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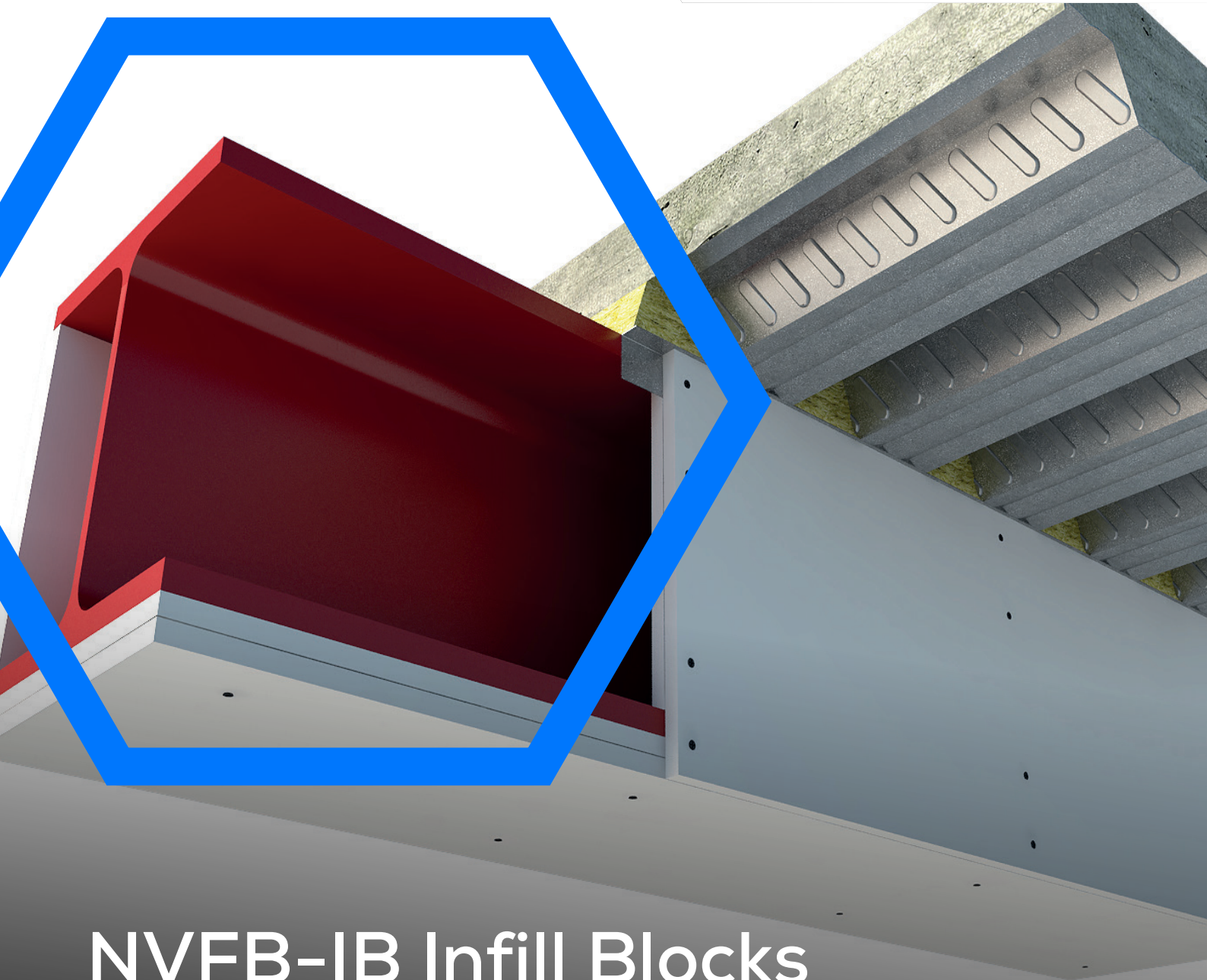

NVFB-IB Infill Blocks

Tenmat's NVFB-IB Infill Blocks are stone wool blocks designed to provide fire resistance to trapezoidal profile openings.

Passive Fire Protection

Product Description

Tenmat NVFB-IB Infill Blocks are fire resistant, A1 Reaction to Fire rated, pre-cut stone wool sections designed to be installed in trapezoidal profiles such as in composite profile decks where they meet the head of flexible and rigid wall constructions or above steel beams* protected with a gypsum based cladding system.

They are supplied pre cut to suit the shape and size of profile in which it is to be installed. The NVFB-IB can be installed in composite decks with profiles up to 210mm.

Fire tested in accordance with EN1366-4 and classified to EN13501-2, the Tenmat NVFB-IB Infill Blocks can provide up to EI120 minutes fire integrity and insulation performance.

Intended Use

Tenmat NVFB-IB Infill Blocks are designed and tested to close off trapezoidal voids, for example in composite profile decks at the head of a flexible or rigid wall and above a steel beam* protected with a gypsum based cladding system.

When used in flexible walls, the Tenmat NVFB-IB Infill must be of sufficient length to be installed flush with the outer face of the plasterboard on both sides.

When used in rigid walls, the NVFB-IB Infill Blocks must be a minimum 100mm deep and installed centrally within the wall.

The NVFB-IB can be used in conjunction with the NVFB-LGS Linear Gap Seals above a separate Linear Gap Seal Strip to a maximum trapezoidal profile of 210mm and a maximum linear gap width of 150mm. The block above the steel beam* should finish flush with both outer faces of the gypsum based cladding system.

Please ensure the product has been reviewed and accepted as suitable for the application before installation.

Key Points

- Non combustible A1 Reaction to Fire rated stone wool.
- Pre-cut to suit trapezoidal profiles
- Suitable for profiled composite decking up to 210mm.
- Can be used above Flexible walls, rigid walls, and steel beams* (protected with gypsum based beam encasement system).
- Provides up to 120 minutes fire integrity and insulation performance.

* Please see fire test performance tables for the exact configuration for steel beams

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Flexible Walls & Steel Beam

- Ensure surfaces are clean, dry and free from dirt, dust and other contaminants.
- Ensure the opening to be filled has been tested with and is suitable for the product being installed.
- The NVFB-IB Infill Blocks should be 5mm larger than the opening in both height and width.
- Compress the NVFB-IB Infill Blocks and push into the profile ensuring it finishes flush with the outer face of plaster board on both sides of the wall/beam.
- Fill any gaps up to 5mm with PFC Corofil Acoustic Intumescent Sealant to a minimum depth of 10mm.
- Large gaps between 6mm and 15mm caused by the splaying of the composite profile deck should be filled with the same stone wool as the blocks by tightly packing the gaps until filled all the way through the wall.

Rigid Walls

- Ensure surfaces are clean, dry and free from dirt, dust and other contaminants.
- Ensure the opening to be filled has been tested with and is suitable for the product being installed.
- The NVFB-IB Infill Blocks should be 5mm larger than the opening in both height and width.
- Compress the NVFB-LGS Linear Gap Seal and push into the linear gap at the head of the wall ensuring it is central within the wall.
- Compress the NVFB-IB Infill Blocks and push into the profile ensuring it finishes flush with the outer face of the PFC Corofil Linear Gap Seal Strip on both sides of the wall.
- Fill any gaps up to 5mm with PFC Corofil Acoustic Intumescent Sealant to a minimum depth of 10mm.
- Large gaps between 6mm and 15mm caused by the splaying of the composite profile deck should be filled with the same stone wool as the blocks by tightly packing the gaps until filled all the way through the wall.

Substrates

- Flexible walls: NVFB-IB Infill Blocks can be installed at the head of flexible walls at minimum 100mm thick, comprising of metal or timber studs lined on both sides with 2 layers of 12.5mm 'Type F' gypsum plasterboards according to EN520.
- Rigid walls: Minimum 100mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m3.
- Steel Beam: 254mm high x 102mm wide x 22kg/m I beam with 75 microns C400V3 primer, clad with a double layer of British Gypsum beam encasement system to three sides (top and both sides of beam).

The supporting construction must be classified in accordance with EN13501-2 for the required fire resistance period.

Terminology

Fire resistance classes:

E = Integrity

Integrity refers to the ability of a product to maintain its physical integrity and prevent the passage of flames and hot gases through to the non-fire side.

I = Insulation

Insulation refers to the ability of a material to resist the transfer of heat from one side to another. Giving occupants and the fire service more time to evacuate and control the fire.

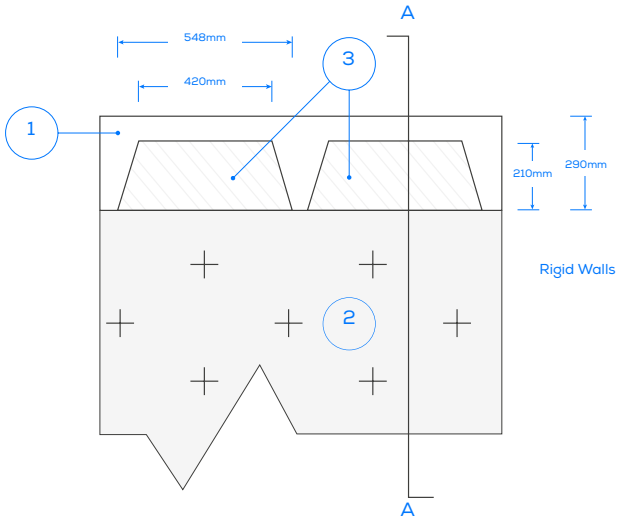
Performance Data

Rigid Walls

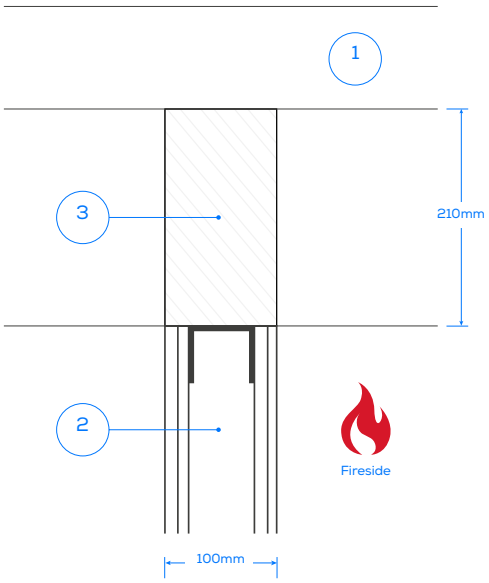
Walls minimum thickness 100mm
Flexible Wall

NVFB-IB Infill Blocks flexible wall finish flush with outer face of plasterboard on both sides of the wall

Composite profile deck height (mm)	Fire resistance performance (minutes)
10 - 210	EI120



Rigid Walls

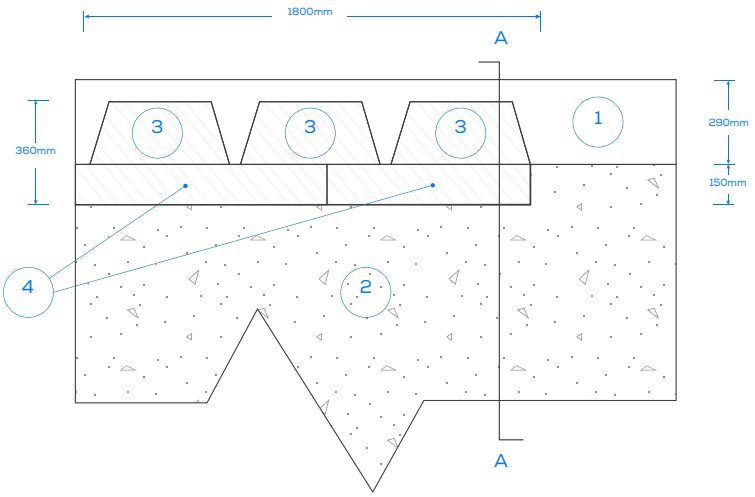


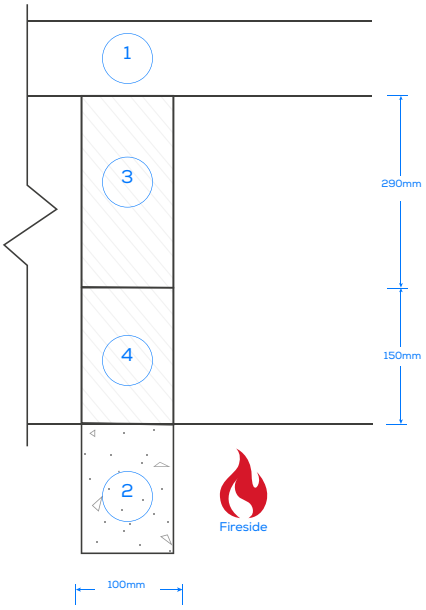
Section A - A

1 = Concrete floor deck
2 = Flexible Wall
3 = NVFB-IB Infill Block

Rigid Wall

NVFB-IB Infill Blocks rigid wall installed centrally, minimum 100mm thick		
Composite profile deck height (mm)	Linear joint between head of wall and underside of composite deck (mm)	Fire resistance performance (minutes)
10 - 210	10 - 150	E120 EI30





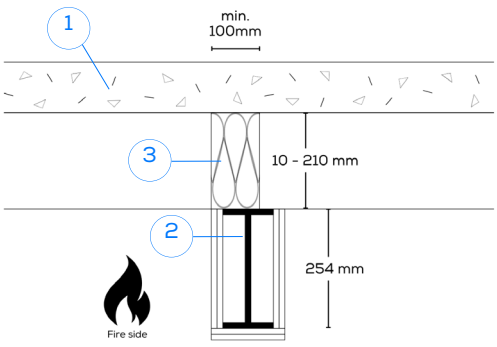
1 = Concrete floor deck
2 = Rigid Wall
3 = NVFB-IB Infill Block
4 = NVFB-LGS Linear Gap Seal

Section A - A

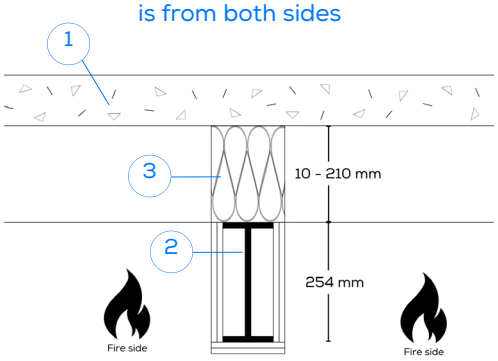
Steel Beam

NVFB-IB Infill Blocks above steel beam to finish flush to the plasterboard on the fire side or full width of beam and plasterboards if fire side not known		
Steel Beam Description	Composite profile deck height (mm)	Fire resistance performance (minutes)
254mm high x 102mm wide x 22kg/m x 5m long I beam with 75 microns C400V3 primer protected by British Gypsum Beam Encasement System with 2 layers of Fireline board 15mm thick on 3 sides	10 - 120	EI120

Installation of 100mm wide NVFB when fire risk side is known



Installation of NVFB-IB to full width of steel beam encasement when fire risk is from both sides



1 = Concrete Floor Deck
2 = Steel beam and encasement
3 = NVFB-IB

NVFB-IB
Infill Blocks

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The information contained in Tenmat data sheets is presented in good faith. Tenmat Limited makes passive fire protection product suggestions based solely upon and limited to the information made available to Tenmat. Tenmat possesses knowledge of fire test data and offers manufacturers installation advice. Within reason, Tenmat is skilled at offering opinion concerning the installations in question, and can comment on interfaces with other construction materials, but this is not a recommendation or decision. Decisions on overall building fire strategy are not made by Tenmat. Tenmat products have been tested for a wide range of construction types, and they must be only used in accordance with Tenmat test evidence. Each specific Tenmat product must be installed into a construction that matches the corresponding test report. Tenmat product performance requires safe and proper handling and correct installation.

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