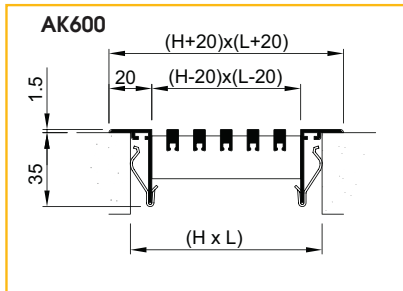
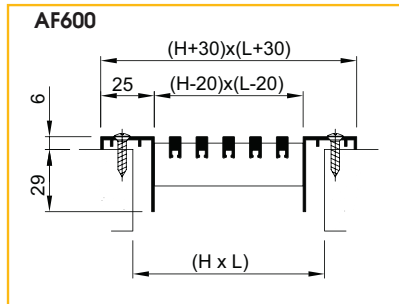
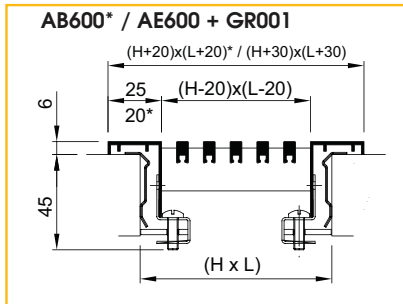
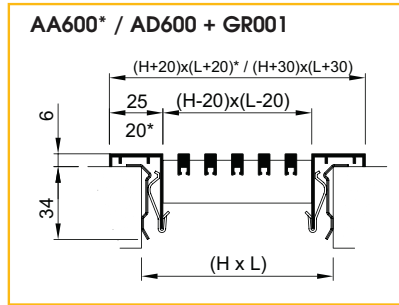
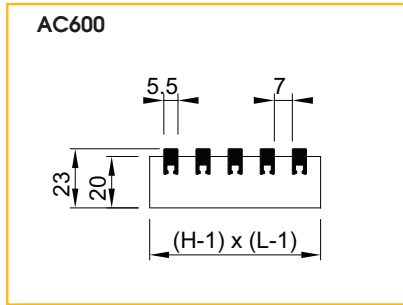


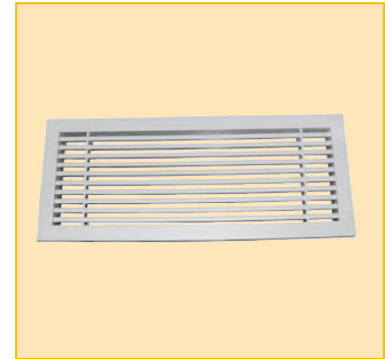
BAR GRILLE

TYPE: A-600

Installation dimensions



L: nominal length
H: nominal height
All dimensions in mm



Application

The bar grille type A-600 is used for the supply and exhaust of cooled or heated air in facilities such as offices, shopping centres, ... where strict aesthetic construction is desired. The grilles cannot be used for floor mounting.

Technical information

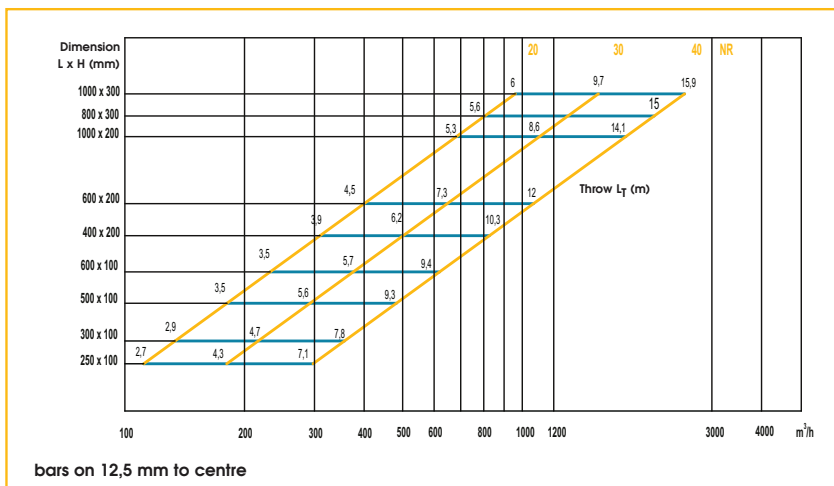
Characteristics:

- straight bars or with 15° deflection
- bars on 12,5 or 16^{2/3} mm to centre
- available in multiples of 1 mm in length and 12,5 mm in height
min L = 100 mm, max L = 2000 mm
min H = 37,5 mm, max H = 600 mm
- GT007 only available in multiples of 25 mm as well in length as in height (min H = 75 mm). **See next page *1**
- linear grilles (= grilles consisting of intermediate and end pieces) only available in heights 75, 100, 150, 200, 300 mm

Construction:

- extruded aluminium frame and bars
- **in case of construction with flow equalizer**, the adjustable vanes are integrated in the frame and form a whole with the grille. Aluminium sheet vanes (min. H = 75, max H = 525 mm, in steps of 25 mm). **See next page *2**
- finish satin anodised

Fast selection diagram



Throw factor is based on a v_R of 0,17 m/s in the occupied zone.

For a detailed selection and other dimensions, see p. 1 182.

Valid only for supply.

BAR GRILLE

TYPE: A-600

Specifications description

Example:

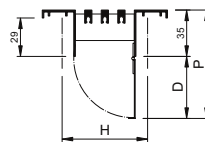
Aluminium grille with fixed horizontal straight bars for wall or window sill mounting, equipped with a damper. The grille is satin anodised.

Type: AA600 + GT007
nom. dim. (L x H) ... x ... mm

Accessories

- **GT007:** damper with vertical opposed blades, galvanised steel sheet, painted black (for details, see p. 1 290)
- **GR001:** mounting frame in rollformed, galvanised steel sheet (only for AA/AB/AD/AE/AN/AV600)
- flow equalizer with aluminium sheet, satin anodised vanes
- **Damper type: ..9**
Only available for the nominal heights 38, 50 and 63 mm.
NOT AVAILABLE SEPARATELY.

H	D	P
38	21	56
50	33	67
63	46	81



Bar types

Deflection 0°

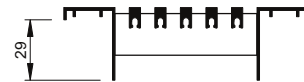


Deflection 15°

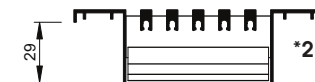


Delivery possibilities

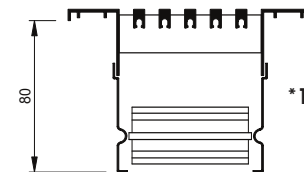
- **A-600, 620, 640, 660**
Supply and exhaust grille with fixed horizontal bars.



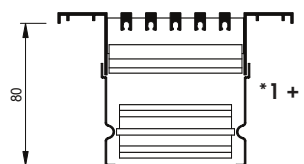
- **A-610, 630, 650, 670**
Supply grille with fixed horizontal bars complete with flow equalizer with adjustable vertical bars.



- **A-607, 627, 647, 667**
Supply and exhaust grille same as A-600/620/640/660 complete with opposed blade damper.



- **A-617, 637, 657, 677**
Supply grille same as A-610/630/650/670 complete with opposed blade damper.



*1+2

Attention:

The AC execution is not deliverable with flow equalizer or damper.

How to order

AA600, dimension 600 x 200 mm, with damper GT007

a) Grille

A	A	6	0	7	-	-	0	6	0	0	0	3	0	0
L											H			

- : grille in one piece
- E: end piece
- M: intermediate piece
- L: left end piece (for deflection 15°)*
- R: right end piece (for deflection 15°)*
- C: end piece, deflection 0° or deflection 15° to the inside
- D: end piece deflection 0° or deflection 15° to the outside
- 0: without damper
- 4: with access doors right
- 5: with access doors left
- 7: with damper
- 9: with damper for heights 38, 50 and 63mm

- 0: bar grille only, on 12,5 mm to centre
- 1: bar grille and flow equalizer, on 12,5 mm to centre
- 2: bar grille, 15° deflection, on 12,5 mm to centre
- 3: bar grille, 15° deflection, on 12,5 mm to centre and flow equalizer
- 4: bar grille, on 16^{2/3} mm to centre
- 5: bar grille, on 16^{2/3} mm to centre and flow equalizer
- 6: bar grille, 15° deflection, on 16^{2/3} mm to centre
- 7: bar grille, 15° deflection, on 16^{2/3} mm to centre and flow equalizer

- A: frame width 20 mm, friction spring fixing
- B: frame width 20 mm, concealed screw fixing
- D: frame width 25 mm, friction spring fixing
- E: frame width 25 mm, concealed screw fixing
- F: frame width 25 mm, screw fixing
- K: frame width 20 mm straight, friction spring fixing (without mounting frame GR001)
- M: frame width 35 mm, screw fixing
- N: frame width 35 mm, friction springs
- V: frame width 35 mm, concealed screw fixing
- C: only core, without frame

b) Mounting frame

G	R	0	0	1	-	-	0	6	0	0	0	3	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- : one grille
- E: end piece
- M: middle piece

* NOTE: L (left) and R (right) looking at the face of the bar grille having a downward deflection.

BAR GRILLE

TYPE: A-600

Access Doors

The A-600 grilles series can be provided with a left or right access door as of a H = 100 mm nominal.

How to order:

A	D	6	0	4	-	-	0	6	0	0	0	0	2	0	0
						L					H				

4: with access doors right*
5: with access doors left*

A, B, D, E, F, K, M, N or V

* NOTE: L (left) and R (right) looking at the face of the bar grille having a downward deflection.

Corner Sections

The corner sections are being manufactured in one piece with an inner dimension of 300 x 300 mm nominal (see drawing). The corner sections are standard 90°

How to order:
AD600 corner section, H = 200 mm

A	D	6	0	0	C	-	0	3	0	0	0	0	2	0	0
						inner dimension					H				

0: 0° defl.
2: 15° defl.

C: corner section 0° deflection or 15° inwards
D: corner section 0° deflection or 15° outwards

A, B, D, E, F, K, M, N or V

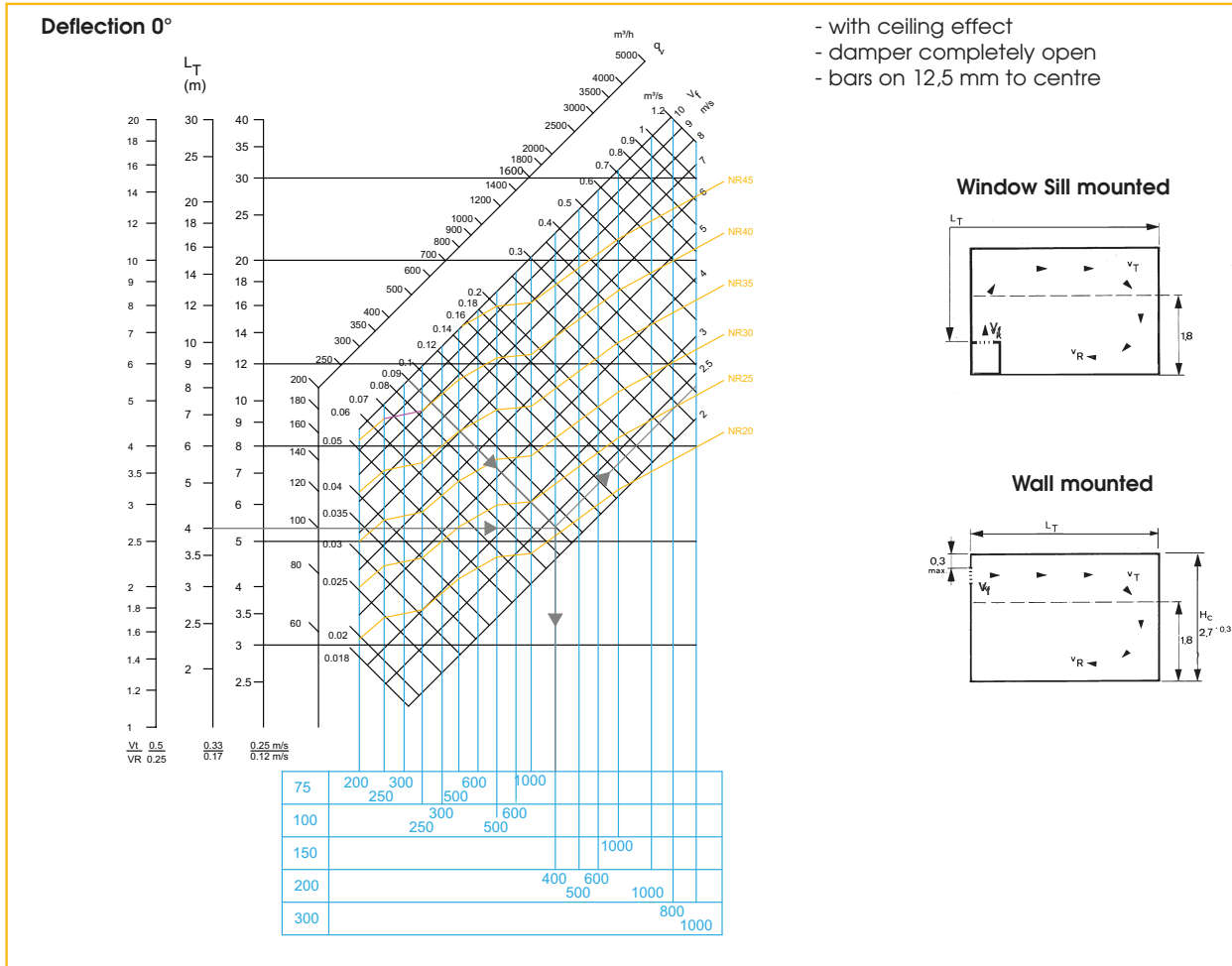
Montage

execution	AA	AB	AC	AD	AE	AF	AK	AM	AN	AV
window sill mounting			x			x	x	x		
wall mounting	x	x		x	x	x	x	x	x	x
friction springs	x			x			x		x	
concealed screw		x			x					x
visible screw fixing						x		x		

BAR GRILLE

TYPE: A-600

Selection diagram - supply



Af - values (m ²)								
H (mm)	L (mm)							
	200	250	300	400	500	600	800	1000
75	0,006	0,007	0,009	0,012	0,015	0,018	0,024	0,030
100	0,008	0,010	0,013	0,017	0,022	0,026	0,035	0,044
150	-	0,017	0,020	0,028	0,035	0,042	0,057	0,071
200	-	-	-	0,038	0,048	0,058	0,079	0,099
300	-	-	-	-	0,075	0,091	0,122	0,154

Correction factors:

- Throw correction factor without ceiling effect
- Correction factors for vertical vane deflection of flow equalizer (p. 1 183)
- Correction factors for large linear grilles

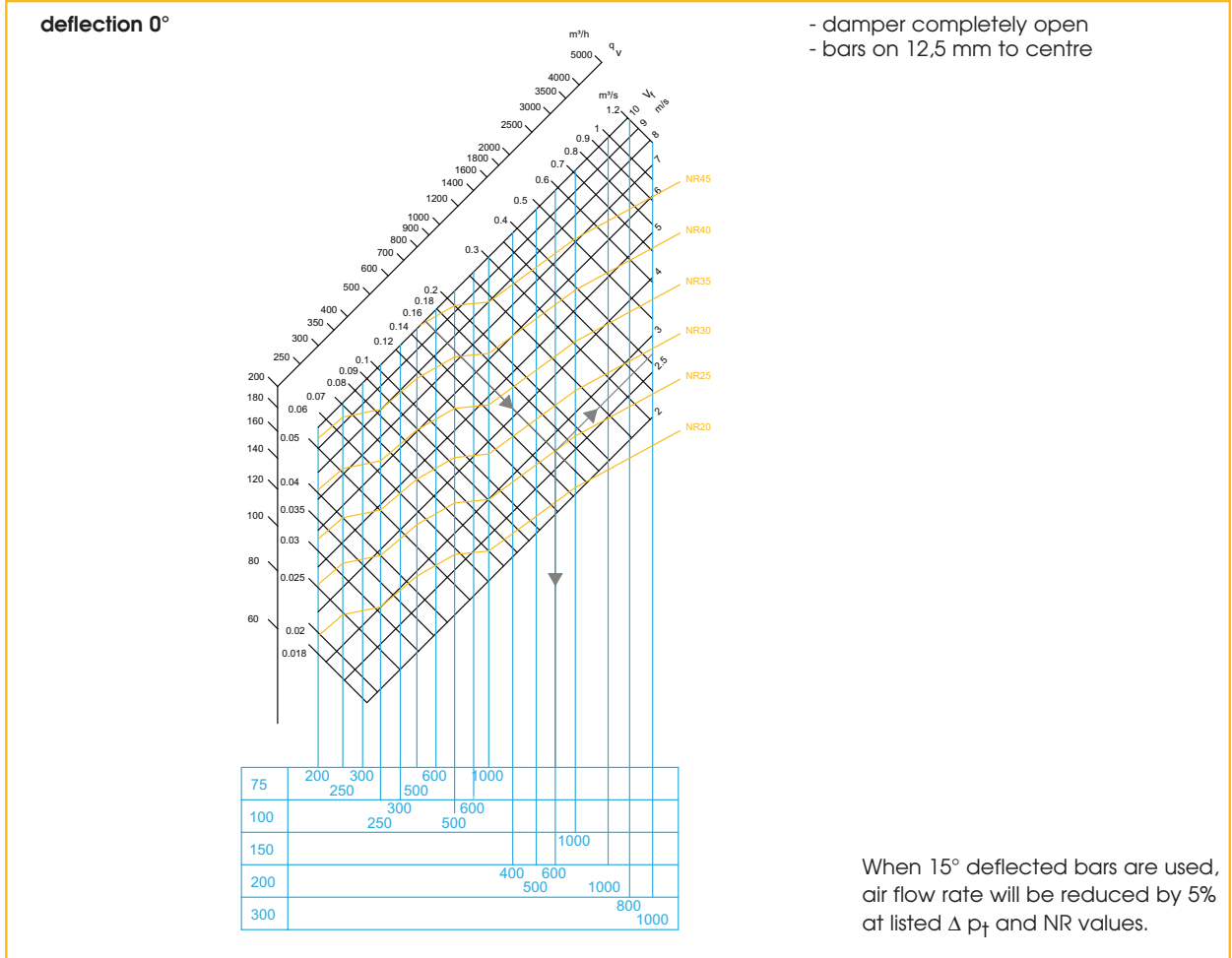
Distance between ceiling and supply grille	Correction
≥ 0,9 m	L _T x 0,75

grille length (m)	throw correction	noise level correction (NR)
1 - 2	L _T x 1,00	+ 0 NR
2 - 6,5	L _T x 1,10	+ 5 NR

BAR GRILLE

TYPE: A-600

Selection diagram - exhaust



Af - values (m²)								
H (mm)	L (mm)							
	200	250	300	400	500	600	800	1000
75	0,006	0,007	0,009	0,012	0,015	0,018	0,024	0,030
100	0,008	0,010	0,013	0,017	0,022	0,026	0,035	0,044
150	-	0,017	0,020	0,028	0,035	0,042	0,057	0,071
200	-	-	-	0,038	0,048	0,058	0,079	0,099
300	-	-	-	-	0,075	0,091	0,122	0,154

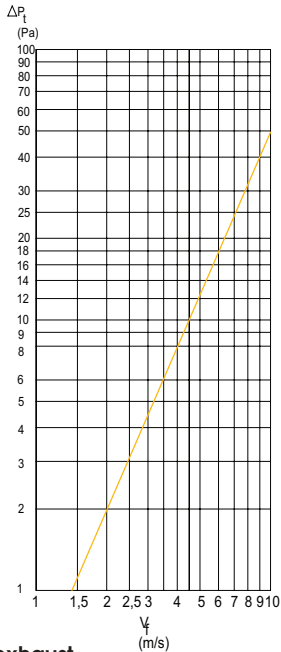
BAR GRILLE

TYPE: A-600

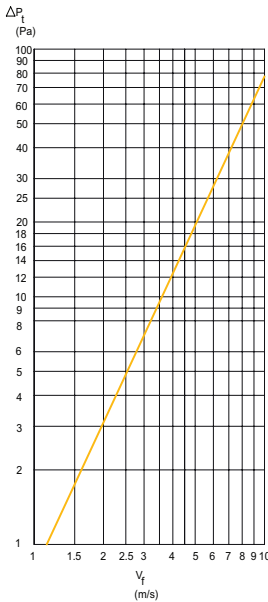
Pressure loss - supply

Example

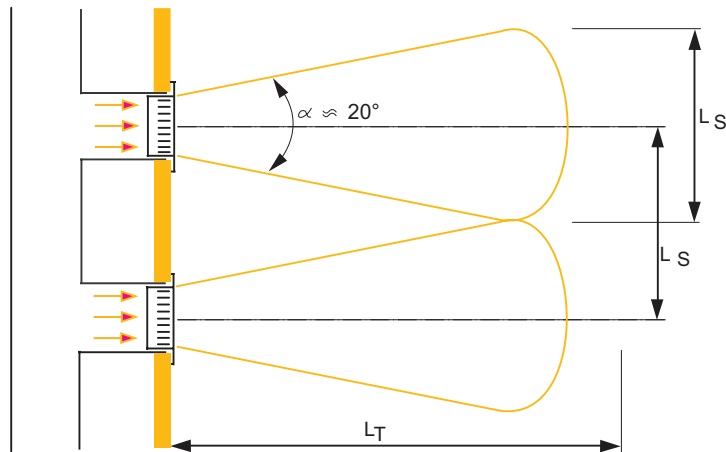
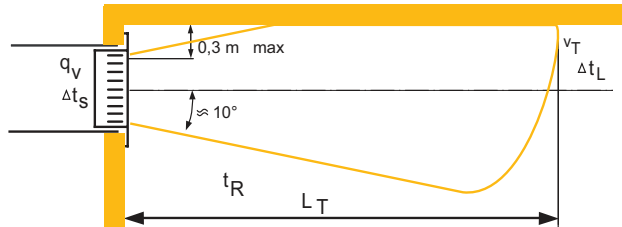
supply



exhaust



- bars on 12,5 mm to centre
- without damper or with damper fully open



SUPPLY

Selection data:

Air flow rate $q_v = 0,09 \text{ m}^3/\text{s}$
Throw $L_T = 4 \text{ m}$ at $v_T = 0,33 \text{ m/s}$.

Solution:

Grille 400 x 200 mm
Supply air velocity $v_k = 2,4 \text{ m/s}$.
Noise level NR 21
Total pressure loss $\Delta p_t = 59 \text{ Pa}$.
Without damper

EXHAUST

Selection data:

Exhaust air flow rate $q_v = 0,16 \text{ m}^3/\text{s}$
Noise level NR 25

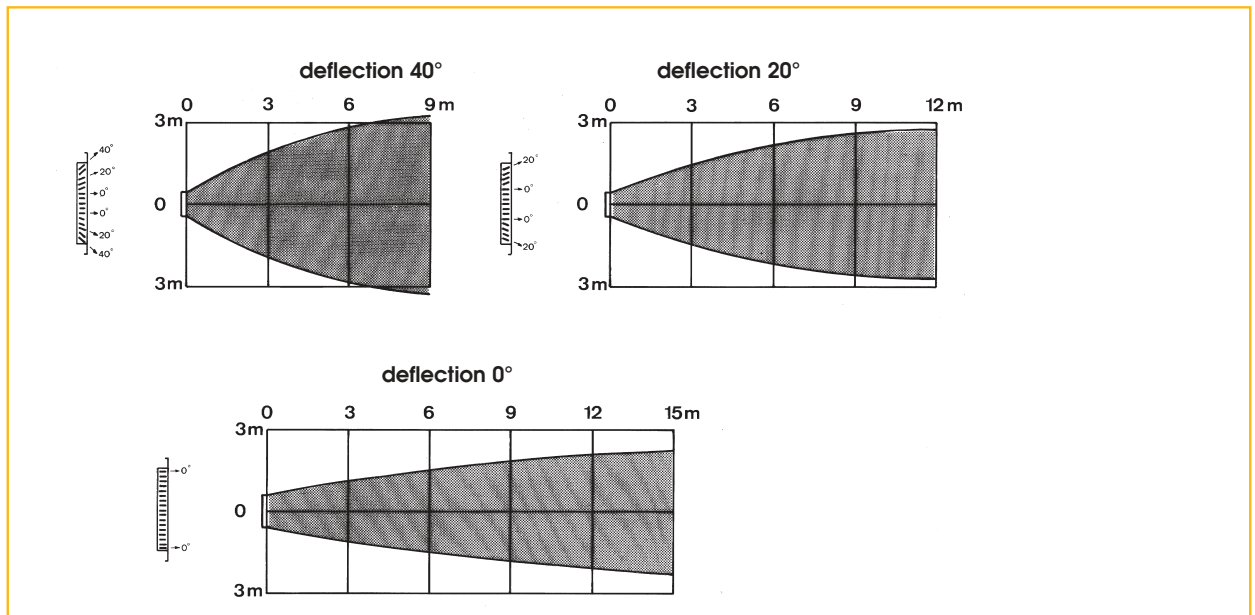
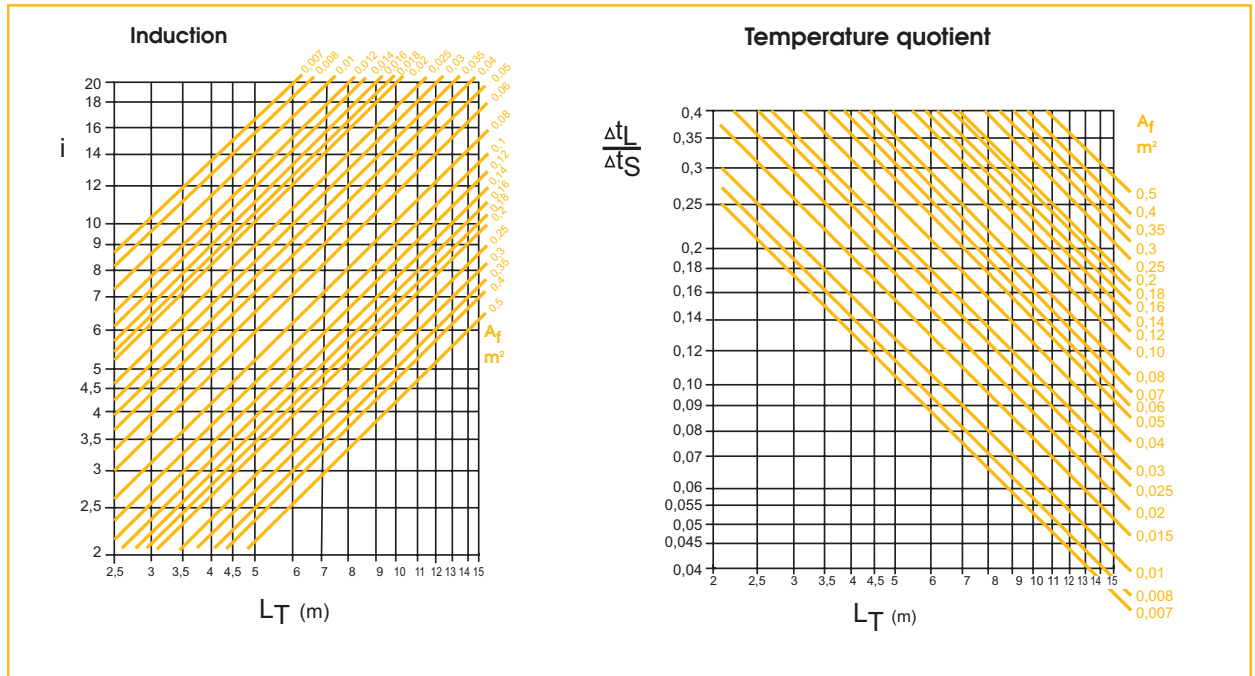
Solution:

Grille 600 x 200 mm
Air velocity $v_f = 2,7 \text{ m/s}$
Total pressure loss $\Delta p_t = 5,5 \text{ Pa}$

BAR GRILLE

TYPE: A-600

Induction and temperature quotient with ceiling effect (also valid for linear grilles)



Correction factors	Type	Deflection	A _f	v _f	L _T	NR	i	$\frac{\Delta t_L}{\Delta t_S}$
Correction factors for vertical vane deflection of flow equalizer	600	20°	x 0,87	x 1,15	x 0,85	+ 3	x 1,4	x 0,7
		40°	x 0,80	x 1,25	x 0,75	+ 5	x 2	x 0,5