

Perforated supply air wall diffuser OKE



A surface installed wall diffuser with a round sleeve and measuring output. Balancing of the airflow is done by changing the number of open holes with a magnetic strip.

The diffuser can also be manufactured to suit a rectangular opening.

Order key

Wall diffuser OKE - 100 + VAM
1 2

1 = size 100 - 200

2 = accessories:
sound reducing plenum box VAM or VAL

The order key for the diffuser to suit rectangular opening is presented on page 5.

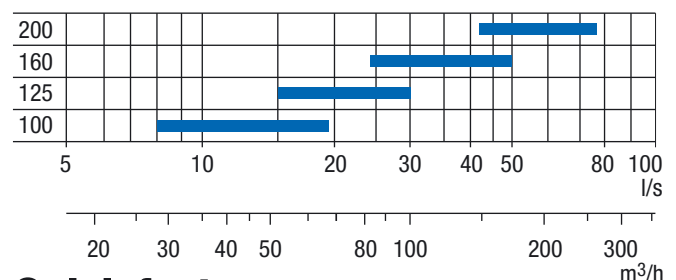
Material and surface treatment

Manufactured of galvanised sheet steel. The diffuser face is as standard painted white RAL 9010. Other RAL colours are available at additional costs.

Plenum boxes VAM and VAL are made of galvanised sheet steel with acoustic lining.

Quick guide

The table shows data with total pressure drop of 30 Pa



Quick facts

	min.	max
Face distance from the ceiling, mm	70	
- cooled supply air, mm		300
Max cooling temp. Δt °C		-6

Wall diffuser OKE

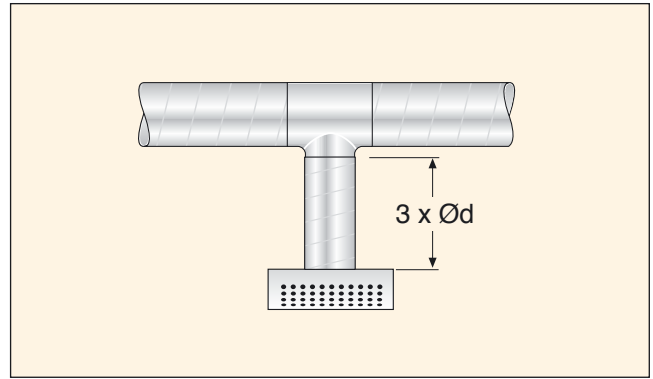
Performance

The graphs are not to be used for commissioning.

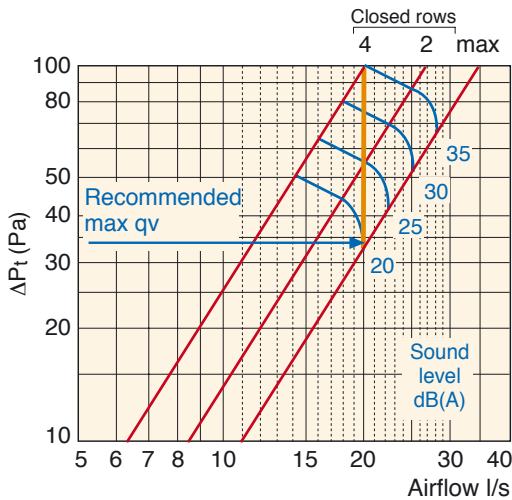
Airflow - pressure drop - sound level

The sound level increases if the distance after fitting is shorter than $3 \times \varnothing d$:

- after bend +4 dB (A)
- after T-bend +8 dB (A)

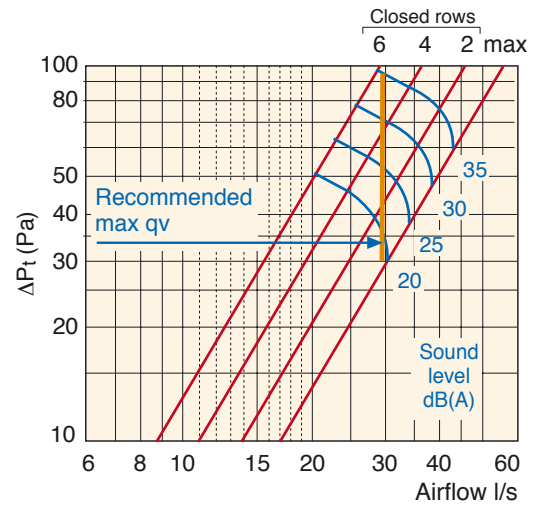


OKE-100



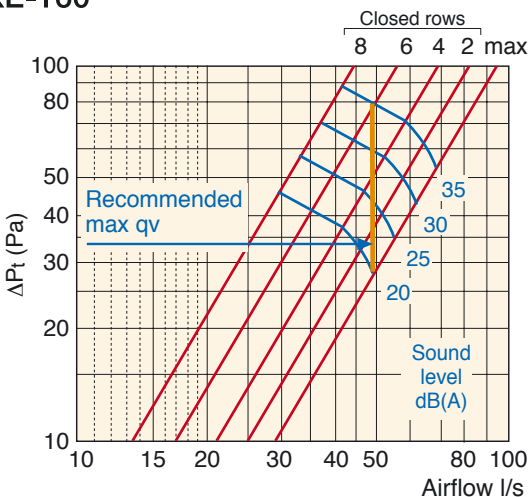
		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K_{okt} , dB		-2	-7	-1	2	1	-9	-23	-25
		Sound attenuation							
ΔL , dB		22	16	10	6	4	2	1	1

OKE-125



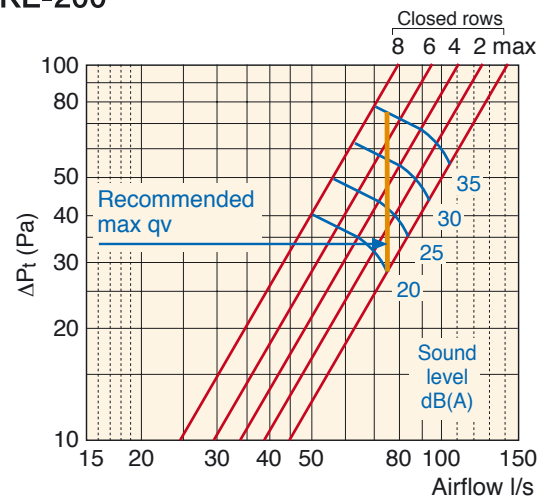
		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K_{okt} , dB		-6	-3	1	1	-2	-1	-21	-25
		Sound attenuation							
ΔL , dB		19	14	9	4	2	2	1	1

OKE-160



		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K_{okt} , dB		-7	-4	-1	0	0	-1	-8	-17
		Sound attenuation							
ΔL , dB		18	12	7	4	2	1	1	1

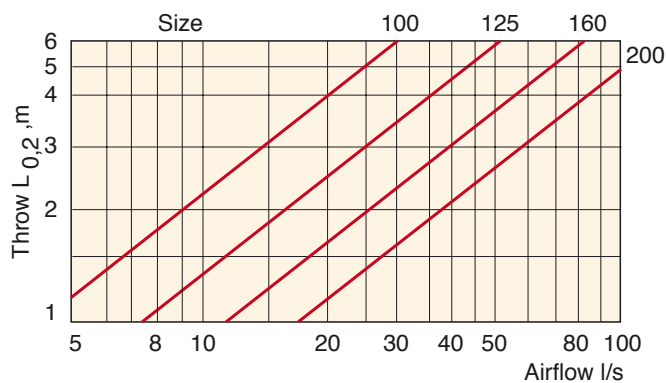
OKE-200



		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K_{okt} , dB		-7	-2	1	2	1	-5	-12	-12
		Sound attenuation							
ΔL , dB		16	11	6	3	2	1	1	1

Airflow - throw

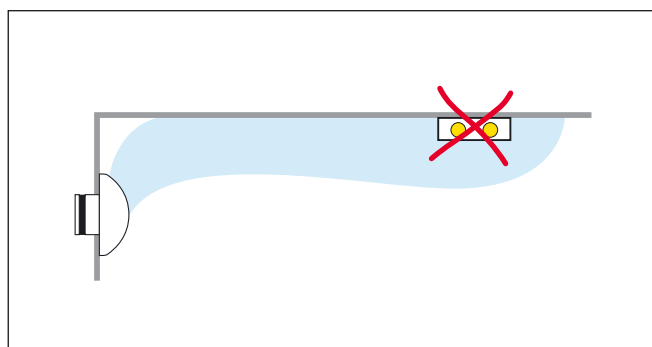
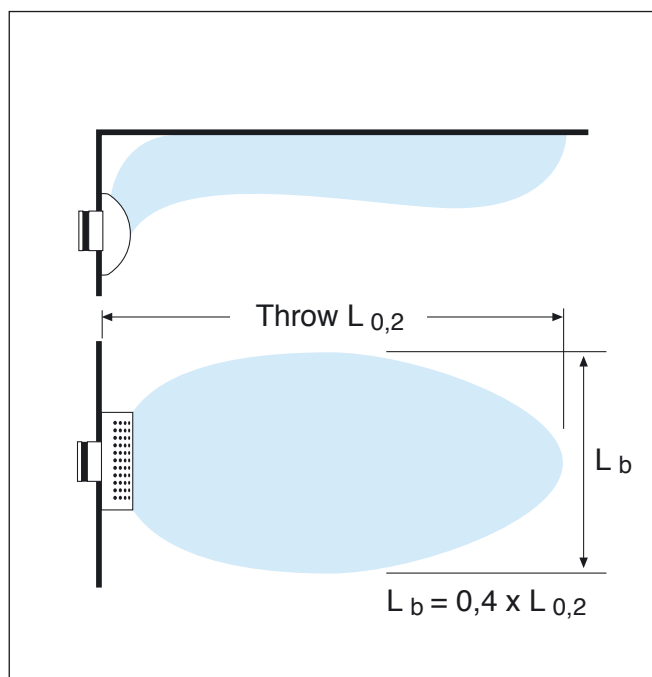
With a fully open face upper edge 100 mm from the ceiling



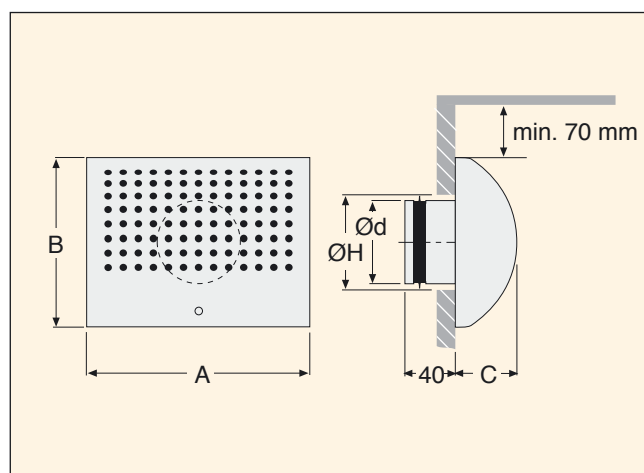
Extension of the throw:

- 2 rows closed = 1,15 x
- 4 rows closed = 1,30 x
- 6 rows closed = 1,50 x

Air distribution pattern



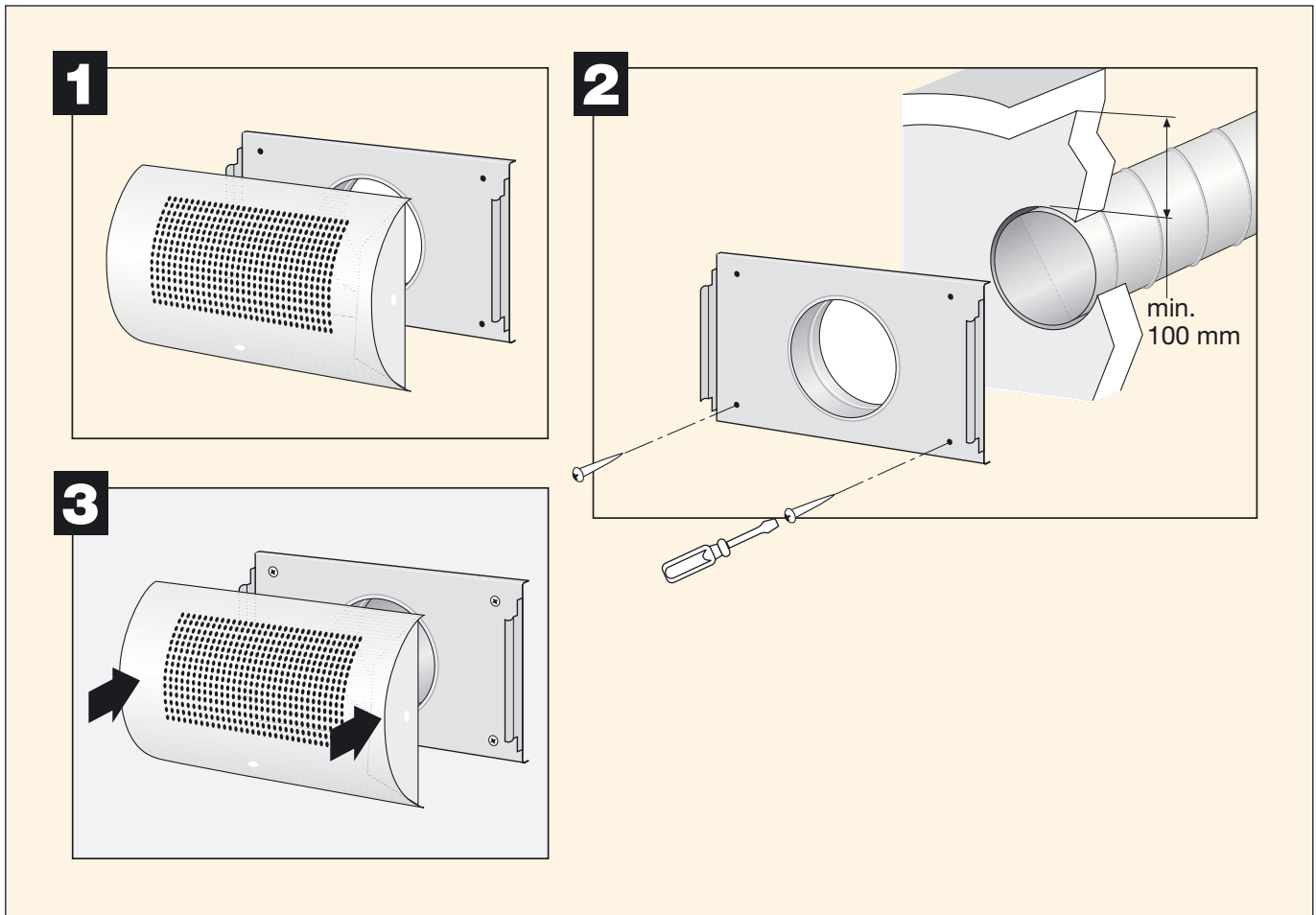
Dimensions



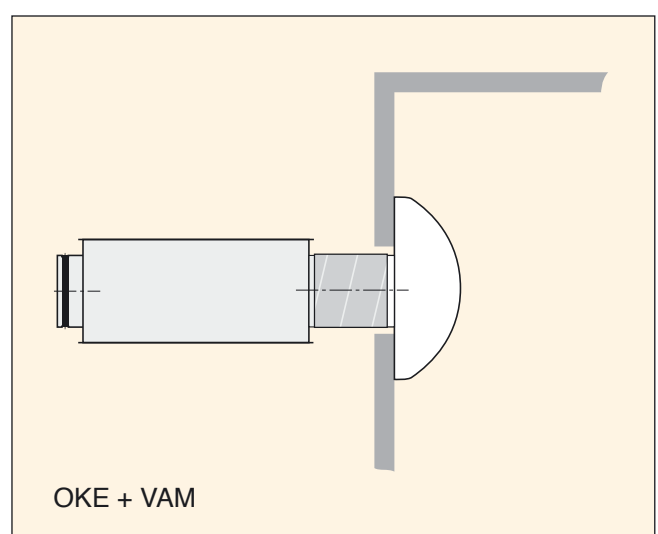
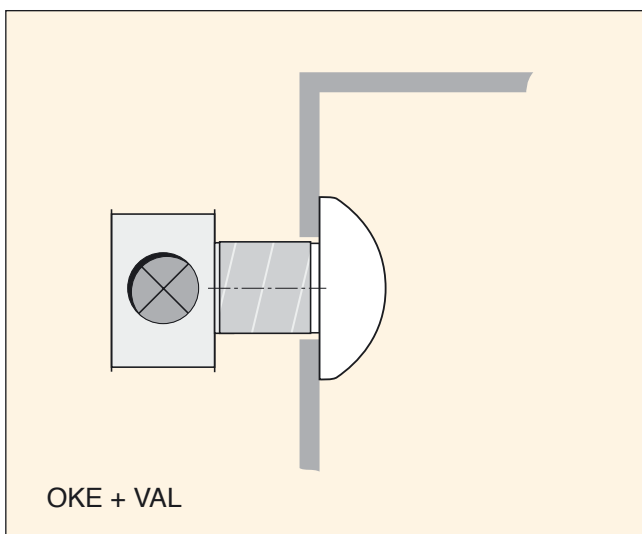
Size	Ø d	Ø H	A x B	C
100	99	110	230 x 140	60
125	124	135	280 x 177	73
160	159	170	360 x 226	90
200	199	210	440 x 282	100

Wall opening = Ø H

Installation



Accessories



Order key for OKE to suit a rectangular opening

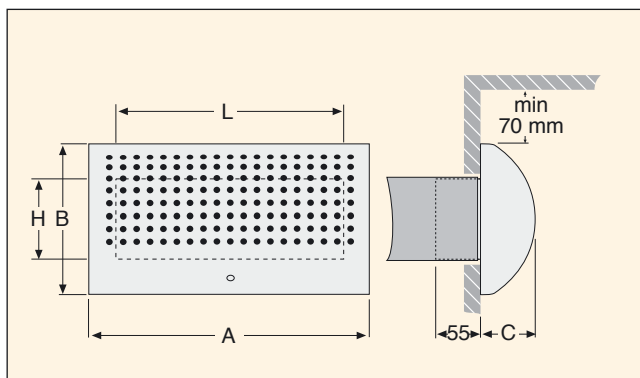
Wall diffuser

OKE - 300 x 140 / 200 x 100

1 2 3

- 1 = The length A mm
- 2 = The height B mm
- 3 = The rectangular opening

By order could the diffuser face be extended



The length A = 300 - 800 mm

The height B = fixed to four alternatives:
140, 177, 226 and 282 mm

Max dimensions for the duct connection L x H:

L = A - 80 mm

H = B - 40 mm

Installation example is shown on page 6.

Airflows for extended OKE diffuser

The maximum velocity in the connecting duct is 2 m/s.

Max airflow l/s

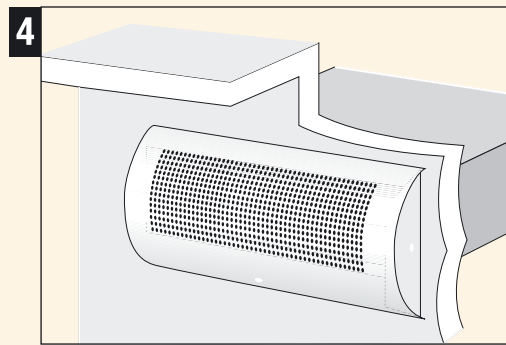
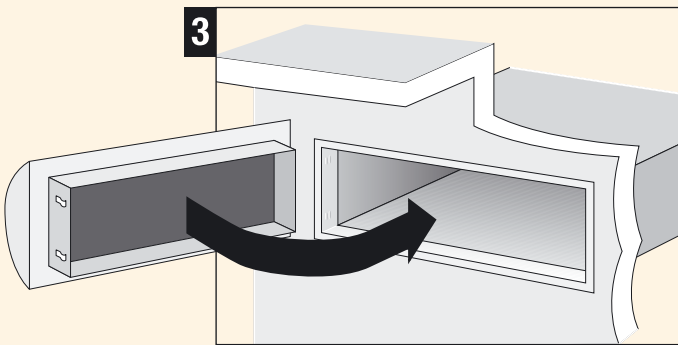
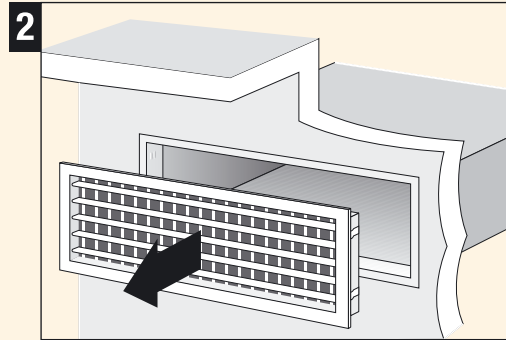
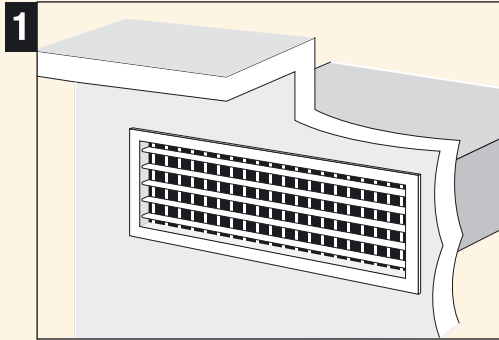
		Length A					
		300	400	500	600	700	800
Height B	140	35	45	60	70	85	95
	177	45	60	75	95	110	130
	226		75	95	115	135	150
	282			105	125	150	170

The pressure drop will be 40 Pa with airflows shown on the table.

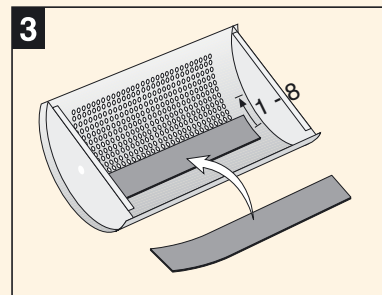
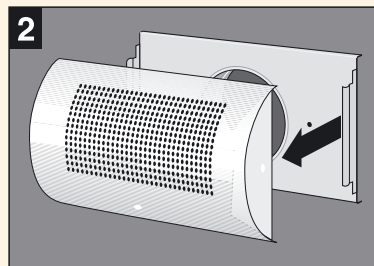
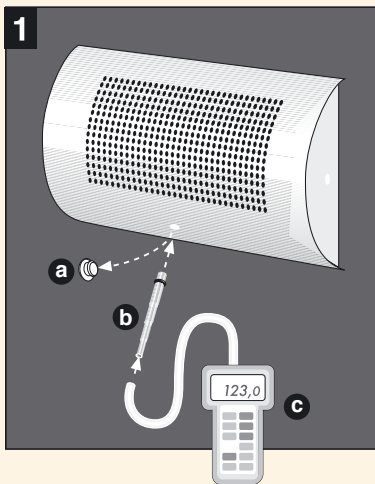
The sound level for the diffuser is under 30 dB(A).

Installation example

How to change a grille to OKE diffuser



Commissioning



The measurement of the airflow is done by pressure-difference over the face. The "k" factors are shown in the adjustment guide.