

SQUARE SWIRL DIFFUSER (SSD)



SSD (Square Swirl Diffuser) are manually adjustable. It adjusts the direction of the air current to adapt to any change in the pattern of the building.

Air is blown by means of swirl, which guarantees high inductivity as well as the rapid reduction in wind speed and temperature. The air supply temperature difference can reach $\pm 20^{\circ}\text{C}$.

SSD type diffuser could be used for air blow and draught. The specified diversion blades are to be used when the diffuser is used for air blow. Change of air blow direction could be achieved by means of altering the blade settings.

PRODUCTS FEATURES

- To supply helical air with high inductivity rate.
- Rapid reduction in temperature.
- Round and square diffuser panel as option.
- Manually adjustable.

ACCESSORIES

For specification 300 x 8, 400 x 16, 500 x 54, 600 x 24, 625 x 24, the diversion blades are set to operate by turning outward.

For specification 600 x 48 and 825 x 72, the external diversion blades are set to operate by turning outward and the internal ones are set to operate by turning inward.

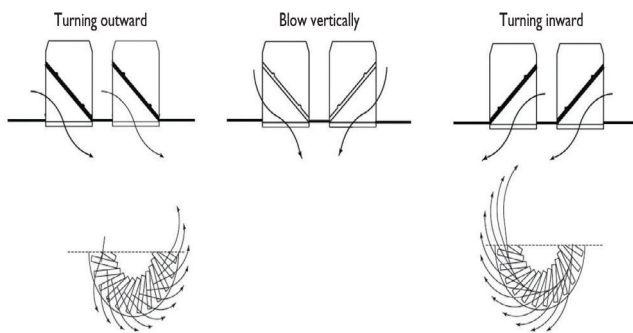
MATERIALS

With Aluminium - Powder coated. The diversion blades are made of polystyrene and painted in white or black

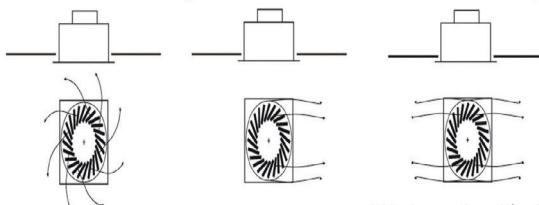
INSTALLATION

Installation flat to the ceiling is applicable to all types. If the density of diversion ring is less than 50mm, and even if the diffuser is installed and sealed beneath the suspended ceiling, a stable blowing current can be guaranteed.

Install flat to the ceiling Install through tapping on the hover



The direction of current (specifications 300 x 8, 400 x 16, 500 x 54, 600 x 24, 625 x 24)

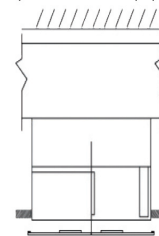


All of the diversion blades are set at turning outward.

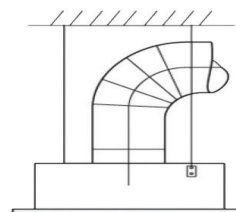
Diversion blades are set at turning half outward and half inward.

Within the scope of every 90° on the diffuser panel diversion blades are set in agreement, whereas diversion blades between neighboring scope of 90° are set reversely, i.e., half inward and half outward.

Installation on suspended ceiling (connection pipe)

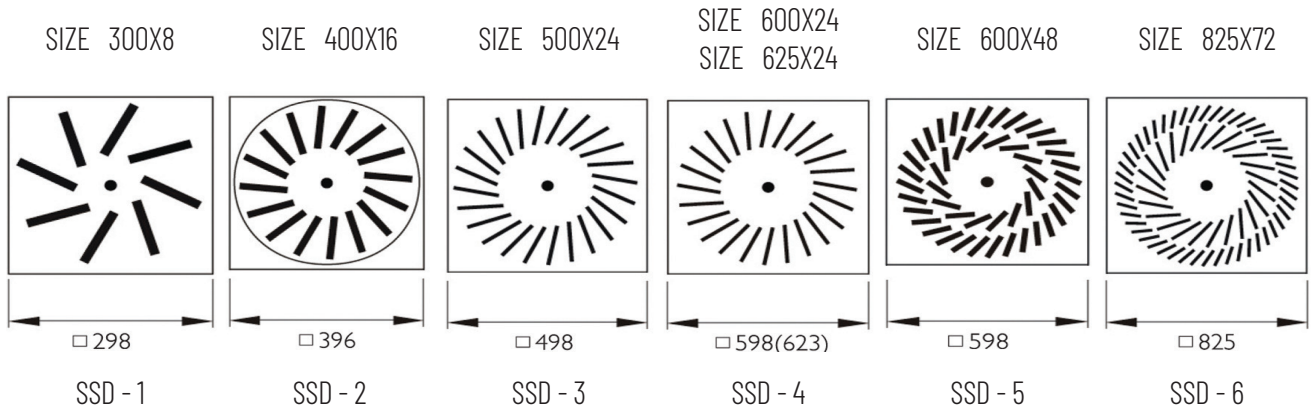


Hang freely



Install through hooks

TYPES



PARAMETERS

| AIR BLOW VERTICAL | | | | |
|----------------------|-------------------|-------|-------|-------|
| Specs | Breastplate Angle | 0° | 45° | 90° |
| 300 X 8 | Δ Pt | X 1.0 | X 1.2 | X 1.8 |
| | L _{WA} | - | - | - |
| 400 X 16 | Δ Pt | X 1.0 | X 1.1 | X 2.0 |
| | L _{WA} | - | - | + 1 |
| 500 X 24 | Δ Pt | X 1.0 | X 1.4 | X 2.8 |
| | L _{WA} | - | + 3 | + 6 |
| 600 X 24 625 X 24 | Δ Pt | X 1.0 | X 1.3 | X 2.8 |
| | L _{WA} | - | + 3 | + 5 |
| 600 X 48 | Δ Pt | X 1.0 | X 1.6 | X 3.4 |
| | L _{WA} | - | + 4 | + 9 |
| 825 X 72 | Δ Pt | X 1.0 | X 1.3 | X 3.3 |
| | L _{WA} | - | + 2 | + 4 |

| AIR BLOW HORIZONTAL | | | | |
|----------------------|-------------------|-------|-------|-------|
| Specs | Breastplate Angle | 0° | 45° | 90° |
| 300 X 8 | Δ Pt | X 1.0 | X 1.3 | X 2.2 |
| | L _{WA} | - | + 3 | + 5 |
| 400 X 16 | Δ Pt | X 1.0 | X 1.2 | X 2.3 |
| | L _{WA} | - | + 1 | + 3 |
| 500 X 24 | Δ Pt | X 1.0 | X 1.5 | X 3.4 |
| | L _{WA} | - | + 2 | + 3 |
| 600 X 24 625 X 24 | Δ Pt | X 1.0 | X 1.5 | X 4.0 |
| | L _{WA} | - | + 2 | + 5 |
| 600 X 48 | Δ Pt | X 1.0 | X 1.7 | X 4.5 |
| | L _{WA} | - | + 5 | + 10 |
| 825 X 72 | Δ Pt | X 1.0 | X 1.5 | X 4.7 |
| | L _{WA} | - | + 5 | + 11 |

| Size | Max Air Volume (m ³ /h) | Min. Air Volume (m ³ /h) | Max Noise dB (A) | Min. Noise dB (A) | Effective Air Blowing Area (m ²) |
|----------|------------------------------------|-------------------------------------|------------------|-------------------|--|
| 300 x 8 | 252 | 54 | 40 | <20 | 0.0070 |
| 400 x 16 | 396 | 108 | 40 | <20 | 0.0140 |
| 500 x 24 | 468 | 144 | 40 | <20 | 0.0210 |
| 600 x 24 | 684 | 216 | 40 | <20 | 0.0295 |
| 600 x 48 | 828 | 360 | 40 | <20 | 0.0390 |
| 625 x 24 | 684 | 216 | 40 | <20 | 0.0295 |
| 825 x 72 | 1260 | 558 | 40 | <20 | 0.0730 |

CHART

| AIR BLOW VERTICAL | | | |
|----------------------|--------------------------------|--------------------|------------|
| Specs | Air Volume (m ³ /h) | Pressure Loss (Pa) | Noise (dB) |
| 300 X 8 | 72 | 5.5 | <20 |
| | 90 | 9 | <20 |
| | 108 | 15 | 20 |
| | 144 | 25 | 27.5 |
| | 180 | 35 | 38 |
| | 252 | 70 | 47.5 |
| | 288 | 100 | 50 |
| 400 X 16 | 162 | 4 | <20 |
| | 180 | 8 | <20 |
| | 216 | 13 | 23 |
| | 288 | 25 | 25 |
| | 360 | 36 | 37 |
| | 540 | 80 | 55 |
| 500 X 24 | 252 | 10 | 22 |
| | 360 | 20 | 33 |
| | 576 | 45 | 45 |
| | 720 | 70 | 50 |
| | 1080 | 170 | 70 |
| 600 X 24 625 X 24 | 360 | 9.5 | 21 |
| | 450 | 14 | 26 |
| | 540 | 20 | 33 |
| | 720 | 33 | 42 |
| | 900 | 55 | 47.5 |
| | 1080 | 80 | 55 |
| 600 X 48 | 360 | 6.5 | <20 |
| | 450 | 9 | 20 |
| | 540 | 13 | 25 |
| | 720 | 25 | 35 |
| | 900 | 50 | 46 |
| | 1080 | 90 | 50 |
| 825 X 72 | 630 | 7.5 | 20 |
| | 720 | 10 | 28 |
| | 900 | 15 | 31 |
| | 1080 | 20 | 36 |
| | 1440 | 40 | 45 |
| | 1800 | 60 | 53 |
| - | - | - | - |

| AIR BLOW HORIZONTAL | | | |
|----------------------|--------------------------------|--------------------|------------|
| Specs | Air Volume (m ³ /h) | Pressure Loss (Pa) | Noise (dB) |
| 300 X 8 | 108 | 10 | <20 |
| | 144 | 18 | 22.5 |
| | 180 | 28 | 28 |
| | 252 | 55 | 38 |
| | 288 | 65 | 42.5 |
| | 360 | 120 | 50 |
| | 400 X 16 | 180 | 9 |
| 252 | | 18 | 26 |
| 288 | | 23 | 30 |
| 360 | | 35 | 37.5 |
| 450 | | 50 | 42 |
| 540 | | 70 | 50 |
| 500 X 24 | 252 | 10 | 15 |
| | 360 | 20 | 33 |
| | 450 | 28 | 37 |
| | 540 | 45 | 43 |
| | 630 | 60 | 47 |
| | 720 | 70 | 70 |
| 600 X 24 625 X 24 | 288 | 6 | <20 |
| | 360 | 8 | 22 |
| | 450 | 13 | 27 |
| | 540 | 19 | 34 |
| | 720 | 30 | 41 |
| | 900 | 40 | 45 |
| | 1080 | 65 | 53 |
| 600 X 48 | 360 | 6 | 13 |
| | 450 | 10 | 22.5 |
| | 540 | 15 | 27 |
| | 720 | 26 | 36 |
| | 900 | 33 | 40 |
| | 1080 | 60 | 46 |
| | 825 X 72 | 540 | 7 |
| 720 | | 10 | 23 |
| 900 | | 13 | 26 |
| 1080 | | 20 | 34 |
| 1440 | | 32 | 43 |
| 1800 | | 60 | 47 |