## **Floor Swirl Diffuser**

## Description

Designed for supply air applications, the floor swirl diffuser is suitable for installing into floors with a pressurised void, or can be ducted using an additional plenum box.

The diffuser includes an integral baffle, which can be adjusted to provide horizontal or vertical discharge patterns, along with a combined damper and dust basket.

## Construction

The face plate and mounting ring are manufactured from cast aluminium, while the dust basket and baffle are formed from sheet mild steel.

The diffuser is supplied complete with fixing cleats to suit a floor thickness up to 45mm.

#### Finish

The face plate is plain cast aluminium as standard, or can be polyester powder coated as required. The rear dirt collection basket and baffle arrangement are powder coated matt black as standard.

#### Size and Weight

The diffuser is available in size 200mm dia only and weighs 1.4kg.



Frame Style	Size Code	Options	Accessories		Fixings	Finish
DN	2	0	0		2	C PPC RAL 9010
		1 Top Inlet Plenum		+		D Cast Aluminium
		2 Side Inlet Plenum				

Size	ØA	ØB	ØC	E
200	236	190	160	19



ØA



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# Floor Swirl Diffuser - DN200 + Selection Data

DN200 + SELECTION DATA							
q (l/s)	14	16	20	25	30	40	
Lt Horizontal (M)	0.5	0.6	0.7	0.9	1.1	1.4	
Lt Vertical (M)	0.62	0.72	0.9	1.1	1.3	1.8	
Ps (Pa)	13	16	26	40	60	105	
NC Horizontal Throw	<15	15	22	26	32	45	
NC Vertical Throw	<15	<15	15	20	25	33	



Pressure drop figures given above are with the combined dust basket damper set to the fully open position and with the diffuser set to a horizontal throw pattern. Apply a correction factor of Ps X 0.9 for vertical throw settings.

Damper adjustment will influence the pressure drop and noise figures. Apply the following correction factors:

Damper position	50% Open	Ps X 1.4 + 2 NC	
	25% Open	Ps X 2.0 + 8 NC	

Throw values given are at 0.5 M/s Vt and are valid for horizontal throws with a Td- $10^{\circ}$ C to  $20^{\circ}$ C. Vertical throws will reduce when used for cooling, in this case apply the following factors.

Td 0 <sup>0</sup>	-4 <sup>0</sup>	-6 <sup>0</sup>	-8 <sup>0</sup>	-10 <sup>0</sup>
Lt X 1	Lt x 0.7	Lt x 0.6	Lt x 0.5	Lt x 0.45