



the knowledge to produce solutions



DCT Tenmat Ventilated Fire Barriers



DCT Tenmat Ventilated Fire Barriers

Many rainscreen and cladding systems are designed with an open cavity to provide back ventilation. The cavity acts like an open chimney to allow for moisture dissipation and to create a back pressure to repel rain ingress.

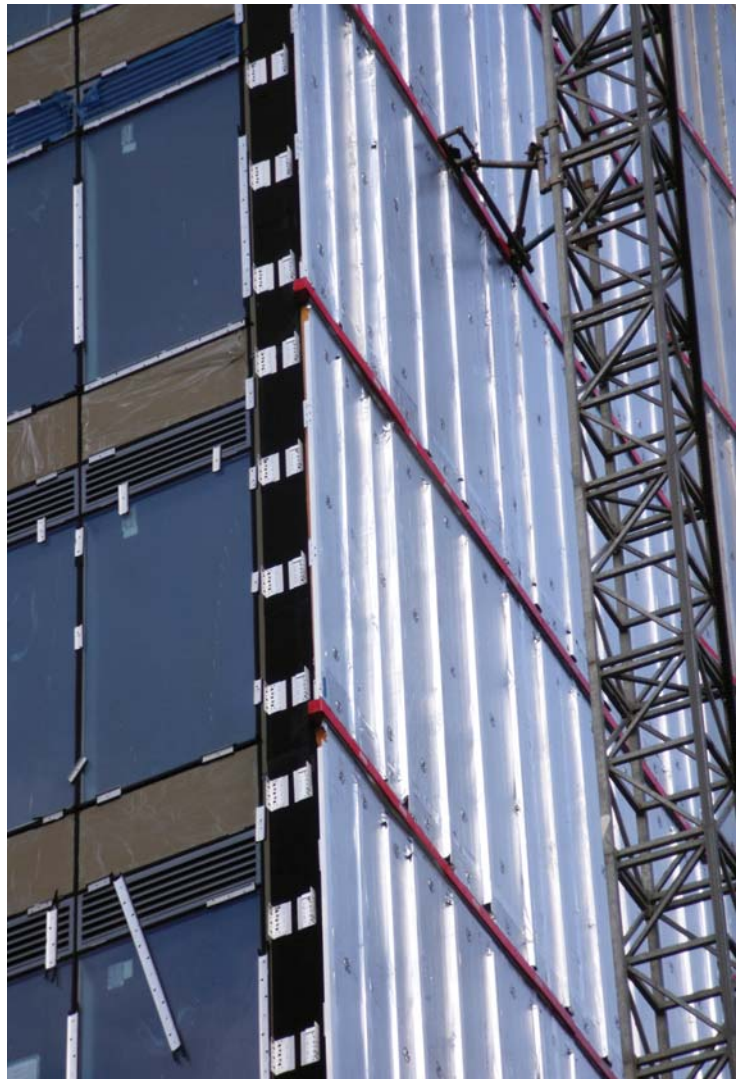
However, in a fire situation this chimney effect creates an open path for the hidden spread of fire both vertically and horizontally behind the cladding system.

Building Regulations require that Fire Barriers be installed within the cavity to prevent fire spread.

DCT's range of Ventilated Fire Barriers maintain the ventilated cavity, but, in the event of fire on the outside of the building, the DCT Tenmat Ventilated Fire Barriers quickly expand to isolate or contain flame spread, whilst maintaining an open vented cavity to allow the facade to operate effectively long term.

Key features

- Maintains ventilation behind facade
- Isolates/restricts flame spread up the building
- Can be flexible with building tolerances
- Simplifies cladding installation
- Simple to install on site, easy to install lengths
- Age tested and compatible with zinc panels
- Straight forward installation with 2-4 compatible metal fixings
- Low thermal conductivity
- Ideally used in conjunction with rigid panel insulation



Quick and Easy Installation

Supplied in easy to cut metre lengths
Only 2 - 4 fixings per length

DCT Tenmat Ventilated Fire Barriers

DCT Tenmat VFB Plus

- Up to 120 minutes Fire Rated
- Maintains 44-54*mm air gap
- Up to 500mm cavities
- Weather Proof/Age Tested
- Simple to install



DCT Tenmat VFB Plus Ventilated Fire Barrier is an 'Open State' cavity fire barrier system for ventilated cavities of up to 500mm which employs a high expansion intumescent seal fixed to DCT High Density Mineral Wool.

The product has undergone extensive fire testing to BS 476: Parts 20 and 22: 1987, EN1363-1: 1999, and ASFP TGD19 (Fire Resistance Test for 'Open-State' Cavity Barriers). It is suitable for use within the majority of construction types, enabling the versatile system to be specified with confidence and provide the installer with a simple, time saving and site friendly solution.

The DCT Tenmat VFB Plus can be mechanically fixed both horizontally and vertically within ventilated cavities behind rainscreen or cladding systems to act as a cavity fire barrier.

The DCT Tenmat VFB Plus is a particularly versatile Ventilated Fire Barrier which can be installed in a wide range of construction types.

The product is simply mechanically fixed in position to leave up to a maximum 44mm air gap.

Fix DCT Tenmat VFB Plus with steel fixing brackets

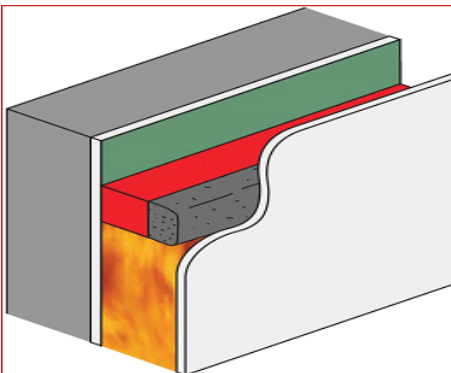
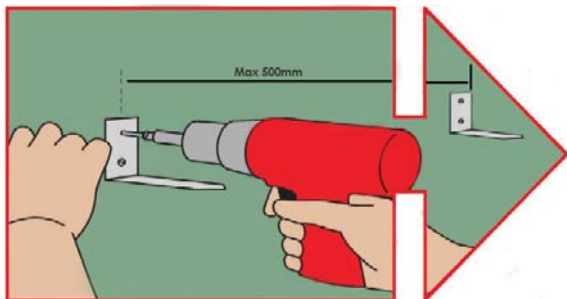
The brackets should be fitted at the centre point of the product.

Product must be fixed at max. 500mm centres (max. 250mm centres if being directly screw fixed in position).

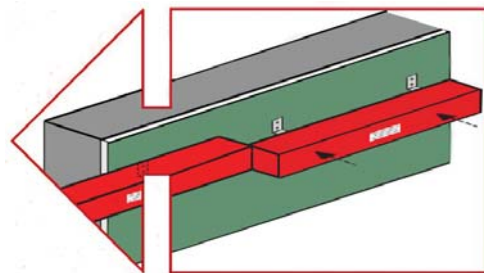
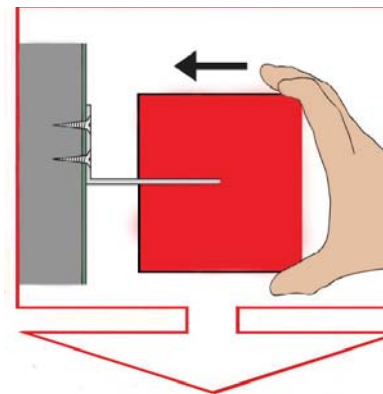
The bracket should not protrude through the rigid intumescent element.

Each section of DCT Tenmat VFB Plus must be mechanically fixed.

Cut the bracket down to size if required.



Maximum remaining air gap to the back of the cladding panel is 44mm
Ensure Fire Barrier free to expand in a fire situation



Ensure label side is facing out so that intumescent element faces into cavity in case of fire
Adjacent lengths can be tightly butted together

DCT Tenmat Ventilated Fire Barriers

DCT Tenmat FF109/125

The DCT Tenmat FF109/125 Ventilated Fire Barrier is a cavity fire barrier system for ventilated cavities of up to 125mm which is a fully intumescent component. The product is fire rated for up to 30 minutes and is suitable for use within timber and masonry construction types, enabling the versatile system to be specified with confidence and provide the installer with a simple, time saving and site friendly solution.

Product Description

The DCT Tenmat FF109/125 Ventilated Fire Barrier is a fully intumescent component encased in red polythene. The DCT Tenmat FF109/125 can be mechanically fixed both horizontally and vertically within ventilated cavities behind rainscreen or cladding systems to act as a cavity fire barrier.

Product Dimensions

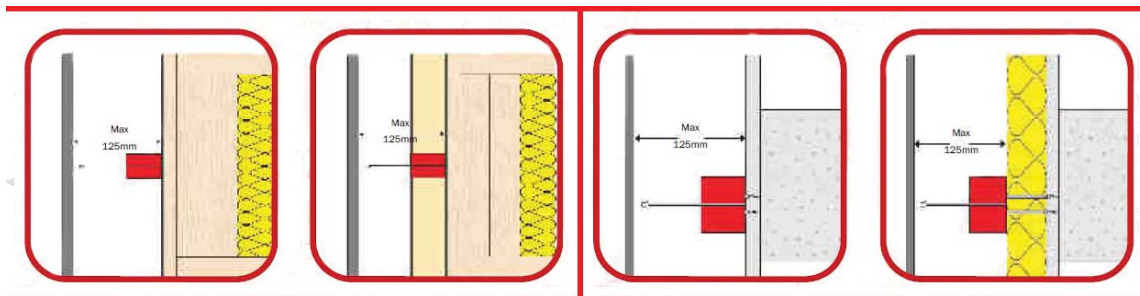
50mm x 50 mm x 1000 mm

Max. Cavity

125mm (this dimension does not include cavity insulation thickness)

Approved Applications

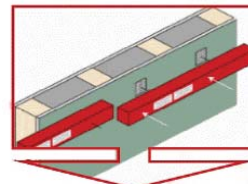
The DCT Tenmat FF109/125 Ventilated Fire Barrier has been independently fire tested and assessed by Chiltern International Fire for the applications below, for details on Fire Ratings for specific cavity and construction types please contact DCTECH



VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical	VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF109/125	Timber Frame	30	30	DCT Tenmat FF109/125	Masonry/Concrete	30	30

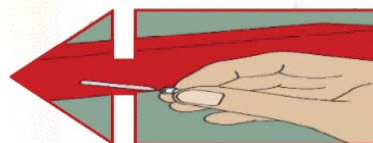
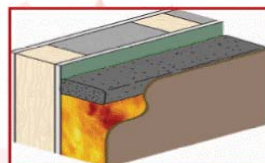
Fitting Instructions

Fix DCT Tenmat FF109/125 with steel fixing spikes supplied using suitable non-combustible fixings. Product must be fixed at max. 250mm centres.



Push the DCT Tenmat FF109/125 onto fixing spikes centrally through the product. The spikes should be left to protrude into the cavity. Label side MUST face outward.

Maximum remaining air gap to the back of the cladding is 75mm. Ensure Fire Barrier is free to expand in a fire situation.



Adjacent lengths can be tightly butted together. Do not fold or bend the spikes. Use Plastic End Caps

DCT Tenmat Ventilated Fire Barriers

DCT Tenmat FF102/25

The DCT Tenmat FF102/25 Ventilated Fire Barrier is a high expansion intumescent seal offering industry leading performance as a ventilated cavity fire barrier. The product has undergone extensive fire testing and is suitable for use within the majority of construction types, enabling the versatile system to be specified with confidence and provide the installer with a simple, time saving and site friendly solution.

Product Description

The DCT Tenmat FF102/25 Ventilated Fire Barrier is a rigid, high expansion intumescent strip encased in aluminum foil. The DCT Tenmat FF102/25 can be mechanically fixed both horizontally and vertically within ventilated cavities behind rainscreen or cladding systems to act as a cavity fire barrier.

Product Dimensions

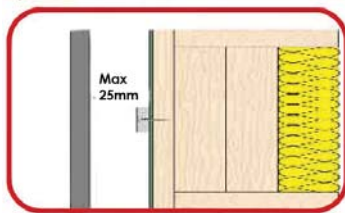
4.0 mm x 35 mm x 1000 mm

Max. Cavity

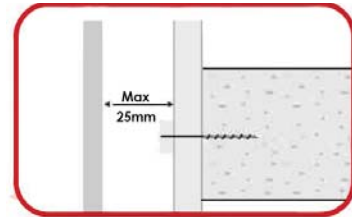
25mm

Approved Applications

The DCT Tenmat FF102/25 Ventilated Fire Barrier has been independently fire tested and assessed by Chiltern International Fire for the applications below, for details on Fire Ratings for specific cavity and construction types please contact DCTECH.



DCT Tenmat FF102/25 Fixed to Combustible Timber Constructions



DCT Tenmat FF102/25 Fixed to Non-Combustible Constructions

VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical	VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF102/25	Timber Frame	30	60	DCT Tenmat FF102/25	Masonry/Concrete	120	120

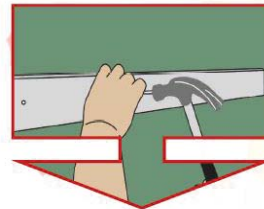
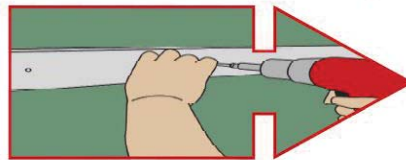
Fitting Instructions

Fix DCT Tenmat FF102/25 with non-combustible screws (Trumpet / Countersunk type head only)

Product must be fixed at maximum 250mm centres

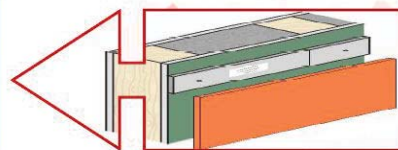
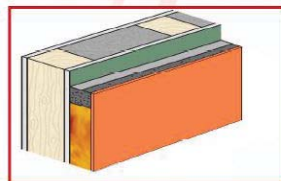
Maximum remaining air gap to the back of the cladding is 21mm

Ensure Fire Barrier free to expand in a fire situation



Alternatively the product can be nailed in position with suitable non-combustible nails.

Product must be fixed at maximum 250mm centres



Fixings must be along centre line of the DCT Tenmat FF102/25

Ensure label side is facing out into cavity

Adjacent lengths can be tightly butted

DCT Tenmat Ventilated Fire Barriers

DCT Tenmat FF102/50

DC Tenmat FF102/50 Ventilated Fire Barrier is a high expansion intumescent seal offering industry leading performance as a ventilated cavity fire barrier. The product has undergone extensive fire testing and is suitable for use within the majority of construction types, enabling the versatile system to be specified with confidence and provide the installer with a simple, time saving and site friendly solution.

Product Description

The DCT Tenmat FF102/50 Ventilated Fire Barrier is a rigid, high expansion intumescent strip encased in aluminum foil. The DCT Tenmat FF102/50 can be mechanically fixed both horizontally and vertically within ventilated cavities behind rainscreen or cladding systems to act as a cavity fire barrier.

Product Dimensions

6 mm x 75 mm x 1000 mm

Max. Cavity

For use in up to 50mm cavities

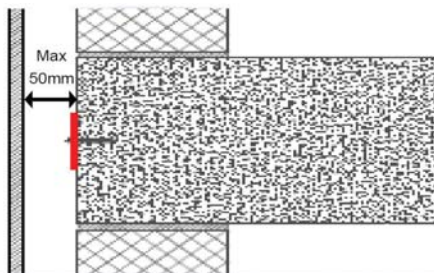
Approved Applications

The DCT Tenmat FF102/25 Ventilated Fire Barrier has been independently fire tested and assessed by Chiltern International Fire for the applications below, for details on Fire Ratings for specific cavity and construction types please contact DCTECH.



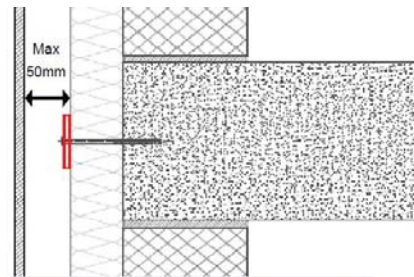
FF102/50 Ventilated Fire Barrier

DCT Tenmat FF102/50 Fixed to Non-Combustible Construction



VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF102/50	Brick, Block, Masonry	120	120
DCT Tenmat FF102/50	Aerated Concrete Block	120	120

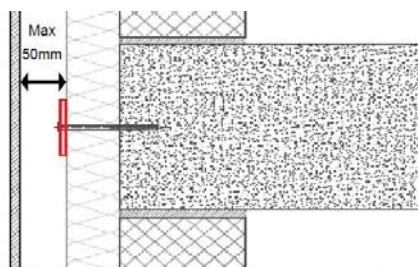
DCT Tenmat FF102/50 Fixed onto Existing Cavity Insulation



VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF102/50	Min. Fibre on Concrete	90	90
DCT Tenmat FF102/50	Min. Fibre on Timber Frame	30	60

For details on approved Mineral Fibre insulation types, please consult DCTECH

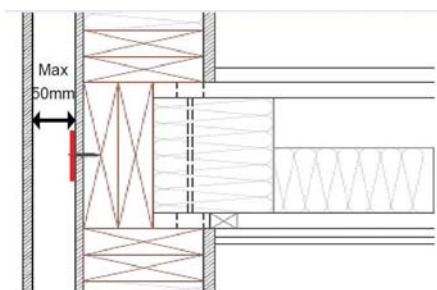
DCT Tenmat FF102/50 Fixed to Timber Batten



VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF102/50	Timber Batten on T. Frame	30	30

Cavities greater than 50mm can be reduced to 50mm by the installation of a suitable OSB, Timber or Non-Combustible packer (Consult DCTECH for details).

DCT Tenmat FF102/50 Fixed to Combustible Timber Constructions



VFB Ref.	Assessed Construction Type	Fire Rating Horizontal	Fire Rating Vertical
DCT Tenmat FF102/50	Timber Frame	30	60

DCT Tenmat Ventilated Fire Barriers

FIRE TEST DATA

DCT Tenmat Ventilated Fire Barriers have been extensively fire for periods ranging from 30 to 120 Minutes.

The products have been tested in Concrete, Blockwork, Timber & Cement Board structures as well as in conjunction with both DCT Mineral Fibre & DCT Rigid Insulation.

A full scale Timber Frame Building with Timber External Cladding has also been fire tested where DCT Tenmat Ventilated Fire Barriers successfully limited fire spread between floor levels.

For specific fire ratings, cavity sizes and application type please contact DCTECH.

The performance of the DCT Tenmat Ventilated Fire Barriers has been proven through the following fire tests and assessments.

Independent Fire Testing Body	Test Report Number	Fire Test Duration
Chiltern International Fire	IF04065	30 - 60 Minutes
Chiltern International Fire	IF06005	30 Minutes
Chiltern International Fire	IF06013	30 - 60 Minutes
Chiltern International Fire	IF06040	120 Minutes
Chiltern International Fire	IF08052	90 - 120 Minutes
Chiltern International Fire	IF09011	30 Minutes
Chiltern International Fire	IF09032	30 - 90 Minutes
Chiltern International Fire	IF09093	30 - 90 Minutes
Chiltern International Fire	IF10048	30 - 60 Minutes
Chiltern International Fire	IIF10060	120 Minutes
BRE	243-505	30 Minutes
Chiltern International Fire	A06037	Assessment Report 30 Minutes
Chiltern International Fire	A10030	Assessment Report 30 - 120 Minutes

HEALTH & SAFETY

All Tenmat Intumescent and associated mineral fibre materials are not classified as possible carcinogens.

A Material Safety Data Sheet is available upon request.

For additional questions please contact DCT Tenmat using the contact information given below.

ACCELERATED AGEING

Tenmat have carried out In-House and Independent age testing on a range of Tenmat Intumescent Materials where various environmental conditions have shown no significant detrimental effect on material performance.

SHELF LIFE

The shelf life of DCT Tenmat Intumescent Materials is likely to be indefinite in normal storage conditions.

ORDERING

To order or specify DCT Tenmat Ventilated Fire Barriers please:

- Specify overall cavity size
- Construction type
- Type & thickness of insulation within the cavity (if any)
- Fire rating required
- Linear metres required

about dctech

Dynamic Composite Technologies, or as we are now known DCTech, has been serving the Australian building industry with an extensive portfolio of technically advanced thermal insulation, geotextile membranes, rainscreen cladding brackets and fibreglass reinforced plastic wall and ceiling liner panels - which have been tried and tested to Australian building codes and standards.

This diverse portfolio provides DCTech with the ability to consider the building envelope holistically and hence develop a 'total system solutions' for a wide range of building applications. DCTech total system solutions incorporate high-performance building materials and innovative solutions which are designed to meet the continuously evolving requirements of the Australian building industry.

DCTech total system solutions address the risk of interstitial condensation, affords NCC and Greenstar compliant thermal efficiency and optimum acoustic and fire performance.



<http://www.dctech.com.au/dct-tenmat-fire-barriers/>



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