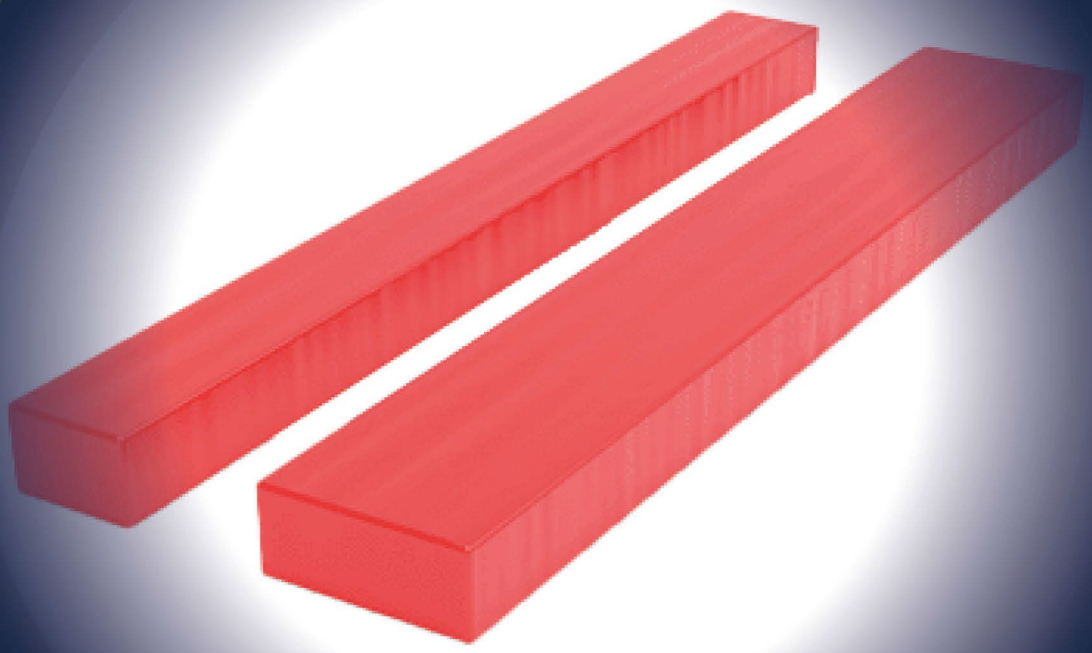
ALFA VFB PLUS

Ventilated Cavity Barrier

TECHNICAL DATA SHEET



CE

ALFASEAL® GROUP

www.alfaseal.pl

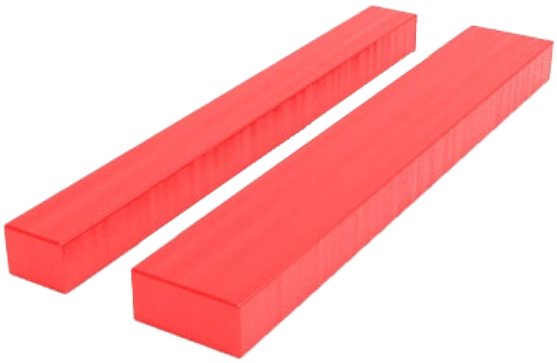
ALFA VFB PLUS

Ventilated Cavity Barrier

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

The **ALFA VFB PLUS** fire barrier is made of mineral wool and intumescent material attached to the front edge. In the event of a fire, the intumescent material expands, closing the outer wall cavity and blocking the spread of fire, ensuring fire resistance up to EI180. The **ALFA VFB PLUS** barrier allows for almost twice as large a ventilated gap (with air flow after installation of the barrier) than the **ALFA VFB** fire protection barrier.



APPLICATION

ALFA VFB PLUS barriers are used to restore fire resistance to ventilated facades (walls with an air gap inside) wherever a large ventilation gap must be maintained after the barrier is installed. The following layers that may be present in the partition are approved for use:

- wall structure: wooden frame, autoclaved concrete
- external wall cladding: wool board, architectural concrete board.

The **ALFA VFB PLUS** barrier is suitable for ventilated gaps with a total gap width including the air gap of up to 450 mm with or without insulation inside the partition. The maximum air gap width after installation of the fire barrier is 44 mm.

AVAILABILITY

Product	Maximum gap width [mm]	Dimensions [mm]	Delivery form	Article number
ALFA VFB PLUS	60	16 x 75 x 1000	1 pcs.	8800016750
	100	56 x 75 x 1000	1 pcs.	8800056750
	150	106 x 75 x 1000	1 pcs.	8800106750
	200	156 x 75 x 1000	1 pcs.	8800156750
	250	206 x 75 x 1000	1 pcs.	8800206750
	300	256 x 75 x 1000	1 pcs.	8800256750
	350	306 x 75 x 1000	1 pcs.	8800306750
	400	356 x 75 x 1000	1 pcs.	8800356750

TECHNICAL DATA

Color	RED
Finishing	Polyethylene cladding
Cutting capability	YES
Fungus resistance	Provided by polyethylene
Service life	60 years
Durability	Class X, the product may be exposed to weather conditions (UV, rain, frost)

COMPLIANCE

Fire resistance classification:

EN 1363-1

TRANSPORT AND STORAGE

Transport and store (in original, unopened packaging) in a safe, dry place.

ALFASEAL GROUP Sp. z o.o.
ul. Kineskopowa 1
05-500 Piaseczno, Polska
NIP 1231274821

T: + 48 22 498 7 498
E: sprzedaz@alfaseal.pl

www.alfaseal.pl

INSTALLATION

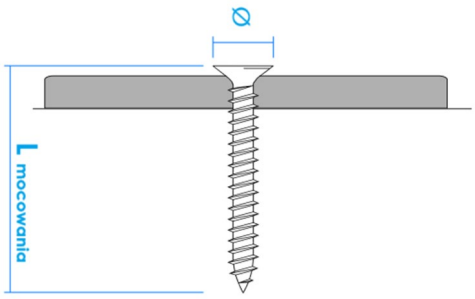
a) PREPARATION. Clean the surface of the barrier installation area of grease, dust, and dirt. Ideally, the gap barrier should be installed in a continuous line. If there are gaps/obstacles that prevent the barrier from being installed in a continuous line, the product can be cut with a sharp knife and pressed tightly against the obstacle, then restarted on the opposite side of the obstacle.

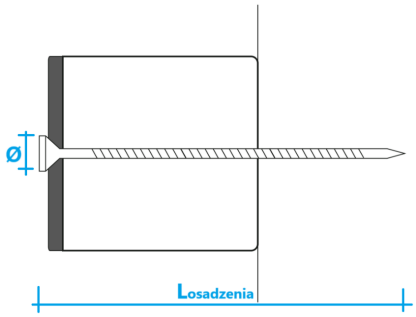
b) SELECTION OF THE APPROPRIATE FASTENING. Using the table below, select the fastening method depending on the width of the gap:

Slot width [mm]	Slotted barrier width [mm]	Mountings on the rear wall of the ALFA VFB PLUS barrier			
		Mounting type	Type of fasteners	Number of fasteners per 1 m	Max spacing
60 - 120	16 - 76	**1**	Nails	4	250
121 - 134	77 - 90	**2**	MP + handles with screws	2	500
135 - 259	91 - 215	**3**			
260 - 300	216 - 256	**4**		3	350
301 - 450	257 - 406	**5**	HP handles + screws	2	500

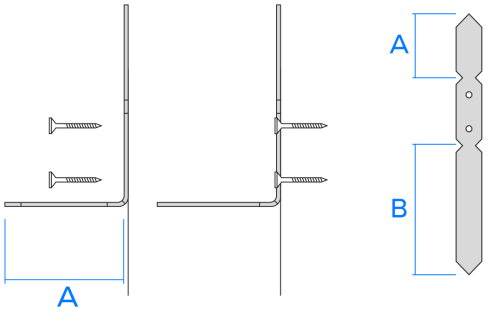
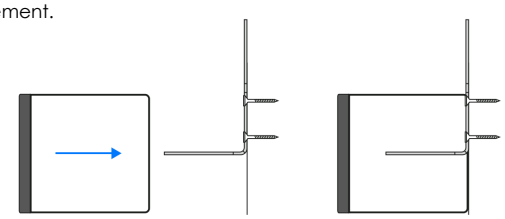
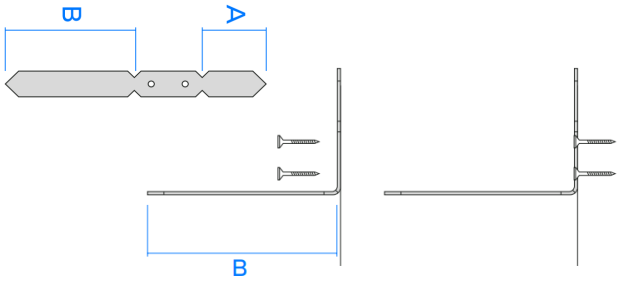
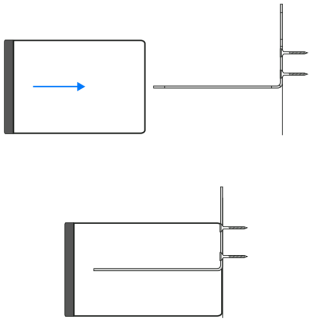
- The length of fasteners - nails or screws - should be selected so that they are sufficient to achieve the correct fastening depth in the substrate. The typical minimum fastening depth in the substrate, "$L_{fastening}$," is:

  - 25 mm in wood
  - 50 mm in concrete/masonry



Mounting type	Type of fasteners	Fastening elements per 1 m
1		
	• Stainless steel screws with countersunk heads, with a maximum head diameter of ø ≤16 mm Note: The screw head should be flush or slightly protruding. Be careful not to tighten too much.	Secure the product using stainless steel screws or nails at intervals of max. 250 mm between centers and max. 125 mm from each end. For cut sections of the barrier with a length ≤ 250 mm, only one fastening is required.

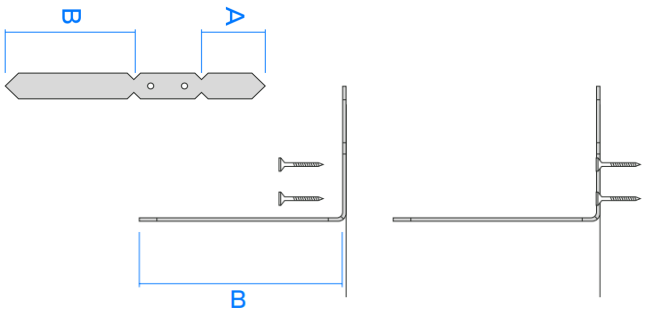
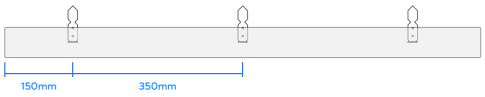
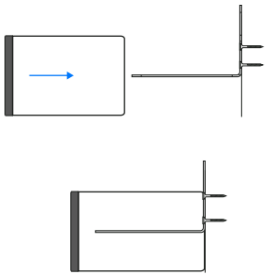
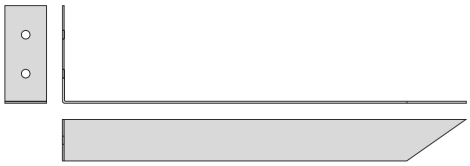
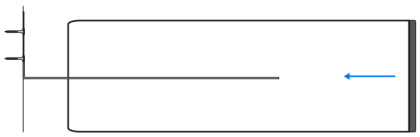
ALFASEAL GROUP Sp. z o.o.
ul. Kineskopowa 1
05-500 Piaseczno, Polska
NIP 1231274821
T: + 48 22 498 7 498
E: sprzedaz@alfaseal.pl
www.alfaseal.pl

<table>
<tr><th>Mounting type</th><th>Type of fasteners</th><th>Fastening elements per 1 m</th></tr>
<tr><td rowspan="2">2</td><td> 
</td><td>1) Secure 2 MP brackets per running meter to the ground at a maximum distance of 250 mm from each end. For cut sections of the barrier with a length ≤ 500 mm, only one MP bracket is required.
 
</td></tr>
<tr><td>• MP brackets have two fixing spikes, one spike is 65 mm long (A), the other 160 mm (B), with a central, pre-drilled section for fixing the bracket to the ground.
• For recessed barriers with a width of 77–90 mm, use two MP brackets.
• Use stainless steel screws ø 5 mm with a maximum head diameter of ø ≤13 mm to secure the bracket.</td><td>2) Press the ALFA VFB PLUS barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barier and must not protrude through the expanding element.
  </td></tr>
<tr><td rowspan="2">3</td><td> 
</td><td>1) Attach 2 MP brackets per running meter to the ground at a maximum distance of 250 mm from each end.
For cut sections of the barrier with a length ≤ 500 mm, only one MP bracket is required.
 
</td></tr>
<tr><td>• MP brackets have 2 fixing spikes, one spike is 65 mm long (A), the other 160 mm (B), with a central, pre-drilled section for fixing the bracket to the ground.
• For recessed barriers with a width of 91–215 mm, use 2 MP brackets.
To secure the bracket, use stainless steel screws ø 5 mm, with a maximum head diameter of ø ≤13 mm.</td><td>2) Press the ALFA VFB PLUS barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barrier and must not protrude through the expanding element.
  </td></tr>
</table>

ALFASEAL GROUP Sp. z o.o.
ul. Kineskopowa 1
05-500 Piaseczno, Polska
NIP 1231274821

T: + 48 22 498 7 498
E: sprzedaz@alfaseal.pl

www.alfaseal.pl

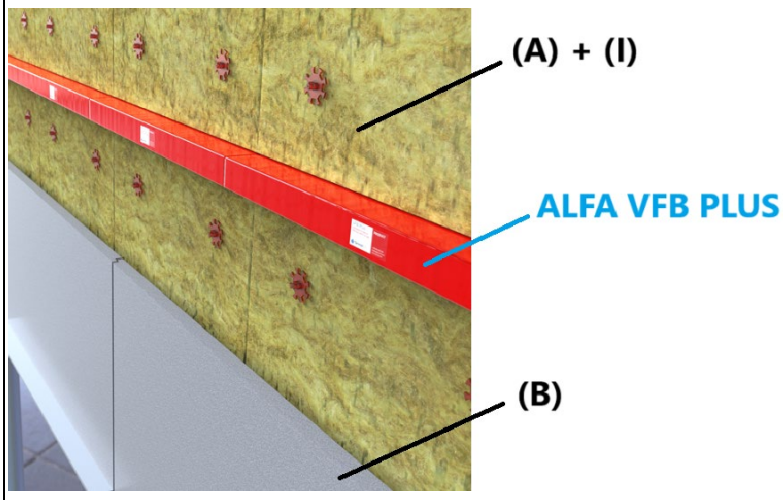
Mounting type	Type of fasteners	Fastening elements per 1 m
4		**1)** Attach 3 MP brackets per running meter to the ground at a maximum distance of 150 mm from each end. For cut sections of the barrier with a length ≤ 500 mm, only one MP bracket is required. 
	• MP brackets have 2 mounting spikes, one spike is 65 mm long (A), the other 160 mm (B), with a central, pre-drilled section for attaching the bracket to the ground. • For recessed barriers with a width of 216–256 mm, use 3 MP brackets. • To secure the bracket, use stainless steel screws ø 5 mm, with a maximum head diameter of ø ≤13 mm.	**2)** Press the ALFA VFB PLUS barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barrier and must not protrude through the expanding element. 
5		**1)** Attach 2 HP brackets per meter at a maximum distance of 250 mm from the end of the barrier. If the barrier is ≤ 500 mm long, 1 HP bracket can be used. 
	• HP handles are supplied with a single mounting spike 328 mm long with two pre-drilled mounting holes. • The spike will need to be cut to size on barriers less than 350 mm wide to ensure that the spike does not pierce through the surface of the intumescent material. • Use stainless steel screws ø 5 mm, with a maximum head diameter of ø ≤13 mm, to secure the bracket.	**2)** Press the ALFA VFB PLUS barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barrier and must not protrude through the swelling element. 

FIRE CLASSIFICATION FIRE CLASSIFICATION

Barrier type	Wall construction (A)	Facade cladding (B)	Type of insulation in the partition (I)	Max. slot width [mm]	Max. gap width after using the gasket [mm]	Dimensions (thickness x height x length) [mm]	Fire resistance class
ALFA VFB PLUS	Cement-bonded particleboard	Architectural concrete cladding / concrete slabs / autoclaved concrete	None	60	44	16 x 75 x 1000	EI 180
	Steel frame with weather-resistant panel Cement-bonded particle board		Insulation made of mineral wool / glass wool / phenolic boards	80	44	36 x 75 x 1000	EI 90
	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements / architectural concrete		Insulation made of mineral wool / glass wool / phenolic boards / PIR foam	300	44	256 x 75 x 1000	EI 60
	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements / architectural concrete			450	44	406 x 75 x 1000	EI 30
	Weather-resistant board with a minimum thickness of 12.5 mm						
	Steel frame with calcium silicate panel						
	Steel frame with calcium silicate board		None	60	44	16 x 75 x 1000	EI 90
				300	44	256 x 75 x 1000	EI 30

SOLUTION DETAILS

ALFA VFB PLUS barrier



- **(A)** Wall construction – structural layer e.g. aerated concrete blocks (autoclaved elements).
- **(I) Insulation** attached to the wall structure, the insulation is interrupted by a fire barrier – the barrier is attached directly to layer (A).
- **(B) Facade cladding –** the outer layer of a partition, e.g. architectural concrete panels.

ALFASEAL GROUP Sp. z o.o.
ul. Kineskopowa 1
05-500 Piaseczno, Polska
NIP 1231274821

T: + 48 22 498 7 498
E: sprzedaz@alfaseal.pl

www.alfaseal.pl