



NON-INSULATED STEEL, COPPER & IRON PIPE SYSTEMS

BOSS Fire offers an extensive range of approved systems in relation to non-insulated steel, copper & iron pipes that penetrate a large variety of fire rated wall systems, concrete floor slabs and ceiling systems. The range includes approvals for galvanised steel sprinkler pipes that don't require any thermal wrap. Firestopping systems now approved include leading products such as FireMastic-300™, P40-MAK Wrap, BOSS Fire® Transit Box, Thermal Defence Wrap & FireSilicone-EMA™. Approved systems also include allowance for oversized apertures by using cavity barrier products such as BOSS Batts and FirePillows-240™. Certified systems include 90min, 120min & 180min FRL's.

BOSS PRODUCTS:

FireMastic-300™	P40-MAK Wrap	BOSS Fire® Transit Box	FirePillows-240™	Thermal Defence Wrap	BOSS Batts	Ablative Coating	FireSilicone-EMA™
							

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 of BOSS' certification please contact BOSS Technical Services on +61 2 9531 8591.

NON-INSULATED METAL PIPES IN WALLS

ELEMENT	SUBSTRATE	FRL	SERVICE TYPE	SERVICE SIZE	PRIMARY FIRE STOPPING ELEMENTS	SECONDARY FIRE STOPPING ELEMENT	Tertiary Fire Stopping Element	Report Ref
Walls	Min 96mm Thick: FR Plasterboard, Concrete, Masonry	- /90/90	Copper / Steel Pipe	19mm Ø	FireMastic-300™ - 50mm x 50mm Fillet	P40-MAK Wrap - 300mm Both Sides	N/A	CSIRO COT 2968
	Min 144mm Thick: FR Plasterboard, Concrete, Masonry	- /120/120	Steel Pipe	34mm Ø	FireMastic-300™ - 50mm x 50mm Fillet	No wrap required		FRT 180403i.1
	Min 116mm Thick: FR Plasterboard, Concrete, Masonry	- /120/120	Steel Pipe	60.3mm Ø	FireMastic-300™ - 50mm x 50mm Fillet	No wrap required		SFC FRT180472a.1
	Min 75mm Thick: Hebel / AAC	- /120/90	Steel Pipe	60.3mm Ø	FireMastic-300™ - 50mm x 50mm Fillet	No wrap required		SFC FRT180473a.1
Walls	Min 96mm (90min FRL) or 116mm (120min FRL): - FR Plasterboard - Shaftwall / Shaftliner - Concrete - Solid & Hollow Masonry - AFS	Wall must be minimum 96mm Thick: - /90/90 Or Wall must be minimum 116mm Thick: - /120/120	Steel, Copper & Iron Pipes	32mm - 80mm Ø	FireMastic-300™ - 20mm x 20mm surface fillet - Annular gap 26mm depth - Both sides of wall	P40-MAK Wrap - 300mm Both Sides	BOSS Batt - 2 x 50mm Used if needed to fire stop oversize apertures	FAS190346 R1.4
	80mm - 159mm Ø			P40-MAK Wrap - 600mm Both Sides				
	Build up options - 100mm clearance from perimeter of service: - BOSS Batt - FR Plasterboard - Calcium Silicate Board - Shaftwall / Shaftliner							

NON-INSULATED METAL PIPES IN WALLS (Continued)

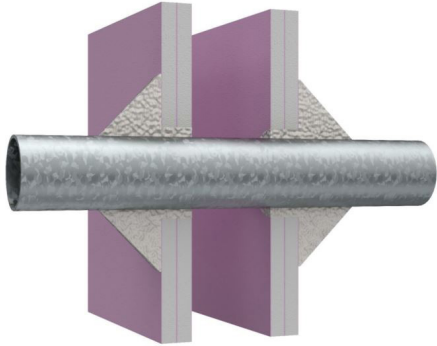
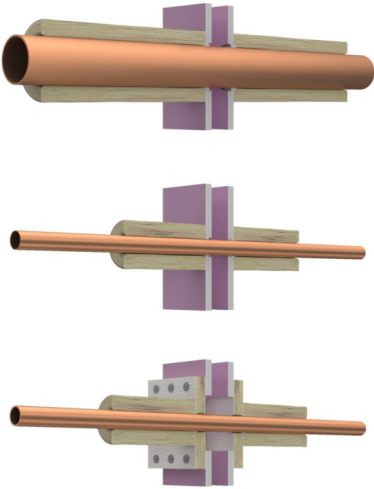
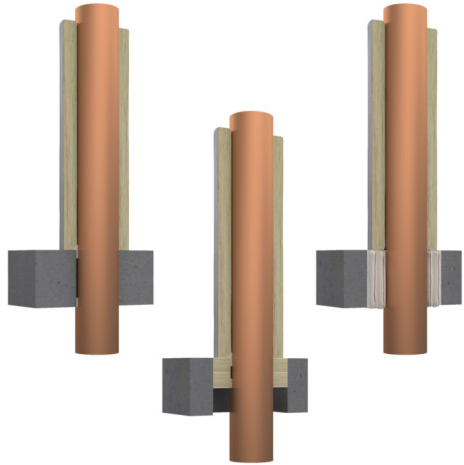

ELEMENT	SUBSTRATE	FRL	SERVICE TYPE	SERVICE SIZE	PRIMARY FIRE STOPPING ELEMENTS	SECONDARY FIRE STOPPING ELEMENT	Tertiary Fire Stopping Element	Report Ref
Walls	Min 140mm Thick: <ul style="list-style-type: none"> - Concrete - Solid & Hollow Masonry - AFS Walls with Build Up to Min 140mm: <ul style="list-style-type: none"> - Speedpanel & Korok - AAC / Hebel, Pronto Panel, Supa Panel 	- /180/120	Steel, Copper & Iron Pipes	32mm - 100mm Ø	FireMastic-300™ <ul style="list-style-type: none"> - 20mm x 20mm Surface Fillet - Annular Gap Min 26mm Depth - Both Sides of wall *If using pillows: <ul style="list-style-type: none"> - 20mm Surface Fillet Both Sides - Annular Gap between service filled to full depth. 	P40-MAK Wrap <ul style="list-style-type: none"> - 600mm Both Sides 	BOSS FirePillows-240™ <ul style="list-style-type: none"> Used if needed to fire stop oversize apertures 	FAS190346 R1.4
Walls	Min 140mm Thick: <ul style="list-style-type: none"> - Concrete Block Wall 	- /180/120 *For 180min use a insulation radiation guard. Contact BOSS for more info.	Copper Pipes	100mm Ø	FireMastic-300™ <ul style="list-style-type: none"> - 20mm x 20mm Surface Fillet Both Sides - Applied length wise along pillows. - Annular Gap between service filled to full depth. 	P40-MAK Wrap <ul style="list-style-type: none"> - 600mm Both Sides - Wrapped twice around pipe 	BOSS FirePillows-240™	FAS190042 R1.2

NON-INSULATED METAL PIPES IN WALLS - For use when a thinner wrap is required than the P40-MAK Wrap.

ELEMENT	SUBSTRATE	FRL	SERVICE TYPE	SERVICE SIZE	PRIMARY FIRE STOPPING ELEMENTS	SECONDARY FIRE STOPPING ELEMENT	Tertiary Fire Stopping Element	Report Ref
Walls	Min 100mm (90min FRL) or 116mm (120min FRL) Thick: <ul style="list-style-type: none"> - FR Plasterboard / GIB - Concrete, Solid & Hollow Masonry Walls with Build Up to Min 100mm (90min FRL) or 116mm (120min FRL) Thick: <ul style="list-style-type: none"> - Speedpanel & Korok, AAC / Hebel, Pronto Panel, Supa Panel Build up options - 100mm clearance from perimeter of service: <ul style="list-style-type: none"> - BOSS Batt, FR Plaster board 	Wall must be minimum 96mm Thick: <ul style="list-style-type: none"> - /90/90 Or Wall must be minimum 116mm Thick: <ul style="list-style-type: none"> - /120/120 	Steel & Iron Pipes	32mm - 113mm Ø	FireMastic-300™ or FireSilicone-EMA™ <ul style="list-style-type: none"> - 20mm x 20mm fillet both sides - Annular Gap Min 25mm depth both sides 	Thermal Defence Wrap <ul style="list-style-type: none"> - 300mm Both Sides 	BOSS Batt <ul style="list-style-type: none"> - 2 x 50mm Used if needed to fire stop oversize apertures 	FAS200332 R1.0
				113mm - 159mm Ø		Thermal Defence Wrap <ul style="list-style-type: none"> - 600mm Both Sides 		
			Copper Pipes	32mm - 54mm Ø		Thermal Defence Wrap <ul style="list-style-type: none"> - 300mm Both Sides 		
				54mm - 159mm Ø		Thermal Defence Wrap <ul style="list-style-type: none"> - 600mm Both Sides 		

NON-INSULATED METAL PIPES – FLOORS & CEILINGS								
ELEMENT	SUBSTRATE	FRL	SERVICE TYPE	SERVICE SIZE	PRIMARY FIRE STOPPING ELEMENTS	SECONDARY FIRE STOPPING ELEMENT	Tertiary Fire Stopping Element	Report Ref
Floors	Min 150mm Thick Concrete	- /120/120	Steel, Copper & Iron Pipes	32mm Ø	FireMastic-300™ - 10mm x 10mm Surface Fillet Top Side Only - Annular Gap Min 25mm Depth Both Sides *If using pillows: - 20mm Surface Fillet Both Sides - Annular Gap between service filled to full depth.	P40-MAK Wrap - 300mm Top Side Only	BOSS Batt - 2 x 50mm Used if needed to fire stop oversize apertures	FAS190346 R1.4
				32mm - 159mm Ø		P40-MAK Wrap - 600mm Top Side Only		
				32mm - 100mm Ø		P40-MAK Wrap - 600mm Top Side Only - Wrapped twice around pipe	BOSS FirePillows-240™ Used if needed to fire stop oversize apertures	
Floors	Min 150mm Thick Concrete	- /120/120	Steel, Copper & Iron Pipes	32mm - 159mm Ø	FireMastic-300™ or FireSilicone-EMA™ - 20mm x 20mm fillet top side only. - Annular Gap Max 20mm Min 25mm depth top side	Thermal Defence Wrap - Double wrapped top side only. - First layer must extend 600mm from face of slab. - Second layer must extend 300mm from face of slab.	BOSS Batt - 2 x 50mm Used if needed to fire stop oversize apertures	FAS200332 R1.0
Floors	Min 150mm Thick Concrete	- /180/120	Copper Pipes	100mm Ø	FireMastic-300™ - 20mm x 20mm Surface Both Sides - Applied length wise along pillows. - Annular Gap between service filled to full depth	P40-MAK Wrap - 600mm Top Side Only - Wrapped twice around pipe	BOSS FirePillows-240™	FAS190042 R1.2
Floors	Min 130mm Thick Concrete / Comflor® 60	- /120/30	Copper / Steel Pipe 32mm	32mm Ø	FireMastic-300™ - 10mm x 10mm Fillet + 25mm Deep in Annular Gap	N/A	N/A	SFC FRT180137d.2
Ceiling	Min 26mm FR Plaster-board - Overall 235mm Ceiling Floor System	- /60/60 - /90/90	Steel Pipe 32mm	42.8mm Ø	FireMastic-300™ - Flush Seal over UniWrap®	UniWrap®	Thermal Defence Wrap	SFC FRT180474.1

MIXED SERVICE COMBINATIONS							
SERVICE PENETRATION	ELEMENT	SUBSTRATE	SYSTEM DESCRIPTION	SEAL SIZE	FRL	SPECIFIC DIMENSIONS	CERTIFICATION REFERENCE
Steel Pipes up to 60.3mm Copper Pipes up to 50.8mm Can be bundled with a wide variety of other plumbing, electrical & HVAC services	Wall / Floor / Ceilings	Wide variety of flexible and rigid walls, concrete floor slabs and ceiling/floor systems.	BOSS Fire® Transit Box with P40-MAK Wrap™. FireMastic-300™ perimeter seal.	Perimeter Seal around box. Refer certification.	Up to-/120/120	Mixed Combinations	Refer specific applications refer to BOSS Fire® Transit Box Technical Guide.
For more info refer BOSS Fire® Transit Box documentation and certification.							

EXAMPLES ILLUSTRATIONS			
			
Steel Sprinkler Pipes	Bare Metal Pipes in Walls	Bare Metal Pipes in Floors	Steel Sprinkler Pipes in Ceiling System

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