STIENEN B



- Robust central operation
- Aerodynamic design
- Constant air throw over the entire ventilation range
- Minimal risk of freezing
- Very easy to assemle
- 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, keeping it moving evenly all the time. The temperature in the house should remain constant and draughts should be avoided. Sufficient air exchange is necessary to remove CO_2 , 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.



Inlets for tunnel ventilation

Tunnel ventilation can be used as additional ventilation during extreme warm days. The inlets for tunnel ventilation can be used alongside the conventional AeroWing. This should provide an additional cooling effect by taking the air with a higher speed over the animals.

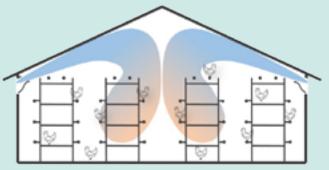


AeroWing mounting position

The mounting position of the AeroWing depends on the type of housing. The example below shows two poultry houses with different housing systems: floor housing and aviary or cage housing.



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.

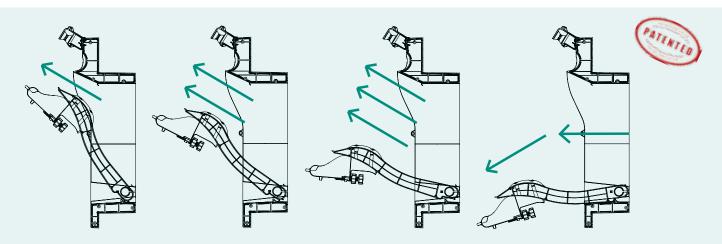


For aviary or cage housing systems, the AeroWing can be placed high up to ensure ventilation between the roof and the housing system.

AeroWing unique benefits

1. Constant and independent air throw

The aerodynamic design of the AeroWing gives the incoming air a 22-degree angle, resulting in an air throw path which is always known and enables any kind of ventilation, regardless of the roof structure. A constant air throw is even guaranteed at minimum ventilation.

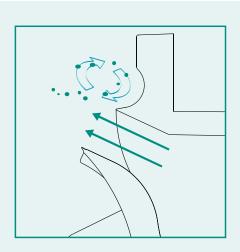


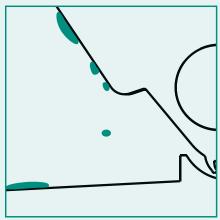
LOWERING PRESSURE DROP

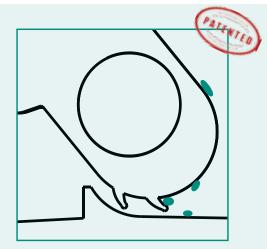
If the ventilation level is 70% or higher, the pressure can be lowered to apply displacement ventilation.

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 flap to prevent the condensate from dripping into the moving parts and the air from leaking away under the valve.



In our video channel you will find an animation video of the AeroWing.

LDA-200 and EGM winch motor

To control air inlet systems in intensive livestock buildings Stienen BE has developed the LDA-200 and the EGM winch motor

LDA-200: robust brushless 24V motor with a tensile force of twice 1000N. Thanks to the direct connection with pull cables, only a fine adjustment will be necessary. Any risk of expansion of the pull cables is minimized by pulling in two directions. The LDA-200 motor is equipped with a stainless steel rack and pinion drive system. Moreover, the LDA-200 motor can be set without any use of tools and without opening it.

EGM winch motor: robust brushless 24V motor with a tensile force of 100 resp. 250 kg. As standard, the EGM series is supplied with a cable drum and is available with a 0-10V control signal or potentiometer feedback.





Technical spezifications

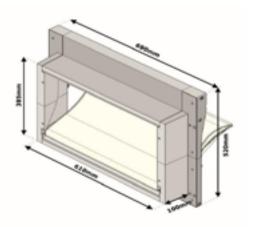
General

- Constant and independent air throw
- Minimal risk of freezing
- Supplied as a self-assembly kit which saves 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

Options

- Can be expanded vertically using 1 or more connecting piece(s)
- Spring opening
- Available with a plastic grille
- Available with a rod guide

Dimensions AW1-16



Matrix

Туре	Layers	Cut-out (mm) *		Rear view (mm)		Front view (mm)		Air flow (m ³ /h)				Force
		Width	Height	Width	Height	Width	Height	10 Pa	20 Pa	30 Pa	40 Pa	Kg
AW1-16 C	1	617	390	610	385	690	520	1,600	2,200	2,700	3,100	5
AW1-24 C	1	902	390	895	385	975	520	2,400	3,400	4,100	4,800	6
AW1-32 C **	1	1187	390	1180	385	1260	520	3,200	4,500	5,500	6,400	7
TAW2-48	2	902	745	895	740	975	875	4,800	6,700	8,300	9,500	12
TAW2-64	2	1187	745	1180	740	1260	875	6,400	9,100	11,100	12,800	14
TAW3-72	3	902	1100	895	1095	975	1230	7,200	10,100	12,400	14,300	18
TAW3-96	3	1187	1100	1180	1095	1260	1230	9,600	13,600	16,600	19,200	21
TAW3-120	3	1472	1100	1465	1095	1545	1230	12,000	17,000	20,900	24,100	24
TAW4-95	4	902	1455	895	1450	975	1585	9,500	13,500	16,500	19,100	24
TAW4-128	4	1187	1455	1180	1450	1260	1585	12,800	18,100	22,200	25,600	28
TAW4-161	4	1472	1455	1465	1450	1545	1585	16,100	22,700	27,800	32,100	32
TAW5-119	5	902	1810	895	1805	975	1940	11,900	16,900	20,700	23,900	30
TAW5-160	5	1187	1810	1180	1805	1260	1940	16,000	22,600	27,700	32,000	35
TAW5-201	5	1472	1810	1465	1805	1545	1940	20,100	28,400	34,800	40,200	40

^{*} With the recess dimensions any tolerance variations in width or height have been taken into account.

Stienen BE Agri Automation

Stienen BE is a leading family company (1977) which has strong roots in the livestock farming. By nature we are very close to the farmer. We are a global supplier of innovative automation solutions for poultry and pig farms. Climate solutions, automation systems, management software and peripheral equipment are developed and produced in-house.

^{**} As standard, the AW1-32 C has been equipped with 2 brackets.