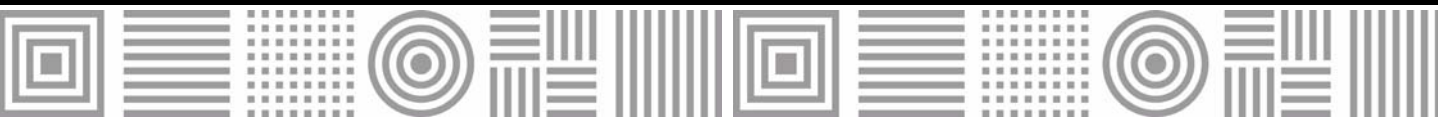


## RMT eggcrate grilles



MADEL®

The **RMT-A** series grilles are designed to be used in air-conditioning, ventilation, and heating.

According to the model, they are mounted on walls, ceilings or false ceilings. They form a square netting, designed to be used in extraction.

**Models:**

**RMT**

**RMT-KLIN**

**RMT-MOD**

## RMT

### Classification

**RMT-A** Square netting grilles of 13x13 mm.

### Material

Frame in extruded aluminium and netting in strips of laminated aluminium.

All grilles are provided with a seal on the back of the frame in order that the perimeter in contact with walls, ceiling, ducts, etc... is airtight.

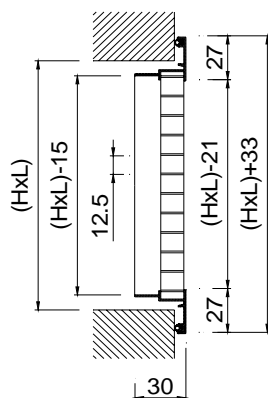
### Additional accessories

**SP** Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. Constructed from electro-zinc steel, painted in black colour. The damper is held in place by "S" springs.

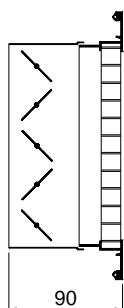
**PFT** Filter box made in galvanised steel with mesh and filter included (K/8 efficiency EN 779 G3). The grille is held in place by threaded knobs.

**CM** Mounting frame constructed from galvanised steel. It is delivered in 4 linear elements to assemble. When assembling with metallic frame, measures H and L increase 8 mm.

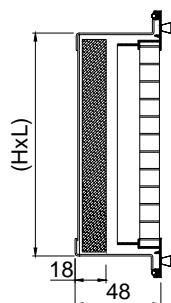
### RMT-A



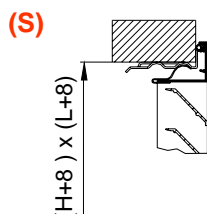
### RMT-A+SP



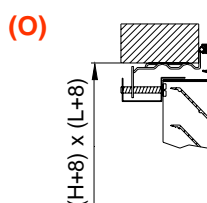
### RMT-A+PFT



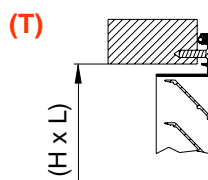
### Fixing systems



**(S)** The grille is fixed in place with clips. It requires the CM mounting frame.



**(O)** The grille is fixed in place by a hidden screw. It requires the CM mounting frame.



**(T)** The grille is fixed in place with screws.

**1)** The filter box is fixed in place with screws or sidepieces. The grille is held to the PFT by threaded knobs.

### Finishes

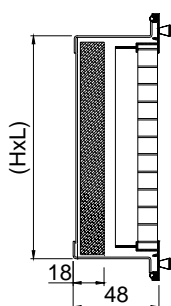
**AA** Matt silver anodised.

**M9016** Painted in white similar to RAL 9016.

**R9010** Painted in white RAL 9010.

**RAL...** Painted in other RAL colours.

### RMT-A+PFT



### Specification text

Supply and mounting of egg-crate grille for air return series **RMT-A+SP+CM (S) AA dim. LxH**, constructed from aluminium and anodised in matt silver **AA** with opposed blades volume damper from electro-zinc steel in black colour **SP**, invisible fixing by clips **(S)** and mounting frame **CM**. Manufacturer **MADEL**.

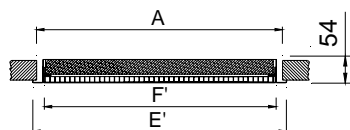
## RMT-KLIN

### Classification

**RMT-KLIN** Square netting grilles of 13x13 mm, hinged removable core without tools, by pressing on the invisible PUSH fasteners. By slightly pressing on the invisible latch, the core opens, remaining hinged on one side. If necessary the core can be easily removed for its maintenance, that conforms with the regulations required for maintenance of HVAC installations.

**RMT-45-KLIN** Square netting grille at 45° of 13x13 mm.

### RMT-KLIN / RMT-KLIN+PFT



### RMT-KLIN

	E	A	F
600	595	569	545
625	620	594	570
675	670	644	620

### RMT-45-KLIN

	E	A	F
600	595	569	545
625	620	594	570

### Material

Grilles constructed from aluminium and galvanised steel.

### Additional accessories

**PFT** Filter box made in galvanised steel with mesh and filter included (K/8 class EN 779 G3).

**PLFZ** Plenum box fixed to the grille with an upper connection, made in galvanised steel.

**...-R** Plenum box with a flow damper in the spigot.

**.../L/** Plenum box with a lateral connection.

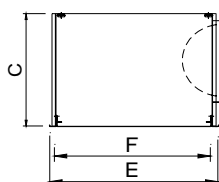
**.../AIS/** Plenum box thermo acoustically insulated by a foam with a coefficient of thermal conductivity of 0,04 w/mk. This foam complies with the fire reaction specifications:

UNE 23-727 M2

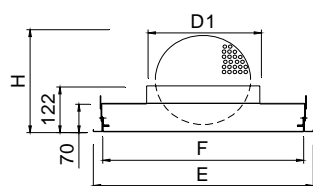
NFP 92-501 M2

DIN 4102 M2

### PLFZ/L/...-R



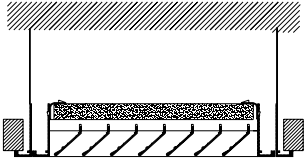
### PLFZ...-R



	E'	A	F'	E	F
600	595	569	545	595	545
625	620	594	570	620	570
675	670	644	620	670	620



(1)



### Fixing systems

1) Supports to hang the assembly from the ceiling with drops rods.

### Finishes

**M9016** Painted in white similar to RAL 9016.

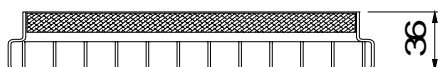
**R9010** Painted in white RAL 9010.

**RAL...** Painted in other RAL colours.

### Specification text

Supply and mounting of egg-crate grille for air return with hinged removable core without tools, by pressing on the invisible PUSH fasteners series **RMT-KLIN+PFT M9016 dim. LxH**, with filter type K/8 efficiency EN 779 G3, constructed from aluminium paint in white **M9016**.  
Manufacturer **MADEL**.

### RMT-MOD-PFT



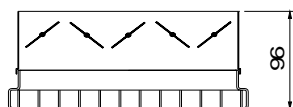
### RMT-MOD

595x295
595x595
620x620

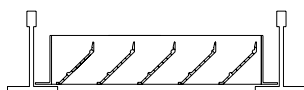
### RMT-45-MOD

595x595
---------

### RMT-MOD+SP



(1)



## RMT-MOD

### Classification

**RMT-MOD** Square netting grille of 13x13 mm, specially designed to replace a false ceiling tile.

**RMT-45-MOD** Square netting grille at 45° of 13x13 mm.

**...-MOD-PFT** Grilles with filter type K/8 efficiency EN 779 G3.

### Material

Grilles constructed from aluminium and galvanised steel.

### Additional accessories

**SP** Opposed blades damper to regulate the air flow. The damper is operated by an easily accessible key inside the grille. Constructed from electro-zinc steel, painted in black colour. The damper is held in place by "S" springs.

### Fixing systems

**1)** Suspended at the false ceiling. Replace a false ceiling plate.



### Finishes

**AA** Matt silver anodised.

**M9016** Painted in white similar to RAL 9016.

**R9010** Painted in white RAL 9010.

**RAL...** Painted in other RAL colours.

### Specification text

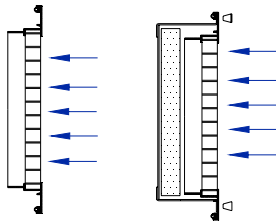
Supply and mounting of egg-crate grille for air return series **RMT-MOD+PFT AA dim. 595x595**, with filter type K/8 efficiency EN 779 G3, designed to replace false ceiling tile, constructed from aluminium and anodised in matt silver **AA**. Manufacturer **MADEL**.

## RMT

FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,009	0,013	0,017	0,021	0,025	0,028	0,032	0,036	0,043	0,05	0,056	0,064	0,072
150	0,016	0,022	0,028	0,034	0,040	0,046	0,052	0,058	0,070	0,08	0,092	0,104	0,116
200	0,022	0,030	0,038	0,047	0,055	0,064	0,072	0,080	0,097	0,11	0,128	0,144	0,160
250	0,028	0,038	0,049	0,06	0,071	0,081	0,092	0,103	0,124	0,142	0,162	0,184	0,206
300	0,034	0,047	0,060	0,073	0,086	0,099	0,112	0,125	0,151	0,172	0,198	0,224	0,250
350	0,040	0,055	0,071	0,086	0,101	0,117	0,132	0,147	0,178	0,202	0,234	0,264	0,294
400	0,046	0,064	0,081	0,099	0,117	0,134	0,152	0,169	0,205	0,234	0,268	0,304	0,338
450	0,052	0,072	0,092	0,112	0,132	0,152	0,172	0,192	0,232	0,264	0,304	0,344	0,384
500	0,058	0,080	0,103	0,125	0,147	0,169	0,192	0,214	0,258	0,294	0,294	0,384	0,428
600	0,070	0,097	0,124	0,151	0,178	0,205	0,231	0,258	0,312	0,356	0,410	0,462	0,516

RMT-A      RMT-A+PFT



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow.  
Measuring the Vf in different points  
of the grille, we find the Vfmed.

$$Q \text{ (l/s)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 1000$$

$$Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 3600$$

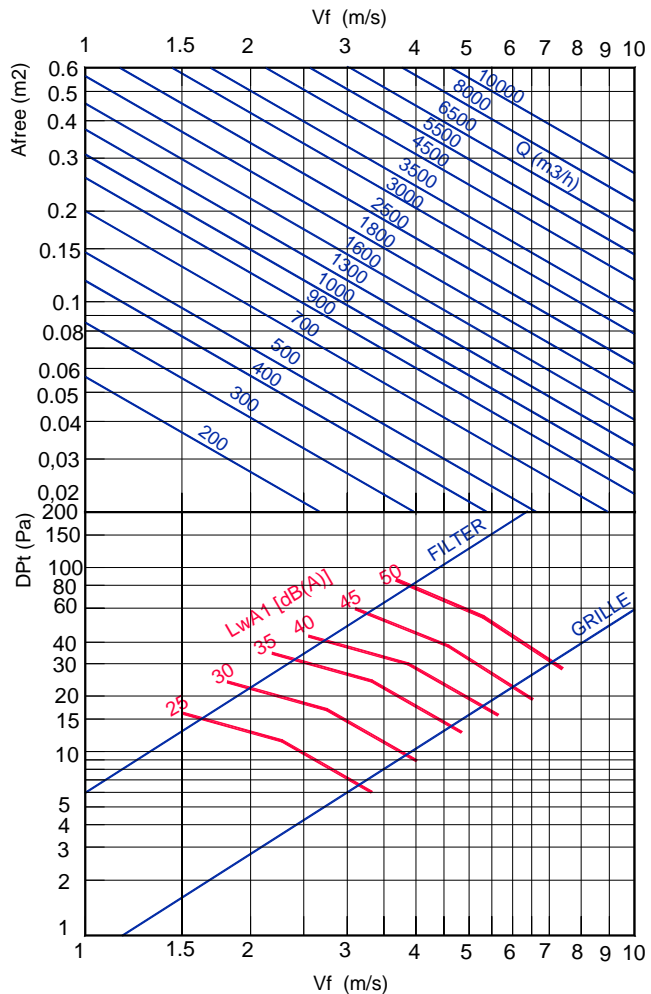
CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1 (kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to  
Afree = 0,1m2.

$$Lwa = Lwa1 + Kf$$

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



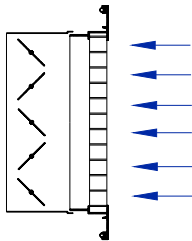
## RMT

FREE FACE AREA m2.

H \ L	150	200	250	300	350	400	450	500	600	700	800	900	1000
100	0,009	0,013	0,017	0,021	0,025	0,028	0,032	0,036	0,043	0,05	0,056	0,064	0,072
150	0,016	0,022	0,028	0,034	0,040	0,046	0,052	0,058	0,070	0,08	0,092	0,104	0,116
200	0,022	0,030	0,038	0,047	0,055	0,064	0,072	0,080	0,097	0,11	0,128	0,144	0,160
250	0,028	0,038	0,049	0,06	0,071	0,081	0,092	0,103	0,124	0,142	0,162	0,184	0,206
300	0,034	0,047	0,060	0,073	0,086	0,099	0,112	0,125	0,151	0,172	0,198	0,224	0,250
350	0,040	0,055	0,071	0,086	0,101	0,117	0,132	0,147	0,178	0,202	0,234	0,264	0,294
400	0,046	0,064	0,081	0,099	0,117	0,134	0,152	0,169	0,205	0,234	0,268	0,304	0,338
450	0,052	0,072	0,092	0,112	0,132	0,152	0,172	0,192	0,232	0,264	0,304	0,344	0,384
500	0,058	0,080	0,103	0,125	0,147	0,169	0,192	0,214	0,258	0,294	0,294	0,384	0,428
600	0,070	0,097	0,124	0,151	0,178	0,205	0,231	0,258	0,312	0,356	0,410	0,462	0,516

### RMT-A+SP

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow.

Measuring the Vf in different points of the grille, we find the Vfmed.

$$Q \text{ (l/s)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2\text{)} * 1000$$

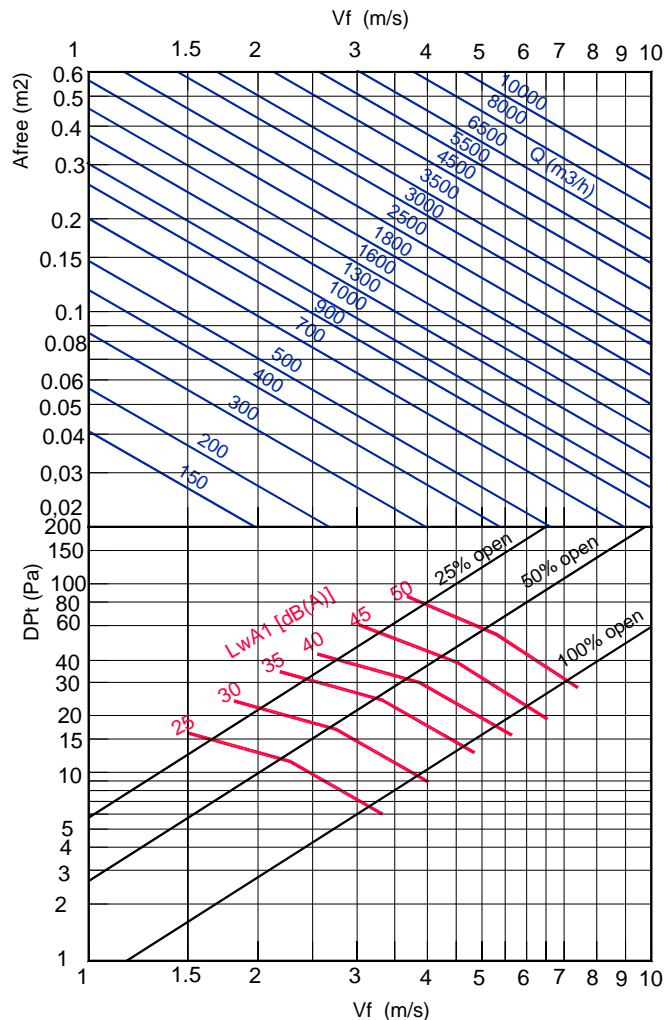
$$Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2\text{)} * 3600$$

CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1(kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to Afree = 0,1m2.

$$Lwa = Lwa1 + Kf$$





**RMT-KLIN**

FREE FACE AREA m2.

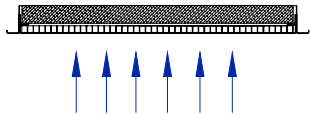
**RMT-KLIN**

L x H	
600x600	0,290
625x625	0,302
675x675	0,326

**RMT-45-KLIN**

L x H	
600x600	0,290
625x625	0,302

**RMT-KLIN + PFT**



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow.  
Measuring the Vf in different points of the grille, we find the Vfmed.

$Q \text{ (l/s)} = V_{\text{fmed}} \text{ (m/s)} * A_{\text{free}} \text{ (m}^2\text{)} * 1000$   
 $Q \text{ (m}^3\text{/h)} = V_{\text{fmed}} \text{ (m/s)} * A_{\text{free}} \text{ (m}^2\text{)} * 3600$

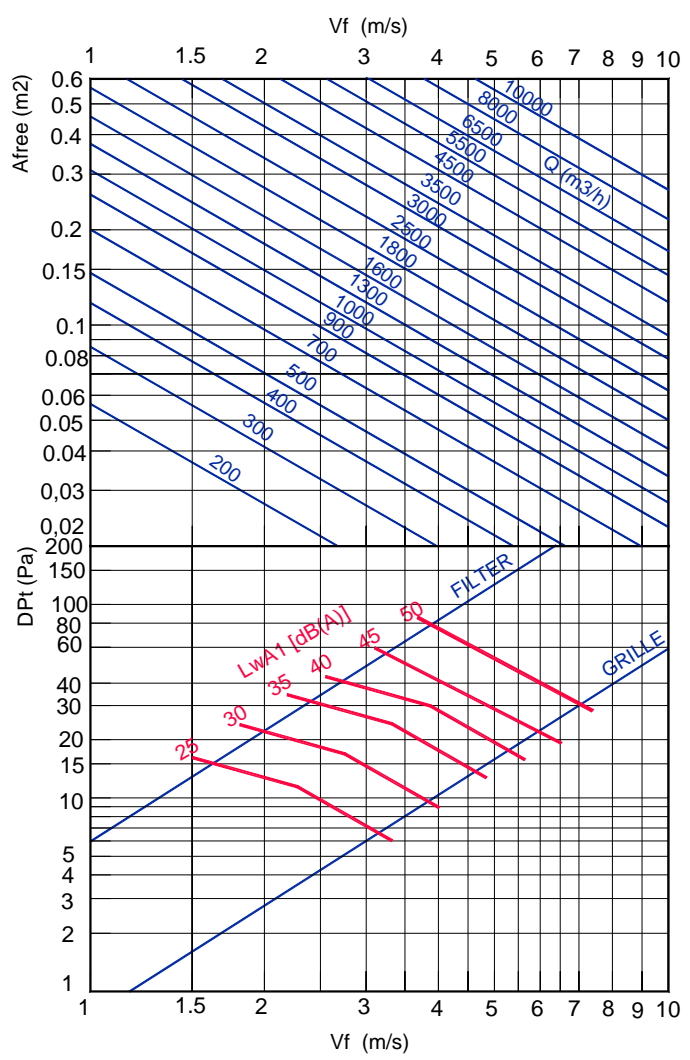
CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1(kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to Afree = 0,1m2.

$L_{\text{wa}} = L_{\text{wa1}} + K_{\text{f}}$

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.





**RMT-MOD**

FREE FACE AREA m2.

**RMT-MOD**

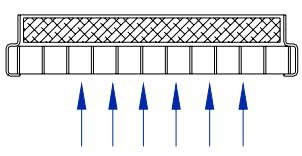
L x H	
595x295	0,150
595x595	0,300
620x620	0,156

**RMT-45-MOD**

L x H	
595x595	0,300

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.

**RMT-MOD + PFT**



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow.  
Measuring the Vf in different points of the grille, we find the Vfmed.

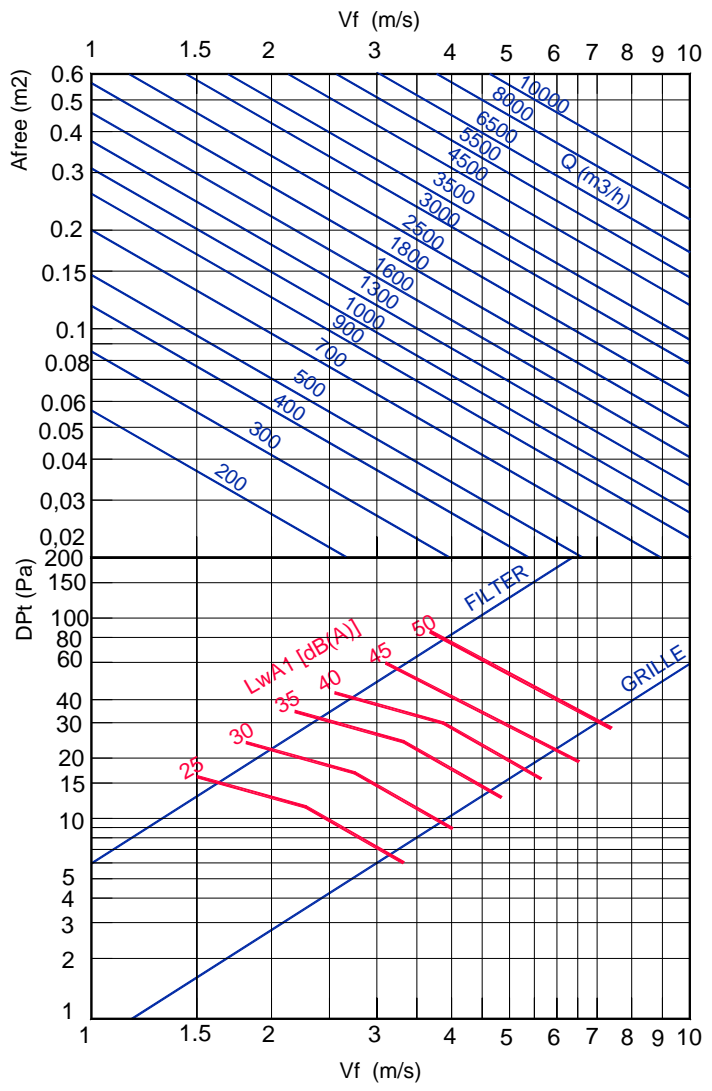
$Q \text{ (l/s)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 1000$   
 $Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} * A_{free} \text{ (m}^2) * 3600$

CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1(kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to  
 $A_{free} = 0,1\text{m}^2$ .

$Lwa = Lwa1 + Kf$



## RMT-MOD

FREE FACE AREA m<sup>2</sup>.

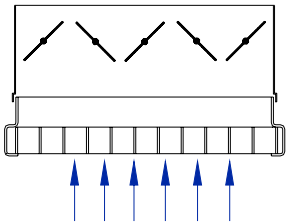
### RMT-MOD

L x H	
595x295	0,150
595x595	0,300
620x620	0,156

### RMT-45-MOD

L x H	
595x595	0,300

### RMT-MOD +SP



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
1,5	3

Determination of air flow.

Measuring the Vf in different points of the grille, we find the Vfmed.

$$Q \text{ (l/s)} = V_{fmed} \text{ (m/s)} \cdot A_{free} \text{ (m}^2\text{)} \cdot 1000$$

$$Q \text{ (m}^3\text{/h)} = V_{fmed} \text{ (m/s)} \cdot A_{free} \text{ (m}^2\text{)} \cdot 3600$$

CORRECTION FACTOR FOR Lwa1.

Afree m <sup>2</sup>	0,01	0,02	0,05	0,1	0,2	0,4
Lwa1(kf)	-9	-6	-3	-	+4	+7

Weighted noise level related to Afree = 0,1m<sup>2</sup>.

$$Lwa = Lwa1 + Kf$$

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.

