MP551

Timber Frame Cavity Barrier and Timber Frame Party Wall Barrier



Technical Data Sheet





Designed to provide fire compartmentation within concealed voids within the external fabric of a timber frame building.

PRODUCT

MP551 Timber Frame Cavity Barrier & MP551 Timber Frame Party Wall Barrier are polythene enclosed stone mineral wool cavity barriers manufactured in sizes to suit customer specified cavity widths.

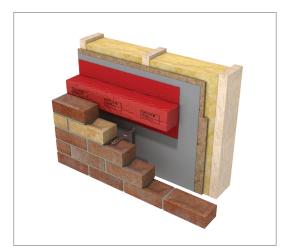
MP551 Timber Frame Cavity Barriers assist in satisfying requirements of guidance documents such as Approved Document B and The Scottish Technical Handbooks.

MP551 Timber Frame Cavity Barriers are suitable for both vertical and horizontal positioning to the edge of cavities such around openings, at compartment lines and to subdivide cavities.

MP551 Timber Frame Party Wall Barrier is suitable for use at party wall lines.

MP551 is stapled at 150mm centres to the inner OSB substrate at designated positions prior to brickwork being erected which then compresses the barrier within the cavity creating a seal against smoke and heat transmission.

FEATURE	BENEFIT	
Can be used for cavities from 35-150mm	Wide range of cavities gives design scope	
Tested to BS EN1366-4:2021 for up to 60 minutes fire integrity (E)	Achieves the desired fire performance for compartmentation	
Tested at both mid-cavity and flush to apertures, as per the requirement of BS EN1366-4:2021	Suitable for vertical and horizontal applications for mid- cavity and around apertures such as doors and windows	
Suitable for all party wall cavities (typically 50-100mm)	MP551 Party Wall Barrier sizes permit flexibility in design	
Closed state barrier	Assists in reducing flanking sound transmission between properties	



MP551 Timber Frame Cavity Barrier - mid-cavity (construction by others)



MP551 Timber Frame Cavity Barrier - around aperture (construction by others)



MP551 Timber Frame Party Wall Barrier - installed vertically (construction by others)

MP551 TIMBER FRAME CAVITY BARRIER

Fixings	Staples at minimum 150mm centres
DPC	When installing Mayplas MP551 Timber Frame Cavity Barrier it may be necessary to consider additional use of DPC's and/or cavity trays in line with relevant Building Control guidance.
Width of cavity	35 to 150mm cavities
Compression	15mm Minimum. NOTE: Greater compression has no impact upon stated fire resistance.
Thermal Conductivity (W/mK)	0.037
Fire Resistance Integrity (E) Insulation (I	MP551 Timber Frame Cavity has been independently tested in accordance with BS EN 1366-4:2021 and subsequently assessed as a Field of Application
Field of application report number	WF 547245

Max Cavity Width	Product	Fire Resistance mid cavity (mins)		Fire Resistance apertures (mins)		Product Dimensions
(up to)	Orientation	Integrity (E)	Insulation (I)	Integrity (E)	Insulation (I)	(mm)
35 mm					30	50x65x1200
40 mm		60	45	30		55x65x1200
45 mm	Horizontal or Vertical					60x65x1200
50 mm						65x65x1200
55 mm						70x65x1200
60 mm					15	75x90x1200
65 mm	Horizontal or Vertical	60	60	30		80x90x1200
70 mm						85x90x1200
75 mm						90x100x1200
80 mm				95x100x1200		
85 mm						100x100x1200
90 mm						105x100x1200
95 mm	Horizontal or Vertical 60	20	45	20	110x100x1200	
100 mm						115x100x1200
105 mm						120x100x1200
110 mm						125x100x1200
115 mm						130x100x1200
120 mm						135x130x1200
125 mm						140x130x1200
130 mm				45	20 Horizontal Only	145x130x1200
135 mm	Horizontal or Vertical	60	20			150x130x1200
140 mm						155x130x1200
145 mm						160x130x1200
150 mm						165x130x1200

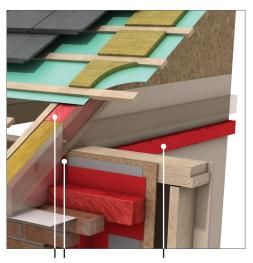
Please note these are the minimum depths of banner to achieve the performance stated.

For specific fire performance or higher performance requirements please contact us.

Data for 110mm and 150mm deep barriers are also available.

MP551 TIMBER TO TIMBER SOLUTION

Fixings	Staples at minimum 100mm centres
DPC	When installing Mayplas MP551 Timber Frame Cavity Barrier it may be necessary to consider additional use of DPC's and/or cavity trays in line with relevant Building Control guidance.
Width of cavity	35 to 100mm cavities
Compression	15mm Minimum. NOTE: Greater compression has no impact upon stated fire resistance.
Thermal Conductivity (W/mK)	0.037
Fire Resistance Integrity (E) Insulation (I)	MP551 Timber Frame Cavity has been independently tested in accordance with BS EN 1366-4:2021 and subsequently assessed as a Field of Application
Field of application report number	WF 547245



MP551 Timber Frame Cavity Barrier

Max		Fire Resistance	mid cavity (mins)	Product Dimensions (mm)	
Cavity Width (up to)	Product Orientation	Integrity (E)	Insulation (I)		
05	Horizontal		30	50,00,1000	
35 mm	Vertical		45	50x90x1200	
40	Horizontal		30	55x90x1200	
40 mm	Vertical		45		
45	Horizontal		30	00.00.1005	
45 mm	Vertical		45	60x90x1200	
50	Horizontal		30	05 00 1000	
50 mm	Vertical		45	65x90x1200	
<i>FF</i>	Horizontal	45	30	70001000	
55 mm	Vertical	45	45	70x90x1200	
00	Horizontal		30	75 00 1000	
60 mm	Vertical		45	75x90x1200	
GE man	Horizontal		30	90,00,1000	
65 mm	Vertical		45	80x90x1200	
70 mm	Horizontal		30	05001000	
70 mm	Vertical		45	85x90x1200	
7E	Horizontal		30	0000001000	
75 mm	Vertical		45	90x90x1200	
00	Horizontal		45	95x150x1200	
80 mm	Vertical		60		
05	Horizontal		45	100,450, 4000	
85 mm	Vertical		60	100x150x1200	
00 mm	Horizontal	60	45	105v150v1000	
90 mm	Vertical	60	60	105x150x1200	
95 mm	Horizontal		45	110x150x1200	
95 111111	Vertical		60		
100 mm	Horizontal		45	115,,150,,1000	
100 mm	Vertical		60	115x150x1200	

Note

The Horizontal solutions were tested mid cavity, with no supporting timbers behind the OSB, deemed as a worst case test scenario.

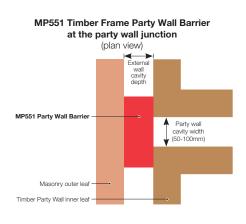
The Vertical solutions were tested worst case as if at an aperture, but with supporting timber:

- The 90mm deep barriers were tested without OSB directly behind them, comprising Timber to Timber.
- The 150mm deep barriers had partial supporting timber behind them.

Additional test information regarding the above is available within the Field of Application, WF 547245.

MP551 TIMBER FRAME PARTY WALL BARRIER

Fixings	Staples at minimum 150mm centres
DPC	When installing Mayplas MP551 Timber Frame Cavity Barrier it may be necessary to consider additional use of DPC's and/or cavity trays in line with relevant Building Control guidance.
Width of cavity	35 to 150mm cavities
Compression	15mm Minimum. NOTE: Greater compression has no impact upon stated fire resistance.
Thermal Conductivity (W/mK)	0.037
Fire Resistance Integrity (E) Insulation (I)	MP551 Timber Frame Cavity has been independently tested in accordance with BS EN 1366-4:2021 and subsequently assessed as a Field of Application
Field of application report number	WF 547245



Max External	Product	Fire Resistance (mins)		Product Dimensions (mm)		
Cavity Width (up to)	Orientation	Integrity (E)	Insulation (I)	for 50mm PW Cavities	for 75mm PW Cavities	for 100mm PW Cavities
35 mm		60	60	50x180x1200	50x210x1200	50x230x1200
40 mm				55x180x1200	55x210x1200	55x230x1200
45 mm	Vertical			60x180x1200	60x210x1200	60x230x1200
50 mm				65x180x1200	65x210x1200	65x230x1200
55 mm				70x180x1200	70x210x1200	70x230x1200
60 mm				75x230x1200	75x260x1200	75x280x1200
65 mm	Vertical	90	90	80x230x1200	80x260x1200	80x280x1200
70 mm				85x230x1200	85x260x1200	85x280x1200
75 mm		60	60 60	90x270x1200	90x300x1200	90x320x1200
80 mm				95x270x1200	95x300x1200	95x320x1200
85 mm				100x270x1200	100x300x1200	100x320x1200
90 mm	Vertical			105x270x1200	105x300x1200	105x320x1200
95 mm				110x270x1200	110x300x1200	110x320x1200
100 mm				115x270x1200	115x300x1200	115x320x1200
105 mm				120x350x1200	120x380x1200	120x400x1200
110 mm				125x350x1200	125x380x1200	125x400x1200
115 mm				130x350x1200	130x380x1200	130x400x1200
120 mm				135x350x1200	135x380x1200	135x400x1200
125 mm	Vortical	00		140x350x1200	140x380x1200	140x400x1200
130 mm	Vertical 90	90	145x350x1200	145x380x1200	145x400x1200	
135 mm			150x350x1200	150x380x1200	150x400x1200	
140 mm			155x350x1200	155x380x1200	155x400x1200	
145 mm			160x350x1200	160x380x1200	160x400x1200	
150 mm			165x350x1200	165x380x1200	165x400x1200	

Additional Party Wall Solutions are available.

The typical Party Wall Cavities are shown for illustration purposes only.

Please contact us for futher information.

MP551 TIMBER FRAME 3 CAVITY BARRIER SOLUTION AT THE PARTY WALL JUNCTION

Alternative to the single MP551 Timber Frame Cavity Barrier.

This solution is based on Timber Cassette to Masonry testing for the 2 barriers within the external cavity but also Timber to Timber testing for the barrier within the party wall cavity.

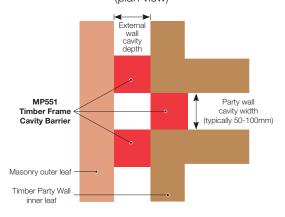
It is essential to consider the respective datasheet tables for the correct solution.

The direction of fire attack should be considered.

Please refer to the test information available within the Field of Application, WF 547245.

MP551 Timber Frame 3 Cavity Barrier Solution at the party wall junction

(plan view)



MAYPLAS SOLUTION FOR PENETRATIONS

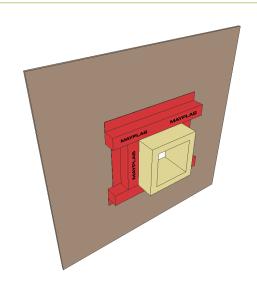
Mayplas solution to penetration is to utilise 4 pieces of MP551 Timber Frame Cavity Barrier around penetrations through the external wall of low rise houses. They are designed to perform the function of a cavity barrier around openings in the wall.

The penetrations may be circular of rectangular. The representation shows rectangular.

Please refer to the MP551 Timber Frame Cavity Barrier table, specifically the mid-cavity fire resistance columns for fire performances.

All joints must tightly but jointed.

Please refer to Mayplas MP551 Timber Frame Installation Guide for full details on installation.



Management Systems

Certified as meeting the requirements of ISO 9001, ISO 14001, ISO 45001

NBS

Our products can be found on NBS Source.

Storage and Handling

- Keep the product dry and undercover
- Suitable handling equipment will be required for bulky products or pallets
- DO NOT stack products or pallets as these will become unstable

Installation

See separate installation guidelines.

Operation

Coetacoducteishimtatistalestador: static 400583323tallation. There is no operator involvement in its use

Maintenance

The products intended use and design, along with its ofteninaccessible location post construction, means there are no maintenance requirements.

Health & Safety

- Dry working by cutting or handling non-encapsulated products may release fibre dust
- Use suitable PPE for site hazards
- Where possible use on tool dust extraction with HEPA filter
- "Machine Made Mineral Fibre" the primary material has workplace exposure limits in HSE EH40

Packaging & Product Disposal

- Pallets can be readily re-used
- Pallet wrap / covers should be placed in an appropriate waste stream
- The product remains in the construction until refurbishment or demolition as such the project lead should apply the contemporary national and local regulations for waste.







IMPORTANT: The information provided within this document is believed correct and to the best of our available knowledge as at its revision date. The information should only be used as guidance for safe handling, use, processing, storage, transportation and disposal and should not be considered as obligation in respect of warranty of (technical) performance, quality (specification) or suitability for any particular application. It is strongly recommended that prospective users test a sample of product under their own conditions to satisfy themselves of its suitability for an intended purpose and that expert advice be sought where different applications are contemplated, or where the extent of any application is in doubt. Due to our policy of continuous improvement we reserve the right to after or amend published specification or design without prior notice. Reproduction of any part of this publication in any manner is not permitted without our prior written consent.

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