

## Declaration of Performance

- No.: DoP Protect F-Black 001
1. Unique identification code of the product-type: FEF Kaiflex Protect F-Black
2. Intended use/es: Thermal insulation for technical building equipment and industrial installations (ThIBEII)
3. Manufacturer: Kaimann GmbH  
Hansastraße 2-5  
D-33161 Hövelhof
4. System/s of AVCP 3
5. Harmonised standard: Declaration of performance according to product standard EN 14304:2009+A1:2013
- Notified body/ies: 0751 "Forschungsinstitut für Wärmeschutz e.V. München"
6. Declared performance/s:

Essential Features		Performance			
Reaction to fire euroclass-characteristics	Reaction to fire	Sheet: d <sub>N</sub> = 3 - 50 mm Tube: d <sub>N</sub> = 6 - 50 mm	E E <sub>L</sub>		
Acoustic absorption index	Structure-borne noise transmission Acoustic absorption		NPD		
Thermal resistance	Thermal conductivity Dimensions and limits	Sheet: d <sub>N</sub> = 3 - < 32 mm Tube: d <sub>N</sub> = 6 - < 25 mm	°C	-10 °C	0 °C
		Sheet: d <sub>N</sub> = ≥ 32 mm Tube: d <sub>N</sub> = ≥ 25 mm	W/(m·K)	0,032	0,033*
			W/(m·K)	0,035	0,036**
Water permeability	Water absorption		WS01 (W <sub>p</sub> ≤ 0,1 kg/m <sup>2</sup> )		
Water vapour permeability	Water vapour diffusion resistance	Sheet: d <sub>N</sub> = 3 - 50 mm Tube: d <sub>N</sub> = 6 - 50 mm	MU 10.000 (μ ≥ 10.000)		
Release of corrosive substances	Minor amounts of water soluble chlorides and pH- value		NPD		
Release of dangerous substances to indoor environment	Release of dangerous substances		NPD <sup>a</sup>		
Continuous glowing combustion	Continuous glowing combustion		NPD		
Durability of reaction to fire against ageing/degradation	Durability characteristics <sup>b</sup>				
Durability of thermal resistance against ageing/degradation	Durability characteristics <sup>c</sup>				
	Maximum service temperature	Sheet: d <sub>N</sub> = 3 - 50 mm Tube: d <sub>N</sub> = 6 - 50 mm	ST(+) 80 °C		
	Minimum service temperature	Sheet: d <sub>N</sub> = 3 - 50 mm Tube: d <sub>N</sub> = 6 - 50 mm	ST(-) -30 °C		
Durability of reaction to fire Against high temperature	Durability characteristics <sup>b</sup>				
Durability of thermal resistance against high temperature	Durability characteristics <sup>c</sup>				

a No test method yet adopted.

b The fire performance of flexible elastomeric foam does not change with time.

c The thermal conductivity of flexible elastomeric foam does not change with time.

NPD = No Performance Determined

\*λ<sub>0</sub> ≤ 0,033 + 7,1316 · 10<sup>-6</sup> θ + 1,2533 · 10<sup>-6</sup> θ<sup>2</sup> | \*\*λ<sub>0</sub> ≤ 0,036 + 7,1316 · 10<sup>-6</sup> θ + 1,2533 · 10<sup>-6</sup> θ<sup>2</sup>

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Andrea Trox, Head of Quality Management

A handwritten signature in black ink that reads 'A. Trox'.

Hövelhof, 21.11.2022