

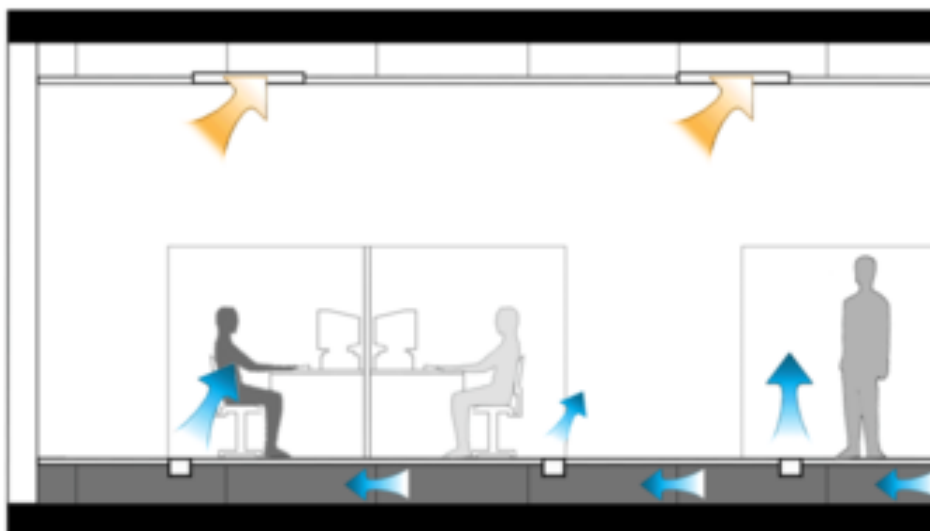
CIRCULAR FLOOR DIFFUSERS

Rev.02
26-05-2015



GMC CFD-030 PRODUCT SPECIFICATIONS:

- Standard material: Steel Sheet (all parts).
- Designed specifically for floor installation within raised floor systems, common to modern commercial buildings.
- Projection data were determined in a room with ceiling height of 2,7m. and 5⁰C differential between supply air and average occupied zone temperature. Tests conducted with dirt basket/damper installed. Pressure loss values are calculated with fully opened damper.
- Has two models: Standard Model (CFD-130) and Improved Model (CFD-230).
- Electrostatic powder coating with the color from RAL catalogue.



TECHNICAL DETAILS



HVAC Systems and Equipments Co.
4640 Hedcoxe Road 227 Plano, TX 75024 – US

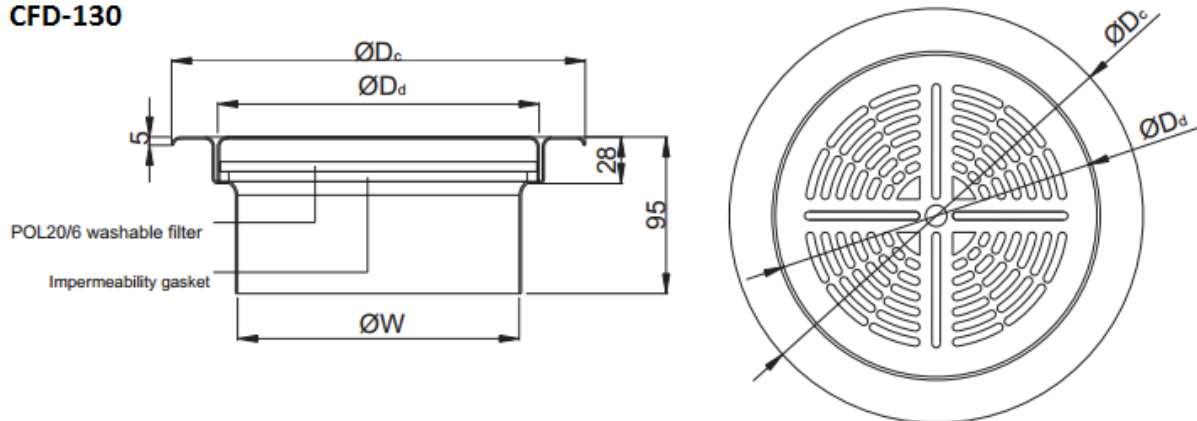
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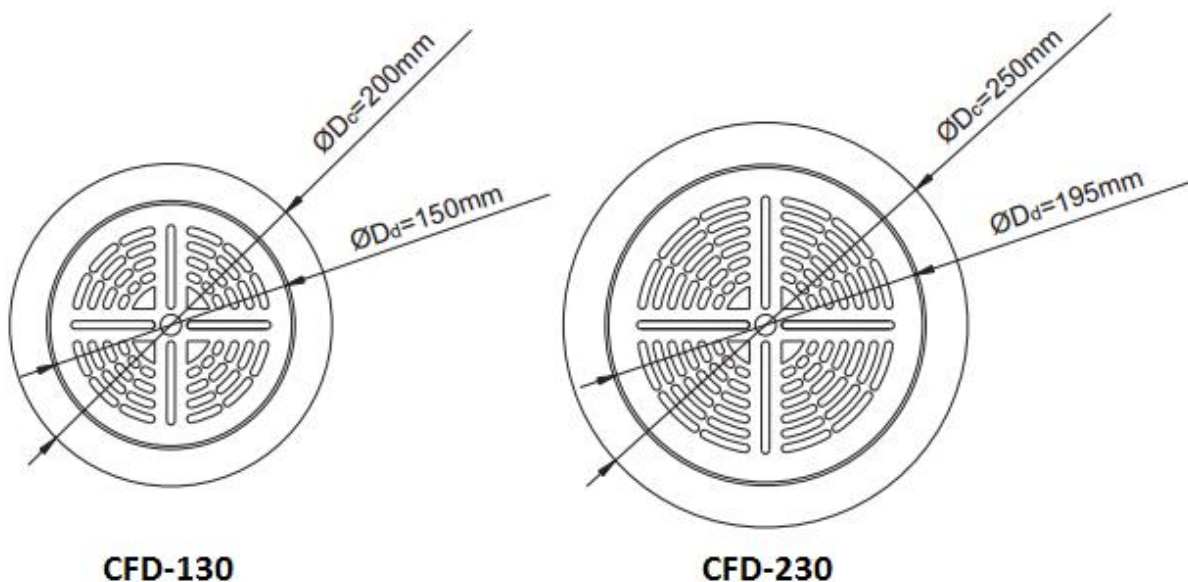
CFD-130



CFD-130/230 STANDARD SELECTION TABLE

Model	ØW(mm)	ØDd(mm)	ØDc(mm)	A _{eff.} (m ²)
CFD-130	120	150	200	0,0049
CFD-230	171	195	250	0,0088

- ØD_c(mm) : Floor diffuser core diameter
 ØD_d(mm) : Diffuser surface diameter
 ØW(mm) : Floor diffuser neck diameter
 A_{eff.} (m²) : Effective area



DETAILED SELECTION TABLE



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V (m ³ /h)	A _{eff.} (m ²)		
		0,0049	0,0088
50	u _{eff.} (m/s)	2,8	
	ΔP _{tot.} (Pa)	7	
	SPL (dBA)	18	
60	u _{eff.} (m/s)	3,4	
	ΔP _{tot.} (Pa)	10	
	SPL (dBA)	24	
70	u _{eff.} (m/s)	4,0	
	ΔP _{tot.} (Pa)	15	
	SPL (dBA)	27	
80	u _{eff.} (m/s)	4,5	2,5
	ΔP _{tot.} (Pa)	19	10,5
	SPL (dBA)	32	25
90	u _{eff.} (m/s)	5,1	2,8
	ΔP _{tot.} (Pa)	24	14
	SPL (dBA)	34	28
100	u _{eff.} (m/s)	5,7	3,2
	ΔP _{tot.} (Pa)	28	16
	SPL (dBA)	37	29
120	u _{eff.} (m/s)	6,8	3,8
	ΔP _{tot.} (Pa)	43	24
	SPL (dBA)	42	34
140	u _{eff.} (m/s)	7,9	4,4
	ΔP _{tot.} (Pa)	58	32
	SPL (dBA)	45	37
160	u _{eff.} (m/s)	9,1	5,1
	ΔP _{tot.} (Pa)	75	42
	SPL (dBA)	49	40
180	u _{eff.} (m/s)		5,7
	ΔP _{tot.} (Pa)		52
	SPL (dBA)		42
200	u _{eff.} (m/s)		6,3
	ΔP _{tot.} (Pa)		65
	SPL (dBA)		44

V (m³/h) : Air flow rate
A_{eff.} (m²) : Effective area
u_{eff.} (m/s) : Effective area
ΔP_{tot.} (Pa) : Pressure Drop
SPL (dBA) : Sound Power Level

DATA DIAGRAM

PRESSURE LOSS AND NOISE LEVELS

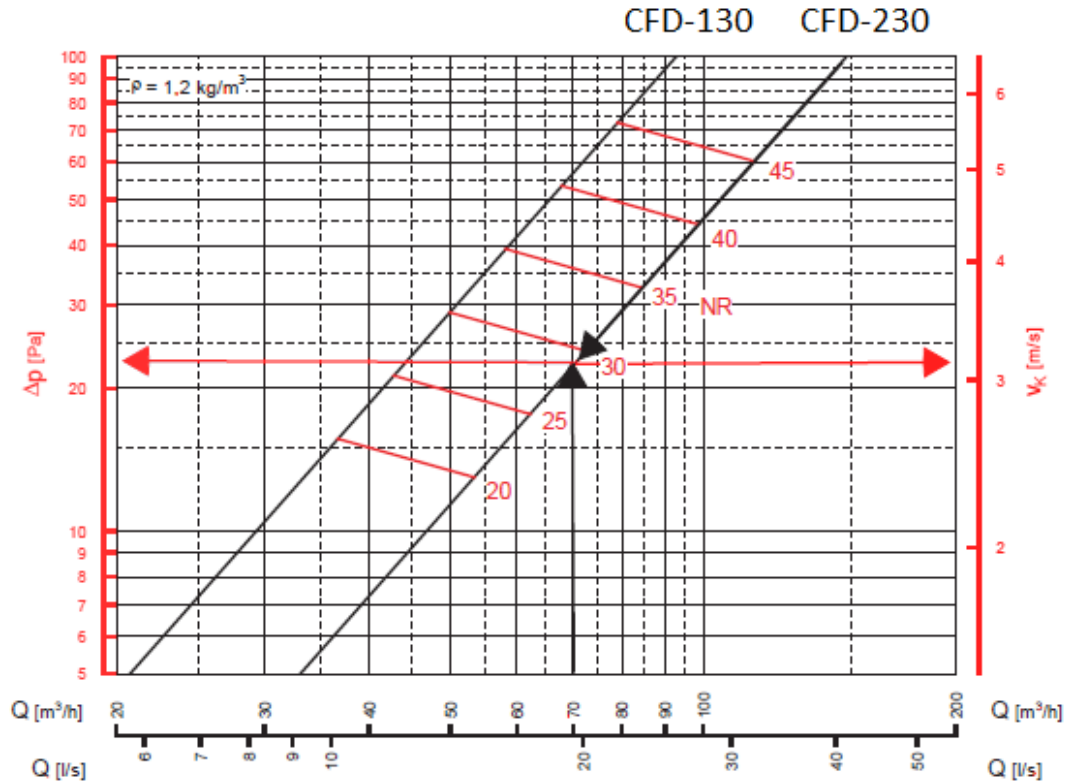


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Q [m³/h] [l/s] supply air flow rate

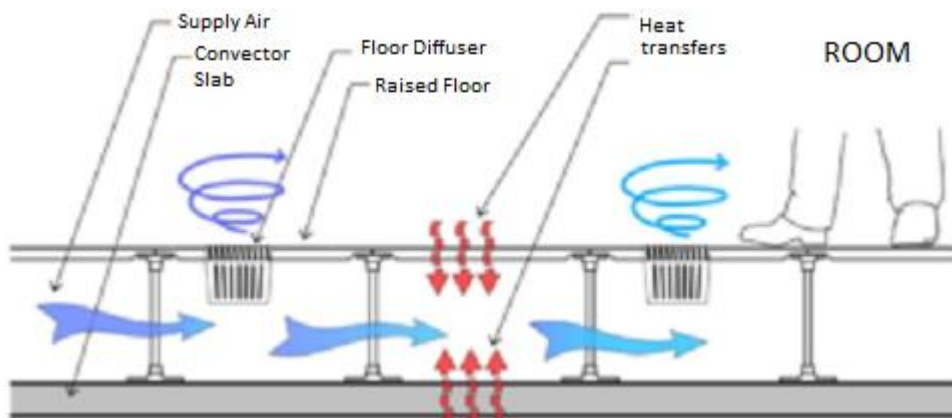
v_k [m/s] velocity relating to the effective outlet area S

Δp [Pa] total pressure loss

NR noise rating (ISO standard, in relation to 10^{-12} W) taking no account of the attenuation of the room

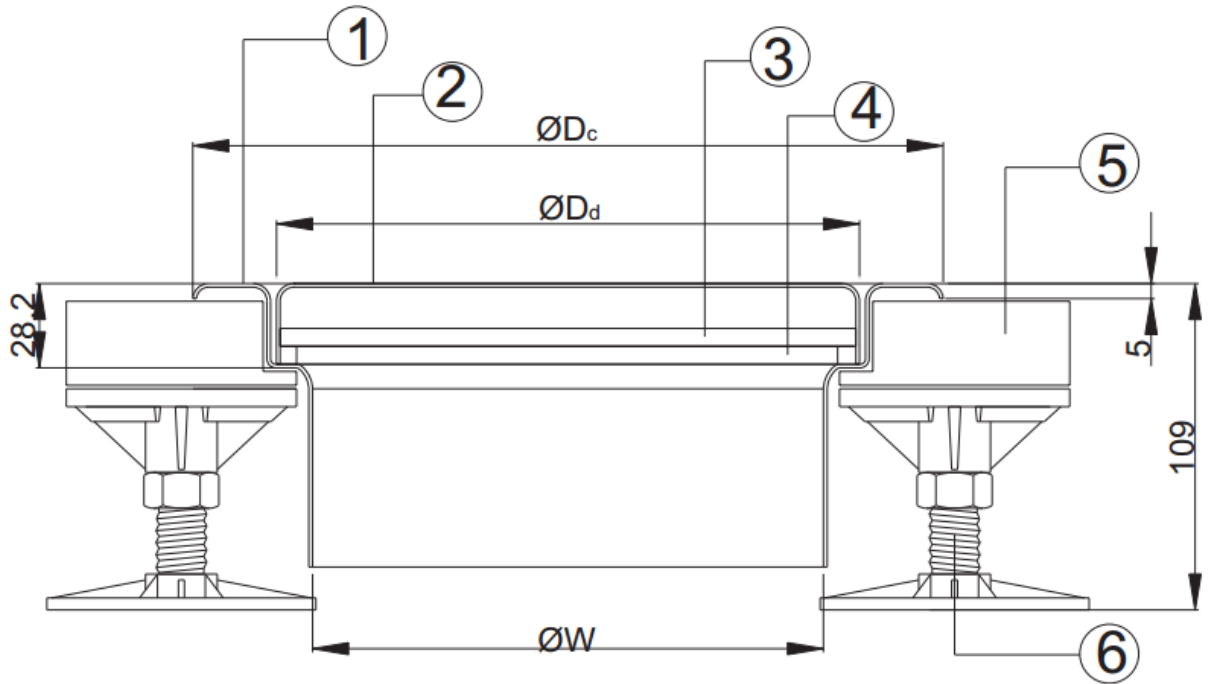
The pressure loss and noise level do not vary noticeably with the type of plate (a, b, c, or d)

WORKING PRINCIPLE



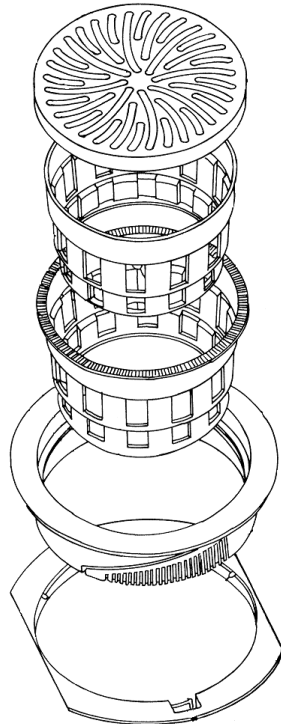
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- 1 Floor diffuser core
- 2 Diffuser surface
- 3 POL20/6 washable filter
- 4 Impermeability gasket
- 5 False floor
- 6 False floor profile

MOUNTING DETAIL



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ORDER PARAMETERS:

CFD-030	S	OD9010	00	F 400
CFD-130: Standard CFD-230: Improved S: Steel material only				F: Frame Size 00: No Mounting FM: Click-Fitted Mounting 00: No coating OD----: Oven Drying Coating

