

## Type Approval and decision on production control C901039

### Biltema's circular ventilation duct system

#### Holder/Issued to

### Biltema Nordic Services AB

Garnisonsgatan 26, 2 tr, SE-254 66 Helsingborg, Sweden

#### **Product description**

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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Box 857, 501 15 Borås







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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

Biltema's circular ventilation duct system

#### **Approval**

The product satisfies 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

<sup>\*</sup> Material class A2-s1, d0. Sealings has no requirement (class F).

#### **Associated documents**

Assembly instruction Biltema Ventilation System 100 & 125 mm, dated 2024-02-28 Assembly instruction Biltema Ventilation System 80-1250 mm, dated 2024-02-28

#### Control

The factory production control (FPC) is monitored by an independent inspection body. Control plan: According to ref no. 210-09-0056 dated 2024-02-20, 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 places

Production control includes the following places:

Biltema Nordic Services AB, Garnisonsgatan 26, 254 66 Helsingborg, Sverige and manufacturing plant 63036.

<sup>\*\*</sup> 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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#### Marking

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

Holder Biltema
Manufacturing place/Factory code 63036
Article number no.
Consecutive manufacture no./date of production no./date
Type approval number C901039
Boverket's registered trade mark
RISE Accreditation number 1002
Inspection body RISE

#### **Basis for approval**

Test reports 1157685-01B and 1157685-01C and inspection 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.

#### **Validity**

Valid through 2029-03-09.

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.