

CI/SfB	(29)	(K2)
CAW P10		
Uniclass JP10:L68114		

Product Information

Description

FZ100 Fire Safe Zone is a revolutionary fire protection system, and a single product solution tested to cover many fire stopping requirements. Nullifire has developed a ground breaking and unique fire stopping technology: GXT (Graphite eXpansion Technology) GXT has been incorporated within FZ100, encompassing the ability of many fire protection products within a single sheet.

Usage / Purpose

- FZ100 is a fire compartment reinstatement solution for many planned and future penetrating services.
- FZ100 may be located and restrained anywhere within a partition, either at the point of construction, or retrospectively fitted within the rock fibre insulated partition (min 100kg/m³). This allows a designer to anticipate future fire sealing requirements, and to integrate FZ100 at strategic points within the building, where subsequent services may be located.
- FZ100 is proven for use within flexible fire compartment walls; where FZ100 is located, openings created are not required to be framed or lined.
- FZ100 is ideally suited for use in modular application, permitting services to be located after the compartment has been closed.
- FZ100 is placed centrally within the wall cavity, allowing the potential of high service movement, and an uninterrupted aesthetic appearance on all visible wall faces.
- FZ100 may be installed quickly & easily, is self-supporting between studs and has zero potential waste.
- In the event of a fire, FZ100 will completely close all openings left by the (tested) degrading combustible products. Additionally, it will also completely seal up to all (tested) non-combustible products, forming a tight and solid seal.

Product Dimensions

Length: 1100mm (-0/+20)
Width: 600mm (-0/+70)
Thickness: 50mm (±1,5)

Packaging

Supplied individually wrapped, in pallet quantities of 16 units.

Availability

Direct from Tremco CPG UK Limited (see details on this TDS).

Usage Guidelines

Always read SDS, pre-application guidance and relevant application detail prior to application. Ensure the latest documents are downloaded prior to every project commencement.

Necessary Tools

- Tape measure
- Suitable cutting equipment
- Gloves
- Drill and associated drill bits

Installation

- FZ100 is typically installed during the drywall construction phase. One side of the partition may be fully constructed prior to the application of FZ100.
- FZ100 should be compressed between two vertical studs, at the expected service locations (e.g. above door head).
- Close the partition wall with the required plasterboard system to manufacturer's tested recommendations.
- Externally identify the "Fire Safe Zone" infilled perimeter area using Nullifire FZ100 identification tape.

Requirements for services

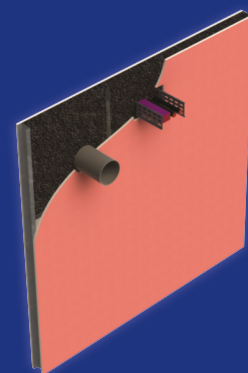
- In the required locations, and within the FZ100 perimeter identification, mark out and identify your service requirements (ensuring to avoid stud locations), and locally remove the plasterboard facings as necessary for the service size.
- Plasterboard openings are required to be either the same dimensions as the services, or can be up to 25mm larger to all sides of the service dimensions (building conditions may require the increased opening size, e.g. building movement tolerances).
- For square or rectangular services, drill directly through the partition at the 4 corners in the required service location. Plasterboard can now be cut to each side individually without removing FZ100 infill.
- For circular services, drill a pilot hole directly through the partition at the centre of the required service location. Using a suitable core drill bit, plasterboard can now be cut to each side individually without removing FZ100 infill.

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Key Benefits Summary

- Unique GXT technology included
- Fire stops existing & future service penetrations
- Quick and easy to install: dry, easy to cut, lightweight
- Fibre free: can be used in clean areas such as hospitals or food preparation facilities
- Simple service installation
- Very low odour
- Service movement capable by design
- Does not detract from the acoustic capabilities of the partition
- Fully breathable, does not absorb moisture
- Tested to BS EN 1366-3, up to EI120

ETA 20/0827



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- Once FZ100 is revealed by the local removal of plasterboard, cross cut the FZ100 using a suitable cutting knife, creating 4 slits from the centre of the opening to the corners of the opening (rectangular type aperture), or at centre point to perimeter at 90° (circular type aperture).
- Once cross cut, gently push back FZ100 within cavity space to reveal your required opening.
- Pass the required service through the now revealed opening.
- FZ100 will over time form its original shape around the service.
- A cold smoke seal will be required on both sides of partition; we recommend the use of Nullifire FS702 Intumastic (please read FS702 TDS for limitations).

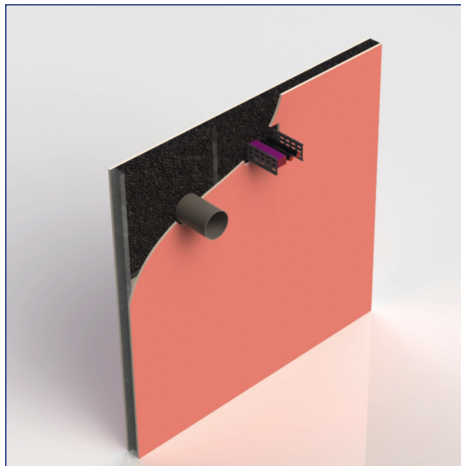
Important Information

- A cold smoke seal must also accommodate the required building movement or service product thermal expansion.
- The product does not absorb moisture; however, it should not be installed unless dry.
- For retrofitted installation, it will be required to remove a local area of plasterboard revealing the left & right studs. Rock fibre insulation infill (min 100 kg/m³) will be required to be removed to accommodate the FZ100 installation in the cavity.
- If the partition wall is uninsulated (or insulated with any other material than rock fibre min 100kg/m³), a steel frame must be provided to all sides of the FZ100 product (vertical stud being considered as steel framing).
- Vertical C-channels / studs may not be removed to accommodate the FZ100 installation.
- Minimum dimension of FZ100 should be 30mm larger to all sides than the anticipated area of the service penetration(s).
- Maximum dimension of FZ100 is limited only by the size of the partition.
- FZ100 may not come into contact with Lubrizol CVPC piping systems. For other sensitive pipework, please confirm suitability with service manufacturer prior to application.
- Services were tested with the first support at 250mm from partition face.
- If stored below 0°C, the product must be placed in a +5°C and rising area for a minimum of 12 hours prior to application (this is to ensure the product does not contain moisture).

Technical information

Property	Value
Fire Resistance	Up to 120 minutes (see performance table)
Density	127 kg/m ³ (±20)
Maximum Continuous Operating Temperature	+90°C
Acoustic Capability	Up to 66dB at 50mm thickness within partition (cannot exceed the capability of the partition, however does not detract)
Thermal Conductivity	0.08 W/(m.K)
Storage	Store in dry conditions between -10°C and +70°C (do not store directly on concrete floors)
Shelf Life	Unlimited when stored as recommended

Typical Details



FZ100 Fire Safe Zone installed in 100 mm compartment flexible wall

Health & Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

Guarantee / Warranty

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

It is a requirement of the installer to ensure suitability and compatibility of all elements before installation commences and that compliance can be achieved as required.



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Performance Data

Fire performance in accordance with EN1366-3 testing.

Cable diameters can be increased up to 25%, and cable bundle diameters can be increased up to 10%

* = Pipe penetration at 90 to 45 degree angle.

= Partial penetration (proven for fire conditions from either side of partition)

Material		Diameter in mm	Wall Thickness in mm	Additional Product	Classification	
					Integrity (E)	Insulation (I)
120mm Flexible Walls - COMBUSTIBLE PIPES						
CPVC pipe	*	≤ 90	7.5	FS719 HP CPVC	120	120
Nylon PVC ribbed pipe		≤ 40	0,5 to 1,5	-	120	120
Nylon PVC ribbed pipe	#	≤ 90	0,5 to 1,5	-	120	120
Nylon PVC ribbed pipe		≤ 90	0,5 to 1,5	-	90	90
1 Bundle of 5 PEX multilayer pipes		≤ 22	1.5	-	60	60
PEX multilayer pipe		≤ 28	2.6	-	120	120
1 Bank of 5 PEX multilayer pipes		≤ 28	2.6	-	120	90
HDPE pipe	*	≤ 110	10.0	-	120	120
HDPE pipe	*	≤ 110	6.6	-	60	60
HDPE pipe		≤ 125	3.7	-	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	*	≤ 40	1.9	FS702 Intumastic	120	120
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 40	1.9	-	90	90
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 40	3.7	-	90	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	*	≤ 63	5.0	FS702 Intumastic	120	120
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 63	3.7	-	60	60
1 Bank of 3 PE pipes (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 63	3.7	-	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 90	8.2	-	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	*	≤ 110	16	FS702 Intumastic	120	120
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	*	≤ 110	3.2	FS702 Intumastic	120	120
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 110	16	-	90	90
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 110	4.2	-	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 110	10.0	-	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)		≤ 110	6.6	-	60	60
PVC-U pipe (+ PVC-C)		≤ 40	3.2	-	60	60
PVC-U pipe (+ PVC-C)		≤ 40	1.9	-	60	60
1 Bank of 3 PVC-U pipes (+ PVC-C)		≤ 40	1.9	-	60	60
1 Bank of 6 PVC-U pipes (+ PVC-C) & ABS pipes		≤ 40	1.9	-	60	60
PVC-U pipe (+ PVC-C)		≤ 110	4.2	-	120	120
PVC-U pipe (+ PVC-C)		≤ 110	6.6	-	120	120
PVC-U pipe (+ PVC-C)		≤ 125	4.8	-	60	60
PP pipe (+ HDPE, PVC-U & PVC-C)		≤ 41	1.9	-	60	60
1 Bank of 4 PP pipes (+ HDPE, PVC-U & PVC-C)		≤ 41	1.9	-	60	60
1 Bank of 3 ABS pipes		≤ 40	1.9	-	60	60
ABS pipe		≤ 110	3.4	-	60	60
PVC-U pipe (+ PVC-C)		≤ 125	7.4	-	60	60



FZ100

Fire Safe Zone

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Material	Diameter in mm	Wall Thickness in mm	Additional Product	Classification	
				Integrity (E)	Insulation (I)
120mm Flexible Walls - NON-COMBUSTIBLE PIPES					
Copper (+ Steel, Cast Iron)	# ≤ 14	≥ 0,7	-	120	120
Copper (+ Steel, Cast Iron)	≤ 15	≥ 1	-	90	90
Copper (+ Steel, Cast Iron)	≤ 40	≥ 1	FI025 Intuflex	120	120
Copper (+ Steel, Cast Iron)	≤ 42	≥ 1	-	90	0
Copper (+ Steel, Cast Iron)	≤ 160	≥ 1,2	FI025 Intuflex	120	120
Copper (+ Steel, Cast Iron)	≤ 160	≥ 2	-	90	0
Steel (+ Cast Iron)	≤ 22	≥ 2	-	90	60
Steel (+ Cast Iron)	≤ 89	≥ 5	-	90	15

Material	Diameter in mm	Wall Thickness in mm	Insulation Material	Insulation Thickness in mm	Insulation Location	Insulation Local Extension	Classification	
							Integrity (E)	Insulation (I)
120mm Flexible Walls - INSULATED NON COMBUSTIBLE PIPES								
Copper (+ Steel, Cast Iron)	≤ 42	≥ 1	PIR	20	LI (Local Interrupted)	500	90	90
Copper (+ Steel, Cast Iron)	≤ 42	≥ 1	Glass Fibre / Rock Fibre	20	CI (Continuous Interrupted)	-	90	60

Material	Dimensions in mm	Cable Type	Cable Quantity	Additional Products	Classification	
					Integrity (E)	Insulation (I)
120mm Flexible Walls - SOCKET & FUSE BOXES						
PVC UK Double Socket Box (Appleby, 2 gang)	≤ 86 x 146 x 9 (combustible back box ≤ 35mm depth)	Twin & earth 17mm	2	-	120	120
PVC UK Double Socket Box (MK, 2 gang)	≤ 104 x 146 x 15 (combustible back box ≤ 35mm depth)	Twin & earth 17mm	2	-	120	120
Timber & PVC UK Double Socket Box (Varilight, 2 gang)	≤ 86 x 146 x 9 (combustible back box ≤ 47mm depth)	Twin & earth 17mm	2	-	120	120
PVC UK Triple Multimedia Socket Box (Lap, 3 gang)	≤ 420 x 146 x 9 (combustible back box ≤ 35mm depth)	Twin & earth 17mm	2	-	120	120
PVC UK Double Socket Box (RS Pro, 2 gang)	≤ 104 x 146 x 15 (combustible back box ≤ 35mm depth)	Twin & earth 17mm	2	-	90	90
Steel & Plastic Fuse Box (British General, 12 way)	≤ 496 x 231 x 155	Twin & earth 17mm Twin & earth 30mm G1 21mm	14 4 2	-	120	120



FZ100

Fire Safe Zone

Nullifire

Smart Protection

Performance Data

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Material		Dimensions in mm	Cable Type	Cable Quantity	Additional Products	Classification	
						Integrity (E)	Insulation (I)
120mm Flexible Walls - CABLE CARRIERS & CABLES							
Cable Tray, Trunking, Basket		≤ 450 x 25 x 1,0	-	-	-	120	120
Cable Basket	#	≤ 200 x 25	-	-	-	120	120
Cable		-	TV coaxial 10mm	1	-	120	120
Cable		-	Ethernet Cat 5 6mm	1	-	120	120
Cable		-	Fibre optic 7mm	1	-	120	120
Cable		-	D1 80mm	1	F1025 Intuflex	120	120
Cable		-	G1 21mm	1	F1025 Intuflex	120	120
Cable		-	D2 65mm	1	-	90	90
Cables in Rigid Combustible Conduit		≤ Ø28 x 2,6	Ethernet Cat 5 6mm	1	-	120	120
Cables in Rigid Combustible Conduit		≤ Ø28 x 2,6	Ethernet Cat 5 6mm TV coaxial 10mm Fibre optic 7mm	1 1 1	-	120	120
Cables in Rigid Combustible Conduit		≤ Ø28 x 2,6	Fibre optic 7mm	1	-	120	120
Cables in Rigid Combustible Conduit		≤ Ø28 x 2,6	TV coaxial 10mm	1	-	120	120
Cables in 1 Bank of 5 Rigid Combustible Conduits		≤ Ø28 x 2,6	Ethernet Cat 5 6mm TV coaxial 10mm Fibre optic 7mm	1 1 1	-	120	90
Cables in Flexible & Rigid PVC Combustible Conduit	#	Ø63 to Ø90 x 0,5 to 1,5	Twin & earth 17mm	≤ 8	-	120	120
Cables in Flexible & Rigid PVC Combustible Conduit	#	Ø63 to Ø90 x 0,5 to 1,5	Twin & earth 17mm	≤ 32	-	90	90
Cables in Flexible & Rigid PVC Combustible Conduit	#	Ø63 to Ø90 x 0,5 to 1,5	TV coaxial 10mm	1	-	60	60
Cables in Flexible & Rigid PVC Combustible Conduit	#	Ø63 to Ø90 x 0,5 to 1,5	Twin & earth 17mm TV coaxial 10mm	≤ 5 1	-	60	60
Cables in Flexible Combustible Conduit	#	≤ Ø63 x 0,5 to 1,5	Twin & earth 17mm	≤ 8	-	120	120
Cables in Flexible Combustible Conduit	#	≤ Ø63 x 0,5 to 1,5	Twin & earth 17mm	≤ 32	-	90	90
Cables in Flexible Combustible Conduit	#	≤ Ø63 x 0,5 to 1,5	TV coaxial 10mm	1	-	60	60
Cables in Flexible Combustible Conduit	#	≤ Ø63 x 0,5 to 1,5	Twin & earth 17mm TV coaxial 10mm	≤ 5 1	-	60	60
Cable Bundle		-	Fibre optic 7mm	≤ 5	-	120	120
Cable Bundle		-	TV coaxial 10mm	≤ 5	-	120	120
Cable Bundle	#	-	A1 12mm	≤ 10	-	120	120
Cable Bundle		≤ 80	Ethernet Cat 5 6mm	≤ 80	-	90	90
Cable Bundle		-	Fibre optic 7mm	≤ 10	-	120	30
Cable Bundle		≤ 100	Twin & earth 17mm	≤ 26	-	90	30
Cable Bundle		≤ 100	Fibre optic 7mm	≤ 308	-	90	30
Cable Bundle		≤ 80	TV coaxial 10mm	≤ 32	-	90	30
Cable Bundle		-	Fibre optic 7mm TV coaxial 10mm	≤ 9 1	-	60	30



FZ100

Fire Safe Zone

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Smart Protection

Performance Data

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Material	Diameter in mm	Wall Thickness in mm	Classification	
			Integrity (E)	Insulation (I)
100mm Flexible Walls - COMBUSTIBLE PIPES				
1 Bundle of 5 PEX multilayer pipes	≤ 22	1.5	60	60
PEX multilayer pipe	≤ 28	2.6	120	120
1 Bank of 5 PEX multilayer pipes	≤ 28	2.6	120	90
PVC-U pipe (+ PVC-C)	≤ 40	3.2	60	60
1 Bank of 3 PVC-U pipe (+ PVC-C)	≤ 40	1.9	60	60
1 Bank of 6 PVC-U pipes (+ PVC-C) & ABS pipes	≤ 40	1.9	60	60
PVC-U pipe (+ PVC-C)	≤ 110	4.2	120	120
PVC-U pipe (+ PVC-C)	≤ 110	6.6	120	120
PVC-U pipe (+ PVC-C)	≤ 125	4.8	60	60
PVC-U pipe (+ PVC-C)	≤ 125	7.4	60	60
HDPE pipe *	≤ 110	10.0	120	120
HDPE pipe *	≤ 110	6.6	60	60
HDPE pipe	≤ 125	3.7	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 40	3.7	90	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 63	3.7	60	60
1 Bank of 3 PE pipes (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 63	3.7	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 90	8.2	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 110	10.0	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 110	6.6	60	60
PE pipe (+ HDPE, ABS, San+ PVC, PVC-U & PVC-C)	≤ 110	4.2	60	60
ABS pipe	≤ 40	1.9	60	60
ABS pipe	≤ 110	3.4	60	60
ABS pipe	≤ 110	11.2	60	60
PP pipe (+ HDPE, PVC-U & PVC-C)	≤ 41	1.9	60	60
1 Bank of 4 PP pipes (+ HDPE, PVC-U & PVC-C)	≤ 41	1.9	60	60
100mm Flexible Walls - NON-COMBUSTIBLE PIPES				
Copper pipe (+ Steel, Cast Iron)	≤ 15	≥ 1	90	90
Copper pipe (+ Steel, Cast Iron)	≤ 42	≥ 1	90	0
Copper pipe (+ Steel, Cast Iron)	≤ 160	≥ 2	90	0
Steel pipe (+ Cast Iron)	≤ 22	≥ 2	90	60
Steel pipe (+ Cast Iron)	≤ 89	≥ 5	90	15



FZ100

Fire Safe Zone

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Performance Data

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Material	Diameter in mm	Dimensions in mm	Insulation Material	Insulation Thickness in mm	Insulation Location	Insulation Local Extension	Classification	
							Integrity (E)	Insulation (I)
100mm Flexible Walls - INSULATED NON COMBUSTIBLE PIPES								
Copper pipe (+ Steel, Cast Iron)	≤ 42	≥ 1	PIR	20	LI (Local Interrupted)	500	90	90
Copper pipe (+ Steel, Cast Iron)	≤ 42	≥ 1	Glass Fibre / Rock Fibre	20	CI (Continuous Interrupted)	-	90	60

Material	Dimensions in mm	Cable Type	Cable Quantity	Classification	
				Integrity	Insulation
100mm Flexible Walls - CABLE CARRIERS & CABLES					
Cable Tray, Trunking, Basket	≤ 450 x 25 x 1,0	-	-	-	120
Cables in Rigid Combustible Conduit	≤ 28 x 2,6	Ethernet Cat 5 6mm	1	120	120
		TV coaxial 10mm	1		
		Fibre optic 7mm	1		
Cables in Rigid Combustible Conduit	≤ Ø28 x 2,6	Ethernet Cat 5 6mm	1	120	120
Cables in Rigid Combustible Conduit	≤ Ø28 x 2,6	Fibre optic 7mm	1	120	120
Cables in Rigid Combustible Conduit	≤ Ø28 x 2,6	TV coaxial 10mm	1	120	120
Cables in 1 Bank of 5 Rigid Combustible Conduits	≤ Ø28 x 2,6	Ethernet Cat 5 6mm	1	120	90
		TV coaxial 10mm	1		
		Fibre optic 7mm	1		
Cable	-	TV coaxial 10mm	1	120	120
Cable	-	Ethernet Cat 5 6mm	1	120	120
Cable	-	Fibre optic 7mm	1	120	120
Cable	-	D2 65mm	1	90	90
Cable Bundle	-	Fibre optic 7mm	≤ 5	120	120
Cable Bundle	-	TV coaxial 10mm	≤ 5	120	120
Cable Bundle	≤ 80	Ethernet Cat 5 6mm	≤ 80	90	90
Cable Bundle	-	Fibre optic 7mm	≤ 10	120	30
Cable Bundle	≤ 100	Twin & earth 17mm	≤ 26	90	30
Cable Bundle	≤ 100	Fibre optic 7mm	≤ 308	90	30
Cable Bundle	≤ 80	TV coaxial 10mm	≤ 32	90	30