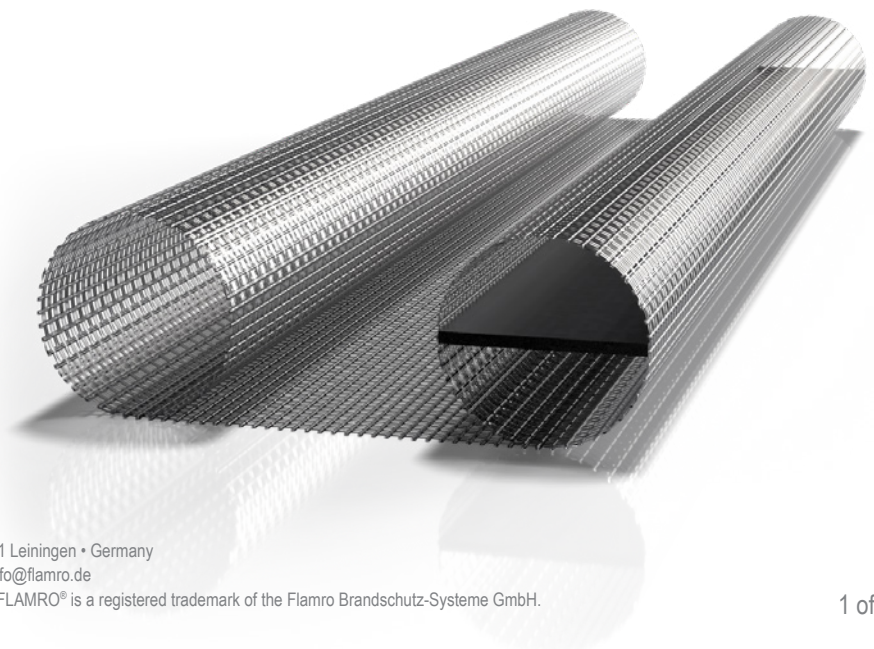
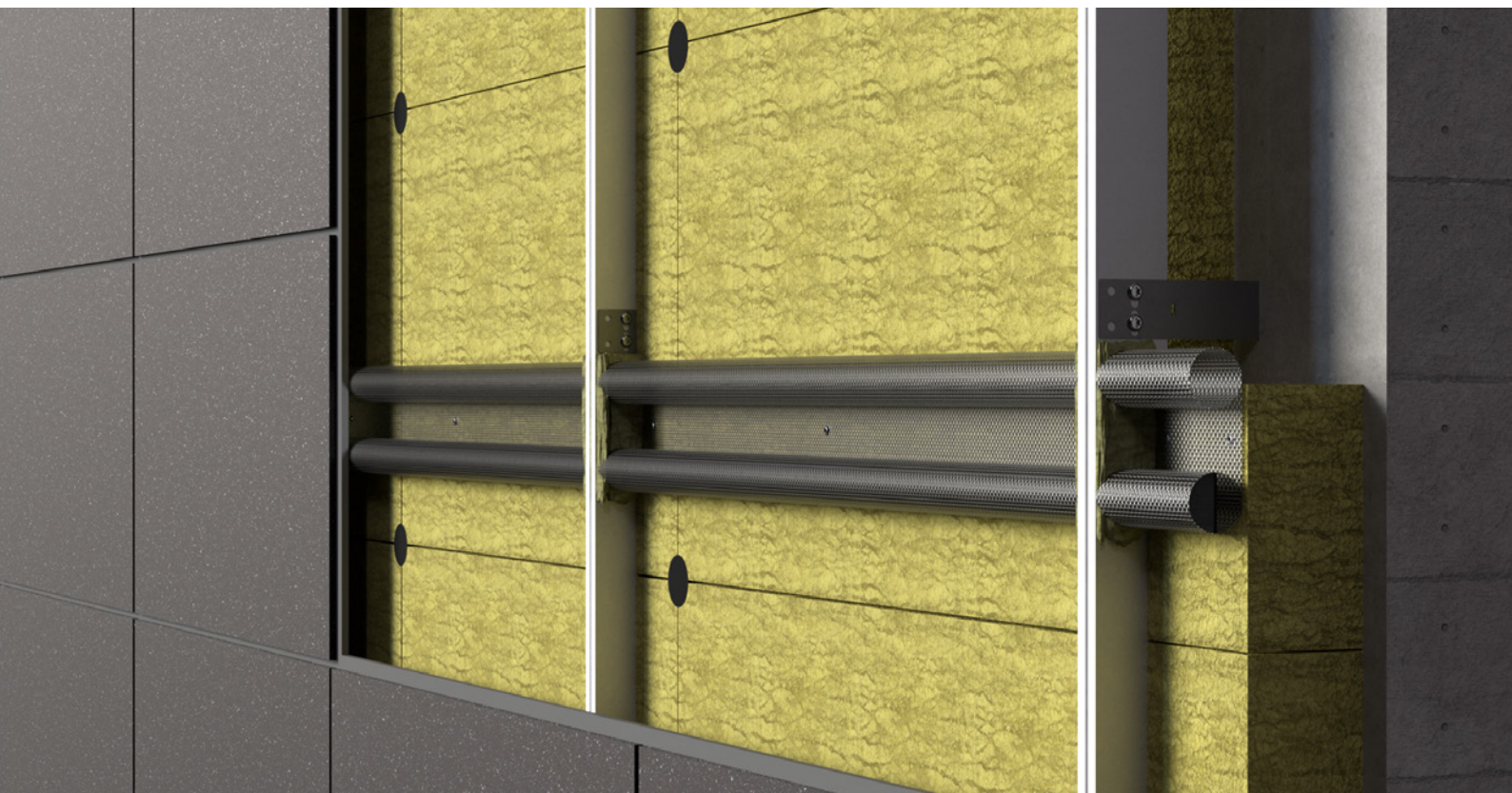


Firebreather® Cavity Barrier

Open state cavity barrier

Open state cavity barrier consisting of a stainless steel flame arrestor mesh with an intumescent fire resisting inlay.

Fire rating EI 30 / EI 60 / EI 90 in accordance with EN 13501-2, depending on the material behind the ventilated façade or in the roof construction.



Firebreather® Cavity Barrier

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1. Preliminary remarks

1.1 Use of the instructions

Before starting work, read through these installation instructions completely. Pay particular attention to the following safety instructions.

The authorisation holder assumes no liability for damage caused by failure to comply with these instructions.

Pictorial representations serve as examples only. Installation results may differ in appearance.

Unless stated otherwise, all lengths are specified in mm.

Subject to errors, misprints and changes. All information contained in this brochure reflects the state of the art or, if applicable, the requirements of the pertinent standard at the time of printing (25.02).

All information in this document represents the state of the art at the time of writing or the current version of the standard.

Upon request, flamro will be pleased to provide the relevant legal and technical framework and manufacturer specifications for each individual case.

1.2 Safety instructions

Personal protective equipment



Wear protective clothing and non-slip shoes.



Use safety goggles, safety glasses.



Wear work gloves.

Firebreather® Cavity Barrier

2. Test methods and standards / certificates

All façades and cladding systems are subject to national or local approval for fire protection. Firebreather® Cavity Barrier has been tested in accordance with a number of test standards to ensure its ability to stop the passage of flames, embers, radiation and hot gases.

Product tests	
EN 1366-4	Fire resistance tests for service installations – linear joint seals
EN 1364-6	Fire resistance tests for non-loadbearing elements – cavity barriers
ASTM 2912	Test method for sudden direct flame impingement for the open state in ventilated constructions
TGD 19	Fire resistance test for 'open-state' cavity barriers used in the external envelope or fabric of buildings
System tests	
BS 8414	Fire performance of external cladding systems
SP FIRE 105	Fire test for façades
Lepir 2	Test of façade fire behaviour of buildings
NFPA 285	Standard fire test method for evaluation of fire propagation characteristics of exterior wall assemblies containing combustible components

Certificates of Usability
RISEFR 010-0238
CSTB Appréciation de Laboratoire N° AL16-182
Certificate of Conformity ESL-24-11693

Firebreather® Cavity Barrier

3. Selected international test results with fire resistance classes

Every construction site has its own requirements and not every detail can be tested in advance. To help you plan as precisely and individually as possible, here is a selection of results from our various international tests.

3.1 Fire resistance classes as per RISEFR 010-0238

Material in cavity	Single or double strip	End seals	Fire resistance class (in acc. with EN 13501-2)
23–36 mm wide cavity			
51 mm × 152 mm softwood	single	mineral wool	EI 30
13 mm gypsum board	single		EI 60
19 mm softwood and 12 mm fibre board	single		EI 30
50 mm wide cavity			
Fibre cement board and mineral wool A2, density ≥ 135 kg/m ³	single	mineral wool	EI 60
15 mm gypsum boards type F (Norgips)	single		EI 90
Spruce 36 × 198 mm density ≥ 460 kg/m ³	single		EI 60
Fibre cement board and mineral wool A2, density ≥ 135 kg/m ³ *	single		EI 90
13 mm gypsum board*	single		EI 60
13 mm gypsum board*	double		EI 90
* See RISEFR 010-0238, Table 2.			

3.2 Fire resistance classes as per CSTB approval N° AL16-182

36 mm wide cavity				
Single or double strip	Material in cavity	Fire resistance class (in acc. with EN 13501-2)		
		E	I	EI
double	wood	90	58	EI 45
	wood			
single	wood	61	48	EI 45
	wood			
double	13 mm gypsum board	90	90	EI 90
	13 mm gypsum board			
single	13 mm gypsum board	90	87	EI 60
	13 mm gypsum board			
single	19 mm softwood	56	41	EI 30
	12 mm fibre board			
double	13 mm gypsum board	90	90	EI 90
	13 mm gypsum board			
single	wood	61	41	EI 30
	wood			

Firebreather® Cavity Barrier

3.3 Fire resistance classes as per ESL-24-11693

28 mm wide cavity		
Single or double strip	Thermal insulation of façade	Fire resistance class (in acc. with EN 13501-2)
single	mineral wool thickness ≤ 100 mm, bulk density ≥ 50 kg/m ³	E 90 I 45
	without insulation	E 120 I 60
50 mm wide cavity		
Single or double strip	Thermal insulation of façade	Fire resistance class (in acc. with EN 13501-2)
single	mineral wool thickness ≤ 100 mm, bulk density ≥ 50 kg/m ³	E 120 I 45
	without insulation	E 120 I 90

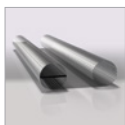
Feel free to contact our support for an individual assessment of your system's fire protection.

4. Further technical data

4.1 Air flow

Pressure level [Pa]	Air flow per cavity width [m ³ /h]		
	50 mm	30 mm	23 mm
5	119	108.2	68
10	181	165.5	108
15	230	195	135

5. Products



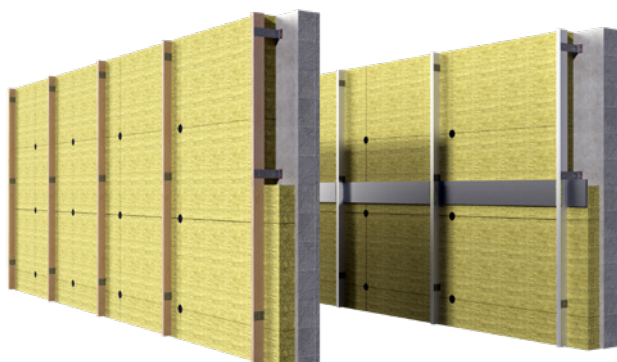
Firebreather® Cavity Barrier

Article	Length [mm]	Fire rating	Width [mm] (Tolerance + 4 mm)	Height [mm] (Tolerance ± 7 mm)	Art. no.
Firebreather® Cavity Barrier 23 mm	1130	EI 30	23	112	500003023113
	530	EI 30	23	112	500003023053
	1130	EI 60	23	112	500006023113
	530	EI 60	23	112	500006023053
Firebreather® Cavity Barrier 28/30 mm	1130	EI 30	28 / 30	87	500003028113
	530	EI 30	28 / 30	87	500003028053
	1130	EI 60	28 / 30	87	500006028113
	530	EI 60	28 / 30	87	500006028053
Firebreather® Cavity Barrier 36 mm	1130	EI 30	36	112	500003036113
	530	EI 30	36	112	500003036053
	1130	EI 60	36	112	500006036113
	530	EI 60	36	112	500006036053
Firebreather® Cavity Barrier 50 mm	1130	EI 60	50	150	500006050113
	530	EI 60	50	150	500006050053
	1130	EI 90	50	150	500009050113
	530	EI 90	50	150	500009050053

Firebreather® Cavity Barrier

6. Installation steps

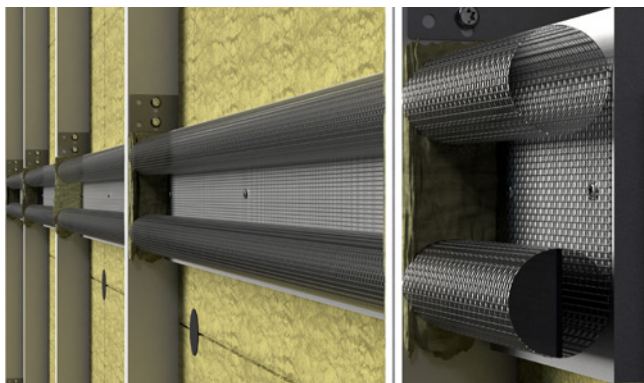
1. Wall before installation of Firebreather® Cavity Barrier (profiles made of wood, aluminium or steel with wall brackets).



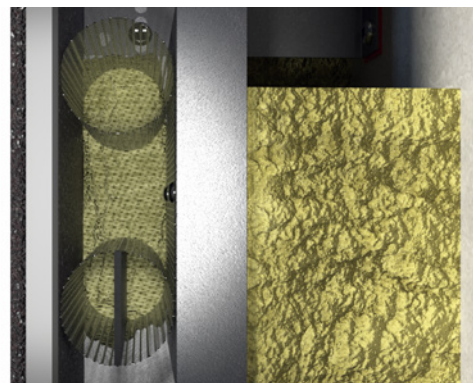
2. Firebreather® Cavity Barrier lengths are cut to fit by grinder or stainless steel metal cutting circular saw.



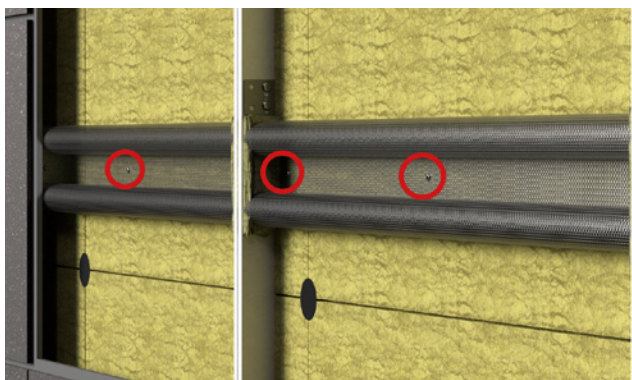
3. Install the Firebreather® Cavity Barrier continuously with the intumescent material in the lower roll. Install directly on the concrete wall or the mineral wool or on continuous crossbars without cavities.



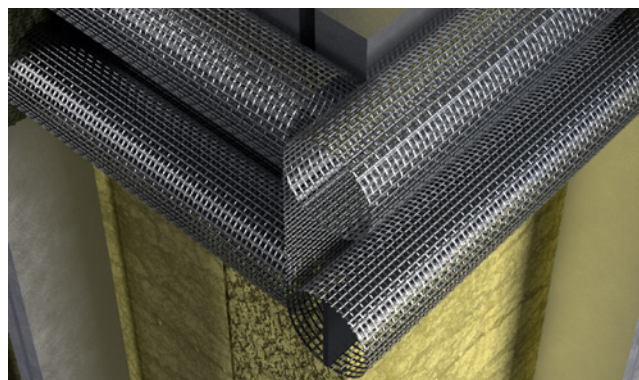
4. The Firebreather® Cavity Barrier must be installed in such a way that the intumescent strip is situated in the lower mesh and in a vertical position.



5. Fasten the Firebreather® Cavity Barrier
 - either directly on the mineral wool using pigtail screws (2–3 screws per meter)
 - or onto the substrate or crossbar using suitable fasteners

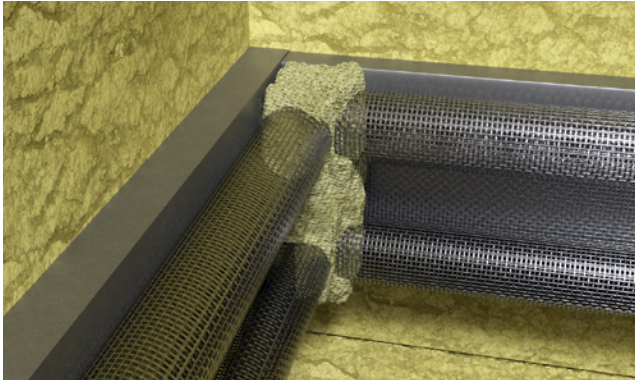


6. Install with overlap at the outside corner.

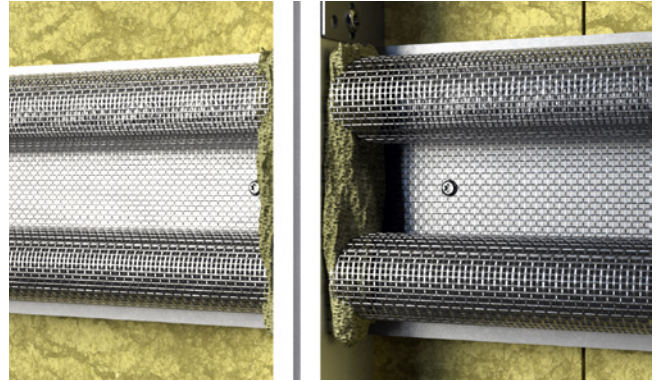


Firebreather® Cavity Barrier

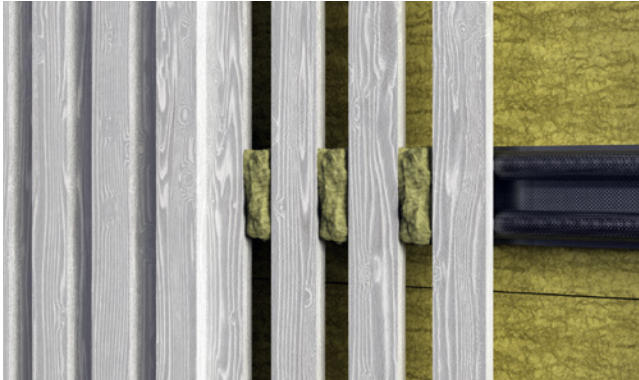
7. Seal the inside corner with mineral wool or similar fireproof material.



8. To ensure the best fit, mineral wool or similar materials can be used to close any gaps between the cavity barrier and the studs.



9. In case the barrier does not fit tightly because of additional cavities, use mineral wool or equivalent material for sealing. The sealing height must correspond to the Firebreather® Cavity Barrier.



10. Install the cladding directly on top of the Firebreather® Cavity Barrier.

