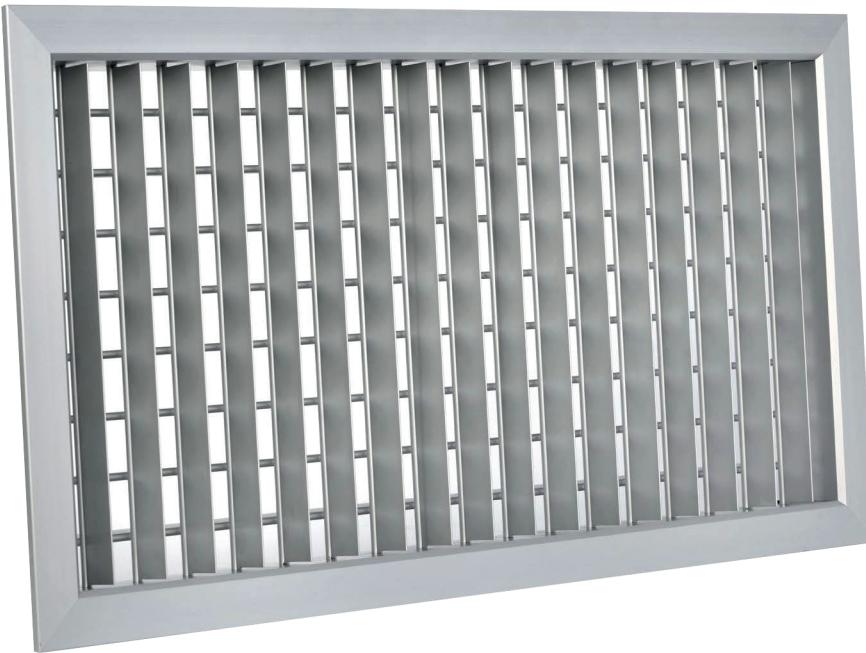


**AHVN-I**

- Industrial wall grilles
- Aluminium
- Anodized natural finish
- Adjustable blades



## Aluminium wall grilles double deflection type AHVN-I

High volume double deflection industrial 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
- Double row of blades (distance between blades = 50 mm)

### **Mounting**

- Invisible mounting with clips in mounting frame, type **CCN-I**
- Fixing by means of screws available upon request

### **Accessories**

- Mounting frame, type **CCN-I**
- Volume control damper, type **DWN-I**

### **Text for tender**

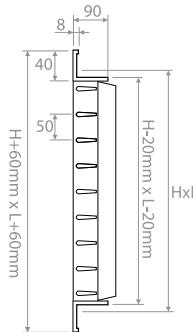
- The air supply grilles for wall mounting have individually adjustable blades to regulate the direction of the air flow pattern. They are of the double deflection type with an invisible clip fixing system and are supplied with a volume control damper.
- Anodized aluminium
- Cairox type **AHVN-I+CCN-I**

**Order example****AHVN-I, 1200, 600 + CCN-I**

Explanation

**AHVN-I** = Grille type**1200** = Length (see table)**600** = Height (see table)

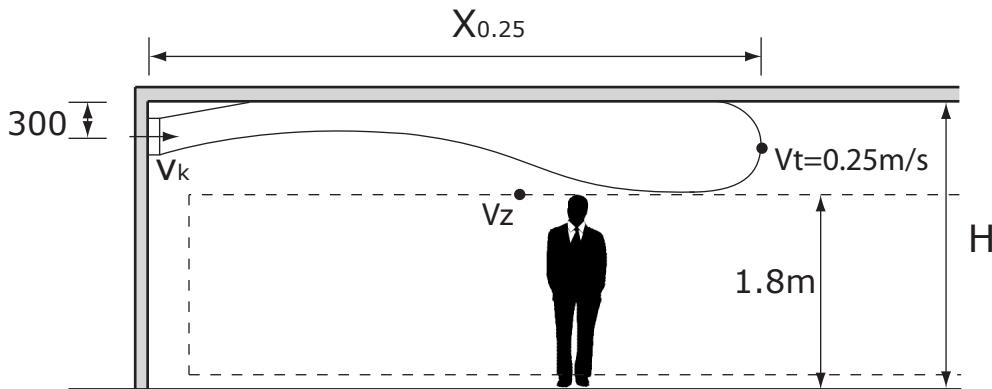
Accessories (Optional)

**CCN-I** = Mounting frame

Quick selection													
AHVN-I	LxH	1200 x 400 1000 x 500	1400 x 400	1500 x 400 1200 x 500 1000 x 600	1800 x 400 1400 x 500 1200 x 600	2000 x 400 1400 x 600 1000 x 800	1800 x 500 1500 x 600	2000 x 500 1200 x 800 1000 x 1000	1800 x 600 1400 x 800	2000 x 600 1500 x 800 1200 x 1000	1800 x 800 1400 x 1000	2000 x 800 1600 x 1000	2000 x 1000
<b>Qv</b>	<b>Ak</b>	0.3969	0.4659	0.5006	0.6052	0.6753	0.7634	0.8518	0.9228	1.0298	1.2449	1.3891	1.7522
<b>2000</b>	<b>Vk</b>	1.4	1.2	1.1									
	<b>X0,25</b>	10.6	9.8	9.5									
	<b>Ps</b>	1.7	1.2	1.1									
	<b>Lw(A)</b>	23	<20	<20									
<b>3500</b>	<b>Vk</b>	2.4	2.1	1.9	1.6	1.4	1.3	1.1	1.1				
	<b>X0,25</b>	18.5	17.2	16.6	15.3	14.5	13.7	13.1	12.6				
	<b>Ps</b>	5.2	3.8	3.3	2.2	1.8	1.4	1.1	1				
	<b>Lw(A)</b>	36	33	32	28	26	24	22	20				
<b>5000</b>	<b>Vk</b>	3.5	3	2.8	2.3	2.1	1.8	1.6	1.5	1.3	1.1		
	<b>X0,25</b>	26.4	24.6	23.8	21.8	20.8	19.6	18.7	18	17.1	15.7		
	<b>Ps</b>	10.6	7.7	6.7	4.6	3.7	2.9	2.3	2	1.6	1.1		
	<b>Lw(A)</b>	45	42	40	37	35	32	30	29	26	23		
<b>6500</b>	<b>Vk</b>	4.5	3.9	3.6	3	2.7	2.4	2.1	2	1.8	1.5	1.3	1
	<b>X0,25</b>	34.4	32	30.9	28.4	27	25.5	24.3	23.4	22.3	20.4	19.4	17.5
	<b>Ps</b>	18	13	11.3	7.7	6.2	4.9	3.9	3.3	2.7	1.8	1.5	0.9
	<b>Lw(A)</b>	51	48	47	43	41	39	36	35	33	29	27	23
<b>8000</b>	<b>Vk</b>	5.6	4.8	4.4	3.7	3.3	2.9	2.6	2.4	2.2	1.8	1.6	1.3
	<b>X0,25</b>	42.3	39.3	38.1	34.9	33.2	31.4	29.9	28.8	27.4	25.1	23.9	21.5
	<b>Ps</b>	27.2	19.7	17.1	11.7	9.4	7.4	5.9	5	4	2.8	2.2	1.4
	<b>Lw(A)</b>	56	53	52	48	46	44	41	40	38	34	32	28
<b>10000</b>	<b>Vk</b>	6	5.5	4.6	4.1	3.6	3.3	3	2.7	2.2	2	1.6	
	<b>X0,25</b>	49.2	47.6	43.7	41.5	39.3	37.4	36	34.3	31.4	29.9	26.9	
	<b>Ps</b>	30.8	26.7	18.3	14.7	11.5	9.2	7.9	6.3	4.3	3.5	2.2	
	<b>Lw(A)</b>	58	57	53	51	49	47	45	43	39	37	33	
<b>12000</b>	<b>Vk</b>			5.5	4.9	4.4	3.9	3.6	3.2	2.7	2.4	1.9	
	<b>X0,25</b>			52.4	49.8	47.1	44.8	43.2	41.1	37.7	35.9	32.3	
	<b>Ps</b>			26.3	21.1	16.5	13.3	11.3	9.1	6.2	5	3.1	
	<b>Lw(A)</b>			58	56	53	51	50	48	44	42	37	
<b>14000</b>	<b>Vk</b>			6.4	5.8	5.1	4.6	4.2	3.8	3.1	2.8	2.2	
	<b>X0,25</b>			61.1	58.2	55	52.3	50.4	48	44	41.9	37.7	
	<b>Ps</b>			35.8	28.8	22.5	18.1	15.4	12.4	8.5	6.8	4.3	
	<b>Lw(A)</b>			61	59	57	55	53	51	48	45	41	
<b>16000</b>	<b>Vk</b>					5.8	5.2	4.8	4.3	3.6	3.2	2.5	
	<b>X0,25</b>					62.9	59.8	57.7	54.8	50.3	47.9	43	
	<b>Ps</b>					29.4	23.6	20.1	16.2	11.1	8.9	5.6	
	<b>Lw(A)</b>					60	58	57	54	51	49	44	
<b>18000</b>	<b>Vk</b>						5.9	5.4	4.9	4	3.6	2.9	
	<b>X0,25</b>						67.3	64.9	61.7	56.6	53.8	48.4	
	<b>Ps</b>						29.9	25.5	20.4	14	11.2	7.1	
	<b>Lw(A)</b>						61	59	57	54	51	47	
<b>20000</b>	<b>Vk</b>							6	5.4	4.5	4	3.2	
	<b>X0,25</b>							72.1	68.6	62.9	59.8	53.8	
	<b>Ps</b>							31.4	25.2	17.3	13.9	8.7	
	<b>Lw(A)</b>							62	60	56	54	50	
<b>22000</b>	<b>Vk</b>								5.9	4.9	4.4	3.5	
	<b>X0,25</b>								75.4	69.2	65.8	59.2	
	<b>Ps</b>								30.5	20.9	16.8	10.6	
	<b>Lw(A)</b>								62	58	56	52	
<b>24000</b>	<b>Vk</b>								6.5	5.4	4.8	3.8	
	<b>X0,25</b>								82.3	75.5	71.8	64.6	
	<b>Ps</b>								36.3	24.9	20	12.6	
	<b>Lw(A)</b>								64	61	58	54	
<b>26000</b>	<b>Vk</b>									5.8	5.2	4.1	
	<b>X0,25</b>									81.8	77.8	70	
	<b>Ps</b>									29.2	23.4	14.7	
	<b>Lw(A)</b>									62	60	56	

**Symbols and specifications**

- LxH = Width L and height H in mm
- Q = Air volume in m<sup>3</sup>/h
- Ak = Effective surface (free area) in m<sup>2</sup>
- V<sub>k</sub> = Average effective velocity through the grill in m/s
- X0.25 = Horizontal throw in m at an endvelocity V<sub>t</sub> of 0.25 m/s
- P<sub>s</sub> = Static pressure loss given in Pa
- Lw(A) = Acoustic power in dB(A)
- The throw X0.25 is given without deflection of the airstream at an end velocity of 0.25m/s. The distances are given for a smooth ceiling and installation distance of the center of the grille at 300mm 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 600mm from the ceiling, the throw distance X0.25 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 X0.25 values with factor 1.1. For heating purposes at D<sub>t</sub> of +11K a multiplier of 1.1 should be applied to the given X0.25 value.
- Advised mounting distance between centers of multiple grilles in the same wall should be greater than 1/3 of the throw length X0.25 (without spread)
- The pressure losses P<sub>s</sub> are given for grilles without damper or with fully opened damper.
- The acoustic powers Lw(A) are given for grilles without damper or with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.

**Placement instruction**

**REW**

- Plenum boxes
- Galvanized steel
- Non-insulated



## Plenum boxes for wall/floor grilles type REW

Galvanized steel plenum box for wall and floor grilles

### **Brand**

- Cairox

### **Other available products**

- Insulated plenum box, type **REW ISO**
- Customized plenum boxes available upon request

### **Accessories**

- Circular volume control damper, type **CRC**

### **Order example**

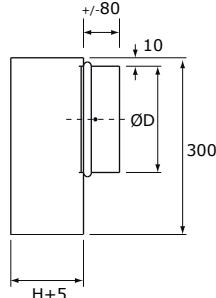
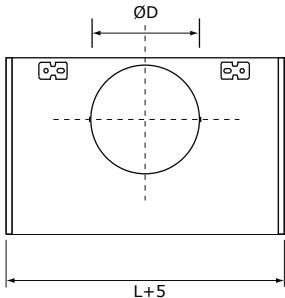
- **REW, 800, 200**

Explanation

**REW** = Plenum box

**800** = Length (see table)

**200** = Height (see table)



Dimensions			
LxH [mm]	ØD [mm]	LxH [mm]	ØD [mm]
200x100	1x 125	500x200	1x 250
300x100	1x 125	600x200	2x 200
400x100	1x 160	800x200	2x 250
500x100	1x 160	1000x200	2x 250
600x100	1x 200	1200x200	2x 250
800x100	1x 250	300x300	1x 250
1000x100	1x 250	400x300	1x 250
1200x100	2x 200	500x300	2x 200
200x150	1x 125	600x300	2x 200
300x150	1x 160	800x300	2x 250
400x150	1x 200	1000x300	2x 250
500x150	1x 200	1200x300	3x 250
600x150	1x 250	400x400	1x 250
800x150	1x 250	500x400	1x 250
1000x150	2x 200	600x400	2x 250
1200x150	2x 250	800x400	2x 250
200x200	1x 200	1000x400	3x 250
300x200	1x 200	1200x400	4x 250
400x200	1x 250		