



Chilled Beam OKNH

- ▶ Ventilation, cooling and heating
- ▶ For T-bar mounting
- ▶ High Capacity
- ▶ Removable faceplate
- ▶ Closed type

Design:

Casing:	
material:	steel
treatment:	galvanised sendzimir
finish:	visible parts; epoxy powder
colour:	white RAL 9010
Coil:	
tubes:	copper
fin:	aluminium
finish:	none
working/test pressure:	10/15 bar

Certification:



Available types:

O K N H - - -

O chilled beam
K closed type
N ventilation and cooling
H high capacity

- **type**
600
- **model**
1200 / 1500 / 1800 / 2400 / 3000
- **nozzle**
 - **fixed:**
A1 / A2
B1 / B2 / B3
C1 / C2
 - **adjustable (extravent) AD00**
t/m AD14
(depends on model of choice)
- **coil**
 - K** coil for cooling only
 - V** coil for cooling and heating (double circuit)

For full order code see page: 454.

Remarks:

The dimensions are given in mm.
The weight is given in kg.

For optimum performance of the OKNH it is crucial to ensure the duct connection to the beam is correct. Any reduction/increase must be a minimum length of 3 times the diameter prior to the spigot.

Connection "D" is actual O.D.

Application:

The OKNH chilled beam is a very high capacity device designed for ventilation, cooling and heating of areas with ceiling heights up to 3 metres.

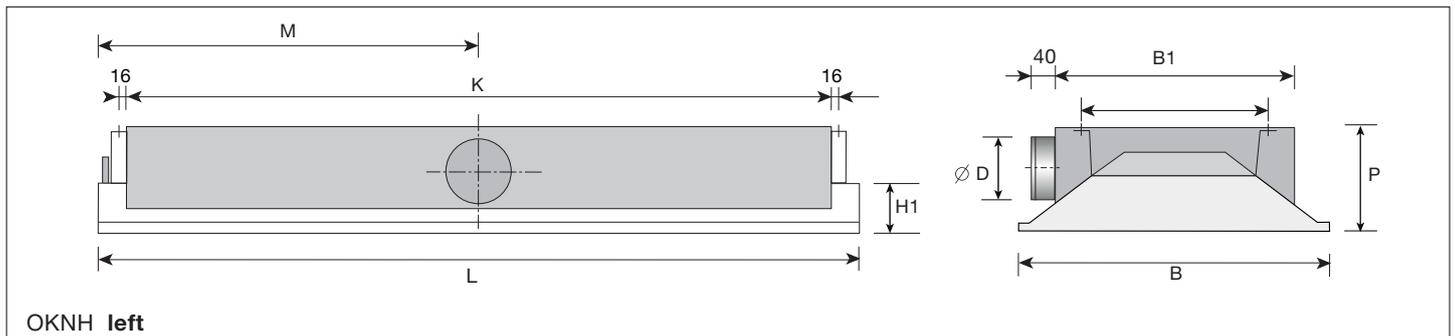
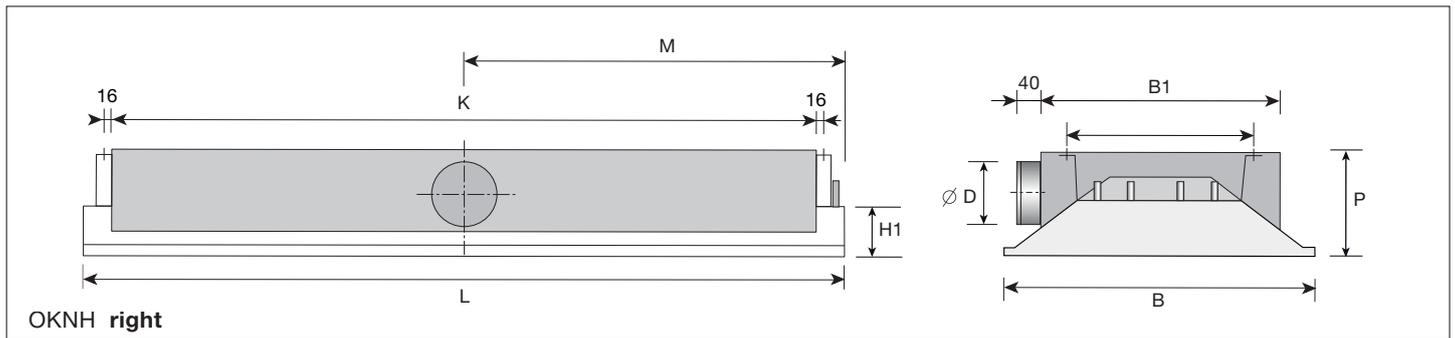
The beam has been designed for integration with suspended ceilings with 600 mm centres. Integration in a sheet metal cassette ceiling is a possibility. Module sizes range from 1200 to 3000 mm. Suitable for most suspended ceiling systems employing Tee- bar or lattice supports, the beam can be supplied in any length from 1195 to 2995 mm in 5 mm steps. We suggest to suspend the OKNH on drop rods or wires.

The closed beam supplies air from both sides and due to its high induction rate can be mounted parallel to the perimeter in the middle of an office. In order to obtain an efficient combination of ventilation and cooling capacity, three different nozzle types are available.

To facilitate nozzle and coil cleaning the perforated faceplate is removable without the need of tools.

The chilled beam type "OKNI extravent" (nozzle type AD00 t/m AD14) has additional nozzles which groups can be switched from small to large nozzles. The operation takes place via the front by sliding a magnetic closing strip. This patented system guarantees complete closure and prevents unwanted sound production. By using the extra vents primary airflow can be significantly changed without the unit air or water side affects from the work area. Change an office to meeting room, or vice versa, is easily possible with this unit.

Dimensions:



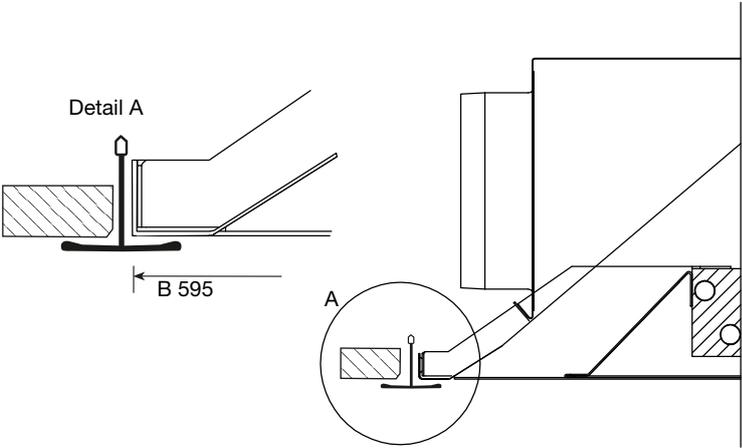
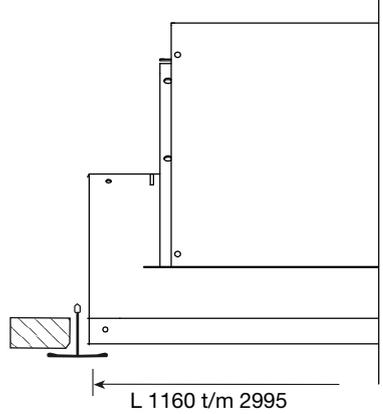
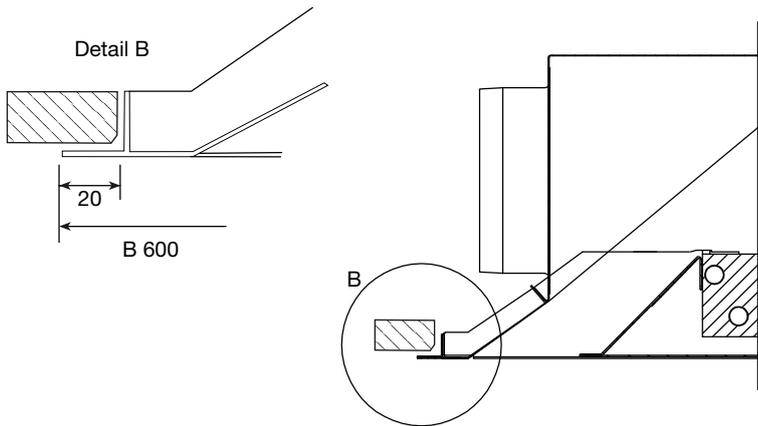
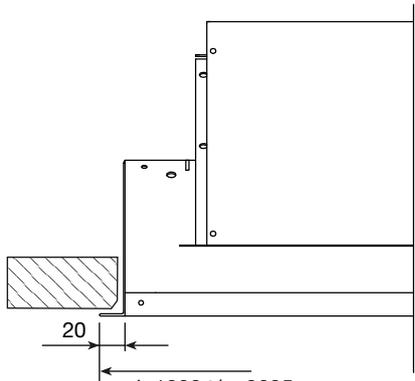
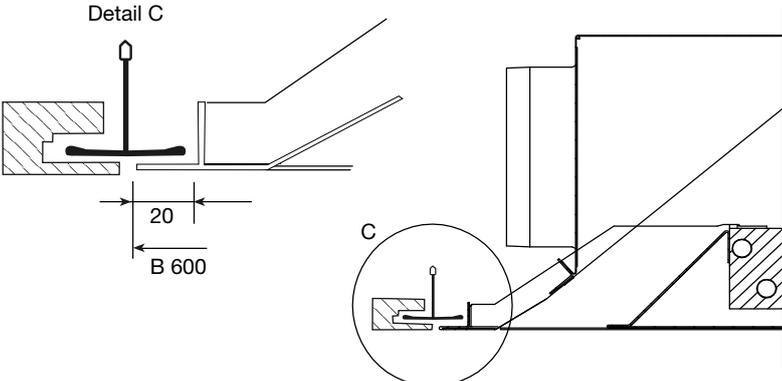
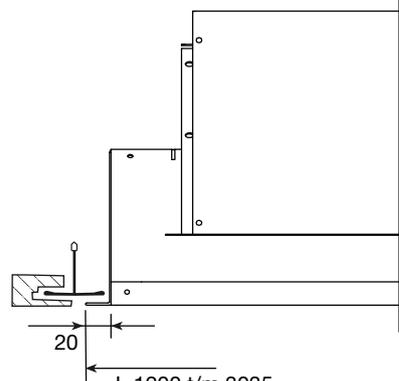
Dimensional data:

type	model	L from/to	B	B1	H1	D	M	P	K	weight
OKNH 600	1200	1195 / 2995	595	453	106	123	602	205	1100	22
	1500	1495 / 2995	595	453	106	123	752	205	1400	29
	1800	1795 / 2995	595	453	106	123	902	205	1700	34
	2400	2395 / 2995	595	453	106	158	1202	240	2300	46
	3000	2995 / 2995	595	453	106	158	1502	240	2900	57

*) Special widths are available on request



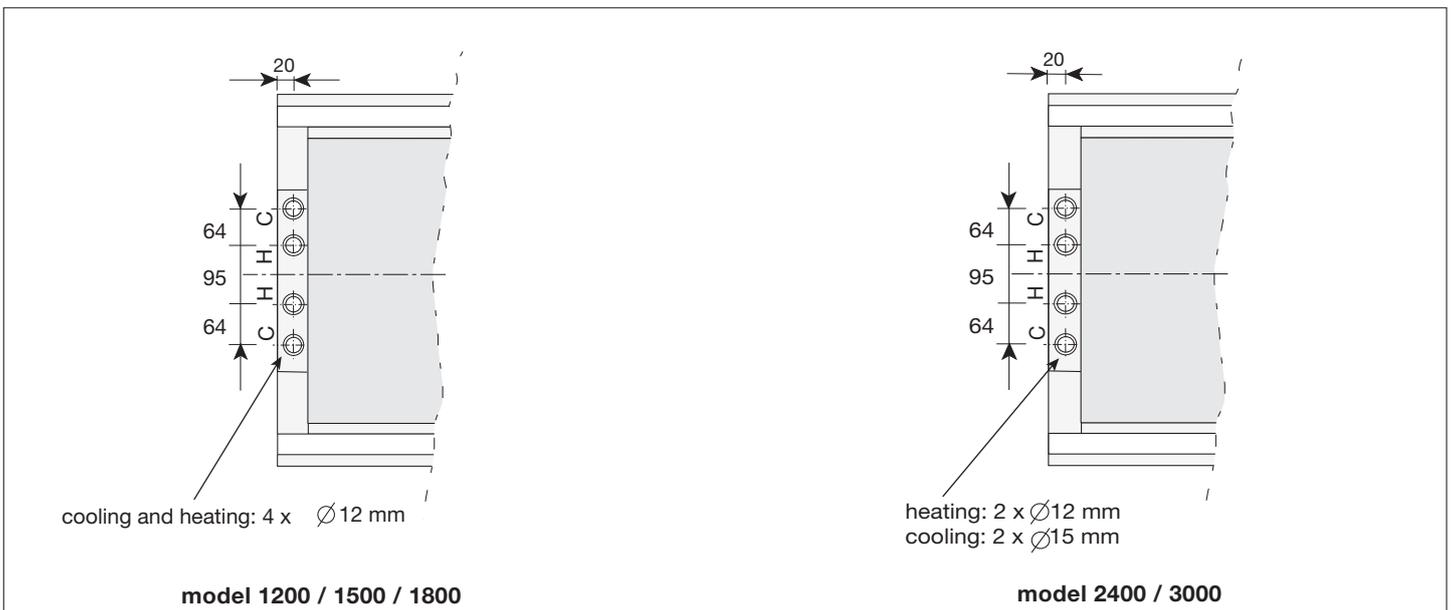
Side-edge configuratie:

Actual width B chilled beam: Dimensions in mm. Tolerance ± 2.0 mm.	Actual length L chilled beam: Tolerance: + 0 / -4 mm.
<p>1 T-bar mountable</p> 	
<p>2 Surface mounted</p> 	
<p>3 Concealed ceiling system</p> 	



Water connections:

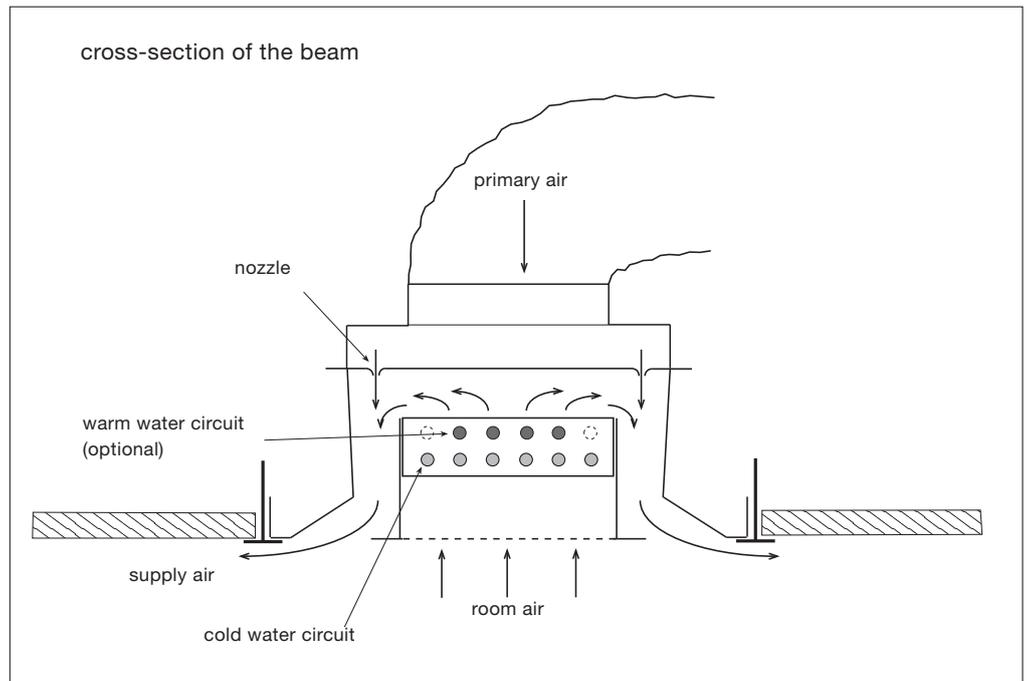
OKNH cooling and heating:





System technology:

The primary air is supplied through the nozzles at a very high velocity. This results in a strong induction effect which causes a flow of room air over the coil via the mesh faceplate. The combined room air and primary air is then directed through the integrated slot outlets and supplied to the room. Whilst passing over the coil the air can be either cooled or heated (optional), depending on the requirements in the room.



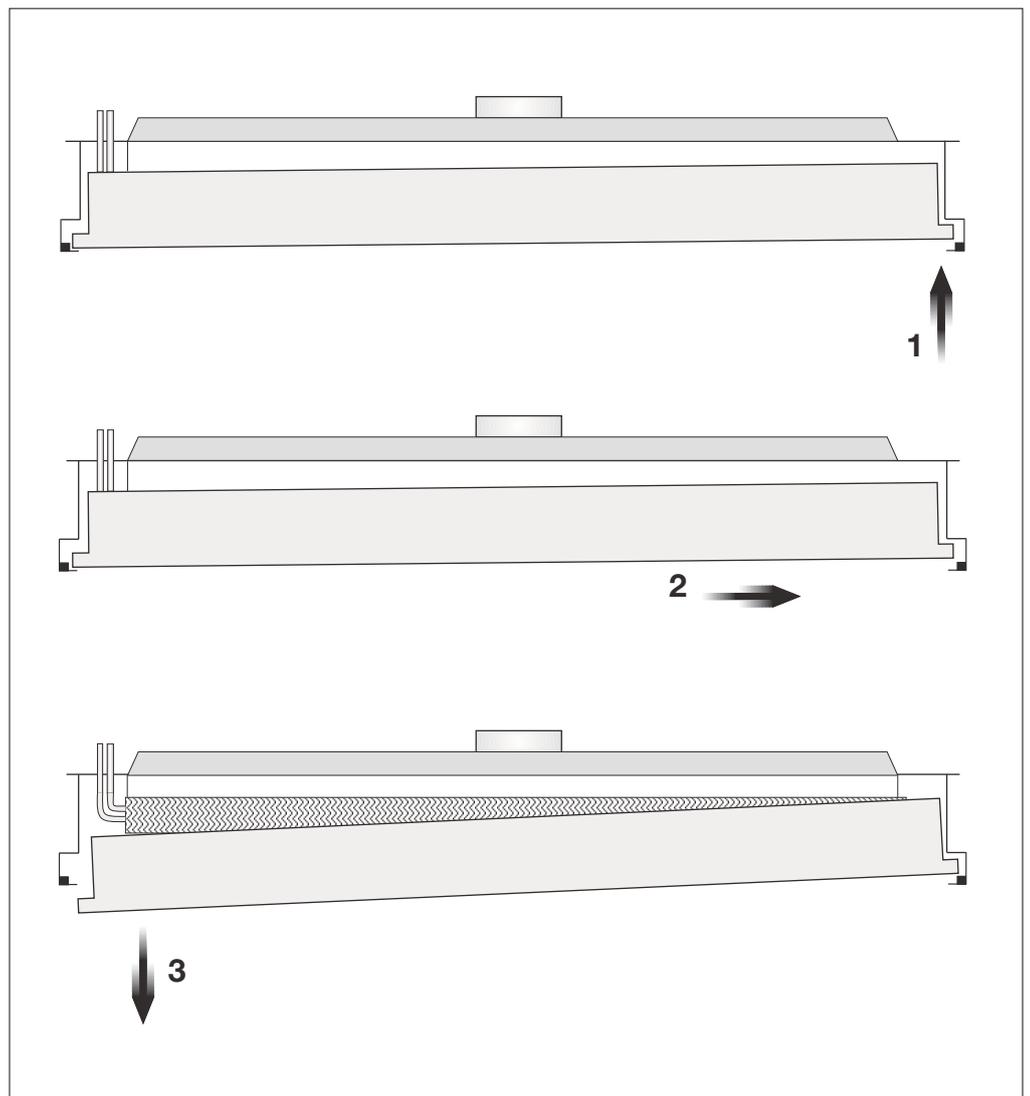
Maintenance of the middle segment:

For maintenance of the beam the perforated front can be removed. This is very simple and can be done without additional tools.

Instructions:

- 1 Push the far end on either side of the perforated face plate next to the endcap upward in the middle part of the perforation (5 mm).
- 2 Move the face plate further in to the endcap on one end.
- 3 Beware! The other side of the face plate will come out of it's endcap. The complete face plate can be removed now. It is still connected to the unit by a safety catch on both sides of the face plate.

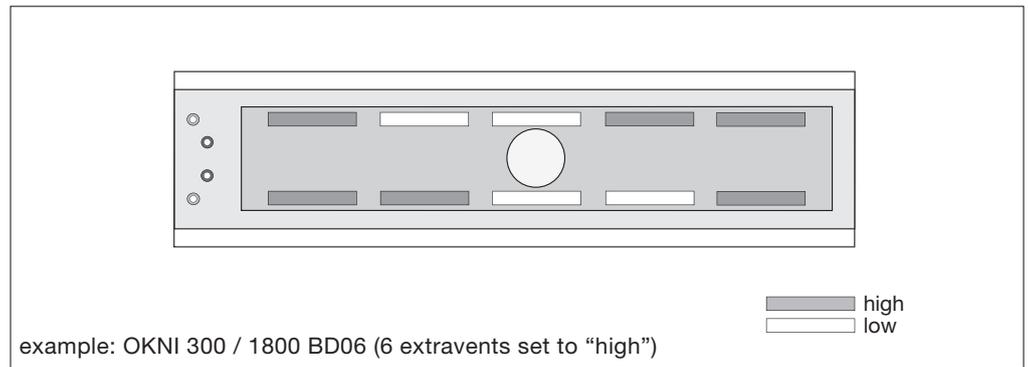
Fitting the face plate is done in reverse order.



Factory settings

extravents:

By choice of nozzle type AD (extravent execution) the chilled beams will be set in the factory according to a fixed protocol. This means that extravents will be set to “high” from the outside. See the drawing on the right as an example of OKNI 300/1800 nozzle type BD06. When the units have to be set differently, we advise you to contact our sales department.



Extravents control:

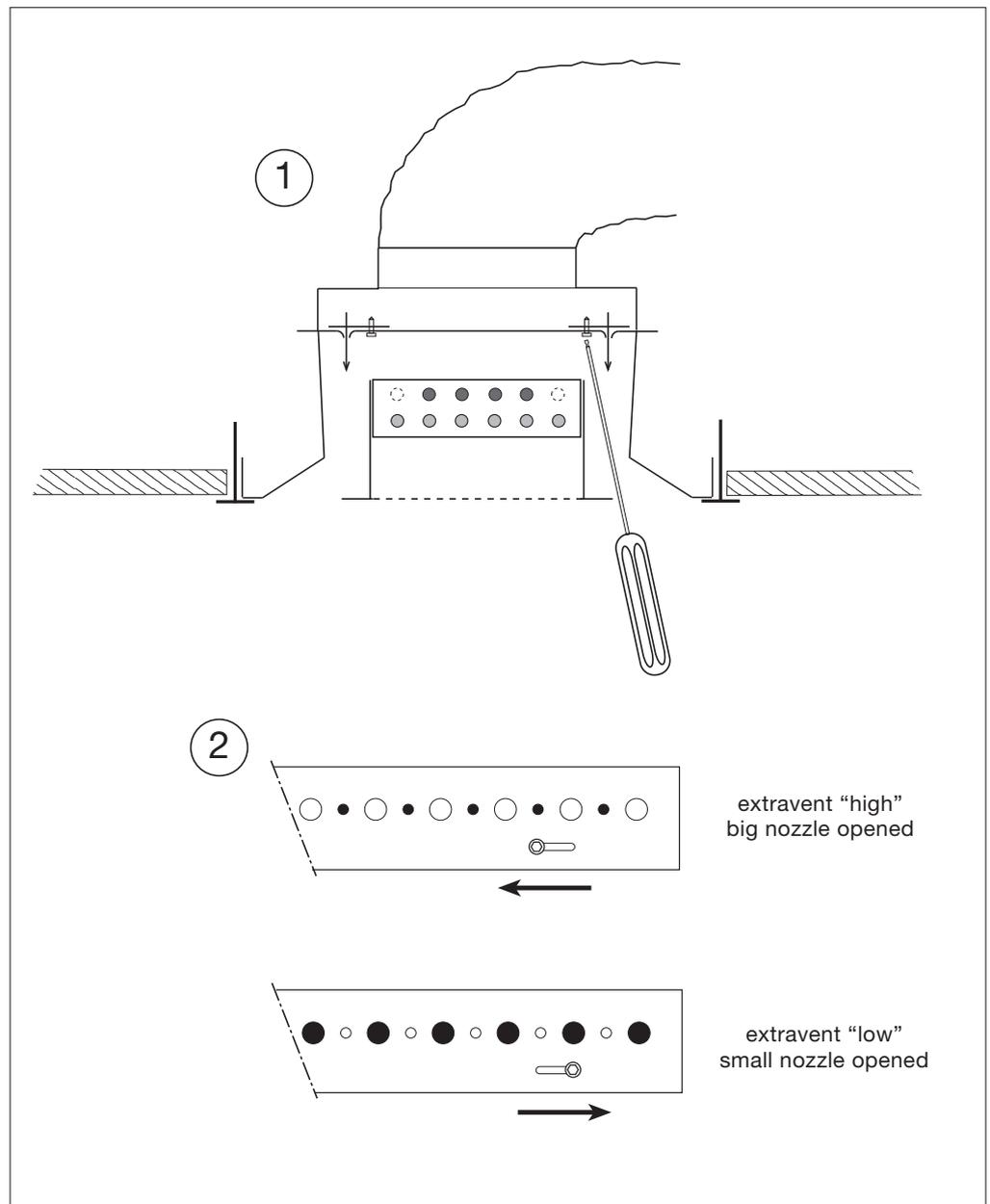
By means of extra nozzles it is possible to raise or reduce the net nozzle free area. This can be done in sections of grouped nozzles. In this way the primary airflow can be raised or reduced at a constant inlet pressure or the ratio between primary flow and inlet pressure can be changed.

One extravent consists of sliding magnetic strip fitted on the plenum box side of the nozzle plate. At each end of the strip two socket head screws are fitted. The screws can be reached through the discharge slot with a socket head screwdriver of at least 110mm length.

Adjusting the extravents:

- Unscrew the screws 1 full turn ①
- Move 1 of the screws to either the “low” or high” position. Intermediate settings are not allowed. The setting is low. ②
- Tighten both screws.

Consult CB-Select for the data selection.



Extravents per model:

model	amount extravents
1200	6 (AD00 t/m AD06)
1500	8 (AD00 t/m AD08)
1800	10 (AD00 t/m AD10)
2400	12 (AD00 t/m AD12)
3000	14 (AD00 t/m AD14)



Order and option codes:

OKNH 600/1200 A1 K 2 L O - - O I O 595 x 1195 9010 55

Type _____
600

Model _____
1200 - 1500 - 1800 - 2400 - 3000

Nozzle _____
A1 - A2
B1 - B2 - B3
C1 - C2
AD00 to AD14 (depends on model choice)

Coil _____
K cooling only
V cooling and heating
O none (dummy)

Spread pattern _____
2 2-way (standard)
3 1-way left
4 1-way right

Air connection position _____
L left
R right

Water connections _____
O standard

Air connection _____
- standard see table page: 449.

Plenum _____
O standard see table page: 449.

Diffuser _____
O not applicable

Edge _____
1 T-bar mounting
2 surface mounted
3 concealed grid

Flow Pattern Control _____
O not applicable
F FPC

Actual width (mm) _____
595 (depends on edge configuration)

Actual length (mm, actual length = L-2) _____
depending on model size and edge configuration

RAL colour _____
9010 (standard)

Gloss _____
55% (standard)

Position of air and water connections:

