

TRAFALGAR



FyreFLEX™

Fire Rated Sealant

**Up to 4 Hours
Fire Protection**
(to AS 1530.4-2014)

1800 888 714
www.tfire.com.au



FyreFLEX™

FIRE RATED SEALANT



Trafalgar Fyreflex Sealant is a water based, low VOC and environmentally friendly fire rated, intumescent based sealant.

FyreFlex has two distinct applications, the first being fire protection of construction and expansion joints in fire rated barriers. The second application being fire stopping of services passing through openings in fire barriers.

FyreFlex is unique in that it has over 25 years of fire and acoustic testing and is therefore approved for use in most control joint or fire stopping applications required under the Building Code of Australia.

FyreFlex was the first commercially available latex sealant in the Australian market and has proven performance in Australia's harshest building site conditions.

KEY FEATURES AND BENEFITS

- 🔥 Known and trusted brand - Benchmark Quality
- 🔥 Australian made using Australian raw materials
- 🔥 Environmentally friendly with low VOC levels
- 🔥 Up to 4 hours fire ratings. (For full FRL, FyreWrap insulation will be required for some services)
- 🔥 Water based allowing easy clean-up
- 🔥 Water resistant once cured
- 🔥 Excellent adhesion properties
- 🔥 For further information on these products, contact Trafalgar

FYREFLEX USAGE RATE (ml/m)

DEPTH OF JOINT (mm)	WIDTH OF JOINT (mm)						
	10	15	20	25	30	40	50
10	100	150	200	250	300	400	500
12	120	180	240	300	360	480	600
15	150	225	300	375	450	600	750
20	200	300	400	500	600	800	1000



APPLICATIONS

Trafalgar FyreFlex is designed for sealing internal construction and expansion joints and openings for service penetrations requiring up to 4 hour fire ratings.

- Insitu internal joints in concrete, precast panels, block work, brick work and drywall systems.
- Sealing of electrical cables and pipe penetrations.
- Acoustic gap filling combined with fire rating requirement.
- Suitable for use with other Trafalgar products including board, mortar, pillow and collar systems.

METHOD OF APPLICATION

Install back-up material or joint filler such as Styrofoam as specified. Apply FyreFlex sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint or penetration. Tool FyreFlex with sufficient pressure to spread the sealant against the back-up material and onto the joint surfaces. A tool with a concave profile is recommended to achieve the correct shape.

Trafalgar is the well respected brand, synonymous with the supply of engineered solutions for the containment of fire, smoke and sound. As the foremost Australian owned supplier of passive fire protection systems, Trafalgar's products have been specified and installed into Australian buildings for over 70 years.



CONTAINMENT & ACCESS SOLUTIONS
WHOLLY AUSTRALIAN OWNED

FYREFLEX FIRE RATED SEALANT

Product	Code	Volume	Colour	Box Volume	Pallet Quantity
FyreFlex Cartridges	FyreFlex 300W FyreFlex 300G	300ml 300ml	White Grey	20	72 Boxes
FyreFlex Sausages	FyreFlex 600W FyreFlex 600G	600ml 600ml	White Grey	18	45 Boxes
FyreFlex Pails	FyreFlex 10W FyreFlex 10G	10L 10L	White Grey	N/A	32 Pails

PRODUCT DESCRIPTION

COLOUR - White - For service penetrations and easy painting.

Grey - Colour matched to concrete or blockwork.

PACKAGING & HANDLING - Available in three convenient packaging options for to suit applicators preference: Bulk loading, troweled on from pails, sausage or cartridge caulking.

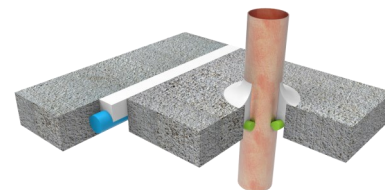
MOVEMENT CAPABILITIES - FyreFlex has a $\pm 10\%$ movement capability.

TESTING - Tested to AS1530.4 and AS4072.1 standards.

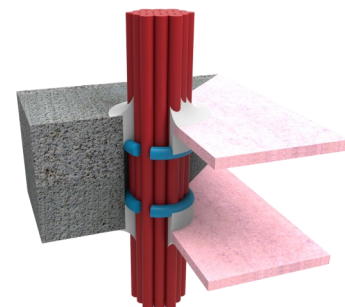
ENVIRONMENT - Easy clean-up, Low Volatile Organic Compounds (VOC) and Ozone Depleting Potential (ODP) formula.

SAFETY - FyreFlex sealant is a non hazardous substance, safe for general use. Please refer to product MSDS for full safety information.

ALSO AVAILABLE – Trafalgar offers a complete range of other fire stopping and fireproofing products.



COPPER PIPE
FRL up to -/240/- on non insulated walls and floors



CABLE BUNDLE
FRL up to -/240/-95 on walls and floors

SPECIFICATION AND STANDARDS

Testing

Fire tests have been conducted to AS1530.4, in accordance with AS4072.1, on concrete floors, brick, masonry, tilt-up panels, block and plasterboard walls.

Construction and Expansion Joints - Construction and expansion joints are to be fire stopped to maintain the required FRL of the wall or floor element by treatment with FyreFlex fire rated sealant in accordance with Trafalgar's instructions.

Service Penetrations - Service penetrations are to be fire stopped to maintain the required FRL of the wall or floor element by treatment with FyreFlex fire rated sealant in accordance with Trafalgar's instructions.

When full insulation rating (temperature rise) is required for the FRL, FyreWrap will be needed to be wrapped on ductile services such as cable trays and steel and copper pipes for example.

STORAGE & HANDLING

All materials shall be stored under cover in a manner that will prevent damage preferably on pallets and protected from moisture.

Do not freeze. Store in temperatures between 5°C - 30°C.

WARRANTY

Limited Warranty:

Your purchase and use of this product is subject to Trafalgar's standard terms and conditions of sale. Trafalgar's sole liability in the event of a product defect is, at our option, to replace this product or return it's purchase price.

All other warranties whether express or implied, including without limitations, any warranty of merchantability or fitness of purpose are expressly disclaimed unless prohibited by law or given in writing by Trafalgar for a specific project.

Disclaimer:

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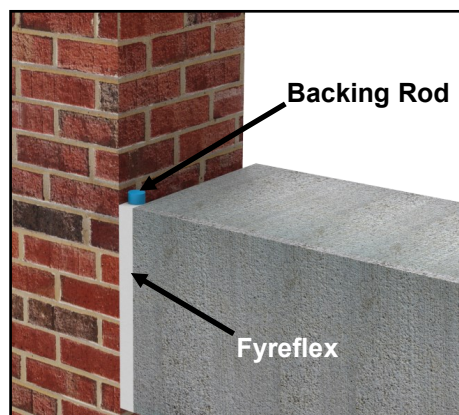
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MASONRY CONSTRUCTION AND EXPANSION JOINTS (FYREFLEX GREY)

Concrete, Brick and Block Walls

A) JOINT PROTECTED FROM EXPOSED SIDE



B) JOINT PROTECTED FROM UNEXPOSED SIDE



C) JOINT PROTECTED FROM BOTH SIDES

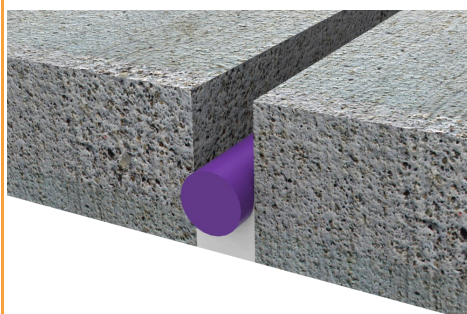


FILL DEPTHS OF FYREFLEX (mm)

JOINT WIDTH (mm)	10			20			25		30		40		50	
	A	B	C	A	B	C	A	C	A	C	A	C	A	C
RATING (minutes)														
-/120/120	10	15	10	10	30	10	12	12	15	15	20	20	25	20
-/180/180	10	15	10	10	30	10	12	12	15	15	20	20	25	20
-/240/240	15	15	10	30	35	15	30	20	30	20	40	20	40	20

NOTE: If the direction of fire is not known, sealant must be applied to both sides of the control joint, or to the thicknesses specified under joint type 'B'.

Internal Concrete and Pre-Cast Slabs



FILL DEPTHS OF FYREFLEX (mm)

RATING (minutes)	JOINT WIDTH (mm)					
	10	20	25	30	40	50
-/120/120	10	10	12	15	20	25
-/180/180	10	10	12	15	20	25
-/240/240	15	30	30	30	40	40

SPECIAL APPLICATIONS

System Description	System Diagram	System Description	System Diagram
<ul style="list-style-type: none"> External applications Up to 4 hours With non-rated external grade sealant 		<ul style="list-style-type: none"> Steel decking Up to 4 hours 	
<ul style="list-style-type: none"> Slab-on-slab Up to 4 hours With non-rated external or internal grade sealant 		<ul style="list-style-type: none"> Joint between wall and floor slab Up to 4 hours 	

DRYWALL CONSTRUCTION AND EXPANSION JOINTS (FYRFLEX WHITE)

I HOUR PLASTERBOARD SYSTEMS

SYSTEM	SYSTEM DIAGRAM
<ul style="list-style-type: none"> T-Junction between concrete wall and plasterboard wall Typical control joint in plasterboard wall 	
<ul style="list-style-type: none"> T-Junction between two plasterboard walls Typical control joint in plasterboard wall 	
<ul style="list-style-type: none"> Deflection head and base between concrete slabs and plasterboard wall <p>NOTE:</p> <ul style="list-style-type: none"> Fire rated plasterboard systems must be installed according to manufacturers instructions. FyreFlex is filled to depth of plasterboard sheet 	

DRYWALL CONSTRUCTION AND EXPANSION JOINTS (FYREFLEX WHITE)

2 HOUR PLASTERBOARD SYSTEMS

SYSTEM	SYSTEM DIAGRAM
<ul style="list-style-type: none"> • T-Junction between concrete wall and plasterboard wall • Typical control joint in plasterboard wall • T-Junction between two plasterboard walls 	
<ul style="list-style-type: none"> • T-Junction between concrete wall and plasterboard wall • Typical control joint in plasterboard wall • T-Junction between two plasterboard walls 	
<ul style="list-style-type: none"> • Deflection head and base between concrete slabs and plasterboard wall <p>NOTE:</p> <ul style="list-style-type: none"> • Fire rated plasterboard systems must be installed according to manufacturers instructions. • FyreFlex is filled to depth of plasterboard sheet 	

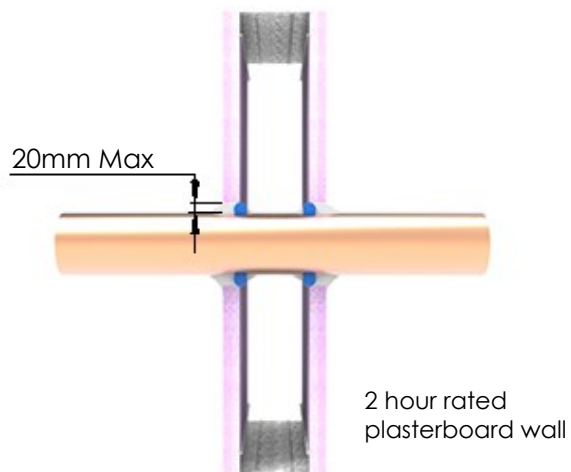
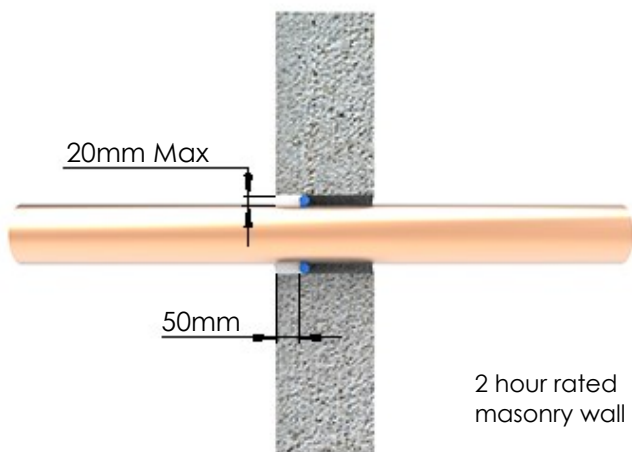
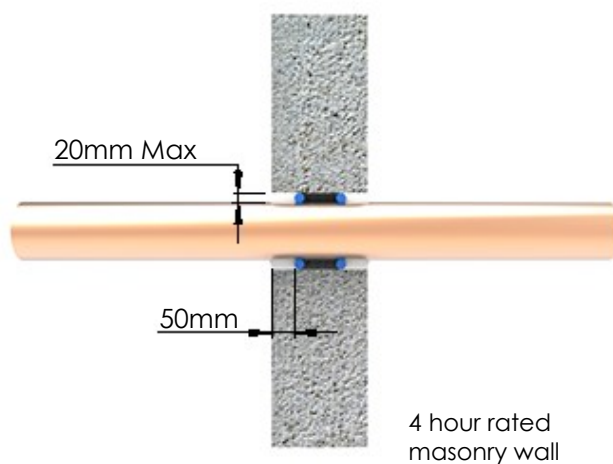
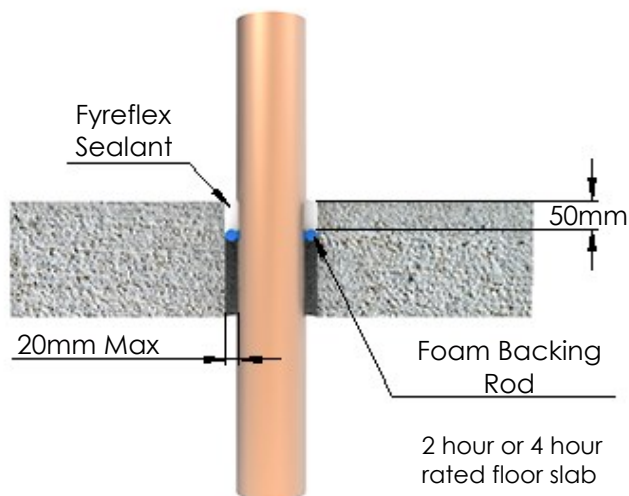
DRYWALL CONSTRUCTION AND EXPANSION JOINTS (FYRFLEX WHITE)

2 HOUR SHAFT WALL SYSTEMS

SYSTEM	SYSTEM DIAGRAM
<ul style="list-style-type: none"> T-Junction between concrete wall and shaft wall Typical control joint in shaft wall T-Junction between two shaft walls 	
<ul style="list-style-type: none"> T-Junction between concrete wall and shaft wall Typical control joint in shaft wall T-Junction between two shaft walls 	
<ul style="list-style-type: none"> Deflection head and base between concrete slabs and plasterboard wall <p>NOTE:</p> <ul style="list-style-type: none"> Fire rated plasterboard systems must be installed according to manufacturers instructions. FyreFlex is filled to depth of plasterboard sheet 	

MISCELLANEOUS PENETRATIONS

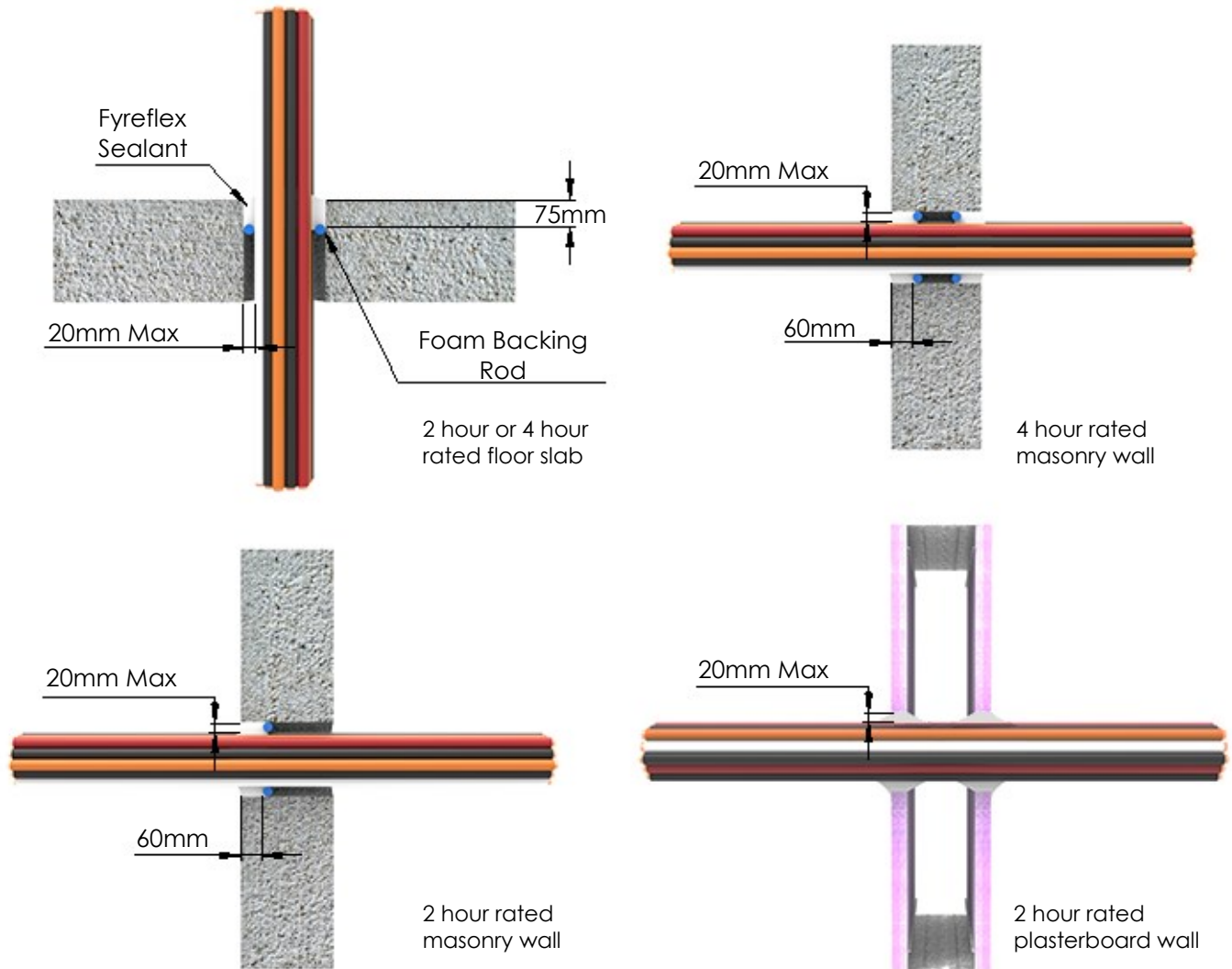
Pipe Penetrations



PIPE TYPE	WALL OR FLOOR	PIPE SIZES	FIRE RESISTANCE LEVEL
STEEL ⇒ Non Insulated ⇒ With 25mm rockwool insulation	Walls and floors Floors only	Up to 225mm diam. Up to 200mm diam.	-/240/- -/180/-
CAST IRON ⇒ Non insulated ⇒ With 25mm rockwool insulation	Walls and floors Floors only	Up to 225mm diam. Up to 200mm diam.	-/240/- -/180/-
BRASS ⇒ Non insulated	Walls and floors	Up to 102mm diam.	-/240/-
COPPER ⇒ Non insulated ⇒ With 25mm rockwool insulation	Walls and floors Floors only	Up to 225mm diam. Up to 19mm diam.	-/240/- -/120/-
FIBRE RE-INFORCED CEMENT PIPES AND COLUMNS	Walls and floors	Up to 225mm diam.	-/120/120

MISCELLANEOUS PENETRATIONS

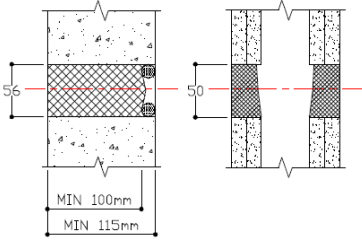
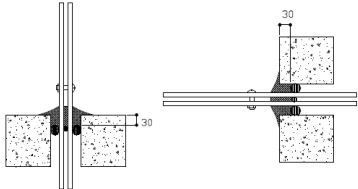
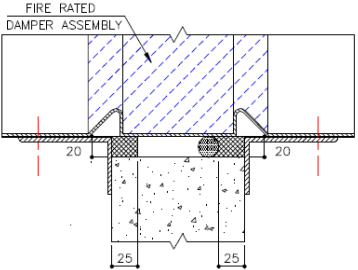
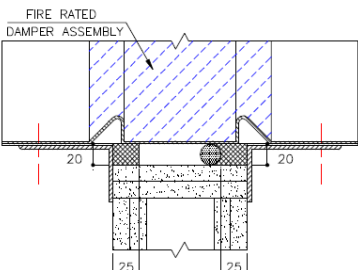
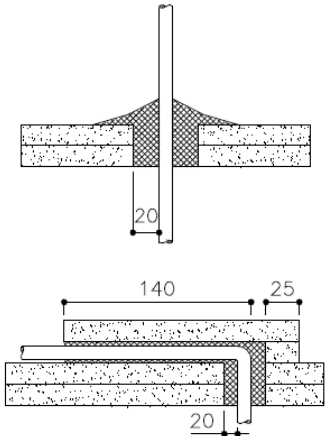
Electrical Cable Penetrations



PENETRATION TYPE	WALL OR FLOOR	PENETRATION SIZES	FIRE RESISTANCE LEVEL
SINGLE CABLE	Walls and floors	Up to 54mm diam.	-/240/90
CABLE BUNDLE	Walls and floors	Bundle of up to 24 cables	-/240/90
STEEL CABLE TRAY	Walls and floors	Up to 380mm wide with assorted cables	-/240/90
BUS BARS	Walls and floors	50mm x 10mm copper bus bars	-/120/-

MISCELLANEOUS PENETRATIONS

Special Applications

SYSTEM	SYSTEM DIAGRAM	FIRE RESISTANCE LEVEL
<ul style="list-style-type: none"> Blank penetration Walls and floors Max 56mm diameter 		<p>-/120/120</p>
<ul style="list-style-type: none"> Copper and aluminium bus bars Walls and floors Max size 10mm x 200mm 		<p>-/120/-</p>
<ul style="list-style-type: none"> Perimeter seal for steel duct and damper used in masonry walls and floors 		<p>-/120/-</p>
<ul style="list-style-type: none"> Perimeter seal for steel duct and damper used in drywalls 		<p>-/120/-</p>
<ul style="list-style-type: none"> Cable penetrations through plasterboard ceiling 		<p>-/60/-</p> <p>Note:</p> <ul style="list-style-type: none"> Fire rated plasterboard systems must be installed according to manufacturer's instructions FyreFlex is filled to depth of plasterboard sheet

FYREWAP + FYREFLEX PENETRATIONS

Plasterboard, Masonry and aerated concrete wall applications

SYSTEM	SYSTEM DIAGRAM	FIRE RESISTANCE LEVEL
<p>⇒ HORIZONTAL</p> <ol style="list-style-type: none"> Horizontal Floor slabs and fire rated ceilings 25mm x 25mm nominal fillet of FyreFlex sealant to entire perimeter extending along the FyreWrap and the fire stopping material Ductile and metallic services including steel, copper and brass pipes, pipes with combustible insulation materials, cables with and without cable trays, bus bars etc. FyreWrap at least 38mm thick for at least 450mm length, with a 75mm longitudinal overlap, applied to the top of the horizontal separating element only 12mm wide x 0.4mm nominal thick steel banding at mid point and 50mm nominal from each end Backing rod 		<p>-/120/120</p>
<p>⇒ VERTICAL</p> <ol style="list-style-type: none"> Vertical fire rated masonry, aerated concrete and plasterboard walls 25mm x 25mm nominal fillet of FyreFlex sealant to entire perimeter extending along the FyreWrap and the fire stopping material Ductile and metallic services including steel, copper and brass pipes, pipes with combustible insulation materials, cables with and without cable trays, bus bars etc. FyreWrap at least 38mm thick for at least 450mm length, with a 75mm longitudinal overlap 12mm wide x 0.4mm nominal thick steel at mid point and 50mm nominal from each end Backing rod 		<p>-/120/120</p>

JOINT SEALANT QUANTITY ESTIMATION TABLE

Note: All quantities estimate for 100 lineal metre requirement

Joint Size		LITRES	300ml Cartridge	600ml SAUSAGES	10 LITRE PAIL
WIDTH	DEPTH				
5	10	5	17	9	-
6	10	6	20	10	-
8	10	8	27	14	-
10	10	10	34	17	1
15	10	15	50	25	2
15	15	22.5	75	38	3
20	10	20	67	34	2
20	15	30	100	50	3
20	20	40	134	67	4
25	15	37.5	125	63	4
25	20	50	167	84	5
30	15	45	150	75	5
30	20	60	200	100	6
40	20	80	266	134	8
50	20	100	334	167	10
60	20	120	400	200	12

FORMULA FOR ESTIMATING QUANTITY OF JOINT SEALANT REQUIREMENTS (Use whole numbers for millimetres and metres)

L = Length of joint in metres	D = Depth of joint in millimetres
W = Width of joint in millimetres	Q = Quantity of Litres required
$Q = \frac{L \times W \times D}{1000}$	e.g. $Q = \frac{100m \times 15mm \times 10mm}{1000} = 15 \text{ Litres}$

Notes:

1. Sealant depth in joints between 10mm & 40mm wide should never be less than half the width
2. It is not recommended for any sealant depth to be less than 10mm or greater than 20mm
3. To estimate the quantity of a triangular fillet, the amount of sealant required would be half that required for a rectangular joint of the same dimensions