

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

Product Information

Description

FD090 is a lightweight, flexible fire curtain which provides a barrier to smoke and flames. It consists of a specially coated glass fabric material. This is suspended between perimeter fixings and staple jointed for maximum effectiveness. FD090 is suitable for up to 90 minutes fire integrity.

Usage / Purpose

FD090 can be used as a smoke barrier for:

- Subdividing ceiling
- Subdividing roof
- Partitioning the void below a raised floor
- Temporary protection around scaffolding

Colour

Grey

Packaging

1.3 m x 50 m roll

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

- GP22 Staple gun & staples
- Curved needle
- Kevlar sewing twine
- Galvanised steel frame 50 x 50 x 2 mm or equivalent
- Non-combustible fixings suitable for substrate

Preparation

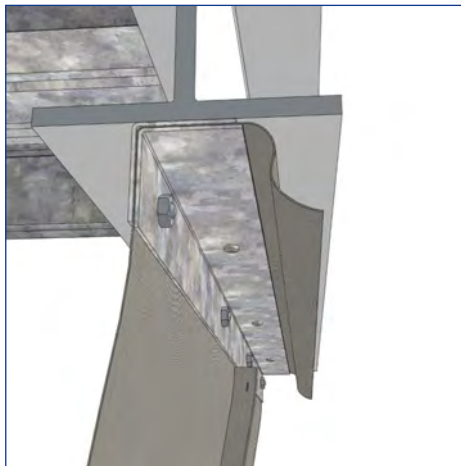
- Ensure the soffit substrate is suitable for fixing FD090.
- There must be 3 solid sides to fix the curtain.
- Fixings around penetrations are in line with Nullifire specification (contact Tremco CPG UK Technical Services Department if in doubt).
- Check that the type of curtain is suited to the requirement.
- The void must not exceed 9 m² without additional framework.
- The curtain must only be used as a permanent barrier, in dry internal conditions.

Application Instructions

FD090 curtain, should be fixed on all sides at the perimeter substrate abutment with a 50 x 50 x 2 mm gauge slotted angle. This can be reduced to 3 sides if draped to a suspended non-fire rated ceiling or similar and secured to the grid. Long drops are achievable, however there will be a need for additional steel framework, if the total area exceeds 9 m².

Fixing to Structural Steel/Masonry/Timber

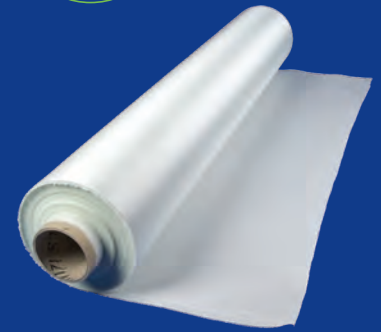
Restrain the FD090 between the angle and the structural member. Fix with non-combustible fixings suited to substrate at 300 mm centres. To secure the curtain further, fix a 40 x 2 mm slotted strap to the exposed face of the angle, trapping the FD090 between angle and strap, and bolt through using M6 x 25 mm steel nuts and bolts.



Nullifire
Smart Protection

FD090

Fire & Smoke Curtain



Key Benefits Summary

- Tested in accordance with BS 476-Pt 20/22 & BS 7346-Pt 3 smoke curtain and BS 476 Pt 7 : 1987 Class 1 spread of flame
- Smoke and cavity fire barrier
- Approval with service penetrations
- Suitable for large openings
- Light weight for easy installation
- Dry installation
- Low dust generation
- Fast and simple seam detail using staples and folds
- Coated on both sides to provide maximum smoke resistance



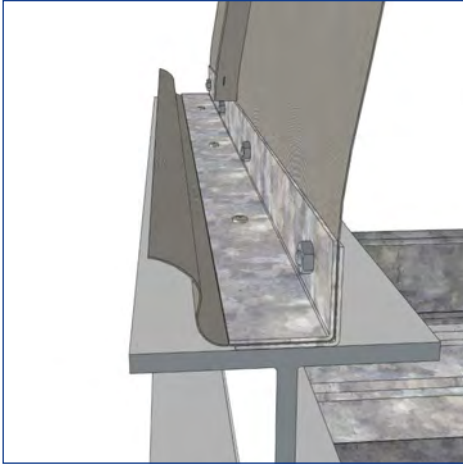
FD090

Fire & Smoke Curtain

Nullifire

Smart Protection

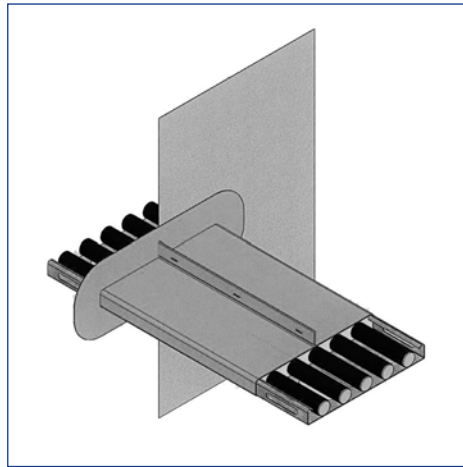
NOTE: Before fixing to lightweight structural steel, approval should be sought from the Specifier or recognised authority to confirm that the weight of the barrier can be safely borne. (FD090 weighs 470 g/m²).



If it is necessary to fix the barrier at its base, use steel angle as above. When fixing the base of the barrier to a suspended ceiling, allow a minimum of 300 mm surplus to the measured drop from soffit level and fix the lower edge to the nearest parallel cross frame member of the ceiling grid using hog rings at 250 mm



- * For steel protected using intumescent fire protection, it will be necessary to apply the same paint loading to the angle, assuming the angle is secured to the steel.
- * For securing angle to timber, timber should be sleeved with FD090

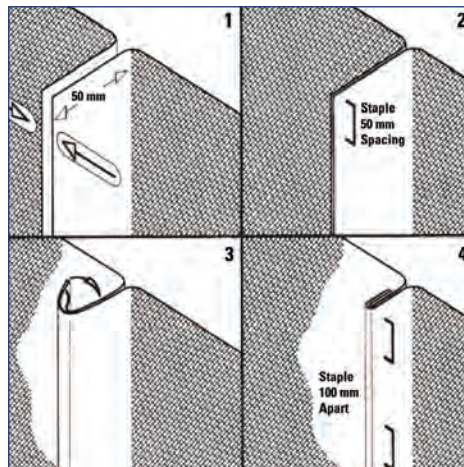


Fixing Across Rafters

When fixing across the line of rafters fix the 50 x 50 x 2 mm slotted angle to the underside of rafters and infill area above angle using FB750 Intubatt and FS702 Intumastic.

Joining Lengths of FD090

Joining one drop of FD090 to the next is very simple. Overlap each drop by 50 mm and create a raised seam by drawing together the two edges of fabric and staple using 8 mm mild steel staples at 500 mm centres. Fold over and re-staple at 100 mm centres.



Staples and staple gun obtainable from Tremco CPG UK.

Fitting Around Non-Combustible Services

Fitting around services can be achieved by slitting the fabric so that it falls around the service and down as far as is required. Make neat cuts around the service in a star shaped pattern making the cuts as short as possible so that the fabric fits around the service snugly.

Wrap the non-combustible penetrating service using FI025 to a length of 400 mm. Create a sleeve around the service and FI025, using FD090 approximately 300 mm long. Make 5 cuts in the rectangle of fabric approximately 100 mm long. Place the sleeve around the service and staple the seam together at 100 mm centres, fold and re-staple at 50 mm centres. Slide the sleeve down the service until the 5 flaps created by the 10 cuts meet the face of the barrier (see drawing 9). Stitch the sleeve to the barrier using stainless steel thread and curved needle, obtainable from Tremco CPG UK.

THIS DETAIL IS REQUIRED ON ONE SIDE ONLY

Fitting Around Dampers

Dampers and/or smoke ducting will require an alternative arrangement. FD090 alone will not suffice. Dampers and ductwork should never be directly attached to FD090. Solution offered are for smoke seals only, always ad hoc. Dampers and ductwork must be suitably independently mechanically restrained.

Fitting Around Combustible Pipes

A steel angle frame should be made using a minimum of 2 mm gauge 50 x 50 steel angle. This framework should be suspended from soffit and never supported by the curtain alone and should extend minimum of 150 mm to every side of the combustible pipe. Once the framework has been constructed the area within the framework is to be suitably filled with FB750 Intubatt retain using FS702 Intumastic and 50 mm Spiral Screws through the pre-drilled angle into all available slots. If required, a suitable closer device (e.g. FS709/FP302/FP170) should be utilised with the FB750 Intubatt.

Once this element has been completed the FD090 may be attached to the angle frame using the stated methodology.



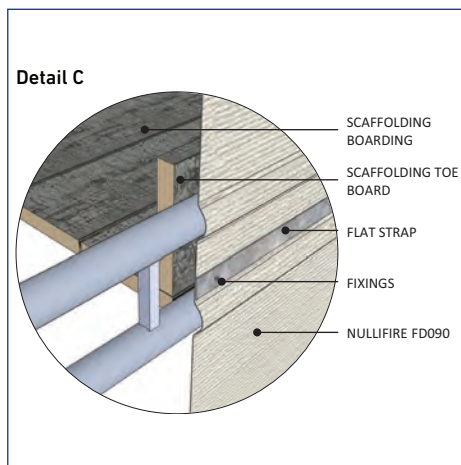
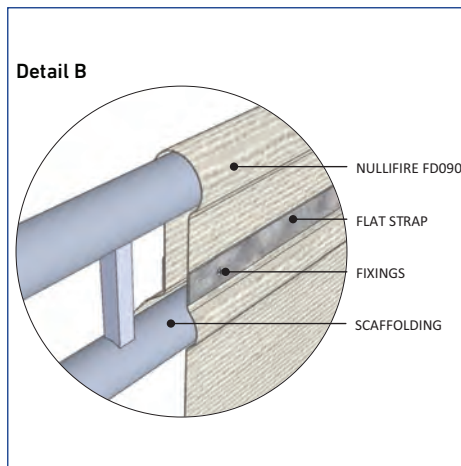
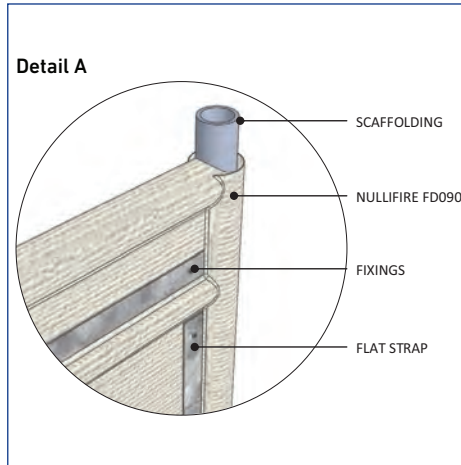
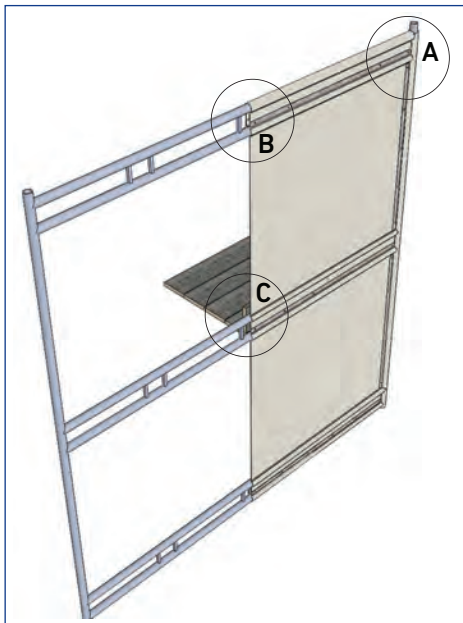
FD090 Fire & Smoke Curtain

Nullifire

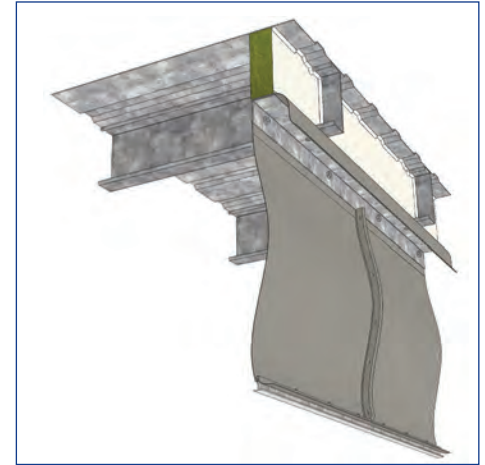
Smart Protection

Temporary Protection Utilising Scaffolding as Framework System

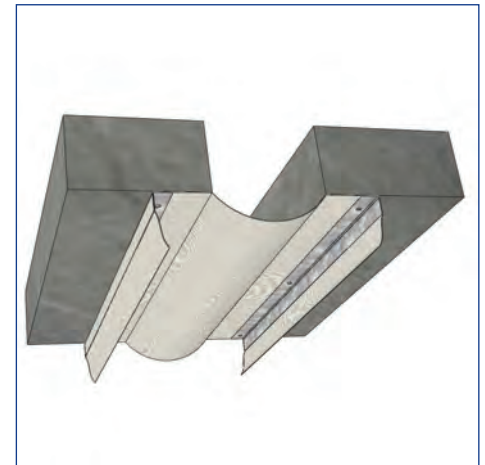
- Ensure surfaces requiring installation are clean and free of debris and remove dust from surfaces requiring installation.
- Cut flat strap to length, ensuring enough to form flat strap to flat strap at perimeter and at ladder sections and to fix to angle.
- Unpack the curtain and position ensuring a minimum overlap at perimeter back on to the main curtain at 100mm and vertical joint at 100mm.
- Fix strap to strap and strap to angle at not exceeding 50mm from each end/cut and at 300mm centres using suitable nuts and bolts. Tighten nuts and bolts ensuring curtain is tightly sandwiched between metal sections.



Typical Details



FD090 Head detail



FD090 Forming right angled barrier



FD090 head detail to intumescently protected structural steel



FD090

Fire & Smoke Curtain

Nullifire
Smart Protection

Important Information

- FD090 is an integrity and smoke barrier and offers no insulation.
- If there is a likelihood of the storage of combustible materials within 1 metre of the barrier, then FD090 is unsuitable and a control Zone should be enforced.
- FD090 has a Class 0 surface spread of flame.
- When used as a temporary barrier around scaffold, we recommend a minimum daily inspection routine is defined by the installing company.
- Damage caused by wind load or the handling of goods / machinery or persons, is not considered within our product guidance.
- The product should not be considered as suitable to protect from injury or potential death caused by falling items or persons. This should be considered within the scaffolding or fire seal design.

Storage

Store in a clean, dry area.

Shelf Life

Unlimited when stored as recommended.

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 +44 (0)1322 551010.

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.