



PAVUS, a.s.
Notified Body No. 1391
Prosecká 412/74, 190 00 Praha 9 - Prosek
Decision No. 27/2013-CPR of 13th December 2013

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-2015/0057

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 certificate applies to the construction product:

Smoke control damper MSD

Technical parameters 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

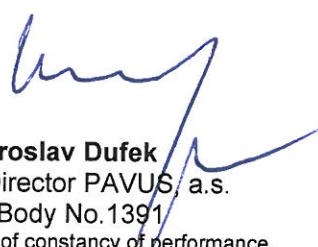
EN 12101- 8:2011

**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 13th 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construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.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 PAVUS, a.s.
Notified Body No.1391

Product parameters and assessing performances are stated on the 2nd side in Annex No.1 of the certificate of constancy of performance.

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
- Schischek
- Material versions: - galvanized sheet metal
- stainless sheet metal
- painted 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 *):

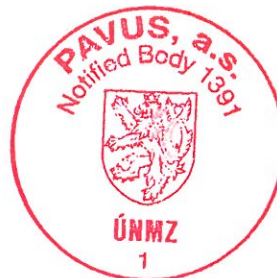
EI 120 (v_{ew}-h_{ow}-i↔o) S1500C₁₀₀₀₀ AAmulti

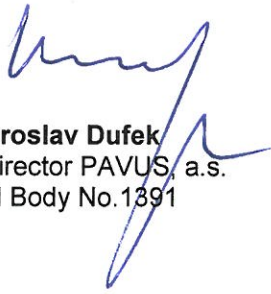
Assessing product performances

| 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 | | | |
| - integrity (E) | 4.1.1 a), 4.4.1 | E 120 < 360 m ³ /(h.m ²) | Conforms |
| - insulation (EI) | 4.1.1 b), 4.4.1 | EI 120 | Conforms |
| - smoke leakage (EIS) | 4.1.1 c), 4.4.1 | EIS 120 < 200 m ³ /(h.m ²) | Conforms |
| - mechanical stability (under E) | 4.1.1 d) | 120 min | Conforms |
| - maintenance of cross-section (under E) | 4.1.1 e) | 120 min | Conforms |
| - high operational temperature | 4.1.1 f), 4.4.1 | No performance determined | NPD |
| Durability | | | |
| - of response delay | 4.4.2.1 | < 60 s | Conforms |
| - of operational reliability | 4.4.2.2 | C 10 000, < 120 s | Conforms |

*) 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-2015/0057 of 13th March 2015.

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| MANDÍK a.s., Dobříšská 550, 267 24 Hostomice, Czech rep. 15 1391 – CPR - 2015/0057 |
| EN 12101-8 Smoke control damper type/model: Smoke control damper MSD |
| Classification EI 120 (v _{ew} -h _{ow} -i↔o) S1500C ₁₀₀₀₀ AAmulti |




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