

Technical specifications **Aerowing**

General

- constant and independent air throw
- minimum risk of freezing
- separate components to save 30% of transport volume
- very easy to assemble
- long service life due to the use of stainless steel and plastic materials
- perfect in combination with other Stienen BE equipment, such as the EGM winch motors and the PL-9200 management computer

Available in 3 versions

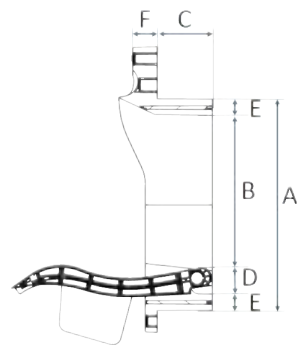
- AW-0: no horizontal connecting piece
- AW-1: 1 horizontal connecting piece
- AW-2: 2 horizontal connecting pieces

Options

- can be expanded vertically using 1 or more connecting piece(s)
- can be expanded modularly to create a tunnel inlet
- spring opening and spring closing
- 30mm insulation - lowers the heat transfer by a factor of 70
- available with a plastic grille
- available with a pulley
- available with a rod guide



front view dimensions	mm
A	520
B	977
C	345
D	287
E	280
F	840



side view dimensions	mm
A	387
B	280
C	100
D	47
E	30
F	45



EGM winch motors

The EGM motors have been specially developed to control air inlet systems in intensive livestock buildings. The EGMs are fitted with robust brushless 24V motors with a tractive force of 100 and 250kg respectively. As standard, the EGM series is supplied with a cable drum and it is also available with a 0-10V control signal or potentiometer feedback.

Capacity in m³/h per house width based on two air inlet zones

House width	12 m	16 m	20 m	25 m	30 m	35 m
Throw [m]	6	8	10	12,5	15	17,5
Pressure drop [Pa]	10	13	16	20	24	28

Type	(cut-out dimensions wxh*)						
AW-01SOX	(620 x 392 mm)	1600	1800	2000	2200	2400	2600
AW-11SOX	(907 x 392 mm)	2400	2700	3000	3400	3700	4000
AW-21SOX	(1194 x 392 mm)	3200	3600	4000	4500	5000	5400
AW-02SOX	(620 x 757 mm)	3100	3600	4000	4400	4900	5300
AW-12SOX	(907 x 757 mm)	4800	5400	6000	6700	7400	8000
AW-22SOX	(1194 x 757 mm)	6400	7300	8100	9100	9900	10700

* A width tolerance of 7 mm and a height tolerance of 5 mm have been taken into consideration for the cut-out dimensions. Stienen BE can supply frames upon request to facilitate integration.

A separate leaflet with more information on the tunnel inlet will soon become available - No rights can be derived from this leaflet.



Aerowing
Air inlet with
constant and independent air throw

- Aerodynamic design
- Constant 22-degree air throw, even at minimum ventilation
- Minimum risk of freezing
- Very easy to assemble
- Can be expanded modularly to create tunnel inlets
- Easy to control using Stienen equipment





Accurate and constant ventilation

The secret of a healthy climate is to provide your animals with the right volume of fresh air at the right speed in the right place. Your animals don't care how the air leaves the house. What matters to them is how it comes in!

The primary requirement for a healthy climate is a good air distribution. The temperature in the house should remain constant and draughts avoided. Sufficient air exchange is necessary to remove CO₂, ammonia and dust to keep your animals healthy.

Stienen BE has developed the AeroWing to optimise the distribution of the air throughout your poultry house under all conditions.

The AeroWing ensures a constant air movement, keeping your animals healthy and optimising their performance!

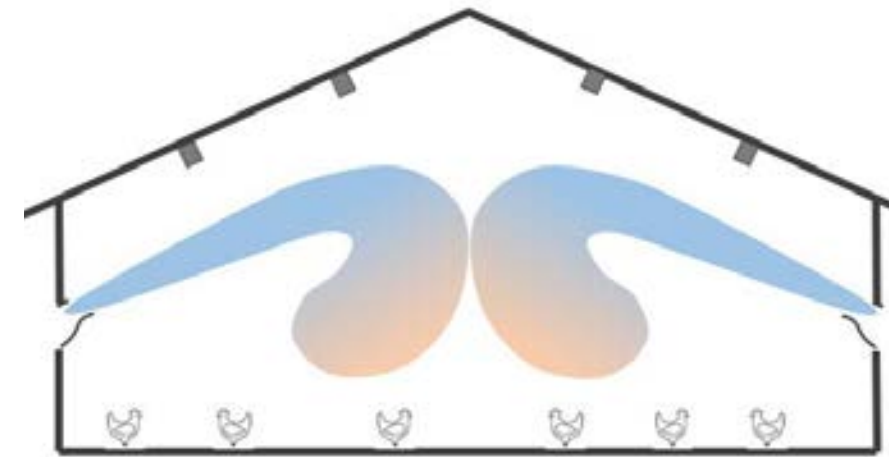
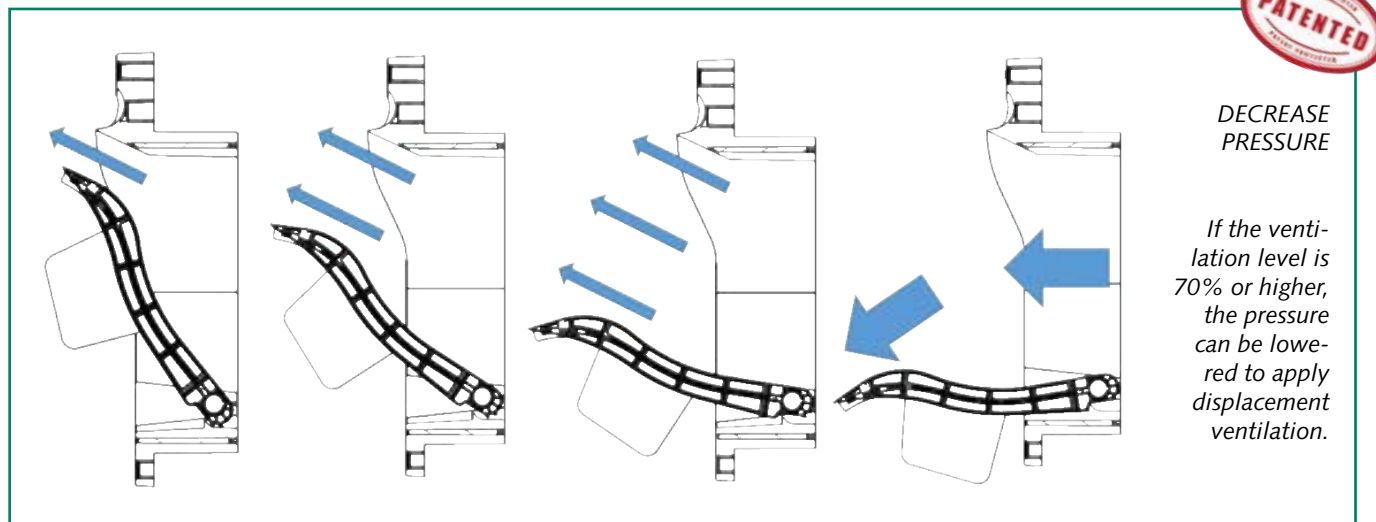


Due to its special design, the AeroWing air inlet offers the following unique benefits:

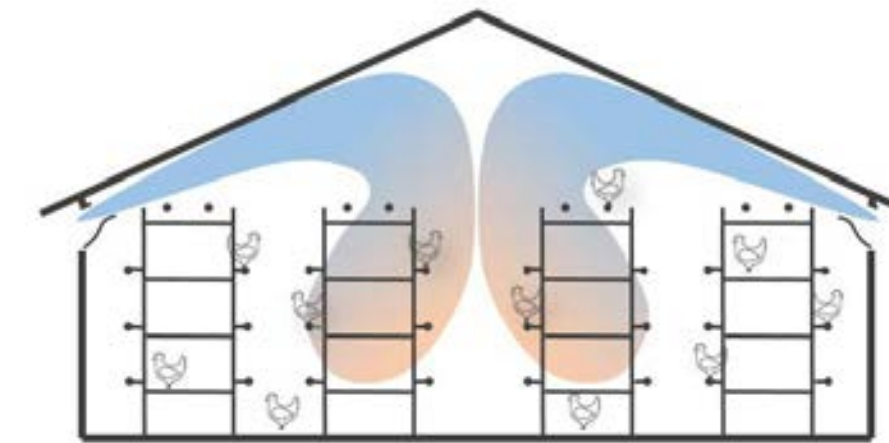
1. constant and independent incoming air throw
2. minimum risk of freezing

1. Constant and independent incoming air throw

The aerodynamic design of the AeroWing gives the incoming air a 22-degree angle. This creates a pre-defined air throw path, enabling any kind of ventilation, regardless of the roof structure. A constant air throw is even guaranteed at minimum ventilation.



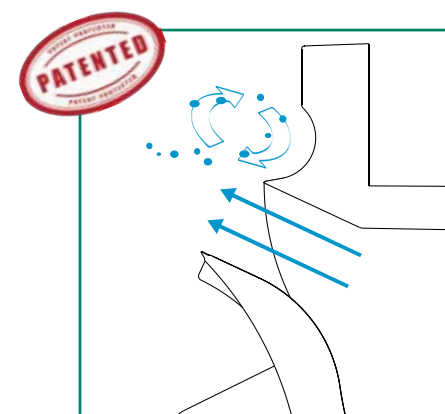
For floor housing, the AeroWing can be installed at a low height, since the air throw is independent of the roof slope. An additional advantage of this is that obstacles at roof height, such as roof trusses, lighting or winch-suspended feed and water lines, do not affect the air distribution.



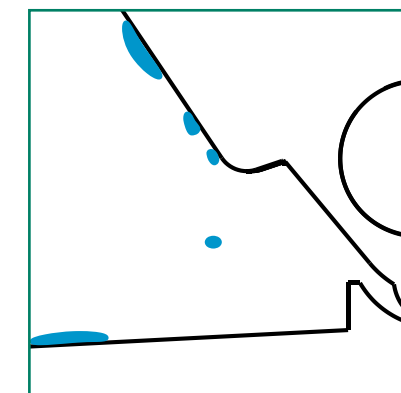
For aviary or cage housing systems, the AeroWing can be placed high up to ensure ventilation between the roof and the housing system.

2. Minimal risk of freezing

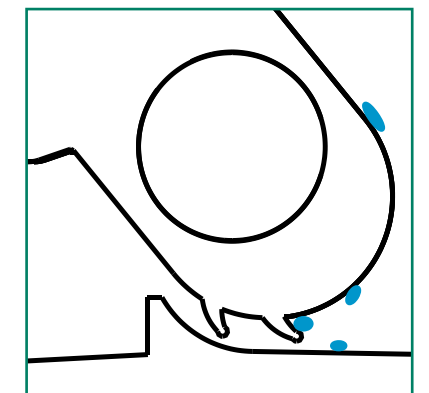
Cold incoming air cools the hot and moist air in the house, causing condensation. This condensate may cause moving parts to freeze. The AeroWing avoids this problem in three ways:



The air inlet uses the Venturi effect to draw in the air inside the house along with the incoming air. The round opening keeps the air in the house moving to prevent condensate from forming on the valve.



The blunt corner on the inside of the valve and the slanted edge of the lower corner sections cause the condensate to run off the moving parts.



Two rubber strips seal the lower side of the valve to prevent the condensate from dripping into the moving parts and air from leaking away under the valve.