

HTE SERIES



GENERAL INFORMATION

The Hurricane™ is a wind-driven roof exhaust fan. Providing natural ventilation - which has proven to be effective while keeping operating costs down - it is an excellent alternative to traditional industrial ventilators that perform poorly and consume energy.

The wind driven Hurricane™ exhausts hot, stale air from buildings and allows it to be replaced at low levels with fresh air at ambient temperatures. The result is a much more pleasant and healthier indoor environment.

FEATURES

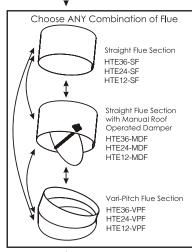
- 100% energy free design
- · No electrical costs EVER!
- · High grade aluminum construction
- · Easy to install
- · Low maintenance
- · Quiet operation
- · Up to 15 year warranty
- Manufactured from 5005 grade aluminum
- Can withstand a continuous gusting wind of 240km/h (150 mph) without damage (Tested by Construction Research Laboratories Inc. Miami, FL)
- Passed the requirements of the Low speed Dynamic Rain Penetration test 0.106 cfm at 35.6 mph (0.05 l/s at 57.4 km/h).

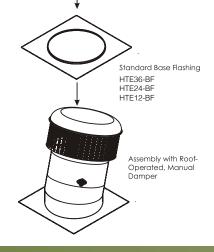
PERFORMANCE SPECIFICATIONS

Model#	Throat Diameter	CFM @ WIND SPEED			
model #		6 KM/H or 4MPH	12 KM/H or 7.5 MPH	16 KM/H or 10 MPH	
HTE12	12"	572	1017	1314	
HTE24	24"	1314	2339	3009	
HTE36	36"	3305	5720	7331	

Note: Maximum airflow is achieved @ 16 KM/H or 10 MPH.









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Hurricane Turbine Exhausters

SIZING THE HURRICANE FANS AND DETERMINING OUANTITY

Determine the volume of building in Cubic feet: **Length x Width x Height = Cubic Feet** ie. Warehouse 150 L x 60 W x 16 H = 144,000 Cu ft



Select the recommended Minutes Per Air Change from Chart below. In this example it's a warehouse - so we would require an air change every 12 minutes:

To determine how much CFM you require - take Cubic ft of space / Minutes per Air Change In the example above use 144,000 cu ft / 12 =12,000 CFM required

To determine # of fans required:

Using the performance specification charts, determine which size of fan would best suit your application (going with smaller fans means more fans required). Then locate your average wind speed (typical is 6 to 12 Km/h or 3 to 7.5 MPH) and divide the CFM required by the CFM (Airflow @ wind speed) for the fan chosen. In this example we will show all 3 fans using an average wind speed of 12 Km/H (7.5 MPH)

				TOTAL CEIM	
12"	12000 / 1017 = 11.79	Rounded to 12 fans	1017 CFM/Fan	12,204 CFM	
24"	12,000 / 2339 = 5.13	Rounded to 6 fans for Aesthetics	2339 CFM/Fan	14,034 CFM	
36"	12,000 / 5720 = 2.09	Rounded to 3 fans	5720 CFM/Fan	17,160 CFM	

Select the most suitable number of vents for the roof spaced uniformly either side of ridge (center line) with a recommended spacing of 16ft (5M).

Application	Minutes per Air Change	Application	Minutes per Air Change	Application	Minutes per Air Change	Application	Minutes per Air Change
Assembly Hall	7	Church	15	Foundry	4	Pressing Room	1
Attic	2	Classroom	6	Garage	5	Projection Booth	2
Auditorium	10	Dance Hall	5	General Office	10	Summer Cooling	1
Barber Shop	6	Department Store	6	Gymnasium	8	Toilet	3
Basement	8	Dry Cleaning	5	Laundry	2	Transformer Room	1
Battery Room	4	Engine Room	6	Locker Room	3	Warehouse	12
Boiler Room	1	Factory	6	Machine Shop	8	Welding Shop	2
Bowling Alley	5	Forge Room	3	Plating Room	3	-	

DETERMINING MOUNTING OPTIONS

- Straight Flue
- · Straight Flue Section with Manual Roof Operated damper
- · Vari-Pitch Flue

- · Standard base Flashing
- · Standard Metal Curb
- · Actuator Kits (requires power)

PLACEMENT OF FANS

Install the required # of fans evenly spaced for aesthetics.

Out of the 3 options above, we would choose either the 12" or the 24" option.

Using the 12" installed would exhaust 12,204 CFM with a 12 Km/h or 7.5 MPH average wind speed 150' 60'

