



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-2015/0096

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.

Rectangular single compartment smoke extraction duct, type NORDsmoke

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:
Smoke control duct sections that are to be used in smoke control systems at 600 °C

produced by:
ETS NORD AS
Peterburi tee 53G, 11415 Tallinn, Estonia

and produced in the manufacturing plant:
ETS NORD AS
1. Aruküla tee 55, 75301 Jüri, Estonia
2. Peterburi tee 53G, 11415 Tallinn, Estonia

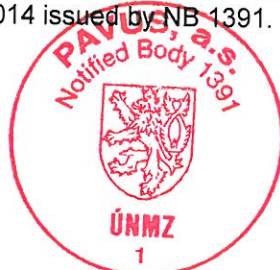
This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

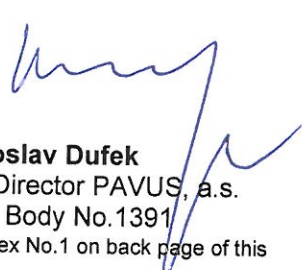
EN 12101- 7:2011

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 31st October 2014 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construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.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 cancels certificate of constancy of performance No. 1391-CPR-0165/2014 of 31th October 2014 issued by NB 1391.

In Prague 7th May 2015




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

Technical parameters of the product, end use application and essential characteristics are listed in Annex No.1 on back page of this certificate of constancy of performance.

Technical parameters of the product

Product	Rectangular single compartment smoke extraction duct
Trade name	NORDsmoke rectangular smoke control duct
Classification according to EN 13501-4:2007+A1:2009 *) (test according to EN 1366-9:2008)	E₆₀₀ 120 (v_e - h_o) S1500single
Form and dimensions	Duct sections are made from galvanized steel sheet, thickness 0,9 mm; The longitudinal seams in every corner are sealed by FireStop Heat Resistante Silicone PENOSIL Premium; The flanges are fixed to the segment by rivets (maximum distance 100 mm) and sealed by the same sealant; Segments of rectangular ducts are connected by flanges height 30 mm. Joints are sealed by the Fireproof Neutral Silicone PIROFOG (producer Olivé). Flanges of the rectangular duct are fastened together with M8 bolt steel clamps (maximum distance 200 mm between the clamps) and with M10 bolts in the duct corners. Dimensions of duct sections are up to maximum size (1250 × 1000) mm (width × height).

End use application

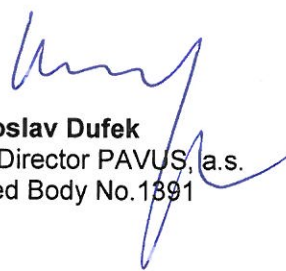
Intended use	Single compartment smoke control duct sections are used in smoke control systems at 600 °C
Max. underpressure	-1 500 Pa
Max. overpressure	+500 Pa
Penetration seals	The fire-stopping at the penetration through the supporting construction: mineral wool thickness 50 mm
Supporting construction	Standard rigid wall construction made of aerated concrete, thickness min. 150 mm Standard ceiling construction made of concrete thickness min. 150 mm

Essential characteristics

Essential characteristics	Requirement clauses in EN 12101-7	Mandated level and/or classes Findings	Conformity Assessment
Fire resistance			
- integrity (E)	4.1.2 a), 4.4.1	E ₆₀₀ - limit: 10 m ³ h ⁻¹ m ⁻² findings: horizontal = 4,59 m ³ h ⁻¹ m ⁻² , vertical = 0,44 m ³ h ⁻¹ m ⁻²	Conforms
- insulation	-	-	**)
- smoke leakage (ES)	4.1.2 b), 4.4.1	E ₆₀₀ S - limit: 5 m ³ h ⁻¹ m ⁻² findings: horizontal = 125 min, vertical = 135 min	Conforms
- mechanical stability (under E)	4.1.2 c)	125/135 minutes, no failure	Conforms
- maintenance of cross-section (under E)	4.1.2 d)	125/135 minutes, no failure	Conforms

*) Conditions of classification are stated in Fire Resistance Classification Reports No. PK4-01-14-003-E-0, issued by PAVUS, a.s. of 2014-10-14 and No. PK4-01-15-002-E-0, issued by PAVUS, a.s. of 2015-05-04.

***) Insulation classification is not required for single compartment smoke control duct sections


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