

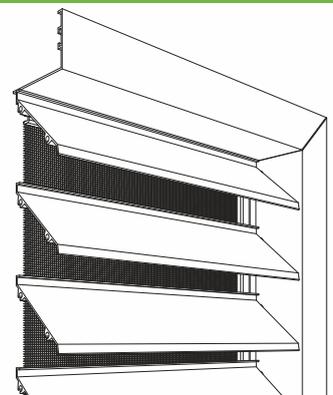


SOLAR SHADING



The SYBA solar shading company is an enthusiastic supporter of environmental protection. We pay attention our environment in all our work process. Klick for more green information!

## MECHANICAL LOUVRES





## LWD

### Louvre wall, without visible vertical divisions

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle. The technical parameters of each lamella can be found on the other pages of this catalog. The louvres can be covered with bird and insect nets.



## VDW

### Louvre wall with visible vertical divisions

The screw-knot lamellas are mounted in a special aluminium profile. The maximum dimensions can be found on other pages of this catalog. In case of -larger than maximum- openings, frames can be arranged with the inclusion of intermediate support profiles. The louvres can be covered with bird and insect nets.



## VL

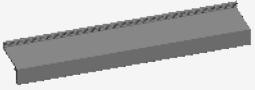
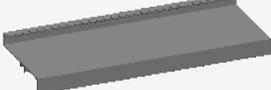
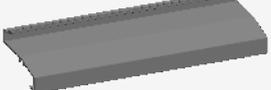
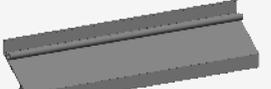
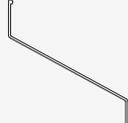
### Ventillation louvres

Louvres with special aluminium frame profile. Lamellas of various sizes and shapes can be attached to the extruded aluminium frame profile. The louvres can be covered with bird and insect nets. Delivery: ready to use louvres, parts, components.

# TYPES OF LAMELLAS



Extruded aluminium lamellas with powder coated surface. (The lamellas are shown to scale)

		Installation options							
		LWD	VDW	VL					
<b>38 Z</b>	19x38 mm continous louvre wall, lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<b>38 Z CLIP</b>
<b>45 Z</b>	45x52 mm continous louvre wall, lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<b>45-55 Z CLIP</b>
<b>55 Z</b>	41x55 mm continous louvre wall, lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
<b>58 Z</b>	30x58 mm lamella with screw -knot	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
<b>60 Z</b>	30x60 mm lamella with screw -knot	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
<b>78 Z</b>	59x78 mm continous louvre wall, lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
<b>86 Z</b>	50x73 mm lamella with screw -knot	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<b>86 Z KERET</b>
<b>109 Z</b>	109x126 mm lamella with bolts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					<b>109 Z UNIQUE FIXING METHOD</b>
<b>113 C</b>	one side elliptical lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<b>113 C CLIP</b>
<b>120 Z B0</b>	80x120 mm continous louvre wall, lamella with clip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<b>120 Z B</b>	80x120 mm continous louvre wall, lamella with bolts and clip	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					<b>120 Z CLIP</b>

# MECHANICAL LOUVRES MODULAR VENTILLATION LOUVRES



Several lamellas taking places in the same frame profile, in this way increasing the range of functions and appearance.

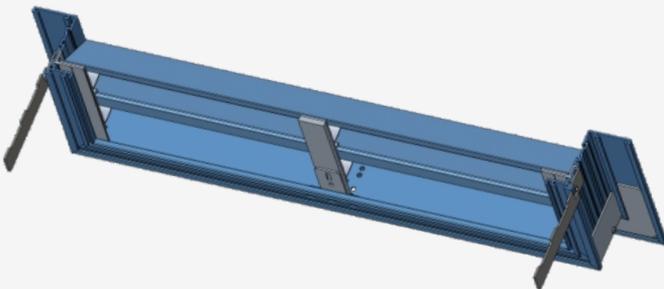
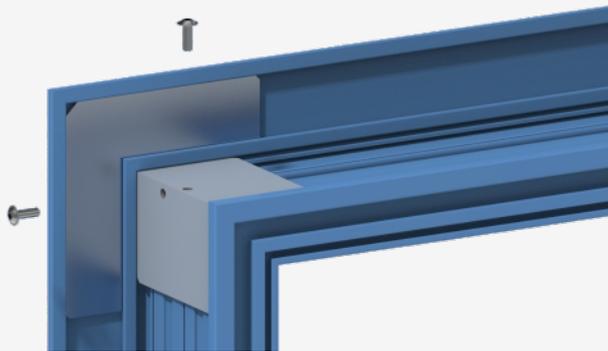


If there is a special demand of air mass, we use the 86 Z lamella. The inclination of lamellas can be open until 60 degrees. In this case the spacing of lamellas are between 50-100 mm.

The cut to size preassembled product can be easily assembled in building suite, thus simplifying of transportation. We do not have to transport fully pre assembled structures.

The elements of the well thought structure fit together perfectly. The extruded aluminium frame components and the stainless fasteners ensure a long service life.

The maximum size of the modular ventilation louvre is 6 meter. Each lamella types has different inertia, and maximum span. Over this sizes we use special vertical reinforcers.

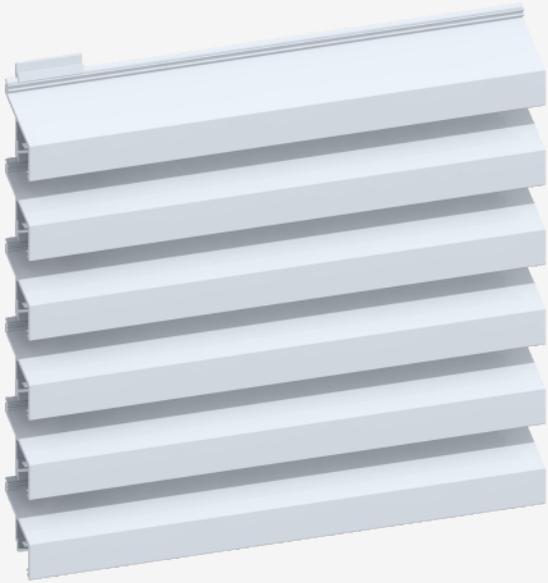


[aluzsalu.hu](http://aluzsalu.hu)

 youtube product video

## Implementation methods

- In case of project order, we produce, transport and install the items based on the received plans
- Our reseller partners handle the items in our factory, than takes care of transport and installation.
- We sell components and parts devided.



19x38,4 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips. Spacing 33 mm

The distance between the lamellas with fixed spacing is 33 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 13 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,3 meters.

Lamella cantileverness is maximum 0,4 meters.

The 40x40 mm clipholder profile is self supporting until 1,5 meters. Above this diameter special reinforcement needed

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

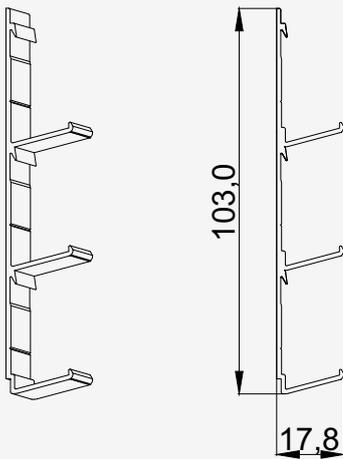
The louvres can be covered with bird and insect nets.

Due to its cross section, this lamella wall is excellently suitable for installation in doors and windows, pressed down with glass strips.

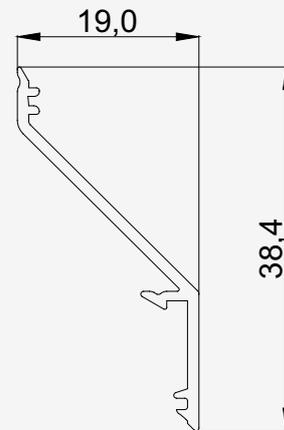
Material: EN 6063-T5 AlMgSi0.5

Surface: polyester powder coated in standard RAL colors

**Clip**



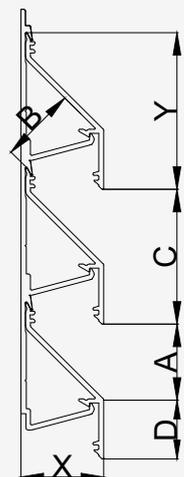
**Lamella**



**Technical data**

- lamella allocation ( C ) 33,0 mm
- width X 20,5 mm
- height Y 38,4 mm
- visual free cross section 56 %
- physical free cross section 56 %
- max. support span 1,3 m
- max. lamella cantilever 0,4 m
- max. lamella length 6 m

**38 Z**





45x52,4 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips.

The distance between the lamellas with fixed spacing is 50 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 10 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,4 meters.

Lamella cantileverness is maximum 0,4 meters.

The 40x40 mm clipholder profile is self supporting until 1,5 meters. Above this diameter special reinforcement needed

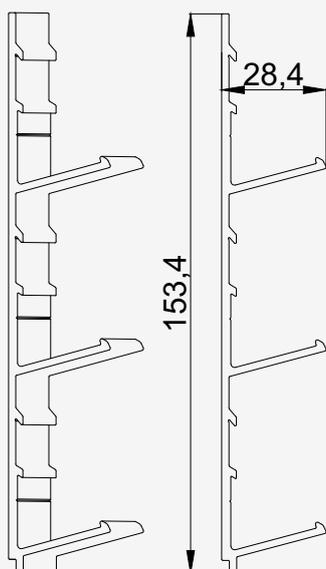
The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

The louvres can be covered with bird and insect nets.

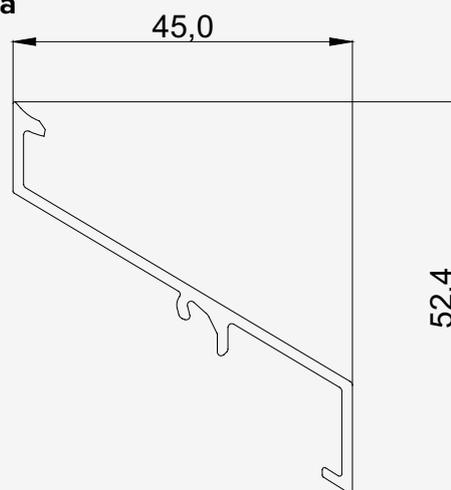
Due to its cross section, this lamella wall is excellently suitable for installation in doors and windows, pressed down with glass strips.

Material: EN 6063-T5 AlMgSi0.5

Clip



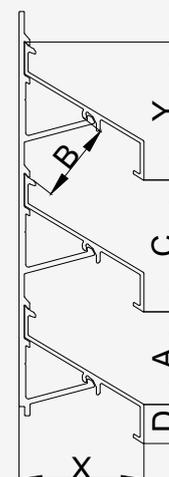
Lamella

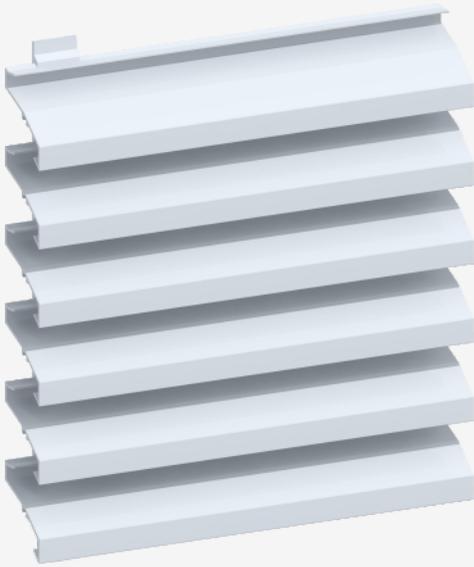


### Technical datas

- lamella allocation ( C ) 50,0 mm
- width ( X ) : 47,0 mm
- height ( Y ) : 52,4 mm
- visual free cross section : 71 %
- physical free cross section : 60 %
- max. support span: 1,4 m
- max. lamella cantilever: 0,4 m
- max. lamella length: 6 m

### 45 Z





40,5x55,2 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips.

The distance between the lamellas with fixed spacing is 50 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 11 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,5 meters.

Lamella cantileverness is maximum 0,4 meters.

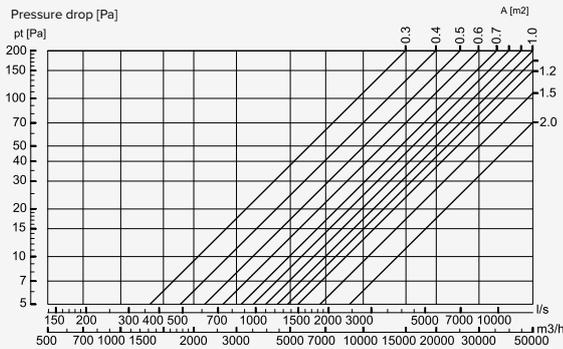
The 40x40 mm clipholder profile is self supporting until 1,5 meters. Above this diameter special reinforcement needed

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

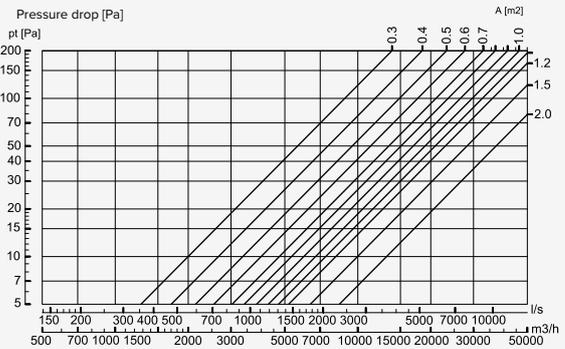
The louvres can be covered with bird and insect nets.

Material: EN 6063-T5 AlMgSi0.5

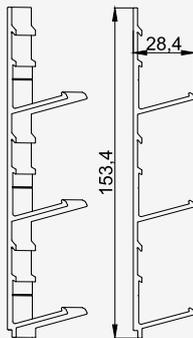
55Z lamella pressure drop,  
49 mm allocation



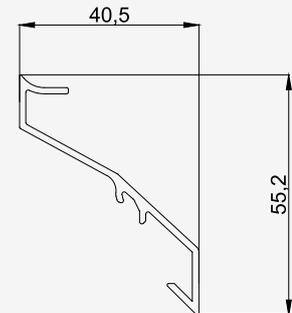
55Z lamella pressure drop,  
49 mm allocation with 2,5x2,5 x 1 mm insect net



Clip



Lamella



### Technical datas

lamella allocation ( C ) 50,0 mm

width ( X ) : 42,5 mm

height ( Y ) : 55,2 mm

visual free cross section : 73 %

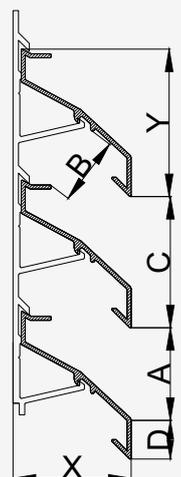
physical free cross section : 45 %

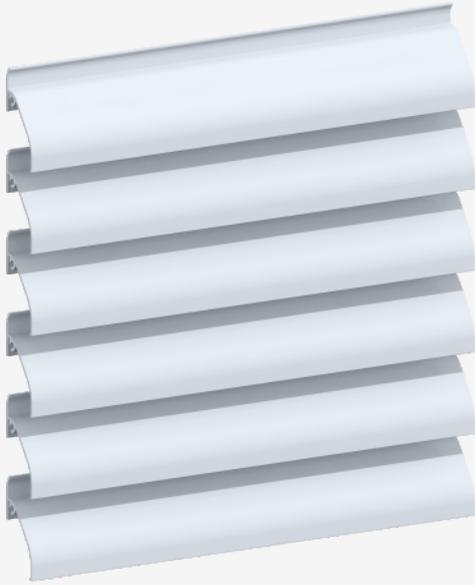
max. support span: 1,5 m

max. lamella cantilever: 0,4 m

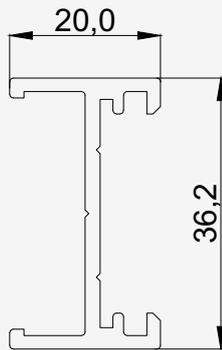
max. lamella length: 6 m

### 55 Z

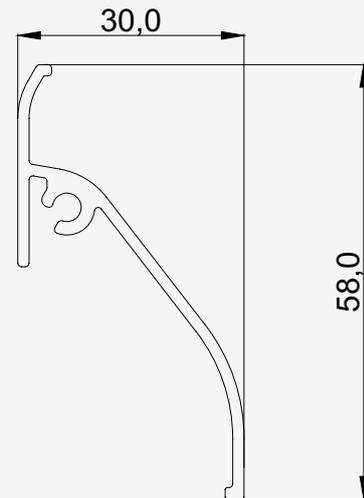




Console



Lamella



30x58 mm louvre, the extruded aluminium lamellas are fixed with special frame.

The distance between the lamellas with fixed spacing is 50-70 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 8-11 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,3 meters.

Lamella cantileverness is maximum 0,4 meters.

The louvre wall fitted in special frame profile.

The louvres can be covered with bird and insect nets.

Due to its cross section, this louvre is excellently suitable for installation in doors and windows, pressed down with glass strips.

Material: EN 6063-T5 AlMgSi0.5



**Technical datas**

lamella allocation ( C ) 50,0-70,0mm

width ( X ) : 30 mm

height ( Y ) : 58 mm

visual free cross section : 50-70 %

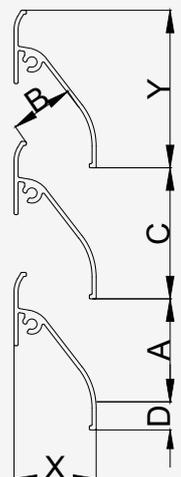
phisical free cross section : 40-60 %

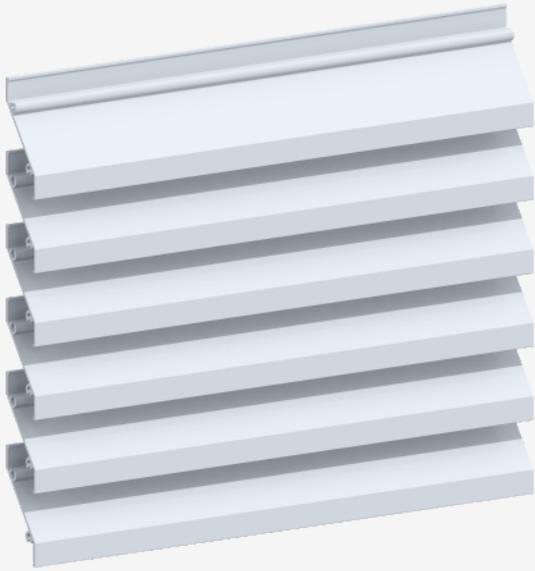
max. support span: 1,3 m

max. lamella cantilever: 0,4 m

max. lamella lenght: 6 m

**58 Z**





30x60 mm extruded aluminium lamellas are fixed in special extruded frame.

The distance between the lamellas between 50-70 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 7-10 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,3 meters.

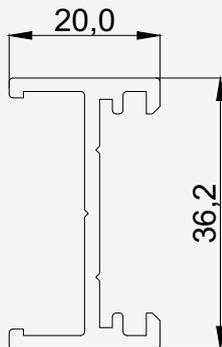
Lamella cantileverness is maximum 0,4 meters.

The louvre fitted with special frame profile and can be covered with bird and insect nets.

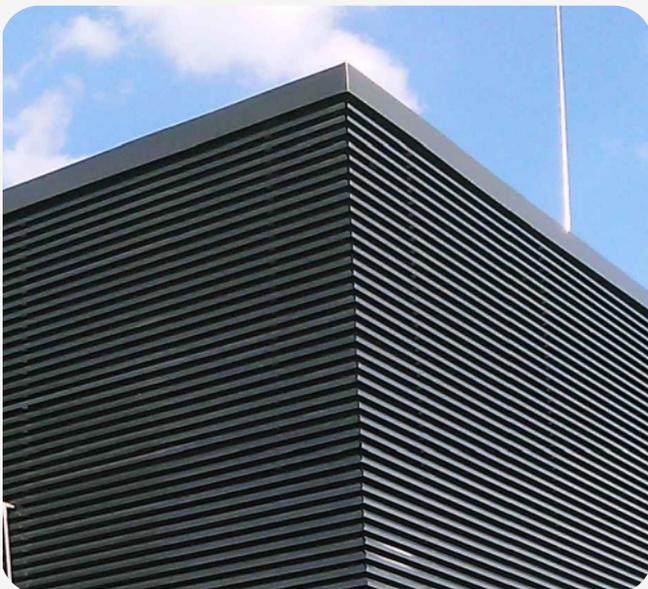
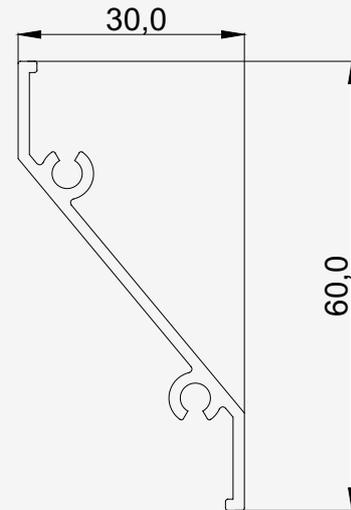
Due to its cross section, this lamella wall is excellently suitable for installation in doors and windows, pressed down with glass strips.

Material:EN 6063-T5 AlMgSi0.5

Console



Lamella



**Technical datas**

lamella allocation ( C ) 50,0-70,0 mm

width ( X ) : 30,0 mm

height ( Y ) : 60,0 mm

visual free cross section : 50-70 %

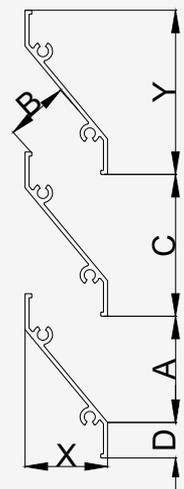
phisical free cross section : 40-60 %

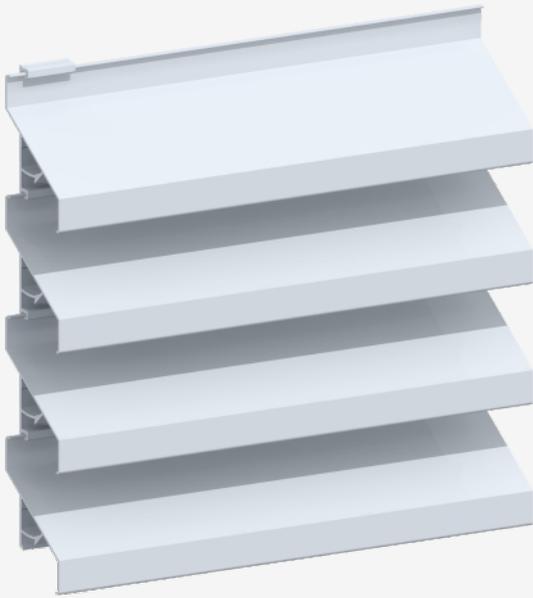
max. support span: 1,3 m

max. lamella cantilever: 0,4 m

max. lamella lenght: 6 m

**60 Z**





59x78 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips.

The distance between the lamellas with fixed spacing is 69 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 10 kg/m<sup>2</sup>.

The maximum distance between the fixing clips are 1,7 meters.

Lamella cantileverness is maximum 0,4 meters.

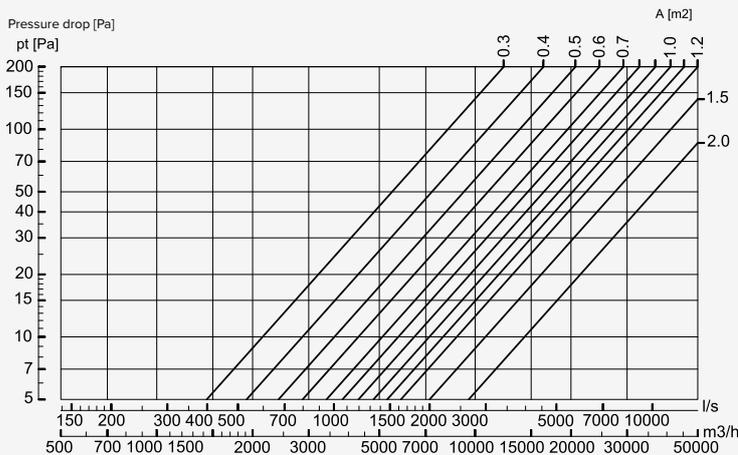
The 40x40 mm clipholder profile is self supporting until 1,5 meters. Above this diameter special reinforcement needed

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

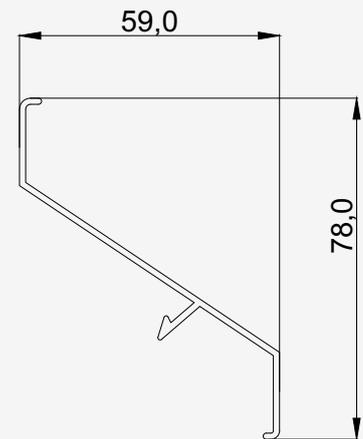
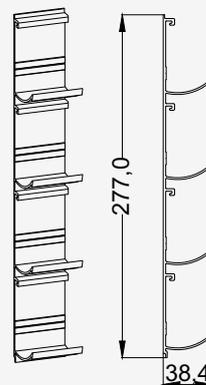
The louvres can be covered with bird and insect nets.

Material:EN 6063-T5 AlMgSi0.5

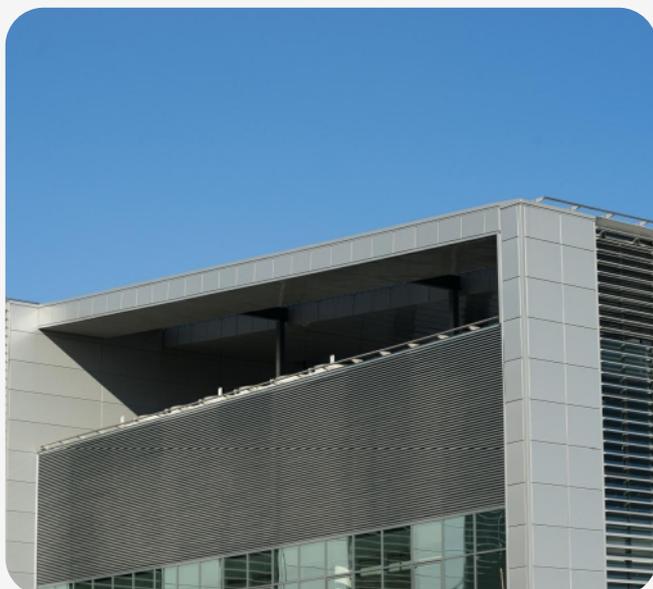
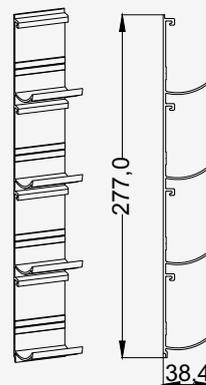
78Z lamella pressure drop,  
79 mm allocation



Lamella



Clip



## Technical datas

## 78 Z

lamella allocation ( C ) 69,0 mm

width ( X ) : 61,0 mm

height ( Y ) : 78,0mm

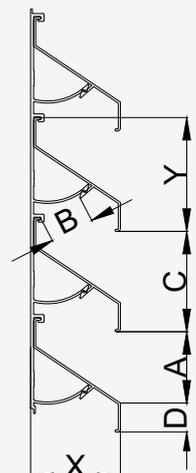
visual free cross section : 79 %

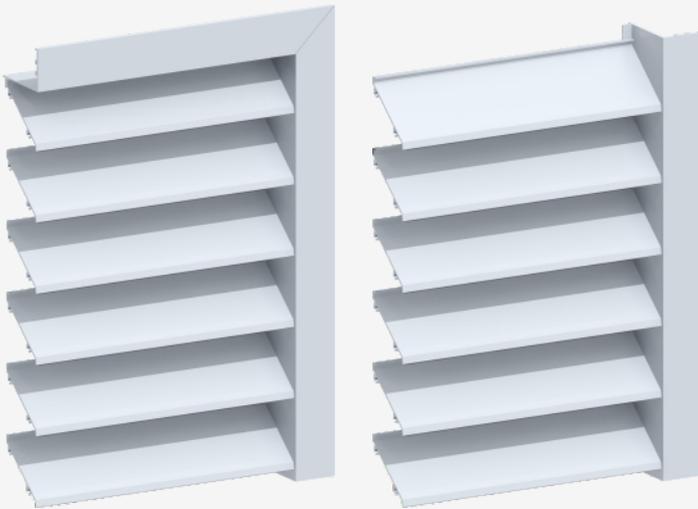
physical free cross section : 43 %

max. support span: 1,7 m

max. lamella cantilever: 0,4 m

max. lamella length: 6 m





50x73 mm extruded aluminium lamellas are fixed with extruded frame profile.

The distance between the lamellas can be between 50-100 mm.

recommended spacing is 70 mm

The weight of the louvre is 9-15 kg/m<sup>2</sup>.

Max .span of lamellas , and the frame is 1,50 m, max height is 6,00 m.

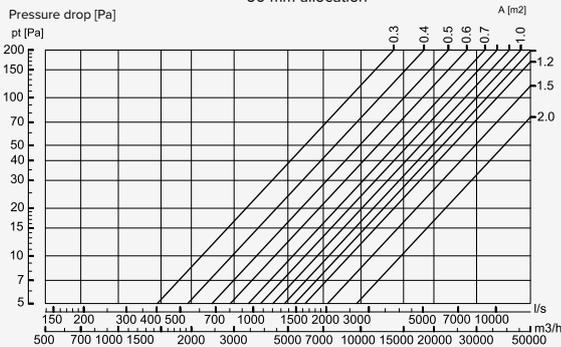
Over the size limits we can use extra support profiles and the louvres can multiply.

The louvres can be covered with bird and insect nets.

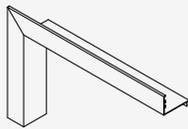
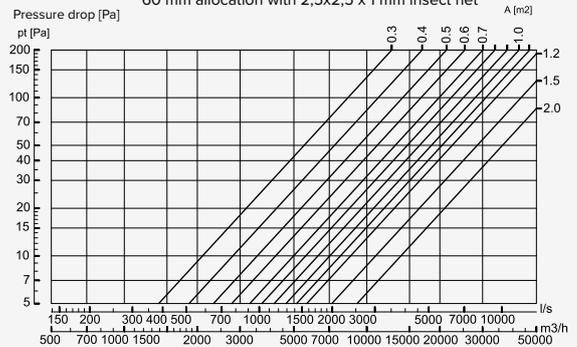
Material:EN 6063-T5 AlMgSi0.5

Surface: poliester powder coated in standard RAL colors

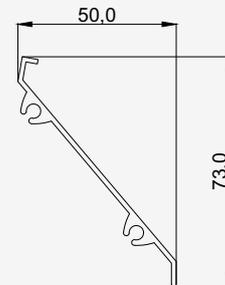
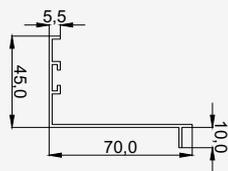
86Z lamella pressure drop,  
60 mm allocation



86Z lamella pressure drop,  
60 mm allocation with 2,5x2,5 x 1 mm insect net



Console profile



Lamella



## Technical datas

lamella allocation ( C ) 50-100 mm

width ( X ) : 71 mm

height ( Y ) :73 mm

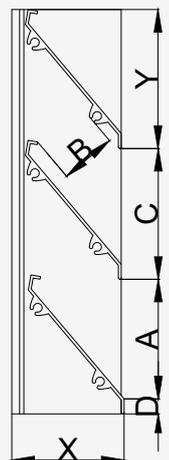
visual free cross section : 84-92%

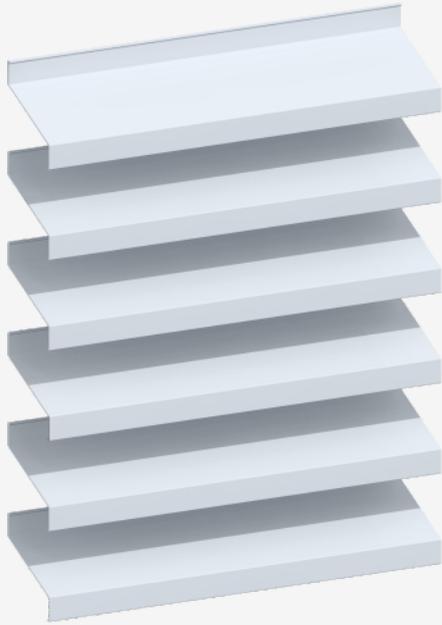
phisical free cross section: 44-51 %

max. support span 1,5 m

max. lamella lenght 6 m

## 86 Z





109x120mm continuous louvre wall, the extruded aluminium lamellas are fixed with bolts.

The distance between the lamellas are free, depends on the user's demand (air mass quantity)

Thanks to the simple but strong enough fixing, the weight of the wall is only 10-20 kg/m<sup>2</sup>.

The maximum distance between vertical fixings are 1,5 meters.

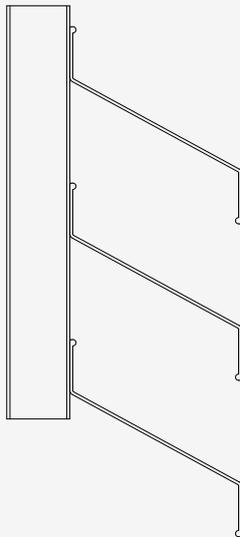
Lamella cantileverness is maximum 0,4 meters.

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

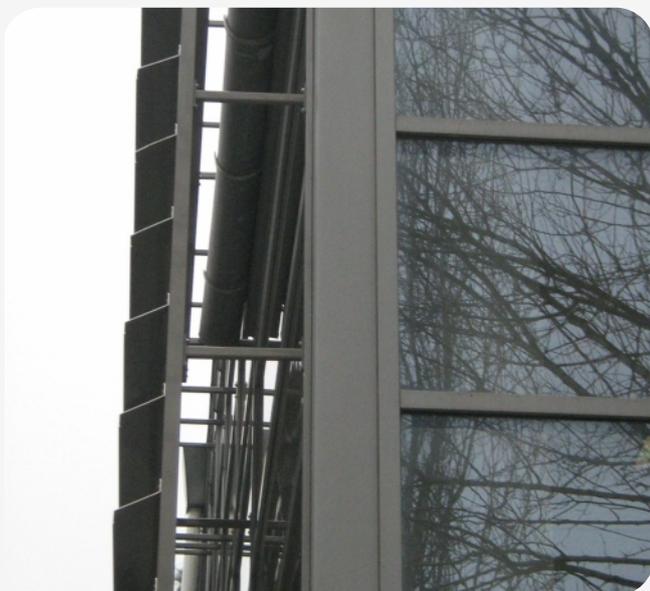
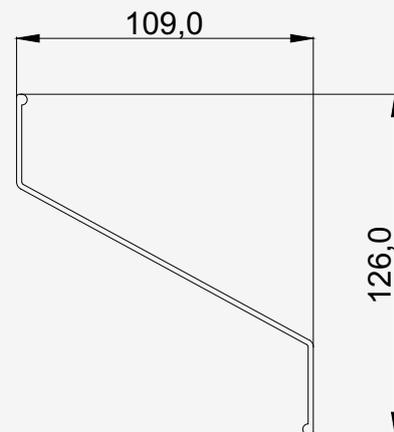
The louvres can be covered with bird and insect nets.

Material: EN 6063-T5 AlMgSi0.5

Cross section



Lamella



**Technical datas**

lamella allocation ( C ) 50,0 – 200,0mm

width ( X ) : 109 mm

height ( Y ) : 126 mm

visual free cross section : 80-95%

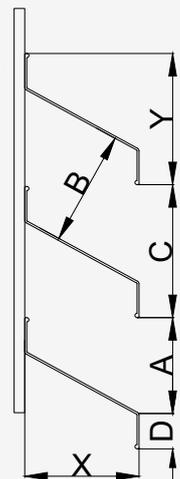
physical free cross section : 45-51%

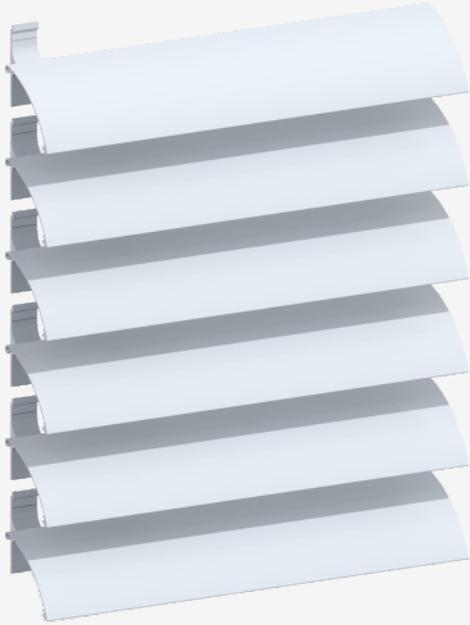
max. support span: 1,5 m

max. lamella cantilever: 0,4 m

max. lamella length: 6 m

**109 Z**





113,5x 20 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips.

The distance between the lamellas with fixed spacing is 83 mm.

Thanks to the simple but strong enough fixing, the weight of the wall is only 12 kg/m<sup>2</sup>.

The maximum distance between the fixing clips and vertical support profiles are 1,75 meters.

Lamella cantileverness is maximum 0,4 meters.

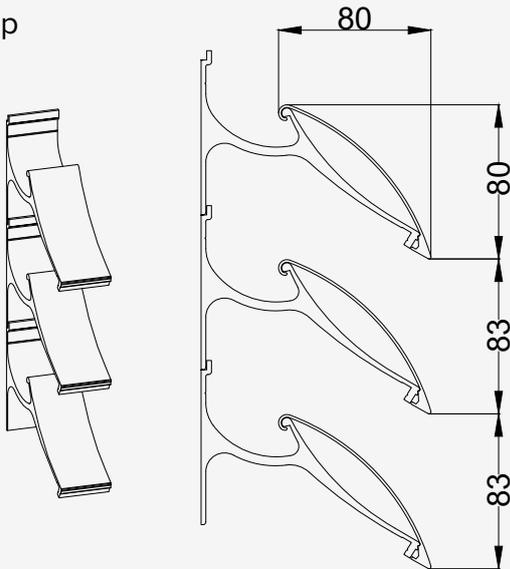
The 40x40 mm clipholder profile is self supporting until 1,5 meters. Above this diameter special reinforcement needed.

The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

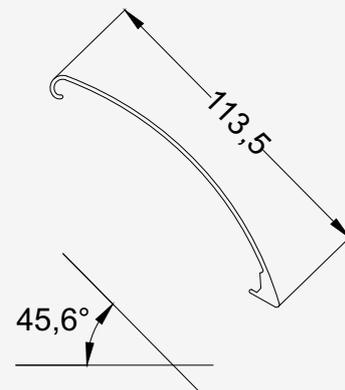
The louvres can be covered with bird and insect nets.

Material:EN 6063-T5 AlMgSi0.5

Clip



Lamella



**Technical datas**

**113 C**

lamella allocation ( C ) 83-200mm

width ( X ) : 122,0 mm

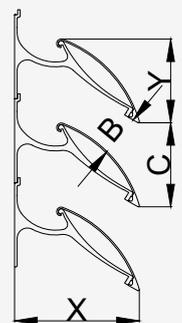
height ( Y ) : 80,0 mm

physical free cross section : 50 %

max. support span: 1,75m

max. lamella cantilever: 0,4 m

max. lamella length: 6 m



# LAMELLA 120 Z



80x120 mm continuous louvre wall, the extruded aluminium lamellas are fixed with clips.

The distance between the lamellas are 70-200 mm.

The weight of the wall is 10-15 kg/m<sup>2</sup>. (depends on the spacing)

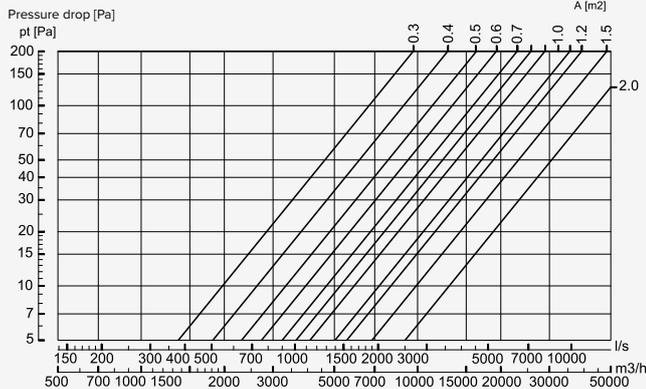
The maximum distance between the fixing clips are 1,5 meters.

Lamella cantileverness is maximum 0,4 meters.

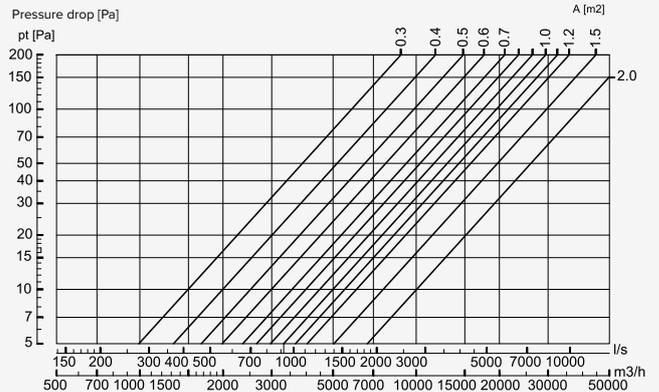
The ends of longitudinal louvre wall are covered with special frame profile or sheeting. It is also possible to cut the louvres at an angle.

Material: EN 6063-T5 AlMgSi0.5

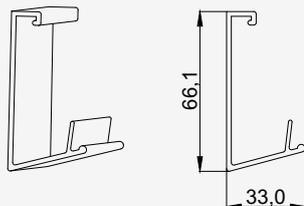
120Z lamella pressure drop,  
120 mm allocation



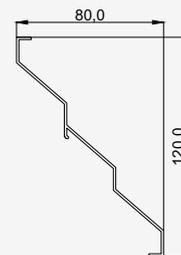
120Z lamella pressure drop,  
120 mm allocation with 2,5x2,5 x 1 mm insect net



Clip



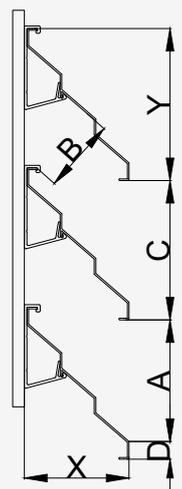
Lamella



## Technical datas

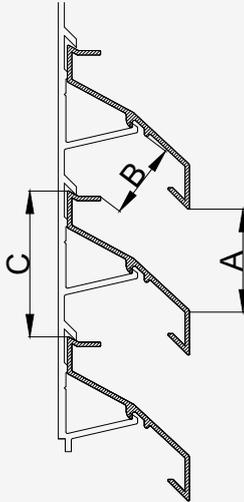
- lamella allocation ( C ) 70-200 mm
- width ( X ) : 82,5 mm
- height ( Y ) : 120 mm
- visual free cross section : 80-95 %
- physical free cross section : 45-60 %
- max. support span: 1,5 m
- max. lamella cantilever: 0,4 m
- max. lamella length: 6 m

## 120 Z



This chapter gives you help to chose the aproprate lamella type.

The visual free cross section is determined by the visual rate of allocation of lamellas (A) and the distance between lamellas(C).



### Phisical free cross section

The phisical cross section is determined by the rate of the smallest distance between two lamellas (B) and the allocation of lamellas (C)

- (A) visual distance between two lamellas
- (B) smallest distance between lamellas
- (C) allocation of lamellas

### Acoustical terminus technicus

dB (a) decibel (dB) values are used to characterize the noise reduction of the sound source

$R_w$  (C;Ctr) =weighted air sound insulation equivalent - laboratory air sound insulation

C = spectral correction duration for pink noise, which must always be added to  $R_w$

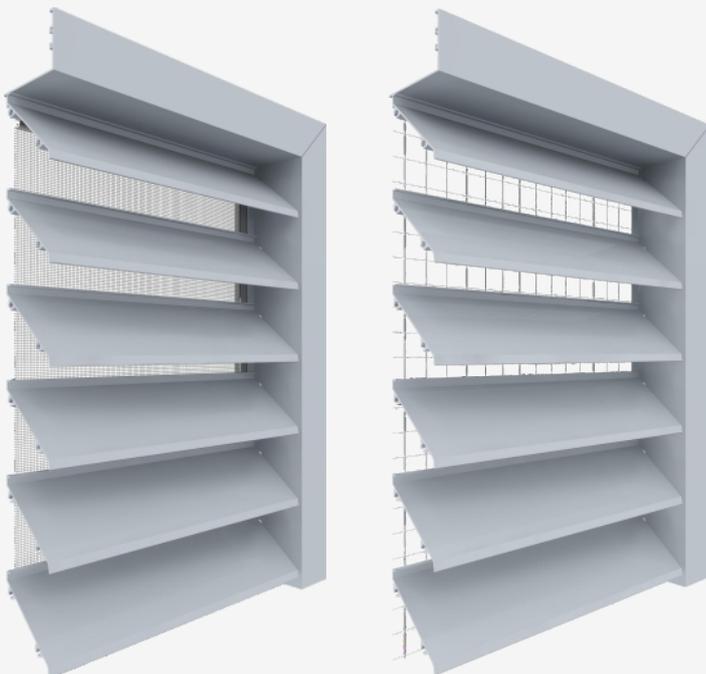
C = the value of the noise reduction effect against traffic noise for the entire external boundary structure, which is the same as the external tr

with the sound insulation requirement of boundary structures, without the influence of the location

Frequency = Hertz (Hz) is the number of vibrations expressed per second.

Note: in order to select the correct vent for your application, please refer to your local building regulations.

## INSECT AND BIRD NETS



On customer's demand, our louvered mechanical ventilators provided with two types of grid size nets, to avoid the unwanted insects and birds visits.

The material of nets can be plastic or metal.

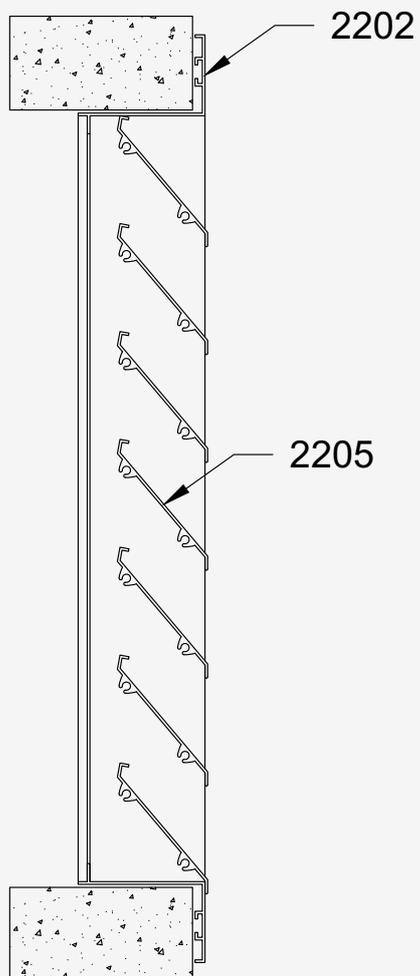
In case of need for cleaning, the nets can be easily removed from the inside.

Pressure drop values with and without insect net or an insect netcan be found on product pages.

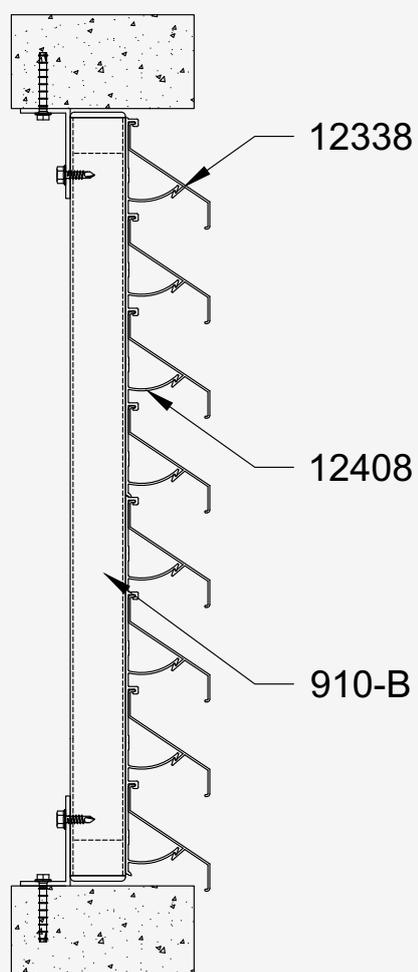
Lamella							free cross section		noise insulation
name	type	identifyer	width	height	allocation	lenght	visual	phisical	Rw dB
38	Z	C2785	19	38,4	33	6000	56%	56%	-
45	Z	12839	45	52,4	50	6000	71%	60%	-
55	Z	16373	40,5	55,2	50	6000	73%	45%	-
58	Z	C2749	30	58	50-70	6000	50-70%	40-60%	-
60	Z	C770220	30	60	50-70	6000	50-70%	40-60%	-
78	Z	12338	59	78	69	6000	79%	43%	-
86	Z	2205	50	73	50-100	6000	84-92%	44-51%	-
109	Z	8358	109	126	50-200	6000	80-95%	44-51%	-
113	C	10420	80	82,6	83-200	6000	50%	-	-
120	Z	8112	80	120	70-200	6000	80-95%	45-60%	-
150AS	Acoustic	14170 + 14171	150	235 + (nx150)	150	6000	68%	35%	10 (-1;-2) dB
150AD	Acoustic	14170 + 14171	300	235 + (nx150)	150	6000	68%	35%	17 (-1;-4) dB

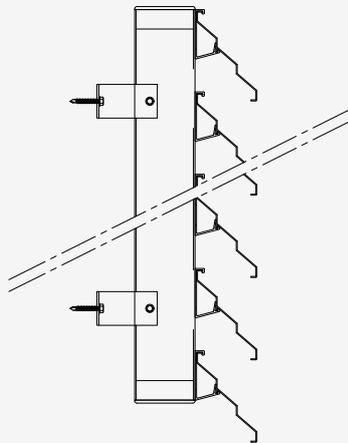
	clips			frame			fixing		self supporting	largest	wall
	width mm	height mm	identifyer	width mm	height mm	identifyer	cantilever max. mm	vert. supp. distance max. mm	magasság max. mm	height max. mm	self weight kg/m <sup>2</sup>
38	17,8	103		-	-	-	400	1300	1500	-	13
45	28,4	153,4	No. 12840	-	-	-	400	1500	1500	-	10
55	28,4	153,4	No. 12840	-	-	-	400	1500	1500	-	11
58	-	-	-	20	36,2	No. C2748	400	1300		-	8-11
60	-	-	-	20	36,2	No. C2748	400	1300		-	7-10
78	38,4	277	No. 12408	-	-	-	400	1700	1500	-	10
86	-	-	-	70	45	No. 2202	-	1500		6000	9-15
109	-	-	-	-	-	-	400	1500		-	10-20
113	88	116	No. 10419	-	-	-	400	1500	1500	-	12
120	33	66,1	No. 6936	74	136	No. 6458	400	1500		-	10-15
150AS	-	-	-	150	-	-	-	4000		-	18
150AD	-	-	-	300	-	-	-	4000		-	36

86Z lamella in 86 Z frame  
60 mm allocation



78 Z lamella, 78 Z clips,  
40x40 profile support,  
L console





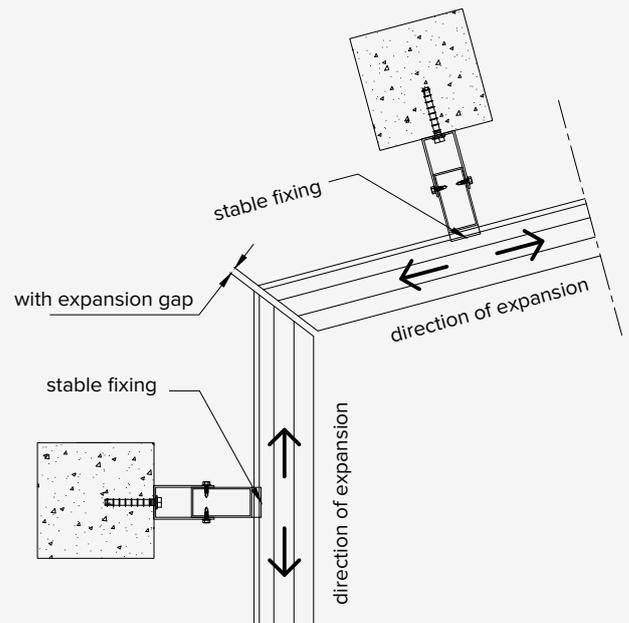
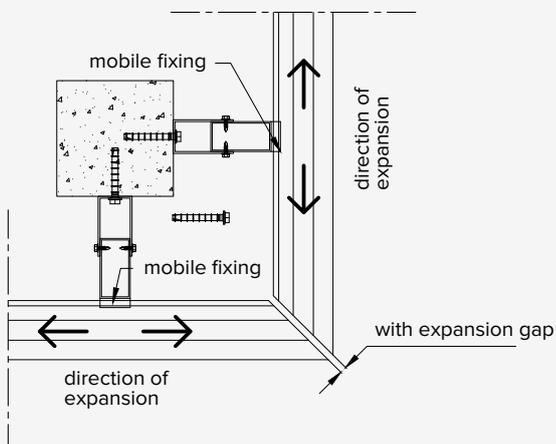
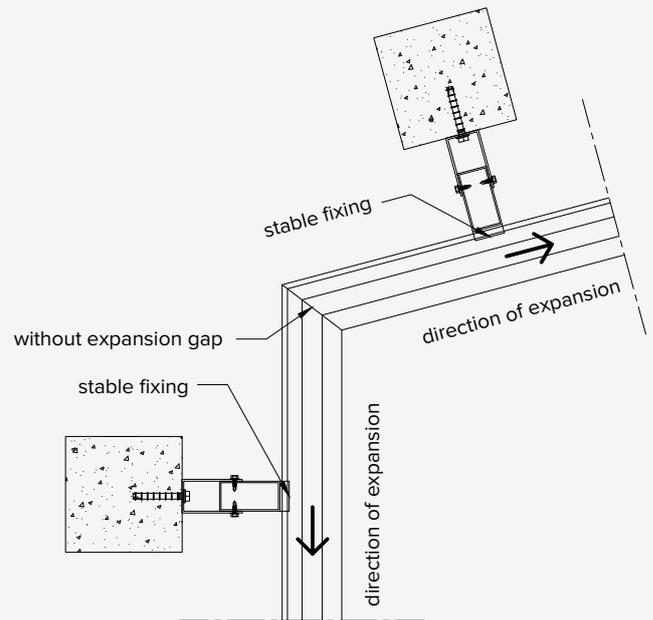
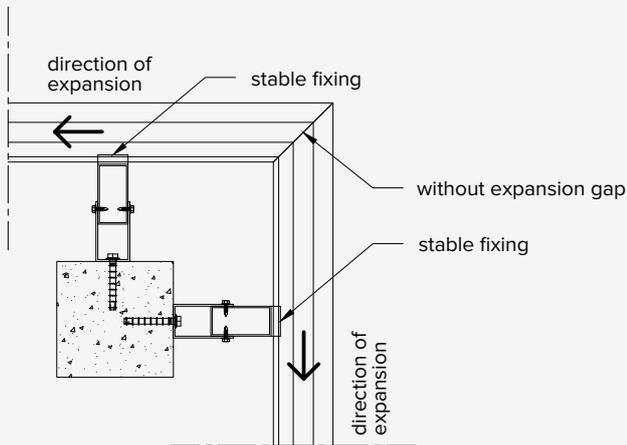
When creating corners the appropriate appearance can be ensured by cutting lamellas at an angle. The angle of the corners can be arbitrary, concave or convex.

When installing aluminium lamella systems, the coefficient of thermal expansion must be taken into consideration, which is  $2,4 \times 10^{-5} \text{ m/mK}$  ( $\Delta L / L$ ).

The size of expansion gap is:

e.g.: 1 meter long lamella from -30 Celsius to 70 Celsius

$$\Delta L = \alpha \times L \times \Delta T = 2,4 \times 10^{-5} \times 1000 \times 100 = 2,4 \text{ mm}$$



# MECHANICAL LOUVRES



SOLAR SHADING

