

## PAVUS, a.s.

Notified Body No. 1391
Prosecká 412/74, 190 00 Praha 9 - Prosek
Decisión No. 27/2013-CPR of 13<sup>th</sup> December 2013

# CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-2015/0058

In compliance with Regulation 305/2011/EU of European Parliament and of the Council of 9 March 2011 (the Construction Product regulation or CPR), this certificates applies to the construction product:

## Smoke control damper MSD-W

Technical parametres of the product:

are stated in the Annex No. 1 of this certificate of constancy of performance

Intended use of the product in buildings:

Multi compartment smoke control dampers that are to be used in smoke and heat control systems at 600°C or under fire conditions.

produced by or for:

MANDÍK. a.s.

Dobříšská 550, 267 24 Hostomice, Czech republic, ID 26718405

and produced in the manufacturing plant:

MANDÍK, a.s.

Dobříšská 550, 267 24 Hostomice, Czech republic

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

## EN 12101-8:2011

under system 1 for the performances set out in this certificate are applied and that the construction product fulfils all the prescribed requirements for these performances

This certificate was first issued on 13<sup>th</sup> March 2015 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.

In Prague 13th March 2015

Ing. Jaroslav Dufek
Managing Director PAVU\$ / a.s.

Notified Body No.1391

Product parametres and assessing performances are stated on the 2<sup>nd</sup> side in Annex No.1 of the certificate of constancy of performance.

## Annex No.1 of the certificate of constancy of performance No. 1391-CPR-2015/0058 of 13th March 2015

### Technical parametres of the product \*)

External dimension of the element:

- circular from min. diameter 180 mm to max. 630 mm

- square from min. (160 x 180) mm to max. (1 500 x 800) mm

Construction length:

from 375 mm to 500 mm

Starting devices and drives:

- Belimo

- Belimo with emergency function and electomagnet - Joventa with emergency function and electomagnet

Material versions:

galvanized sheet metalstainless sheet metalpainted sheet metal

Leak tightness of the damper according to EN 1751:

- circular over blade min. class 2, diameters from 560 mm to 630 mm min. class 3

- square over blade min. class 2, for max. dimension 1 500 x 800 mm min. class 3

- over case min. class C

The classification according to EN 13501-4:2007+A1:2009 \*):

El 120 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti

#### Assessing product performances

Essential characteristics	Requirement clauses in EN 12101-8	Findings	Conformity Assessment
Nominal activation conditions/sensitivity	4.2.1.3	Closure/opening during the test in right time during right period.	Conforms
Response delay(response time)	4.2.1.4	< 60 s	Conforms
Operational reliability	4.4.2.2	C 10 000	Conforms **)
Fire resistance			Odinorina )
- integrity (E)	4.1.1 a), 4.4.1	E 120 < 360 m <sup>3</sup> /(h.m <sup>2</sup> )	Conforms
- insulation (EI)	4.1.1 b), 4.4.1	El 120	Conforms
- smoke leakage (EIS)	4.1.1 c), 4.4.1	EIS 120 < 200 m <sup>3</sup> /(h.m <sup>2</sup> )	Conforms
<ul> <li>mechanical stability (under E)</li> </ul>	4.1.1 d)	120 min	Conforms
<ul> <li>maintenance of cross-section (under E)</li> </ul>	4.1.1 e)	120 min	Conforms
- high operational temperature	4.1.1 f), 4.4.1	No performance determined	NPD
Durability			HFD
- of response delay	4.4.2.1	< 60 s	Conforms
<ul> <li>of operational reliability</li> </ul>	4.4.2.2	C 10 000, < 120 s	Conforms **)

<sup>\*)</sup> Detailed technical parametres and conditions of final classification according to EN 13501-4:2007+A1:2009 are stated in the Assessment Report of performance of the construction product No. P-1391-CPR-2015/0058 of 13<sup>th</sup> March 2015.

<sup>\*\*)</sup> On the request of producer was cycling test performed without load, therefore damper can change own position only before initiation of exhaust.





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