

Hinged Louvre Face Grille



Description

Hyvent Louvre face Grilles deliver versatile air distribution with a sleek louvre face ceiling diffuser design. Built from premium extruded aluminium, they feature a removable core for easy access and maintenance. Available in a wide selection of sizes and air patterns, they are engineered to meet diverse application needs with both performance and style.

Construction

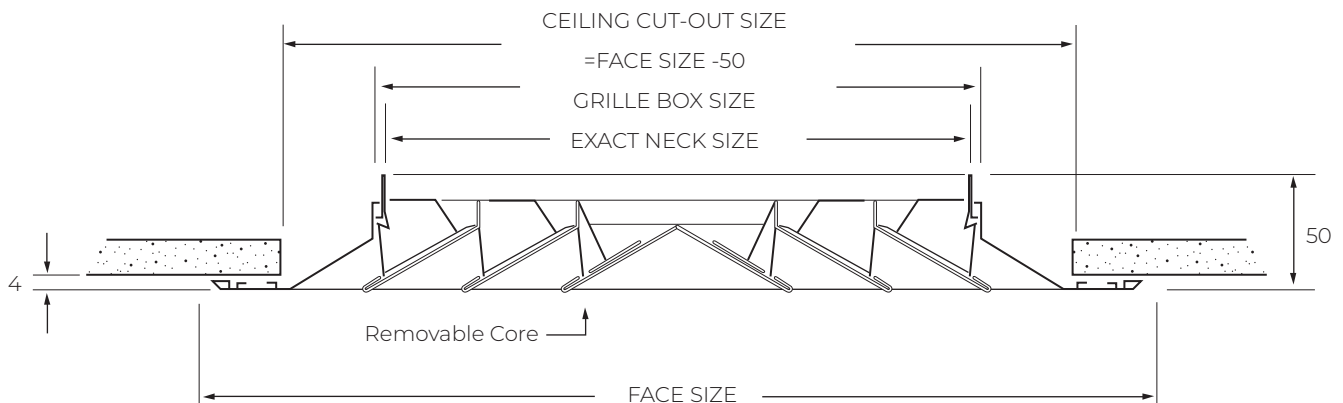
Hyvent Louvre face combine strength, precision, and style. Crafted entirely from lightweight aluminium, they avoid the bulk of cast or molded parts while delivering exceptional durability. Precision corner gussets and braces create seamless hairline mitres, and aluminium rivets lock the core structure firmly in place. The result is a grille that stays perfectly rigid—no warping, no flexing, no rattling—just reliable performance with a refined finish.

Note: Powder coated white as standard

4 Way Grille



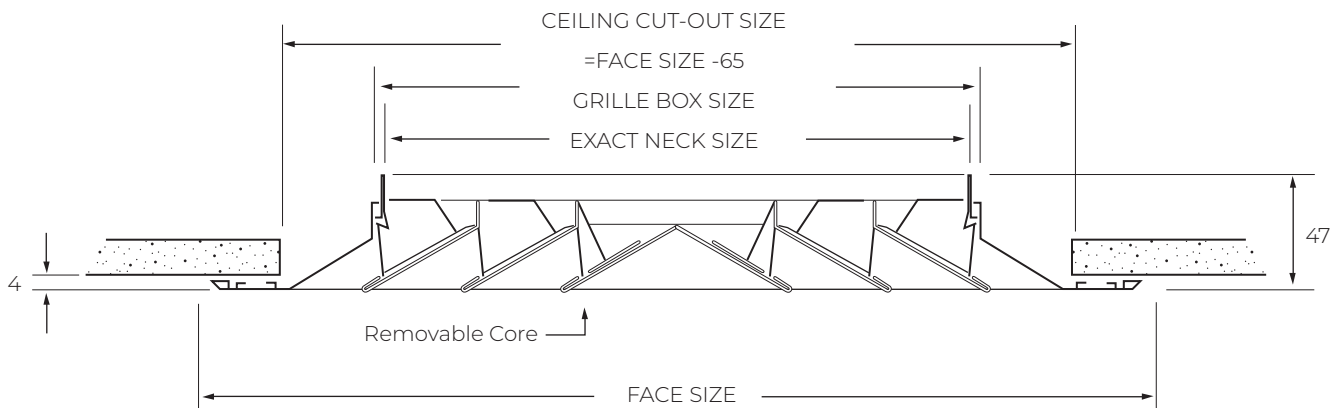
| Product Code | Exact Neck (mm) | Face Size X & Y (mm) | Ceiling Cutout Size (mm) |
|--------------|-----------------|----------------------|--------------------------|
| AGS3015 | 150 x 150 | 300 x 300 | 250 x 250 |
| AGS3722 | 225 x 225 | 375 x 375 | 325 x 325 |
| AGS4530 | 300 x 300 | 450 x 450 | 400 x 400 |
| AGS5237 | 375 x 375 | 525 x 525 | 475 x 475 |
| AGS5845 | 450 x 450 | 595 x 595 | 545 x 545 |



3 Way Louvre Face Grille



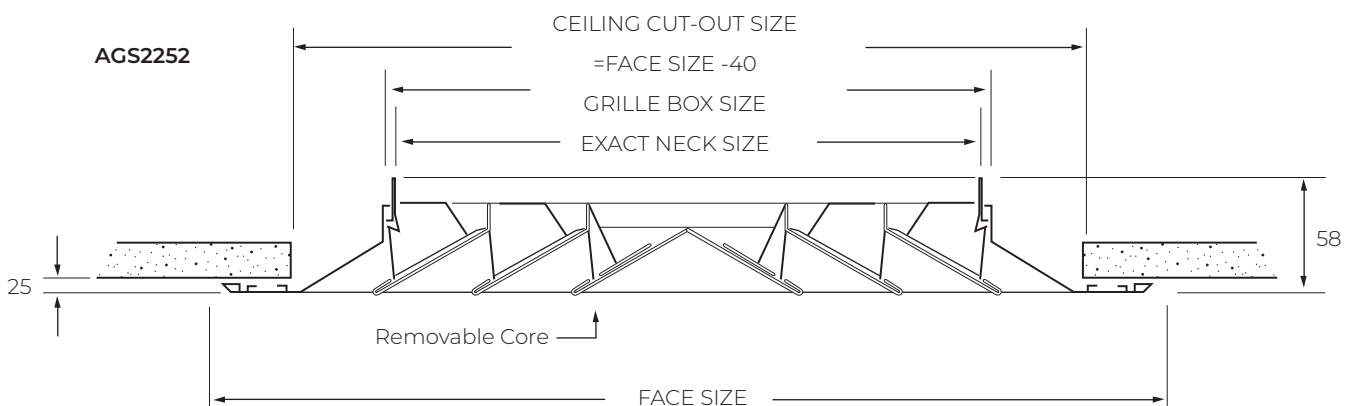
| Product Code | Exact Neck (mm) | Face Size X & Y (mm) | Ceiling Cutout Size (mm) |
|--------------|-----------------|----------------------|--------------------------|
| AGS1503 | 150 x 150 | 295 x 295 | 230 x 230 |
| AGS2253 | 225 x 225 | 370 x 370 | 305 x 305 |

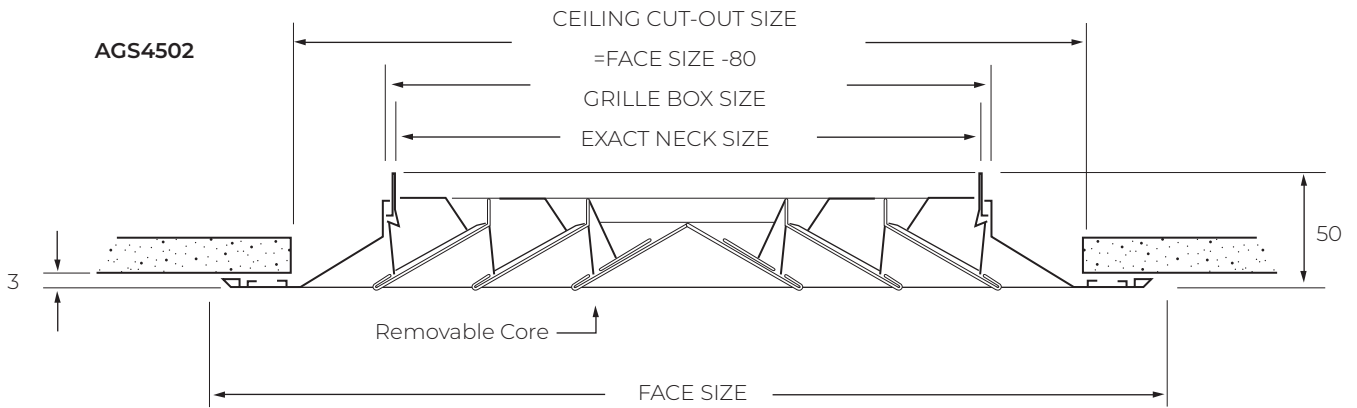


2 Way Louvre Face Grille



| Product Code | Exact Neck (mm) | Face Size X & Y (mm) | Ceiling Cutout Size (mm) |
|--------------|-----------------|----------------------|--------------------------|
| AGS2252 | 220 x 220 | 335 x 335 | 295 x 295 |
| AGS4502 | 445 x 445 | 595 x 595 | 525 x 525 |

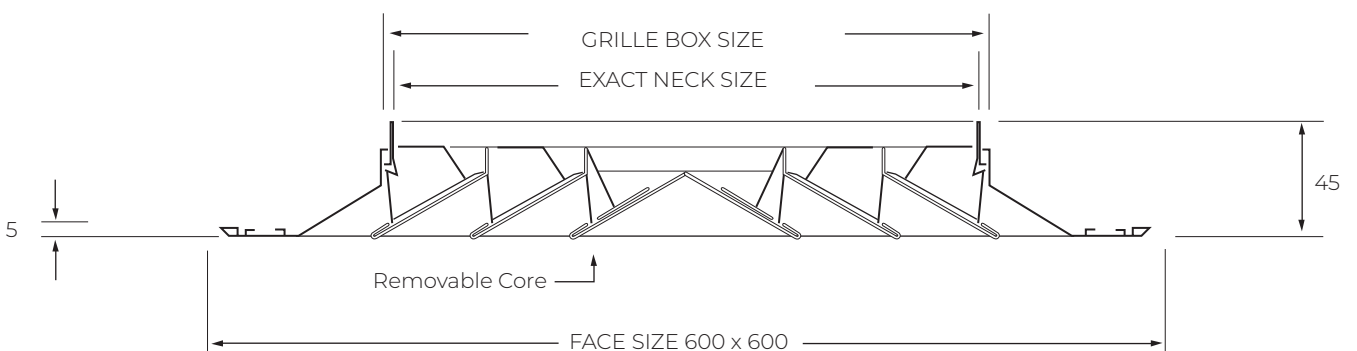




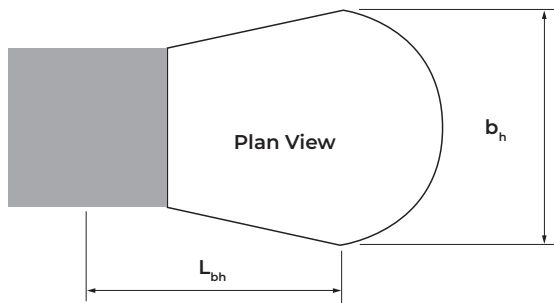
4 Way Louvre Face Plaque



| Product Code | Exact Neck (mm) | Face Size X & Y (mm) |
|--------------|-----------------|----------------------|
| AGP6022 | 220 x 220 | 600 x 600 |
| AGP6022 | 445 x 445 | 600 x 600 |
| AGP6022 | 445 x 445 | 600 x 600 |



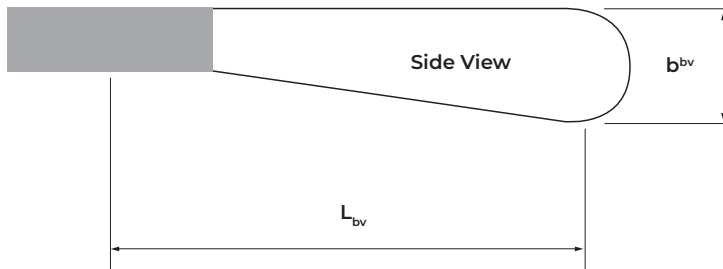
Air Patterns and Throw



Air Pattern (isothermal air supply)

$$b_h = \text{Active Length} + (L_{0.25} \times 0.03)$$

$$L_{bh} = L_{0.25} \times 0.65$$



$$b_v = L_{0.25} \times 0.06$$

$$L_{bv} = L_{0.25} \times 0.65$$

Note:

L = Throw in M (refer graphs)

$L_{0.25}$ = Throw at 0.25 m/s terminal velocity

Active Length = supply air plenum length

Sound Data

NR Levels for the grille may be determined from engineering charts.

Sound power level L_w

The generated sound power level L_w dB is calculated by adding the correction factor K_{OK} (See table on the right) to the sound level NR dB according to the formula:

$$L_w = NR + K_{OK}$$

| Size | Frequency (Cycle Per Second) | | | | | | |
|---------|------------------------------|-----|-----|------|------|------|------|
| | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 150 | +17 | +13 | +10 | +8 | +3 | -5 | -15 |
| 225 | +14 | +11 | +10 | +8 | +1 | -10 | -16 |
| 300 | +13 | +9 | +9 | +8 | -3 | -15 | -18 |
| 450 | +13 | +9 | +11 | +7 | -6 | -21 | -21 |
| 525 | +12 | +7 | +9 | +7 | -4 | -23 | -24 |
| 600 | +12 | +7 | +9 | +7 | -4 | -23 | -24 |
| Tol +/- | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

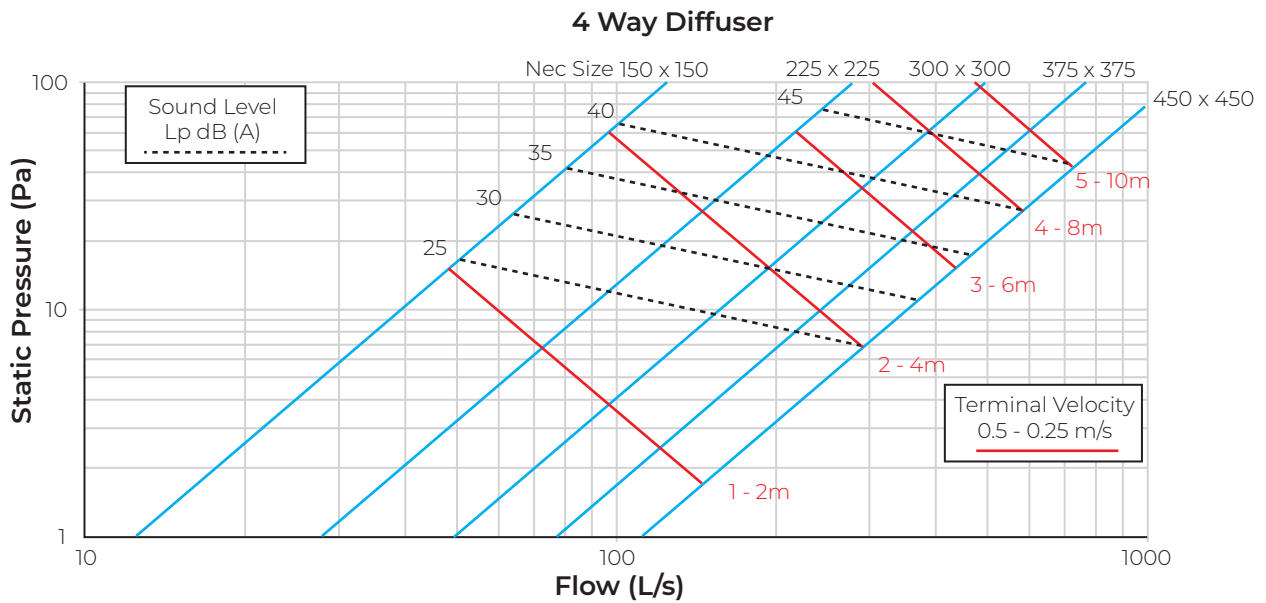
Correction factor K_{OK}



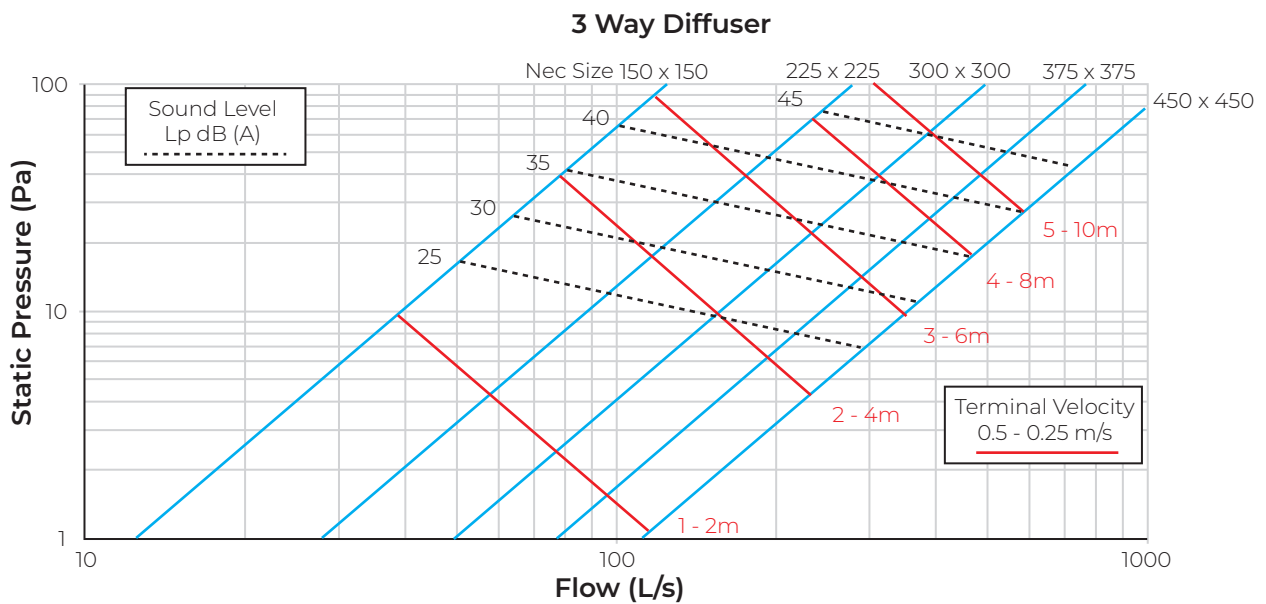
| q (l/s) | A x B | Static Pressure (Pa) | Sound Level dB(A) | Throw (m) | | |
|---------|-----------|----------------------|-------------------|-----------|-----------|-----------|
| | | | | 4-Way | 3-Way | 2-Way |
| 35 | 150 x 150 | 8 | <20 | 0.7 - 1.4 | 0.8 - 1.7 | 0.9 - 1.8 |
| | 225 x 225 | 2 | <20 | 0.4 - 0.9 | 0.5 - 1.1 | 0.6 - 1.2 |
| 60 | 150 x 150 | 23 | 29 | 1.2 - 2.4 | 1.5 - 3.0 | 1.6 - 3.2 |
| | 225 x 225 | 5 | <20 | 0.8 - 1.6 | 1.5 - 3.0 | 1.6 - 3.2 |
| 82 | 150 x 150 | 43 | 35 | 1.6 - 3.3 | 2.1 - 4.2 | 2.2 - 4.4 |
| | 225 x 225 | 9 | 21 | 1.1 - 2.2 | 1.4 - 2.8 | 1.4 - 2.9 |
| 100 | 150 x 150 | 64 | 40 | 2.0 - 4.1 | 2.5 - 5.1 | 2.6 - 5.3 |
| | 225 x 225 | 13 | 26 | 1.3 - 2.7 | 1.7 - 3.4 | 1.7 - 3.5 |
| 125 | 225 x 225 | 20 | 31 | 1.7 - 3.4 | 2.1 - 4.2 | 2.2 - 4.4 |
| | 300 x 300 | 6 | 21 | 1.2 - 2.5 | 1.6 - 3.2 | 1.3 - 4.3 |
| 150 | 225 x 225 | 29 | 34 | 2.0 - 4.1 | 2.5 - 5.1 | 2.6 - 5.3 |
| | 300 x 300 | 9 | 24 | 1.5 - 3.0 | 1.9 - 3.8 | 2.0 - 4.0 |
| 175 | 225 x 225 | 39 | 38 | 2.4 - 4.8 | 2.9 - 5.9 | 3.1 - 6.2 |
| | 300 x 300 | 13 | 28 | 1.8 - 3.6 | 2.2 - 4.4 | 2.3 - 4.7 |
| 200 | 375 x 375 | 5 | 20 | 1.4 - 2.8 | 1.7 - 3.5 | 1.8 - 3.7 |
| | 300 x 300 | 16 | 31 | 2.0 - 4.1 | 2.5 - 5.1 | 2.6 - 5.3 |
| | 375 x 375 | 7 | 23 | 1.6 - 3.3 | 2.0 - 4.0 | 2.1 - 4.3 |
| | 450 x 450 | 3 | <20 | 1.3 - 2.7 | 1.7 - 3.4 | 1.7 - 3.5 |
| 250 | 300 x 300 | 26 | 36 | 2.5 - 5.1 | 3.2 - 6.4 | 3.3 - 6.7 |
| | 375 x 375 | 11 | 28 | 2.0 - 4.1 | 2.5 - 5.1 | 2.6 - 5.3 |
| | 450 x 450 | 5 | 21 | 1.7 - 3.4 | 2.1 - 4.2 | 2.2 - 4.4 |
| 300 | 300 x 300 | 37 | 40 | 3.0 - 6.1 | 3.8 - 7.6 | 4.0 - 8.0 |
| | 375 x 375 | 15 | 32 | 2.4 - 4.9 | 3.0 - 6.1 | 3.2 - 6.4 |
| | 450 x 450 | 7 | 25 | 2.0 - 4.1 | 2.5 - 5.1 | 2.6 - 5.3 |

Test Conditions

Throws are determined under isothermal conditions, measured to terminal velocities of 0.5 m/s and 0.25 m/s, with a ceiling height of 2.7 m. The diffuser is installed flush with the ceiling, and throw factors are given for a single direction only. Noise ratings are based on a room absorption level of 10 dB.



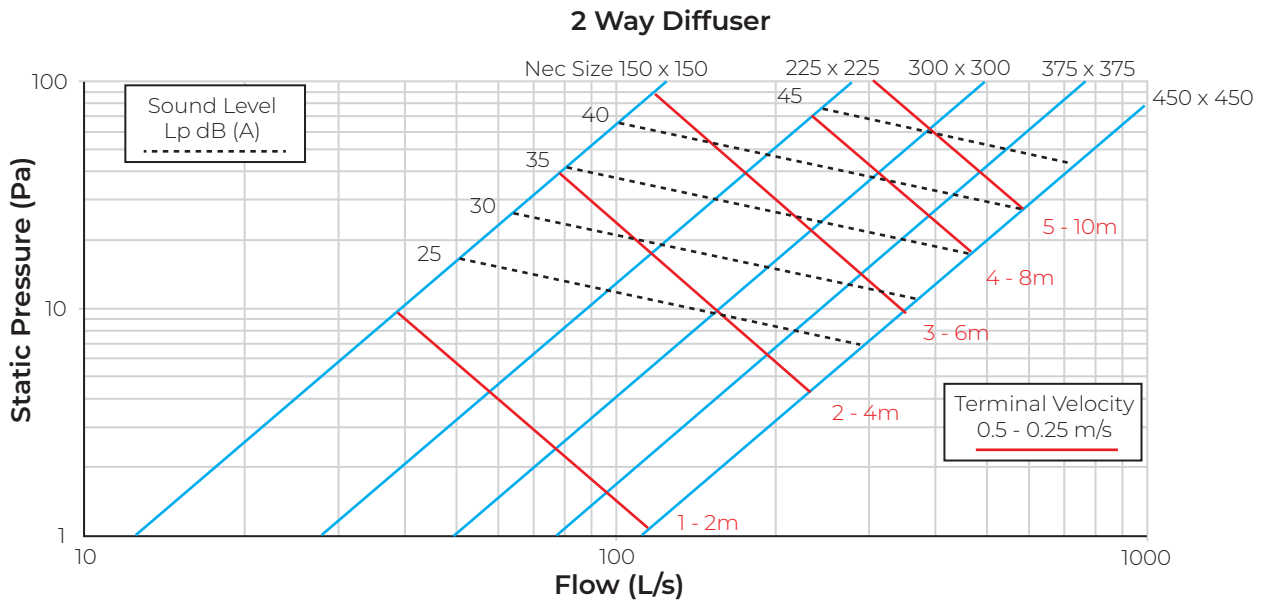
*These graphs are for selection only and should not be used for commissioning.



*These graphs are for selection only and should not be used for commissioning.

Performance Data

Throws are determined under isothermal conditions, measured to terminal velocities of 0.5 m/s and 0.25 m/s, with a ceiling height of 2.7 m. The diffuser is installed flush with the ceiling, and throw factors are given for a single direction only. Noise ratings are based on a room absorption level of 10 dB.



*These graphs are for selection only and should not be used for commissioning.