

Wil-Seal Horizontal & Wil-Seal Vertical

Fire protection solution for masonry & boarding ventilated rainscreen cladding

As part of the comprehensive FirePro® range of fire protection products, FirePro® Wil-Seal Horizontal & Vertical cavity barriers provides an effective hot smoke and fire seal, whilst allowing airflow and drainage of the facade.

Tested to BS 8414 Part 1 & 2, FirePro® Wil-Seal Horizontal & Vertical cavity barriers provides up to 2 hours integrity and fire insulation.

Advantages

- Allows ventilation of the rainscreen system
- Continuous drainage of the external envelope
- Fire rated up to 2 hours integrity and fire insulation
- Rapid closure of the cavity during fire
- Accommodates rainscreen cladding movement
- Can be installed in buildings of any height
- Fast and easy installation
- Closure of horizontal cavity barrier up to 25mm
- Suitable for widths up to 450mm
- Solutions available for masonry and ventilated facades

Description

FirePro® Wil-Seal Horizontal & Wil-Seal Vertical cavity barriers consists of a specially engineered non-combustible, water resistant Rockwool with reinforced aluminium foil facing on both sides.

The FirePro® Wil-Seal Horizontal cavity barrier incorporates a highly reactive intumescent strip on its leading edge. In the event of fire, the high expansion intumescent seal rapidly expands to seal off the air gap and prevent vertical fire spread at the rear of the external wall panels.

The FirePro® Wil-Seal Horizontal & Vertical cavity barriers are supplied with galvanised mild steel brackets. The brackets are mechanically fastened to the wall system within the ventilated cavities behind the rain screen cladding following the fire compartment designation.



Standards

FirePro® Wil-Seal Horizontal cavity barrier has been tested to BS 8414. FirePro® Wil-Seal Vertical cavity barrier has been tested to BS 476 : Part 21 for the fire protection of horizontal & vertical cavities for up to 2 hours.

Performance and properties

Moisture content

0% in air-dried state.

Moisture absorption

0.004% by volume at 20° and 90% relative humidity.

Water absorption

FirePro® Wil-Seal Horizontal cavity barrier is supplied with polythene wrapping and is intended for use in conditions with some exposure to weather.

Sizes

FirePro® Wil-Seal Horizontal & Vertical cavity barriers are supplied in 1m lengths and the following cavity widths.

Wil-Seal Horizontal

Product Code	Cavity Width (mm)	Product (mm)	Size
WH120 - 075-080	75 - 80	55 mm	
WH120 - 081-086	81 - 86	61 mm	
WH120 - 087-090	87 - 90	65 mm	
WH120 - 091-095	91 - 95	70 mm	
WH120 - 096-100	96 - 100	75 mm	
WH120 - 101-105	101 - 105	80 mm	
WH120 - 106-112	106 - 112	87 mm	
WH120 - 113-120	113 - 120	95 mm	
WH120 - 121-129	121 - 129	104 mm	
WH120 - 130-140	130 - 140	115 mm	
WH120 - 141-153	141 - 153	128 mm	
WH120 - 154-170	154 - 170	145 mm	
WH120 - 171-190	171 - 190	165 mm	
WH120 - 191-220	191 - 220	195 mm	
WH120 - 221-250	221 - 250	235 mm	
WH120 - 251-260	251 - 260	235 mm	
WH120 - 261-320	261 - 320	295 mm	
WH120 - 320-400	321 - 400	375 mm	
WH120 - 401-425	401 - 425	400 mm	

Wil-Seal Vertical

Product Code	Cavity Width (mm)	Product (mm)	Size
WV120 - 072-077	72 - 77	87 mm	
WV120 - 078-085	78 - 85	95 mm	
WV120 - 086-094	86 - 94	104 mm	
WV120 - 095-105	95 - 105	115 mm	
WV120 - 106-118	105 - 118	128 mm	
WV120 - 119-135	119 - 135	145 mm	
WV120 - 136-157	136 - 157	167 mm	
WV120 - 158-185	158 - 185	195 mm	
WV120 - 186-225	186 - 225	235 mm	
WV120 - 226-285	226 - 285	295 mm	
WV120 - 286-385	286 - 385	395 mm	
WV120 - 386-450	386 - 450	460 mm	

Installation

FirePro® Wil-Seal Horizontal & Vertical cavity barriers are supplied in 1m lengths and the following cavity widths.

Wil-Seal Vertical Installation

1. Measure cavity width and from the tables, ensure the correct product is to be installed.
2. From the drawings, ensure that the planned location follows the designated fire compartment.
3. Cut the bracket to 75% of the cavity width and insert them to the product.
4. Mechanically fasten the brackets and FirePro® Wil-Seal Vertical to wall.
5. Apply aluminium foil tape on both the left and right of installed FirePro® Wil-Seal Vertical, ensuring all joints are sealed.
6. Ensure there are no gaps between adjacent barriers of FirePro® Wil-Seal Vertical.

Wil-Seal Horizontal Installation

1. Measure cavity width and from the tables, ensure the correct product is to be installed.
2. FirePro® Wil-Seal Horizontal cavity barriers are supplied with an intumescent layer at the leading edge that will be installed facing the rear of ACP/ Panel..
3. 3 brackets are required to install the FirePro® Wil-Seal Horizontal to the wall. The brackets should be L shaped when installed and need a hole for the non-combustible fixing is to be installed. Then bend each bracket 90°.
4. Make 3 incisions at both the front and rear of the FirePro® Wil-Seal Horizontal at 200mm from the ends and 300mm centres. The incisions must align and penetrate the whole cavity barrier from the front intumescent to the rear of the cavity barrier. Bend the protruding brackets to ensure that the FirePro® Wil-Seal Horizontal is held in place.
5. Install the brackets to the wall.
6. Tightly butt join the next FirePro® Wil-Seal Horizontal cavity barrier.
7. Apply aluminium foil tape on top and bottom of FirePro® Wil-Seal Horizontal and at the joints with the FirePro® Wil-Seal Vertical.
8. Do not remove the waterproof polythene layer.
9. All openings through the rain screen such as louvres, ducts, windows, and doors shall be closed with FirePro® Wil-Seal Horizontal and Vertical around the openings.
10. Ensure that the FirePro® Wil-Seal Horizontal is installed with leading edge of intumescent strip facing towards the rear of the cladding panel. Do not apply tape over the face of the barrier.



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