KCD – Kitchen Ceiling Diffuser (CE)

Overview

Uncontrolled draughts – even the smallest ones – can totally ruin the Capture & Containment capacity of hoods. A well designed make up air strategy contributes not only to guarantee this efficiency but also to the final Indoor Air Quality (IAQ) inside the kitchen. It should always be considered as an inherent part of the kitchen ventilation solution.

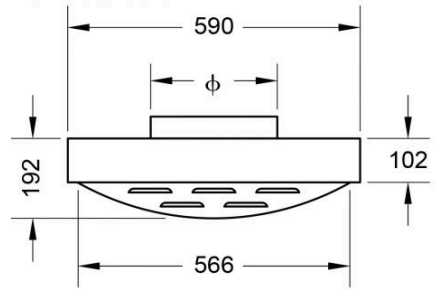
Halton's KCD ceiling diffuser has been specifically designed for kitchens. It provides for a high volume of supply air ideally at 60 cm minimum of the hood(s) without disrupting hood performance. Tested performance of supply air discharge ensures that airflow, pressure drop, and NC (Noise Criteria) specifications are met.

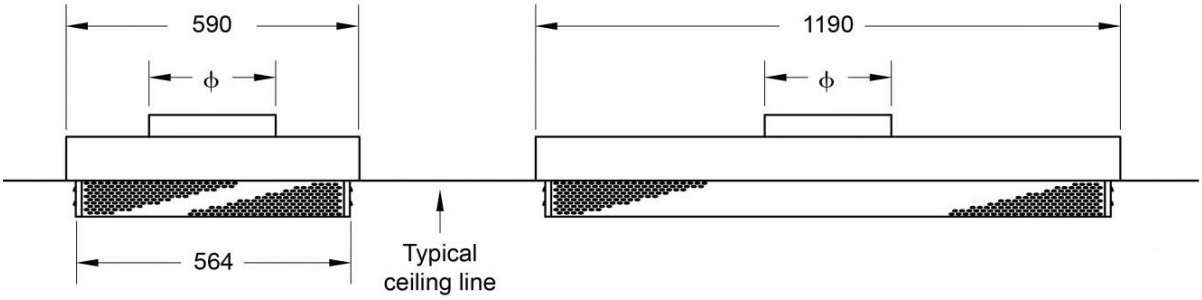
KCD diffusers are particularly suitable for small kitchens, especially when they are equipped with Halton's **M.A.R.V.E.L.** (Demand Controlled Ventilation). This technology constantly adjusts the exhaust airflow rates depending on cooking activity as well as the associated supply airflow rates. KCD diffusers have an excellent reaction to variable airflows.

- Best balance ratio efficiency/ceiling coverage.
- Limited draft compared to traditional 4-way diffusers. Do not degrade the capture efficiency of the hoods.
- Low pressure drop and sound pressure levels.
- Fixed front face made of 1.0 mm AISI 304 stainless steel. Plenum made of galvanised steel.
- Compatible with 600×600 mm ceilings.

Dimensions and weights

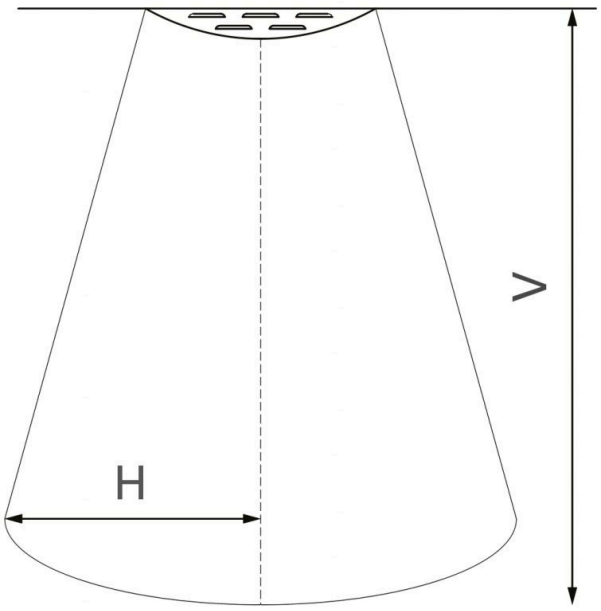
KCD 600×600 / 9 kg
KCD 600×1200 / 19 kg





Quick selection data

Throws @ 0.5 / 0.4 / 0.25 m/s



KCD 600 x 600 mm

Qv [m³/h]	[l/s]	H [m]	V [m]
425	118	na - na - na	0.1 - 0.2 - 0.3
640	178	na - na - 0.5	0.2 - 0.4 - 2.0
850	236	na - 0.4 - 0.8	0.3 - 1.1 - 2.3
1060	294	0.3 - 0.7 - 1.0	0.7 - 2.3 - 3.7
1275	354	0.5 - 0.8 - 1.1	2.1 - 2.4 - 3.7

KCD 600 x 1200 mm

Qv [m³/h]	[l/s]	H [m]	V [m]
850	236	na - na - na	0.1 - 0.2 - 0.3
1275	354	na - na - 0.5	0.2 - 0.4 - 2.0
1700	472	na - 0.4 - 0.8	0.3 - 1.1 - 2.3
2125	590	0.3 - 0.7 - 1.0	0.7 - 2.3 - 3.7

Quick selection data

(1) Air velocity at diffuser connection
(2) Static pressure drop at diffuser connection
(3) Acoustic power level
(4) Sound pressure level with ΩLr=4 dB
* Recommended values

KCD 600 x 600 mm

ϕ [mm]	Qv [m³/h]	[l/s]	V (1) [m/s]	ΔPst (2) [Pa]	LwA (3) [dB(A)]	LpA (4) [dB(A)]
160	500*	139	6.9	49	40	36
160	600*	167	8.3	71	46	42
160	700	194	9.7	95	51	47
160	800	222	11.1	125	56	52
160	900	250	12.4	158	60	56
200	600*	167	5.3	33	38	34
200	700*	194	6.2	46	44	40
200	800*	222	7.1	61	48	44
200	900	250	8.0	75	52	48
200	1000	278	8.8	91	55	51
200	1100	306	9.7	115	59	55
200	1200	333	10.6	135	62	58
250	800*	222	4.5	29	40	36
250	900*	250	5.1	37	44	40
250	1000*	278	5.7	44	47.	43
250	1100	306	6.2	56	51	47
250	1200	333	6.8	67	54	50
250	1300	361	7.4	78	56	52
250	1400	389	7.9	91	59	55
250	1600	444	9.1	120	63	59

KCD 600 x 1200 mm

ϕ [mm]	Qv [m³/h]	[l/s]	V (1) [m/s]	ΔPst (2) [Pa]	LwA (3) [dB(A)]	LpA (4) [dB(A)]
200	500*	139	4.4	24	31	27
200	600*	167	5.3	33	37	33
200	700*	194	6.2	45	42	38
200	800*	222	7.1	58	46	42
200	900	250	8.0	74	50	46
200	1000	278	8.8	90	54	50
250	600*	167	3.4	13	30	26
250	800*	222	4.5	25	37	33
250	1000*	278	5.7	37	44	40
250	1200	333	6.8	55	51	47
250	1400	389	7.9	75	56	52
250	1600	444	9.1	95	61	57
315	800*	222	2.9	8	31	27
315	1000*	278	3.6	12	36	32
315	1200*	333	4.3	17	42	38
315	1400*	389	5.0	23	48	44
315	1600	444	5.7	30	52	48
315	1800	500	6.4	38	56	52
315	2000	556	7.1	48	61	57