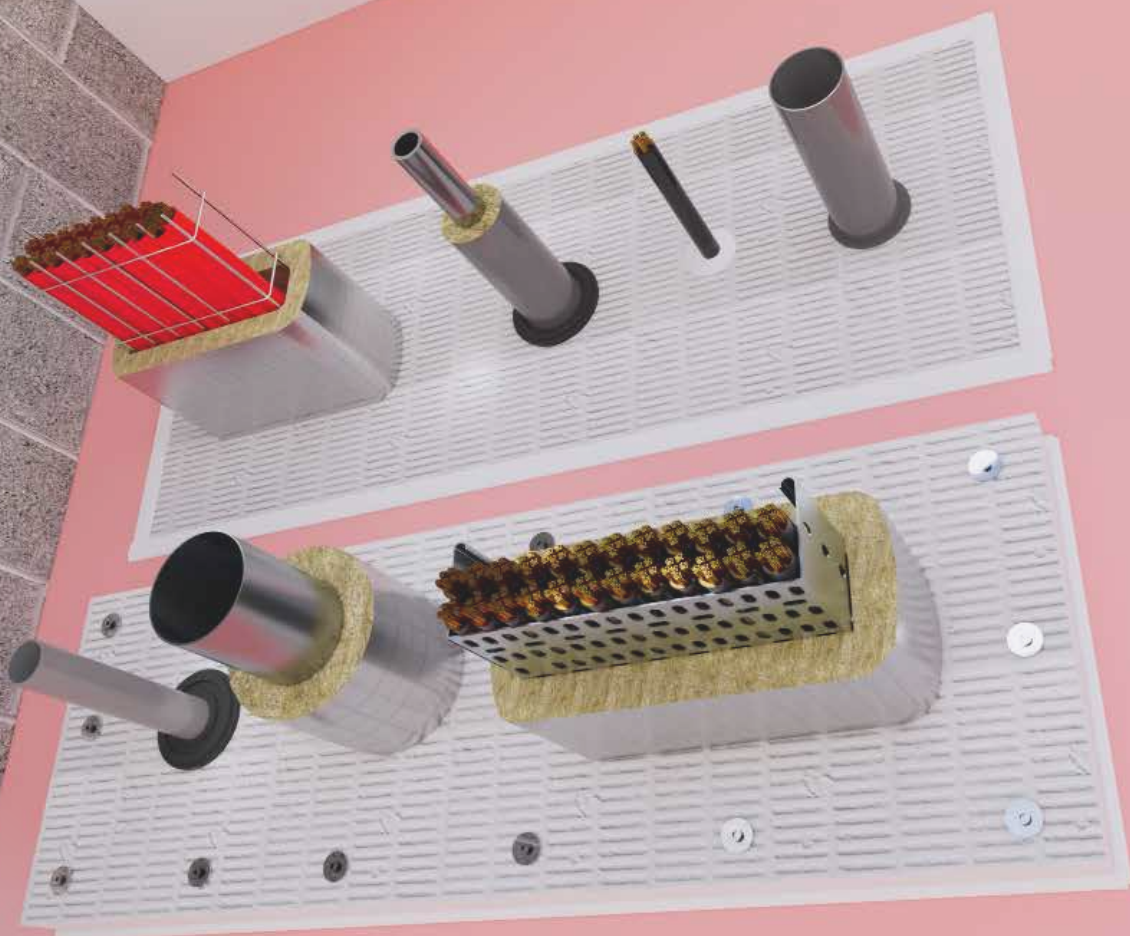




APPLICATION GUIDANCE

FOR FB750 INTUBATT
COATED BATT



INTELLIGENT ENGINEERED PASSIVE FIRE PROTECTION

We are specialists, with one focus that has not and will not change – to protect people and buildings from fire. For nearly 50 years, Nullifire has been a market leader in the Passive Fire Protection industry. We pride ourselves for being the only manufacturer offering intumescent and fire stopping solutions.

Passive fire protection is highly complex but crucially important, especially as buildings become more sophisticated. At Nullifire, we understand the need to have confidence in fire protection; so, we provide systems that perform when they are called upon.

With a unique team of technical experts, everything is focused on providing what our customers need at every stage of their project – smart protection.

Nullifire is a brand of CPG, Construction Products Group, a European manufacturer and service provider of high performance building materials.

- 2 Intelligent Engineered Passive Fire Protection
- 3 Contents & Contact
- 4 Traceability Tools- Optifire & Optifire+
- 6 Introduction
- 8 Intended Use

Installation Designs

- 10 Blank Seals
- 16 Service Types
- 24 Wall Solutions
- 46 Ceiling Solutions
- 47 Concrete Floor Solutions
- 52 Service Separation Distances
- 53 Acoustic Performance

General

- 54 Testing & Certification
- 55 Tremco CPG UK and Its' Trusted Brands

ASSISTANCE WHEN REQUIRED

Our targeted approach allows you to access answers to all of your questions - quickly, simply and for at any stage of the design, build and installation process.

Regardless of the complexity of a project, you can turn to the team here at Nullifire. Our trained expert team support architects, specifiers, main contractors and installers in product selection, specification writing and industry best practices. Involving us at the early stages of a project can help you save money and time, as well as the assurance that the products selected are fully compatible and ideal for the job at hand.

Whilst choosing the right product is vitally important, the application is equally as critical. To optimise this process, we are able to supply the field teams data on formulations, installation specifications and technical drawings to ensure the correct application of our products. Bespoke manuals and instructions can be prepared by our technical teams for specific situations.

Our extensive online and face-to-face training ensures Nullifire products are applied professionally and efficiently, whilst giving installers and contractors access to new technologies and solutions.

All of our product data sheets, technical notes and additional product information can be downloaded from www.nullifire.com.

Contact our
Technical
department

TRACEABILITY TOOLS

Guaranteed Product Traceability

Pioneering technology brought to the market by Nullifire to provide building owners with lifelong traceability of products after construction phase.

These unique technologies offer a guaranteed source of quality and new levels of assurance, whilst acting as an incentive to ensure products are used and applied correctly.

- Applicators – Ability to ensure product installed on site is correct and to standards.
- Main Contractors – Ability to ensure that specifications are being adhered to.
- Architects and Specifiers – Ensuring your design projects comply to the latest building regulations and fire protection that is identifiable in future years.



Optifire is a unique UV technology, which is activated by exposing the product's surface to a UV light source, to offer easy and instant product identification.

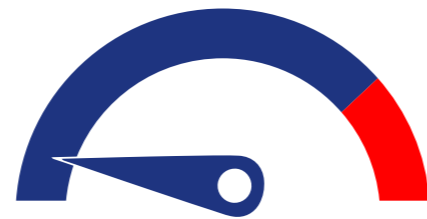
Optifire+ offers pigment technology, which is impossible to manipulate. Visible only with a specific Nullifire detector, it offers lifetime identification, remaining traceable even after a fire.



Insurance Premiums



Lifetime Traceability



Reduced Risk



FB750 INTUBATT - INTRODUCTION



FB750 INTUBATT COATED BATT

up to 240 mins

Rock mineral fibre board with an ablative elastomeric coating

FEATURES & BENEFITS

- Up to 4 hours fire resistance- tested to EN 1366-3 and to BS 476 Pt20/22 tested
- Optifire™ unique traceability identifier
- Acoustic sealing & smoke sealing
- Air pressure tested up to 2000 Pa



INSTALLATION DESIGN - CONFIGURATION OVERVIEW

All the installation designs presented in this document have been proven by and tested to:

- EN 1366-3, issued on 06/05/2022 (Testing standard for service penetrations)

Product Manufactured by:
Tremco CPG UK Ltd.
Coupland Road, Hindley Green
Wigan, WN2 4HT

QUALITY MANAGEMENT SYSTEM CERTIFICATION

- ISO 9001: Certificate Number FM 01764
- Issued by: The British Standards Institute
- Field of Activity: The manufacture and supply of Fire Protection products.

An ISO 9001 quality management system will help you to continually monitor and manage quality across all operations.

ENVIRONMENTAL MANAGEMENT CERTIFICATION

- ISO 14001: Certificate Number EMS 559874
- Scope: The manufacturer and supply of Fire Protection products.

ISO 14001 is an internationally agreed standard that helps organisations identify, manage, monitor and control environmental issues in a holistic manner. This policy sets the best practice benchmark for a long list of sustainable processes.

HEALTH AND SAFETY MANAGEMENT

- ISO 18001: Certificate Number OHS 590478
- Scope: The manufacturer and supply of Fire Protection products.

BS OHSAS 18001 is a framework for an occupational health and safety (ohs) management system and is a part of the OHSAS 18001 (sometimes incorrectly identified as ISO 18001) series of standards, along with OHSAS 18002.



TECHNICAL PRODUCT DESCRIPTION

Nullifire FB750 Intubatt is a coated mineral wool board used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetration of single or multiple services. Nullifire FB750 Intubatt is a 50 mm thick board made of 140 kg/m³ (-5/+15 %) mineral fibre insulation board coated on both sides in factory with ablative acrylic coating, with a minimum Dry Film Thickness of 0.26 mm.

The Nullifire FB750 Intubatt is supplied coated on both faces, the board or boards are then cut to allow the penetration of the required services, before being inserted into the aperture in the wall or floor.

INTENDED USE

The intended use of Nullifire FB750 Intubatt is to reinstate the fire resistance performance of flexible wall, rigid wall and floor constructions where they are penetrated by various cables and pipes to their stated requirement.

The specific elements of construction that the system Nullifire FB750 Intubatt may be used to provide a penetration seal in, are as follows:

- **Flexible walls:** The wall must have a minimum thickness of 75 mm or as defined within this application guidance, and comprise steel studs lined on both faces with minimum 1 layers of 12.5 mm thick boards. Apertures in flexible walls shall be constructed as per the requirements shown in tables contained within this document.
- **Rigid walls:** The wall must have a minimum thickness of 75 mm of concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³ or as defined within this application guidance.
- **Rigid floors:** The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m³.
- **Flexible ceilings:** The ceiling joists will have a minimum dimension of 148 x 46 mm and comprise a minimum 2 x 12.5 mm thick boards to the underside. No extended field of application or scope is possible.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period. The standard EN 1366-3 allows different flexible wall configurations of plasterboard linings.

The system Nullifire FB750 Intubatt may be used to provide a penetration seal with cables, cable trays, metallic pipes, combustible pipes and other services (for details see tables within this document).

The total amount of cross sections of services (including insulation) shall not exceed 60% of the penetration area.

The installation instructions for service support requirements are as per the option "C" requirements of the standard EN 1366-3 2021.

PRODUCT LONGEVITY

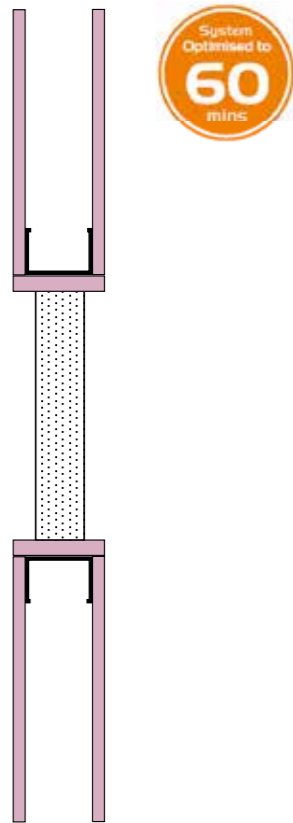
Nullifire can offer up to a 60 years product reliability statement only when installed in C1 environments. Product must be both installed and maintained in accordance to our recommendations.

Note: Imperfections in FB750 abutments are acceptable up to 15 mm over a maximum 40 % of a compressed joint: the imperfection must subsequently be fully filled using FS702.

All FB750 Compartment reinstatements shown are suitable for: single , multiple, mixed or combined penetration seals.

SINGLE SKIN PARTITIONS

Minimum 75 mm overall thickness.
Covers all installations of equal or greater thickness.



Compressed/ Bonded and Sealed

SINGLE BATT COMPRESSION (SYMMETRIC)

Maximum opening dimension:

- 1.9 m²: 2000 x 950 mm

Compression required:

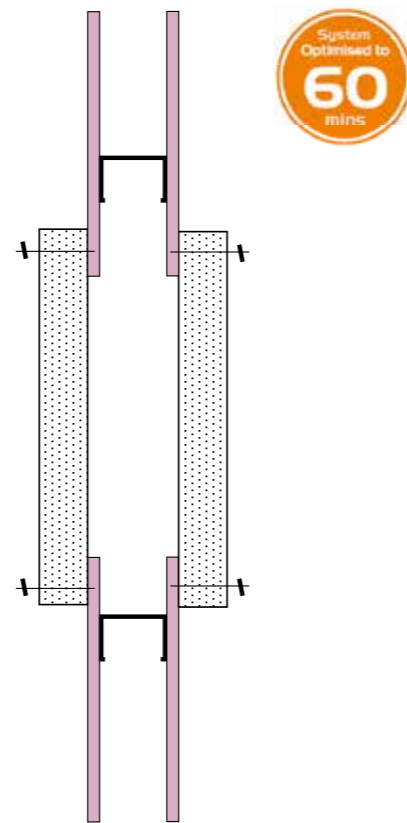
- 2-3 mm

Bond required:

- FS702 - 10 mm bead to all interfaces
- Or FS712 - brush coat to entire width to all joints and interfaces

Seal required:

- FS702 to perimeter edges
- Seal both sides



Pattress Bonded /Sealed mechanically restrained

DOUBLE BATT PATTRESS (SYMMETRIC)

Maximum opening dimension:

- 2.73 m²: 2600 x 1050 mm

Compression required:

- Zero

Overlap to substrates:

- 75 mm typical
- 30 mm in event of obstacle
- Zero to adjacent substrate direction change

Fixings:

- 75 mm steel screws + 25 mm penny washer

Fixing centres:

- Max: 200 mm
- Distance from edge: 5 - 65 mm
- Distance from joint: max 50 mm

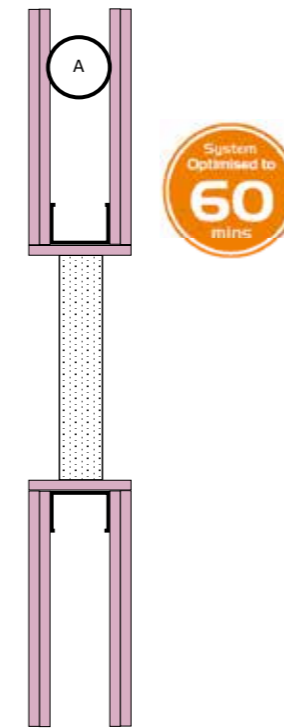
Bond required:

- Continuous 10 mm bead FS702 anywhere on contact area to rear of FB750 / and to all abutting substrates
- Typically required to both sides of substrate

Seal required:

- FS702 to perimeter edges

DOUBLE SKIN PARTITIONS



Single Compressed/ Bonded and Sealed

SINGLE BATT COMPRESSION (SYMMETRIC)

Maximum opening dimension:

- 1.9 m²: 2000 x 950 mm

Compression required:

- 2-3 mm

Bond required:

- FS702 10 mm bead to all interfaces
- Or FS712 brush coat to entire width to all joints and interfaces

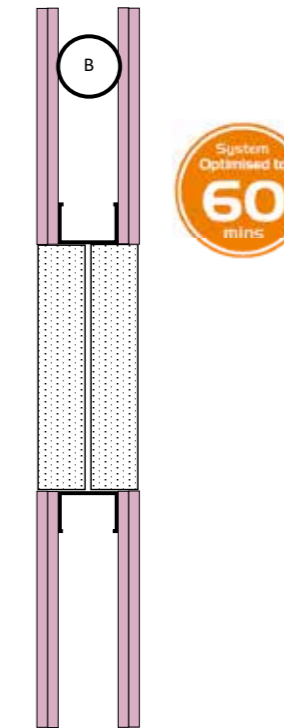
Seal required:

- FS702 to perimeter edges
- Seal both sides

Note:

Depending on opening configuration above:

- Opening type A may use solutions from A, B or C.
- Opening type B may use solutions from B or C.
- Opening type C may use solutions from C only.



Double Compressed/ Bonded and Sealed

DOUBLE BATT COMPRESSION (SYMMETRIC)

Maximum opening dimension:

- 6.76/m²: 2600 x 2600 mm

Compression required:

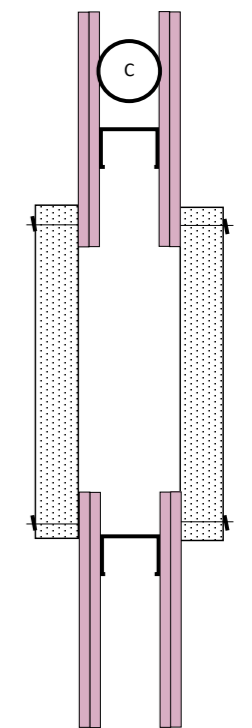
- 2-3 mm

Bond required:

- FS702 10 mm bead to all interfaces
- Or FS712 brush coat to entire width to all joints and interfaces

Seal required:

- FS702 to perimeter edges
- Repeat to 2nd layer FB750
- Seal both sides



Pattress Bonded /Sealed mechanically restrained

DOUBLE BATT PATTRESS (SYMMETRIC)

Maximum opening dimension:

- 2.73 m²: 2600 x 1050 mm

Compression required:

- Zero

Overlap to substrates:

- 75 mm typical
- 30 mm in event of obstacle
- Zero to adjacent substrate direction change

Fixings:

- 75 mm steel screws + 25 mm penny washer

Fixing centres:

- Max: 300 mm
- Distance from edge: 5 - 65 mm
- Distance from joint: max 50 mm

Bond required:

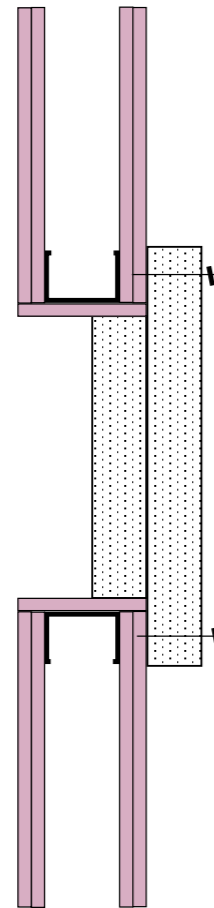
- Continuous 10 mm bead FS702 anywhere on contact area to rear of FB750 / and to all abutting substrates

Seal required:

- FS702 to perimeter edges

DOUBLE SKIN PARTITIONS

Minimum 100 mm overall thickness.
Covers all installations of equal or greater wall thickness.



Tested for single side access installations.
Access from either side.
Tested from both sides.

DOUBLE BATT (ASYMMETRIC)

STEP 1 - SINGLE BATT COMPRESSION

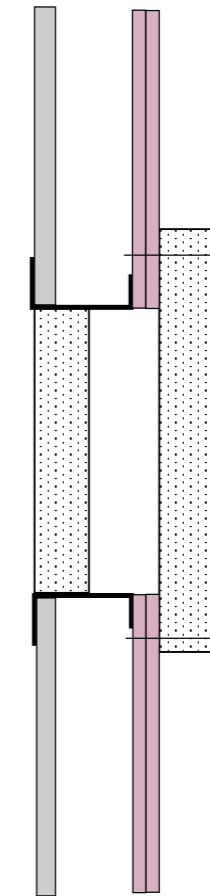
- Maximum opening dimension:**
- 1.21 m²: 1100 x 1100 mm
- Compression required:**
- 2- 3 mm
- Bond required:**
- FS702 10 mm bead to all interfaces
 - Or FS712 brush coat to entire width to all joints and interfaces
- Seal required:**
- FS702 to perimeter edges

STEP 2 - SINGLE BATT PATRESS

- Maximum opening dimension:**
- 1.21 m²: 1100 x 1100 mm
- Compression required:**
- Zero
- Overlap to substrates:**
- 75 mm typical 30 mm in event of obstacle
 - Zero to substrate direction change
- Fixings:**
- 75 mm steel screws + 25 mm penny washer
- Fixing centres:**
- Max: 200 mm
 - Distance from edge: 5 – 65 mm
 - Distance from joint: max 50 mm
- Bond required:**
- Continuous 10 mm bead FS702 anywhere on contact area to rear of FB750 / and to all abutting substrates
 - Must abut and be bonded to the compressed layer
- Seal required:**
- FS702 to perimeter edges

SHAFT WALL

Minimum 90 mm overall thickness.
Covers all installations of equal or greater wall thickness.



Tested for shaft wall applications.

DOUBLE BATT (ASYMMETRIC)

STEP 1 - SINGLE BATT COMPRESSION

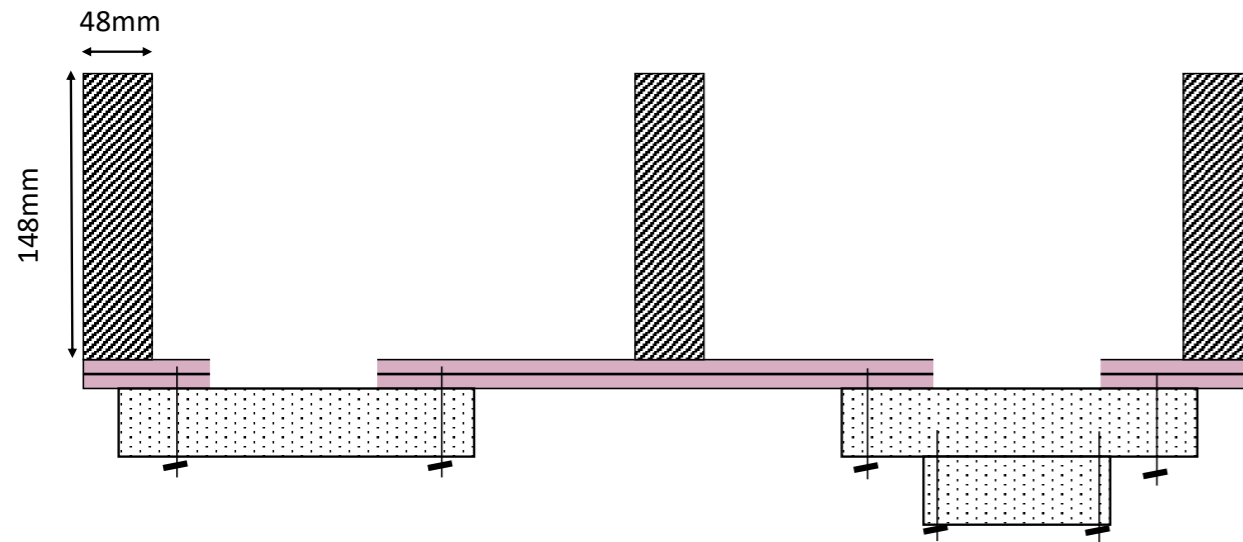
- Maximum opening dimension:**
- 1.21 m²: 1100 x 1100 mm
- Compression required:**
- 2- 3 mm
- Bond required:**
- FS702 10 mm bead to all interfaces
 - Or FS712 brush coat to entire width to all joints and interfaces
- Seal required:**
- FS702 to perimeter edges

STEP 2 - SINGLE BATT PATRESS

- Maximum opening dimension:**
- 1.21 m²: 1100 x 1100 mm
- Compression required:**
- Zero
- Overlap to substrates:**
- 75 mm typical
 - Zero to adjacent substrate direction change
- Fixings:**
- 75 mm steel screws + 25 mm penny washer
- Fixing centres:**
- Max: 200 mm
 - Distance from edge: 5 – 65 mm
 - Distance from joint: max 50 mm
- Bond required:**
- Continuous 10 mm bead FS702 anywhere on contact area to rear of FB750 / and to all abutting substrates
- Seal required:**
- FS702 to perimeter edges

DOUBLE SKIN CEILINGS (TIMBER JOISTED)

Minimum 25 mm overall plasterboard thickness.
Covers all concrete installations of equal or greater total depth.



SINGLE BATT PATTRESS

Maximum opening dimension:

- 260 x 1100 mm

Compression required:

- Zero

Overlap to substrates:

- 75 mm
- Zero to adjacent substrate direction change

Fixings:

- 75 mm steel screws + 25 mm penny washer

Fixing centres:

- Max: 200 mm
- Distance from edge: 5 - 65 mm
- Distance from joint: max 50 mm

Bond required:

- Continuous 10 mm Bead FS702 anywhere on contact area to rear of FB750 / and to all abutting substrates.

Seal required:

- FS702 to perimeter edges

DOUBLE BATT PATTRESS

1st Layer as per single

2nd Layer, service dependent

Maximum opening dimension:

- 260 x 1100 mm

Compression required:

- Zero

Fixings:

- 100 mm spiral screws

Fixing centres:

- Each corner + each side of joints
- Distance from edge: 15 - 70 mm
- Distance from joint: max 50 mm

Bond required:

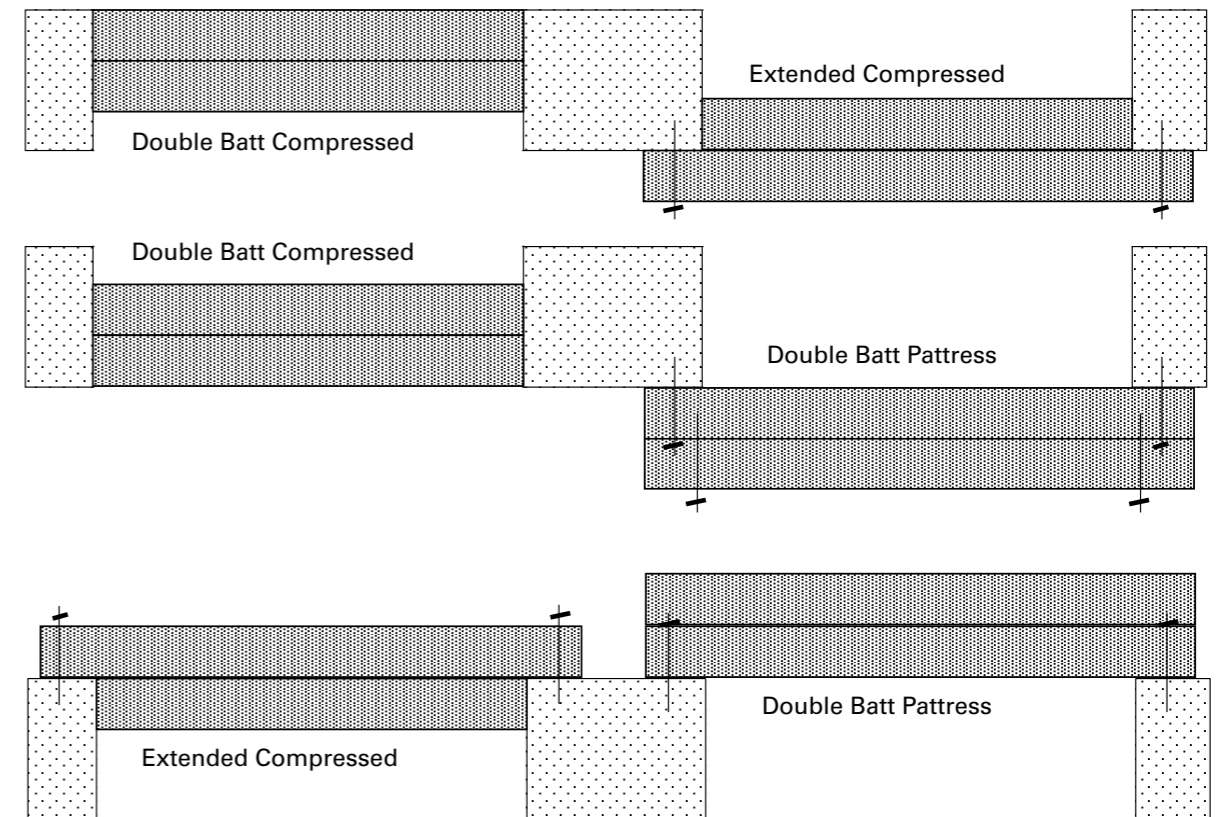
- Continuous 10 mm bead FS702 anywhere on contact area to face of FB750 / and to all abutting substrates.

Seal required:

- FS702 to perimeter edges

150 MM RIGID FLOORS

All seals are interchangeable: covers all concrete / rigid floors of equal or greater total depth.



COMPRESSED ELEMENTS

Maximum opening dimension:

- 1100 x 1100 mm

Compression required:

- 2-3 mm

Seal required:

- Apply a continuous 10 mm bead to the concrete substrate at the expected end location of the FB750

Bond required:

- Apply a continuous 10 mm bead of FS702 to all mating edge and joints of FB750
- Or, a full coat of FS712 to all mating edge and joints of FB750

Seal required:

- Apply a continuous bead of FS702 to all perimeter interfaces and joints

DOUBLE BATT PATTRESS ELEMENTS

1st Layer

Overlap to substrate:

- 75 mm minimum

Fixings:

- 80 mm SFS + 25 mm Penny Washer

Fixing Centres:

- 200 mm to perimeter
- Distance from edge: 10 - 65 mm
- Distance from joint: max 50 mm

2nd Layer

Bond required:

- FS702 10 mm continuous bead 50 mm from edge at interface of first layer of FB750

Fixings:

- 100 mm spiral screws to first layer

Fixing Centres:

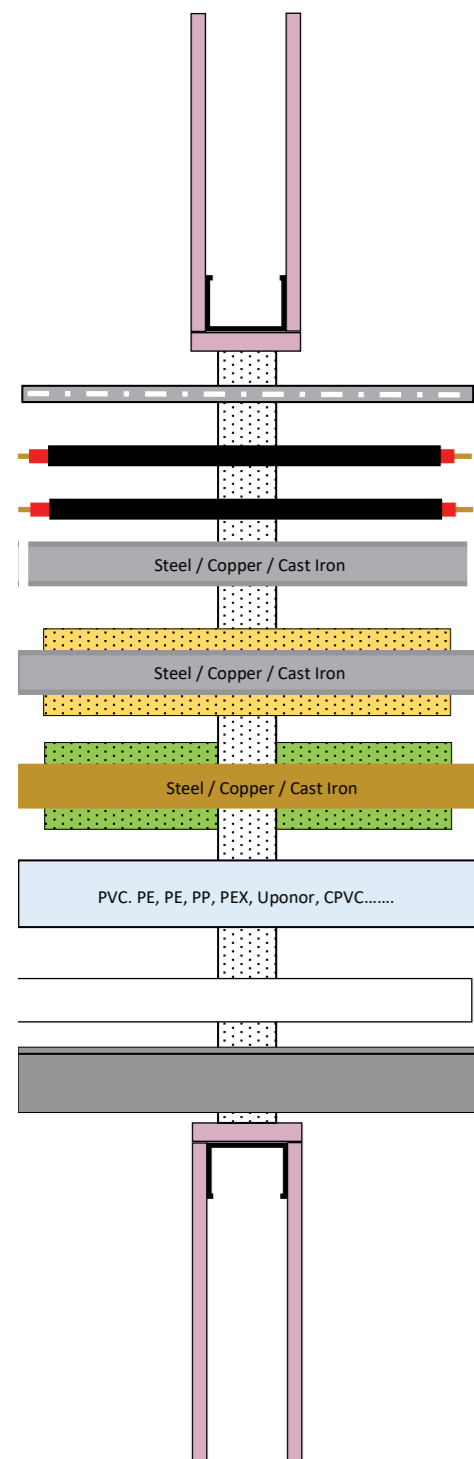
- 300 mm
- Distance from edge: 20 - 60 mm
- Distance from joint: max 50 mm

WALL TYPE SOLUTIONS - SINGLE SKIN PARTITION

Tested in conjunction with the following service types: individual, multiple or mixed services.

This image defines service types tested with wall configuration type (closer devices are omitted).

SINGLE BATT COMPRESSION

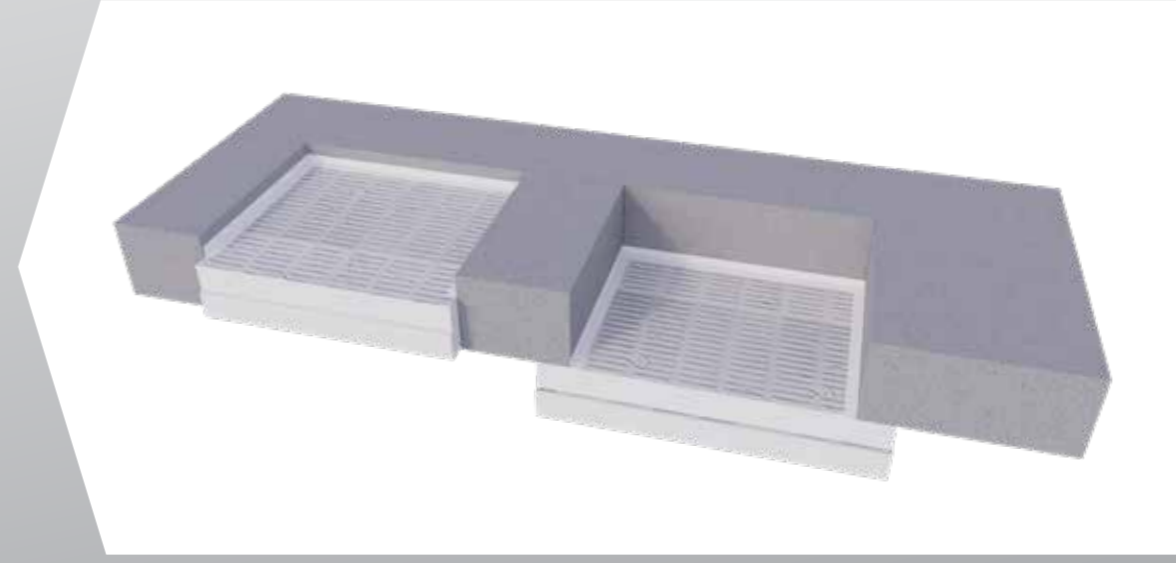
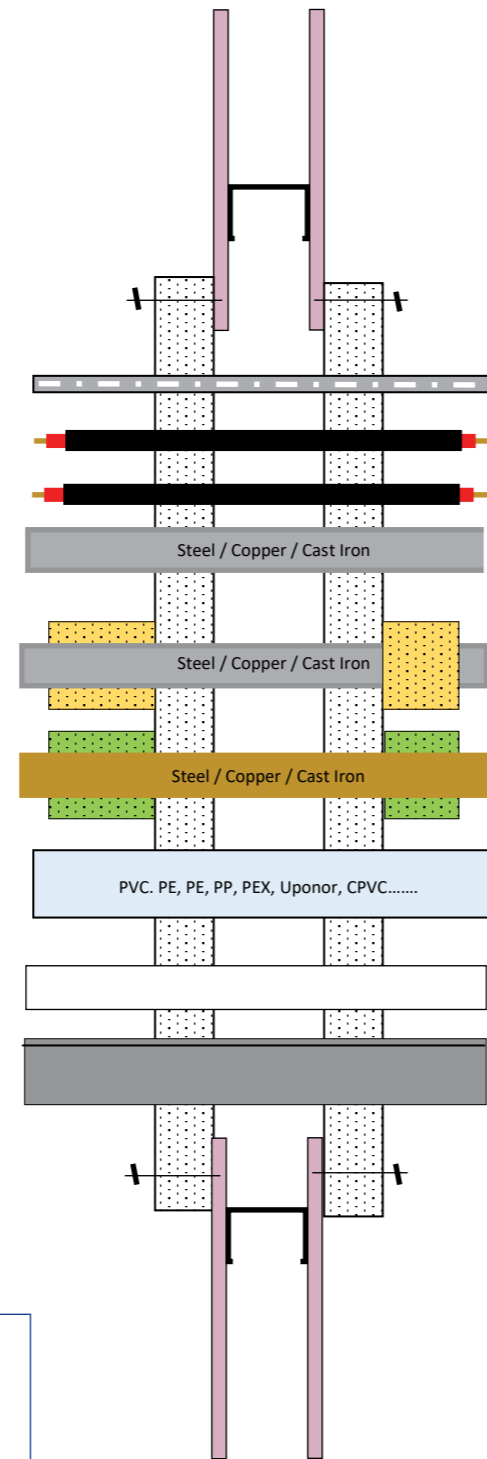


These images represent possible service type only! No solutions are shown on this page

- Cable Carriers
- Cables
- Cable Bundles
- Non-combustible Pipes
- Steel / Copper / Cast Iron
- LS/CS Insulated Non-combustible
- Steel / Copper / Cast Iron
- LI /CI Insulated Non-combustible
- Steel / Copper / Cast Iron
- Combustible Pipes/Conduits
- PVC, PE, PP, PEX, Uponor, CPVC.....
- Flat Plastic Ducting
- Lidded Trunking

LS- Local sustained insulation
 CS- Continuous sustained insulation
 LI- Local interrupted insulation
 CI- Continuous interrupted insulation

DOUBLE BATT PATTRESS

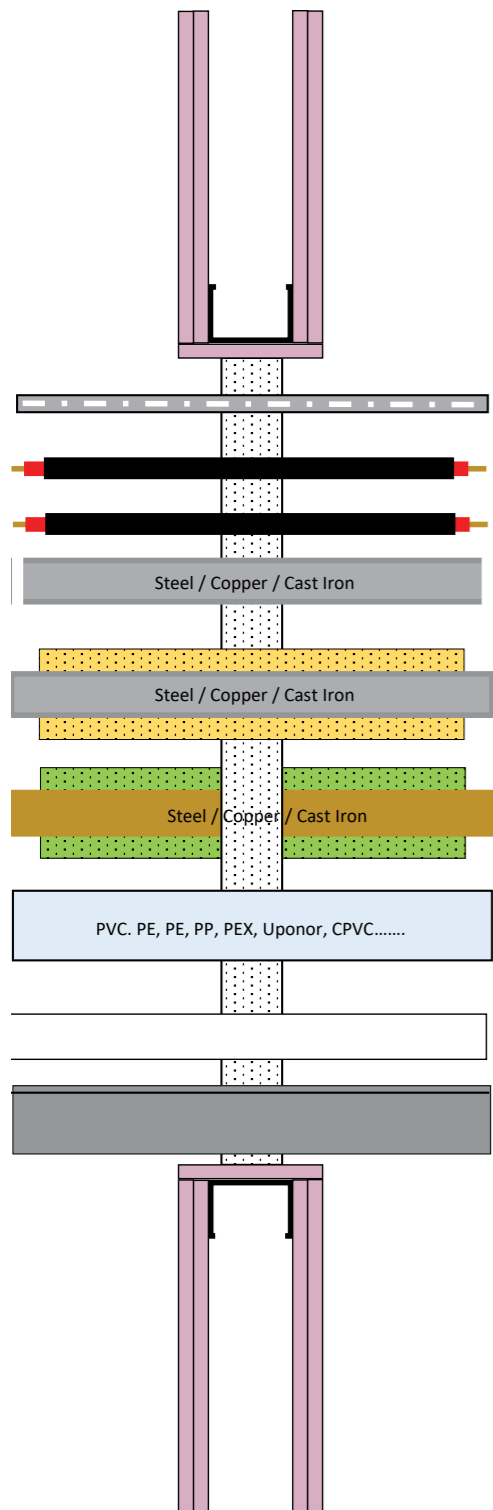


WALL TYPE SOLUTIONS - DOUBLE SKIN PARTITION

Tested in conjunction with the following service types: individual, multiple, mixed or *combined services.

This image defines service types tested with wall configuration type (closer devices are omitted).

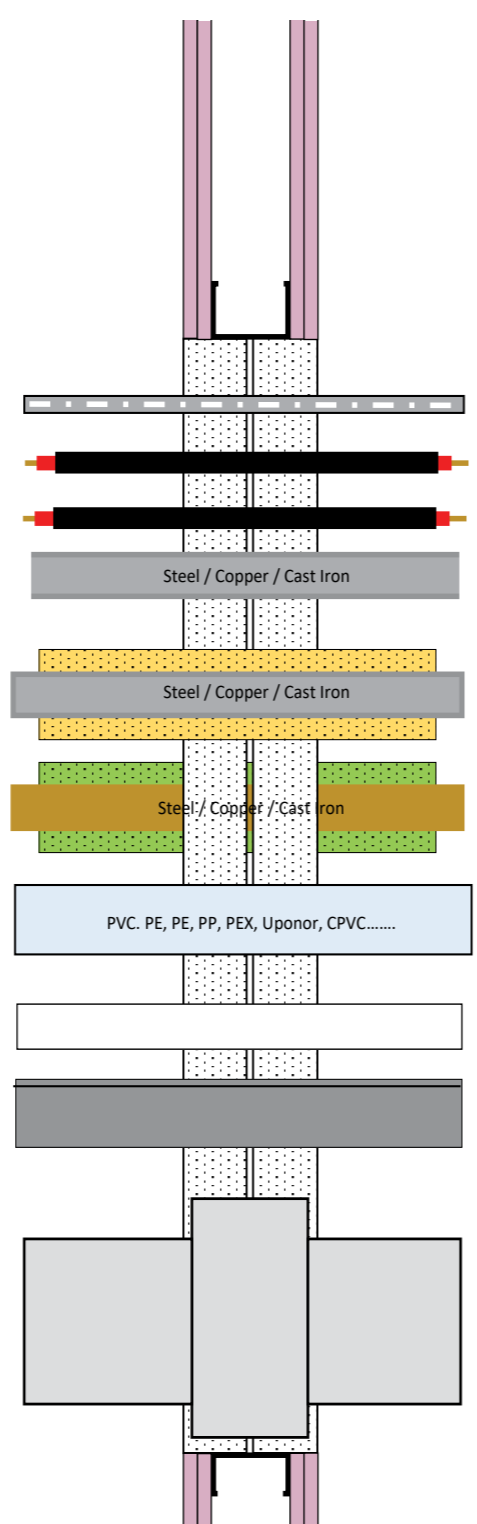
SINGLE BATT COMPRESSION



These images represent possible service type only! No solutions are shown on this page

- Cable Carriers
- Cables
- Cable Bundles
- Non-combustible Pipes
- Steel / Copper / Cast Iron
- LS/CS Insulated Non-combustible
- Steel / Copper / Cast Iron
- LI/CI Insulated Non-combustible
- Steel / Copper / Cast Iron
- Combustible Pipes/Conduits
- PVC, PE, PE, PP, PEX, Uponor, CPVC.....
- Flat Plastic Ducting
- Lidded Trunking
- *Ducted Damper →

DOUBLE BATT COMPRESSION



These images represent possible service type only! No solutions are shown on this page

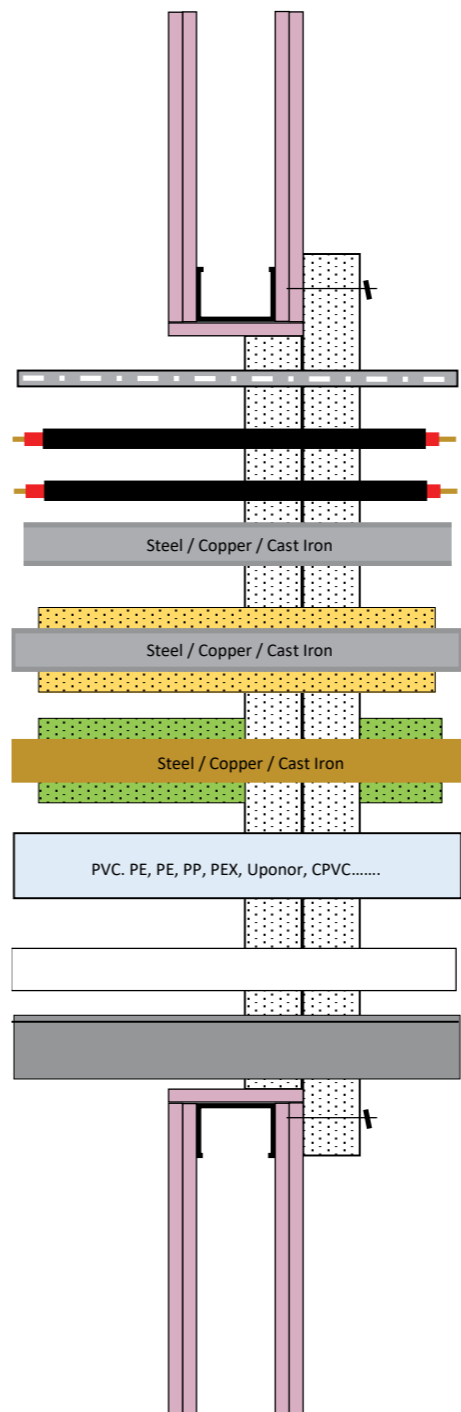
- Cable Carriers
- Cables
- Cable Bundles
- Non-combustible Pipes
- Steel / Copper / Cast Iron
- LS/CS Insulated Non-combustible
- Steel / Copper / Cast Iron
- LI/CI Insulated Non-combustible
- Steel / Copper / Cast Iron
- Combustible Pipes/Conduits
- PVC, PE, PE, PP, PEX, Uponor, CPVC.....
- Flat Plastic Ducting
- Lidded Trunking

WALL TYPE SOLUTIONS - DOUBLE SKIN PARTITION

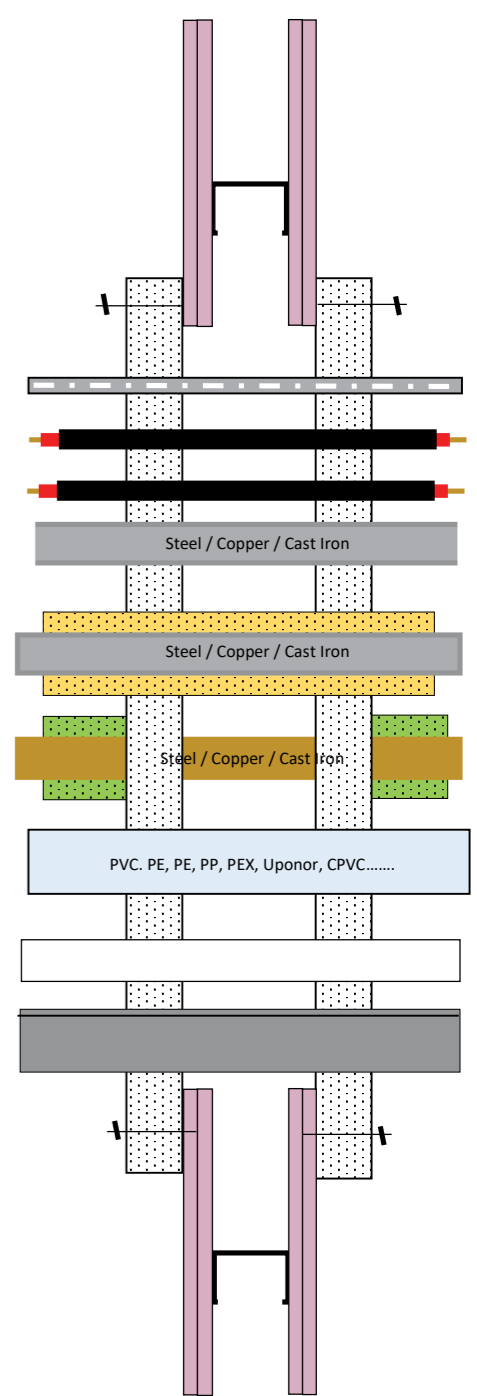
Tested in conjunction with the following service types: suitable for individual, multiple or mixed services.

This image defines service types tested with wall configuration type (closer devices are omitted).

DOUBLE BATT 1X COMPRESSED; 1X PATTRESS



DOUBLE BATT PATTRESS

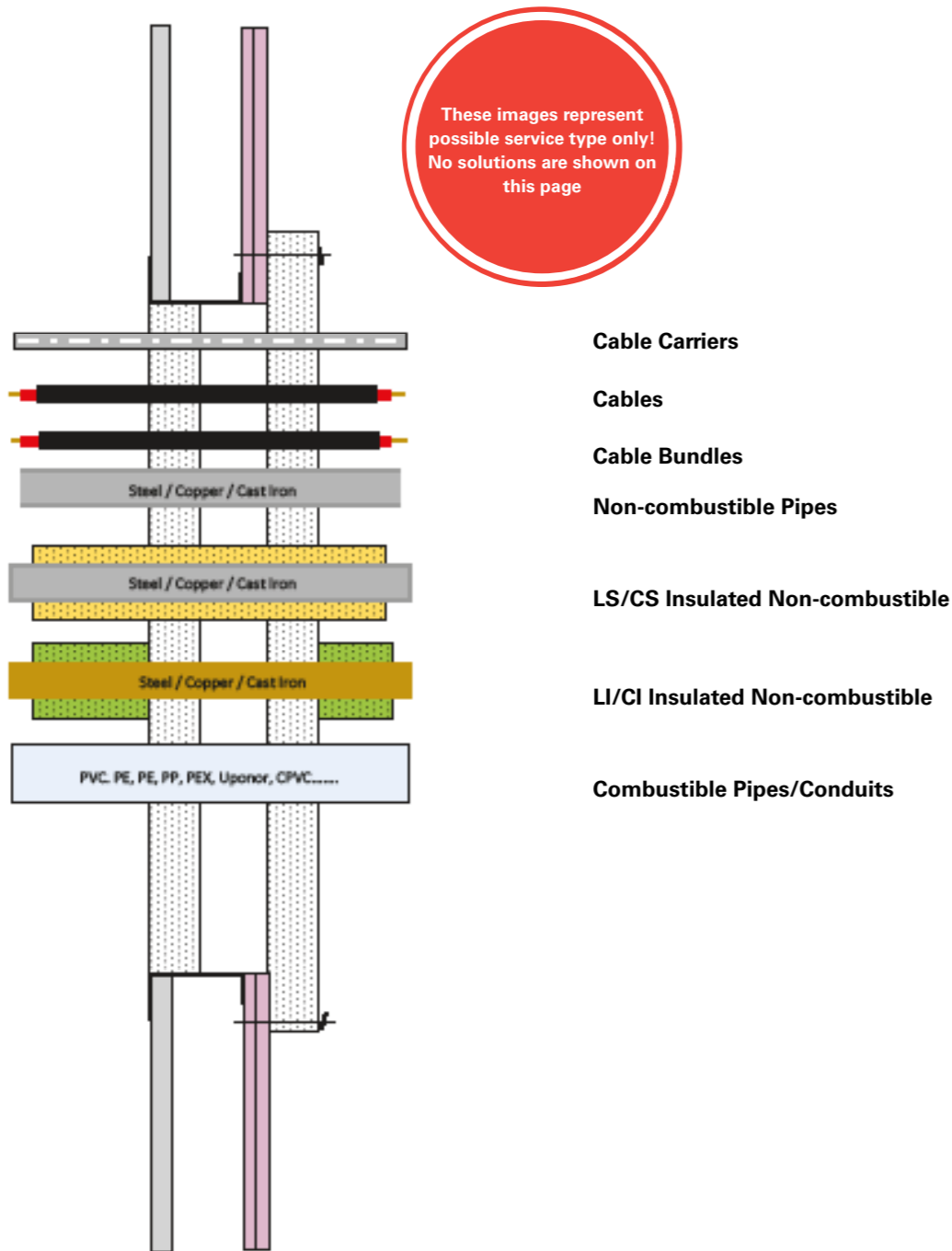


WALL TYPE SOLUTIONS - SHAFT WALL

Tested in conjunction with the following service types: individual, multiple or mixed services.

This image defines service types tested with shaft wall configuration type (closer devices are omitted).

DOUBLE BATT 1X COMPRESSED; 1X PATTRESS



All solutions from single skin construction wall 75 & 80 mm area also applicable.

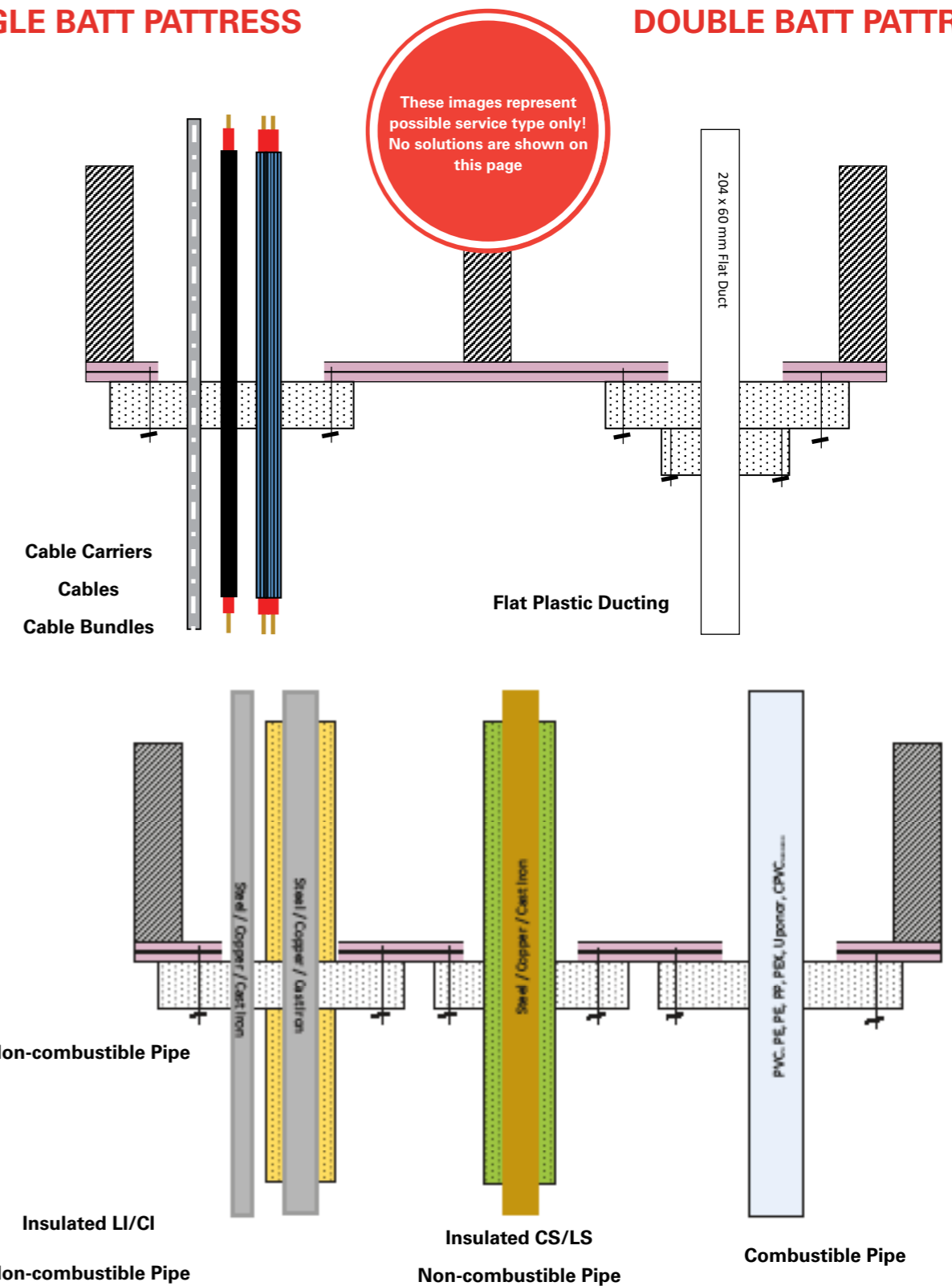
CEILING SOLUTIONS (TIMBER JOISTED)

Tested in conjunction with the following service types: individual, multiple or mixed services.

This image defines service types tested with ceiling configuration type (closer devices are omitted).

SINGLE BATT PATTRESS

DOUBLE BATT PATTRESS



RIGID FLOOR SOLUTIONS

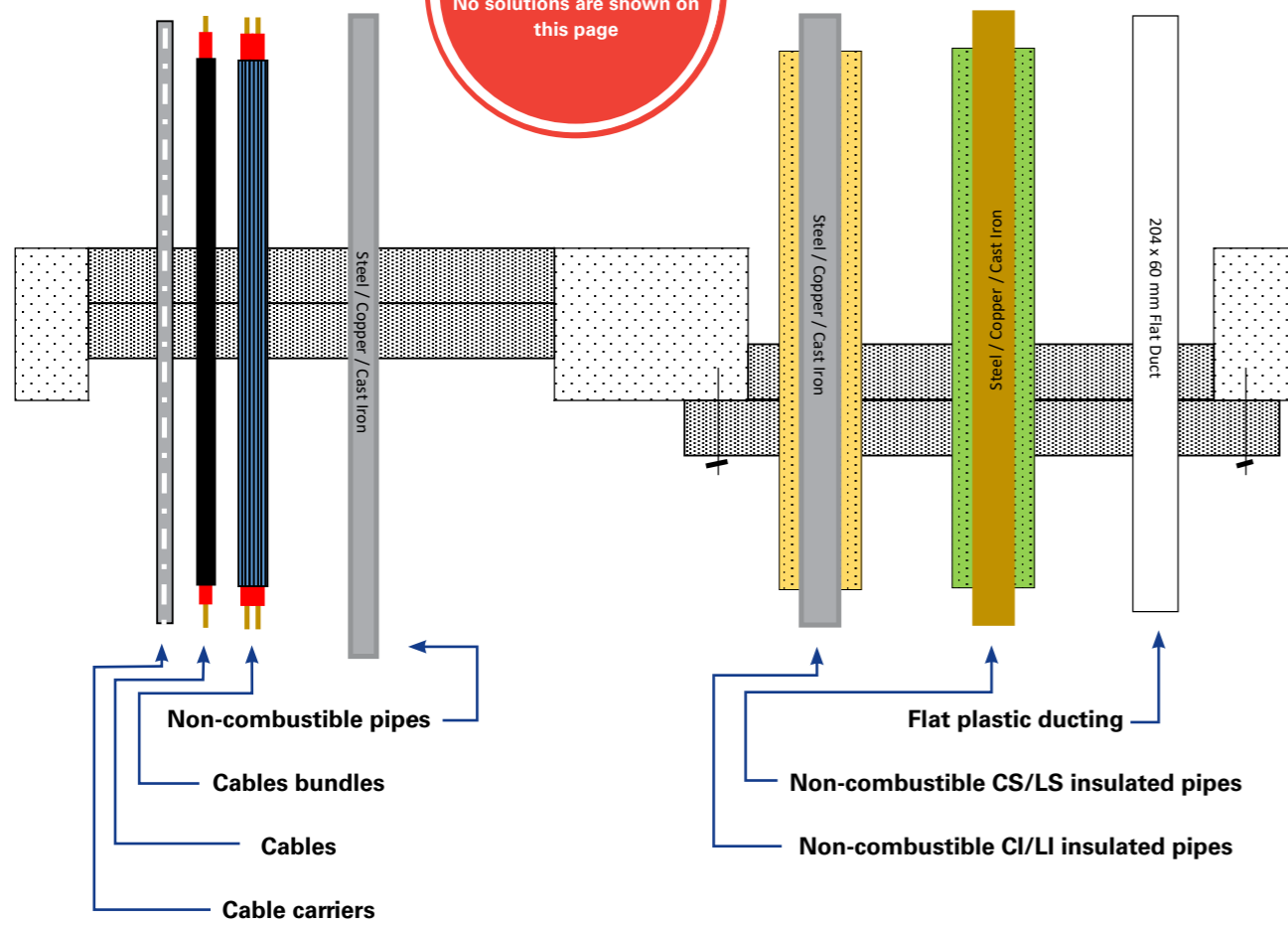
Tested in conjunction with the following service types: individual, multiple or mixed services.

This image defines service types tested with floor configuration type (closer devices are omitted).

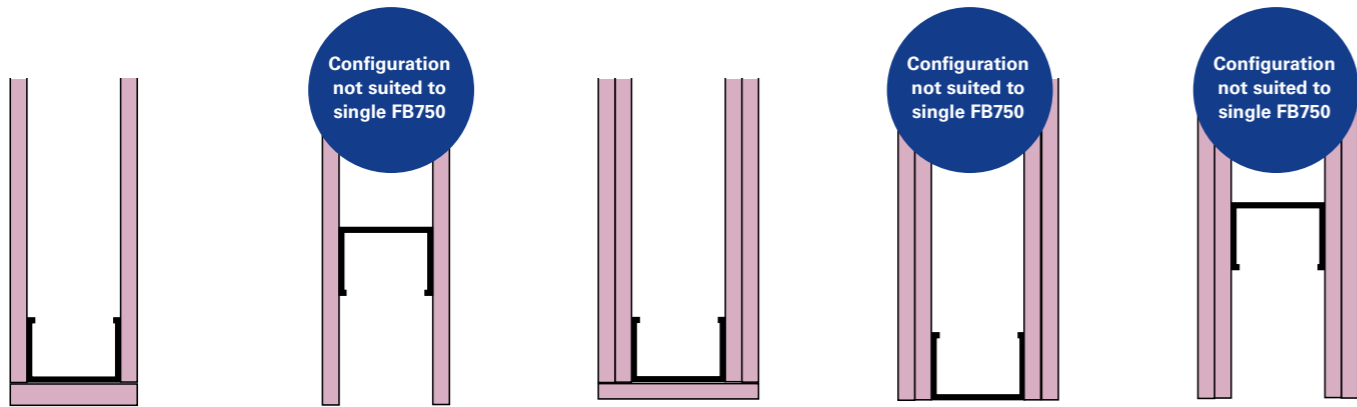
DOUBLE BATT COMPRESSION

DOUBLE BATT 1X COMPRESSED; 1X PATTRESS

These images represent possible service type only! No solutions are shown on this page



SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS

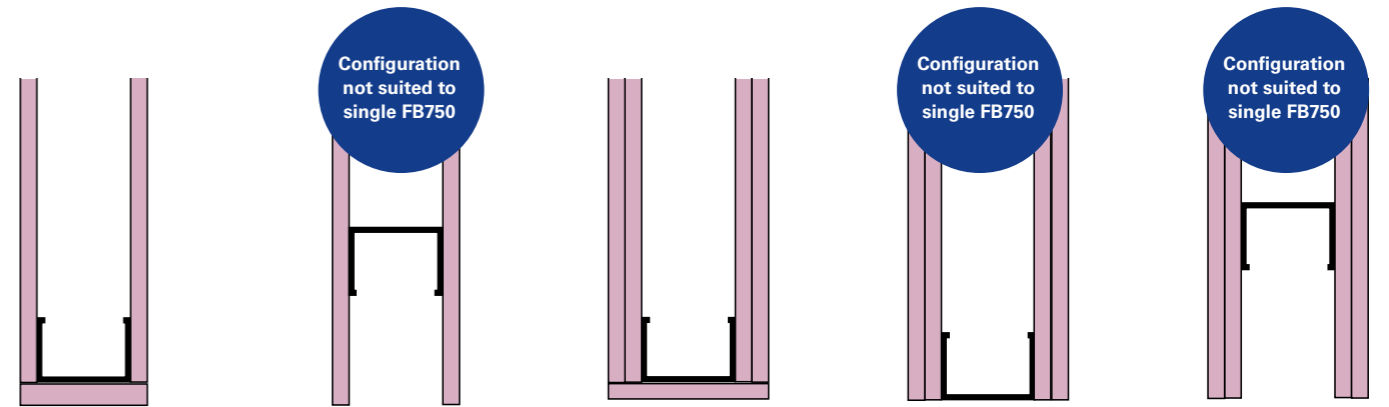


CABLES CARRIERS / CABLE TRAY - SINGLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 90		FB750 + FS702 = EI 30
FB750 + FS702 + FI025 E 120		FB750 + FS702 + FI025 = EI 60
FB750 + FS709 = E 120		FB750 + FS709 = EI 60
FB750 + FS709 + FI025= E 120		FB750 + FS709 + FI025 = EI 60
FB750 + FS702 + Batt Box (FI064) = E 120		FB750 + FS702 + Batt Box (FI064) = EI 90
A-H FB750 + FS702 + FP333 = E 60		A-H FB750 + FS702 + FP333 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS

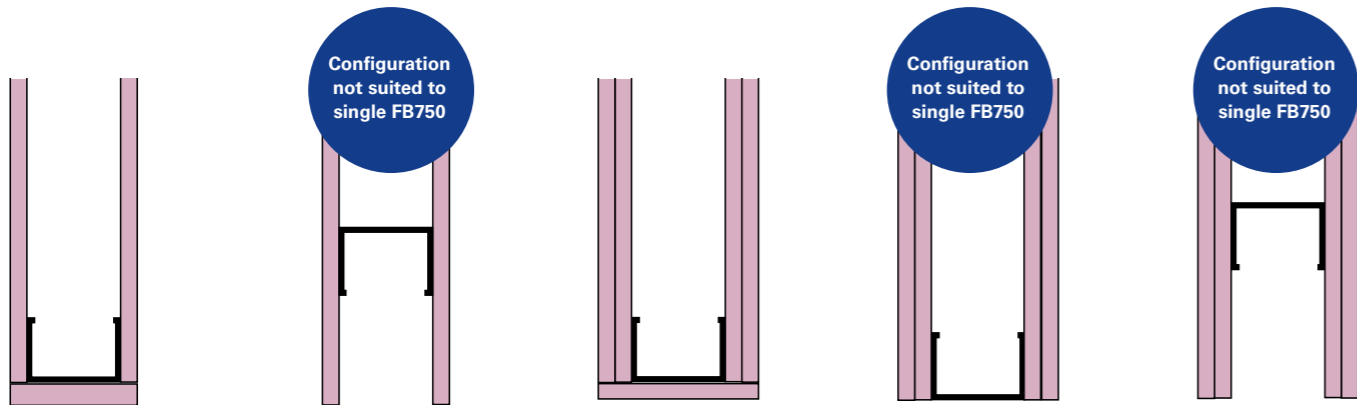


CABLES - SINGLE BATT COMPRESSION

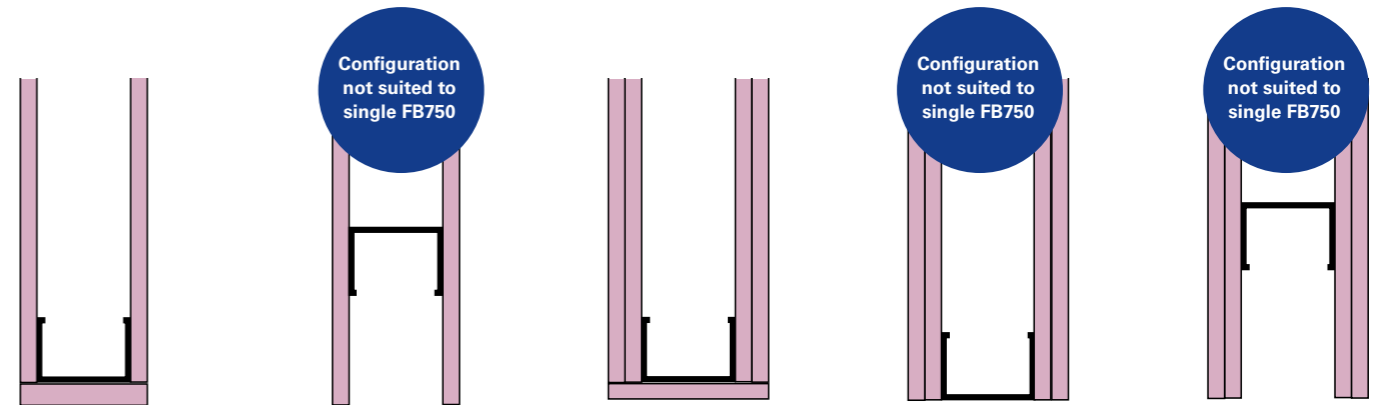
Integrity		Integrity & Insulation
FB750 + FS702 = E 90		FB750 + FS702 = EI 30
FB750 + FS702 + FI025 E 120		FB750 + FS702 + FI025 = EI 60
FB750 + FS709 = E 120		FB750 + FS709 = EI 60
FB750 + FS709 + FI025 = E 120		FB750 + FS709 + FI025 = EI 60
FB750 + FS702 + Batt Box (FI064) = E 120		FB750 + FS702 + Batt Box (FI064) = EI 90
A-H FB750 + FS702 + FP333 = E 60		A-H FB750 + FS702 + FP333 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



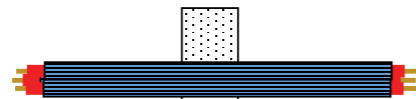
SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



CABLE BUNDLES - SINGLE BATT COMPRESSION

Integrity

FB750 + FS702 = E 90



Integrity & Insulation

FB750 + FS702 = EI 30

FB750 + FS702 + FI025 = E 120



FB750 + FS702 + FI025 = EI 60

FB750 + FS709 = E 120



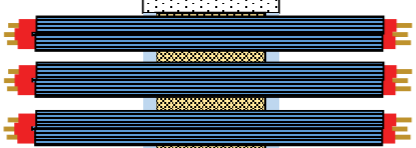
FB750 + FS709 = EI 60

FB750 + FS709 + FI025 = E 120



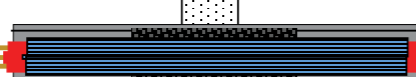
FB750 + FS709 + FI025 = EI 60

FB750 + FS702 + Batt Box (FI064) = E 120



FB750 + FS702 + Batt Box (FI064) = EI 90

A-H FB750 + FS702 + FP333 = E 60

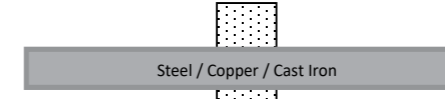


A-H FB750 + FS702 + FP333 = EI 60

NON-COMBUSTIBLE PIPES - SINGLE BATT COMPRESSION

Integrity

FB750 + FS702 = E 60



Integrity & Insulation

FB750 + FS702 = EI 0

FB750 + FS702 + FI025 = E 120



FB750 + FS702 + FI025 = EI 60

FB750 + FS709 = E 120



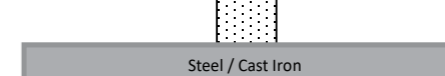
FB750 + FS709 = EI 30

FB750 + FS709 + FI025 = E 120



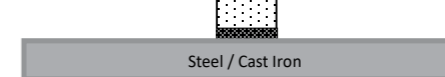
FB750 + FS709 + FI025 = EI 60

FB750 + FS702 = E 60



FB750 + FS702 = EI 30

FB750 + FS709 = E 120

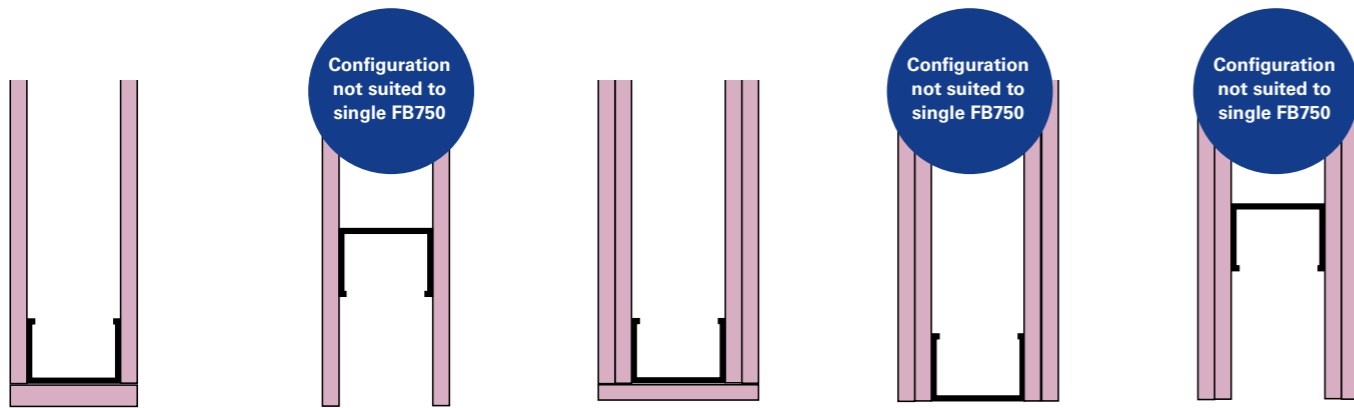


FB750 + FS709 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

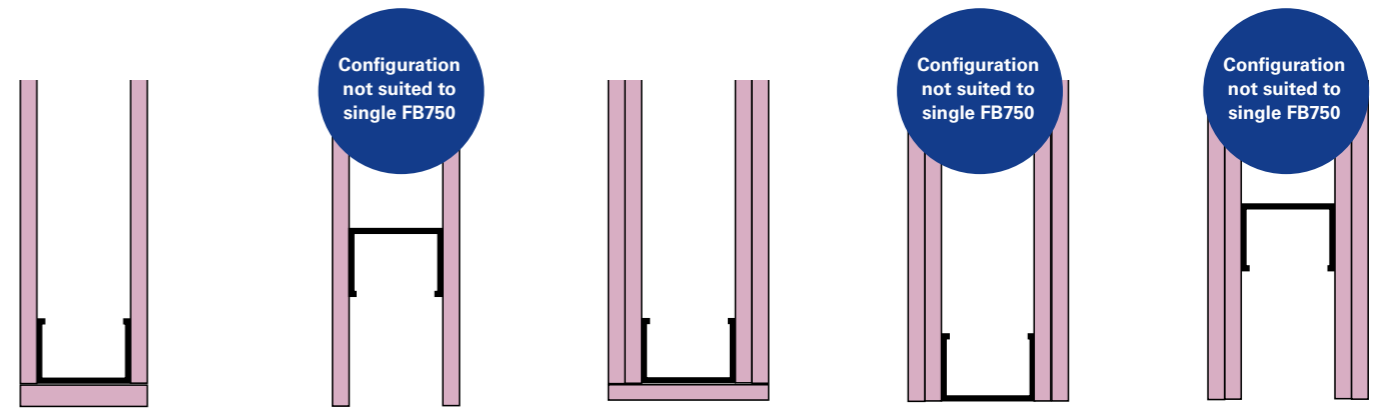
SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



INSULATED NON-COMBUSTIBLE PIPES LS/CS - SINGLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FP302 + FS702 = E 60		FB750 + FP302 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60
FB750 + FP302 + FS702 = E 60		FB750 + FP302 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60
FB750 + FP302 + FS702 = E 60		FB750 + FP302 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



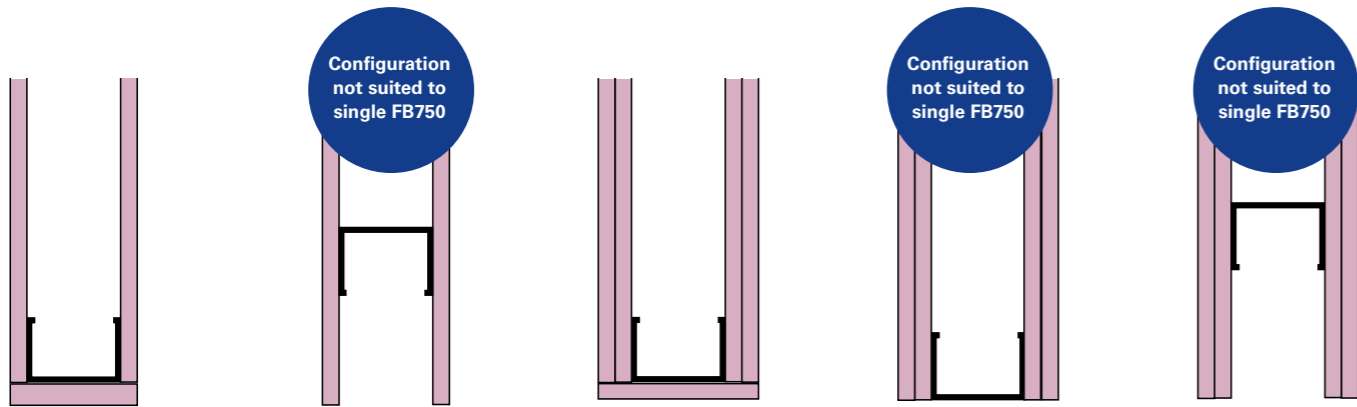
INSULATED NON-COMBUSTIBLE PIPES LI/CI - SINGLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 60		FB750 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60
FB750 + FS702 = E 60		FB750 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60
FB750 + FS702 = E 60		FB750 + FS702 = EI 60
FB750 + FS709 = E 60		FB750 + FS709 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

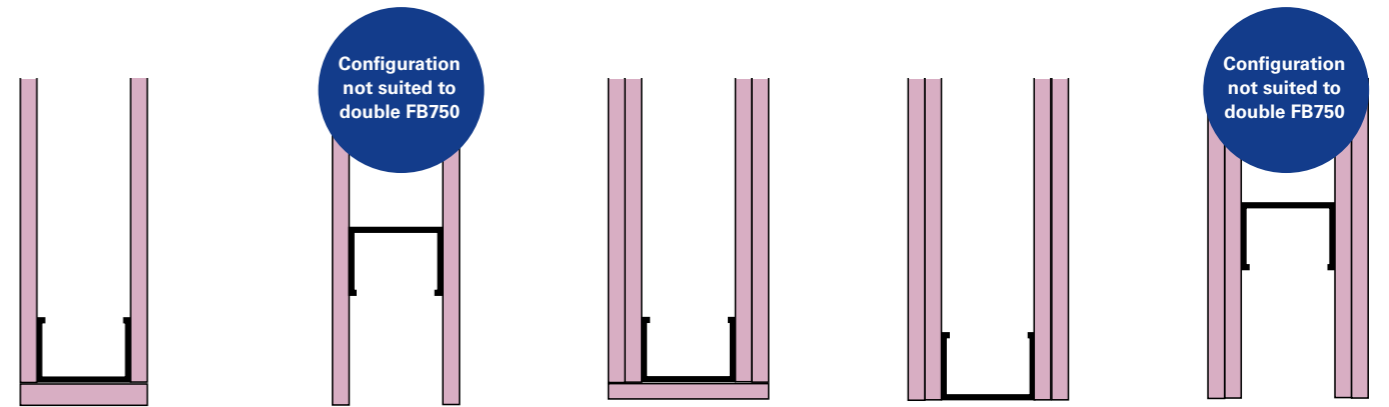
SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



COMBUSTIBLE PIPES - SINGLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FP302 = E 60	Combustible Pipe	FB750 + FP302 = EI 60
FB750 + FS709 = E 60	Combustible Pipe	FB750 + FS709 = EI 60
FB750 + FP220 = E 60	Combustible Pipe	FB750 + FP220 = EI 60
FB750 + FP170 = E 60	Combustible Pipe	FB750 + FP170 = EI 60
FB750 + FS719 = E 60	CPVC ONLY	FB750 + FS719 = EI 60
FB750 + FS719 = E 60	CPVC ONLY	FB750 + FS719 = EI 60
FB750 + FS709 = E 30	Flat Plastic Duct PVC	FB750 + FS709 = EI 30
FB750 + FP220 = E 60	Flat Plastic Duct PVC	FB750 + FP220 = EI 60

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



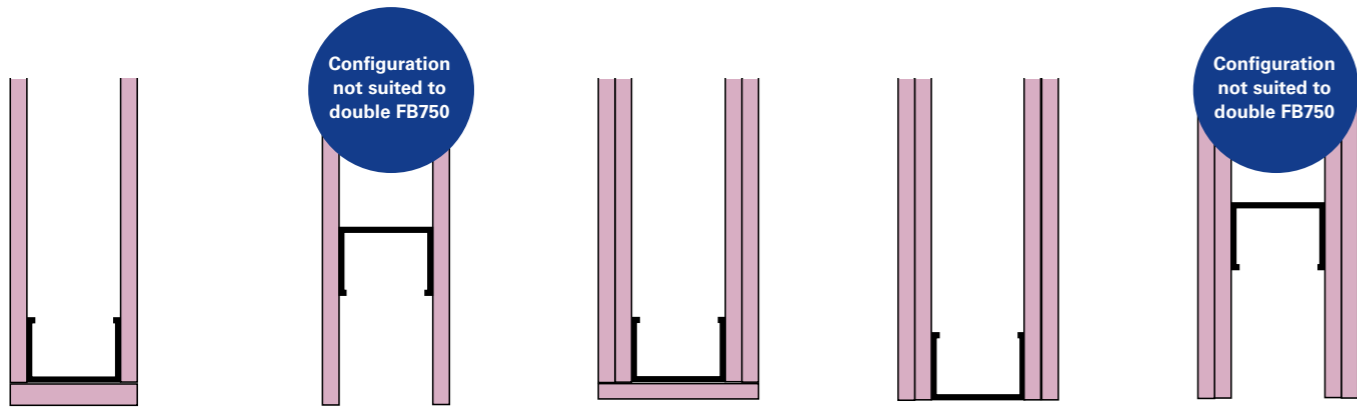
CABLES CARRIERS / CABLE TRAYS - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 120		FB750 + FS702 = EI 90
FB750 + FS702 + FI025 = E 120	FI025	FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS709 + FI025 = E 120	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS702 + Batt Box (FI064) = E 120		FB750 + FS702 + Batt Box (FI064) = EI 120
FB750 + FS702 60mm Cone = E 120		FB750 + FS702 60mm Cone = EI 120
A-H FB750 + FS702 + FP333 = E 120		A-H FB750 + FS702 + FP333 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS

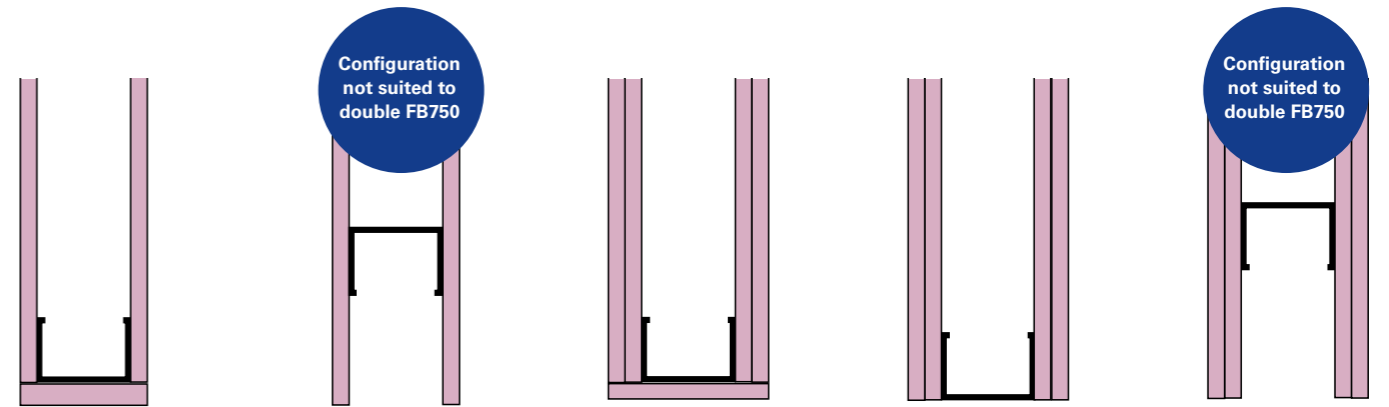


CABLES - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 120		FB750 + FS702 = EI 90
FB750 + FS702 + FI025 = E 120		FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS709 + FI025 = E 120		FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS702 + Batt Box (FI064) = E 120		FB750 + FS702 + Batt Box (FI064) = EI 120
FB750 + FS702 60 mm Cone = E 120		FB750 + FS702 60 mm Cone = EI 120
A-H FB750 + FS702 + FP333 = E 60		A-H FB750 + FS702 + FP333 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS

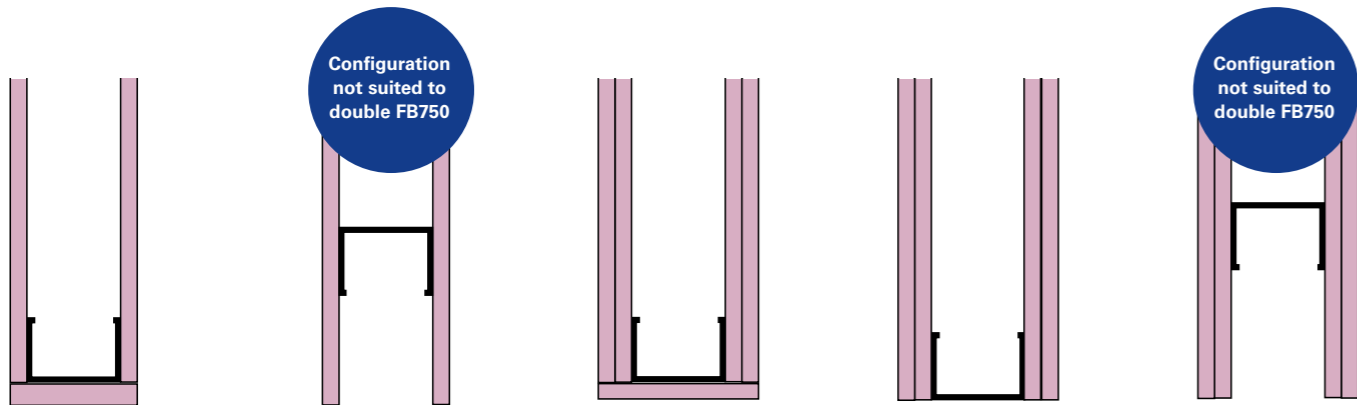


CABLE BUNDLES - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 120		FB750 + FS702 = EI 90
FB750 + FS702 + FI025 = E 120		FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS709 + FI025 = E 120		FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS702 + Batt Box (FI064) = E 120		FB750 + FS702 + Batt Box (FI064) = EI 120
FB750 + FS702 60mm Cone = E 120		FB750 + FS702 60 mm Cone = EI 120
A-H FB750 + FS702 + FP333 = E 120		A-H FB750 + FS702 + FP333 = EI 60

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

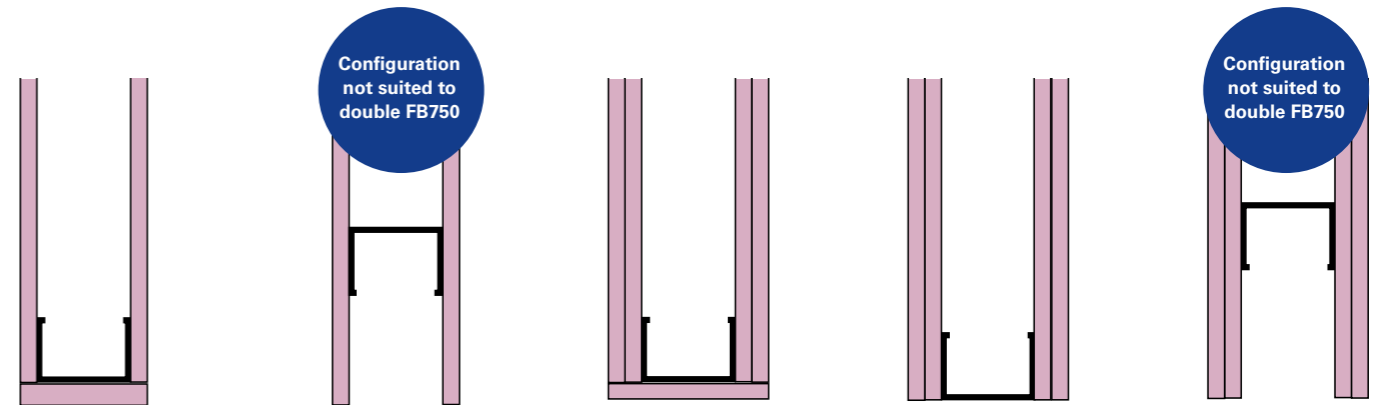
SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



NON-COMBUSTIBLE PIPES - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 120	Steel / Copper / Cast Iron	FB750 + FS702 = EI 15
FB750 + FS702 + FI025 = E 120	FI025 Copper FI025	FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120	Steel / Copper / Cast Iron	FB750 + FS709 = EI 90
FB750 + FS709 + FI025 = E 120	FI025 FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS702 = E 120	Steel / Cast Iron	FB750 + FS702 = EI 60
FB750 + FS709 = E 120	Steel / Cast Iron	FB750 + FS709 = EI 60
FB750 + FS702 60 mm Cone = E 120	Steel / Copper / Cast Iron	FB750 + FS702 60 mm Cone = EI 60

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS



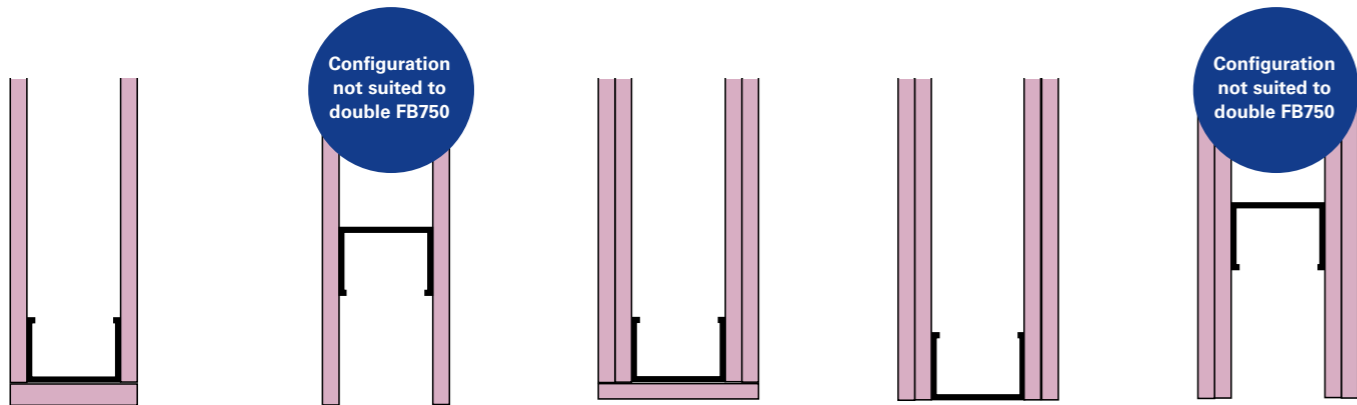
INSULATED NON-COMBUSTIBLE PIPES LS/CS - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FP302 + FS702 = E 120	Mineral Fibre Insulated	FB750 + FP302 + FS702 = EI I20
FB750 + FS709 = E 120	Mineral Fibre Insulated	FB750 + FS709 = EI 120
FB750 + FP302 + FS702 = E 120	PIR/Phenolic Insulated	FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120	PIR/Phenolic Insulated	FB750 + FS709 = EI 120
FB750 + FP302 + FS702 = E 120	Ruberoid Insulated	FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120	Ruberoid Insulated	FB750 + FS709 = EI 120

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

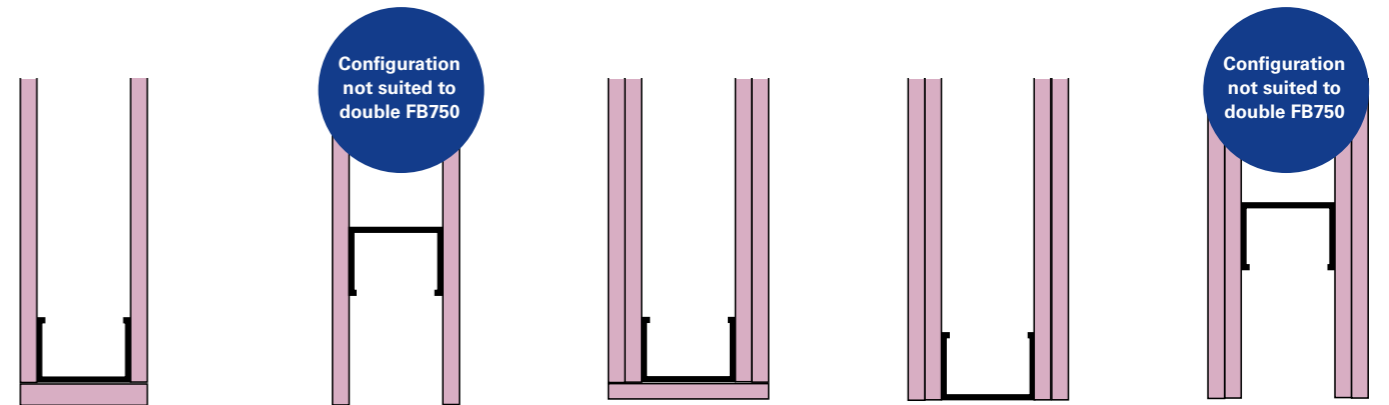
SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



INSULATED NON-COMBUSTIBLE PIPES LI/CI- DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FS702 = E 120	Mineral Fibre Insulated	FB750 + FS702 = EI 120
FB750 + FS709 = E 120	Mineral Fibre Insulated	FB750 + FS709 = EI 120
FB750 + FS702 = E 120	PIR/Phenolic Insulated	FB750 + FS702 = EI 120
FB750 + FS709 = E 120	PIR/Phenolic Insulated	FB750 + FS709 = EI 120
FB750 + FS702 = E 120	Ruberoid Insulated	FB750 + FS702 = EI 120
FB750 + FS709 = E 120	Ruberoid Insulated	FB750 + FS709 = EI 120

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



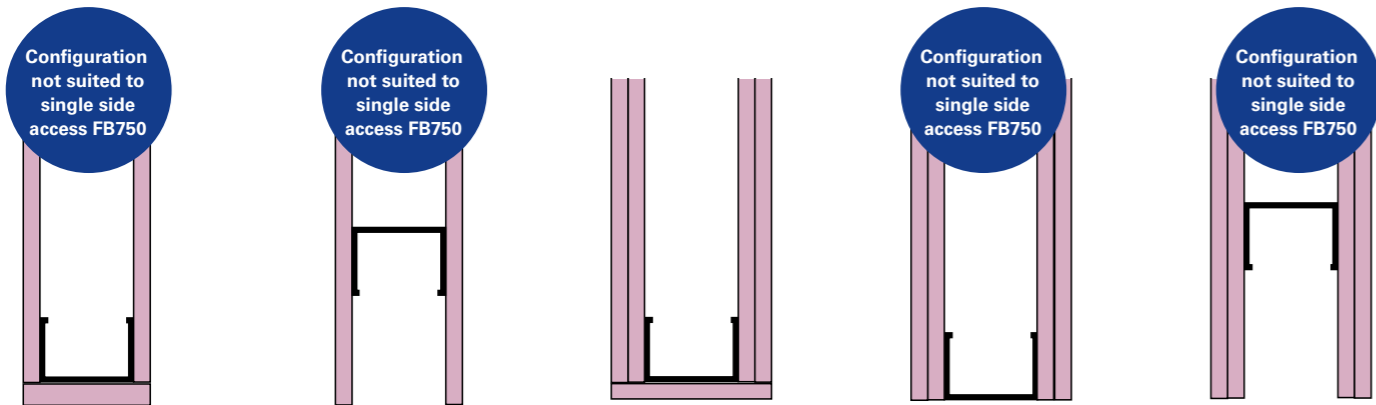
COMBUSTIBLE PIPES - DOUBLE BATT COMPRESSION

Integrity		Integrity & Insulation
FB750 + FP302 + FS702 = E 120	Combustible Pipe	FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120	Combustible Pipe	FB750 + FS709 = EI 120
FB750 + FP220 + FS702 = E 120	Combustible Pipe	FB750 + FP220 + FS702 = EI 120
FB750 + FP170 + FS702 = E 120	Combustible Pipe	FB750 + FP170 + FS702 = EI 120
FB750 + FS719 = E 120	CPVC ONLY	FB750 + FS719 = EI 120
FB750 + FS719 = E 120	CPVC ONLY	FB750 + FS719 = EI 120
FB750 + FS709 = E 120	Flat Plastic Duct PVC	FB750 + FS709 = EI 120
FB750 + FP220 + FS702 = E 120	Flat Plastic Duct PVC	FB750 + FP220 + FS702 = EI 120

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



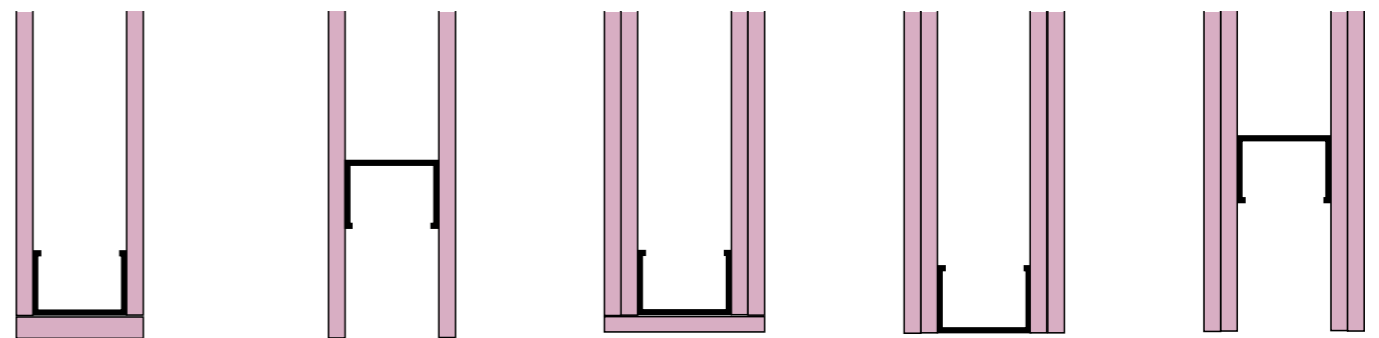
INSULATED NON-COMBUSTIBLE PIPES LI/CI 1X COMPRESSED / 1X PATTRESS

Integrity

Integrity & Insulation

FB750 + FS709 + FI025 = E 120	Cable Carriers	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 + FI025 = E 120	Cable Bundles	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 + FI025 = E 120	Non Combustible Pipes	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 + FI025 = E 120	Steel / Copper / Cast Iron	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120	Non Combustible Insulated		FB750 + FS709 = EI 120
FB750 + FS709 = E 120	Steel / Copper / Cast Iron LS/CS Insulated		FB750 + FS709 = EI 120
FB750 + FS709 = E 120	Non Combustible Insulated		FB750 + FS709 = EI 120
FB750 + FS709 = E 120	Steel / Copper / Cast Iron LI/CI Insulated		FB750 + FS709 = EI 120
FB750 + FS709 = E 120	Combustible Pipes		FB750 + FS709 = EI 120
FB750 + FS709 = E 120	PVC, PE, PP, PEX, Uponor, CPVC.....		FB750 + FS709 = EI 120
FB750 + FS719 = E 120	Combustible CPVC Pipes	CPVC	FB750 + FS719 = EI 120
FB750 + FS709 = E 120	Combustible Ducts	Flat Plastic Ducting	FB750 + FS709 = EI 120

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



CABLES CARRIERS / CABLE TRAY - DOUBLE BATT PATTRESS

Integrity

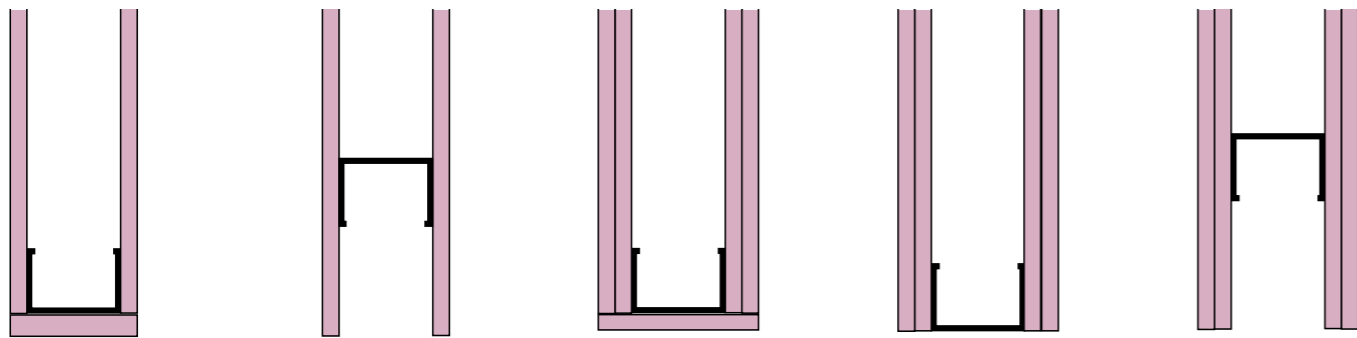
Integrity & Insulation

FB750 + FS702 = E 120		FB750 + FS702 = EI 90
FB750 + FS702 = E 120	FI025	FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS709 = E 120	FI025	FB750 + FS709 + FI025 = EI 120
FB750 + FI064 + FS702 = E 120		FB750 + FI064 + FS702 = EI 120
FB750 + FS702 60mm Cone = E 120		FB750 + FS702 60 mm Cone = EI 120
FB750 + FS702 + FP333 = E 120		FB750 + FS702 + FP333 = EI 120

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

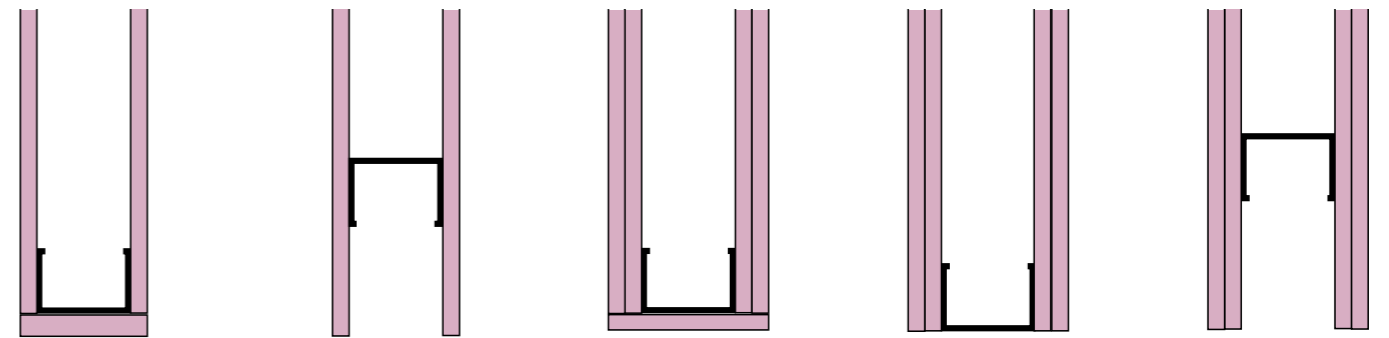
This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



CABLES - DOUBLE BATT PATTRESS

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTCS / TYPICAL RESULTS



NON-COMBUSTIBLE PIPES - DOUBLE BATT PATTRESS

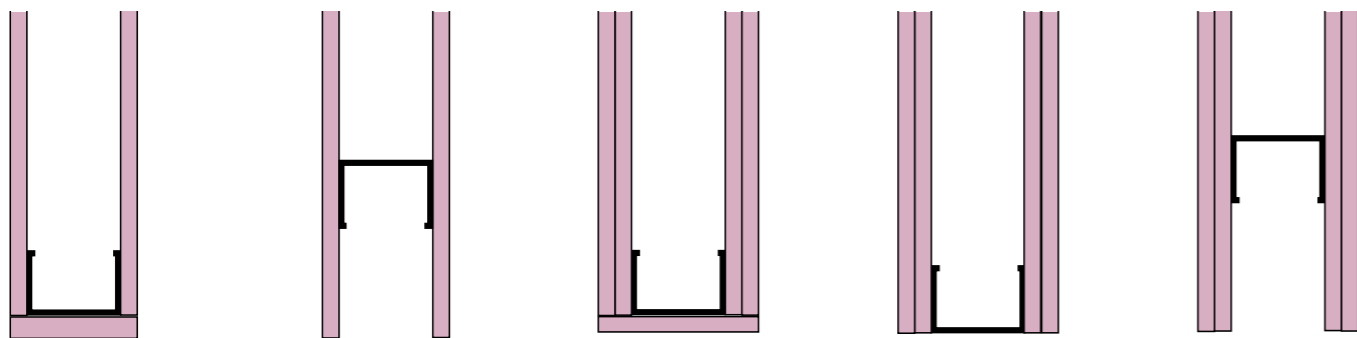
Integrity		Integrity & Insulation
FB750 + FS702 = E 120		FB750 + FS702 = EI 90
FB750 + FS702 = E 120		FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 90
FB750 + FS709 = E 120		FB750 + FS709 + FI025 = EI 120
FB750 + FI064 + FS702 = E 120		FB750 + FI064 + FS702 = EI 120
FB750 + FS702 60 mm Cone = E 120		FB750 + FS702 60 mm Cone = EI 120
FB750 + FS702 + FP333 = E 120		FB750 + FS702 + FP333 = EI 120

Integrity		Integrity & Insulation
FB750 + FS702 = E 120		FB750 + FS702 = EI 60
FB750 + FS702 = E 120		FB750 + FS702 + FI025 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 60
FB750 + FS709 + FI025 = E 120		FB750 + FS709 + FI025 = EI 120
FB750 + FS702 = E 120		FB750 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FS702 = E 120		FB750 + FS702 = EI 90

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

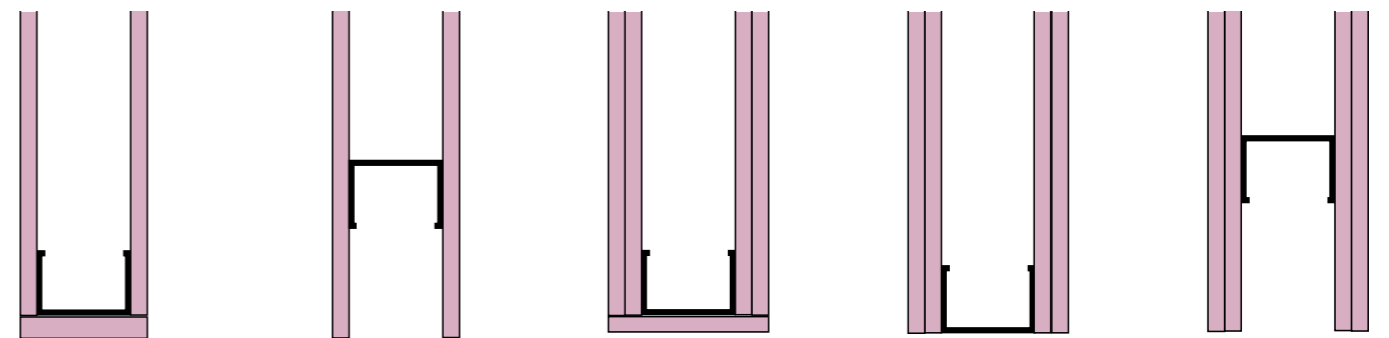
This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

**SEAL REQUIREMENTS / TESTED ADDITIONAL
REQUIRED PRODUCTCS / TYPICAL RESULTS**



**INSULATED NON-COMBUSTIBLE PIPES LS/CS -
DOUBLE BATT PATTRESS**

**SEAL REQUIREMENTS / TESTED ADDITIONAL
REQUIRED PRODUCTCS / TYPICAL RESULTS**



**INSULATED NON-COMBUSTIBLE PIPES LI/CI -
DOUBLE BATT PATTRESS**

Integrity

Integrity & Insulation

FB750 + FP302 + FS702 = E 120		FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FP302 + FS702 = E 120		FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FP302 + FS702 = E 120		FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120

Integrity

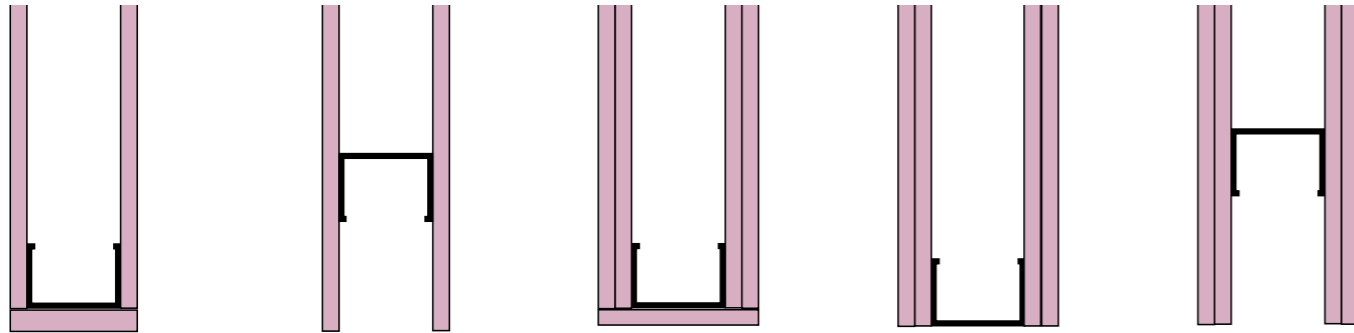
Integrity & Insulation

FB750 + FS702 = E 120		FB750 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FS702 = E 120		FB750 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FS702 = E 120		FB750 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SEAL REQUIREMENTS / TESTED ADDITIONAL REQUIRED PRODUCTS / TYPICAL RESULTS

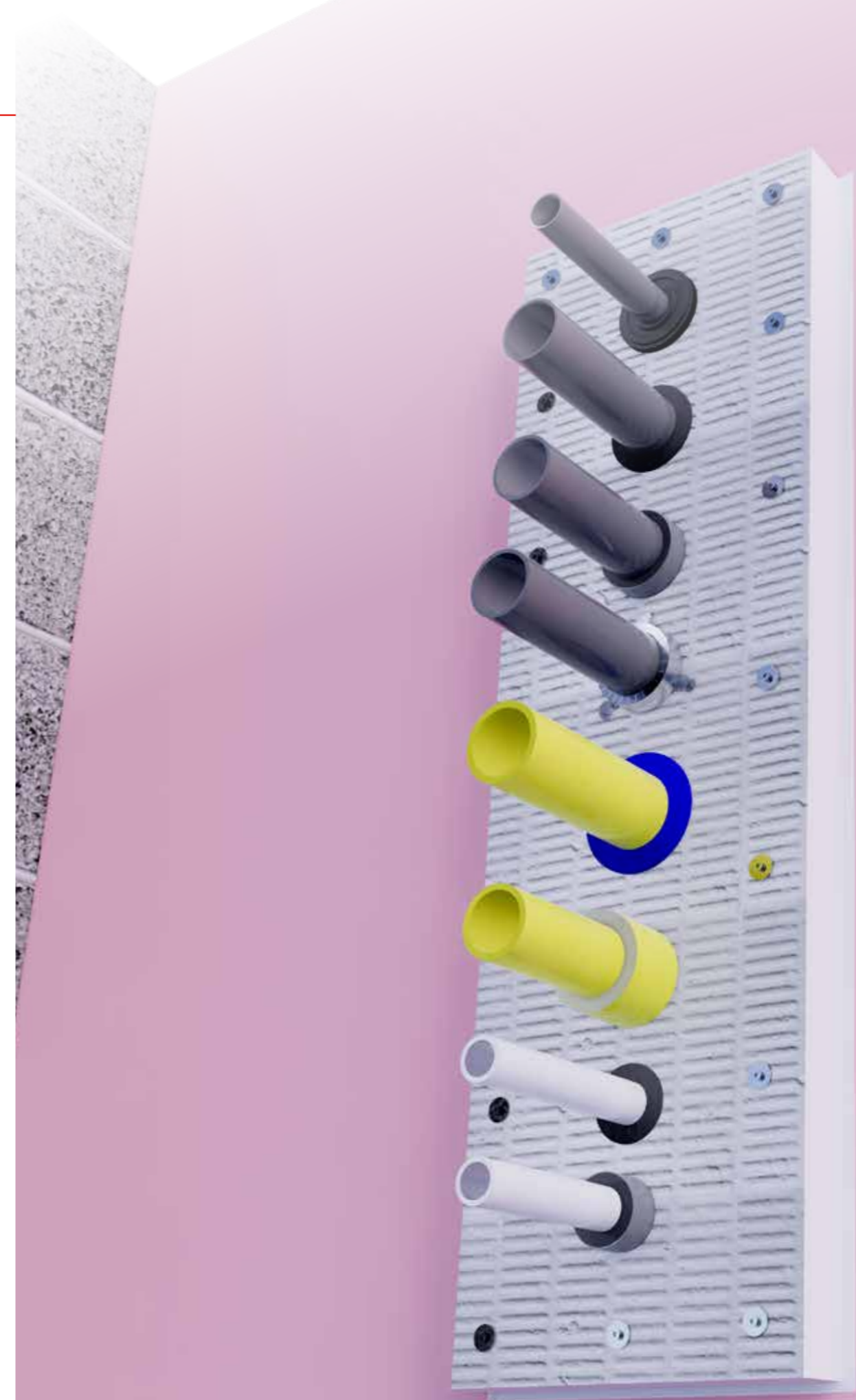


COMBUSTIBLE PIPES - DOUBLE BATT PATTERNS

Integrity

Integrity & Insulation

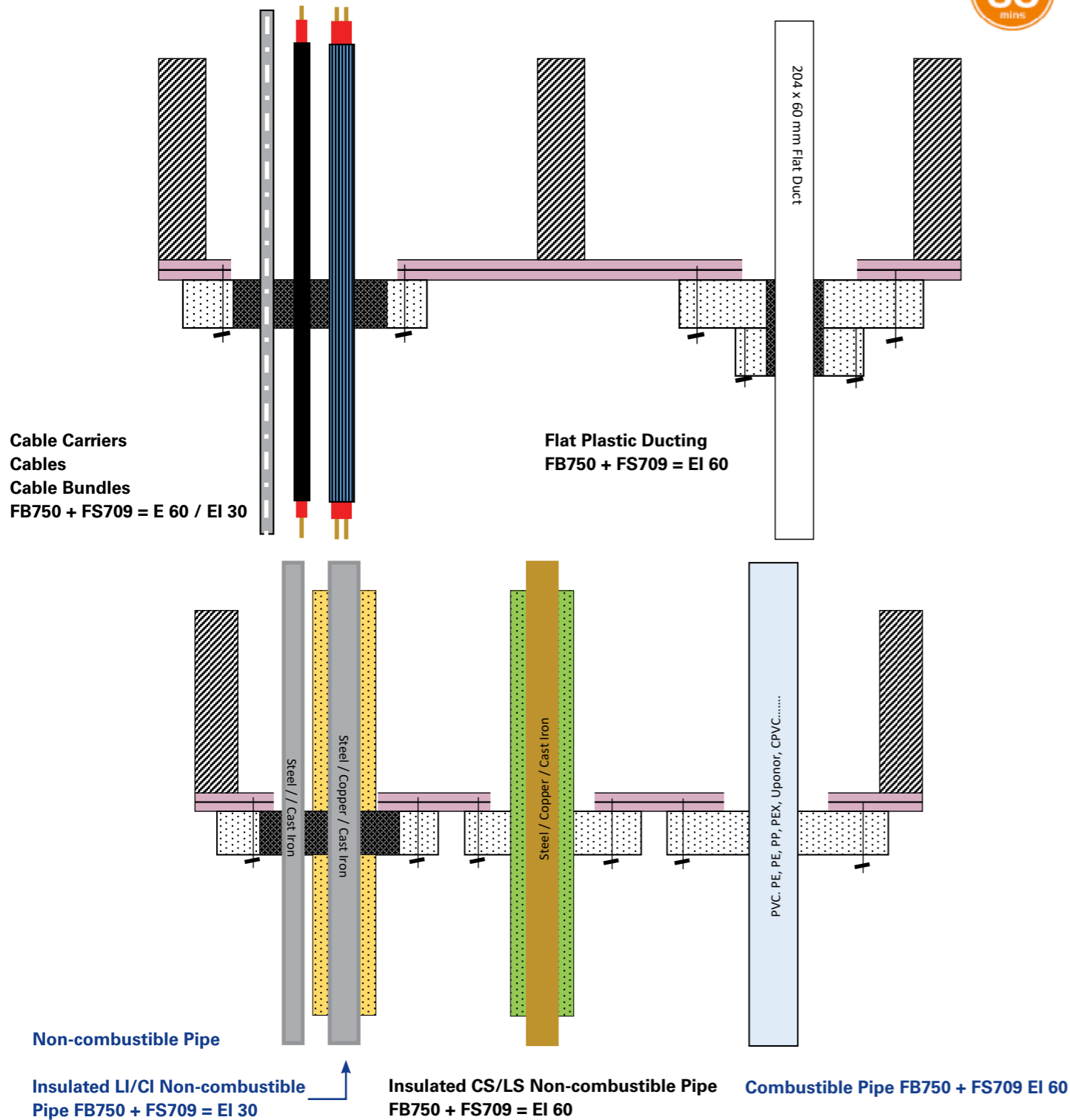
FB750 + FP302 + FS702 = E 120		FB750 + FP302 + FS702 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FP220 + FS702 = E 120		FB750 + FP220 + FS702 = EI 120
FB750 + FP170 + FS702 = E 120		FB750 + FP170 + FS702 = EI 120
FB750 + FS719 = E 120		FB750 + FS719 = EI 120
FB750 + FS719 = E 120		FB750 + FS719 = EI 120
FB750 + FS709 = E 120		FB750 + FS709 = EI 120
FB750 + FP220 + FS702 = E 120		FB750 + FP220 + FS702 = EI 120



This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

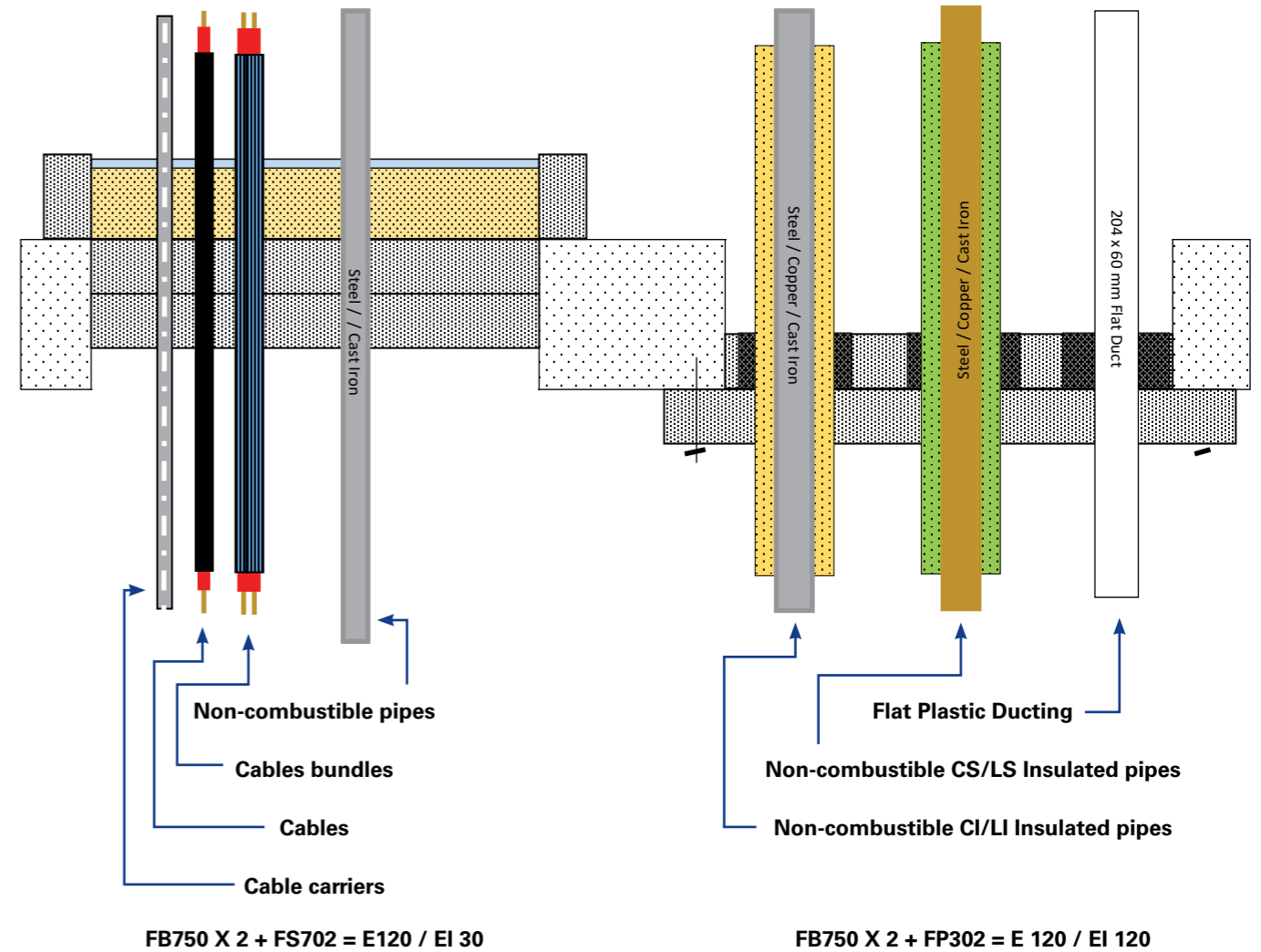
CEILING SOLUTIONS

Tested in conjunction with the following service types: individual, multiple or mixed services.



CONCRETE FLOOR SOLUTIONS

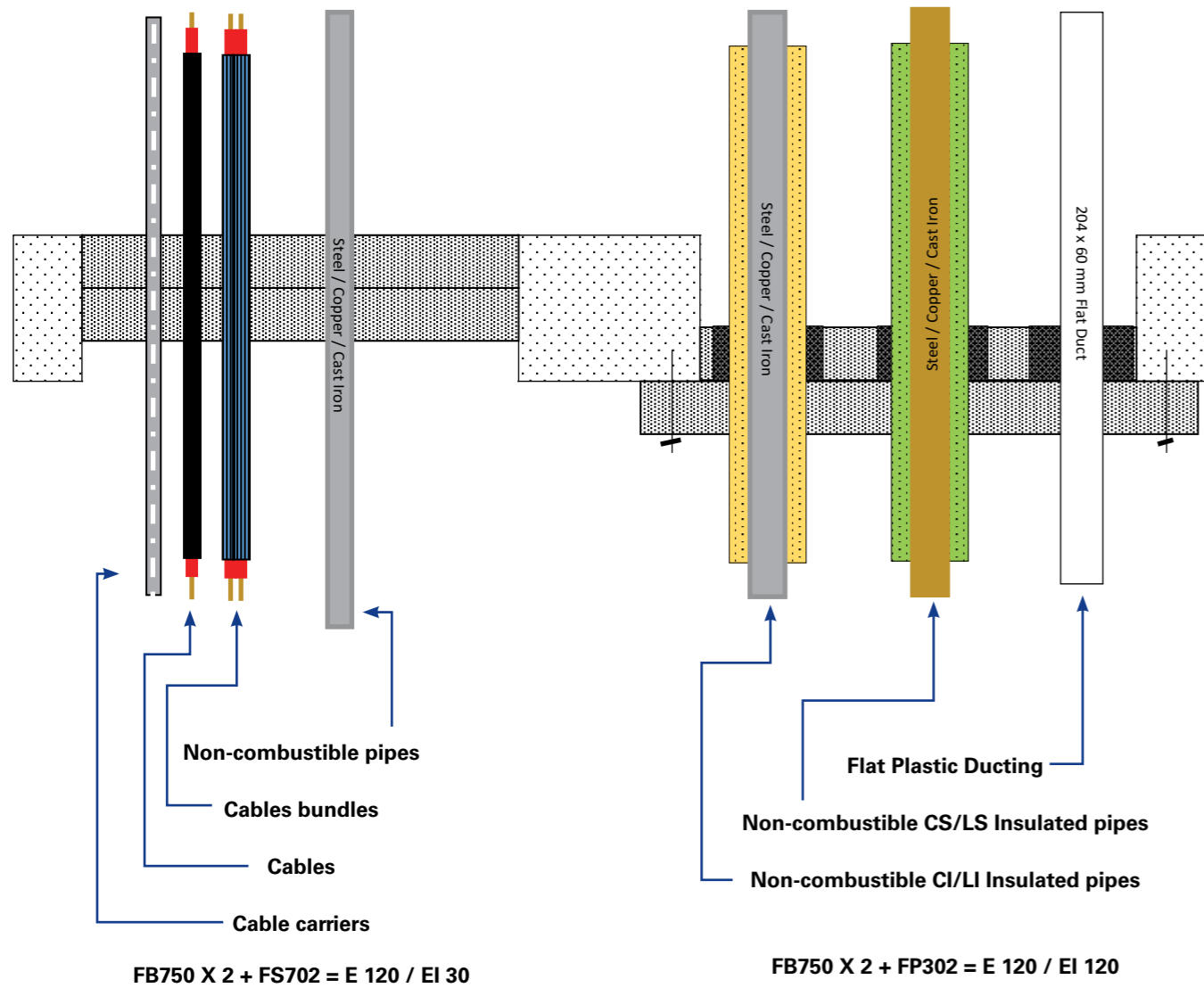
Tested in conjunction with the following service types: individual, multiple or mixed services.



This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

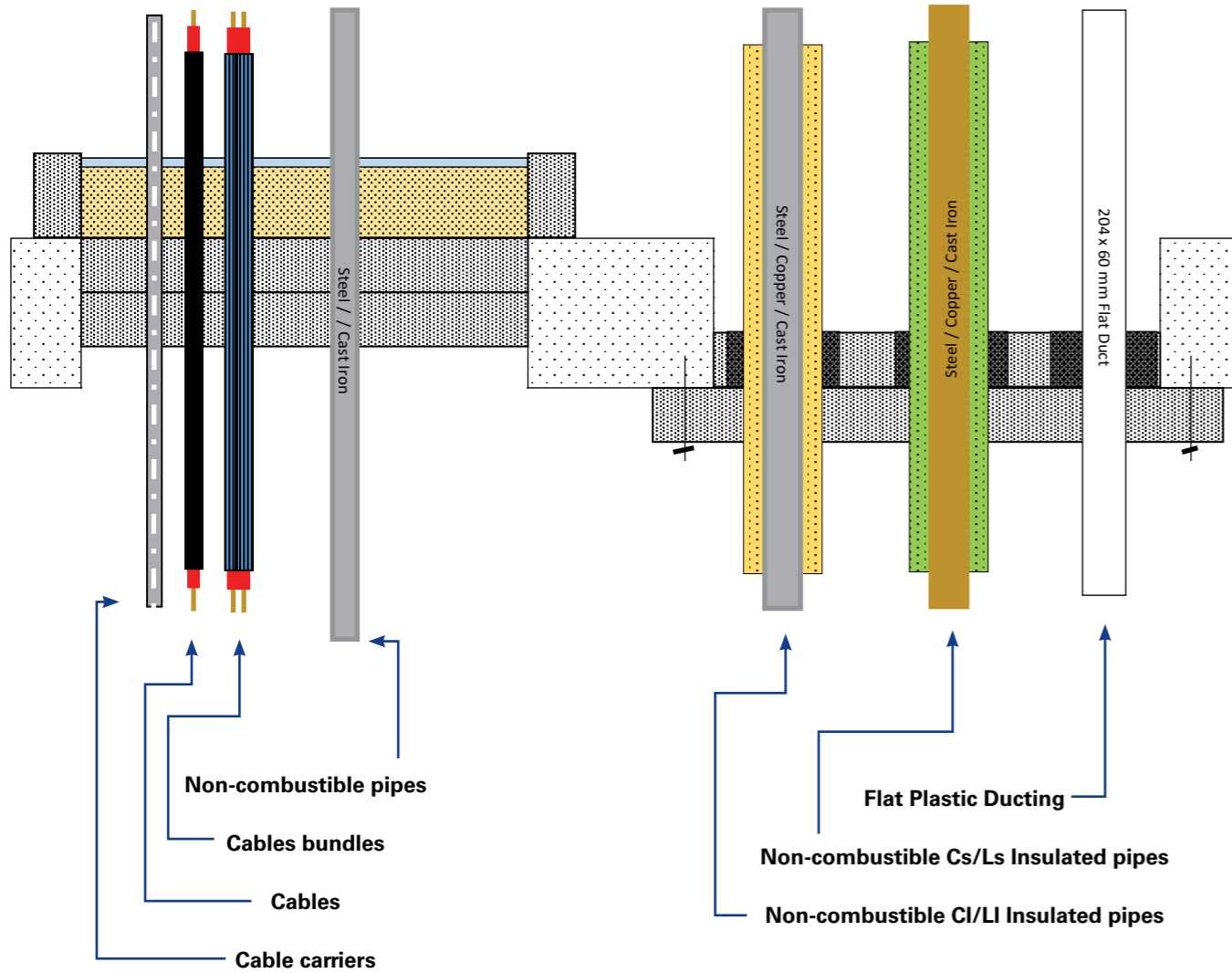
CONCRETE FLOOR SOLUTIONS

Tested in conjunction with the following service types: individual, multiple or mixed services.

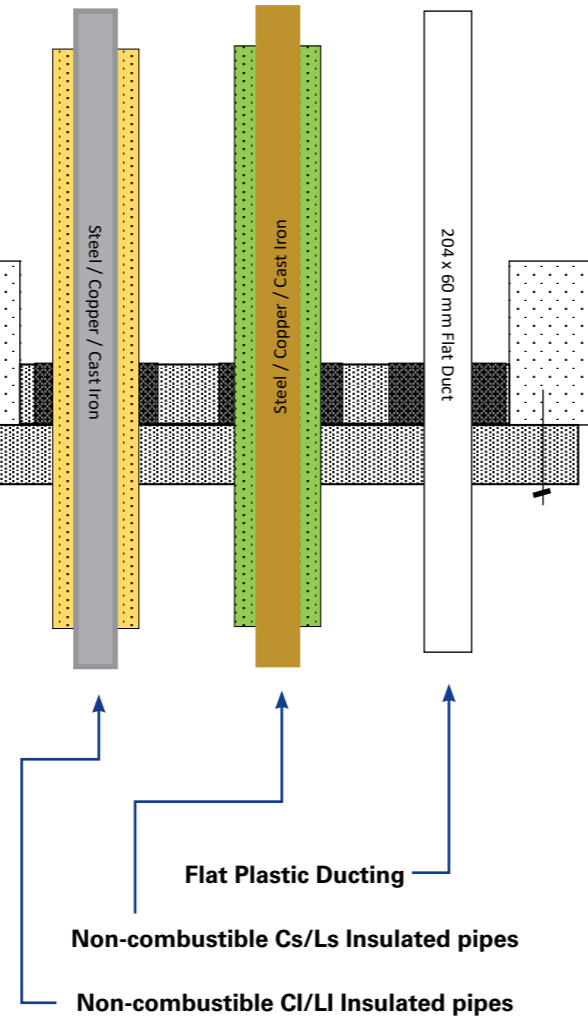


This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

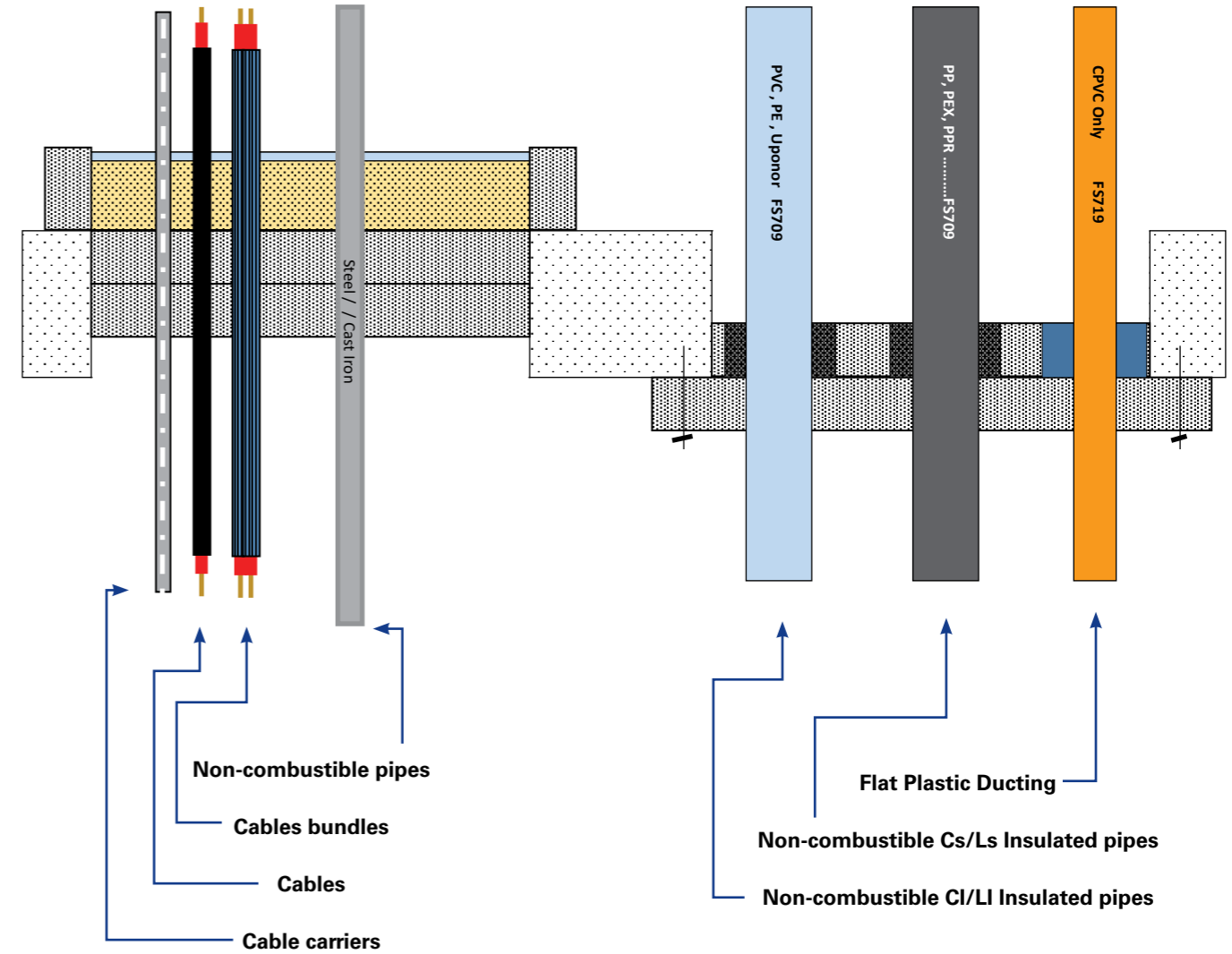
CONCRETE FLOOR SOLUTIONS



FB750 X 2 + FI064 (Batt Box) + FS702 = E 120/ EI 120



FB750 X 2 + FS709 / FS719 = E 120 / EI 120



FB750 X 2 + FI064 (Batt Box) + FS702 = E 120 / EI 120

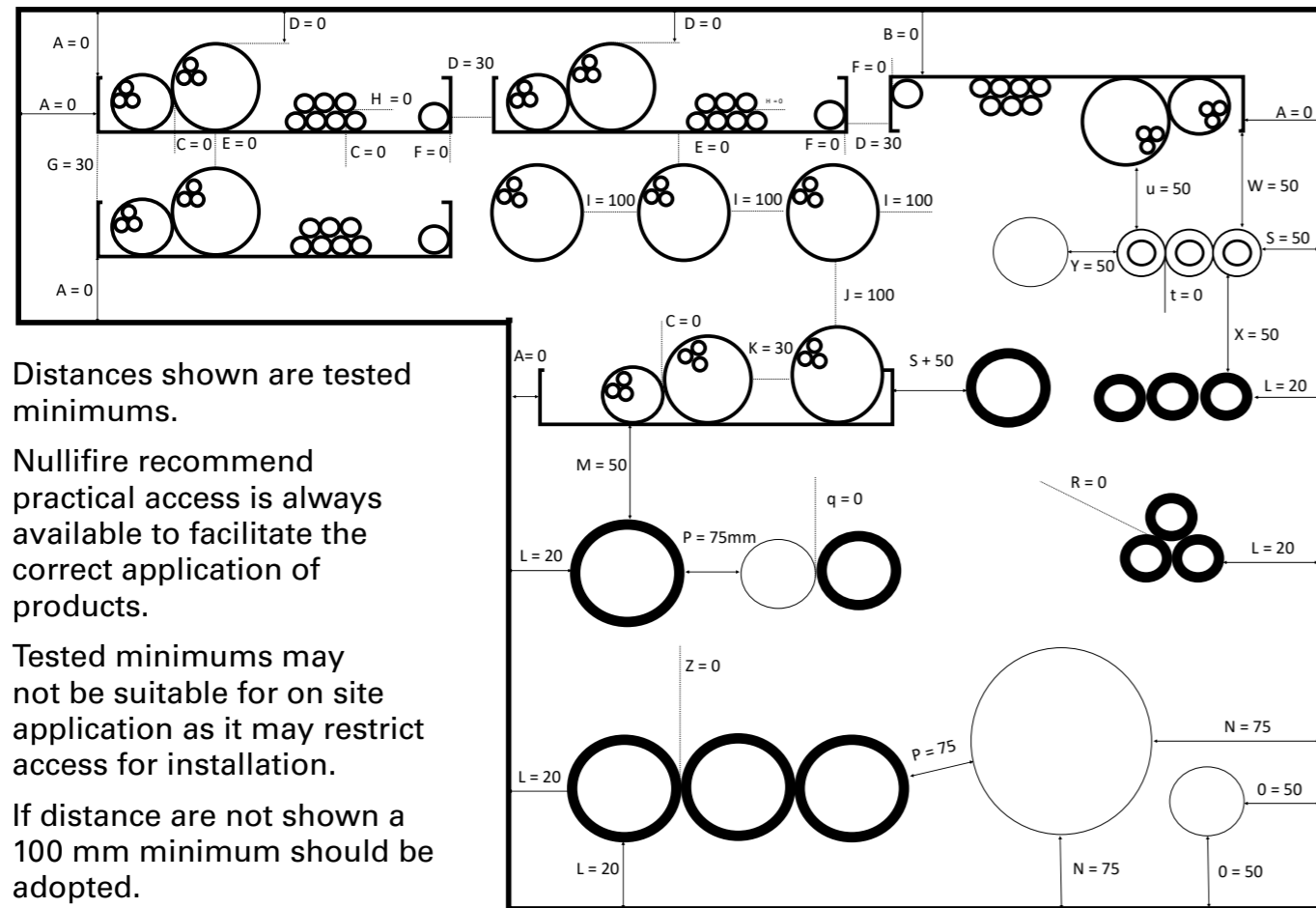
FB750 X 2 + FS709 / FS719 = E 120 / EI 120



This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

This page provides guidance as to the possible tested application details and outlines a selection of product requirements. For specific results refer to the ETA or Classification Report Tables for Nullifire FB750.

SERVICE SEPARATION DIAGRAM



Distances shown are tested minimums.

Nullifire recommend practical access is always available to facilitate the correct application of products.

Tested minimums may not be suitable for on site application as it may restrict access for installation.

If distance are not shown a 100 mm minimum should be adopted.

Key / Dimensions in mm

A = cable carrier to substrate

B = inverted cable carrier to substrate

C = cable to cable up to 80 mm dia left / right

D = cable carrier to carrier: left / right

E = cable to underside of carrier

F = cable to carrier edge

G = cable carrier to cable carrier above / below

H = cable to cable up to 32 mm dia above / below

I = cable bundle to cable bundle up to 100 mm dia left / right

J = cable bundle to cable bundle up to 100 mm dia above / below

K = cable bundles dia 100 mm to cables up to 80 mm dia

L = combustible pipe up to dia 110 mm to substrate

M = combustible pipe up to 110 mm to cable tray

N = Non-combustible pipe up to 220 mm dia to substrate

O = Non-combustible pipe up to 80 mm dia to substrate

P = Non-combustible to combustible pipe up to 110 mm dia

Q = Non-combustible to combustible up to 50 mm dia

R = combustible pipe cluster up to 28 mm diameter pipe

S = insulated pipe to substrate

T = insulated pipe to insulated pipe

U = insulated pipe to cable

W = insulated pipe to cable tray

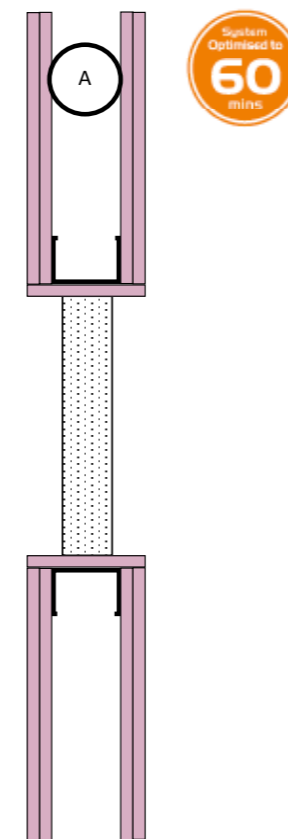
X = insulated pipe to combustible pipe

Y = insulated pipe to Non-combustible pipe

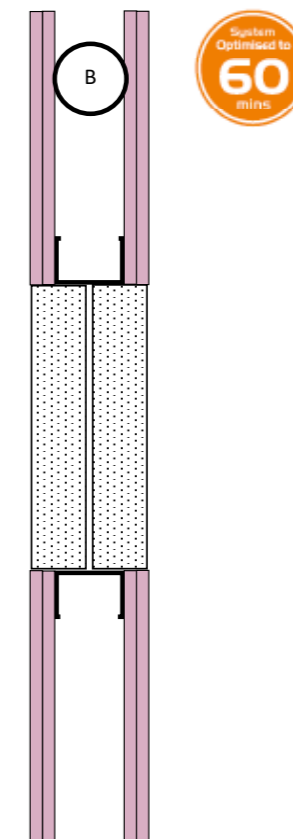
Z = combustible pipe to combustible pipe

ACOUSTIC PERFORMANCE OF DIFFERENT CONFIGURATIONS

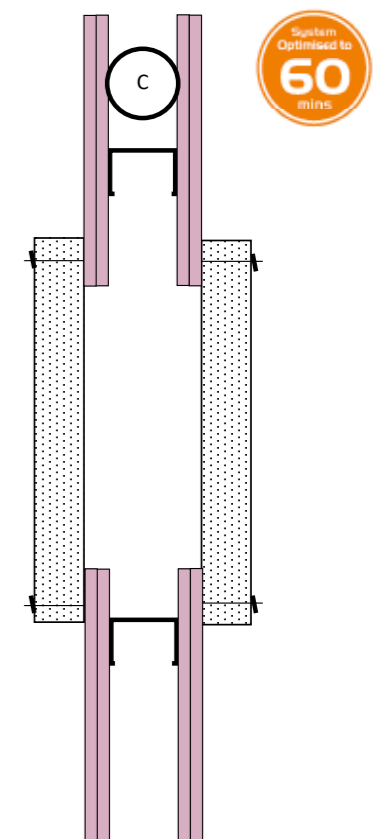
Double Skin Partitions : Minimum 100 mm overall thickness. Covers all installations of equal or greater wall thickness.



Single Batt Compression Bonded & Sealed



Double Batt Compression Bonded & Sealed



Double Batt Pattress Bonded & Sealed & Mechanically restrained



TESTING & CERTIFICATION

Able to assist with a comprehensive selection of passive fire protection products, Nullifire's product portfolio gives architects, specifiers, and contractors the ability to achieve fire protection requirements within any building structure.

Working closely with our in-house technical team, 3rd party accredited installers can deliver the best possible and most cost-effective fire protection solution, without compromising on quality or safety.

As the sole manufacturer to offer both intumescent coatings and fire stopping products, we are uniquely positioned to offer a full package to suit all project requirements. Nullifire's passive fire protection products, in combination with technical support and expert advice, gives all parties peace of mind and assurance of local building code compliance.

Our passive fire protection products undergo initial validation assessments at our in-house facilities prior to undergoing rigorous independent 3rd party testing and certification.



Delivering World-Class Construction Product Solutions.

The product brands housed within Tremco CPG Europe cover a wide array of different construction needs and provide a wealth of complex services, support and systems that are rarely found together under one roof.



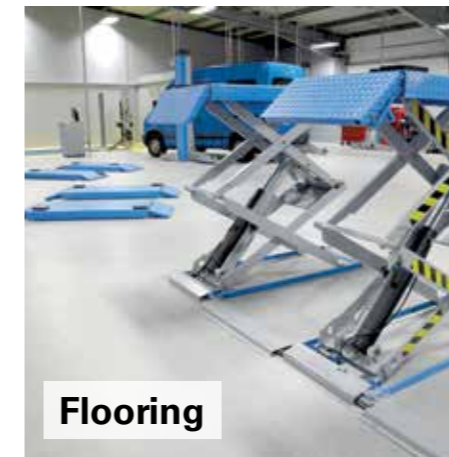
Sealing, bonding & insulation

Window Insulation, Façade Construction, Exterior Insulation & EIFS, Structural & Inplant Glazing, Insulated Concrete Forms (ICFs)



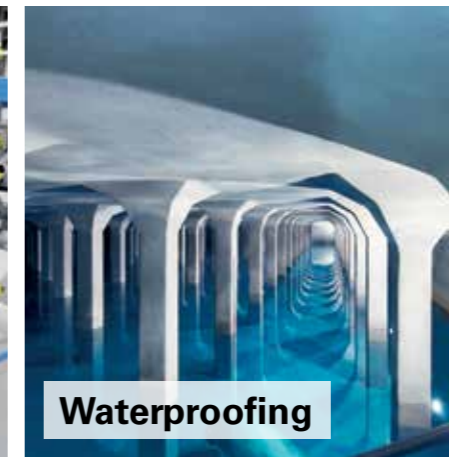
Passive Fire Protection

Fire Stopping for Service Penetrations, Linear Joints and Ventilated Cavity Barriers



Flooring

Seamless Resin Flooring, Subfloor Preparation, Car Parking Structures



Waterproofing

Bridge Decks, Infrastructure, Potable & Waste Water Industry, Balconies, Terraces, Basements & Foundations.



Roofing

Liquid Applied Systems, Felt Systems, Vegetated Roofing

CPG UK products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with CPG UK written instructions and (b) in any application recommended by CPG UK, 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. CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

Europe's leading construction products brands...





Tremco CPG UK Limited
Coupland Road
Hindley Green
WN2 4HT, UK

T : +44 (0) 1942 251400
hello@tremcocpg.com
www.tremcocpg.eu