

FLOOR DIFFUSER

■ Description

ASTI FLD-FP Round Fan Powered Floor Diffusers are specially designed for use in raised floor air distribution systems, where the floor cavity is used as a pressurized supply air plenum. Maximum comfort level could be achieved by producing high induction rates of room air with the design of FLD-FP. Aesthetically appealing FLD-FP is assessable by removing the diffuser core to remove the dust in the dust tray. FLD-FP comes with 3-speed control centrifugal fan by remote controller with infrared features. Temperature set point can be set at the remote controller and the centrifugal fan will run according to the temperature set point with 3 speeds.

■ Material

- Diffuser core: Aluminum die casting
- Outer ring: Aluminum die casting
- Housing: 0.7mm thickness galvanized steel
- Insulation: Fiber glass, 25mm, 36kg/m³

■ Surface Finish

- Natural anodized or powder coated

■ Feature

- Used in raised floor air distribution systems
- Swirl air pattern provides high induction rates of room air
- Suitable for high ceiling air conditioning system
- Dust tray catches anything that might fall through the diffuser face and is removable for cleaning.
- Aluminum die casting diffuser core provides high strength to withstand heavy load.
- Remote control via infrared
- 3 fan speeds (3 air flow rates)
- Fan speed controlled by the difference between temperature set point and supply temperature.
- Fan speed can be override at the remote controller.
- Static pressure regains as fan is running.
- Internal insulation to attenuate noises and prevents condensation.
- The FLD-FP housing can be removed by simply rotating the housing and disengaging it at the collar.
- Hangers are provided for easy installation.
- Vibration free performance.
- Mesh at the air inlet under FLD-FP prevents unwanted object from passing through

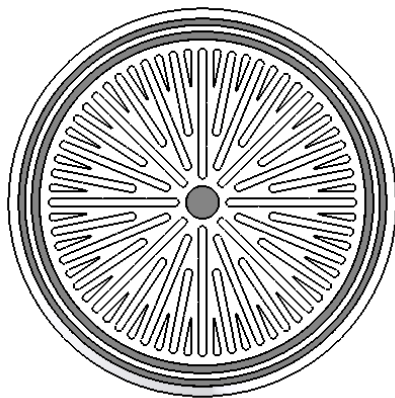
■ Standard Size

- 250ø (mm)

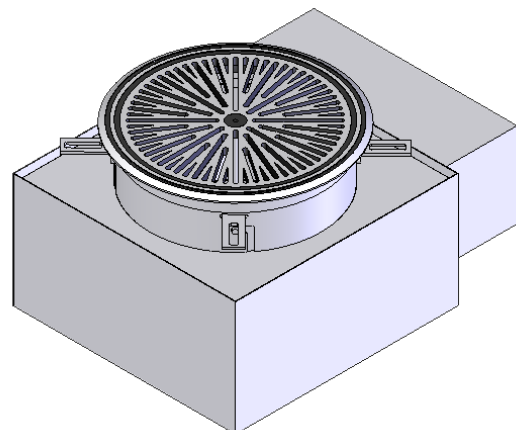
■ Surface Finish

- FLD-FP: Fan Powered Floor diffuser

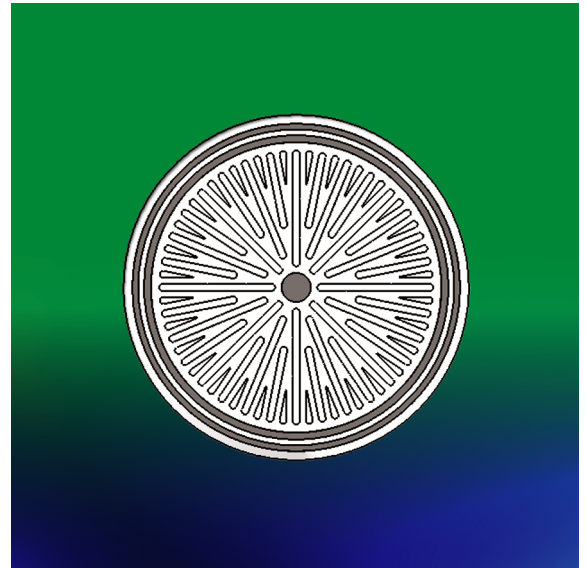
■ Drawings

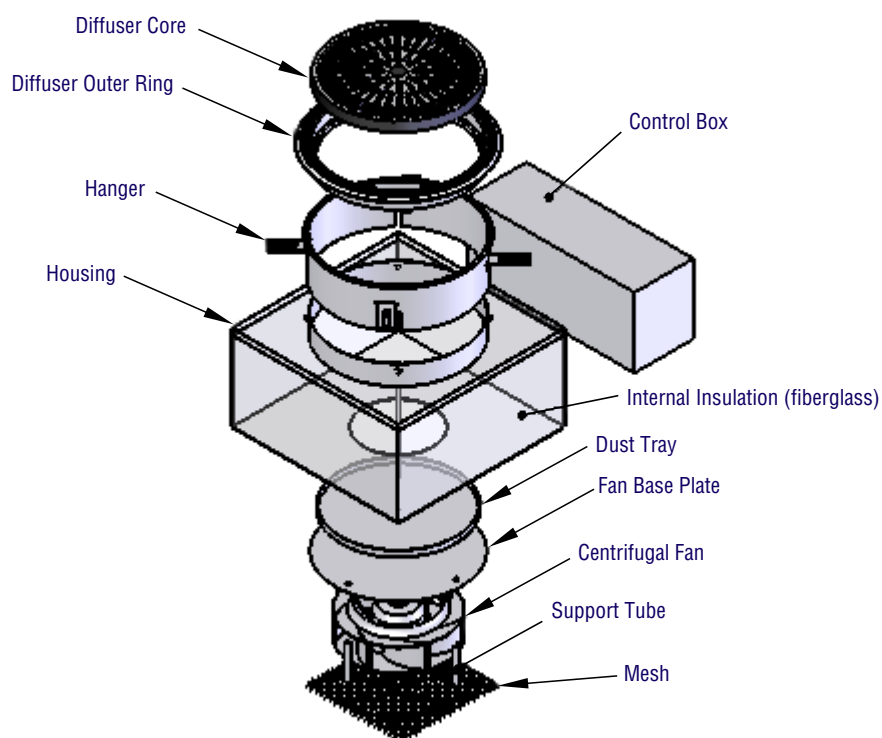


FLD-FP Top View

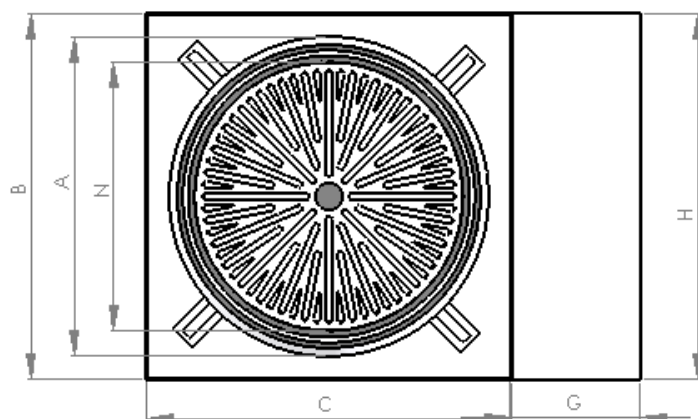


FLD-FP Isometric View

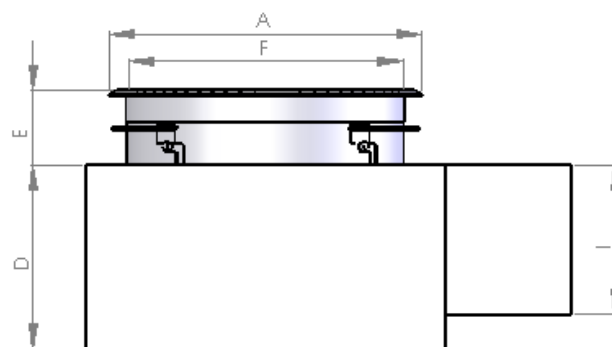




FLD-FP Exploded View



FLD-FP Top View



FLD-FP Side View

■ Fan Powered FLD Physical Dimension (mm)

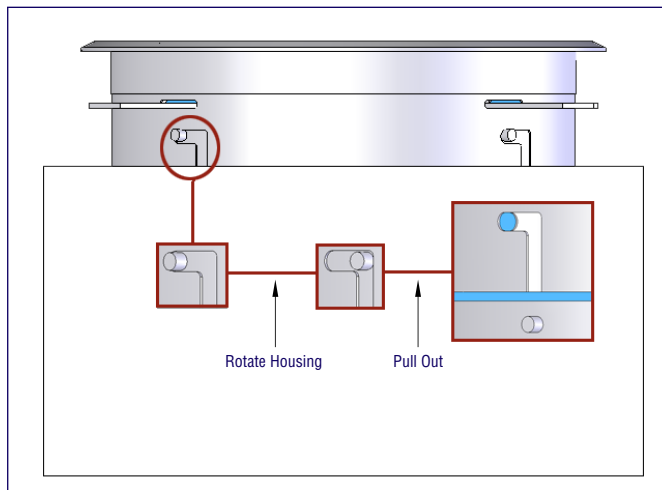
N	A	B	C	D	E	F	G	H	I
250	297	340	340	175	71	264	120	340	142

■ FLD-FP Air Flow Performance

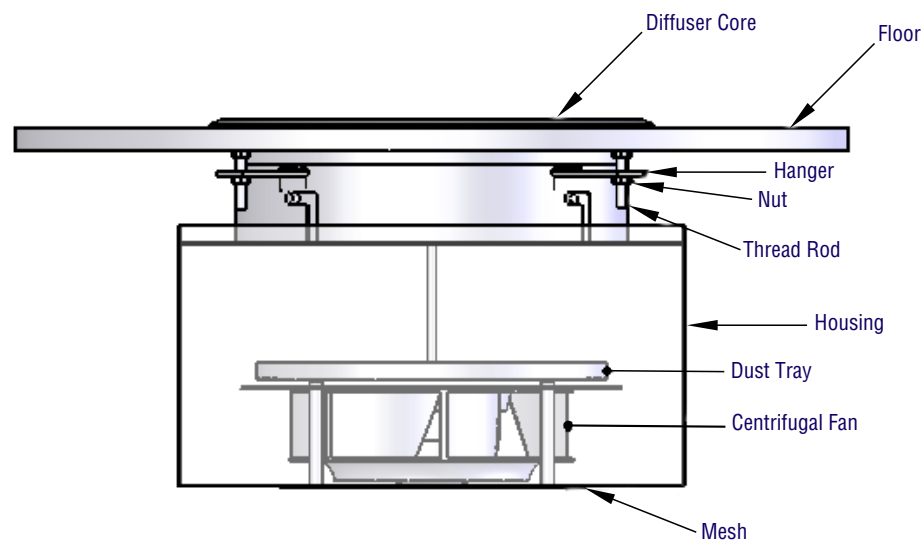
Fan Speed	Low	Medium	High
Air Flow Rate (CMH)	140	180	220
Vertical Projection (m)	1.3 - 1.5	1.7 - 1.9	1.9 - 2.1
Horizontal Spread (m)	1.3 - 1.8	1.1 - 1.7	1.2 - 1.8
NC	24	28	33

- Terminal velocities are based on 0.5m/s and 0.25m/s respectively.
- Air flow rate of 3 speeds can be modified by changing capacitor with difference capacitance.
- Air flow rates are measured with natural air intake without pressurization
- Throw is based on 6° Celsius difference of supply air and room air temperature.
- NC value is based on room absorption of 10dB, re 10⁻¹² watts
- The performance data is tested based on A.D.C. standard

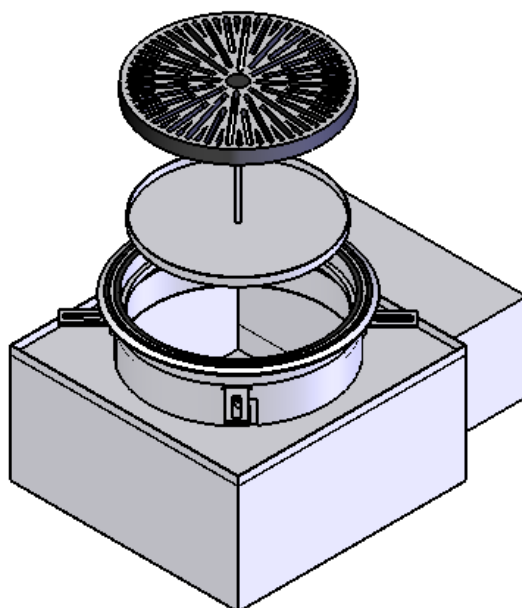
■ Installation



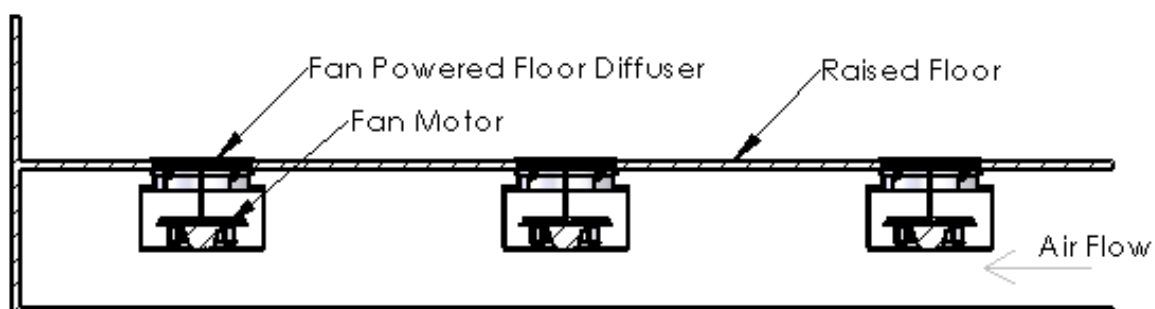
Remove housing of FLD-PB by rotating and disengaging it at the collar



Installation of FLD-FP under the floor - Side view of FLD-FP with transparent housing



Dust on the dust tray can be removed by lifting up the diffuser core of the FLD-FP.



- Raised floor system with FLD-FP

Order Code

Model	Material	Fan Powered	Size (mm)
FLD	Aluminum (A)	FP	250

Example: FLD-A-FP-250

All stated specification is subject to change without notice or obligation. All data is accurate at printing time. Actual products might differ from pictures shown.