ZOO

DESTRATIFICATION FAN

2 YEAR WARRANTY

IP54

The ZOO Fan de-stratifies by producing a gentle column of air that draws warm air from the ceiling and forces it down to floor level. This creates a more comfortable, more productive indoor environment for occupants and has the potential to reduce energy consumption.

ZOO fans are available with either AC or energy efficient EC motors. Models with EC technology feature fully integrated, infinitely variable speed control which eliminates the need for an external VSD, current overload and motor phase protection. Optional matching sensors monitor the temperature and provide real time feedback to the fan. The fan's on-board microprocessor then adjusts its speed to match the specific requirements of the area.

- Improve air circulation and thermal comfort with ceiling heights from 2.6 to over 30 metres.
- Can help to lower a building's running costs and reduce its carbon footprint.
- Installations often need fewer fans compared to other destratification fans, reducing installation and operating costs.
- Ideal for supermarkets as they reduce condensation issues and therefore reduce the occurrence of black mould.
- Can keep floors dry and eliminate hot and cold spots.
- Easy to install around obstructions such as lighting or overhead cranes.
- With the reduced energy costs, the typical payback periods is 1-3 years, with most of the ROI occurring in less than 2 years.
- Available with AC or energy efficient EC motors, and in 250mm and 300mm sizes have been tested to ISO 5801: 2007 for air flow performance and BS848 Part 2: 1985 for sound performance.
- Features a robust UV-treated PC ABS plastic housing that is fire resistant (5VB) and long lasting.
- Fitted with an easy to reach IP54 terminal box and comes with Gripple attachments which makes it quick and easy to install.

CONTROLLERS

MANUAL EC SPEED CONTROLLER

Manually adjustable speed controller provides speed adjustment of ZOO EC fans through a 0-10V control signal.

AUTO EC SPEED CONTROLLER AND SENSORS

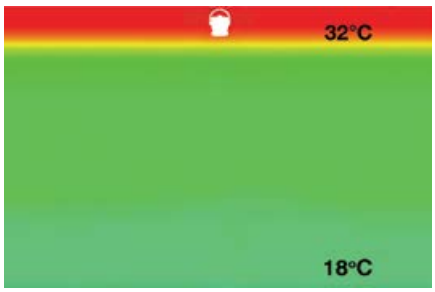
This intuitive ZOO EC controller can be used to manually control EC fan speed, or create a flexible demand control destratification system. When set to auto operation it will adjust air flows according to the temperature difference between two temperature sensors (typically placed near the floor and the ceiling.)

Manual EC Controller
(Code: DCV-POT10K-WM)

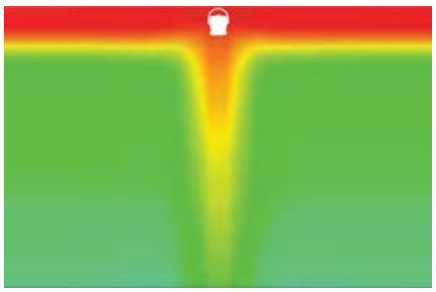
Zoo Fan EC Controller
(Code: ZF-BRT-F606)

Temperature Sensors
(Code: ZF-BRT-T601)

CFD SHOWING THE EFFECT OF A ZOO FAN



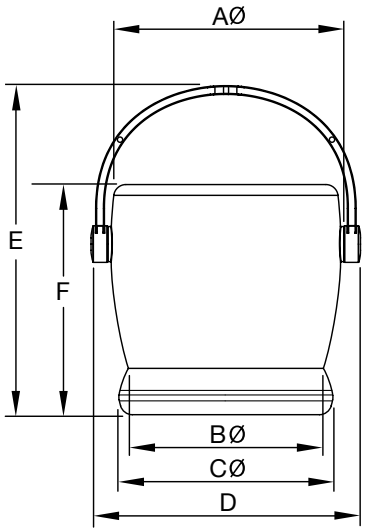
These thermal images are from a CFD (Computational Fluid Dynamics) Analysis showing the effects of Zoo Fans. They show a computer model of a 12.2 metre x 12.2 metre space with a 7.6 metre flat ceiling deck and a ceiling mounted heat source with a thermostat affixed 1.5 metres above the floor, set at 21°C.



The built-up heat at ceiling level is forced down when the ZOO Fan (represented by the white silhouette) is turned on.

Destratification results in a more even temperature throughout the Zone Of Occupancy. Creature comfort improves noticeably and energy consumption is reduced, often significantly.

DIMENSIONS



SPECIFICATIONS

MODEL NO.	ZFH25EC	ZFH25ECG	ZFH30	ZFH30G	ZFH50EC	ZFH50ECG	ZFH60	ZFH60G
GUARDS*	No	Yes	No	Yes	No	Yes	No	Yes
AØ	379	379	379	379	453	453	453	453
BØ	300	300	300	300	367	367	367	367
CØ	352	352	352	352	421	421	421	421
D	445	445	445	445	533	533	533	533
E	539	539	539	539	656	656	656	656
F	375	375	375	375	460	460	460	460

All dimensions in mm
*Finger guards on inlet and outlet

MODEL NO.	ZFH25EC(G)	ZFH30(G)	ZFH50EC(G)	ZFH60(G)
FAN SIZE (MM)	250	250	300	300
FAN SPEED REV/SEC	36	22	31	22
dB(A) @ 6M	55	44	-	-
dB(A) @ 12M	-	-	49	40
FREE AIR M^3/S	0.31	0.32	0.59	0.54
POWER SUPPLY			230V/1Ph/50Hz	
KW	0.057	0.05	0.108	0.1
AMPS	0.49	0.24	0.87	0.42
MAX. OPERATING TEMPERATURE (°C)	60	55	60	60
WEIGHT	9kg	7kg	11kg	10kg

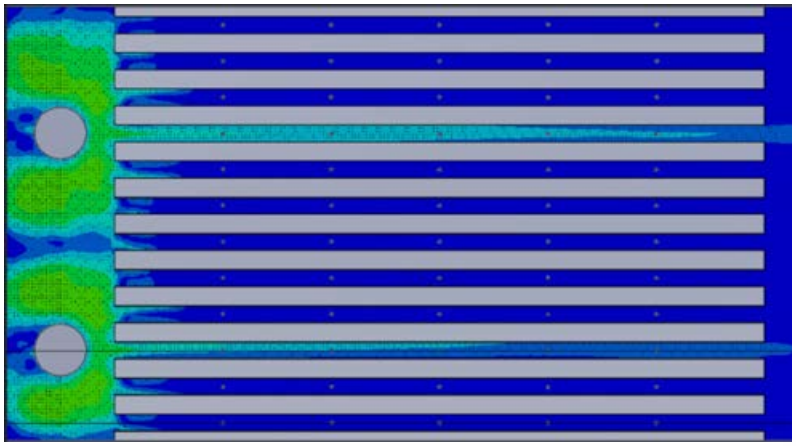
HVLS AND ZOO FANS GO HAND IN HAND

HVLS fans on their own are extremely effective at improving air circulation in open areas. However, in areas where obstructions affect the placement of a HVLS fan, adding ZOO Fans can optimise air flow.

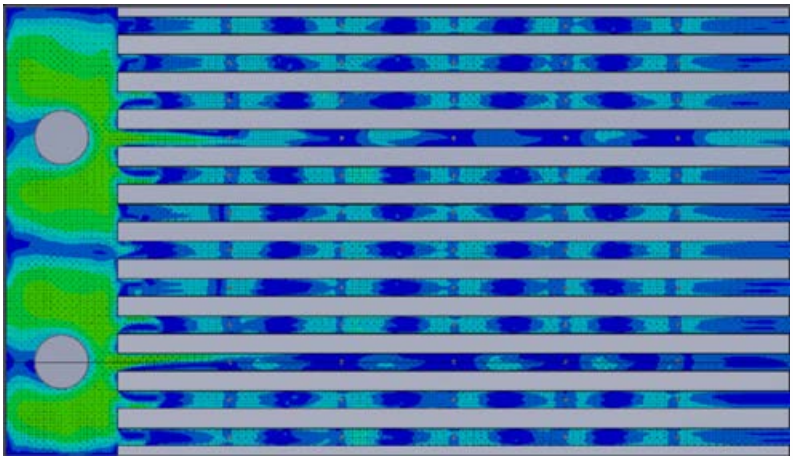
For example, in warehouses, HVLS fans on their own will not be able to reach down long aisles of racking.

Adding ZOO Fans will create much needed circulation throughout the aisles. This leads to a more comfortable indoor working environment for occupants.

Working together, the HVLS and ZOO Fans create a highly efficient air circulation and destratification system in any space, despite any obstacles the space presents.



Air velocities 1.83m above the ground
2 HVLS fans, no ZOO Fans



Air velocities 1.83m above the ground
2 HVLS fans, 60 ZOO Fans

Thermal Stratification results in significantly more energy consumption than necessary and often creates hot and cold spots in a building.

A ZOO FAN CREATES A GENTLE, CONCISE COLUMN OF AIR THAT BRINGS WARM AIR DOWN TO FLOOR LEVEL. **IT CAN CREATE A MORE PRODUCTIVE, MORE COMFORTABLE ENVIRONMENT AND HAS THE POTENTIAL TO REDUCE ENERGY USAGE.**

BENEFITS

- Raises productivity
- Improves thermal comfort
- Lowers energy costs

APPLICATIONS

- Supermarkets
- Car Dealerships
- Shopping Centres
- Warehouses
- Distribution Centres
- Gymnasiums
- Theatres
- Airports
- Transportation Hubs
- Greenhouses
- Workshops

SAVINGS

- Lowers energy consumption
- Reduces a facility's Carbon Footprint
- Maximises the efficiency of the HVAC systems
- Simplifies infrastructure equipment (fewer ducts and diffusers)
- Fast return on investment