

Supply and exhaust grilles

EKE



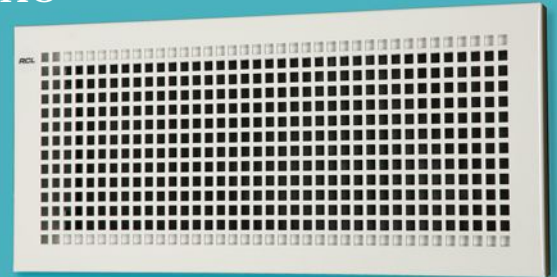
EKR



EKV



EKO



Supply, exhaust and transfer grilles for wall and ceiling installation. The screw fixing has always to be used in ceiling installation. Use the plenum box RAS for measuring and adjustment of the air flow. In wall installation is the recommended distance from the ceiling 200 mm.



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SUPPLY AND EXHAUST GRILLES

Order key

Supply grille EKE - 200 x 100 + K + RAS 1
 1 2 3 4

- 1 = type of grille, EKE, EKV, EKR or EKO
- 2 = size, width L x height H
- 3 = installation frame K
- 4 = accessories
 - plenum box RAS

Material and surface treatment

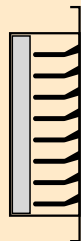
EKE, EKV and EKR are manufactured of aluminium profiles. EKO is manufactured of sheet steel. The standard colour is white RAL 9010. Other RAL colours are available at additional costs.

The frame K and the plenum box RAS are made of sheet steel.

Structure

EKE

Fixed horizontal front vanes, directed in 15° angle. Vertical adjustable back vanes.



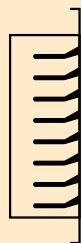
EKR

Fixed horizontal front vanes, 0° angle.



EKV

Fixed horizontal front vanes, directed in 15° angle.



EKO

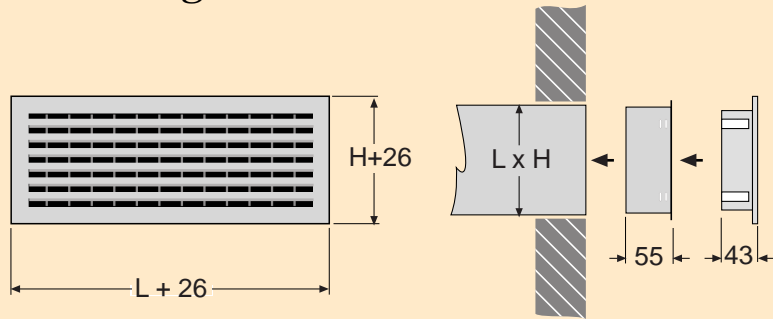
Perforated exhaust grille.



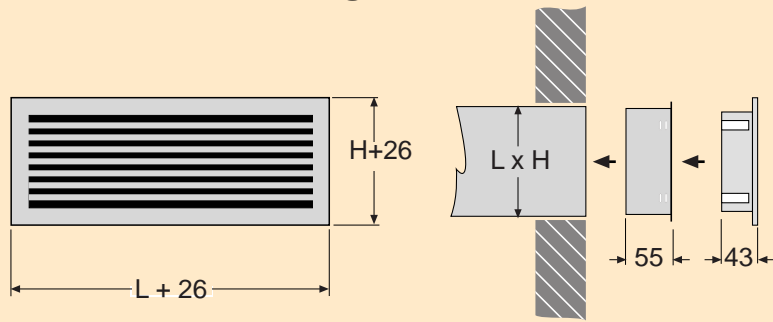
SUPPLY AND EXHAUST GRILLES

Dimensions

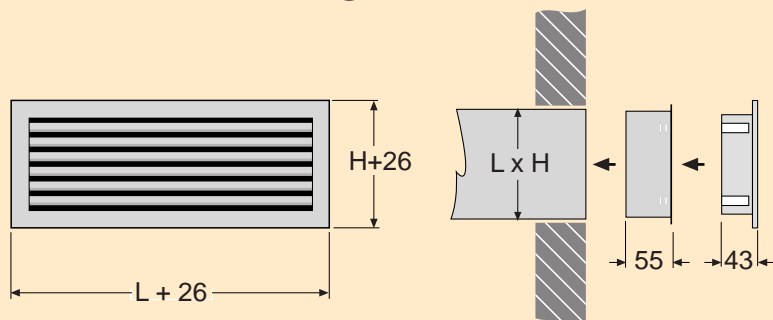
EKE - supply and exhaust grille



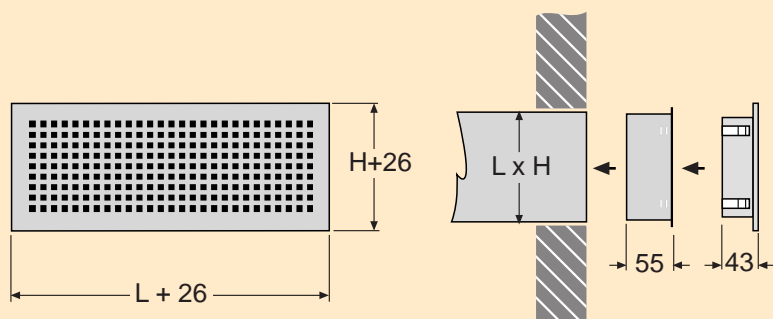
EKR - supply, exhaust and transfer grille



EKV - supply, exhaust and transfer grille



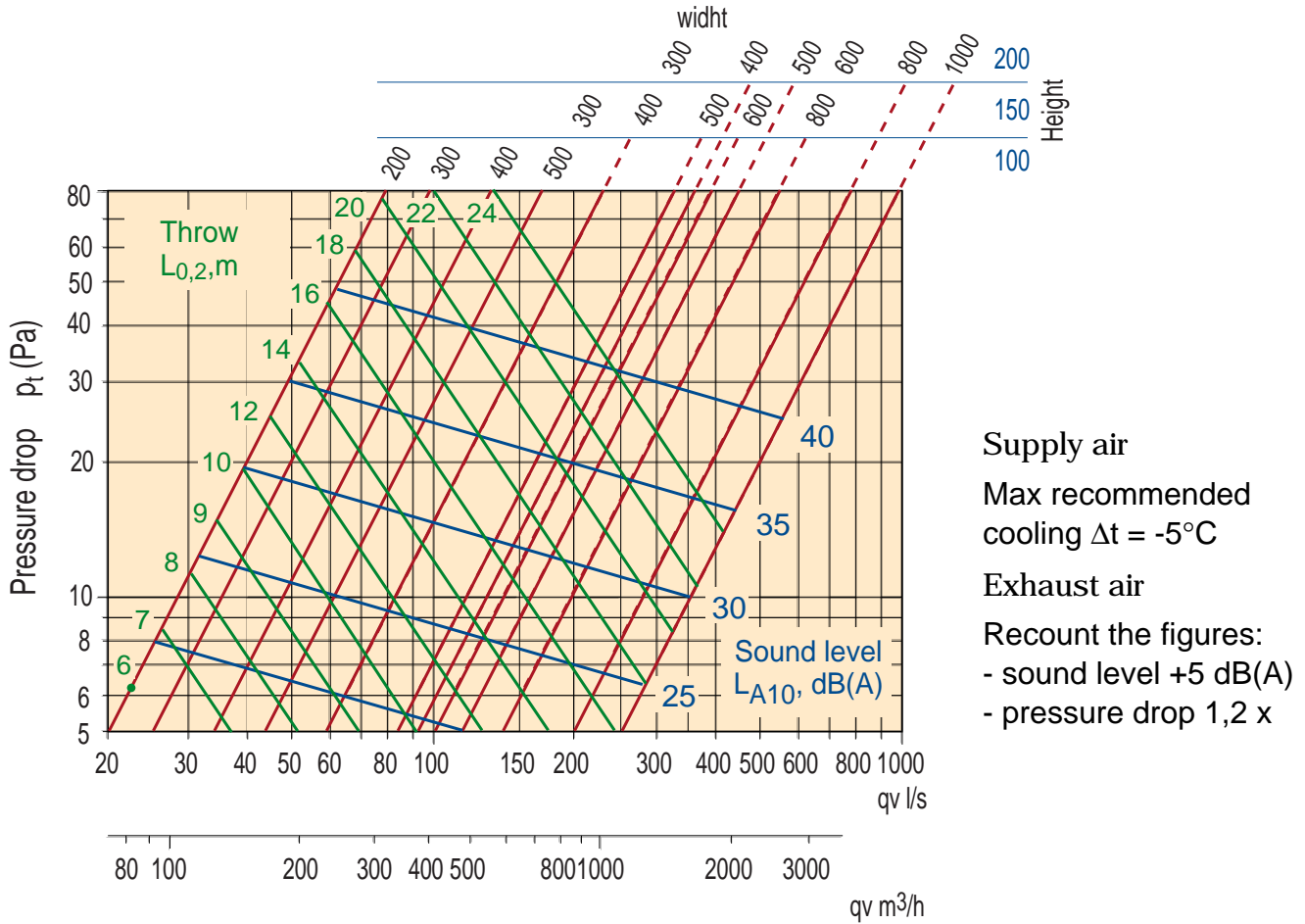
EKO - exhaust grille



SUPPLY AND EXHAUST GRILLES

Type EKE

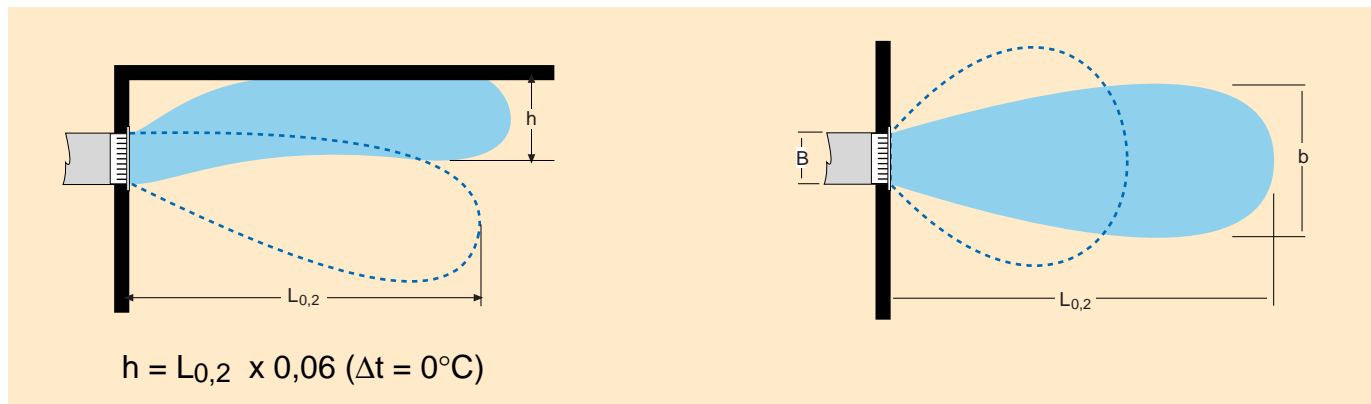
Air flow - pressure drop - sound level - throw



The vertical vanes affect the performance

The back vanes position >	0°	45°	60°
Throw $L_{0,2}$ >	1	0,85 x	0,7 x
Sound level increases dB(A) >	1	+ 3	+ 6
Pressure drop increases >	1	1,3 x	1,5 x

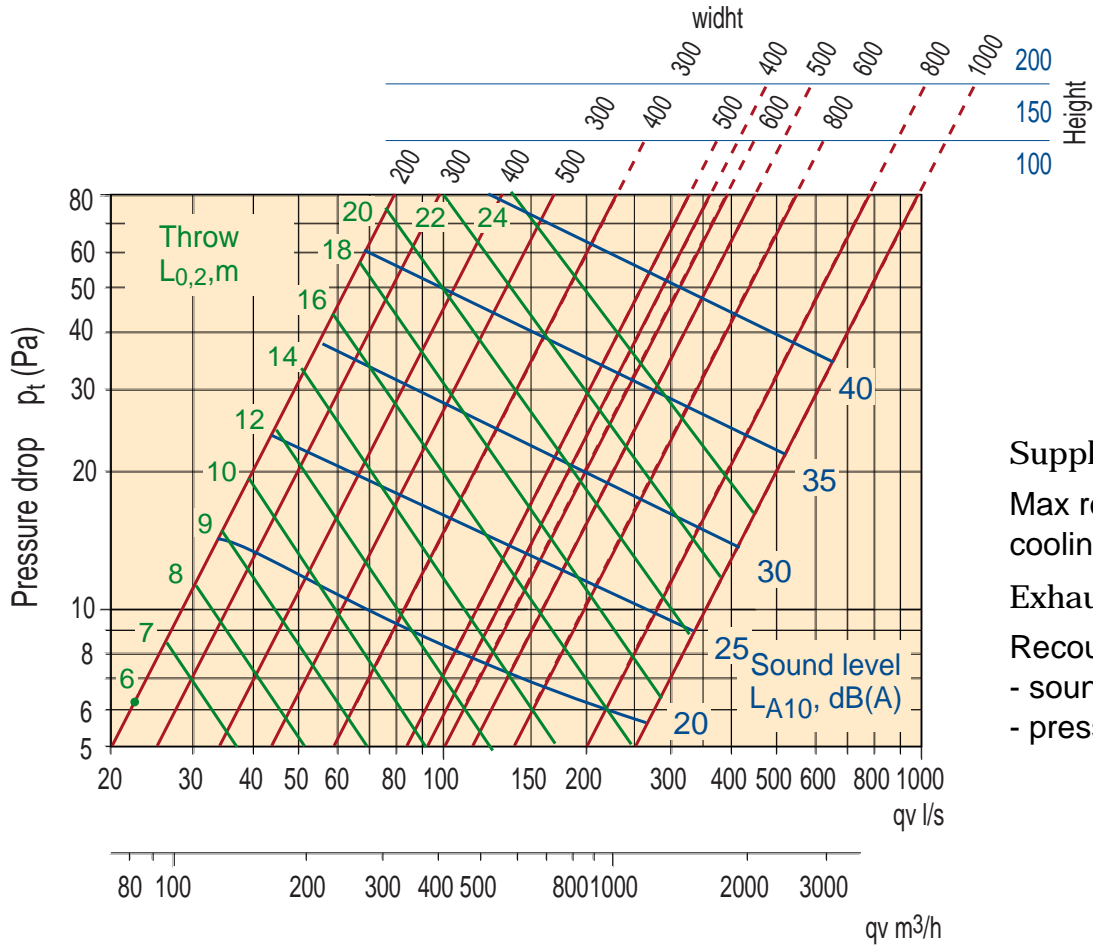
Position	b
0°	$L_{0,2} \times 0,25$
45°	$L_{0,2} \times 0,4$
60°	$L_{0,2} \times 0,5$



SUPPLY AND EXHAUST GRILLES

Type EKR

Air flow - pressure drop - sound level - throw



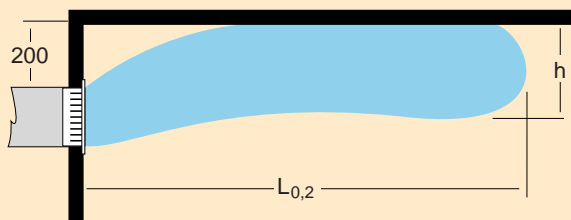
Supply air

Max recommended cooling $\Delta t = -5^\circ\text{C}$

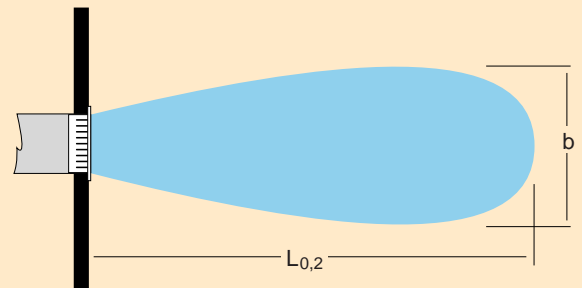
Exhaust air

Recount the figures:

- sound level +5 dB(A)
- pressure drop 1,2 x



$$h = L_{0,2} \times 0,06$$

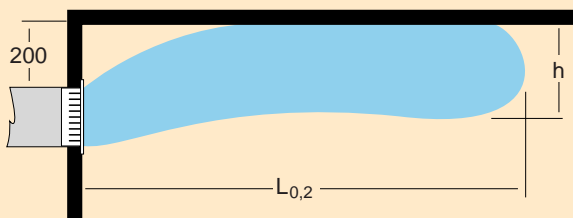
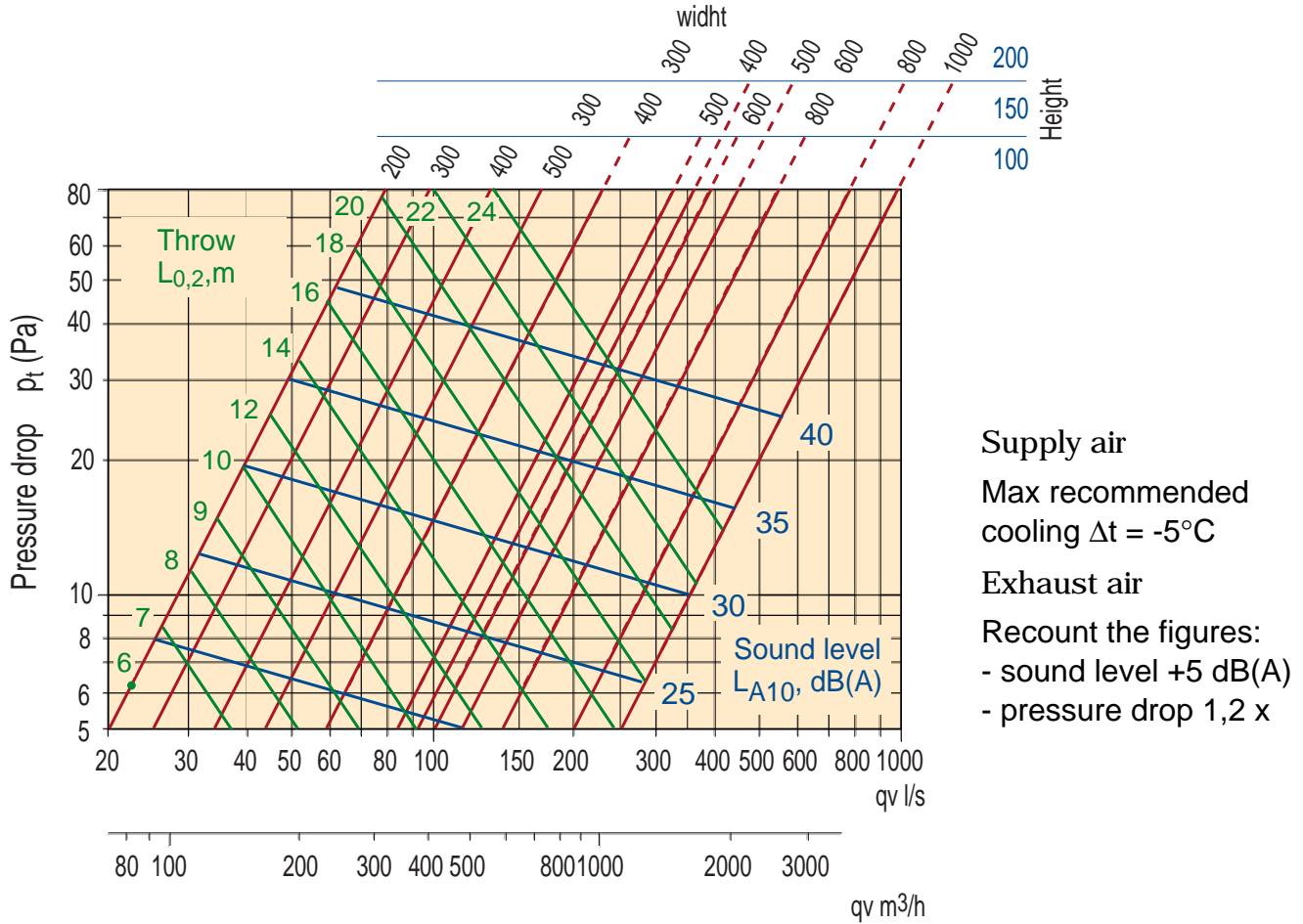


$$b = L_{0,2} \times 0,25$$

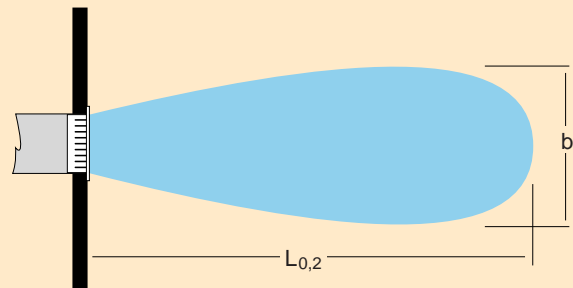
SUPPLY AND EXHAUST GRILLES

Type EKV

Air flow - pressure drop - sound level - throw



$$h = L_{0,2} \times 0,06$$

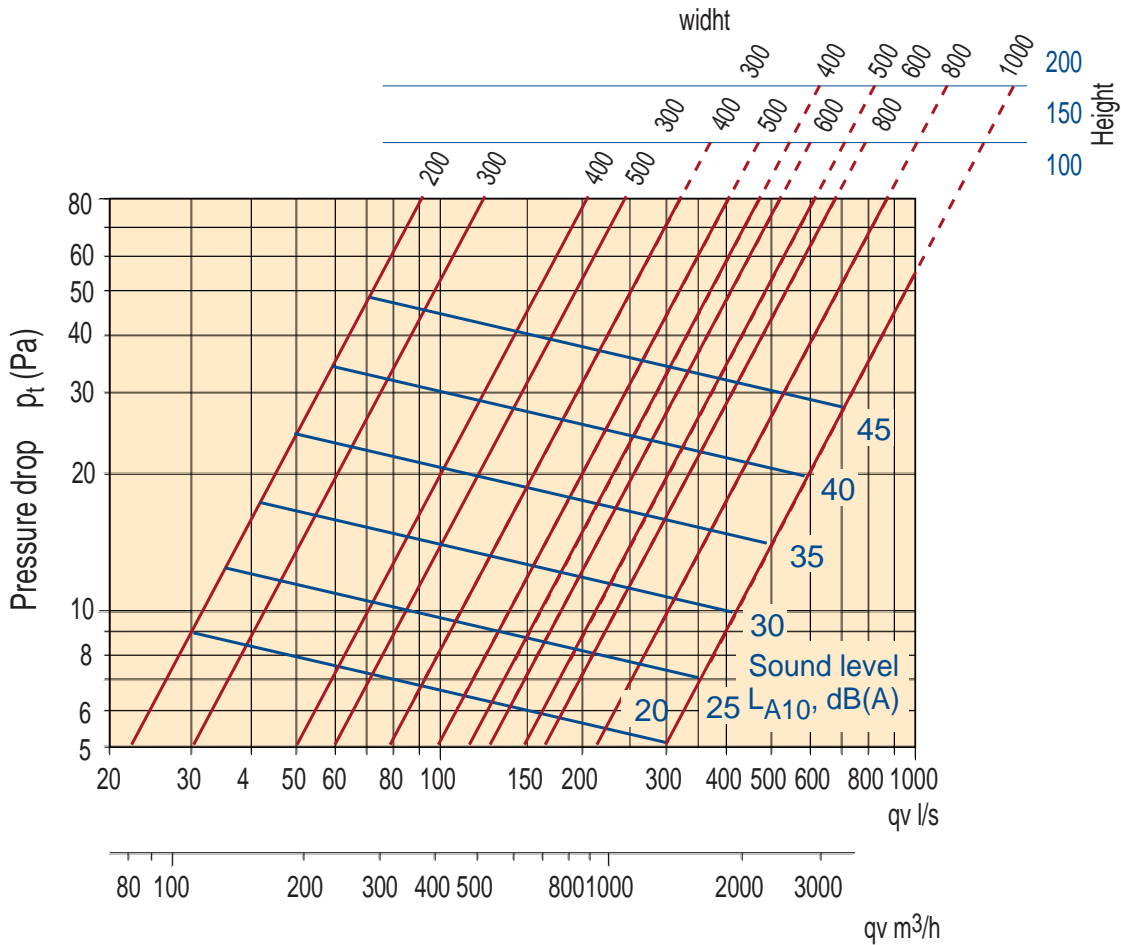


$$b = L_{0,2} \times 0,25$$

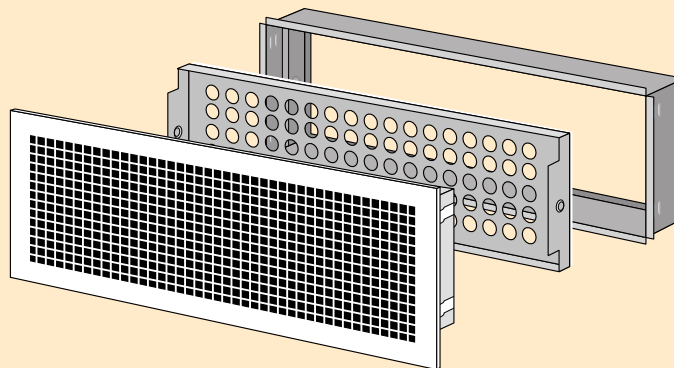
SUPPLY AND EXHAUST GRILLES

Type EKO

Air flow - pressure drop - sound level



EKO + SAP + K = ELO

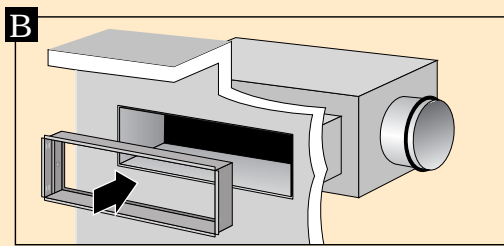
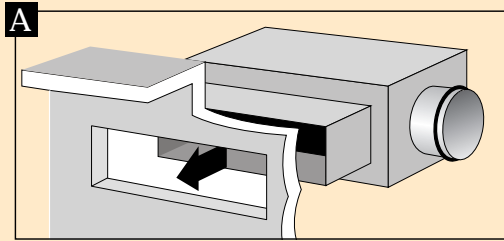


Connection box for exhaust air = PTE

SUPPLY AND EXHAUST GRILLES

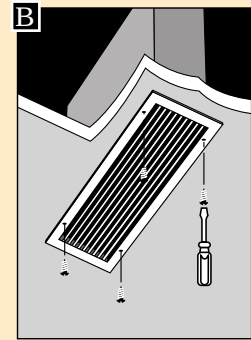
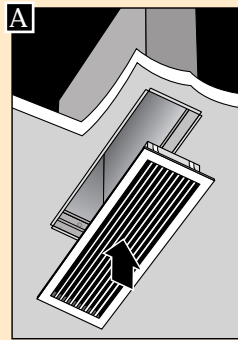
Installation

Plenum box RAS

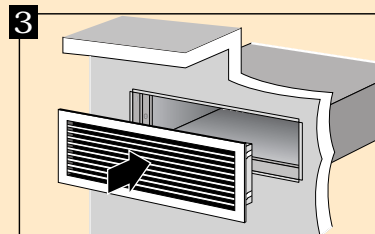
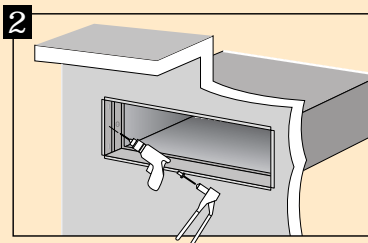
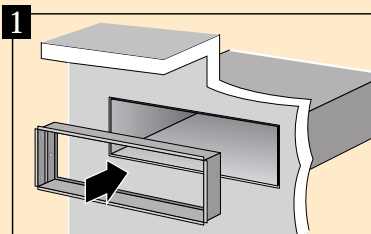
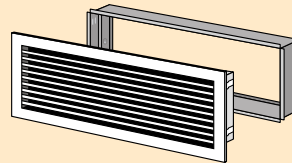


Ceiling installation

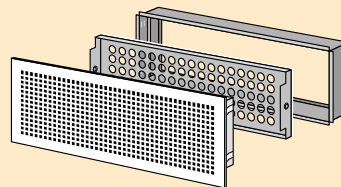
Screw holes in the flange by order



Grille installation



Grille with a damperplate



EKO + SAP + K

