

- Wall grilles
- Aluminium
- Anodized natural finish
- Adjustable blades



Aluminium wall grilles single deflection type AHN

Single deflection wall grilles with adjustable blades

Brand

- Cairox

Application

- For air supply and exhaust in ventilation and air conditioning systems

Material

- Aluminium

Colour

- Anodized natural finish
- Other colours available upon request

Composition

- Deflection: adjustable
- Single row of blades (distance between blades = 20 mm)

Mounting

- Invisible mounting with clips in mounting frame, type **CCN**

Accessories

- Mounting frame, type **CCN**
- Volume control damper, type **DWN**
- Plenum box, type **REW**
- Insulating plenum box, type **REW ISO**

Order example

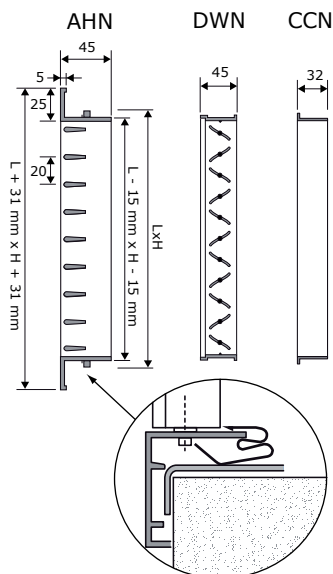
- **AHN, 800, 200 + CCN + DWN + REW**

Explanation

AHN = Grille type
800 = Length (see table)
200 = Height (see table)
 Accessories (Optional)
CCN = Mounting frame
DWN = Volume damper

Wall and floor grilles

REW = Plenum box



Quick selection															
AHN	LxH	200x100	300x100 200x150	400x100 300x150 200x200	500x100	600x100 400x150 300x200	800x100 500x150 400x200	1000x100 600x150 500x200 300x300	1200x100 800x150 600x200 400x300	1000x150 800x200 500x300 400x400	1200x150 1000x200 600x300 500x400	1200x200 800x300 600x400	1000x300 800x400	1200x300 1000x400	1200x400
Q	Ak	0.0111	0.018	0.025	0.032	0.0389	0.0529	0.0668	0.0807	0.1016	0.1225	0.1643	0.2061	0.2479	0.3315
100	Vk	2.5	1.5	1.1											
	X0,25	2.8	2.2	1.8											
	Ps	2.7	1	0.5											
	Lw(A)	<20	<20	<20											
150	Vk	3.8	2.3	1.7	1.3	1.1									
	X0,25	4.2	3.3	2.8	2.5	2.2									
	Ps	6.1	2.3	1.2	0.7	0.5									
	Lw(A)	25	<20	<20	<20	<20									
200	Vk	5	3.1	2.2	1.7	1.4	1.1								
	X0,25	5.6	4.4	3.7	3.3	3	2.5								
	Ps	10.9	4.1	2.2	1.3	0.9	0.5								
	Lw(A)	33	23	<20	<20	<20	<20								
300	Vk	7.5	4.6	3.3	2.6	2.1	1.6	1.2	1						
	X0,25	8.3	6.5	5.5	4.9	4.4	3.8	3.4	3.1						
	Ps	24.6	9.4	4.9	3	2	1.1	0.7	0.5						
	Lw(A)	44	33	26	21	<20	<20	<20	<20						
400	Vk		6.2	4.4	3.5	2.9	2.1	1.7	1.4	1.1					
	X0,25		8.7	7.4	6.5	5.9	5.1	4.5	4.1	3.7					
	Ps		16.7	8.6	5.3	3.6	1.9	1.2	0.8	0.5					
	Lw(A)		41	34	29	24	<20	<20	<20	<20					
600	Vk			6.7	5.2	4.3	3.2	2.5	2.1	1.6	1.4	1			
	X0,25			11.1	9.8	8.9	7.6	6.8	6.2	5.5	5	4.3			
	Ps			19.5	11.9	8	4.4	2.7	1.9	1.2	0.8	0.5			
	Lw(A)			45	39	35	28	23	<20	<20	<20	<20			
800	Vk				6.9	5.7	4.2	3.3	2.8	2.2	1.8	1.4	1.1		
	X0,25				13.1	11.9	10.2	9.1	8.2	7.3	6.7	5.8	5.2		
	Ps				21.2	14.3	7.7	4.9	3.3	2.1	1.4	0.8	0.5		
	Lw(A)				47	43	36	31	27	22	<20	<20	<20		
1000	Vk					7.1	5.3	4.2	3.4	2.7	2.3	1.7	1.3	1.1	
	X0,25					14.8	12.7	11.3	10.3	9.2	8.4	7.2	6.4	5.9	
	Ps					22.4	12.1	7.6	5.2	3.3	2.3	1.3	0.8	0.6	
	Lw(A)					49	42	37	33	28	24	<20	<20	<20	
1200	Vk						6.3	5	4.1	3.3	2.7	2	1.6	1.3	1
	X0,25						15.3	13.6	12.4	11	10	8.7	7.7	7	6.1
	Ps						17.5	11	7.5	4.7	3.3	1.8	1.1	0.8	0.4
	Lw(A)						47	42	38	33	29	22	<20	<20	<20
1600	Vk							6.7	5.5	4.4	3.6	2.7	2.2	1.8	1.3
	X0,25							18.1	16.5	14.7	13.4	11.5	10.3	9.4	8.1
	Ps							19.5	13.4	8.4	5.8	3.2	2	1.4	0.8
	Lw(A)							50	45	40	36	30	25	21	<20
2000	Vk								6.9	5.5	4.5	3.4	2.7	2.2	1.7
	X0,25								20.6	18.4	16.7	14.4	12.9	11.7	10.2
	Ps								20.9	13.2	9.1	5	3.2	2.2	1.2
	Lw(A)								51	46	42	36	31	27	21
2400	Vk									6.6	5.4	4.1	3.2	2.7	2
	X0,25									22	20.1	17.3	15.5	14.1	12.2
	Ps									19	13.1	7.3	4.6	3.2	1.8
	Lw(A)									51	47	41	36	32	25
2800	Vk										7.7	6.3	4.7	3.8	2.3
	X0,25										25.7	23.4	20.2	18	16.4
	Ps										25.9	17.8	9.9	6.3	4.4
	Lw(A)										55	45	40	36	30
3200	Vk											7.3	5.4	4.3	3.6
	X0,25											26.7	23.1	20.6	18.8
	Ps											23.3	13	8.2	5.7
	Lw(A)											55	48	44	39

Symbols and specifications

- $L \times H$ = Width L and height H in mm
 - Q = Air volume in m^3/h
 - A_k = Effective surface (free area) in m^2
 - V_k = Average effective velocity through the grill in m/s
 - $X_{0.25}$ = Horizontal throw in m at an end velocity V_t of 0.25 m/s
 - P_s = Static pressure loss given in Pa
 - $L_w(A)$ = Acoustic power in $\text{dB}(A)$
- The throw $X_{0.25}$ is given without deflection of the airstream at an end velocity of 0.25 m/s . The distances are given for a smooth ceiling and installation distance of the center of the grille at 300 mm from the ceiling surface. When mounted at a distance of 400 to 600 mm from the ceiling, a horizontal deflection towards the ceiling of 15° is advised. When mounted at a distance larger than 600 mm from the ceiling, the throw distance $X_{0.25}$ will be smaller than mentioned due to the missing coanda effect. In these cases and for all other special requirements, please contact our engineering office.
 - The values are given for isothermal supply air. Throw distances for cooling conditions at -11K can be calculated by dividing the $X_{0.25}$ values with factor 1.1 . For heating purposes at Δt of $+11\text{K}$ a multiplier of 1.1 should be applied to the given $X_{0.25}$ value.
 - Advised mounting distance between centers of multiple grilles in the same wall should be greater than $1/3$ of the throw length $X_{0.25}$ (without spread)
 - The pressure losses P_s are given for grilles without damper or with fully opened damper.
 - The acoustic powers $L_w(A)$ are given for grilles without damper or with fully opened damper without room attenuation. Acoustic powers below $20 \text{ dB}(A)$ are mentioned as " <20 " in the tables.

Placement instruction

