CERTIFICATE OF APPROVAL
No CF 5343

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

NULLIFIRE LIMITED

Torrington Avenue, Coventry, West Midlands, CV4 9TJ
Tel: 02476 855000

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	TECHNICAL SCHEDULE
FB750 Fire Rated Coated Board	**TS03 Penetration Sealing Systems, TS40 Linear Gap Sealing Systems**

Signed and sealed for and on behalf of Exova (UK) Limited trading as Warrington Certification

Sir Ken Knight
Chairman
Impartiality Committee

Paul Duggan
Certification Manager

Issued: 15th October 2015
Revised: 20th April 2017
Valid to: 13th May 2020

CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

1. This approval relates to the use of FB750 Fire Rated Coated Board for the fire protection where there are joints in/between or services are penetrating walls & floors. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the thickness and acceptable services for FB750 Fire Rated Coated Board required to provide fire resistance periods in accordance with BS 476: Part 20: 1987 or in accordance with BS EN 1366-3: 2009 (as indicated in the Matrix) for differing services and wall/floor constructions. The scope of certification complies with the guidelines stated in the ASFP Red Book: 3rd Edition for 3rd party certification schemes.

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 & TS40
   iii) A design appraisal against TS03 & TS40
   iv) Inspection and surveillance of factory production control
   v) Production surveillance under ISO 9001: 2008

4. The masonry or concrete walls shall be at least 140 mm thick and have at least the same fire rating as that required for the penetration seal. The concrete floors shall be at least 140 mm thick and have at least the same fire rating as that required for the penetration seal. The gypsum drywalls shall be at least 130 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 cable ladders, cables and metallic pipes, 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.

Issued: 15th October 2015
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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS 476: Part 20 :1987 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Integrity	Insulation
Single layer (50 mm)	Cable tray (150 mm wide by 25 mm high max.)	60 minutes	60 minutes
	Armoured 4 copper core power cables 17mm diam.	60 minutes	60 minutes
	3 copper core power flex 8mm diam.	60 minutes	60 minutes
	4 - 8 mm diameter single core earth cables	60 minutes	60 minutes
	4 - 9 mm diameter single core neutral cables	60 minutes	60 minutes
	Bundles 3.5 mm diam. Data cables	60 minutes	60 minutes
	Stone wool lagged copper pipes up to 22 mm diam.	60 minutes	60 minutes
Double layer (100 mm)	Cable tray (150 mm wide by 25 mm high max.)	120 minutes	60 minutes
	Armoured 4 copper core power cables 17mm diam.	120 minutes	60 minutes
	3 copper core power flex 8mm diam.	120 minutes	60 minutes
	4 - 8 mm diameter single core earth cables	120 minutes	60 minutes
	4 - 9 mm diameter single core neutral cables	120 minutes	60 minutes
	Bundles 3.5 mm diam. Data cables	120 minutes	60 minutes
	Stone wool lagged copper pipes up to 22 mm diam.	120 minutes	60 minutes
Double split layer (100 mm + 130 mm cavity)	Cable tray (150 mm wide by 25 mm high max.)	120 minutes	120 minutes
	Armoured 4 copper core power cables 17mm diam.	120 minutes	120 minutes
	3 copper core power flex 8mm diam.	120 minutes	120 minutes
	4 - 8 mm diameter single core earth cables	120 minutes	120 minutes
	4 - 9 mm diameter single core neutral cables	120 minutes	120 minutes
	Bundles 3.5 mm diam. Data cables	120 minutes	120 minutes
	Stone wool lagged copper pipes up to 22 mm diam.	120 minutes	120 minutes

Pipes must be lagged to full length with 40 mm thick stone wool material (interrupted at the seal) and cable trays/cables must be lagged to a minimum length of 300 mm on both sides of the seal with 20 mm thick stone wool material. All junctions to be sealed with FS702 Acrylic Sealant.

Maximum aperture:	1000 mm high by 400 mm wide Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick and be constructed from steel or timber studs faced with minimum 2 layers of gypsum based boards. Where timber studs are used, the aperture must always be lined with 2 layers of board. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	**Gypsum drywalls**: Single layer board tightly friction requires fitting into the aperture at mid-depth of the wall, the aperture to be lined with 2 layers of gypsum board. Double layer requires boards tightly friction fitted into the aperture flush to each side of the wall. Single and double layer board to aperture junctions are sealed with FS702 Acrylic Sealant. The split board system requires a single layer of board to be face fixed over each side of the aperture, with a 100 mm overlap all round and 70 mm steel screws at 200 mm centres (50 mm from corners). FS702 Acrylic Sealant is used to form a seal between the board and face of the wall. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
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 & 500 mm from the surface of the sealing system on both faces.		
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

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

BS 476: Part 20 :1987 Approval Matrix - Up To 240 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Integrity	Insulation
Single layer (50 mm)	Cable Ladder (150 mm wide by 15 mm high max.)	240 minutes	N/A
	PVC sheathed copper core cables 11 mm diameter	240 minutes	90 minutes
	Steel pipes up to 34 mm diameter (3 mm pipe wall)	240 minutes	N/A
Single layer (60 mm)	Cable Ladder (150 mm wide by 15 mm high max.)	240 minutes	N/A
	PVC sheathed copper core cables 11 mm diameter	240 minutes	90 minutes
	Steel pipes up to 34 mm diameter (3 mm pipe wall)	240 minutes	N/A
Single layer (70 mm)	Cable Ladder (150 mm wide by 15 mm high max.)	240 minutes	N/A
	PVC sheathed copper core cables 11 mm diameter	240 minutes	90 minutes
	Steel pipes up to 34 mm diameter (3 mm pipe wall)	240 minutes	N/A
Single layer (80 mm)	Cable Ladder (150 mm wide by 15 mm high max.)	240 minutes	120 minutes
	PVC sheathed copper core cables 11 mm diameter	240 minutes	90 minutes
	Steel pipes up to 34 mm diameter (3 mm pipe wall)	240 minutes	30 minutes
Double layer (100 mm)*	Cable Ladder (340 mm wide by 100 mm high max.)	240 minutes	60 minutes
	PVC sheathed copper core cables 11 mm diameter	240 minutes	60 minutes
	PVC sheathed copper core cables 33 mm diameter	240 minutes	30 minutes
	Steel pipes up to 115 mm diameter (3-5mm pipe wall)	240 minutes	45 minutes
	Copper pipes up to 28 mm diameter (1 mm pipe wall)	240 minutes	90 minutes

* Services to be wrapped with 25 mm thick stone wool (45 kg/m^3) and coated with nominally 2 mm Coating to a minimum length of 100 mm on each side.

Maximum aperture:	600 mm high by 600 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 140 mm thick. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All concrete or masonry walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	**Concrete/masonry walls**: Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
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 430 mm from the surface of the sealing system on both faces.		
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

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Lagging*	Integrity	Insulation
Single layer (50 mm)	Steel Joist 210 mm x 206 mm x 8 mm Steel pipes up to 160 mm Ø and 5 mm pipe wall	40 mm stonewool (160 kg/m^3)	120 mins	60 mins
	Steel Cable Tray/ladder (500 mm wide max.) Electrical cables up to 80 mm Ø, single or in bundles up to 100 mm Ø Telecomms cables up to 17 mm Ø in bundles up to 100 mm Ø Plastic, steel or copper conduits up 16 mm Ø	25 mm stonewool (45 kg/m^3), 200 mm long	120 mins	90 mins
	Copper pipe up to 15 mm Ø and 1 mm wall thickness	40 mm stonewool (90 kg/m^3)		
	Copper pipe up to 159 mm Ø and 2 mm wall thickness	30 mm stonewool (90 kg/m^3)	60 mins	60 mins
	uPVC pipe 55 mm Ø and 3.2 – 7.2 mm wall thickness$^{\$}$	None	120 mins	60 mins
	uPVC pipe 160 mm Ø and 3.8 mm wall thickness$^{\$}$		120 mins	90 mins
	uPVC pipe 160mm Ø and 9 mm wall thickness$^{\$}$		120 mins	90 mins
	HDPE 55mm Ø and 3.2 - 7.6 mm wall thickness$^{\$}$		120 mins	60 mins
	HDPE 160mm Ø and 6.4 - 15 mm wall thickness$^{\$}$			

* Full length of service (continuous) and interrupted at the seal unless stated otherwise

$^{\$}$ With FP160 Fire Rated Sleeve fitted through the seal

Maximum aperture:	1400 mm high by 700 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
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 430 mm from the surface of the sealing system on both faces.		
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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant/Insulation*	Integrity	Insulation
Single layer (50 mm)	Copper pipe 22 mm Ø and 0.9 mm wall thickness with 50mm 80kg/m^3 glass wool pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	90	30
	Copper pipe 22 mm Ø and 0.9 mm wall thickness with 25mm Nitrile rubber pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	120	30
	Copper pipe 22 mm Ø and 0.9 mm wall thickness with 30mm Phenolic foam pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	90	45

* Full length of service (continuous) and interrupted at the seal unless stated otherwise

Maximum aperture:	630 mm high by 300 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls (Maximum size 1.5m x 1.5m)	The wall shall be constructed by a 45mm x 45mm European Redwood timber framework clad on both faces with 2x layers of 12.5mm thick Type F plasterboard (each) built within a refractory lined steel restrain frame. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
Service Coat-Back :	Not required	**U Value:**	Not known
Service Support Requirements:	Services should be rigidly supported via 4x500mm Unistrut cantilever arm sections providing support for 4x lengths ot Unistrut which horizontally support pipes at 300mm and 450mm from the face of the fire seal. The cantilevers should be fixed with 2x vertical lengths of Unistrut fixed to the restraint frame.		
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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant/Insulation*	Integrity	Insulation
Single layer (50 mm)	PVC pipe 110 mm Ø and 4.2 mm wall thickness	3 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around pipe and at all joints with FS702 Acrylic Sealant	120	60
	PVC pipe 20 mm Ø and 1.5 mm wall thickness with 50mm 80kg/m^3 glass wool pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	120	45
	Copper pipe 22 mm Ø and 0.9 mm wall thickness with 25mm Nitrile rubber pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	120	45
	Copper pipe 22 mm Ø and 0.9 mm wall thickness with 30mm Phenolic foam pipe insulation continuous through seal	2 x layers 60mm wide x 4mm thick (each) FP302 Band/Strap around insulation and at all joints with FS702 Acrylic Sealant	90	45

* Full length of service (continuous) and interrupted at the seal unless stated otherwise

Maximum aperture:	630 mm high by 1100 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls (Maximum size 1.5m x 1.5m)	The wall shall be constructed by a 45mm x 45mm European Redwood timber framework clad on both faces with 2x layers of 12.5mm thick Type F plasterboard (each) built within a refractory lined steel restrain frame. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
Service Coat-Back :	Not required	**U Value:**	Not known
Service Support Requirements:	Services should be rigidly supported via 4x500mm Unistrut cantilever arm sections providing support for 4x lengths ot Unistrut which horizontally support pipes at 300mm and 450mm from the face of the fire seal. The cantilevers should be fixed with 2x vertical lengths of Unistrut fixed to the restraint frame.		
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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Lagging*	Integrity	Insulation
Twin layer (50 mm patress fitted to both faces)	Steel Cable Tray/ladder (200 mm wide max.)	25 mm stonewool (45 kg/m^3), 200 mm long	120 mins	120 mins
	Electrical cables 58 mm Ø, 4 x 185 mm^2 copper core/EVA sheath			
	Copper pipe up to 159 mm Ø and 1-2 mm wall thickness	40 mm stonewool (90 kg/m^3)		
	uPVC rectangular pipe 204 mm x 60 mm and 1.5 mm wall thickness$^{\$}$	None	120 mins	-

* Full length of service (continuous) and interrupted at the seal unless stated otherwise

$^{\$}$ With FP160 Fire Rated Sleeve fitted through the seal

Maximum aperture:	1200 mm high by 500 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards face fixed on both sides of the aperture (bedded onto FS702 Acrylic Sealant) with a minimum 100 mm overlap all round and fixed with 75 mm long steel screws and 'penny' washers at 300 mm centres. The board are then pointed with FS702 Acrylic Sealant.		
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 430 mm from the surface of the sealing system on both faces.		
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

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Lagging*	Integrity	Insulation
Double layer (100 mm)	Steel Cable Tray/ladder (500 mm wide max.)	25 mm stonewool (45 kg/m^3), 200 mm long	120 mins	120 mins
	Electrical cables up to 80 mm Ø, single or in bundles up to 100 mm Ø			
	Telecomms cables up to 17 mm Ø in bundles up to 100 mm Ø			
	Plastic, steel or copper conduits up 16 mm Ø			
	Copper pipe up to 15 mm Ø and 1 mm wall thickness	40 mm stonewool (90 kg/m^3)		
	Copper pipe up to 159 mm Ø and 2 mm wall thickness	30 mm stonewool (90 kg/m^3)		
	uPVC pipe 55 mm Ø and 3.2 – 7.2 mm wall thickness$^{\$}$	None		
	uPVC pipe 160 mm Ø and 3.8 - 9 mm wall thickness$^{\$}$			
	HDPE 55mm Ø and 3.2 - 7.6 mm wall thickness$^{\$}$			
	HDPE 160mm Ø and 6.4 mm wall thickness$^{\$}$			

* Full length of service (continuous) and interrupted at the seal unless stated otherwise

$^{\$}$ With FP160 Fire Rated Sleeve fitted through the seal

Maximum aperture:	1400 mm high by 700 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
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 430 mm from the surface of the sealing system on both faces.		
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

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Intumescent Specification	Integrity	Insulation
Double layer (100mm)	[1]PVC duct 220mm x 90mm x 2mm wall thickness	2 x 4mm layers 250mm wide	120 mins	120 mins
	Steel Pipe 220mm Ø x 8.5mm wall thickness	FS702 Acrylic Sealant both faces		60mins
	Copper Pipe 15mm Ø x 0.8mm wall thickness	FS702 Acrylic Sealant both faces		90mins

[1] FP160 Fire Rated Sleeve Duct

Maximum aperture:	1400 mm high by 500 mm Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted into the aperture. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702 Acrylic Sealant.		
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 200 mm from the surface of the sealing system on both faces.		
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

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FB750 Fire Rated Coated Board
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Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Intumescent Specification	Integrity	Insulation
Double layer (100 mm)	[1]Electrical Cables up to 80mm Ø	N/A	120	120
	[1]Non-sheathed electrical cables up to 24 mm Ø	N/A		
	[1]Up to 21mm Ø telecomm cables in bundles of up to 100 mm diameter	N/A		
	PVC Pipe 160mm Ø and 3.2mm wall thickness	[2]4x4mm thick 140mm long		
	PVC Pipe 50mm Ø and 2.5mm wall thickness	[2]1x4mm thick 140mm long		
	PVC Pipe 43mm Ø and 2mm wall thickness	[3]30mm thick 10mm wide		
	HDPE Pipe 84mm Ø and 3.2mm wall thickness	[3]30mm thick 22mm wide		
	PVC Pipe 43mm Ø and 2mm wall thickness, with 20mm thick rubber nitrile insulation	[2]2x4mm thick 140mm long		

Maximum aperture:	2000mm wide by 1100mm long Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted with staggered joints into the aperture flush with the face of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/made good' with FS702 Acrylic Sealant. [1]A box section utilising single layer FB750 Fire Rated Coated Board through the seal 150mm depth, packed with stonewool and faced with 6mm FS702 Acrylic Sealant. [2]FP160 Fire Rated Sleeve 140mm long penetrating through the fire barrier [3]FP160 Fire Rated Sleeve 130mm long penetrating through the fire barrier, with 30mm thick FS709 Sealant to both faces internally within the sleeve. Refer to Nullifire instructions for full construction details.		
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 200 mm from the surface of the sealing 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

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FB750 Fire Rated Coated Board
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Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Intumescent Specification	Integrity	Insulation
Double layer (100 mm)	Copper Pipe 15mm Ø and 0.8mm wall thickness, with 50mm thick glass wool insulation	[3]30mm thick 10mm wide	120	120
	Copper Pipe 15mm Ø and 0.8mm wall thickness, with 32mm thick rubber nitrile insulation	[3]30mm thick 10mm wide		
	10 x A3 Cables, 9X 3 core twin earth through 20mm Ø by 2.5mm PVC conduit, 2 x Type E cable, PVC Pipe 25mm Ø by 3.2mm wall thickness, HDPE Pipe 40mm Ø by 3.2mm wall thickness, PVC Pipe 43mm Ø by 2mm wall thickness	[4]2x4mm thick 140mm long		45
	2 x E Cables, 10 x A2 Cables, 10 x A1 Cables, 1 x G2 Cable	[4] 6mm thick FS702 Acrylic Sealant to both faces back with 64kg/m^3 Earthwool		90

Maximum aperture:	2000 mm wide by 1100 mm long Multiple apertures must be separated by a minimum of 200 mm		
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.		
Application Technique:	Boards tightly friction fitted with staggered joints into the aperture flush with the face of the wall. Board to aperture junction is sealed with FS702. Apertures for penetrating items are to be tightly fitting and be sealed/made good' with FS702. [3] FP160 Fire Rated Sleeve 130mm long penetrating through the fire barrier, with 30mm thick FS709 Sealant to both faces internally within the sleeve. [4] FP160 Fire Rated Sleeve Cable management system penetrating through the barrier Refer to Nullifire instructions for full construction details.		
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 200 mm from the surface of the sealing 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

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Walls

Product Name:	FB750 Fire Rated Coated Board			
Coating / DFT:	Coating to both sides/0.5-1mm thick			
Density:	140 kg/m^3 minimum			
Barrier	**Service**	**Intumescent Specification**	**Integrity**	**Insulation**
Double layer (100 mm)	HDPE Pipe 110mm Ø and 4.2mm wall thickness, (Rockwrap 45 Insulation abutting the barrier)	[1]3 x 4mm thick 300mm long	120 minutes	120 minutes
	PVC Pipe 50mm Ø and 3.2mm wall thickness, (Rockwrap 45 Insulation abutting the barrier)	[1]1x 4mm thick 300mm long		
	Copper Pipe 159mm Ø and 2mm wall thickness, (Rockwrap 90 Insulation abutting the barrier)	FS702 Acrylic Sealant 25mm wide		
Maximum aperture:	1800 mm wide by 600 mm long Multiple apertures must be separated by a minimum of 200 mm			
Walls	The walls shall be a minimum of 130 mm thick. Stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards. The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier.			
Application Technique:	Boards tightly friction fitted with staggered joints into the aperture flush with the face of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Apertures for penetrating items are to be tightly fitting and be sealed/made good' with FS702 Acrylic Sealant. [1]FP160 Fire Rated Sleeve 300mm long penetrating through the fire barrier Refer to Nullifire instructions for full construction details.			
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 200 mm from the surface of the sealing 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	

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Head of Wall Seal. Double layer (100 mm)	1 x twin & earth cable 10mm wide x 5mm thick	FS702 Acrylic Sealant cones 60mm diam. x 60mm high on each face and trough aperture	120	120
	Bundle of 6 x twin & earth cable 13mm wide x 5mm thick			
	Bundle of 12 x twin & earth cable 13mm wide x 5mm thick			
	1 x Firefix FP200 cable			
	3 x Firefix FP200 cables			
	1 x AV coaxial cable			
	1 x Type G2	FS702 Acrylic Sealant cones 100mm diam. x 60mm high on each face and trough aperture	120	90
	95mm x 45mm softwood batten	100mm wide x 50mm thick FB750 Fire Rated Coated Board sleeve back around the timber on both faces	120	120
	22mm dia. X 1.2mm wall thickness copper pipe with 30mm PIR insulation	64kg/m^3 density mineral wool backing, 50mm wide x 25mm thickness with 25mm x 25mm FS709 on both faces		
	55mm dia. X 2.0mm wall thickness PVC pipe	1 layer 4mm thick FP302 60mm wide in each face of wall		

Maximum aperture:	1245mm wide by 595 mm wide Multiple apertures must be separated by a minimum of 200 mm		
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.		
	All walls shall have at least the same fire rating as that required for the barrier		
Application Technique:	FB750 Fire Rated Coated Board boards should be installed in two layers bonded together with FS702 Acrylic Sealant . Refer to Nullifire instructions for full construction details.		
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 200 mm from the surface of the sealing system.		
Resistance to Smoke, Weather & Movement Capability & Acoustic Rating not covered by this approval			

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Head of Wall Seal Double layer (100mm)	450mm wide cable tray with 1 x Type D2, 1 x Type C2 cables & 1 x Type A1 cable bundle	FS709 50mm thick x 85mm high (maximum) on both faces and filling voids between cables and cable tray	120	120
	55mm dia. X 3.2mm wall thickness ABS pipe conduit with 6 x 2.5mm² twin & earth cables	FS709 25mm x 25mm between conduit & batt on both faces plus 20mm thick mineral wool backing with 2mm FS702 Acrylic Sealant coating in ABS conduit aperture on the unexposed face	60	60
	55mm dia. X 3. 2mm wall thickness ABS pipe conduit with 7 x 2.5mm² twin & earth cables	1 x layer 60mm wide x 4mm thick FP302 around pipe through each batt with 2mm thick FS702 Acrylic Sealant with 20mm mineral wool backing sealing un-exposed end of pipe.		
	Blank seal	N/A	120	120

Maximum aperture:	1500mm wide by 300 mm high Multiple apertures must be separated by a minimum of 200 mm
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. .
	All walls shall have at least the same fire rating as that required for the barrier
Application Technique:	Boards tightly friction fitted with staggered joints into the aperture flush with the face of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Refer to Nullifire instructions for full construction details
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 300 mm from the surface of the sealing 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

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NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Head of Wall Seal. Double layer (100mm)	1 x 55mm dia x 3.2mm wall thickness ABS pipe with 3 x fire alarm cables with 1 x 55mm dia x 3.2mm wall thickness ABS pipe with 9 x TV aerial coax cables. Installed together with aperture partly formed by the head of wall seal batts and partly by a concrete wall and soffit.	2 x layers 60mm wide x 4mm thick FP302 installed between the pipes and the batts. FS702 Acrylic Sealant 2mm thickness with 20mm mineral wool backing sealing the un-exposed end of each pipe.	120	120
	1 x 55mm dia x 3.2mm wall thickness ABS pipe with 12x fibre optic cables fitted between the head of wall batts and the concrete soffit.	1 x 60mm wide x 4mm thick layer FP302 between the pipe and each batt. 2mm thick FS702 Acrylic Sealant with 20mm mineral wool backing sealing the un-exposed end of the pipe.		

Maximum aperture:	1500mm wide by 300 mm high Multiple apertures must be separated by a minimum of 200 mm		
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.		
	All walls shall have at least the same fire rating as that required for the barrier		
Application Technique:	Boards tightly friction fitted with staggered joints into the aperture flush with the face of the wall. Board to aperture junction is sealed with FS702 Acrylic Sealant. Refer to Nullifire instructions for full construction details		
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 300 mm from the surface of the sealing 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

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Double layer (100mm) installed with 1 layer on each face as a pattress	220mm dia. X 6mm wall thickness steel pipe with 50mm thick x 80kg/m³ density Isover foil faced glass fibre insulation	2 layers of 60mm wide x 4mm thick FP302	120	90
	220mm dia. X 6mm wall thickness steel pipe with 38mm thick nitrile rubber insulation		120	60
	82mm dia. X 3.2mm wall thickness PVC pipe conduit with 20 x 10mm AV coaxial, 17 x 6mm Cat 5 ethernet, 17 x 5mm telecom, 7 x 12mm fibre optic, 4 x 2.5mm² twin & earth cables		120	120
	30mm dia. Bundle of AV coaxial cables	FS702 Acrylic Sealant through aperture and to seal pattress boards to wall	60	60
	35mm dia. Bundle of fire alarm cables			
	3 x fire alarm & 3 x AV coaxial cables			
	3 x fire alarm & 3 x AV coaxial cables	25mm x 25mm FS702 Acrylic Sealant FS709 around the service on each face plus 25mm PE backing rods behind each bead	120	120
	Blank seal	FS702 Acrylic Sealant between pattress boards and wall face		

Maximum aperture:	360mm wide by 336mm high. Multiple apertures must be separated by a minimum of 200 mm		
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.		
	All walls shall have at least the same fire rating as that required for the barrier		
Application Technique:	Boards fitted as pattresses to the surface of the wall with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between pattress batts and wall to be made with FS702 Acrylic Sealant		
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 300 mm from the surface of the sealing 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

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Double layer (100mm) installed with 1 layer on each face as a pattress	110mm dia. x 3.2mm wall thickness PVC pipe	3 layers 60mm wide x 4mm thickness FP302 on each side of wall	60	60
	34mm dia. x 3.2mm wall thickness PVC pipe	1 layer 60mm wide x 4mm thick FP302 with wax release paper between pipe and FP302 at each side of wall		
	34mm dia. x 3.2mm wall thickness PVC pipe	10mm thick FS702 Acrylic Sealant FS709 around pipe with wax release paper between pipe and FS702 Acrylic Sealant FS709 at each side of wall		

Maximum aperture:	360mm wide by 336mm high. Multiple apertures must be separated by a minimum of 200 mm		
Masonry Walls			
	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.		
	All walls shall have at least the same fire rating as that required for the barrier		
Application Technique:	Boards fitted as pattresses to the surface of the wall with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between pattress batts and wall to be made with FS702 Acrylic Sealant		
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 300 mm from the surface of the sealing 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

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NULLIFIRE LIMITED

FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant /Backing	Integrity (mins)	Insulation (mins)
Double layer (100mm) installed with one layer recessed into each face of wall	450mm wide cable tray with 1 x Type D2, 1 x type C2 cables and 1 x Type A1 cable bundle.	FS702 Acrylic Sealant through penetration and between edges of the FB750 Fire Rated Coated Board and the aperture	120	120
	20 x Cat 5E cables + 5 x twin & earth cables			
	110mm dia. x 3.2mm wall thickness PVC pipe	2 layers 60mm wide x 4mm thick FP302 through each batt & FS702 Acrylic Sealant around surface batt/FP302 joint.		
Double layer (100mm) installed flush to each face	450mm wide cable tray with 1 Type D2 cable, 1x Type C2 cable and 1x A1 Cable bundle		60	60

Maximum aperture:	580mm wide x 350mm high. Multiple apertures must be separated by a minimum of 200 mm		
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.		
	All walls shall have at least the same fire rating as that required for the barrier		
Application Technique:	Boards fitted as pattresses to the surface of the wall with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between the pattress batts and wall to be made with FS702 Acrylic Sealant. Boards fitted in aperture flush with wall faces should be a tight friction fit and with all joints sealed with FS702 Acrylic Sealant.		
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 300 mm from the surface of the sealing 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

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NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 60 Minute Wall

Product Name:	FB750 Fire Rated Coated Board				
Coating / DFT:	Coating to both sides/0.5-1mm thick				
Density:	140 kg/m^3 minimum				
Barrier	**Service**		**Sealant /Backing**	**Integrity (mins)**	**Insulation (mins)**
Double layer (100mm) installed flush to each face	450mm wide cable tray with 1 Type D2 cable, 1x Type C2 cable and 1x A1 Cable bundle		Batts sealed to aperture with FS702 Acrylic Sealant FS709 used to seal around cables and cable tray	60	60
	1x 30mm dia bundle TV aerial coax cables, 1 x 30mm dia bundle fire alarm cables, 1 x 40mm dia bundle twin & earth cables		Batts sealed to aperture with FS702 Acrylic Sealant and FS702 Acrylic Sealant used around cables.		
Maximum aperture:	580mm wide x 350mm high. Multiple apertures must be separated by a minimum of 200 mm				
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3.				
	All walls shall have at least the same fire rating as that required for the barrier				
Application Technique:	Boards fitted as pattresses to the surface of the wall with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between the pattress batts and wall to be made with FS702 Acrylic Sealant. Boards fitted in aperture flush with wall faces should be a tight friction fit and with all joints sealed with FS702 Acrylic Sealant.				
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 300 mm from the surface of the sealing 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		

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Wall

Product Name:	FB750 Fire Rated Coated Board				
Coating / DFT:	Coating to both sides/0.5-1mm thick				
Density:	140 kg/m^3 minimum				
Barrier	**Service**		**Sealant /Backing**	**Integrity (mins)**	**Insulation (mins)**
Double layer (100mm) installed within the aperture 30mm apart	Fire/smoke damper with casing size 400mm x 400mm x 78mm deep*		Batts sealed to aperture with FS702 Acrylic Sealant and on both faces a nominal 25mm fillet of FS702 Acrylic Sealant between the damper and the batts.	120	120
Maximum aperture:	700mm wide x 1400mm high. Multiple apertures must be separated by a minimum of 200 mm				
***** seal around damper only & not the damper performance					
Walls	**Stud Walls**	Timber stud walls shall be constructed from minimum timber studs 95mm width x 45mm thick lined on both faces with 2 layers of12.5mm of Gypsum plasterboard. Metal stud walls shall be constructed from minimum 70 mm studs lined on both faces with 2 layers of 15 mm thick Type F Gypsum boards.			
	Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. .			
	All walls shall have at least the same fire rating as that required for the barrier				
Application Technique:	. Boards fitted in aperture should be a tight friction fit and with all joints sealed with FS702 Acrylic Sealant. A fillet of FS702 Acrylic Sealant to seal around the perimeter joints.				
Service Coat-Back :	Not required		**U Value:**	Not known	
Service Support Requirements:	Damper should be supported as per manufacturers installation instructions				
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		

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 240 Minute Wall

Product Name:	FB750 Fire Rated Coated Board				
Coating / DFT:	Coating to both sides/0.5-1mm thick				
Density:	140 kg/m^3 minimum				
Barrier	**Service**		**Sealant /Backing**	**Integrity (mins)**	**Insulation (mins)**
Double layer (100mm) installed centrally in the wall thickness	Blank seal		All gaps between batts and batts and aperture to be sealed with FS702 Acrylic Sealant	240	240
Maximum aperture:	2250mm wide x 2250mm high. Multiple apertures must be separated by a minimum of 200 mm				
Masonry Walls	The minimum density for the concrete or brick of the wall is 780kg/m^3 and for walls made of concrete blocks is 600kg/m^3. All walls shall have at least the same fire rating as that required for the barrier				
Application Technique:	Boards fitted in aperture centred within the wall faces and should be a tight friction fit and with all joints sealed with FS702 Acrylic Sealant. Refer to the Nullifire installation instructions				
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 300 mm from the surface of the sealing 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		

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NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Floors

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Lagging	Integrity	Insulation
Double layer (100 mm)	Steel Cable Tray (300 mm wide max.)	25 mm stonewool (45 kg/m^3), 200 mm long	120 mins	120 mins
	18-21 mm Ø 1 x 95 mm^2 copper core/PVC sheath cable			
	Bundles of up to 10, 11-14 mm Ø 5 x 1.5 mm^2 copper core/PO sheath cable			
	40-47 mm Ø 4 x 95 mm^2 copper core/PVC sheath cable			
	Copper pipe up to 15 mm Ø and 1 mm wall thickness with FP302 wrap 8 mm x 60 mm	20 mm stonewool (90 kg/m^3)*		
		20 mm Phenolic*		
		20 mm glass wool (48 kg/m^3)*		
		Armaflex*	120 mins	60 mins
	Steel pipe up to 160 mm Ø and 5 mm wall thickness	30 mm stonewool (90 kg/m^3)*	120 mins	120 mins
	CPVC pipe 160mm Ø and 7mm wall thickness	None		
	uPVC pipe 55mm Ø and 2mm wall thickness$^{\$}$		90 mins	60 mins
	uPVC pipe 160mm Ø and 10mm wall thickness$^{\$}$		120 mins	120 mins
	HDPE pipe 56mm Ø and 5mm wall thickness$^{\$}$			
	HDPE pipe 60mm Ø and 6mm wall thickness$^{\$}$		90 mins	60 mins
	HDPE pipe 160mm Ø and 7-15mm wall thickness$^{\$}$		120 mins	120 mins

* Full length of service (continuous) and interrupted at the seal

$^{\$}$ With FP160 Sleeve fitted to the exposed side (through bolted)

Maximum aperture:	700 mm high by 700 mm Multiple apertures must be separated by a minimum of 200 mm		
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.		
Application Technique:	**Concrete/aerated concrete floors**: Boards tightly friction fitted into the aperture at mid-depth of the wall. Board to aperture junction is sealed with FS702. Apertures for penetrating items are to be tightly fitting and be sealed/'made good' with FS702.		
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 430 mm from the surface of the sealing system on both faces.		
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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Floors

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Integrity	Insulation
Double layer (100 mm)	[1]Electrical Cables up to 80mm Ø	120	90
	[1]Non-sheathed electrical cables up to 24 mm Ø		120
	[1]Up to 21mm Ø telecomm cables in bundles of up to 100 mm diameter		
	[2]PVC Pipe 50mm Ø and 2.4mm wall thickness, (1layer of FP302)		
	[2]PVC Pipe 82mm Ø and 2.2mm wall thickness, (2layers of FP302)		
	Steel Pipe 220mm Ø and 8mm wall thickness		15
	[3]Copper Pipe 22mm Ø and 0.8mm wall thickness (50mm glass fibre or 35mm nitrile rubber insulation at the seal)		120

Maximum aperture:	1800 mm wide by 600 mm long Multiple apertures must be separated by a minimum of 200 mm		
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.		
Application Technique:	**Concrete/aerated concrete floors**: Boards tightly friction fitted with staggered joints into the aperture flush with the unexposed face of the floor. Board to aperture junction is sealed with Coating. Apertures for penetrating items are to be tightly fitting and be sealed/made good' with FS702. [1]A box section utilising single layer FB750 Fire Rated Coated Board to the upper face of the seal 600mm x 600mm x 100 depth incorporating galvanised steel angels, packed with stonewool and faced with 6mm FS702 Acrylic Sealant. [2]FP302 recessed into the underside layer of FB750 Fire Rated Coated Board [3]FP302 2 x 4mm recessed into the underside layer of FB750 Fire Rated Coated Board Refer to Nullifire instructions for full construction details.		
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 500 mm from the surface of the sealing 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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Floors

Product Name:	FB750 Fire Rated Coated Board		
Coating / DFT:	Coating to both sides/0.5-1mm thick		
Density:	140 kg/m^3 minimum		
Barrier	**Service**	**Integrity**	**Insulation**
Double layer (100 mm)	Damper frame 378mm x 378mm x 78mm outer casing, connected to a galvanised steel duct*	120	90
Maximum aperture:	450mm wide by 450mm long Multiple apertures must be separated by a minimum of 200 mm		
***** seal around damper only & not the damper performance			
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.		
Application Technique:	**Concrete/aerated concrete floors**: Boards tightly friction fitted with staggered joints into the aperture flush with the unexposed face of the floor. Refer to Nullifire instructions for full construction details. Board to aperture junction is sealed with Coating. Apertures for penetrating items are to be tightly fitting and be sealed/made good' with FS702.		
Service Coat-Back :	Not required	**U Value:**	Not known
Service Support Requirements:	Damper should be supported as per manufacturers installation instructions.		
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

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CERTIFICATE No CF 5343
NULLIFIRE LIMITED

FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 240 Minute Floors

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant	Integrity (mins)	Insulation (mins)
Double layer (100 mm) installed as pattress	220mm dia. x 6mm wall thickness steel pipe with 40mm (2 x 20mm) Armaflex 530mm long	2 x 60mm wide layers of 4mm FP302	240	45 *
	160mm dia. x 6mm wall thickness steel pipe	N/A	150	45
	2 x 110mm dia. x 3.2mm wall thickness PVC pipes	3 x 60mm wide layers of 4mm FP302 around each pipe	120	90
	30mm dia. Cable bundle, insulated cables 50mm dia. Cable bundle, insulated cables	N/A	60	60
	10 x Cat. E cables + 5x fibre optic cables 3 x fire alarm cables + 6 x lighting flex cables	N/A	180	150
Double layer (100mm) with 1 x layer inside aperture & 1 x layer as a pattress	Blank seal	N/A	120	120

Maximum aperture:	336mm diameter or 336mm high x 360mm wide mm with double layer pattress systems. 450mm wide x 400 high with a single layer pattress + single layer inside aperture system. Multiple apertures must be separated by a minimum of 200 mm		
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.		
Application Technique:	**Concrete/aerated concrete floors**: Boards fitted as pattresses to the under surface of the floor with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between pattress batts and floor to be made with FS702 Acrylic Sealant		
Notes	*if insulation is continuous on pipe above the seal the insulation rating is 240 minutes		
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 430 mm from the surface of the sealing system on the unexposed face.		
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

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FB750 Fire Rated Coated Board
BS EN 1366-3: 2009 Approval Matrix - Up To 240 Minute Floors

Product Name:	FB750 Fire Rated Coated Board			
Coating / DFT:	Coating to both sides/0.5-1mm thick			
Density:	140 kg/m^3 minimum			
Barrier	**Service**	**Sealant/ Coating**	**Integrity (mins)**	**Insulation (mins)**
Single layer (50mm) installed as pattress	55mm dia. X 3.2mm wall thickness HDPE pipe	1 x layer 60mm wide x 4mm thick FP302	60	60
	55mm diam. X 3.2mm wall thickness HDPE pipe conduit with 8 x twin & earth cables	1 x layer 60mm wide x 4mm thick FP302	240	240
Single layer installed in aperture flush with upper surface of floor	2 x Type B, 1 x each of Type C1, C2, C3, G1, G3	Voids around cables filled with FS702 Acrylic Sealant	60	30
Single layer installed in aperture flush with upper surface of floor and supported with timber battens	Blank seal (battens to unexposed face) (max sixe 600 x 200mm)	N/A	120	60
Maximum aperture:	1800 mm wide by 600 mm long unless otherwise listed above. Multiple apertures must be separated by a minimum of 200 mm			
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.			
Application Technique:	**Concrete/aerated concrete floors**: Boards fitted as pattresses to the under surface of the floor with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between pattress batts and floor to be made with FS702 Acrylic Sealant . Boards fitted within aperture to be tightly friction fitted with staggered joints and edges sealed with FS702 Acrylic Sealant.			
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 430 mm from the surface of the sealing system on the unexposed face.			
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	

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 240 Minute Floors

Product Name:	FB750 Fire Rated Coated Board
Coating / DFT:	Coating to both sides/0.5-1mm thick
Density:	140 kg/m^3 minimum

Barrier	Service	Sealant/Coating	Integrity (mins)	Insulation (mins)
Double layer (100mm) installed within aperture & flush with exposed face	160mm dia. X 6.9mm wall thickness steel pipe with 2 x layers 30mm thickness x 300mm long Armaflex	1 x layer 60mm wide x 4mm thick FP302	60	15
	2 x 110mm dia. X 3.2mm wall thickness PVC pipe	2 x layers of 60mm wide x 4mm thick FP302 around each pipe	60	45
Double layer (100mm) installed within aperture & flush with unexposed face	Cable tray with 2 x Type B, 1 x each of Type C1, C2, C3, G1, G3 cables	Voids around cables and cable tray filled with FS702 Acrylic Sealant	120	30
Double layer (100mm) installed within aperture flush with exposed face + 100mm wide frame around service	95mm x 45mm European Redwood timber section	N/A	240	180
Double layer (100mm) installed within aperture flush with exposed face	55mm dia. X 3.2mm wall thickness ABS pipe conduit with 10 x fire alarm cables	1 x layer 60mm wide x 4mm thick FP302	240	180
Single layer (50mm) installed flush with unexposed face	Cable tray with 2 x Type B, 1 x each of Type C1, C2, C3, G1, G3 cables	Voids around cables and cable tray filled with FS702 Acrylic Sealant	60	30

Maximum aperture:	1800mm x 600mm for double layer systems. 600mm x 200mm for single layer systems. Multiple apertures must be separated by a minimum of 200 mm		
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.		
Application Technique:	**Concrete/aerated concrete floors**: Boards fitted as pattresses to the under surface of the floor with screws as per Nullifire installation instructions and with overlaps around aperture as specified. Seal between pattress batts and floor to be made with FS702 Acrylic Sealant . Boards fitted within aperture to be tightly friction fitted with staggered joints and edges sealed with FS702 Acrylic Sealant.		
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 430 mm from the surface of the sealing system on the unexposed face.		
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

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FB750 Fire Rated Coated Board

BS EN 1366-3: 2009 Approval Matrix - Up To 120 Minute Floors

Product Name:	FB750 Fire Rated Coated Board 70D				
Coating / DFT:	Coating to both sides/0.5-1mm thick				
Density:	140 kg/m^3 minimum				
Barrier	**Service**		**Sealant/Coating**	**Integrity (mins)**	**Insulation (mins)**
Single layer (70mm) as a pattress installed on the exposed face of the floor	Blank seal		N/A	120	120
Maximum aperture:	1100mm x 400mm. Multiple apertures must be separated by a minimum of 200 mm				
Floors	The floors shall be a minimum of 150 mm thick. The minimum density for the aerated concrete or concrete floor is 650kg/m^3. All floors shall have at least the same fire rating as that required for the seal.				
Application Technique:	**Concrete/aerated concrete floors**: Boards fitted as pattresses to the under surface of the floor with screws as per Nullifire installation instructions and with overlaps around aperture as specified.				
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 430 mm from the surface of the sealing system on the unexposed face.				
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	

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FB750 Fire Rated Coated Board 3
BS 476: Part 20 :1987 Approval Matrix - Up To 240 Minute Floors

Product Name		FB750 Fire Rated Coated Board 3			
Coating / DFT:		Coating to the upper face/0.5-1mm thick			
Density:		100 kg/m^3 minimum			
Configuration	**Max. Joint Width (mm)**	**Minimum Seal Depth (mm)**	**Compression**	**Integrity (mins)**	**Insulation (mins)**
Autoclaved aerated concrete/concrete	200	100	5-10%	240	120
	200	120	5-10%	240	180
Application Technique	FB750 Fire Rated Coated Board 3 compressed into the joint and the edges sealed with FS702 Acrylic Sealant.				
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		

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FB750 Fire Rated Coated Board 3

BS EN 1366-4: 2006 Approval Matrix - Up To 240 Minute Floors

Product Name		FB750 Fire Rated Coated Board 3			
Coating / DFT:		Coating to the upper face/0.5-1mm thick			
Density:		100 kg/m^3 minimum			
Configuration	**Max. Joint Width (mm)**	**Minimum Seal Depth (mm)**	**Minimum compression**	**Integrity (mins)**	**Insulation (mins)**
Autoclaved aerated concrete/concrete	200	100	5%	240	60
Application Technique	FB750 Fire Rated Coated Board 3 compressed into the joint and the edges sealed with FS702 Acrylic Sealant.(may include butt joints)				
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		

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Air Permeability
BS EN 1026:2000

Product Name	FB750 Fire Rated Coated Board		
Coating / DFT:	Coating to the upper face/0.5-1mm thick		
Density:	140 kg/m^3 minimum		
Air Permeability	**Pressure (Pa)**	**Positive Pressure (m³/h/m²)**	**Negative Pressure (m³/h/m²)**
	50	0.3	0.7
	100	0.5	0.7
	150	0.8	0.7
	200	0.8	0.7
	250	0.9	0.8
	300	1.1	0.8
	450	1.5	0.9
	500	1.5	1.4
	1000	1.9	1.5
Data refers to specimen 600mm wide x 1200mm high x 50mm thick			
Application Technique	FB750 Fire Rated Coated Board compressed into the joint and the edges sealed with FS702 Acrylic Sealant.		

Acoustic Performance
BS EN ISO 10140-2:2010

Product Name	FB750 Fire Rated Coated Board	
Coating / DFT:	Coating to the upper face/0.5-1mm thick	
Density:	140 kg/m^3 minimum	
Sound Reduction Index	**Specimen**	**$R_w(C;C_{tr})$**
	FB750 Fire Rated Coated Board single seal 0.6m²	24 (0;-2)dB
	FB750 Fire Rated Coated Board double seal 0.6m²	38(-1;-5)dB
	FB750 Fire Rated Coated Board double seal 0.3m²	42(-2;-9)dB
Data refers to specimen 600mm wide x 1200mm high x 50mm thick		
Application Technique	FB750 Fire Rated Coated Board compressed into the joint and the edges sealed with FS702 Acrylic Sealant.	

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