

# **DS-4 Series** Destratification Fans

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# **DS-4 Series**

With any conventional air heating system warm air will rise to roof level by natural convection. In high buildings such as factories, warehouses and sports centres, this can result in high temperature gradients and consequently increased energy usage. Reznor destratification fans reverse the natural convection process, recirculating warm air back to working level providing a permanent reduction in roof space temperature and uniform temperature distribution.

### **Model Range**

Destrat fans are available in four sizes, with mounting heights ranging from 4m to 18m and air volumes from 3,000 m<sup>3</sup>/h up to 9,000 m<sup>3</sup>/h.

DS units are supplied with a high efficiency axial fan with mesh finger guard, robust cabinet with four point suspension and four way discharge adjustable louvres. Frost protection unit excluding integral thermostat also available.

# Sourcess of heating stratification

For effective de-stratification, sufficient fans must be

installed to re-cycle heat from the full roof area.

# **Features**

- Heat recovery by re-circulating high level hot air back to occupancy level
- Reduced fuel bills by eliminating excess heat loss through the roof
- Heat reclaim from lighting and machinery
- Improved comfort level for occupants
- Reduced pre-heat time



Without de-stratification heat rises resulting in poor distribution, increased heat loss and running costs.

## Installation

DS units are supplied ready for automatic operation with installation only requiring mounting and connection to a single phase electrical supply.

Standard units are supplied with an integral thermostat to operate the fan as soon as the roof space temperature rises above the set point.

For frost protection applications units are supplied without thermostats to be linked to frost protection controls. The four-way adjustable outlet blades allow the air direction and terminal velocity to be set to suit the application and mounting height.

## **Design Data**

Select the DS unit to suit the mounting height required, ideally the units should be installed approximately 1 metre below the apex.

Calculate the volume of the building and multiply by two to determine the amount of air that needs to be re-circulated for effective de-stratification. Divide by the primary air volume of the unit to determine the number of units required.



The DS fan returns heat to the working zone for improved comfort and reduced running costs.

Technical Data									
		Model Ref							
		DS3-4	DS4-4	DS6-4	DS10-4				
Mounting height	m	4 to 8	6 to 12	6 to12	10 to 18				
Primary air volume	m³/h	3,000	5,300	6,600	9,000				
Electrical supply		230V 1N 50Hz							
Current rating	А	0.52	1.15	1.75	2.4				
Absorbed power	kW	0.11	0.25	0.38	0.52				
Sound pressure level <sup>1</sup>	dB(A)	50	54	57	62				
Net weight	kg	13.5	17	17.5	25.5				

1 Sound level @ 5m, Q=1, A=160m<sup>2</sup>

Dimensions									
		DS3-4	DS4-4	DS6-4	DS10-4				
Width	А	492	573	573	694				
Depth	В	492	573	573	694				
Suspension Centres	С	332	365	400	440				
Suspension Centres	D	332	365	400	440				
Height	Ε	306	345	306	345				
Casing Height	F	180	180	180	180				







Top view

Other products in the Reznor range:-

- Warm air heaters
- Radiant heating
- Air curtains
- Heating & ventilation units
- Packaged rooftop units
- Air induction systems
- Gas fired heater modules
- Evaporative cooling



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