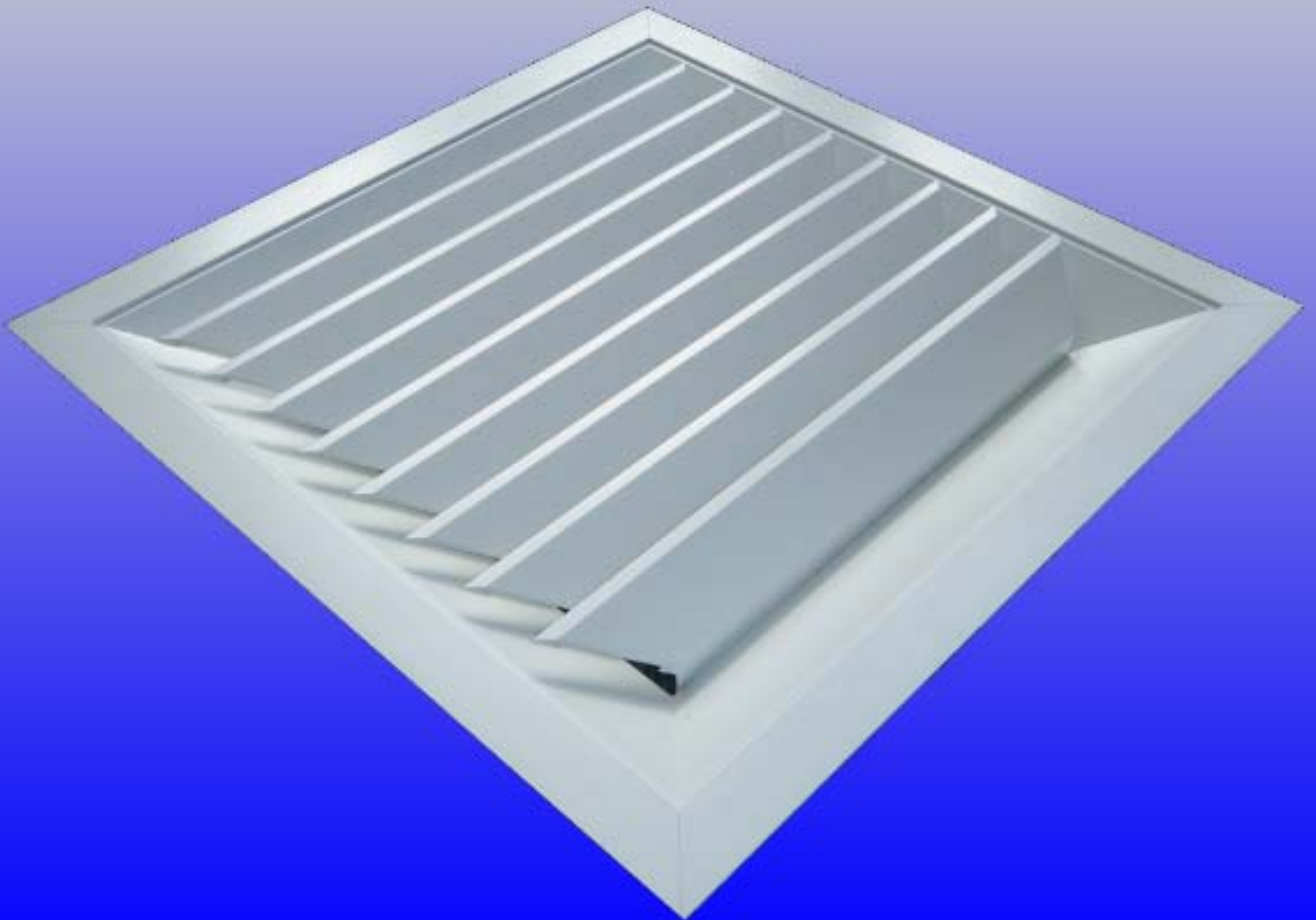




Ceiling diffuser - 1 way blow Series CD1



Ceiling diffuser - 1 way blow

Model

CD1

Overview

1 way blow ceiling diffusers are best suited to supply applications, in areas like the edges of rooms or close to exterior doors, where directing air against a wall or through a door would be wasteful. CD1s, like all of the HVC range of Ceiling Diffusers, enable bespoke air movement layouts to be created, while retaining aesthetic quality.



Construction

- Extruded aluminium frame (30mm flat flange) and core.
- Welded corners, reinforced with pressed aluminium corners on frame.
- Removable core utilising spring clips and safety cord as standard

Options and accessories

HVC can supply you a standard 1 way blow ceiling diffuser, or a customised unit made to your exact specifications. Please see our list of options and accessories below for an overview of what we can do.

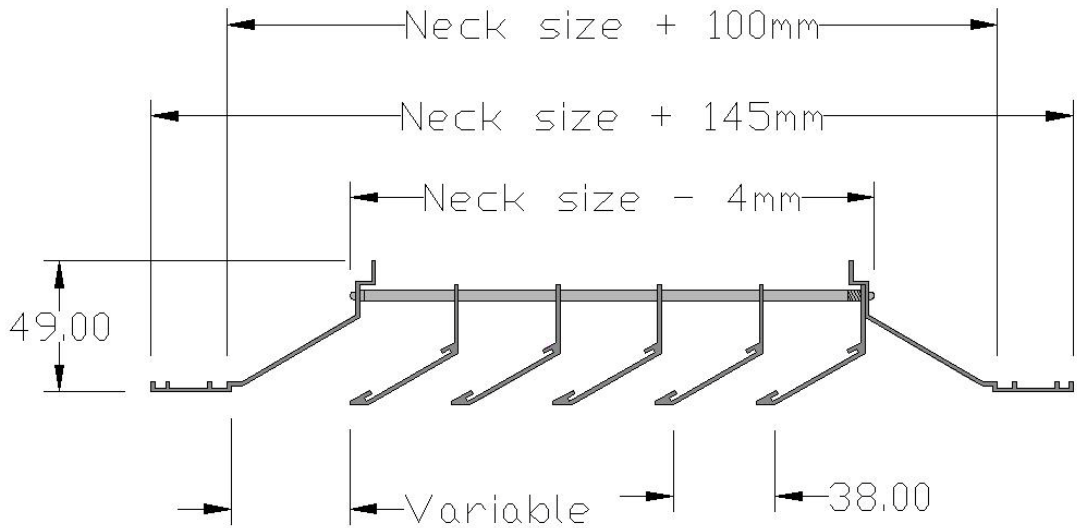
- **Opposed blade damper** - Operated via key/screwdriver, access possible by removing core. . Lever operated OBDs can also be fitted to ceiling diffusers, access is also possible by removing the core.
- **Blanking plate** - Blanking plates enable a portion or all of the grille to be disabled. These are useful with CD1s when line of sight through the diffuser is undesirable.
- **Specialised tiles** - HVC can cater for situations where specific tile formats are needed. Please get in touch with our sales team for more information on CD2s fitted into tile layouts such as Burgess clip in systems.



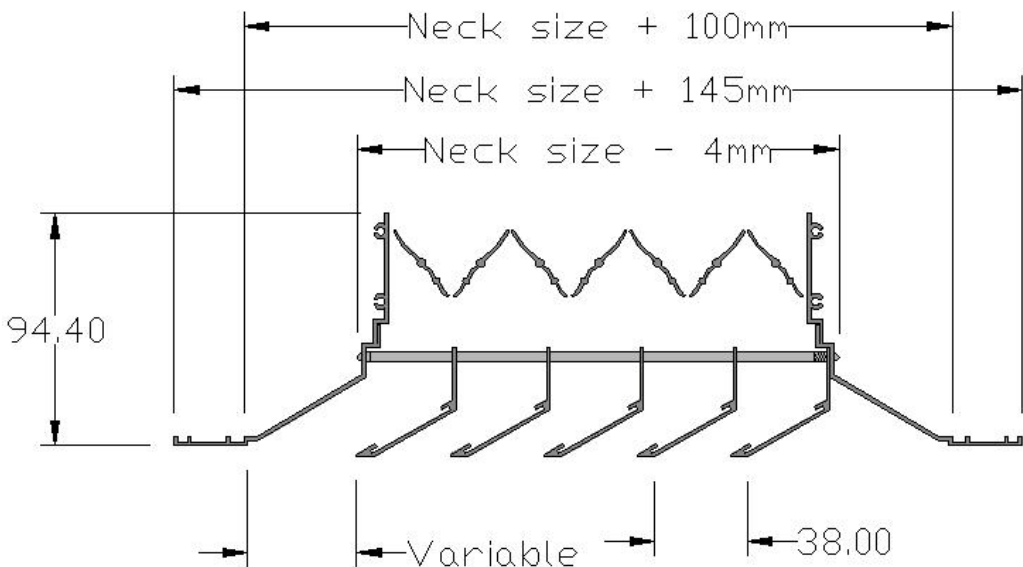
Technical information

- Free area - Approximately 50%
- CD1 Mass / M² - 8.5 KG
- CD1/D Mass / M² - 16 KG

- ___ x ___ - CD1



- ___ x ___ - CD1 - D



Spacing between frame and outermost blade is variable based on the size of diffuser selected. Never will this gap be large enough to enable line of sight into ductwork / ceiling void from directly below the diffuser.

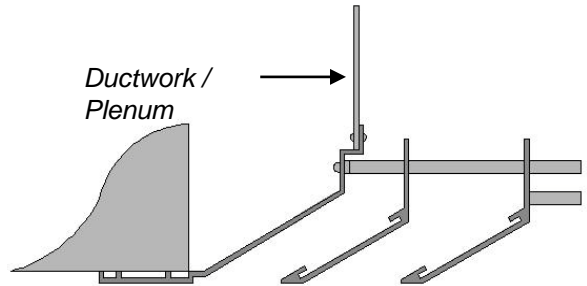


- ___ x ___ - CD1 / ___ x ___ - CD1 - D



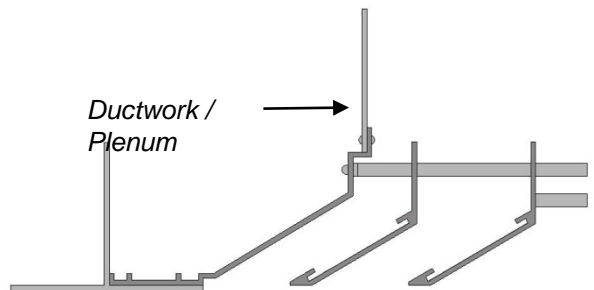
• SURFACE MOUNTED

A surface mounted CD1 must be put into position and then fixed to supporting ductwork or plenum, using pop rivets or another suitable fixing method. This is easiest when the core is removed allowing access through the face of the grille



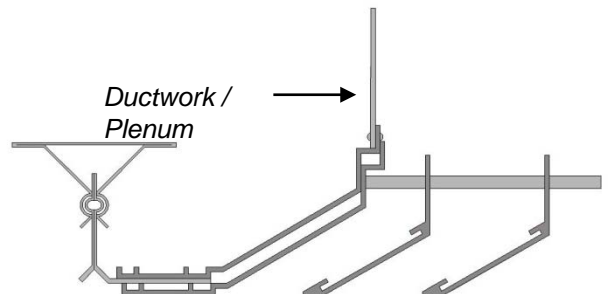
• LAY IN

Simply lay the diffuser into the pre-prepared T bar ceiling grid and then through the face, connect the diffuser to the ductwork.



• BURGESS / OTHER TILE SYSTEM

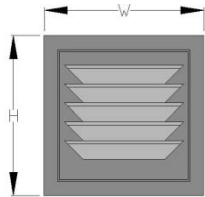
The diffuser will be fitted into the tile before despatch. Installation then involves simply clipping the burgess tile into the pre-prepared ceiling grid.



Please note - Diagrams are for illustrative purposes only

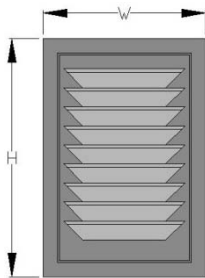


CD1 – Square sizes



SIZE (w x h)	AK m sq.	NECK VELOCITY m/s	1.5	2	2.5	3	3.5
		Total Pd mm w.g.	0.9	1.5	2.3	3.3	4.3
150 x 150	0.0097	m cub/sec	0.0361	0.0472	0.0597	0.0708	0.0833
		Throw min-max (m)	0.9 - 2.4	1.2 - 2.8	1.5 - 3.0	2.2 - 3.4	2.5 - 3.7
		Noise (dB)			20	24	28
225 x 225	0.0219	m cub/sec	0.0805	0.1069	0.1319	0.1611	0.1861
		Throw min-max (m)	1.5 - 3.7	2.1 - 4.3	2.4 - 4.6	3.1 - 5.2	3.7 - 5.5
		Noise (dB)		20	25	29	32
300 x 300	0.0390	m cub/sec	0.1416	0.1888	0.2361	0.2833	0.3305
		Throw min-max (m)	2.2 - 4.9	2.8 - 5.5	3.4 - 6.4	4.0 - 6.7	4.6 - 7.3
		Noise (dB)		23	28	32	35
375 x 375	0.0609	m cub/sec	0.2222	0.2958	0.3680	0.4444	0.5166
		Throw min-max (m)	2.5 - 6.1	3.4 - 7.0	4.3 - 8.0	4.9 - 8.6	5.8 - 9.2
		Noise (dB)		25	30	34	37

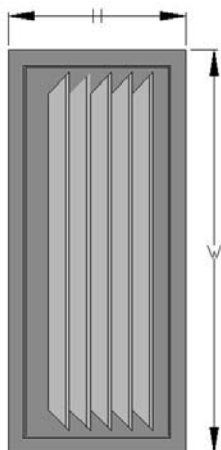
CD1 – Short blades



SIZE (w x h)	AK m sq.	NECK VELOCITY m/s	1.5	2	2.5	3	3.5
		Total Pd mm w.g.	0.9	1.5	2.3	3.3	4.3
225 x 150	0.0147	m cub./sec.	0.0541	0.0708	0.0902	0.1069	0.1250
		Throw min-max (m)	1.8 - 4.3	2.4 - 4.9	3.0 - 5.5	3.3 - 5.8	3.9 - 6.4
		Noise (dB)			23	27	30
300 x 225	0.0292	m cub./sec.	0.1083	0.1416	0.1791	0.2125	0.2500
		Throw min-max (m)	2.4 - 5.8	3.3 - 6.7	3.9 - 7.6	4.9 - 8.6	5.8 - 9.2
		Noise (dB)		22	27	30	34
375 x 300	0.0487	m cub/sec	0.1777	0.2361	0.2958	0.3541	0.4138
		Throw min-max (m)	3.1 - 7.6	4.3 - 8.8	5.2 - 9.8	6.4 - 10.9	7.3 - 11.6
		Noise (dB)		24	29	33	36



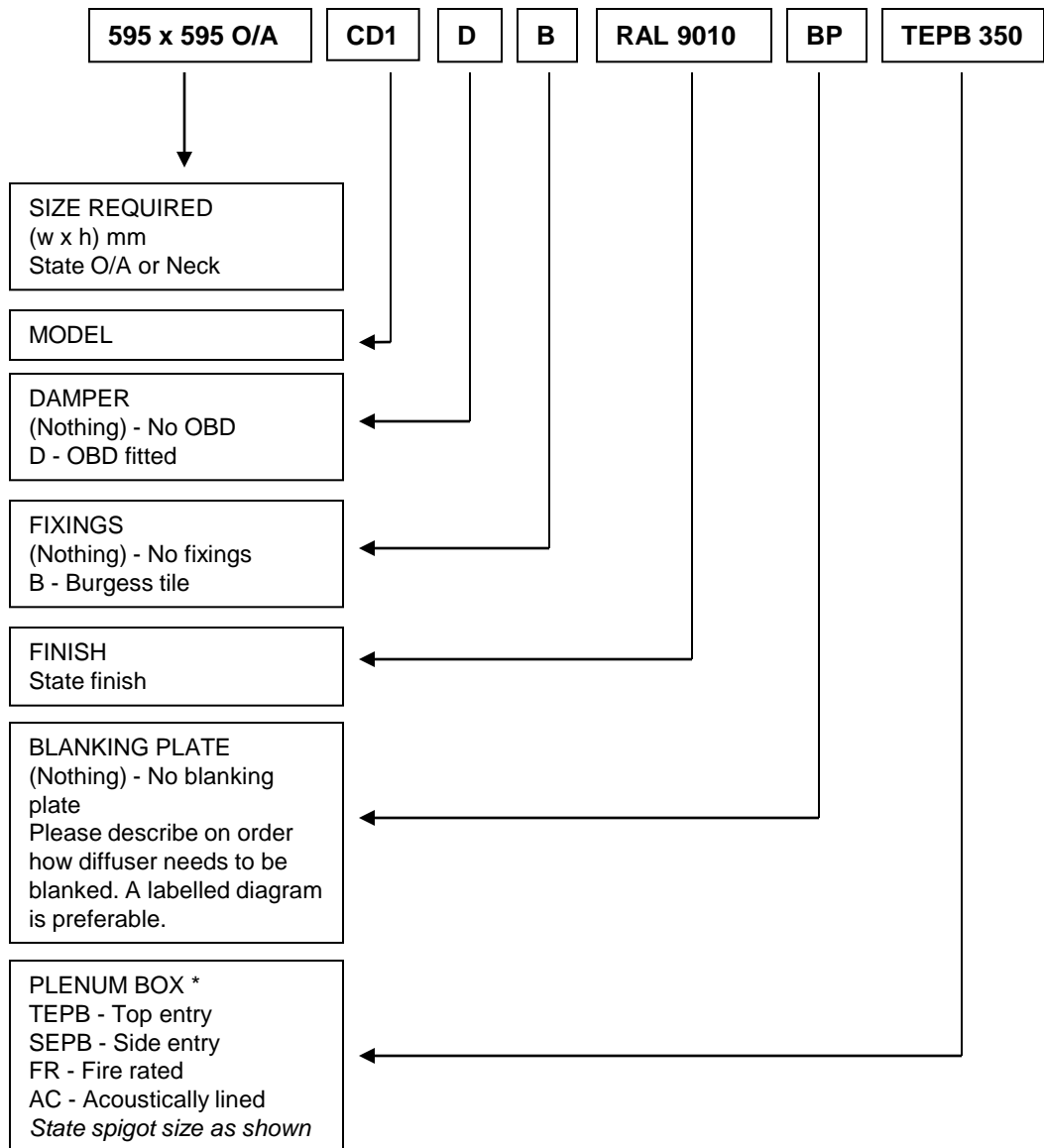
CD1 – Long blades



SIZE (w x h)	AK m sq.	NECK VELOCITY m/s	1.5	2	2.5	3	3.5
		Total Pd mm wg	0.9	1.5	2.3	3.3	4.3
225 x 150	0.0147	m cub/sec	0.0541	0.0708	0.0902	0.1069	0.1250
		Throw min-max (m)	1.8 - 4.3	2.4 - 4.9	3.0 - 5.5	3.3 - 5.8	4.0 - 6.4
		Noise (dB)			23	27	30
300 x 150	0.0195	m cub/sec	0.0708	0.0944	0.1180	0.1416	0.1652
		Throw min-max (m)	2.2 - 4.9	2.8 - 5.5	3.4 - 6.4	4.0 - 6.7	4.6 - 7.3
		Noise (dB)			24	28	32
375 x 150	0.0244	m cub/sec	0.0902	0.1180	0.1486	0.1777	0.2083
		Throw min-max (m)	2.2 - 5.5	3.0 - 6.4	3.7 - 7.0	4.6 - 7.6	5.2 - 8.3
		Noise (dB)		20	26	29	33
450 x 150	0.0292	m cub/sec	0.1083	0.1416	0.1791	0.2125	0.2500
		Throw min-max (m)	2.5 - 5.8	3.4 - 6.7	4.0 - 7.6	4.9 - 8.6	5.8 - 9.2
		Noise (dB)		22	27	30	34
300 x 225	0.0292	m cub/sec	0.1083	0.1416	0.1791	0.2125	0.2500
		Throw min-max (m)	2.5 - 5.8	3.4 - 6.7	4.0 - 7.6	4.9 - 8.6	5.8 - 9.2
		Noise (dB)		22	27	30	34
375 x 225	0.0367	m cub/sec	0.1319	0.1763	0.2222	0.2666	0.3125
		Throw min-max (m)	2.8 - 6.7	3.7 - 7.6	4.6 - 8.6	5.5 - 9.5	6.4 - 10.0
		Noise (dB)		22	27	32	35
525 x 225	0.0511	m cub/sec	0.1861	0.2486	0.3097	0.3708	0.4319
		Throw min-max (m)	3.4 - 8.0	4.3 - 9.2	5.5 - 10.0	6.4 - 11.0	7.7 - 11.9
		Noise (dB)		24	29	33	37
375 x 300	0.0487	m cub/sec	0.1777	0.2361	0.2958	0.3541	0.4138
		Throw min-max (m)	3.1 - 7.6	4.3 - 8.9	5.2 - 9.8	6.4 - 11.0	7.3 - 11.6
		Noise (dB)		24	29	33	36
450 x 300	0.0585	m cub/sec	0.2125	0.2833	0.3541	0.4250	0.4958
		Throw min-max (m)	3.4 - 8.6	4.6 - 9.8	5.8 - 11.0	7.1 - 11.9	8.0 - 12.8
		Noise (dB)		25	30	33	37
525 x 300	0.0683	m cub/sec	0.2486	0.3305	0.4138	0.4958	0.5791
		Throw min-max (m)	3.7 - 9.2	4.9 - 10.4	6.1 - 11.6	7.4 - 12.8	8.9 - 13.7
		Noise (dB)	20	26	30	34	37



Ordering Codes



* Plenum boxes are as standard 100mm deep, please state should other depth be required.

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