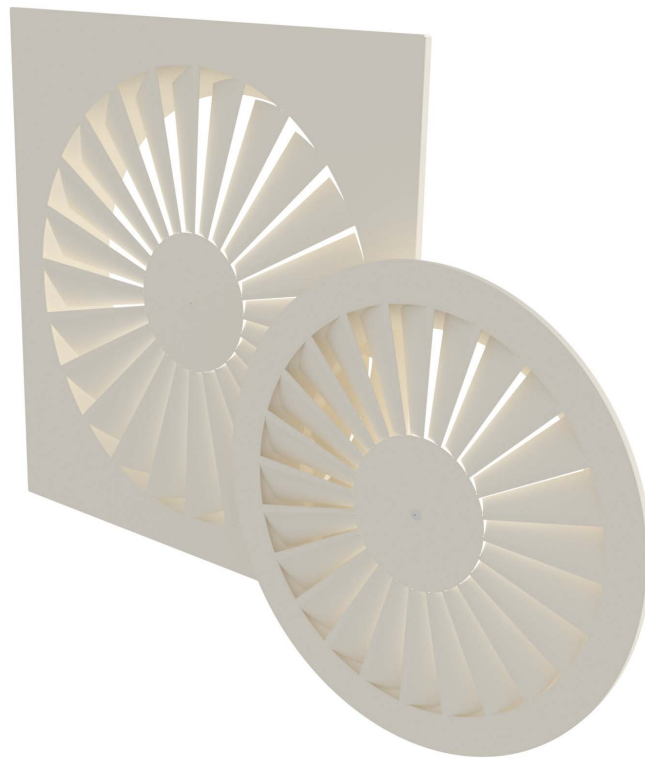


## STRAIGHT VANE SWIRL DIFFUSER



## STRAIGHT VANE SWIRL DIFFUSER

SSW Straight vane swirl diffusers are suitable for ceiling mounting and can be manufactured to suit most ceiling tile arrangements.

The SSW straight vane swirl diffuser offers excellent induction of room air and the rapid decay of supply air velocities and air temperature differentials.

Available in square or circular formats, the SSW can be manufactured to suit standard lay-in, tegular and clip-in ceiling systems.

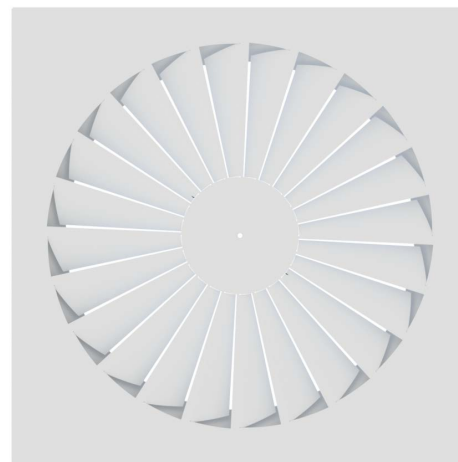
SSW swirl diffusers are also suitable for exposed ceiling applications.

Bespoke plenum boxes can be supplied to suit and are available in either galvanized or painted finish and with acoustic & thermal foam lining.

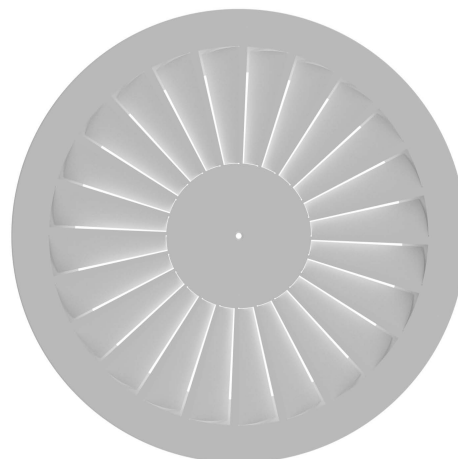
*Tegular frame options are available to suit most ceiling systems*



*SSW-24-L Lay-in Ceiling Type*



*SSW-24-C Circular Type*



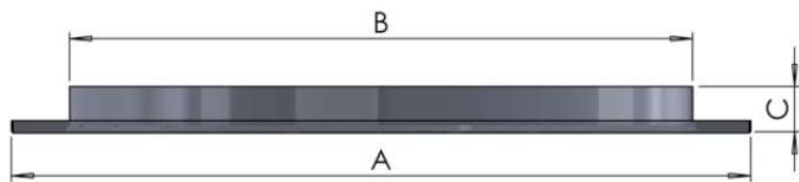
*SSW-24-C Circular Exposed Ceiling Type*



## Frame Options, Dimensional Information & Ordering

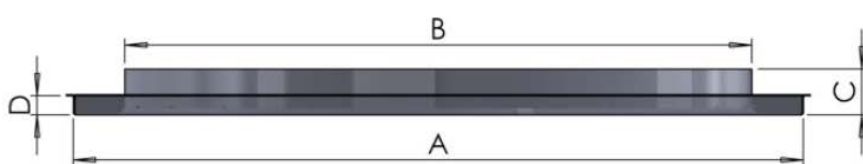
### Multiple Variations

SSW-24-L Lay-in Ceiling Type



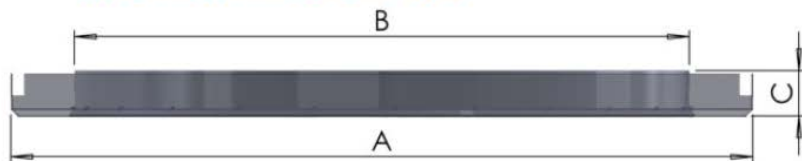
| Nom Size | A         | B   | C    |
|----------|-----------|-----|------|
| 200      | 595 x 595 | 197 | 37mm |
| 300      | 595 x 595 | 297 | 37mm |
| 350      | 595 x 595 | 347 | 37mm |
| 450      | 595 x 595 | 447 | 37mm |
| 500      | 595 x 595 | 500 | 37mm |
| 535      | 595 x 595 | 535 | 37mm |

SSW-24-T Tegular Ceiling Type



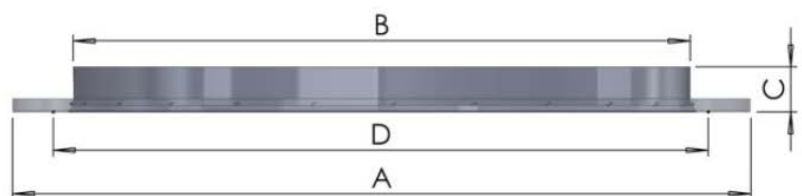
| Nom Size | A         | B   | C    | D         |
|----------|-----------|-----|------|-----------|
| 200      | 574 / 584 | 197 | 37mm | Drop Size |
| 300      | 574 / 584 | 297 | 37mm | Drop Size |
| 350      | 574 / 584 | 347 | 37mm | Drop Size |
| 450      | 574 / 584 | 447 | 37mm | Drop Size |
| 500      | 574 / 584 | 500 | 37mm | Drop Size |
| 535      | 574 / 584 | 535 | 37mm | Drop Size |

SSW-24-M Clip-in Metal Ceiling Type



| Nom Size | A         | B   | C    |
|----------|-----------|-----|------|
| 200      | 599 x 599 | 197 | 37mm |
| 300      | 599 x 599 | 297 | 37mm |
| 350      | 599 x 599 | 347 | 37mm |
| 450      | 599 x 599 | 447 | 37mm |
| 500      | 599 x 599 | 500 | 37mm |
| 535      | 599 x 599 | 535 | 37mm |

SSW-24-C Circular Swirl Diffuser



| Nom Size | A       | B   | C    | D   |
|----------|---------|-----|------|-----|
| 200      | 300 Dia | 197 | 37mm | 225 |
| 300      | 400 Dia | 297 | 37mm | 325 |
| 350      | 500 Dia | 347 | 37mm | 375 |
| 450      | 600 Dia | 447 | 37mm | 475 |
| 500      | 600 Dia | 500 | 37mm | 525 |
| 535      | 600 Dia | 535 | 37mm | 560 |

### How to Order

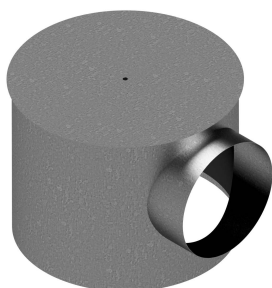
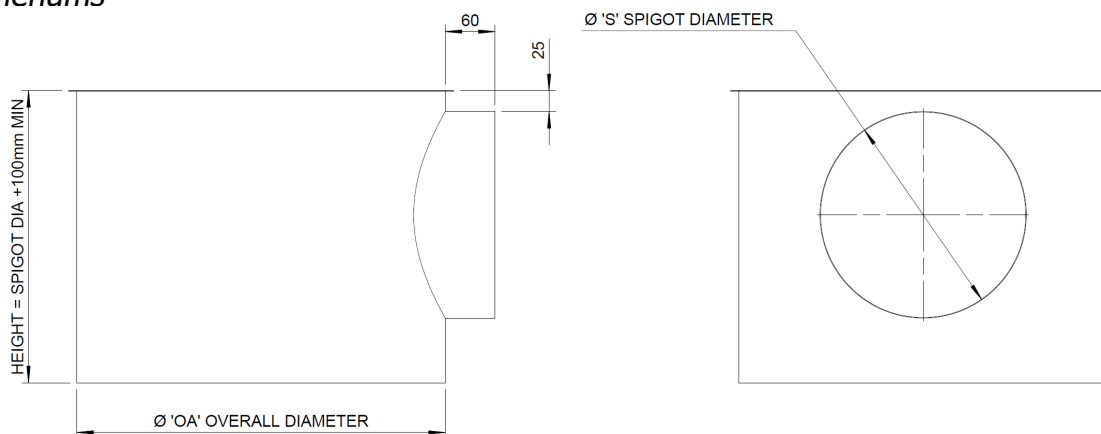
| Type | No of Blades | Edge Detail             | Tegular Depth | Size | Overall Size   | Finish          |
|------|--------------|-------------------------|---------------|------|----------------|-----------------|
|      |              | L - Lay In Grid         |               | 200  |                |                 |
|      |              | C - Circular            |               | 300  |                | RAL Colour      |
| SSW  | 24           | T15 - Tegular 584 x 584 | e.g. 8mm      | 350  | e.g. 595 x 595 | Galvanised      |
|      |              | T24 - Tegular 574 x 574 |               | 450  |                | Stainless Steel |
|      |              | M - Clip In Metal Tile  |               | 500  |                |                 |
|      |              |                         |               | 535  |                |                 |

e.g. 10 No SSW - 24 - L - 450 - 595 x 595 - RAL 9010

## Plenum Box Dimensions & Standards

All plenum boxes are available with 6mm or 12mm Class 'O' foam lining. Additional spigots and bespoke boxes are available on request, please contact the Sales Office to discuss your requirements.

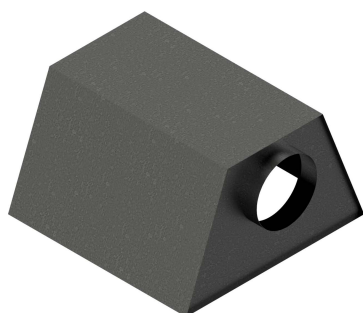
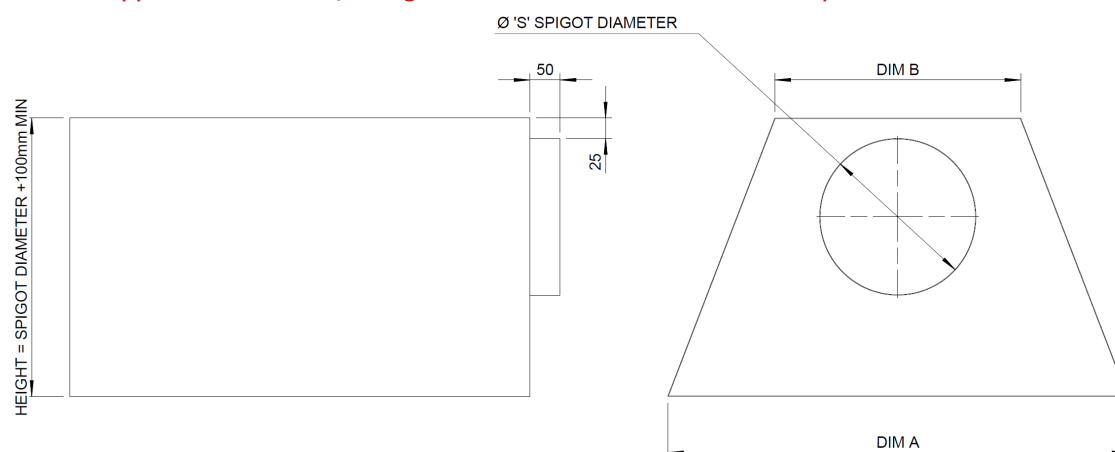
### Circular Plenums



| Nom Diffuser Size | OA Ceiling Type | OA Exposed Type |
|-------------------|-----------------|-----------------|
| 200               | 210             | 297             |
| 300               | 310             | 397             |
| 350               | 360             | 497             |
| 450               | 460             | 597             |
| 500               | 510             | 597             |
| 535               | 545             | 597             |

### Square Plenums

Tapered boxes are supplied as standard, straight sided boxes are available on request.



| Nom Diffuser Size | DIM A | DIM B |
|-------------------|-------|-------|
| 200               | 290   | 197   |
| 300               | 390   | 297   |
| 350               | 440   | 347   |
| 450               | 540   | 447   |
| 500               | 540   | 500   |
| 535               | 580   | 535   |

3/12/25

# SSW-24 SWIRL DIFFUSER

## Performance Data

Performance Data

| Size    |                        | 10        | 15        | 20        | 25        | 30        | 35        | 40        | 45        | 50        |
|---------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 200 DIA | L/s                    | 10        | 15        | 20        | 25        | 30        | 35        | 40        | 45        | 50        |
|         | Throw m 0.5 - 0.25 m/s | 0.3 - 0.5 | 0.4 - 0.8 | 0.5 - 1.0 | 0.6 - 1.3 | 0.8 - 1.5 | 0.9 - 1.8 | 1.0 - 2.2 | 1.2 - 2.3 | 1.3 - 2.7 |
|         | Pa                     | 1         | 3         | 5         | 9         | 12        | 17        | 22        | 28        | 41        |
|         | NR                     | 2         | 3         | 6         | 12        | 17        | 22        | 25        | 29        | 32        |
|         | L/s                    | 55        | 60        | 65        | 70        |           |           |           |           |           |
|         | Throw m 0.5 - 0.25 m/s | 1.4 - 2.8 | 1.5 - 3.1 | 1.7 - 2.3 | 1.8 - 3.6 |           |           |           |           |           |
| 300 DIA | Pa                     | 41        | 49        | 57        | 67        |           |           |           |           |           |
|         | NR                     | 34        | 37        | 39        | 41        |           |           |           |           |           |
|         | L/s                    | 30        | 35        | 40        | 45        | 50        | 55        | 60        | 65        | 70        |
|         | Throw m 0.5 - 0.25 m/s | 0.5 - 1.0 | 0.6 - 1.2 | 0.7 - 1.4 | 0.7 - 1.5 | 0.8 - 1.7 | 0.9 - 1.9 | 1.2 - 2.2 | 1.2 - 2.3 | 1.2 - 2.4 |
|         | Pa                     | 3         | 4         | 5         | 6         | 8         | 9         | 11        | 13        | 15        |
|         | NR                     | 2         | 4         | 7         | 11        | 14        | 16        | 19        | 21        | 22        |
| 350 DIA | L/s                    | 75        | 80        | 85        | 90        | 95        | 100       | 105       | 110       | 115       |
|         | Throw m 0.5 - 0.25 m/s | 1.3 - 2.5 | 1.4 - 2.7 | 1.5 - 2.9 | 1.8 - 3.1 | 2.1 - 3.2 | 2.2 - 3.4 | 2.6 - 3.6 | 2.6 - 3.7 | 2.6 - 3.9 |
|         | Pa                     | 17        | 20        | 22        | 25        | 28        | 31        | 33        | 38        | 41        |
|         | NR                     | 25        | 27        | 29        | 30        | 32        | 33        | 35        | 36        | 37        |
|         | L/s                    | 50        | 55        | 60        | 65        | 70        | 80        | 90        | 100       | 110       |
|         | Throw m 0.5 - 0.25 m/s | 0.8 - 1.6 | 0.8 - 1.7 | 1.0 - 1.9 | 1.1 - 2.0 | 1.1 - 2.2 | 1.2 - 2.5 | 1.5 - 2.8 | 1.5 - 3.1 | 1.5 - 3.4 |
| 450 DIA | Pa                     | 4         | 4         | 5         | 6         | 7         | 9         | 12        | 14        | 17        |
|         | NR                     | 4         | 6         | 9         | 11        | 13        | 17        | 20        | 23        | 26        |
|         | L/s                    | 120       | 130       | 140       | 150       | 160       | 170       | 180       | 190       | 200       |
|         | Throw m 0.5 - 0.25 m/s | 1.8 - 3.8 | 2.0 - 4.1 | 2.1 - 4.4 | 2.3 - 4.7 | 2.4 - 5.0 | 2.5 - 5.3 | 2.8 - 5.6 | 2.9 - 5.9 | 3.0 - 6.3 |
|         | Pa                     | 21        | 24        | 28        | 32        | 36        | 41        | 46        | 51        | 57        |
|         | NR                     | 28        | 31        | 33        | 35        | 36        | 38        | 40        | 41        | 43        |
| 500 DIA | L/s                    | 75        | 80        | 90        | 100       | 110       | 120       | 130       | 140       | 150       |
|         | Throw m 0.5 - 0.25 m/s | 0.8 - 1.8 | 0.9 - 1.9 | 1.0 - 2.2 | 1.1 - 2.4 | 1.2 - 2.6 | 1.4 - 2.9 | 1.5 - 3.1 | 1.6 - 3.4 | 1.8 - 3.6 |
|         | Pa                     | 5         | 6         | 7         | 9         | 11        | 13        | 15        | 18        | 20        |
|         | NR                     | 5         | 7         | 10        | 13        | 16        | 18        | 21        | 23        | 25        |
|         | L/s                    | 160       | 170       | 180       | 190       | 200       | 210       | 220       | 230       | 240       |
|         | Throw m 0.5 - 0.25 m/s | 1.8 - 3.8 | 2.0 - 4.1 | 2.1 - 4.3 | 2.3 - 4.6 | 2.4 - 4.8 | 2.4 - 5.0 | 2.5 - 5.3 | 2.7 - 5.5 | 2.8 - 5.8 |
| 535 DIA | Pa                     | 23        | 26        | 29        | 33        | 36        | 40        | 44        | 48        | 52        |
|         | NR                     | 26        | 28        | 30        | 31        | 33        | 34        | 35        | 37        | 38        |
|         | L/s                    | 100       | 110       | 120       | 130       | 140       | 150       | 160       | 170       | 180       |
|         | Throw m 0.5 - 0.25 m/s | 0.8 - 2.0 | 1.0 - 2.2 | 1.1 - 2.4 | 1.2 - 2.6 | 1.3 - 2.8 | 1.4 - 3.0 | 1.5 - 3.2 | 1.6 - 3.4 | 1.8 - 3.6 |
|         | Pa                     | 6         | 7         | 8         | 9         | 11        | 13        | 14        | 16        | 18        |
|         | NR                     | 2         | 3         | 5         | 8         | 15        | 17        | 18        | 20        | 22        |
| 535 DIA | L/s                    | 190       | 200       | 210       | 220       | 230       | 240       | 260       | 280       | 300       |
|         | Throw m 0.5 - 0.25 m/s | 1.8 - 3.8 | 2.0 - 4.0 | 2.1 - 4.2 | 2.2 - 4.4 | 2.2 - 4.6 | 2.3 - 4.8 | 2.5 - 5.2 | 2.6 - 5.6 | 2.9 - 6.0 |
|         | Pa                     | 20        | 22        | 25        | 27        | 29        | 32        | 38        | 44        | 50        |
|         | NR                     | 23        | 25        | 26        | 27        | 29        | 30        | 32        | 34        | 36        |
|         | L/s                    | 150       | 170       | 190       | 210       | 220       | 230       | 240       | 250       | 260       |
|         | Throw m 0.25 - 0.5 m/s | 2.5 - 1.3 | 2.9 - 1.4 | 3.2 - 1.6 | 3.5 - 1.8 | 3.7 - 1.8 | 3.9 - 1.9 | 4 - 2     | 4.2 - 2.1 | 4.4 - 2.2 |
| 535 DIA | Pa                     | 8         | 10        | 13        | 16        | 18        | 19        | 21        | 23        | 25        |
|         | NR                     | 12        | 15        | 18        | 21        | 22        | 24        | 25        | 26        | 27        |
|         | L/s                    | 270       | 280       | 290       | 300       | 310       | 320       | 330       | 340       | 350       |
|         | Throw m 0.25 - 0.5 m/s | 4.5 - 2.3 | 4.7 - 2.4 | 4.9 - 2.4 | 5 - 2.5   | 5.2 - 2.6 | 5.4 - 2.7 | 5.5 - 2.8 | 5.7 - 2.9 | 5.9 - 2.9 |
| 535 DIA | Pa                     | 26        | 28        | 31        | 33        | 35        | 37        | 40        | 42        | 44        |
|         | NR                     | 28        | 29        | 30        | 31        | 32        | 33        | 34        | 35        | 36        |

**NOTE:**

All throws based on terminal velocities of 0.5 - 0.25 m/s

For Return Air Applications Multiply Pa x 0.75, NC Levels remain the same