Giménez Ganga®

LOUVERS

TECHNICAL DOSSIER


Giménez
Ganga®

Giménez Ganga®

CONSTRUCTING THE BUILDINGS OF THE FUTURE

Achieving maximum efficiency in building design is the great challenge currently facing architecture.

Improvement of thermal and visual comfort, as well as that of air quality, drives planners, designers and manufacturers in the search for new products and construction systems that contribute to the creation of those **Nearly Zero-Energy** spaces that are in such high demand in our increasingly environmentally aware society.

To help comply with this aim, **Giménez Ganga's** louvers are the most efficient, safe and aesthetic construction solution for covering roofs and façades.

A solution that is already being enjoyed in places as varied as apartments or venues, through to official buildings, offices, factories or hotels. A solution that has already been **discovered by the most ambitious architects**.

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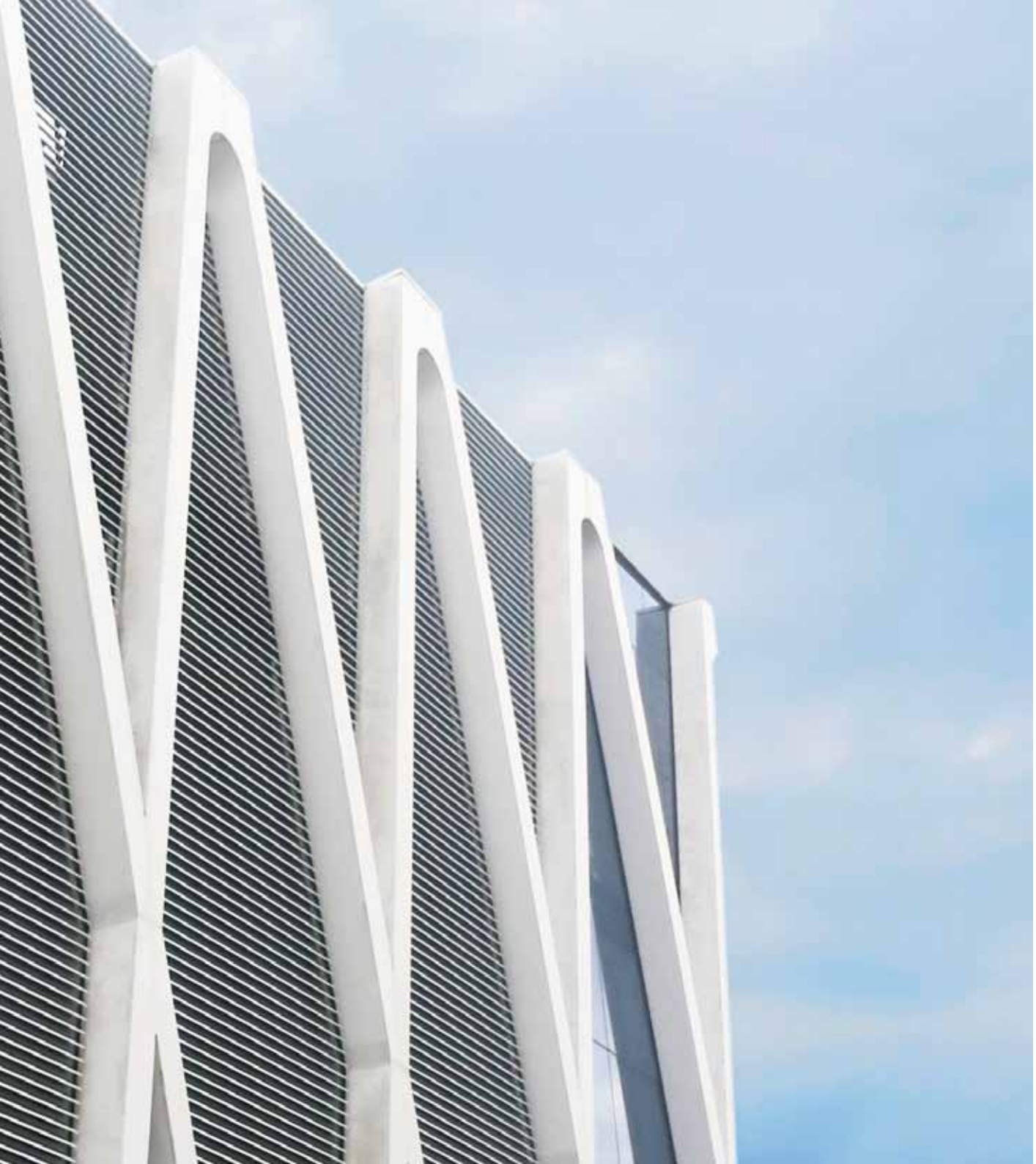
MAXIMUM EFFICIENCY IN EVERY TYPE OF USE

VENTILATION

Permitting air circulation while maintaining the sun at a safe distance helps to reduce, especially in the hottest months, the heat produced by solar radiation by up to 80%.

The air contained in the chamber created between the louver and the glazing warms up and rises via convection, allowing air from outside to enter via the slats' openings, promoting the renewal of the air in the chamber. This action stops the glazing overheating and avoids the transfer of heat to the interior.

Thanks to the slats' action, the user can keep the windows open, connecting the room with the exterior. This allows ventilation and air renewal even when it is raining outside.



INTIMACY

The positioning of the slats, using an optimum separation and angle of inclination, allows the intimacy of the room to be maintained, without compromising on ventilation or light entry.

So, anyone who finds themselves inside can enjoy the peace of being able to observe without being seen themselves.

AESTHETIC & DURABILITY

Giménez Ganga's louvers are a forefront reference on a technical and aesthetic level, that thanks to their properties and wide catalogue of slats and systems, adapt to the needs of every type of professional.

Thanks to these louvers, our clients can:

- Choose from one of the widest ranges of colours, finishes and textures on the market.
- Offer different types of solutions if the need to reformulate a project arises.
- Count on a product that is able to resist to perfection the effects of various atmospheric agents, including ultraviolet rays.
- Supply a product that is easy to install, adapts to any architectural style and that requires minimum maintenance.

ENERGY SAVING

One of the most common uses of our louvers, especially in large corporate buildings with very high electricity consumption, is **reducing the energy requirements of the building**.

Giménez Ganga's option is ideal both in new builds and renovations, thanks to the increased thermal resistance it creates. In this way, we promote:

- The reduction of the thermal transmission coefficient (U) of the building's siding.
- The prevention of direct radiation on the base siding, drastically reducing the effect of the sun's heat on the glazing.
- The reduction of the energy transmission via thermal bridges in the floor edge zones, by reducing the sun's effect on these.
- The reduction of the building's CO_2 emissions and of airborne noise.

So, the improvement of the room's sun protection system makes its interior more comfortable, reducing the need for central heating and significantly helping to save energy.

IMPROVING THE LIVES OF CUSTOMERS WITH DIVERSE NEEDS

THERMAL COMFORT

Solar action

All buildings are exposed to the sun's effect. The solar rays fall on the building's exterior, producing a generalised increase in temperature in its interior. Because of this, we must regulate the incident solar energy on the exterior of the building concerned.

Temperature regulation

We know that the thermal comfort of an individual in a certain place depends on various parameters, such as the air temperature and speed, the relative humidity, the physical activity they have carried out, the amount of clothing they have on, or each person's own metabolism.

So, a sensation of comfort is achieved by reaching a thermal balance in which heat losses and gains are equal.

The need to act regarding building temperature regulation arises here, in order to make rooms thermally comfortable.

Temperature balance

The sun protection systems **regulate the transmittance of the incident solar energy that is transferred from the outside to the inside of the building**, achieving a balanced interior temperature. So, energy efficiency is directly influenced. Let's see in detail how the thermal transmittance works:

ENERGY TRANSMITTANCE g_{tot}

The transmittance of total solar energy, also called the "solar factor", represents the part of the incident energy that is transmitted towards the interior of the enclosed area.

The value **g** is the solar factor of the glazing, the value g_{tot} is the solar factor of the combination of glazing and a sun protection system.

If there is no solar protection system, the modified solar factor of the opening takes into account the properties of the profile, the glazing and the shadows of the construction elements.

It is calculated according to the following formula:

$$F_H = F_S \cdot (1\text{-}FM) \cdot g + FM \cdot 0.04 \cdot U_m \cdot \alpha$$

BEING:

F_S = the shadow factor for the opening obtained in Tables 11 to 14 of the supporting document DA of the DB HE1 (calculation of the characteristic envelope parameters), depending on the shadow device or by simulation. Should the value of **F_S** not be adequately justified, it should be considered equal to the unit.

F_M = the fraction of the opening taken up by the frame in the case of windows, or the fraction of a solid part in the case of doors.

$g_\perp$ = the solar factor of the semi-transparent part of the opening, at normal incidence. The solar factor can be determined via the method described in UNE EN 410. It corresponds to the solar factor of glass, which varies between 0.80 and 0.40 for the existing residential-sector windows on the market.

$U_m = U_f$ = the thermal transmittance of the frame of the opening
($W/m^2 K$).

g = the absorbency of the frame obtained from table 10 of the supporting document of the DB HE1, according to its colour (see table). Taking these respective definitions into account:

Solar factor: the ratio between solar radiation at normal incidence that is introduced into the building through the glazing and which would be introduced if the glazing were replaced by a perfectly transparent opening.

Shadow factor: this refers to the fraction of radiation falling on an opening that is not blocked by the presence of obstacles such as setbacks, overhangs, awnings, side protrusions or others.

Modified shadow factor: product of the solar factor and the shadow factor.

The value, of both **g** and g_{tot}, is a value between 0 y 1 (0 means that no radiation is being transmitted to the interior of the enclosed area, and 1 signifies that all the radiation is being transmitted).

The **g** value of the glazing is measured according to the UNE-EN standard 410. There are two methods to calculate g_{tot} of a system of solar protection associated with glazing:

- A simplified method is given in standard UNE-EN 13363-1 (solar protection devices combined with glazing. Calculation of solar and light transmittance factor. Part 1: Simplified method).

- A detailed method is provided in standard UNE-EN 13363-2 (sun protection devices combined with glazing. Calculation of solar and light transmittance factor. Part 2: Detailed calculation method).

Both methods take into account the properties of the glazing, and the material that makes up the solar protection device.

In the simplified method from standard UNE-EN 13363-1, the U and **g** values of the glazing, along with the energy transmittance and the reflectance of the sun protection system, are taken into account.

The formulae used are as follows:

- For a shutter or louver.

$$g_{tot} = \tau_e g + \alpha_e \frac{G}{G_2} + \tau_e (1 - g) \frac{G}{G_1}$$

WHERE:

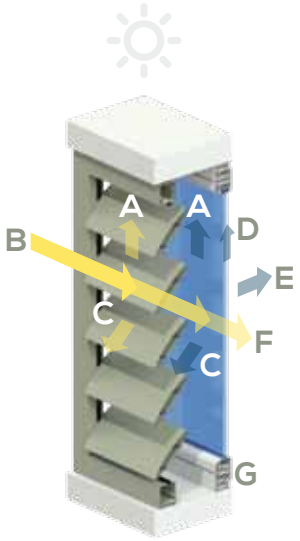
τ_e is the solar transmittance of the blind or lattice.
ρ_e is the solar reflectance of the blind or lattice.
α_e is the absorbance of the blind or lattice.
g is the solar factor of the glazing.
G_1, G_2 and G_3 are fixed values given in the standard.

These formulae may be applied only if the transmittance and solar reflectance of the solar protection device are within these ranges:

$$0 \leq \tau_e \leq 0.5 \text{ y } 0.1 \leq \rho_e \leq 0.8$$

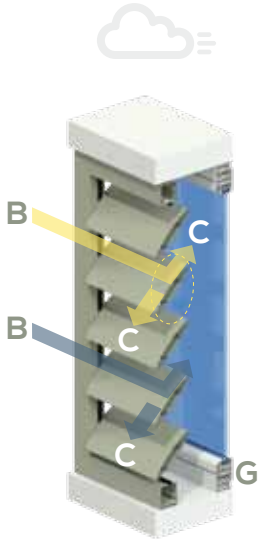
Furthermore, the solar factor of the glazing must be between 0.15 and 0.85.

TRANSMITTANCE OF TOTAL ENERGY g_{tot}																	
Exterior solar protection device		Translucent single glass				Translucent double glass				Translucent triple glass				Double glass (low emissions)			
		Reflection factor ρ_e				Reflection factor ρ_e				Reflection factor ρ_e				Reflection factor ρ_e			
Transmittance factor τ_e		White	Pastel	Dark	Black	White	Pastel	Dark	Black	White	Pastel	Dark	Black	White	Pastel	Dark	Black
Opaque	0	0.06	0.11	0.15	0.19	0.05	0.08	0.11	0.14	0.04	0.06	0.09	0.11	0.03	0.05	0.08	0.10
Medium translucence	0.2	0.22	0.27	0.31	0.33	0.20	0.23	0.26	0.28	0.17	0.20	0.22	0.24	0.17	0.20	0.22	0.23
Highly translucent	0.4	0.41	0.43	0.45	0.47	0.36	0.38	0.39	0.41	0.32	0.33	0.35	0.36	0.33	0.34	0.35	0.36



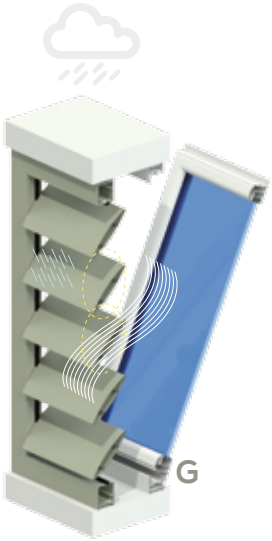
Summer

Increased sun protection.
Regulation of natural light.



Winter

Regulation of
natural light.



Protection from the weather

Ventilation in
adverse conditions.

- **A** Convection
- **B** Shortwave solar radiation
- **C** Refl ection
- **D** Absorption
- **E** Secondary longwave radiation
- **F** Directly transmitted shortwave radiation
- **G** Window with insulating glass

VISUAL COMFORT

People receive almost 80% of information via their eyes, meaning quantity and quality of light directly influences our daily decision-making.

Light **intensity**

Because of this, we know that limiting the lack or excess of illumination, avoiding dark interiors and optimising the appropriate shapes and sizes of the openings in façades and coverings are key to maintaining contact with the outside world, while filtering the intensity of the light coming from outside.

Suitable **atmospheres**

The creation of suitable atmospheres for carrying out daily tasks is a responsibility that we take very seriously at Giménez Ganga.

Balanced illumination

Balanced illumination that takes advantage of natural light, permitting views of the outside where possible, guarantees visual comfort and wellbeing. This provides the building with additional energy and balance that increases the productivity and safety of those inside it.

Light **comfort**

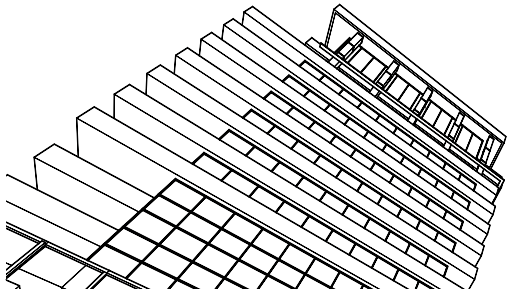
Here we're referring to the human eye being in a position to carry out an activity quickly, without distractions and without any type of stress.

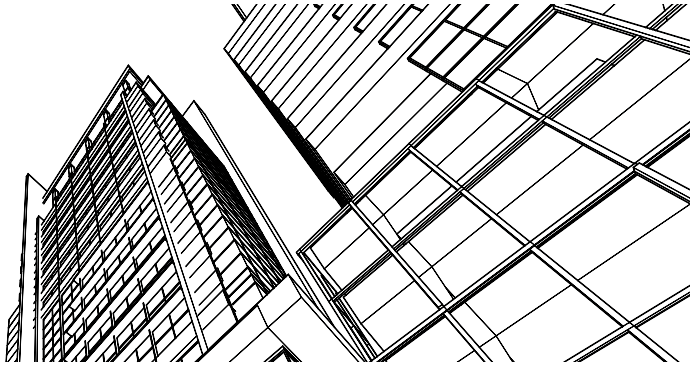
PROTECTION FROM BAD WEATHER

The optimal positioning of the slats that form a louver protect the room and the window from the effects of rain, meaning the window can remain open without allowing water to penetrate the interior.

Furthermore, the risk of ice is reduced and the direct impact of gusts of wind on the window is avoided, prolonging the life of the woodwork.

SUPPORTING THE PROFESSIONAL IN EVERY STEP OF THE PROJECT





TECHNICAL CONSULTANCY

Our specialised team, formed of architects, engineers and construction professionals, is always available to help, working shoulder to shoulder with the commercial department and with our clients to advise on doubts that could arise during any installation.

Choosing the best option on a technical and aesthetic level, or identifying the concrete requirements of a space, will be much simpler for our clients, thanks to being able to count on assistance of the highest calibre.

So, we ensure that our sun protection system installations for buildings not only reach any location, but also become optimally integrated into any type of project.

BIM MODELLING

Satisfying clients goes beyond offering the best products with the market leader's guarantee. Full satisfaction is reached when solutions are provided that make a project easier for those working on it.

The most popular products are constantly available on our website in BIM format, ready to be implemented in project plans. This aspect allows professionals to integrate our products into a model of the building, to better understand the opportunities presented by the product and its components during the project phase.

In this way, we have enabled **Giménez Ganga** products to be present in the most influential professionals' databases, considered a solution to always bear in mind.

PRODUCT TEST

We have the latest technology in our facilities in order to submit all our products to the most demanding conditions, guaranteeing their correct function throughout the project's life cycle.

Each project is analysed based on the type of sun protection system under consideration. According to the conditions of each facility, such as location, orientation and projection, that, together with snow and wind stresses, are parameters that determine the scope of the study carried out.

We carry out the louver system cutting, mobilisation and assembly processes developed by our technical department in our own facilities.

Testing the wind resistance of the AC-150 slat in the Giménez Ganga laboratory.

EXTRUSION ALUMINIUM

The aluminium profiles that our products use are extruded with alloys 6060/6063 and T5 tempering.

The surface finishes comply with the specifications of the Qualicoat, Qualideco and Qualanod brands.

DIn this way, **we guarantee a high-quality product, durable and with high aesthetic value**, scrupulously produced in our advanced facilities, where we have 5 extrusion presses and 2 lacquering floors.

ALUMINIUM TREATMENTS AND FINISHES

ANODISED

After its extrusion, the aluminium forms a slim aluminium oxide film, which provides it with some minimum anti-oxidation and anti-corrosion properties. This natural process is improved via anodising, an electrolytic chemical process that allows us to artificially obtain oxide films that are much thicker and offer better protection than naturally-formed layers.

The advantages of the anodised finish are:

- The surface layer is more resistant than steel.
- It gives the aluminium a very varied decorative appearance, as it can be coloured with any tone.
- Sunlight does not deteriorate the product.

SUBLIMATION

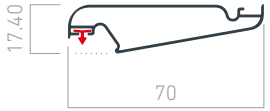
Sublimation is the process of transferring an image to the pre-lacquered surface of the aluminium, decorating it with a pre-determined design.

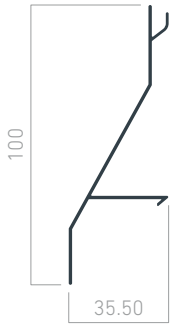
LACQUER

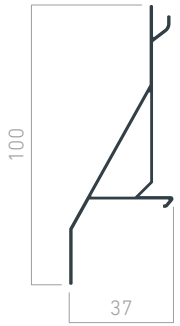
The lacquer, applied to aluminium profiles, consists of a pre-treatment of the surface to be decorated, for the subsequent application of paint powder on the surface of the aluminium, which offers high robustness to light and resistance to corrosion.

There is an infinite variety of colours and textures that allow the user to have total control over every chromatic nuance of the product.

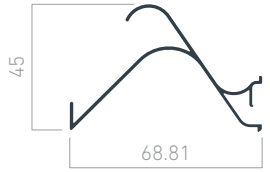
SLATS GLOSSARY

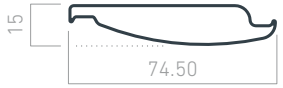


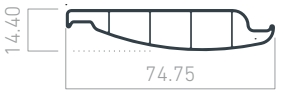




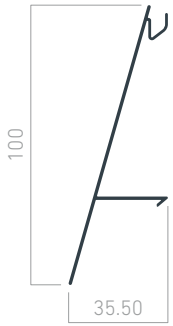
	D-5	D-7	Z	Z PVC
Composition	Aluminium	Aluminium	Aluminium	PVC
Operation	**Fixed**	**Moveable**	**Fixed**	**Fixed**
Anchoring	Die-cut profile	Naco-system	Double support	Double support
Family	Fixed framed	Framed moveable	Fixed on support	Fixed on support
	Page I 54	Page I 151	Page I 60	Page I 60

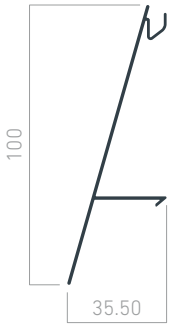


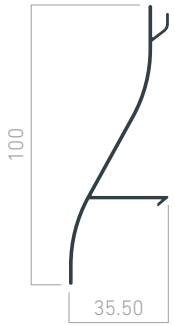


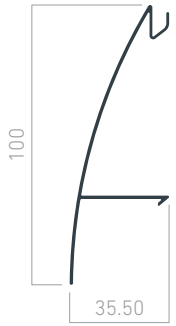


	V-5	HR	AP-75	AP-75 PVC
Composition	Aluminium	Aluminium	Aluminium	PVC
Operation	**Fixed**	**Fixed**	**Moveable**	**Moveable**
Anchoring	Double support	Double support	40x40 mm overlap frame	40x40 mm overlap frame
Family	Fixed on support	Fixed on support	Framed moveable	Framed moveable
	Page I 63	Page I 63	Page I 156	Page I 157

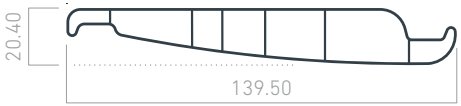


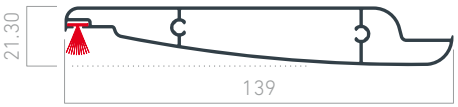






	I	I Microperforated	S	C
Composition	Aluminium	Aluminium	Aluminium	Aluminium
Operation	**Fixed**	**Fixed**	**Fixed**	**Fixed**
Anchoring	Double support	Double support	Double support	Double support
Family	Fixed on support	Fixed on support	Fixed on support	Fixed on support
	Page	61	Page	61	Page	60	Page	61



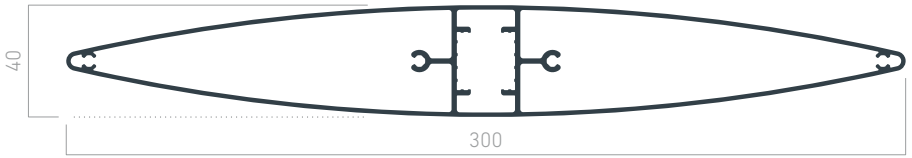


	AP-140 PVC		AP-140	
Composition	PVC		Aluminium	
Operation	**Moveable (pivot system)**	**Moveable (grill system)**	**Moveable (pivot system)**	**Moveable (grill system)**
Anchoring	40x40 mm overlap frame	40x40 mm overlap frame	50x40 mm frame	50x40 mm frame
Family	Framed moveable	Framed moveable	Framed moveable	Framed moveable
	Page	160	Page	161	Page	164	Page	165

SLATS GLOSSARY

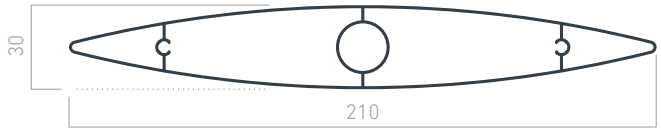
O-120

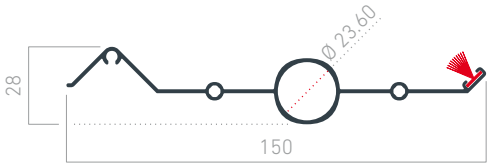
Composition	Aluminium				
Operation	**Fixed**		**Moveable (pivot system)**		**Moveable (grill system)**
Anchoring	Clamp	Fixed position end plate	Moveable zamack end plate	Moveable zamack end plate	Moveable aluminium end plate
Family	Fixed with clamps	Fixed with lateral anchoring	Moveable on frame	Moveable on structural profile	Moveable on frame
	Page I 76	Page I 92	Page I 168	Page I 178	Page I 169



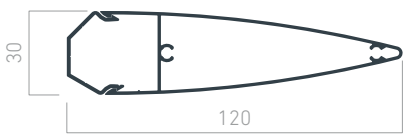
O-300

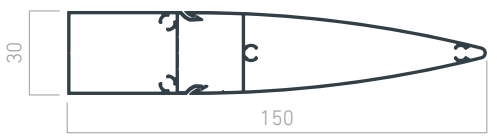
Composition	Aluminium			
Operation	**Fixed**		**Moveable**	
Anchoring	Clamp	Fixed position end plate	Moveable aluminium end plate	
Family	Fixed with clamps	Fixed with lateral anchoring	Moveable on structural profile	
	Page I 76	Page I 93	Page I 178	





	O-210				AC-150
Composition	Aluminium				Aluminium
Operation	**Fixed**		**Moveable**		**Moveable (grill system)**
Anchoring	Clamp	Fixed position end plate	Moveable aluminium end plate	Aluminium end plate	Moveable aluminium end plate
Family	Fixed with clamps	Fixed with lateral anchoring	Framed moveable	Moveable on structural profile	Framed moveable
	Page I 76	Page I 93	Page I 173	Page I 178	Page I 152



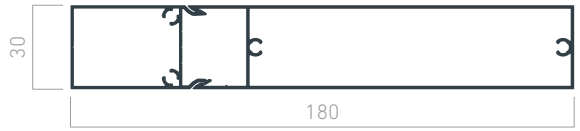


	A-120		A-150	
Composition	Aluminium		Aluminium	
Operation	**Fixed**		**Fixed**	
Anchoring	40x20 mm guided support	65x40 mm carrier profile	40x20 mm guided support	65x40 mm carrier profile
Family	Fixed with selectable inclination	Fixed with selectable inclination	Fixed on structural profile	Fixed on structural profile
	Page I 116 and 118	Page I 116 and 118	Page I 132 and 134	Page I 132 and 134

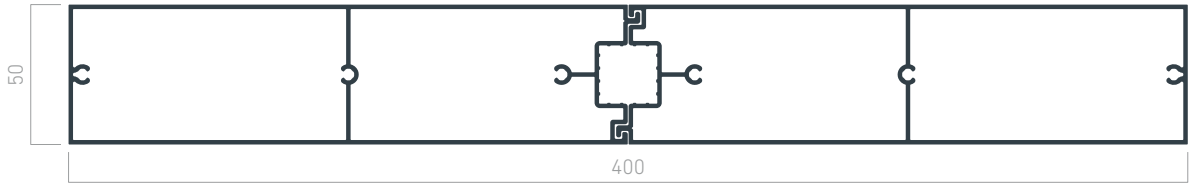
SLATS GLOSSARY

	R-100	R-150	
Composition	Aluminium	Aluminium	
Operation	**Fixed**	**Fixed**	
Anchoring	Fixed position end plate	40x20 mm guided support	65x40 mm carrier profile
Family	Fixed with lateral anchoring	Fixed with selectable inclination	Fixed with selectable inclination
	Page | 92	Page | 116 and 119	Page | 116 and 119

	R-300		
Composition	Aluminium		
Operation	**Fixed**		**Moveable**
Anchoring	Upper-lower bracket	45° support	Moveable aluminium end plate
Family	Fixed with lateral anchoring	Fixed with lateral anchoring	Moveable on structural profile
	Page | 106 and 108	Page | 106 and 112	Page | 179



	R-180		R-250		
Composition	Aluminium		Aluminium		
Operation	**Fixed**		**Fixed**		**Moveable**
Anchoring	40x20 mm guided support	65x40 mm guided support	Upper-lower bracket	90° support	Moveable aluminium end plate
Family	Fixed on structural profile	Fixed on structural profile	Fixed with lateral anchoring	Fixed with lateral anchoring	Moveable on structural profilel
	Page | 132 and 134	Page | 132 and 134	Page | 106 and 108	Page | 106 and 112	Page | 179



	R-400	
Composition	Aluminium	
Operation	**Fixed**	**Moveable**
Anchoring	Upper-lower bracket	Moveable aluminium end plate
Family	Fixed with lateral anchoring	Moveable on structural profile
	Page | 107	Page | 179

1 SUPPORT PROFILES

RESISTANCE AND ADAPTABILITY AT THE SERVICE OF ARCHITECTS

The structural component of Giménez Ganga's systems is comprised of extruded aluminium profiles of variable dimensions, on which fixed or moveable slats are installed using machine-made parts or accessories.

The use of fastenings and fixture components **allows perimeter frames to be created, which adapt to every type of design and façade typology**.

The selection of the structural profile suitable for each facility will depend on the design, typology and location of the building, these conditions considered in the study carried out prior to each project.

SLAT C **ON DOUBLE SUPPORT**

1 SUPPORT PROFILES

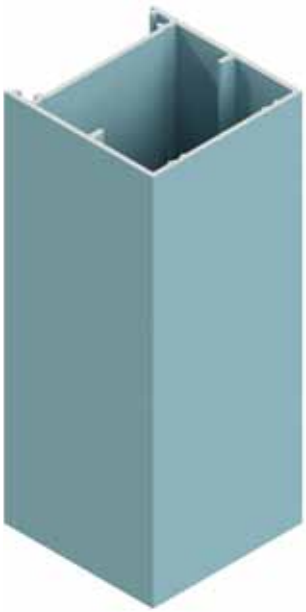
1.1 40x40 frame profile
1.2 50x40 frame profile
1.3 Double support profile
1.4 40x20 guided support
1.5 65x40 carrier profile
1.6 100x40 carrier profile
1.7 65x65 carrier profile
1.8 Shared profiles

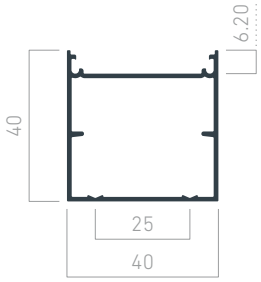
1.1 40x40 FRAME PROFILE

40x40 mm overlap frame

027642

Extruded aluminium profile for creating frames on which fixed slats will be installed.



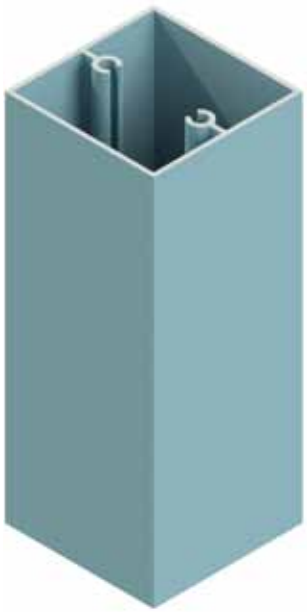


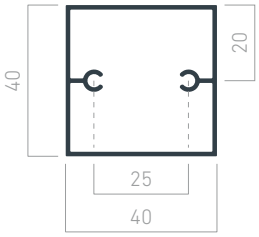
Technical data	
Profile depth	40 mm
Profile width	40 mm
Profile weight	0.60 Kg/ml

40x40 mm auto-drilled aluminium tube

027394

Extruded aluminium profile for the division in intervals of frames created with the 40x40 mm overlap frame profile. Its use will depend on the slat that forms the louver ensemble.





Technical data	
Profile depth	40 mm
Profile width	40 mm
Profile weight	0.67 Kg/ml

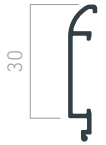
In option

Overlaps

Extruded aluminium adapter clipped to **40x40 mm overlap frame profile**. With this adapter we achieve a perfect seal between the frame and the building, hiding possible imperfections and clearance of the openings in which it is installed.

Overlap 30

005201



Overlap 50

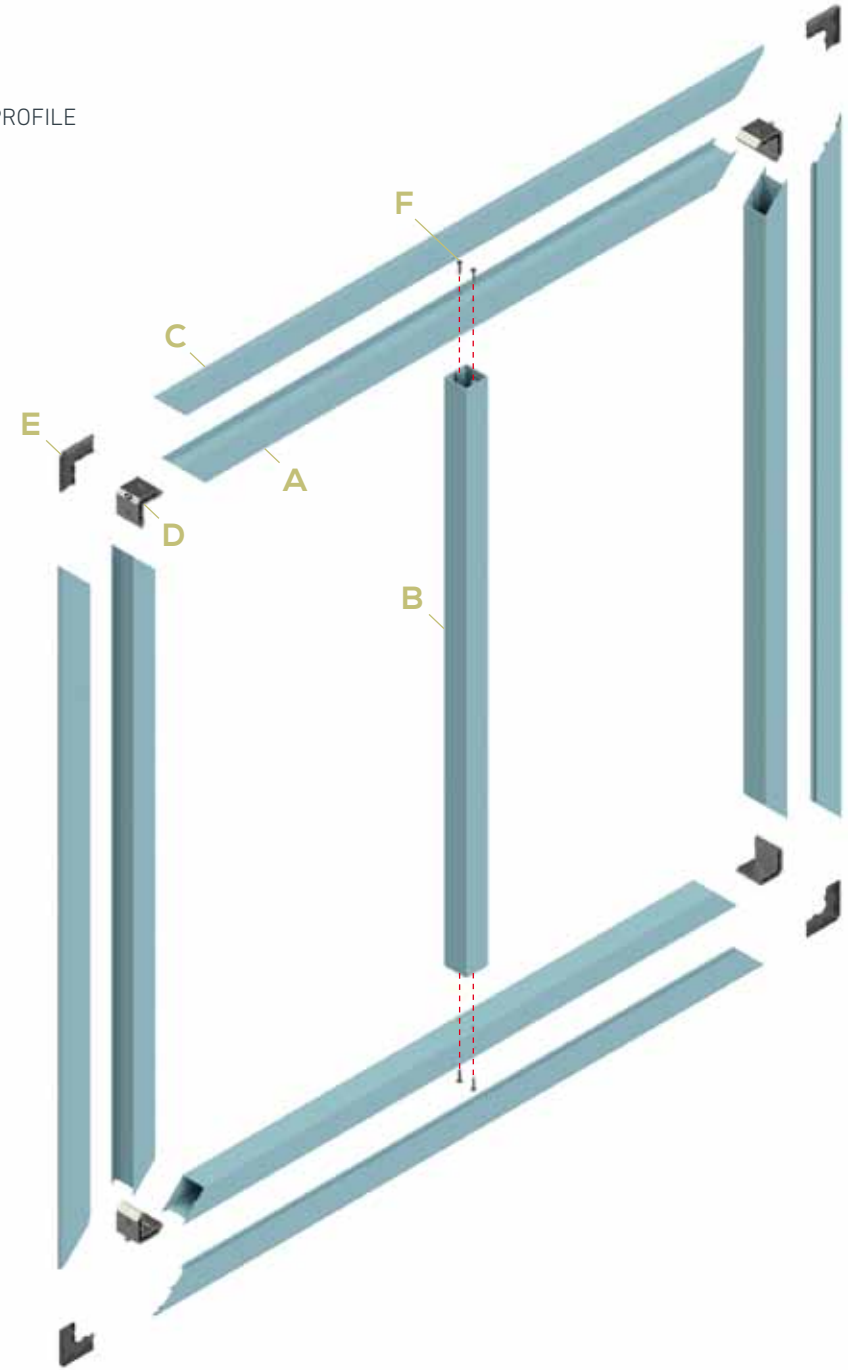
005211

Overlap 80

005221

See installation detail on page 37.

EXPLODED VIEW
40x40 mm FRAME PROFILE



PROFILES

A 40x40 mm overlap frame
027642

B 40x40 mm auto-drilled aluminium tube
027394

C Overlap 30, 50, 80
005201 | 005211 | 005221

ACCESSORIES

D Aluminium square 37-14-C
020010

E Overlap square
005341

SCREWS

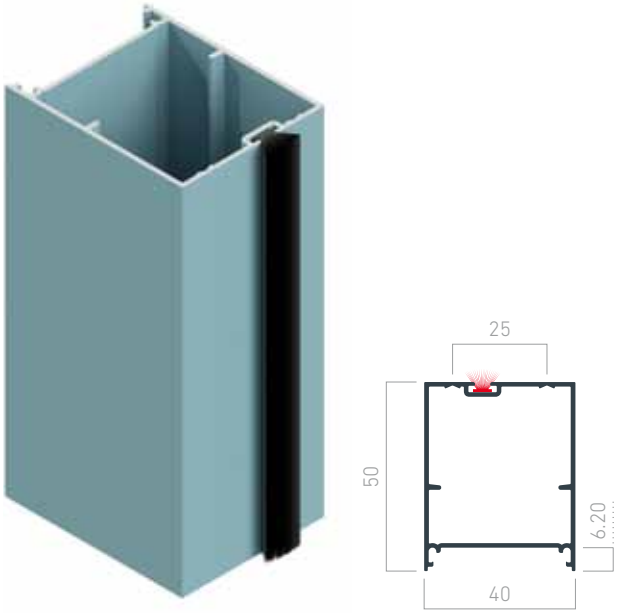
F Screw DIN 7981 A2 4.2x50 mm
051301

1.2 50x40 FRAME PROFILE

50x40 mm frame with seal

005052

Extruded aluminium profile for creating frames on which slats with moveable anchorage can be installed. Allows the installation of a brush for a total seal between the slats and the frame.

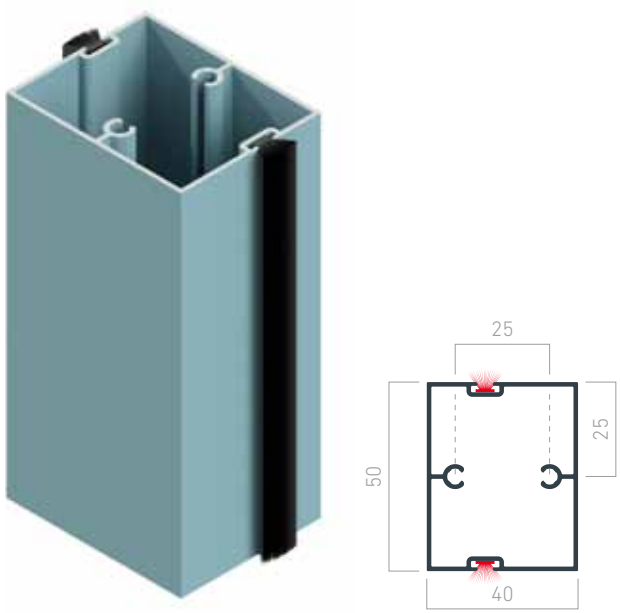


Technical data	
Profile depth	40 mm
Profile width	50 mm
Profile weight	0.70 Kg/ml

50x40 mm central frame with seal

005111

Extruded aluminium profile for the division in intervals of frames created with the 50x40 mm with seal. Its use will depend on the slat that forms the louver ensemble.



Technical data	
Profile depth	40 mm
Profile width	50 mm
Profile weight	0.80 Kg/ml

In option

Overlaps

Extruded aluminium adapter clipped to **50x40 mm overlap frame profile**. With this adapter we achieve a perfect seal between the frame and the building, hiding possible imperfections and clearance of the openings in which it is installed.

Overlap 30

005201

Overlap 50

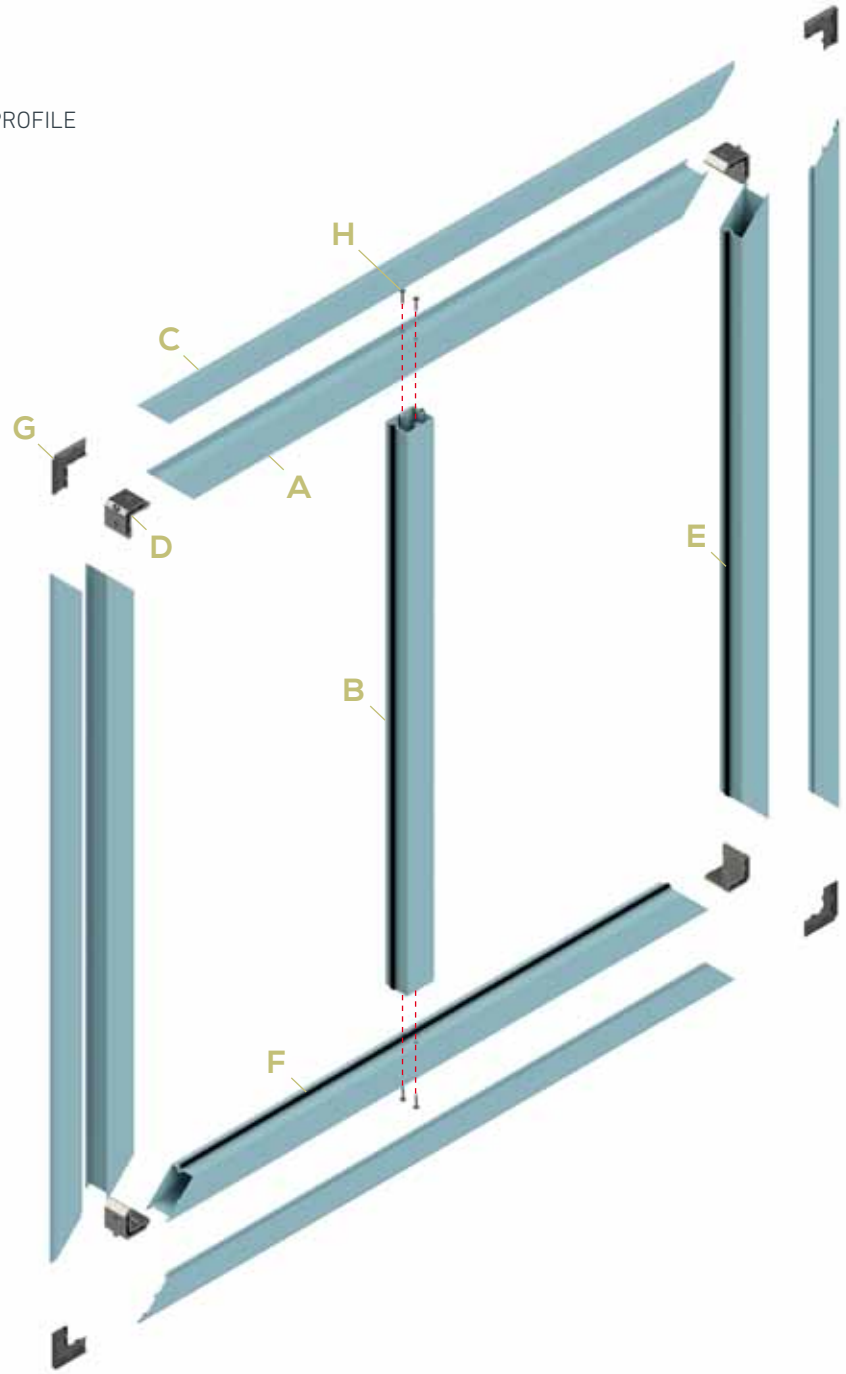
005211

Overlap 80

005221

See installation detail on page 39.

EXPLODED VIEW
50x40 mm FRAME PROFILE



PROFILES

A 50x40 mm frame with seal
005052

B 50x40 mm central frame with seal
005111

C Overlap 30, 50, 80
005201 | 005211 | 005221

ACCESSORIES

D Aluminium square 37-14-C
020010

E Perimeter brush 69-550
026015

F Perimeter brush 69-1000
041068

G Overlap square
005341

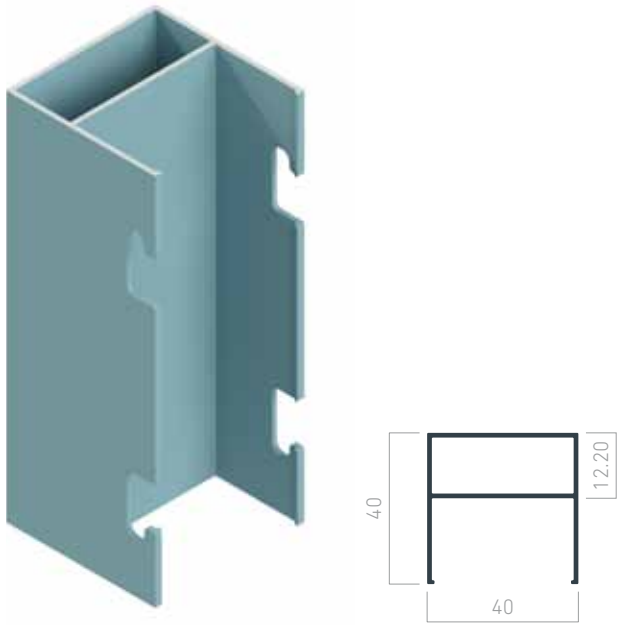
SCREWS

H Screw DIN 7981 A2 4.2x50 mm
051301

1.3 DOUBLE SUPPORT PROFILE

Double support

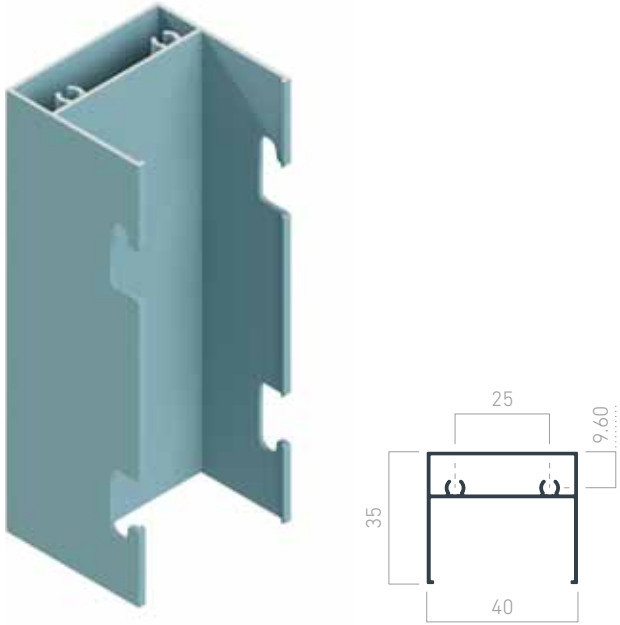
Extruded aluminium profile used for fixture of slats via a clip after a die-cutting process.



Technical data	
Profile depth	40 mm
Profile width	40 mm
Profile weight	0.49 Kg/ml

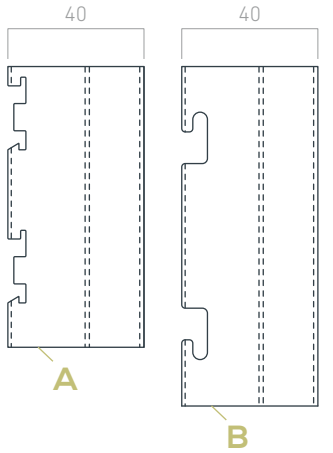
Auto-drilled double support

Extruded aluminium profile used for fixture of slats via a clip after a die-cutting process.



Technical data	
Profile depth	35 mm
Profile width	40 mm
Profile weight	0.49 Kg/ml

Die-cut on double support



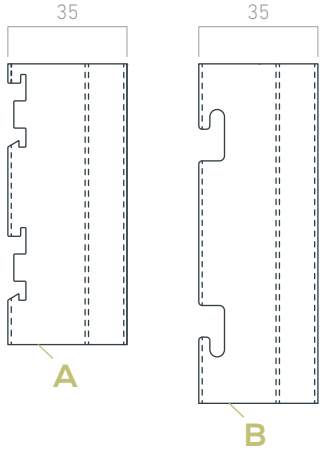
A
Slat model
V-5 | HR

Step
22.2

B
Slat model
Z | Z PVC | S | C
| | | Microperforated

Step
7 | 8 | 9 | 10 | 11

Die-cut on auto-drilled double support



A
Slat model
V-5 | HR

Step
22,2

B
Slat model
Z | Z PVC | S | C
| | | Microperforated

Step
7 | 8 | 9 | 10 | 11

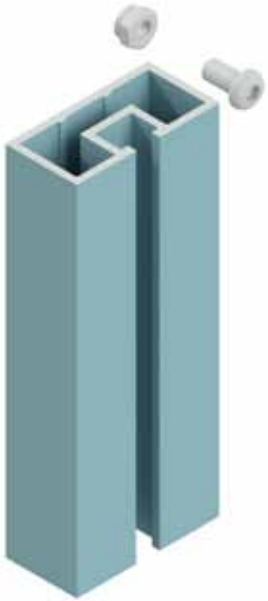
SLAT C **ON DOUBLE SUPPORT**

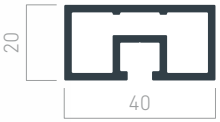
1.4 40x20 GUIDED SUPPORT

40x20 mm guided support NEW!

050331

Structural aluminium extrusion profile that has a slot on one face in which to place nuts DIN 985 A2 M6 and easily affix slat anchoring elements.



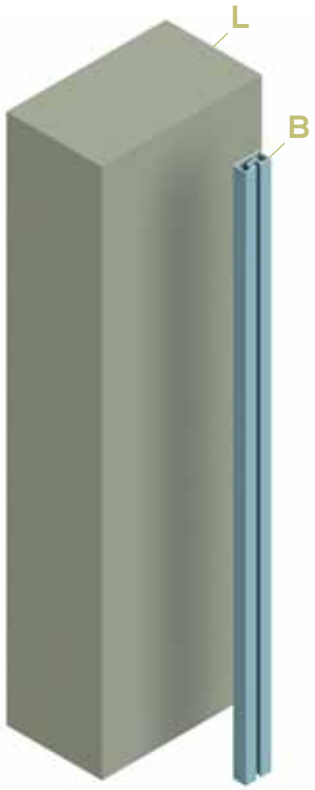


Technical data	
Profile depth	20 mm
Profile width	40 mm
Profile weight	0.80 Kg/m
Inertia moment Iy	14,309 mm^4
Inertia moment Ix	46,278 mm^4

Installation examples

Fixture on siding or wall

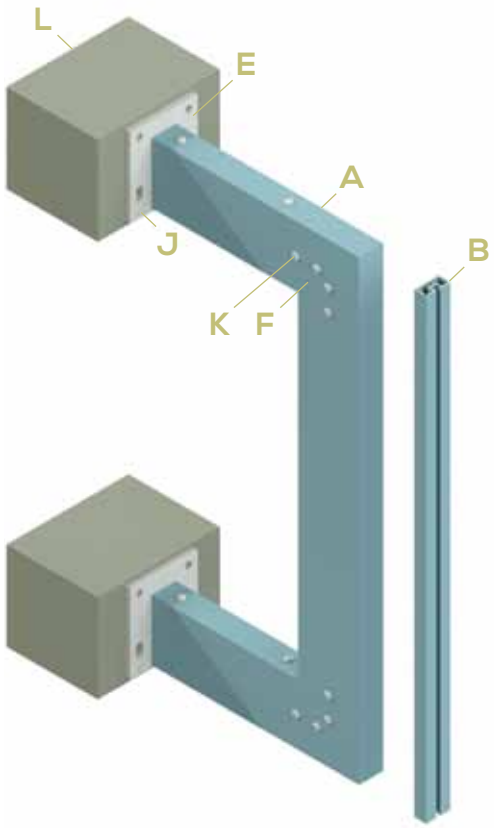
Facilitates the installation of the louver assimilating irregularities of the building.



Anchoring screws will depend on the type of wall. Not provided.

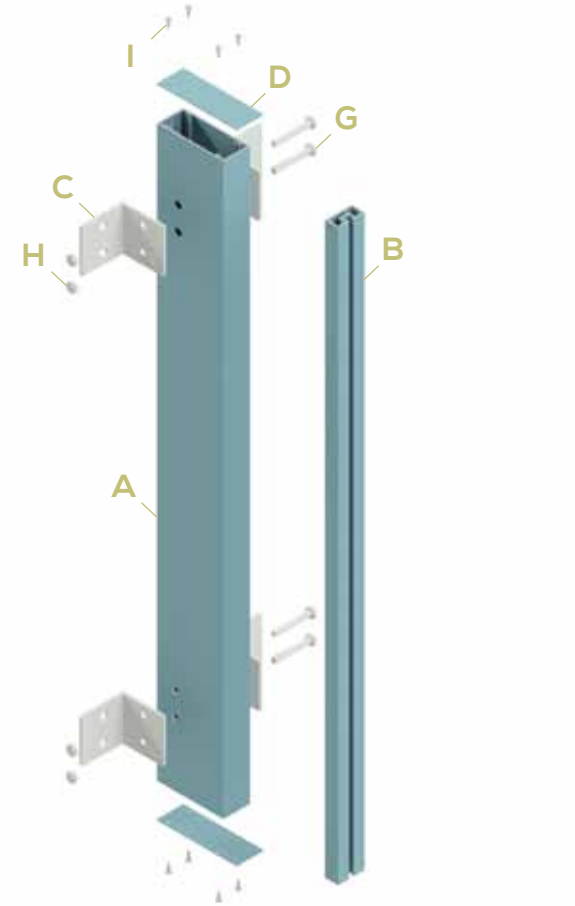
Fixed on 100x40 mm carrier profile

Allows the installation of the louver covering openings with large dimensions. Can also be adapted to pre-existing structures in renovations.



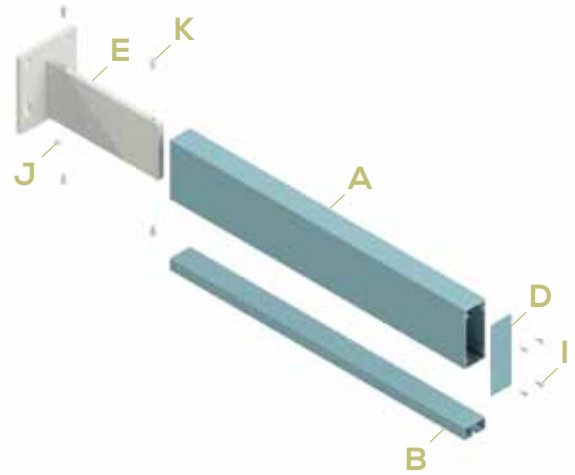
Fixed on 100x40 mm carrier profile

Adapts the installation of the louver over openings in the building.



Fixed on 100x40 mm carrier profile

Allows the cantilevered installation of the louver.



The adaptability of the 40x20 mm guided support allows it to be used without requiring its installation on a base structure.

The use of the support structure and the choice of its typology will be determined by the study carried out prior to each installation.

This will be subject to the conditions of the location of the building and façade design and typology.

PROFILES

A 100x40 mm carrier profile
027395

B 40x20 mm guided support
050331

ACCESSORIES

C 65x65x4 mm square stainless 304
050193

D 100x40 mm and double end plate for carrier profile
023107

E 100x40 mm carrier profile wall bracket
023104

F 90° angle square carrier profile stainless steel (internal)
023106

SCREWS

G Screw DIN 931 A2 M10x70 mm
051114

H Nut DIN 985 A2 M10
051122

I Screw A2 4.2x22 mm fixture end plate for carrier profile
051107

J Bolt DIN 913 A2 M8x14 mm
020000

K Screw ULS ISO 7380 + washer A2 M6x16 mm
051103

CONSTRUCTIVE ELEMENTS

L Façade siding

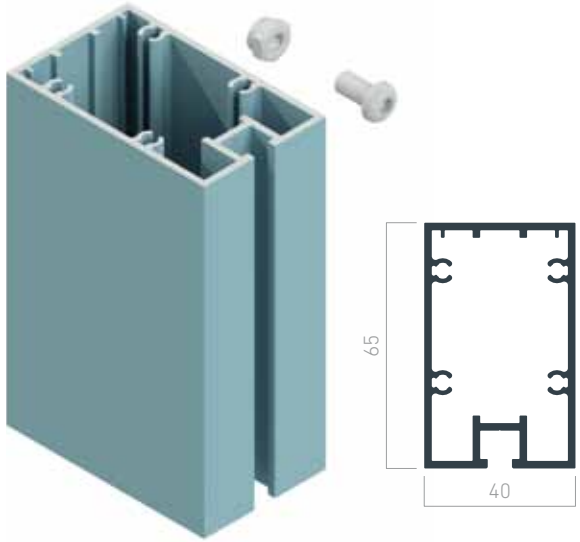
1.5 65x40 CARRIER PROFILE

65x40 mm carrier profile NEW!

051302

Aluminium extrusion structural profile for direct fixture on the building using steel anchorings.

Has an assembly slot lengthwise on one of its faces in which to place nuts DIN 985 A2 M6 and easily affix slat anchoring elements.



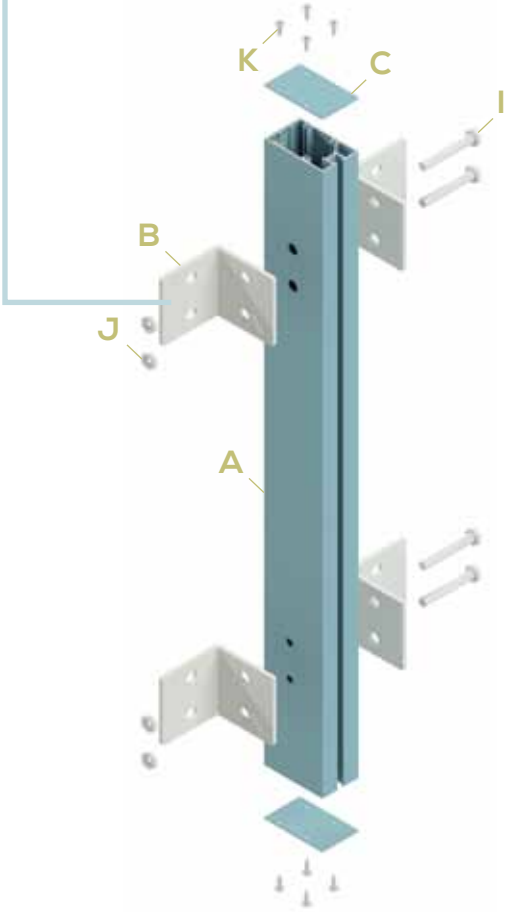
Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Inertia moment Iy	288.065 mm^4
Inertia moment Ix	128.143 mm^4

Accessories

65x65x4 mm square stainless steel 304

050193

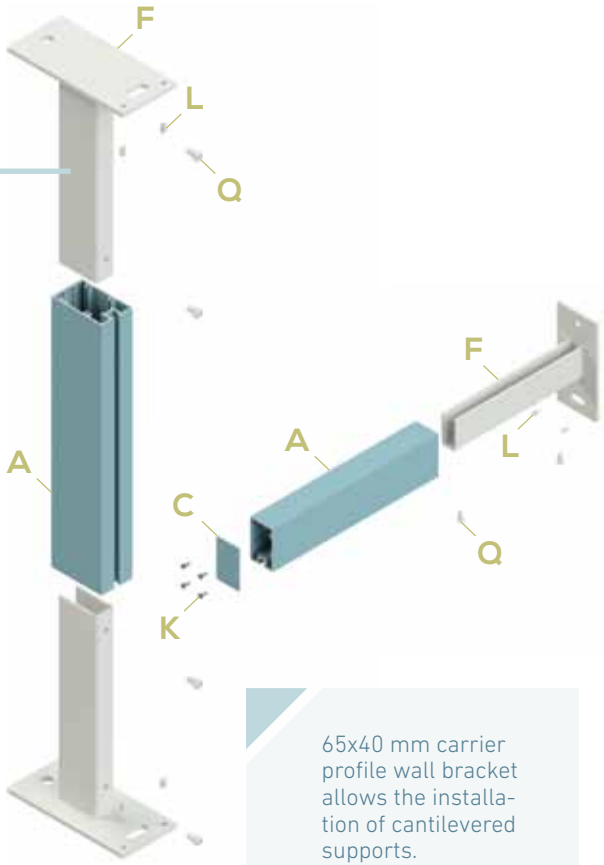
Allows fixation to the building and the creation of joints between profiles. In the case of fixtures to the building, it allows the correct levelling of the profiles when they are going to be installed between brackets.



65x40 mm stainless steel 304 carrier profile wall bracket

023126

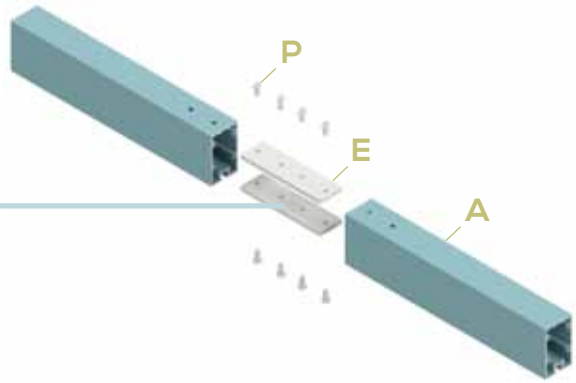
Allows the 65x40 mm carrier profile to be fixed vertically and horizontally to the building.



65x40 mm carrier profile wall bracket allows the installation of cantilevered supports.

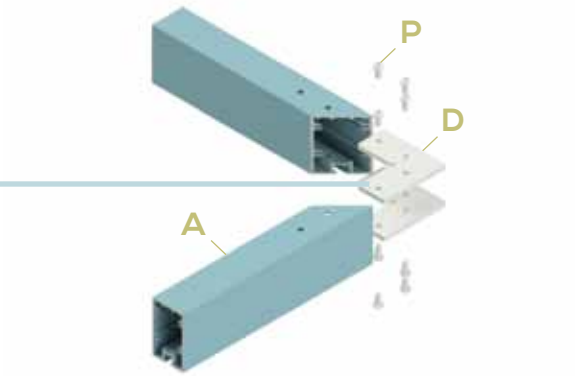
Joining plate carrier profile stainless steel
050000

Offers continuity of the 65x40 mm profile.



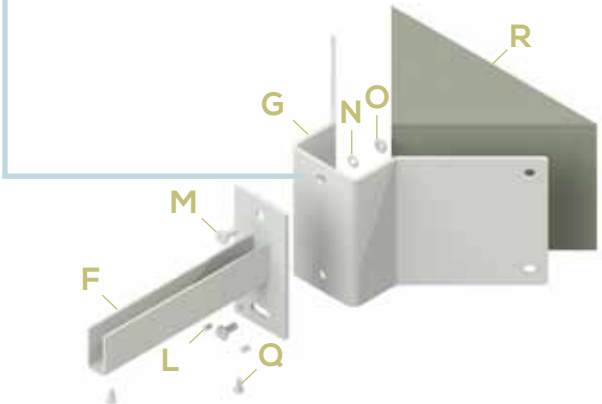
90° angle square carrier profile stainless steel
023106

Allows corner joints of the 65x40 mm profile, via mitre joints.



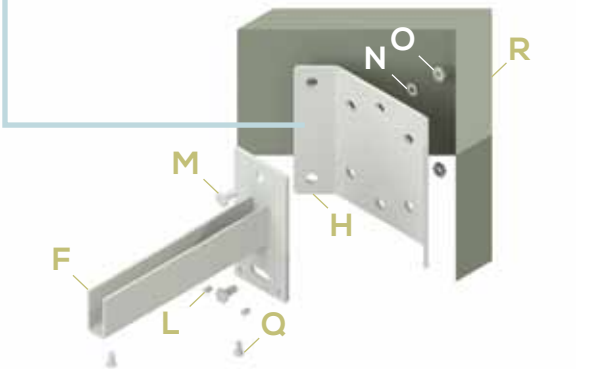
65x40 mm stainless steel carrier profile exterior corner adapter NEW!
051323

Allows the installation of the 65x40 mm carrier profile wall bracket on exterior corners.



65x40 mm stainless steel carrier profile interior corner adapter NEW!
051324

Allows the installation of the 65x40 mm carrier profile wall bracket on interior corners.



PROFILES

A 65x40 mm carrier profile
051302

ACCESSORIES

B 65x65x4 mm square stainless 304
050193

C 65x40 mm end plate for carrier profile
023127

D 90° angle square carrier profile stainless steel
023106

E Joining plate carrier profile stainless steel
050000

F 65x40 mm carrier profile wall bracket
023126

G Carrier profile exterior corner adapter 65x40 mm
051323

H Carrier profile interior corner adapter
051324

SCREWS

I Screw DIN 931 A2 M10x70 mm
051114

J Nut DIN 985 A2 M10
051122

K Screw A2 4.2x22 mm fixture end plate for carrier profile
051107

L Bolt DIN 913 A2 M6x10 mm
051305

M Screw DIN 933 A2 M10x25 mm
051322

N Washer DIN 985 A2 M10
030694

O Nut DIN 985 A2 M10
051122

P Screw ULS ISO 7380 + washer A2 M6x16 mm
051103

Q Allen Screw DIN 7380 A2 M6x12 mm
051306

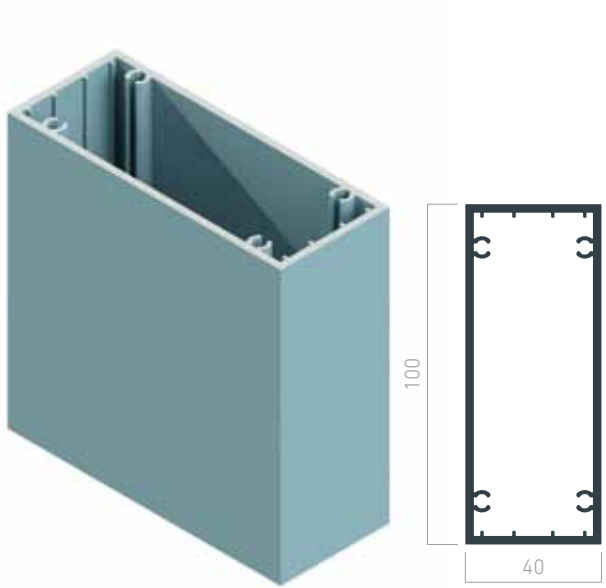
CONSTRUCTIVE ELEMENTS

R Façade siding

1.6 100x40 CARRIER PROFILE

100x40 mm carrier profile
027395

Aluminium extrusion structural profile for direct fixture on the building using steel anchorings, allowing the mechanism for the placement of slats or screws.

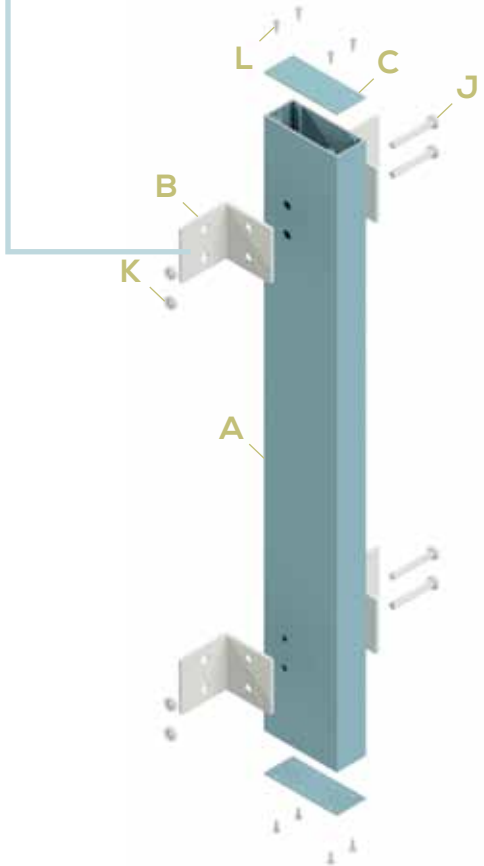


Technical data	
Profile depth	100 mm
Profile width	40 mm
Profile weight	2.20 Kg/ml
Inertia moment Iy	934,415 mm^4
Inertia moment Ix	207,966 mm^4

Accessories

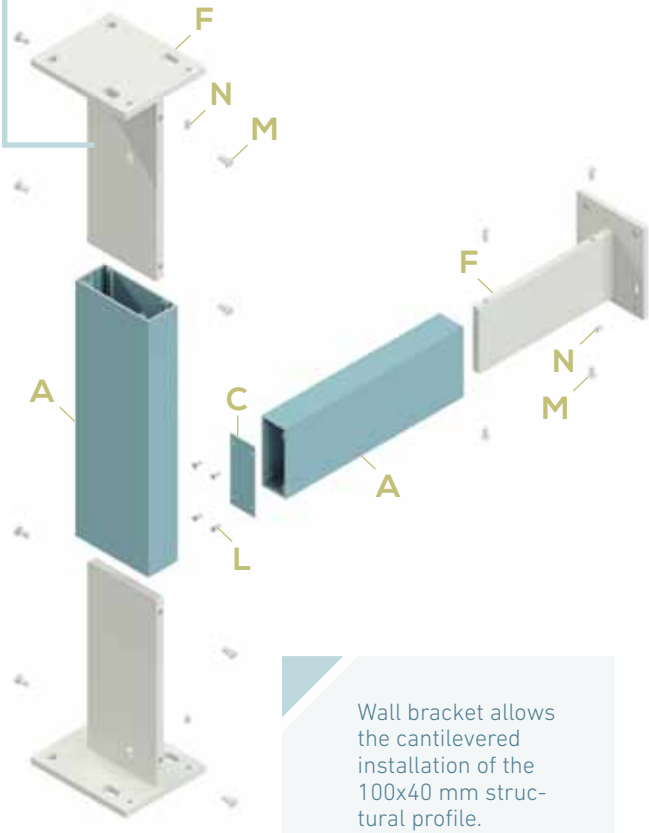
65x65x4 mm square stainless steel 304
050193

Allows fixture to the building and creating joints between profiles. In the case of fixtures to the building, it allows the correct levelling of the profiles when they are installed between brackets.



100x40 mm stainless steel carrier profile wall bracket
023104

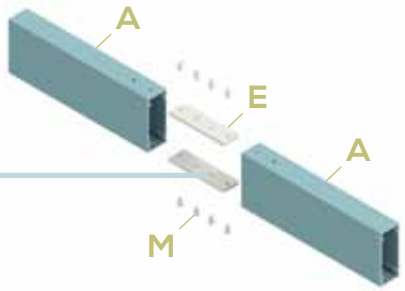
Allows the 100x40 mm carrier profile to be fixed vertically and horizontally to the building.



Wall bracket allows the cantilevered installation of the 100x40 mm structural profile.

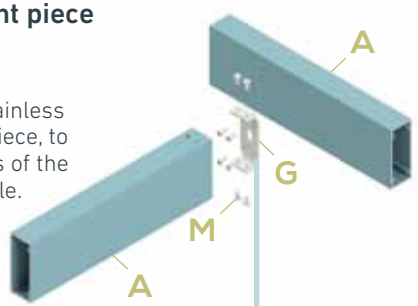
Joining plate carrier profile stainless steel
050000

Offers continuity of the 100x40 mm profile.



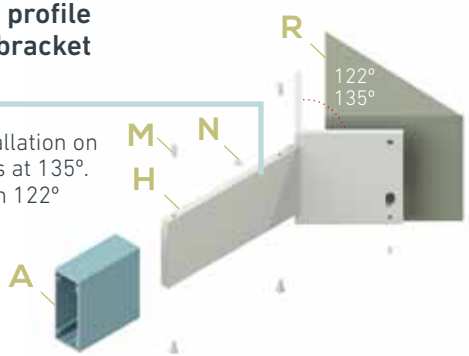
Carrier profile stainless steel front joint piece
023113

Carrier profile stainless steel front joint piece, to create front joints of the 100x40 mm profile.



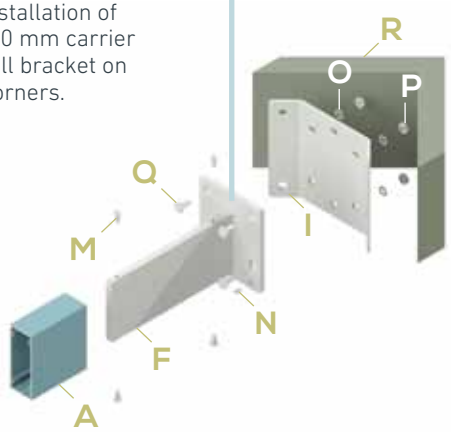
100x40 mm stainless steel carrier profile corner wall bracket
051266

Allows the installation on exterior corners at 135°. Also available in 122° (051265).



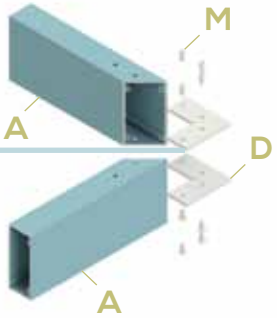
Stainless steel carrier profile interior corner adapter
051324

For the installation of the 100x40 mm carrier profile wall bracket on interior corners.



90° angle square carrier profile stainless steel
023106

Allows corner joints of the 100x40 mm profile, via mitre joints.



PROFILES

- **A** 100x40 mm carrier profile
  027395

ACCESSORIES

- **B** 65x65x4 mm square stainless 304
  050193
- **C** 100x40 mm end plate for carrier profile
  023112
- **D** 90° angle square carrier profile stainless steel
  023106
- **E** Joining plate carrier profile stainless steel
  050000
- **F** 100x40 mm carrier profile wall bracket
  023104
- **G** Carrier profile stainless steel front joint piece
  023113
- **H** 100x40 mm carrier profile corner wall bracket
  051266
- **I** Carrier profile interior corner adapter 100x40 mm
  051324

SCREWS

- **J** Screw DIN 931 A2 M10x70 mm
  051114
- **K** Nut DIN 985 A2 M10
  051122
- **L** Screw A2 4.2x22 mm fixture end plate for carrier profile
  051107
- **M** Screw ULS ISO 7380 + washer A2
  051103
- **N** Bolt DIN 913 A2 M8x14 mm
  020000
- **O** Washer DIN 985 A2 M10
  030694
- **P** Nut DIN 985 A2 M10
  051122
- **Q** Screw DIN 933 A2 M10x25 mm
  051322

CONSTRUCTIVE ELEMENTS

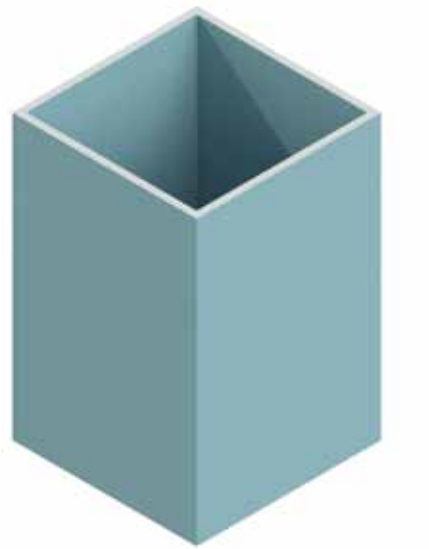
- **R** Façade siding

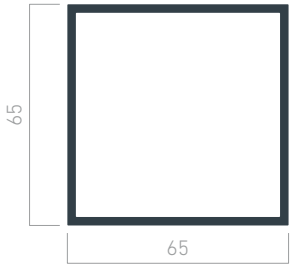
1.7 65x65 CARRIER PROFILE

65x65 mm aluminium tube

027590

Aluminium extrusion structural profile for direct fixture on the building using steel anchorings. Allows the mechanism for placing slats or screws.





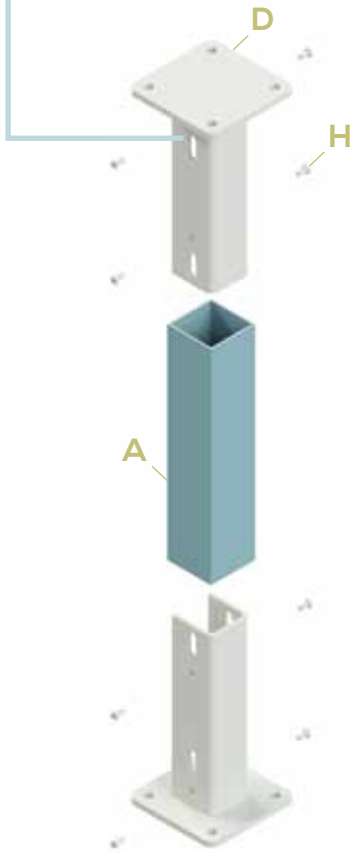
Technical data	
Profile depth	65 mm
Profile width	65 mm
Profile weight	2.07 Kg/ml
Inertia moment Iy	450,095 mm^4
Inertia moment Ix	450,095 mm^4

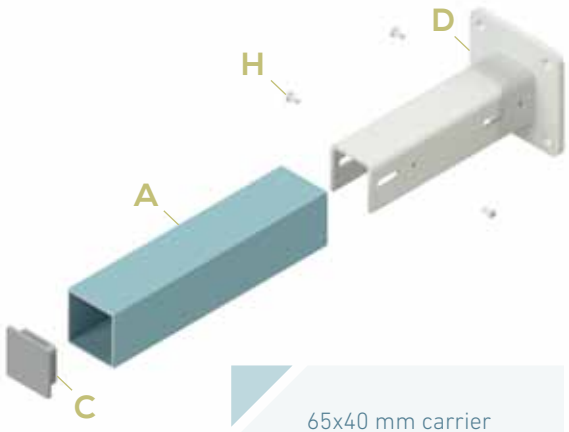
Accessories

Fastening for 65x65 mm machine-made tube fixture stainless steel

051085

Fastening for 65x65 mm tube fixture allows fixing the 65x65 mm carrier profile to the building vertically and horizontally.

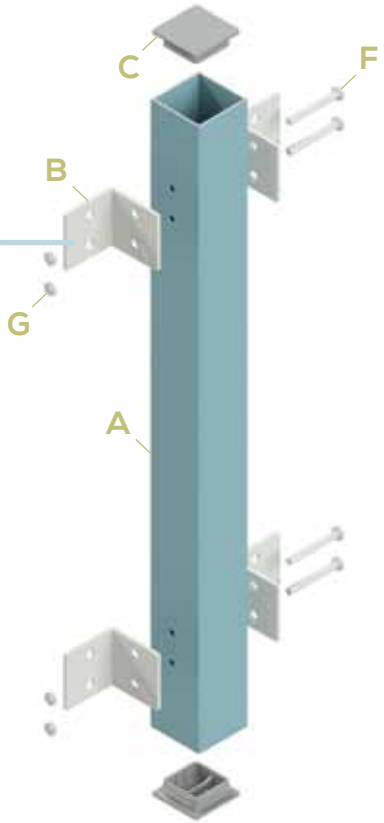




65x40 mm carrier profile wall bracket allows the installation of cantilevered supports.

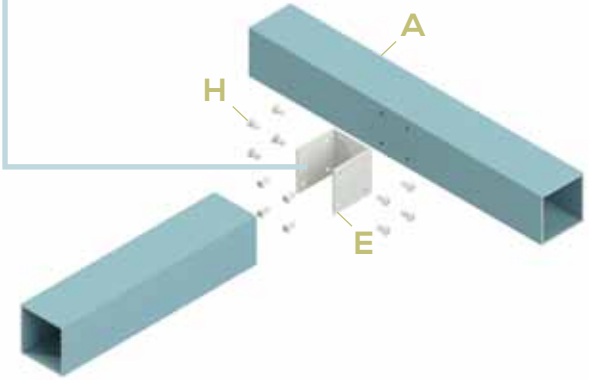
65x65x4 mm square stainless steel 304
050193

65x65x4 mm square stainless steel 304 allows fixture to the building and creating joints between profiles. In the case of fixtures to the building it allows the correct levelling of the profiles when they are installed between brackets.

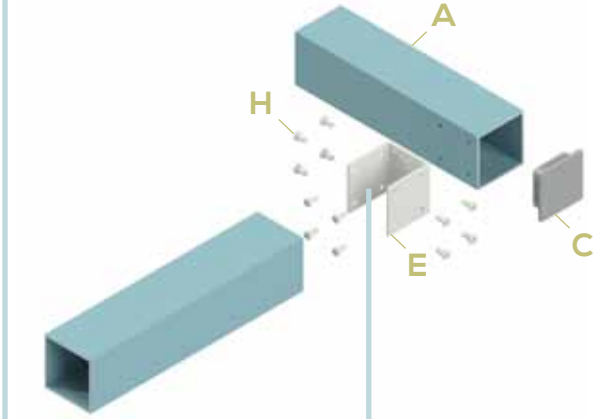


Joint piece 65x65 mm

Joint piece 65x65 mm allows the front joint of the 65x65 mm profile.



Joint piece 65x65 mm allows the corner joint of the 65x65 mm profile.



PROFILES

A 65x65 mm aluminium tube
027590

ACCESSORIES

B 65x65x4 mm square stainless 304
050193

C Square plastic end cup for 65x65 mm tube
051000

D Fastening for 65x65 mm tube fixture
051085

E Joint piece 65x65 mm tube

SCREWS

F Screw DIN 931 A2 M10x70 mm
051114

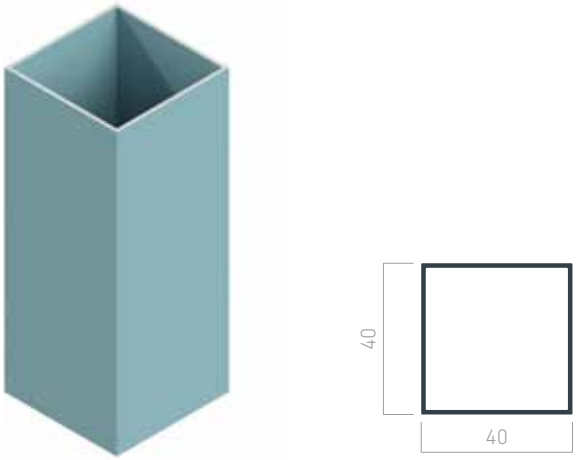
G Nut DIN 985 A2 M10
051122

H Screw ULS ISO 7380 + washer A2 M6x16 mm
051103

1.8 SHARED PROFILES

40x40 mm aluminium tube
027640

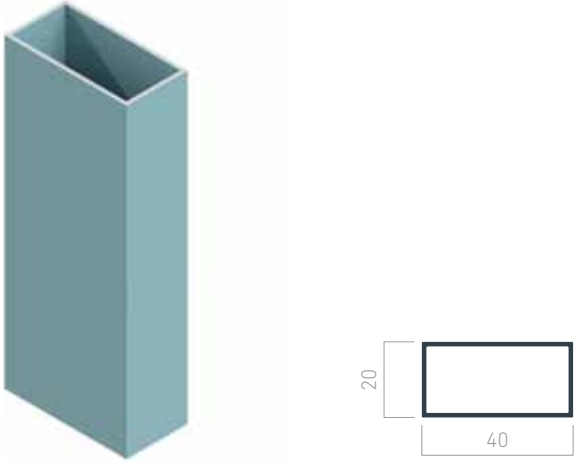
Aluminium extrusion profile for construction of louver frames. Allows the mechanism for placing slats or screws.



Technical data	
Profile weight	0.56 Kg/ml

40x20 mm aluminium tube
027251

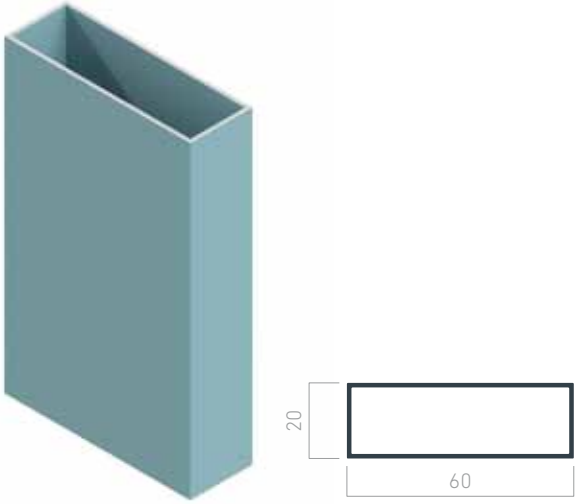
Complementary aluminium extrusion profile for construction of louver frames.



Technical data	
Profile weight	0.41 Kg/ml

60x20 mm aluminium tube
027363

Complementary aluminium extrusion profile for construction of louver frames.

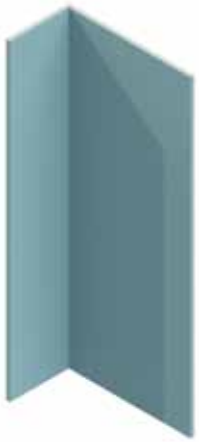


Technical data	
Profile weight	0.55 Kg/ml

40x20 mm aluminium angle

027253

Aluminium extrusion for sealing building to frame, hiding possible imperfections and clearance of the openings in which it is installed.



Technical data	
Profile weight	0.18 Kg/ml

SLAT Z **ON 40x40 mm ALUMINIUM TUBE**

2 FIXED LOUVERS

DESIGN TO ACHIEVE MAXIMUM ENERGY EFFICIENCY

The fixed-slat louver systems are comprised of a structure formed by extruded aluminium profiles, with variable dimensions and different slat models anchored at a fixed angle. This forms a solid and light structure that is used as façade covering.

In this way, the wide variety of slat families and anchoring typologies make **Giménez Ganga's option versatile and adaptable to all types of façades and coverings.**

2.1 FRAMED

2.1.1 Types of slats
2.1.2 Carrier profiles
2.1.3 Technical data

2.2 FIXED ON SUPPORT

2.2.1 Types of slats
2.2.2 Carrier profiles
2.2.3 Models of louvers fixed on support
2.2.4 Technical data
2.2.5 Technical data Support structure
2.2.6 Types of installation

2.3 FIXED WITH CLAMPS

2.3.1 Types of slats
2.3.2 Carrier profiles
2.3.3 Orientable clamps
2.3.4 Models of fixed louvers with clamps
2.3.5 Installation of slat on clamp
2.3.6 Technical data
2.3.7 Types of installation

2.4 FIXED WITH LATERAL ANCHORING

2.4.1 Types of slats
2.4.2 Carrier profiles
2.4.3 Fixed position end plates
2.4.4 Models of fixed louvers with lateral anchoring
2.4.5 Installation of slats on support
2.4.6 Technical data
2.4.7 Types of installation
2.4.8 Types of rectangular slats
2.4.9 Large format
2.4.10 Types of large format installation

2.5 FIXED WITH SELECTABLE INCLINATION

2.5.1 Types of slats Composition
2.5.2 Carrier profiles
2.5.3 Models of fixed louvers with selectable inclination
2.5.4 Technical data
2.5.5 Installation of slats on structure
2.5.6 Types of installation

2.6 FIXED ON STRUCTURAL PROFILE

2.6.1 Types of slats Composition
2.6.2 Carrier profiles
2.6.3 Models of fixed louvers with structural profile
2.6.4 Technical data
2.6.5 Installation of slats on structure
2.6.6 Types of installation

2.1

FIXED FRAMED LOUVERS

Structure formed by an extruded aluminium profile frame joined with steel squares on which a mechanism operates that allows the uniform placement of the fixed angle extruded aluminium slats.

The system allows the use of slat D-5 with a fixed slat density.

2.1.1 TYPES OF SLATS

Slat D-5

050160

Extruded aluminium profile rounded at ends. Installed with slat step 41.5 mm and an inclination angle of 57°, allowing ventilation and avoiding entry of rainwater.

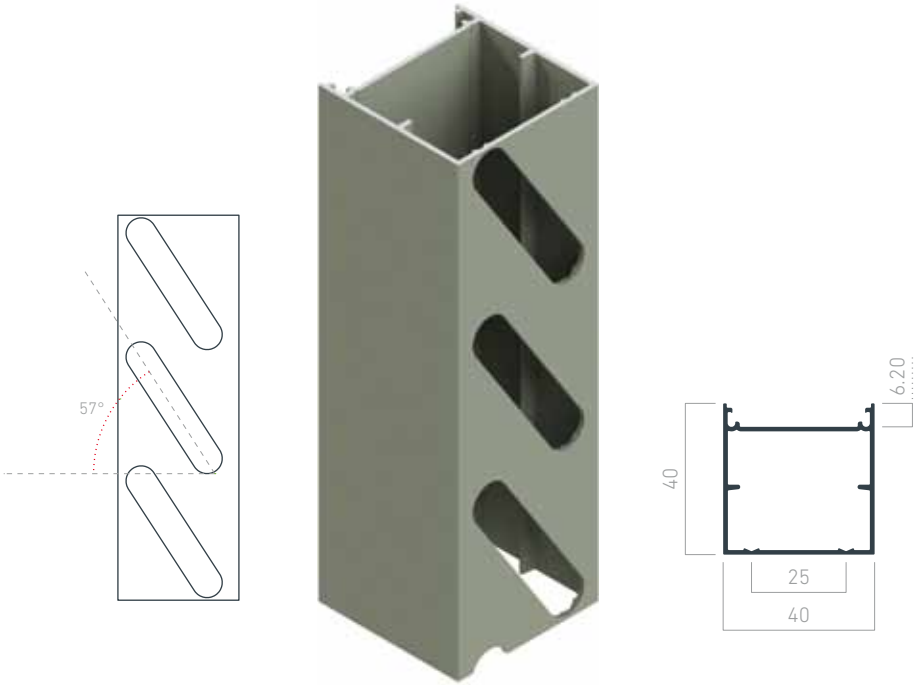
Technical data	
Slat depth	50 mm
Slat height	10 mm
Slat weight	0.32 Kg/ml
Maximum distance between fixture points	950 mm

2.1.2 FRAME PROFILES

40x40 mm overlap frame

027642

Extruded aluminium profile that forms the perimeter of the frame, machine-made with an angle of 57° to facilitate the insertion of slat D-5. The profile section allows the installation of 30, 50 and 80 mm overlaps, both on the exterior and the interior of the frame.

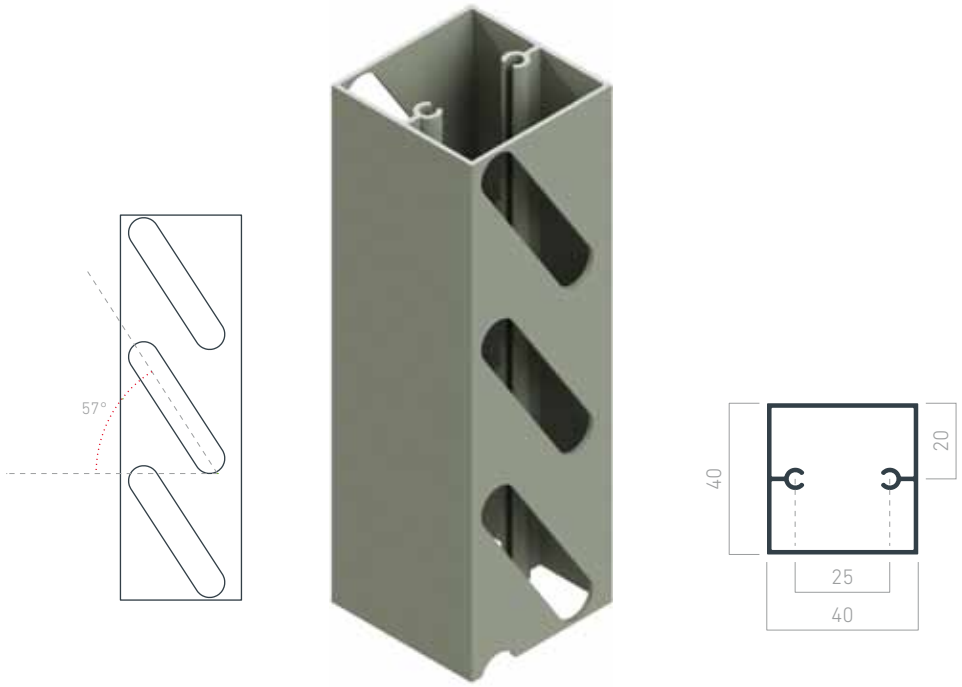


Technical data	
Profile depth	40 mm
Profile width	40 mm
Profile weight	0.60 Kg/ml

40x40 mm auto-drilled aluminium tube

027394

Extruded aluminium profile for the division in intervals of frames created with the 40x40 overlap frame profile, machine-made at 57° to facilitate the insertion of slat D-5.



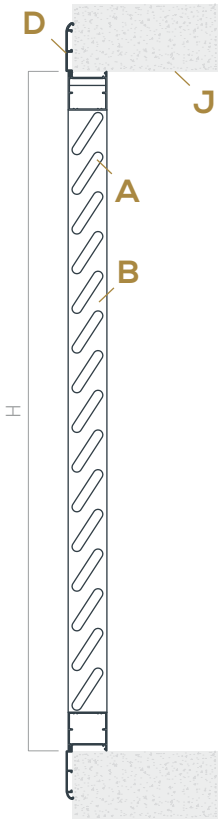
Technical data	
Profile depth	40 mm
Profile width	40 mm
Profile weight	0.67 Kg/ml

Slats		D-5
		Aluminium
N° (slats/m)		24.10
Step (mm)		41.50
Slat inclination angle		57°
Frame profiles	40x40 for overlap	Perimeter
	40x40 auto-drilled	Intermediate
Compatible overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum recommended slat length mm		950
Wind resistance (UNE-EN 13659:2016) CLASS 6		≈ 112 Km/h

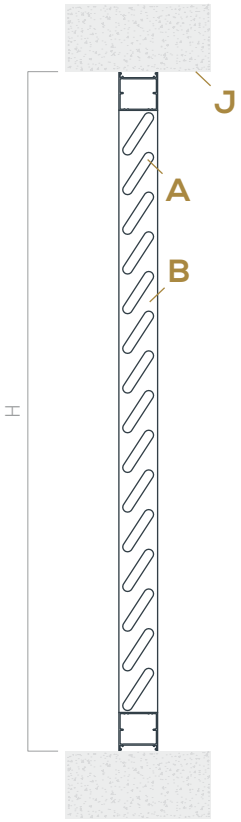
2.1.3 TECHNICAL DATA

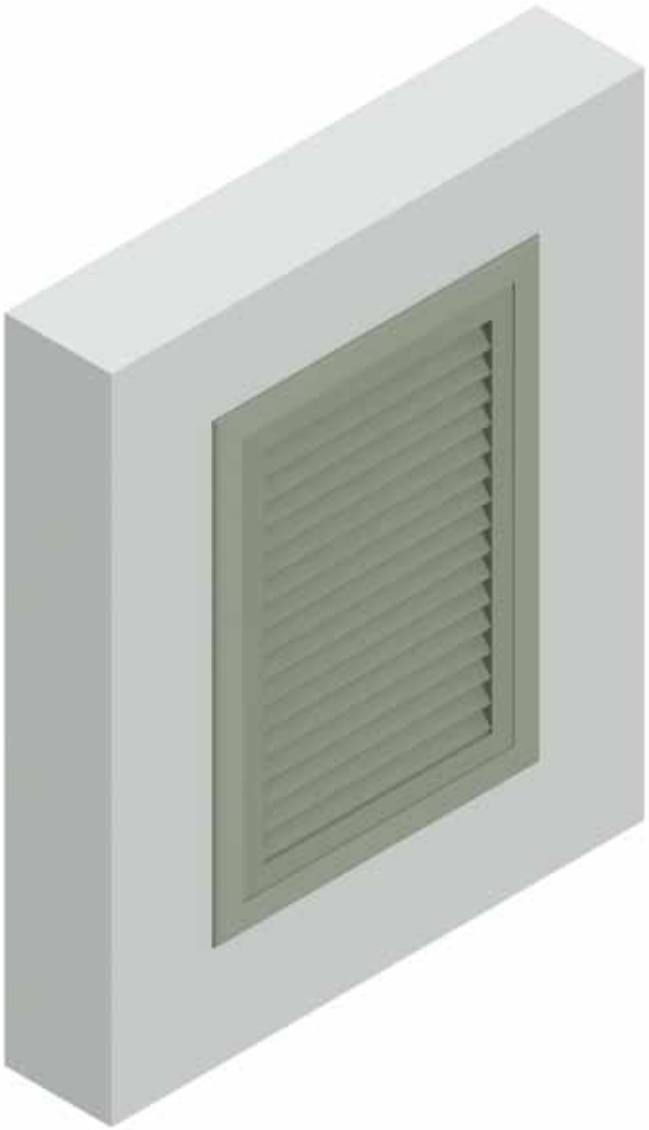
Installation examples

With overlap



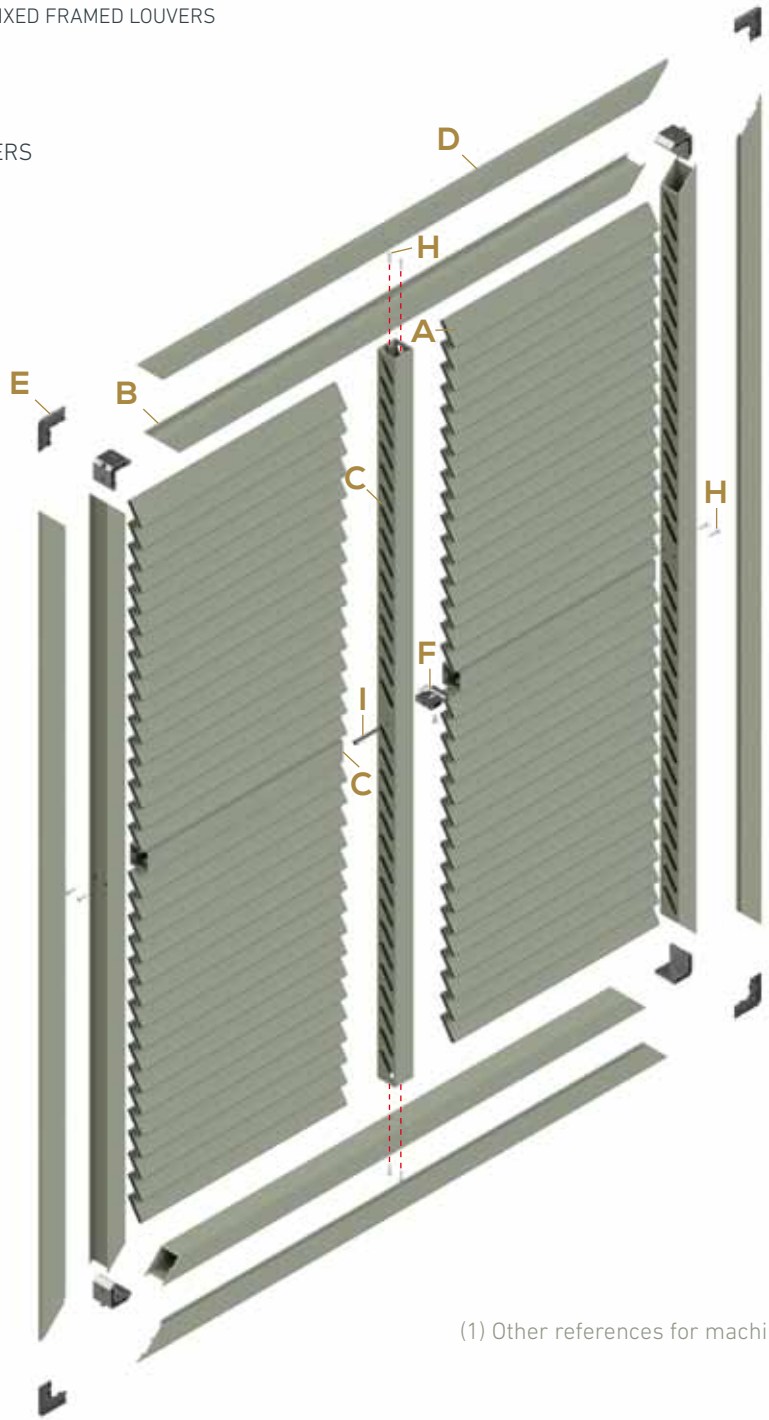
Between walls





In installations with heights (H) over 1,500 mm, an intermediate horizontal crossbar will be installed with auto-drilled 40x40 aluminium tube.

EXPLODED VIEW
FIXED FRAMED LOUVERS



(1) Other references for machine-made profile.

PROFILES

A Slat D-5
050160

B 40x40 overlap frame (1)
027642

C 40x40 auto-drilled aluminium tube (1)
027394

D Overlap 30, 50, 80
005201 | 005211 | 005221

ACCESSORIES

E Aluminium square 37-14-C
020010

F Lower joint folding window and door shutters
005402

G Overlap square
005341

SCREWS

H Screw DIN 7981 A2 4.2x50 mm
051301

I Screw DIN 7380 A2 M6x10 mm oval head
507319

CONSTRUCTIVE ELEMENTS

J Façade siding

2.2

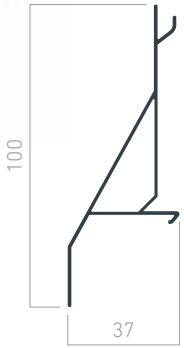
SLAT FIXED
ON SUPPORT

Fixed angle louver system comprised of extruded slats anchored using pressure and horizontal or vertical clipping. Installed on extruded aluminium supports equidistantly placed perpendicularly to the slat, achieving continuity in the louver.

The system allows the use of models Z, Z PVC, I, I microperforated, C, S, V-5 and HR.

2.2.1 TYPES OF SLAT

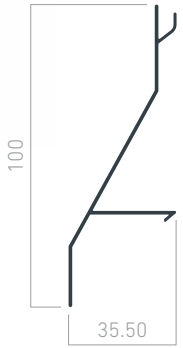
Slat Z PVC
050001



Option model Z in PVC, practically with the same form as that produced in aluminium, but with high mechanical performance in a more economic version.

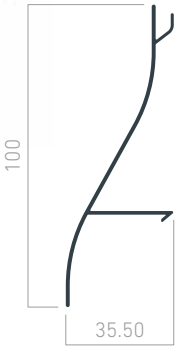
Technical data	
Slat depth	37 mm
Slat height	100 mm
Slat weight	0.36 Kg/ml

Slat Z
050020



Technical data	
Slat depth	35.50 mm
Slat height	100 mm
Slat weight	0.45 Kg/ml

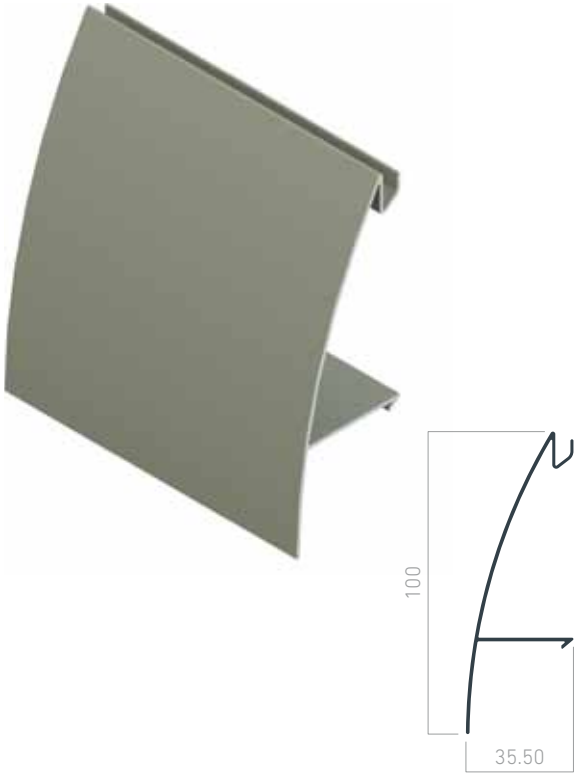
Slat S
050080



Technical data	
Slat depth	35,50 mm
Slat height	100 mm
Slat weight	0.48 Kg/ml

Slat C

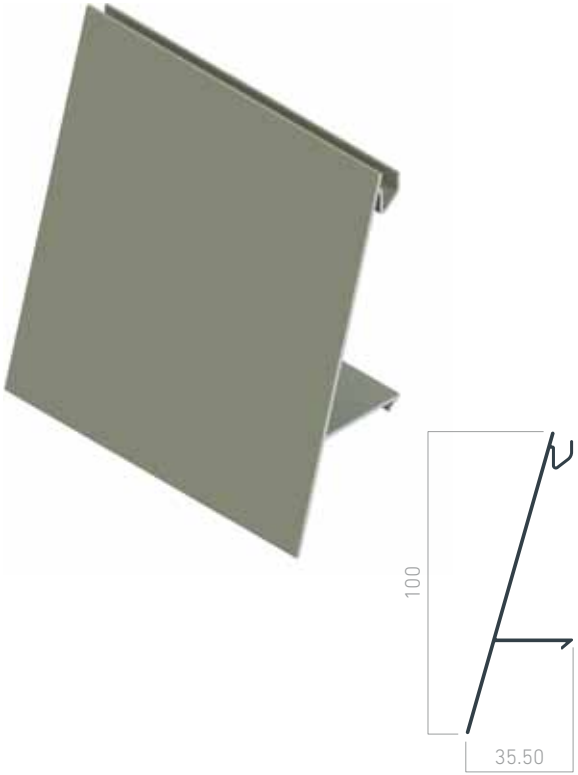
050070



Technical data	
Slat depth	35.50 mm
Slat height	100 mm
Slat weight	0.50 Kg/ml

Slat I

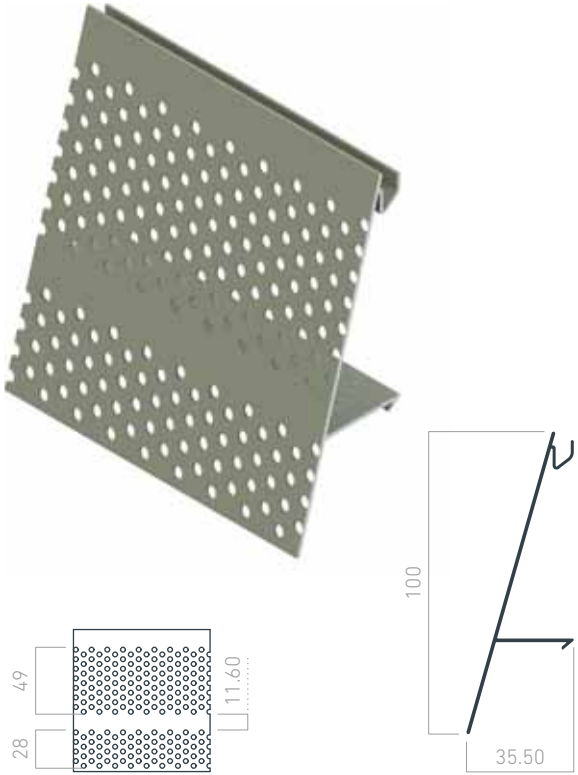
050090



Technical data	
Slat depth	35.50 mm
Slat height	100 mm
Slat weight	0.45 Kg/ml

Slat I Microperforated

050095



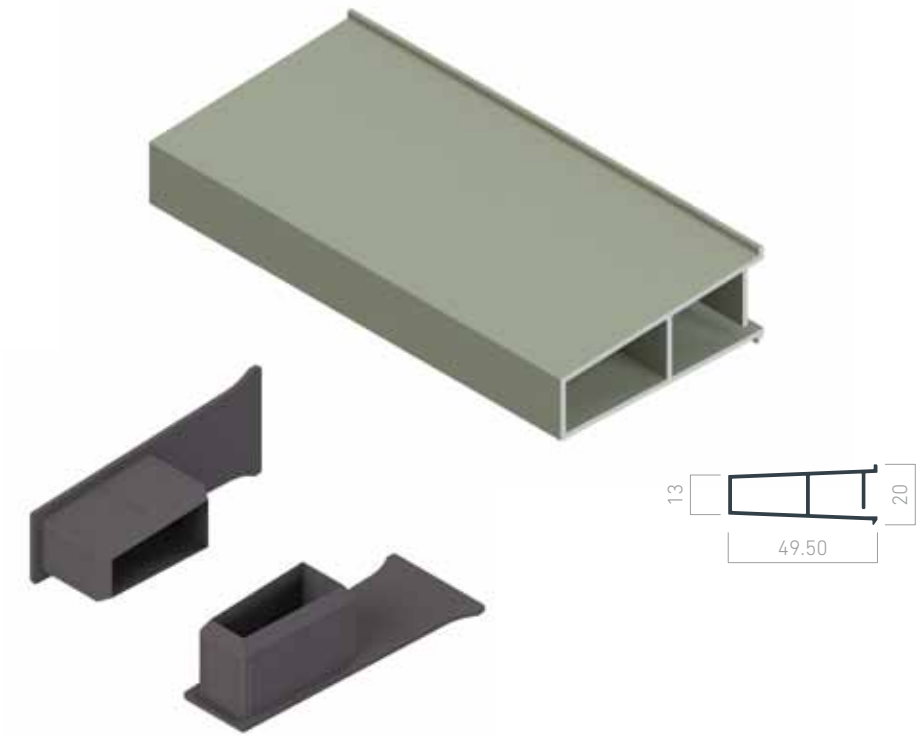
Increase in ventilation and natural light of approx. 20%.

Technical data	
Slat depth	35.50 mm
Slat height	100 mm
Slat weight	0.45 Kg/ml

2.2.1 TYPES OF SLAT

Slat V-5

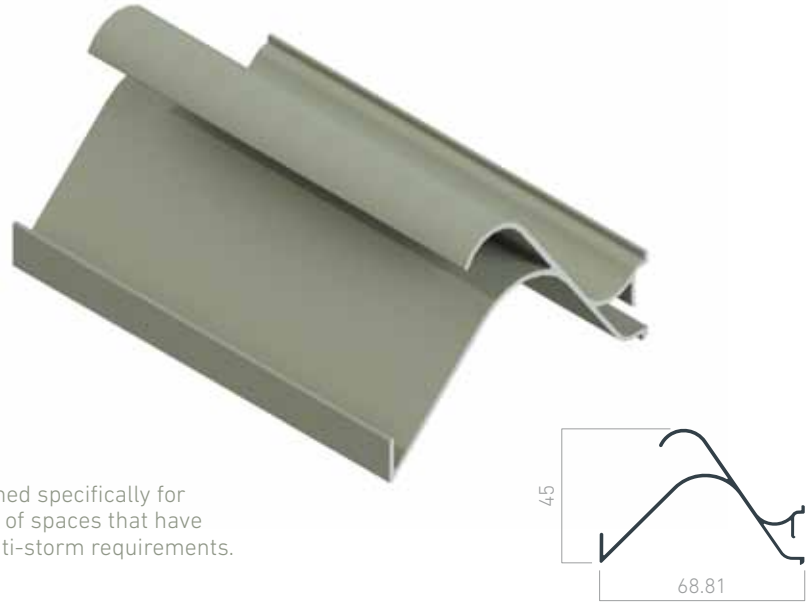
050150



Technical data	
Slat depth	49.50 mm
Slat height	13-20 mm
Slat weight	0.45 Kg/ml

Slat HR **NEW!**

051287



Slat designed specifically for ventilation of spaces that have specific anti-storm requirements.

A special tool is required to install the slat.

Technical data	
Slat depth	68.81 mm
Slat height	45 mm
Slat weight	0.56 Kg/ml

2.2.2 SUPPORT PROFILES

Double support

050104

A

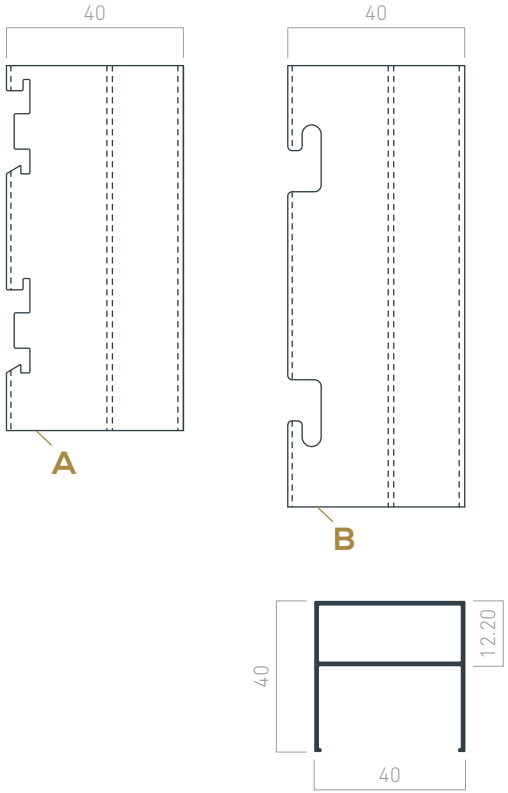
Slat model
V-5 | HR

Step
22.2

B

Slat model
Z | Z PVC | S | C
| | | Microperforated

Step
7 | 8 | 9 | 10 | 11



Technical data	
Profile depth	40 mm
Altura del perfil	40 mm
Profile weight	0.49 Kg/ml

Auto-drilled double support

050030

A

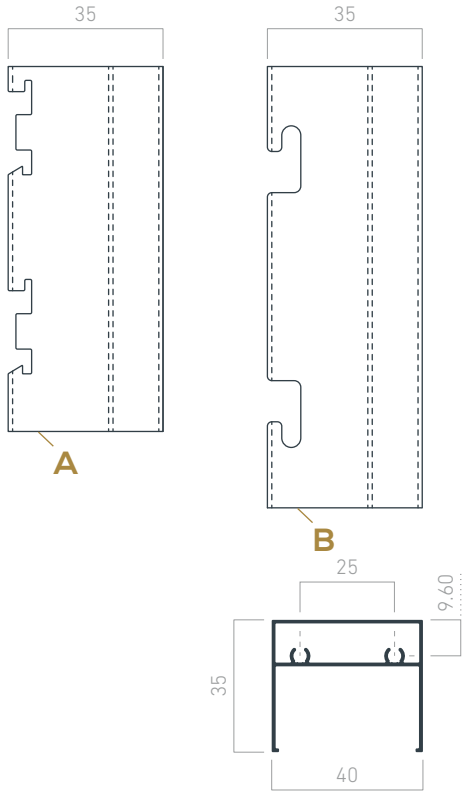
Slat model
V-5 | HR

Step
22.2

B

Slat model
Z | Z PVC | S | C
| | | Microperforated

Step
7 | 8 | 9 | 10 | 11



Technical data	
Profile depth	35 mm
Altura del perfil	40 mm
Profile weight	0.49 Kg/ml

2.2.3 MODELS OF LOUVERS FIXED ON SUPPORT

Installation of slat on aluminium support

SLAT

The choice of slat will be determined by the dimensions of the opening to be covered and the façade aesthetic desired.

SUPPORT PROFILES

The slat will be installed on a double support. The use of the support profiles will depend on the prior study of the facility, taking into account its dimensions, design, location and base anchoring structure. Factors that will determine the separation of the anchoring points from the support profiles.

DISTANCES TO AXLE BETWEEN SUPPORT

The distance between slats will be variable. The choice between the different steps available will depend on the ventilation and illumination requirements and the design chosen for the façade.

Model Z

Slat Z louver with 40x40 mm double support step 10.

Model S

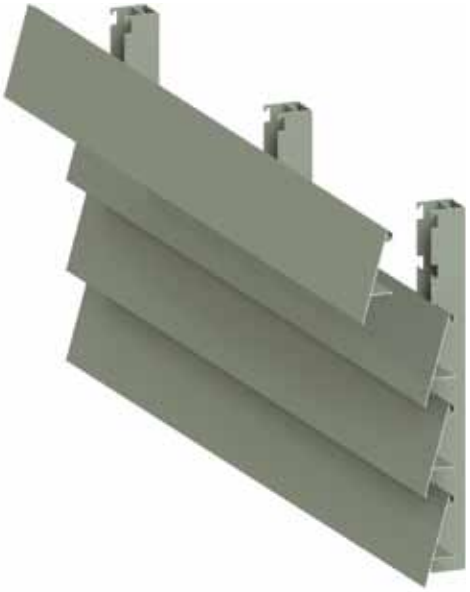
Slat S louver with double support 40x40 mm step 10.

Model C

Slat C louver with 40x40 mm double support step 10.

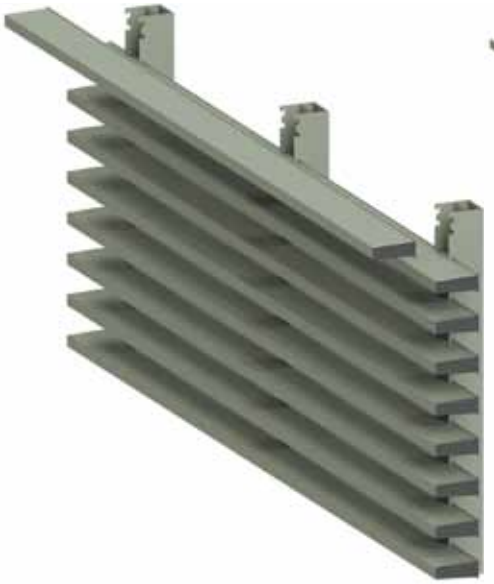
Model I

Slat I louver with double support 40x40 mm step 10.



Model V-5

Slat V-5 louver with double support 40x40 mm step 22.2.



Model HR

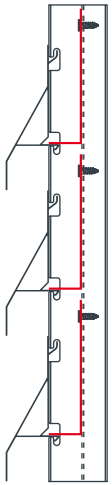
Slat HR louver with double support 40x40 mm step 22.2.

2.2.4 TECHNICAL DATA

Installation of slat on aluminium support

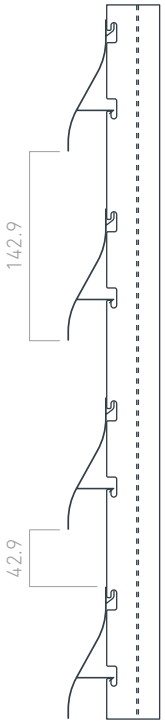
This clipper system allows quick placement of the slats on the double support notches without using screws, regulating the slats' separation and so making the different slat steps uniform. To better clamp the slats, use the block of fixed louver slats.

Fixed louver slat block
051086

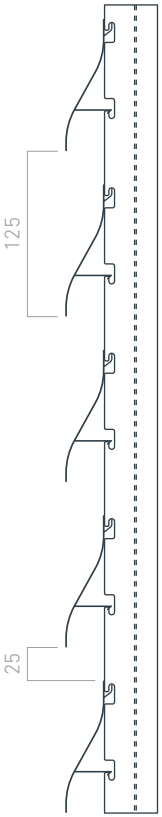


A **Screw A2 4.2x13 mm**
051049

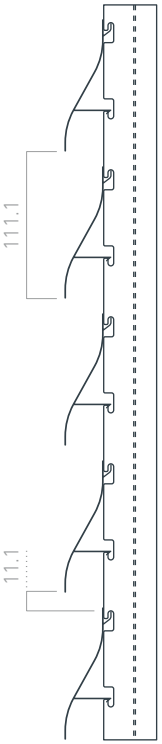
Step 7
7 slats m/l



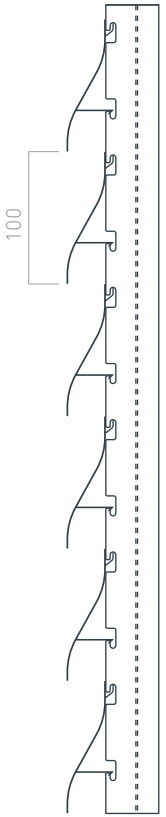
Step 8
8 slats m/l



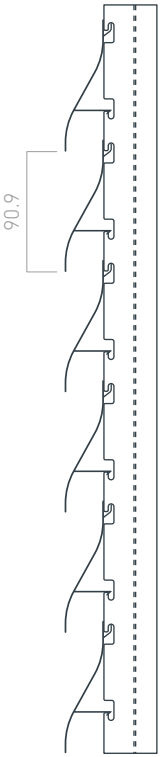
Step 9
9 slats m/l



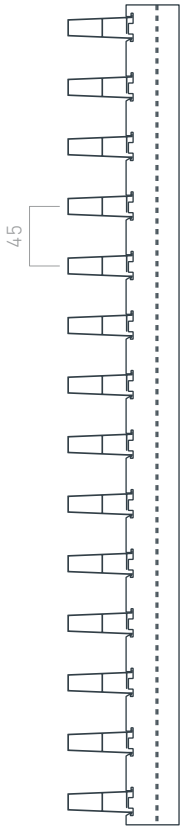
Step 10
10 slats m/l



Step 11
11 slats m/l



Step 22.2*
22.2 slats m/l



To optimise the sun protection system and to increase its effectiveness, the slats' angle and separation should be adapted to the movement of the sun.

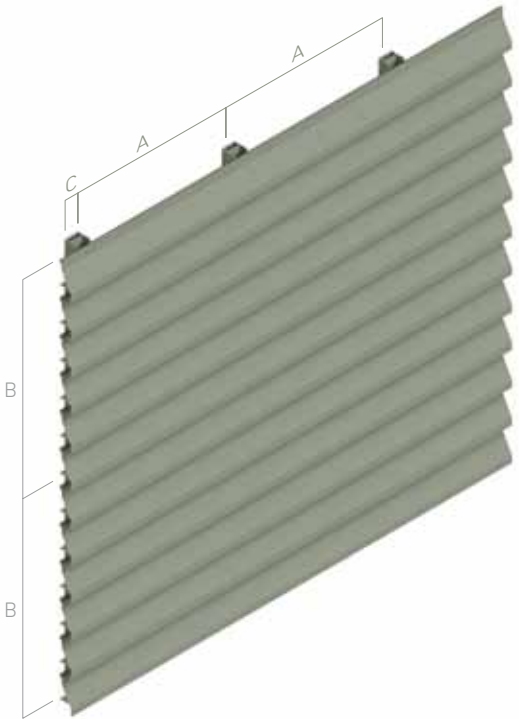
* Step 22.2
Variable under minimum order.

		Slat Z	Slat Z PVC	Slat C	Slat I	Slat I Mic.	Slat S	Slat V-5	Slat HR
		Aluminium	PVC	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
N° slats/ml	Step 7	X	X	X	X	X	X		
	Step 8	X	X	X	X	X	X		
	Step 9	X	X	X	X	X	X		
	Step 10	X	X	X	X	X	X		
	Step 11	X	X	X	X	X	X		
	Step 22.2							X	X
Support	35x40	X	X	X	X	X	X	X	X
	40x40	X	X	X	X	X	X	X	X
(A) Separation between support profile centres (mm)		2,000	1,000	2,000	2,000	2,000	2,000	1,200	1,200
(C) Slat overhang maximum (mm)		300	150	300	300	300	300	300	300
(B) Maximum distance between fixture points of supports (mm)		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Wind resistance (UNE-EN 13659:2016)		Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h	Class 6 ≈ 112 Km/h

Test carried out with 40x40 mm double support.

When the double support is over 1,500 mm in length, it should be installed fixed to a structural profile.
The choice of structural profile, as well as the fixture screws and elements, will depend on the study prior to each installation.

Installation of double aluminium support

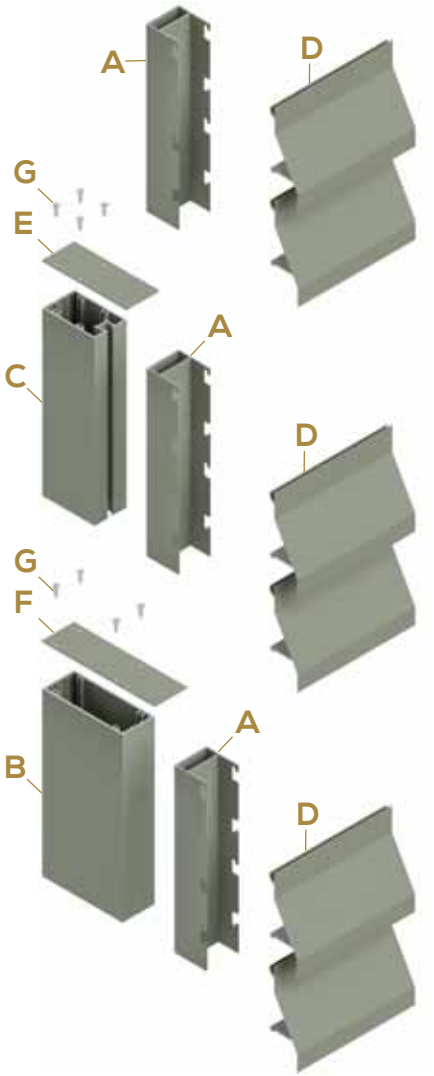


A **Separation between support profile centres**

B **Maximum distance between support fixture points**

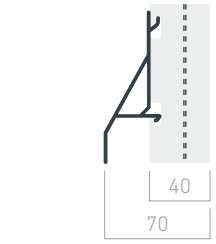
C **Maximum slat overhang**

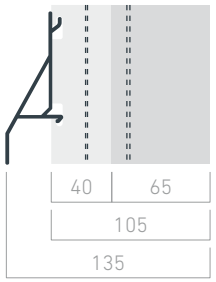
2.2.5 TECHNICAL DATA **CARRIER STRUCTURE**

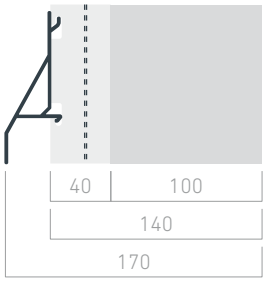


The use of the auto-drilled support depends on the study prior to the project.

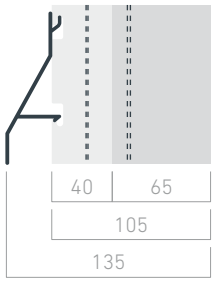
Slat Z PVC
050001

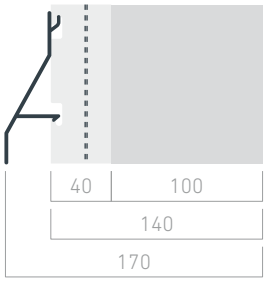




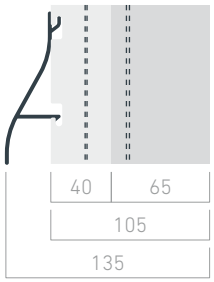


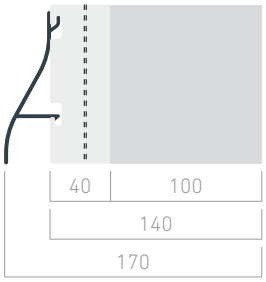
Slat Z
050020



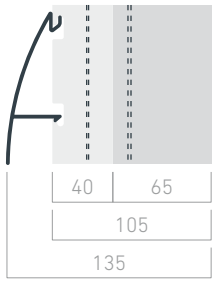


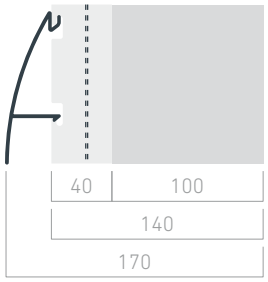
Slat S
050080



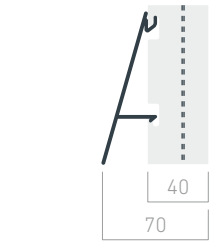


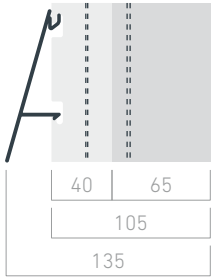
Slat C
050070

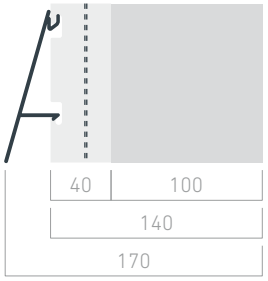




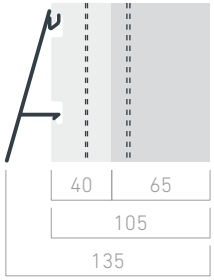
Slat I
050090

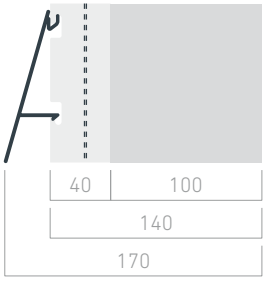




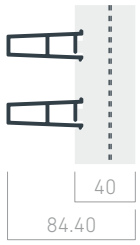


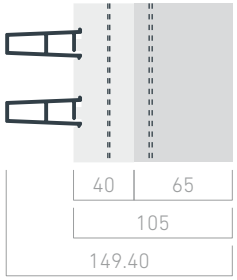
Slat I Micro
050095

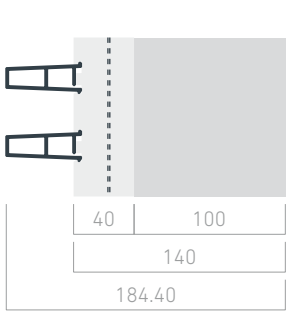




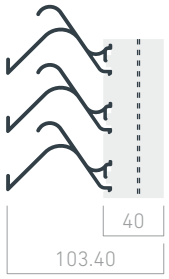
Slat V-5
050150

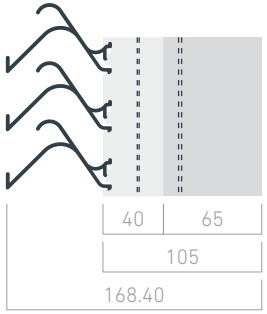


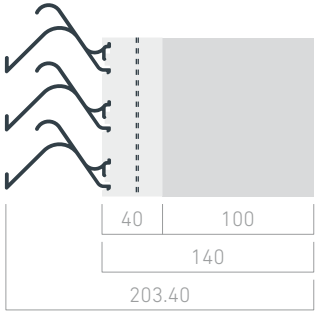




Slat HR
051287







PROFILES

A Double support
050104

B 100x40 mm carrier profile
027395

C 65x40 mm carrier profile
051302

D Slat

ACCESSORIES

E 65x40 mm end plate for carrier profile and double
023128

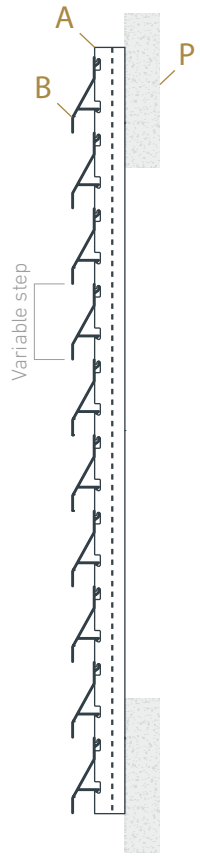
F 100x40 mm end plate for carrier profile and double
023107

SCREWS

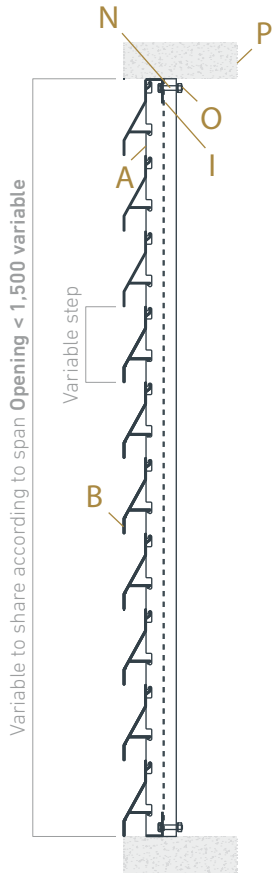
G Screw A2 4.2x22 mm fixture end plate for carrier profile
051107

2.2.6 TYPES OF INSTALLATION

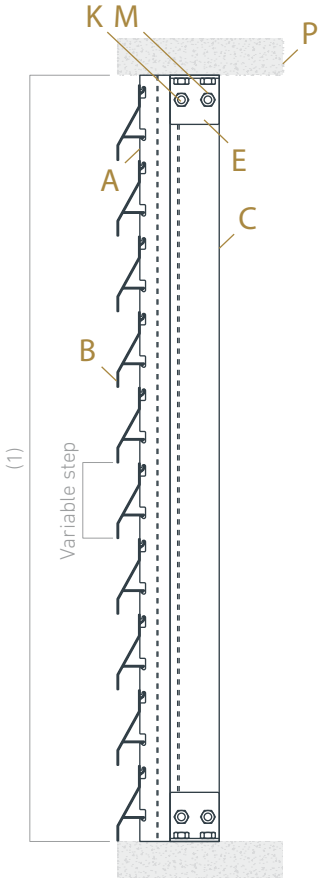
Louver installation on wall



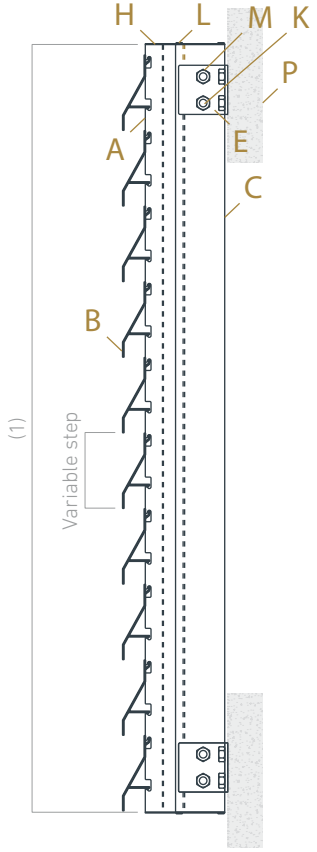
Louver between wall installation without structural profile



Louver between wall installation with 65x40 mm profile

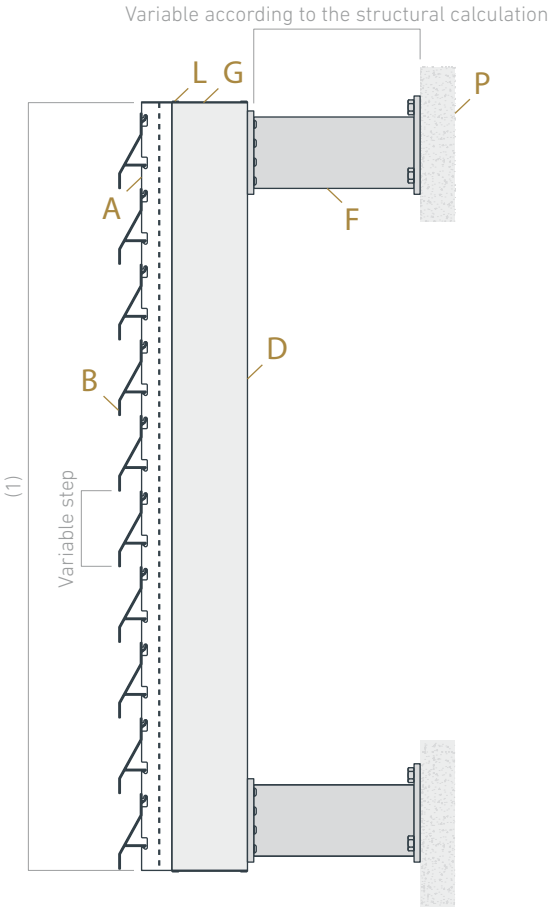


Louver outside wall installation with 65x40 mm profile

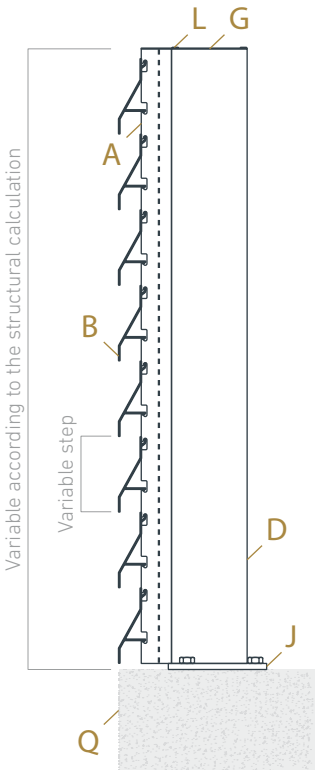


Screws for anchoring to building not provided, these will depend on the study for each project.

Louver outside wall installation with 100x40 mm profile with bracket



Louver installation on enclosure with 100x40 mm profile



(1) Distance between anchoring points determined by the study prior to installation.

PROFILES

A Double support
050104

B Aluminium slat
Z | Z PVC | I | I Micro | S | C | V-5 | HR

C 65x40 mm carrier profile
051302

D 100x40 mm carrier profile
027395

ACCESSORIES

E 65x65x4 mm square stainless 304
050193

F Stainless steel bracket (according to project)

G 100x40 mm end plate for carrier profile and double
023107

H 65x40 mm end plate for carrier profile and double
023128

I Square (according to project)

J 100x40 mm carrier profile wall bracket
023104

SCREWS

K Screw DIN 931 A2 M10x70 mm
051114

L Screw A2 4.2x22 mm fixture end plate for carrier profile
051107

M Nut DIN 985 A2 M10
051122

N Screw DIN 933 A2 M6x25 mm
051152

O Nut with brake DIN 985 A2 M6 stainless
051048

CONSTRUCTIVE ELEMENTS

P Façade siding

Q Wall

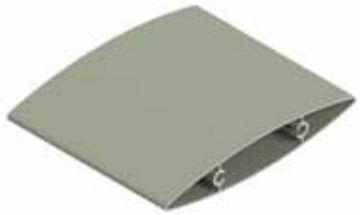
2.3

FIXED SLAT
WITH CLAMPS

Fixed slat louver system with a selection of orientation angles, comprised of oval-shaped extruded slats that are affixed to aluminium structural profiles using orientable aluminium clamps. These allow the installation of the slat with different degrees of inclination, achieving slat continuity.

The system allows the selection of slat inclination in the models O-120, O-210 and O-300, as well as choosing the separation between clamps according to the area covered by the slat. These factors will determine the density of the louver slats according to the illumination, ventilation and thermal comfort requirements of the building.

2.3.1 TYPES OF SLATS

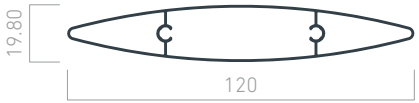


Slat O-120

051002

Oval-shaped slat that offers maximum performance in small openings.

Technical data	
Dimension (x)	120 mm
Dimension (y)	19.80 mm
Slat weight	0.87 Kg/ml

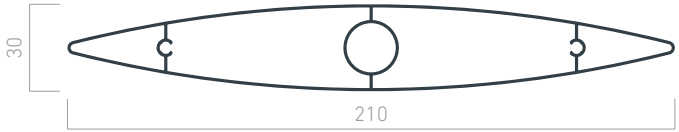


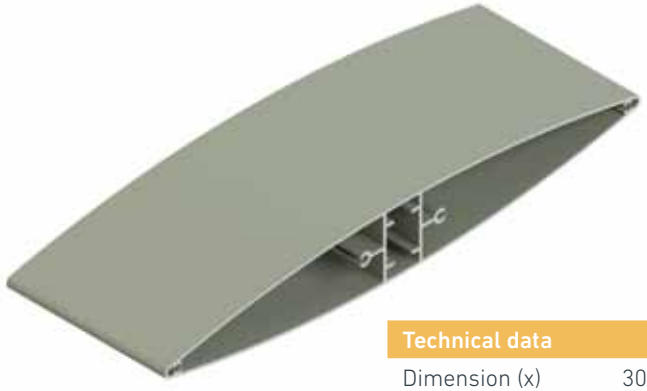
Slat O-210

051022

Oval-shaped slat that offers maximum performance in medium-large openings.

Technical data	
Dimension (x)	210 mm
Dimension (y)	30 mm
Slat weight	1.76 Kg/ml



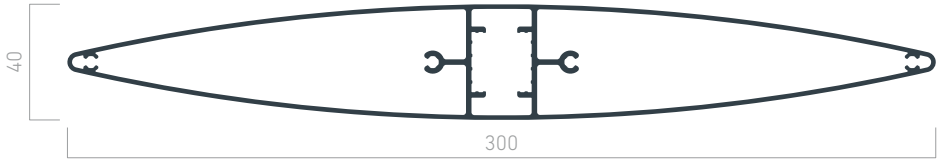


Slat O-300

051296

Oval-shaped slat that offers maximum performance in large openings.

Technical data	
Dimension (x)	300 mm
Dimension (y)	40 mm
Slat weight	3.78 Kg/ml



2.3.2 CARRIER PROFILES

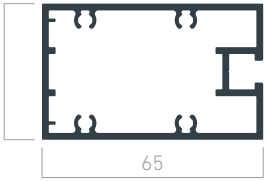
40x20 mm guided support

050331

Technical data	
Profile depth	20 mm
Profile width	40 mm
Profile weight	0.80 Kg/ml
Inertia moment Iy	14,309 mm^4
Inertia moment Ix	46,278 mm^4

65x40 mm carrier profile

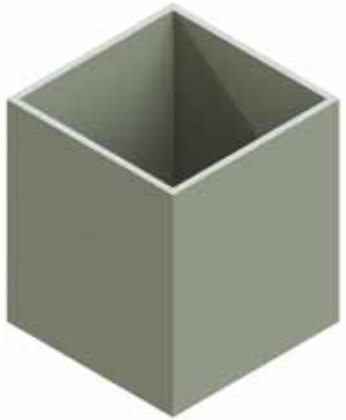
051302

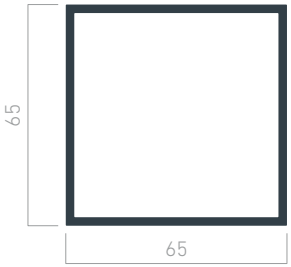


Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Inertia moment Iy	288,065 mm^4
Inertia moment Ix	128,143 mm^4

65x65 mm aluminium tube

027590

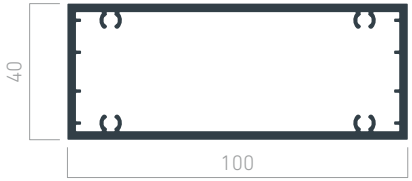




Technical data	
Profile depth	65 mm
Profile width	65 mm
Profile weight	2.07 Kg/ml
Inertia moment Iy	450,095 mm^4
Inertia moment Ix	450,095 mm^4

100x40 mm carrier profile

027395



Technical data	
Profile depth	100 mm
Profile width	40 mm
Profile weight	2.20 Kg/ml
Inertia moment Iy	934,415 mm^4
Inertia moment Ix	207,966 mm^4

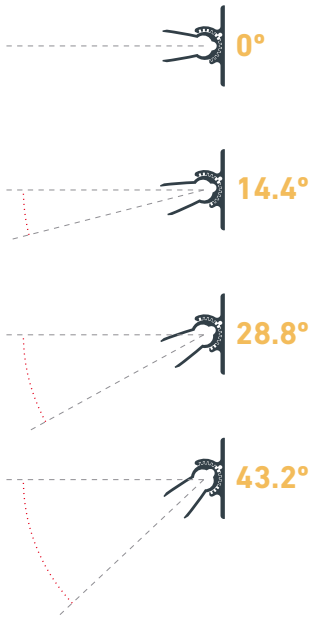
2.3.3 ORIENTABLE CLAMPS

Orientable clamp composition

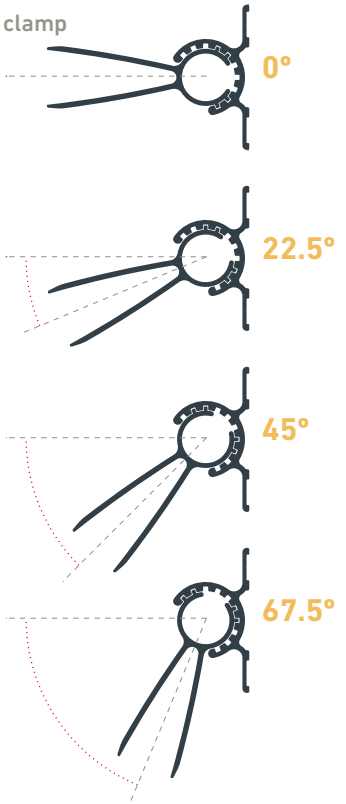
The clamp is comprised of two pieces of aluminium. These are anchored to the oval-shaped slat and to the carrier structure via screws with two systems, guided and fixed. The gear system of the two pieces facilitates the selection of the angle of inclination desired, both clamp pieces fixed via a safety screw.

Degrees of orientation

Orientable clamp
O-120 | O-210



Orientable clamp
O-300



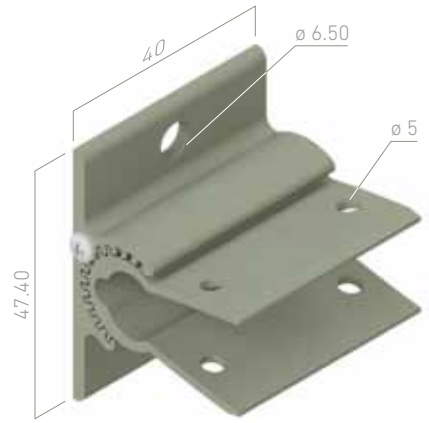
Guided system

Orientable clamp O-120 | O-210

051337

For application in fixing slat models O-120 and O-210.

The clamp is assembled on the carrier profiles by inserting a screw in each one of the 2 openings in the clamp. Each screw is anchored to a nut previously inserted into the guide in the structural support profile.



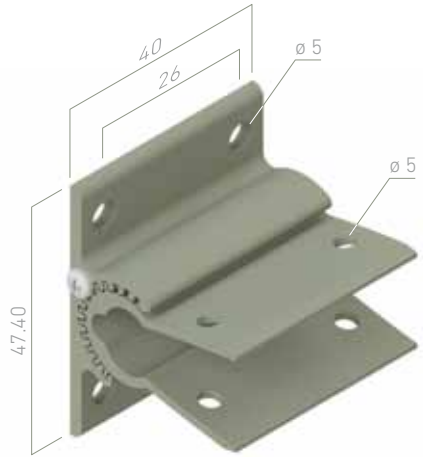
Fixed system

Orientable clamp O-120 | O-210

051013

For application in fixing slat models O-120 and O-210.

The clamp is directly assembled on the carrier profiles with screws using 4 openings in the clamp.

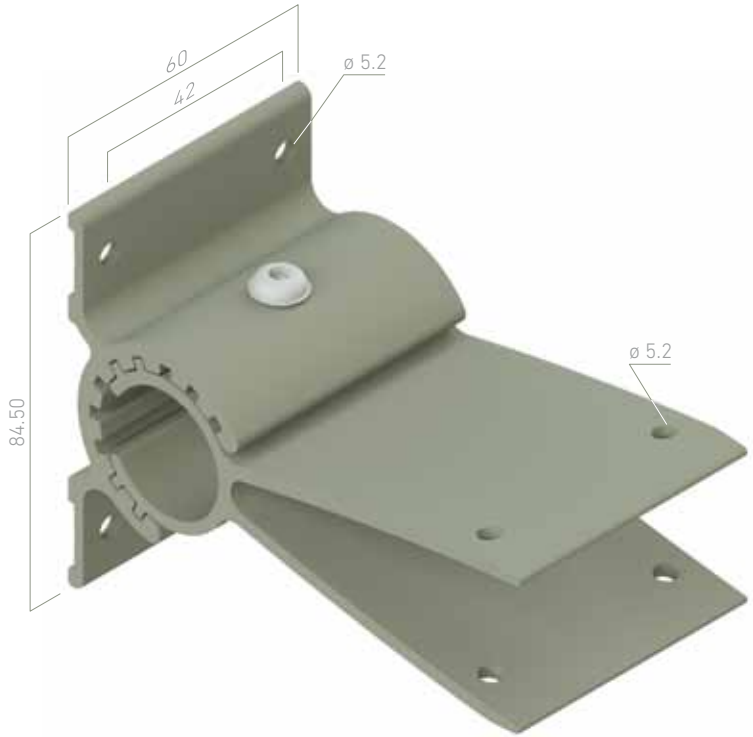


Orientable clamp O-300

051039

For application in fixing slats model O-300.

The clamp is directly assembled on the carrier profiles with screws using 4 openings in the clamp.



2.3.4 MODELS OF FIXED LOUVERS WITH CLAMPS

Oval-shaped slats

The choice of slat will be determined by the dimensions of the opening to be covered and the façade aesthetic desired.

The use of carrier profiles depends on the study prior to the installation, bearing in mind its dimensions, design, location and base anchoring structure. These factors will determine the separation of the clamp anchoring points and, with this, the choice of slat.

Possibility of horizontal or vertical slat installation, for linear or curved façades.

Model O-120

Louver ensemble comprised of oval-shaped slat O-120 and orientable clamp O-120, O-210 anchored to the slat using screws. Allows installation using a fixed or guided system.

Model O-210

Louver ensemble comprised of oval-shaped slat O-210 and orientable clamp O-120, O-210 anchored to the slat using screws. Allows installation using a fixed or guided system.

Model O-300

Louver ensemble comprised of oval-shaped slat O-300 and orientable clamp O-300 anchored to the slat using screws. Allows installation using a fixed system.

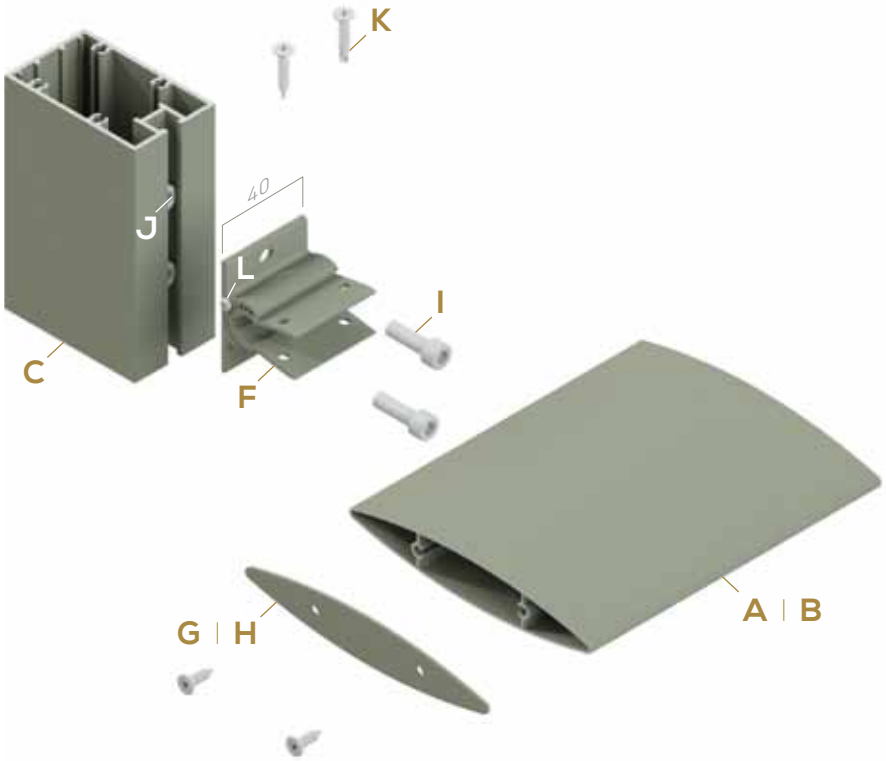
2.3.5 INSTALLATION OF SLAT ON CLAMP

Guided system

Clamp O-120 O-210 + carrier profile 65x40

The clamp is assembled on the 65x40 mm carrier profile using screws, anchoring to a nut previously inserted into the 65x40 mm carrier profile's guide.

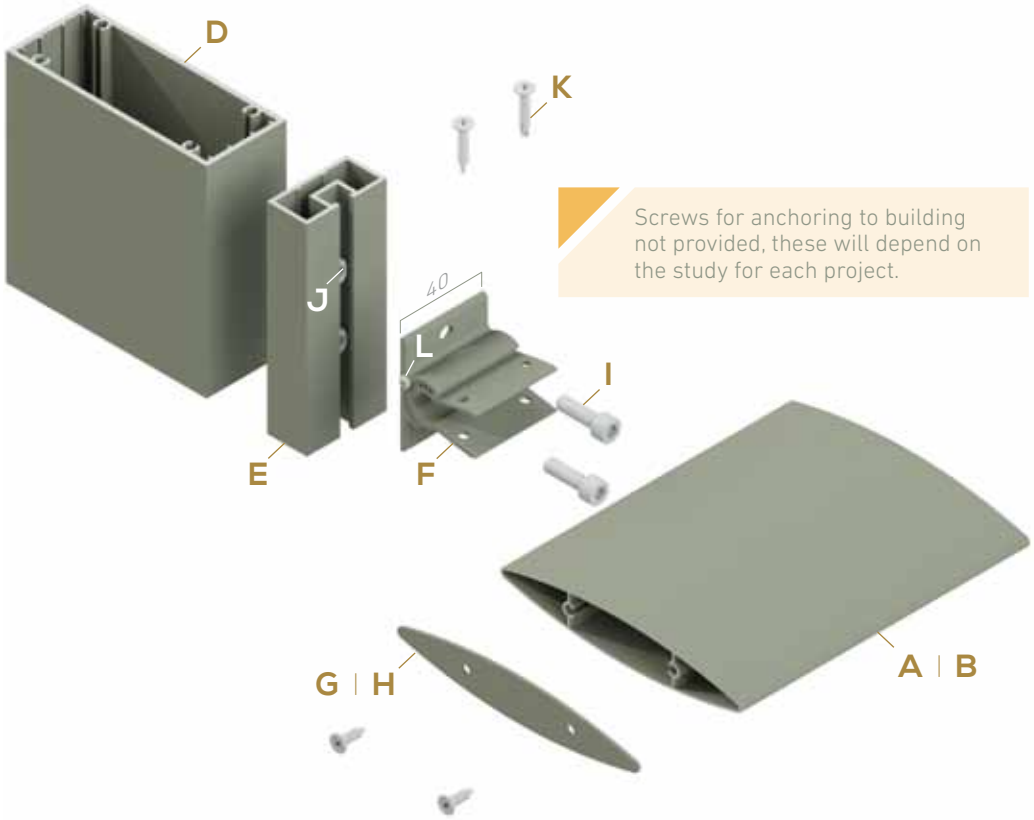
The installation of the carrier profile 65x40 mm, over surfaces or openings to cover can be intramural or extramural, allowing the regulating of the slat separation in the building itself.



Clamp O-120 O-210 + guided support 40x20

The clamp is assembled on the 40x20 mm guided support using screws, anchoring to a nut previously inserted into the guide of the 40x20 mm guided support.

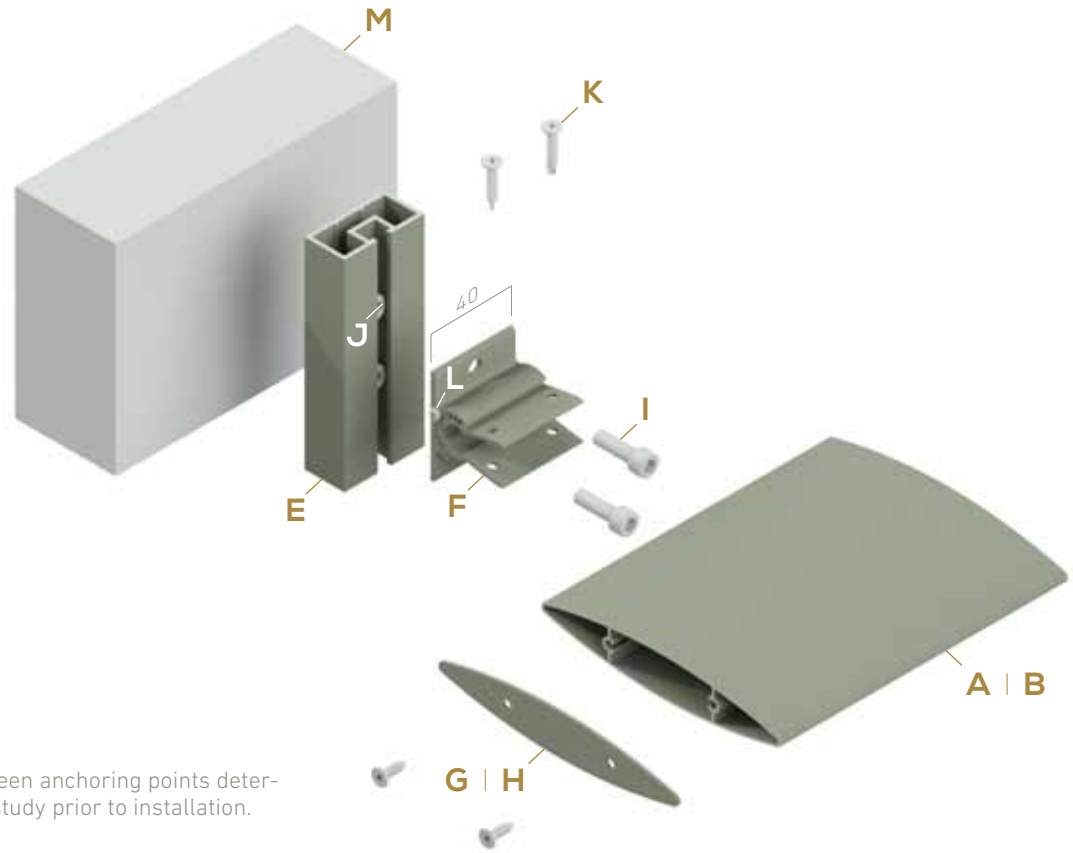
The 40x20 mm guided support allows the installation of the louver on an existing or new carrier structure. The prior study will determine the use of the 100x40 mm structural profile. Allows the adjustment of the slats' separation on the building itself.



Screws for anchoring to building not provided, these will depend on the study for each project.

The clamp is assembled on the 40x20 mm guided support using screws, anchoring to a nut previously inserted into the guide.

Fixing the guided support to the siding wall allows the adjustment of the slats' separation on the building itself, countering the irregularities in the support wall's face.



Distance between anchoring points determined by the study prior to installation.

PROFILES

A Slat O-120
051002

B Slat O-210
051022

C 65x40 mm carrier profile
051302

D 100x40 mm carrier profile
027395

E 40x20 mm guided support
050331

ACCESSORIES

F Orientable clamp O-120 | O-210
051337

G Blind aluminium end plate set O-120 with screws
051131

H Blind aluminium end plate set O-210 with screws
051132

SCREWS

I Screw DIN 912 A2 M6x12 mm
051306

J Nut DIN 985 A2 M6
051048

K Screw A2 4.8x16 mm
051168

L Screw DIN 7504-N A2 3.5x9.5 mm
051173

CONSTRUCTIVE ELEMENTS

M Wall

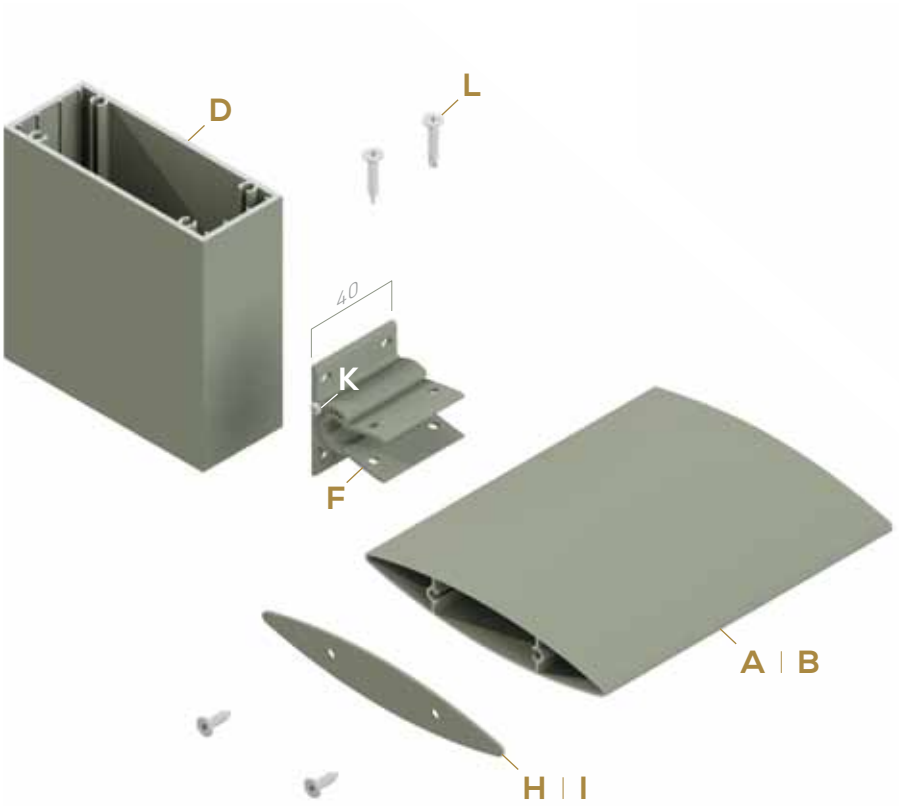
2.3.5 INSTALLATION OF SLAT ON CLAMP

Fixed system

Clamp O-120 I O-210 + carrier profile 100x40

The clamp is installed on the new or existing carrier profiles with screws, using the 4 openings in the clamp.

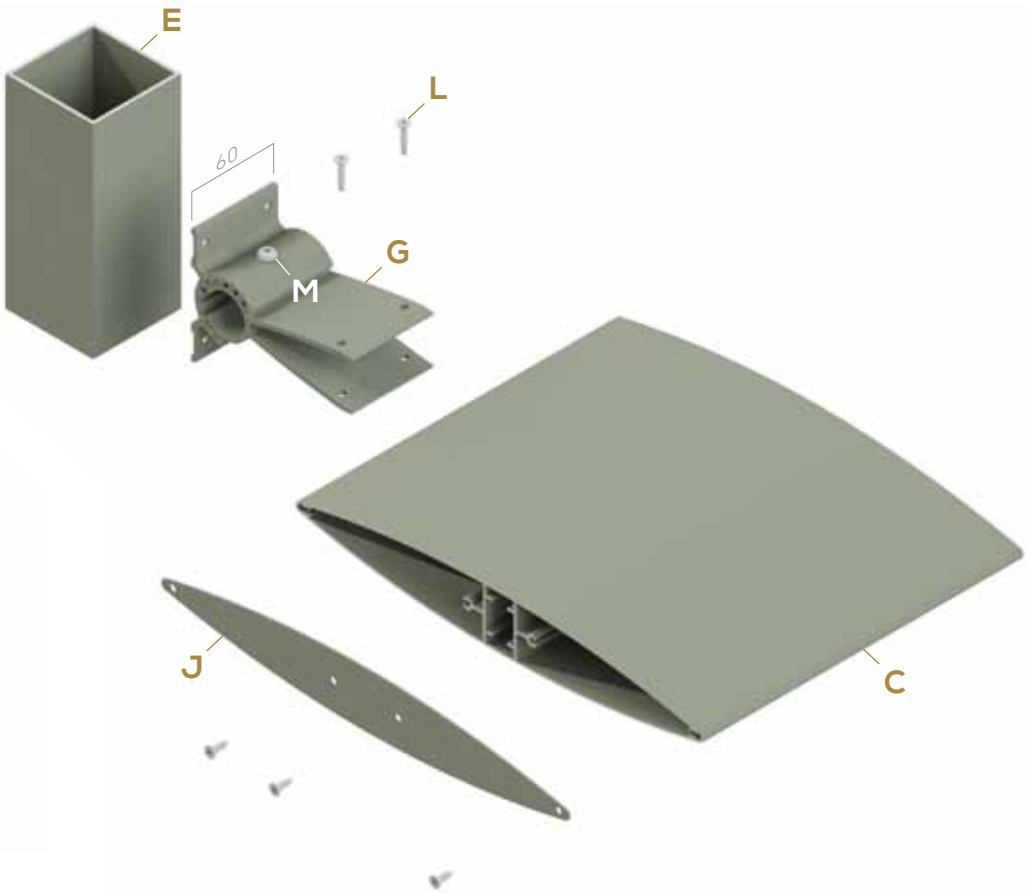
The minimum profile width for clamp anchoring will be 40 mm.



Clamp O-300 + 65x65 carrier profile

The clamp is installed on the new or existing carrier profiles with screws, using the 4 openings in the clamp.

The minimum profile width for clamp anchoring will be 65 mm.



PROFILES

A **Slat O-120**
051002

B **Slat O-210**
051022

C **Slat O-300**
051296

D **100x40 mm carrier profile**
027395

E **65x65 mm aluminium tube**
027590

ACCESSORIES

F **Orientable clamp O-120 O-210**
051013

G **Orientable clamp O-300**
051039

H **Blind aluminium end plate set O-120 with screws**
051131

I **Blind aluminium end plate set O-210 with screws**
051132

J **Blind aluminium end plate set O-300 with screws**
051133

SCREWS

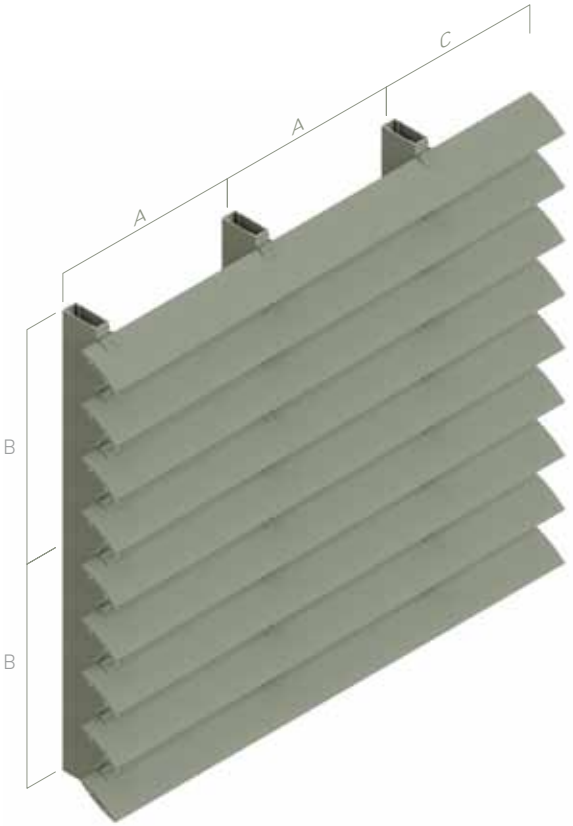
K **Screw DIN 7504-N A2 3.5x9.5 mm**
051173

L **Screw DIN 7504-NH A2 4.8x16 mm**
051168

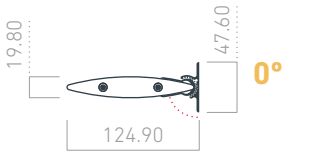
M **Screw USL ISO 7380 A2 Mx16 mm**
051103

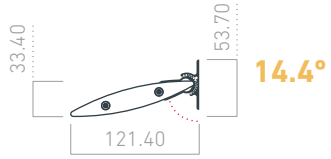
2.3.6 TECHNICAL DATA

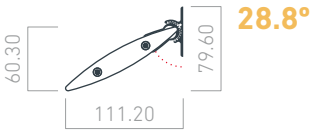
Maximum assembly dimensions

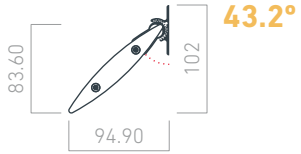


Orientation O-120

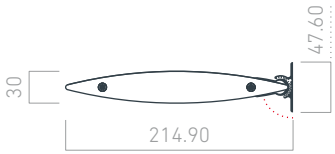


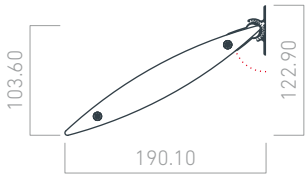


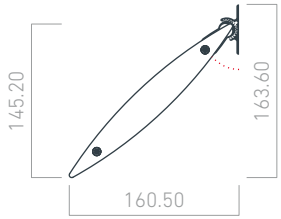




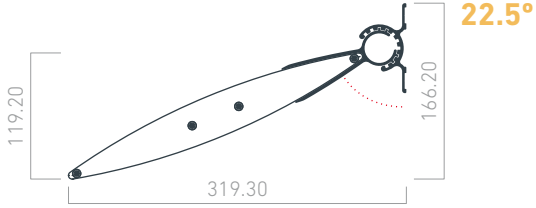
Orientation O-210

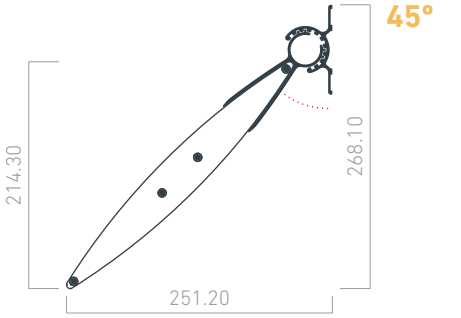


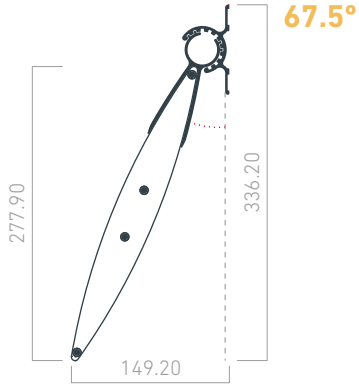




Orientation O-300







An optimal and effective sun protection system is achieved via proper selection of the slats' orientation angle and their separation, adapting these to the movement of the sun. This regulates the surface area of the shade on the façade and the effective ventilation surface.

Maximum assembly dimensions fixed and guided system

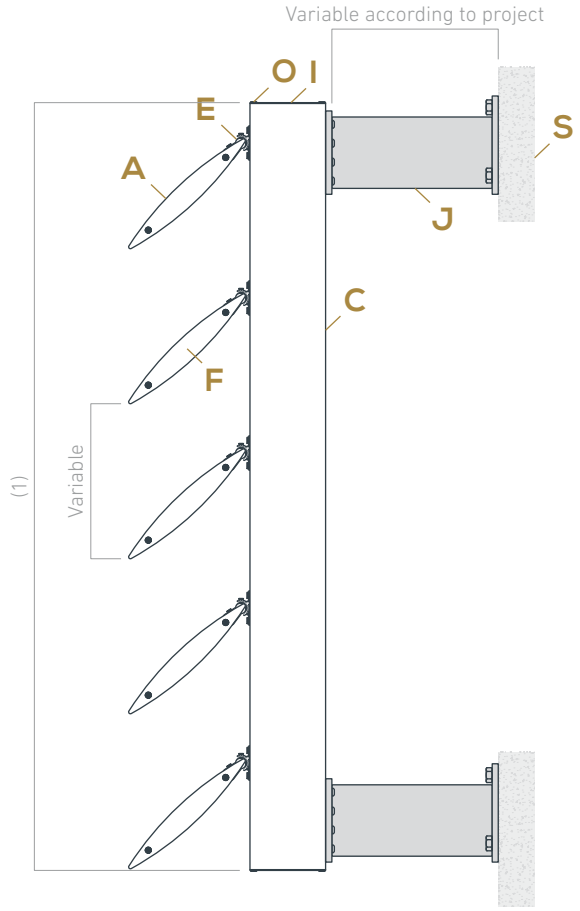
		N° slats/ ml					A	B	C
Slat	Material	Step	Degree of orientation with respect to the horizontal	Surface useful slat coverage (mm)	Surface coverage of slat with clamp (mm)	Length of slat + clamp installation in (mm)	Maximum distance between clamps in (mm)	Maximum distance between fixture points in (mm)	Maximum slat overhang mm
O-120	Aluminium	Variable	0°	19.80	47.60	124.90	1,260	According to project	300
			14.40°	33.40	53.70	121.40	1,260		300
			28.80°	60.30	79.60	111.20	1,260		300
			43.20°	83.60	102	94.90	1,260		300
O-210	Aluminium	Variable	0°	30	47.60	214.90	709		300
			14.40°	55.80	76.40	208.60	709		300
			28.80°	103.60	122.90	190.10	709		300
			43.20°	145.20	163.60	160.50	709		300
O-300	Aluminium	Variable	0°	40	85	343.20	3,500		300
			22.50°	119.20	166.20	319.30	3,500		300
			45°	214.30	268.10	251.20	3,500		300
			67.50°	277.90	336.20	149.20	3,500		300

Studies carried out according to regulation: wind resistance (UNE-EN 13659:2016).
Maximum distance between clamps is optimised to resist CLASS 6 ≈ 112 Km/h.

2.3.7 TYPES OF INSTALLATION

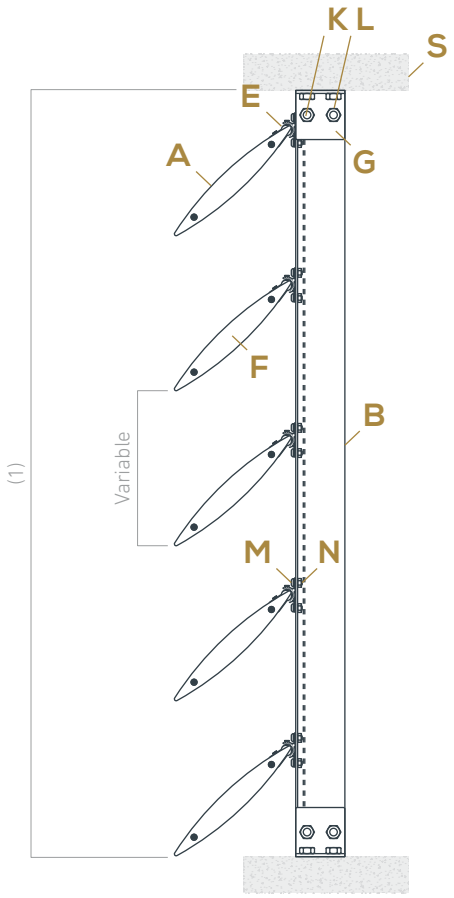
Fixed system

Slat+clamp on 100x40 mm carrier profile with bracket

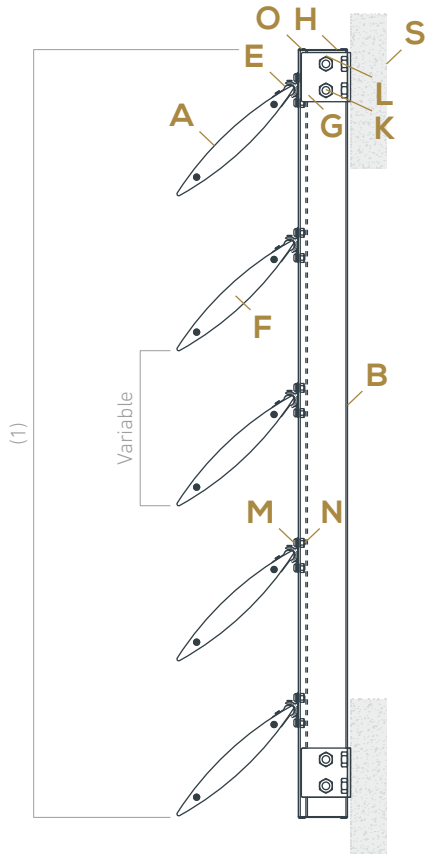


Guided system

Slat+clamp on 65x40 mm carrier profile between wall profile

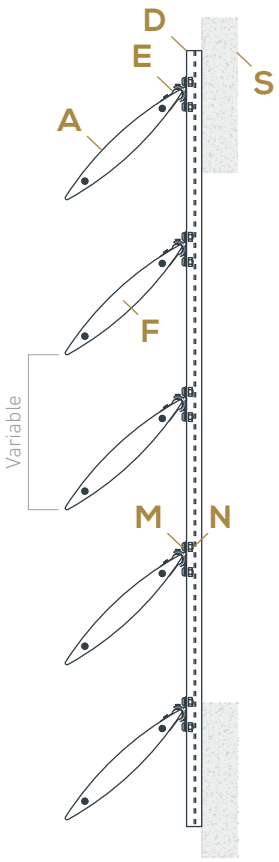


Slat+clamp on 65x40 mm outside wall profile

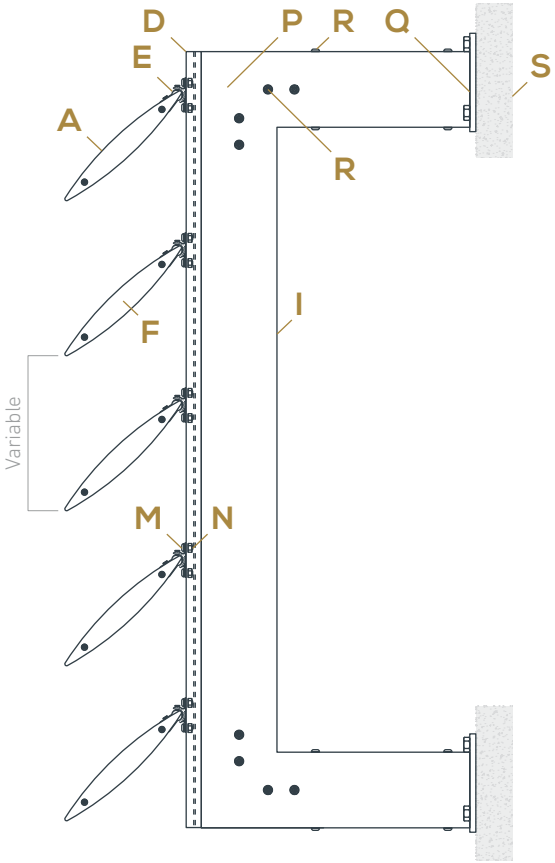


(1) Distance between anchoring points determined by the study prior to installation.

Slat+clamp on 40x20 mm guided support, anchored to wall



Slat+clamp on 40x20 mm guided support, anchored to new and existing carrier structure



PROFILES

A **Aluminium slat**
051002 O-120 | 051022 O-210
051296 O-300 (fixed system only)

B **65x40 mm carrier profile**
051302

C **Carrier profile**
027395 Carrier profile 100x40 (slat O-120, O-210)
027590 Aluminium tube 65x65 (slat O-300)

D **40x20 mm guided support**
050331

ACCESSORIES

E **Aluminium orientable clamp**
051013 Orientable clamp O-120 | O-210
051337 Orientable clamp O-120 | O-210
051039 Orientable clamp O-300 (fixed system only)

F **Blind end plate set**
051131 O-120 | 051132 O-210
051133 O-300 (fixed system only)

G **65x65x4 mm square stainless 304**
050193

H **65x40 mm end plate for carrier profile and double**
023127

I **100x40 mm end plate for carrier profile**
023112

J **Stainless steel bracket (according to project)**

SCREWS

K **Screw DIN 931 A2 M10x70 mm**
051114

L **Nut DIN 985 A2 M10**
051122

M **Screw DIN 912 A2 M6x12 mm**
051306

N **Nut DIN 985 A2 M6**
051048

O **Screw A2 4.2x22 mm fixture for carrier profile**
051107

P **Square at 90° carrier profile (internal)**
023106

Q **100x40 mm carrier profile wall bracket**
023104

R **Screw ULS ISO 7380 + washer A2 M6x16 mm**
051103

CONSTRUCTIVE ELEMENTS

S **Façade siding**

2.4

FIXED SLAT
WITH LATERAL ANCHORING

System of discontinuous fixed slat louvers with a variable orientation angle selection. Comprised of extruded slats laterally anchored to a structural aluminium profile that allows the installation of the slat with different degrees of inclination from 0° to 90°.

The system permits the selection of the slat inclination in models O-120, O-210, O-300, R-100, R-250, R-300 and R-400, as well as the selection of the separation between slats according to the area covered by the slat, determined by the angle of inclination.

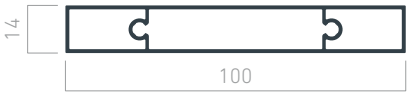
2.4.1 TYPES OF SLAT

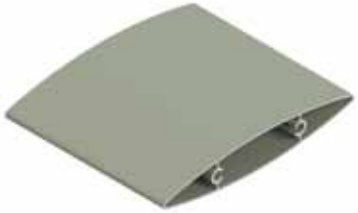
Slat R-100

050091

Rectangular slat offering maximum performance in small openings.

Technical data	
Dimension (x)	100 mm
Dimension (y)	14 mm
Slat weight	0.87 Kg/ml



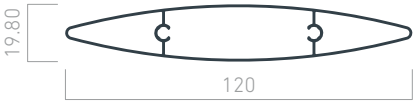


Slat O-120

051002

Oval-shaped slat offering maximum performance in small openings.

Technical data	
Dimension (x)	120 mm
Dimension (y)	19.80 mm
Slat weight	0.87 Kg/ml

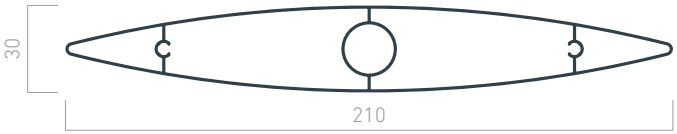


Slat O-210

051022

Oval-shaped slat that offers maximum performance in medium-large openings.

Technical data	
Dimension (x)	210 mm
Dimension (y)	30 mm
Slat weight	1.76 Kg/ml

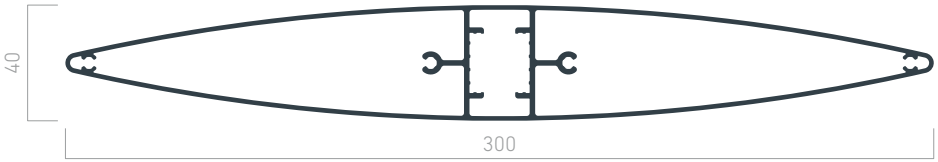


Slat O-300

051296

Oval-shaped slat that offers maximum performance in large openings.

Technical data	
Dimension (x)	300 mm
Dimension (y)	40 mm
Slat weight	3.78 Kg/ml

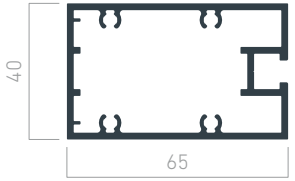


2.4.2 CARRIER PROFILES

40x20 mm guided support
050331

Technical data	
Profile depth	20 mm
Profile width	40 mm
Profile weight	0.80 Kg/ml
Inertia moment ly	14,309 mm^4
Inertia moment lx	46,278 mm^4

65x40 mm carrier profile
051302



Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Inertia moment ly	288,065 mm^4
Inertia moment lx	128,143 mm^4

100x40 mm carrier profile
027395

Technical data	
Profile depth	100 mm
Profile width	40 mm
Profile weight	2.20 Kg/ml
Inertia moment ly	934,415 mm^4
Inertia moment lx	207,966 mm^4

2.4.3 FIXED POSITION END PLATES

Fixed position end plate R-100
023130

Fixed position end plate O-120
051097

Fixed position end plate O-210
051098

Fixed position end plate O-300
051099

2.4.4 MODELS OF FIXED LOUVERS WITH LATERAL ANCHORING

RECTANGULAR SLATS

Range of rectangular slats made via extrusion of aluminium in a single piece. The straight line design integrates perfectly into architecture with straight and modern lines, naturally fitting with the R-100 slat model.

OVAL-SHAPED SLATS

Range of oval-shaped slats made via extrusion of aluminium in a single piece. The curved line design facilitates their integration into any type of architectural element, allowing a choice between three slat models O-120, O-210 and O-300.

ASSEMBLY

The slat is assembled on the carrier structure using a set of aluminium end plates adapted to the section dimensions of each slat and the typology of the anchoring to the structure. There is a choice between a fixed system or guided system.

Model R-100

Installation compatible with O-120 | O-210 | O-300.

Model O-120

Installation compatible with R-100 | O-210 | O-300.

Model O-210

Installation compatible with R-100 | O-120 | O-300.

Model O-300

Installation compatible with R-100 | O-120 | O-210.

2.4.5 INSTALLATION OF SLAT ON SUPPORT

The slat can be installed vertically and horizontally. The choice of slat type will determine the end plate model to be installed on the new or existing carrier structure, via a fixed or guided system.
The slat separation is variable in both systems, according to the technical characteristics determined in the project.

FIXED SYSTEM

The end plate set is assembled directly on the carrier profile using screws previously machine-made with the selected inclination angle and slat separation.

GUIDED SYSTEM

The end plate set is designed with the selected angle and assembled with screws placed in the interior of a guided profile, allowing the adjustment of the slats' separation on the building itself.

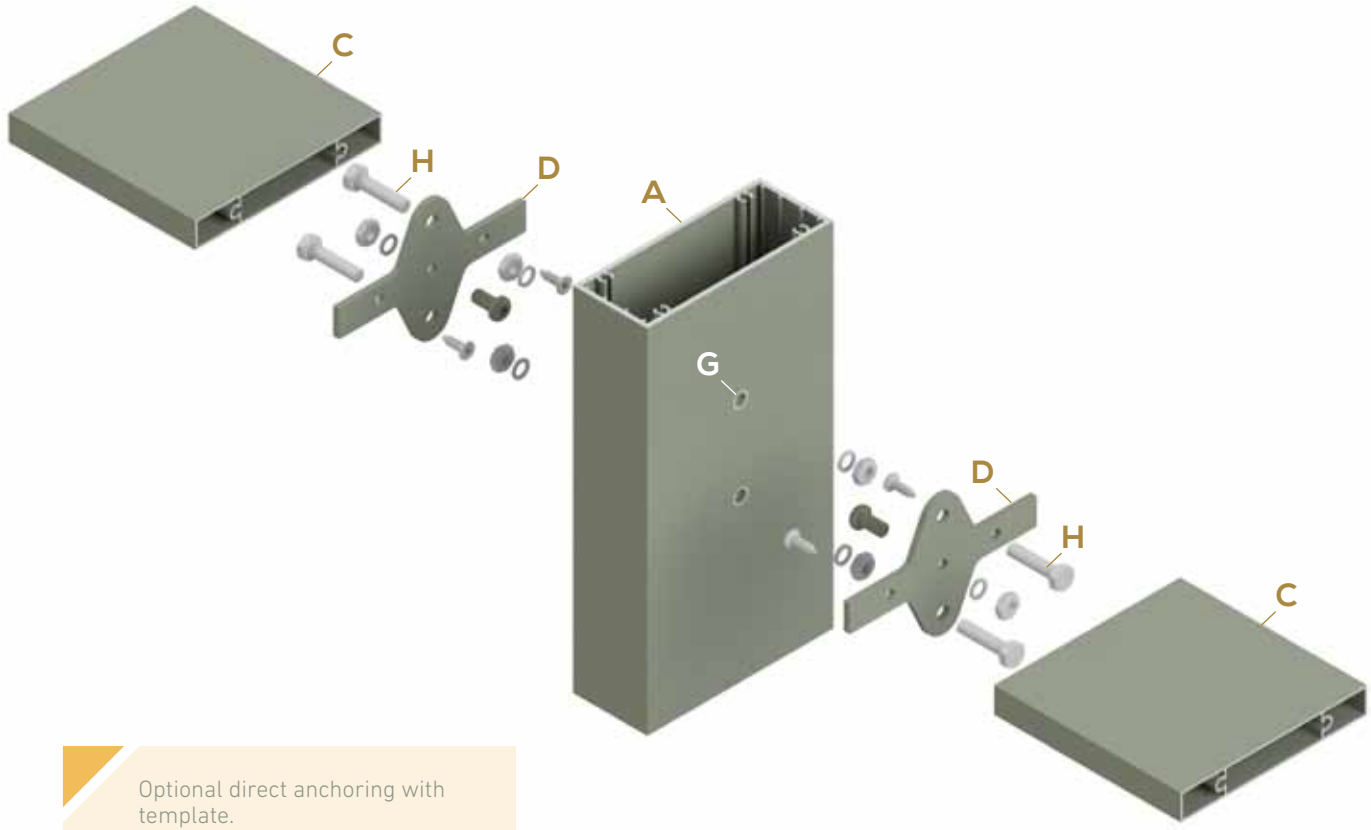
The aluminium end plate is designed and manufactured according to the inclination selected for the installation and is fixed to the slat using screws. Production under minimum order.

Fixed system

Fixed aluminium end plate anchored directly on carrier profile

The choice of inclination angle and separation between slats will be determined prior to placement on the building. The machine-made part that holds the screws is produced in the workshop.

The final installation on the building will be carried out via screwing the slat to the end plate previously installed on the slat. The end plate will be anchored via screws to the blind rivet nuts installed in the workshop.



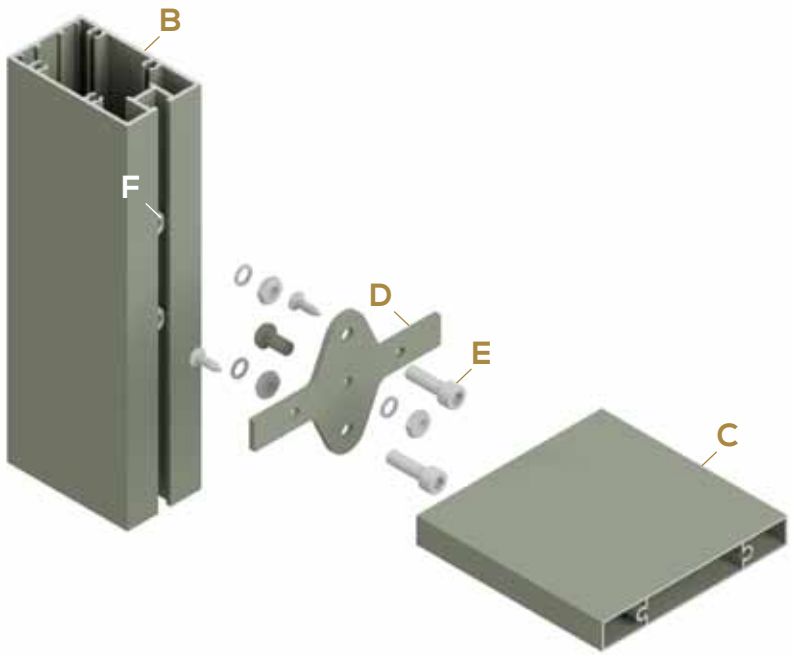
Optional direct anchoring with template.

Guided system

Guided aluminium end plate with 65x40 mm carrier profile

The end plate is assembled on the structural profile by inserting two nuts into the profile guide, where two screws that anchor the end plate to the 65x40 mm carrier profile will be fixed.

The inclination angle must be previously chosen, the adjustment of the slats' separation being carried out on the building itself.



PROFILES

A 100x40 mm carrier profile
027395

B 65x40 mm carrier profile
051302

C Slat
051002 O-120 | 051022 O-210 | 051296 O-300
050091 R-100

ACCESSORIES

D Fixed end plate set
051097 O-120 | 051098 O-210 | 051099 O-300
023130 R-100

SCREWS

E Screw ISO 7380 A2 M6x12 mm
051306

F Nut DIN 985 A2 M6
051048

G Blind rivet nut M6 aluminium
051257

H Screw DIN 933 A2 M6x25 mm
051152

2.4.5 INSTALLATION OF SLAT ON SUPPORT

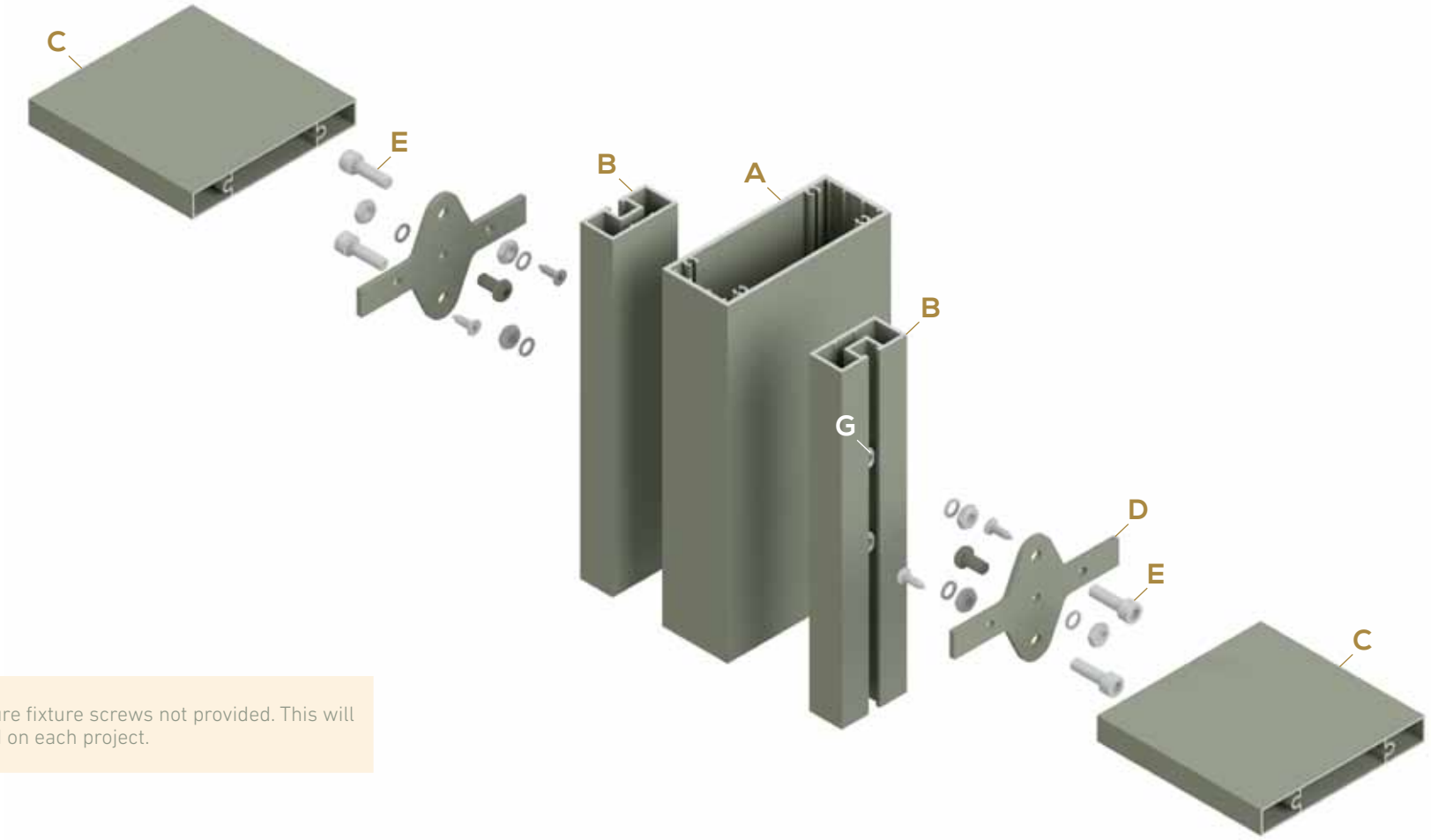
Guided **system**

Guided aluminium end plate with 40x20 mm guided support + carrier profiles

The end plate is assembled on the structural profile by inserting two nuts into the profile guide, where two screws that anchor the end plate to the 40x20 mm guided support will be fixed.

The inclination angle must be previously chosen, while the slats' separation will be determined in the final installation on the building itself.

The system allows the installation of the slat on the interior or exterior of openings in the building, via anchoring the 40x20 mm guided support with screws to the building's new or existing carrier profiles.



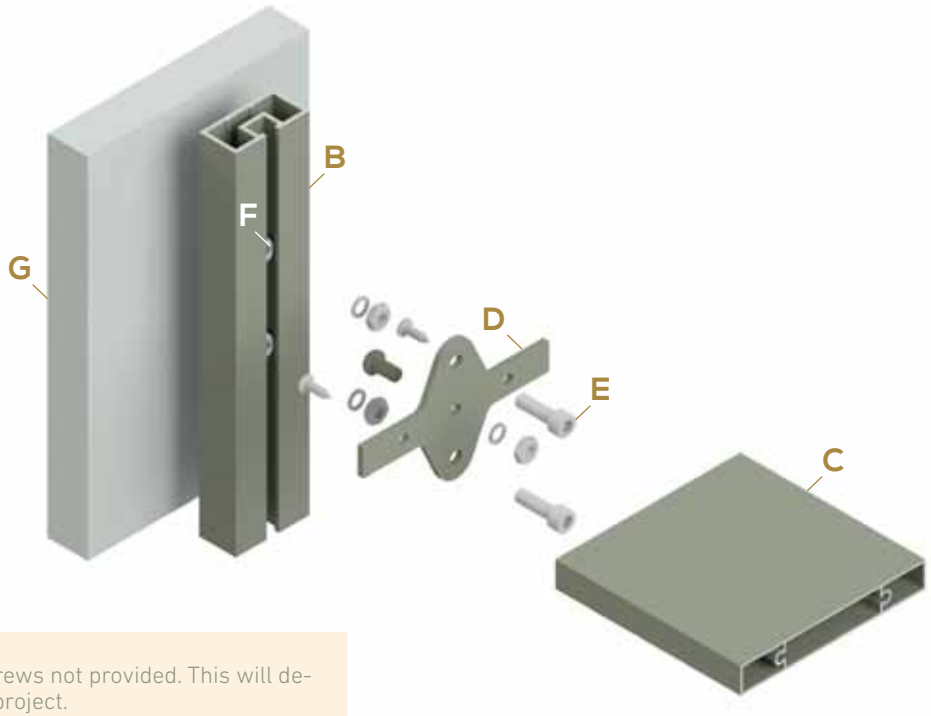
Structure fixture screws not provided. This will depend on each project.

Guided **system**

Guided aluminium end plate with 40x20 mm guided support on wall

The end plate is assembled on the structural profile by inserting two nuts into the profile guide, which will affix two screws that anchor the end plate to the 40x20 mm guided support. The inclination angle and the slats' separation on the building itself are previously determined.

The system allows the installation of the slat on the wall, via anchoring the 40x20 mm guided support with screws to the siding itself, countering the irregularities of the wall.



Wall fixture screws not provided. This will depend on each project.

PROFILES

A **100x40 mm carrier profile**
027395

B **40x20 mm guided support**
050331

C **Slat**
051002 O-120 | 051022 O-210 | 051296 O-300
050091 R-100

ACCESSORIES

D **Fixed end plate set**
051097 O-120 | 051098 O-210 | 051099 O-300
023130 R-100

SCREWS

E **Screw ISO 7380 A2 M6x12 mm**
051306

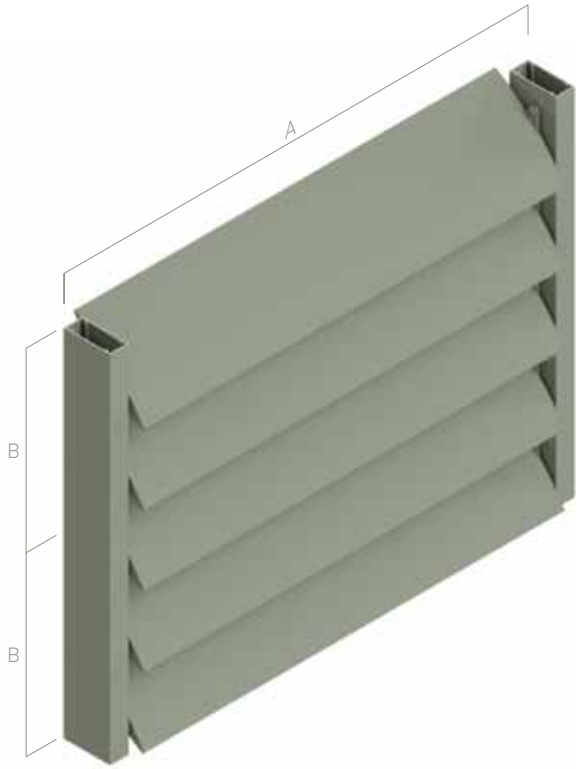
F **Nut DIN 985 A2 M6**
051048

CONSTRUCTIVE ELEMENTS

G **Wall**

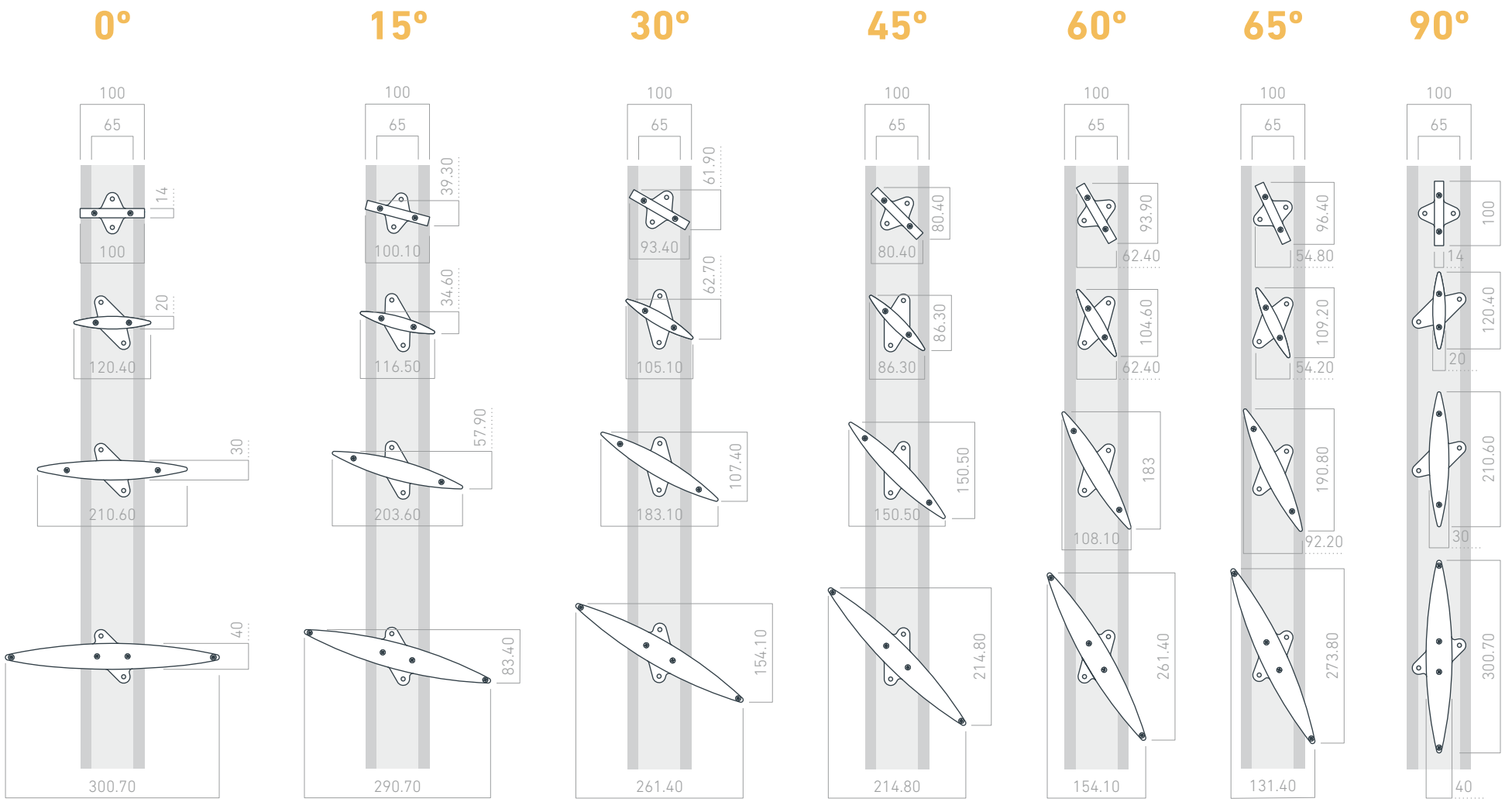
2.4.6 TECHNICAL DATA

An optimal and effective sun protection system is achieved via proper adaptation of the slats' orientation angle and separation to the movement of the sun. This regulates the surface area of the shade on the façade and the effective ventilation surface.



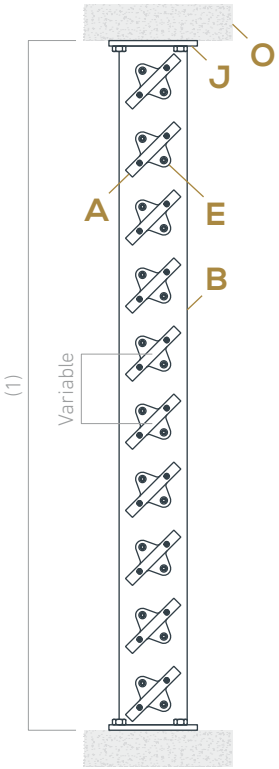
		N° slats / ml				A	B
Slat	Material	Step	Degree of horizontal orientation	Useful coverage of the slat (mm)	Total slat installation section (mm)	Max. distance between anchorings (mm) Fixed and guided end plate	Maximum distance between fixture points in (mm)
O-120	Aluminium	Variable	0°	20	120.40	1,500	According to project
			15°	34.60	116.50	1,500	
			30°	62.70	105.10	2,000	
			45°	86.30	86.30	2,000	
			60°	104.60	62.40	2,000	
			65°	109.20	54.20	2,000	
			90°	120.40	20	2,000	
O-210	Aluminium	Variable	0°	30	210.60	2,000	
			15°	57.90	203.60	2,000	
			30°	107.40	183.10	2,500	
			45°	150.50	150.50	2,500	
			60°	183	108.10	2,500	
			65°	190.80	92.20	2,500	
			90°	210.60	30	2,500	
O-300	Aluminium	Variable	0°	40	300.70	3,500	
			15°	83.40	290.70	3,750	
			30°	154.10	261.40	4,000	
			45°	214.80	214.80	4,000	
			60°	261.40	154.10	4,000	
			65°	273.80	131.40	4,000	
			90°	300.70	40	4,000	
R-100	Aluminium	Variable	0°	14	100	1,410	
			15°	39.30	100.10	1,410	
			30°	61.90	93.40	1,410	
			45°	80.40	80.40	1,410	
			60°	93.90	62.40	1,410	
			65°	96.40	54.80	1,410	
			90°	100	14	1,410	

Inclination degrees

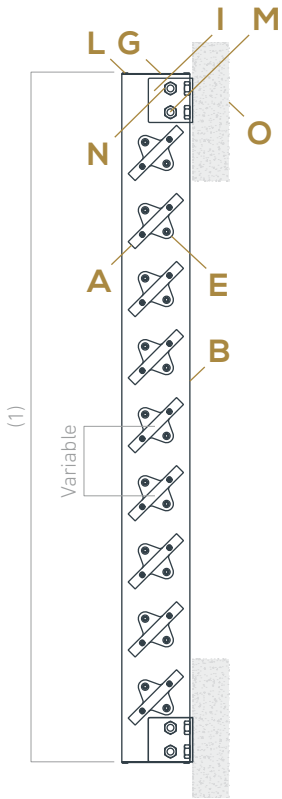


2.4.7 TYPES OF INSTALLATION

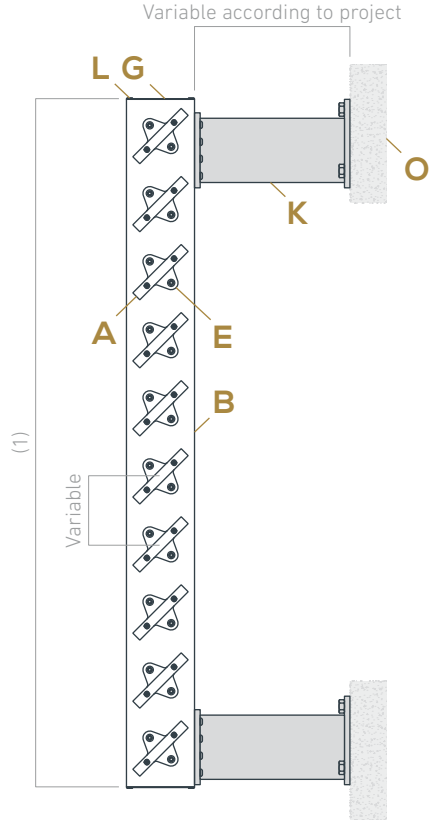
Installation with fixed end plate on 100x40 mm between wall profile



Installation with fixed end plate on 100x40 mm outside wall profile

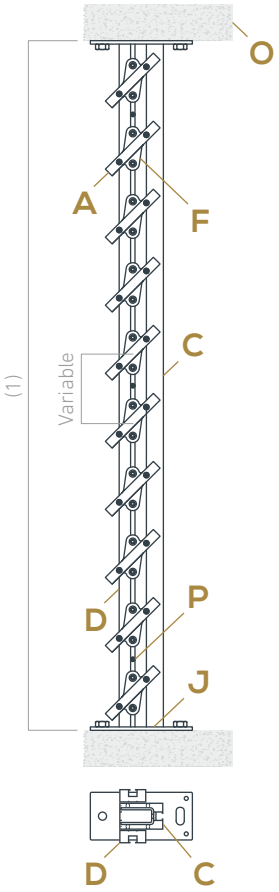


Installation with fixed end plate on 100x40 mm outside wall profile with bracket

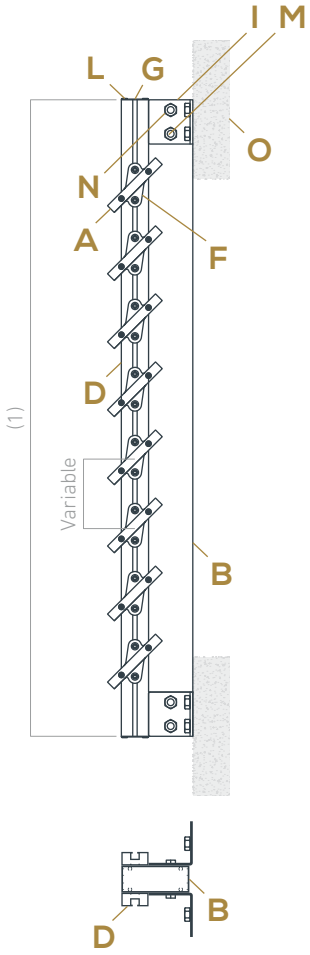


The width of the total slat installation section will vary according to the selected degree of orientation, data compiled in the table on page 94.
(1) Distance between anchoring points determined by the study prior to installation.
For installations with profile 65x40 mm, consult us.

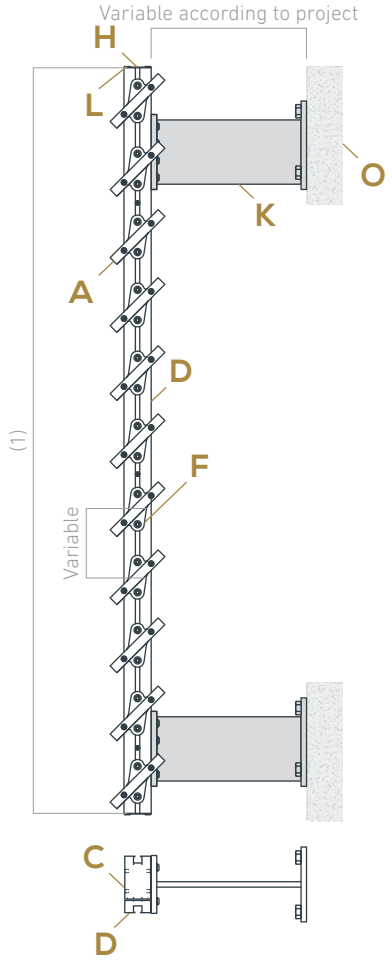
Installation with 100x40 mm between wall profile



Installation with guided end plate on 65x40 mm outside wall profile



Installation with guided end plate on 100x40 mm outside wall profile with bracket



PROFILES

A Slat
051002 O-120 | 051022 O-210 | 051296 O-300
050091 R-100

B 100x40 mm carrier profile
027395

C 65x40 mm carrier profile
051302

D 40x20 mm guided support
050331

ACCESSORIES

E Fixed end plate
051097 O-120 | 051098 O-210 | 051296 O-300
023130 R-100

F Guided end plate
O-120 | O-210 | O-300 | R-100

G 100x40 mm end plate for carrier profile
023112

H 65x40 mm end plate for carrier profile
023127

I 65x65x4 mm square stainless 304
050193

J 100x40 mm stainless steel carrier profile wall bracket
023104

K Stainless steel bracket (according to project)

SCREWS

L Screw A2 4.2x22 mm bracket end plate for carrier profile
051107

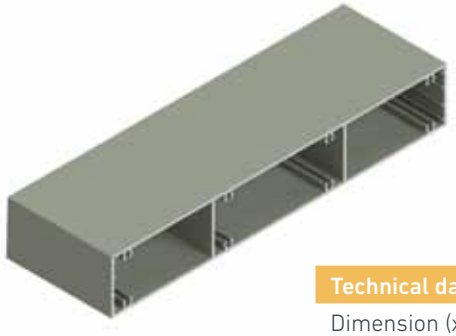
M Screw DIN 931 A2 M10x70 mm
051114

N Nut DIN 985 A2 M10
051122

CONSTRUCTIVE ELEMENTS

O Façade siding

2.4.8 TYPES OF RECTANGULAR SLATS

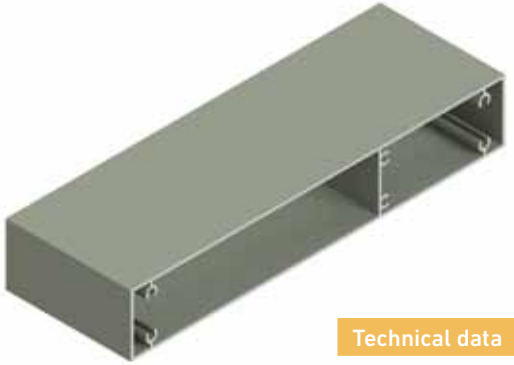


Slat R-250

Rectangular slat that offers maximum performance in medium openings.

Over minimum order.

Technical data	
Dimension (x)	250 mm
Dimension (y)	40 mm
Slat weight	4.25 Kg/ml



Slat R-300

050343

Rectangular slat that offers maximum performance in large openings.

Over minimum order.

Technical data	
Dimension (x)	300 mm
Dimension (y)	40 mm
Slat weight	5.72 Kg/ml

Slat R-400

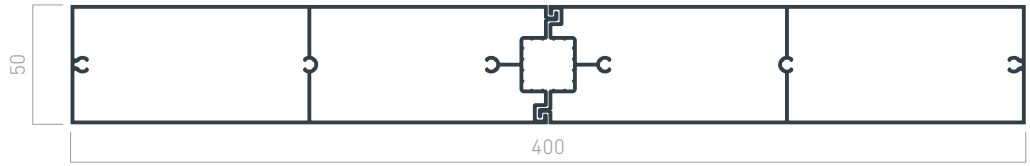
1/2 Slat R-400

051069

Rectangular large-format slat that offers maximum performance in large openings. Comprised of 2 units 1/2 slat R-400.

Over minimum order.

Technical data	
Dimension (x)	400 mm
Dimension (y)	50 mm
Slat weight	5.98 Kg/ml
1/2 slat weight	2.99 Kg/ml



2.4.9 LARGE FORMAT

Of rectangular design and made by aluminium extrusion.

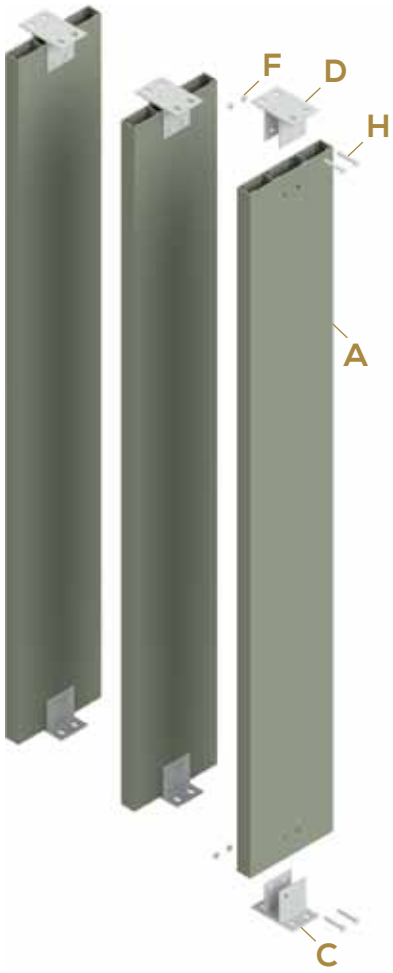
They are designed to cover large openings in building façades with horizontal or vertical orientation perfectly integrating in an architecture of straight and modern lines in a natural manner.

ASSEMBLY

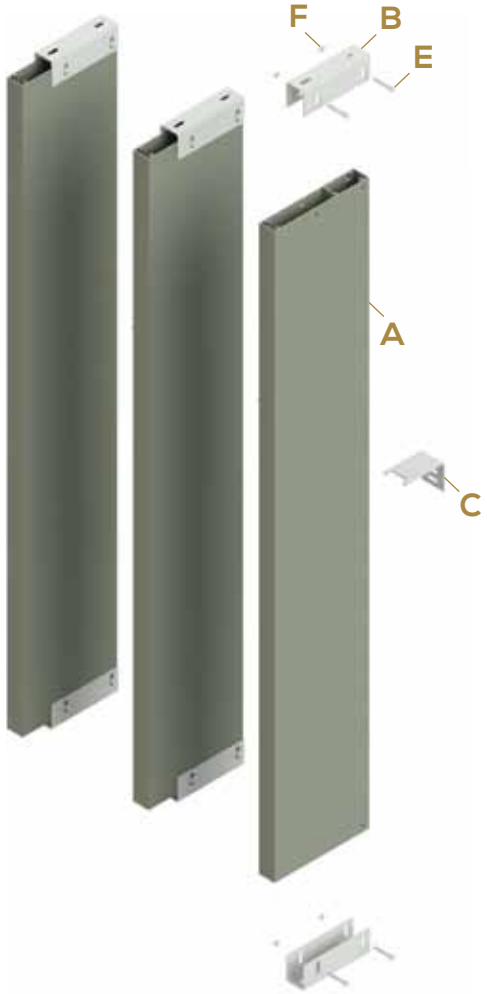
The assembly of the slat is done directly over the structure of the building by the stainless steel upper-lower bracket, which, is attached to the ends of the slats with steel screws. The anchoring of the slats to the building's structure allows the selection of angles from 0° to 90°.

Over minimum order.

Model R-250 NEW!



Model R-300 NEW!

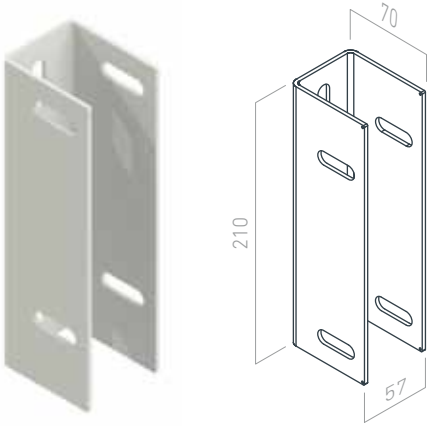


Model R-400

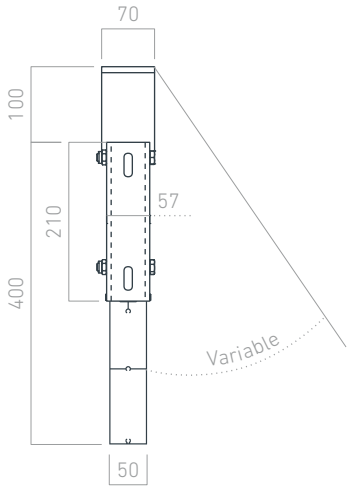
Option of placement of fixed end plate R-400.

Anchoring

Upper-lower slate bracket R-300 | R-400
051090



Orientation R-300 | R-400



PROFILES

A **Slats**
051069 1/2 SLAT R-400 | 050343 SLAT R-300
SLAT R-250

ACCESSORIES

B **Upper-lower stainless steel bracket R-400**
051090

C **Bracket to hole stainless steel slat R-400**
051079

D **Support R-250 (90°)**
051336

SCREWS

E **Screw DIN 931 A2 M10x70 mm**
051114

F **Assembly nut DIN 985 A2 M10**
051122

G **Screw A2 4.2x22 mm**
051107

H **Screw DIN 933 A2 M10x55 mm**

2.4.10 TYPES OF LARGE FORMAT INSTALLEMENT

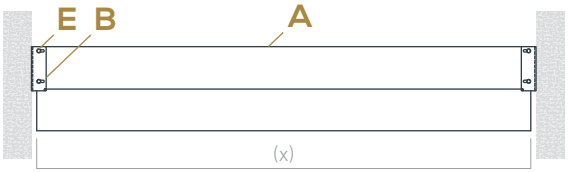
In vertical installations for heights greater than 4,500 mm installation of stainless steel bracket to hole is recommended.

Maximum installation length will depend on the type of slat chosen and on the prior study of the project.

Both for vertical and horizontal slat installations, the slat step will be variable, just like its inclination. The minimum installation depth of the opening (P1) will be variable depending on the chosen slat.

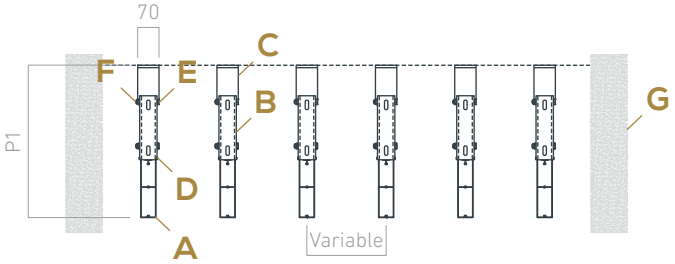
Model R-300 | R-400 + horizontal upper-lower bracket installation

In installations with horizontal slats, the upper-lower brackets anchor the sides of the openings to cover.

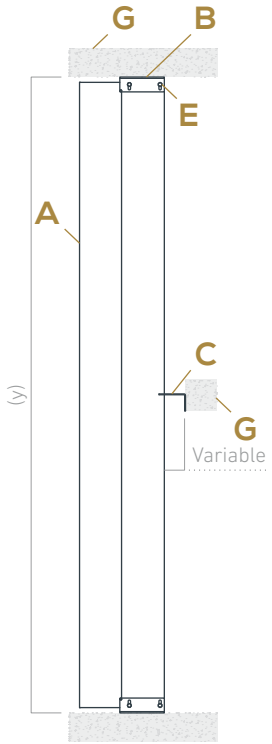


R-400 + upper-lower bracket vertical installation (upper view)

The upper-lower brackets anchored interiorly in the upper-lower zone of the opening to cover.



Model R-300 | R-400 + vertical upper-lower bracket installation



		N° slats / ml			(y)	(x)	
Slat	Material	Step	Degree of horizontal orientation	Usable slat coverage (mm)	Max. vertical slat length (mm)	Max. horizontal slat length (mm)	P1 (mm)
R-250	Aluminium	Variable	0°-90°	Variable	Consult according to project		Variable
R-300	Aluminium	Variable	0°-90°	Variable	Consult according to project		Variable
R-400	Aluminium	Variable	0°-90°	Variable	Consult according to project		Variable

PROFILES

A **Slats**
051069 1/2 SLAT R-400 | 050343 SLAT R-300
SLAT R-250

ACCESSORIES

B **Upper-lower bracket R-400 stainless steel**
051090

C **Bracket to hole R-400 acero stainless steel**
051079

SCREWS

D **Screw A2 4.2x22 mm**
051107

E **Screw assembly DIN 931 A2 M10x70 mm**
051114

F **Assembly nut DIN 985 A2 M10**
051122

CONSTRUCTIVE ELEMENTS

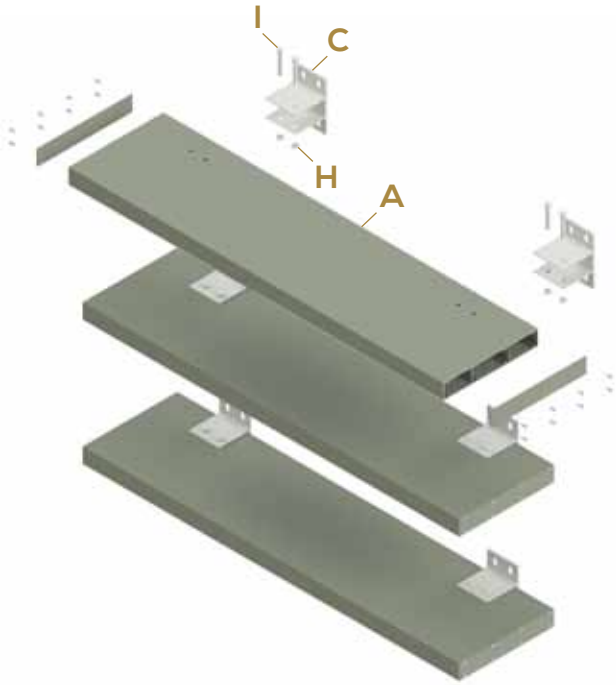
G **Façade sidings**

2.4.10 TYPES OF LARGE FORMAT INSTALLEMENT

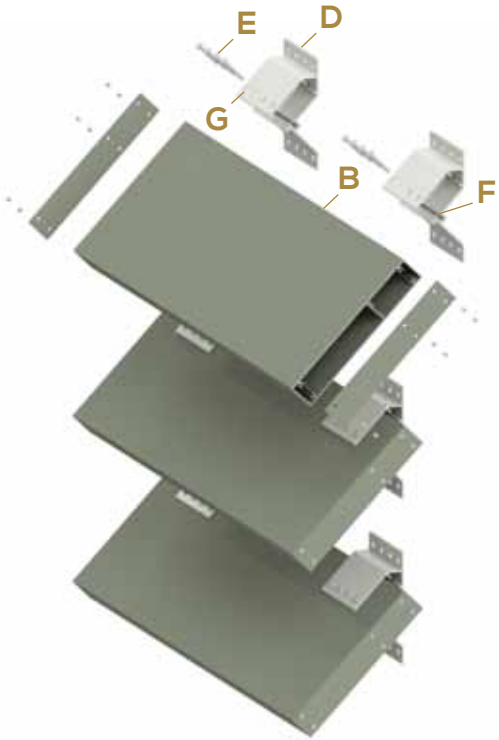
Of rectangular design made by aluminium extrusion the slats are designed to cover large openings in building façades with horizontal or vertical orientation perfectly integrating in an architecture of straight and modern lines in a natural manner.

The assembly of the slat is done directly over the structure of the building by the frontal anchoring with angles of 90° or 45°, allowing the assembly over the structure and with this the continuity of the slat.

Model R-250 NEW!



Model R-300 NEW!



		N° slats / ml			
Slat	**Material**	**Step**	**Degree of horizontal orientation**	**Max. vertical slat length (mm)**	**Max. horizontal slat length (mm)**
R-250	Aluminium	Variable	90°	Consult according to project	
R-300	Aluminium	Variable	45°	Consult according to project	

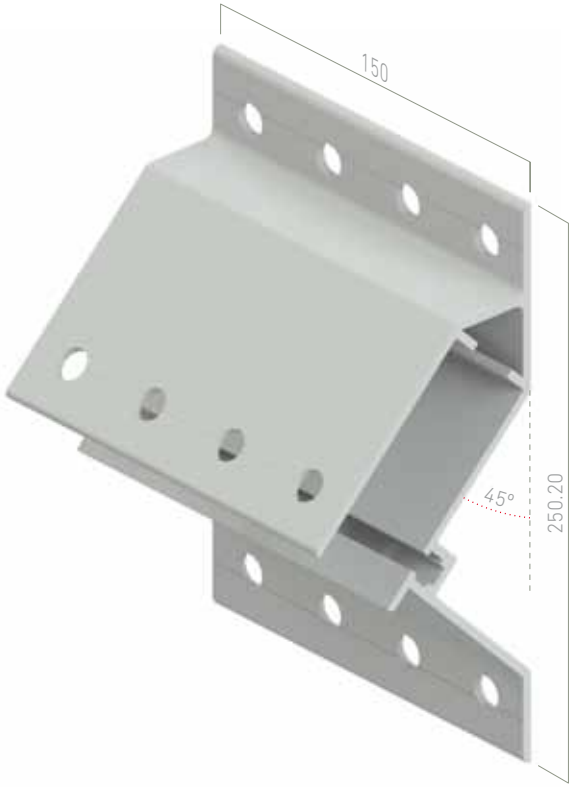
Anchoring

Support R-250 (90°) NEW!
051336

Designed for slat R-250 installation at 90° allowing continuity of the slat in the façade.

Support R-300 (45°) NEW!
050342

Designed for slat R-300 installation at 45° allowing continuity of the slat.



PROFILES

A Slat R-250

B Slat R-300
050343

ACCESSORIES

C Special support R-250 90°
051336

D Support R-300 45°
050342

SCREWS

E Screw DIN 933 A2 M8x70 mm
050312

F Nut DIN 985 A2 M8
050128

G Washer DIN 125 A2 M8
022839

H Nut DIN 985 A2 M10
051122

I Screw DIN 933 A2 M10x55 mm

2.5

SELECTABLE INCLINATION SLAT

VERSATILITY FOR INSTALLERS, INTEGRAL PROTECTION FOR USERS

New fixed slats louvre system with selectable inclination made up of two extruded profiles forming a unique exterior geometry that is anchored by screws to a guided profile bracket.

The anchoring with guided profile brackets enables the slat installation with different horizontal orientations, adapting to the design of the façade maintaining the slate continuity.

The system allows the selection of two slat models, model A-120, comprised of the faceted base profile + slat A-120 and model R-150 formed by the faceted base profile + slat R-150.

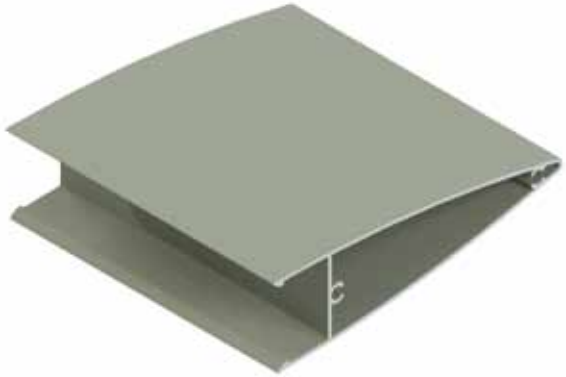
In both models the faceted base profile enables the anchoring of the ensemble's base allowing a selectable inclination of 30°, 45° or 90°, using one of its three faces according to the bracket profile.

2.5.1 TYPES OF SLATS | COMPOSITION

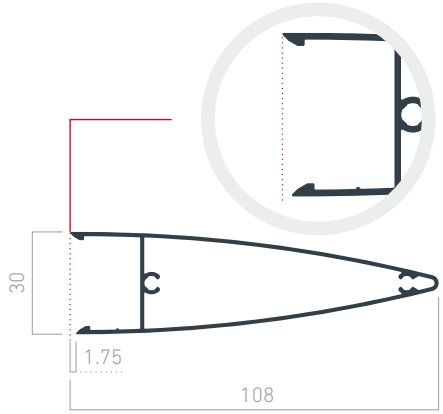
Slat A-120
051312

Curved line slat with opening on one end for clipping over the faceted base profile shaping the geometry of slat's ensemble A-120.

It is not symmetrical.



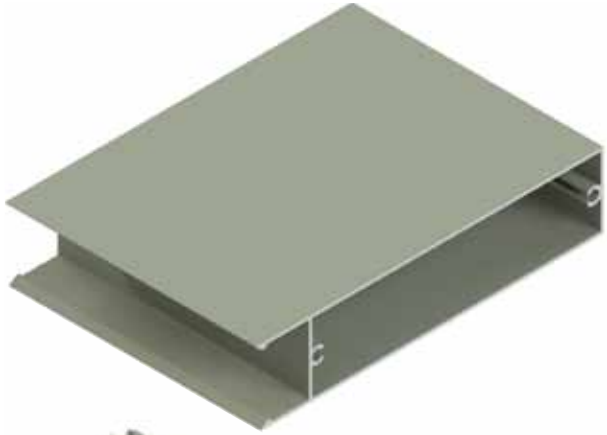
Technical data	
Dimension (x)	108 mm
Dimension (y)	30 mm
Slat weight	1.05 Kg/ml



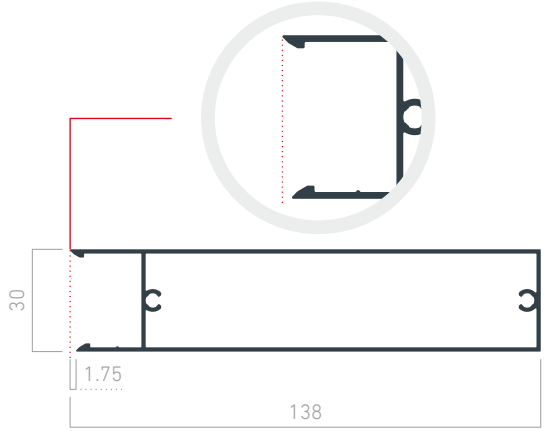
Slat R-150
051313

Curved line slat with opening on one end for clipper over the faceted base profile shaping the geometry of slat's ensemble R-150.

It is not symmetrical.



Technical data	
Dimension (x)	138 mm
Dimension (y)	30 mm
Slat weight	1.33 Kg/ml

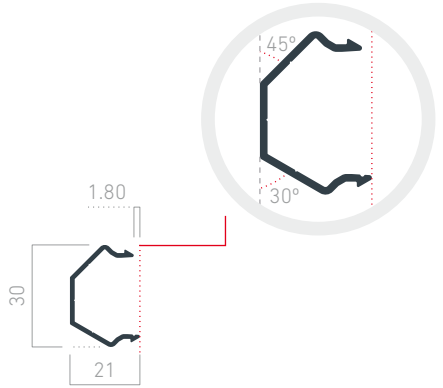


Faceted base profile
051314

Faceted profile in three faces with selectable inclination 30°, 45°, 90°, with an opening on one end for clipping over slat A-120 and R-150.

It is not symmetrical.

Technical data	
Dimension (x)	21 mm
Dimension (y)	30 mm
Slat weight	0.24 Kg/ml



2.5.2 CARRIER PROFILES

40x20 mm guided support

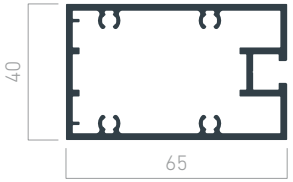
050331

Technical data	
Profile depth	20 mm
Profile width	40 mm
Profile weight	0.80 Kg/ml
Moment of inertia Iy	14,309 mm^4
Moment of inertia Ix	46,278 mm^4

65x40 mm carrier profile

051302

Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Moment of inertia Iy	288,065 mm^4
Moment of inertia Ix	128,143 mm^4



2.5.3 FIXED LOUVER MODELS WITH SELECTABLE INCLINATION

SLAT A-120

Comprised of two extruded aluminium profiles, curved line slat A-120 that forms the exterior geometry and faceted base profile that enables the anchoring of the ensemble's base.

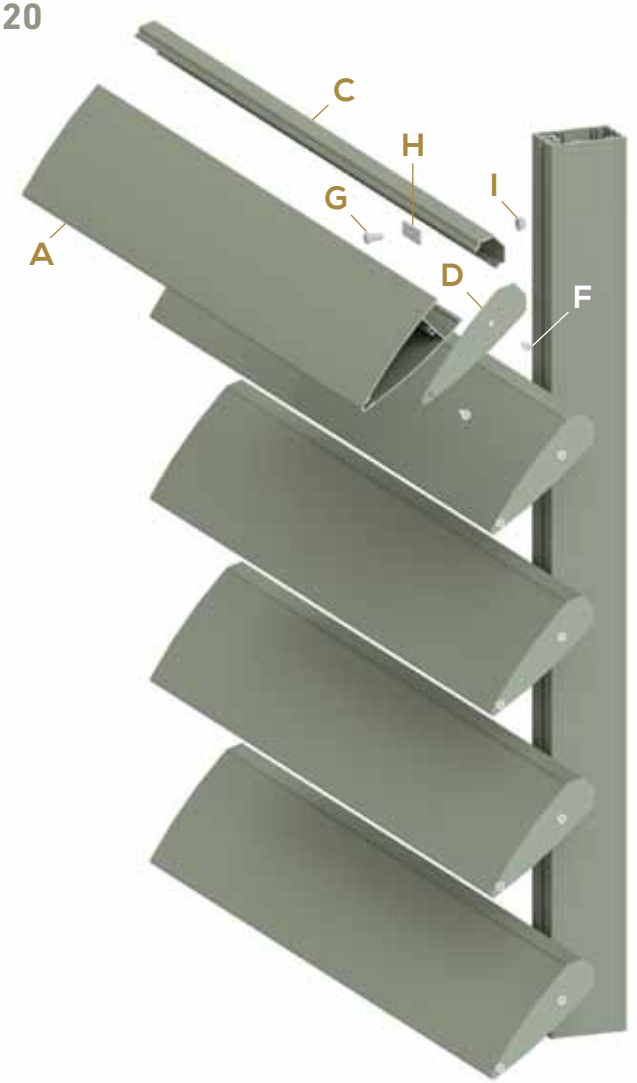
SLAT R-150

Comprised of two extruded aluminium profiles, the straight line slat R-150 that forms the exterior geometry and faceted base profile that enables the anchoring of the ensemble's base.

FACETED BASE PROFILE

In both slats the faceted base profile enables the anchoring of the ensemble's base to the structural profiles allowing a selectable inclination between 30°, 45° and 90° through any of its faces regarding the bracket base.

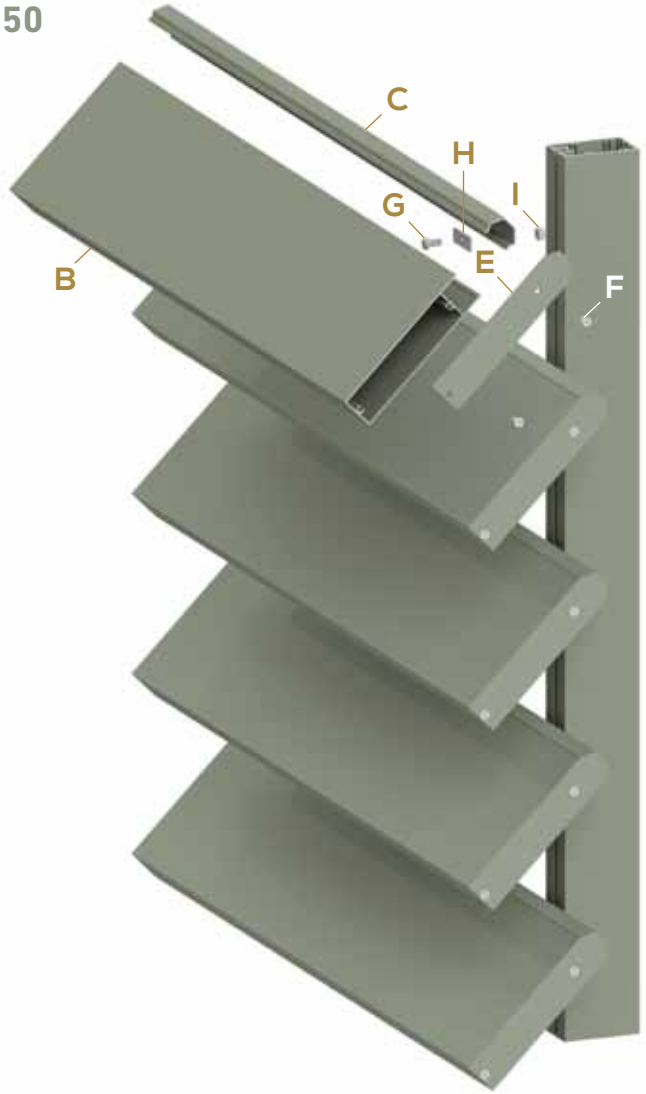
Model A-120



Option of choosing the support profiles between carrier profile 65x40 mm or guided support 40x20 mm.

The choice of profile will depend on the prior study of the installation.

Model R-150



Option of choosing the support profiles between carrier profile 65x40 mm or guided support 40x20 mm.

The choice of profile will depend on the prior study of the installation.

PROFILES

A Slat A-120
051312

B Slat R-150
051313

C Faceted base profile
051314

ACCESSORIES

D Slat A-120 end plate
050234

E Slat R-150 end plate
050236

SCREWS

F Screw A2 4.2x22 mm
051107

G Screw ISO 7380 A2 M6x12 mm
051306

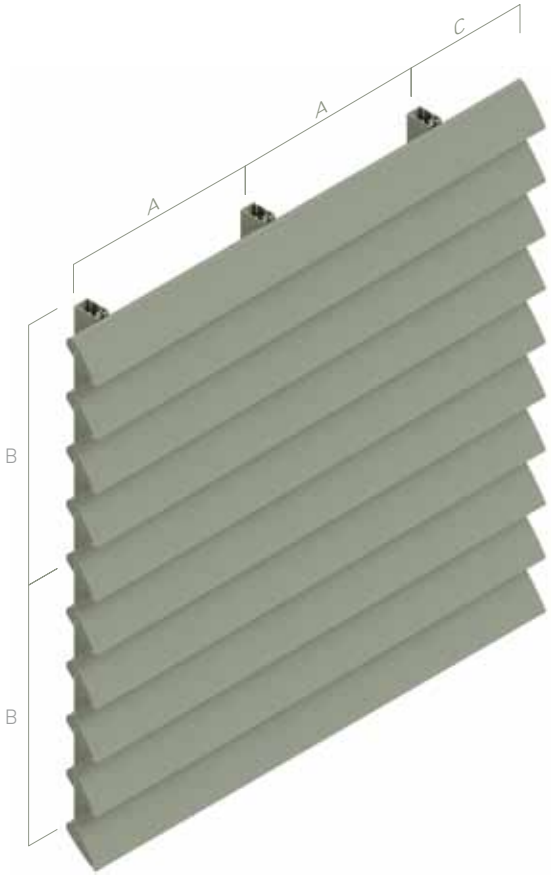
H Internal fixing plate 35 mm made of stainless steel 304
050213

I Nut DIN 985 A2 M6
051048

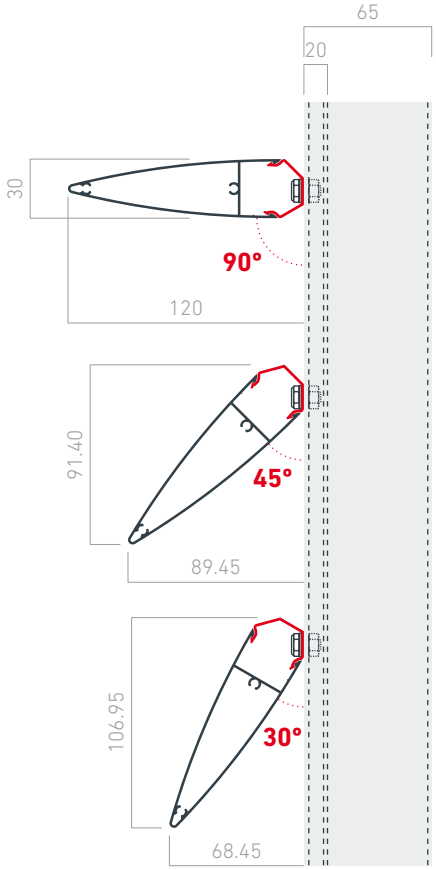
2.5.4 TECHNICAL DATA

Maximum installation dimensions

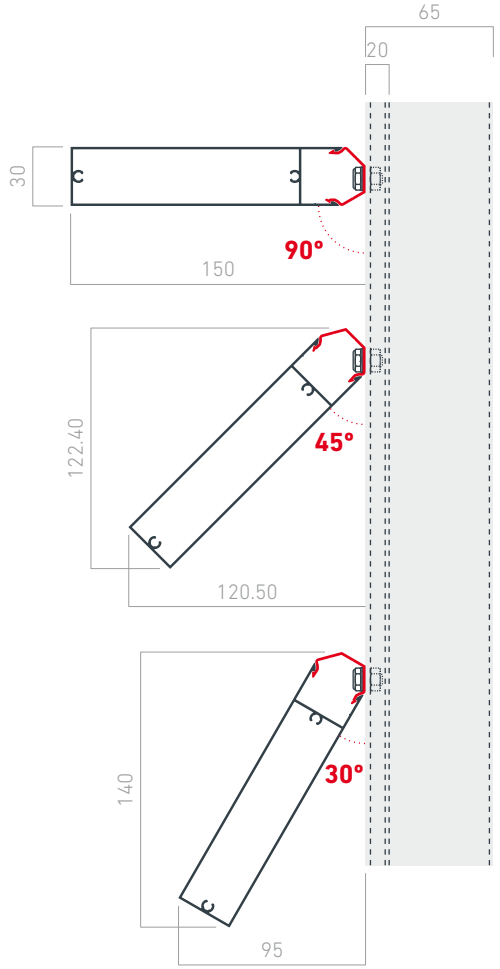
For optimal solar protection and increase its efficiency, the choice of the slat inclination angle and its separation must adapt to the movement of the sun, regulating the shadow surface over the façade and the effective surface area of ventilation.



Slat A-120 installation



Slat R-150 installation



The slat inclination will be chosen with one of the faceted base profile's faces, choosing between 30°, 45°, 90°.
The support profile can be chosen between the carrier profile 65x40 mm or guided support 40x20 mm.

Technical specifications

		A-120			R-150			
Aluminium alloy		EN AW 6063 T5			EN AW 6063 T5			
Number of slats (unit/ml)		Variable according to project						
Slat weight (kg/ml)		1.3			1.6			
Slat inclination		90°	45°	30°	90°	45°	30°	30°
(A) Maximum slat length (mm)		2,000	2,000	2,000	2,000	2,000	2,000	1,500
(B) Maximum distance between fixture points		According to project						
(C) Maximum slat overhang (mm)		300	300	300	300	300	300	300
Wind resistance (Pa) UNE-EN 13659:2016		1,250	1,250	1,200	1,250	1,250	580	750
Speed (km/h)		~162	~162	~159	~162	~162	~110	~125
Slat orientation over support		0° a 90°						
Support	Carrier profile 65x40 mm		✓			✓		
	Option of installation over different types of structural supports and surfaces with guided support 40x20 mm		✓			✓		

2.5.5 INSTALLING SLAT OVER STRUCTURE

Installation of slat over base bracket

The prior study of the system, will determine the support profile bracket of the slat choosing between the carrier profile 65x40 mm, or the guided support 40x20 mm.

INCLINATION

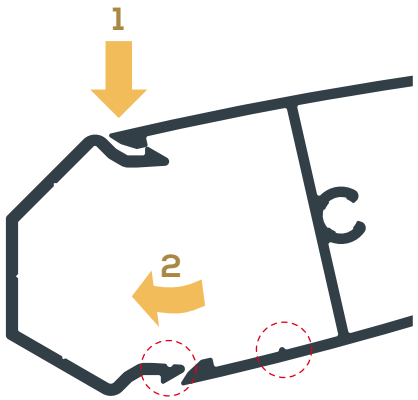
The inclination of the slat will be chosen with one of the faces of the faceted base profile and the slat's horizontal orientation, four openings will be made in the faceted profile base for each anchoring point respecting the maximum installation dimensions and a stainless steel screw plus an internal steel fixing plate that will avoid the deformation of the aluminium at the fixation point to a large extent.

The screw will be attached to the support profile with a steel nut previously inserted in the guide of said profile. Afterwards the chosen slat A-120 or R-150 will be clipped over the faceted base profile respecting an order of clipping during the assembly.

Slat A-120 or R-150 installation

1. Position slat flap A-120 o R-150 over its final position in the faceted base profile.

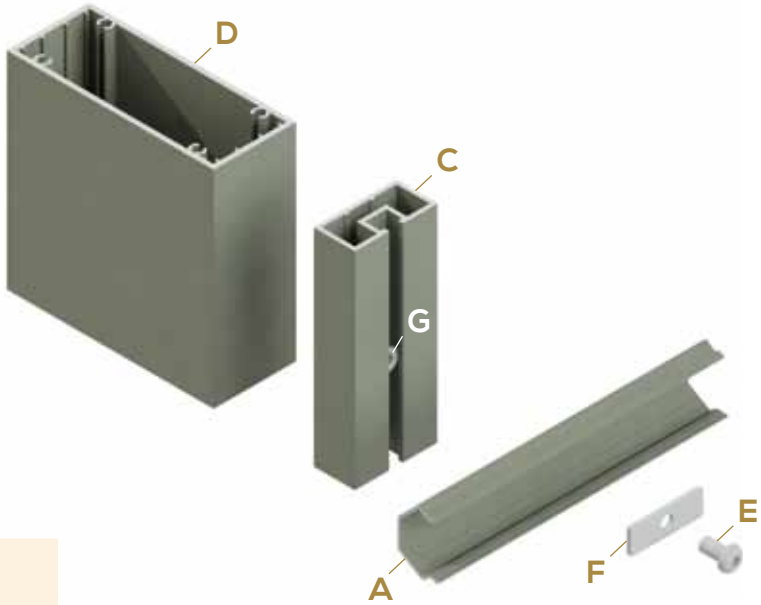
2. Twist/press the slat A-120 o R-150 for clipping of the opposite flap.



Respect the positioning of the position markings for a correct clipping.

Installation over structural profile

The guided support 40x20 mm, enables the installation of the louver over existing carrier structures or of new installation allowing the regulation of the separation of the slats in the building itself.

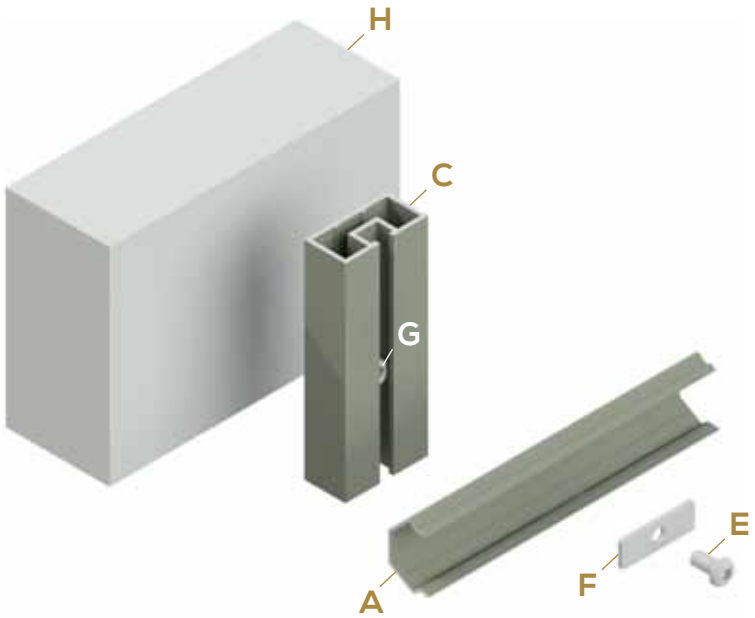


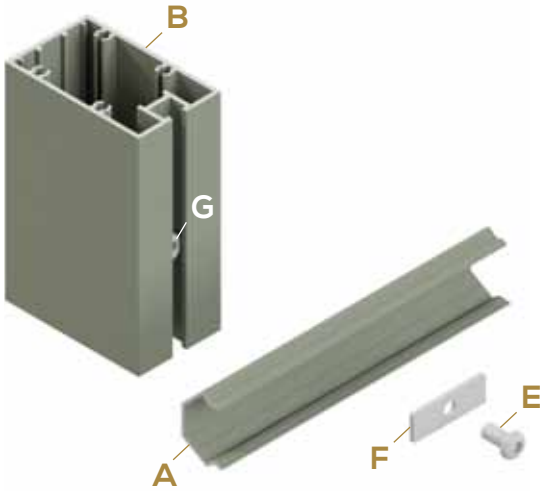
Installation over wall

The installation of the guided support 40x20 mm, over the wall absorbs the plan's surface irregularities allowing the regulating of the slats separation in the building itself.

Installation over profile 65x40 mm

The installation of the carrier profile 65x40 mm, over surfaces or openings to cover can be intramural or extramural, allowing the regulating of the slat separation in the building itself.





Screws for mounting onto wall or structure not provided will depend on the study of each project.

PROFILES

- **A** Faceted base profile 051314
- **B** 65x40 mm carrier profile 051302
- **C** 40x20 mm guided support 050331
- **D** 100x40 mm carrier profile 027395

ACCESSORIES

- **E** Screw ISO 7380 A2 M6x12 mm 051306
- **F** Internal fixing plate 35 mm made of stainless steel 304 050213
- **G** Nut DIN 985 A2 M6 051048

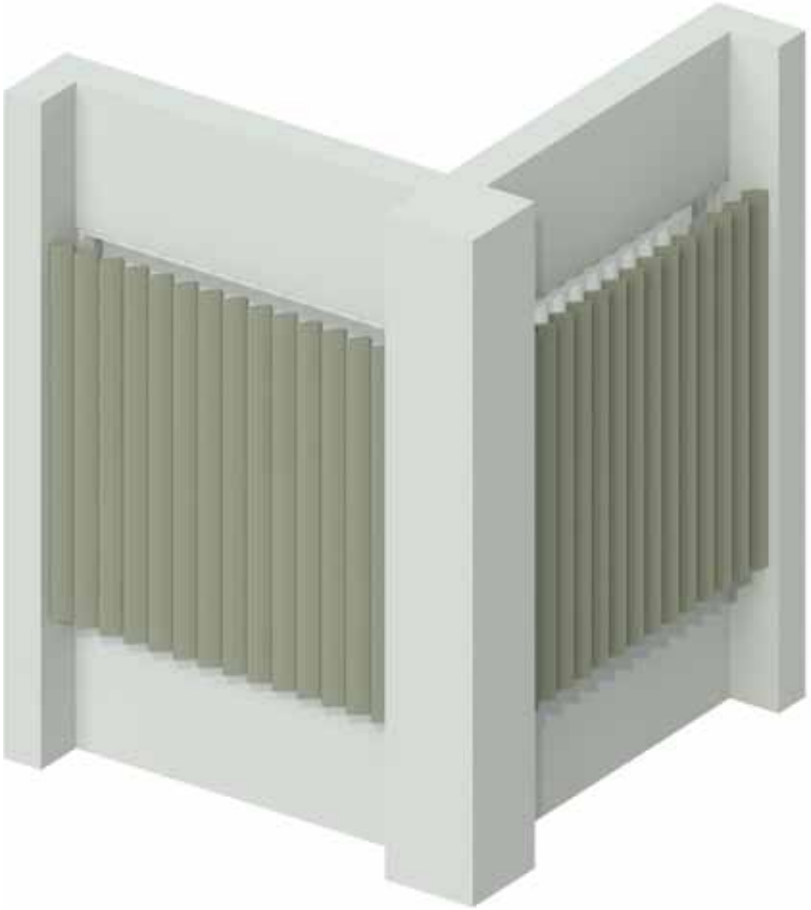
CONSTRUCTIVE ELEMENTS

- **H** Wall

2.5.6 TYPES OF INSTALLATION

Window installation with vertical slat

Slat A-120



Horizontal overhang with oblique slat

Slat A-120

Installation over wall with oblique slat

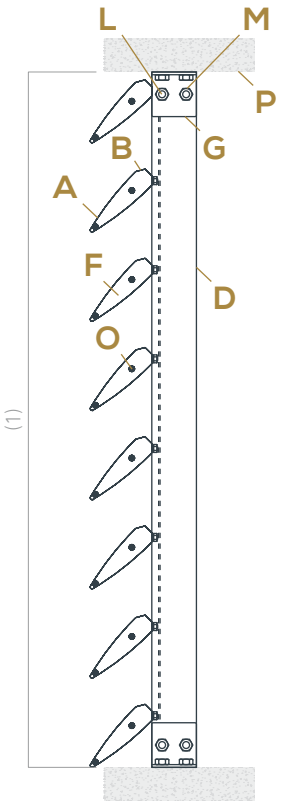
Slat R-150

Horizontal overhang installation with horizontal slat

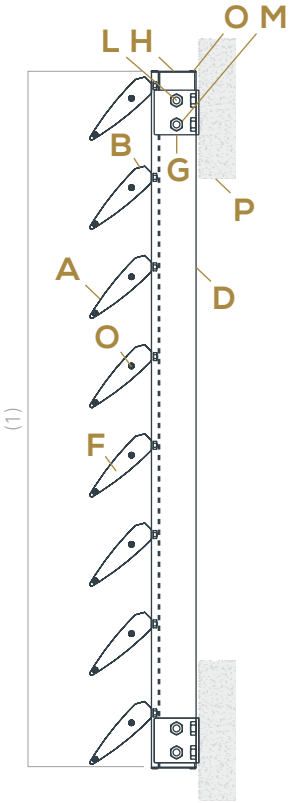
Slat R-150

2.5.6 TYPES OF INSTALLATION

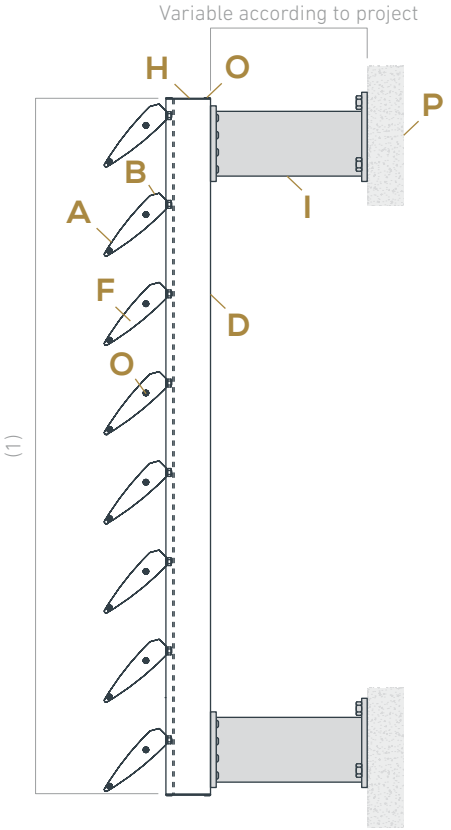
A-120 over intramural profile 65x40 mm



A-120 over extramural profile 65x40 mm

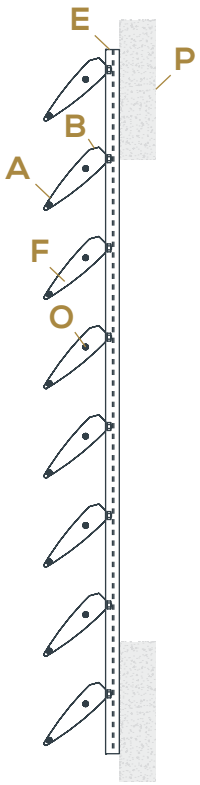


A-120 over profile bracket 65x40 mm

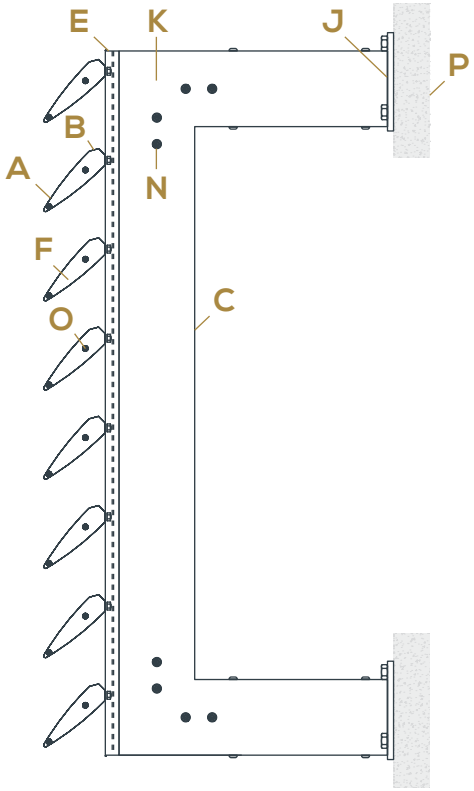


(1) Distance between anchoring points determined by the prior study of the installation.

A-120 over guided support 40x20 mm anchored to wall



A-120 over guided support 40x20 mm anchored to carrier structure



PROFILES

- **A** Slat A-120 — 051312
- **B** Faceted base profile — 051314
- **C** 100x40 mm carrier profile — 027395
- **D** 65x40 mm carrier profile — 051302
- **E** 40x20 mm guided support — 050331

ACCESSORIES

- **F** Slat A-120 end plate — 050234
- **G** Stainless bracket 65x65x4 mm 304 — 050193
- **H** 65x40 mm end plate for carrier profile — 023127
- **I** Stainless steel bracket (according to project)
- **J** Carrier profile support to wall 100x40 mm — 023104
- **K** Carrier profile bracket at 90° (hidden) — 023106

SCREWS

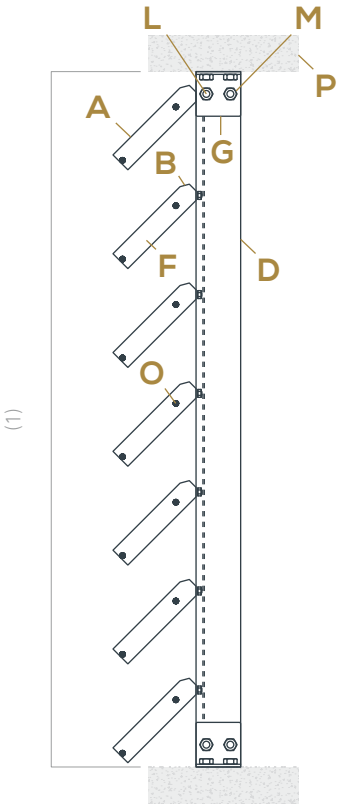
- **L** Screw DIN 931 A2 M10x70 mm — 051114
- **M** Nut DIN 985 A2 M10 — 051122
- **N** Screw ULS A2 M6x16 mm — 051103
- **O** Screw A2 4.2x22 mm — 051107

CONSTRUCTIVE ELEMENTS

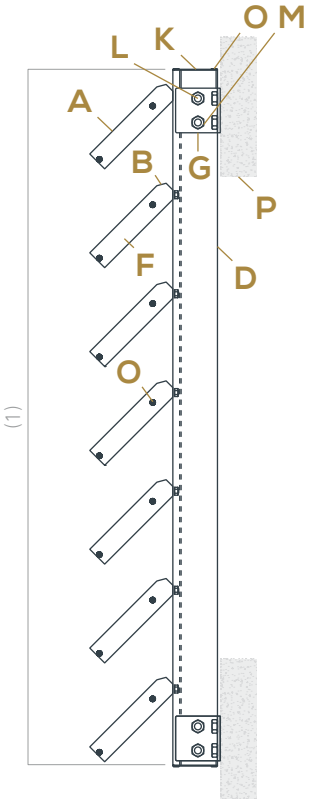
- **P** Façade sidings

2.5.6 TYPES OF INSTALLATION

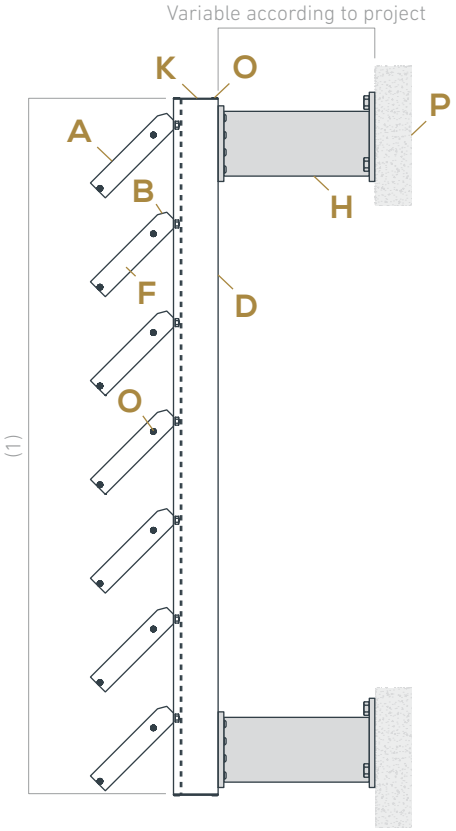
R-150 over intramural profile 65x40 mm



R-150 over extramural profile 65x40 mm

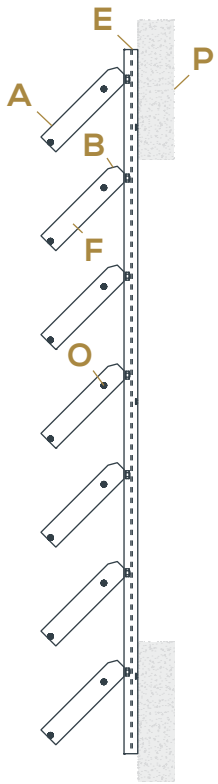


R-150 over profile bracket 65x40 mm

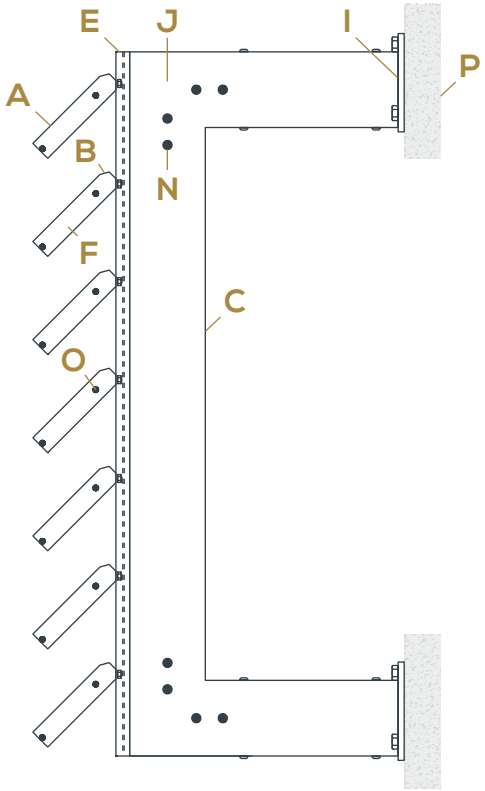


(1) Distance between anchoring points determined by the prior study of the installation.

R-150 over guided support 40x20 mm



R-150 over guided support 40x20 mm anchored to carrier structure



PROFILES

- **A** Slat R-150 — 051313
- **B** Faceted base profile — 051314
- **C** 100x40 mm carrier profile — 027395
- **D** 65x40 mm carrier profile — 051302
- **E** 40x20 mm guided support — 050331

ACCESSORIES

- **F** Carrier profile R-150 — 050236
- **G** 65x65x4 mm square stainless 304 — 050193
- **H** Stainless steel bracket (according to project)
- **I** Carrier profile support to wall 100x40 mm — 023104
- **J** Carrier profile bracket at 90° (hidden) — 023106
- **K** 65x40 mm end plate for carrier profile — 023127

SCREWS

- **L** Screw DIN 931 A2 M10x70 mm — 051114
- **M** Nut DIN 985 A2 M10 — 051122
- **N** Screw ULS ISO 7380 A2 M6x16 mm — 051103
- **O** Screw A2 4.2x22 mm — 051107

CONSTRUCTIVE ELEMENTS

- **P** Façade sidings

2.6

FIXED SLAT
OVER STRUCTURAL PROFILE

Fixed slats louvre system made up of two extruded profiles forming a unique exterior geometry that is anchored using screws to a mounting base. Enables the installation of slats with different horizontal orientations, adapting to the design of the façade maintaining the slate continuity.

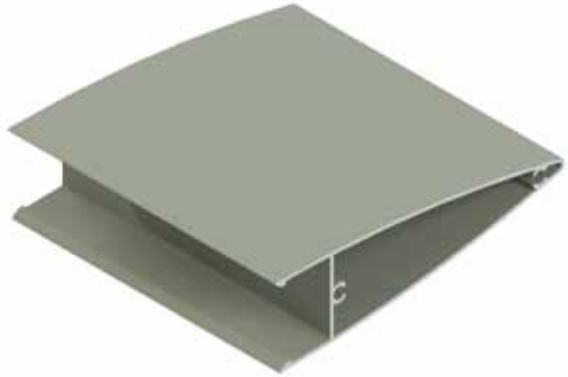
The system allows the selection of two slat models, model A-150, composed by the faceted base profile + slat A-120 and model R-180 formed by the base profile + slat R-150. Both base profile R models enable the anchoring of ensemble's base with a fixed inclination of 90º.

2.6.1 TYPES OF SLAT | COMPOSITIONS

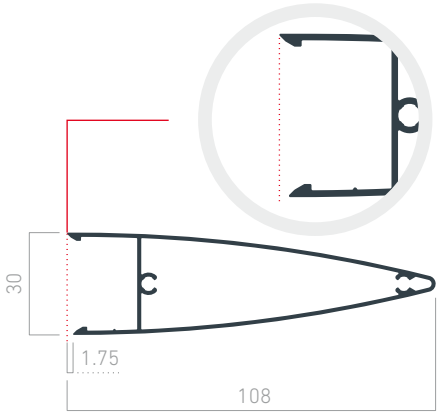
Slat A-120
051312

Curved line slat with opening on one end for clipping over the faceted base profile shaping the geometry of slat's ensemble A-150.

It is not symmetrical.



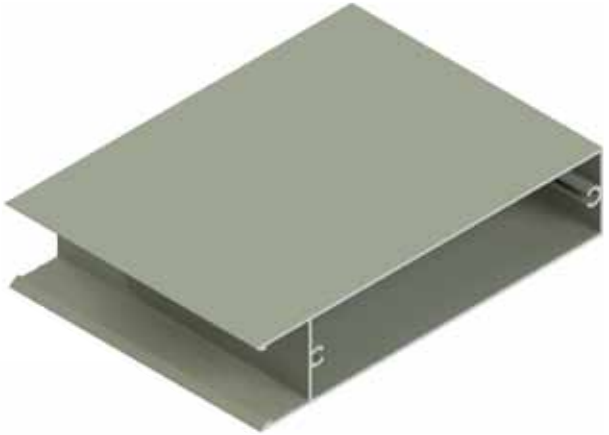
Technical data	
Dimension (x)	108 mm
Dimension (y)	30 mm
Slat weight	1.05 Kg/ml



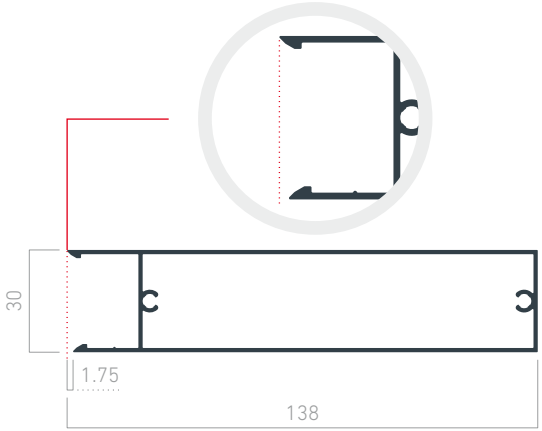
Slat R-150
051313

Curved line slat with opening on one end for clipper over the faceted base profile shaping the geometry of slat's ensemble R-180.

It is not symmetrical.



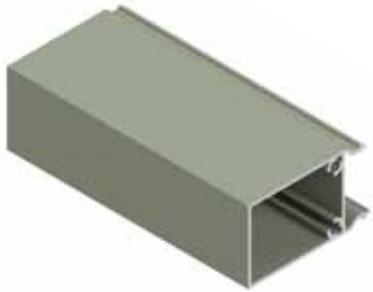
Technical data	
Dimension (x)	138 mm
Dimension (y)	30 mm
Slat weight	1.33 Kg/ml



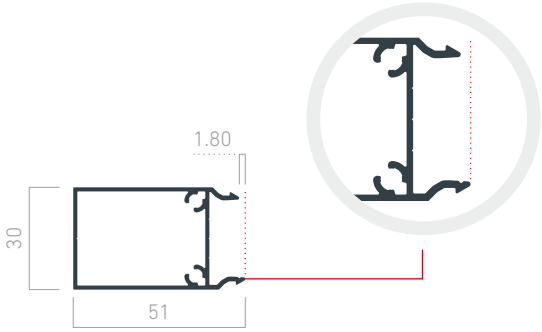
Base profile R
051311

Straight profile for anchoring at 90°, with an opening on one end for clipping over the slat A-120 and R-150.

It is not symmetrical.



Technical data	
Dimension (x)	51 mm
Dimension (y)	30 mm
Slat weight	0.64 Kg/ml

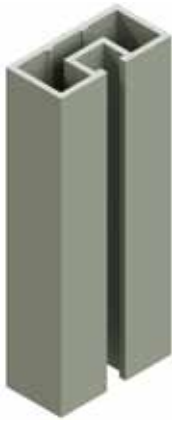


2.6.2 CARRIER PROFILES

Guided support 40x20 mm

050331

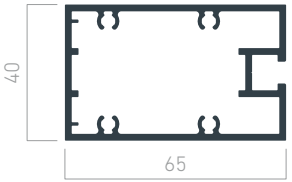
Technical data	
Profile depth	20 mm
Profile width	40 mm
Profile weight	0.80 Kg/ml
Moment of inertia Iy	14,309 mm^4
Moment of inertia Ix	46,278 mm^4

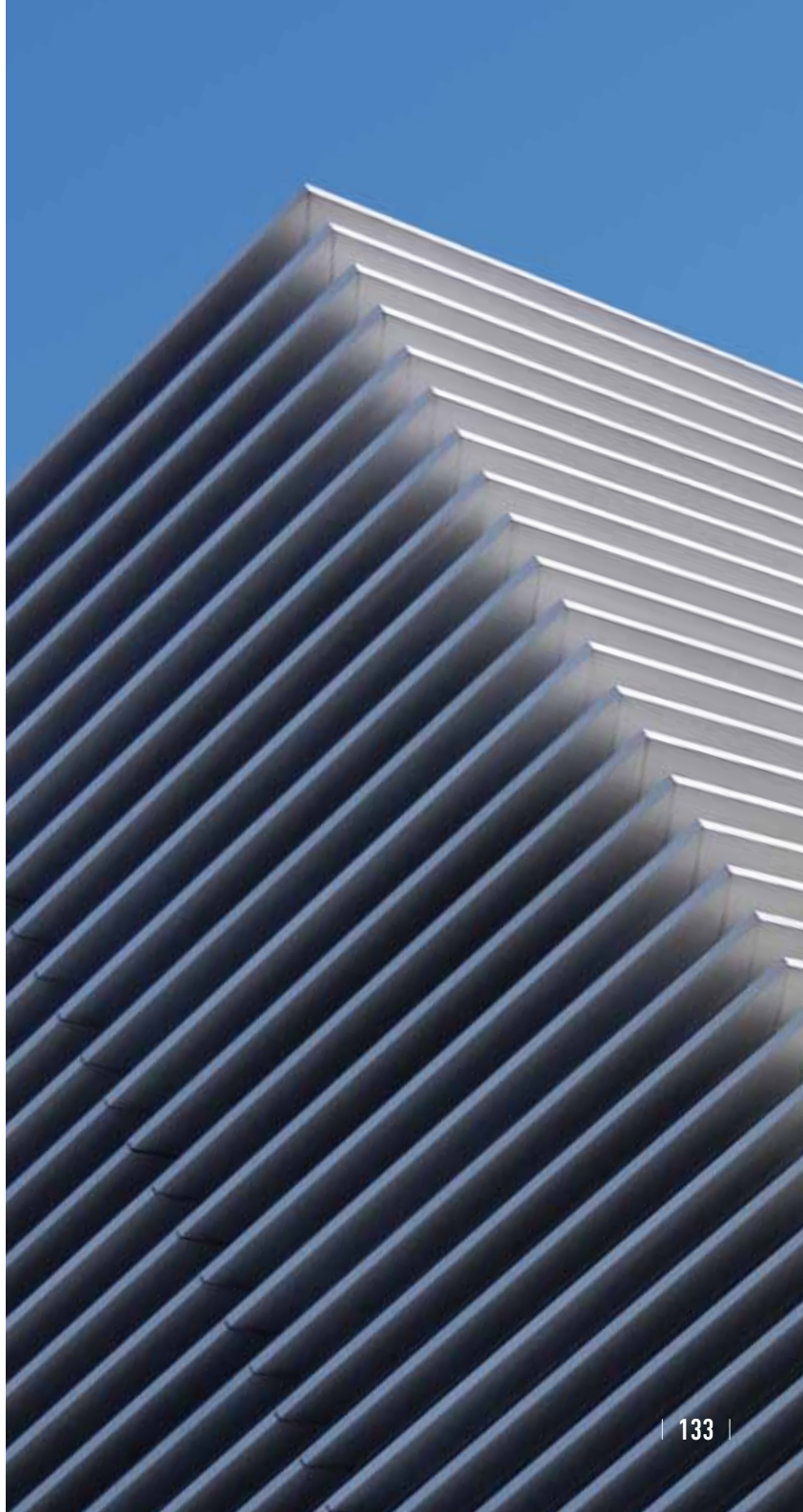


Carrier profile 65x40 mm

051302

Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Moment of inertia Iy	288,065 mm^4
Moment of inertia Ix	128,143 mm^4





2.6.3 FIXED LOUVER MODELS OVER STRUCTURAL PROFILE

SLAT A-150

Formed by two extruded aluminium profiles, curved line slat A-120 that forms the exterior geometry and faceted base profile R that enables the anchoring of the ensemble's base.

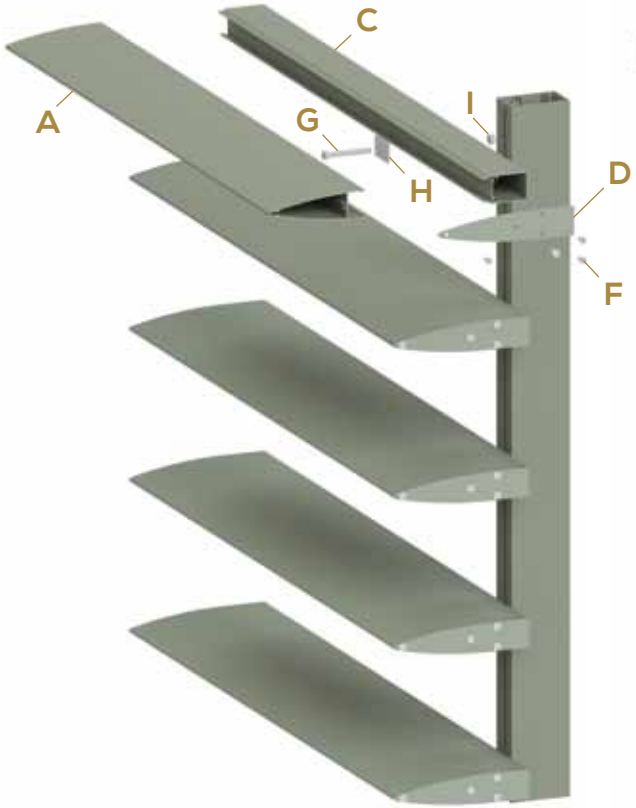
SLAT R-180

Formed by two extruded aluminium profiles, straight line slat R-150 that forms the exterior geometry and faceted base profile that enables the anchoring of the ensemble's base.

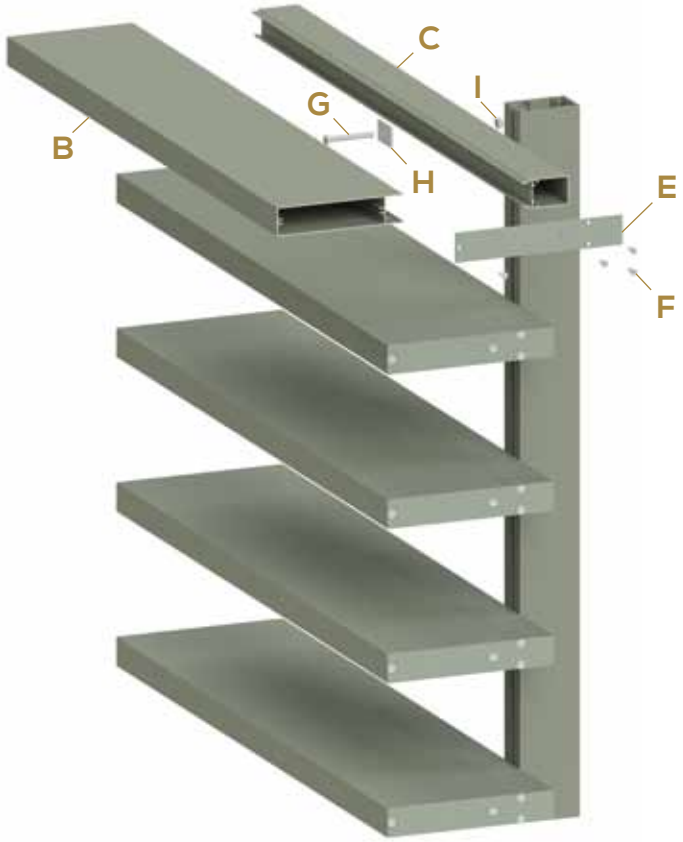
BASE PROFILE R

In both slats the faceted base profile R enables the anchoring of the ensemble's base to the structural profiles allowing a selectable inclination of 90º regarding the bracket base.

Model A-150



Model R-180



Option of choosing the support profiles between carrier profile 65x40 mm or guided support 40x20 mm.
The choice of profile will depend on the prior study of the installation.

PROFILES

A **Slat A-120**
051312

B **Slat R-150**
051313

C **Base profile R**
051311

ACCESSORIES

D **Slat A-150 end plate**
050235

E **Slat R-180 end plate**
050237

SCREWS

F **Screw A2 4.2x22 mm**
051107

G **Screw ISO 7380 A2 M6x50 mm**
050245

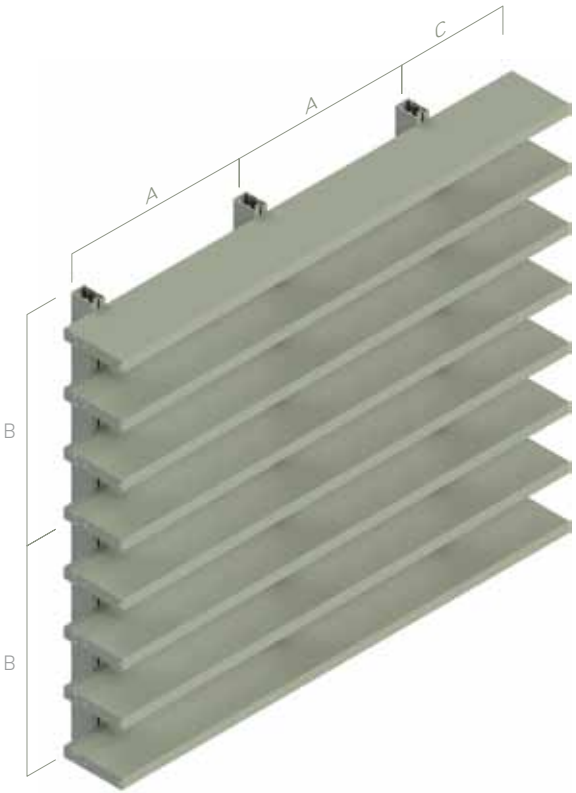
H **Internal fixing plate 22x35mm made of stainless steel 304**
050244

I **Nut DIN 985 M6 A2**
051048

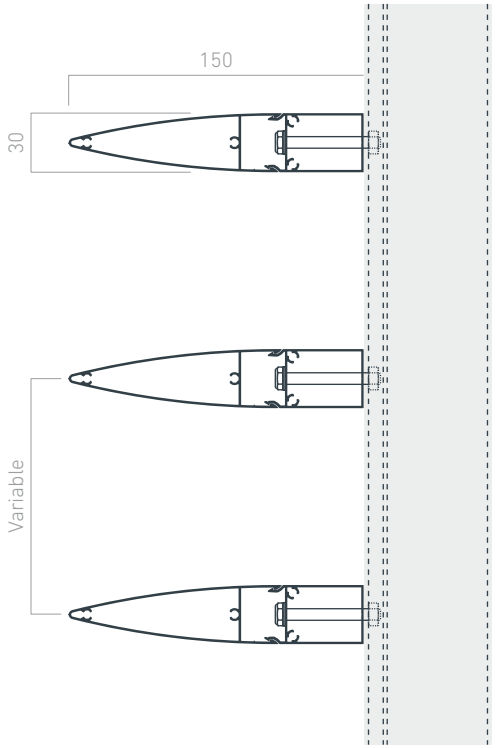
2.6.4 TECHNICAL DATA

Maximum assembly dimensions

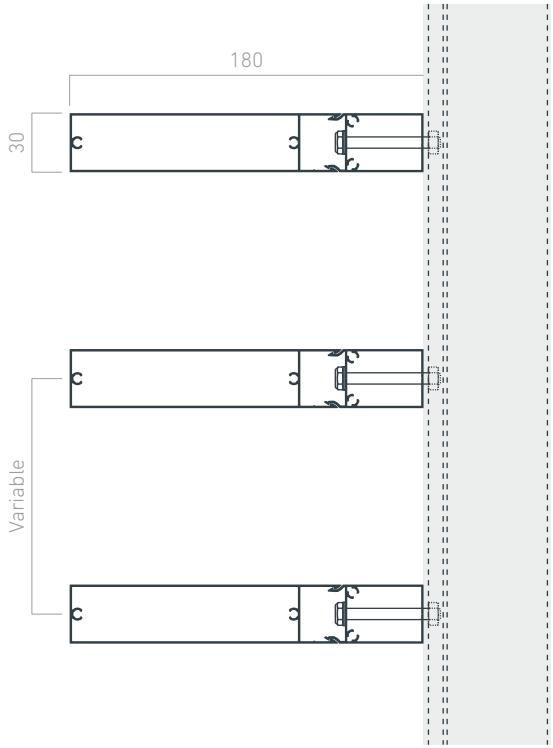
For optimal solar protection and increase its efficiency, the separation between slats must adapt to the movement of the sun, regulating the shadow surface over the façade and the effective surface area of ventilation.



Slat A-150 installation



Slat R-180 installation



The support profile can be chosen between the carrier profile 65x40 mm or guided support 40x20 mm.

Technical specifications

		A-150	R-180
Aluminium alloy		EN AW 6063 T5	EN AW 6063 T5
Number of slats (unit/ml)		Variable according to project	
Slat weight (kg/ml)		1.6	2
Slat inclination		90°	90°
(A) Maximum slat length (mm)		2,000	2,000
(B) Maximum distance between fixture points (mm)		According to project	
(C) Maximum slat overhang (mm)		300	300
Wind resistance (Pa) UNE-EN 13659:2016		1,250	1,250
Speed (km/h)		~162	~162
Slat orientation over support		0° a 90°	
Support	Carrier profile 65x40 mm	✔	✔
	Option of installation over different types of structural supports and surfaces with guided support 40x20 mm	✔	✔

2.6.5 INSTALLING SLAT OVER STRUCTURE

Installation of slat over base bracket

The prior study of the system, will determine the support profile bracket of the slat choosing between the carrier profile 65x40 mm. or the guided support 40x20 mm.

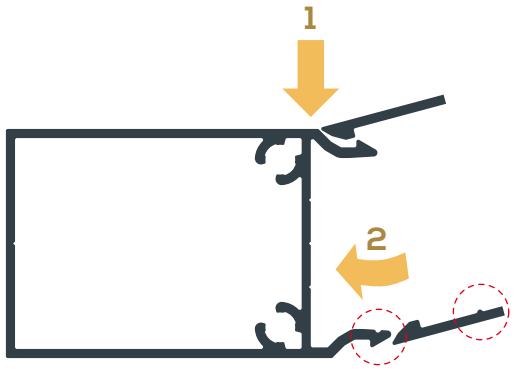
The inclination of the slat of horizontal orientation will be chosen, openings will be made in the faceted profile base for each anchoring point respecting the maximum installation dimensions and a stainless steel screw plus an internal steel fixing plate will be inserted, that will avoid the deformation of the aluminium at the fixation point to a large extent. The screw will be attached to the support profile with a steel nut previously inserted in the guide of said profile.

Afterwards the chosen slat A-120 or R-150 will be clipped over the base profile R respecting an order of clipping during the assembly.

Slat A-150 or R-180 installation

1. Position slat flap A-120 o R-150 over its final position In the base profile R.

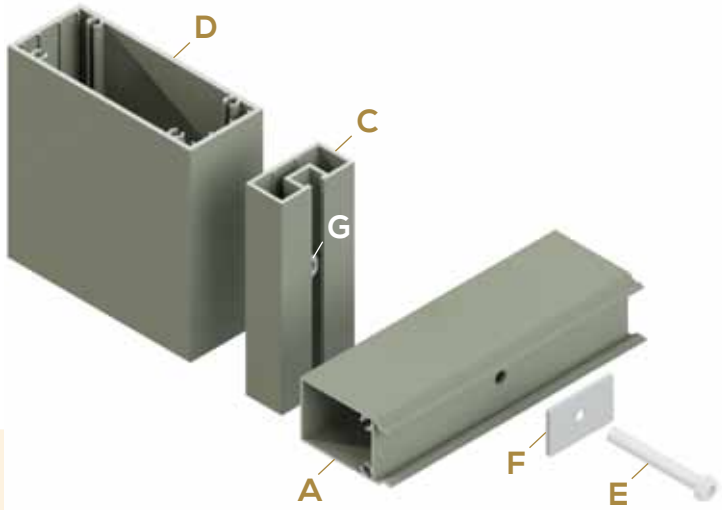
2. Twist/press the slat A-120 or R-150 for the clipper of the opposite flap.



Respect the positioning of the position markings for a correct clipping.

Installation over structural profile

The guided support 40x20 mm, enables the installation of the louver over existing structural supports or of new installation allowing the regulation of the separation of the slats in the building itself.

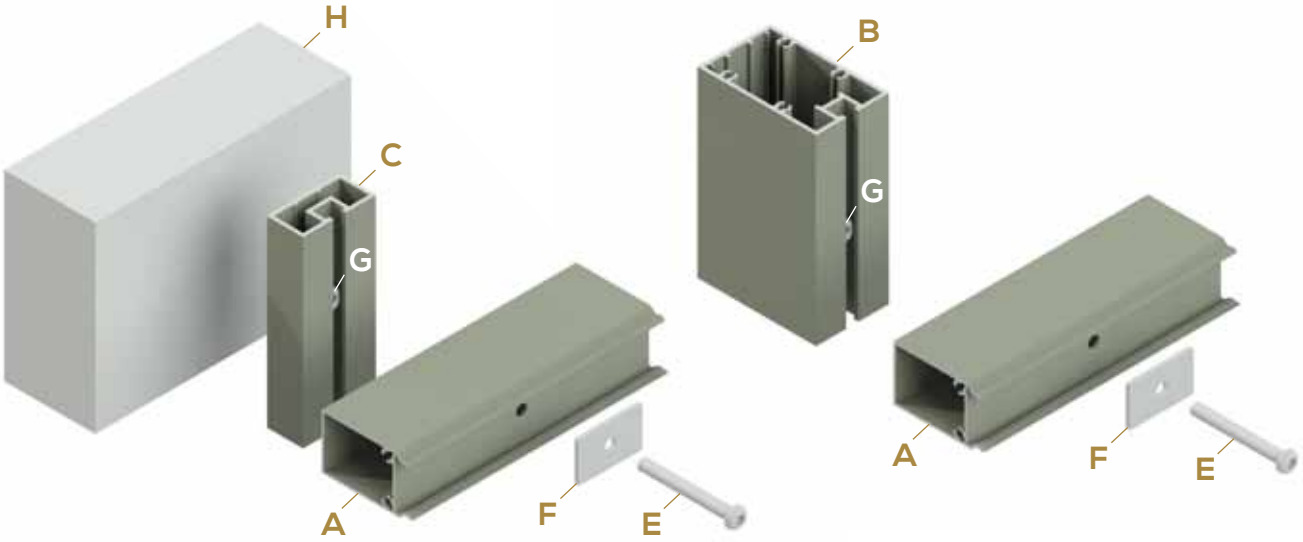


Installation over wall

The installation of the guided support 40x20 mm, over the wall absorbs the plan's surface irregularities allowing the regulating of the slats separation in the building itself.

Installation over profile 65x40 mm

The installation of the carrier profile 65x40 mm, over surfaces or openings to cover can be intramural or extramural, allowing the regulating of the slat separation in the building itself.



PROFILES

A Base profile R
051311

B Carrier profile 65x40 mm
051302

C Guided support 40x20 mm
050331

D Carrier profile 100x40 mm
027395

SCREWS

E Screw ISO 7380 A2 M6x50 mm
050245

F Internal fixing plate 22x35 mm Stainless steel 304
050244

G Nut DIN 985 A2 M6
051048

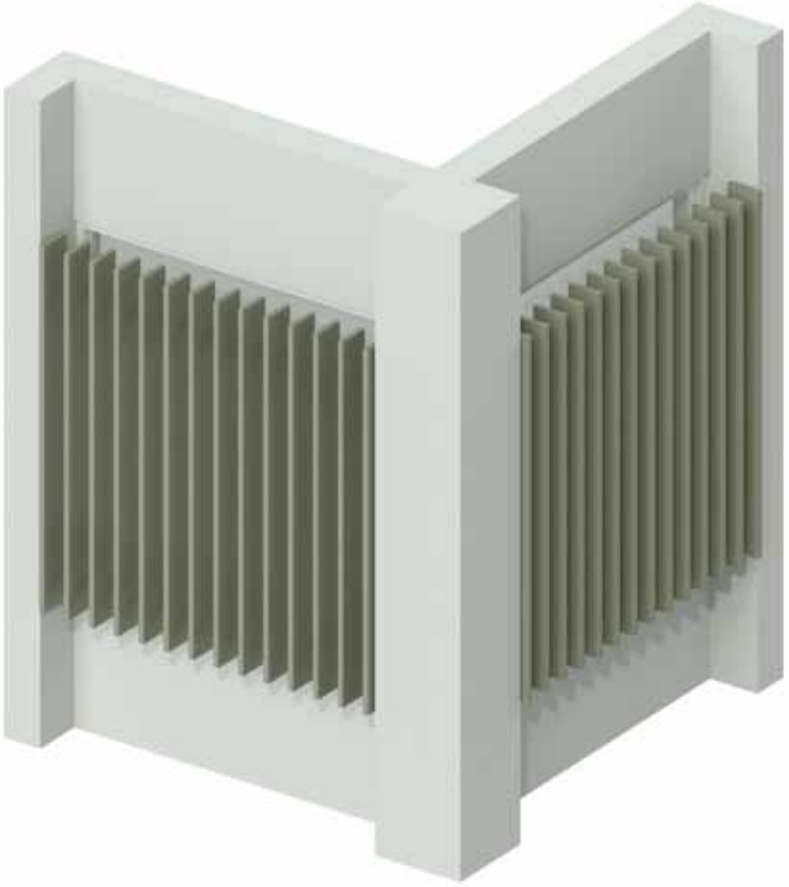
CONSTRUCTIVE ELEMENTS

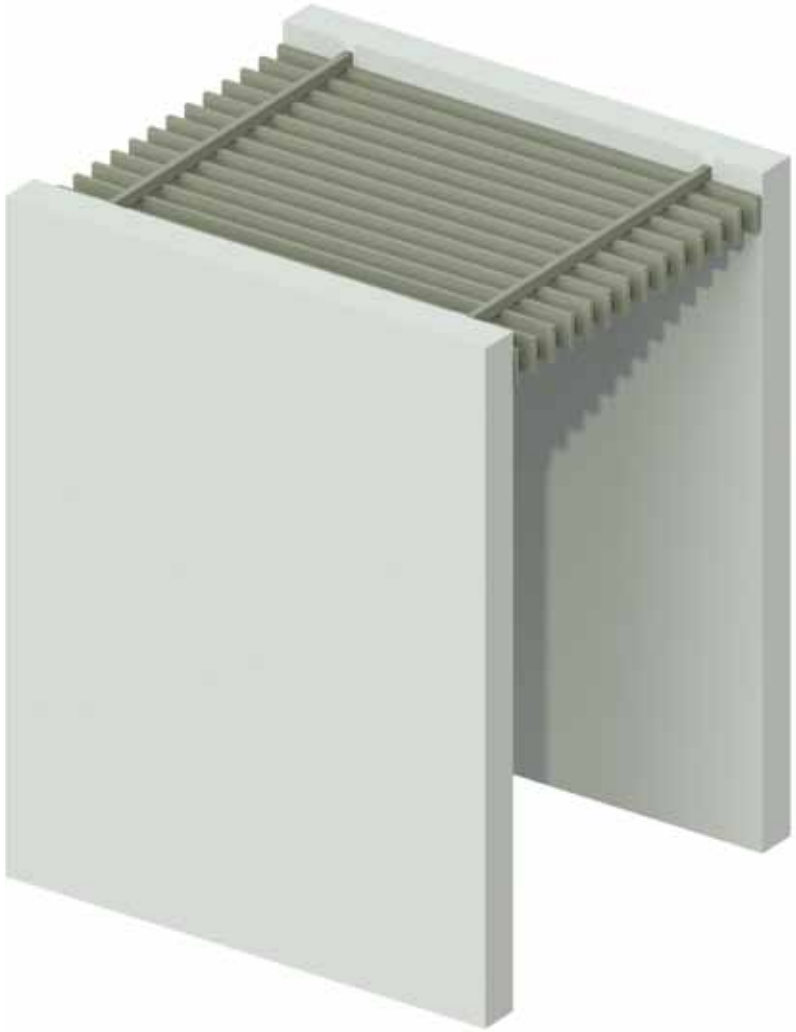
H Wall

2.6.6 TYPES OF INSTALLATION

Installation over window with vertical slat

Slat R-180





Installation of roof between walls

Slat R-180

Installation over window with horizontal slat

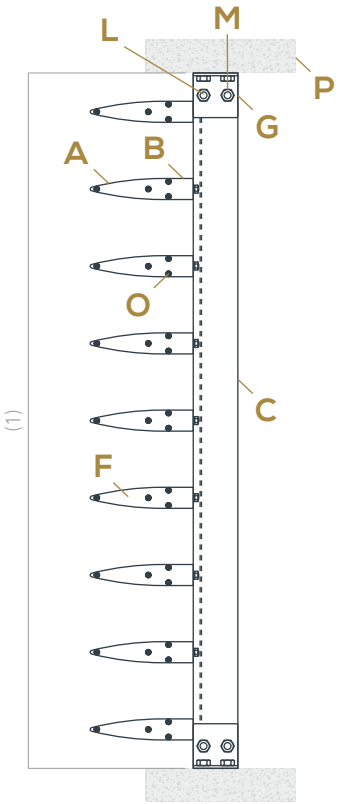
Slat A-150

Overhang installation over window with horizontal slat

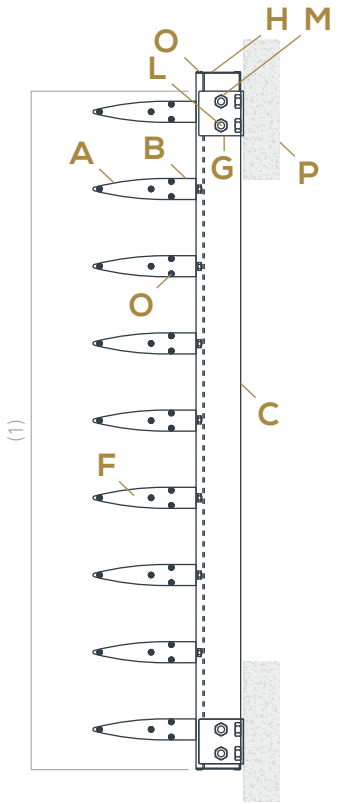
Slat A-150

2.6.6 TYPES OF INSTALLATION

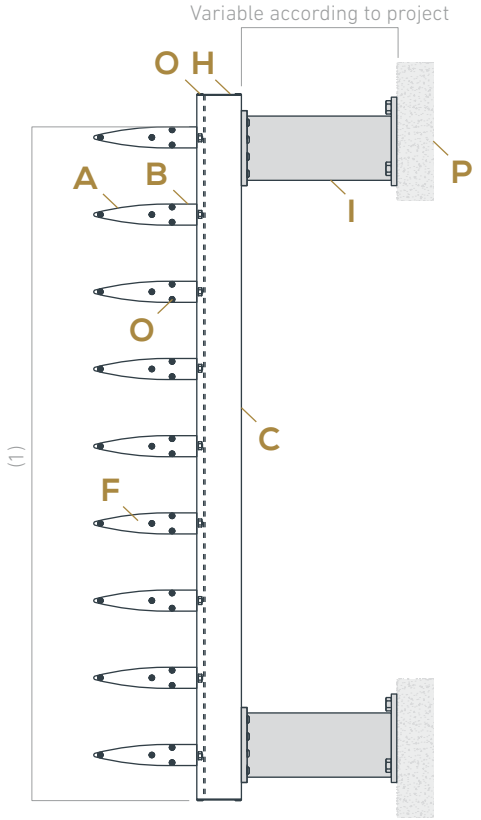
A-150 over intramural profile 65x40 mm



A-150 over extramural profile 65x40 mm

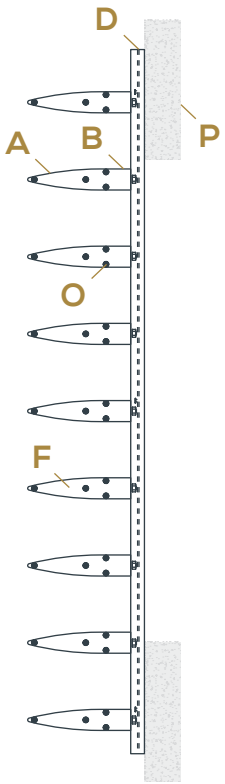


A-150 over profile bracket 65x40 mm

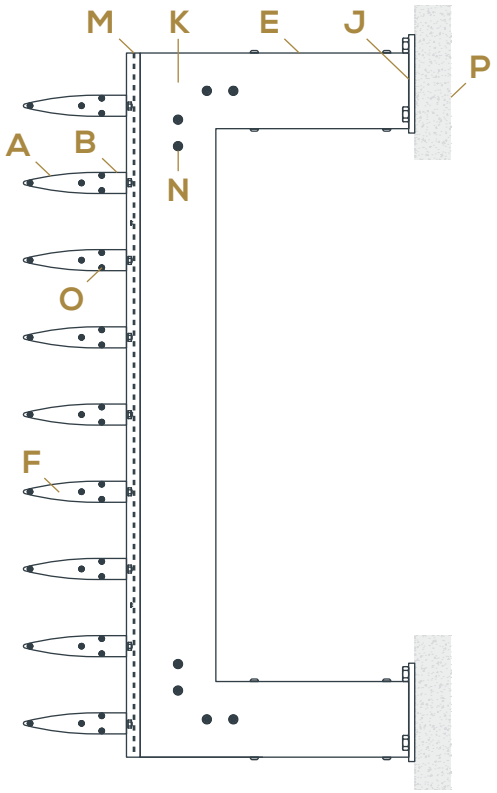


(1) Distance between anchoring points determined by the prior study of the installation.

A-150 over guided support 40x20 mm



A-150 over guided support 40x20 anchored to carrier structure



PROFILES

- **A** Slat A-120 — 051312
- **B** Base profile R — 051311
- **C** Carrier profile 65x40 mm — 051302
- **D** Guided support 40x20 mm — 050331
- **E** Carrier profile 100x40 mm — 027395

ACCESSORIES

- **F** Slat A-150 end plate — 050235
- **G** Stainless bracket 65x65x4 mm 304 — 050193
- **H** End support plate 65x40 mm — 023127
- **I** Stainless steel bracket (according to project)
- **J** Carrier profile support to wall 100x40 mm — 023104
- **K** Carrier profile bracket at 90° (hidden) — 023106

SCREWS

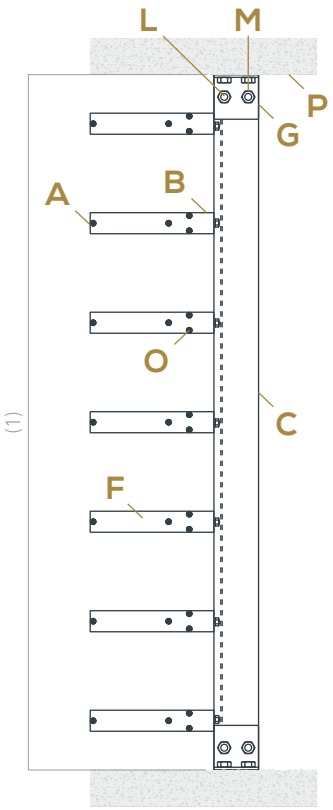
- **L** Screw DIN 931 A2 M10x70 mm — 051114
- **M** Nut DIN 985 A2 M10 — 051122
- **N** Screw ULS ISO 7380 A2 M6x16 mm — 051103
- **O** Screw A2 4.2x22 mm — 051107

CONSTRUCTIVE ELEMENTS

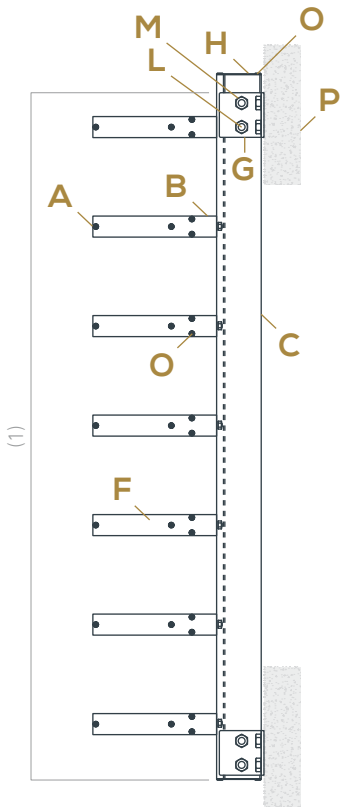
- **P** Façade sidings

2.6.6 TYPES OF INSTALLATION

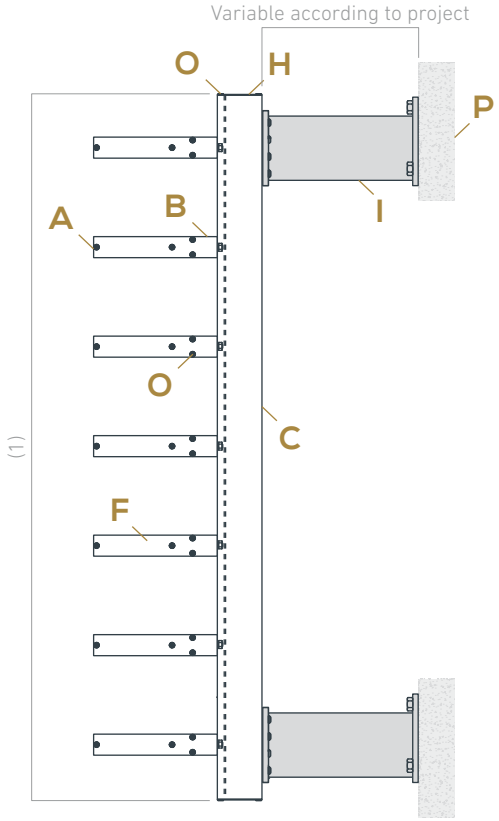
R-180 over intramural profile 65x40 mm



R-180 over extramural profile 65x40 mm

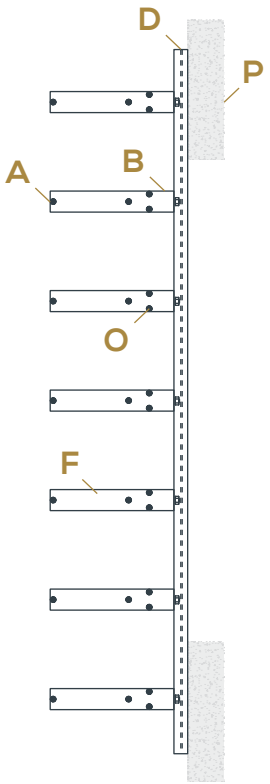


R-180 over profile bracket 65x40 mm

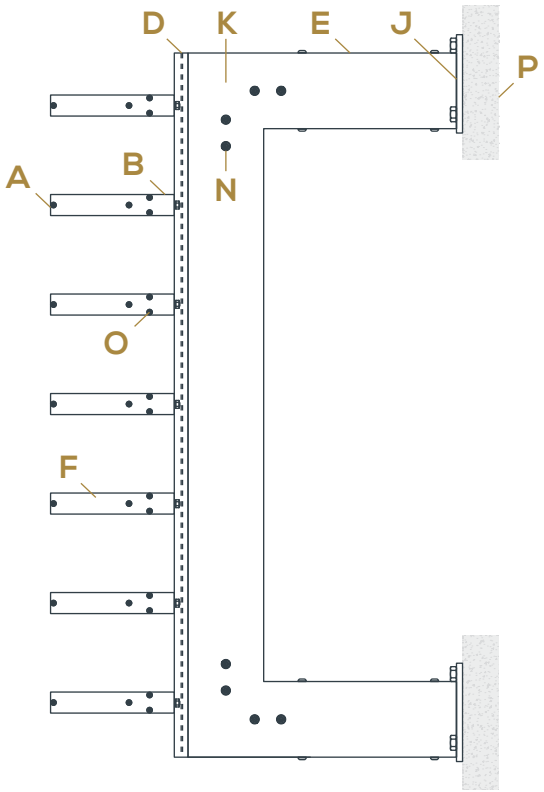


1) Distance between anchoring points determined by the prior study of the installation.

R-180 over guided support 40x20 mm



R-180 over guided support 40x20 mm anchored to carrier structure



PROFILES

- **A** Slat R-150 051313
- **B** Base profile R 051311
- **C** Carrier profile 65x40 mm 051302
- **D** Guided support 40x20 mm 050331
- **E** Carrier profile 100x40 mm 027395

ACCESSORIES

- **F** Slat R-180 end plate 050237
- **G** Stainless bracket 65x65x4 mm 304 050193
- **H** End support plate 65x40 mm 023127
- **I** Stainless steel bracket (according to project)
- **J** Carrier profile support to wall 100x40 mm 023104
- **K** Carrier profile bracket at 90° (hidden) 023106

SCREWS

- **L** Screw DIN 931 A2 M10x70 mm 051114
- **M** Nut DIN 985 A2 M10 051122
- **N** Screw ULS ISO 7380 A2 M6x16 mm 051103
- **O** Screw A2 4.2x22 mm 051107

CONSTRUCTIVE ELEMENTS

- **P** Façade sidings

3 MOVEABLE LOUVERS

TOTAL CONTROL OF SOLAR IMPACT

Giménez ganga's louver systems of moveable slat are constituted of a structure formed by extruded aluminium structures of variable dimensions over which different models of slat are supported. The rotation of the slat takes place by means of manual or motorised drives.

3.1 MOVEABLE OVER FRAME

3.2 MOVEABLE FRAMING OVER STRUCTURAL PROFILE

3.3 MOTORISATION

3.1

MOVEABLE LOUVERS OVER FRAME

Comprised of extruded slats supported laterally by an end plate set to an aluminium perimeter structural profile. Enables the choice of angle of the slat opening in models D-7, AC-150, AP-75, AP-75 PVC, AP-140, AP-140 PVC, O-120, O-210.

The assembly of the slat to the carrier structure allows the uniform rotation of the total slats by means of the manual or motorised operation, in this way adapting itself to the lighting, ventilation, and thermal comfort requirements of the building.

Used as protection for façades and roofs for industrial, commercial, office and residential spaces. The system offers coverage of glass surfaces and empty openings.

3.1.1 D-7

Slat D-7 + double support frame

SLAT

The slat D-7 is lodged in the interior of a naco-system, allowing the manually operated rotation by means of the rotary control.

The upper-lower end is made with half an aluminium slat lodged in a base profile mounted over the double support profile. The rubber of co extrusion incorporated at the end of the slat avoids the passing of sun rays in its closed position, lessening the vibrations caused by the wind.

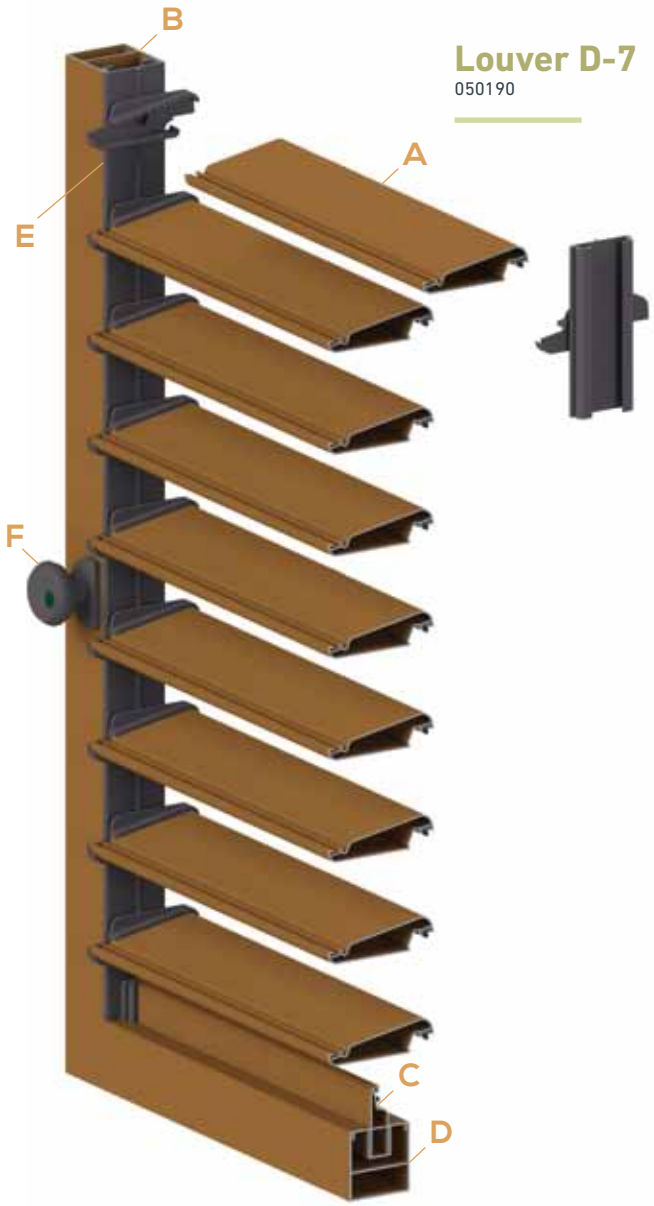
Slat D-7 installation + double support frame

FRAME

The frame interiorly adjusts the opening.

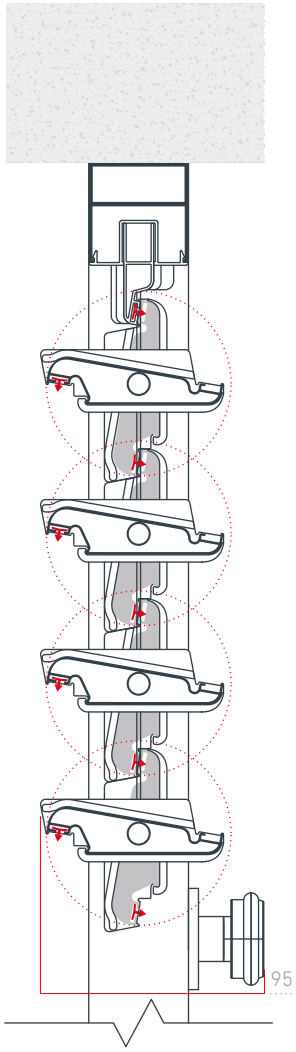
With slat lengths higher than 950 mm., the span will be divided in two by the dividing central Majorcan profile 50x40 mm.

With span heights more than 1500 mm, the louver will be compartmentalised by means of the horizontal aluminium profiles (according to the project).



Louver D-7
050190

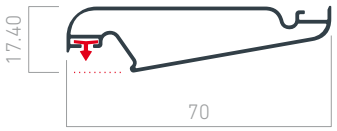
Rotational movement



Slat D-7

054050

Technical data	
Slat depth	70 mm
Slat width	17.40 mm
Slat weight	0.52 Kg/ml



Slats		D-7
		Aluminium
N° slats/ml		16.70
(P) Maximum step (mm)		60
Slat inclination angle		0°-104°
Frame profiles	Perimeter	Double support 40x40 mm
	Medium vertical division	Central major can dividing profile 50x40 mm
	Medium horizontal division	Cross bar profile 100x40 mm slat D-7
Maximum slat length recommended (mm)		950
Operation	Manual	Mechanism body
Wind resistance (UNE-EN 13659:2016) CLASS 6		≈112 Km/h

Also available with lever mechanism body.
005121 **Mechanism body set (right)**.

PROFILES

A **Slat D-7**
054050

B **Double support**
050104

C **1/2 slat D-7**
005021

D **Base profile D-7**
005241

ACCESSORIES

E **Naco-system**
005120

F **Stainless rotary control**
005170

3.1.2 AC-150

Slat AC-150 + frame 50x40 mm with seal

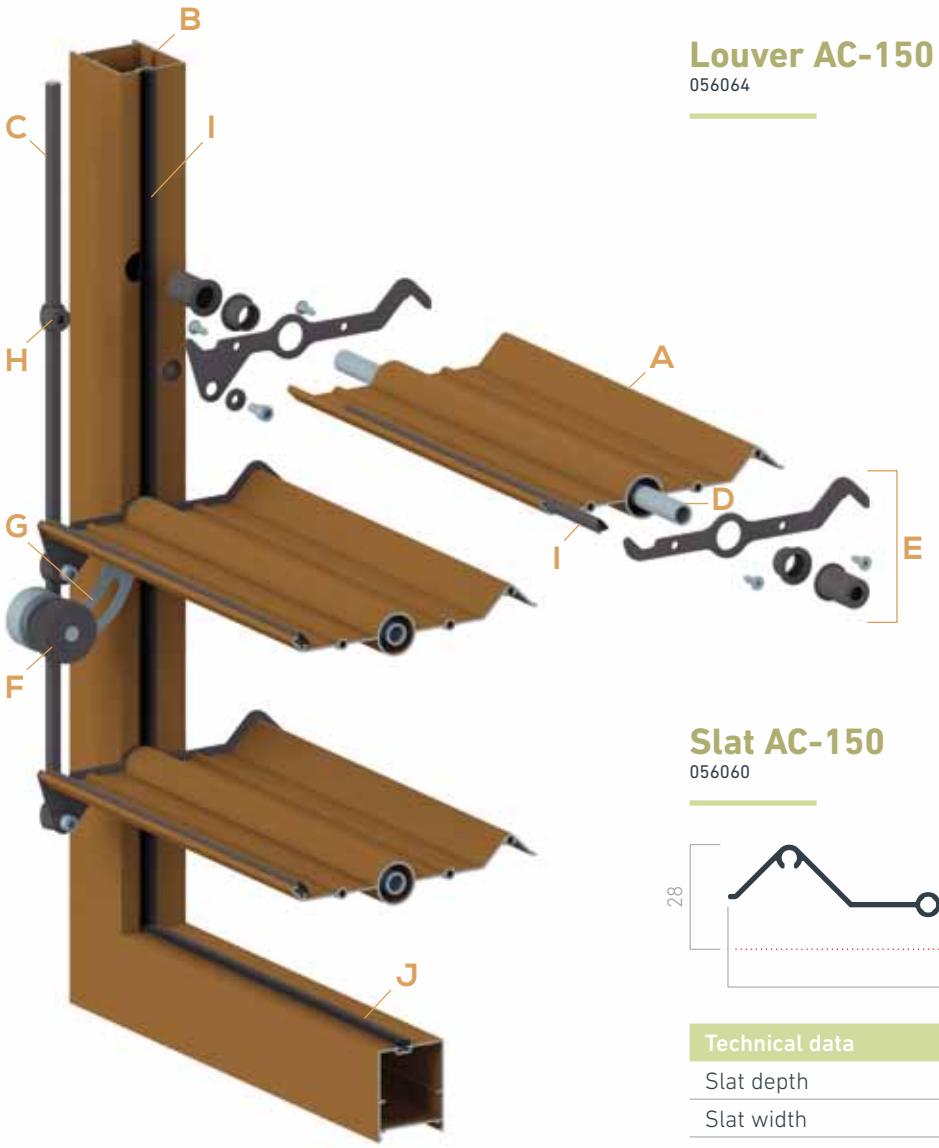
SLAT AC-150

Positions its centre of rotation in an equilibrated position rotating by means of manual or motorised operation. The aluminium end plates guide an aluminium tube through the interior of the slat that is anchored to some mechanised openings in the frame of 50x40 mm, by means of an anti-friction cap.

BRUSH

The brush sealing incorporated in the slats facilitates soft closure avoiding impact against each other and along with the brush perimeter frame, prevents the passing of light rays through the louver in the closed position diminishing the vibrations caused by the wind.

This system adds great resistance to the louver's ensemble.

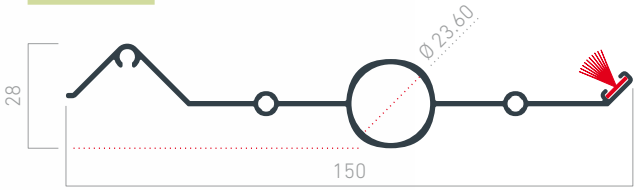


Louver AC-150

056064

Slat AC-150

056060



Technical data	
Slat depth	150 mm
Slat width	28 mm
Slat weight	0.99 Kg/ml

PROFILES

A **Slat AC-150**
056060

B **Frame 50x40 with seal**
005052

C **Aluminium transmission rod 8 mm**
051110

D **Aluminium axle 11.80 x 1.30 mm**
052027

ACCESSORIES

E **Complete aluminium end plate set grill system**
056061

F **Stainless orientation control**
051250

G **Orientation arch**
056067

H **Transmission cap**
051180

I **Brush 69-550**
026015

J **Brush 69-1000**
041068

3.1.2 AC-150

Installation AC-150 + frame 50x40 mm with seal

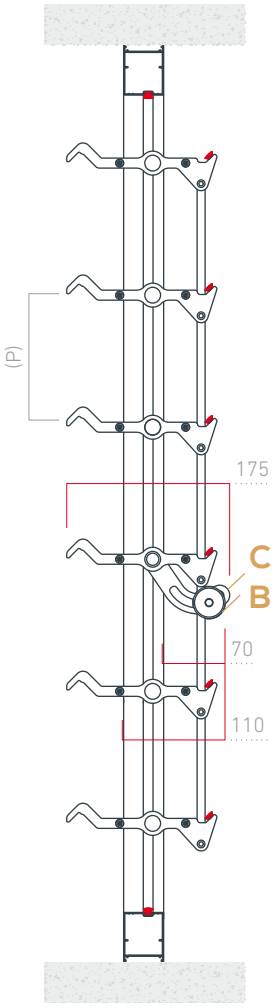
FRAME

The frame interiorly adjusts the opening.

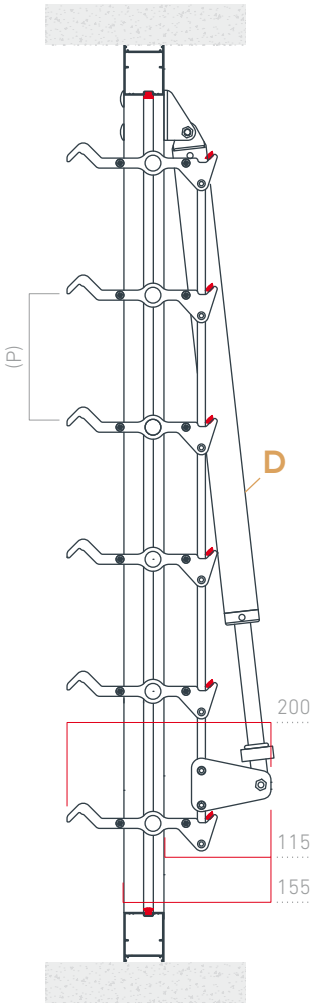
In the case of installation aligned with the wall's exterior surface a perfect seal is acquired from the frames in the building with the overlaps of 30, 50 and 80 hiding possible imperfections.

For installations with frames with pre-assembly of frames in use, a spring will be put into the cap to facilitate the installation of the slats.

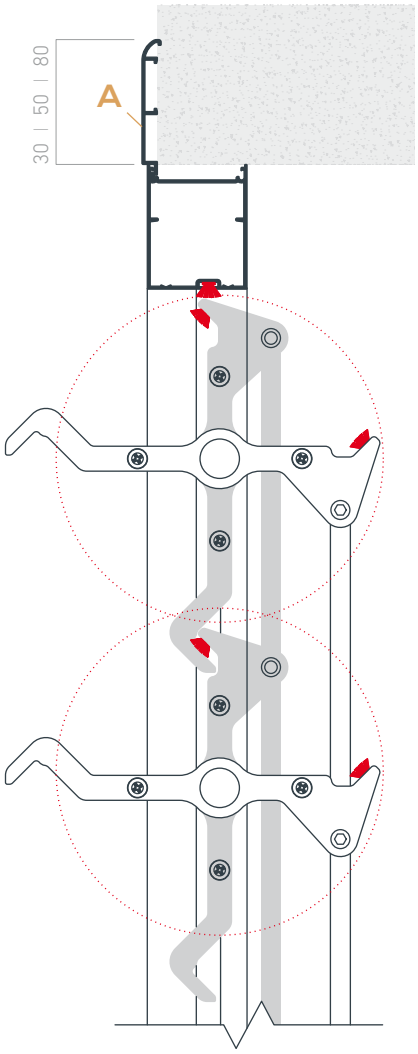
Manual operation



Motorised operation



Rotational movement



Slats		AC-150
		Aluminium
N° slats/ml		7.30
(P) Maximum step (mm)		137
Slat inclination angle	Manual	0°-110°
	Motorised	0°-105°
Frame profiles	Perimeter	Profile 50x40 mm with brush
	Medium divisions	Central aluminium frame 50x40 mm with brush
Overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum slat length recommended (mm)	Grill system	2,150
Operation	Manual	Stainless orientation control Orientation arch
	Motorised (see page 199)	Linear motor 180 mm 650N 24V (Minimum span height 950 mm)
Wind resistance (UNE-EN 13659:2016) CLASS 6		≈ 112 Km/h

PROFILES

A **Overlaps 30, 50, 80**
005201 | 005211 | 005221

ACCESSORIES

B **Stainless orientation control**
051250

C **Orientation arch**
056067

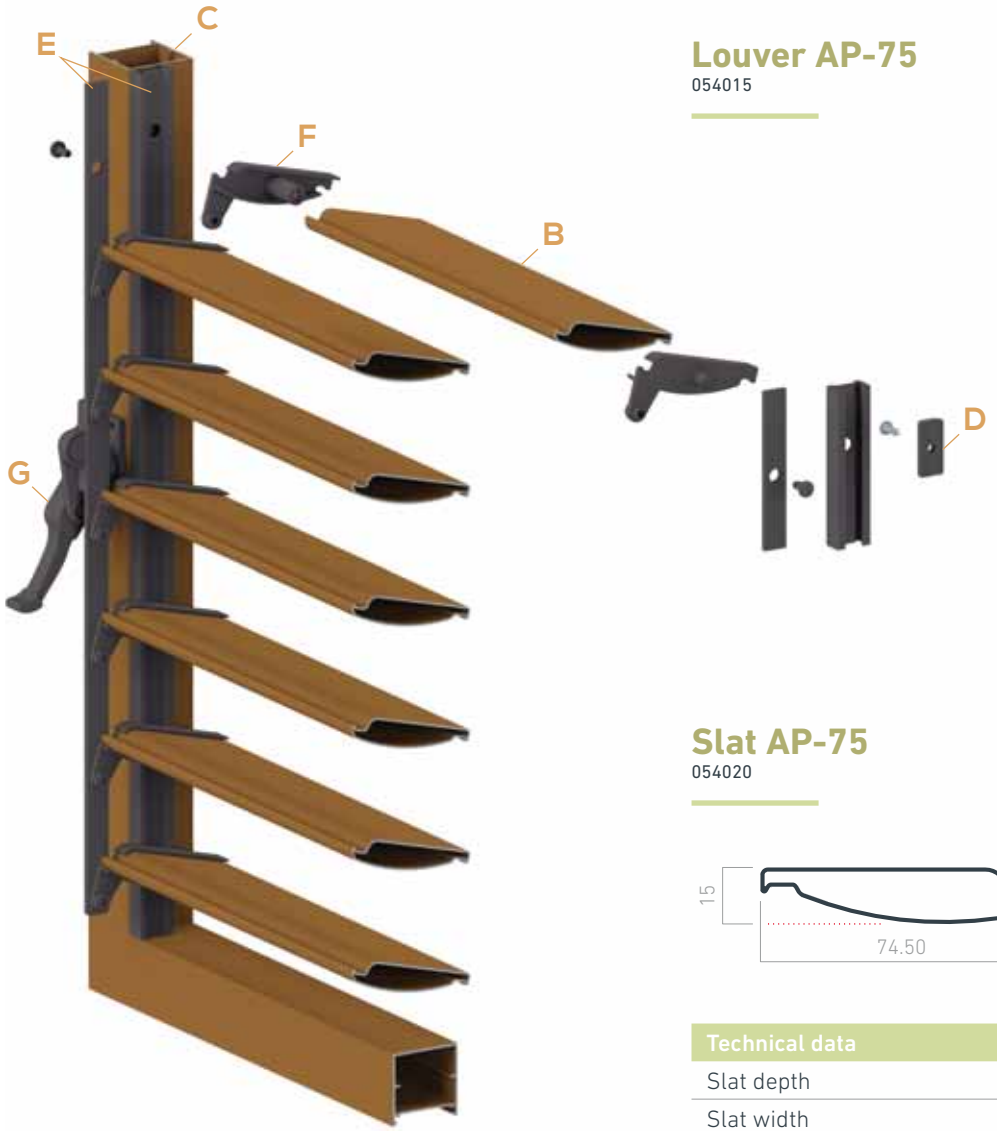
D **Linear motor 180 mm 650N 24V**
051191

3.1.3 AP-75 | AP-75 PVC

Slat AP-75 (aluminium or PVC) + slat holder + profile frame 40x40 mm for overlap

SLAT

In both its versions aluminium and PVC the PVC end plates with retractable pivots, positioned at the ends of the slats act as axles of rotation inserted in the interior of one of the equidistant openings in the slat holder anchored to the frame of 40x40 mm. The operation will be done manually using the PVC orientation control.

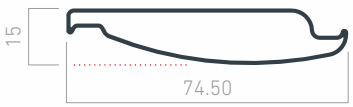


Louver AP-75

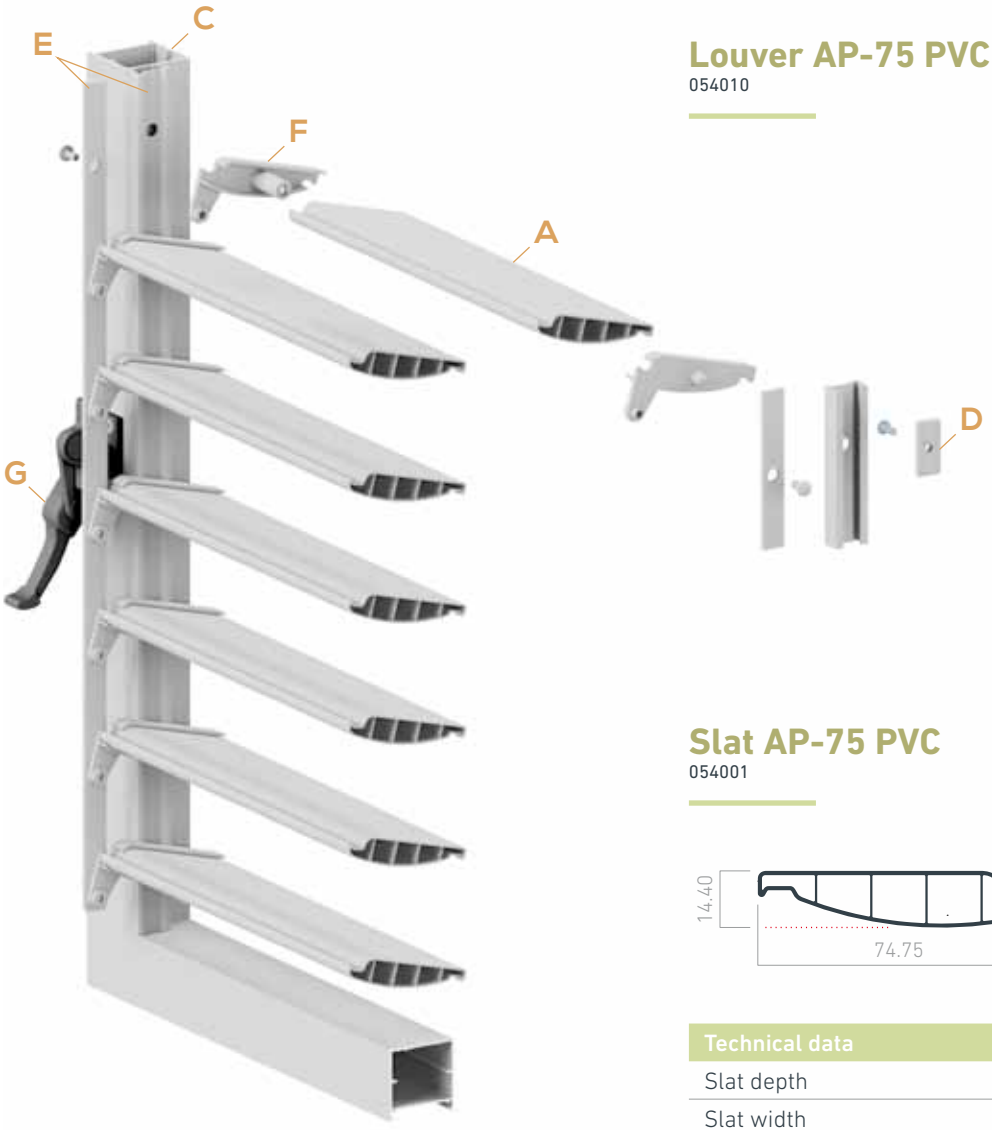
054015

Slat AP-75

054020



Technical data	
Slat depth	74.50 mm
Slat width	15 mm
Slat weight	0.54 Kg/ml

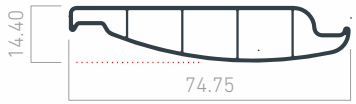


Louver AP-75 PVC

054010

Slat AP-75 PVC

054001



Technical data	
Slat depth	74.75 mm
Slat width	14.40 mm
Slat weight	0.31 Kg/ml

PROFILES

A Slat AP-75 PVC
054001

B Slat AP-75
054020

C Frame 40x40 mm for overlap
027642

ACCESSORIES

D Slat holder clip anchoring
056006

E Slat holder + PVC plate
056004

F PVC end plates pivot system set
054002

G PVC orientation control
054004

3.1.3 AP-75 | AP-75 PVC

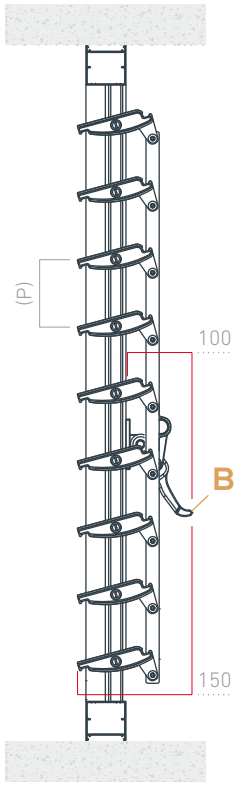
Slat AP-75 installation (aluminium or PVC) + slat holder + frame profile 40x40 mm for overlap

FRAME

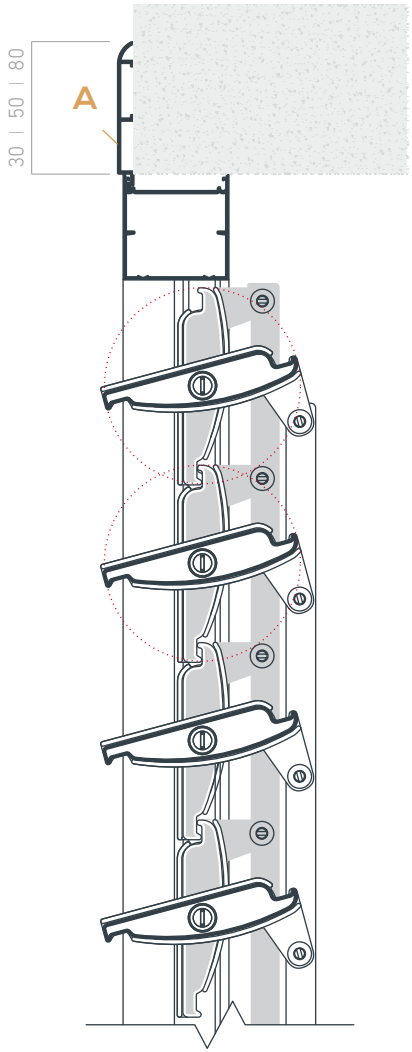
The frame interiorly adjusts the opening.

In the case of installation aligned with the wall's exterior surface a perfect seal is acquired from the frames in the building with the overlaps of 30, 50 and 80 hiding possible imperfections.

Manual operation



Rotational movement



Slats		AP-75	
		Aluminium	**PVC**
N° slats/ml		14	14
(P) Maximum step (mm)		69	69
Slat inclination angle	Manual	0°-75°	
Frame profiles	Perimeter	Profile 40x40 mm for overlap	
	Medium divisions	Auto-drilled aluminium tube 40x40 mm	
Overlaps		Overlap 30	
		Overlap 50	
		Overlap 80	
Maximum slat length recommended (mm)		1,600	1,200
Operation	Manual	PVC orientation control	
Wind resistance (UNE-EN 13659:2016) CLASS 6		≈112 Km/h	≈112 Km/h

PROFILES

A **Overlaps 30, 50, 80**
005501 | 005211 | 005521

ACCESSORIES

B **PVC orientation control**
054004

3.1.4 AP-140 PVC

Slat AP-140 PVC + slat holder + profile 40x40 mm for overlap (pivot system)

END PLATES

The PVC end plates with retractable pivots positioned at the ends of the slats act as the axle of rotation inserted in the interior of an equidistant opening in the slat holder anchored to the frame of 40x40 mm for overlap.

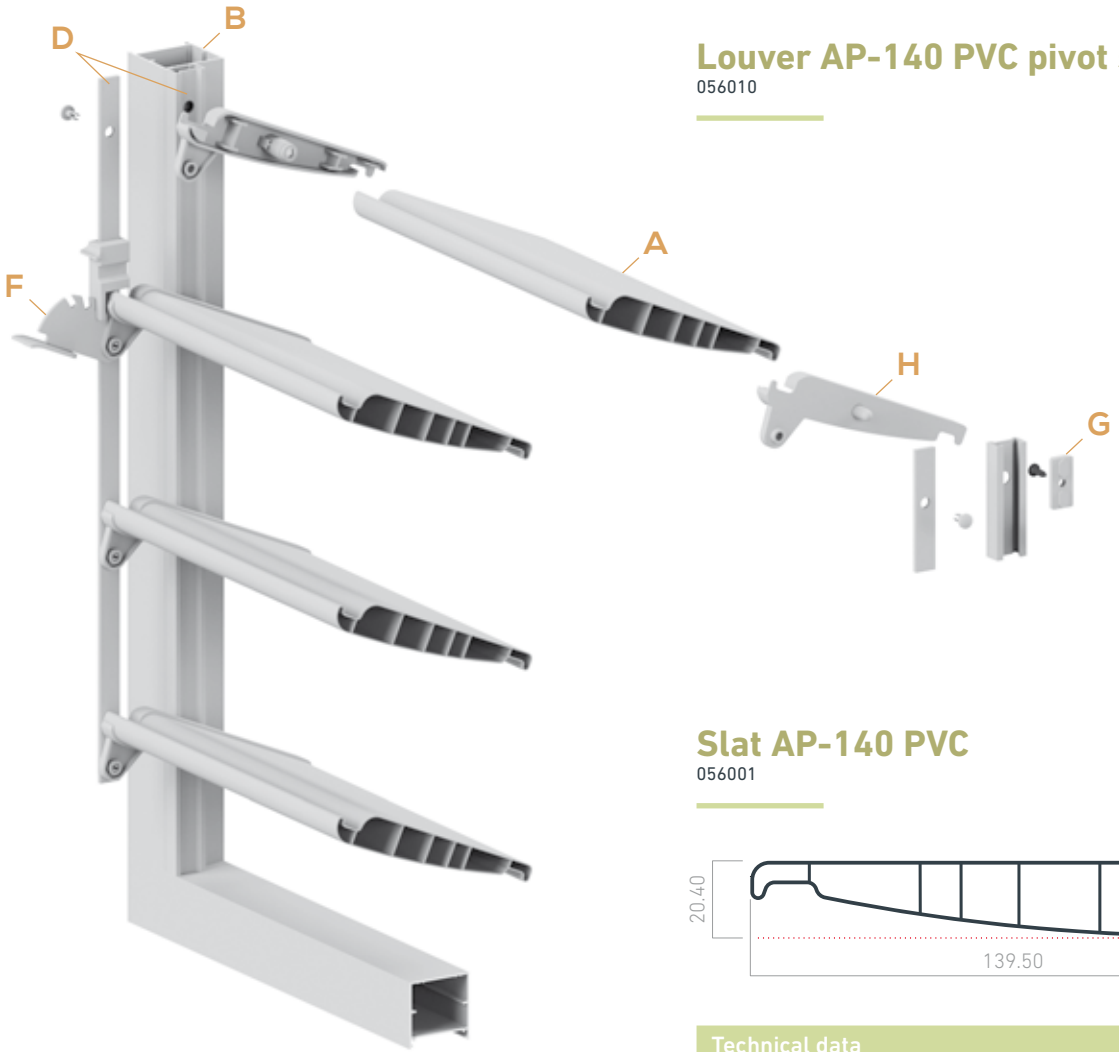
Slat AP-140 PVC + frame 40x40 mm for overlap (grill system)

END PLATES

The PVC end plates guide the aluminium tube through the interior of the slat acting as the axle of the rotation that is anchored to equidistant openings mechanised on the frame of 40x40 mm for the overlap. This system adds great resistance to the louver's ensemble.

SLAT

In both systems the slat AP-140 PVC positions its rotation centre in a balanced position making both manual and motorised operation available.

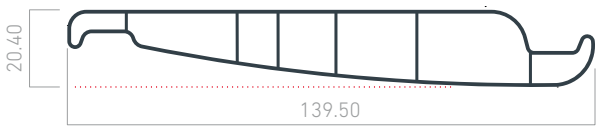


Louver AP-140 PVC pivot system

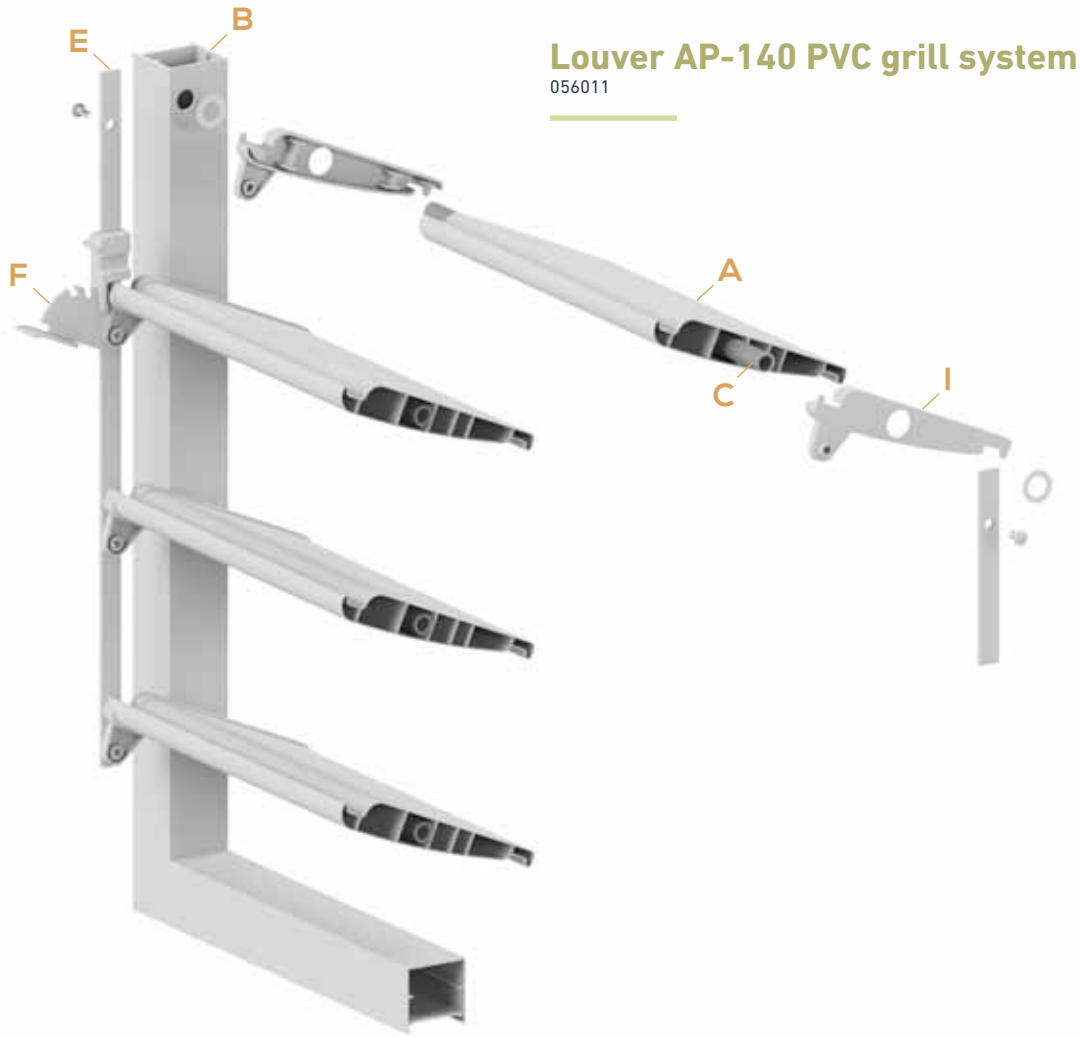
056010

Slat AP-140 PVC

056001



Technical data	
Slat depth	139.50 mm
Slat width	20.40 mm
Slat weight	0.59 Kg/ml



Louver AP-140 PVC grill system

056011

PROFILES

- **A** Slat AP-140 PVC
  056001
- **B** Frame 40x40 mm with overlap
  027642
- **C** Aluminium tube 16x1.20 PVC grill system
  052028
- **D** Slat holder + PVC plate
  056002
- **E** Perforated aluminium plate
  052004

ACCESSORIES

- **F** Zamak orientation control
  056070
- **G** PVC slat holder anchoring clip
  056006
- **H** PVC end plate pivot system
  056026
- **I** PVC end plate grill system
  056050

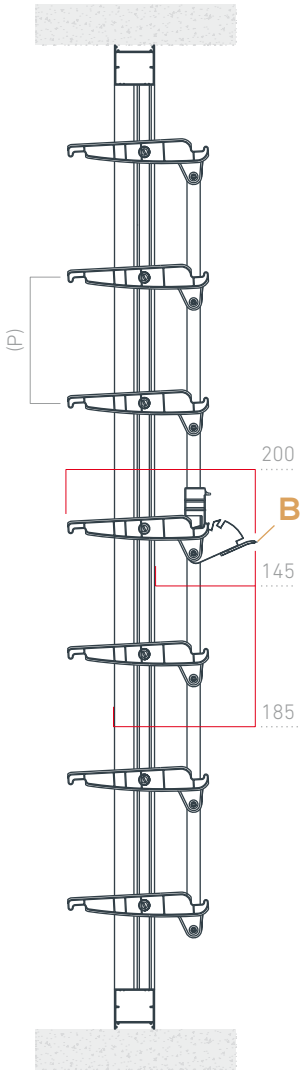
3.1.4 AP-140 PVC

Slat AP-140 PVC installation + slat holder + frame 40x40 mm for overlap (pivot and grill system)

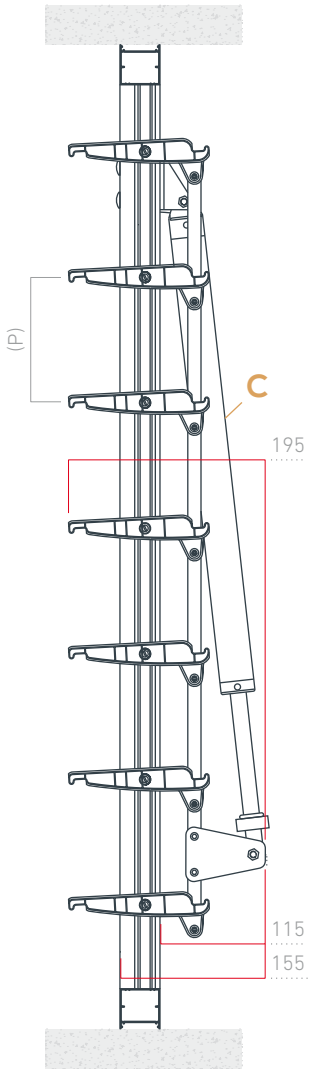
FRAME

The frame interiorly adjusts the opening.
In the case of installation aligned with the wall's exterior surface a perfect seal is acquired from the frames in the building with the overlaps of 30, 50 and 80 hiding possible imperfections.

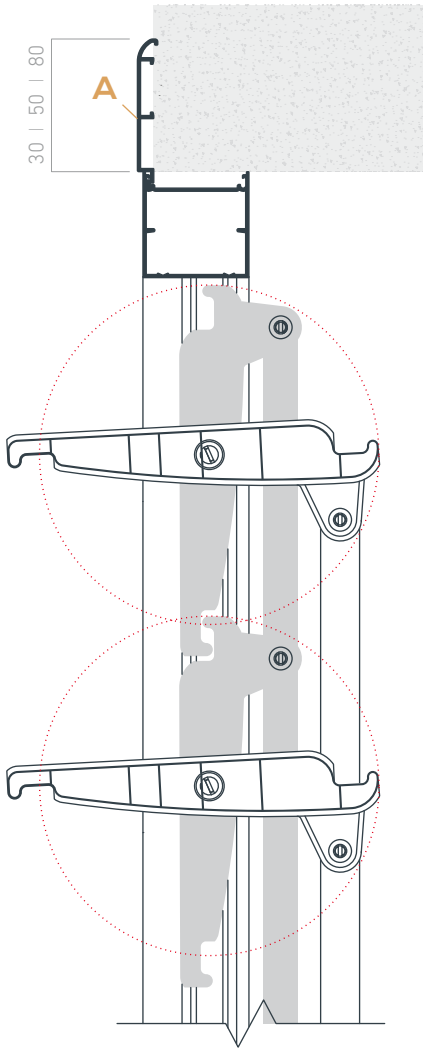
Manual operation



Motorised operation



Rotational movement



Slats		AP-140 PVC
		PVC
Nº slats/ml		8.23
(P) Maximum step (mm)		132.50
Slat inclination angle	Manual	0º-65º
	Motorised	0º-105º
Frame profiles	Perimeter	Profile 40x40 for overlap
	Medium divisions	Auto-drilled aluminium tube 40x40 mm
Overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum slat length recommended (mm)	Pivot system	1,500
	Grill system	2,000
Operation	Manual	Pivot | grill system (zamak orientation control)
	Motorised (see page 199)	Pivot | grill system (Linear motor 180 mm 650N 24V)
Wind resistance (UNE-EN 13659:2016) CLASS 6	Grill system	≈112 Km/h
	Pivot system	≈112 Km/h

In the event of motorising the louver a perforated aluminium plate will be installed.

PROFILES

A **Overlaps 30, 50, 80**
005201 | 005211 | 005521

ACCESSORIES

B **Zamak orientation control**
056070

C **Linear motor 180 mm 650N 24V**
051191

3.1.5 AP-140

Slat AP-140 + frame 50x40 mm with seal (pivot system)

END PLATES

Aluminium end plates with retractable pivots positioned at the ends of the slats are inserted in the interior of motorised openings in the frame of 50x40 mm, using an anti-friction cap.

Slat AP-140 + frame 50x40 mm with seal (grill system)

END PLATES

The aluminium end plates guide an aluminium tube through the interior of the slat that is anchored to some mechanised openings in the frame of 50x40 mm, using an anti-friction cap. This system adds great resistance to the louver's ensemble.

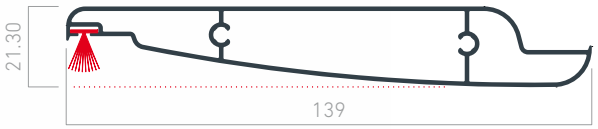
Manual or motorised operation can be used in both cases. The brush of the incorporated seal in the slats avoids impact and along with the brush perimeter of the frame avoids the passing of sunlight through the louver in the closed position, diminishing the vibrations caused by the wind.

Louver AP-140 pivot system

056015

Slat AP-140

056025



Technical data	
Slat depth	139 mm
Slat width	21.30 mm
Slat weight	1.24 Kg/ml

Louver AP-140 grill system

056035

PROFILES

- **A** Slat AP-140 — 056025
- **B** Frame 50x40 mm with seal — 005052
- **C** Aluminium tube 11.80x1.30 mm grill system — 052027
- **D** Aluminium transmission rod 8 mm — 051110

ACCESSORIES

- **E** Zamak end plates set right/left pivot system — 056021
- **F** Aluminium end plate set grill system — 051150
- **G** Stainless orientation arch — 056067
- **H** Transmission cap — 051180
- **I** Stainless orientation control — 051250
- **J** Brush 69-550 — 026015
- **K** Brush 69-1000 — 041068

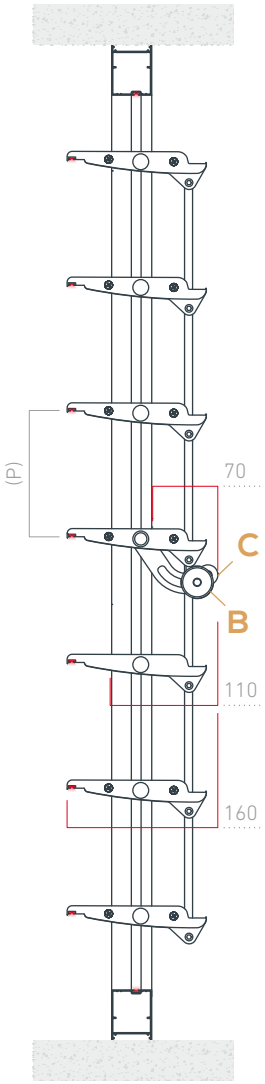
3.1.5 AP-140

Slat AP-140 installation + frame 50x40 mm with seal (pivot and grill system)

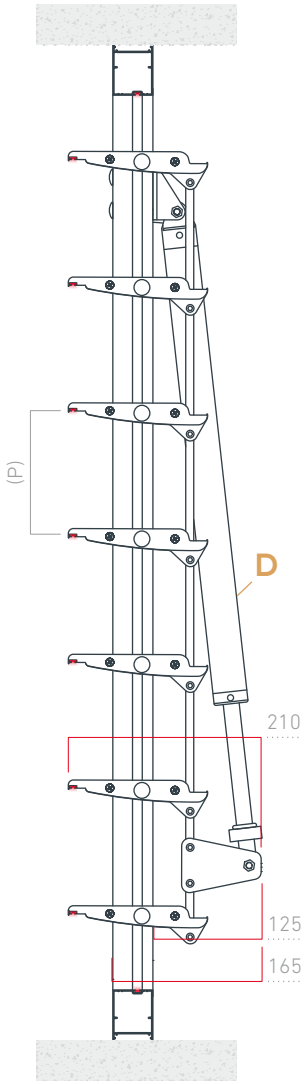
END PLATES

The frame interiorly adjusts the opening.
In the event of installation aligned with the wall's exterior surface a perfect frame is acquired from the frames in the building with the overlap of 30, 50 and 80 hiding possible imperfections.

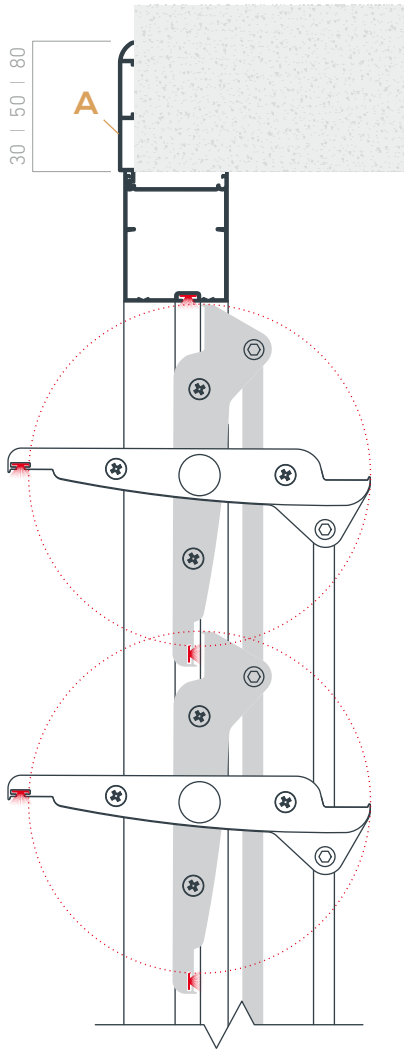
Manual operation



Motorised operation



Rotational movement



Slats		AP-140
		Aluminium
Nº slats/ml		8.23
(P) Maximum step (mm)		132.50
Slat inclination angle	Manual	0º-110º
	Motorised	0º-105º
Frame profiles	Perimeter	Frame 50x40 mm with seal Central frame 50x40 mm
	Medium divisions	Auto-drilled aluminium tube 40x40 mm
Overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum slat length recommended (mm)	Pivot system	2,000
	Grill system	2,500
Operation	Manual	Pivot | grill system (Stainless orientation control + stainless orientation arch)
	Motorised (see page 199)	Pivot | grill system (Linear motor 180 mm 650 N 24V)
Wind resistance (UNE-EN 13659:2016) CLASS 6	Grill system	≈112 Km/h
	Pivot system	≈112 Km/h

PROFILES

A **Overlaps 30, 50, 80**
005201 | 005211 | 005521

ACCESSORIES

B **Stainless orientation control**
051250

C **Stainless orientation arch**
056067

D **Linear motor 180 mm 650N 24V**
051191

3.1.6 O-120

Slat O-120 + frame 50x40 mm with seal (pivot system)

END PLATES

The aluminium end plates with a retractable pivot at the end of the slats are inserted in the interior of motorised openings in the frame of 50x40 mm, by means of an anti-friction cap.

Slat O-120 + frame profile 50x40 mm with seal (grill system)

END PLATES

The aluminium end plates guide an aluminium tube through the interior of the slat that is anchored to some mechanised openings in the frame of 50x40 mm, by means of an anti-friction cap.
This system adds great resistance to the louver's ensemble.

Manual or motorised operation can be used in both cases. The brush perimeter seal positioned on the frame 50x40 mm., prevents the entering of sun rays through the louver ensemble, in the closed position, as well as diminishes the vibrations caused by the wind.

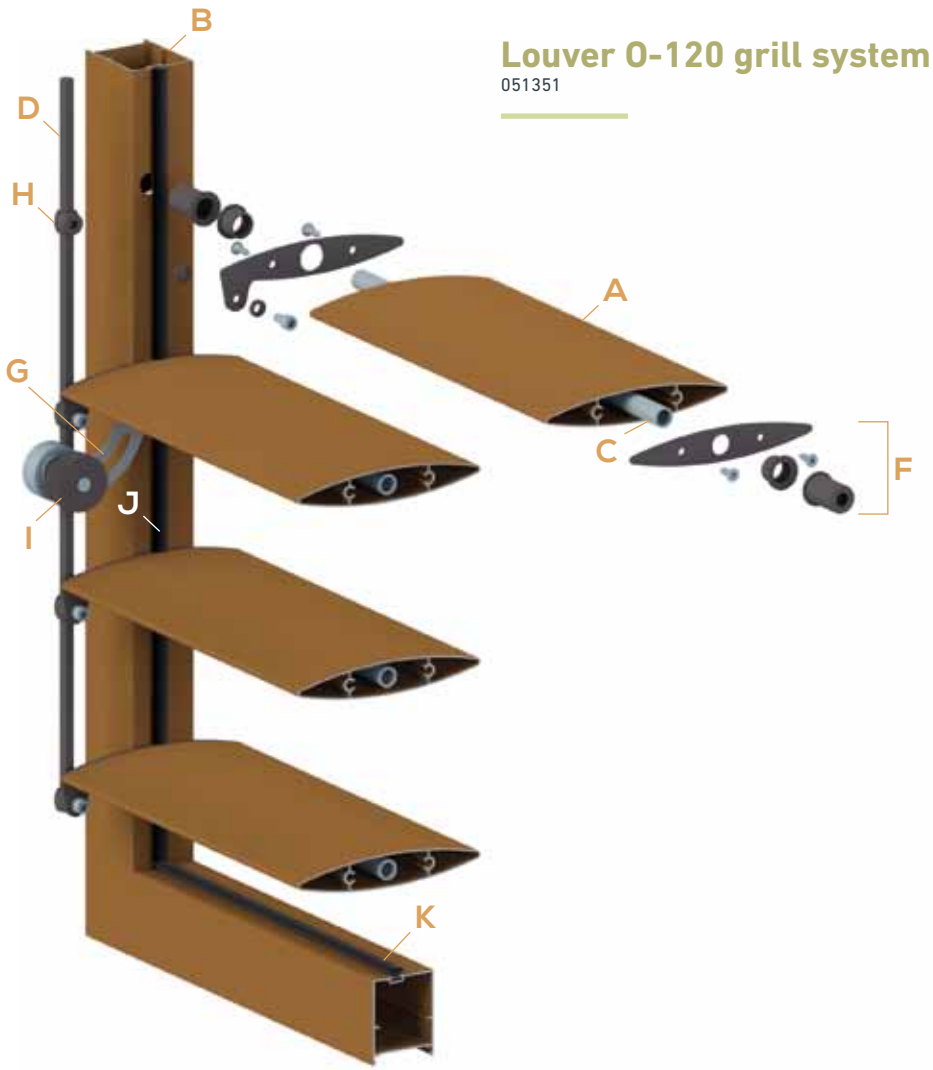
Louver O-120 pivot system

051051

Slat O-120

051002

Technical data	
Slat depth	120 mm
Slat width	19.80 mm
Slat weight	0.87 Kg/ml



Louver O-120 grill system

051351

PROFILES

- **A** Slat O-120 — 051002
- **B** Frame 50x40 mm with seal — 005052
- **C** Aluminium tube 11.80x1.30 mm grill system — 052027
- **D** Aluminium transmission rod 8 mm — 051110

ACCESSORIES

- **E** Zamak end plates set right/left pivot system — 051066
- **F** Aluminium end plate set grill system — 051008
- **G** Stainless orientation arch — 056067
- **H** Transmission cap — 051180
- **I** Stainless orientation control — 051250
- **J** Brush 69-550 — 026015
- **K** Brush 69-1000 — 041068

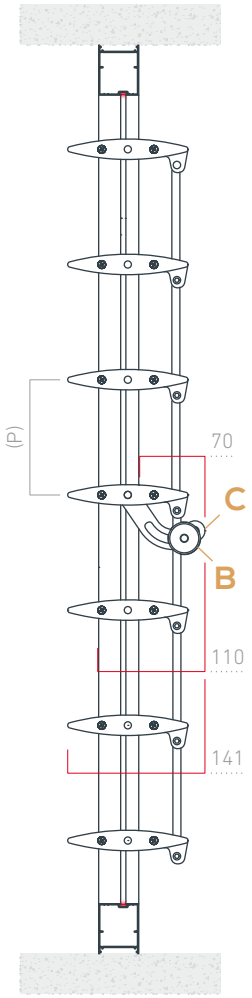
3.1.6 O-120

Slat O-120 installation + frame 50x40 mm with seal (pivot and grill system)

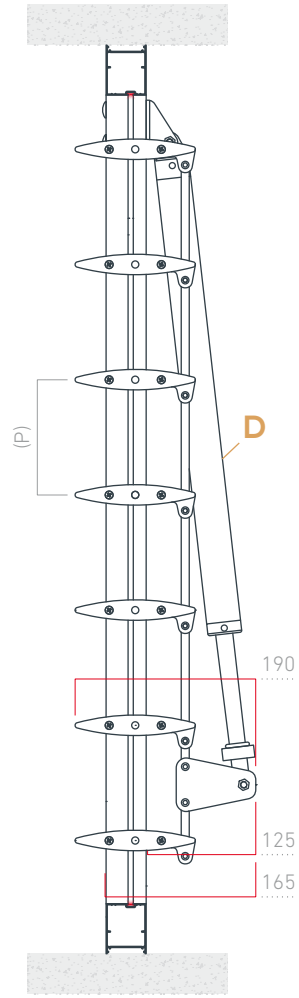
FRAME

The frame interiorly adjusts the opening.
In the case of installation aligned with the wall's exterior surface a perfect seal is acquired from the frames in the building with the overlaps of 30, 50 and 80 hiding possible imperfections.

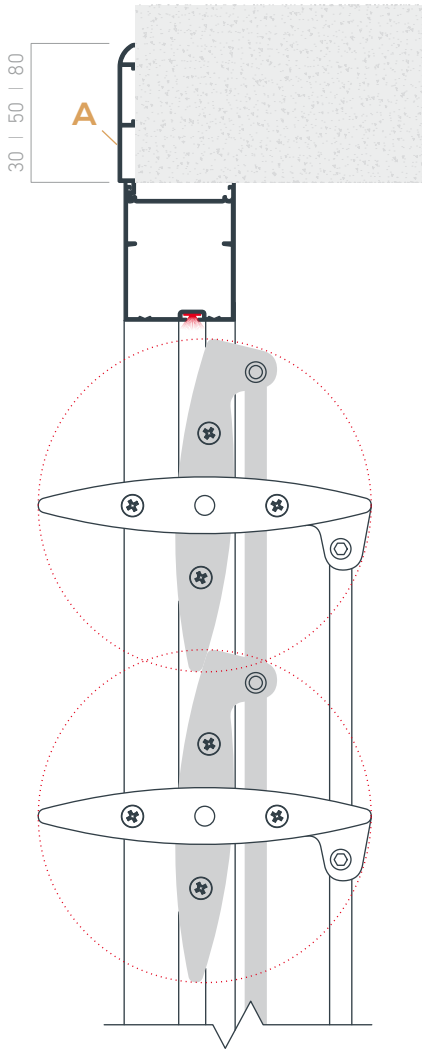
Manual operation



Motorised operation



Rotational movement



Slats		O-120
		Aluminium
Nº slats/ml		9
(P) Maximum step (mm)		115
Slat inclination angle	Manual	0º-110º
	Motorised	0º-105º
Frame profiles	Perimeter	Frame 50x40 mm with seal
	Medium divisions	Central frame 50x40 mm
Overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum slat length recommended (mm)	Pivot system	2,000
	Grill system	2,500
Operation	Manual	Pivot | grill system (Stainless orientation control + stainless orientation arch)
	Motorised (see page 199)	Pivot | grill system (Linear motor 180 mm 650 N 24V)
Wind resistance (UNE-EN 13659:2016) CLASS 6	Grill system	≈112 Km/h
	Pivot system	≈112 Km/h

PROFILES

A **Overlaps 30, 50, 80**
005201 | 005211 | 005521

ACCESSORIES

B **Stainless orientation control**
051250

C **Stainless orientation arch**
056067

D **Linear motor 180 mm 650N 24V**
051191

3.1.7 O-210

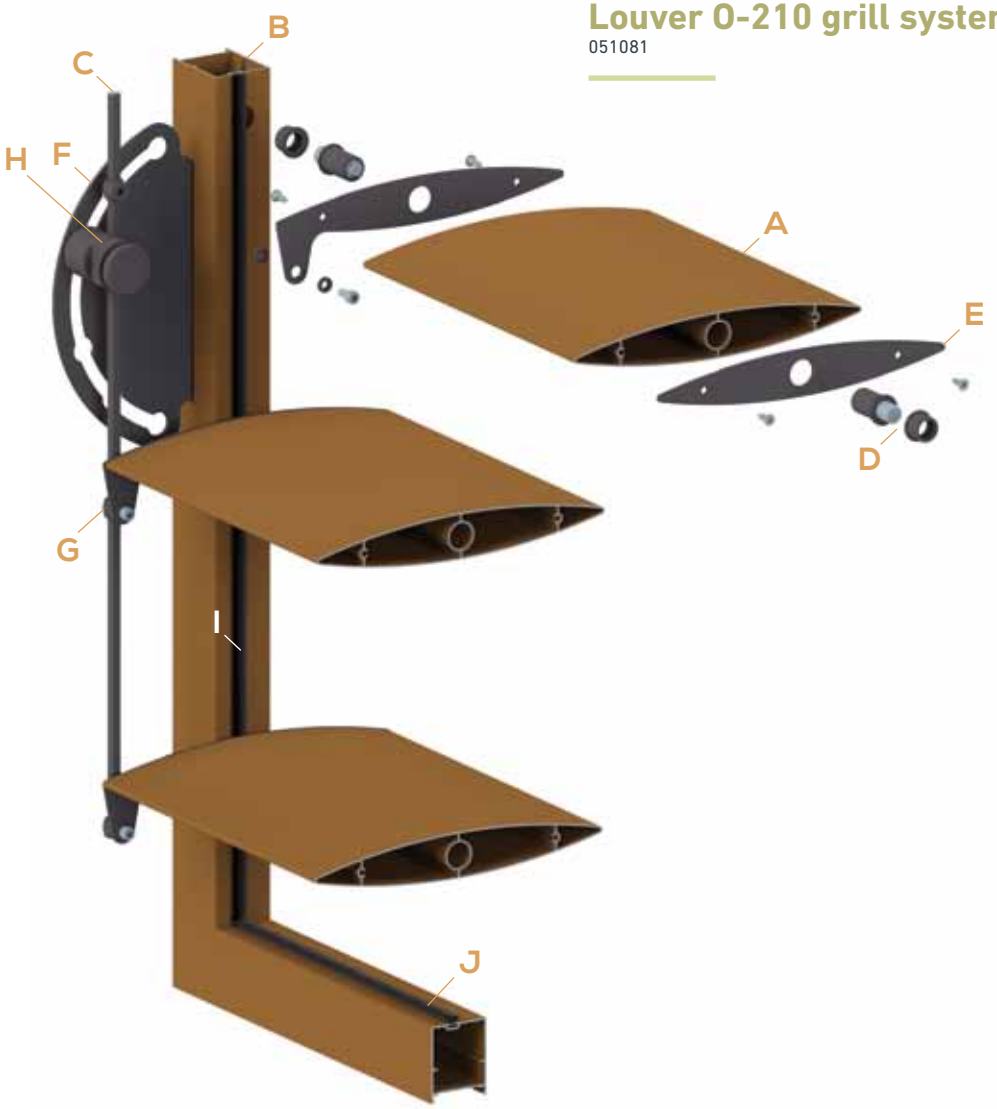
Slat O-210 + frame profile 50x40 mm with seal (grill system)

END PLATES

The aluminium end plates positioned on the ends of the slats are inserted in the interior of equidistant motorised openings in the frame of 50x40 mm., using an anti-friction cap.

SLATS

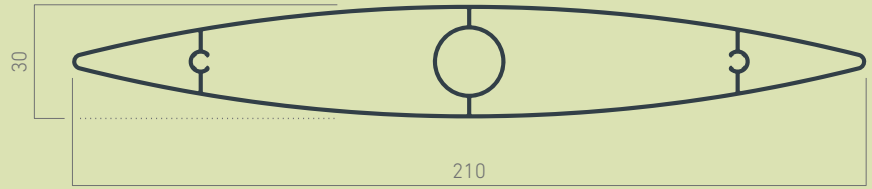
The operation of the slats can be done manually or motorised. The brush perimeter seal positioned on the frame 50x40 mm., prevents the entering of light rays through the louver ensemble, in the closed position, as well as diminishes the vibrations caused by the wind.



Louver O-210 grill system
051081

Slat O-210

051022



Technical data	
Slat depth	210 mm
Slat width	30 mm
Slat weight	1.76 Kg/ml

PROFILES

A Slat O-210
051022

B Frame 50x40 mm with seal
005052

C Aluminium transmission rod 8 mm
051110

ACCESSORIES

D Pivot system set with axle and cap
051075

E Aluminium end plate set grill system
051026

F Aluminium orientation arch
051019

G Transmission cap
051180

H Orientation control
051011

I Brush 69-550
026015

J Brush 69-1000
041068

3.1.7 O-210

Slat O-210 installation + frame profile 50x40 mm with seal (grill system)

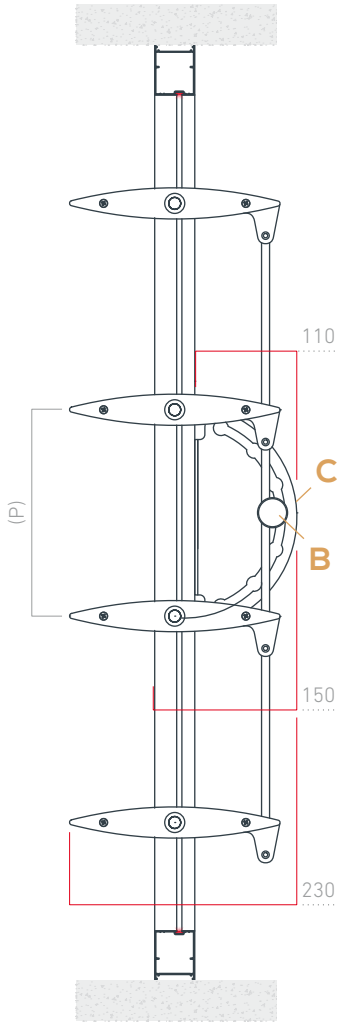
FRAME

The frame interiorly adjusts the opening.

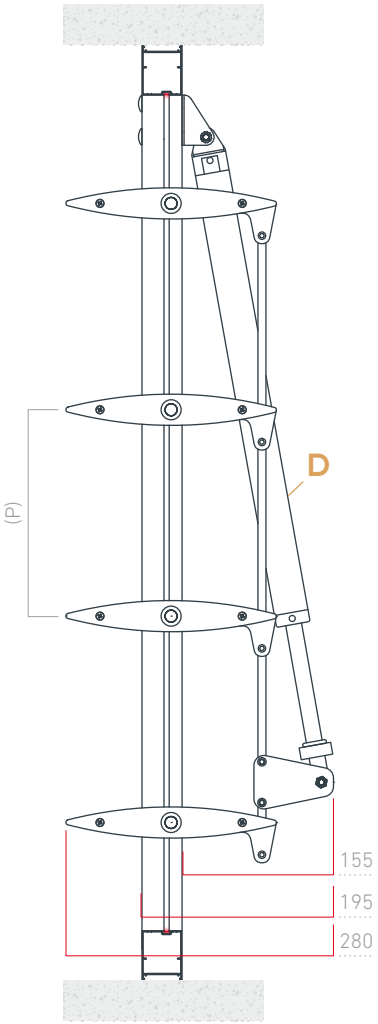
In the event of installation aligned with the wall's exterior surface a perfect frame is acquired from the frames in the building with the overlap of 30, 50 and 80 hiding possible imperfections.

The retractable cap facilitates the installation of the slats in structures with prior installation of the frame on-site.

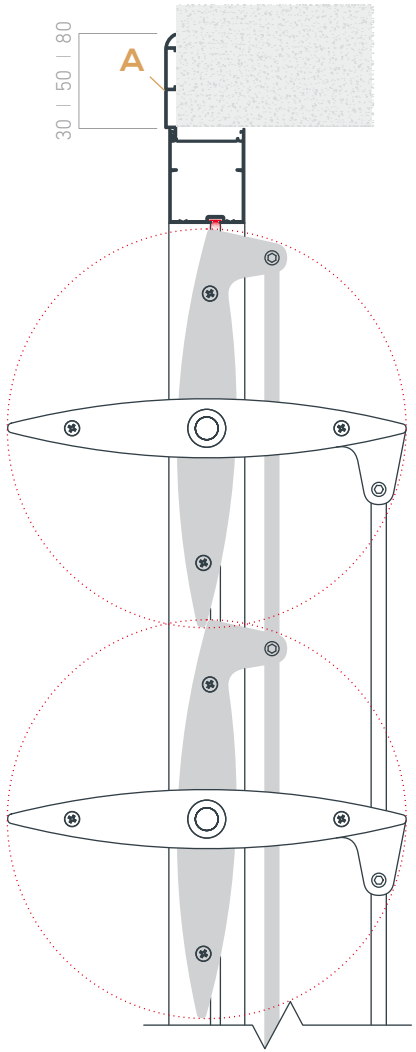
Manual operation



Motorised operation



Rotational movement



Slats		O-210
		Aluminium
N° slats/ml		5
(P) Maximum step (mm)		205
Slat inclination angle	Manual	0°-130°
	Motorised	0°-105°
Frame profiles	Perimeter	Frame 50x40 mm with seal
	Medium divisions	Central frame 50x40 mm
Overlaps		Overlap 30
		Overlap 50
		Overlap 80
Maximum slat length recommended (mm)	Grill system	3,000
Operation	Manual	Pivot I grill system (Stainless orientation control + stainless Orientation arch)
	Motorised (see page 199)	Pivot I grill system (Linear motor 180 mm 650N 24V)
Wind resistance (UNE-EN 13659:2016) CLASS 6	Grill system	≈112 Km/h

PROFILES

A **Overlaps 30, 50, 80**
005201 | 005211 | 005521

ACCESSORIES

B **Aluminium orientation control**
051011

C **Aluminium orientation arch**
051019

D **Linear motor 180 mm 650N 24V**
051191

3.2

MOVEABLE SLATS **OVER STRUCTURAL PROFILE**

Moveable slat louver system comprised of extruded slats, laterally supported by an aluminium end plate set to an aluminium structural profile that allows the angle variation of the slat models O-120, O-210, O-300, R-250, R-300 and R-400.

The assembly of the slat to the carrier structure allows the uniform rotation of the total slats using manual or motorised operation, in this way adapting itself to the lighting, ventilation, and thermal comfort requirements of the building.

Used as protection for façades and roofs for industrial, commercial, office and residential spaces. The system offers coverage of blind and glass surfaces covering large lights without the need of medium divisions.

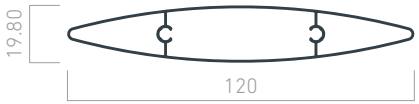
3.2.1 TYPES OF SLAT

Slat O-120

051002

Oval slat that offers maximum performance in openings of small dimensions.

Technical data	
Dimension (x)	120 mm
Dimension (y)	19.80 mm
Slat weight	0.87 Kg/ml

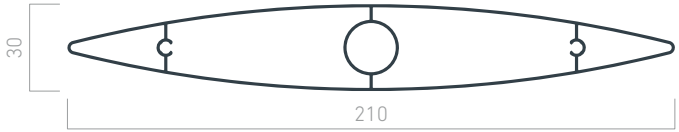


Slat O-210

051022

Oval-shaped slat that offers maximum performance in medium-large openings.

Technical data	
Dimension (x)	210 mm
Dimension (y)	30 mm
Slat weight	1.76 Kg/ml

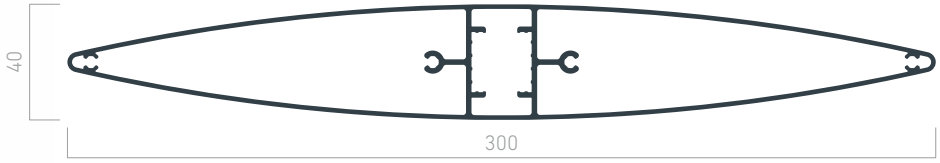


Slat O-300

051296

Oval slat that offers maximum performance in openings of large dimensions.

Technical data	
Dimension (x)	300 mm
Dimension (y)	40 mm
Slat weight	3.77 Kg/ml



Slat R-250

Rectangular slat that offers maximum performance in openings of medium dimensions.

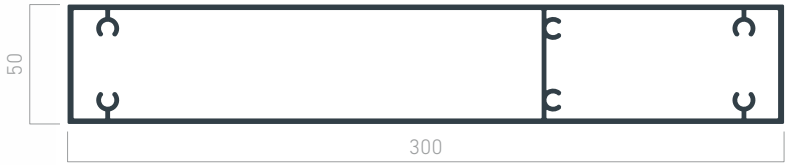
Technical data	
Dimension (x)	250 mm
Dimension (y)	40 mm
Slat weight	4.25 Kg/ml

Slat R-300

050343

Rectangular slat maximum performance in openings of large dimensions.

Technical data	
Dimension (x)	300 mm
Dimension (y)	50 mm
Slat weight	5.72 Kg/ml

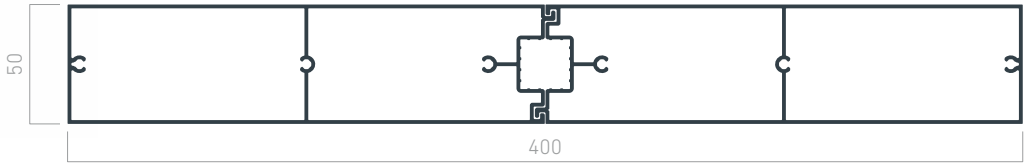


1/2 slat R-400

051069

Rectangular large format slat that offers maximum performance in openings of large dimensions.

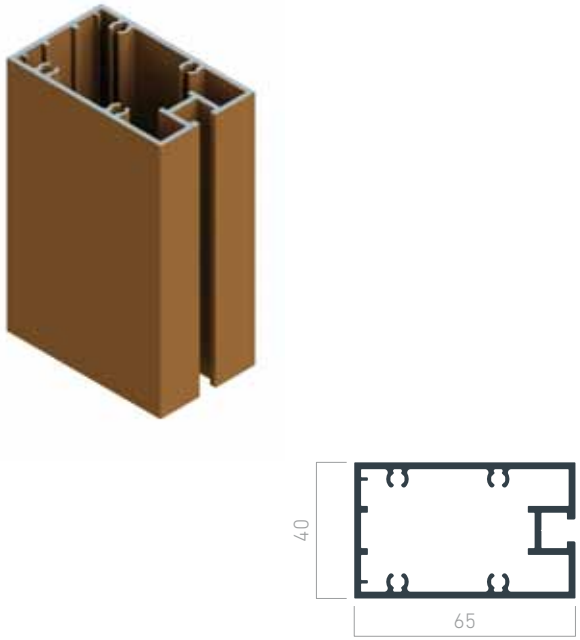
Technical data	
Dimension (x)	400 mm
Dimension (y)	50 mm
Slat weight	5.98 Kg/ml
½ slat weight	2.99 Kg/ml



3.2.2 CARRIER PROFILES

Carrier profile 65x40 mm

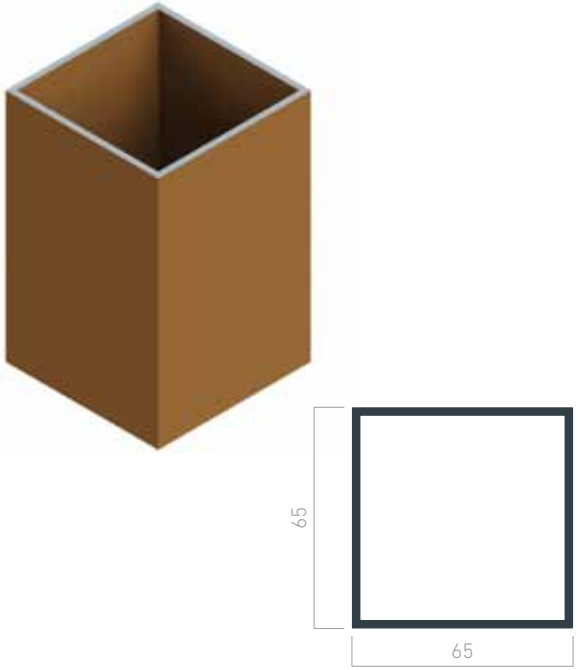
051302



Technical data	
Profile depth	65 mm
Profile width	40 mm
Profile weight	1.60 Kg/ml
Moment of inertia Iy	288,065 mm⁴
Moment of inertia Ix	128,143 mm⁴

Aluminium tube 65x65 mm

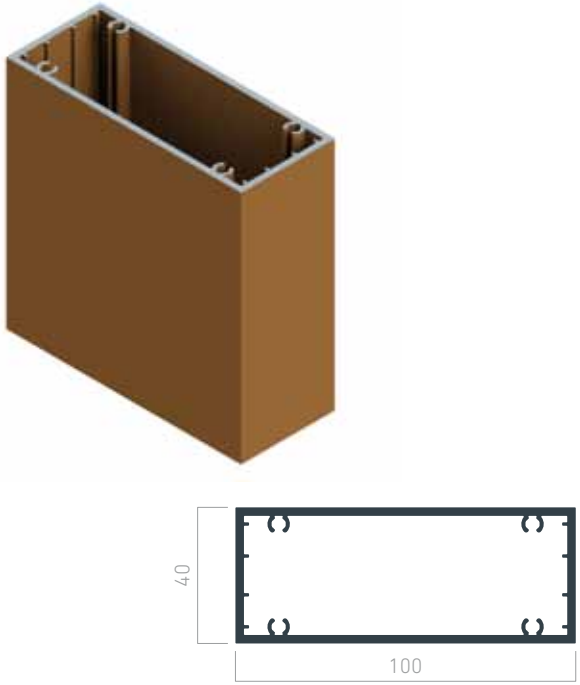
027590



Technical data	
Profile depth	65 mm
Profile width	65 mm
Profile weight	2.07 Kg/ml
Moment of inertia Iy	450,095 mm⁴
Moment of inertia Ix	450,095 mm⁴

Carrier profile 100x40 mm

027395



Technical data	
Profile depth	100 mm
Profile width	40 mm
Profile weight	2.20 Kg/ml
Moment of inertia Iy	934,415 mm⁴
Moment of inertia Ix	207,966 mm⁴

3.2.3 MOVEABLE LOUVER MODELS OVER STRUCTURAL PROFILE

OVAL SLATS

Range of oval slats made through aluminium extrusion its curved lines design facilitates the integration of any type of architectural element allowing the choice between three slat models O-120, O-210 and O-300.

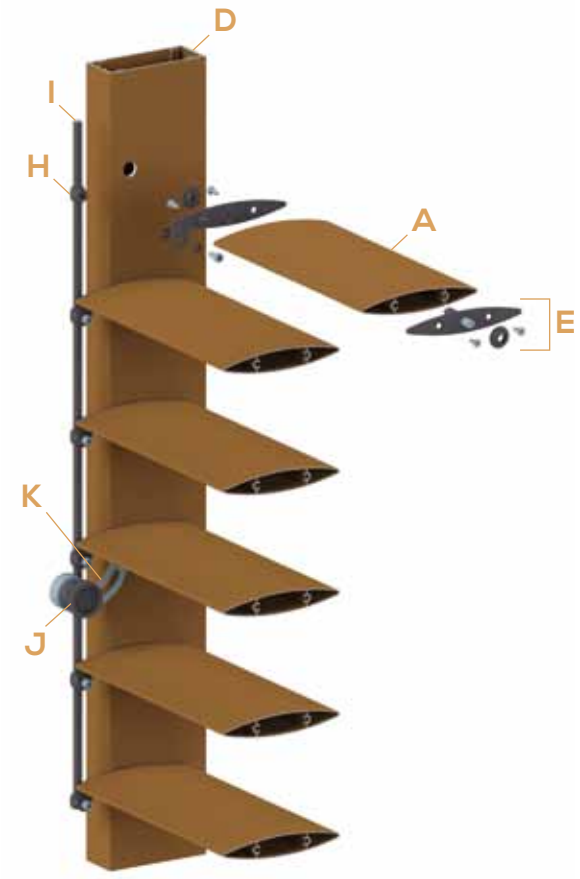
RECTANGULAR SLATS

Range of rectangular slats made through aluminium extrusion in one single piece, its straight lines design integrates perfectly in an architecture of straight and modern lines in a natural manner with slat model R-250, R-300 and R-400.

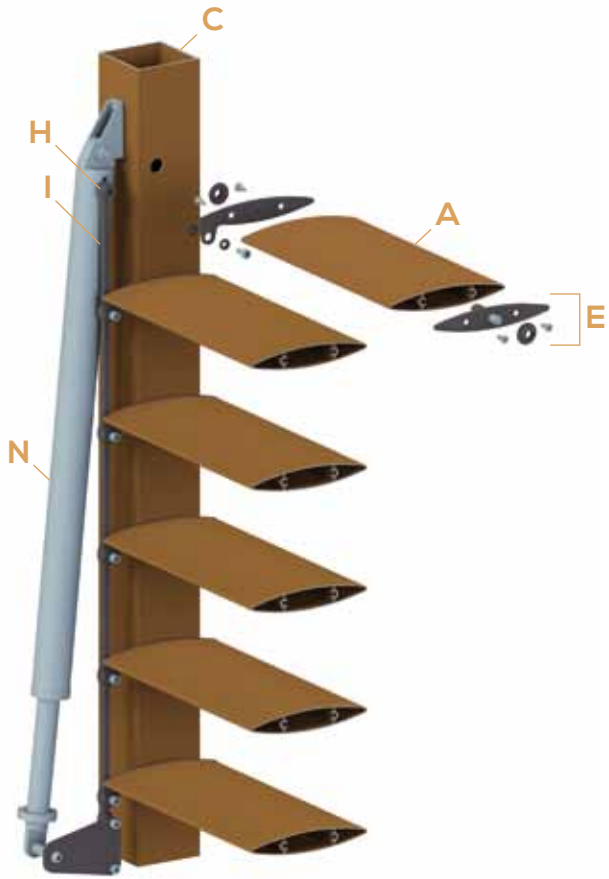
ASSEMBLY

The assembly of the carrier structure is done using an aluminium end plate set adapted to the dimensions of each slat section allowing the manual or mechanised rotation of the slat.

Model O-120 pivot system manual

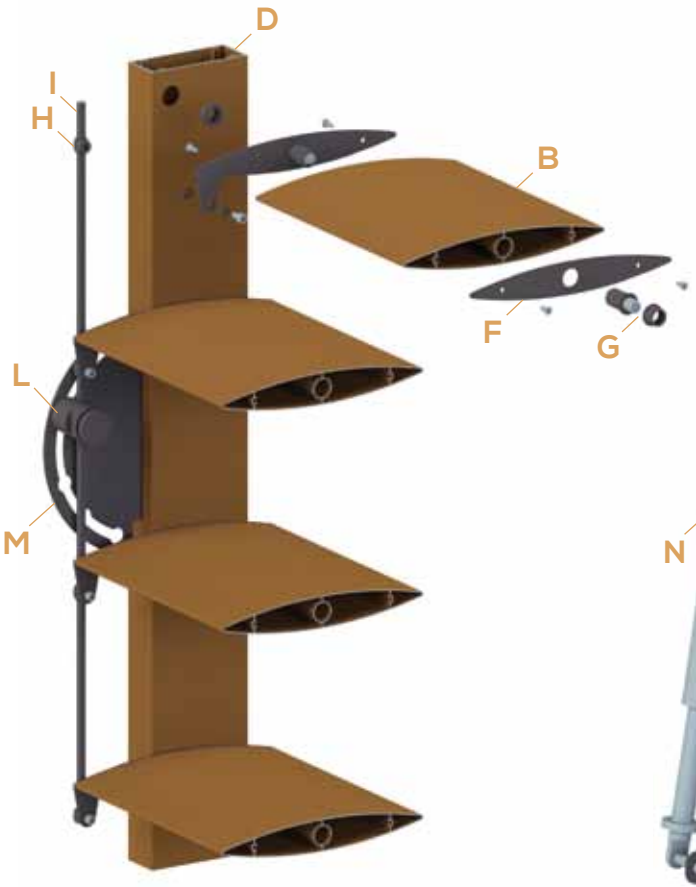


Model O-120 pivot system motorised

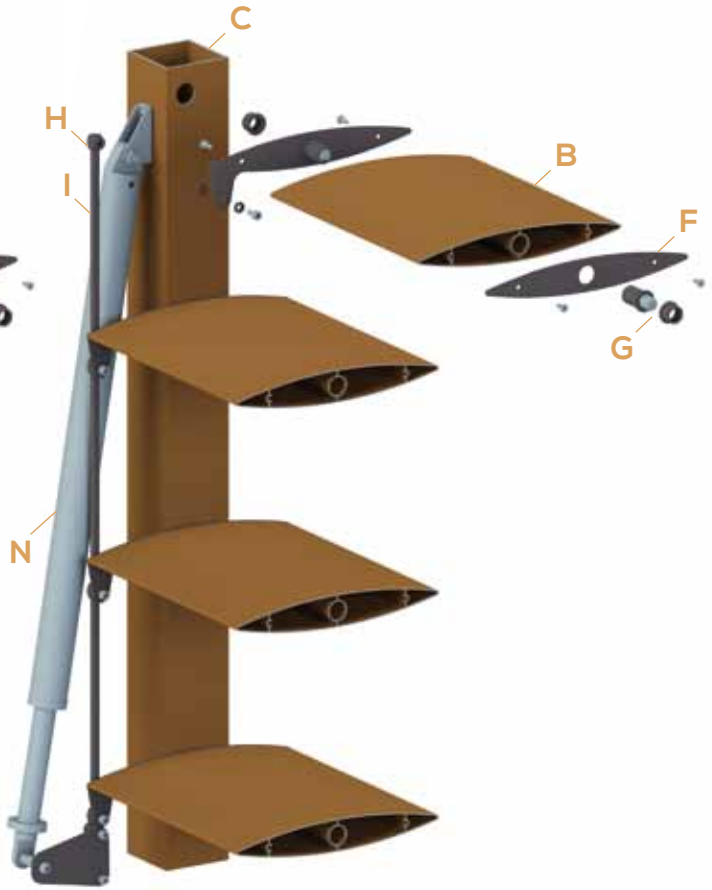


Valid for installations with horizontal and vertical slats.

Model O-210 pivot system manual



Model O-210 pivot system motorised



PROFILES

- **A** Slat O-120 — 051002
- **B** Slat O-210 — 051022
- **C** Aluminium tube 65x65 mm — 027590
- **D** Carrier profile 100x40 mm — 027396

ACCESSORIES

- **E** Zamak end plates set pivot system O-120 — 051066
- **F** Aluminium end plate set grill system O-210 — 051026
- **G** Pivot system set with axle and cap — 051075
- **H** Transmission cap — 051180
- **I** Aluminium transmission rod 8 mm — 051110
- **J** Stainless orientation control — 051250
- **K** Stainless orientation arch — 056067
- **L** Orientation control aluminio — 051011
- **M** Aluminium orientation arch — 051019
- **N** Linear motor 180 mm 650N 24V — 051191

3.2.3 MOVEABLE LOUVER MODELS OVER STRUCTURAL PROFILE

OVAL SLATS

Range of oval slats made through aluminium extrusion in one single piece, its curved lines design facilitates the integration of any type of architectural element allowing the choice between three slat models O-120, O-210 and O-300.

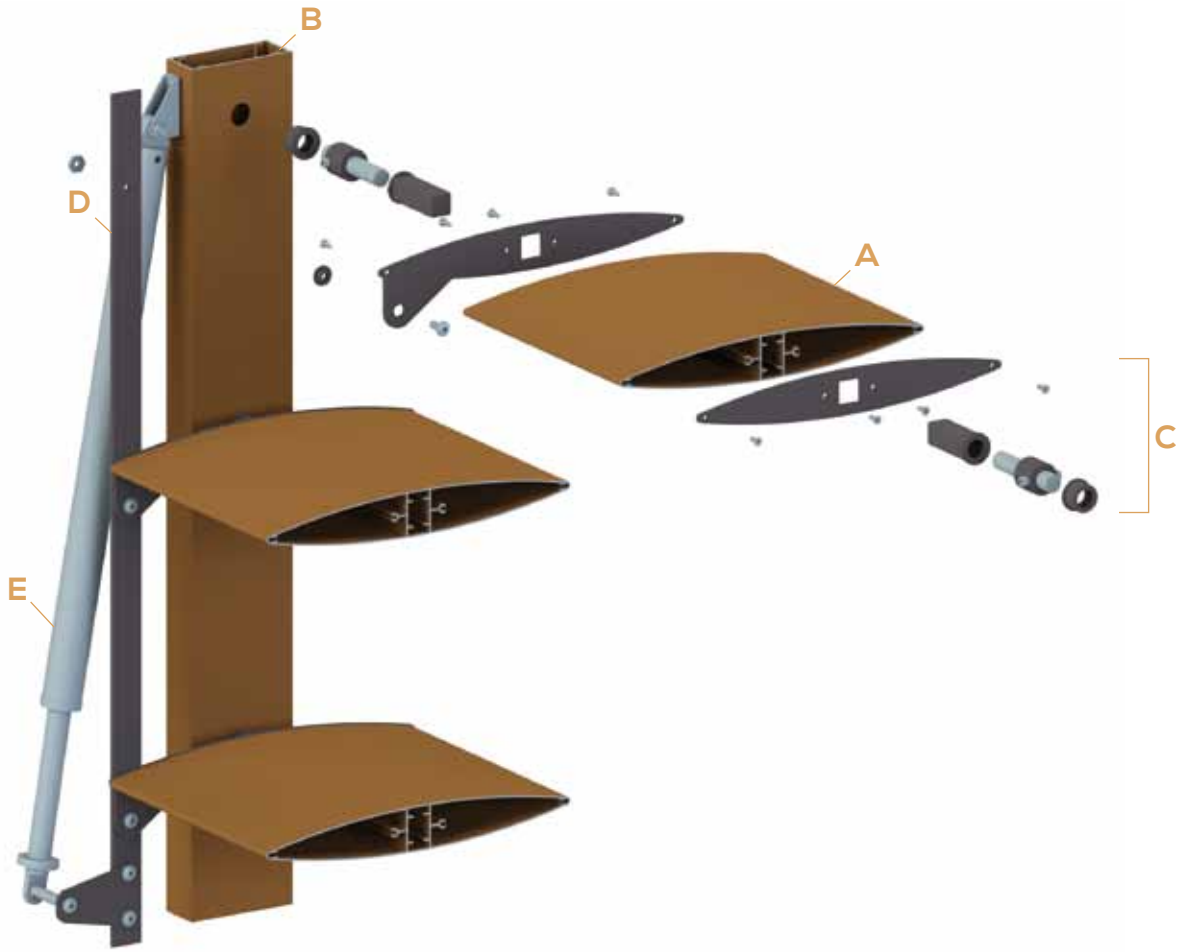
LAMAS RECTANGULARES

Range of rectangular slats made through aluminium extrusion in one single piece, its straight lines design integrates perfectly in an architecture of straight and modern lines in a natural manner with slat model R-250, R-300 and R-400.

ASSEMBLY

The assembly of the slats to the carrier structure is done through aluminium end plates set adapted to the dimensions of each selected slat allowing the mechanised rotation of the slat.

Model O-300



Valid for installations with horizontal and vertical slats.

PROFILES

A Slat O-300
051296

B Carrier profiles 100x40 mm
027396

ACCESSORIES

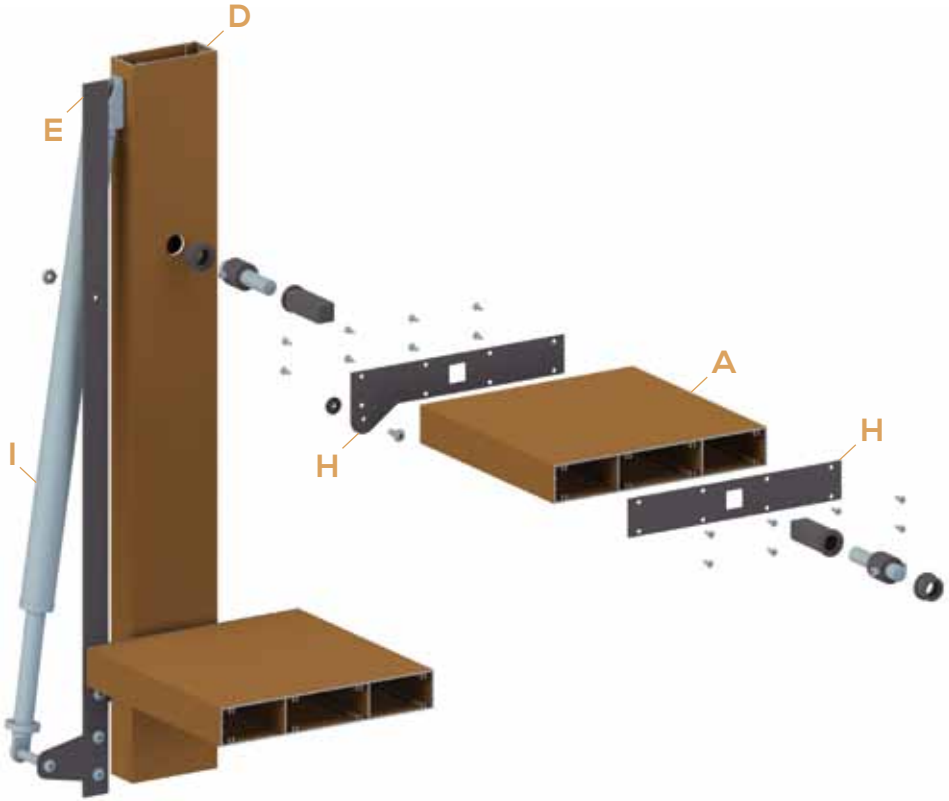
C Aluminium end plates set grill system O-300
051032

D Mechanised aluminium plate 30x4 mm
051130

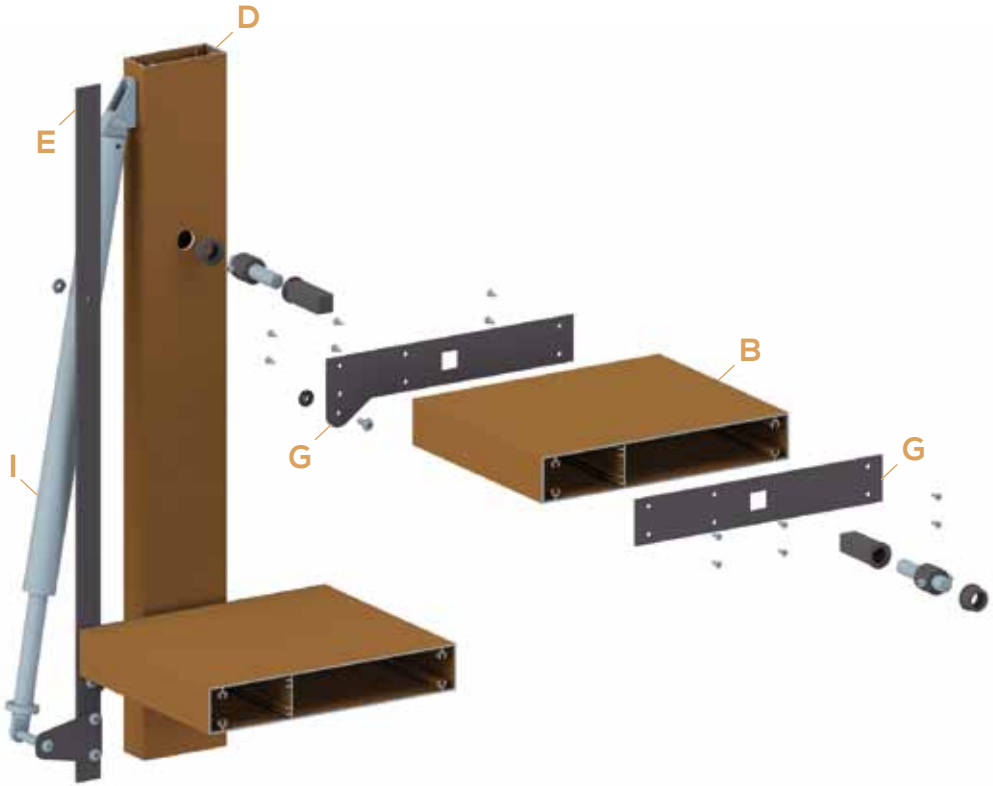
E Linear motor O-300 mm 650N 24V
051192

3.2.3 MOVEABLE LOUVER MODELS OVER STRUCTURAL PROFILE

Model R-250

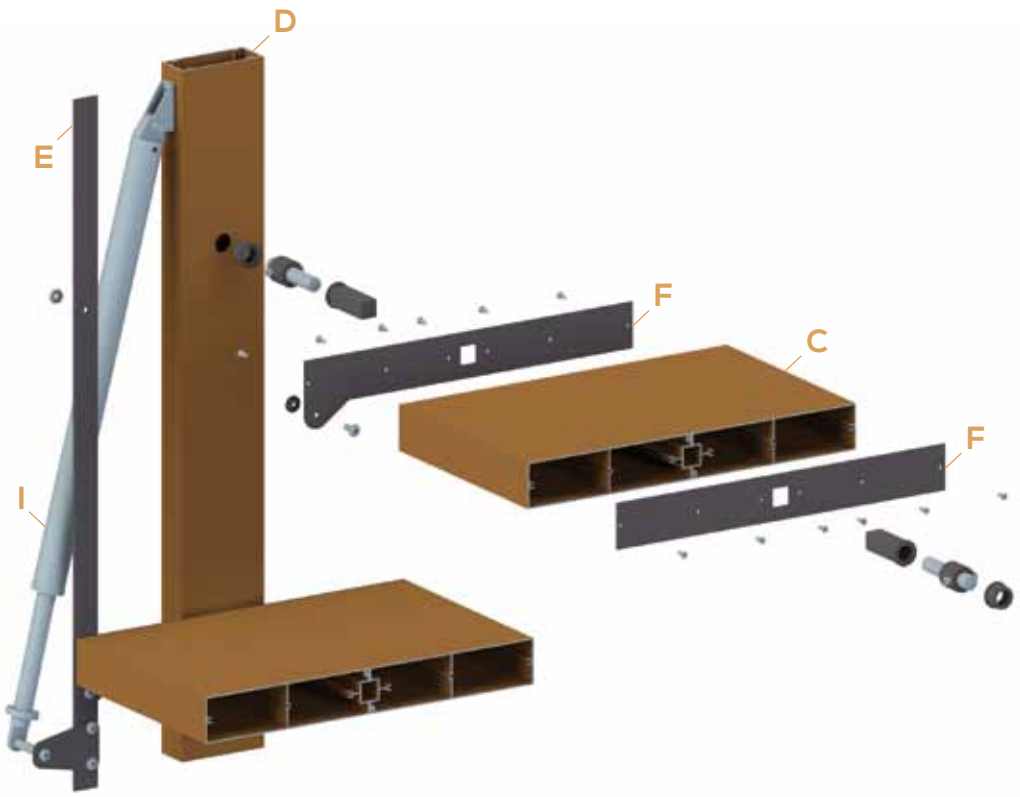


Model R-300



Valid for installations with horizontal and vertical slats.

Model R-400



PROFILES

A Slat R-250

B Slat R-300
050343

C 1/2 slat R-400
051069

D Carrier profile 100x40 mm
027396

E Mechanised aluminium plate 30x4 mm
051130

ACCESSORIES

F End plates set R-400
050006

G End plates set R-300

H End plates set R-250

I Linear motor 300 mm 650N 24V
051192

3.2.4 INSTALLATION OF FLAT OVER STRUCTURAL PROFILE

The slat can be installed vertically or horizontally, the choice of the type of slate will determine the end plate model to install over the new or existing carrier structure depending on the geometry, components, dimensions, ventilation, light and design of the façade.

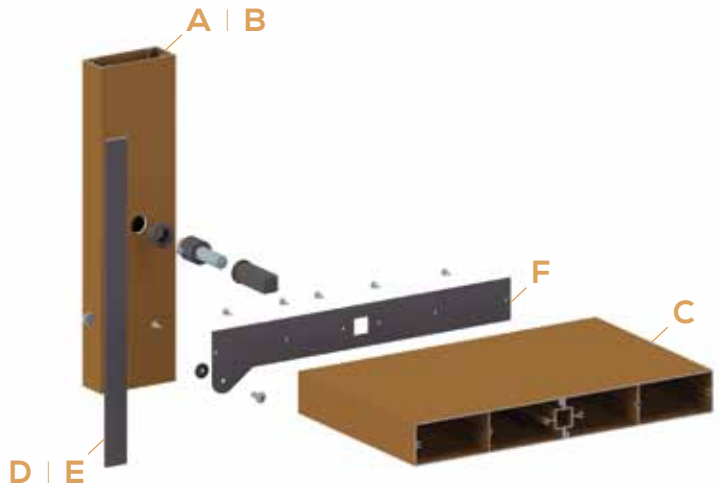
The requirements of each façade are previously studied and determine the choice of the profiles that comprise the carrier structure. The use of stainless steel accessories facilitates joints, overlaps and anchoring of the carrier profile over which adjustable slats will be installed, achieving the maximum performance in energy efficiency adjusting to the design of the building.

Mechanised installation to one side

027396 Carrier profile 100x40 mm mechanising one side | 027600 Tube 65x65 mm mechanising one side

In installations in which its span length is accepted by the maximum anchoring width of the selected slat, a mechanised equidistant (step) is carried out on one of the carrier profile faces to insert the end plate sets that act as the rotation axle of the slat.

Allows vertical and horizontal installation of slat. The choice of the step between slats is previously determined depending on the dimensions of the opening to cover achieving an equal distribution of the slats.



Profile 100x40 mm available in installations with slat models O-120 | O-210 | O-300 | R-250 | R-300 | R-400.

See installation ironwork and typologies of the carrier profile: page 44-49.

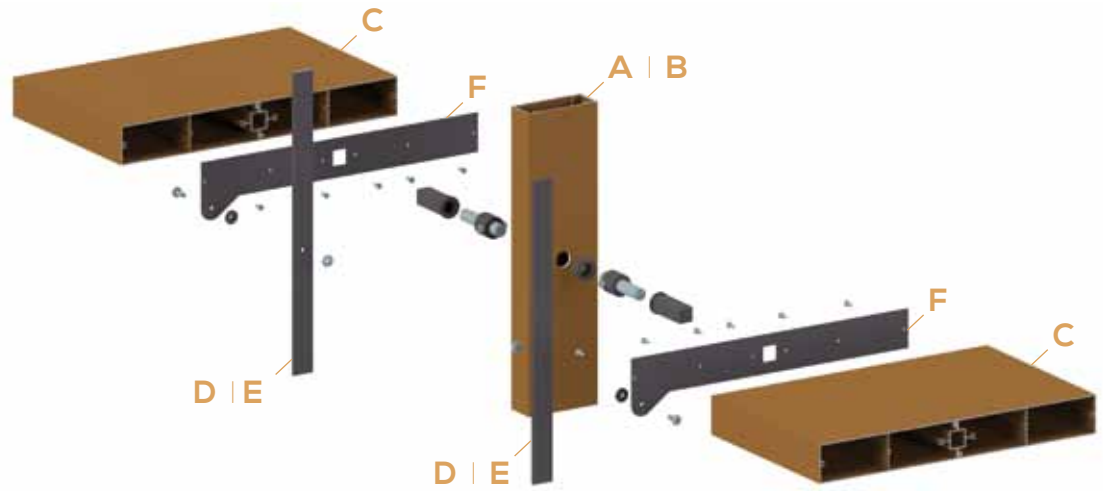
Mechanised installation on two faces

051321 Carrier profile 100x40 mm mechanising two faces | Tube 65x65 mm mechanising two faces

In installations in which its span length not accepted when exceeding the maximum anchoring width of the selected slat, the gaps are divided in the necessary spans, without exceeding the maximum width of the slat, by means of carrier profiles.

In the medium profile a mechanised equidistant (step) will be carried out on two parallel faces where the end plate sets are inserted that act as rotation axle of the slat allowing linear continuity and its alignment, finalising the ends of the louver with a mechanised profile on one side. Allows vertical and horizontal installation of slat.

The selection of the step between slats is determined previously depending on dimensions of the opening to cover achieving an equal distribution of the slats.



Profile 100x40 mm available in installations with slat models O-300 | R-250 | R-300 | R-400.

PROFILES

A **Carrier profile 100x40 mm**
027395

B **Carrier profile 65x65 mm**
027590

C **Slat**
051002 O-120 | 051022 O-210 | 051296 O-300
051069 1/2 R-400 | R-250 | 050343 R-300

D **Aluminium transmission rod 8 mm**
O-120 | O-210
051110

E **Mechanised aluminium plate 30x4 mm**
O-300 | R-400
051130

ACCESSORIES

F **Moveable end plate set**
051066 O-120 pivot system | 051008 O-120 blind
051026 O-210 | 051032 O-300 | 050006 R-400
R-250 | R-300

3.2.5 TECHNICAL DATA

For optimum solar protection and so that its efficiency increases the slat must orient depending on the movement of the sun.

The regulation on the variation of the slat orientation angle allows the adjustment to the movement of the sun, regulating the shadow surface over the façade and the effective ventilation surface.

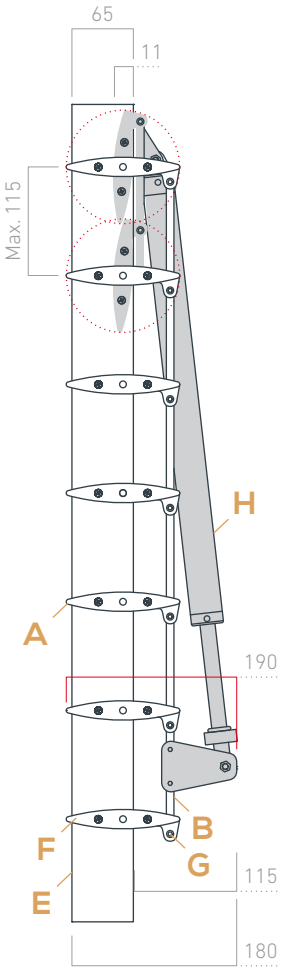
					(A)						
Slat	Material	Slat number m/l	Step (mm)	Opening angle	Maximum recommended width (mm)		Structural profiles and motorisation (Its selection will be determined by the study of the installation)				Wind resistance (UNE-EN 13659:2016)
							Profiles	Motor	Profiles	Motor	
O-120	Aluminium	9	115	0-105°	2,000 (pivot system)		65x65	Linear motor 180 mm 650N 24V 051191	100x40	-	≈ 112 Km/h
O-210	Aluminium	5	205	0-105°	3,000		65x65	Linear motor 180 mm 650N 24V 051191	100x40	-	≈ 112 Km/h
O-300	Aluminium	4	280	0-120°	4,000		65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	≈ 112 Km/h
R-250	Aluminium	3.92	280 (fixed)	0-120°	Horizontal	Variable according to project	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	According to project
					Vertical	Variable according to project	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	According to project
R-300	Aluminium	3.26	310 (fixed)	0-120°	Horizontal	Variable according to project	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	According to project
					Vertical	Variable according to project	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	According to project
R-400	Aluminium	2.44	410 (fixed)	0-120°	Horizontal	4,000	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	≈ 112 Km/h
					Vertical	4,500	65x65	Linear motor 300 mm 650N 24V 051192	100x40	Linear motor 300 mm 650N 24V 051192	≈ 112 Km/h

In models O-120 and O-210 consult the option of manual operation installation. Depending on the typology of the project, provided that the control is accessible.

3.2.5 TECHNICAL DATA

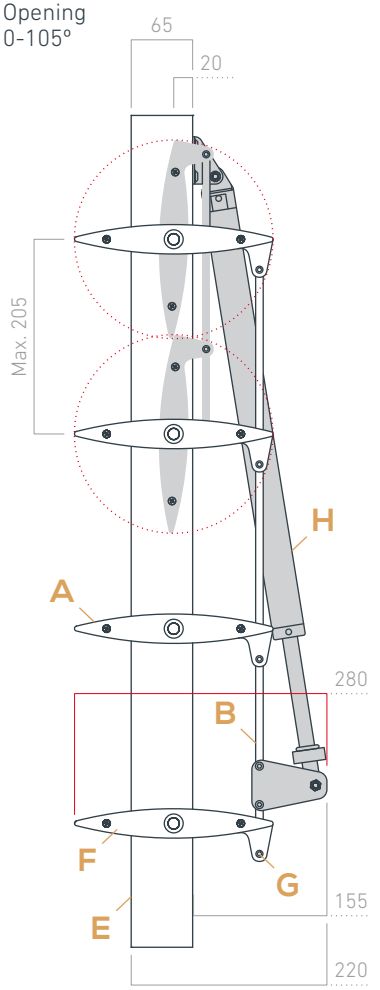
O-120
Motorised operation

Opening
0-105°



O-210
Motorised operation

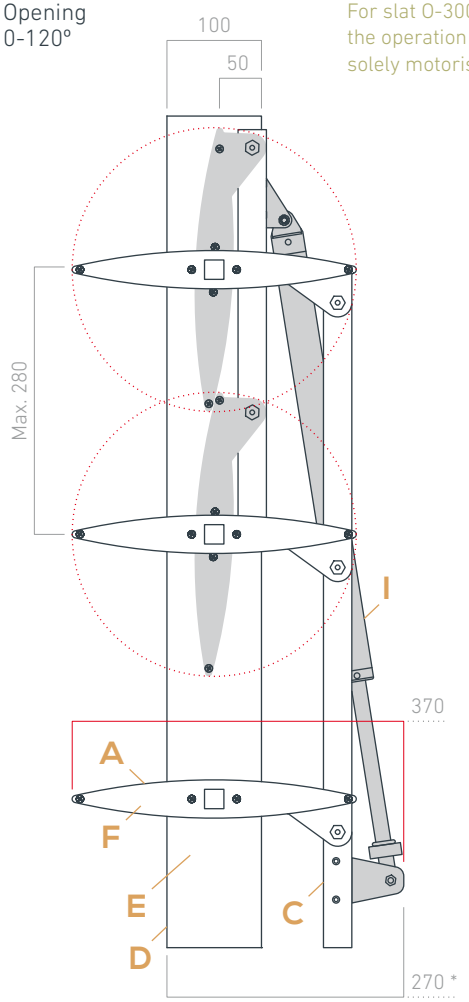
Opening
0-105°



O-300
Motorised operation

Opening
0-120°

For slat O-300 and R-400 the operation will be solely motorised.

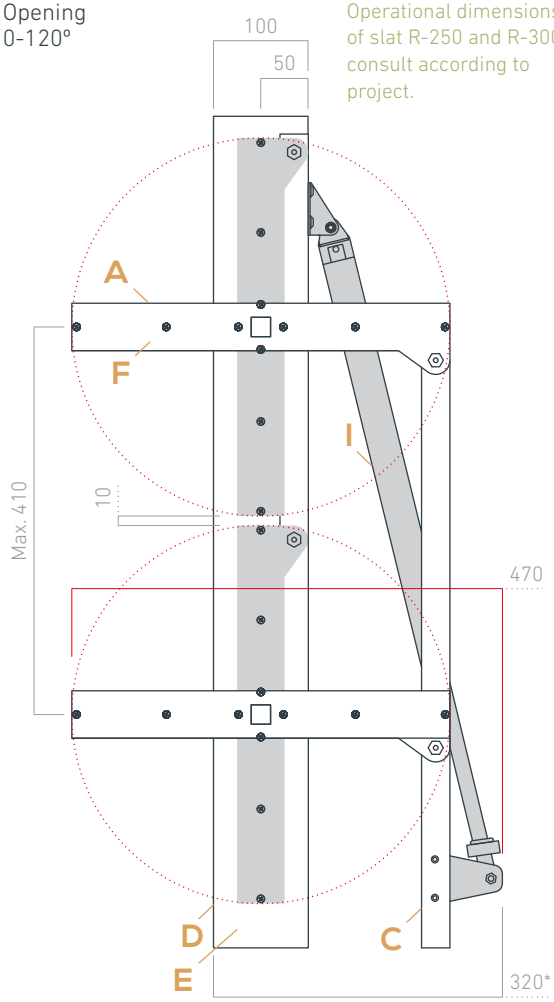


* Elevation for profile 65x65 mm = 255 mm.

R-400
Motorised operation

Opening
0-120°

Operational dimensions of slat R-250 and R-300, consult according to project.



* Elevation for profile 65x65 mm = 305 mm.

PROFILES

A Slat
051002 O-120 | 051022 O-210 | 051296 O-300
051069 1/2 R-400

B Aluminium transmission rod 8 mm
O-120 | O-210
051110

C Mechanised aluminium plate 30x4 mm
O-300 | R-400
051130

D Carrier profile 100x40 mm
027395

E Aluminium tube 65x65 mm
027590

ACCESSORIES

F Moveable end plate set
051066 O-120 pivot syst. | 051026 O-210 grill syst.
051032 O-300 pivot syst. | 050006 R-400

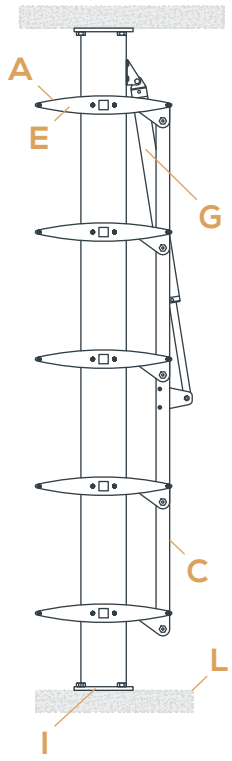
G Transmission cap
051180

H Linear motor 24V (180 mm)
051191

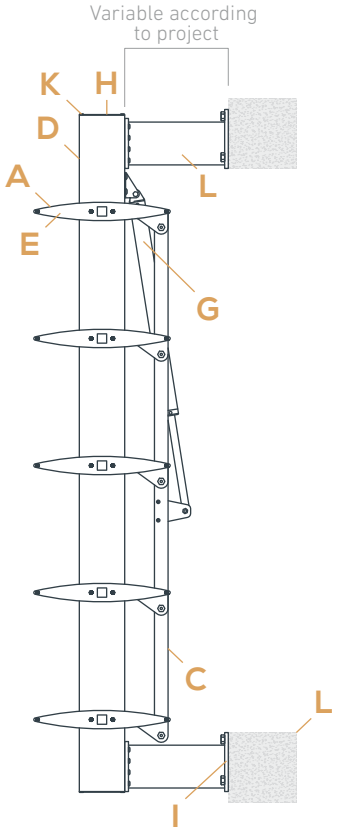
I Linear motor 24V (300 mm)
051192

3.2.6 TYPES OF INSTALLATION

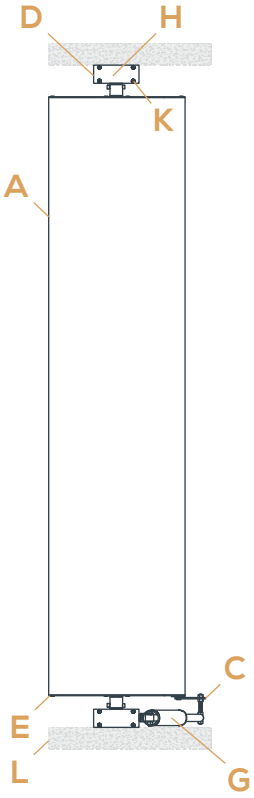
O-300 horizontal over intramural structural profile 100x40 mm



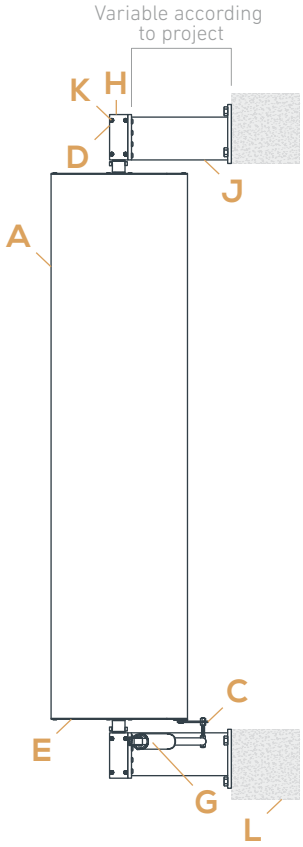
O-300 horizontal over structural profile 100x40 mm with extra-mural bracket



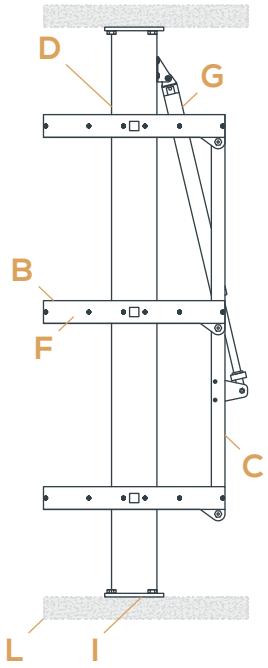
O-300 vertical over intramural structural profile 100x40 mm



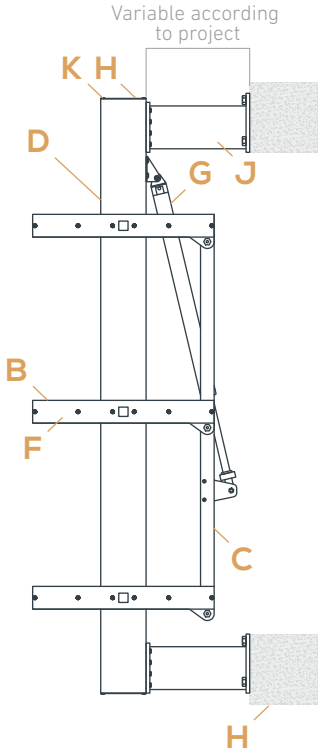
O-300 vertical over structural profile 100x40 mm with extramural bracket



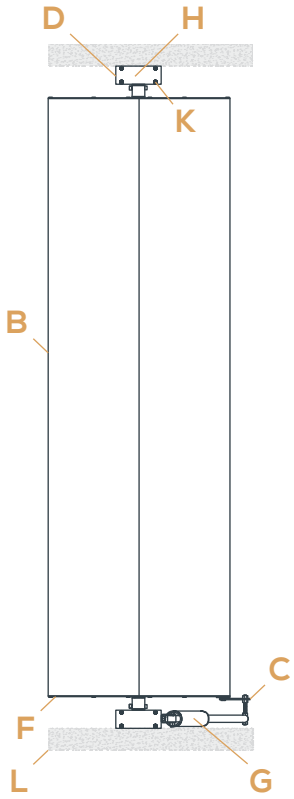
R-400 horizontal over intramural structural profile 100x40 mm



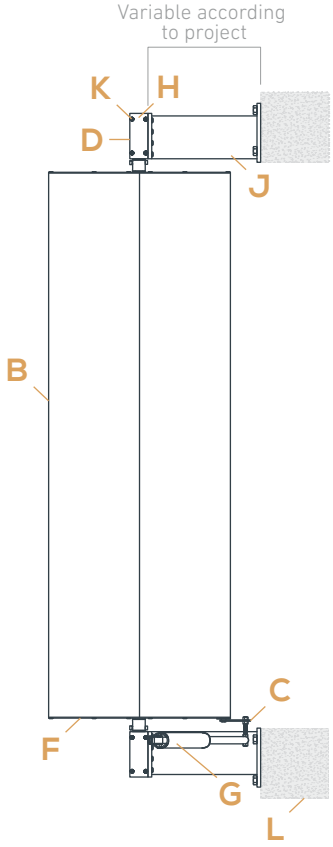
R-400 horizontal over structural profile 100x40 mm with extramural bracket



R-400 vertical over intramural structural profile 100x40 mm



R- 400 vertical over structural profile 100x40 mm with extramural bracket



PROFILES

A Slat O-300
051296

B 1/2 slat R-400
051069

C Mechanised aluminium plate 30x4 mm
O-300 | R-400
051130

D Carrier profile 100x40 mm
027395

ACCESSORIES

E End plate set O-300
051032 O-300 pivot syst. | 050006 R-400

F End plates set R-400
050006

G Linear motor (300 mm) 24V 650N
051192

H Carrier profile end plate 100x40 mm
023112

I Fixture to wall 100x40 mm
023104

J Stainless steel bracket (according to project)

SCREW

K Screw 4.2x22 mm end plate for tube
051107

CONSTRUCTIVE ELEMENTS

L Façade sidings

3.3
MOTORISATION

The range of linear motors that integrate Giménez Ganga's louvers, applied to the façade and with options that yield the maximum in both the exterior and the interior, guarantee the user comfort thanks to the total automation in the sunshade's movement.

The ability to operate the system without the need to open the window, not only helps to maintain the interior temperature while it is used, but it also turns it into an ideal option for curtain walls.

In the event of exterior installation, the bar must be pointing down and/or protected from the rain.

Linear motor 24V 650N (300 mm)
051192

Power supply: 24V ± 10%.
Switch: 300 mm.
Force (in thrust and traction): 650N.
Speed: 6 m/s.
Maximum weight consumption: ± 1 A.
Parallel connection: If (simultaneous operation of various motors).
Limit switch: Electronic detection.
Protection: Electronic detection.
Protection level: IP 65.
Operating temperature: de -10° a +60° with relative humidity maximum of 60%.

Linear motor 24V 650N (180 mm)

051191

Power supply: 24V± 10%.
Switch: 180 mm.
Force (in thrust and traction): 650N.
Velocidad: 6 m/s.
Maximum weight consumption: ± 1 A.
Parallel connection: If (simultaneous operation of various motors).
Final de carrera: Electronic detection.
Protection: Electronic detection.
Protection level: IP 65.
Operating temperature: de -10° a +60° with relative humidity maximum of 60%.

4 CANTILEVERS

ORIGINAL SOLUTIONS TO PROTECT SPECIAL PLACES

The system allows the horizontal installation of the louver with anchoring to wall or carrier structure on one of the ends of the structural profiles.

The anchoring of the slat is selectable between:
- Fixed over support.
- Fixed with clamps.
- Fixed with lateral anchoring.
- Fixed with selectable inclination.
- Fixed over structural profile.
- Moveable over structural profile.

The provision as cantilever protects lower zones from bad weather conditions, providing solar protection that prevents glares and temperature increases, favouring ventilation and regeneration of the air accumulated in the lower zone.

CANTILEVERS

Design and installation

The study prior to the installation is determined by the material and composition of the wall over which it's going to be installed and the weight that the installation supports regarding positioning, orientation and situating of the cantilever.
The parameters obtained from the study of each installation will determine the type of profiles that the structure will consist of, the maximum manufacturing dimensions, as well as the use of steel spring locks.

MOVEABLE SLAT

Those installations in which the placement of a moveable slat is required will be the object of study between the installations:

Nº 2 Installation with frontal frame

Nº 3 Installation with perimeter frame

Nº 1 with double support

Structure
Carrier profile 100x40 mm.
(Page 46)

Family
Fixed over support.
(Page 60)

Slats
Z, Z PVC, I, I Microperforated, C, S V-5 and HR.

Nº 2 with frontal frame

Structure
Carrier profile 100x40 mm.
(Page 46)

Family
Fixed over support.
(Page 92)

Moveable over structural profile.
(Page 178)

Slats
O-120, O-210, O-300 and R-100.

Nº 3 with perimeter frame

Structure
Carrier profile 100x40 mm.
(Page 46)

Family
Fixed over support.
(Page 92)

Moveable over structural profile.
(Page 178)

Slats
O-120, O-210, O-300 and R-100.

Attention only for fixture between walls.

Nº 4 with orientation clamps

Structure
Carrier profile 100x40 mm.
(Page 46)

Family
Fixed with clamps.
(Page 76)

Slats
O-120, O-210 and O-300.

CANTILEVERS

Design and installation

The study prior to the installation is determined by the material and composition of the wall over which it's going to be installed and the weight that the installation supports regarding positioning, orientation and situating of the cantilever.
The parameters obtained from the study of each installation will determine the type of profiles that the structure will consist of, the maximum manufacturing dimensions, as well as the use of steel spring locks.

MOVEABLE SLAT

Those installations in which the placement of a moveable slat is required will be the object of study between the installations:

Nº 2 Installation with frontal frame

Nº 3 Installation with perimeter frame

Nº 5 single

Structure
Carrier profile 100x40 mm.
(Page 46)

Family
Fixed with lateral anchoring.
(Page 92)

Slats
O-120, O-210, O-300 and R-100.

Nº 6 with guided support 40x20 mm

Structure
Carrier profile 100x40 mm + guided support 40x20 mm.
(Page 44 and 46)

Familys
Fixed with selectable inclination.
(Page 116)

Fixed over structural profile.
(Page 132)

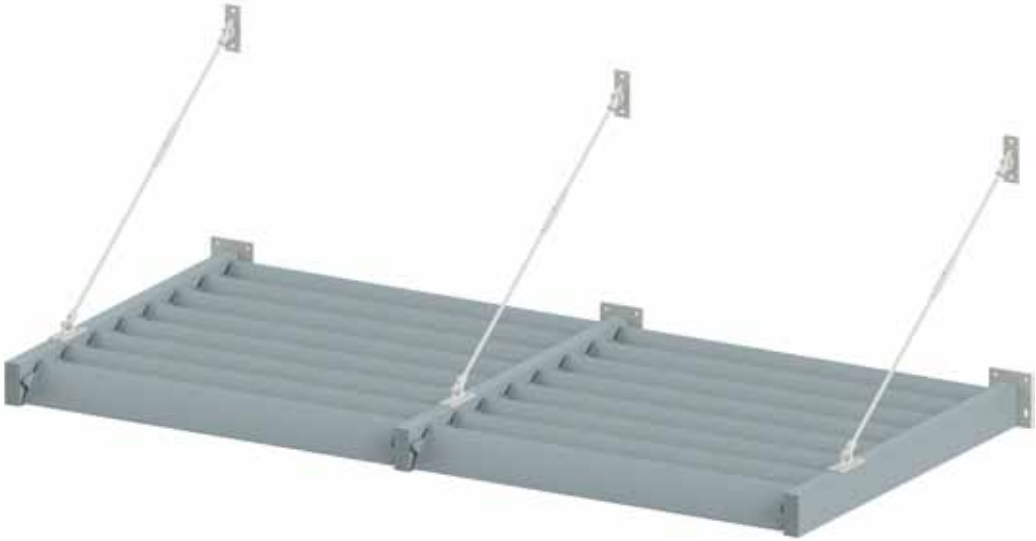
Slats
A-120, A-150, R-150 and R-180.

Installation of stainless steel spring lock

In installation Nº 1, 2, 3, 4, 5, 6 the placement of the spring lock will depend on the calculation results in the installation study.

Adjustable stainless spring lock M10.
050087

Installation with counter-plate lodged in the carrier profile 100x40 mm fixed with 8 screw ULS (ISO 7380+ washer) A2 M6x16, and fixed to wall by a support with two openings of ø 11 mm.
Resistance: ±100 mm.



Nº 7 carrier profile 65x40 mm

Structure
Carrier profile 65x40 mm.
(Page 44)

Familys
Fixed with selectable inclination.
(Page 116)

Fixed over structural profile.
(Page 132)

Slats
A-120, A-150, R-150 and R-180.
Installation with spring locks not available.

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