm x 95mm² - Approx. Dia 14.1-17.1mm G2 – PVC/- 1mm x 185mm² - Approx. Dia 19.3-23.3mm	Min 150mm Thick Concrete Floor Slab	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap – Top Side Only 2 Layers: 1st Layer 600mm 2nd Layer 300mm	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on top side only.	FAS 200332 R1

The table above only relates to BOSS Fire® solutions using the FirePillows-240™ product. For other BOSS Fire® products that offer certified telecommunications cable penetration systems please consult the BOSS Fire website - bossfire.com
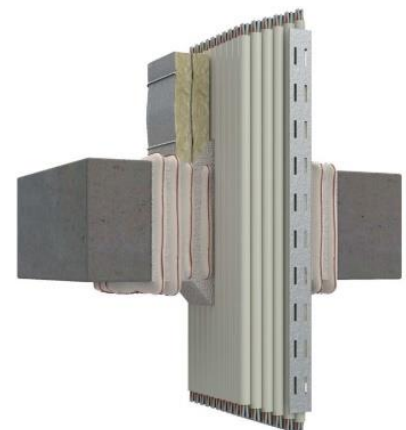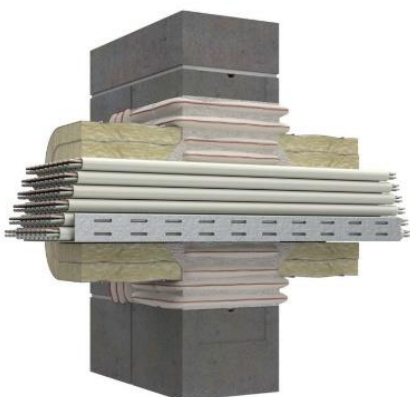
TABLE 3 – METAL PIPE PENETRATIONS

Service Penetration	Substrate	System Description	Seal Size	FRL	Specific Dimensions	Certification Reference
Metal Pipes						
Steel, Copper & Iron Pipes 32mm – 100mm Ø	Min 140mm Thick Concrete Block wall & Masonry Wall	FirePillows-240™ & FireMastic-300™ & P40-MAK Wrap – 600mm Both Sides – 2 Layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*	FireMastic300™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 20mm x 20mm fillet around service both sides.	FAS190346 R1.4
Steel, Copper & Iron Pipes 32mm – 100mm Ø	Min 150mm Thick Concrete Floor Slab	FirePillows-240™ & FireMastic-300™ & P40-MAK Wrap – 600mm Top Side Only – 2 Layers	Nominal 600mm wide (or greater) x 400mm High	-/180/120*		FAS190346 R1.4
***For 180 minute insulation requirements, a Radiation Guard can be used. Contact the technical team at BOSS Fire for more information.**						
Steel & Iron Pipes 32mm – 113mm Ø Steel & Iron Pipes 113mm – 159mm Ø	Min 100mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap: • 32-113 Ø Pipes – 300mm Both Sides - 2 layers • 113-159 Ø Pipes – 600mm Both Sides - 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/90/90	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
Steel & Iron Pipes 32mm – 113mm Ø Steel & Iron Pipes 113mm – 159mm Ø	Min 116mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap: • 32-113 Ø Pipes – 300mm Both Sides - 2 layers • 113-159 Ø Pipes – 600mm Both Sides - 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
Copper Pipes 32mm – 54mm Ø Copper Pipes 54mm – 159mm Ø	Min 100mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap: • 32-113 Ø Pipes – 300mm Both Sides - 2 layers • 113-159 Ø Pipes – 600mm Both Sides - 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/90/90	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
Copper Pipes 32mm – 54mm Ø Copper Pipes 54mm – 159mm Ø	Min 116mm Thick Rigid walls** (With or without Build-Up***)	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap: • 32-54 Ø Pipes – 300mm Both Sides - 2 layers • 54-159 Ø Pipes – 600mm Both Sides - 2 layers	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 50mm x 50mm fillet on both sides.	FAS 200332 R1
** Rigid Wall Types include: Concrete, Masonry, Speedpanel, Korok, AAC/ Hebel, Pronto Panel & Supa panel. *** Build up can include: BOSS Batt or FR Plasterboard minimum 100mm wall overlap from the edge of service.						
Steel Copper & Iron Pipes 32mm – 159mm Ø	Min 150mm Thick Concrete Floor Slab	FirePillows-240™, FireMastic-300™ / FireSilicone-EMA™ & Thermal Defence Wrap Top Side Only 2 Layers: 1st Layer 600mm 2nd Layer 300mm	Nominal 600mm wide (or greater) x 400mm High	-/120/120	FireMastic300™ or FireSilicone-EMA™ between pillows, and between pillows & separating element. Plus depth of 25mm around service & 20mm x 20mm fillet on top side only.	FAS 200332 R1

The table above only relates to BOSS Fire® solutions using the FirePillows-240™ product. For other BOSS Fire® products that offer certified metal pipe penetration systems please consult the BOSS Fire website - bossfire.com

STORAGE

Store in a cool dry, well ventilated area off the ground and palletised. Store in original packaging.

HEALTH AND SAFETY

To learn more about the safe handling of FirePillows-240™ see the Safety Data Sheet available at bossfire.com

IS THIS PUBLICATION CURRENT?

This document may be superseded by new versions. If you are unsure of whether or not this document is a current publication, please call us on +61 2 9531 8591 to confirm.

LIMITATION

BOSS Fire & Safety Pty Ltd 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 & 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 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 should 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

For additional technical information on the performance of BOSS FirePillows-240™ , other BOSS Fire® products or any other BOSS Fire® related information please contact us on:

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