CONNOLS-AIR

RAISED FLOOR DIFFUSER



Designed for installation on raised floor where cold air is supplied to the space created by the raised and structural floor.

CONSTRUCTION

The installation ring and face plate are constructed of die-cast aluminum. All other components are fabricated from hot-dipped pre-galvanized steel plate.

Supplied in standard: 150mm, 200mm nominal size.

Centre Point Load Capacity
150mm diffuser: 90 kg
200mm diffuser: 75 kg

Pedestrian load will be higher than the centre print load capacity.

Powder-coated to standard matt black color.
Other colors available upon request.

FEATURES

Rapid room temperature equalization

Pressure loss& generated noise minimized

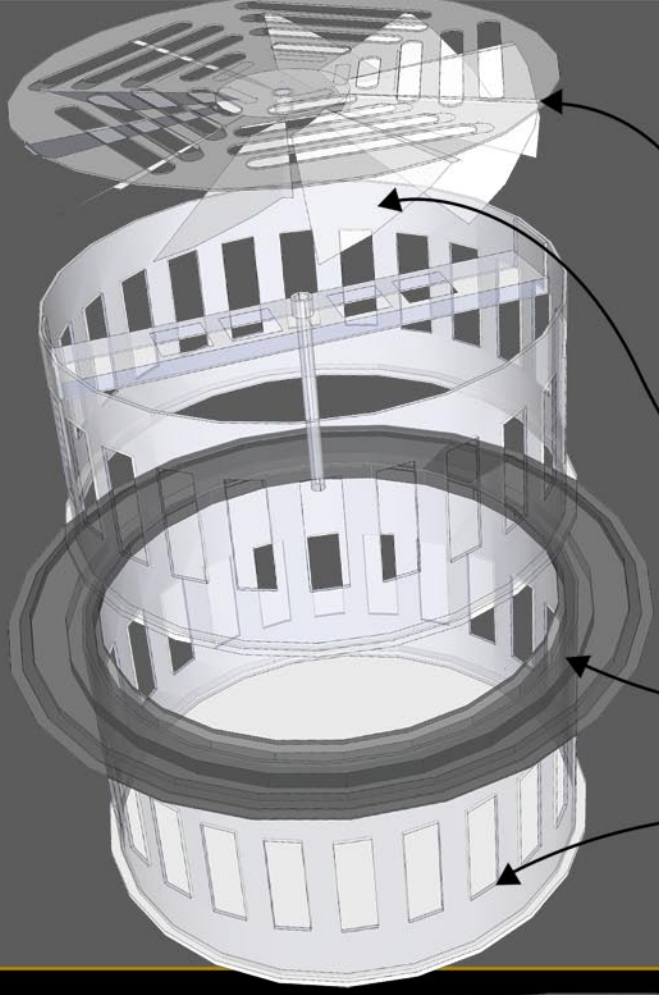
Robust construction to withstand heavy load

Energy saving to comply with Green requirements

Low discharge velocity ensures no in-room draft

Low discharge noise

Easy to install, clean & maintain.



RAISED FLOOR DIFFUSER

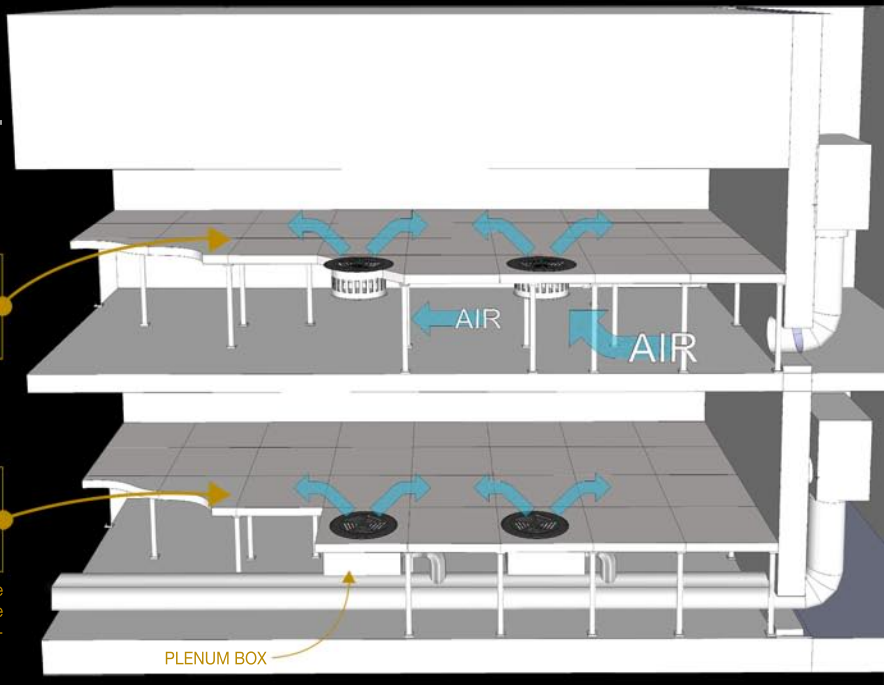
3.4mm thick thick face plate with 6mm air slots
Maximum effective free area minimizes pressure loss and generated noise

Swirl Element
(not required for vertical air flow discharge)
Enables high induction and rapid room air mixing, ensuring rapid room temperature equalization

Installation ring with tapered edge
Easy installation & effective design

Integrated dirt trap and throttling damper
Easy installation, low noise discharge

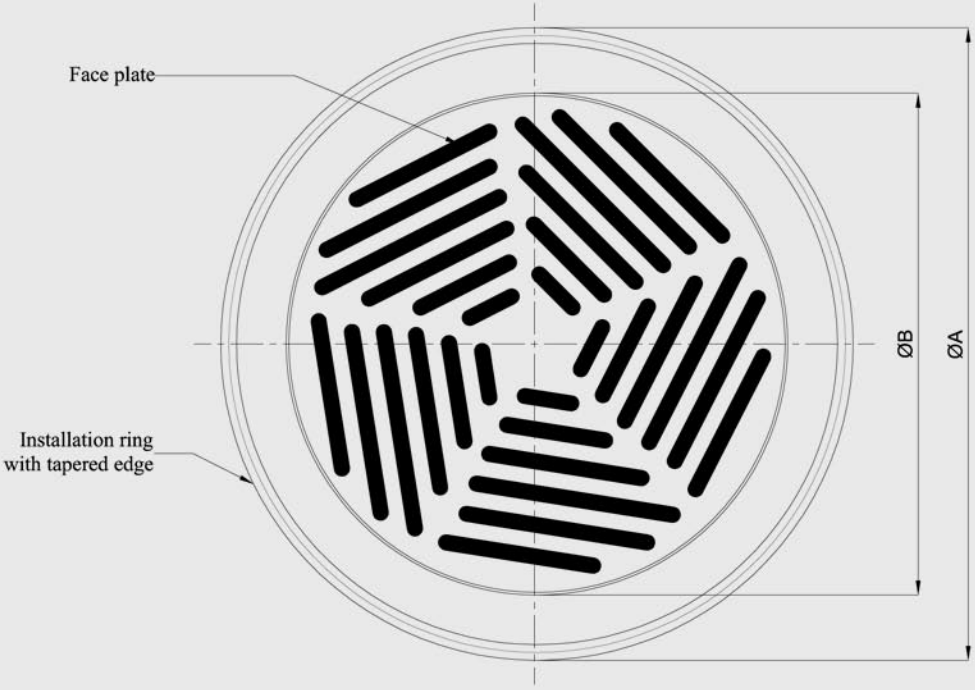
COMFORTABLE INDOOR AIR CLIMATE. ROOM COOLING DEMANDS DECREASE. SIGNIFICANT ENERGY SAVINGS.

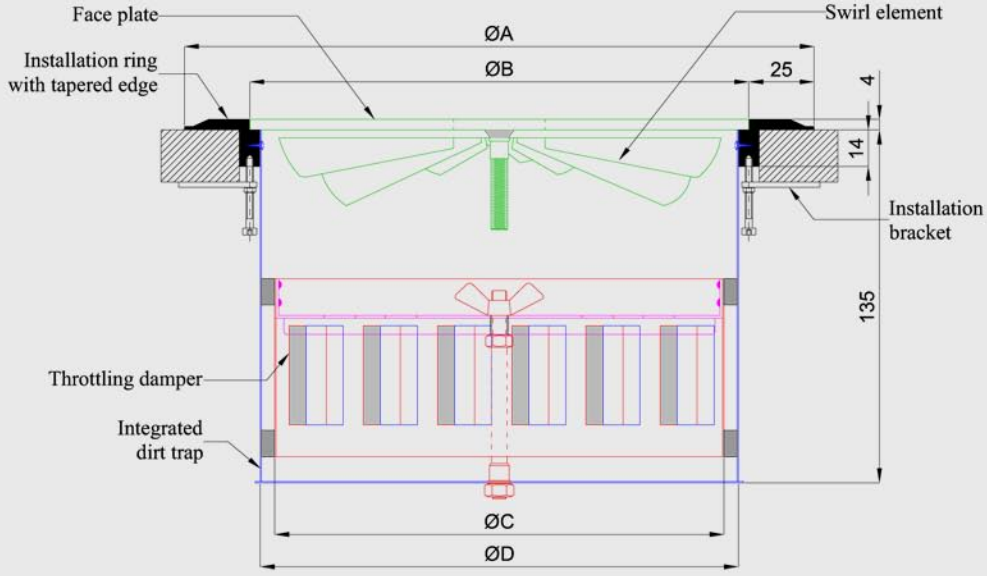


PLENUM SYSTEM
Cold air supplied to the space below the raised floor.

DUCTED SYSTEM
Cold air supplied through ductwork utilizing a plenum box.

The plenum box is provided with a round spigot for flexible ducting connection. Option: Plenum Supply system may be internally insulated with fire retardant acoustic foam to provide noise attenuation if required.





Model	ØA	ØB	ØC	ØD
150	Ø190	Ø140	Ø122	132.5
200	Ø240	Ø190	Ø172	182.5

All dimensions are in mm.

PERFORMANCE DATA

Table 1: Raised Floor Diffuser with Swirl Element

Size (mm)	Airflow (mm)	Press Drop (Pa)	Sound Power Level dB re 10-12 watts Octave Band Centre Frequency (Hz)						NC	Throw (mm) Terminal velocity (m/s)		
			125	250	500	1000	2000	4000		0.75	0.5	0.25
150	50	6	35	30	25	-	-	-	-	280	410	500
	100	29	41	38	35	34	28	-	27	630	840	1180
	125	40	44	41	40	38	30	29	33	1075	1285	1625
	150	71	50	46	44	45	42	31	38	1520	1730	2070
200	75	8	34	27	20	-	-	-	-	191	262	298
	100	15	35	30	26	23	-	-	21	250	310	380
	125	23	40	35	31	30	24	20	26	335	405	490
	150	30	45	39	35	37	31	21	30	420	500	600
	175	45	49	42	39	41	37	26	25	496	580	700
	200	59	52	45	43	45	43	31	38	572	660	800

Table 2: Raised Floor Diffuser without Swirl Element

Size (mm)	Airflow (mm)	Press Drop (Pa)	Sound Power Level dB re 10-12 watts Octave Band Centre Frequency (Hz)						NC	Throw (mm) Terminal velocity (m/s)		
			125	250	500	1000	2000	4000		0.75	0.5	0.25
150	50	7	30	21	-	-	-	-	-	390	630	800
	75	12	34	26	-	-	-	-	-	730	1090	1330
	100	20	39	33	28	27	-	-	20	1090	2010	2310
	125	37	45	39	35	35	27	21	29	2495	3135	3405
200	75	7	26	-	-	-	-	-	-	510	740	1100
	100	10	30	22	-	-	-	-	-	820	1160	1300
	125	15	35	28	23	22	-	-	-	1000	1335	1575
	150	19	40	33	29	28	-	-	20	1180	1510	7850
	175	26	43	37	33	33	25	20	25	1403	1760	2100
	200	33	46	40	36	38	30	21	31	1626	2010	2350

Notes:
1. " - " indicates value below 20.
2. NC based on 6 dB room absorption.
3. Throw values are based on vertical projection and 3°C temperature differential.

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