

# Supply air wall diffusers



**RAN**



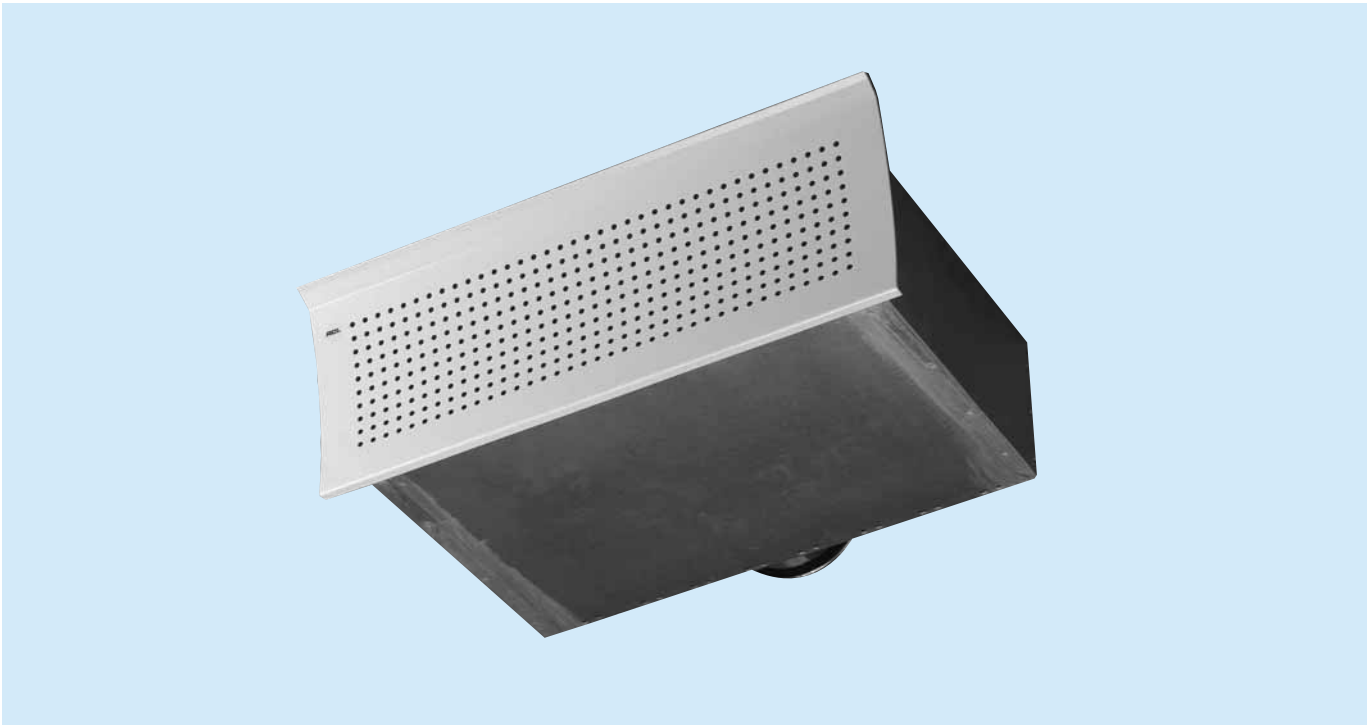
**RON**

**RCL<sup>®</sup>**

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# WALL DIFFUSERS RAN and RON



Supply air diffusers RAN and RON consists of a diffuser face and a balancing plenum box. The throw pattern is directed upwards. The recommended min. distance from the ceiling is 100 mm.

## Quick facts

	min.	max
Room height, m	2,3	4,0
Max. cooling temp., °C		8

## Material and surface treatment

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

The plenum box is made of galvanised sheet steel with acoustic lining.

The balancing plenum box includes a adjustment and measurement unit. The unit is easy to remove without changing the settings.

## Quick guide

Size	Airflow l/s	
	min	max
100	10	25
125	20	40
160	30	65
200	40	90

## Order key

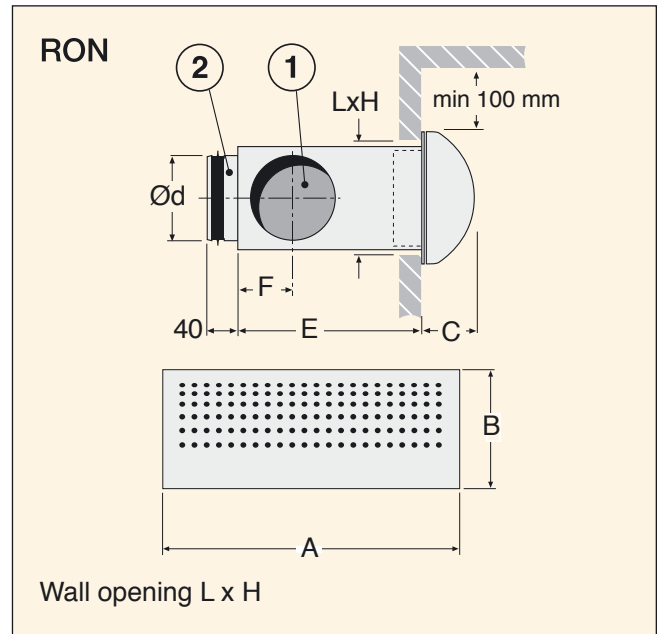
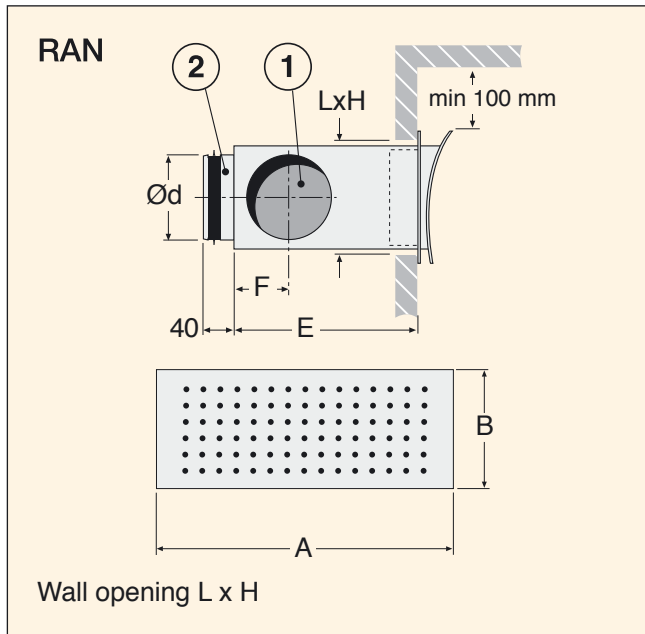
Supply air diffuser RAN 1 - 100  
1 2 3

1 = supply air diffuser RAN or RON

2 = duct connection alternatives: 1 = side  
2 = rear

3 = size 100 - 200 (= duct size of the plenum box)

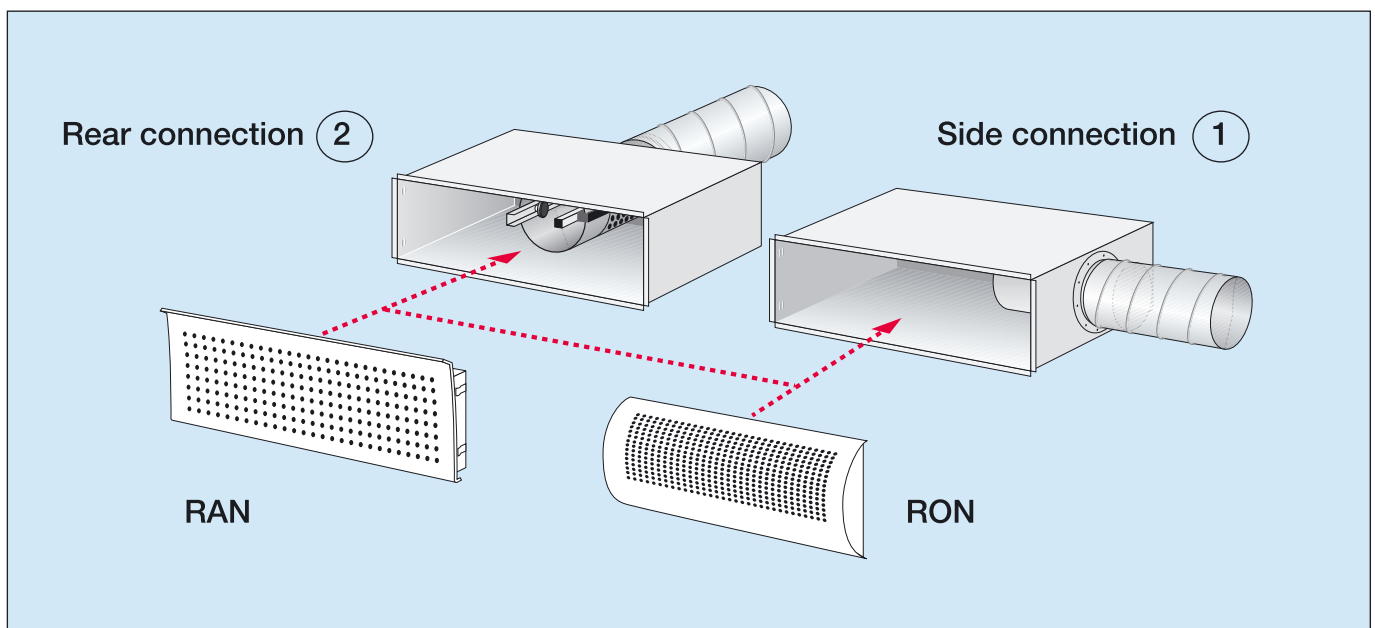
## Dimensions



Size	$\varnothing d$	A x B	L x H	E	F
100	99	450 x 195	400 x 150	320	125
125	124	550 x 195	500 x 150	320	135
160	159	550 x 240	500 x 200	390	155
200	199	650 x 295	600 x 250	450	175

Size	$\varnothing d$	A x B	L x H	E	F	C
100	99	500 x 177	400 x 150	320	125	73
125	124	600 x 177	500 x 150	320	135	73
160	159	600 x 226	500 x 200	390	155	90
200	199	700 x 282	600 x 250	450	175	100

## Structure

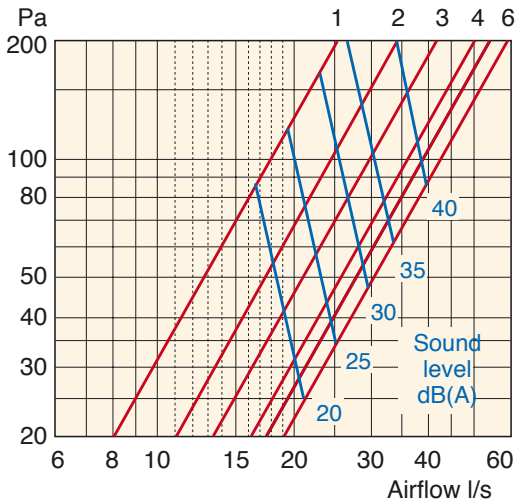


# WALL DIFFUSERS RAN and RON

## Performance

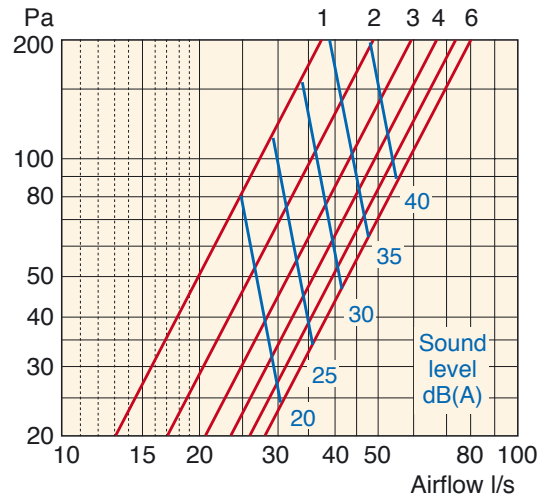
The graphs are not to be used for commissioning. Measuring is presented on page 5.

RAN / RON -100 (nominal face size 400x150)



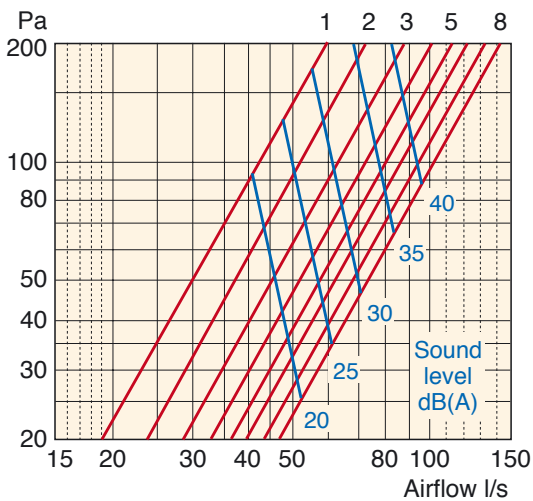
		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K <sub>okt</sub> , dB		-7	-1	8	3	-3	-10	-17	-18
		Sound attenuation							
ΔL, dB		18	13	5	9	7	7	8	10

RAN / RON -125 (nominal face size 500x150)



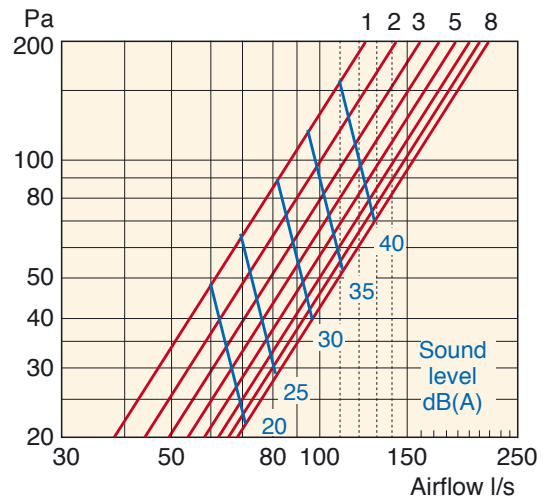
		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K <sub>okt</sub> , dB		-4	2	7	2	-2	-10	-15	-16
		Sound attenuation							
ΔL, dB		17	14	6	8	8	9	10	10

RAN / RON -160 (nominal face size 500x200)



		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K <sub>okt</sub> , dB		-1	2	5	2	-2	-9	-13	-13
		Sound attenuation							
ΔL, dB		16	12	6	7	9	10	11	10

RAN / RON -200 (nominal face size 600x250)



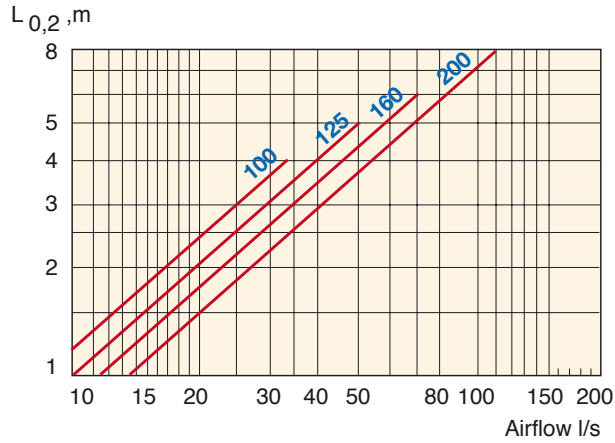
		Sound power level							
f, Hz		63	125	250	500	1 k	2 k	4 k	8 k
K <sub>okt</sub> , dB		-1	3	4	3	-1	-7	-11	-13
		Sound attenuation							
ΔL, dB		14	7	5	6	9	9	9	10

# WALL DIFFUSERS RAN and RON

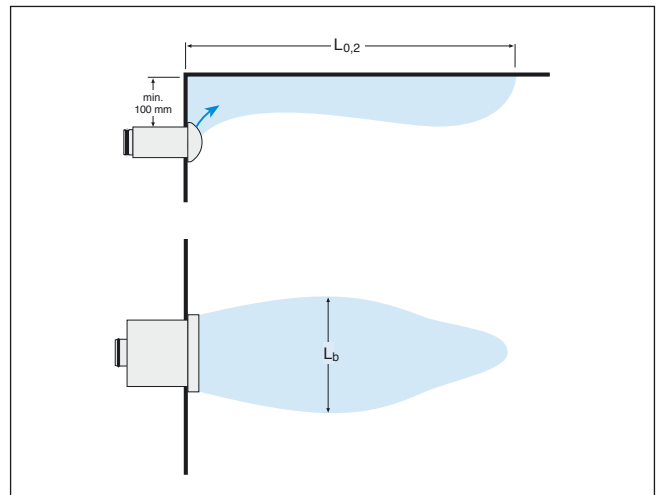
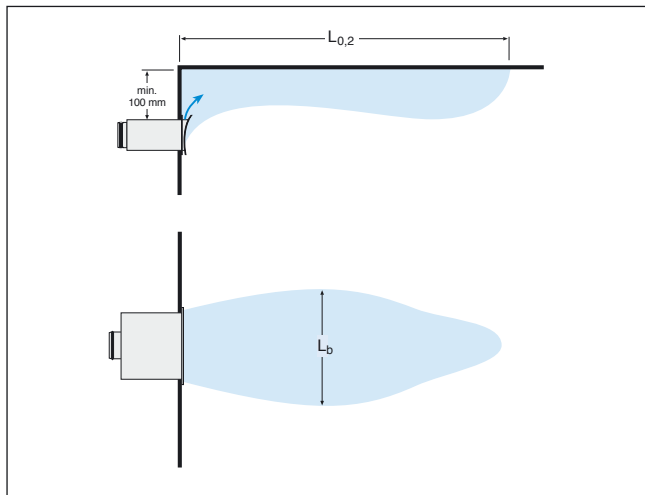
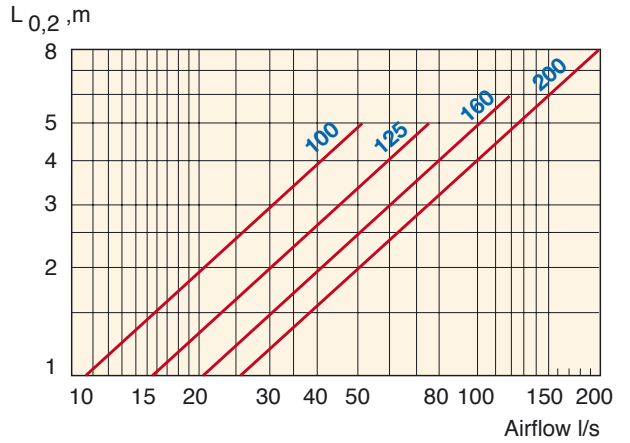
## Airflow - throw

Valid for a diffuser with the face 200 mm from the ceiling. Throw length increases 20 %, if the face is 100 mm from the ceiling.

### RAN



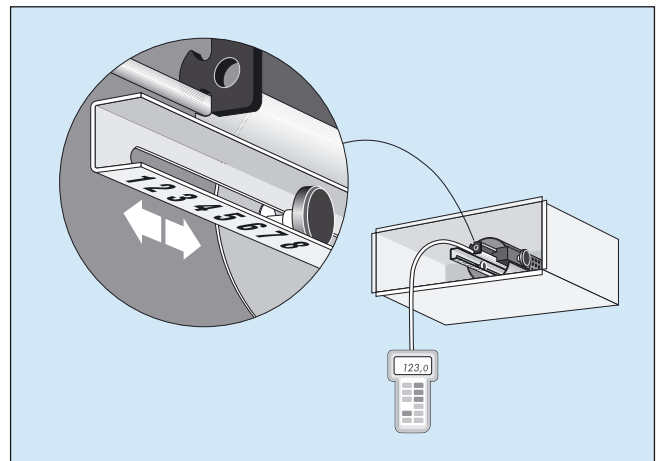
### RON



## Commissioning

$$\text{Airflow } q_v \text{ l/s} = k \times \sqrt{\Delta p_m}$$

The k-factors are connected to the measuring tube



# WALL DIFFUSERS RAN and RON

## Installation

