



CERTIFICATE OF APPROVAL

No CF 5151

This is to certify that, in accordance with
 TS00 General Requirements for Certification of Fire Protection Products
 The undermentioned products of

FISCHERWERKE GMBH & CO. KG

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Have been assessed against the requirements of the Technical Schedule(s)
 denoted below and are approved for use subject to the conditions
 appended hereto:

CERTIFIED PRODUCT
FIGM-PFS+ INTUMESCENT
MASTIC

TECHNICAL SCHEDULE
TS03 Fire Resisting
Penetration Sealing Systems

Signed and sealed for and on behalf of CERTIFIRE



Sir Ken Knight
 Chairman
WCL Impartiality Committee



Paul Duggan
 Certification Manager
Warrington Certification Ltd



Issued: 22nd February 2013
 Revised: 8th February 2016
 Valid to: 22nd November 2017

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FISCHERWERKE GMBH & CO. KG

FIGM-PFS+ INTUMESCENT MASTIC

1. This approval relates to the use of FIGM-PFS+ intumescent mastic pipe closure system for fire protection where there are services penetrating walls. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the acceptable configurations to provide fire resistance periods in accordance with BS EN 1366-3: 2009 of up to 120 minutes for differing services and elements of construction.
2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section 2 of the Technical Standards (Scotland), Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.'
3. The product is approved on the basis of:
 - i) Initial type testing
 - ii) Audit testing at the frequency specified in TS03
 - iii) A design appraisal against TS03
 - iv) Inspection and surveillance of factory production control
 - v) Production surveillance under ISO 9001:2008
4. The masonry or concrete walls and drywalls shall be at least 100 mm thick and have at least the same fire rating as that required for the penetration seal.
5. The services which may be fitted through the seals are PVC, HDPE, ABS, insulated copper pipes and cables as detailed within the Approval Matrix included in this Certificate.
6. The approval relates to ongoing production. Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

Further Information

Further information regarding the details contained in this data sheet may be obtained from FISCHERWERKE GmbH & Co (+49 7443 12-4925).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel:01925 646777, website: www.warringtonfire.net)

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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Walls –EN 1366-3

Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Wall Thickness	Integrity	Insulation
PVC – 125mm Ø by 4.8-7.2 mm wall thickness	16 mm annulus x 25mm deep	Stone wool 30mm deep nominal 80kg/m ³	120 mm	120 minutes	120 minutes
PVC – 40mm Ø by 1.9-3 mm wall thickness	10 mm annulus x 25mm deep	N/A			
HDPE – 90mm Ø by 9.2 mm wall thickness	12.5 mm annulus x 25mm deep				
ABS – 90mm Ø by 6mm wall thickness	12.5 mm annulus x 25mm deep				
Copper/Steel – 60mm Ø by 0.8-14.2mm wall thickness, with 32mm Armaflex insulation	20 mm annulus x 25mm deep			120 minutes	90 minutes
Copper/Steel –13 Ø by 0.8-7mm wall thickness, with 13mm Armaflex insulation	12 mm annulus x 25mm deep			120 minutes	120 minutes
Walls			The walls shall be a minimum of 120 mm thick. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50 mm studs. Masonry/concrete walls shall have a minimum density for concrete or brick of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All walls shall have at least the same fire rating as that required for the pipe closure system.		
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth (of the drywall skin) min 25mm, with the FIGM-PFS+ INTUMESCENT MASTIC sealant material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 150 mm and 450 mm from the surface of the sealing system on both faces.			

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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Walls –EN 1366-3

Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Wall Thickness	Integrity	Insulation
HDPE – 63mm Ø by 7.2 mm wall thickness with Cables up to Ø 21mm	300mm wide x 100mm high x 25mm deep	N/A	120 mm	120 minutes	120 minutes
Cables up to Ø 21mm	300mm wide x 100mm high x 25mm deep				
Walls		The walls shall be a minimum of 120 mm thick. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50 mm studs. Masonry/concrete walls shall have a minimum density for concrete or brick of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All walls shall have at least the same fire rating as that required for the pipe closure system.			
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth (of the drywall skin) min 25mm, with the FIGM-PFS+ INTUMESCENT MASTIC sealant material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 150 mm and 450 mm from the surface of the sealing system on both faces.			

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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Walls –EN 1366-3

Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Wall Thickness	Integrity	Insulation
PVC – 40mm Ø by 1.9mm wall thickness	20 mm annulus x 25mm deep	N/A	100 mm	120 minutes	120 minutes
PVC – 125mm Ø by 9.2 mm wall thickness				60 minutes	60 minutes
HDPE – 90mm Ø by 9.2 mm wall thickness				120 minutes	120 minutes
ABS – 40mm Ø by 1.9mm wall thickness					
HDPP – 40mm Ø by 1.9mm wall thickness					
Copper/Steel –40mm – 159mm Ø by 2mm-14.2mm wall thickness, with 32mm Armaflex insulation (LS650mm)				120 minutes	30 minutes
Walls	The walls shall be a minimum of 100 mm thick. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50 mm studs. Masonry/concrete walls shall have a minimum density for concrete or brick of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All walls shall have at least the same fire rating as that required for the pipe closure system.				
Application Technique:	The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth (of the drywall skin) min 25mm, with the FIGM-PFS+ INTUMESCENT MASTIC material.				
Service Coat-Back :	Not required			U Value:	Not known
Service Support Requirements:	Services should be rigidly supported via steel angles, hangars or channels, not further than 270 mm from the surface of the sealing system on both faces.				

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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Floors –EN 1366-3

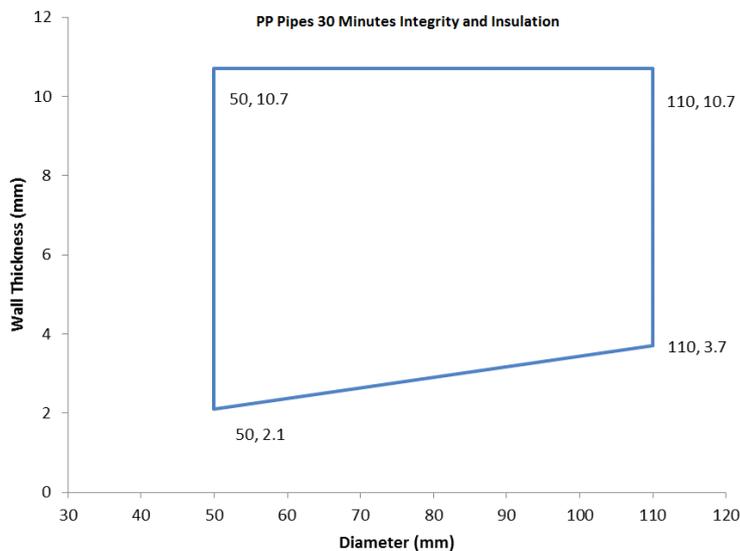
Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Floor Thickness	Integrity	Insulation
Electrical cables up to 21mm Ø	Max 200mm x 200mm Min 50mm x 50mm	100mm deep stone wool 45kg/m ³	150 mm	180 minutes	20 minutes
Electrical cables 22-80mm Ø				120 minutes	20 minutes
Non sheathed electrical cables up to 24mm Ø				180 minutes	15 minutes
Up to 21mm Ø telecom cables in bundles of up to 100mm Ø				180 minutes	15 minutes
Copper/Steel –41mm – 159mm Ø by 2.5mm-14.2mm wall thickness, with 16mm - 32mm Armaflex insulation (CS)	20 mm annulus x 25mm deep			120 minutes	120 minutes
Floor		The floor shall be a minimum of 150 mm thick. Masonry/concrete floors shall have a minimum density for concrete of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All floors shall have at least the same fire rating as that required for the pipe closure system.			
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth of min 25mm to the upper surface, with the FIGM-PFS+ INTUMESCENT MASTIC material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 270 mm from the surface of the sealing system on the upper face			

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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Floors –EN 1366-3

Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Floor Thickness	Integrity	Insulation
PP Pipe 110mm Ø 3.7mm wall thickness	20 mm annulus x 25mm deep(both faces)	100mm deep stone wool 45kg/m ³	150 mm	30 minutes	30 minutes
PP Pipe 50mm Ø 10.7mm wall thickness				120 minutes	120 minutes
PP Pipe 110mm Ø 2.1mm wall thickness				240 minutes	240 minutes
Floors		The floor shall be a minimum of 150 mm thick. Masonry/concrete floors shall have a minimum density for concrete of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All floors shall have at least the same fire rating as that required for the pipe closure system.			
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth of min 25mm to the both faces, with the FIGM-PFS+ INTUMESCENT MASTIC material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 270 mm from the surface of the sealing system on upper face			

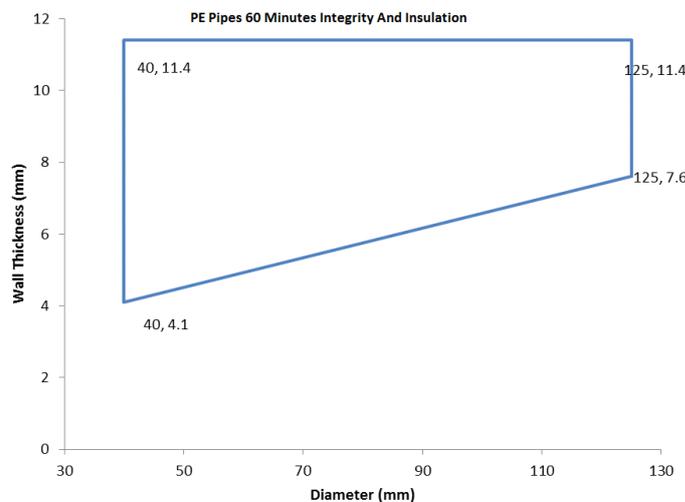


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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Floors –EN 1366-3

Pipe Size and Type	FIGM-PFS+ INTUMESCENT MASTIC Dimensions	Backing Material	Minimum Floor Thickness	Integrity	Insulation
PE Pipe 125mm Ø 7.6mm wall thickness	20 mm annulus x 25mm deep(both faces)	100mm deep stone wool 45kg/m ³	150 mm	60 minutes	60 minutes
PE Pipe 125mm Ø 11.4mm wall thickness				90 minutes	90 minutes
PE Pipe 40mm Ø 4.1mm wall thickness				240 minutes	240 minutes
Floors		The floor shall be a minimum of 150 mm thick. Masonry/concrete floors shall have a minimum density for concrete of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All floors shall have at least the same fire rating as that required for the pipe closure system.			
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth of min 25mm to the both faces, with the FIGM-PFS+ INTUMESCENT MASTIC material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 270 mm from the surface of the sealing system on the upper face			

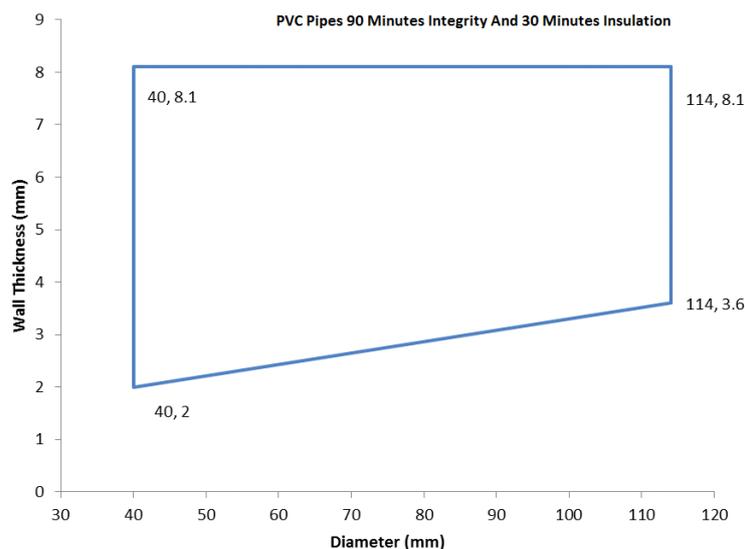


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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix Floors –EN 1366-3

Pipe Size and Type	Pyropro HPE Dimensions	Backing Material	Minimum Floor Thickness	Integrity	Insulation
PVC Pipe 40mm Ø 2mm wall thickness	20 mm annulus x 25mm deep(both faces)	100mm deep stone wool 45kg/m ³	150 mm	240 minutes	240 minutes
PVC Pipe 114mm Ø 3.6mm wall thickness				90 minutes	45 minutes
PE Pipe 114mm Ø 8.1mm wall thickness				120 minutes	120 minutes
Floors		The floor shall be a minimum of 150 mm thick. Masonry/concrete floors shall have a minimum density for concrete of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All floors shall have at least the same fire rating as that required for the pipe closure system.			
Application Technique:		The hole for the pipe shall be drilled to suit the required annular space. The pipe shall then be positioned centrally within the hole and then the remaining annular space shall be in-filled to full depth of min 25mm to the both faces, with the FIGM-PFS+ INTUMESCENT MASTIC material.			
Service Coat-Back :		Not required		U Value:	Not known
Service Support Requirements:		Services should be rigidly supported via steel angles, hangars or channels, not further than 270 mm from the surface of the sealing system on the upper face			



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FIGM-PFS+ INTUMESCENT MASTIC

Approval Matrix –EN 1366-4

Wall Installations					
Product Name		FIGM-PFS+ INTUMESCENT MASTIC			
Joint Width mm	Depth mm	Backing Material	Gap Face Material	Integrity (mins)	Insulation (mins)
20	25	PE Backing	AAC/DW	120	120
Application Technique	Compress backing material into gap/joint to form a pocket of the correct depth for the sealant to finish flush with the surface of the wall, then infill with FIGM-PFS+ INTUMESCENT MASTIC to a depth of 25mm. The seal is required to be formed on both faces/sides of the wall.				
Walls	The walls shall be a minimum of 100 mm thick. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50 mm studs. Masonry/concrete walls shall have a minimum density for concrete or brick of 780kg/m ³ and for aerated concrete blocks of 600kg/m ³ . All walls shall have at least the same fire rating as that required for the pipe closure system.				
Resistance to Smoke:	Not evaluated by this approval		Weather Capability:	Not evaluated by this approval	
Acoustic Rating:	Not evaluated by this approval		Movement Capability:	Not evaluated by this approval	

AAC- Autoclaved aerated concrete
 PE - Polyethylene
 DW - Drywall