

BLAZE
TURBINE AIR VENTILATOR



Ultimate Solution
for
Powerless Ventilation

BLAZE ENGINEERS

(DESIGNERS & MANUFACTURERS OF TURBINE AIR VENTILATOR)

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Company Profile

BLAZE ENGINEERS manufacturer and supply Turbine Air Ventilator (which is a unique Exhaust Fan, which works without electricity. It runs on Wind Velocity). The company was incepted in 2005 by Mr. V Bhaskaran who has 25 years of experience in production and quality control of engineering products. We are recipient of various national & International Awards for Quality & Services. Our products make a clean sweep in comparison to others in the industry. The factors behind our unrivaled position in the market are outstanding quality, attractive rates, research work that upgrades our products and maximum possible efforts to meet the expectations of our customers. The immense faith and support of our customers has been a constant source of motivation for us. This gives us power to fulfill every possible requirement of our customers. We do not believe in compromising with our quality has been a primary factor for our hard earned goodwill in the market. Our pool of expert technical professionals including the highly proficient erection team support the goals and ambitions of our company.

Product Profile

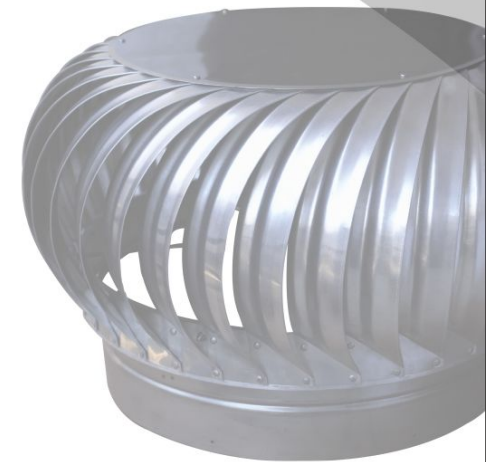
SALIENT FEATURES OF TURBINE AIR VENTILATOR

- › New technology without power or operating costs
- › Improves working conditions and increases productivity
- › Easy to install and can be fitted to any type of roofing
- › Can be configured to meet required fresh air changes
- › Runs on wind power
- › Weather and storm proof
- › Economical & ecological
- › Maintenance free
- › It works on thermal currents, centrifugal force to exhaust and turbo design creates suction
- › Sturdy, light weight and slight breeze to rotate ventilator
- › Temperature and corrosion resistant alloy steel material



Working Principle

Turbine Air Ventilator works by utilizing the wind energy to induce air flow by centrifugal action. The centrifugal force caused by spinning winds creates a region of low pressure area which draws air out through turbine. Air drawn out by the turbine is continuously replaced with fresh air from outside. Slightest breeze will cause the turbine to spin and even after the breeze has stopped, the fly wheel effect of the rotor cage will use it continuously remove air and increasing rise to ventilation. Suction is maintained even at low wind velocity.



Without Turbine Air Ventilator



Advantages

- ✓ No maintenance cost
- ✓ No electricity charges
- ✓ No accidental hazards like fire due to short circuits, electrical shocks
- ✓ Low cost of installation
- ✓ Assured ventilation for 24hrs. / 365 days
- ✓ Protects food products & chemicals
- ✓ Removes foul smell & maintains hygienic conditions
- ✓ 80% depreciation under section 32 of Income Tax act

Our Achievements for Quality & Service:

We have been recipients of Various prestigious awards like:

- › Nation's Udyog Ratan Award & Gold Medal-2007 by Indian Organization for Business Research & Development
- › Rajiv Gandhi Shiromani Award and Gold Medal -2007
- › International Quality Excellence Award -2007
- › National Status Award for Industry Excellency - 2006 with Gold Medal
- › Ugyog Pratibha Award-2006 (Gold Medal) by Indian Organization for Commerce and Industry

Installation / Erection



Installation in prefab shed with colour coated metal sheet



Installation on shed with fully corrugated asbestos roof sheet



Installation on round shed



Installation on side wall

Turbine Air Ventilator can be installed on any type of roof and shed as per customers requirements

Product Range



Ventilator Dia	Thorat Dia	Number of Fins.
16"	12"	21 Nos.
28"	21"	36 Nos.
32"	24"	42 Nos.

Other dia are also available as per customer requirements

Material of Construction Available



Stainless Steel grade is selected as per customer requirements (SS202, SS304/SS316, etc.)

Calculation - Selection Procedure

Determine Volume of space to be ventilated
 Volume (ft³) = L x W x H, where L = Length, W = Width, H = Height

Select air changes per hour inside working area from Table-A
 Calculate required ventilation rate Q (cfm)

$$Q(\text{cfm}) = \frac{\text{Volume (ft}^3\text{)} \times \text{Air Change Rate}}{60}$$

Determine Number of Ventilators = $\frac{\text{Ventilation Rate Q}}{\text{Exhaust capacity of each ventilator @ minimum wind velocity}}$

Table - A Recommended Air Change Rate per hour

Type of Building	Air change per hour	Type of Building	Air change per hour
Assly. Hall	6-12	Factories (Heavy)	10-30
Auditorium	4-12	Laundry	12-30
Boiler Room	15-60	Paper Mill	8-30
Brewery	8-30	Packing Room	8-30
Limine Room	12-30	Transformer Room	12-30
Factories (light)	6-12	Paint Shop	10-30

To know the exhaust capacity kindly gets in touch with our technical team for further assistance.

Technical details of FRP base



FRP Base is of pyramid shape and profile of Base (Grooves) are moulded as per the design of the customers roof sheet profile (Asbestos, Aluminium, G.I., Coated steel, Plastic, Rcc, etc.). To make FRP hood matching to customer's roof sheet we require sample of roof sheet or detailed drawing of roof sheet with corrugation dimension.

Due to pyramid shape of FRP base all the load and impact that comes to the ventilator will be transferred to entire roof sheet and hence decrease possibility of damaging the ventilator and roof sheet.

Direct sunlight comes inside the shed with transparent FRP Base and partial light will come inside the shed with Semi-transparent FRP base, which enables to switch off the tube light / bulb running with electricity during day time and saves energy. This makes our ventilator dual energy saver.

FRP Base is available in three types transparent, Semi-transparent and opaque

FRP Base are Available in various colours and thickness as per customers requirement