

Econox wall grille, aluminium, single adjustable

Description and function

The Econox wall grille is a wall-mounted supply and extract air diffuser featuring individually adjustable horizontal aluminum louvres. It is suitable for a variety of applications, providing flexibility in air diffusion. The grille can be mounted using clip-ons. Mounting the grille with a plenum box is possible only with clips and without a mounting frame.

Applications

The Econox wall grille is best suited for comfort environments, such as offices, schools, retail stores, restaurants and hotels.

Standard sizes

Refer to table 4 for detailed size specifications.

Airflow range

40 - 1430 m³/h (10-400 l/s).

For detailed performance data, refer to the provided diagrams.

Materials

The outer frame and louvres are made of aluminum. The product is available in RAL 9010, 9016 and 9005.



Main characteristics

- Individually adjustable horizontal aluminum air deflectors
- Suitable for wall installations
- Mounting options include clip-ons

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Technical data

The throw lengths are measured at 8°C Δt (temperature difference between the supplied and the room air) and 2,7 m room height. The throw length values can be read off of diagrams 1. and 2.

The sound level is applicable at an equivalent sound absorption area of 10 m².

Sound effect level: LW [dB]

Sound level: LPA [dB(A)] (see diagram 1. and 2.)

Correction factor: KOK [dB] from table 1.

$LW = LPA + KOK$

Free area Af

Calculated with the help of the following equation:

$Af = B \times H \times k$ where

Af = free area [m²]

B = nominal width [mm]

H = nominal height [mm]

k = Correction factor according to table 3.

Example: 600 x 150

$Af = 0,6 \times 0,15 \times 0,60 = 0,054 \text{ m}^2$

T.1. Correction KOK [dB]

Medium frequency [Hz]							
63	125	250	500	1000	2000	4000	8000
+11	+6	+5	+2	-2	-10	-18	-20

Tolerance ±2 dB

T.2. Sound attenuation ΔLD [dB]

Nominal height	Medium frequency [Hz]				
	63	125	250	500	1000
100	10	8	4	2	1
150	9	7	3	1	0
200	8	6	2	0	0

Tolerance ±3 dB

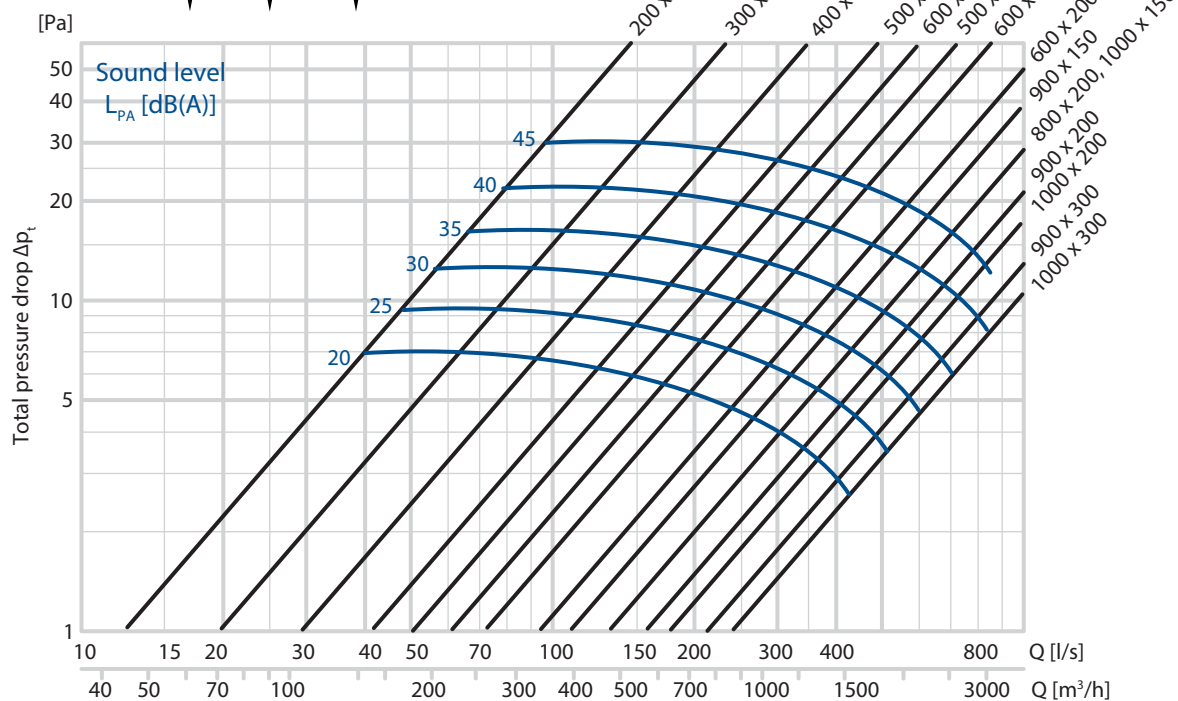
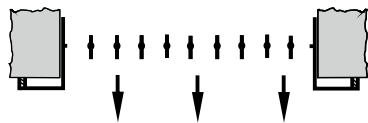
T.3. Correction factor

Nominal height H	Correction factor k
100	0,50
150	0,60
200	0,65
300	0,70

Diagrams

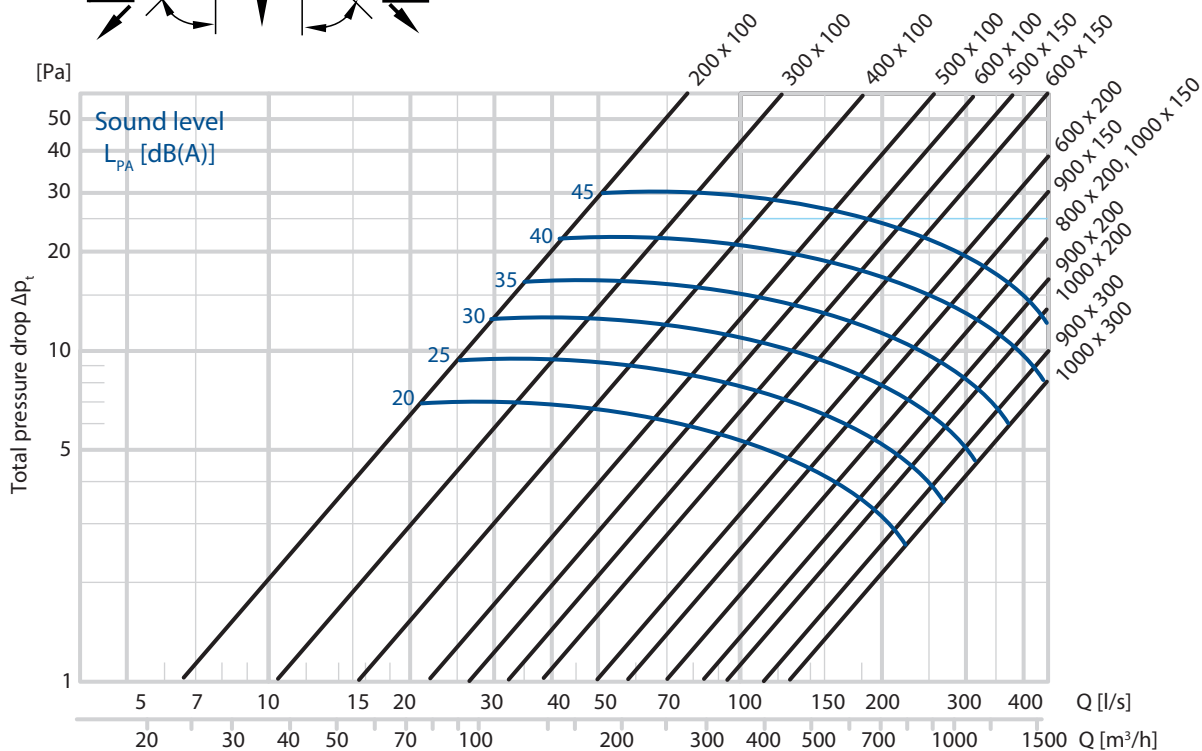
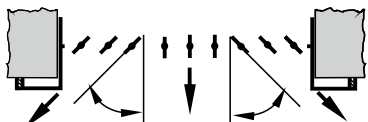
D.1.

Straight air flow 0°



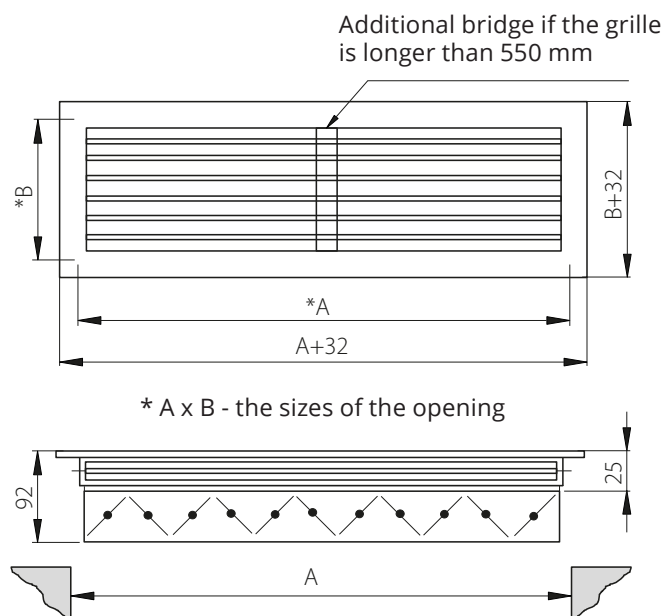
D.2.

45° air flow

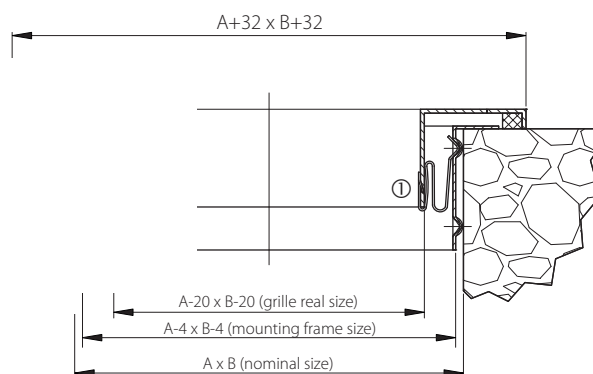


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Sizes



Installation of the grille



1. with spring clips