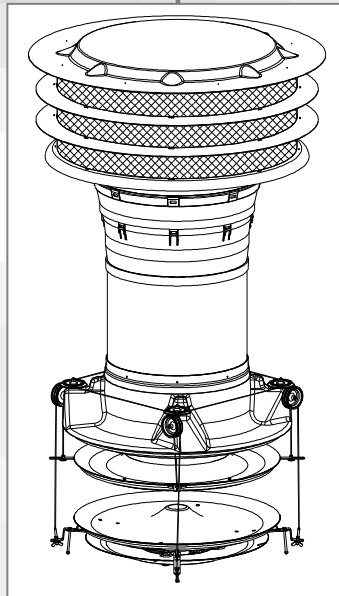


DA 50-650

Technical Info



1 Product description

The DA 50 Air Supply Unit is an air inlet, which combines high output with low air velocity in the area occupied by the birds.

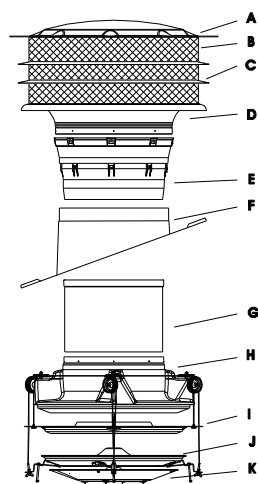
DA 50-650 performs up to 12,250 m³/h at 40 Pa negative pressure.
The high output is obtained without the use of a fan.

DA 50 has a parallel motion system, which ensures that the air supply unit opens uniformly all the way around. This ensures a uniform air distribution in the entire house.

The 100 % stepless control ensures that the system can be adjusted to the required air jet range during the concerned period of the year. Thus, it is possible always to make a combination of negative pressure and opening, which provides the required relation between output and air velocity.

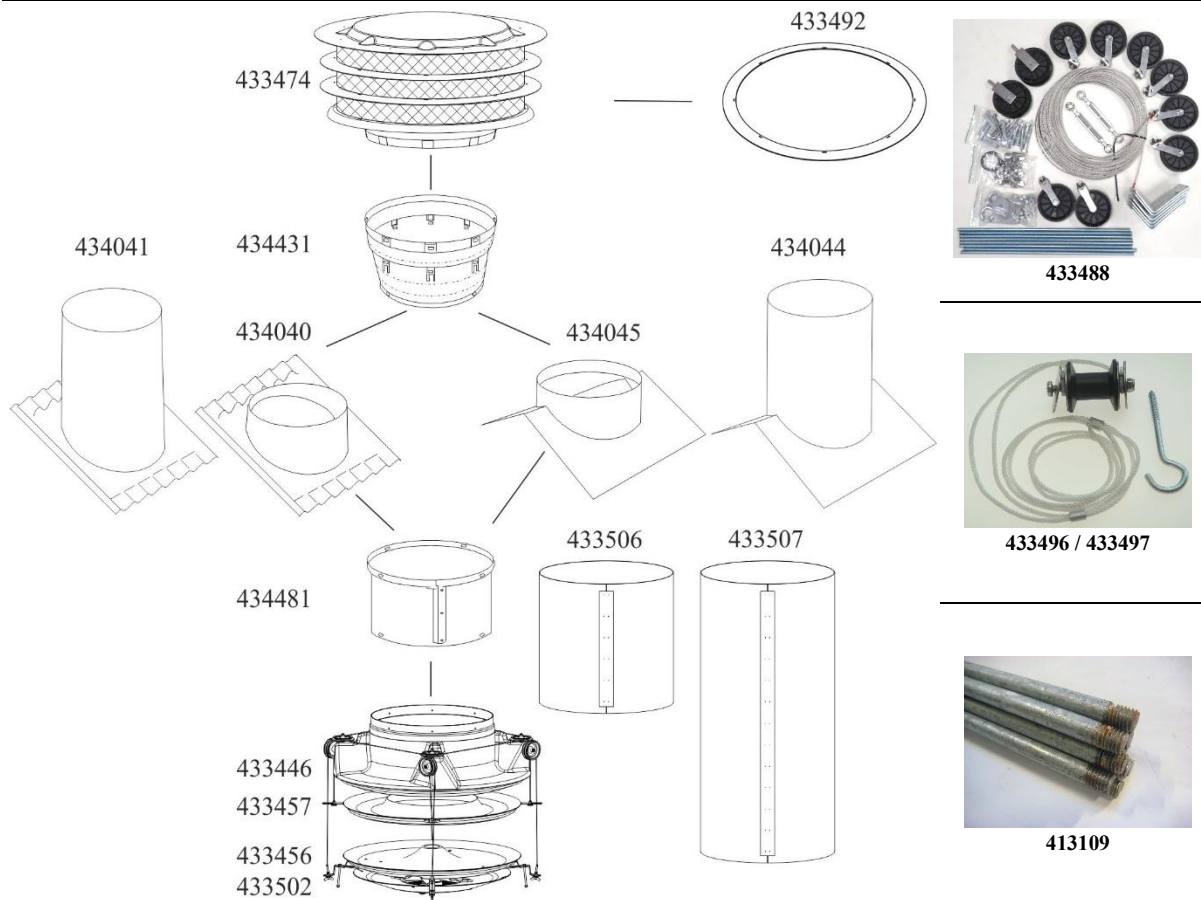
DA 50 is cast in double shell fibreglass for better insulation.

DA 50-650



A	DA 50-650 Roof cap
B	DA 50-650 Net
C	DA 50-650 Rain screen
D	DA 50-650 Bell mouth
E	DA 600 Roof duct
F	DA 600 Roof sheet
G	DA 600 Duct
H	DA 50-650 Funnel tube complete
I	DA 50-650 Intermediate plate
J	DA 50-650 Bottom plate
K	DA 50-650 Recirculation fan

2 Product survey DA 50-650



Gray	Workpiece	Black
433474	DA 50-650 Roof cap complete	433574
433492	DA 50-650 Rain screen for roof cap	433592
434431	DA 600 Roof duct	434432
434041	DA 600 Roof sheet, side, long	434241
434040	DA 600 Roof sheet, side	434240
434045	DA 600 Roof sheet, ridge	434245
434044	DA 600 Roof sheet, ridge, long	434244
433493	Roof cloth neoprene 1.9 x 1.7m	433493
434481	DA 600 Duct 500 mm	434482
433506	DA 50-650 Insulating cover 750 mm	433506
433507	DA 50-650 Insulating cover 1500 mm	433507
433446	DA 50-650 Funnel tube complete	433546
433457	DA 50-650 Intermediate plate 1	433557
433456	DA 50-650 Bottom plate	433556
433502	DA 50-650 Recirculation fan	433504
433488	DA 50 mounting set decentral. winch motor	433488
433496	Pulley suspen. f. pull rod 0.3m -ceiling	433496
433497	Pulley suspen. f. pull rod 1.5m -ceiling	433497
413109	Pull rod M8x5500mm galv incl. sleeve	413109


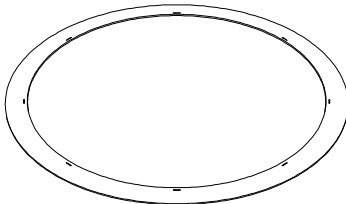


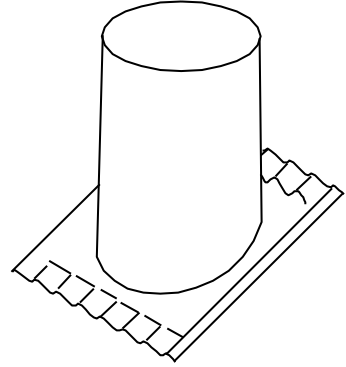
Figure	Description
	<p>433474 DA 50-650 Roof cap complete, gray 433574 DA 50-650 Roof cap complete, black</p> <p>Used for air intake above the roof.</p> <p>A rain screen is mounted on the net to resist water. The top of the bell mouth is shaped in such a way that water running down the net will always be led to the roof.</p> <p>Bell mouth and roof cap are made of weatherproof fibreglass. The net is hot-galvanized and has a mesh width of 10 × 25 mm and is 350 mm high.</p>
	<p>433492 DA 50-650 Rain screen for roof cap, gray 433592 DA 50-650 Rain screen for roof cap, black</p> <p>DA 50 is delivered as standard with two rain screens on the roof cap.</p> <p>An extra rain screen can be bought in cases when further reduction of penetrating rainwater and snow is required.</p>
	<p>434431 DA 600 roof duct gray 434432 DA 600 roof duct black</p> <p>Must always be used when mounting through a fibreglass roof sheet, and is always used when mounting through a ceiling where the air is drawn from the garret.</p>
	<p>434040 DA 600 Roof sheet, side, gray 434240 DA 600 Roof sheet, side, black</p> <p>Standard roof sheet, plain, or one of the many standard roof profiles.</p> <p>The labyrinth packing between the roof duct and the roof sheet ensures watertightness in the whole service life of the construction without the use of silicone, rubber edges or plastic cloth.</p> <p>CANNOT hold the load of the DA 50 pull, so if a unit is hanging freely, an extra anchoring in the roof construction, a supplementary wire or the like must be made.</p>
	<p>434041 DA 600 Roof sheet, side, long, gray 434241 DA 600 Roof sheet, side, long, black</p> <p>Long standard roof sheet, plain, or one of the many standard roof profiles.</p> <p>Is only used in very special cases when the units are placed rather low on a roof side and there are bad wind conditions, or alternatively in areas where heavy snowfalls may occur.</p> <p>If the building is exposed to wind, the roof sheet should be supported by bracing wires, and remember support of the roof sheet by means of a couple of laths so that they can absorb vertical load.</p>

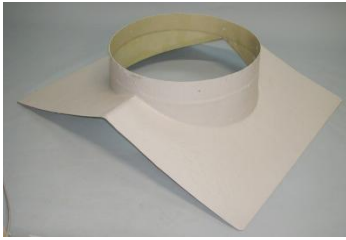
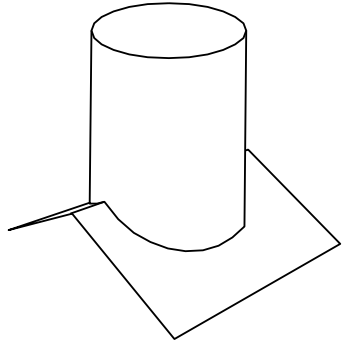


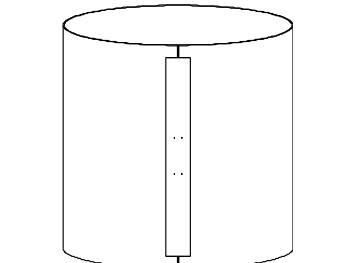


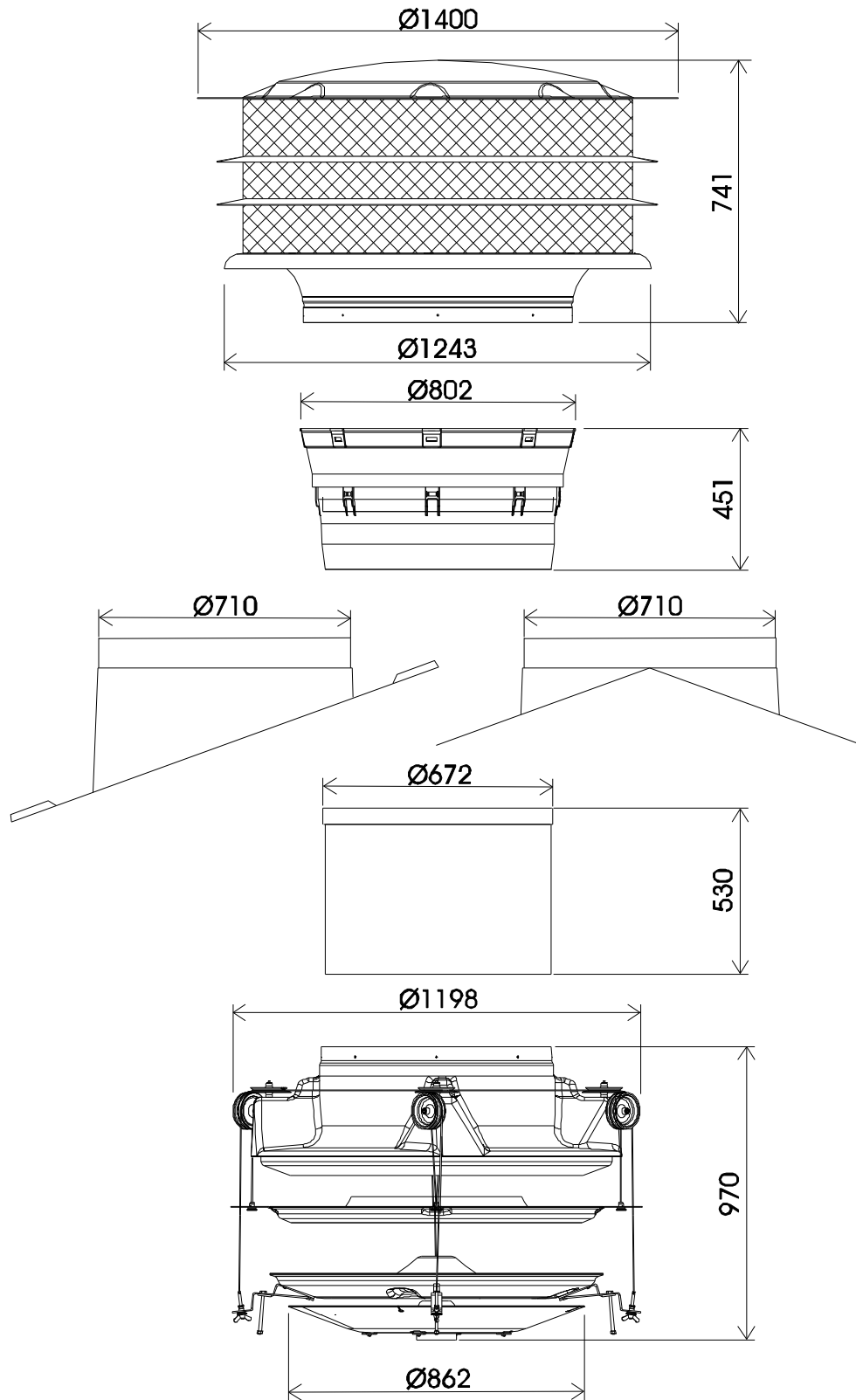
Figure	Description
	<p>434045 DA 600 Roof sheet, ridge, gray 434245 DA 600 Roof sheet, ridge, black</p> <p>Standard roof sheet, plain, or one of the many standard roof profiles.</p> <p>CANNOT hold the load of the DA 50 pull, so if a unit is hanging freely, an extra anchoring in the roof construction, a supplementary wire or the like must be made.</p>
	<p>434044 DA 600 Roof sheet, ridge, long, gray 434244 DA 600 Roof sheet, ridge, long, black</p> <p>Long standard roof sheet, plain, or one of the many standard roof profiles.</p> <p>Is only used in very special cases and in areas where heavy snowfalls may occur.</p> <p>If the building is exposed to wind, the roof sheet should be supported by bracing wires, and remember support of the roof sheet by means of a couple of laths so that they can absorb vertical load.</p>
	<p>433493 Roof cloth neoprene 1.9 x 1.7m</p> <p>An inexpensive alternative to the roofing sheet side or flex flashing. Neoprene cloths can be used at the transition between the building's roofing sheets and side mounted exhaust units/roof inlets.</p> <p>Supplied with joint sealer and screws.</p> <p>1 per exhaust unit/roof inlet.</p>
	<p>434481 DA 600 duct 500 mm gray 434482 DA 600 duct 500 mm, black</p> <p>500 mm standard pipe made of high-impact PP.</p> <p>Complete with socket and click connection that is just locked by means of four screws.</p> <p>Vertical bayonet connection for optimal handling and transportation.</p>
	<p>433506 DA 50-650 Insulating cover 750 mm 433507 DA 50-650 Insulating cover 1500 mm</p> <p>Can be mounted around the DA 600 pipe to avoid condensation. The pipes in the houses should always be insulated against condensation.</p> <p>Complete with plate, strap and screws.</p>
	<p>433446 DA 50-650 Funnel tube complete, gray 433546 DA 50-650 Funnel tube complete, black</p> <p>Supplied complete with pull system and wire for mounting of the bottom plate.</p> <p>The funnel tube is made with c 20 mm cavity to counter condensation.</p>

Figure	Description
	<p>433457 DA 50-650 Intermediate plate 1, gray 433557 DA 50-650 Intermediate plate 1, black</p> <p>Supplied complete with cord suspension for c 125 mm opening.</p> <p>About 50 % of the air is led out on the intermediate plate, which reduces the air speed from the air supply unit and thus the speed on the floor.</p>
	<p>433456 DA 50-650 Bottom plate, gray 433556 DA 50-650 Bottom plate, black</p> <p>The bottom plate is made with c 20 mm cavity to counter condensation.</p> <p>Spring fitting for overload protection is included.</p>
	<p>433502 DA 50-650 Recirculation fan, gray 433504 DA 50-650 Recirculation fan, black</p> <p>If there are very large temperature differences, bad conditions for Coanda-effect on the ceiling, or free jets are used, a recirculation fan can remedy an undesirable draught.</p>
	<p>280060 Contactor tripolar 400V, 230V 50/60 Hz</p> <p>The contactor is used for the recirculation fan.</p>
	<p>433488 DA 50 mounting set decentral. winch motor</p> <p>The mounting set comprises the parts required to connect a common winch motor to DA 50/60.</p> <p>Also provides a gearing between the winch motor and the DA 50-650 units.</p> <p>Use one set per two rows of DA 50-650.</p>
	<p>433496 Pulley suspen. f. pull rod 0.3m -ceiling 433497 Pulley suspen. f. pull rod 1.5m -ceiling</p> <p>Dispose one pulley suspension for each three m free hanging pull rod.</p>

Figure	Description
	<p>413109 Pull rod M8x5500mm galv incl. sleeve</p> <p>The pull rods are 5.5 m long and the number of pull rods can be determined by dividing the required number of meter by 5.5m/pcs.</p>

3 Technical data

3.1 Dimensioned sketch DA 50-650 (in mm)



3.2 Tensile force

Combination	Tensile force [kg]
	DA 50-650
With bottom plate	7
With bottom plate and control plate	11
With bottom plate, control plate and recirculation fan	20
With bottom plate, control plate, recirculation fan and max. load on springs	37

Tensile length max. 375 mm +/- 50 mm

3.3 Air output

The test of the DA 50-650 has been accomplished by SKOV A/S (unofficial test).

The test has been made with ducts without fan and mounted with net, rain screen, bell mouth, intermediate plate and bottom plate, 12.5 cm + 25 cm.

Negative pressure [Pa]	Output [m ³ /h] - DA 50-650
2	2,150
4	3,050
6	3,700
8	4,300
10	4,800
12	5,250
14	5,650
16	6,050
18	6,450
20	6,750
25	7,550
30	8,300
35	8,950
40	9,600

3.4 Technical data recirculation fan

Fan type	HCFB/4-315/H-MN
Voltage	230 V
Frequency	50 Hz
Revolutions per minute	1300 Rpm
Power consumption	0.1 kW
Current	0.6 A
Air output	2200 m ³ /h

