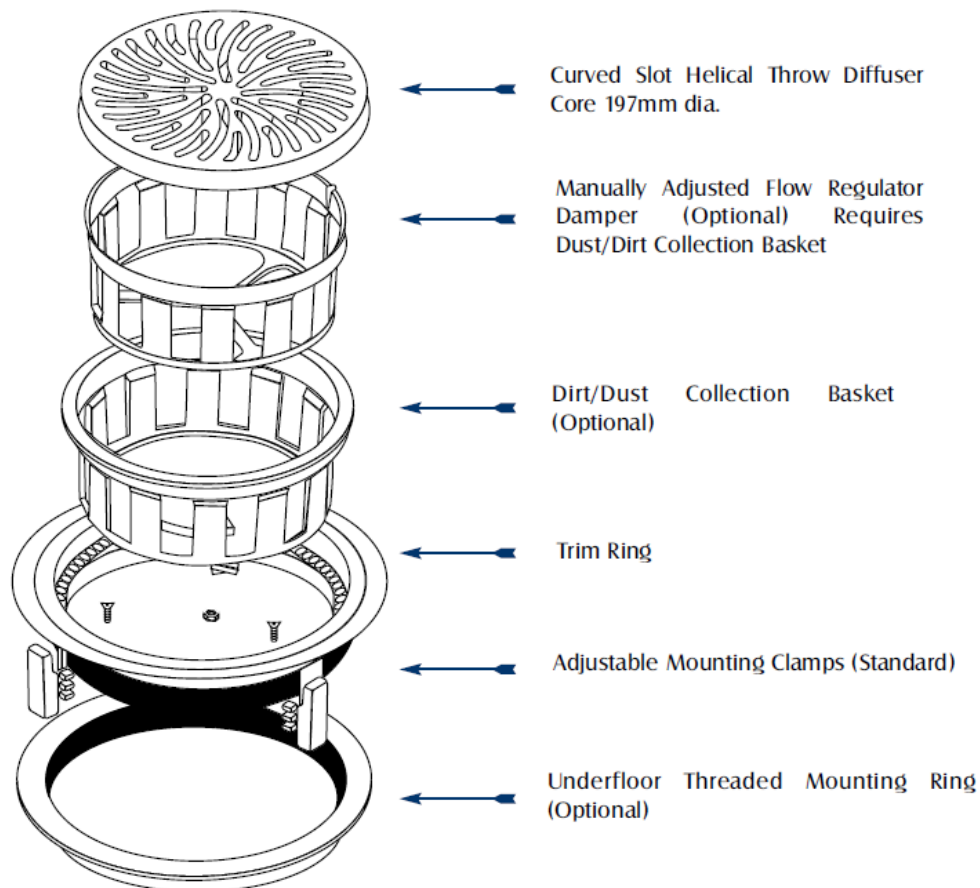


FLOOR SWIRL DIFFUSER



Description

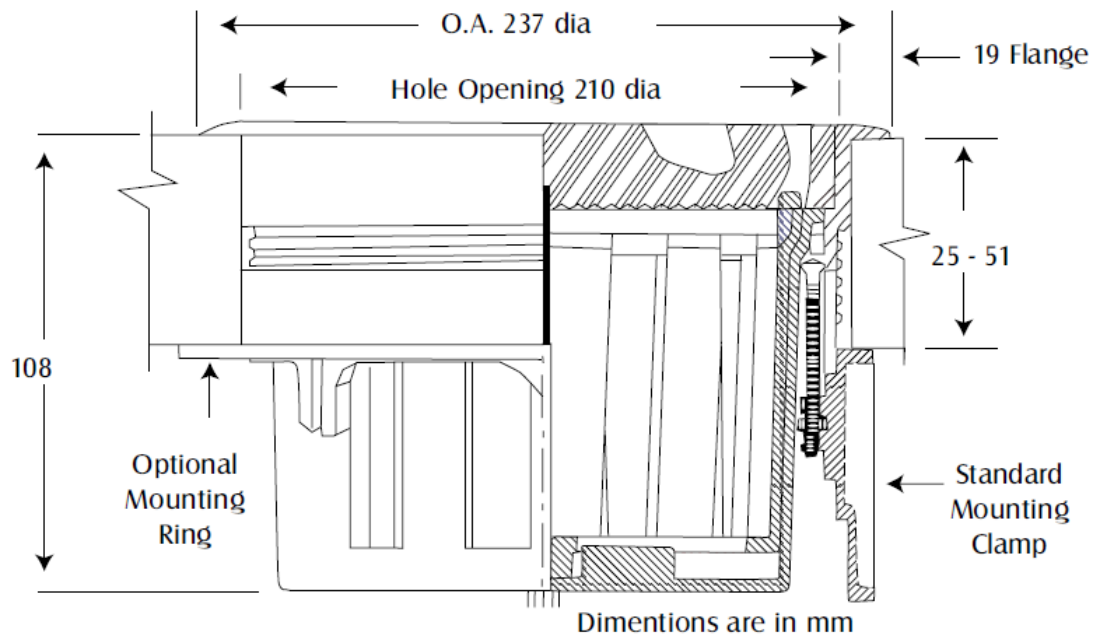
The JPR NFD diffuser is designed for use in raised access floor air distribution systems, where the floor cavity is used as a pressurised supply air plenum. The NFD core design produces a low velocity helical discharge air pattern. The design achieves high induction rates of room air which optimises circulation and therefore comfort conditions.



Features

- Constructed from high impact polycarbonate plastic complying with UL Standard 94-5V for flammability
- Nominal size 203mm dia. Low profile design.
- Dust/dirt collection basket catches anything that might fall through the diffuser face. Removable for cleaning
- Optional flow regulator damper adjustable **without removing the diffuser core**, features visual open/closed indication and includes built in end stops.
- Low pressure drop core/damper assembly design.
- Architecturally pleasing face design complements contemporary decor. Lies flush with trim ring flange, with or without damper.
- Rugged trim ring design secures carpet and prevents edges fraying.
- Unique adjustable mounting clamp design adapts to any floor panel thickness and provides simple and secure installation. Permits installation **without removal of floor panel or carpet**.
- Optional underfloor mounting ring available
- Standard finish is GR Grey or BK Black core and trim ring. Damper/basket are black.

Cross Section



Selection

- 1) TR Trim Ring (standard)
 None
- 2) Dirt Basket/Damper
 BDL Loose (standard)
 BDA Attached to Core
 BOO Basket Only
 None
- 3) Mounting (Requires Trim Ring)
 MC Mounting Clamps (Standard)
 MR Mounting Ring (Option)
- 4) Finish
 GR Grey
 BK Black
 SP Special Custom Colour

Specify _____

Performance Data

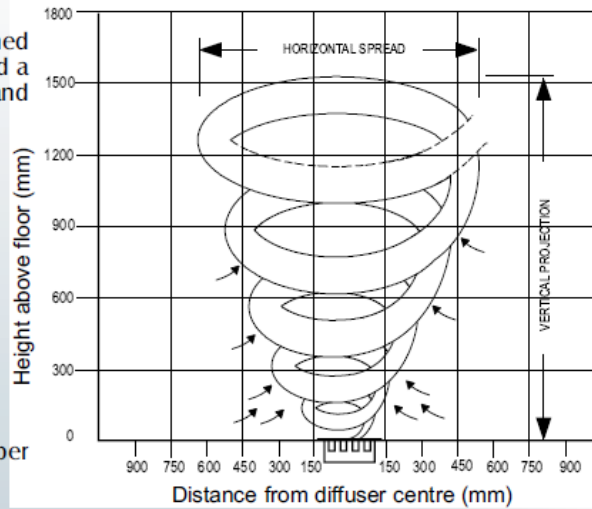
Airflow l/s	30	35	40	45	50	55	60
Plenum Pressure N/m ²	9	12	15	20	25	30	35
Vertical Projection (mm)							
Terminal Velocity m/s							
0.75	336	397	427	488	610	610	641
0.50	427	519	549	641	763	793	824
0.25	856	1068	1129	1342	4525	1647	1708
Horizontal Spread (mm)							
Terminal Velocity m/s							
0.25	640	946	1037	1129	1220	1312	1373
NC	-	-	-	-	15	18	20

Correction Factors for other supply air temperature differentials.

	3.4	4.5	5.6	6.7	7.8	8.9
Projection, m.	x 1.33	x 1.11	x 1.00	x 0.96	x 0.92	x 0.91
Spread, m.	x 0.87	x 0.94	x 1.00	x 1.06	x 1.11	x 1.16

Performance Notes

- 1) Projection and spread data were determined in a room with a 3.5m ceiling height, and a 3°C differential between supply air and averaged occupied room temperature
- 2) Vertical projection (throw) is the maximum height above the floor where terminal velocities of 0.75, 0.50, and 0.25 m/s were observed. Horizontal spread is the total width of the 0.25 m/s isovel.
- 3) Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts. Dash (-) in space denotes and NC value of less than 15.
- 4) Tests conducted with dirt basket/damper installed. Damper fully open. Ak = 0.104
- 5) Data derived form independent test conducted in accordance with ANSI/ASHRAE Standard 70-1991



High Induction "Swirl" Pattern 50l/s supply @ 3°C ΔT. Outline indicates maximum room air velocity of 0.25 m/s

