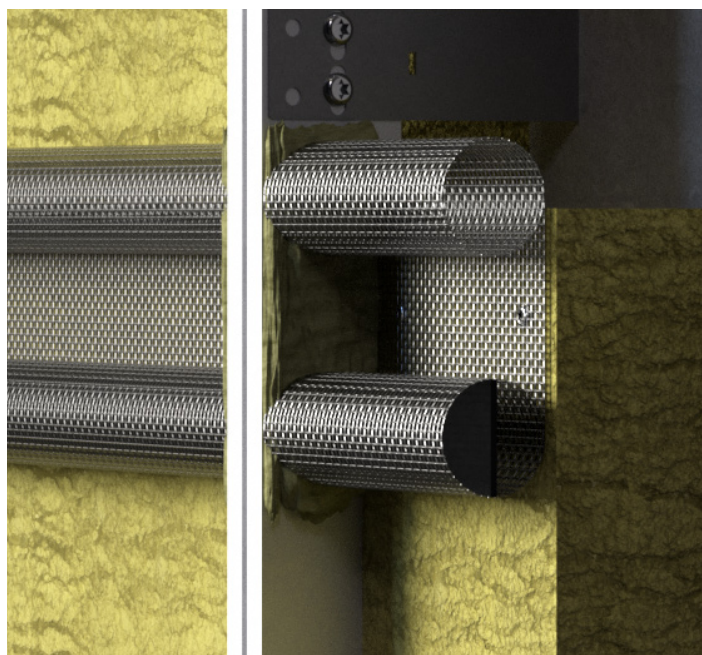


# Firebreather® Cavity Barrier

## Open state cavity barrier

Application for preventing fire spread behind façade cladding



### Mode of operation

The Firebreather® technology employs multiple mechanisms to block heat transfer, thereby suppressing flame spread immediately.

The stainless-steel mesh is engineered to prevent flame breakthrough until the intumescent strip has fully expanded. Throughout the declared fire-resistance period, ignition on the unexposed side is precluded.

The cavity barrier is manufactured exclusively from corrosion-resistant materials and requires no periodic testing or maintenance.

### Fire resistance classes

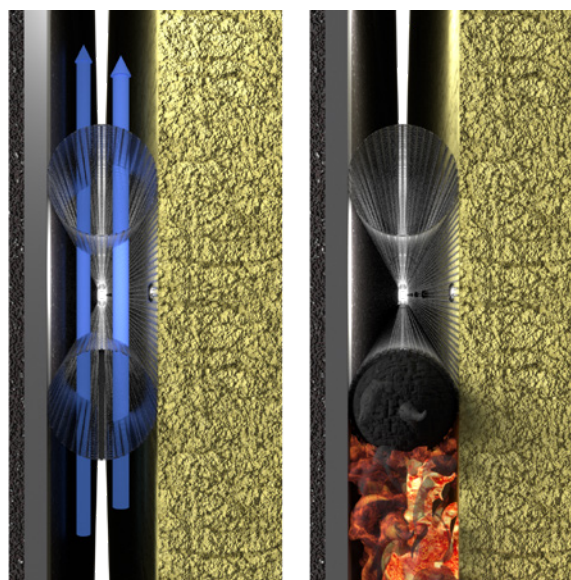
Fire rating EI 30 / EI 60 / EI 90 in accordance with EN 13501-2, depending on the material behind the ventilated façade

### Fields of application

behind ventilated façade cladding or other cavities with fire protection requirements

### Benefits

- for uncompromising fire safe venting of voids and cavities in constructions
- instantly prevents flame spread but provides ample ventilation behind the cladding until the intumescent strip has fully expanded
- fully passive vent design, containing no moving parts or cabling
- no PVC or plastic that can form burning droplets spreading downward fires
- blocks ember attacks
- blocks birds, rodents and insects which are larger than 2 mm



unexposed to fire

exposed to fire



Expected lifetime  
**60 YEARS**  
in accordance with ASTM E 2923-14

## Certificates of usability

- RISE DOCUMENTATION RISEFR 010-0238
- CSTB Appréciation de Laboratoire N° AL16-182
- Certificate of Conformity ESL-24-11693
- ETA-25/0626: 20.08.25

## Test standards and methods

- EN 1366-4 (product test)
- pr-EN 1364-6 (product test)
- ASTM 2912 (product test)
- TGD 19 (product test)
- BS 8414 (system test)
- SP FIRE 105 (system test)
- Lepir 2 (system test)
- NFPA 285 (system test)

## Selected 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.

### 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
<b>23–36 mm wide cavity</b>			
51 mm × 152 mm softwood	single	stone wool	<b>EI 30</b>
13 mm gypsum board	single		<b>EI 60</b>
19 mm softwood and 12 mm fibre board	single		<b>EI 30</b>
<b>50 mm wide cavity</b>			
Fibre cement board and mineral wool A2, density ≥ 135 kg/m <sup>3</sup>	single	stone wool	<b>EI 60</b>
15 mm gypsum boards type F (Norgips)	single		<b>EI 90</b>
Spruce 36 × 198 mm density ≥ 460 kg/m <sup>3</sup>	single		<b>EI 60</b>
Fibre cement board and mineral wool A2, density ≥ 135 kg/m <sup>3</sup> *	single		<b>EI 90</b>
13 mm gypsum board*	single		<b>EI 60</b>
13 mm gypsum board*	double		<b>EI 90</b>

\* See RISEFR 010-0238, Table 2

## Sustainability / Environment

NEPD-5507-4806-EN	Cavity-Barrier 23 mm × 1130 mm
NEPD-5508-4810-EN	Cavity-Barrier 28 / 30 mm × 1130 mm
NEPD-5380-4700-EN	Cavity-Barrier 36 mm × 1130 mm
NEPD-5509-4804-EN	Cavity-Barrier 50 mm × 1130 mm

## Longevity assessment

Expected lifetime: 60 years

All building materials tested based on ASTM E2923–14 in combination with DIN EN ISO 6270-2.

## 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		
	left	right	E	I	EI
double	wood	wood	90	58	EI 45
single	wood	wood	61	48	EI 45
double	13 mm gypsum board	13 mm gypsum board	90	90	EI 90
single	13 mm gypsum board	13 mm gypsum board	90	87	EI 60
single	19 mm softwood	12 mm fibre board	56	41	EI 30

## 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 <sup>3</sup>	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 <sup>3</sup>	E 120 I 45
	without insulation	E 120 I 90

Since there are no harmonised standards for façade cladding systems, feel free to contact our support for an individual assessment of your system's fire protection.

## Products

Article	Length [mm]	Fire rating	Width [mm] (Tolerance + 4)	Height [mm] (Tolerance ± 7)	Art. no.
Firebreather® Cavity Barrier 23 mm	1130	EI 30	23	112	FBH-23-1130-30
		EI 60			FBH-23-1130-60
Firebreather® Cavity Barrier 28 / 30 mm	1130	EI 30	30	87	FBH-30-1130-30
		EI 60			FBH-30-1130-60
Firebreather® Cavity Barrier 36 mm	1130	EI 30	36	112	FBH-36-1130-30
		EI 60			FBH-36-1130-60
Firebreather® Cavity Barrier 50 mm	1130	EI 60	50	150	FBH-50-1130-60
		EI 90			FBH-50-1130-90

## Technical data

Mesh material	stainless steel mesh (AISI304) with wire diameter 0.56 mm and mesh width 2 mm
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## Air Permeability (informative value)

In its normal condition, the Firebreather® Cavity Barrier remains open, allowing natural façade ventilation. The airflow rate through the open barrier has been measured at different pressure levels. These figures are provided for information only and are not part of the fire resistance assessments.

Pressure [Pa]	Air flow per cavity width [m³/h]		
	50 mm	30 mm	23 mm
5	119	108.2	68
10	181	165.5	108
15	230	195	135

## Intumescent strip KERAFIX® Flexpan 200 NG-A

Composition	halogen free, expanding construction material on the basis of expandable graphite
Certificate	ETA-15/0719
Expansion rate [x times]	22 to 37
Start of reaction [°C]	from approx. 175
Expansion pressure [N/mm²]	0.6 to 1.3 (300 °C, method 4)
Storage	Store in a dry place.
Safety information	Consult the safety data sheet for further information.
Disposal	Dispose of the product according to local standards and regulations.