



Curved Blade Diffuser

General Information:

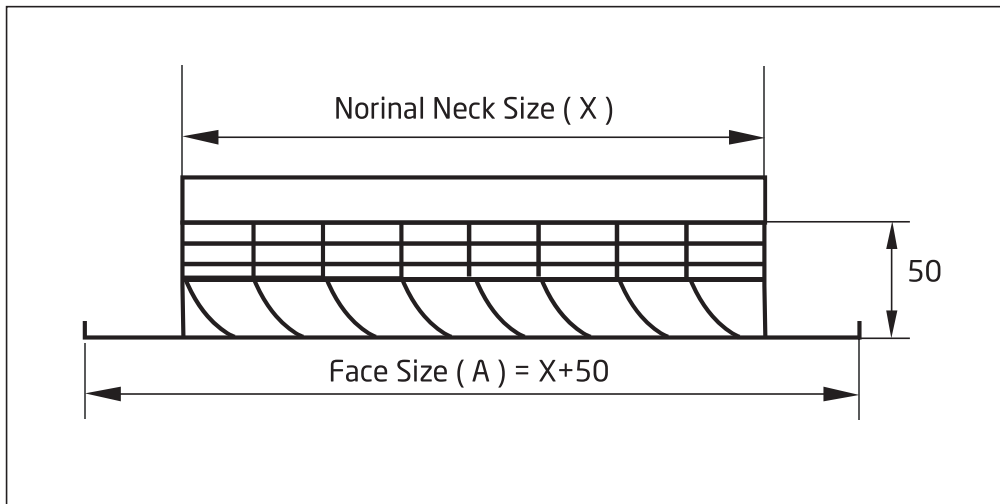
The Ventech Curved Blade Diffuser can turn into a multi directional outlet. For each blade it can also be adjusted individually which results in improved airflow control.

The Curved Blade Diffuser is suitable for heating, cooling or evaporative air distribution. Commonly used in ceiling or side wall applications where positive direction control is required. Individual adjustable blades make it easy to be closed off, avoiding draughts without the expense of any volume control damper.

Features:

- All extruded aluminium frame and curved blades
- Other patterns are available on request
- Optional Opposed blade dampers, stream splitter dampers
- Size manufactured on request

Curved Blade 1 Way Diffuser



Nominal Neck Metric (X)	Face Size (A)
150 x 150 mm	200 x 200 mm
225 x 225 mm	275 x 275 mm
300 x 300 mm	350 x 350 mm
375 x 375 mm	425 x 425 mm
450 x 450 mm	500 x 500 mm

* Grilles are powder coated white as standard

* The first number is for horizontal dimension and the second number is for vertical dimension

Quick Selection Table

Flow rate		Dim	150 x 150	225 x 225	300 x 300	375 x 375	450 x 450	525 x 525	600 x 600	Flow rate		Dim	150 x 150	225 x 225	300 x 300	375 x 375	450 x 450	525 x 525	600 x 600			
(m³/h)	(l/s)	A _k	0.0109	0.0244	0.0435	0.0679	0.0978	0.1331	0.1739	(m³/h)	(l/s)	A _k	0.0109	0.0244	0.0435	0.0679	0.0978	0.1331	0.1739			
100	27.8	V _k	2.1	0.9						700	194.4	V _k		6.4	3.6	2.3	1.6	1.2	0.9			
		X	0.5	0.3								X		2.3	1.7	1.4	1.2	1.0	0.9			
		P _t	4.4	0.9									P _t		43.6	13.7	5.6	2.7	1.5	0.9		
		NR	17.5	-									NR		47.5	35.9	27.2	20.4	14.6	8.7		
120	33.3	V _k	2.5	1.1						800	222.2	V _k			4.1	2.6	1.8	1.4	1.0			
		X	0.6	0.4								X			2.0	1.6	1.3	1.1	1.0			
		P _t	6.4	1.3									P _t			17.9	7.4	3.5	2.0	1.1		
		NR	21.3	5.8									NR			39.8	31.0	23.3	17.5	11.6		
140	38.9	V _k	2.9	1.3						900	250.0	V _k			4.6	3.0	2.1	1.5	1.1			
		X	0.7	0.5								X			2.2	1.8	1.5	1.3	1.1			
		P _t	8.7	1.8									P _t			22.6	9.3	4.5	2.5	1.4		
		NR	25.2	8.7									NR			42.7	34.0	26.2	20.4	14.6		
160	44.4	V _k	3.3	1.4	0.8					1000	277.8	V _k			5.1	3.3	2.2	1.7	1.3			
		X	0.8	0.5	0.4							X			2.5	2.0	1.7	1.4	1.2			
		P _t	11.4	2.3	0.7								P _t			27.9	11.5	5.5	2.9	1.8		
		NR	28.1	12.6	-								NR			44.6	35.9	29.1	22.3	17.5		
180	50.0	V _k	3.7	1.6	0.9					1200	333.3	V _k			6.2	3.9	2.7	2.0	1.5			
		X	0.9	0.6	0.4							X			3.0	2.4	2.0	1.7	1.5			
		P _t	14.4	2.8	0.9								P _t			40.3	16.6	7.9	4.3	2.5		
		NR	31.0	15.5	-								NR			49.5	40.7	33.0	27.2	22.3		
200	55.6	V _k	4.1	1.8	1.0					1400	388.9	V _k				4.6	3.2	2.3	1.8			
		X	1.0	0.7	0.5							X				2.8	2.3	2.0	1.7			
		P _t	17.8	3.5	1.1								P _t				22.5	10.9	5.9	3.4		
		NR	34.0	17.5	5.8								NR				44.6	36.9	31.0	25.2		
250	69.4	V _k	5.1	2.2	1.3	0.8				1600	444.4	V _k				5.2	3.6	3.3	2.6			
		X	1.2	0.8	0.6	0.5						X				3.2	2.7	1.8	1.6			
		P _t	27.8	5.6	1.8	0.7							P _t				29.4	14.2	7.6	4.5		
		NR	38.8	23.3	11.6	-							NR				47.5	39.8	34.0	29.1		
300	83.3	V _k	6.1	2.7	1.5	1.0				1800	500.0	V _k				5.9	4.1	3.0	2.3			
		X	1.5	1.0	0.7	0.6						X				3.6	3.0	2.6	2.2			
		P _t	40.1	8.0	2.5	1.1							P _t				37.2	17.9	9.7	5.7		
		NR	43.7	27.2	15.5	6.8							NR				50.4	42.7	36.9	32.0		
350	97.2	V _k	7.1	3.2	1.8	1.1	0.8			2000	555.6	V _k					4.6	3.4	2.6			
		X	1.7	1.2	0.9	0.7	0.6					X					3.3	2.9	2.5			
		P _t	54.6	10.9	3.4	1.4	0.7						P _t					22.1	12.0	7.0		
		NR	47.5	31.0	19.4	10.7	-						NR					45.6	39.8	34.0		
400	111.1	V _k		3.7	2.1	1.3	0.9			2500	694.4	V _k					5.7	4.2	3.2			
		X		1.3	1.0	0.8	0.7					X					4.2	3.6	3.1			
		P _t		14.2	4.5	1.9	0.9						P _t					34.6	18.7	11.0		
		NR		34.0	23.3	14.6	6.8						NR					50.4	44.6	39.8		
450	125.0	V _k		4.1	2.3	1.4	1.0			3000	833.3	V _k						5.0	3.8			
		X		1.5	1.1	0.9	0.7					X						4.3	3.7			
		P _t		18.0	5.7	2.4	1.1						P _t						26.9	15.8		
		NR		36.9	26.2	16.5	9.7						NR						49.5	43.7		
500	138.9	V _k		4.6	2.6	1.6	1.1			3500	972.2	V _k							5.8	4.5		
		X		1.7	1.2	1.0	0.8					X							5.0	4.4		
		P _t		22.2	7.0	2.8	1.4						P _t							36.6	21.5	
		NR		39.8	28.1	19.4	12.6						NR							52.4	47.5	
600	166.7	V _k		5.4	3.0	2.0	1.4	1.0		4000	1111.1	V _k								6.6	5.1	
		X		2.0	1.5	1.2	1.0	0.9				X								5.7	5.0	
		P _t		32.0	10.1	4.1	2.0	1.1					P _t								47.8	28.0
		NR		43.7	33.0	24.3	16.5	10.7					NR								56.3	52.0

* This table only be used for single way Curved Blade Diffuser products

Symbols:

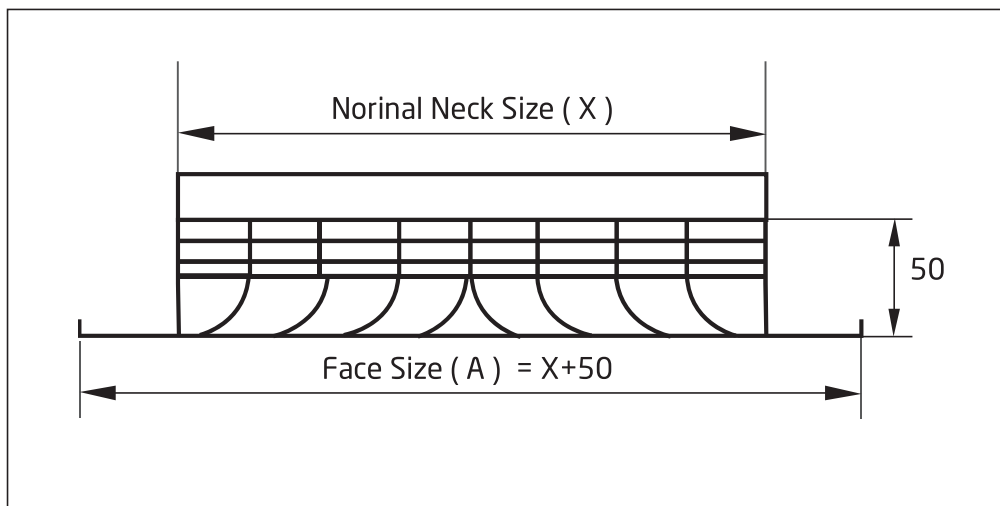
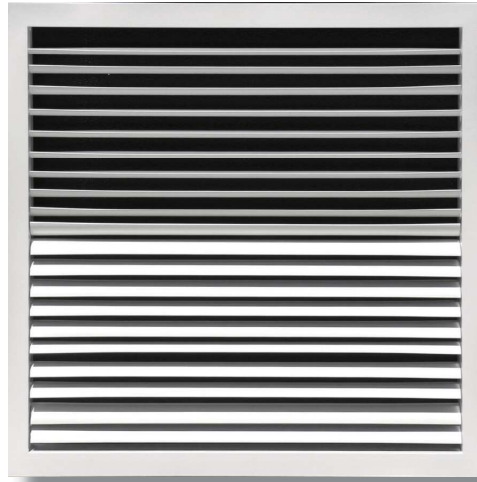
A_k - Effective area

V_k - Effective velocity in m/s

X - Throw in metres correspond to a terminal velocity in occupied zone of 0.25m/s

Pressure (P_t) - All pressures are in Pa (N/m²)

Curved Blade 2 Way Diffuser



Nominal Neck Metric (X)	Face Size (A)
150 x 150 mm	200 x 200 mm
225 x 225 mm	275 x 275 mm
300 x 300 mm	350 x 350 mm
375 x 375 mm	425 x 425 mm
450 x 450 mm	500 x 500 mm

* Grilles are powder coated white as standard

* The first number is for horizontal dimension and the second number is for vertical dimension