

Type Approval and decision on production control 0103/07

ALNOR Circular Spiral Duct Work System

Holder/Issued to

ALNOR Systemy Wentylacji Sp. z o. o.

UI. Zwierzyniecka 8B, 00-719 Warzawa, Poland

Product description

ALNOR circular spiral ducts and duct work elements manufactured from galvanized sheet steel, stainless steel or aluminium with sealings by EPDM-rubber, as follows:

- Galvanized sheet steel with designation DX51D + Z275 according to EN 10346:2015. Coating Z275 meets corrosion class C3 according to AMA VVS & Kyla 22 and EN ISO 12944-2:2017.
- Stainless steel sheet with designation EN 1.4301 (SS 2333, AISI 304) or EN 1.4404 (SS2348, AISI 316L) according to EN 1008-2:2014. The material meets corrosion class C4 and C5 respectively, according to AMA VVS & Kyla 22 and EN ISO 12944-2:2017.
- Aluminium sheet with designation EN AW-1050A H24 (SS 4007) according to EN 485-2:2016. The material meets corrosion class C4 according to AMA VVS & Kyla 22 and EN ISO 12944-2:2017.

The Swedish technical approval includes dimensions 80 - 630/1250 mm according to dimensional standard SS-EN 1506:2007 and as below.

Diameter and wall thickness for ducts made of galvanized steel:

Ducts (diameter, wall thickness)	Fittings (diameter, wall thickness)
Ø 80-315 mm, t ≥ 0,4 mm Ø 355-500 mm, t ≥ 0,5 mm Ø 560-630 mm, t ≥ 0,6 mm Ø 710-800 mm, t ≥ 0,7 mm Ø 900-1250 mm, t ≥ 0,9 mm	Ø 80-500 mm, t ≥ 0,5 mm Ø 560-630 mm, t ≥ 0,6 mm Ø 710-900 mm, t ≥ 0,7 mm Ø 1000-1250 mm, t ≥ 0,9 mm

Diameter and wall thickness for ducts made of stainless steel:

Ducts (diameter, wall thickness)	Fittings (diameter, wall thickness)	
ø 80-630 mm, t ≥ 0,5 mm	ø 80-630 mm, t ≥ 0,5 mm	
ø 700-1250 mm, t ≥ 0,7 mm	ø 710-1250 mm, t ≥ 0,7 mm	

Diameter and wall thickness for ducts made of aluminium:

Ducts (diameter, wall thickness)	Fittings (diameter, wall thickness)
ø 80-630 mm, t ≥ 0,6 mm	ø 80-630 mm, t ≥ 0,8 mm

Supports for ductwork: Maximum distance between supports shall be 2000 mm and ducts shall be provided with support maximum 500 mm from each joint.

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Intended use

Distribution of air with demand for air tightness class D according to EN 12237:2003, in buildings.

Trade name

SPIRAL® system

Approval

The products satisfy the requirements set forth in chapter 8, 4 § 2 and 3 PBL, in respect to and under conditions stated in this type approval, and are therefore approved in accordance with the provisions of the following sections of Boverket Building Regulations (BBR) and Boverket mandatory provisions on application of the European construction standards (Eurocodes), (EKS): both issued by the National Board of Housing, Building and Planning.

Air Treatment Installation, general*	5:526
Materials	6:11
Microorganisms	6:24
Ventilation	6:25
Installations	6:254
Tightness**	6:255

^{*} Material class A2-s1, d0. Sealings has no requirement (class F).

Associated documents

Assembly instructions dated 2012
Assembly instruction drawing dated 2012-06-11

Control

The factory production control (FPC) is monitored by an independent inspection body. Control plan: Ref no. 210-07-0129 dated 2007-06-05, Inspection body: RISE

When the building proprietor performs inspection at the building site, markings shall be checked to ensure that the correct products have been supplied and that they are used in accordance with the conditions in this type approval and associated documents. Further the product shall be accompanied by a manufacturer's assurance, certifying that the product has been manufactured in accordance with the documents on which this type approval is based.

Manufacturing place

Production control includes the following place:

ALNOR Systemy Wntylacji Sp. z o. o., Aleja Krakowska 10, 05-552 Wola Mrokowska, Poland, code = 77

Marking

The products are to be marked at the factory. The marking consists of a label on every product supplied and includes:

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^{**} Ducts and duct components fulfills tightness class D according to EN 12237:2003 and AMA VVS & Kyla 22, figure AMA Q/1.



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Basis for approval

Test reports 1157685-01B and 1157685-01C and audit report 1157685-01A from RISE.

Comments

The products are tested according to EN 12237 with the headline: "Ventilation for buildings – Ductwork – Strength and leakage of circular sheet metal ducts". The duct system fulfills tightness class D at 2000 Pa overpressure and 750 Pa negative pressure.

Associated documents shall accompany the product or by other means be available to users of the product.

This type approval supersedes the previous type approval with the same number dated 2018-02-19.

Validity

Valid through 2028-02-09.

The validity of this type approval can be verified at RISE homepage.

The validity of this type approval expires when the type approved product with the intended use according to this type approval shall be CE-marked according to the Construction Products Regulation (EU) 305/2011.

Stefan Coric

This is a translation from the Swedish original document. In the event of any dispute as to its content, the Swedish original shall take precedence.