SHN (RAL9016)

- Wall grilles
- Steel
- White, RAL 9016
- Adjustable blades

Steel wall grilles single deflection type SHN (RAL9016)

Single deflection wall grilles with adjustable horizontal blades

Brand
- Cairox

Application
- Air supply and exhaust in ventilation and air conditioning systems

Material
- Steel

Colour
- Standard colour white, RAL 9016
- Other colours available upon request

Composition
- Single row of adjustable blades

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

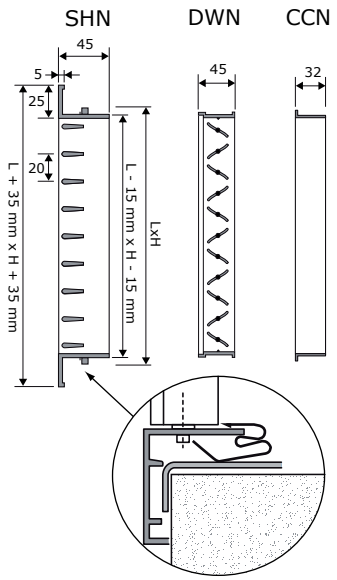
Accessories
- Mounting frame, type **CCN**
- Volume control damper, type **DWN**
- Plenum box, type **REW**
- Insulating plenum box, type **REW ISO**

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 single deflection type with an invisible clip fixing system and are supplied with a volume control damper. Finished white powder coating RAL 9016
- **Cairox** type **SHN+CCN+DWN**

Order example
- **SHN, 800, 200 + CCN + DWN + REW**

Explanation
SHN = Grille type
800 = Length (see table)
200 = Height (see table)

Accessories (Optional)
CCN = Mounting frame
DWN = Volume control damper
REW = Plenum box



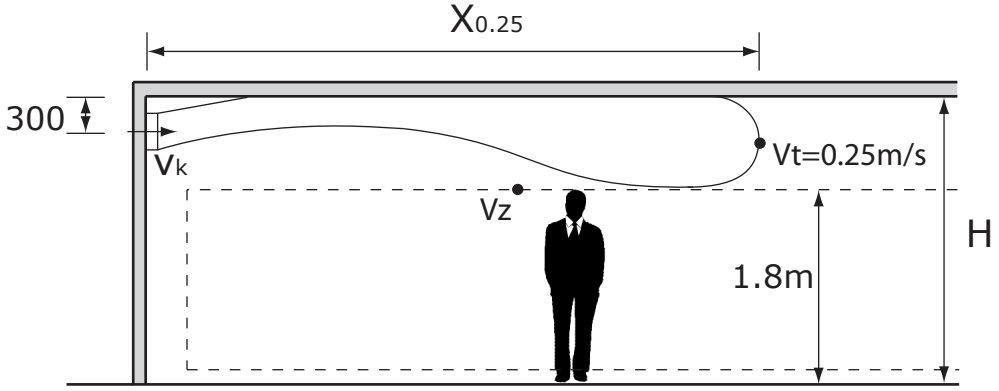
Quick selection															
SHN	**LxH**	**200x100**	**300x100 200x150**	**400x100 300x150 200x200**	**500x100**	**600x100 400x150 300x200**	**800x100 500x150 400x200**	**1000x100 600x150 500x200 300x300**	**1200x100 800x150 600x200 400x300**	**1000x150 800x200 500x300 400x400**	**1200x150 1000x200 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	3.1	2.3
	X0,25									25.7	23.4	20.2	18	16.4	14.2
	Ps									25.9	17.8	9.9	6.3	4.4	2.4
	Lw(A)									55	51	45	40	36	30
3200	**Vk**										7.3	5.4	4.3	3.6	2.7
	X0,25										26.7	23.1	20.6	18.8	16.3
	Ps										23.3	13	8.2	5.7	3.2
	Lw(A)										55	48	44	39	33

Symbols and specifications

- LxH = Width L and height H in mm
- Q = Air volume in m³/h
- Ak = Effective surface (free area) in m²
- Vk = Average effective velocity through the grill in m/s
- X0.25 = Horizontal throw in m at an endvelocity Vt of 0.25 m/s
- Ps = 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 Dt 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 Ps are given for grilles without damper of with fully opened damper.
- The acoustic powers Lw(A) are given for grilles without damper of with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.

Placement instruction



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

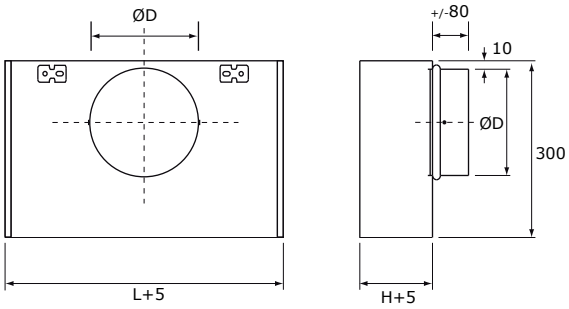
Accessoiries

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

Order example

- **REW, 800, 200**

Explanation
REW = Plenum box
800 = Length (see table)
200 = Height (see table)



Wall and floor grilles

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		