

Table de selection

Air flow (m ³ /h)	LxH	150x150	225x225	300x300	375x375	455x455	525x525	600x600
		Ak [m ²]	0.0109	0.0244	0.0435	0.0679	0.0978	0.1331
100	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]	2.6 0,6 18.0 5.0						
160	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]	4.1 1,0 29.0 12.0	1.8 0,7 13.0 2.0					
200	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]	5.1 1,2 35.0 18.0	2.3 0,8 18.0 4.0					
300	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]	7.7 1,9 45.0 41.0	3.4 1,3 28.0 8.0	1.9 0,9 16.0 3.0				
400	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]		4.6 1,7 35.0 15.0	2.6 1,3 24.0 5.0	1.6 1,0 15.0 2.0			
500	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]		5.7 2,1 41.0 23.0	3.2 1,6 29.0 7.0	2.1 1,3 20.0 3.0			
600	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]		6.8 2,5 45.0 33.0	3.8 1,9 34.0 10.0	2.5 1,5 25.0 4.0	1.7 1,3 17.0 2.0		
700	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]		8.0 2,9 49.0 44.0	4.5 2,2 37.0 14.0	2.9 1,8 28.0 6.0	2.0 1,5 21.0 3.0		
800	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]		9.1 3,3 53.0 58.0	5.1 2,5 41.0 18.0	3.3 2,0 32.0 7.0	2.3 1,7 24.0 4.0	1.7 1,4 18.0 2.0	
900	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]			5.8 2,8 44.0 23.0	3.7 2,3 35.0 9.0	2.6 1,9 27.0 5.0	1.9 1,6 21.0 2.0	
1000	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]			6.4 3,1 46.0 29.0	4.1 2,5 37.0 12.0	2.8 2,1 30.0 6.0	2.1 1,8 23.0 3.0	1.6 1,6 18.0 2.0
1200	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]			7.7 3,8 51.0 41.0	4.9 3,0 42.0 17.0	3.4 2,5 34.0 8.0	2.5 2,1 28.0 4.0	1.9 1,9 23.0 3.0
1600	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]				6.6 4,0 49.0 30.0	4.5 3,3 41.0 14.0	3.3 2,9 35.0 8.0	2.6 2,5 30.0 5.0
2000	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]				8.2 5,0 54.0 47.0	5.7 4,2 47.0 23.0	4.2 3,6 41.0 12.0	3.2 3,1 35.0 7.0
3000	Veff [m/s] X (m) NR [dB(A)] ΔP_t [pa]					8.5 6,3 57.0 51.0	6.3 5,4 51.0 27.0	4.8 4,7 45.0 16.0

Annotation

- * Ak [m²] - Free surface of the diffuser
- * Veff[m/s] - Air velocity in diffuser
- * X [m] - Air jet length
- * NR [dB(A)] - Noise level without the room attenuation
- * ΔP_t [pa] - Pressure loss inside diffuser
- * $V_k = 0.2$ [m/s] - Speed at which airflow length was calculated "x" [m]

NR < 35 35 ≤ NR ≤ 45 NR > 45