

## Declaration of Performance

DoP/WFK/DE/2017/001

Barrier against fire spreading, fire protection damper

### WFK



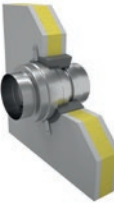
Bartholomäus GmbH

Bachstraße 10

D - 89607 Emerkingen

The notified body 1322 executed the initial inspection of the work and the factory production control as well as the ongoing monitoring, assessment and evaluation of the factory production control according to System 1 of Construction Product Regulation and issued the certificate of constancy of performance 1322-CPR-08678/01.

### Declared Performance

Key Features				
Construction Size	Load bearing structure	Design	Type of Installation	Performance Class EN 13501-3:2010-2
Ø100 to Ø250 [mm]	 solid ceiling	d ≥ 150mm Minimum distance ≥ 25mm Minimum distance to bearing construction parts ≥ 75mm	Wet installation Ceiling (mortar)	EI 120 (h <sub>o</sub> , i <--> o) S (300 Pa)
	 solid walls	d ≥ 100mm Minimum distance ≥ 25mm Minimum distance to bearing construction parts ≥ 75mm	Wet installation Wall (mortar)	EI 90 (v <sub>e</sub> , i <--> o) S (300 Pa)
	 Reinforced steel wall system	Light weight construction wall with metal support panelling on both sides; with mineral wool filling ≥ 100 mm Minimum distance ≥ 200mm Minimum distance to bearing construction parts ≥ 75mm	Wet installation Wall (mortar)	EI 90 (v <sub>e</sub> , i <--> o) S (300 Pa)

\*d= Thickness

Please note: in no event the construction class of the fire protection damper can be higher than the performance class of the wall/ceiling, in which they are installed. In such a case the performance class of the fire protection damper will be reduced to the verified performance class of the wall/ceiling.

Wesentliche Merkmale	Leistung
Nominal conditions of the activation/sensitivity according to ISO 10294-4 <ul style="list-style-type: none"> <li>▪ Sensor resilience</li> <li>▪ Operating temperature of sensor</li> </ul>	fulfilled
Closing time according to EN 1366-2	fulfilled
Opening and closing attempt according to 1366-2	fulfilled
Durability of response delay according to ISO 10294-4:2001(E) <ul style="list-style-type: none"> <li>▪ Sensor response to temperature and durability</li> </ul>	fulfilled
Damper leakage according to EN 1366-2	fulfilled
Corrosion protection according to EN 60068-2-52	KNF
<b>Durability of operational safety</b> <ul style="list-style-type: none"> <li>▪ <b>Functional test:</b> A functional test, respectively inspection openings on each floor, are dispensable. The ventilation duct should have an inspection opening at the upper and lower end as well as in case of duct defaults, which allow camera inspection and pipe cleaning.</li> <li>▪ <b>Commissioning:</b> The flawless installation of the WFK fire damper must be checked by camera inspection after installation and before the shaft is closed.</li> <li>▪ <b>Maintenance:</b> Maintenance is due every 5 years by camera inspection. If the pipe is contaminated, it has to be cleaned without delay. In the course of this cleaning, the fire damper of type WFK will also be cleaned. The release unit tested by VdS is 100 % corrosion-free, including the release unit. The double torsion bars made of stainless steel are covered and without hinge. The release unit has been used a million times by GEBA in the last 15 years and has been proven in practice. All components are abrasion-proof. The free cross-section allows a low pipe resistance with higher air velocity, e. g. more than 3m/s, which prevents dust from settling. The air flow without turbulences substantially contributes to the pipe cleaning. The Hermann Rietschel Institute determined, according to a CCI publication, a dust precipitation with an air velocity of less than 3m/s. It was found that 4 – 5 m/s would be ideal. This also benefits the dimensioning of the pipe. Dampers in the air flow represent a resistance, lead to turbulences and thereby reduce the efficiency of a ventilation system. This inevitably results in lower air velocity, which then again requires larger pipe dimensions and makes the system more expensive.</li> </ul>	
<b>General note:</b> <ul style="list-style-type: none"> <li>▪ Certification also includes checking the declaration of performance, assembly instructions and technical documentation for accuracy</li> </ul>	

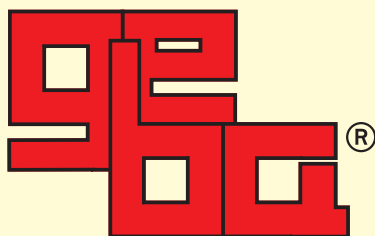
The product performance WFK corresponds to the declared performance.

The manufacturer is solely responsible for the creation of the performance declaration.



Gert Bartholomäus  
Geschäftsführer  
Bartholomäus GmbH

Emerkingen, 25.09.2017



Bartholomäus GmbH

Bartholomäus GmbH  
Bachstraße 10  
D-89607 Emerkingen

Phone +49 (0)7393 ' 95 19 - 0  
Fax +49 (0)7393 ' 95 19 - 40  
info@geba-brandschutz.de  
www.geba-brandschutz.de