

Aluminium decorative grille



Application

For supply and exhaust ventilation, heating and air conditioning systems in industrial, commercial and domestic premises.

Design

Made of high quality extruded aluminium profile. The polymer or anodized coating of the grille provides resistance to adverse weather conditions.

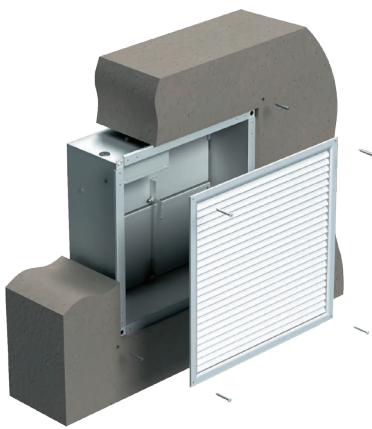
Grilles with special dimensions can be manufactured upon request.

Grilles from 450 mm in size are produced with an additional partition to provide rigidity (ONFS series).

Modifications

Can be equipped with an adapter (A) (see the end of the section).

Can be equipped with special springs (p) for quick installation (see the end of the section).



The unit can be equipped with a decorative grille made of aluminium for a more aesthetic appearance.

The grille has one row of non-adjustable horizontal air flow guides fixed at 45°.

The grille is polymer coated and anodised for extra protection against the weather elements.

To enable the decorative grille installation, the damper must be embedded at least 40 mm deep into the wall as measured from the wall face to the damper flange.

NOTE:

While selecting the aluminium decorative grille mind the wall opening dimensions.

Ordering scheme



Grille type:

ONF/ONFS – single-row unregulated grille with horizontal (vertical) arrangement of air flow guides (fixed at an angle of 45 °)

Opening dimensions:

L – length [mm]
H – height [mm]

Grille coating:

__ – colour* (white by default)
Anodized

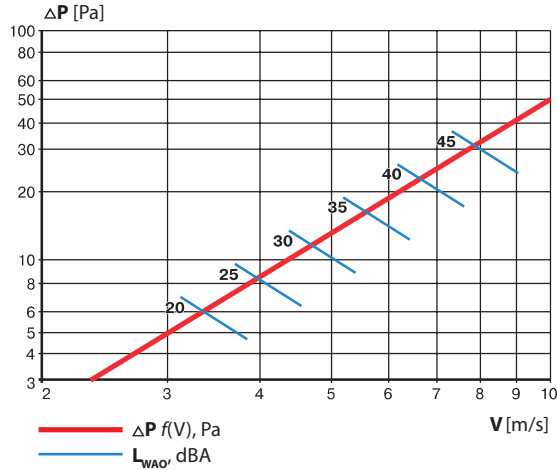
Accessories:

__ – no
A – adapter

Grille fastening:

p – spring

Pressure drop and sound power level



Calculation formula

$$L_{WA} = L_{WAO} \times K$$

Correction factor K

S [m ²]	0.005	0.01	0.02	0.03	0.05	0.07	1
K [dBA]	-13	-9	-6	-4.5	-3	-1.5	0

Designation key:

ΔP – pressure drop [Pa]

L_{WA} – sound power level [dBA]

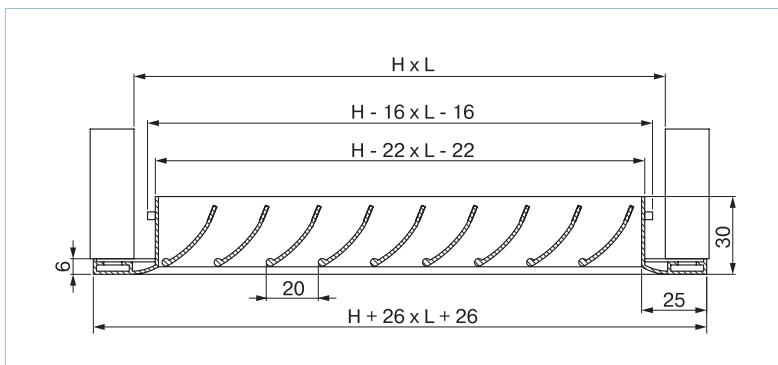
L_{WAO} – sound power level for cross-sectional area of 0.1 m² [dBA]

K – correction factor for sound power level depending on cross-sectional area [dBA]

S – cross-sectional area [m²]

V – design speed [m/s]

Overall and mounting dimensions



Air flow distribution



Deflection angle of air flow guides – 45°

Cross-section dimensions and area [m²]

Height H [mm]	Length L [mm]													
	100	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0.004	0.007	0.010	0.012	0.015	0.018	0.021	0.024	0.027	0.033	0.039	0.045	0.051	0.057
150	0.070	0.010	0.015	0.018	0.023	0.027	0.031	0.035	0.039	0.047	0.055	0.064	0.072	0.080
200	0.010	0.015	0.021	0.026	0.033	0.038	0.045	0.051	0.058	0.070	0.081	0.093	0.105	0.115
250	0.012	0.018	0.026	0.032	0.041	0.047	0.055	0.062	0.070	0.084	0.098	0.106	0.113	0.128
300	0.015	0.023	0.033	0.041	0.051	0.059	0.069	0.077	0.086	0.096	0.115	0.132	0.149	0.168
350	0.017	0.026	0.038	0.047	0.059	0.068	0.080	0.090	0.099	0.111	0.132	0.151	0.170	0.193
400	0.020	0.030	0.044	0.054	0.069	0.079	0.093	0.103	0.117	0.142	0.166	0.189	0.212	0.237
450	0.023	0.035	0.051	0.062	0.080	0.090	0.107	0.117	0.131	0.160	0.186	0.214	0.239	0.265
500	0.026	0.039	0.056	0.070	0.089	0.100	0.119	0.130	0.145	0.178	0.206	0.238	0.265	0.293
600	0.031	0.047	0.067	0.084	0.105	0.121	0.142	0.158	0.173	0.214	0.246	0.287	0.318	0.349
700	0.036	0.055	0.078	0.094	0.124	0.145	0.170	0.184	0.203	0.251	0.288	0.336	0.372	0.408
800	0.042	0.063	0.090	0.112	0.141	0.163	0.190	0.211	0.232	0.288	0.330	0.385	0.426	0.467
900	0.048	0.072	0.103	0.129	0.160	0.185	0.228	0.238	0.262	0.325	0.372	0.435	0.481	0.527
1000	0.053	0.079	0.113	0.141	0.177	0.204	0.239	0.266	0.292	0.361	0.414	0.484	0.536	0.587