

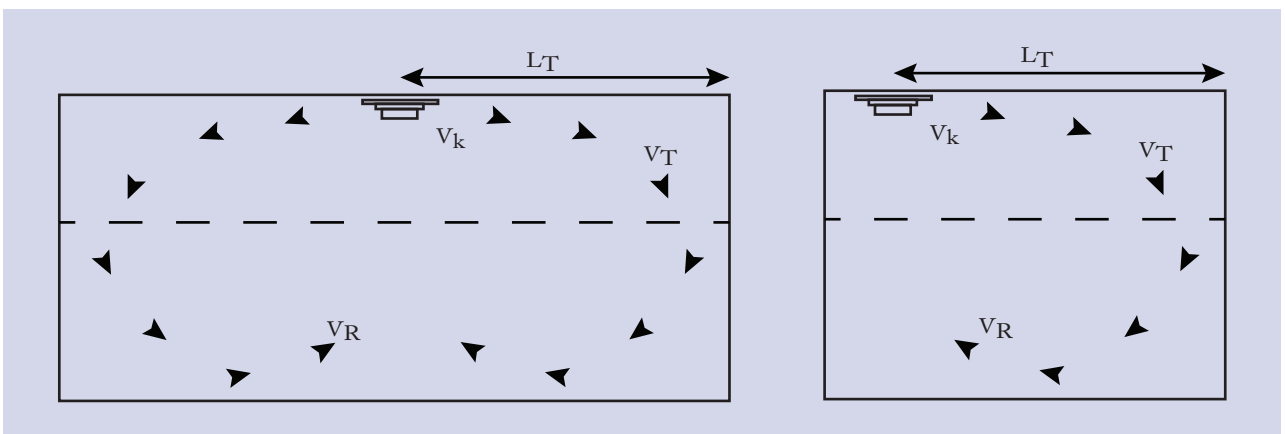
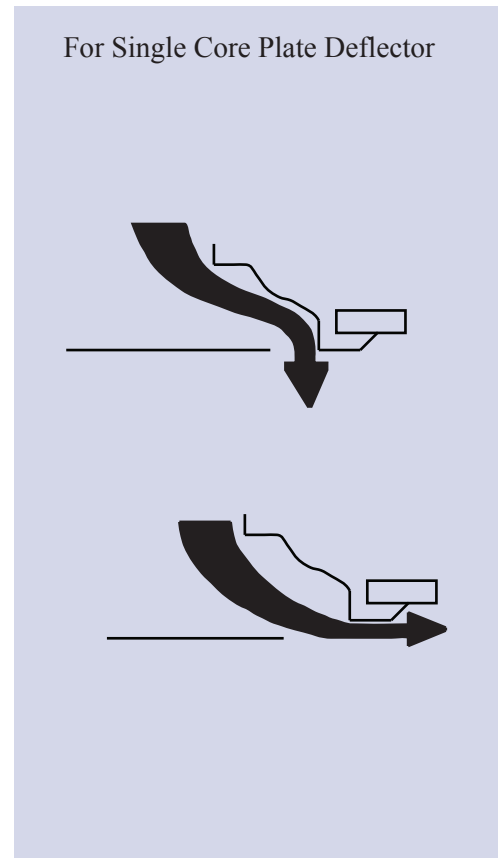
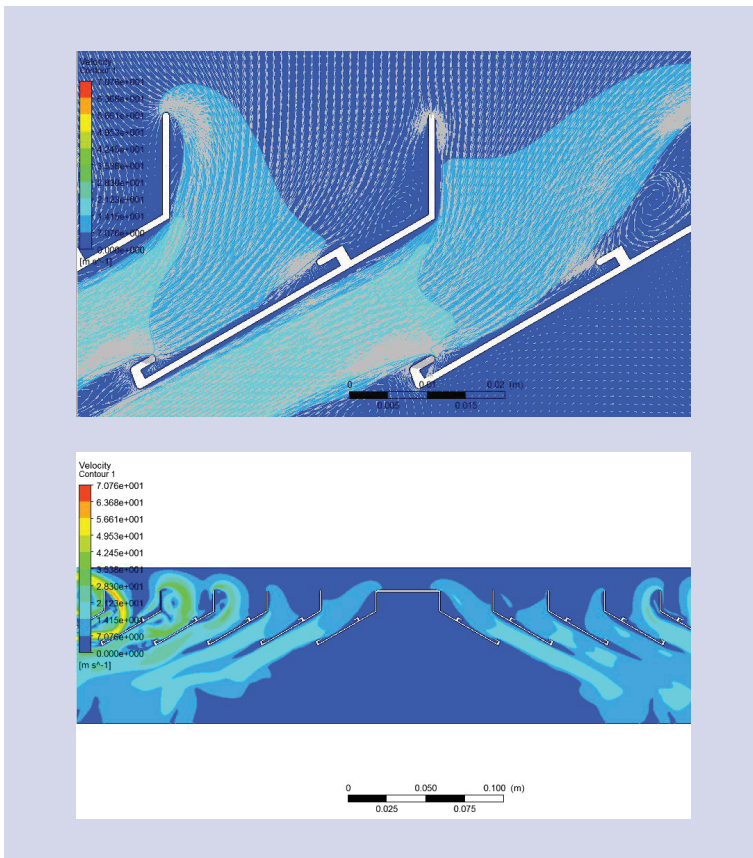
PRUDENTAIR®

CEILING DIFFUSER


DESCRIPTION . ILLUSTRATIONS

With wide range of flow deflection designs, Ceiling Diffusers (CD/DDCD/CDP 500-6000 series) are capable of providing excellent air distribution (horizontal/angled/vertical throw) for a wide range of operating conditions. By arranging blade vanes in pre-determine orientation, ceiling diffuser is able to create multi-directional air flow from a single outlet (1-4 different flow directions).

Equipping with a Double Deflection center core, ceiling diffuser (DDCD 700 series) is able to provide flexible direction of air distribution and yet maintaining superb horizontal distribution (for individual cooling and conventional uniform zone cooling).



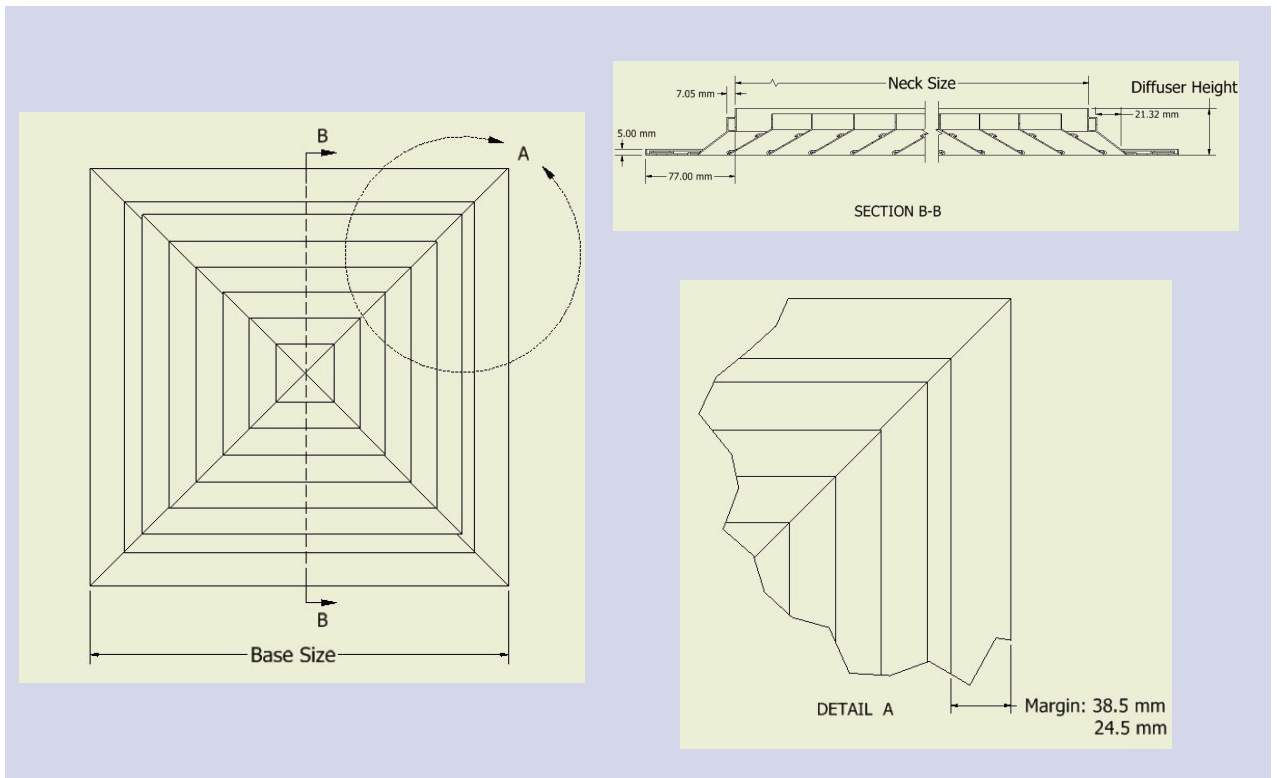
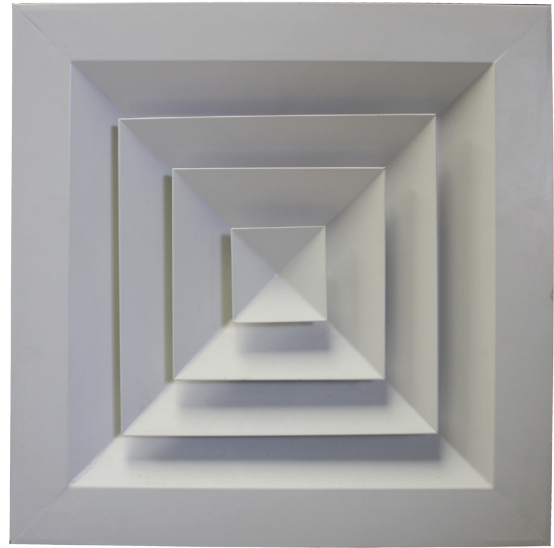

CONSTRUCTION

- . 1-4 way flow directions
- . Adjustable throw directions (Plate deflector)
- . Customizable throw (Horizontal/Angled, Upon request)
- . Removable center cores (Upon request)
- . Highly customizable designs

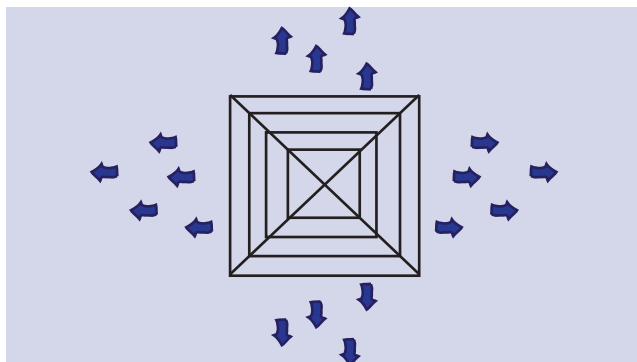


MATERIALS

- . Frame: 1.2 mm extruded aluminium
0.6 mm galvanized steel
Stainless steel (Upon request)
- . Vanes: 1.2 mm extruded aluminium
0.5 mm galvanized steel
Stainless steel (Upon request)



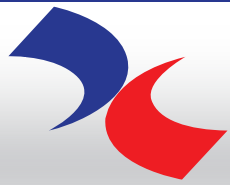
TECHNICAL PERFORMANCE . SUPPLY. 4-WAY SQ DIFFUSER



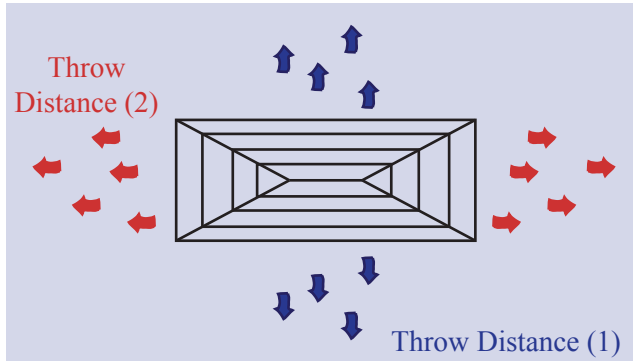
* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | NR 40 | | NR 45 | | |
|----------------------|--------------------------------------|---|-------|------|-------|-------|-------|-------|-------|------|------|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 2000 | 3000 |
| 150 x 150 | 0.0225 (0.009) | Throw Distance (0.37 m/s), m | 1.2 | 1.8 | 2.4 | 3.0 | - | - | - | - | - |
| | | Face Velocity, m/s | 3.0 | 4.6 | 6.2 | 7.7 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 5.0 | 13 | 22 | 32 | - | - | - | - | - |
| | | Noise Rating (NR) | 20 | 30 | 36 | 42 | - | - | - | - | - |
| | | Temperature Quotient | 0.12 | 0.05 | 0.027 | 0.022 | - | - | - | - | - |
| | | Induction Ratio | 13 | 23 | >30 | >30 | - | - | - | - | - |
| 225 x 225 | 0.0506 (0.02) | Throw Distance (0.37 m/s), m | - | 1.2 | 1.6 | 2.1 | 4.0 | - | - | - | - |
| | | Face Velocity, m/s | - | 2.1 | 2.8 | 3.5 | 6.9 | - | - | - | - |
| | | Total Pressure Loss, Pa | - | 2.5 | 4.7 | 7.0 | 26 | - | - | - | - |
| | | Noise Rating (NR) | - | <20 | 22 | 26 | 42 | - | - | - | - |
| | | Temperature Quotient | - | 0.23 | 0.13 | 0.08 | 0.025 | - | - | - | - |
| | | Induction Ratio | - | 8.0 | 11 | 16 | >30 | - | - | - | - |
| 300 x 300 | 0.09 (0.036) | Throw Distance (0.37 m/s), m | - | - | 1.2 | 1.5 | 3.0 | 4.8 | 5.8 | - | - |
| | | Face Velocity, m/s | - | - | 1.5 | 1.9 | 3.9 | 6.2 | 7.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | <2.0 | 2.2 | 8.2 | 22 | 32 | - | - |
| | | Noise Rating (NR) | - | - | <20 | <20 | 32 | 42 | 47 | - | - |
| | | Temperature Quotient | - | - | >0.25 | 0.23 | 0.07 | 0.035 | <0.03 | - | - |
| | | Induction Ratio | - | - | 5.0 | 7.5 | 18 | >30 | >30 | - | - |
| 375 x 375 | 0.141 (0.056) | Throw Distance (0.37 m/s), m | - | - | - | 1.3 | 2.4 | 3.9 | 4.8 | 9.0 | - |
| | | Face Velocity, m/s | - | - | - | 1.2 | 2.5 | 4.0 | 5.0 | 9.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | <2.0 | 3.5 | 9.0 | 14 | 55 | - |
| | | Noise Rating (NR) | - | - | - | <20 | 24 | 34 | 38 | >50 | - |
| | | Temperature Quotient | - | - | - | >0.25 | 0.14 | 0.065 | 0.045 | - | - |
| | | Induction Ratio | - | - | - | 4.0 | 11 | 20 | 25 | - | - |
| 450 x 450 | 0.2025 (0.081) | Throw Distance (0.37 m/s), m | - | - | - | - | 2.1 | 3.5 | 4.0 | 8.0 | - |
| | | Face Velocity, m/s | - | - | - | - | 1.7 | 2.7 | 3.4 | 6.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | <2.0 | 4.2 | 7.0 | 27 | - |
| | | Noise Rating (NR) | - | - | - | - | <20 | 27 | 32 | 47 | - |
| | | Temperature Quotient | - | - | - | - | >0.25 | 0.11 | 0.09 | - | - |
| | | Induction Ratio | - | - | - | - | 6.5 | 13 | 16 | - | - |
| 525 x 525 | 0.276 (0.110) | Throw Distance (0.37 m/s), m | - | - | - | - | 1.8 | 2.7 | 3.5 | 7.0 | 10 |
| | | Face Velocity, m/s | - | - | - | - | 1.3 | 2.0 | 2.5 | 5.1 | 7.6 |
| | | Total Pressure Loss, Pa | - | - | - | - | <2.0 | 2.2 | 3.5 | 15 | 32 |
| | | Noise Rating (NR) | - | - | - | - | <20 | 22 | 26 | 43 | >50 |
| | | Temperature Quotient | - | - | - | - | >0.25 | 0.23 | 0.15 | - | - |
| | | Induction Ratio | - | - | - | - | 2.7 | 7.5 | 11 | - | - |



TECHNICAL PERFORMANCE . SUPPLY. 4-WAY RECT DIFFUSER



* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

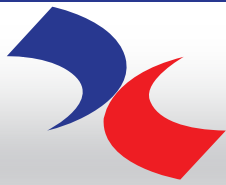
* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

* Neck size given are in Height x Length.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | NR 40 | | NR 45 | | 1000 | 2000 | 2500 |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|-----|-------|---|------|------|------|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | | | | |
| 150 x 225 | 0.03375 (0.014) | Throw Distance (1) (0.37 m/s), m | 2.2 | 2.7 | 4.5 | 5.5 | - | - | - | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | 1.6 | 2.0 | 3.2 | 4.0 | - | - | - | - | - | - |
| | | Face Velocity, m/s | 4.0 | 5.0 | 8.0 | 10 | - | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 9.0 | 14 | 37 | 55 | - | - | - | - | - | - |
| | | Noise Rating (NR) | 27 | 33 | 44 | >50 | - | - | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.05/0.1 | 0.04/0.06 | 0.02/0.03 | - | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | 21/14 | 27/19 | >30 | - | - | - | - | - | - | - |
| 150 x 300 | 0.045 (0.018) | Throw Distance (1) (0.37 m/s), m | 2.0 | 2.6 | 4.2 | 5.0 | 6.0 | - | - | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | 1.2 | 1.6 | 2.5 | 3.0 | 3.8 | - | - | - | - | - |
| | | Face Velocity, m/s | 3.0 | 3.9 | 6.2 | 7.7 | 9.3 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 5.0 | 9.0 | 22 | 30 | 50 | - | - | - | - | - |
| | | Noise Rating (NR) | 22 | 27 | 37 | 44 | >50 | - | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.09/0.22 | 0.05/0.13 | 0.02/0.04 | 0.01/0.04 | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | 16/8.0 | 22/11 | -/20 | -/27 | - | - | - | - | - | - |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | NR 40 | | NR 45 | | 1000 | 2000 | 2500 |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|-----------|--------|--------|------|------|------|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | | | | |
| 225 x 300 | 0.0675 (0.027) | Throw Distance (1) (0.37 m/s), m | 1.5 | 2.0 | 3.0 | 3.9 | 4.5 | 6.0 | - | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | 1.3 | 1.6 | 2.5 | 3.0 | 3.5 | 4.7 | - | - | - | - |
| | | Face Velocity, m/s | 2.0 | 2.6 | 4.1 | 5.1 | 6.2 | 8.2 | - | - | - | - |
| | | Total Pressure Loss, Pa | 2.2 | 4.0 | 9.0 | 15 | 22 | 40 | - | - | - | - |
| | | Noise Rating (NR) | <20 | 20 | 31 | 36 | 40 | 47 | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.19/0.25 | 0.11/0.18 | 0.05/0.08 | 0.03/0.06 | 0.03/0.04 | - | - | - | - | - |
| | | Induction Ratio (1,2) | 8.5/8.0 | 13/9.0 | 22/17 | 30/22 | -/27 | - | - | - | - | - |
| 225 x 375 | 0.0844 (0.034) | Throw Distance (1) (0.37 m/s), m | - | 1.7 | 3.0 | 3.5 | 4.5 | 5.5 | 7.0 | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | 1.3 | 2.0 | 2.5 | 2.7 | 3.5 | 4.7 | - | - | - |
| | | Face Velocity, m/s | - | 2.0 | 3.3 | 4.1 | 4.9 | 6.5 | 8.2 | - | - | - |
| | | Total Pressure Loss, Pa | - | 2.2 | 6.0 | 9.0 | 14 | 22 | 37 | - | - | - |
| | | Noise Rating (NR) | - | <20 | 26 | 32 | 36 | 43 | 47 | - | - | - |
| | | Temperature Quotient (1,2) | - | 0.18/- | 0.07/0.14 | 0.06/0.1 | 0.04/0.09 | -/0.06 | -/0.03 | - | - | - |
| | | Induction Ratio (1,2) | - | 9.0/6.0 | 18/11 | 22/14 | 30/16 | -/23 | - | - | - | - |
| 225 x 450 | 0.1013 (0.041) | Throw Distance (1) (0.37 m/s), m | - | - | 2.7 | 3.5 | 4.1 | 5.2 | 6.5 | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | - | 1.7 | 2.2 | 2.4 | 3.2 | 3.8 | - | - | - |
| | | Face Velocity, m/s | - | - | 2.7 | 3.4 | 4.1 | 5.4 | 6.8 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | 4.5 | 7.0 | 10 | 17 | 25 | - | - | - |
| | | Noise Rating (NR) | - | - | 23 | 26 | 33 | 38 | 44 | - | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.09/0.2 | 0.06/0.14 | 0.05/0.1 | -/0.07 | -/0.05 | - | - | - |
| | | Induction Ratio (1,2) | - | - | 16/8 | 23/11 | 26/14 | -/20 | -/23 | - | - | - |



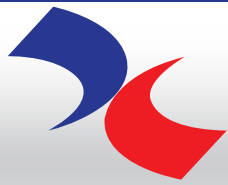


TECHNICAL PERFORMANCE . SUPPLY

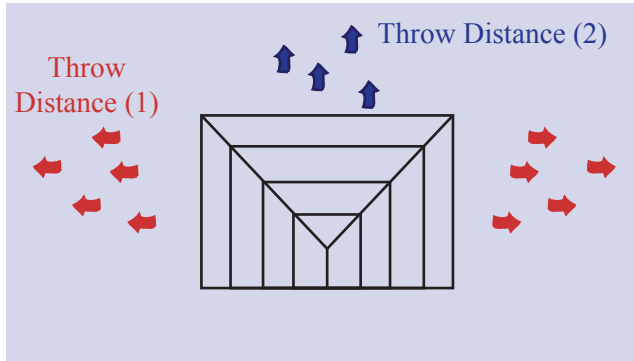
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | | | NR 25 | | NR 35 | | NR 40 | | NR 45 | |
|----------------------|--------------------------------------|---|-----|-----|-----------|-----------|-----------|-----------|-----------|------|-------|---|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | 2000 | 2500 | |
| 300 x 375 | 0.1125 (0.045) | Throw Distance (1) (0.37 m/s), m | - | - | 2.4 | 2.8 | 3.4 | 4.7 | 5.3 | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | - | 2.0 | 2.4 | 2.7 | 3.8 | 4.7 | - | - | - |
| | | Face Velocity, m/s | - | - | 2.5 | 3.1 | 3.7 | 4.9 | 6.2 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | 3.5 | 5.0 | 8.0 | 14 | 22 | - | - | - |
| | | Noise Rating (NR) | - | - | 21 | 26 | 30 | 36 | 42 | - | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.12/0.18 | 0.11/0.15 | 0.07/0.11 | 0.04/0.06 | -/0.04 | - | - | - |
| | | Induction Ratio (1,2) | - | - | 13/9.5 | 14/11 | 19/14 | 27/23 | -/27 | - | - | - |
| 300 x 450 | 0.135 (0.054) | Throw Distance (1) (0.37 m/s), m | - | - | 2.2 | 2.5 | 3.0 | 4.0 | 5.0 | - | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | - | 1.6 | 2.0 | 2.5 | 3.2 | 4.0 | - | - | - |
| | | Face Velocity, m/s | - | - | 2.1 | 2.6 | 3.1 | 4.1 | 5.1 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | 2.5 | 3.8 | 5.0 | 10 | 15 | - | - | - |
| | | Noise Rating (NR) | - | - | <20 | 23 | 25 | 33 | 38 | - | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.17/- | 0.14/0.21 | 0.11/0.15 | 0.07/0.1 | 0.05/0.07 | - | - | - |
| | | Induction Ratio (1,2) | - | - | 9/6 | 11/8.5 | 14/11 | 20/15 | 26/20 | - | - | - |
| 300 x 525 | 0.1575 (0.063) | Throw Distance (1) (0.37 m/s), m | - | - | - | 2.6 | 3.2 | 4.3 | 5.0 | 10.5 | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | - | - | 1.6 | 2.0 | 2.7 | 3.5 | 6.5 | - | - |
| | | Face Velocity, m/s | - | - | - | 2.2 | 2.6 | 3.5 | 4.4 | 8.8 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.5 | 4.0 | 7.0 | 13 | 40 | - | - |
| | | Noise Rating (NR) | - | - | - | 20 | 24 | 30 | 35 | >50 | - | - |
| | | Temperature Quotient (1,2) | - | - | - | 0.15/- | 0.11/0.22 | 0.06/0.14 | 0.05/0.09 | - | - | - |
| | | Induction Ratio (1,2) | - | - | - | 11/5.5 | 13/7.2 | 20/11 | 24/15 | - | - | - |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | | | NR 25 | | NR 35 | | NR 40 | | NR 45 | |
|----------------------|--------------------------------------|---|-----|-----|-------|--------|-----------|-----------|-----------|------|-------|---|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | 2000 | 2500 | |
| 375 x 450 | 0.1688 (0.068) | Throw Distance (1) (0.37 m/s), m | - | - | - | 2.3 | 2.8 | 3.8 | 4.5 | 9.2 | - | - |
| | | Throw Distance (2) (0.37m/s), m | - | - | - | 1.8 | 2.3 | 3.2 | 3.8 | 7.2 | - | - |
| | | Face Velocity, m/s | - | - | - | 2.0 | 2.5 | 3.3 | 4.1 | 8.2 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.2 | 3.5 | 6.0 | 10 | 37 | - | - |
| | | Noise Rating (NR) | - | - | - | 20 | 24 | 30 | 36 | >50 | - | - |
| | | Temperature Quotient (1,2) | - | - | - | 0.22/- | 0.14/0.22 | 0.08/0.11 | 0.06/0.08 | - | - | - |
| | | Induction Ratio (1,2) | - | - | - | 8/6.5 | 11/8 | 15/13 | 20/16 | - | - | - |
| 375 x 525 | 0.1969 (0.079) | Throw Distance (1) (0.37 m/s), m | - | - | - | - | 2.6 | 3.6 | 4.5 | 9.0 | 11 | |
| | | Throw Distance (2) (0.37m/s), m | - | - | - | - | 1.9 | 2.7 | 3.4 | 6.5 | 8.0 | |
| | | Face Velocity, m/s | - | - | - | - | 2.1 | 2.8 | 3.5 | 7.0 | 8.8 | |
| | | Total Pressure Loss, Pa | - | - | - | - | 2.3 | 4.5 | 7.0 | 27 | 40 | |
| | | Noise Rating (NR) | - | - | - | - | 20 | 24 | 32 | 47 | >50 | |
| | | Temperature Quotient (1,2) | - | - | - | - | 0.18/- | 0.11/0.18 | 0.08/0.11 | - | - | |
| | | Induction Ratio (1,2) | - | - | - | - | 9/6.5 | 14/9.5 | 18/12.5 | - | - | |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | | | NR 25 | | NR 35 | | NR 40 | | NR 45 | |
|----------------------|--------------------------------------|---|-----|-----|-------|-----|-------|-----------|-----------|------|-------|--|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | 2000 | 2500 | |
| 450 x 525 | 0.2363 (0.095) | Throw Distance (1) (0.37 m/s), m | - | - | - | - | - | 2.9 | 4.0 | 7.5 | 9.8 | |
| | | Throw Distance (2) (0.37m/s), m | - | - | - | - | - | 2.7 | 3.5 | 6.5 | 8.0 | |
| | | Face Velocity, m/s | - | - | - | - | - | 2.3 | 2.9 | 5.8 | 7.3 | |
| | | Total Pressure Loss, Pa | - | - | - | - | - | 3.0 | 5.0 | 17 | 30 | |
| | | Noise Rating (NR) | - | - | - | - | - | 22 | 29 | 43 | 47 | |
| | | Temperature Quotient (1,2) | - | - | - | - | - | 0.17/0.22 | 0.11/0.13 | - | - | |
| | | Induction Ratio (1,2) | - | - | - | - | - | 9.5/8.5 | 14.5/12 | - | - | |



TECHNICAL PERFORMANCE . SUPPLY. 3-WAY DIFFUSER (1)

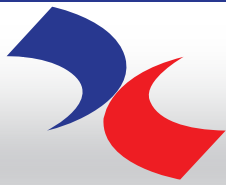


* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.
* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.
* Neck size given are in Height x Length.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | Noise Rating (NR) | | | | | | | | | |
|----------------------|--------------------------------------|---|-------------------|-----------|---------|---------|-----|-----|------|------|------|---|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | 2000 | 2500 | |
| 150 x 150 | 0.0225 (0.009) | Throw Distance (1) (0.30 m/s), m | 3.4 | 4.2 | - | - | - | - | - | - | - | - |
| | | Throw Distance (2) (0.30 m/s), m | 2.7 | 3.4 | - | - | - | - | - | - | - | - |
| | | Face Velocity, m/s | 6.2 | 7.7 | - | - | - | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 23 | 32 | - | - | - | - | - | - | - | - |
| | | Noise Rating (NR) | 35 | 41 | - | - | - | - | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.03/0.02 | -/0.02 | - | - | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | - | - | - | - | - | - | - | - | - | - |
| 150 x 300 | 0.045 (0.018) | Throw Distance (1) (0.30 m/s), m | 2.0 | 2.4 | 4.0 | 4.9 | 5.8 | - | - | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | 2.6 | 3.3 | 5.5 | 6.5 | 8.0 | - | - | - | - | |
| | | Face Velocity, m/s | 3.1 | 3.9 | 6.2 | 7.7 | 9.3 | - | - | - | - | |
| | | Total Pressure Loss, Pa | 5.5 | 9.0 | 22 | 32 | 48 | - | - | - | - | |
| | | Noise Rating (NR) | 22 | 27 | 38 | 44 | 46 | - | - | - | - | |
| | | Temperature Quotient (1,2) | 0.08/0.05 | 0.06/0.04 | 0.025/- | 0.018/- | - | - | - | - | - | |
| | | Induction Ratio (1,2) | 16/22 | 22/27 | - | - | - | - | - | - | - | |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | Noise Rating (NR) | | | | | | | | | |
|----------------------|--------------------------------------|---|-------------------|-----------|-----------|-----------|-----------|-----|-----|---|---|--|
| | | | NR 25 | NR 35 | NR 40 | NR 45 | | | | | | |
| 225 x 225 | 0.0506 (0.020) | Throw Distance (1) (0.30 m/s), m | 2.3 | 2.7 | 4.5 | 5.6 | 6.5 | - | - | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | 1.8 | 3.0 | 3.7 | 4.8 | 5.8 | - | - | - | - | |
| | | Face Velocity, m/s | 2.8 | 3.5 | 5.6 | 6.9 | 8.3 | - | - | - | - | |
| | | Total Pressure Loss, Pa | 4.5 | 7.0 | 18 | 27 | 38 | - | - | - | - | |
| | | Noise Rating (NR) | 21 | 26 | 37 | 42 | 45 | - | - | - | - | |
| | | Temperature Quotient (1,2) | 0.07/0.09 | 0.05/0.04 | 0.02/0.03 | -/0.017 | - | - | - | - | - | |
| | | Induction Ratio (1,2) | 19/14 | 23/27 | - | - | - | - | - | - | - | |
| 225 x 300 | 0.0675 (0.027) | Throw Distance (1) (0.30 m/s), m | 1.8 | 2.4 | 3.6 | 4.5 | 5.5 | 7.0 | - | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | 1.8 | 2.4 | 3.6 | 4.5 | 5.5 | 7.0 | - | - | - | |
| | | Face Velocity, m/s | 2.0 | 2.6 | 4.1 | 5.1 | 6.2 | 8.2 | - | - | - | |
| | | Total Pressure Loss, Pa | 2.3 | 4.0 | 10 | 13 | 22 | 36 | - | - | - | |
| | | Noise Rating (NR) | <20 | 20 | 31 | 35 | 40 | 47 | - | - | - | |
| | | Temperature Quotient (1,2) | 0.13 | 0.08 | 0.045 | 0.028 | - | - | - | - | - | |
| | | Induction Ratio (1,2) | 11.5 | 17 | 26 | - | - | - | - | - | - | |
| 225 x 375 | 0.0844 (0.034) | Throw Distance (1) (0.30 m/s), m | - | 1.8 | 2.7 | 3.7 | 4.5 | 5.5 | 7.8 | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | - | 2.4 | 3.5 | 4.5 | 5.0 | 6.5 | 9.0 | - | - | |
| | | Face Velocity, m/s | - | 2.0 | 3.3 | 4.1 | 4.9 | 6.5 | 8.2 | - | - | |
| | | Total Pressure Loss, Pa | - | 2.3 | 6.0 | 10 | 14 | 23 | 33 | - | - | |
| | | Noise Rating (NR) | - | <20 | 26 | 30 | 35 | 42 | 47 | - | - | |
| | | Temperature Quotient (1,2) | - | 0.15/0.09 | 0.06/0.05 | 0.05/0.04 | 0.04/0.03 | - | - | - | - | |
| | | Induction Ratio (1,2) | - | 11/14.5 | 16/22 | 23/- | - | - | - | - | - | |





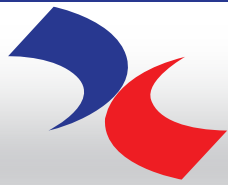
TECHNICAL PERFORMANCE . SUPPLY. 3-WAY DIFFUSER (1)

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | | NR 40 | NR 45 | 2000 | 2500 |
|----------------------|--------------------------------------|---|-------|-----|-----------|-----------|-----------|--------|-------|------|------|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | | |
| 300 x 300 | 0.09 (0.036) | Throw Distance (1) (0.30 m/s), m | - | - | 3.6 | 4.4 | 5.0 | 6.6 | 8.0 | - | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 2.6 | 3.5 | 4.0 | 5.5 | 6.7 | - | - |
| | | Face Velocity, m/s | - | - | 3.1 | 3.9 | 4.6 | 6.2 | 7.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | 5.0 | 8.0 | 13 | 23 | 32 | - | - |
| | | Noise Rating (NR) | - | - | 26 | 31 | 35 | 42 | 47 | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.06/0.07 | 0.04/0.05 | 0.03/0.05 | - | - | - | - |
| | | Induction Ratio (1,2) | - | - | 22/14.5 | 28/23 | -/26 | - | - | - | - |
| 300 x 375 | 0.1125 (0.045) | Throw Distance (1) (0.30 m/s), m | - | - | 3.0 | 3.8 | 4.4 | 6.0 | 7.5 | - | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 2.3 | 3.5 | 4.1 | 5.5 | 6.5 | - | - |
| | | Face Velocity, m/s | - | - | 2.5 | 3.1 | 3.7 | 4.9 | 6.2 | - | - |
| | | Total Pressure Loss, Pa | - | - | 3.5 | 5.2 | 7.5 | 14 | 22 | - | - |
| | | Noise Rating (NR) | - | - | 22 | 26 | 30 | 37 | 42 | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.08/0.15 | 0.06/0.07 | 0.05/0.06 | - | - | - | - |
| | | Induction Ratio (1,2) | - | - | 15.5/10 | 22/19 | 27/23 | - | - | - | - |
| 300 x 450 | 0.135 (0.054) | Throw Distance (1) (0.30 m/s), m | - | - | 2.5 | 3.2 | 3.7 | 5.0 | 6.2 | - | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 2.7 | 3.5 | 4.1 | 5.2 | 6.5 | - | - |
| | | Face Velocity, m/s | - | - | 2.1 | 2.6 | 3.1 | 4.1 | 5.1 | - | - |
| | | Total Pressure Loss, Pa | - | - | 2.5 | 4.0 | 5.0 | 10 | 15 | - | - |
| | | Noise Rating (NR) | - | - | <20 | 23 | 27 | 34 | 37 | - | - |
| | | Temperature Quotient (1,2) | - | - | 0.15/0.12 | 0.1/0.08 | 0.07/0.06 | 0.05/- | - | - | - |
| | | Induction Ratio (1,2) | - | - | 11/12 | 14/17 | 18/20 | 26/- | - | - | - |

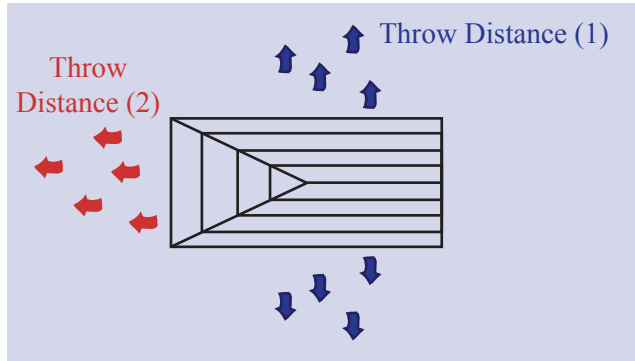
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | NR 40 | NR 45 | 2000 | 2500 | |
|----------------------|--------------------------------------|---|-------|-----|---------|-----------|-----------|-----------|------|------|---|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | | | |
| 375 x 375 | 0.1406 (0.056) | Throw Distance (1) (0.30 m/s), m | - | - | 1.8 | 3.5 | 4.0 | 5.5 | 7.0 | 13 | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 1.3 | 2.7 | 3.4 | 4.5 | 5.5 | 11 | - |
| | | Face Velocity, m/s | - | - | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 9.9 | - |
| | | Total Pressure Loss, Pa | - | - | 2.2 | 3.5 | 5.0 | 9.0 | 14 | 50 | - |
| | | Noise Rating (NR) | - | - | <20 | 23 | 27 | 34 | 38 | >50 | - |
| | | Temperature Quotient (1,2) | - | - | 0.24/- | 0.08/0.12 | 0.06/0.09 | -/0.05 | - | - | - |
| | | Induction Ratio (1,2) | - | - | 7.5/4.5 | 16.5/13 | 19/16 | -/23 | - | - | - |
| 375 x 450 | 0.1688 (0.068) | Throw Distance (1) (0.30 m/s), m | - | - | - | 3.0 | 3.7 | 4.7 | 6.1 | 12 | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | - | 2.7 | 3.5 | 4.5 | 5.6 | 11 | - |
| | | Face Velocity, m/s | - | - | - | 2.0 | 2.5 | 3.3 | 4.1 | 8.2 | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.3 | 3.5 | 6.0 | 10 | 35 | - |
| | | Noise Rating (NR) | - | - | - | <20 | 23 | 30 | 34 | 50 | - |
| | | Temperature Quotient (1,2) | - | - | - | 0.12/0.14 | 0.08/0.09 | 0.05/0.06 | - | - | - |
| | | Induction Ratio (1,2) | - | - | - | 12.5/11 | 17/15 | 22/20 | - | - | - |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | NR 40 | NR 45 | 2000 | 2500 | |
|----------------------|--------------------------------------|---|-------|-----|-------|-----|-----------|-----------|--------|------|-----|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | | | |
| 450 x 450 | 0.2025 (0.081) | Throw Distance (1) (0.30 m/s), m | - | - | - | - | 3.5 | 4.5 | 5.5 | 11 | 14 |
| | | Throw Distance (2) (0.30 m/s), m | - | - | - | - | 2.6 | 3.5 | 4.4 | 8.7 | 11 |
| | | Face Velocity, m/s | - | - | - | - | 2.1 | 2.7 | 3.4 | 6.9 | 8.6 |
| | | Total Pressure Loss, Pa | - | - | - | - | 2.4 | 4.5 | 6.5 | 26 | 36 |
| | | Noise Rating (NR) | - | - | - | - | 20 | 26 | 31 | 45 | >50 |
| | | Temperature Quotient (1,2) | - | - | - | - | 0.11/0.19 | 0.07/0.12 | -/0.07 | - | - |
| | | Induction Ratio (1,2) | - | - | - | - | 13/9 | 18/14 | -/18 | - | - |





TECHNICAL PERFORMANCE . SUPPLY. 3-WAY DIFFUSER(2)



* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

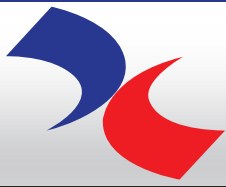
* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

* Neck size given are in Height x Length.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | NR 40 | NR 45 | 600 | 800 | 1000 | 2000 | 2500 |
|----------------------|--------------------------------------|---|-----------|-----------|--------|--------|-------|-----|-----|------|------|------|
| | | | 200 | 250 | 400 | 500 | | | | | | |
| 150 x 225 | 0.0338 (0.014) | Throw Distance (1) (0.30 m/s), m | 2.7 | 3.5 | 5.5 | 7.0 | - | - | - | - | - | - |
| | | Throw Distance (2) (0.30 m/s), m | 1.8 | 2.4 | 3.7 | 4.8 | - | - | - | - | - | - |
| | | Face Velocity, m/s | 4.0 | 5.0 | 7.9 | 9.9 | - | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 9.0 | 14 | 32 | 52 | - | - | - | - | - | - |
| | | Noise Rating (NR) | 27 | 33 | 44 | 48 | - | - | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.04/0.08 | 0.03/0.05 | - | - | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | 27/17 | -/24 | - | - | - | - | - | - | - | - |
| 150 x 300 | 0.045 (0.018) | Throw Distance (1) (0.30 m/s), m | 2.6 | 3.5 | 5.2 | 6.2 | 7.6 | - | - | - | - | - |
| | | Throw Distance (2) (0.30 m/s), m | <1.5 | 1.8 | 3.0 | 3.7 | 4.3 | - | - | - | - | - |
| | | Face Velocity, m/s | 3.1 | 3.9 | 6.2 | 7.7 | 9.3 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 5.5 | 9.0 | 22 | 32 | 48 | - | - | - | - | - |
| | | Noise Rating (NR) | 23 | 27 | 38 | 44 | 46 | - | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.05/- | 0.04/0.09 | -/0.04 | -/0.03 | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | 22/- | 27/14 | -/26 | - | - | - | - | - | - | - |

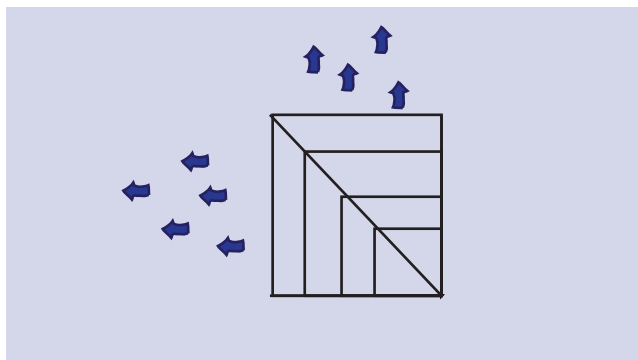
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | NR 40 | NR 45 | 600 | 800 | 1000 | 2000 | 2500 |
|----------------------|--------------------------------------|---|--------|-----------|-----------|-----------|-----------|---------|--------|------|------|------|
| | | | 200 | 250 | 400 | 500 | | | | | | |
| 225 x 300 | 0.0675 (0.027) | Throw Distance (1) (0.30 m/s), m | 2.0 | 2.6 | 4.1 | 5.0 | 6.1 | 8.0 | - | - | - | - |
| | | Throw Distance (2) (0.30 m/s), m | <1.5 | 1.7 | 2.7 | 3.4 | 4.2 | 5.6 | - | - | - | - |
| | | Face Velocity, m/s | 2.0 | 2.6 | 4.1 | 5.1 | 6.2 | 8.2 | - | - | - | - |
| | | Total Pressure Loss, Pa | 2.3 | 4.0 | 10 | 13 | 22 | 36 | - | - | - | - |
| | | Noise Rating (NR) | <20 | 20 | 31 | 35 | 40 | 47 | - | - | - | - |
| | | Temperature Quotient (1,2) | 0.11/- | 0.07/0.14 | 0.03/0.07 | -/0.05 | - | - | - | - | - | - |
| | | Induction Ratio (1,2) | 12.5/- | 17/10 | -/17 | -/26 | - | - | - | - | - | - |
| 225 x 375 | 0.0844 (0.034) | Throw Distance (1) (0.30 m/s), m | - | 2.3 | 3.7 | 4.5 | 5.3 | 7.0 | 9.0 | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | - | <1.5 | 2.6 | 2.7 | 3.4 | 4.3 | 5.7 | - | - | |
| | | Face Velocity, m/s | - | 2.0 | 3.3 | 4.1 | 4.9 | 6.5 | 8.2 | - | - | |
| | | Total Pressure Loss, Pa | - | 2.3 | 6.0 | 10 | 14 | 23 | 33 | - | - | |
| | | Noise Rating (NR) | - | <20 | 26 | 30 | 35 | 42 | 47 | - | - | |
| | | Temperature Quotient (1,2) | - | 0.12/- | 0.05/0.09 | 0.04/0.09 | -/0.05 | -/0.035 | - | - | - | |
| | | Induction Ratio (1,2) | - | 13/- | 24/15 | -/16 | -/23 | -/30 | - | - | - | |
| 225 x 525 | 0.1181 (0.046) | Throw Distance (1) (0.30 m/s), m | - | - | 3.2 | 4.2 | 4.8 | 6.2 | 8.0 | - | - | |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 1.6 | 2.0 | 2.4 | 3.2 | 4.0 | - | - | |
| | | Face Velocity, m/s | - | - | 2.4 | 3.0 | 3.6 | 4.8 | 6.0 | - | - | |
| | | Total Pressure Loss, Pa | - | - | 3.4 | 7.0 | 7.5 | 13 | 23 | - | - | |
| | | Noise Rating (NR) | - | - | 22 | 26 | 30 | 37 | 42 | - | - | |
| | | Temperature Quotient (1,2) | - | - | 0.08/0.25 | 0.05/0.17 | 0.04/0.13 | -/0.08 | -/0.05 | - | - | |
| | | Induction Ratio (1,2) | - | - | 17/7 | 26/9.5 | 27/12 | -/16.5 | 23 | - | - | |





TECHNICAL PERFORMANCE . SUPPLY. 3-WAY DIFFUSER (2)

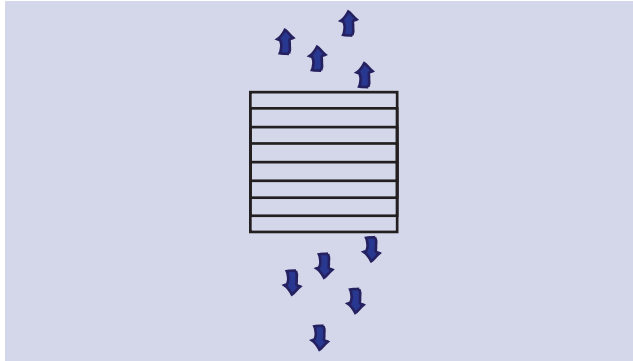
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 35 | | NR 40 | NR 45 | |
|----------------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|--------|-----|-------|-------|------|
| | | | 200 | 250 | 400 | 500 | 600 | 800 | 1000 | 2000 | 2500 |
| 300 x 375 | 0.1125 (0.046) | Unit Volume Flowrate, m ³ /hr | 56 | 70 | 112 | 140 | 168 | 224 | 280 | 560 | 700 |
| | | Unit Volume Flowrate, l/s | 56 | 70 | 112 | 140 | 168 | 224 | 280 | 560 | 700 |
| | | Throw Distance (1) (0.30 m/s), m | - | - | 2.9 | 3.9 | 4.4 | 6.0 | 7.2 | - | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 2.2 | 2.7 | 3.2 | 4.2 | 5.5 | - | - |
| | | Face Velocity, m/s | - | - | 2.4 | 3.0 | 3.6 | 4.8 | 6.0 | - | - |
| | | Total Pressure Loss, Pa | - | - | 3.4 | 7.0 | 7.5 | 13 | 23 | - | - |
| | | Noise Rating (NR) | - | - | 22 | 26 | 30 | 37 | 42 | - | - |
| Temperature Quotient (1,2) | - | - | 0.09/0.16 | 0.06/0.11 | 0.04/0.08 | -/0.05 | - | - | - | | |
| Induction Ratio (1,2) | - | - | 15.5/10 | 23/16 | 26/17 | -/24 | - | - | - | | |
| 300 x 450 | 0.135 (0.054) | Unit Volume Flowrate, m ³ /hr | - | - | 2.8 | 3.6 | 4.4 | 5.8 | 7.2 | - | - |
| | | Unit Volume Flowrate, l/s | - | - | 2.8 | 3.6 | 4.4 | 5.8 | 7.2 | - | - |
| | | Throw Distance (1) (0.30 m/s), m | - | - | 1.8 | 2.3 | 2.6 | 3.8 | 4.7 | - | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | 1.8 | 2.3 | 2.6 | 3.8 | 4.7 | - | - |
| | | Face Velocity, m/s | - | - | 2.1 | 2.6 | 3.1 | 4.1 | 5.1 | - | - |
| | | Total Pressure Loss, Pa | - | - | 2.5 | 4.0 | 5.0 | 9.0 | 15 | - | - |
| | | Noise Rating (NR) | - | - | <20 | 23 | 27 | 34 | 38 | - | - |
| Temperature Quotient (1,2) | - | - | 0.12/0.22 | 0.08/0.17 | 0.06/0.14 | -/0.07 | -/0.05 | - | - | | |
| Induction Ratio (1,2) | - | - | 13/7.5 | 18/9.5 | 23/11 | -/19 | -/24 | - | - | | |
| 375 x 450 | 0.1688 (0.068) | Unit Volume Flowrate, m ³ /hr | - | - | - | 3.0 | 3.8 | 5.0 | 6.1 | 13 | - |
| | | Unit Volume Flowrate, l/s | - | - | - | 3.0 | 3.8 | 5.0 | 6.1 | 13 | - |
| | | Throw Distance (1) (0.30 m/s), m | - | - | - | 2.3 | 2.8 | 3.8 | 4.7 | 9.0 | - |
| | | Throw Distance (2) (0.30 m/s), m | - | - | - | 2.3 | 2.8 | 3.8 | 4.7 | 9.0 | - |
| | | Face Velocity, m/s | - | - | - | 2.0 | 2.5 | 3.3 | 4.1 | 8.2 | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.2 | 3.5 | 6.0 | 9.0 | 35 | - |
| | | Noise Rating (NR) | - | - | - | <20 | 24 | 30 | 35 | 50 | - |
| Temperature Quotient (1,2) | - | - | - | 0.12/0.18 | 0.08/0.12 | 0.05/0.1 | -/0.06 | - | - | | |
| Induction Ratio (1,2) | - | - | - | 13/7.7 | 17/11.5 | 23/16.5 | -/22 | - | - | | |
| 450 x 525 | 0.2363 (0.095) | Unit Volume Flowrate, m ³ /hr | - | - | - | - | - | 4.0 | 5.6 | 10 | 14 |
| | | Unit Volume Flowrate, l/s | - | - | - | - | - | 4.0 | 5.6 | 10 | 14 |
| | | Throw Distance (1) (0.30 m/s), m | - | - | - | - | - | 3.0 | 4.1 | 7.5 | 10 |
| | | Throw Distance (2) (0.30 m/s), m | - | - | - | - | - | 3.0 | 4.1 | 7.5 | 10 |
| | | Face Velocity, m/s | - | - | - | - | - | 2.3 | 3.0 | 5.8 | 7.3 |
| | | Total Pressure Loss, Pa | - | - | - | - | - | 3.0 | 5.0 | 17 | 27 |
| | | Noise Rating (NR) | - | - | - | - | - | 24 | 29 | 44 | 50 |
| Temperature Quotient (1,2) | - | - | - | - | - | 0.07/0.12 | -/0.06 | - | - | | |
| Induction Ratio (1,2) | - | - | - | - | - | 17/12.5 | -/18 | - | - | | |


TECHNICAL PERFORMANCE . SUPPLY. 2-WAY SQ DIFFUSER


* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | NR 45 | | | | | |
|----------------------|--------------------------------------|---|--------|--------|--------|--------|-------|------|------|------|------|---|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 | |
| 150 x 150 | 0.0225 (0.008) | Throw Distance (0.25 m/s), m | 2.6 | 4.0 | 5.2 | 6.5 | - | - | - | - | - | - |
| | | Face Velocity, m/s | 3.5 | 5.2 | 6.9 | 8.7 | - | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 7.0 | 16 | 27 | 37 | - | - | - | - | - | - |
| | | Noise Rating (NR) | 22 | 31 | 37 | 42 | - | - | - | - | - | - |
| | | Temperature Quotient | <0.015 | <0.015 | <0.015 | <0.015 | - | - | - | - | - | - |
| | | Induction Ratio | >30 | >30 | >30 | >30 | - | - | - | - | - | - |
| 225 x 225 | 0.0506 (0.018) | Throw Distance (0.25 m/s), m | - | 2.6 | 3.5 | 4.5 | 8.5 | - | - | - | - | - |
| | | Face Velocity, m/s | - | 2.3 | 3.1 | 3.9 | 7.7 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | - | 3.0 | 5.5 | 8.0 | 30 | - | - | - | - | - |
| | | Noise Rating (NR) | - | <20 | 23 | 28 | 44 | - | - | - | - | - |
| | | Temperature Quotient | - | 0.052 | 0.03 | 0.022 | - | - | - | - | - | - |
| | | Induction Ratio | - | 23 | >30 | >30 | - | - | - | - | - | - |
| 300 x 300 | 0.09 (0.032) | Throw Distance (0.25 m/s), m | - | - | - | 3.2 | 6.5 | 10.5 | 13 | - | - | - |
| | | Face Velocity, m/s | - | - | - | 2.2 | 4.3 | 6.9 | 8.7 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.5 | 10 | 27 | 38 | - | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 32 | 43 | 49 | - | - | - |
| | | Temperature Quotient | - | - | - | 0.055 | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | 21 | - | - | - | - | - | - |
| 375 x 375 | 0.141 (0.050) | Throw Distance (0.25 m/s), m | - | - | - | - | 5.2 | 8.2 | 11 | 16 | - | - |
| | | Face Velocity, m/s | - | - | - | - | 2.8 | 4.4 | 5.6 | 8.3 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | - | 4.5 | 13 | 17 | 33 | - | - |
| | | Noise Rating (NR) | - | - | - | - | 25 | 36 | 41 | 50 | - | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - | - |
| 450 x 450 | 0.2025 (0.071) | Throw Distance (0.25 m/s), m | - | - | - | - | 4.5 | 7.0 | 9.0 | 13 | 17 | |
| | | Face Velocity, m/s | - | - | - | - | 2.0 | 3.1 | 3.9 | 5.9 | 7.8 | |
| | | Total Pressure Loss, Pa | - | - | - | - | 2.2 | 5.5 | 9.0 | 20 | 30 | |
| | | Noise Rating (NR) | - | - | - | - | <20 | 28 | 34 | 43 | 50 | |
| | | Temperature Quotient | - | - | - | - | 0.065 | - | - | - | - | |
| | | Induction Ratio | - | - | - | - | 19 | - | - | - | - | |
| 525 x 525 | 0.276 (0.100) | Throw Distance (0.25 m/s), m | - | - | - | - | - | 6.2 | 7.5 | 12 | 14.5 | |
| | | Face Velocity, m/s | - | - | - | - | - | 2.2 | 2.8 | 4.2 | 5.6 | |
| | | Total Pressure Loss, Pa | - | - | - | - | - | 2.7 | 4.5 | 10 | 16 | |
| | | Noise Rating (NR) | - | - | - | - | - | 23 | 28 | 37 | 43 | |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - | |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - | |

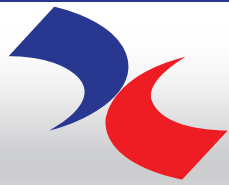

TECHNICAL PERFORMANCE . SUPPLY. 2-WAY DIFFUSER


* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | <div style="display: flex; justify-content: space-around; font-size: small;"> NR 25 NR 35 NR 40 NR 45 </div> | | | | | | | | | | | |
|----------------------|--------------------------------------|---|--|-------|-------|-------|-----|-----|------|------|------|---|--|--|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 | | | |
| 150 x 225 | 0.0338 (0.012) | Throw Distance (0.25 m/s), m | 2.1 | 3.2 | 4.2 | 5.2 | - | - | - | - | - | - | | |
| | | Face Velocity, m/s | 2.3 | 3.5 | 4.6 | 5.8 | - | - | - | - | - | - | | |
| | | Total Pressure Loss, Pa | 3.0 | 7.0 | 12 | 17 | - | - | - | - | - | - | | |
| | | Noise Rating (NR) | <20 | 24 | 30 | 35 | - | - | - | - | - | - | | |
| | | Temperature Quotient | 0.05 | 0.022 | 0.015 | - | - | - | - | - | - | - | | |
| | | Induction Ratio | 24 | - | - | - | - | - | - | - | - | - | | |
| 150 x 300 | 0.045 (0.016) | Throw Distance (0.25 m/s), m | - | 2.7 | 3.5 | 4.5 | 8.8 | - | - | - | - | | | |
| | | Face Velocity, m/s | - | 2.6 | 3.5 | 4.3 | 8.7 | - | - | - | - | | | |
| | | Total Pressure Loss, Pa | - | 4.0 | 7.0 | 12 | 38 | - | - | - | - | | | |
| | | Noise Rating (NR) | - | <20 | 24 | 28 | 45 | - | - | - | - | | | |
| | | Temperature Quotient | - | 0.04 | 0.017 | - | - | - | - | - | - | | | |
| | | Induction Ratio | - | 27 | - | - | - | - | - | - | - | | | |
| 150 x 375 | 0.0563 (0.020) | Throw Distance (0.25 m/s), m | - | 2.5 | 3.3 | 4.0 | 8.2 | - | - | - | - | | | |
| | | Face Velocity, m/s | - | 2.0 | 2.8 | 3.5 | 6.9 | - | - | - | - | | | |
| | | Total Pressure Loss, Pa | - | 2.3 | 4.5 | 7.0 | 25 | - | - | - | - | | | |
| | | Noise Rating (NR) | - | <20 | 21 | 25 | 42 | - | - | - | - | | | |
| | | Temperature Quotient | - | 0.06 | 0.037 | 0.025 | - | - | - | - | - | | | |
| | | Induction Ratio | - | 21 | 27 | - | - | - | - | - | - | | | |

| | | | | | | | | | | | |
|-----------|----------------|------------------------------|---|---|------|-------|-----|-----|-----|---|---|
| 225 x 300 | 0.0675 (0.024) | Throw Distance (0.25 m/s), m | - | - | 3.0 | 3.8 | 7.5 | 12 | - | - | - |
| | | Face Velocity, m/s | - | - | 2.3 | 2.9 | 5.8 | 9.3 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | 3.2 | 5.0 | 17 | 45 | - | - | - |
| | | Noise Rating (NR) | - | - | <20 | 22 | 38 | 48 | - | - | - |
| | | Temperature Quotient | - | - | 0.05 | 0.03 | - | - | - | - | - |
| | | Induction Ratio | - | - | 13 | - | - | - | - | - | - |
| 225 x 450 | 0.09 (0.036) | Throw Distance (0.25 m/s), m | - | - | - | 3.2 | 6.0 | 9.7 | 13 | - | - |
| | | Face Velocity, m/s | - | - | - | 1.9 | 3.9 | 6.2 | 7.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 2.0 | 8.0 | 22 | 30 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 32 | 43 | 46 | - | - |
| | | Temperature Quotient | - | - | - | 0.065 | - | - | - | - | - |
| | | Induction Ratio | - | - | - | 19 | - | - | - | - | - |
| 225 x 525 | 0.1181 (0.041) | Throw Distance (0.25 m/s), m | - | - | - | 2.8 | 5.7 | 9.0 | 12 | - | - |
| | | Face Velocity, m/s | - | - | - | 1.7 | 3.4 | 5.4 | 6.8 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | <2 | 7.0 | 16 | 25 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 27 | 40 | 44 | - | - |
| | | Temperature Quotient | - | - | - | 0.09 | - | - | - | - | - |
| | | Induction Ratio | - | - | - | 15 | - | - | - | - | - |



TECHNICAL PERFORMANCE . SUPPLY. 2-WAY DIFFUSER

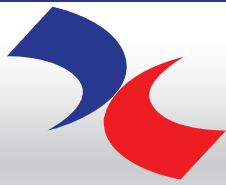
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 45 | | | | |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|------------|------------|-------------|-------------|-------------|
| | | | 100 28 | 150 42 | 200 56 | 250 70 | 500 140 | 800 224 | 1000 280 | 1500 420 | 2000 560 |
| 300 x 300 | 0.09 (0.032) | Throw Distance (0.25 m/s), m | - | - | - | 3.5 | 6.5 | 11 | 13 | - | - |
| | | Face Velocity, m/s | - | - | - | 2.2 | 4.3 | 6.9 | 8.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 3.5 | 10 | 27 | 38 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 34 | 44 | 49 | - | - |
| | | Temperature Quotient | - | - | - | 0.05 | - | - | - | - | - |
| 300 x 375 | 0.1125 (0.039) | Throw Distance (0.25 m/s), m | - | - | - | 2.8 | 5.7 | 9.0 | 12 | - | - |
| | | Face Velocity, m/s | - | - | - | 1.8 | 3.6 | 5.7 | 7.2 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | <2 | 7.0 | 18 | 27 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 27 | 40 | 44 | - | - |
| | | Temperature Quotient | - | - | - | 0.09 | - | - | - | - | - |
| 300 x 450 | 0.135 (0.047) | Throw Distance (0.25 m/s), m | - | - | - | - | 5.3 | 8.3 | 11 | 16 | - |
| | | Face Velocity, m/s | - | - | - | - | 3.0 | 4.7 | 5.9 | 8.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | 5.0 | 13 | 19 | 40 | - |
| | | Noise Rating (NR) | - | - | - | - | 25 | 36 | 41 | 50 | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| Induction Ratio | - | - | - | - | - | - | - | - | - | - | |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 45 | | | | |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|------------|------------|-------------|-------------|-------------|
| | | | 100 28 | 150 42 | 200 56 | 250 70 | 500 140 | 800 224 | 1000 280 | 1500 420 | 2000 560 |
| 375 x 375 | 0.1406 (0.049) | Throw Distance (0.25 m/s), m | - | - | - | - | 5.3 | 8.3 | 11 | 16 | - |
| | | Face Velocity, m/s | - | - | - | - | 3.0 | 4.7 | 5.9 | 8.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | 5.0 | 13 | 19 | 40 | - |
| | | Noise Rating (NR) | - | - | - | - | 25 | 36 | 41 | 50 | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| Induction Ratio | - | - | - | - | - | - | - | - | - | - | |

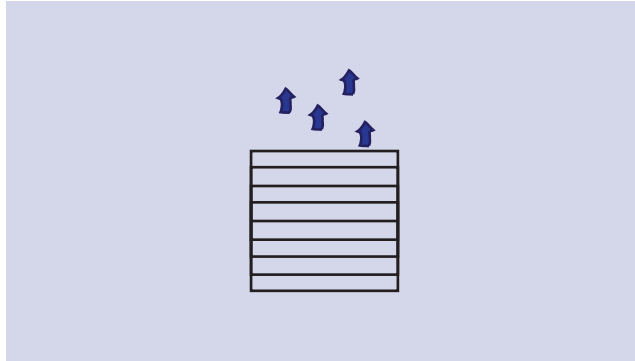
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 35 | | NR 45 | | |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|------------|------------|-------------|-------------|-------------|
| | | | 100 28 | 150 42 | 200 56 | 250 70 | 500 140 | 800 224 | 1000 280 | 1500 420 | 2000 560 |
| 450 x 450 | 0.2025 (0.071) | Throw Distance (0.25 m/s), m | - | - | - | - | 4.5 | 7.0 | 8.2 | 13 | 17 |
| | | Face Velocity, m/s | - | - | - | - | 2.0 | 3.1 | 3.9 | 5.9 | 7.8 |
| | | Total Pressure Loss, Pa | - | - | - | - | 2.2 | 5.5 | 9.0 | 20 | 30 |
| | | Noise Rating (NR) | - | - | - | - | <20 | 28 | 33 | 42 | 49 |
| | | Temperature Quotient | - | - | - | - | 0.065 | - | - | - | - |
| Induction Ratio | - | - | - | - | 19 | - | - | - | - | - | |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 35 | | NR 45 | | |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|------------|------------|-------------|-------------|-------------|
| | | | 100 28 | 150 42 | 200 56 | 250 70 | 500 140 | 800 224 | 1000 280 | 1500 420 | 2000 560 |
| 525 x 525 | 0.2756 (0.097) | Throw Distance (0.25 m/s), m | - | - | - | - | - | 6.0 | 7.8 | 12 | 15 |
| | | Face Velocity, m/s | - | - | - | - | - | 2.3 | 2.9 | 4.3 | 5.7 |
| | | Total Pressure Loss, Pa | - | - | - | - | - | 3.0 | 5.0 | 12 | 17 |
| | | Noise Rating (NR) | - | - | - | - | - | 24 | 27 | 36 | 45 |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| Induction Ratio | - | - | - | - | - | - | - | - | - | - | |





TECHNICAL PERFORMANCE . SUPPLY. 1-WAY DIFFUSER



* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | Flowrate (l/s) | | | | | | | | | | | |
|----------------------|--------------------------------------|---|----------------|--------|--------|-----|-----|-----|------|------|------|---|---|---|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 | | | |
| 150 x 225 | 0.0338 (0.012) | Throw Distance (0.25 m/s), m | 3.0 | 4.5 | 5.8 | 8.0 | - | - | - | - | - | - | - | - |
| | | Face Velocity, m/s | 2.3 | 3.5 | 4.6 | 5.8 | - | - | - | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 3.0 | 7.0 | 12 | 17 | - | - | - | - | - | - | - | - |
| | | Noise Rating (NR) | <20 | 24 | 30 | 35 | - | - | - | - | - | - | - | - |
| | | Temperature Quotient | 0.026 | <0.015 | - | - | - | - | - | - | - | - | - | - |
| 150 x 300 | 0.045 (0.016) | Throw Distance (0.25 m/s), m | - | 3.8 | 5.0 | 6.2 | 13 | - | - | - | - | - | - | |
| | | Face Velocity, m/s | - | 2.6 | 3.5 | 4.3 | 8.7 | - | - | - | - | - | - | |
| | | Total Pressure Loss, Pa | - | 4.0 | 7.0 | 12 | 38 | - | - | - | - | - | - | |
| | | Noise Rating (NR) | - | <20 | 24 | 28 | 45 | - | - | - | - | - | - | |
| | | Temperature Quotient | - | 0.023 | <0.015 | - | - | - | - | - | - | - | - | |
| 150 x 375 | 0.0563 (0.020) | Throw Distance (0.25 m/s), m | - | 3.5 | 4.7 | 5.7 | 11 | - | - | - | - | - | - | |
| | | Face Velocity, m/s | - | 2.0 | 2.8 | 3.5 | 6.9 | - | - | - | - | - | - | |
| | | Total Pressure Loss, Pa | - | 2.3 | 4.5 | 7.0 | 25 | - | - | - | - | - | - | |
| | | Noise Rating (NR) | - | <20 | 21 | 25 | 42 | - | - | - | - | - | - | |
| | | Temperature Quotient | - | 0.033 | 0.02 | - | - | - | - | - | - | - | - | |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | Flowrate (l/s) | | | | | | | | | | | |
|----------------------|--------------------------------------|---|----------------|-----|-------|-------|------|-----|------|------|------|---|---|--|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 | | | |
| 225 x 300 | 0.0675 (0.024) | Throw Distance (0.25 m/s), m | - | - | 4.2 | 5.3 | 10.5 | 16 | - | - | - | - | - | |
| | | Face Velocity, m/s | - | - | 2.3 | 2.9 | 5.8 | 9.3 | - | - | - | - | - | |
| | | Total Pressure Loss, Pa | - | - | 3.2 | 5.0 | 17 | 45 | - | - | - | - | - | |
| | | Noise Rating (NR) | - | - | <20 | 22 | 38 | 48 | - | - | - | - | - | |
| | | Temperature Quotient | - | - | 0.026 | - | - | - | - | - | - | - | - | |
| 225 x 450 | 0.09 (0.036) | Throw Distance (0.25 m/s), m | - | - | - | 4.5 | 8.5 | 13 | 16 | - | - | - | | |
| | | Face Velocity, m/s | - | - | - | 1.9 | 3.9 | 6.2 | 7.7 | - | - | - | | |
| | | Total Pressure Loss, Pa | - | - | - | 2.0 | 8.0 | 22 | 30 | - | - | - | | |
| | | Noise Rating (NR) | - | - | - | <20 | 32 | 43 | 46 | - | - | - | | |
| | | Temperature Quotient | - | - | - | 0.035 | - | - | - | - | - | - | | |
| 225 x 525 | 0.1181 (0.041) | Throw Distance (0.25 m/s), m | - | - | - | 4.0 | 8.0 | 13 | 16 | - | - | | | |
| | | Face Velocity, m/s | - | - | - | 1.7 | 3.4 | 5.4 | 6.8 | - | - | | | |
| | | Total Pressure Loss, Pa | - | - | - | <2 | 7.0 | 16 | 25 | - | - | | | |
| | | Noise Rating (NR) | - | - | - | <20 | 27 | 40 | 44 | - | - | | | |
| | | Temperature Quotient | - | - | - | 0.05 | - | - | - | - | - | | | |

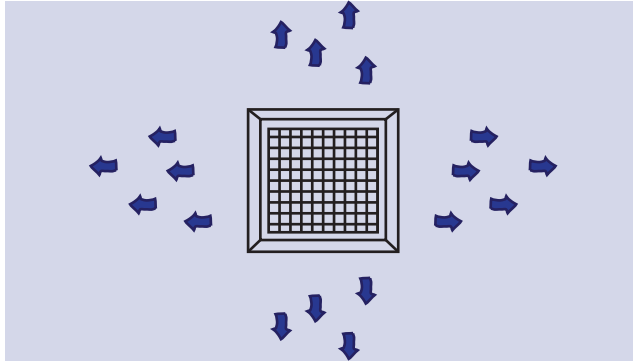
TECHNICAL PERFORMANCE . SUPPLY. 1-WAY DIFFUSER

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 45 | | | | |
|----------------------|--------------------------------------|---|-------|-----|-----|------|-------|-----|------|------|------|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 |
| 300 x 300 | 0.09 (0.032) | Throw Distance (0.25 m/s), m | - | - | - | 4.7 | 9.0 | 14 | 18 | - | - |
| | | Face Velocity, m/s | - | - | - | 2.2 | 4.3 | 6.9 | 8.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 3.5 | 10 | 27 | 38 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 34 | 44 | 49 | - | - |
| | | Temperature Quotient | - | - | - | 0.03 | - | - | - | - | - |
| 300 x 375 | 0.1125 (0.039) | Throw Distance (0.25 m/s), m | - | - | - | 4.0 | 8.0 | 13 | 16 | - | - |
| | | Face Velocity, m/s | - | - | - | 1.8 | 3.6 | 5.7 | 7.2 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | <2 | 7.0 | 18 | 27 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | 27 | 40 | 44 | - | - |
| | | Temperature Quotient | - | - | - | 0.05 | - | - | - | - | - |
| 300 x 450 | 0.135 (0.047) | Throw Distance (0.25 m/s), m | - | - | - | - | 7.3 | 12 | 14 | 18 | - |
| | | Face Velocity, m/s | - | - | - | - | 3.0 | 4.7 | 5.9 | 8.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | 5.0 | 13 | 19 | 40 | - |
| | | Noise Rating (NR) | - | - | - | - | 25 | 36 | 41 | 50 | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 45 | | | | |
|----------------------|--------------------------------------|---|-------|-----|-----|-----|-------|-----|------|------|------|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 |
| 375 x 375 | 0.1406 (0.049) | Throw Distance (0.25 m/s), m | - | - | - | - | 7.3 | 12 | 14 | 18 | - |
| | | Face Velocity, m/s | - | - | - | - | 3.0 | 4.7 | 5.9 | 8.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | 5.0 | 13 | 19 | 40 | - |
| | | Noise Rating (NR) | - | - | - | - | 25 | 36 | 41 | 50 | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 35 | | NR 45 | | |
|----------------------|--------------------------------------|---|-------|-----|-----|-----|-------|-----|-------|------|------|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 |
| 450 x 450 | 0.2025 (0.071) | Throw Distance (0.25 m/s), m | - | - | - | - | 6.1 | 9.5 | 13 | 16 | 23 |
| | | Face Velocity, m/s | - | - | - | - | 2.0 | 3.1 | 3.9 | 5.9 | 7.8 |
| | | Total Pressure Loss, Pa | - | - | - | - | 2.2 | 5.5 | 9.0 | 20 | 30 |
| | | Noise Rating (NR) | - | - | - | - | <20 | 28 | 33 | 42 | 49 |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |

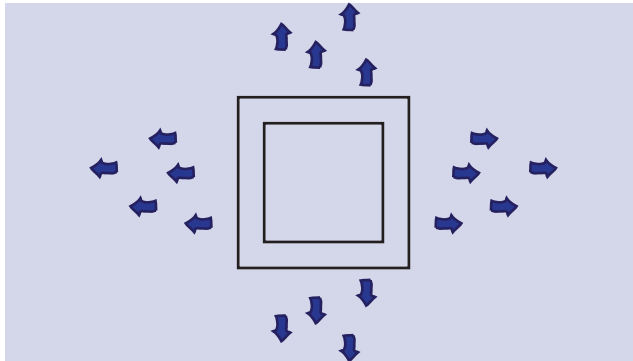
| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | | | NR 35 | | NR 45 | | |
|----------------------|--------------------------------------|---|-------|-----|-----|-----|-------|-----|-------|------|------|
| | | | 100 | 150 | 200 | 250 | 500 | 800 | 1000 | 1500 | 2000 |
| 525 x 525 | 0.2756 (0.097) | Throw Distance (0.25 m/s), m | - | - | - | - | - | 8.1 | 11 | 13 | 21 |
| | | Face Velocity, m/s | - | - | - | - | - | 2.3 | 2.9 | 4.3 | 5.7 |
| | | Total Pressure Loss, Pa | - | - | - | - | - | 3.0 | 5.0 | 12 | 17 |
| | | Noise Rating (NR) | - | - | - | - | - | 24 | 27 | 36 | 45 |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |


TECHNICAL PERFORMANCE . SUPPLY. DDCD DIFFUSER


* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | NR 40 | | NR 45 | | |
|----------------------|--------------------------------------|---|-----------|-----------|-----------|-----------|------------|------------|-------------|-------------|-------------|
| | | | 110 31 | 165 46 | 220 62 | 275 77 | 550 154 | 880 246 | 1100 308 | 2200 616 | 3300 924 |
| 150 x 150 | 0.0225 (0.010) | Throw Distance (0.37 m/s), m | 1.2 | 1.8 | 2.4 | 3.0 | - | - | - | - | - |
| | | Face Velocity, m/s | 3.0 | 4.6 | 6.2 | 7.7 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 5.0 | 13 | 22 | 32 | - | - | - | - | - |
| | | Noise Rating (NR) | 20 | 30 | 36 | 42 | - | - | - | - | - |
| | | Temperature Quotient | 0.12 | 0.05 | 0.027 | 0.022 | - | - | - | - | - |
| | | Induction Ratio | 13 | 23 | >30 | >30 | - | - | - | - | - |
| 225 x 225 | 0.0506 (0.022) | Throw Distance (0.37 m/s), m | - | 1.2 | 1.6 | 2.1 | 4.0 | - | - | - | - |
| | | Face Velocity, m/s | - | 2.1 | 2.8 | 3.5 | 6.9 | - | - | - | - |
| | | Total Pressure Loss, Pa | - | 2.5 | 4.7 | 7.0 | 26 | - | - | - | - |
| | | Noise Rating (NR) | - | <20 | 22 | 26 | 42 | - | - | - | - |
| | | Temperature Quotient | - | 0.23 | 0.13 | 0.08 | 0.025 | - | - | - | - |
| | | Induction Ratio | - | 8.0 | 11 | 16 | >30 | - | - | - | - |
| 300 x 300 | 0.09 (0.041) | Throw Distance (0.37 m/s), m | - | - | 1.2 | 1.5 | 3.0 | 4.8 | 5.8 | - | - |
| | | Face Velocity, m/s | - | - | 1.5 | 1.9 | 3.9 | 6.2 | 7.7 | - | - |
| | | Total Pressure Loss, Pa | - | - | <2.0 | 2.2 | 8.2 | 22 | 32 | - | - |
| | | Noise Rating (NR) | - | - | <20 | <20 | 32 | 42 | 47 | - | - |
| | | Temperature Quotient | - | - | >0.25 | 0.23 | 0.07 | 0.035 | <0.03 | - | - |
| | | Induction Ratio | - | - | 5.0 | 7.5 | 18 | >30 | >30 | - | - |
| 375 x 375 | 0.141 (0.064) | Throw Distance (0.37 m/s), m | - | - | - | 1.3 | 2.4 | 3.9 | 4.8 | 9.0 | - |
| | | Face Velocity, m/s | - | - | - | 1.2 | 2.5 | 4.0 | 5.0 | 9.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | <2.0 | 3.5 | 9.0 | 14 | 55 | - |
| | | Noise Rating (NR) | - | - | - | <20 | 24 | 34 | 38 | >50 | - |
| | | Temperature Quotient | - | - | - | >0.25 | 0.14 | 0.065 | 0.045 | - | - |
| | | Induction Ratio | - | - | - | 4.0 | 11 | 20 | 25 | - | - |
| 450 x 450 | 0.2025 (0.089) | Throw Distance (0.37 m/s), m | - | - | - | - | 2.1 | 3.5 | 4.0 | 8.0 | - |
| | | Face Velocity, m/s | - | - | - | - | 1.7 | 2.7 | 3.4 | 6.9 | - |
| | | Total Pressure Loss, Pa | - | - | - | - | <2.0 | 4.2 | 7.0 | 27 | - |
| | | Noise Rating (NR) | - | - | - | - | <20 | 27 | 32 | 47 | - |
| | | Temperature Quotient | - | - | - | - | >0.25 | 0.11 | 0.09 | - | - |
| | | Induction Ratio | - | - | - | - | 6.5 | 13 | 16 | - | - |
| 525 x 525 | 0.276 (0.121) | Throw Distance (0.37 m/s), m | - | - | - | - | 1.8 | 2.7 | 3.5 | 7.0 | 10 |
| | | Face Velocity, m/s | - | - | - | - | 1.3 | 2.0 | 2.5 | 5.1 | 7.6 |
| | | Total Pressure Loss, Pa | - | - | - | - | <2.0 | 2.2 | 3.5 | 15 | 32 |
| | | Noise Rating (NR) | - | - | - | - | <20 | 22 | 26 | 43 | >50 |
| | | Temperature Quotient | - | - | - | - | >0.25 | 0.23 | 0.15 | - | - |
| | | Induction Ratio | - | - | - | - | 2.7 | 7.5 | 11 | - | - |


TECHNICAL PERFORMANCE . SUPPLY. PLATE DIFFUSER


* Diffuser performance data factored in Coanda effect & fully opened Radial OBD conditions.

* The effective area given is to the best estimation & knowledge of Prudentaire's engineers at the point of entry.

| Grille Neck Size, mm | Neck Area (Eff. Area) m ² | Unit Volume Flowrate, m ³ /hr Unit Volume Flowrate, l/s | NR 25 | | NR 35 | | 200 | 250 | 500 | 800 | 1000 |
|----------------------|--------------------------------------|---|-------|------|-------|------|------|------|-----|-----|------|
| | | | 60 | 80 | 100 | 150 | | | | | |
| 100 x 100 | 0.001 (0.0044) | Throw Distance (0.37 m/s), m | 0.70 | 0.90 | 1.1 | 1.6 | - | - | - | - | - |
| | | Face Velocity, m/s | 3.8 | 5.1 | 6.3 | 9.5 | - | - | - | - | - |
| | | Total Pressure Loss, Pa | 7.5 | 15 | 22 | 45 | - | - | - | - | - |
| | | Noise Rating (NR) | <20 | 20 | 26 | 37 | - | - | - | - | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |
| 125 x 125 | 0.0156 (0.0066) | Throw Distance (0.37 m/s), m | - | 0.75 | 0.85 | 1.4 | 1.7 | - | - | - | - |
| | | Face Velocity, m/s | - | 3.4 | 4.2 | 6.3 | 8.4 | - | - | - | - |
| | | Total Pressure Loss, Pa | - | 6.0 | 9.0 | 20 | 35 | - | - | - | - |
| | | Noise Rating (NR) | - | <20 | <20 | 28 | 37 | - | - | - | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |
| 160 x 160 | 0.0256 (0.0110) | Throw Distance (0.37 m/s), m | - | - | 0.70 | 1.0 | 1.45 | 1.7 | - | - | - |
| | | Face Velocity, m/s | - | - | 2.5 | 3.8 | 5.1 | 6.3 | - | - | - |
| | | Total Pressure Loss, Pa | - | - | 3.2 | 8.0 | 13 | 22 | - | - | - |
| | | Noise Rating (NR) | - | - | <20 | <20 | 25 | 32 | - | - | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |
| 200 x 200 | 0.04 (0.0171) | Throw Distance (0.37 m/s), m | - | - | - | 0.85 | 1.2 | 1.45 | 2.8 | - | - |
| | | Face Velocity, m/s | - | - | - | 2.4 | 3.2 | 4.1 | 8.1 | - | - |
| | | Total Pressure Loss, Pa | - | - | - | 3.0 | 6.0 | 8.2 | 32 | - | - |
| | | Noise Rating (NR) | - | - | - | <20 | <20 | 23 | 44 | - | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |
| 250 x 250 | 0.0625 (0.0270) | Throw Distance (0.37 m/s), m | - | - | - | 0.75 | 0.9 | 1.2 | 2.3 | 3.7 | - |
| | | Face Velocity, m/s | - | - | - | 1.5 | 2.1 | 2.6 | 5.1 | 8.2 | - |
| | | Total Pressure Loss, Pa | - | - | - | <2.0 | 2.3 | 3.3 | 14 | 35 | - |
| | | Noise Rating (NR) | - | - | - | <20 | <20 | 23 | 33 | 47 | - |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |
| 315 x 315 | 0.0992 (0.0429) | Throw Distance (0.37 m/s), m | - | - | - | - | 0.77 | 0.93 | 1.8 | 3.0 | 3.5 |
| | | Face Velocity, m/s | - | - | - | - | 1.3 | 1.6 | 3.2 | 5.2 | 6.5 |
| | | Total Pressure Loss, Pa | - | - | - | - | <2.0 | <2.0 | 5.3 | 14 | 22 |
| | | Noise Rating (NR) | - | - | - | - | <20 | <20 | 23 | 37 | 43 |
| | | Temperature Quotient | - | - | - | - | - | - | - | - | - |
| | | Induction Ratio | - | - | - | - | - | - | - | - | - |