PAVUS, a.s.
Notified Body No. 1391
Prosecká 412/74, 190 00 Praha 9 - Prosek
Decision No. 27/2013-CPR of 13. 12. 2013

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-0089/2014

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:

Fire damper FDMD

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:
Fire dampers are used in conjunction with partitions to maintain fire compartments and protect means of escape in case of fire in heating, ventilation and air conditioning (HVAC) systems in buildings, under methods of use and installation conditions stated in Certification report and related documentation. All fire dampers close automatically in response to raised temperatures indicating fire.

produced by or for:
MANDÍK, a.s.
Dobřišská 550, 267 24 Hostomice, Czech republic, IdNo. 26718405

and produced in the manufacturing plant:
MANDÍK, a.s.
Dobřišská 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 15650:2010

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 30th May 2013 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construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body. This Certificate replaces and canceles ES certificate of conformiity No. 1391-CPD-0092/2013 of 30th May 2013 issued by NB 1391.

In Prague 28th July 2014

PAVUS, a.s. Notified Body 1391 ÚNMZ 1

Ing. Jaroslav Dufek
Managing Director PAVUS, a.s.
Notified Body No.1391

Product parametres 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: min. diameter 100 mm, max. diameter 200 mm

Construction length: min. 250 mm, max. 500 mm

Starting devices and drives:
- fuse safety lock 72°C/95°C/104°C/147°C with closing spring
- pulse magnetic drive
- Bellimo - spring drive with starting device 72°C/95°C
- Gruner - spring drive with starting device 72°C/95°C
- Schischek - spring drive with starting device 72°C/95°C

All used marks of drives fulfil 10 000 cycles according to EN 15650.

Material versions:
- galvanized sheet metal,
- stainless sheet metal,
- painted sheet metal.

Leak tightness of the damper according to EN 1751:
- over blade class 3 (diameter 200 mm) and class 2 (other diameters 100 - 180 mm)
- over case min. class C

The classification according to EN 13501-3:2005+A1:2009:

EI 90 (ve ho i↔o) S
EI 120 (ve ho i↔o) S

Assessed properties of the product

Essential characteristics	Requirement clauses in EN 15650	Requirement	Conformity Assessment
Nominal activation conditions/sensitivity:	4.2.1.2	EN 15650, 4.2.1.2	**conforms**
– sensing element load bearing capacity	4.2.1.2.2	EN 15650, 5.2.5	**conforms**
– sensing element response temperature	4.2.1.2.3	EN 15650, 5.2.5	**conforms**
Response delay (response time): – closure time	4.2.1.3	EN 1366-2, 10.4.6	**conforms**
Operational reliability: – cycling	4.3.1, a)	The fire damper conforms to cycle test if 50 cycles are done prior to the fire test	**conforms**
Fire resistance			
– integrity	4.1.1, a)	E	**conforms**
– insulation	4.1.1, b)	EI	**conforms**
– smoke leakage	4.1.1, c)	ES/EIS	**conforms**
– mechanical stability (under E)	4.1.1, a)	-	**conforms**
– maintenance of the cross section (under E)	4.1.1, a)	-	**conforms**
Durability of response delay: – sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	EN 15650, 4.2.1.2	**conforms**
Durability of operational reliability: – open and closing cycle tests	4.3.3.2	EN 15650, Annex C.3.2	**conforms**
Resistance against corrosion	4.2.2 Annex B	Increased resistance against corrosion - Salt spray exposure test (EN 60068-2-52)	**conforms**

*) Detailed technical parametres and conditions of final classification according to EN 13501-3:2005+A1:2009 are stated in the Certification Report No. P-1391-CPR-0089/2014 of 28th July 2014.

The fire damper FDMD fulfils also all the prescribed requirements of the standard ÖNORM H 6025, see the Certification Report No. P-1391-CPR-0089/2014 of 28th July 2014.

Fire damper FDMD may be produced and placed on the market also with trade name BSK-D-90-R.

CE

1391

MANDÍK a.s.,

Dobříšská 550, 267 24 Hostomice, Czech rep.

14

1391 – CPR - 0089/2014

EN 15650

Fire damper

type/model: Fire damper FDMD

Classification
EI 90 (ve ho i↔o) S
EI 120 (ve ho i↔o) S

PAVUS, a.s. Notified Body 1391 ÚNMZ 1

Ing. Jaroslav Dufek
Managing Director PAVUS, a.s.
Notified Body No.1391

MANDÍK®

Declaración de Prestaciones

emitida según el Anexo III de la Directiva de la UE nº 305/2011

No. PM/FDMD/01/18/1

1. **Código de identificación único de tipo de producto:**
   FDMD
   (Se puede también producir o distribuir bajo los nombres comerciales: BSK-D-90-R)

2. **Uso previsto**
   Las compuertas cortafuego se usan junto con las particiones para mantener los compartimientos cortafuego y proteger medios de escape en caso de un incendio en sistemas de calefacción, ventilación y aire acondicionado (HVAC) en edificios bajo los métodos de uso y las condiciones de instalación indicadas en el informe de certificación y la documentación relacionada TPM 092/13.
   Las compuertas cortafuego sirven para eliminar la propagación de incendios y humos según EN 15560: 2010, están disponibles con resistencia al fuego EIS 90, EIS 120

3. **Fabricante:**
   MANDÍK, a.s., Dobříšská 550, 26724, Hostomice, Czech Republic
   VAT: CZ26718405, phone: +420 311 706 706, e-mail: mandik@mandik.cz, website: www.mandik.com

4. **Representante autorizado:**
   Irrelevante

5. **Sistema de evaluación y verificación de la constancia del producto de construcción:**
   Sistema 1

6a) **Norma armonizada:**
   EN 15650:2010
   Organismo notificado:
   PAVUS, a.s., Notified body no. 1391, Prosecká 412/74, 190 00 Praha 9, IVA: CZ60193174

6b) **Documento Europeo de Evaluación**
   Irrelevante

7. **Propiedades declaradas**

Características esenciales	Secciones de requerimientos de EN 15650:2010	Requerimiento
Condiciones nominales de activación/ sensibilidad	4.2.1.2	EN 15650, Sec. 4.2.1.2
- sensor de carga	4.2.1.2.2	EN 15650, Sec. 5.2.5
- sensor de respuesta térmica	4.2.1.2.3	EN 15650, Sec. 5.2.5
Retraso de respuesta (tiempo de respuesta): - tiempo de cierre	4.2.1.3	EN 1366-2, Sec. 10.4.6
Estabilidad de operación: - ciclos	4.3.1 , a)	La compuerta contrafuego está conforme a las pruebas cíclicas si 50 ciclos se hacen antes de la prueba de fuego
Resistencia al fuego		
- integridad	4.1.1 , a)	E
- aislamiento	4.1.1, b)	EI
- estanqueidad al humo	4.1.1, c)	ES/EIS
- estabilidad mecánica (debajo E)	4.1.1 , a)	-

- mantenimiento de sección transversal (debajo E)	4.1.1 , a)	-
Estabilidad del retraso de respuesta - respuesta del sensor a temperatura y carga	4.2.1.2.2 4.2.1.2.3	EN 15650, Sec. 4.2.1.2
Estabilidad de la confiabilidad operacional - pruebas cíclicas de abrir y cerrar	4.3.3.2	EN 15650, Anejo C.3.2
Resistencia a la corrosión	4.2.2 Anejo B	Resistencia elevada a la corrosión - Prueba de exposición al aerosol salino (EN 60068-2-52)

CE 1391
MANDÍK a.s., **Dobříšská 550, 267 24 Hostomice, Czech rep.** **14** **1391 – CPR - 0089/2014**
EN 15650 **Fire damper** **type/model: Fire damper FDMD**
Classification **EI 90 (ve ho i↔o) S** **EI 120 (ve ho i↔o) S**

8. **Documentación técnica particular o documentación técnica especificada:**
OS 1391 PAVUS, a.s. ha emitido el Certificado de la Constancia de las Prestaciones no. 1391-CPR-2015/0175, 8.10.2015.

El fabricante declara bajo su exclusiva responsabilidad, que el producto especificado anteriormente está en la conformidad con las propiedades declaradas.

Firmado por y en nombre de fabricante por:

En Hostomice, 28. de Junio 2018

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Mgr. Marcel Mandík
CEO, MANDÍK, a.s

MANDÍK
MANDÍK, a.s.
267 24 Hostomice, Dobříšská 550
www.mandik.cz

BUILDING RESEARCH INSTITUTE - CERTIFICATION COMPANY Ltd.

Authorized and Notified Body Certification Body for Products, Qualification, EPD and Quality Buildings Testing Laboratory

Certification Body No. 3009 for Management Systems accredited by CAI

CERTIFICATE

No.: 3009/108-17/SMJ-S2

MANDÍK, a.s.

Address: Dobřišská 550, 267 24 Hostomice; ID: 267 18 405

The organization has established and maintains the Quality management system fulfilling the requirements of

ISO 9001:2015

in conjunction with

ISO 3834-2:2005

Certified activities:

Production of air conditioning systems, fire protection dampers and valves, related fire protection elements, manufacture of air-conditioning, fire protection dampers and valves for special applications, production, installation and servicing of industrial heating, heat engineering and air-conditioning/condensing units.

Certified activities are applicable to workplace:
Dobřišská 550, 267 24 Hostomice

The validity of the Certificate is bound to the positive decision of surveillance audit.
Integral part of this Certificate is the Appendix No. 1 of 14.08.2017.

Date of issue:	14.08.2017
Validity until:	13.08.2020
Date of issue of the first Certificate:	31.07.2005
Print No.:	1

IAF

S 3009

Ing. Lada Pluhařová
Head of the Certification Body
for Management Systems

Konto: 17186

Výzkumný ústav pozemních staveb - Certifikační společnost, s.r.o. 102 21 Praha 10 - Hostivař, Pražská 810/16
IČO: 250 520 63 DIČ: CZ25052063 tel.: +420 271 751 148 Fax: +420 281 017 241 info@vups.cz www.vups.cz

BUILDING RESEARCH INSTITUTE - CERTIFICATION COMPANY Ltd.
Authorized and Notified Body Certification Body for Products, Qualification, EPD and Quality Buildings Testing Laboratory
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Appendix No. 1 to the Certificate

No. 3009/108-17/SMJ-S2

Scope delimitation

Product type:	Welded components of steel structures
Product standard:	EN 12101-8, EN 15650, ČSN EN 1020, ČSN EN 416-1, ČSN EN 13053+A1
Welding methods (in accordance with ČSN EN ISO 4063):	135, 141, 212
Parent materials (in accordance with TNI CEN ISO/TR 15608):	Group 1.1, 1.2, 8.1

Welding processes:	**Groups of parent materials:**
135	1.1, 1.2 (BW 1,4-3,9; FW 1,4-6,0) a (plug weld 2,1-6,0)
141	8.1 (BW 1,4-12,0; FW 1,4-16,0)
212	1.1 (t=1,5)

Responsible employees of welding coordinator:

Name and surname	**Qualification**	**Job appointment**	**Level according ČSN EN ISO 14731**
Ing. Tomáš Hála	IWE/CZ 11044	Welding coordinator	6.2 a)
Martin Šebek	IWT/CZ 16052	Representative of welding coordinator	6.2 b)

Date of issue: 14.08.2017
Print No.: 1

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Ing. Lada Pluhařová
Head of the Certification Body for Management Systems