

THERMAL CAVITY BARRIERS / FIRE CAVITY STOP SOCKS STONESHIELD

Description

These products comprise a 1200mm length of semi-rigid Euro class A1 mineral Rock fibre slab fully encapsulated within a 38 micron polythene film. This is tested to the latest EN 1366-4:2009/EN 1363:1 2012 and BS 476 20:1987

Applications

Primarily designed to prevent fire penetration, the StoneShield TCB product range maintains thermal insulation integrity and reduces sound transmission within the cavities of buildings. Stoneshield TCB products are available to fit a wide range of cavity widths within masonry, timber frame and steel panel constructions and are equally suitable for installation around apertures and at floor level in partition walls. When installed in the above types of construction Stoneshield TCB's meet the insulation requirements of Approved Document L1A (England & Wales: October 2010).

Installation

For use within timber frame construction with a brick or block outer skin, Stoneshield TCB products are supplied with flanges incorporated into the polythene outer sleeve. These enable the barriers to be held in place until the brickwork is complete. The TCB product is fixed to the timber frame using non-corrosive large head nails or staples at 150mm centers, with the subsequent construction of the brickwork maintaining a minimum compressive contact with the barrier as shown. The TCB at the corners should overlap to ensure a close butted fit is achieved to close the cavity.

In the case of masonry outer skin to masonry inner skin or steel frame construction, Stoneshield TCB products are supplied with unflanged polythene Outer sleeves. Barrier size is selected so that the TCB forms a friction fit within the cavity with minimum compression. Care should be taken in respect of joints, which should be closely butted together. In the case of apertures such as windows or doors where barriers are friction fitted, it is important that the horizontal barrier overlaps the vertical barrier at the corner joints.



Technical

Stoneshield TCB products have been extensively tested by Exova Warringtonfire. Several test samples have been undertaken and assessments conducted as foreseen in warres 316443A

The 50mm x 50mm entry level item within the product range provides in excess of the 30 minute cavity fire barrier requirement defined in Table 6 of Appendix A to Approved Document B, Building Regulations 2022 onwards. Moving through the product range, performance levels increase to in excess of 60 minutes integrity and insulation. The following Performance Tables are included to assist in selecting an appropriately-sized barrier for a given application.

PERFORMANCE TABLES

	Max Cavity Width (mm)	Barrier Width (mm)	Barrier Depth (mm)	colour
30 Minutes Integrity	40	55	65	red
	50	65	65	red

30 Minutes Integrity + 15 Minutes Insulation	50	65	65	red
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30 Minutes Integrity + 30 Minutes Insulation	40	50	75	red
	50	60	75	red
	60	70	75	red
	70	80	75	red
	80	90	75	red
	90	100	100	Green
	100	110	100	Green
	110	120	100	Green
	120	130	100	Blue
	130	140	100	Blue
	140	150	100	Yellow

60 Minutes Integrity	40	55	110	red
	50	65	110	red
	60	75	110	red
	70	85	110	red
	80	95	110	Green
	85	100	110	Green

60 Minutes Integrity + 60 Minutes Insulation	40	55	145	Green
	50	65	145	Green
	60	75	145	Green
	70	85	145	Green
	80	95	145	Green
	90	105	145	Blue
	100	115	145	Blue
	110	125	145	Blue
	120	135	145	yellow
	130	145	165	yellow
	140	155	165	yellow

