

ALUMINIUM CABLE

APPLICATIONS

Aluminium cables are becoming more commonly used in the market and just like any service penetration they have to be properly fire rated in accordance to AS 1530.4.

Trafalgar has a range of approved systems to offer for all commonly used service penetrations.











SuperSTOPPER SI AR-MOLINT RAMBINO

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TWRAP



APPLICATIONS

- Aluminium core cable
- Aluminium core cable bundles
- Aluminium core cables on cable trays



TRADES







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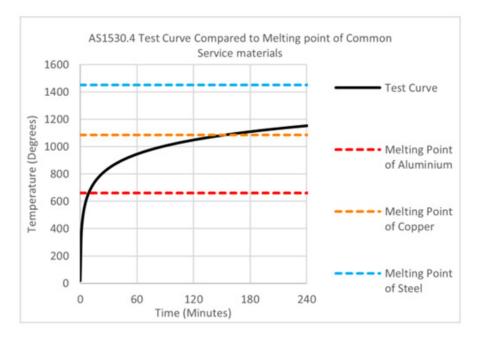




COMPLIANCE



Traditionally, copper core cables are used in the electrical and power industries however aluminum cables are becoming increasingly popular across the Australian building industry, specifically due to the cost of these when compared to the rising costs of copper core cables. However, aluminum cables have a much lower melting point of 660 degrees Celsius, compared with copper at 1080 degrees Celsius, which means that under fire conditions the cables react very differently.



This means that for cable service penetration systems through fire rated barriers, we cannot directly apply previous cable testing from copper cables to aluminum cables because they will yield very different results. To address this, the National Construction Code (NCC) and AS1530.4 require that AL core cables should be tested separately to determine their performance as a penetration system.

Trafalgar Fire is committed to innovation within the passive fire industry and has been developing new passive fire systems specifically designed to maintain the Fire Resistance Level (FRL) of AL core cable penetrations through a range of common fire rated barriers. The Trafalgar products in this datasheet have been fire tested to AS1530.4-2014 as penetration systems with aluminum cable services, and are fully compliant under the National Construct Code (NCC).







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Aluminium Cables

FRL TABLES - WALLS



In the Fire Stopping column, click on the system names to to learn more!

Fire Barrier	Barrier Type	Tested Ser- vices	Fire Stopping	Aperture Size	FRL	Test Report
	2 x 13mm Plas- terboard	3 x 240mm2, 1 x 120mm2 core Aluminium cables	SuperSTOPPER® Circular 100 & Twrap 300mm	110mm	-/120/120	FSV 2163
		3 x 240mm2 5 x 70mm^2 Single Core Alu- minium cables	SuperSTOPPER® Bambino & Twrap 300mm	180x135mm	-/120/120	
Walls	Walsc AAC Panel	1 x 4C&E 16mm^2 Alu- minium cable	FyrePEX HP Sealant (Wrap free)	50mm	-/120/120	FSP 2249
		Bundle of up to 4x 630mm^2 Al- uminium cables, and a 120mm^2 single core cop- per earth cable	Maxilite board, FyrePEX Sealant & Twrap 450mm	120mm	-/120/120	
	Ritek 150X-PLUS	1x 1C 630mm2 4x 1C 240mm2 3x 1C 16mm2 8x 4C+E 16mm2	FyreBATT, FyrePEX HP Sealant & TWrap	400x420mm	-/240/240	FSP 2461















Aluminium Cables

FRL TABLES - FLOORS



In the Fire Stopping column, click on the system names to to learn more!

Fire Barrier	Barrier Type	Tested Services	Fire Stopping	Aperture Size	FRL	Test Report
	Concrete	Up to a 450mm cable tray with 8 x 16mm ² 4C+E, 8 x 240mm ² 1C, 2 x 120mm ² 1C Al and 1 x 400mm ² single core	SuperSTOPPER® & TWrap 300	570x145mm	-/180/120	FRT 220259
Floors		1 x 16mm2 single core Al Cable, or Bundle of 4 x 16mm2 4C&E	FyrePEX Sealant and TWrap 450mm on the top side	100mm	-/180/180	FRT 210260
		3 x 240mm^2, 1 x 210mm^2 Single Core Al Cables		100mm	-/180/120	









RELATED SYSTEMS

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