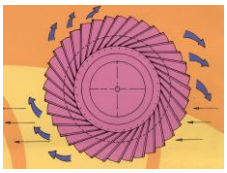
Natural Ventilation
www.nova-air.dk

Winter gardens
Solariums

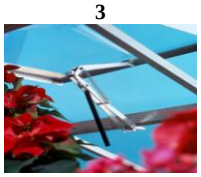
1

2



Wind driven exhausts cowls
Natural green energy

3



Greenhouse Ventilation
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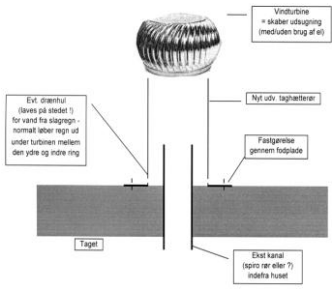
Ad 2 - Natural ventilation or hybrid air suck

Use Wind Energy

It's free of charge, and it prevents cold-drop!!

Insulated tube for motordriven turbine.
Turbine hat taken off for looking inside.



Example with a non-insulated covering pipe/tube for holding the cowl. The covering pipe has a larger diameter than that coming up from the house. This design prevents condensate and rain to enter house.

Ø350 wind cowls turbines

Motor driven cowls Ø350 can create Exhaust of up to 950 m3/h dependable of the free opening available in your tube/pipe. Using insulation reduces the free opening considerably. An alternative could be to use a larger diameter cowl i.e. Ø600 (see below).

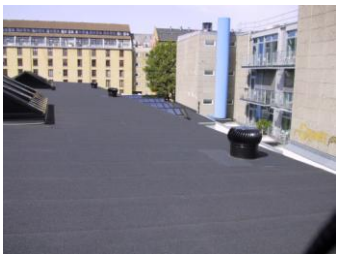
A solely wind driven cowl of Ø350 can create an Exhaust of up to 1100+ m3/h depending on the size of the free opening and of the speed of the Wind energy is GRATIS energy.

Ø200 wind cowls turbines

Ø200 mm Exhaust solely driven by wind creates an air exchange of up to 600+ m3/h depending on the wind speed.

If the air is sucked from a basement or a similar low positions the thermal power of warm air rising will add to the effect of the cowl/wind.

The system is extremely well suited for passive removal of polluted air f.ex. from polluted grounds or moist basements or bad smells in houses/blocks.



Ready to use wind turbine on a flat roof with roofing felt covering.

Covering pipe is not a part we deliver. Can be made for slanting roof or horizontal roofs. The base plate is fixed to the roofing material underneath it. Slightly above this level some drain holes should be made allowing condensate to escape the pipe.

Air exchanges at different wind speeds and height differences

Eksempler på kapaciteter hvis **UDEN** tryktab i afkastet
(højde diff mellem luft ind/ud giver termisk opdrift = tilskud til drivtryk)

m3/time	ved Vind hastigheder:	2 m/s			6 m/s		
Rør Ø =	+Temperatur diff Ude/inde	3°C	5°C	10°C	3°C	5°C	10°C
200 mm	Højde luft ind/ud = 3 meter	265	275	290	545	550	565
Model	Højde luft ind/ud = 6 meter	275	285	305	550	560	580
AV 8"	Højde luft ind/ud = 9 meter	285	295	315	560	575	595
	Højde luft ind/ud = 12+ m	295	305	325	570	585	605
300 mm	Højde luft ind/ud = 3 meter	420	440	470	830	850	880
Model	Højde luft ind/ud = 6 meter	440	465	500	850	875	915
AV 12"	Højde luft ind/ud = 9 meter	455	485	530	870	900	940
	Højde luft ind/ud = 12+ m	465	500	550	885	915	965
350 mm	Højde luft ind/ud = 3 meter	500	530	565	985	1010	1045
Model	Højde luft ind/ud = 6 meter	530	560	610	1010	1045	1095
AV 14"	Højde luft ind/ud = 9 meter	550	590	650	1030	1070	1135
	Højde luft ind/ud = 12+ m	565	310	685	1050	1095	1165
600 mm	Højde luft ind/ud = 3 meter	940	1010	1130	1770	1840	1960
Model	Højde luft ind/ud = 6 meter	1015	1110	1265	1845	1940	2090
AV 24"	Højde luft ind/ud = 9 meter	1080	1195	1380	1910	2025	2205
	Højde luft ind/ud = 12+ m	1135	1265	1475	1965	2090	2300

Ø600 cowls / turbiner

Automatic control for 200-2000 m3/h exhaust by a low-energy consumption motor.

This level of air exchange requires a square box going through the roof in order to have sufficient capacity together with insulation.

For achieving sound damping against the wind blast special insulation is often inserted in this box too.

Flat roofs / gymnasiums? or...

Measurement of the roofing box = 760x700 mm with a height of up to 1500 mm. To be fastened to the trusses or a cross bar. Box has angled iron bearings iron adjusted the roofs slanting angle or horizontal roof..

Can at its bottom have fixing points for exhaust canals for several rooms to be serviced by one wind cowl. If the box is visible from inside the house a perforated panel can be supplied.

Above the roof the covering outside panels are painted in a matching color to your roof.