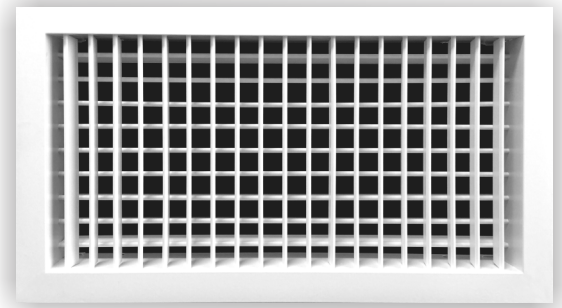


DOUBLE DEFLECTION GRILLE DD-LT



Description

Aluminium ventilation grille provided with two rows of individually adjustable blades that allow directing air flow.

Application

Supply/exhaust of air flow.

Characteristics

- The front row blades are mounted perpendicularly to the length "L".
- The grille is provided with mounting holes (standard).
- Specially designed for paneled ceiling insertion (600 x 600 mm), 595 x 595 mm (exterior size) grille is provided without mounting holes.
- The air flow can be adjusted by mounting a air control damper OBD on the grille inlet.
- The grilles with length ≥ 600 mm are provided with intermediate shaft for reinforcement.

Accessories

- Air control damper with opposable blades OBD.
- Insulated/Non-insulated adaptor ADP IZ/N.

Materials and finishing

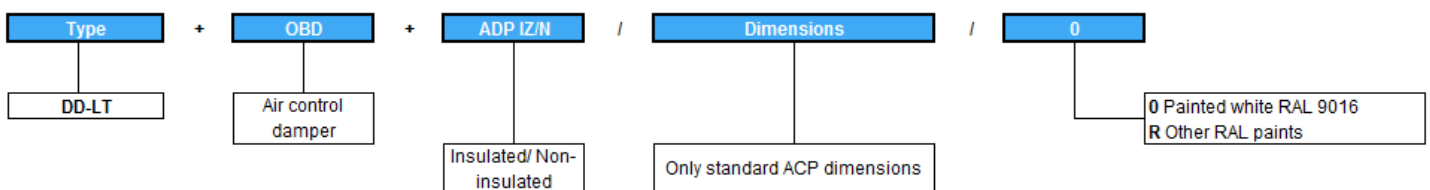
- Extruded aluminum, electrostatic field painted white RAL 9016.
- Other RAL colors available on request.



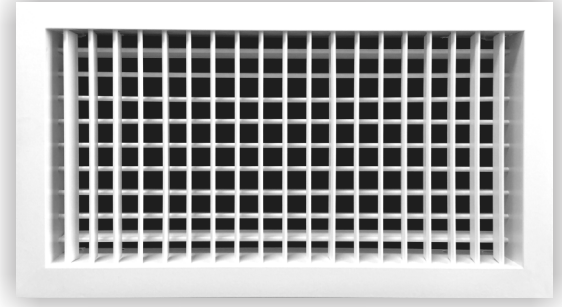
Mounting

- Mounting screws (standard).

Order code



DOUBLE DEFLECTION GRILLE DD-LT



Technical Specifications

Air flow (m³/h)	L x H	200	300	300	400	500	300 x	400	600	400	500	800 x	500	600	600	800	500	800	600	800	1000
		x 100	x 100	x 150	x 100	x 100	200	x 150	x 100	x 200	x 150	100	x 200	x 150	x 200	x 150	x 300	x 200	x 300	x 300	x 300
	Ak [m²]	0.011	0.016	0.024	0.024	0.03	0.04	0.04	0.04	0.049	0.049	0.049	0.06	0.06	0.078	0.078	0.105	0.105	0.132	0.16	0.21
150	Veff[m/s]	3.8	2.6																		
	ΔPt [pa]	10.0	5.0																		
	X [m]	4.1	3.4																		
	NR [dB(A)]	-	-																		
200	Veff[m/s]	5.0	3.5	2.3	2.3																
	ΔPt [pa]	18.0	8.0	4.0	4.0																
	X [m]	5.5	4.5	3.7	3.7																
	NR [dB(A)]	19.0	-	-	-																
300	Veff[m/s]	7.6	5.2	3.5	3.5	2.8	2.1	2.1	2.1												
	ΔPt [pa]	40.0	19.0	8.0	8.0	5.0	3.0	3.0	3.0												
	X [m]	8.2	6.8	5.6	5.6	5.0	4.3	4.3	4.3												
	NR [dB(A)]	28.0	21.0	-	-	-	-	-	-												
400	Veff[m/s]		6.9	4.6	4.6	3.7	2.8	2.8	2.8	2.3	2.3	2.3									
	ΔPt [pa]		3.4	15.0	15.0	10.0	5.0	5.0	5.0	4.0	4.0	4.0									
	X [m]		9.1	7.4	7.4	6.0	5.7	5.7	5.7	5.2	5.2	5.2									
	NR [dB(A)]		28.0	20.0	20.0	16.0	-	-	-	-	-	-									
500	Veff[m/s]			5.8	5.8	4.6	3.5	3.5	3.5	2.8	2.8	2.8	2.3	2.3							
	ΔPt [pa]			23.0	23.0	15.0	8.0	8.0	8.0	6.0	6.0	6.0	4.0	4.0							
	X [m]			9.3	9.3	8.3	7.2	7.2	7.2	6.5	6.5	6.5	5.9	5.9							
	NR [dB(A)]			25.0	25.0	21.0	-	-	-	-	-	-	-	-							
700	Veff[m/s]					6.5	4.9	4.9	4.9	4.0	4.0	4.0	3.2	3.2	2.5	2.5					
	ΔPt [pa]					29.0	17.0	17.0	17.0	11.0	11.0	11.0	7.0	7.0	4.0	4.0					
	X [m]					12.0	10.0	10.0	10.0	9.1	9.1	9.1	8.2	8.2	7.2	7.2					
	NR [dB(A)]					29.0	23.0	23.0	23.0	19.0	19.0	19.0	15.0	15.0	-	-					
900	Veff[m/s]						6.2	6.2	6.2	5.1	5.1	5.1	4.2	4.2	3.2	3.2	2.4	2.4			
	ΔPt [pa]						27.0	27.0	27.0	18.0	18.0	18.0	12.0	12.0	7.0	7.0	4.0	4.0			
	X [m]						13.0	13.0	13.0	12.0	12.0	12.0	11.0	11.0	9.2	9.2	8.0	8.0			
	NR [dB(A)]						29.0	29.0	29.0	25.0	25.0	25.0	21.0	21.0	16.0	16.0	-	-			
1200	Veff[m/s]									6.8	6.8	6.8	5.5	5.5	4.3	4.3	3.2	3.2	2.5	2.1	
	ΔPt [pa]									32.0	32.0	32.0	22.0	22.0	13.0	13.0	7.0	7.0	4.0	3.0	
	X [m]									16.0	16.0	16.0	14.0	14.0	12.0	12.0	11.0	11.0	9.5	8.6	
	NR [dB(A)]									32.0	32.0	32.0	22.0	22.0	23.0	23.0	17.0	17.0	-	-	
1500	Veff[m/s]												6.9	6.9	5.3	5.3	4.0	4.0	3.2	2.6	2.0
	ΔPt [pa]												34.0	34.0	20.0	20.0	11.0	11.0	7.0	5.0	3.0
	X [m]												18.0	18.0	15.0	15.0	13.0	13.0	12.0	11.0	9.4
	NR [dB(A)]												34.0	34.0	29.0	29.0	23.0	23.0	18.0	-	-

"n" - NR < 25

"n" - 25 ≤ NR ≤ 35

Annotation

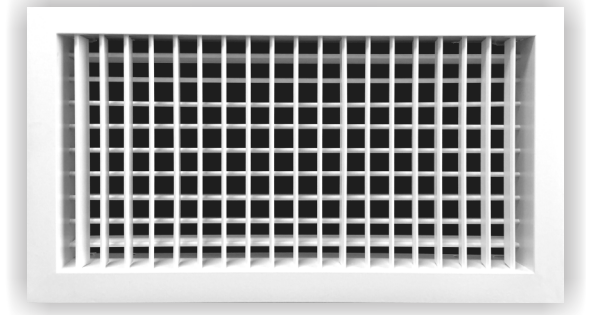
- *Ak [m²] - Free surface of the grille
- *Veff[m/s] - Air velocity in grille
- *ΔPt [pa] - Pressure loss
- *X [m] - Air jet length
- *NR [dB(A)] - Noise level without the room attenuation
- *Vk [m/s] - Speed at which airflow length was calculated "x" [m] - Vk [m/s] = 0.375 m/s

Correction coefficients for other air velocities

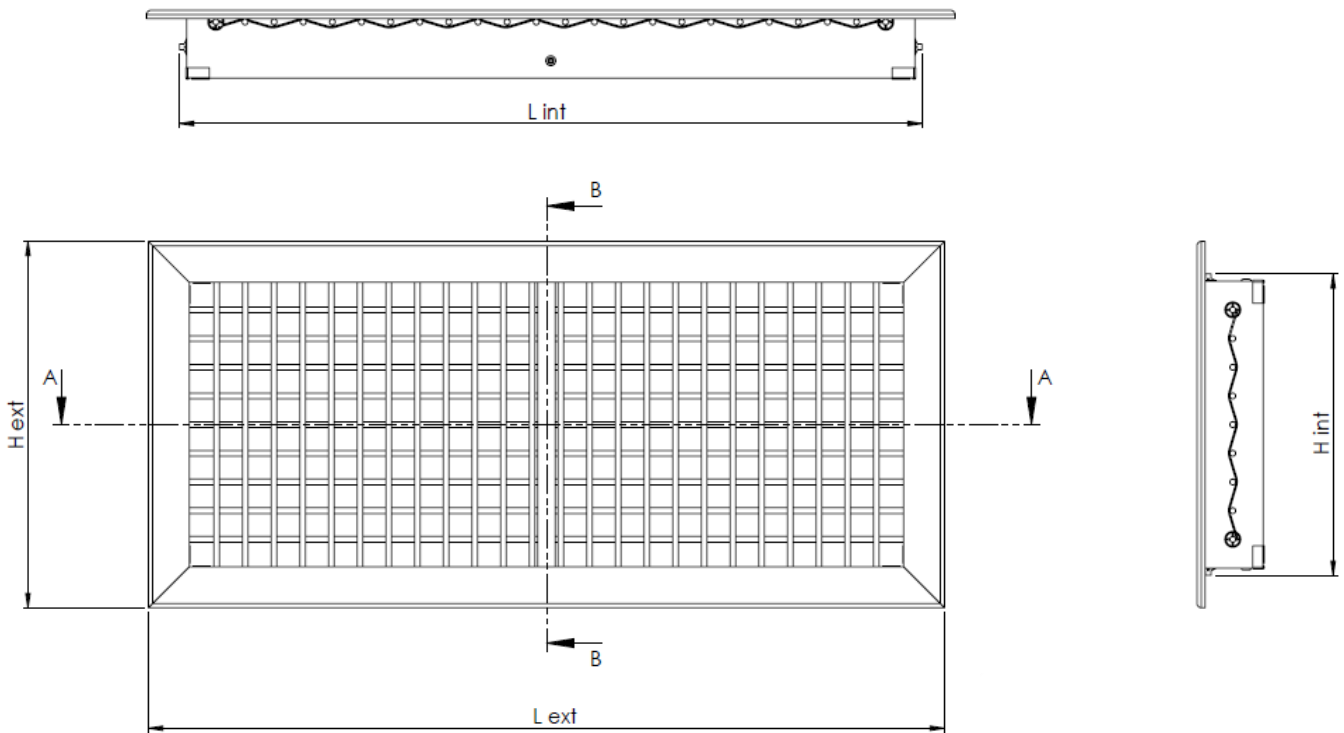
Vk[m/s]		0.25	0.375	0.5
x[m]	A	1.5	1	0.75
	B	1.05	0.7	0.53

- *A = with Coanda effect
- *B = without Coanda effect

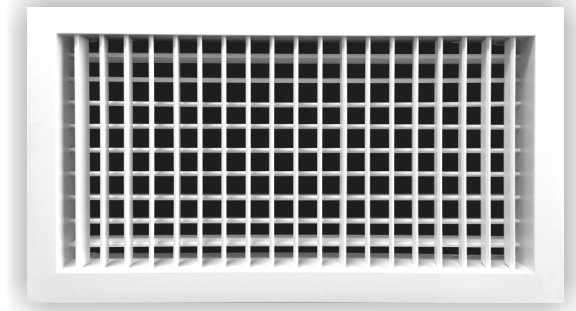
DOUBLE DEFLECTION GRILLE DD-LT



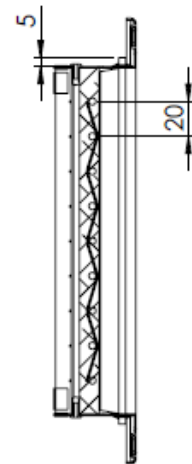
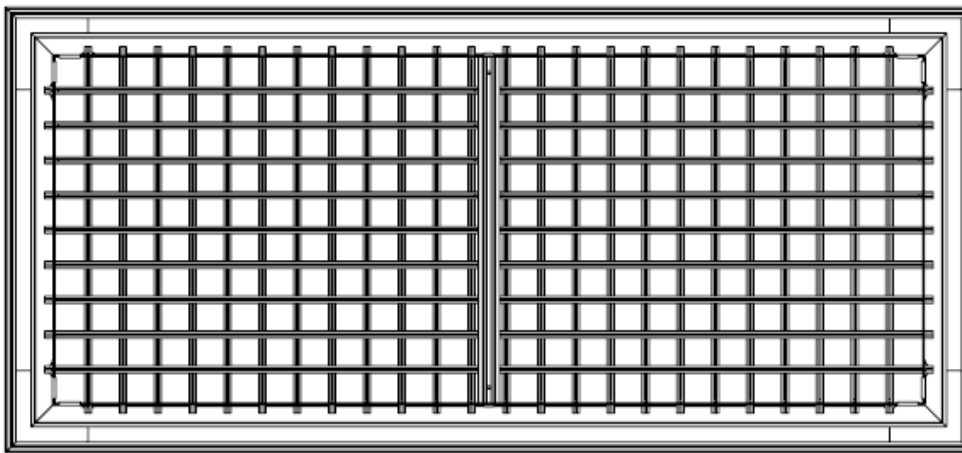
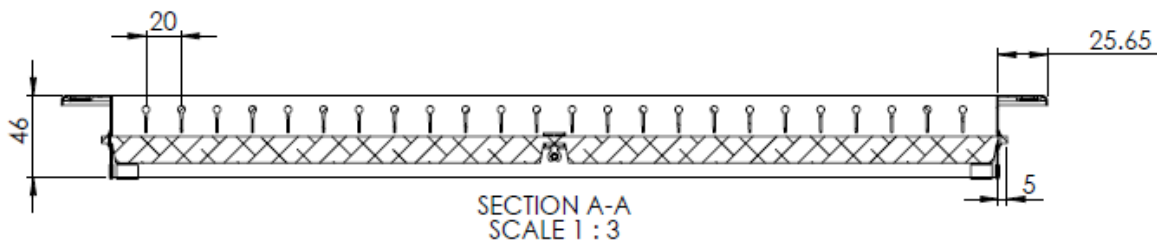
Technical Design



DOUBLE DEFLECTION GRILLE DD-LT



Technical Design



SECTION B-B
SCALE 1 : 3