ALFA VFB Ventilated Cavity Barrier

TECHNICAL DATA SHEET





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PRODUCT DESCRIPTION

The **ALFA VFB** 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** barrier is available in two types depending on the maximum gap width and the required fire resistance.

APPLICATION

ALFA VFB barriers are used to restore fire resistance to ventilated facades (walls with an air gap inside). 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** barrier is suitable for ventilated gaps with a total width of the gap including the air cavity of up to 450 mm with or without insulation inside the partition. The maximum air gap width after installation of the fire barrier is 25 mm.

AVAILABILITY

Product	Maximum gap width [mm]	Dimensions Delivery [mm] form		Article number	
	60	35 x 75 x 1000 1 pcs.		8706035750	
	100	75 x 75 x 1000 1 pcs.		8706075750	
	150	125 x 75 x 1000	1 pcs.	8706125750	
ALEA VED /0//0	200	175 x 75 x 1000	1 pcs.	8706175750	
ALFA VFB 60/60	250	225 x 75 x 1000	1 pcs.	8706225750	
	300	256 x 75 x 1000	1 pcs.	8706256750	
	350	275 x 75 x 1000	1 pcs.	8706275750	
	400	375 x 75 x 1000	1 pcs.	8706375750	
	60	35 x 75 x 1000	1 pcs.	8712035750	
	100	75 x 75 x 1000	1 pcs.	8712075750	
	150	125 x 75 x 1000	1 pcs.	8712125750	
ALEA VED 100/100	200	175 x 75 x 1000	1 pcs.	8712175750	
ALFA VFB 120/120	250	225 x 75 x 1000	1 pcs.	8712225750	
	300	256 x 75 x 1000	1 pcs.	8712256750	
	350	275 x 75 x 1000	1 pcs.	8712275750	
	400	375 x 75 x 1000	1 pcs.	8712375750	



TECHNICAL DATA

Color	Black		
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.

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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.

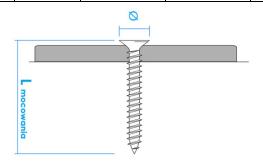
b) CHOOSING THE RIGHT MOUNTING. Use the table below to select the mounting method depending on the gap width:

Slot width [mm]		Mountings on the rear wall of the ALFA VFB barrier				Mountings on the front wall of the ALFA VFBbarrier			
	Width of the slot barrier [mm]	Mounting type	Type of fasteners	Number of fasteners per 1 m	Max spacing	Type of connectors	Number of connectors front	Max spacing	
40 - 100	15 – 75	1	Nails	-	-	Nails			
101 - 115	76 - 90	2	MP + 2 500		500				
116 - 240	91 - 215	3	handles with	2	2	300	Spring	4	250
241 - 300	216 - 275	4	screws	3	350	connectors	7	250	
301 - 450	276 - 425	5	HP handles + screws	2	500	221			

 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	Ø Losadzenia	125mm 250mm		
	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 overtighten.	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 \leq 250 mm, only one fastening is required.		





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Mounting type	Type of fasteners	Fastening elements per 1 m		
	A	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. 250mm 250mm 250mm 250mm 250mm 250mm		
2	 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 76–125 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. 3) Screw the spring connectors through the surface of the intumescent mowith the label) at intervals of max. 250 mm between centers and max. 1stend. For cut sections of the barrier with a length ≤ 250 mm, only one sprequired. All sections of the slotted barrier require spring connectors unless fastened with nails in accordance with option 1. 	aterial (the surface 25 mm from each pring connector is		
3		 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. Press the ALFA VFB barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barrier and must not protrude through the expanding element. Screw the spring connectors through the surfaces of the expanding material (surface with label) 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 spring connector is required. 		



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Mounting type	Type of fasteners	Fastening elements per 1 m
4	A B	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. 2) Press the ALFA VFB barrier onto the spikes of the bracket. The brackets should be inserted halfway into the barrier and must not protrude through the expanding element.
•	 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 241–300 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. 	125mm 250mm
	3) Screw the spring connectors through the surface of the intumescent material (the surface with the label) at intervals of max. 250 mm between centers and max. 125 mm from each end. For cut sections of the barrier with a length \leq 250 mm, only one spring connector is required.	25mm —
		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.
5	 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 brackets 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. 	
	3) Screw the spring connectors through the surface of the intumescent material (the surface with the label) at intervals of max. 250 mm between centers and max. 125 mm from each end. For cut sections of the barrier with a length \leq 250 mm, only one spring connector is required.	
	125mm 250mm	H 25mm

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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 seal [mm]	Dimensions (thickness x height x length) [mm]	Fire resistance class	
ALFA VFB 60/60	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements	Architectural concrete cladding / concrete slabs / autoclaved concrete	none	40	25	15 x 75 x 1000	EI 180	
lub ALFA VFB 120/120	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements Weather-resistant board with a minimum thickness of 12.5 mm		Insulation made of mineral wool / glass wool / phenolic boards	60	25	35 x 75 x 1000	El 120	
ALFA VFB 60/60	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements / architectural concrete	Mineral wool board with a density of ≥ 100 kg/m³	Insulation made of	300	25	275 x 75 x 1000	EI 120	
				300	25	275 x 75 x 1000	EI 60	
	Cement-bonded particleboard		mineral wool / glass wool /	450	25	425 x 75 x 1000	EI 60	
ALFA VFB 120/120	Weather-resistant board (e.g. Siniat) with a minimum thickness of 12.5 mm	Architectural concrete cladding / concrete slabs / autoclaved concrete	concrete cladding /	phenolic boards / PIR foam	300	25	275 x 75 x 1000	EI 120
	Autoclaved concrete, e.g. aerated concrete blocks / hollow blocks / masonry elements			450	25	425 x 75 x 1000	El 90	
			none	50	25	25 x 75 x 1000	El 120	
	board		HOHE	300	25	275 x 75 x 1000	EI 60	

SOLUTION DETAILS

ALFA VFB ALFA VFB (B)

- (A) Wall structure structural layer
 e.a. gerated concrete blocks (autoclayed)
 - 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 outer layer of the partition,
 e.g. architectural concrete panels