

FyreWrap® Hydrant Pipe Protection Systems



Due to its fast clean and easy nature, Trafalgar Fire's FyreWrap is now approved for use in protection of steel pipe hangers and brackets, and copper hydrant pipes in non-sprinklered fire compartments within a building. The FyreWrap system is simple to install and provides a safe and compliant protection in a range of applications to meet AS2419 requirements to prevent early collapse of hydrant systems.

Fast. Clean. Easy.

Key Features



- Flexible material for easy installation
- Secured simply with steel cable ties
- Greenguard listed for microbial resistance
- Compliant to AS2419 for steel pipe hanger and support protection
- Compliant to AS2419 for copper hydrant protection

Applications



- DN100 Copper hydrant protection
- Up to NB150 Steel pipe hanger, supports and bracket protection
- Other applications such as duct protection (refer to [FyreWRAP Duct Systems](#) for more!)

Trades

Passive Fire Professionals



Plumber



FyreWrap® is a registered Trademark of Unifrax

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Systems Overview

Trafalgar Fire has committed to finding a system that meets compliance standards as well as being an extremely safe method of protection. As such fire testing and fire safety reports have been obtained, assessing the suitability of the FyreWrap® system for the applications of protecting various metal hydrant pipes and/or their support systems.

Steel pipe requirements (brackets only)

AS 2419.1-2017 requires that where fire hydrant system pipework is likely to be exposed to fire in a building that is not sprinkler protected, the pipe supports shall have measures taken to prevent its early collapse when exposed to fire (per section 10.4.1). To meet this requirement, Trafalgar Fire has engaged expert fire safety engineers to assess the performance of the FyreWrap® Systems.



Based on actual fire test data, this Fire Safety Report assesses the hanger size and spacing requirements under the FyreWrap® systems to prevent the early collapse of steel hydrant pipes. For a copy of this report (JN20-00222), contact technical@tgroup.com.au. This report provides a compliant method of protection hangers/pipe supports and brackets for steel pipes up to NB 150.



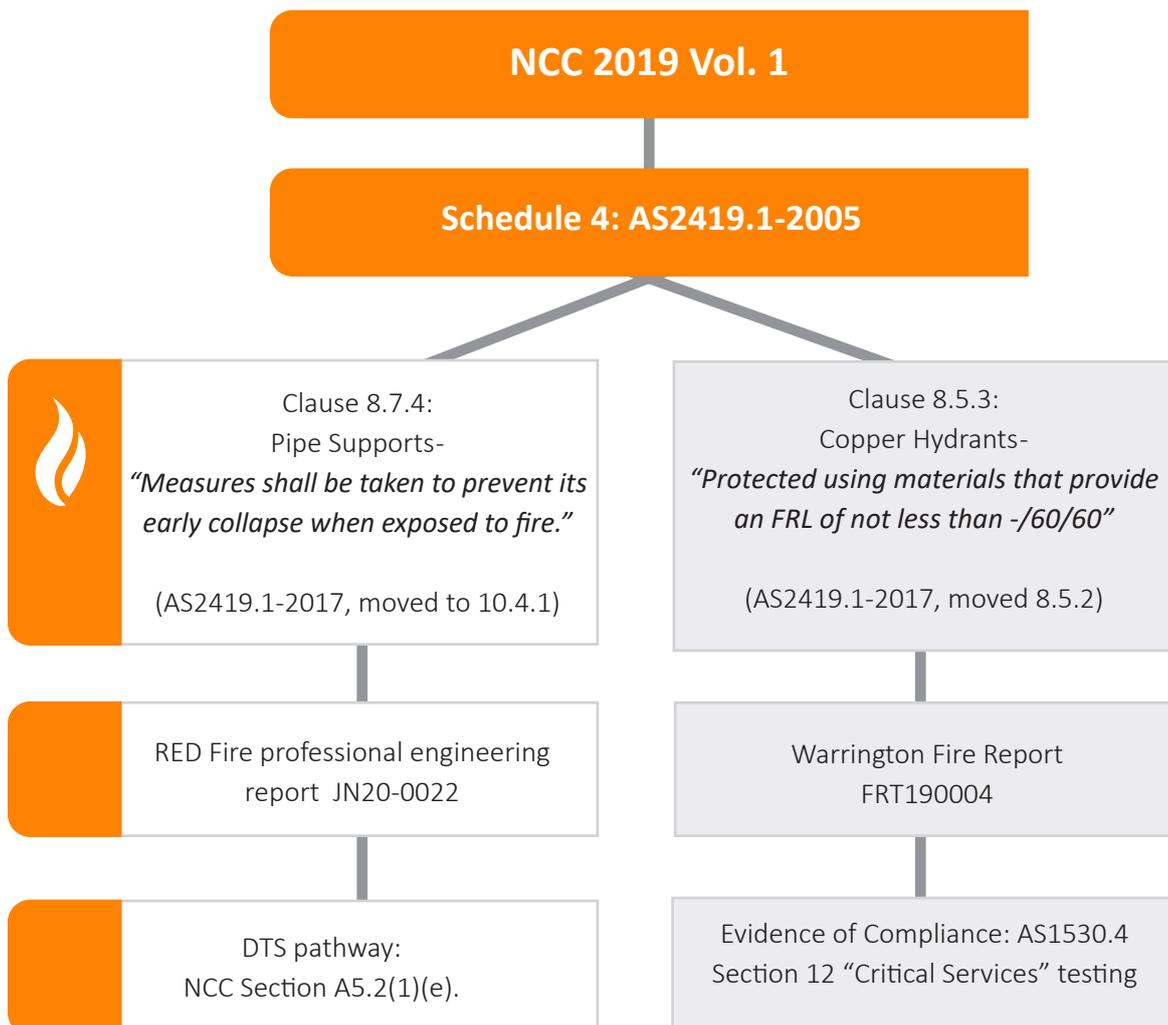
Copper pipe requirements

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 (critical service protection) under AS2419.1 using materials that provide an FRL of no less than-/60/60, as well as protection by construction capable of resisting the effects of fire for a period not less than 60 min.

Trafalgar Fire has tested FyreWrap® to AS1530.4 section 12 in order to meet this standard, providing compliance for copper hydrant pipes up to DN100 with appropriate protection. For information on this contact technical@tgroup.com.au for a copy of FRT 190004.

Compliance

See below for an overview of the path of compliance for these applications (pipe support protection and copper hydrant pipes). For any questions regarding the path of compliance or requirements for these applications, please contact Trafalgar Fire (1800 888 714).



FyreWrap®

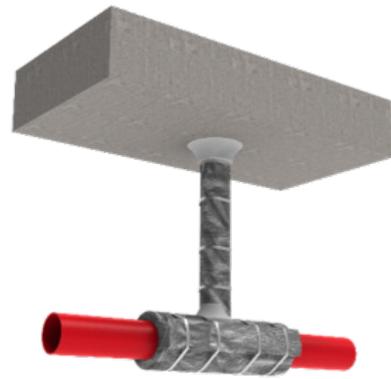


Specifications

	Thickness	38mm	
	Roll Widths	610mm	1220mm
	Surface area	4.65m ²	9.30m ²
	Roll weight	22kg	44kg
	Material density	96kg/m ³	
	Microbial/mould resistance	GREENGUARD certified	
	Bio-soluble	Yes	
	Green Building Council /LEED Accreditation	Yes	
	Contains Volatile Organic Compounds (VOC)	No	
	R-Value (Thermal Resistance)	1.2m ² .K/W	
	Acoustic Rating	31dB	
	Ozone depleting manufacture/ composition	No	

STEEL PIPE SUPPORTS

Hanger Size and Spacing Requirements



Maximum distance between hangers supports for various sized hangers

Hanger Size	NB 100 Medium Steel Pipe	NB 100 Heavy Steel Pipe	NB 150 Medium Steel Pipe	NB 150 Heavy Steel Pipe
M10	2.7m	2.4m	1.4m	1.4m
M12 or larger	3.9m	3.6m	2.1m	2.0m

COPPER HYDRANT PIPE PROTECTION

Per FRT 190004



Service	Hanger and Support Specification	Protection Method	Operational Protection
Up to DN100 Copper Pipes	Per AS2419.1	FyreWrap Elite 1.5	Up to 90min.

For Copper hydrant pipe protection, the full length of the pipe must be wrapped. For steel pipe and hanger protection, simply as shown above with a single width of FyreWrap® around the service centered around the hanger. Specific drawings for Copper hydrant pipes in appendix.

INSTALLATION

STEEL PIPE HANGER PROTECTION

Step 1: Install & Hang Services



Referencing AS2419, check the maximum hanger spacings as listed on page 6 for hanger sizes and separation, along the desired path.

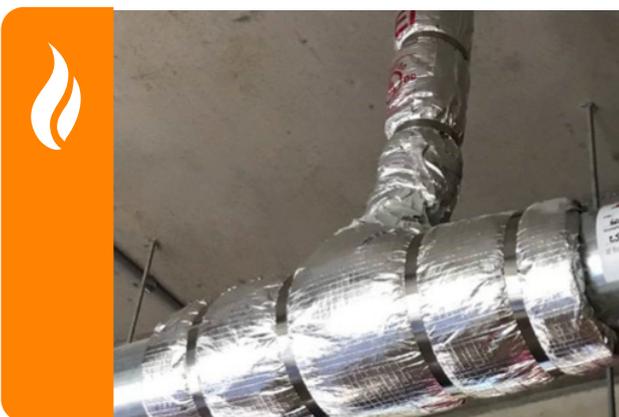
Step 2: Apply Wrap



Wrap a single width of FyreWrap® around the pipe, creating a slit in the center of the wrap for the hanger to go through. Wrap the hangers the full height from pipe to concrete. Tape any open edges of wrap with foil tape.

When wrapping any pipe, FyreWrap® must overlap itself at any joins for a distance of 100mm.

Step 3: Secure



Secure the FyreWrap® with steel cable ties at 120mm centres and 50mm from each end up the threaded rod section. Also apply 4 x steel cable ties to the FyreWrap® around the pipe, 50mm from each end and either side of the support bracket (as shown above).

Step 4: Seal



Apply FyreFLEX® Sealant to the FyreWrap® interface where the hanger meets the slab, and where the hanger meets the pipe. Nominal 20x20mm fillet should be applied.

INSTALLATION

COPPER PIPE CRITICAL SERVICES PROTECTION

Step 1: Install & Hang Services



Referencing AS2419, check the maximum hanger spacings as listed on page 6 for hanger sizes and separation, along the desired path.

Step 2: Apply Wrap



Wrap a single width of FyreWrap® around the pipe, creating a slit in the center of the wrap for the hanger to go through. Wrap the hangers the full height from pipe to concrete. Tape any open edges of wrap with foil tape.

FyreWrap® must overlap itself at any joins for a distance of 100mm when applied around the threaded rod, and 60mm along the length of the pipe.

Step 3: Secure



Secure the FyreWrap® with steel cable ties at 120mm centres and 50mm from each end up the threaded rod, then 200mm centres along the main pipe section.

Step 4: Seal



Apply FyreFLEX® Sealant to the FyreWrap® interface where the hanger meets the slab, and where the hanger meets the pipe. Nominal 20x20mm fillet should be applied. Where the pipe meets a wall, backing rod is applied in the gap (flush with the wall) and a 20x20mm fillet of FyreFLEX® sealant at the interface.

FyreWrap® System



FyreWrap®

- Lightweight fireproofing
- Fast, clean and easy to install
- Bio-soluble insulation material
- Up to 3 hour duct fire rating in accordance with AS1530.4 for internal and external fire
- Steel/copper hydrant protection

Item Number	Size	Thick	Qty	Pallet Qty
FyreWrap Elite 610	610mm wide x 7620mm long	38mm	1 roll	12 rolls
FyreWrap Elite 1220	1220mm wide x 7620mm long	38mm	1 roll	6 rolls

FyreWrap® Accessories

Item Number	Description	Min Order Qty	Pallet QTY
FyreFLEX 600W FyreFLEX 600G	FyreFLEX Sealant Sausage 600ml White or Grey	1	1920
FyreFLEX 300W FyreFLEX 300G	FyreFLEX Sealant Cartridge 300ml White or Grey	1	1040
Cable Tie SS 12 x 521	4.6mm wide x 521mm long	25	N/A
Cable Tie SS 12 x 910	4.6mm wide x 910mm long	25	N/A
Tape	Foil tape, 95mm wide, 50m roll	1	N/A

FAQ

Steel pipe Hangers to AS2419.1 – 2017 Section 10

Q – Do I need to wrap the hangers?

A – Yes, per the installation instructions on page 7.

Q – Do I need to wrap the full length of the pipe?

A – No, only a single width of FyreWrap® centered around each hanger.

Q – Do I need to apply FyreFLEX® Sealant?

A – Yes, at both ends of the threaded rod to seal the wrap to the concrete slab and to the wrap around the pipe.

Q – Does FyreWrap® comply with the older AS2419.1 – 2005 standard.

A – Yes.

Copper Hydrant Pipes to AS2419.1 – 2017 Section 8

Q – Do I need to wrap the hangers?

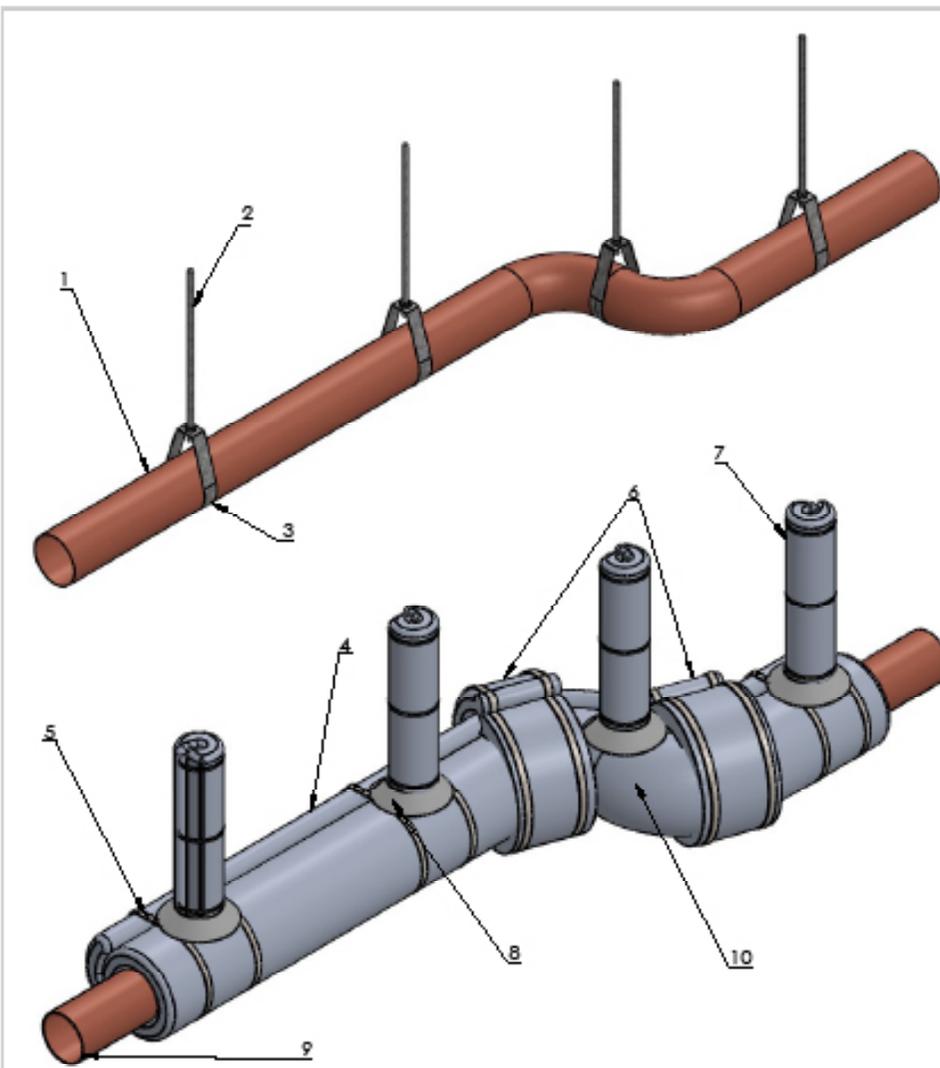
A – Yes, per the installation instructions on page 8.

Q – Do I need to wrap the full length of the pipe?

A – Yes, per the installation instructions on page 8.

Q – Do I need to apply FyreFLEX® Sealant?

A – Yes, where the service and wrap meets the wall and at both ends of the threaded rod to seal the wrap to the concrete slab and to the wrap around the pipe.



#	Item	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 60mm overlaps, through the entire length of fire compartment
5	Cable Ties	4.6mm stainless steel cable ties	Installed every 200mm centres along the pipe
6	Cover-strips	150mm wide, FyreWrap® blanket	Wrapped over any joints between two sections of FyreWrap®, tied in place with steel ties on either side of the joint
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 C3.1.5 requirements	Refer to drawing 3
10	Bend radius	FyreWrap® 38mm blanket with joint/coverstrip detail	Refer to drawing 5

Drawing Name: Overview

Project Title: Drawing V2

Drawing No. :
1

Sheet:
1 of 6

Date:
27/06/2019

Scale:
NTS

Test Standard:
AS1530.4

Fire resistance level:

Based on Report No.:

Codes:

Drawn By:
RB

Checked By:
JH

Revision:

Date:

No.:

NOTICE:

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (MM)

STANDARD DRAWING
 PROJECT DRAWING



