

### PAVUS, a.s.

Authorized Body AO 216, Notified Body 1391 Prosecká 412/74, 190 00 Praha 9 - Prosek Authorization Decision No. 18/2011 of 18th October 2011

# **EC-CERTIFICATE OF CONFORMITY**

N° 1391-CPD-0193/2011

In compliance with the Directive 89/106/EEC of the Council of European Communities of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products, amended by the Directive 93/68/EEC of the Council of European Communities of 22 July 1993, it has been stated that the construction product:

## SMOKE AND HEAT CONTROL SYSTEMS NATURAL SMOKE AND HEAT EXHAUST VENTILATORS ACCORDING TO ČSN EN 12101-2:2004 TYPE/VERSION: OS RWA 1-2 SINGLE - WING FLAP FOR CONTINUOUS OR INDIVIDUAL ROOF LIGHTS

Essential technical characteristics of the product are included in Annex No 1, which is on the rear side of this EC-Certificate of Conformity

#### Product use in the construction:

Natural smoke and heat exhaust ventilators for smoke and heat control in construction works in case of fire

placed on the market by: SKYLIGHTEC s.r.o., Kubánské nám.1391/11, 100 00 Praha 10 - Vršovice, IC: 24665568

> and produced in the factory SKYLIGHTEC s.r.o., Albeř 109, 378 33 Nová Bystřice

is submitted by the manufacturer to a factory production control and to the further testing of samples taken at the factory in accordance with a prescribed manner and that the notified body

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has performed the initial type testing for the relevant characteristics of the product, the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

This certificate attests that all provisions concerning the attestation of conformity and the performances described in Annex ZA of the standard

#### ČSN EN 12101 - 2:2004

were applied and that the product fulfils all the prescribed requirements.

EC - Certificate of conformity was first issued on 18.6.2008.

This certificate replaces and cancels out Certificate N° 1391-CPD-0014/2010 /O issued on 16.7.2010.

This certificate remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the factory production control itself are not modified significantly.

An integral part of this EC-Certificate of Conformity is the Annex Nº 1 to the EC -Certificate of Conformity N° 1391-CPD-0193/2011 dated 19<sup>th</sup> January 2012 and Certification Report N° P - 1391-CPD-0193/2011 dated 19<sup>th</sup> January 2012.

Prague, 19th January 2012

Jaroslav Dufek

Managing Director PAVUS, a.s.- NO 1391

Essential characteristics of the certified product are given in Annex N° 1 of this Certificate.

# Annex N° 1 to EC-Certificate of Conformity N° 1391-CPD-0193/2011 dated 19<sup>th</sup> January 2011

Natural smoke and heat exhaust ventilator - Type/Version: OS RWA 1-2 Single-wing flap for continuous or individual roof lights

Essential requirement/ Characteristic	Standard, Regulation	Required/ Declared level	Found / Classification	Assessment of Conformity
Nominal activation conditions/ sensitivity – Initiation device	ČSN EN 12101-2: 2004, clause 4.1	Each ventilator shall be fitted one or more initiation devices	The ventilator is initiated by a thermal fuse, thermo-valve and CO <sub>2</sub> source, automatic detection signal or by push-button fire switch	Conforms
nominal activation conditions/ sensitivity – Opening mechanism	ČSN EN 12101-2: 2004, clause 4.2	Ventilator shall be provided with an opening mechanism with internal and/or external energy source	The ventilation system is equipped with a pneumatic opening mechanism Grasl PMAV xxxx BGx (according to size of flap)	Conforms
Response time	ČSN EN 12101- 2:2004, clause 7.1.2	Fire open position shall be achieved not later than 60 s after activation	Fire open position achieved in 60 s after activation	Conforms
Operational reliability – Functional reliability	ČSN EN 12101-2: 2004, clause 7.1, Annex C	10 000 cycles of commonly ventilation/ sequentially 1000 cycles to fire open position Re 1000	10 000 cycles of commonly ventilation/ sequentially 1000 cycles to fire open position Re 1000	Conforms
Operational reliability – Wind load	ČSN EN 12101-2: 2004, clause 7.4, Annex F	Max. WL value = 2000 (other WL values pursuant to relevant construction design)	Max. WL value = 2000 (other WL values pursuant to relevant construction design)	Conforms
Effectiveness of smoke/hot gas extraction/ aerodynamic free area	ČSN EN 12101- 2:2004, clause 6, Annex B	Discharge coefficient $C_v$ $A_a = A_v \times C_v$	Discharge coefficient values C <sub>v</sub> see Test Report N° 1368-CPD-P-095/2008-B	Conforms
Performance parameters under fire conditions	ČSN EN 12101-2: 2004, clause 7.5, Annex G	B <sub>300</sub> 30	B <sub>300</sub> 30	Conforms
Fire resistance – Mechanical stability	ČSN EN 12101-2: 2004, clause 7.5, Annex G	Ventilator shall open when exposed to heat and shall maintain the fire open position with cross-sectional area reduced by not more than 10%	After the test the cross-sectional area was reduced not more than 10%	Conforms
Opening ability in environmental conditions – Snow load	ČSN EN 12101-2: 2004, clause 7.2, Annex D	Max. SL value 1500 (other SL values pursuant to relevant construction design)	Max. SL value 1500 (other SL values pursuant to relevant construction design)	Conforms
Opening ability in environmental conditions – Low environmental temperature	ČSN EN 12101-2: 2004, clause 7.3, Annex E	T (-15)	T (-15)	Conforms
Reaction to fire	ČSN EN 12101-2: 2004, clause 7.5 ČSN EN 13501-1	A to F	Aluminium, no surface-treated: A1 Polycarbonate board: B-s1, d0 EPDM seal, surface-treated aluminium: F	Conforms

This Certificate is valid up to maximum damper dimensions of 2 300 mm x 2 080 mm

Jaroslav Dufek

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