

FYREWRAP ®

Fire Protection for Copper Hydrant Pipe





The Trafalgar fire stopping range includes:

Sealant | Pillows | Mortar | FR Batts
FR Collars | FR Access Panels | Pipe Wraps
FyreWrap Duct Wrap | FR Downlight Covers
Intumescent Dampers | Fire Door Hardware
Fire Rated Board and Systems | Cable Coating
FYREBOX for multiple and mixed services

Insulation for Copper Hydrant Pipe

Product Overview

During fire conditions where copper hydrant pipe has been used in un-sprinklered compartments, the heat within the fire compartment can potentially weaken copper pipes making the hydrant system ineffective which compromises the entire fire suppression capacity of the building. To address this, fire hydrant pipes made from copper require fire isolation or critical service protection under AS2419.1 using materials that provide an FRL of no less than -/60/60.



FyreWrap Critical Services Protection
Wrapped around the copper pipe and steel
hangers to protect the hydrant system

Constructing fire resistant bulkheads to enclose the pipes can be impractical and expensive so **Trafalgar now has a tested system** that meets the AS1530.4 section 12 requirements for critical services with copper hydrant pipes. The solution is **FyreWrap!**

FyreWrap, wrapped and fastened with stainless steel cable ties can be applied directly to copper hydrant pipes up to DN100 to allow safe operating conditions for up to a 90-minute period, well in excess of the requirements of AS2419.1.

Fast Clean Easy

Insulation for Copper Hydrant Pipe

Installation **Details**

PRODUCT DESCRIPTION

Fire Rating	Up to 90-minute operational protection			
Colour	Silver foil finish with distinctive red FyreWrap® logos printed on outer surface for ease of identification.			
Testing	In accordance with AS1530.4-2014 (section 12) charged hydrant pipes at 1000KPa.			
Storage	Store in dry areas on site.			
Microbial Resistance	GREENGUARD listed for microbial resistance.			
Safety	Total bio-soluble insulation material - refer to MSDS available on request or online at www.fyrewrap.com.au			
Installation	Apply a single layer of FyreWrap Elite 38mm along the straight sections of the pipe held in place with 4.6mm stainless steel cable ties at 200mm centres. Hangers also require wrapping, see installation details over page.			
Also Available	Trafalgar also supply a full range of fire stopping products to achieve integrity ratings.			



Unwrapped hydrant pipes



Hydrant pipes wrapped with **FyreWrap** within the fire compartment

Insulation for Copper Hydrant Pipe

Technical **Specifications**



TESTING:

AS1530.4 section 12 provides a test method for assessing the ability of systems to protect critical services under fire conditions. FyreWrap Elite 1.5 has been tested to this onerous method, wrapped around a copper hydrant pipe and has met the operational test requirements in excess of 90 minutes.

Heating Regime	Design Capacity	Time to Operational failure (min)	Average temperature at failure (°C)	Max. temperature at failure	Mode of failure
AS 1530.4	1000 kPa and charged with water	98 minutes	259 °C	346 °C	Service



SUITABLE FOR:

 Vertical or horizontal hydrant pipe systems designed and installed as per AS2419.1 requirements, for up to DN100 copper pipes.

SPECIFICATION:

Where a Copper hydrant pipe is required to have an FRL of-/60/60, it should be appropriately wrapped for the full length of the fire compartment, and the full height of the hanger with 38mm, fully encapsulated Trafalgar FyreWrap 1.5, sealed/wrapped and installed to meet manufacturers guidelines to meet the fire rating.

Insulation for Copper Hydrant Pipe

Ordering Information

Trafalgar FyreWrap					
Product	Specifications	Dimensions			
FyreWrap Elite 1.5	1x layer of 38mm foil faced wrap	FyreWrap is available in 7.62m long rolls at the following widths: - 450mm - 610mm - 1220mm			
Cable Ties	Stainless steel	12mm wide, available in 520mm and 910mm lengths			
	Steel Banding Roll	12.7mm wide x 250m long			
	Snap on Seals	13mm (box of 1000)			
FyreWrap Accessories	FyreWrap Tensioner	1x			
Kit	FyreWrap Crimper	1x			
	Steel Strap Cutter	1x			
	Premium Reinforced Tape	96mm wide x 50m long			



Other Applications

FyreWrap is approved for use for a range of applications, including the wrapping of ductwork to provide 2-3 hour fire protection, and increasing insulation performance with service penetrations. Refer to www.fyrewrap.com.au or call Trafalgar for more information.







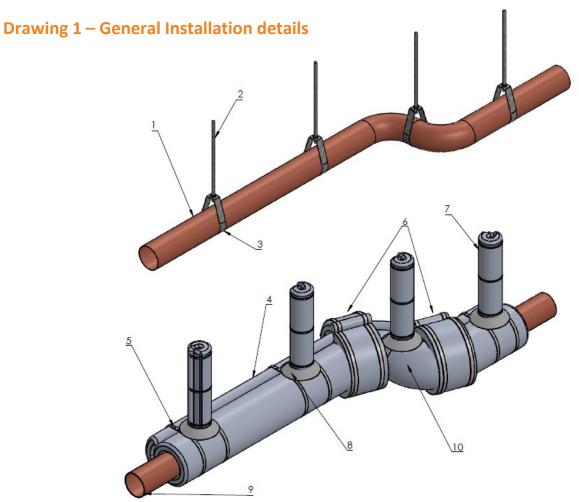
Trafalgar has developed a range of **installation videos** to assist our customers. To view these step by step install videos please go to <u>Trafalgar TV our YouTube Channel</u>.

Subscribe and you will be notified when new videos are uploaded.

Insulation for Copper Hydrant Pipe

Installation Requirements

FyreWrap Installation Details					
#	ltem	Specification	Installation		
1	Pipe	DN100 type B copper hydrant pipe	In accordance with AS4809 requirements		
2	Pipe supports	Minimum M10 steel rod	In accordance with AS2419.1 requirements		
3	Pipe hangers	Selected in accordance with AS2419.1 requirements	Installed as per manufactures and AS2419.1 requirements		
4	FyreWrap	38mm thick blanket	Wrapped around the pipe with 75mm overlaps, through the entire length of fire compartment		
5	Cable ties (min.)	4.6mm stainless steel cable ties	Installed at max. 200mm centres along the pipe		
6	Cover-strips	150mm wide, FyreWrap blanket	Wrapped over any joins between two sections of FyreWrap, tied in place with steel ties on either side of the join.		
7	Hanger protection	FyreWrap 38mm blanket	Wrapped around the steel hangers with 100mm overlaps, secured in place with steel ties at 120mm centres		
8	Sealant	Fyreflex acrylic sealant	20mm fillet applied between FyreWrap/hanger junction		
9	Wall penetration	Copper pipe sealed through wall using an approved method as per NCC C3.15 requirements	Refer to drawing 3		
10	Bend radius	FyreWrap 38mm blanket with joint/coverstrip detail	Refer to drawing 4		



Insulation for Copper Hydrant Pipe

Installation Requirements

Installation steps

- 1. Cut down the FyreWrap to size, ensuring that any cut edges of FyreWrap are sealed with reinforced aluminium tape. Allow for an overlap of 75mm once installed around the pipe.
- 2. Slit and tape the FyreWrap as required to fit around the existing steel support hangers, ensuring that when installed the overlap section will cover any open slits in the FyreWrap.
- 3. Install the FyreWrap around the pipe using steel cable ties at 200mm centres, and either side of a support hangers. Cable ties should be tightened appropriately to hold FyreWrap firm to the pipe, however over tightening will damage the FyreWrap. Aim for approximately 10mm compression.
- 4. Butt joints between two FyreWrap sections require a cover-strip of 150mm FyreWrap (refer to drawing 4).
- 5. Steel hanger supports also need to be wrapped with FyreWrap, allowing for a 100mm overlap. Once wrapped, apply a 20x20mm fillet of Fyreflex sealant to the base of the wrapped hangers, where the two sections of FyreWrap meet (refer to drawing 2).
- 6. Where the hydrant pipe exits the fire compartment, the pipe should be sealed in accordance with NCC section C3.15 requirements using Fyreflex sealant refer to the Fyreflex Sealant technical manual for wall-specific installation requirements.

Frequency Asked Questions:

Do I need to apply Fyrewrap to the hangers?

Yes, this prevents the pipework and supports from early collapse when exposed to fire.

Can I treat pipes larger or smaller than 100mm?

Copper pipes up to DN100 can be treated with FyreWrap.

Do I need to use sealant?

Fyreflex sealant forms an integral part of the fire stopping system. It must be used to ensure performance.

Does the system achieve -/60/60?

The wrapped pipe achieved 60 minutes of insulation, and over 90 mins operational performance.

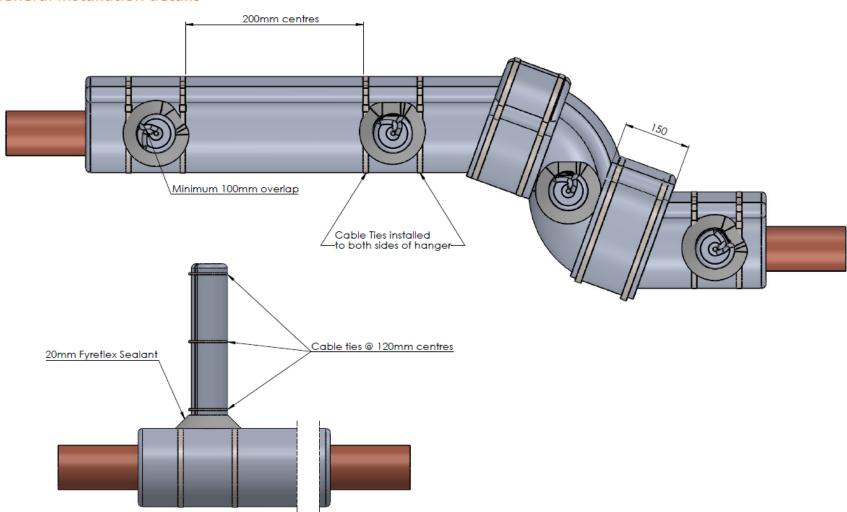
Can this system be used if the hydrant is not charged?

No, Fyrewrap is only suitable for charged hydrant pipes.

Insulation for Copper Hydrant Pipe

Installation Requirements

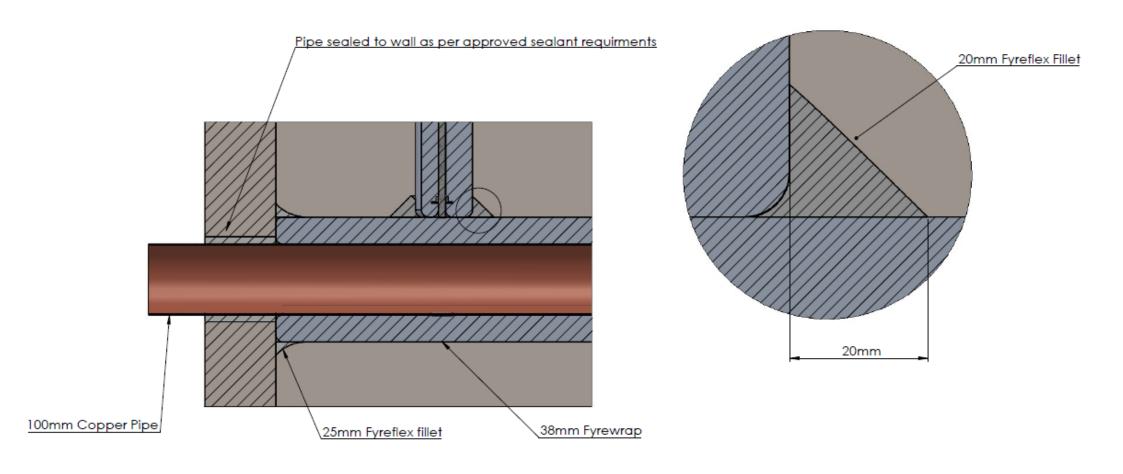
Drawing 2 – General Installation details



Insulation for Copper Hydrant Pipe

Installation Requirements

Drawing 3 – Wall Penetration Details



Insulation for Copper Hydrant Pipe

Installation Requirements

Drawing 4 – Recommended Radius Bend

