# **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 planned and future penetrating services.
- FZ100 may be located anywhere within a partition, either at the point of construction, or retrospectively fitted. 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 it is located, openings created are not required to be framed or lined. However it is required to be restrained on all edges, either by an infill of a minimum 100 kg/m<sup>3</sup> rock fibre/mineral wool to the entire stud line or by traditional framing using steel stud directly above and below.
- FZ100 is ideally suited for use in modular application, where services may be located after the construction of the compartment.
- FZ100 is placed centrally within the wall cavity, allowing both high service movement, and an uninterrupted aesthetic appearance on all visible wall faces.
- FZ100 may be installed quickly & easily, and has zero potential waste.
- In the event of a fire, FZ100 will completely reinstate the compartment line to the values stated within the Performance tables document.

### **Product Dimensions**

Length: 1100 mm (-0/+20) Width: 620 mm (-5/+65) Thickness: 50 mm (±1,5)

### Packaging

Supplied individually wrapped, in pallet quantities of 15 units.

## Availability

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

### **Usage Guidelines**

Always read SDS, technical handbook, available reports and relevant application details 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). Services must be supported as required. Alternatively, it can be installed locally but it must be fully restrained as previously described.
- 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**

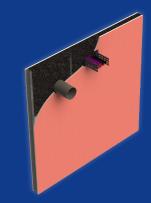
- In the required locations, and within the FZ100 perimeter identification, mark out and identify your service requirements (ensuring to avoid stud locations), and locally remove areas of plasterboard as necessary for the service size.
- Plasterboard openings are required to be either the same dimensions as the services, or larger to all sides of the service dimensions (building conditions may require the increased opening size, e.g. building movement tolerances).
  Consult construction details within technical handbook for permitted 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.











## **Key Benefits Summary**

- Unique GXT technology
- Fire stops existing & future service penetrations
- Quick and easy to install: dry, easy to cut, lightweight
- Fibre free ideal for clean areas
- Simple service installation
- No odour
- Building service movement
- Tested to 66dB for acoustics
- Fully breathable, does not absorb moisture
- Tested to BS EN 1366-3, up to EI120

This product is certified to applicable European (EN) standards and UL-EU Mark service requirements. CERT. N° UL-EU-01263-CPR

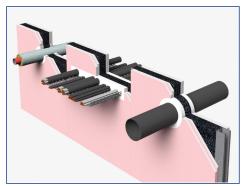






- For circular services, drill a pilot hole directly through the partition at the centre of the required service location. Using a suitable core drill bit, plasterboard can now be cut to each side individually without removing FZ100 infill.
- Once FZ100 is revealed by the local removal of plasterboard, cross cut or Horseshoe 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). Please Note: Cable Tray openings in FZ100, such openings should be cut in order to permit the lifted element of FZ100 to return to the cables, larger cables may require a vertical slit in the FZ100 to allow return to the tray and seal to the cable.
- Once cut, gently push back FZ100 within cavity space to reveal your required opening.
- Pass the required service through the now revelead 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 (read FS702TDS for limitations).

### **Typical Details**



FZ100 Fire Safe Zone installed in 100 mm compartment flexible wall with multiple penetration.

#### **Important Information**

- A cold smoke seal must also accommodate the required building movement or service product thermal expansion.
- FZ100 does not absorb moisture; however, it should not be installed unless dry.

Technical information	
Property	Value
Fire Resistance	Up to 120 minutes (see performance table)
Density	127 kg/m³ (±20)
Maximum Continuous Operating Temperature	+90°C
Acoustic Capability	Up to 66dB at 50 mm thickness within partition
Thermal Conductivity	0.08 W/(m.K)
Storage	Store in dry conditions between -10°C and +70°C
Shelf Life	Unlimited when stored as recommended

- For retrofitted installation, it will be required to remove a local area of plasterboard revealing the left & right studs. Rock fibre/mineral wool insulation infill (min. 100 kg/m<sup>3</sup>) will be required to be removed to accomodate the FZ100 installation in the cavity.
- If the partition wall is uninsulated (or insulated with any other material than rock fibre/mineral wool min 100 kg/m<sup>3</sup>), 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 accomodate the FZ100 installation.
- Minimum dimension of FZ100 should be 50 mm larger to all sides than the anticipated area of the service penetration(s).
- Minimum 100 mm plasterboard separations will be required between service openings.
- Maximum dimension of FZ100 is limited only by the size of the partition.
- FZ100 may not come into contact with CVPC piping systems. For other sensitive pipework, please confirm suitability with service manufacturer prior to application.
- Services were tested with the first support at 250 mm 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).

#### Health & Safety Precautions

Safety data sheet must be read and understood before use.

Nullifire

Smart Protection

#### **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 information, service, 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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