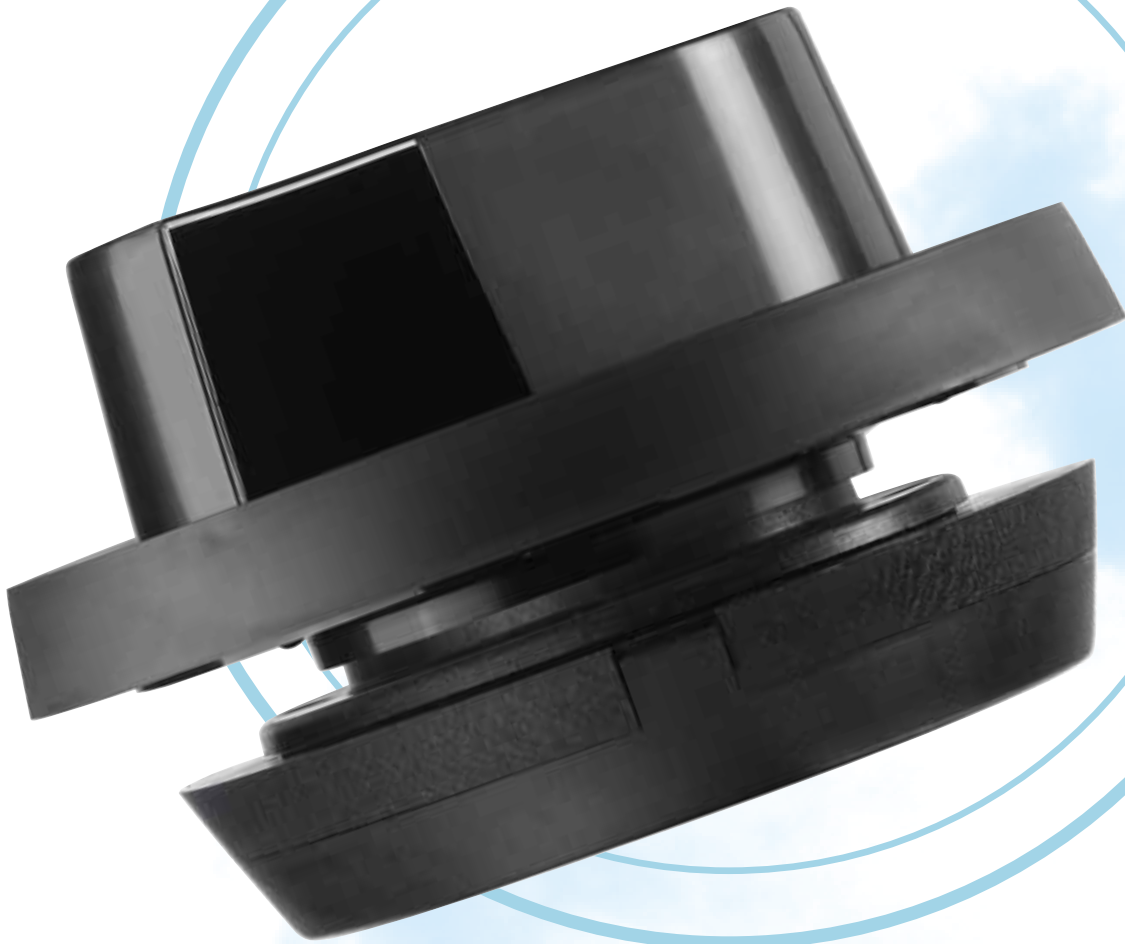


# Flettner '2000' Ventilator

The definitive rotary roof ventilator



## World leader

Flettner Ventilator Ltd. is the world leader in compact wind-powered rotary ventilation systems.

Its ventilators, known for their amazing reliability, are widely used around the world on virtually every type of vehicle and for other diverse applications including caravans, mountain cabins, portable work units, greenhouses and farm buildings.

Engineered for sheer durability and toughness, Flettner ventilators can cope with the most extreme conditions from equatorial downpours to mountain blizzards and from desert heat to Antarctic ice.

Look for the 'Genuine Flettner' logo. Don't settle for less than the very best.

## Ventilation is vital

Proper ventilation is not a luxury – it is absolutely vital. Excessive heat, condensation, stale air and dangerous fumes are just some of the by-products of inadequate ventilation. Protection of the public and of employees is now a legal obligation for firms in most countries of the world, whilst the prevention of damage to plant, equipment and perishable goods is an economic necessity. Increasingly, regulations requiring vehicles to be fitted with adequate ventilation apply to the transportation of gases and chemicals.

The Flettner '2000' ventilator combats the problems associated with poor ventilation in a simple, economical and highly effective way.

## The definitive rotary ventilator

Known for its sheer reliability the **Flettner '2000'** is firmly established as the definitive wind-powered rotary ventilator.

Used around the world the **Flettner '2000'** has proved itself to be tough, durable and utterly reliable. Capable of operating in extreme conditions this ventilator is built to last.

From vans to buses, from ambulances to 4x4s and from fishing vessels to glider trailers the **Flettner '2000'** provides round the clock ventilation with no battery drainage. That means less heat build up, less condensation and no build up of dangerous fumes.

Discreet, compact and extremely quiet, the **Flettner '2000'** is also an ideal roof ventilator for homes, especially where the removal of excess heat and condensation within attic spaces is required, or for situations where an electricity supply is not readily available.

Meticulous attention to detail and design are Flettner Ventilator's hallmarks. Engineering expertise and rigorous quality management ensure that each and every **Flettner '2000'** ventilator is built to Flettner's exacting standards. The bearings are incredibly smooth-running and are made of high quality stainless steel. The polypropylene rotor head is tough and durable. The Flettner maxim has never been more true: '**Fit It and Forget It**'

**The Flettner '2000': Simple, Economical and Effective**

**Don't Settle for Less than the Best - Always Fit A Flettner**

**Benefits** • Reliable extraction • Ultra quiet • Extremely tough • No maintenance • No battery drainage • No electrical connections  
**Uses** • Vans • Trucks • Buses • Minibuses • Caravans • RVs/Camper-Vans • Trailers • 4x4s • Ambulances • Railway Carriages • Boats





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'Genuine Flettner' logo.  
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the very best.



Flettner '2000' Ventilator  
available in black or white  
(not actual size).

## How it works

The **Flettner '2000'** is the result of over 70 years of experience in the design of wind-driven rotary ventilators. It is powered by a rotor that catches the wind or the air stream created by the motion of a vehicle. Beneath the rotor is a powerful centrifugal fan that expels air outwards and thus draws stale air out from below, helping to eliminate excess heat, condensation, mould and the build-up of vapours and gases

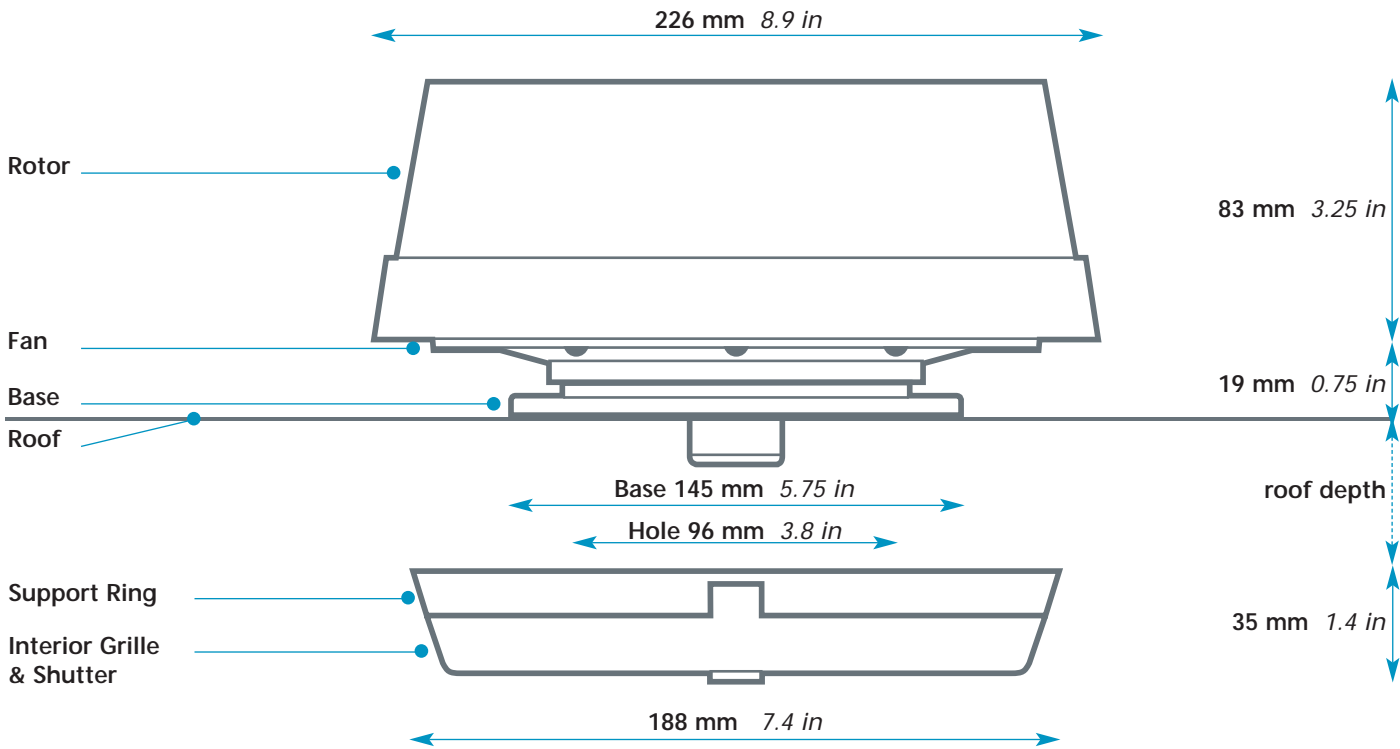
## Peace of Mind

The **Flettner '2000'** ventilator is designed and constructed to eliminate the entry of rain, dust and downdraughts. The unit delivers maintenance-free performance with no electrical connections to worry about, no drain on batteries and no running costs. Quiet, round the clock ventilation is provided whenever there is a slight breeze even when the vehicle is parked or where a building has no power supply

## Installation

Installation onto the roof of a vehicle or building is simple, requiring only a four bolt fixing and a 96 mm (3.8 inch) circular vent aperture. An adaptor is available to enable the ventilator to bridge thicker roof cavities or the insulation layer within a double-skinned roof.

## Dimensions



## Changes of Air

The number of changes of air per hour (N) provided by a single **Flettner '2000'** ventilator can be calculated as follows:

$$N = 60 \times \frac{\text{Extraction rate per minute at given wind speed}}{\text{Volume of space to be ventilated}}$$

The number of ventilators required for a given application can be calculated accordingly.

For stationary sites local wind speeds should be ascertained. Mean annual wind speeds in middle latitudes are typically 10 mph (16 km/h).

## Extraction Figures

Wind Speed		Air Extraction Rate	
MPH	km/h	Cubic ft per min	Cubic m per min
10	16	8	0.23
20	32	19	0.54
30	48	30	0.84
40	64	41	1.16
50	80	52	1.48
60	96	63	1.79
70	112	75	2.13

Source: MIRA Ltd

The extraction rates quoted above are sourced from tests undertaken by MIRA Ltd, Watling Street, Nuneaton, Warwickshire CV10 0TU, UK

Air extraction rates may vary according to the positioning of the ventilator(s) and the configuration of the vehicle or building to which the ventilator is fitted.

It is the responsibility of the customer to ensure that the extraction achieved for any given application and configuration is adequate.

## Ribbed Roofs

The **Flettner '2000'** can be fitted to vehicles with ribbed roofs provided that the gap between each rib is at least 145mm (5.75in).

An alternative model, the **Flettner TCX-2™** with a narrow base option, can be fitted to roofs where the gap between ribs as small as 108mm (4.25in).

## Distributed by



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