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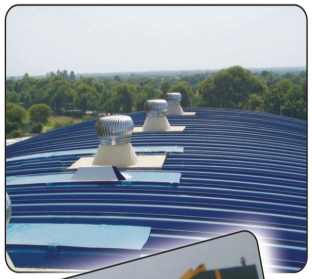
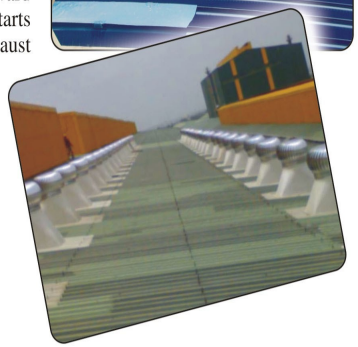
Working Principle of Turboventilator :

The turboventilator is combination of both natural & forced ventilation system. It Functions as a natural ventilator when there is a difference in thermal or wind pressure between the inside and outside of the building which Forces the air to move through the opening of the ventilator. Industrial activity generates heat and hot air being lighter moves upwards. The lighter air get accumulated in the turbine of the Wind Ventilator. As the hot air tries to escape from the turbine, it exerts a backwards thrust on the vanes and sets them in a rotational movement . When the ventilator blades rotate the turbine it gives rise to the centrifugal force and creates a vacuum inside the turbine .The partial vacuum is replaced by strong upward forceful movement of the wind . As the hot air is thrown out, fresh air starts entering through windows and door openings. This works for a perfect exhaust by wind driven ventilator





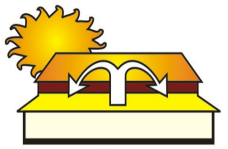
Special key features of Turboventilator :

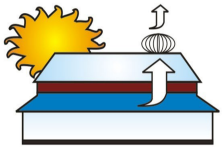
- No Maintenance - rust Free, rain Proof.
- Fire-retardant, Corrosion resistance
- Economical & Environmental friendly
- Easy installation & adaptable to all kind of roofs & Also for RCC roofing
- Available in Different sizes and shapes
- Designed to withstand winds in excess speed
- Anti-block Design to Distribute water while heavy rain
- Cost effective investment.
- Enhances the architectural and aesthetic appearance of buildings
- Combination of both natural and forced air ventilation system
- Great energy saver because its give day lights
- Assured 24 Hrs. 365 Days free of cost Ventilation & Exhaust system
- Replaces hot air, humidity, stale air, smoke & gas fumes with fresh ambient air.
- Improves human comfort level & productivity.
- Remove foul smell and maintain hygienic condition.
- Reduction in maintenance cost of machinery
- Increases life of roofing sheets.
- Increase electronic devices life, PLC, drives etc.
- 80% depreciation under section 32 of IT Act

Industries We Cater To

Our exclusive assortment of ventilators is designed to perfection and finds wide application in:

- Automobile Industry
- Food Industry, Textiles (Spinning, Twisting, Sizing, Weaving, Dyeing, Knitting, Processing)
- Chemical Industry
- Engineering Industry (Large Size Vessels/Tanks Evacuation during Welding)
- Pharmaceutical Industry
- Boiler House
- Foundry
- Power Generation House
- Utility Sheds
- Maintenance Sheds
- Warehouses
- Restaurants
- Public Halls
- Residents





Melting Process Units, Steel & Power Industries, Rolling Mills, Furnace Unit, Textile Industries, Rice Mill, Food Industries, Plastic Industries, Chemical Industries, Dyeing Mills, Hospitals, Hospitalities Industries, Diamond Industries, Auto Industries, Paper Industries, Engineering Units, Wooden Industries, Warehouses, Storage Units, Pharma Industries, Oil & gas Industries & All kind of industries having roof top ventilation.

Calculation of no. of ventilator :

Let's look at this engineering formula when airflow is unknown and you need to calculate the required CFM for a room, first you look at the Air Changes per Hour Chart and identify the required air changes needed for the use of the room.. Next calculate the volume of the room (L x W x H) ft³. Then multiply by the required air changes per min to get required CFM.

$$\text{Required CFM} = \frac{\text{Volume of the room x Air change per hour}}{60}$$

Note : Determine air changes per hour require from table No. 1
To calculate the number of ventilator require kindly use the below formula,

$$\text{No. Of Ventilator} = \frac{\text{Require CFM}}{\text{Exhaust capacity of each ventilator}}$$

Note : Determine the exhaust capacity of each ventilator from table no. 2.

Table No.: 1

Building / Room	Air Change Rates - n - (1/hr)
Auditoriums	8 - 15
Banks	4 - 10
Boiler rooms	15 - 20
Cafeterias	12 - 15
Computer Rooms	15 - 20
Engine rooms	4 - 6
Factory buildings, ordinary	2 - 4
Factory buildings, fumes and moisture	10 - 15
Foundries	15 - 20
Galvanizing plants	20 - 30
Garages repair	20 - 30
Kitchens	15 - 60
Laundries	10 - 15
Malls	6 - 10
Mills, paper	15 - 20
Mills, textile general buildings	4
Mills, textile dye houses	15 - 20
Offices, private	4
Precision Manufacturing	10- 50
Pump rooms	5
Restaurants	8 - 12
Shops, machine	5
Shops, paint	15 - 20
Shops, woodworking	5
Substation, electric	5 - 10
Theaters	8 - 15
Turbine rooms, electric	5 - 10
Warehouses	2

Table No.: 2

	Tp-W	3				5				10			
	h	5	10	15	20	5	10	15	20	5	10	15	20
Size	v	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
300	1	160	200	250	290	250	250	295	325	300	425	550	620
	2	190	300	360	450	360	435	495	550	425	510	650	715
	3	340	550	565	635	565	580	650	705	590	640	750	790
	4	505	730	760	795	760	765	870	900	770	880	930	990
	5	770	870	930	965	930	875	960	990	895	990	1065	1170
500	1	535	640	640	830	640	725	850	1030	735	925	1170	1200
	2	820	905	925	1005	925	925	1070	1180	960	965	1335	1490
	3	965	1225	1300	1320	1300	1180	1325	1425	1235	1323	1595	1682
	4	1512	1535	1580	1650	1580	1560	1605	1710	1540	1615	1880	1940
	5	1829	1835	1840	1895	1840	1910	1980	2025	1850	1990	2005	2215
600	1	710	850	1070	1205	1070	1070	1300	1530	1080	1375	1675	1990
	2	1120	1205	1350	1530	1350	1360	1575	1795	1390	1635	1900	2170
	3	1550	1680	1795	1850	1795	1760	1910	2065	1795	1990	2305	2450
	4	2120	2120	2190	2425	2190	2215	2310	2450	2250	2405	2600	2790
	5	2540	2620	2665	2750	2665	2680	2770	2865	2705	2750	3015	3175
700	1	820	950	1010	1090	1010	1050	1130	1210	1110	1190	1280	1360
	2	1450	1510	1580	1690	1580	1670	1780	1850	1720	1810	1930	2060
	3	1990	2110	2250	2410	2250	2380	2450	2630	2420	2520	2650	2810
	4	2730	2930	3050	3110	3050	3160	3220	3390	3210	3380	3520	3750
	5	3190	3250	3380	3450	3380	3480	3610	3750	3590	3680	3810	3990

Tp-w for Temp. Difference (°C) h for hight (m) v for wind speed (m/s)

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