

Firestop™

Firestop is a range of polymeric fire resistant cables designed to maintain circuit integrity in a fire situation while minimising the evolution of smoke and gases harmful when exposed to fire. This range is designed to save lives and help protect property in the event of a fire.

Firestop cables are typically used in underground transport tunnels, high-rise building, airports and other densely populated places. They are used where power supply to essential circuits like water pumps, lift motors, emergency lighting, fire alarms and automation and control systems where continued operation is critical in during a fire event.

Prysmian Firestop are low smoke and fume (LSOH) cables that are designed to allow safe evacuation making them ideal for buildings such as multi-storey dwellings, office blocks, hotels and educational institution buildings.

The focus of Prysmian research and development has been to reduce potential hazards by developing cable constructions and materials that will limit flame propagation, contribute less smoke and emit combustion by-products that are not harmful. This performance objective has been achieved in the Firestop range of cables.

Firestop is easy to install fire safety cable range fully complying with the latest version of AS/NZS 3013 standard and Building Code of Australia requirements. This range is classified (WS52W) which implies the scope of testing is designed to confirm performance when installed in a wiring system.

Firestop™ – performance levels included:

- Circuit integrity up to an extreme temperature of 1050 °C at the end of 2 hours.
- Moderate mechanical protection rated in line with building codes requirements.
- Stranded class 2 or bunched class 5 conductor for ease of installation.
- 90 °/110 °C rated for increased current rating and hot ambient.
- LSZH – Suitable for confined and high people density areas.
- 0.6/1 kV – robust construction with improved electrical performance.

Linking the future

Prysmian Australia Pty Ltd

1 Heathcote Road, Liverpool 2170 NSW, Australia
Ph: 1300 300 304 Fx: 1300 300 307
E-mail: sales.au@prysmiangroup.com

www.prysmiancable.com.au

Prysmian New Zealand Ltd

30 Binsted Road, New Lynn 0600 Auckland, New Zealand
Ph: (09) 827 3109 Toll Free: 0800 492 225
E-mail: sales.nz@prysmiangroup.com

www.prysmiancable.co.nz



Safe even when the alarms go off.

Afumex® – there when you need it the most.



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It's when the flames consume everything around them and the heat becomes intolerable that our range of Fire Rated Cables, Afumex, display their best qualities. Withstanding the heat, they maintain the supply to critical systems such as fire alarm, emergency lighting and fans (as it is the case of our Fire Resistant cables, Firestop) or simply burn without emitting toxic fumes (like it is the case of our Fire Retardant, non-fire-resistant cables). Low smoke and halogen free – that's the common feature of Afumex, the very well known Prysmian's safe and secure cable family.



AFUMEX LSOH

FIRE RESISTANT			NON-FIRE RESISTANT
Approval: AS/NZS 3013 (WS52W)			Approvals: IEC 60332-1, IEC 60332-3
GOLD	Class 5 Flexible conductor	FIRESTOP FS110 FLEXIBLE MULTICORE	Our Firestop cables are also available in a NON-FIRE RESISTANT construction with NO FIRE RESISTANCE properties (no Mica glass tape for fire barrier). These are still LSOH, flame/fire retardant and meet all requirements of IEC 60332-1 and IEC 60332-3.
		FIRESTOP FS110 FLEXIBLE SDI	
SILVER	Class 2 Stranded conductor	FIRESTOP FS110 STRANDED CONDUCTOR MULTICORE	
		FIRESTOP FS110 STRANDED CONDUCTOR SDI	
		FIRESTOP FS110 STRANDED CONDUCTOR ALARM CABLE	
BRONZE	Class 2 Stranded conductor	FIRESTOP FS90 STRANDED CONDUCTOR MULTICORE	
		FIRESTOP FS90 STRANDED CONDUCTOR ALARM CABLE	

Why choose Afumex?

Afumex is a series of LSOH cables that save lives and money in case of a fire. The black toxic smoke that obstructs the evacuation is gone, just as the corrosive acid that destroys metal and electronic devices. What remain are the flexible and user-friendly qualities, which makes these cables easy to install. It's time to choose a new path – the safe and sound one: Afumex.

LSOH CABLES	PVC CABLES
Reduced smoke formation.	Heavy smoke formation.
Light smoke, easy to find exits.	Black smoke, hard to find exits.
Fewer toxic gases, easier to evacuate.	Lots of toxic gases, obstruct evacuation.
Creates a white harmless powder, spare metals and electronic devices.	Creates hydrochloric acid that destroys electronics and corrodes metals.
Easier to sanitise, shorter production interruption of production.	Inhibits sanitation, longer break.
Better for the environment, contain no phthalates and dioxin.	Harmful to the environment, contain phthalates and dioxin.

Afumex – saves lives

At a fire scene three decisive factors influence the possibilities for people to rapidly find an exit: smoke formation, visibility and the amount of toxic substances in the air. With Afumex LSOH cables, less and lighter smoke is created compared to a fire containing PVC cables. In addition the smoke includes less toxic substances. That is, people at a fire scene equipped with Afumex cables will have better visibility and more time to find exits, which increase the chance to survive.

Afumex – saves money

A fire often involves large financial losses due to damaged electronics, machines and buildings. A contributing cause to these losses is the hydrochloric acid that is developed by traditional PVC cables on fire. The acid corrodes electronics and metals. LSOH cables on the other hand develop a white harmless powder that minimizes damages on buildings as well as equipment. In addition the fire scene will be a lot easier to sanitise, which means the production can be resumed faster.

Afumex – better for health and environment

When manufacturing PVC different types of phthalates are added to make the plastic soft and easy to shape. Recent scientific research however, have shown that these substances can be unhealthy and a source to both cancer and hormone-disturbance. Furthermore, burning PVC develops dioxins. Dioxins are very dangerous to our environment as they are hard to break down and stored in the body tissue of both humans and animals. As Afumex LSOH cables don't include phthalates, nor develop dioxins at a fire, these cables are a better choice for our health and the environment.

” All fire resistant cables are also flame retardant. However not all flame retardant cables are fire resistant. Know what is required for your application and choose from our Afumex LSOH. We've got it all.

Know the difference: Fire resistance vs Fire retardancy

There is a vast difference between cables that are rated fire resistant and those that only have earned the rating fire/flame retardant.

Flame retardant cables prevent the spread of fire into a new area, while fire resistant cables maintain circuit integrity and continue to work for a specified time under defined conditions. The differences between the two ratings are significant for the critical circuits required for life safety or a safe and immediate plant shut down.

Additionally, fire resistant cables can be used to replace expensive fire rated structures, blankets or wraps and the difficult to install MI cable. Flame retardant cables are not rated to continue to operate in a fire, and in all probability will not maintain circuit integrity during a fire. The summary of differences between flame retardant and fire resistive cables are shown in table below.

FIRE RESISTANT	FIRE/FLAME RETARDANT
Approval: AS/NZS 3013 (WS52W)	Approvals: IEC 60332-1, IEC 60332-3
A cable that will continue to operate in the presence of a fire, also identified as Circuit Integrity Cable.	A cable that will not convey or propagate a fire as defined by the Flame Retardant or Propagation Tests indicated above.

KEY TERMS

Fire performing = Fire rated (does not refer to any particular standard or test)

Fire resistant = AS/NZS 3013 = Prysmian Firestop Range

Fire retardant = Flame retardant = Fire/Flame Propagation = IEC 60332-1, IEC60332-3

- All fire resistant cables are LSOH
- All flame retardant cables are LSOH
- All fire resistant cables are flame retardant
- NOT all flame retardant cables are fire resistant.