

**CERTIFIED TRANSLATION FROM POLISH**

*Katarzyna Kaczmarczyk, Certified Translator of the English Language no. TP/740/05  
Record no. 1229/11/2012 • Poznań, 2<sup>nd</sup> November 2012 • Page 1 of 3*

**INSTITUTE OF CONSTRUCTION TECHNOLOGY  
DEPARTMENT OF FIRE PERFORMANCE STUDIES**

RESEARCH LABORATORIES COMPLEX  
accredited by the Polish Center for Accreditation  
accreditation certificate no. AB 023  
FIRE PERFORMANCE LABORATORY (LP)

**CLASSIFICATION REPORT FOR FIRE PERFORMANCE  
as per PN-EN 13501-1+A1:2010**

Contract no.: 0982/11/Z00NPU

<b>Ordering party:</b>	ALNOR Systemy Wentylacji Sp. z o.o. ul. Zwierzyniecka 8b, 00-719 Warsaw, Poland
<b>Prepared by:</b>	Department of Fire Performance Studies of the Institute of Construction Technology ul. Filtrowa 1, 00-611 Warsaw, Poland
<b>Product name:</b>	Flexible ventilation duct: ALUDUCT AD-L
<b>Classification report no:</b>	0982.4/11/Z00NPU
<b>Revision no. 1</b>	Copy 2
<b>Issue date:</b>	2011-06-14

The present classification report consists of four pages in total and may be used or reproduced only if complete.

**1. Introduction**

The present classification report specifies the fire performance classification for the ALUDUCT AD-L flexible duct, according to the procedures defined in PN-EN 13501-1+A1:2010.

**2. Detailed information about the product subject to classification**

**2.1 General terms**

The product is described as a flexible ventilation duct to be used indoors.

**2.2 Product description**

See below for product description.

Product description:  
Flexible ventilation duct ALUDUCT AD-L  
Construction of ALUDUCT AD-L (from inside):  
The duct consists of two aluminum layers and a 0.045 mm polyester layer with a sealed flexible wire spiral.

*I, Katarzyna Kaczmarczyk, Certified Translator and Interpreter of the English Language, entered onto the list of certified translators and interpreters kept by the Minister of Justice under no. TP/740/05, hereby approve conformity of the present translation with the original document in the Polish language.*



**CERTIFIED TRANSLATION FROM POLISH**

*Katarzyna Kaczmarczyk, Certified Translator of the English Language no. TP/740/05  
Record no. 1229/11/2012 • Poznań, 2<sup>nd</sup> November 2012 • Page 2 of 3*

ALUDUCT AD-L flexible ducts are manufactured by AFS IVEDIK ORGANIZE SANAYI BÖLGESI 1468, Cadde No: 153 Ostim/Ankara Turkey.

**3. Test results and test reports which are the grounds for the classification**

**3.1 Test reports**

Name of Laboratory	Ordering party	Test report no.	Testing method
Fire Performance Laboratory of the Institute of Construction Technology	ALNOR Systemy Wentylacji Sp. z o.o.	LP09-0982/11/Z00NPU	PN-EN ISO 11925-2
		LP05-0982/11/Z00NPU	PN-EN 13823
		LP06-0982/11/Z00NPU	PN-EN 13823

**3.2 Test results**

Testing method	Parameter	Number of tests	Results	
			Continuous parameter - average value (m)	Conformity with parameter
PN-EN ISO 11925-2 Fire performance on edge and surface Exposure time 30 s (ALUDUCT AD-L flexible ventilation duct with nominal diameter of 200 mm)	Flame propagation $F_s \leq 150$ mm	6	(-)	Y
	Burning drops/particles		(-)	N
PN-EN 13823 (ALUDUCT AD-L flexible ventilation duct with nominal diameter of 200 mm)	FIGRA <sub>0.2MJ</sub>	3	1854.2	(-)
	FIGRA <sub>0.4MJ</sub>		1798.3	(-)
	LFS < edge		(-)	Y
	THR <sub>600s</sub> [MJ]		1.9	(-)
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		549.8	(-)
	TSP <sub>600s</sub> [m <sup>2</sup> ]		48.9	(-)
	Burning drops/particles		(-)	N
PN-EN 13823 (ALUDUCT AD-L flexible ventilation duct with nominal diameter of 500 mm)	FIGRA <sub>0.2MJ</sub>	3	1509.6	(-)
	FIGRA <sub>0.4MJ</sub>		1311.9	(-)
	LFS < edge		(-)	Y
	THR <sub>600s</sub> [MJ]		2.3	(-)
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		182.9	(-)
	TSP <sub>600s</sub> [m <sup>2</sup> ]		36.8	(-)
	Burning drops/particles		(-)	N

(-): not applicable, Y: YES, N: NO

**4. Classification and its scope of application**

**4.1 Classification reference**

Classification was specified as per PN-EN 13501 -1+A1:2010.

*I, Katarzyna Kaczmarczyk, Certified Translator and Interpreter of the English Language, entered onto the list of certified translators and interpreters kept by the Minister of Justice under no. TP/740/05, hereby approve conformity of the present translation with the original document in the Polish language.*



## CERTIFIED TRANSLATION FROM POLISH

Katarzyna Kaczmarczyk, Certified Translator of the English Language no. TP/740/05  
Record no. 1229/11/2012 • Poznań, 2<sup>nd</sup> November 2012 • Page 3 of 3

### 4.2 Classification

The product in question, ALUDUCT AD-L flexible ventilation duct, with regards to its fire performance, has received the following classification rating:

**D<sub>L</sub>**

With regards to smoke emission, the product has received an additional rating:

**s2**

With regards to the generation of burning drops/particles, the product received an additional classification:

**d0**

The classification format in respect of the fire performance of linear products for thermal insulation of ducts is as follows:

Fire performance		Smoke emission				Burning drops	
<b>D<sub>L</sub></b>	-	<b>s</b>	<b>2</b>	,	<b>d</b>	<b>0</b>	

i.e.: **D<sub>L</sub>-s2,d0**

**Fire performance classification: D<sub>L</sub>-s2,d0**

### 4.3 Scope of application

The present classification applies to the following product parameters:

- Flexible ventilation duct as described in point 2.2 of the present classification.
- Flexible ventilation duct as described in point 2.2 of the present classification, fixed to ground beams and other items with fire reaction class A1 or A2.

### 5 Limitations

The classification once granted remains valid until:

- testing methodology changes,
- manufacturing standard or product technical approval is changed,
- construction and material changes do not exceed the scope of application as specified in point 4.3.

The present classification report was issued in 2 copies. Certified copies of the report may be issued by the Department of Fire Performance Studies of the Institute of Construction Technology on exclusive request of the report holder.

This classification report does not in any way constitute product approval or certification.

Signed by:  
mgr inż. Bartłomiej Papis  
[illegible signature]

dr inż. Andrzej Kolbrecki  
[illegible signature]

Approved by:  
dr Andrzej Borowy [illegible signature]  
Manager of Department of Fire Performance  
Studies

FIRE PERFORMANCE LABORATORY  
UL. KSAWERÓW 21, 02-656 WARSAW,  
POLAND  
tel. +48 22 8533427, +48 22 8482307  
fax+48 22 8472311, e-mail: fire@itb.pl

member of  
INSTITUTE OF CONSTRUCTION  
TECHNOLOGY  
www.itb.pl

Laboratory Office in Katowice  
Al. Korfantego 191, 40-153 Katowice  
tel. +48 32 7302352,  
fax +48 32 7302949  
e-mail: fire@itb.katowice.pl

I, Katarzyna Kaczmarczyk, Certified Translator and Interpreter of the English Language, entered onto the list of certified translators and interpreters kept by the Minister of Justice under no. TP/740/05, hereby approve conformity of the present translation with the original document in the Polish language.

