

SDACH Thermally actuated swirl diffuser

SDACH-T

SDACH-TE

SDACH-TP





Thermally actuated swirl diffuser

SDACH

Introduction

Variable swirl, using a temperature controlled actuator, for either vertical or horizontal throw dependant on heating or cooling applications. The Actuator determines the correct blade angle based on supply air temperature, there are no requirements for a power supply.

For installation heights between 2.5m and 20m.

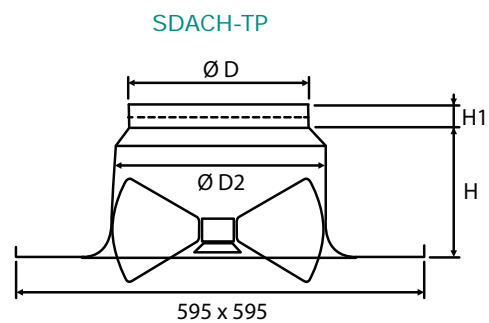
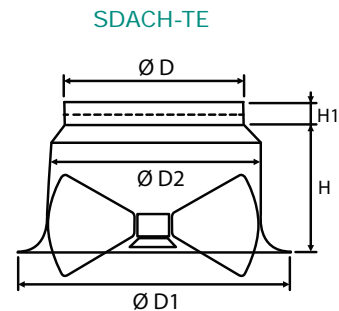
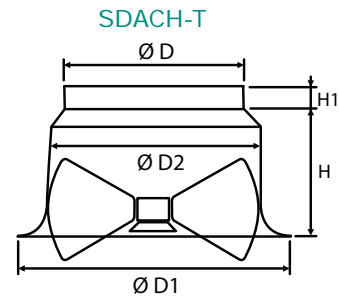
Aluminium and steel construction, powder coated RAL 9010.

Product Description

SDACH-T Diffuser with thermostatic actuator controlled connected blades

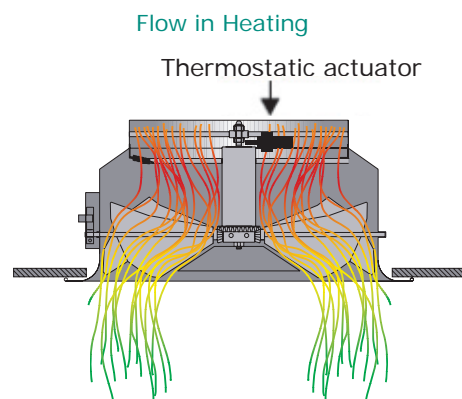
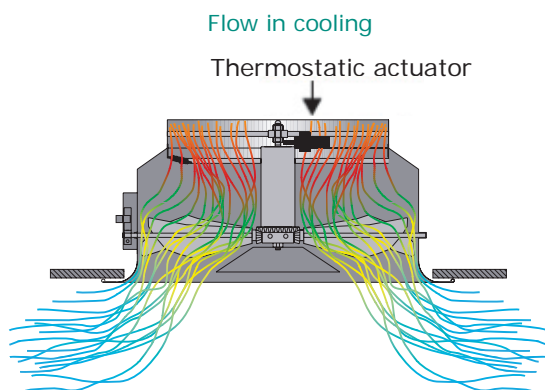
SDACH-TE Diffuser with thermostatic actuator controlled connected blades, with equaliser

SDACH-TP Diffuser with thermostatic actuator controlled connected blades, 595 x 595 tile



Sizes

Nominal Dimensions BxH mm	ØD	ØD1	ØD2	H	H1
200	198	316	242	174	40
250	248	404	315	200	40
315	313	472	375	235	40
400	398	601	460	260	50
500	498	787	570	315	60
630	628	903	700	320	65



Selection Table

Blades at 45°

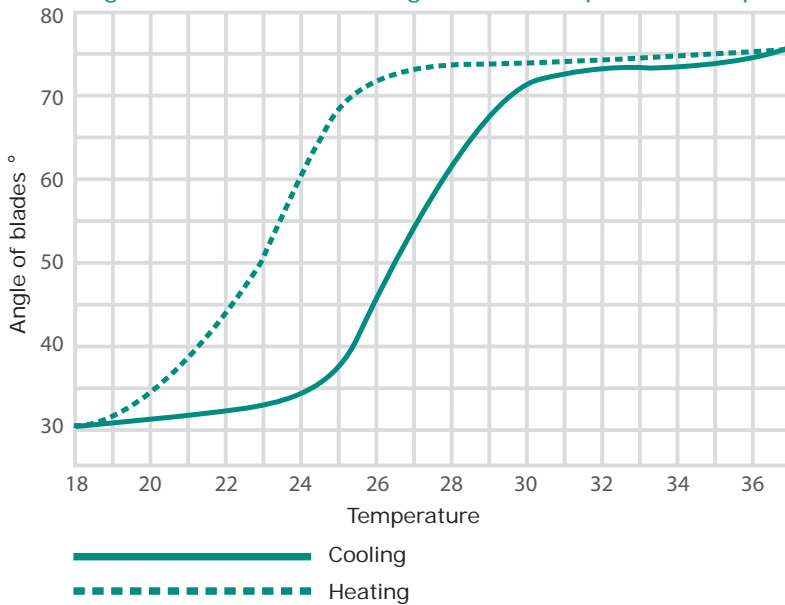
Model	A _k [m ²]	Q [m ³ /h]		L _{WA} [dB(A)]		X _(0,25) [m]		Dp _t [Pa]	
		min	max	min	max	min	max	min	max
SDACH-T 200	0,0314	310	950	39	64	2,1	6,7	10	50
SDACH-T 250	0,0491	460	1410	38	62	2,4	7,7	10	50
SDACH-T 315	0,0779	700	2140	37	61	2,9	9,10	10	50
SDACH-T 400	0,1257	1080	3280	36	60	3,6	11,2	10	50
SDACH-T 500	0,1963	1620	4900	35	59	4,5	14,5	10	50
SDACH-T 630	0,3117	2450	7420	34	58	6,19	20,9	10	50



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Diagram below shows how angle of blades depends on temperature

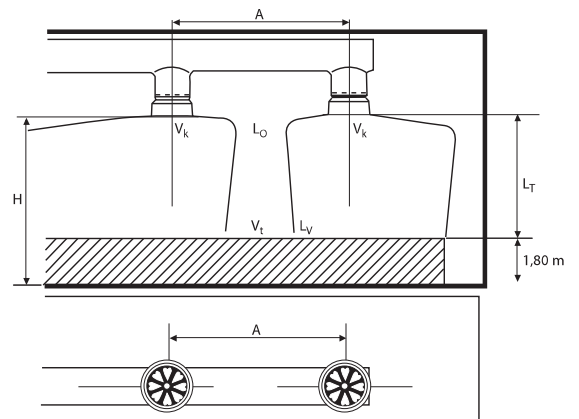
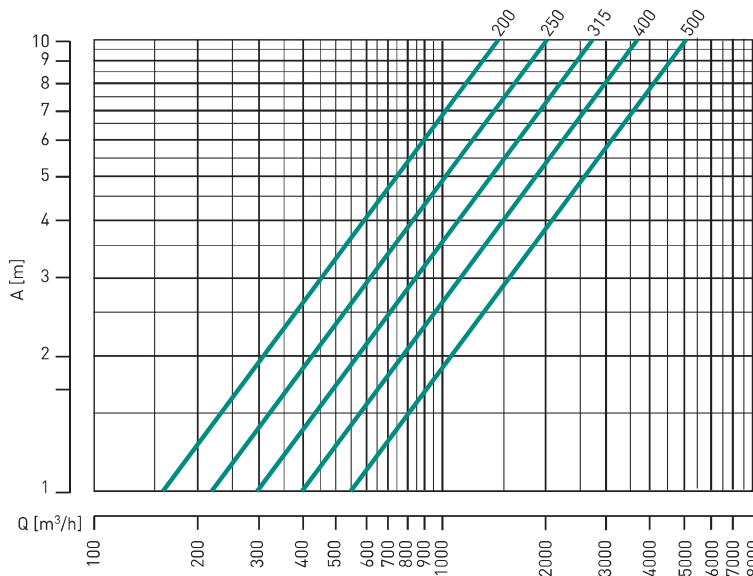


Thermostatic actuator is fixed to the bracket at the rear of the unit.

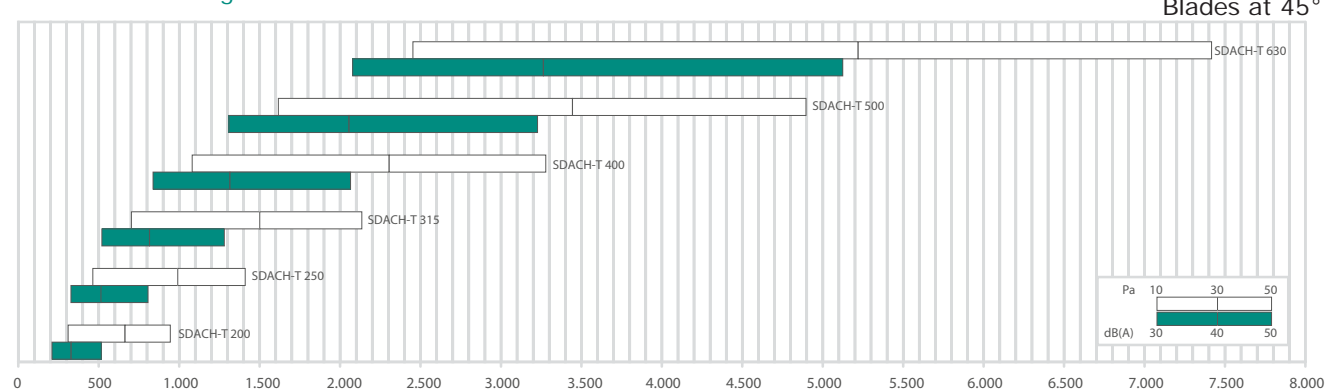
Thermostatic actuator reacts to the supplied air temperature and adjusts the blades to suit hot or cold distribution.

There is no need for a power supply.

Distance between diffusers

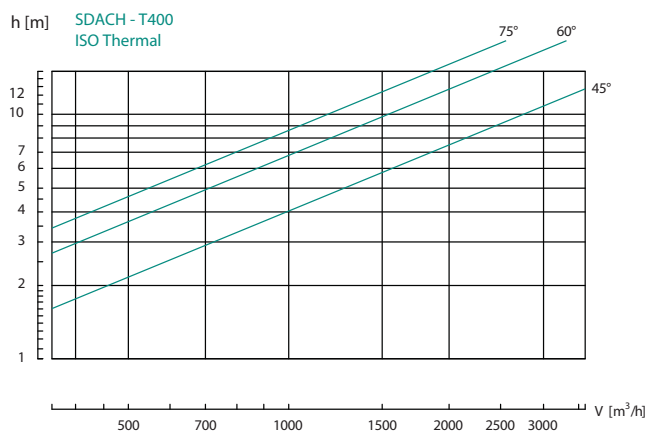
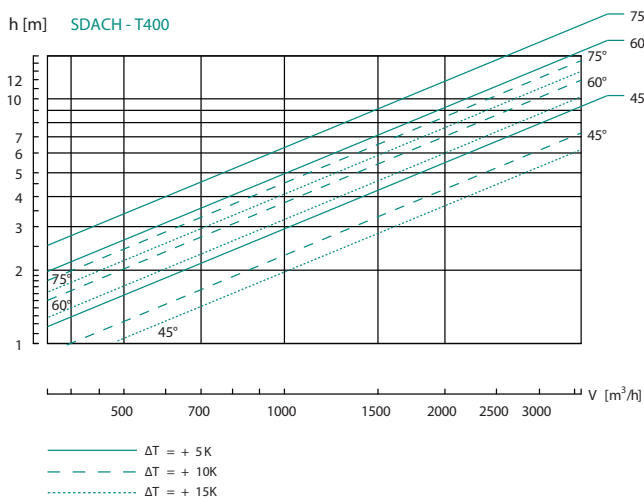
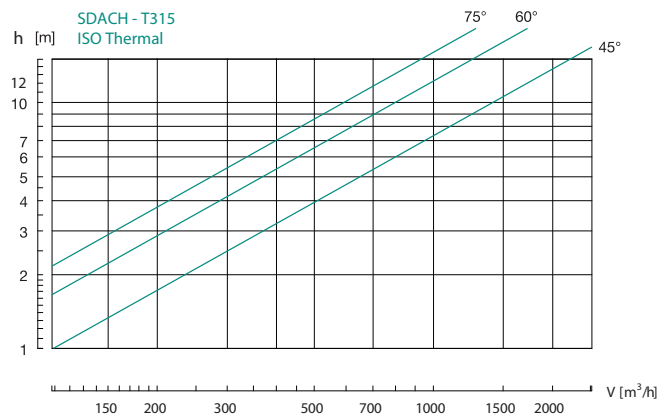
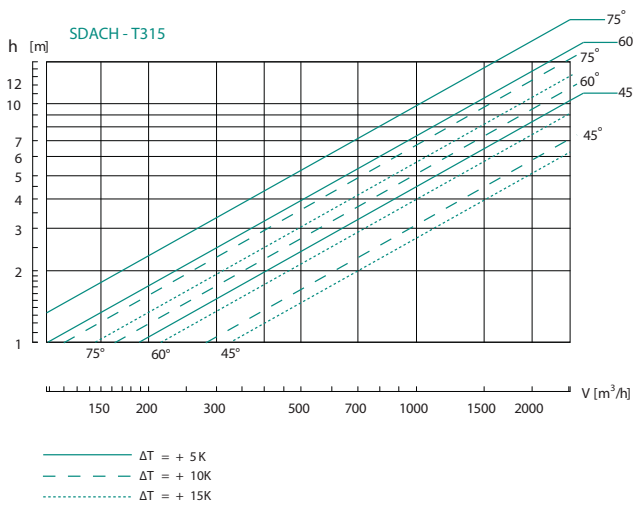
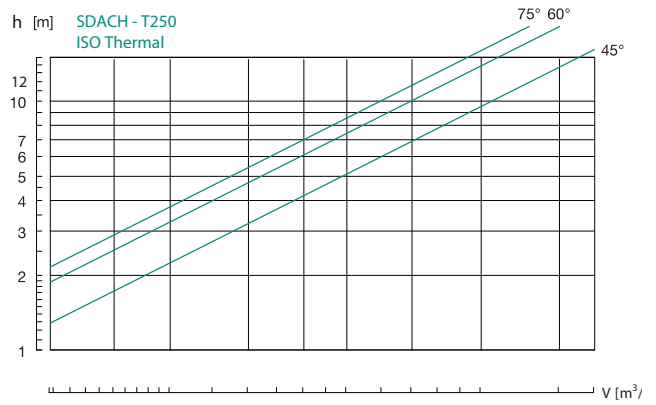
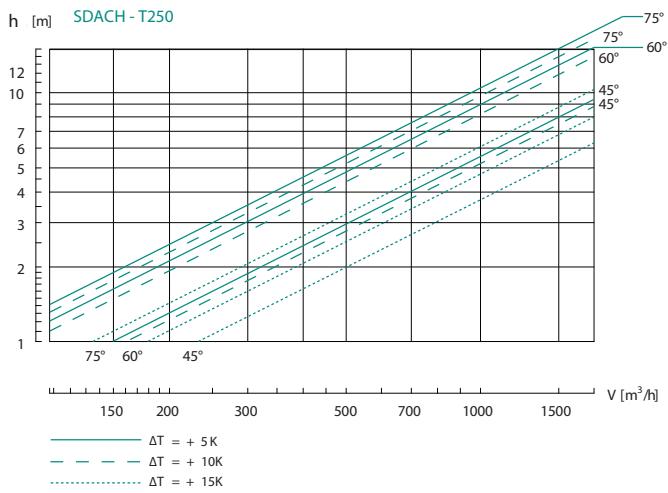


Quick selection diagram



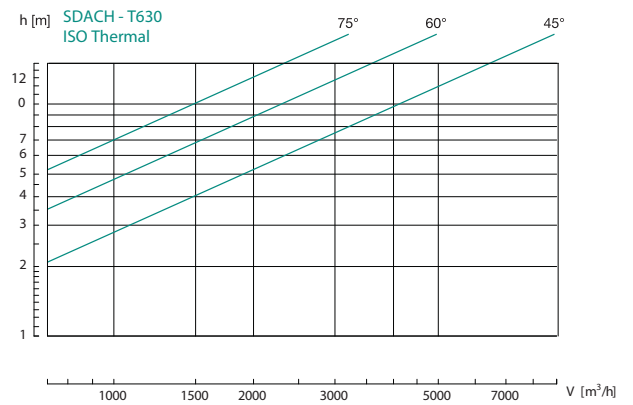
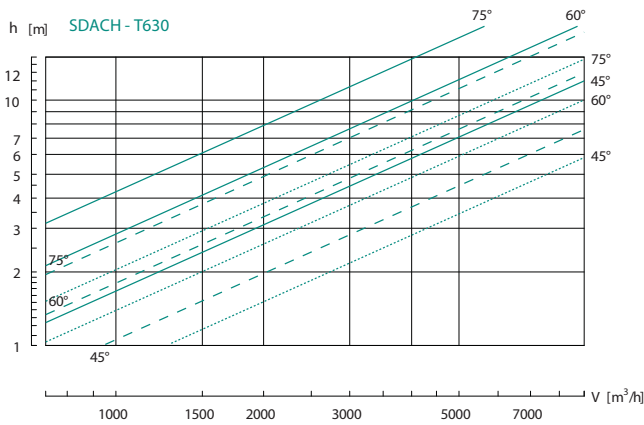
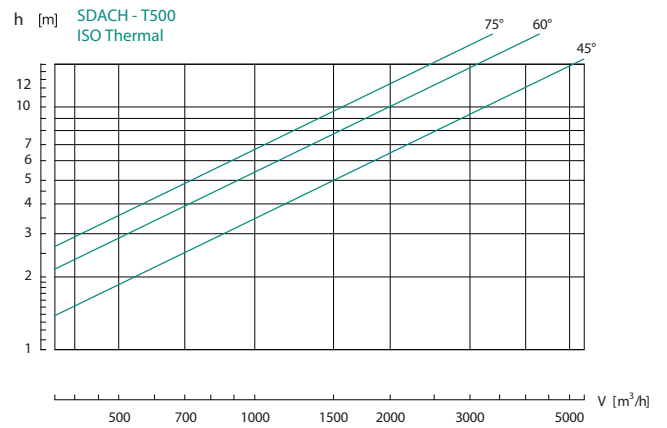
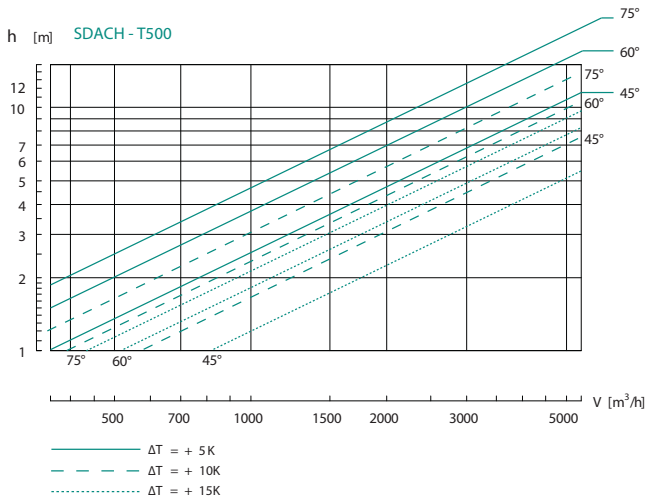


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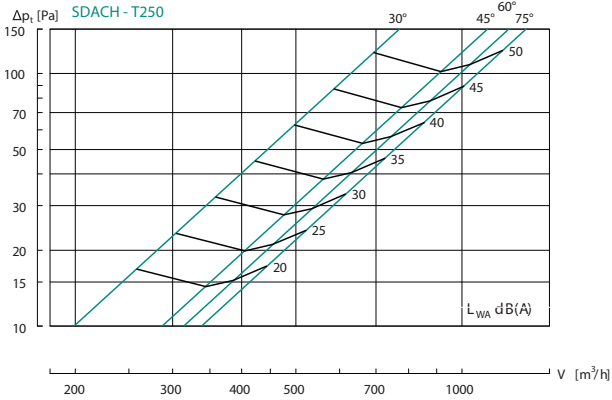




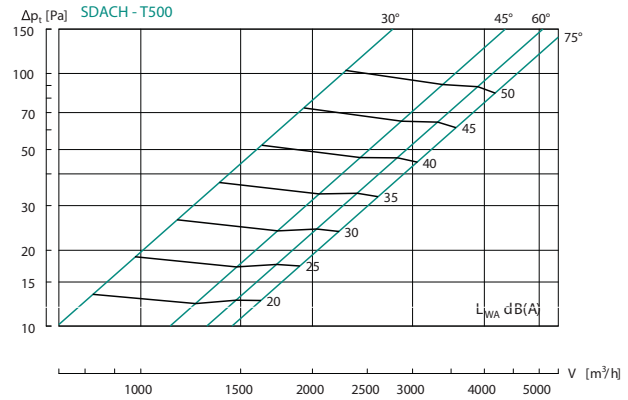
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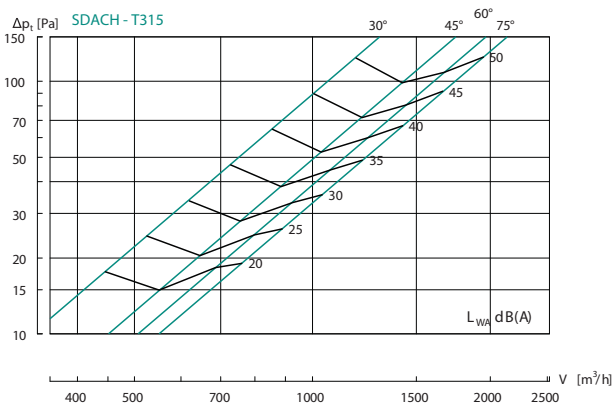
Sound level and pressure drop



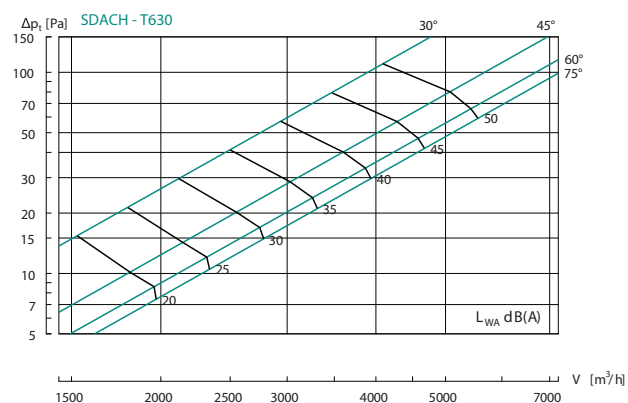
Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	7	1	-2	-2	-4	-9	-18	-21



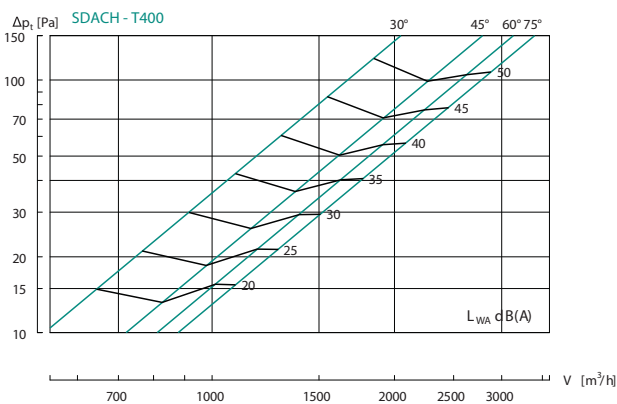
Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	12	1	-2	-1	-4	-12	-20	-22



Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	10	2	-1	-3	-4	-10	-17	-21



Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	15	5	0	-2	-5	-12	-18	-22



Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	12	1	-2	-2	-3	-13	-20	-23

Waterloo Product Range



Waterloo Product Range

GRILLES

A complete range of products suitable for all wall, ceiling and floor applications. Most grilles are made from aluminium and have a range of fixed or moveable blades designed to give performance whilst remaining aesthetically pleasing to the eye. Grilles are made to customer specified sizes and colours (PPM/G); standard colour PPM9010 (20% Gloss White). The range is complemented by the Aircell range of polymer Grilles.



DIFFUSERS

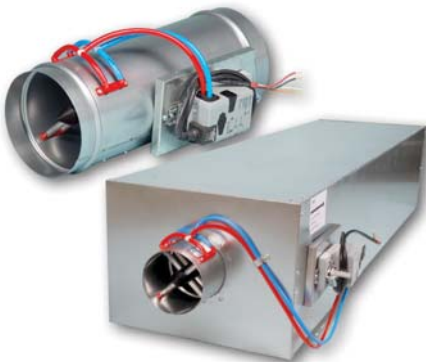
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetic requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G); standard colour is PPM 9010 (20% Gloss White). This range is complemented by the Aircell range of polymer Diffusers.



ACTIVE AND PASSIVE CHILLED BEAMS

The finest quality range of high output active beams, used for ventilated heating and cooling applications. These units have 4 pipe coils to allow heating and cooling circuits to run simultaneously, giving constant and responsive control. The design allows a large optimum capacity and also allows the customer to specify the nozzle type and pitch for individual circumstances.

Active beams are made from steel to a large range of customer specified sizes and as such are suitable for various different ceiling systems. Standard finish is PPM 9010, however other (PPM/G) colours are available on request.



AIR VOLUME CONTROL DAMPERS

Pressure independent Variable Air Volume and Constant Air Volume dampers made from zintec plate. Most volume dampers are regulated with an electronic motor and sensors and are calibrated to customer specifications before delivery.

The Constant Air Volume damper requires no power source as it is controlled via a mechanical device and calibrated before delivery. All volume dampers can be ordered with a single or double (insulation) skin.

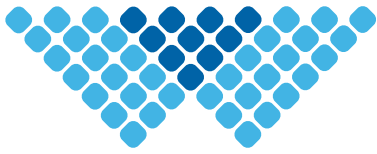
EXTERNAL LOUVRES

A quality range of products for external wall applications. Made from aluminium, with birdscreen or insect screen options. All louvres are made to customer specified sizes and (PPM/G) colours; standard colour is PPM 9006.



DISPLACEMENT

A full range of recessed, semi-recessed, floor, wall and corner units providing high ventilation efficiency and excellent comfort. The very low pressure involved also offer quiet installations. Displacement units are available as wall or floor mounted, or indeed integrated within the architectural design.



waterloo

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