QIF INSULATED FIRE SLEEVE



QIF Insulated Fire Sleeve prevents the spread of fire where combustible (plastic) and non-combustible (metal) pipes penetrate fire compartment walls and floors.



QIF Insulated Fire Sleeves

FEATURES & BENEFITS

- Section 2009 Tested to BSEN 1366-3: 2009
- S Up to 4 hour fire rating
- Suitable for plasterboard partitions and concrete floors and walls
- Suitable for 15 to 160mm diameter pipes
- Can be retrofitted
- Suitable for plastic pipes
- Suitable for metal pipes
- Stype X Durability
- Suitable for use in conjunction with the QuelStop Fire Batt System
- Maintains thermal insulation of the pipe
- Allows thermal movement of the pipe
- No additional sleeving required
- Simple and quick to install, no mechanical fixing required
- Supplied as a 300mm length and can be cut to length



QIF Insulated Fire Sleeve installed in a wall penetration

COMPOSITION

The QIF Insulated Fire Sleeves is supplied as a 300mm long sleeve and consists of a reinforced foil containing an insulating mineral fibre and graphite intumescent material which reacts under the influence of heat to exert pressure on the penetration.

As plastic pipes soften the intumescent forms a carbonaceous char, crushing the melting pipe and forming a plug, likewise, when used around non-combustible metal pipes, the intumescent will char around the pipe and prevent fire passing through to the adjoining compartment.

APPLICATION / INSTALLATION

The QIF Insulated Fire Sleeve can be used around both metal and plastic pipes.

QIF Insulated Fire Sleeve are suitable for use in concrete floors and various wall constructions including solid concrete masonry/block walls and flexible fire rated plasterboard partitions with and without QuelStop Fire Batt.

Fire ratings depend on the substrate and services so refer to the technical data and installation details for full details.

The QIF are primarily made from a mineral wool material so they will provide a degree of thermal insulation and thermal movement to the pipe as it passes through the fire compartment so no extra sleeves are required. Other pipe insulations can then be jointed onto the ends of the QIF once installed.

QIF INSULATED FIRE SLEEVE



The QIF is approx. 25mm thick so holes should be cut or drilled at 50mm bigger than the Internal Diameter (ID) of the sleeve, refer to the table below for full details:

Quelfire Product Code	(ID) Inside diameter	To suit pipes with (OD) Outside Diameters	Approx. thickness of QIF	Recommended hole diameter
QIF17	17mm	15 to 19mm	25mm	67mm
QIF21	21mm	19 to 23mm	25mm	71mm
QIF27	27mm	25 to 29mm	25mm	77mm
QIF34	34mm	32 to 36mm	25mm	84mm
QIF42	42mm	40 to 44mm	25mm	92mm
QIF48	48mm	46 to 50mm	25mm	98mm
QIF54	54mm	52 to 56mm	25mm	104mm
QIF60	60mm	58 to 62mm	25mm	110mm
QIF67	67mm	65 to 69mm	25mm	117mm
QIF76	76mm	74 to 78mm	25mm	126mm
QIF80	80mm	78 to 82mm	25mm	130mm
QIF89	89mm	87 to 91mm	25mm	139mm
QIF102	102mm	100 to 104mm	25mm	152mm
QIF108	108mm	106 to 110mm	25mm	158mm
QIF114	114mm	112 to 116mm	25mm	164mm
QIF127	127mm	125 to 129mm	25mm	177mm
QIF140	140mm	138 to 142mm	25mm	190mm
QIF159	159mm	157 to 161mm	25mm	209mm

The QIF should be installed centrally within the substrate and although can be cut down in length must be either flush or protruding with a minimum required length depending on a number of factors so refer to the relevant documentation before commencing installation.

A set of installation details and an installation guide is available, however, installation of the QIF Insulated Fire Sleeve is simple, requiring no mechanical fixings and can be retrofitted around the pipe or simply slid on to the end like a sleeve during pipe installation.

To retrofit, the sleeve must be first cut along its length with a sharp knife, it can then be opened up and fed around the pipe where it must be then wrapped tight again and sealed with the self-adhesive foil tape that is provided with the QIF.

Provided the hole in the substrate has been drilled accurately, the QIF Insulated Fire Sleeve can then be slid along the pipe into position, ensuring that the minimum protrusions where required on both sides are achieved, and then finally sealed in place with QuelStop Intumescent Acrylic Sealant.

A set of installation details and an installation guide is available.



PERFORMANCE

QIF Insulated Fire Sleeves are suitable for use in in both floors and walls with plastic, copper and steel pipes and have been tested up to 4 hours integrity. They have also been tested in conjunction with QuelStop Fire Batt seals.

Installation and performance details are dependent on a number of variables such as insulation and supporting construction etc so as always the product must be installed in accordance with the specific installation details which are available from the Quelfire Technical Team. A broad summary of results can be summarised as follows:

Service Type	Diameter of pipe	Minimum substrate details	Minimum length of sleeve	Length of protrusion either side	Fire rating - Integrity	Fire rating - Insulation		
Walls:								
UPVC Pipes	15-160mm	132mm flexible or rigid wall	180mm	24mm	Up to 120 minutes	Up to 120 minutes		
HDPE Pipes	15-160mm	132mm flexible or rigid wall	180mm	24mm	Up to 120 minutes	Up to 120 minutes		
Metal Pipes	15mm	132mm flexible or rigid wall	150mm	9mm	Up to 120 minutes	Up to 120 minutes		
Metal Pipes	16-159mm	132mm flexible or rigid wall	150mm	9mm	Up to 120 minutes	Up to 30 minutes		
UPVC Pipes	15-110mm	150mm rigid wall	150mm	0mm	Up to 240 minutes	Up to 240 minutes		
UPVC Pipes	40-110mm	Double QuelStop Fire Batt in 100mm flexible or rigid wall	150mm	25mm	Up to 120 minutes	Up to 90 minutes		
Floors:								
UPVC Pipes	15-40mm	150mm concrete floor	150mm	0mm	Up to 120 minutes	Up to 120 minutes		
HDPE Pipes	15-160mm	150mm concrete floor	150mm	0mm	Up to 120 minutes	Up to 120 minutes		
UPVC Pipes	15-160mm	150mm concrete floor	175mm	25mm*	Up to 120 minutes	Up to 120 minutes		

*25mm protrusion required to underside of floor only.

Technical Support & Guidance:

Should you require any further information regarding this product, please do not hesitate to contact the technical department at Quelfire Ltd.

Tel: 0161 928 7308. Email: technical@quelfire.co.uk

Please be aware that this document is intended for general information only and all details should be checked against all relevant supporting test evidence, certification and installation guidelines.

Use of alternative components or deviations from the instructions in any way is likely to mean that the installation will not comply with the assessed rating.

Quelfire Ltd does not accept responsibility for the consequences of using Quelfire products in applications or for purposes not authorised by Quelfire Ltd. Expert advice should be sought where such applications are contemplated.

The policy of Quelfire Ltd is one of constant improvement. Details are subject to change and/or withdrawal without notification therefore you must ensure this is the latest published documentation. Whilst Quelfire will endeavour to keep its publications up to date, the accuracy of the information contained within this document may be affected by pertinent changes in the law or regulatory requirements and alterations or amendments to the specification of Quelfire products.

All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As Quelfire Ltd has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, is intended to be given as to the actual performance of the product mentioned or referred to herein and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given. Full terms and conditions can be accessed at: https://quelfire.co.uk/terms-conditions-of-sale/