

IntRwall[®] **Penetrations Solutions**

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IntRwall®or party wall systems are unique types of intertenancy plasterboard walls that have a solid fire-rated core with stud cavities on both sides which provides excellent acoustic and other benefits for multi-story apartment buildings. However, when used as a fire rated wall along an apartment-to-corridor boundary, multiple service penetrations need to be considered.

Trafalgar Fire have successfully fire tested this wall type specifically to provide a range of practical apartment entry penetration systems for the high-rise residential market.

	SYSTEMS			APPLICATIONS		
()	Fure BOARD MAXILITE	V	Electricians	Power cables Data cables PVC Conduits		
	FyreBOX CAST-IN FyreBOX SLAB-MOUNT		Plumbers	Copper and Steel pipes PEX pipes		
	^Ø FyreBOXMAXI ^Ø FyreFLEX	Pluilibers	PEX-AL-PEX pipes			
	[∲] FureBOXmini [¢] TWRAP		Active Fire Professionals	Steel Sprinkler pipes Fire cables		





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COMPLIANCE

COMPLIANCE



COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE (NCC)

Formerly known as BCA

The use of IntRwall[®] style (or so called 'party wall') are increasing in popularity within the Australian building industry based on key attributes including, lightweight construction, speed of installation and acoustics. Low to high density multistory apartment blocks, aged care and other housing projects may present logistical implications caused by space and close fire separation.

Party walls provide an attractive advantage to combat these challenges whilst streamlining the construction process. Although construction may seem similar to a shaft wall system, party walls systems have a unique configuration using a central solid core that is clad on both sides with stud cavities and non-fire rated plasterboard sheets.

To further complicate the design for passive fire penetrations, the head of the party wall above the ceilings, only consists of the core shaft liner panel, laminated with a sheet of fire rated plasterboard.

As a result, we can't apply fire testing data from penetration systems tested in standard plasterboard or shaft wall constructions, and separate fire testing to AS1530.4 is required.

Until now, there have been little to no tested penetration systems available for this type of party wall. Trafalgar Fire is committed to ongoing innovation within the passive fire industry so we have developed a set of new penetration systems specifically designed and tested to maintain the fire resistance level (FRL) of service penetrations through party wall systems.

The Trafalgar Fire systems referenced in this document have been fire tested to AS1530.4-2014 and are approved specifically for use in these Party Wall systems, with full compliance for the upcoming NCC2022.





Fyre SEALANT RANGE

FyreFLEX® SEALANT



FyreFLEX

Applications	Trade Icons	System	Details	FRL	Report Reference	
	erector and a second	FyreFLEX®	For specific system and FRL details refer to the: FyreFLEX® and TWRAP for Electricians Technical Manual FyreFLEX® and TWRAP for Plumbers Technical Manual TWRAP™ Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website.	-/60/60* Wrap Free system	FSP 2230	
				Small Cable Bundles up to 5x TPS Cables		
Small Cable Bundles up to 5x TPS Cables				Contraction of the second seco	FLEX	
	FyreFLEX®			FRL	Report Reference	
				-/60/60**	FSP 2230	
				Copper Pipes up to 50mm		
Copper Pipes up to 50mm				آwrw	RAP	

* Locally thickened with 60mm <u>FyreBOARD Maxilite®</u> with 100mm overlap. ** For insulation rating, 300mm <u>TWRAP™</u> must be installed around the system on either side of the wall.



FyreBOX[™] RANGE

FyreBOX[™] Slab-Mount MIXED SERVICE PENETRATION



Fure<u>BOX</u>slab-mount

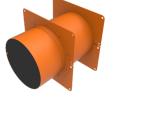
Applications	Trade Icons	System	Details	FRL	Report Reference
Apartments services. Apartments services. Any quantity of typical apartment entry services: • Electrical and Data Cables • PVC Conduit • PEX water • Gas PEX Pipes • Insulated Pair Coil • Sprinkler Pipes • Etc	Trade Icons	System FyreBOX™ Slab-Mount sizes: • 160 x 125mm • 350 x 125mm	Details Installed to the slab soffit before the walls are constructed. Allows service trades to run their pipes and cables quicker/ sooner, speeding up build time and reducing risk of defects on site. Rw50 acoustic rating. For specific system and FRL details refer to the: FyreBOX™ Slab- Mount Technical. Manual Available from	-/60/60	Report Reference FSP 2230 Jount Applications
	The second second	NU CFF	Available from the Trafalgar Fire <u>Knowledge Centre</u> <u>Technical Manuals</u> on the website.	ر ج <mark>γFur∈BOX</mark> s	SLAB-MOUNT

* For insulation rating, 300mm <u>TWRAP™</u> must be installed around the system on either side of the wall.



FyreBOX[™] RANGE

FyreBOX[™] Mini MIXED SERVICE PENETRATION





⁰Fure<u>BOX</u>MINI

Applications	Trade Icons	System	Details	FRL	Report Reference
	Trade Icons	System FyreBOX™ Mini Range: • 100mm diameter	Details Mounted anywhere in the wall with steel mounting flanges (FyreFLANGE™), hinged for easy retrofit. Allows for high volume of services in a small footprint. For specific system and FRL details refer to the: FyreBOX™ Maxi and Mini Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website	FRL -/60/60 FyreBOX [™] Min	FSP 2230 ni Application
				⁰ FyreBOX MINI	[¢] ⊺ <u>wrap</u>

* For insulation rating, 300mm <u>TWRAP™</u> must be installed around the system on either side of the wall.





RELATED SYSTEMS



⁰FureBOARDMAXILITE ⁰FureFLEX



