

## CL Jet Diffuser (Pankah Louver)

### Description

ASLI CL ball type jet diffusers are excellent for spot heating and cooling which provides ventilation to places where distribution of air via ceiling diffuser is not possible or not practical. The nozzle of the diffuser can be rotated in any direction off center. The air volume is adjustable by turning a knob on the nozzle. No special tools or techniques are required. Kitchen, factories, stadiums or any places where the conditioned air needed to move from an inaccessible place to the work environment is easily handled by ASLI CL jet diffuser. For industrial applications, air showers with numerous ASLI CL jet diffusers is an effective way to eliminate contaminants.

### Materials

- Nozzle: CL-A, 1.0mm thickness aluminum sheet roll formed.
- Frame: CL-A, 1.0mm thickness aluminum sheet roll formed.
- Curved blade: CL-A, 1.0mm thickness aluminum sheet roll formed.

### Surface Finish

- Baked white powder coat as standard.

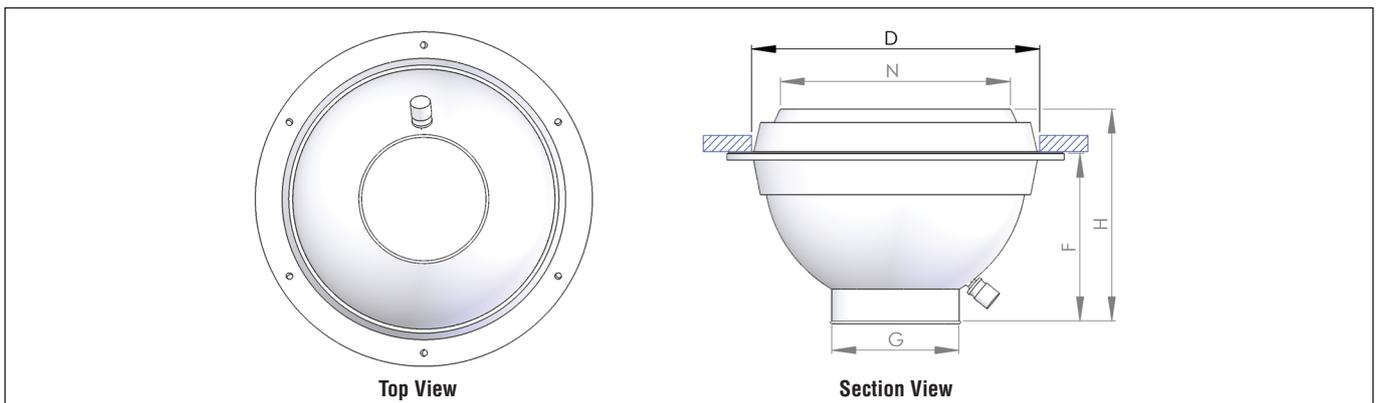
### Features

- Economical.
- Long throw capability.
- High air flow capability.
- Excellent for spot heating or cooling.
- Suitable for exposed ductwork or surface mounted.
- Suitable for ceiling or wall installation.
- Air flow volume is adjustable.
- Air flow direction is adjustable.
- Maximum rotation angle up to 45° in all direction.
- Self rotation around nozzle center axis in 360°.

### Standard Sizes

- 125ø, 150ø, 200ø, 250ø (mm)

### CL Construction Illustrations



### CL Physical Dimension Unit:mm

| N = Neck Size | D   | F   | H   | G   |
|---------------|-----|-----|-----|-----|
| 125           | 145 | 92  | 120 | 65  |
| 150           | 165 | 90  | 135 | 75  |
| 200           | 215 | 118 | 160 | 100 |
| 250           | 285 | 170 | 230 | 140 |

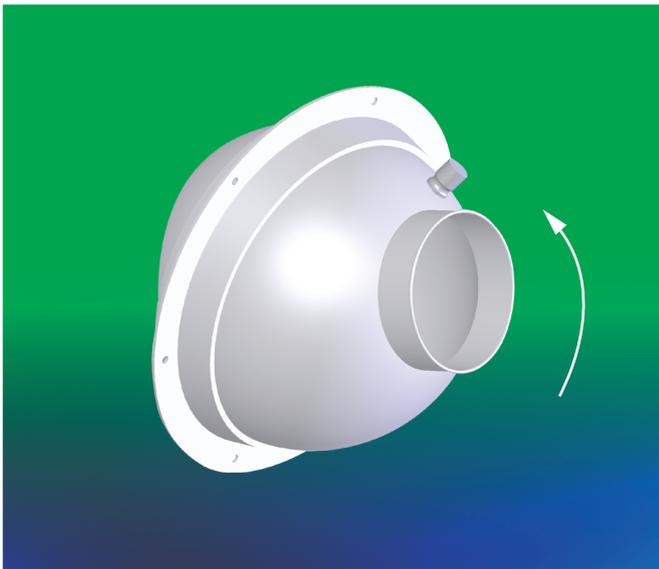


## CL Jet Diffuser

### ■ CL Air Flow Performance Data

| Neck Size (mm) | Nozzle Area (m <sup>2</sup> ) | Nozzle Vel. (m/s) | 2.5       | 5          | 7.5         | 10          | 12.5        | 15          | 17.5        | 20          |
|----------------|-------------------------------|-------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 125            | 0.0033                        | CMH               | 30        | 59         | 89          | 119         | 149         | 178         | 208         | 238         |
|                |                               | St. Press. (mmAq) | 0.5       | 1.7        | 4.5         | 7.7         | 9.9         | 16.9        | 23.1        | 32.3        |
|                |                               | NC                | -         | -          | -           | 20          | 24          | 29          | 34          | 37          |
|                |                               | Throw (m)         | 2.9 - 4.3 | 4.3 - 8.6  | 6.0 - 12.0  | 8.3 - 15.7  | 10.0 - 17.7 | 11.4 - 22.8 | 12.8 - 27.9 | 14.8 - 29.9 |
| 150            | 0.0044                        | CMH               | 40        | 79         | 119         | 158         | 198         | 238         | 277         | 317         |
|                |                               | St. Press. (mmAq) | 0.5       | 1.6        | 4.5         | 7.2         | 10.9        | 20.4        | 23.1        | 29.8        |
|                |                               | NC                | -         | -          | -           | 22          | 24          | 29          | 32          | 35          |
|                |                               | Throw (m)         | 2.9 - 5.4 | 4.6 - 8.6  | 7.1 - 14.3  | 8.8 - 18.5  | 10.5 - 22.8 | 12.8 - 28.5 | 15.7 - 31.6 | 14.3 - 35.6 |
| 200            | 0.0079                        | CMH               | 71        | 142        | 213         | 284         | 356         | 427         | 498         | 569         |
|                |                               | St. Press. (mmAq) | 0.4       | 1.5        | 3.5         | 6.0         | 10.9        | 15.6        | 22.8        | 29.8        |
|                |                               | NC                | -         | -          | -           | 24          | 29          | 35          | 37          | 41          |
|                |                               | Throw (m)         | 3.4 - 7.1 | 5.7 - 11.4 | 8.6 - 17.7  | 11.1 - 24.2 | 14.8 - 29.9 | 17.7 - 35.6 | 20.5 - 42.8 | 22.8 - 46.2 |
| 250            | 0.0154                        | CMH               | 139       | 277        | 416         | 554         | 693         | 832         | 970         | 1109        |
|                |                               | St. Press. (mmAq) | 0.4       | 1.5        | 3.5         | 6.0         | 10.9        | 15.6        | 22.8        | 29.8        |
|                |                               | NC                | -         | -          | -           | 22          | 28          | 32          | 36          | 40          |
|                |                               | Throw (m)         | 4.3 - 8.6 | 8.6 - 15.7 | 12.0 - 25.7 | 15.7 - 31.9 | 20.5 - 42.2 | 23.9 - 46.2 | 28.5 - 54.2 | 31.9 - 64.1 |

- Throw is based on terminal velocity of 0.5m/s - 0.25m/s respectively.
- Throw is based on isothermal condition.
- NC value is based on room absorption of 10dB, re 10<sup>-12</sup> watts.
- Dash (-) in space indicates NC value less than 20.
- The performance data is tested in zero degree deflection in axial installation with blade fully open (wall installation).



Directing air upwards



Directing air downwards

## CL Jet Diffuser



100% closed

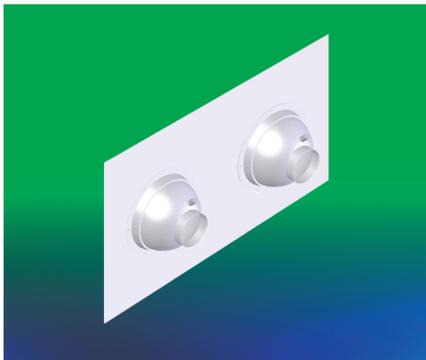


50% open

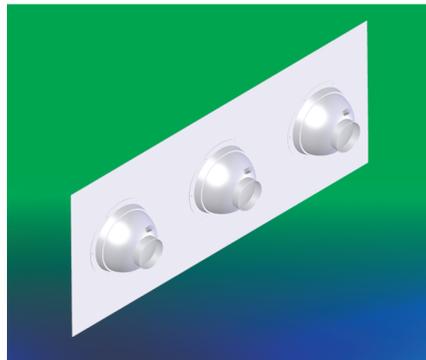


100% open

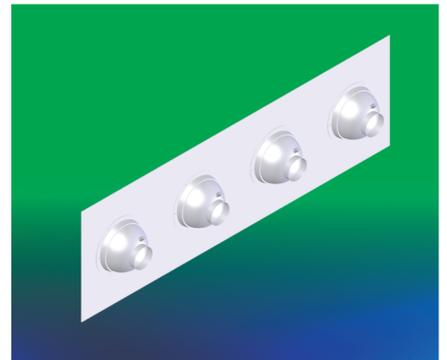
**CL could be mounted on a panel and supplied as a unit. The CL panel could be installed on the wall or ceiling**



Two CL panel



Three CL panel



Four CL panel

### ■ CL Suggested Specification

CL-A jet diffuser shall be made of 1.0mm thickness aluminum roll formed. The nozzle shall be adjustable with 45° deflection towards all direction. The nozzle shall be able to rotate 360° around the center axis through the nozzle. The curved blade shall be adjustable with a knob at the surface of the nozzle to close or open the nozzle outlet without using any tools. The curved blade shall be shaped to the nozzle shape and located inside the nozzle. The frame shall consist of an outer frame and inner frame with a gasket in between. The frames shall be detachable from the nozzle with simple tools. The diffuser shall be epoxy coated and furnished to architectural requirement.

### ■ CL Order Code

| Model | Material     | Neck Size (mm)     |
|-------|--------------|--------------------|
| CL    | A (Aluminum) | 125, 150, 200, 250 |

Example: CL-A-200mm