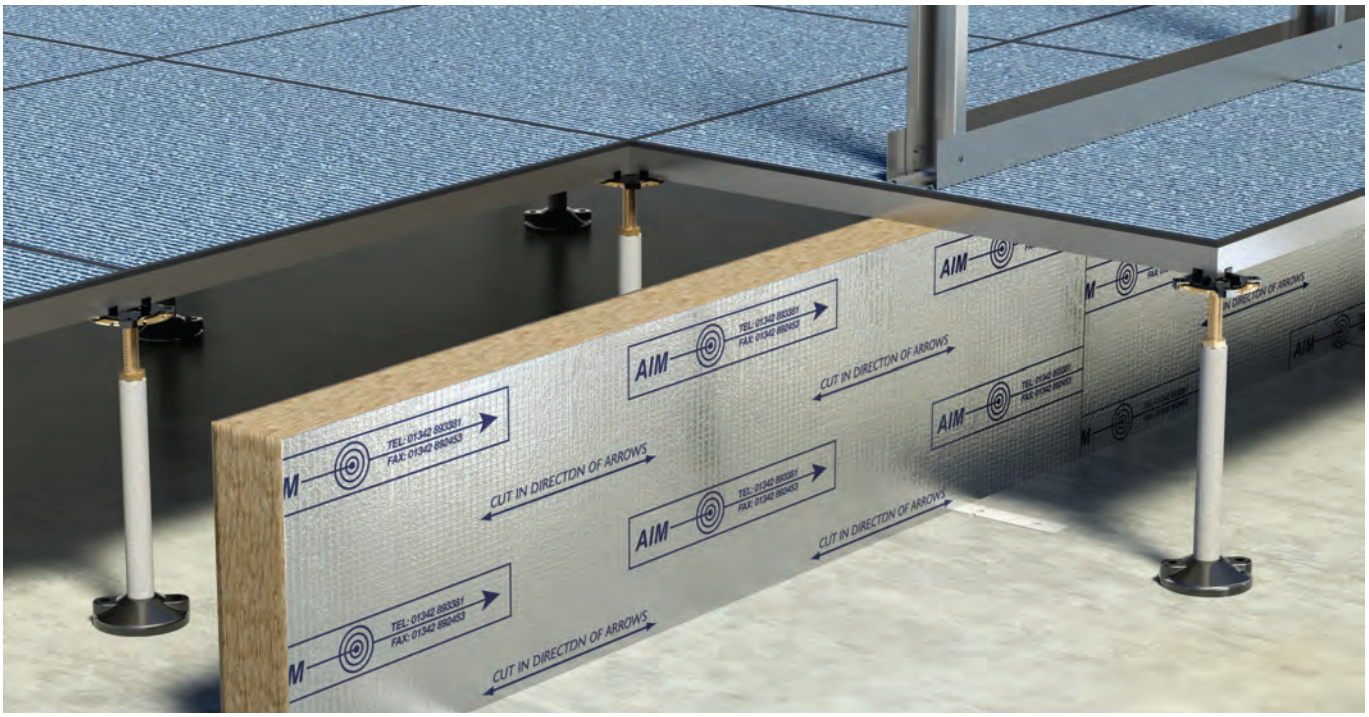
AIM Raised Access Floor Fire Barrier

Foil Faced Rockwool stone wool Fire and Smoke Barrier for the voids beneath Raised Access Floors



AIM Raised Access Floor Fire Barrier prevents fire from spreading under the floor void, for at least the period of fire rating specified. AIM Raised Access Floor Fire Barrier is made from high density Rockwool stone wool slab, faced with Class 0 foil. It is available cut to size or in slabs suitable for cutting on site.

Specification

Lengths: 1000mm

Voids: 50 - 1000mm (barrier to be compressed by about 5%)

- Available as ½ hour, 1 hour, & 2 hour RAF Barrier
- Also High Void RAF Barrier for void heights in excess of 600mm; 150mm thick and suitable for ½ hour and 1 hour applications
- Reduces airborne transmission of sound by a minimum of 9dB
- Available cut to size or in slabs
- Foil Facing (with AIM logo)
- No mastics or sealants required
- Ozone depletion potential of zero; no CFCs or HCFCs used in manufacture
- Thermal Conductivity Đ = 0.036W/mK
- Also available Polythene sleeved
- Global warming potential = zero

The Barrier is permanently held in place by compression of approximately 5%. To ensure stability in deeper voids, the barrier is either tied to a row of pedestals with lacing wire, or a system of support brackets is employed. (See next page for more details).

Requirements for fire barriers

Raised Access Floor fire barriers are required for two applications:

1. Subdivision of large uninterrupted cavities.

i) To comply with Building Regulations – 30 minutes' integrity plus 15 minutes insulation.

ii) To comply with LPC Design Guides – 30 minutes' integrity plus 30 minutes' insulation.

2. Alignment under a partition, to maintain partition rating.

i) 30 minute partition – 30 minutes' integrity plus 30 minutes' insulation.

ii) 60 minute partition – 60 minutes' integrity plus 60 minutes' insulation.

iii) 120 minute partition – 120 minutes' integrity plus 120 minutes' insulation.

Fire Performance

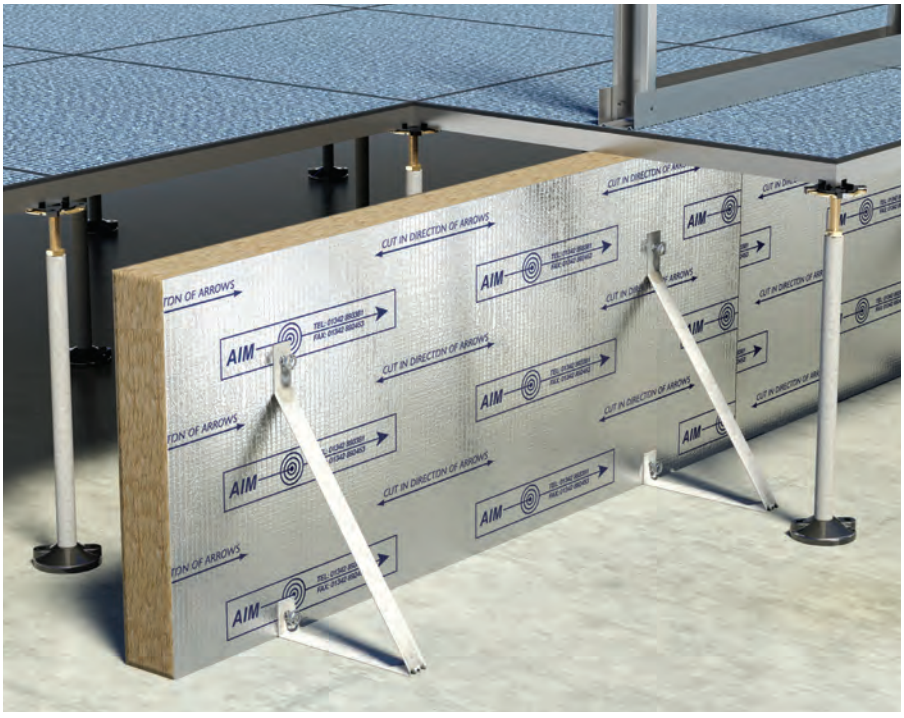
The performance of the AIM fire protection range has been tested to BS 476 part 20 and assessed by Warrington Fire Research Centre to achieve the values stated in the table, which apply to insulation and integrity. The Barrier is incombustible to BS 476 part 4, rated Class 1 Surface Spread of Flame to BS 476 part 7. The access floor and structural slab should have a fire rating at least that of the barrier.

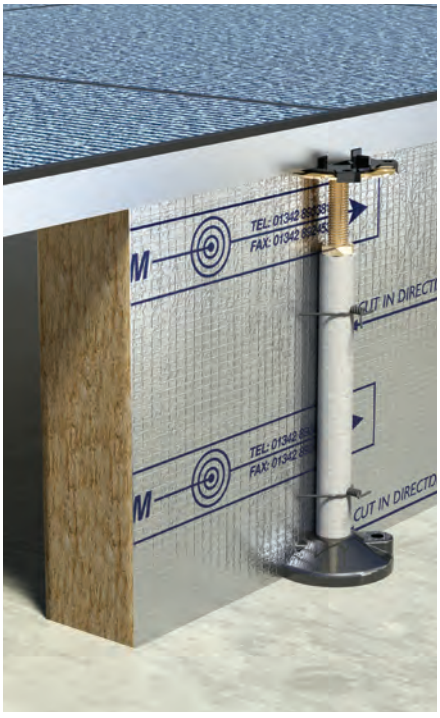
AIM RAF Fire Barrier

Type	Fire Resistance	Barrier Thickness	Maximum void unsupported	Maximum void supported
AIM ½ hour RAF Barrier	30 minutes	50mm[1]	250mm	600mm
AIM 1 hour RAF Barrier	60 minutes	75mm[2]	400mm	600mm
AIM 2 hour RAF Barrier	120 minutes	100mm	400mm	600mm
AIM High Void RAF Barrier	30 & 60 minutes	150mm	600mm	1000mm

4 hour RAF Barriers are available— please contact AIM.

Notes: 1. 75mm for voids 401 – 600mm
2. 100mm for voids 401 – 600mm





ROCKWOOL®

Acoustic Performance

Where the barrier is installed beneath a partition line into an imperforate timber based access floor system of at least 30mm thickness, with floor covering over, the room-to-room sound reduction on the path of the fire barrier will be at least 45dB.

The AIM Raised Access Floor Fire Barrier must faithfully follow all the partition lines directly above, and be compressed in installation as per AIM instructions, with no gaps. The partition must achieve at least 45dB SRI and similar acoustic consistency provisions be made at ceiling and further, similar, room-to-room interfaces.

Service Penetrations

This system and its components have been assessed by Exova Warrington to provide an effective solution for handling a wide variety of service penetrations running within the raised access floor void.

Full details available at www.aimlimited.co.uk

Installation

The Barrier should maintain contact with the underside of the access floor and the top of the structural floor so that no gaps are apparent, as this may risk loss of integrity. Any gaps caused by joints or coffers in the floor must be fire stopped e.g. by caulking with intumescent mastic. Butt end joints must be tight so that the ends of adjoining barriers are fitted in contact for the full height of the barrier.

Supporting Raised Access Floor Barrier

The Raised Access Floor Barrier may be used unsupported to the height limits specified in the table. Over this, the barrier requires support using one of the two following systems.

1. AIM Bracket System
For 250-400mm voids 'L' angle brackets are supplied. These are impaled into the base of the barrier to approximately ¾ depth, 3 brackets are used per full length of barrier, the 2 end brackets having their 'leg' to one side of the barrier and the middle one with its leg to the other side. See diagram above.

For 400-1000mm voids 'buttress' brackets are supplied. These consist of pre-drilled galvanised steel strips which are easily bent on site to form the buttress brackets which are then fastened to the barrier with 2 pigtail screws. Similarly to the 'L' brackets detailed above, 3 buttress brackets are used per full length of barrier, with the end ones on one side of the barrier and the middle one on the other. See diagram above.

2. Pedestal Connection System
One face of the barrier must touch a row of pedestals of the Raised Access Floor system. The RAF Barrier is connected to each pedestal with 1.5mm stainless steel wire fitted around the pedestal, pushed through the barrier, with its ends twisted together. When the wire is pushed through the barrier, the two strands must be at least 50mm apart. Vertical spacing of the wires, up each pedestal, must not exceed 200mm.

Suggested accessories

- Rockwool ablatitive batt
- Rockwool Intumescent mastic,
- Rockwool ablative liquid