WALSC
AAC Panel Penetration Systems

Walsc Panel Systems are comprised of reinforced Autoclaved Aerated Concrete (AAC). The National Construction Code (NCC) requires fire-stopping systems to be fire-tested and/or assessed to determine the FRL of the specific penetration in different walls. The Trafalgar Fire products in this technical manual have been tested and approved to AS1530.4-2014 specifically for use in AAC panel wall systems, providing compliance under the National Construction Code (NCC).

NCC 2022 ready!

Products

- FyreBOX™ range
- FyreCHOKE Collars
- FyreFLEX® Sealant
- FyrePEX HP Sealant & FyreSHEATH
- FyrePLUG Pillows
- FyreSHIELD™ Access Panel
- TWRAP

Applications

Builders	Access Panels
Electricians	Power Cables Data cables PVC Conduits
HVAC&R	Insulated pipes
Plumbers	Copper and Steel pipes PEX pipes PEX-AL-PEX pipes
Fire Professionals	Sprinkler pipes Fire Cables

Trades

Builders | *Electricians* | *Plumbers* | *HVAC&R* | *Passive Fire Professionals*

11/20/20

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WALSC
AAC Panel Penetrations Systems
NCC2022 READY

Compliance with the National Construction Code (NCC)

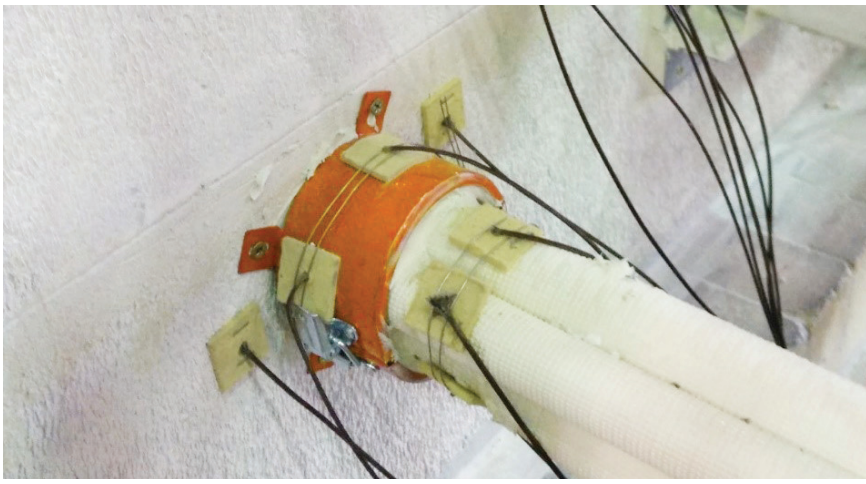
Formerly known as BCA

Walsc AAC wall systems are very popular in the Australian building industry due to the reduction in overall wall thickness, speed of construction and their acoustic and fire-resistant properties.

Trafalgar Fire is committed to innovation within the passive fire industry and as such have been developing new products and re-testing existing technologies, specifically designed to maintain the fire resistance level (FRL) of service penetrations through Walsc systems.

Walsc is a proprietary panel system comprised of reinforced autoclaved aerated concrete (AAC). AS1530.4 requires walls made of AAC to be fire-tested to determine the FRL of the specific service penetration.

The Trafalgar Fire systems in this document have been fire tested and approved specifically for use in AAC wall systems, providing full compliance with the NCC. Refer to www.tfire.com.au for a full list of test reports and product technical manuals.



FRL Approvals Tables

Fyre Sealants Range

FyreFLEX® Sealant & FyrePEX HP Intumescent Mastic Sealant

Applications		Trade	System	Details	FRL
Small Cable Bundles			FyreFLEX® Sealant	For specific system and FRL details refer to the: FyreFLEX® Technical Manual TWRAP Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website.	-120/120
Large Cable Bundles					-/120/120
Cable Trays					-/120/120
Steel Pipes	90min		FyreFLEX® Sealant TWRAP		-/90/90
Cooper Pipes	90min				-/90/90
Steel Pipes	120min		FyreFLEX® Sealant FyreBOARD Maxilite™ TWRAP		-/120/120
Cooper Pipes	120min				-/120/120
PEX Pipes			FyrePEX HP	For specific system and FRL details refer to the: FyrePEX HP Technical Manual TWRAP Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website.	-/120/120
PEX-AL-PEX pipes					-/120/120
Air-conditioning bundle (FR or FE insulation)					-/120/120
Insulated Metal Pipes	up to 32mm				-/120/120
PVC Conduits					-/120/120

FyreFLEX

FyrePEX HP

FRL Approvals Tables

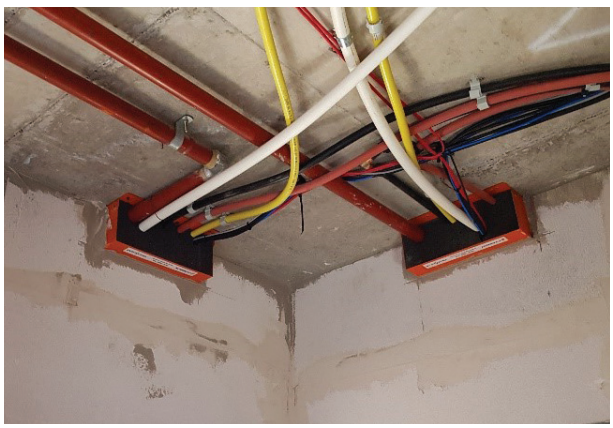
FyreBOX SLAB-MOUNT

FyreBOX™ Slab-Mount

Apartment entry mixed service penetrations

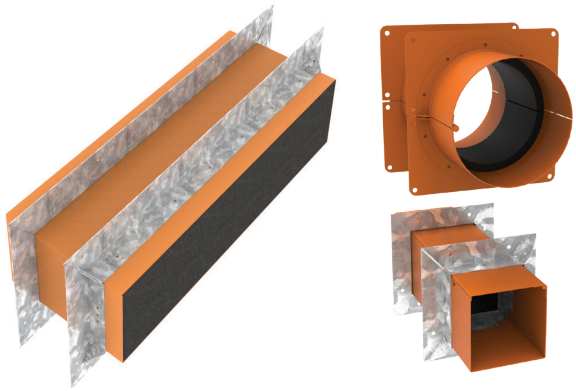
AUSTRALIAN MADE AND OWNED

Applications	Trade	System	Details	FRL
Apartments services Any quantity of typical apartment entry services: • electrical and data • PVC conduit • PEX • gas PEX pipes • insulated pair coil • sprinkler pipes • etc.		FyreBOX™ Slab-Mount Available Sizes: • 160 x 125mm • 350 x 125mm • 550 x 125mm • 650 x 125mm • Custom up to 1100 x 125mm	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™ Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website.	-/60/60
Riser shaft services Any quantity or configuration of typical riser shaft services				-/90/90
2 hour wall applications Any quantity or configuration of approved services				-/120/120



FRL Approvals Tables

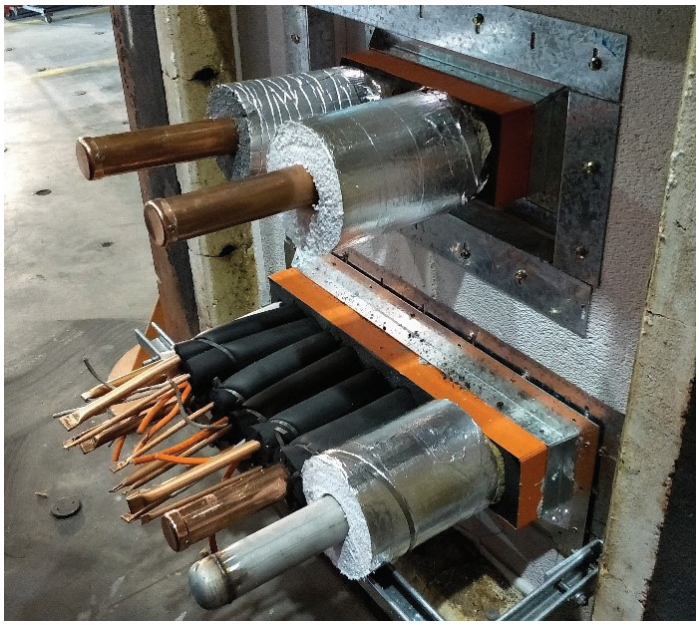
FyreBOX MAXI & FyreBOX MINI



FyreBOX™ Maxi & Mini

Retro-fit

Applications	Trade	System	Details	FRL
Small services Any including: • electrical and data • PVC conduit • PEX • gas PEX pipes • insulated pair coil		FyreBOX™ Mini Square sizes: • 65mm • 100mm Round sizes: • 100mm • 150mm	Mounted anywhere in the wall with steel mounting flanges (FyreFLANGE), hinged for easy retrofit. 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.	-/120/120
Large services Any including large quantities of: • insulated/bare copper • steel metal pipes • cable trays • conduits		FyreBOX™ Maxi Available Sizes: • 350 x 125mm • 550 x 125mm • 650 x 125mm • 750 x 125mm • 1100 x 125mm		-/120/120

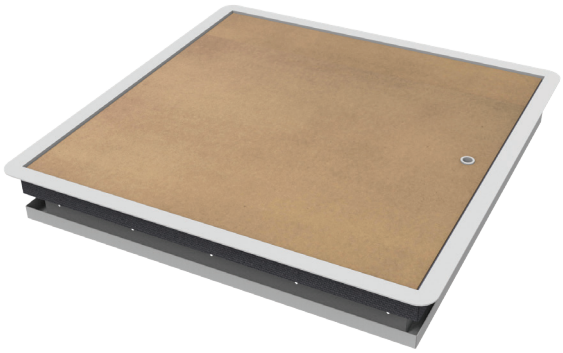


FRL Approvals Tables

FyreSHIELD

FyreSHIELD™

2 way tested
Fire Rated Access Panel



Applications	Trade	System	Details	FRL*
Access Panels		FyreSHIELD™ Sizes: • 300 x 300mm • 400 x 400mm • 450 x 450mm • 550 x 550mm • 600 x 600mm • Custom any size up to 600 x 600mm	For specific system and FRL details refer to the: FyreSHIELD™ Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website	-/60/60 or -/90/30

* Shaft walls only require 30 minutes insulation as per NCC C3.13

FyreSHIELD

Fully Insulated
2-Way Fire Protection

NCC 2022 ready!

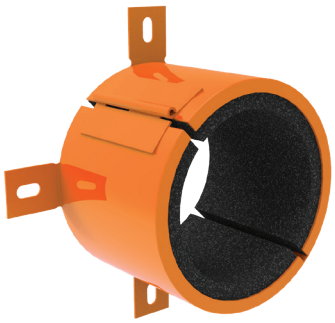
* Patent Pending

FRL Approvals Tables

FyreCHOKE PREMIUM HINGED RETROFIT

FyreCHOKE Premium Hinged Retrofit

Fire Collars



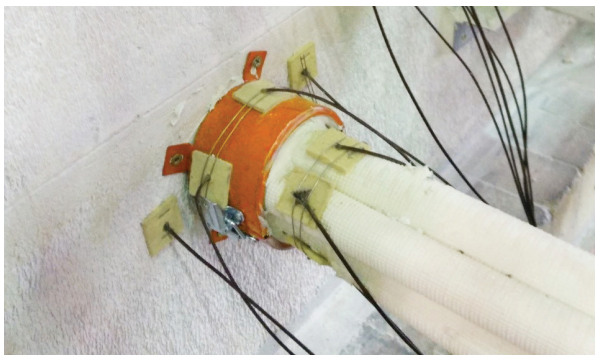
Applications	Trade	System	Details	FRL
PVC Conduits		FyreCHOKE Premium Hinged Retrofit	For specific system and FRL details refer to the: FyreCHOKE Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website	-120/120
PVC Pipes				-/120/120
PEX pipes				-/120/120
PEX-AL-PEX pipes				-/120/120
Air-conditioning bundle (FR or FE insulation)				-/120/120

FyrePLUG

FyrePLUG

Fire Pillows

Applications	Trade	System	Details	FRL
Electrical and Data Cables		FyrePLUG Pillows	For specific system and FRL details refer to the: FyrePLUG Technical Manual Available from the Trafalgar Fire Knowledge Centre Technical Manuals page on the website	-120/120
PVC Conduit				-/120/120
Metal pipes				-/120/120



FyreFLEX®
Sealant

Trafalgar Fire's FyreFLEX® Sealant is a water based, low VOC and environmentally friendly fire-rated sealant with intumescent properties which makes it perfect for fire stopping cable and metal pipe penetrations through fire rated barriers.

FyreFLEX® is the one of the most fire tested sealants in the market with more than 30 fire and acoustic tests, and assessments spanning over 30 years. FyreFLEX® has been approved for use in a large range of control joint or firestopping applications required under the National Construction Code (NCC).

NCC 2022 ready!

Key Features

- NCC 2022 ready – fire tested and approved in accordance with AS1530.4 and AS4072.1
- Non-Toxic
- Water-based allowing for easy clean-up
- Excellent adhesion properties
- Tested and compliant in single layer plasterboard, Hebel and Speed panel walls.
- Approved for use in both walls and floors

Applications

Builders	Control and Expansion Joints
Electricians	Electrical Cables Data Cables
Passive Fire	Steel Sprinkler Pipes TPS Fire Cables
Plumbers	Copper Pipes Steel Pipes

Trades

Builders *Electricians* *Passive Fire Professionals* *Plumbers*

11/20/20

FyrePEX™ HP

FyrePEX™ High-Performance Sealant is a graphite water-based intumescent mastic sealant that is used for fire stopping of service penetrations through fire-rated walls and floors to prevent the spread of fire for up to 2 hours.

Key Features

- Specifically designed for water and gas PEX pipe penetrations
- Also suitable for HVAC&R services
- Quick and easy to apply and install
- FyreSHEATH option helps reduce wastage
- Tested for SpeedPanel, Hebel and plasterboard walls
- Non-toxic & Green star rated for low VOC
- Water based for easy clean up
- Tested and approved in accordance with AS1530.4-2014 and AS4072.1

Applications

Plumbers	PEX pipes PEX-AL-PEX pipes Insulated Steel Copper
HVAC&R	Pair coil (single or in clusters up to 3)
Electricians	Power Data cables Conduits

Trades

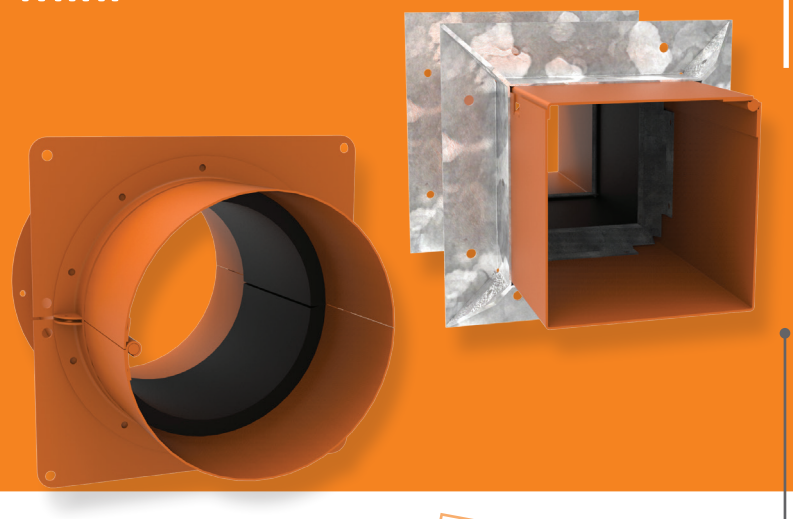
Plumbers *HVAC&R* *Electricians*

11/20/20

TRAFALGAR FIRE

FyreBOX MINI & FyreFLANGE

FyreBOX™ Mini



The FyreBOX™ Mini and Maxi are a retro-fit multi-service penetration system designed to prevent the spread of fire through small or large service penetrations, in the smallest footprint possible.

FyreBOX™ has been tested rigorously with a range of mixed service types and bundles in common wall and floor types and is one of the most fire tested products in the world, with industry leading FRL's of up to -/240/240 (system specific).

NCC 2022 ready!

NEW IMPROVED FYREFLANGE

Key Features

- Allows multiple and mixed services to pass through one opening
- Mixed services approved in any quantity or configuration
- Retro-fit or new construction
- Space saving, eliminates the need for 200mm separation between adjacent services
- Tested in Hebel, single/ double layer plasterboard, Speedpanel and many other common wall/floor systems.
- Fire tested in independent laboratories
- Thoroughly tested to AS1530.4-2014

Applications

Electricians	Power Data cables Conduits
Plumbers	Steel and Copper pipes PVC pipes PEX pipes PEX-AL-PEX pipes
HVAC&R	Insulated pipes
Active Fire	Sprinkler pipes Fire cables

Trades

Architect | *Builders* | *Electricians* | *Plumbers* | *HVAC&R* | *Passive Fire Professionals*

11/20/20

TRAFALGAR FIRE

FyreBOX MAXI & FyreFLANGE

FyreBOX™ Maxi

AUSTRALIAN MADE AND OWNED

The FyreBOX™ Mini and Maxi are a retro-fit multi-service penetration system designed to prevent the spread of fire through small or large service penetrations, in the smallest footprint possible.

FyreBOX™ has been tested rigorously with a range of mixed service types and bundles in common wall and floor types and is one of the most fire tested products in the world, with industry leading FRL's of up to -/240/240 (system specific).

NCC 2022 ready!

Key Features

- Allows multiple and mixed services to pass through one opening
- Mixed services approved in any quantity or configuration
- Retro-fit or new construction
- Space saving, eliminates the need for 200mm separation between adjacent services
- Tested in Hebel, single/ double layer plasterboard, Speedpanel and many other common wall/floor systems
- Fire tested in independent laboratories
- Thoroughly tested to AS1530.4-2014

Applications

Electricians	Power Data cables Conduits
Plumbers	Steel and Copper pipes PVC pipes PEX pipes PEX-AL-PEX pipes
HVAC&R	Insulated pipes
Active Fire	Sprinkler pipes Fire cables

Trades

Architect | *Builders* | *Electricians* | *Plumbers* | *HVAC&R* | *Passive Fire Professionals*

11/20/20

TRAFALGAR FIRE

FyreBOX SLAB-MOUNT

FyreBOX™
Slab-Mount

AUSTRALIAN MADE AND OWNED

The FyreBOX™ Slab Mount is a proudly Australian made passive fire penetration system used for multiple and mixed service penetrations which has been designed and tested to be built into residential/commercial apartment walls and riser shafts reducing the space required for service penetrations, providing predictable site costs and a reliable method of fire stopping.

NCC compliant
NCC 2022 ready!

BIM MODELS NOW AVAILABLE

Key Features

- Allows firestopping to be installed before the walls are constructed
- Patented system allows multiple and mixed services to pass through one opening in any quantity or configuration
- Space saving, eliminates the need for 200mm separation between adjacent services
- Tested in Hebel and single layer plasterboard walls
- Fire tested in independent laboratories
- Acoustic performance Rw50
- Thoroughly tested to AS1530.4-2014

Applications

Electricians	Power Data cables Conduits
Plumbers	PEX pipes PEX-AL-PEX pipes
HVAC&R	Insulated pipes
Active Fire	Sprinkler pipes Fire cables

Trades

Builders | *Electricians* | *Plumbers* | *HVAC&R* | *Passive Fire Professionals*

11/20/20

FyrePLUG
Fire Rated Pillow

Trafalgar Fire FyrePLUG pillows are a tried and tested passive fire penetration system that have been used across the industry for over forty years and Made in Australia.

NCC compliant
NCC 2022 ready!

Key Features

- Proudly Australian made
- Quick and easy installation
- Use in floors and walls
- Tested to AS1530.4-2014
- Removable
- Suitable for cables and metal pipes
- Approved with Speedpanel and Hebel walls
- Tested with Trafalgar TWrap for increased insulation ratings

What is FyrePLUG?

- Tested for a range of modern services and fire barriers to AS1530.4-2014
- Ideal for small to medium size penetrations for temporary fire stopping
- Undisturbed provide a permanent fire protection as required by the National Construction Code (NCC).
- Fire tested for wall and floor openings with other Trafalgar fire stopping products and with an impressive range of service penetration types

Trades

Electricians

Plumbers

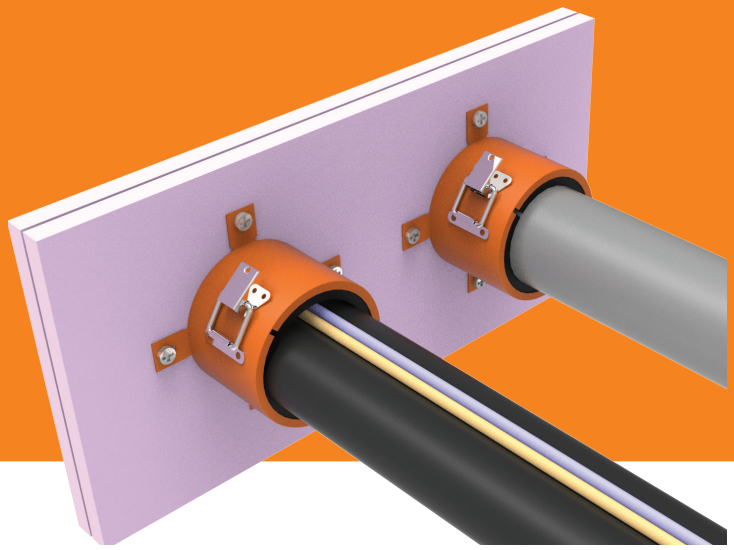
Passive Fire Professionals

TRAFALGAR FIRE

FyreCHOKE PREMIUM HINGED RETROFIT

FyreCHOKE

Premium Hinged Retrofit Collars



Trafalgar Fire FyreCHOKE Premium Hinged Retrofit Collars are designed to provide maximum protection against the spread of fire through walls and floors that are penetrated by plastic conduits, plastic pipes or air-conditioning service bundles. FyreCHOKE Collars are simple to install, simply retro-fitted around the service and fixed to the wall or floor.

NCC 2022 ready!

Key Features

- Intumescent fire stopping for plastic pipes, conduits and air-conditioning bundle penetrations.
- Actively expands during fire conditions, forms a tight seal and prevents the spread of fire through the service penetration.
- Fire tested in a range of wall and floor systems and a wide variety of service types.
- Solid hinge and clasp with durable powder coated finish.
- Simple design allows for quick and easy installation of the collars.
- Sizes from 50-150mm

Applications

Electricians	Data NBN Conduits Electrical Conduits
Plumbers	HDPE pipes PVC pipes PEX pipes PEX-AL-PEX pipes
HVAC&R	HVAC bundle Insulated pipes & cables

Trades

Electricians

Plumbers

HVAC&R

11/20/20

FyreSHIELD™

AUSTRALIAN MADE AND OWNED

New Patented Products

FyreSHIELD™ is a proudly Australian made access panel system which has been designed and tested to be built into partition walls and riser shafts.

With improved fire and acoustic performance while maintaining the signature Trafalgar Australian-made quality, the FyreSHIELD™ is the only access panel worth specifying and installing!

NCC compliant
NCC 2022 ready!

Key Features

- Fully fire tested -/90/60 FRL's in accordance with AS1530.4:2014
- Two way fire protection
- Fire tested in a range of common wall types and shafts
- No calcium silicate blocks required
- Australian made quality
- Fully concealed hinges
- Budget lock as standard

Applications

60 minute walls (-/60/60 FRL)

90 minute shafts (-/90/30 FRL)

- Hebel/Walsc
- Speedpanel
- Plasterboard
- Pronto Panel
- Concrete/Masonry

Full details in the manual

Trades

Architects

Builders

Plasterers

Passive Fire Professionals

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TRAFALGAR FIRE

TWRAP

TWRAP
Fire Rated Wrap

TWRAP is a 25mm thick foil-faced, fire protection wrap that has been engineered to provide insulation performance on service penetrations as required by the National Construction Code (NCC) and tested in accordance with AS1530.4-2014.

NCC compliant
NCC 2022 ready!

Key Features

- Simple fixing requirements
- Up to 3 hours fire insulation performance
- Suitable for cables, cable trays and metal pipes
- Fully encapsulated wrap system
- Bio-soluble fibres
- Easily identified on site for certification
- Easy to wrap around smaller services
- Allows for adds moves and changes during the life of the building
- Tested for use with a range of Trafalgar Fire's penetration systems

What is TWRAP?

- 25mm thick foil-faced, fire protection wrap
- Used with penetration sealing systems
- Aluminium foil, fiberglass-reinforced outside layer completely encapsulates the core
- Strong- additional handling strength and tear resistance
- Resists mould growth
- Thoroughly tested to AS1530.4-2014

Trades

Electricians	*Plumbers*	*HVAC&R*	*Passive Fire Professionals*

11/20/20