

The background image shows a modern industrial or commercial building with a light blue-grey facade. It features multiple rectangular windows with dark frames and several large, closed rolling shutter doors. One prominent rolling shutter door is visible on the right side, showing its coiled metal spring mechanism at the top.

TECHNICAL
DOSSIER

ROLLING SHUTTERS AND ROLLING DOORS



Giménez
Ganga®



**ROLLING
SHUTTERS
AND ROLLING
DOORS**

We always give solutions

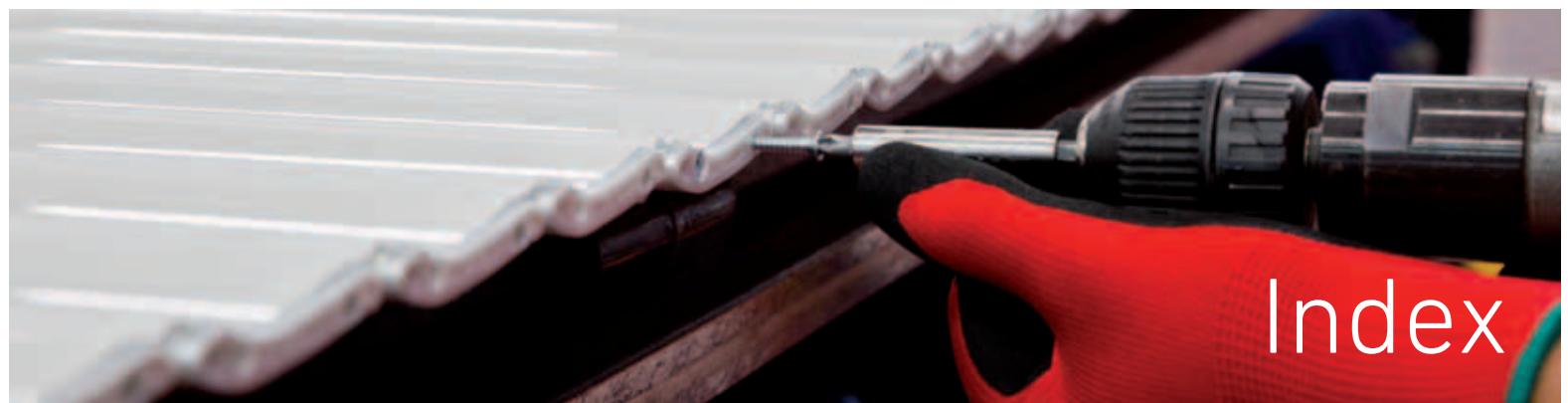
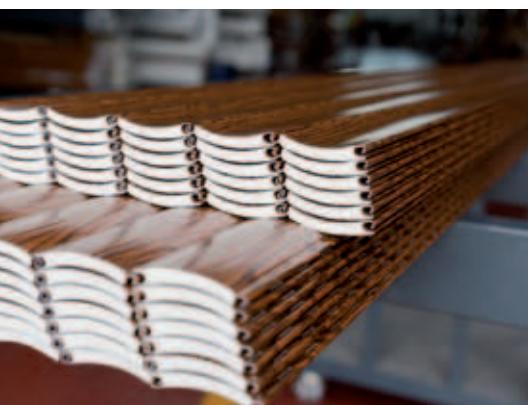
Giménez Ganga is a company that has been providing solutions for the window system industry, solar protection and decoration since 1959.

We manufacture and commercialise blinds and rolling shutters and rolling doors, aluminium and PVC boxes, mosquito screens, louvers, window and door shutters, ceiling coverings, folding doors, blinds and curtains, awnings, pergolas and Alicantina blinds.



A vast catalogue that is the product of initiative and inquisitiveness, arising from the need to open up new pathways. Along these pathways, we remain true to ourselves, always knowing that we exist thanks to our clients.

We adapt to new times by investing and innovating to attain continual improvement in production and management processes, optimising our professionals' knowledge so that they can perfectly assess the client and always give them the best solution.



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aluminium slats

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aluminium slats

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slats

Rolling shutters and rolling doors

Our experience in manufacturing slats and boxes allows us to offer effective solutions for all types of closure systems, guaranteeing high resistance and quality, as well as perfect adaptation to each need and space.

At Giménez Ganga, we produce a wide range of profiled aluminium, extruded aluminium and extruded PVC, as well as aluminium and PVC boxes.

This is all thanks to the great human and technological resource potential we have, allowing us to offer this wide variety with minimum manufacture and service time.

In this regard, our profiled aluminium plant has 8 slat profiling lines, plus 1 new one for casings. All lines are totally automated, with their corresponding cutting, die-cutting and packaging modules.

The extruded aluminium production centre has 3 automated extrusion lines with cutting-edge technology so as to attain

high quality for our extruded slats. The vertical lacquer system has the Qualicoat, Qualideco and Qualanod certifications, providing totally trustworthy lacquering against environmental corrosion.

Lastly, on the 8 PVC extrusion lines, we manufacture all of our PVC slats and casings at a centre where energetic efficiency is in the spotlight.

It should be noted that this latter production centre manufactures slats or Euroblock and Eurodecor boxes, which are ideal for new buildings and to renovate houses thanks to their acoustic and thermal insulation properties.

These capacities allow us to offer a wide range of products, with the highest quality standards, as certified by this technical file.



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Technical aspects

At Giménez Ganga, we understand that quality is the commitment to offer guarantee solutions to all of our clients.

Solutions that have converted to a wide range of models of slats and boxes that adapt to any project.



As such, in order to guarantee quality, all of our products undergo tests to certify that they meet the requirements necessary for commercialisation.

Additionally, for further information, all accessories and compatibilities for the different models available are shown.



CE Mark

Giménez Ganga obtains and maintains the necessary conformity for their slats with the essential requirements established by the European Union.

With a company policy that guarantees a quality product, Giménez Ganga has the technical documentation necessary to verify that the products meet with the corresponding CE marking. Information is also supplied that bears witness to the specified construction characteristics and guarantees that the values stated from the initial test are maintained.

What is more, the product comes with its respective identifying, exclusive label.

The **foam filled roll formed aluminium slats and PVC slats** were developed and manufactured according to the chapters in EN-13659:2004+A1:2008.

On the other hand, **extruded aluminium safety doors and slats** were developed and manufactured according to the chapters in EN-13241-1:2003+A1:2011.

Additionally, the development and manufacture of these products are aligned, given that they fulfil the **European Construction Product Regulation N° 305/2011**, as well as the scope of application of the activation system that they have, such as motorisation and automations according to Guidelines: 2014/30/UE regarding Electromagnetic compatibility, 2014/35/UE regarding Low voltage and 2014/53/UE Radio electric equipment and telecommunication terminal equipment.

■ ENVIRONMENTAL POLICY

Giménez Ganga is a company that provides solutions for solar protection systems, whose purpose is to promote well-being and energetic savings for those who benefit from our products.

This is why sustainability and energetic efficiency have such a fundamental role in the idiosyncrasy of our productive processes. We apply a **strict environmental policy**, in line with the company's social responsibility policy.

We use sustainable, totally reusable materials, such as aluminium, which is used in practically all of our products. This metal can be absolutely recycled, its properties and services kept intact. The extrusion plant is also equipped with purification stations that minimise the impact of waste waters in the lacquer and anodising processes.

Another greatly important material in our products is PVC, where the raw materials used are of the highest quality. Of note is the fact that they are totally lead-free as a stabilising agent. The PVC extrusion plant has excellent filtration, which along with the reduced handling of chemical products, makes for a clean environment that guarantees a totally healthy setting for users.

■ BENEFITS STATEMENT

Benefits statement for different models of Giménez Ganga slats.

DdP N° PE/37/2013 RPC Rolling shutter Alugix-45

Giménez Ganga.

DECLARACIÓN CE DE PRESTACIONES

DdP N° PE/02/2013 RPC

1.- Identificación del Producto: Alugix-45
 2.- Nombre y dirección del fabricante:
GIMÉNEZ GANGA S.L.U. www.gimenezganga.es
 Pd. Ind. 'El Castillo', Ciferna, 4, 03630 SAX (ALICANTE), ESPAÑA
 3.- Uso previsto: Persianas para la edificación
 4.- Sistema de evaluación: Sistema 4
 5.- Organismo notificado: No procede
 6.- Prestaciones declaradas

Características esenciales	Alto x Ancho (mm)	Prestaciones
Resistencia al viento	1450 x 1800	Clase 6
	1450 x 2100	Clase 5
	1450 x 2500	Clase 4
	1450 x 3000	Clase 3
	1450 x 3500	Clase 2
	2255 x 1600	Clase 6
2255 x 1900	Clase 5	
2255 x 2300	Clase 4	
2255 x 2900	Clase 3	
2255 x 3500	Clase 2	

Sustancias peligrosas: Exento de sustancias peligrosas en base a la norma EN 13559:2004+A1:2008. Las prestaciones del producto identificado en el punto 1 son conforme punto 6. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) 305/2011, bajo la única responsabilidad del fabricante indicado en el punto 2. Firmado por y en nombre de GIMÉNEZ GANGA S.L.U.

Sax, 1 de Julio de 2013 Francisco Gómez
 Francisco Responsable



Giménez Ganga.

DECLARACIÓN CE DE PRESTACIONES

DdP N° PE/37/2013 RPC

1.- Identificación del Producto: Alugix-45
 2.- Nombre y dirección del fabricante:
GIMÉNEZ GANGA S.L.U. www.gimenezganga.es
 Pd. Ind. 'El Castillo', Ciferna, 4, 03630 SAX (ALICANTE), ESPAÑA
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	1450 x 2500	Clase 4
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Sax, 1 de Julio de 2013 Francisco Gómez
 Francisco Responsable



Giménez Ganga.

DECLARACIÓN CE DE PRESTACIONES

DdP N° PS/16/2013 RPC

1.- Identificación del Producto: PS-64
 2.- Nombre y dirección del fabricante:
GIMÉNEZ GANGA S.L.U. www.gimenezganga.es
 Pd. Ind. 'El Castillo', Ciferna, 4, 03630 SAX (ALICANTE), ESPAÑA
 3.- Uso previsto: Puerta industrial, comercio o de garaje sin sistema de control de llaves
 4.- Sistema de evaluación: Sistema 4
 5.- Organismo notificado: No procede
 6.- Prestaciones declaradas

Características esenciales	Alto x Ancho (mm)	Prestaciones	Norma Armonizada
Resistencia al viento	1600 x 1022	Clase 6	EN 13559:2004+A1:2008
	1600 x 1200	Clase 5	
	1600 x 1400	Clase 4	
	1600 x 1600	Clase 3	
	1600 x 1800	Clase 2	
	2250 x 1000	Clase 6	
2250 x 1640	Clase 2		

Sustancias peligrosas: Compuesto de PVC-U no clasificado libre de plomo. Las prestaciones del producto identificado en el punto 1 son conforme a las declaradas en el punto 6. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) 305/2011, bajo la única responsabilidad del fabricante indicado en el punto 2. Firmado por y en nombre de GIMÉNEZ GANGA S.L.U.

Sax, 11 de Noviembre de 2013 Francisco Gómez
 Francisco Responsable



Giménez Ganga.

DECLARACIÓN CE DE PRESTACIONES

DdP N° PE/26/2014 RPC

1.- Identificación del Producto: Mini-40 Especial PVC
 2.- Nombre y dirección del fabricante:
GIMÉNEZ GANGA S.L.U. www.gimenezganga.es
 Pd. Ind. 'El Castillo', Ciferna, 4, 03630 SAX (ALICANTE), ESPAÑA
 3.- Uso previsto: Persianas para la edificación
 4.- Sistema de evaluación: Sistema 4
 5.- Organismo notificado: No procede
 6.- Prestaciones declaradas

Características esenciales	Alto x Ancho (mm)	Prestaciones	Norma Armonizada
Resistencia al viento	1600 x 1022	Clase 6	EN 13559:2004+A1:2008
	1600 x 1200	Clase 5	
	1600 x 1400	Clase 4	
	1600 x 1600	Clase 3	
	1600 x 1800	Clase 2	
	2250 x 1000	Clase 6	
2250 x 1640	Clase 2		

Sustancias peligrosas: Compuesto de PVC-U no clasificado libre de plomo. Las prestaciones del producto identificado en el punto 1 son conforme a las declaradas en el punto 6. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) 305/2011, bajo la única responsabilidad del fabricante indicado en el punto 2. Firmado por y en nombre de GIMÉNEZ GANGA S.L.U.

Sax, 29 de Julio de 2014 Francisco Gómez
 Francisco Responsable



DdP N° PE/02/2013 RPC Rolling shutter Alugix-39,5

DdP N° PS/16/2013 RPC Rolling door PS-64

Slats tests

The aluminium and PVC slats that Giménez Ganga produces and manufactures have an advanced design to meet the highest quality controls. They are manufactured with the most demanding finishes and raw materials on the market, using the most cutting-edge technologies.

In this way, we have the **conformity certifications** and tests performed on all of the slat models that meet the requirements to guarantee the **highest services and technical characteristics**.

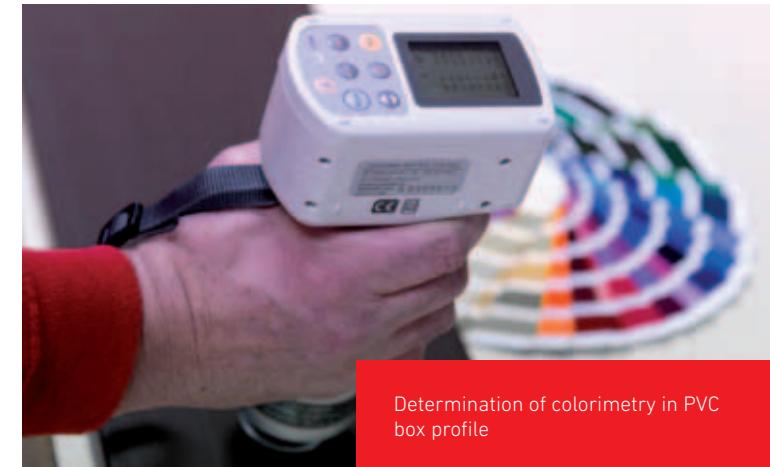
■ R+D+i

Giménez Ganga's R+D+i department is constantly working on developing new products to meet the strictest requirements on the current window system market. They are focused on the requirements needed by the client, especially for architects on projects where energetic savings, sustainability and insulation concepts are of the utmost importance.

The result of this arduous work is the wide range of profiled aluminium, extruded and PVC slat models.

In addition to the functionality provided by this material is the aesthetic for façades, thanks to the RAL colour range available, which makes for finishes that match the different components of the blinds.

The process to attain a quality product at Giménez Ganga doesn't stop here. At the Sax central's facilities, the R+D+i team has the instruments necessary to study the behaviour of each one of the models manufactured under atmospheric phenomena and their life cycle.



Determination of colorimetry in PVC box profile

To this end, performing different trials are fundamental to improve services and to obtain the best performance in blind materials.

Giménez Ganga has a sophisticated technological centre where all tests and trials are performed to certify the guarantee for all systems manufactured.

There is a certified testing team to perform resistance tests against wind, according to standard UNE-EN 1932, as well as specialised technical personnel for use.

This way, each and every one of the blind models manufactured by the company are satisfactorily classified, for all widths and different typologies of guides installed, both in Spain and in the rest of the European Community.

EN 13659:2004+A1:2008 "SHUTTERS, PERFORMANCE REQUIREMENTS INCLUDING SAFETY"

■ TESTS

According to **EN 1932:2013** «Resistance to wind loads, method of testing and performance criteria».

According to **EN 13363-1:2003+A1:2007** «Solar protection devices combined with glazing - Calculation of solar and light transmittance - Part 1: Simplified method».

According to **EN 13125:2001** «Shutters and blinds - Additional thermal resistance - Allocation of a class of air permeability to a product».

■ CLASSIFICATION

According to **EN 13659:2004+A1:2008** «*Shutters, performance requirements including safety*».

Wind resistance of a shutter is characterized by its capacity to resist specific loads that simulate the action of wind pressure and depression. Wind resistance is specified within the classes defined by threshold values of the following pressures:

"p" Nominal pressure Represents wind pressure applied to the blind by which it must not be deformed or damaged which may affect the correct function.

"1,5 p" Safety pressure Represents wind pressure applied to the blind by which no damage will be observed that may be dangerous for the people: break, displacement of devices, locking or blocking.

■ WIND RESISTANCE CLASSES

Wind resistance blinds are evaluated by applying an even distributed load on the whole enclosure, thus representing wind pressure:

CLASS	V-0	V-1	V-2	V-3	V-4	V-5	V-6
Nominal pressure test (Pa) or (N/m ²)	<50 Pa	50 Pa	70 Pa	100 Pa	170 Pa	270 Pa	400 Pa
Safety pressure 1,5 p (Pa) or (N/m ²)	<75 Pa	75 Pa	100 Pa	150 Pa	250 Pa	400 Pa	600 Pa
Pressure safety speed 1,5 p (Km/h)	<39	≈ 39,8	≈ 46	≈ 56	≈ 78	≈ 92	≈ 112

■ PARAMETERS OF SITUATION

Location

Depending on the height at which our blind is located: Being from 0-6 m, 6 m to 18 m, 18 m to 28 m, 28 m to 50 m and 50 m to 100 m above ground.

Land

- 1.** Seaside, lakes traveled by the wind over a distance of at least 5 km, flat countryside unhindered.
- 2.** Countryside with hedges, small farms, houses and occasional trees.
- 3.** Suburban industrial areas and permanent forests.
- 4.** Urban areas in which buildings occupy at least 15% of the area and have an average height greater than 15 m.

$$\text{WIND FORCE (Pa)} = \frac{1}{2} \times r \times v^2$$

1 Pa = 1 N/m²

r = density air = 1,225 kg/m³

v = speed air m/s

1 m/s = 3,6 km/h

Slat tests

■ ADDITIONAL THERMAL RESISTANCE ΔR

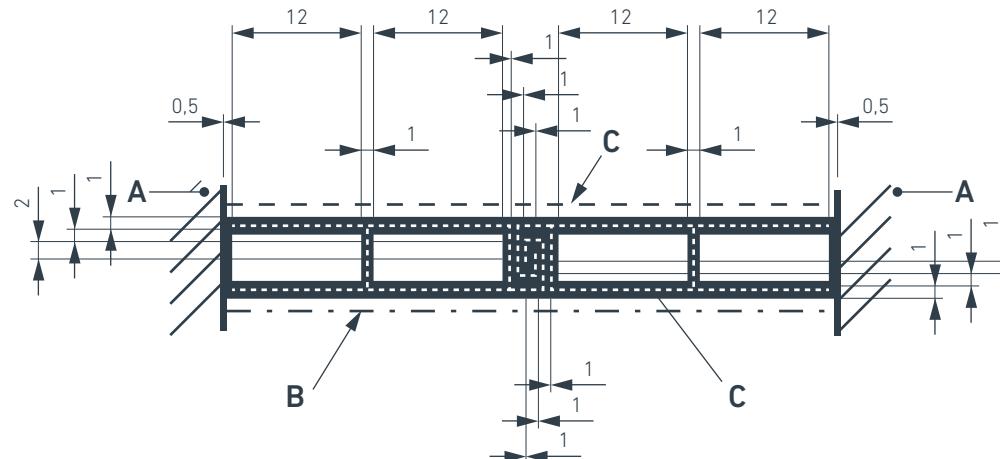
A solar protection system deployed fully in front of the window generates an additional air chamber characterised by an additional thermal resistance, designated as R (measured in $m^2 K/W$). The value of R is calculated according to EN 13125:2001 standards and depends mainly on the air permeability of the device and the thermal resistance of the curtain (designates R_{SH}).

CALCULATION METHOD

Determination of additional thermal resistance

The procedure for calculating the thermal transmittance of the rolling shutter slat is established according to EN ISO 10077-2: 2012 standards. The following diagram shows the contour conditions:

- A) Adiabatic limit
- B) Exterior contour
- C) Interior contour



The additional thermal resistance, R , is the thermal resistance caused by both the air gap between the shutter and the window, and the shutter itself. As defined in EN ISO 10077-1:2010: "Thermal performance of windows, doors and shutters - Calculation of thermal transmittance." Part 1: General Points" there are 5 kinds of air permeability with regard to the sun protection device, ranging from a "very high" permeability corresponding to class 1, to a "null" permeability corresponding to a class 5.

CLASS	AIR PERMEABILITY	ADDITIONAL THERMAL RESISTANCE ΔR ($m^2 K/W$)
1	Very high	0,08
2	High	$0.25 \cdot R_{SH} + 0.09$
3	Medium	$0.55 \cdot R_{SH} + 0.11$
4	Low	$0.80 \cdot R_{SH} + 0.14$
5	Null	$0.95 \cdot R_{SH} + 0.17$

The data needed to calculate the thermal resistance R_{SH} is obtained via the thermal transmittance U_{SH} obtained via calculation, statement: $1/U_{SH} = R_{SE} + R_{SH} + R_{SI}$.

For the vertical or inclined position with respect to the horizontal with an angle α such that $90^\circ - \alpha \geq 60^\circ$. The values of the surface resistors, R_{SI} and R_{SE} , should be:

$$R_{SI} = 0.13 \text{ m}^2 \text{ K/W}$$

$$R_{SE} = 0.04 \text{ m}^2 \text{ K/W}$$

CONTOUR CONDITIONS AND MATERIAL PARAMETERS

Characteristic values for calculating ΔR

The contour conditions used for the calculation are those described in Annex B of EN-ISO 10077-2:2012:

The reference temperature conditions are 20°C inside and 0°C outside.

POSITION	EXTERIOR R_{SE} ($m^2 \text{ K/W}$)	INTERIOR R_{SI} ($m^2 \text{ K/W}$)
Normal (flat surface)	0.04	0.13
The reference temperature conditions are 20°C inside and 0°C outside.	0.04	0.20

Emissivity will be taken as 0.9 in all cavities.

Slats tests

■ 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:

$$F_H = F_s \cdot (1-F_M) \cdot g + F_M \cdot 0,04 \cdot U_m \cdot \alpha$$

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 ($\text{W}/(\text{m}^2 \text{K})$).

α = 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.

Shade 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 solar 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.

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

Where:

τ_e is the solar transmittance of the blind or lattice.

ρ_s is the solar reflectance of the blind or lattice.

α_0 is the absorbance of the blind or lattice.

^e is the solar factor of the glazin

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:

$$0 \leq \tau_s \leq 0.5 \text{ y } 0.1 \leq \rho_s \leq 0.8$$

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

Exterior solar protection device		TRANSMITTANCE OF TOTAL ENERGY g_{tot}															
		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

EN 13241-1:2003+A1:2011 "INDUSTRIAL, COMMERCIAL AND GARAGE DOORS AND GATES"

■ TESTS

According to **EN 12444:2000** «*Industrial, commercial and garage doors and gates. Resistance to wind load. Testing and calculation*».

According to **EN 12605:2000** «*Industrial, commercial and garage doors and gates. Mechanical aspects. Test methods*».

According to **EN 12445:2000** «*Industrial, commercial and garage doors and gates. Safety in use of power operated doors. Test methods*».

■ SAFETY FACTORS FOR WIND LOADS

Safety factors to consider in the design of the doors with respect to their resistance to wind load.

The table shows, for each type of design outlined in **EN 12424**, charges related test, the fracture limit loads (applicable only to tests) and design loads.

■ DEFINITION OF TERMS

The terms are understood as follows:

Design Load rating values of reference for wind load as stated in the table.

Test Load applied load when tested without permanent deformation and is equal to a load x factor of 1.1.

Breaking Load Limit load to be applied when tested with permanent deformation but the door remains in place and that equals a rated load x factor of 1.1 x 1.25.

Load Calculation load to be considered for the calculation based on the stress and equals rated load x factor of 1.5.

CLASS	P-1	P-2	P-3	P-4	P-5
Load design (Pa)	300	450	700	1,000	> 1,000
Load test (Pa)	330	495	770	1.100	design load x 1.1
Load calculation (Pa)	450	675	1.050	1.500	design load x 1.5
Breaking load limit (Pa)	≥ 415	≥ 620	≥ 965	≥ 1.375	design load x 1.25
Wind speed limit load break (km/h)	≈ 93.7	≈ 114.5	≈ 142.9	≈ 170.6	> 170.6

REACTION TO FIRE TESTS FOR "BUILDING PRODUCTS"

■ TESTS

According to **UNE-EN-ISO 11925-2:2002** «*Ignitability of building products subjected to direct impingement of flame. Part 2: Single-flame source test*».

According to **UNE-EN-ISO 13823:2002** «*Building products excluding floorings exposed to the thermal attack by a single burning item*».

■ DEFINITION

This classification was carried out according to the procedures given in the standard **UNE-EN 13501-1:2007 + A1:2010** «*Fire classification of construction products and building elements*».

Part 1: Classification using data from reaction to fire tests.

■ DEFINITION OF THE CLASSIFICATION

Class A Product No Fuel.

Class A1 No permitted inflammation and must meet the criteria for mass loss and increased temperature. It must also meet the criteria for Higher Calorific Power.

Class A2 Allows an inflammation 20 sec. and must meet the criteria for mass loss and increased temperature. It must also meet the criteria for Higher Calorific Power.

Class B High limited contribution to fire. Combustible.

Class C Limited contribution to fire. Combustible.

Class D Average contribution to fire. Combustible.

Class E High contribution to fire. Combustible.

Class F No performance determined. Unclassified.

Slats tests

■ ADDITIONAL EXPRESSIONS

Regarding smoke emission:

Refers to the emission of fumes produced by the sample (opacity), calculating the amount and speed, depending on the values obtained have limits for the possible classification.

- s1** Would correspond to a sample which produces low smoke.
- s2** Would correspond to a sample which produces an average emission of smoke.
- s3** For products with high emission of smoke, when they don't meet the criteria for s1 and s2.

■ FALL OF DROPS

The observation of falling material or inflamed in the first 10 minutes of test particles allow the identification attributed to the material subscript «d», in the following way.

- d0** No drop of inflamed material is observed.
- d1** Drop of inflamed material with a persistent flame 10 seconds.
- d2** Drop of inflamed material with a persistent flame > 10 seconds.

Testing profiled aluminum slats with injected polyurethane.

SLATS WITHOUT LIGHT SLITS

Alugix-39'5, E-45, Alugix-45, Alugan-45, Alugix-50, Alugix-55, Alugix-546, Alugix-56, Alugix-56 2L PG, PS-78.

BEHAVIOR TO FIRE	SMOKE PRODUCTION	FLAME DROPS	CLASSIFICATION OF REACTION TO FIRE
B	s	2 d	0 Class B s2 d0

SLATS WITH LIGHT SLITS

Alugix-39'5, E-45, Alugix-45, Alugan-45, Alugix-50, Alugix-55, Alugix-546, Alugix-56, Alugix-56 2L PG.

BEHAVIOR TO FIRE	SMOKE PRODUCTION	FLAME DROPS	CLASSIFICATION OF REACTION TO FIRE
C	s	2 d	0 Class C s2 d0

■ REACTION TO FIRE TESTS

Reaction to Fire tests for different models of foam filled roll formed aluminium slats manufactured by Giménez Ganga.

Dossier n° 10/101937-1453 MS Partie 2

Applus
LGAU

Annexe 1:
Bande d'aluminium profilé avec mousse de polyuréthane injectée à l'intérieur. Matériel sans perforation entre les lames.

Bilatéral : 13.12.10
Dossier numéro : 10/101937-2242 Partie 2 Version Française
Référence du rapport : GIMENEZ GANGA, S.L.U.
Pte. Ind. El Caudillo
C/Ventura, nº4
03630 Sax (Alicante)

V7
Page 1

Annexe 2: Comportement au feu

1. CARACTÉRISTIQUES DU PRODUIT

Annexe 3:
Bande d'aluminium profilé avec mousse de polyuréthane injectée à l'intérieur. Matériel avec perforation entre les lames.
Référence commerciale du produit : Alugix-39.5

Caractéristiques techniques :

Epaisseur aluminium	0,25 mm
Epaisseur mousse	0,2 mm
Housses de couverture	20,3 mm
Poids par mètre carré	1,4 kg/m ²
Densité de polyuréthane	50,3 kg/m ³

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Page 2

Dossier n° 10/101937-2242 Partie 2

Applus
LGAU

Annexe 1:
Bande d'aluminium profilé avec mousse de polyuréthane injectée à l'intérieur. Matériel sans perforation entre les lames.

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 2: Comportement au feu

2.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 3: Comportement au feu

3.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 4: Comportement au feu

4.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 5: Comportement au feu

5.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 6: Comportement au feu

6.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 7: Comportement au feu

7.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 8: Comportement au feu

8.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 9: Comportement au feu

9.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 10: Comportement au feu

10.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 11: Comportement au feu

11.2- Résultats des essais

Méthode d'essai

CRITÈRES CLASSE B	N° ESSAIS	MOYENNE	CONFORMITÉ
UNE-EN-ISO 1182-2-2002 Fz < 150 mm dans les 60 s	12	Fz < 150 mm	OUI
FRIGA 1000°C 100 W/m	3	150,34	NON
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,11	OUI

CRITÈRES CLASSE C

CRITÈRES CLASSE C	N° ESSAIS	MOYENNE	CONFORMITÉ
FRIGA 1000°C 100 W/m	3	150,34	OUI
LPS < bord de l'échantillon	3	< le bord	OUI
Thermal 1,2,30	3	3,81	OUI

CRITÈRES sous-classe X2

CRITÈRES sous-classe X2	N° ESSAIS	MOYENNE	CONFORMITÉ
TSP < 50 mm ²	2	85,58	NON
CRITÈRES sous-classe X2'	3	31,63	OUI
TSP < 100 mm ²	3	85,58	OUI
CRITÈRES sous-classe X2''	3	85,58	OUI

Chute de gouttes / pertes de lames dans les 60 s

CRITÈRES sous-classe X2''	N° ESSAIS	MOYENNE	CONFORMITÉ
Chute de gouttes / pertes de lames dans les 60 s	3	NON	OUI

Annexe 12: Comportement au feu

<b

Slats tests

THERMAL TRANSMITTANCE TESTS "THERMAL PERFORMANCE OF WINDOWS, DOORS AND SHUTTERS"

■ TESTS

According to **UNE-EN 12412-2:2005** «*Thermal performance of windows, doors and shutters*».

■ DETERMINATION

Determination of thermal transmittance by hot box method.

■ TEST SUBMITTED OBJECTS

The samples were supplied by the company Giménez Ganga and received by the CSTB mail on 3rd October, 2011. There are 21 identical slats of dimensions 19,5x4,5 cm with one aluminium side and the other in white, and are referenced as follows:

CSTB REFERENCE	PRODUCT REFERENCE	COMMENT
CPM 11/260 - 35318	Slat Alugix-45 Bicolor	The test has been carried out in 3 slats together in the aluminium side

■ RESULTS

The thermal transmittance values are given (in%) in the table below. Uncertainty is estimated at 3%.

SAMPLE OF REFERENCE	SIDE	TRANSMITTANCE %
CPM 11/260 - 35318	Aluminium	25

The test report N° CPM 11/260-35318 granted by CSTB on 5th October 2011 after tests made on 4th October 2011 allow a value determination of "E" = 0,205 in the bicolor profile Alugix-45.

■ TABLE OF DEFINITION ΔR (CLASE 4) DEPENDING ON THE VALUE OF "E"

The definition table verifies that with a value of E equal to 0,25, the bicolor slat Alugix-45 reaches a R less than of 0,25.

VALUE OF "E"	0,90	0,80	0,70	0,60	0,50	0,40	0,30	0,20	0,10
Hro	5,14	5,14	5,14	5,14	5,14	5,14	5,14	5,14	5,14
Ha	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50
Hr	4,63	4,11	3,60	3,08	2,57	2,06	1,54	1,03	0,51
Rs	0,14	0,15	0,16	0,18	0,20	0,22	0,25	0,28	0,33
R m ² K/W (Class 4)	0,14	0,15	0,16	0,18	0,20	0,22	0,25	0,28	0,33

■ REPORT TESTS N° CPM 11/260-35318

Determination of Thermal Transmittance for the sample supplied by Giménez Ganga.

Det. Thermal Transmittance (page 2)

CSTB
Le futur en construction

DÉPARTEMENT ENVELOPPE ET REVÈTEMENTS
Division Caractérisation Physique des Matériaux

RP/11/260-35318

RAPPORT d'ESSAIS N° CPM11/1
DETERMINATION de l'EMISSION HEMISPHERIQUE d'ECHANTILLON
de LAMES de VOLET ROUL

Ce rapport d'essai caractérise les échantillons fournis par la société GIMENEZ GANGA. Il concerne une commande effectuée le 13/07/2011 et livrée le 13/07/2011 à l'adresse : 28 RUE JEANNE D'ARC 26000 GRENOBLE. Les échantillons ont été prélevés dans la consigne de la commande n° 115-28 le 04/08/2011.

En cas d'émission du présent rapport sur support physique nous ferme de support papier ou de ligne, ce rapport sera considéré au CSTB comme n'ayant pas été délivré.

La réimpression de ce rapport sous sa forme intégrale.
Se contient 4 pages.

A LA DEMANDE DE : GIMENEZ GANGA
Poligono industrial
Calle Roma 4
ES-03630 SAX (A)

CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT
ÉTABLISSEMENT DE GRENOBLE - 28 RUE JEANNE D'ARC - 26000 GRENOBLE
TÉL : 04 76 78 25 25 - FAX : 04 76 44 28 48 - T. 04 76 44 28 48
Site Internet : www.cstb.fr | Accès direct : cstb.fr/cpt | Courriel : cpt@cstb.fr
CONSEIL D'INVESTIGATION INDUSTRIEL ET COMMERCIAL - RCS GRENOBLE 319 000 000
MARNE-CA-VALLÉE - PARIS - GRENOBLE - MANTES - SÉGÉAN-ANTIBES

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- 2. TEXTES DE RÉFÉRENCE
- 3. DATE D'ESSAI
- 4. OBJET SOUMIS A L'ESSAI
- 5. PRÉPARATION DES ÉCHANTILLONS
- 6. MÉTHODE DE MESURE
- 7. APPAREILLAGE
- 8. RÉSULTATS

Rapport d'essais n° CPM 11/260-35318

CSTB
Le futur en construction

Rapport d'essais n° CPM 11/260-35318

1. OBJET
Déterminer l'émissivité hémisphérique sur des échantillons rouillant.

2. TEXTES DE RÉFÉRENCE
Procédure CSTB.

3. DATE D'ESSAI
Essais réalisés le 4 octobre 2011.

4. OBJET SOUMIS A L'ESSAI
Les échantillons ont été fournis par la société GIMENEZ GANGA par courrier le 3 octobre 2011. Ils sont au nombre de 21, soi identiques de dimensions 19,5 cm x 4,5 cm avec une face alblanche, et sont référencés de la façon suivante :

Référence CSTB	Référence produit	La me sur 3 la
CPM11/260-35318	lame M-45 Bicolore	

Fait à Grenoble

Technicienne chargée des essais
Signature : 
Maud PICHARD

Responsable : 
Frédéric

RD émission TTIR100 V2 - Sept. 2010

CSTB
Le futur en construction

Rapport d'essais n° CPM 11/260-35318

Page 4/4

5. PRÉPARATION DES ÉCHANTILLONS
Les échantillons n'ont subi ni préparation, ni nettoyage.

6. MÉTHODE DE MESURE
Une surface hémisphérique maintenue à 100°C émet un rayonnement infrarouge diffus vers l'échantillon. Un détecteur mesure la réflexion infrarouge de la surface de l'échantillon. L'émissivité de l'échantillon est mesurée après calibration du détecteur avec des échantillons étoffés (forte et faible valeurs d'émissivité). Les mesures sont réalisées en trois endroits différents et le résultat correspond à la valeur moyenne de ces mesures.

7. APPAREILLAGE
Les mesures d'émissivité hémisphérique sont réalisées avec un émissomètre de marque INGLAS et de type TIR 100-2.

8. RÉSULTATS
Les valeurs d'émissivité hémisphérique sont données (en %) dans le tableau ci-dessous. L'incertitude estimée est de 3 %.

Référence échantillon	Face	Emissivité %
CPM11/260-35318	aluminium	25

Tableau 1 : Emissivité hémisphérique en %

FIN DE RAPPORT

RD émission TTIR100 V2 - Sept. 2010

Det. Thermal Transmittance (page 1)

Det. Thermal Transmittance (page 3)

Det. Thermal Transmittance (page 4)

Aluminium and powder coated

■ POLYURETHANE FOAM DENSITY

According to the analysis carried out in the laboratories of the company Elastogram S.A. established in the town of Rubí and samples of our slats made with rigid polyurethane foam BASF, we have obtained the following results:

Density according

UNE EN ISO 845 de 75-250 kg/m³

Dimensional stability according

EN 1604 a 80°C ± 0.5 %

Dimensional stability according

EN 1604 a -20°C

These results were obtained after subjecting samples slat at temperatures of 80 °C and 20 °C for 24 hours.

BASF foam fully fills the cavity of the blade providing a high mechanical strength, torsional strength and also a certain thermo-acoustic properties.

Furthermore, the foam is waterproof, resistant to aging and biochemically inert against molds.

■ ALUMINIUM BAND

The aluminum strip used for making **E-45** model corresponding to the 3005 alloy, temple H 46, thickness 0.23 mm.

The aluminum strip used for making **Alugix-45** model corresponding to the 3005 alloy, temple H 46, thickness 0.25 mm.

The aluminum strip used for making **Alugix-39'5**, **Alugan-45**, **Alugix-50**, **Alugix-546**, **Alugix-56** and **Alugix-56 2L PG** model corresponding to the 3005 alloy, temple H 46, thickness 0.27 mm.

The aluminum strip used for making **Alugix-55** model corresponding to the 3005 alloy, temple H 46, thickness 0.30 mm.

The aluminum strip used for making **PS-78** model corresponding to the 3005 alloy, temple H 46, thickness 0.48 mm.

■ METALLIC SUPPORT

ALLOYS EN AW-3005 (AL Mn1 Mg0,5) de HYDRO - According to EN 573-3.

CHEMICAL COMPOSITION:

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al
(%)	0.6	0.7	0.30	1.0-1.5	0.20 - 0.60	0.10	-	0.25	0.10 Rest

TEMPLE EN AW-3005 (AL Mn1 Mg0,5) de HYDRO - According to EN 1396.

MECHANICAL PROPERTIES AFTER THE LACQUERED:

ALLOY	TEMPLE	BREAKING LOAD			LIMITED ELASTICITY	ELONGATION
		Rm (MPa)	Rp 0.2 (Mpa)	A50 (%)		
3005	H46	Maximum	230			
		Minimum	185	>160		>2

DIMENSION AND TOLERANCE

According to 1/2 EN 485-4.

THICKNESS		BAND WIDTH	
METAL THICKNESS (mm)	TOLERANCE (mm)	WIDTH (mm)	TOLERANCE (mm)
0.23 - 0.25 - 0.48	± 0.02	100 - 300	- 0/+0.3

PRIMER		
REVERSE SIDE COATING	ACCORDING TO	TRANSPARENT BLUSH POLYESTER BASED
Film thickness dry	DIN 13523-1	4±2 microns
Solid content	DIN EN ISO 3251	47-51 %
Density wet	DIN 532172-3	0.99-1.03
Colour	DIN EN 13523-3 / EN 1396	Transparent bluish
Pencil hardness	DIN EN 13523-4	F - H
Bending test	DIN EN 13523-7	TO
Impact test	DIN EN 13523-5/6	GTO / Min. 4 Julios
Substrate		Hot AC Pre-treated aluminium

POWDER COATED	
Pretreatment	a) Stretching b) Alkalic degreasing c) Chromated Cr ⁶⁺
Powder coated	a) Top side coated with PUR/PA thickness of coating depends on colour and gloss ca. 22 µm b) Reverse side protective coated, foamable with PUR

Properties of powder coated

Bending	DIN EN 13523-7	T 0.5 no loss of adhesion after tape test T 1 no cracks
Estampado cupping	DIN EN 13523-6	No loss of coating after tape test up to cracks on metal
*Salt spray test after 500 and 1,000 hours	DIN EN 13523-8	No blistering or loss of adhesion on even, untreated areas max. 3 mm Infiltration at the edges and max. 2 mm an the cut
Water storage	DIN EN 13523-9	No blistering and no loss of adhesion after 1,000 hours
Resistance to abrasion		< 30 mg of abrasion after 1,000 revolutions to 2 x 500 g the weight of the film Roll type CS 10



MAINTENANCE

In order to prevent rusting, we recommend periodically cleaning the materials with water and neutral soap.

The minimum frequency is once per year, or more often for materials exposed to aggressive environments (ocean, industrial, presence of suspended dust, etc.).

It is important to rinse with plenty of water after using detergents to prevent salt formation on the slats' surface.

This periodic cleaning, appropriately carried out, eliminates exogenous agents on the slat's surface that may attack the covering and the aluminium, lengthening the life span of the blind and its aesthetic elements.

*The aluminium band used to manufacture our profiled slats has the highest anti-rust properties.

Giménez Ganga certifies that its products are manufactured by following a strict internal quality control, and that all of the materials used in manufacture are subject to AE-NOR – ISO standards.

Extruded aluminium

■ EXTRUDED ALUMINIUM DETAILS

The aluminium profiles that we use in our factories are extruded with 6060/6063 alloys and a T5 Temper, and their finishes are produced following the specifications of the Qualicoat, Qualideco and Qualanod quality brands.

These alloys and their tempering are suitable for the entire range of profile products for construction and metalwork, as well as architectural and structural applications for general use where a decorative application is sought.

■ EXTRUSION PROCESS

To perform extrusion, the aluminium is supplied in cylindrical ingots, which are also known as "billets". The extrusion process involves applying heat and pressure to the aluminium cylinder (or "billet") by passing it through a mould (or "matrix"), to achieve the desired shape. Each type of profile has a suitable "mould", known as its matrix, which determines its shape.

Once the aluminium has been extruded, ageing and tempering processes are applied to achieve the properties prescribed for each application.

■ ALUMINIUM TREATMENTS AND FINISHES

The aluminium is marketed with a wide variety of finishes and options, with some of the most prominent listed below.

ANODISED

The aluminium forms a thin film of aluminium oxide on its surface after being extruded, to protect itself from the action of atmospheric agents; this has a more or less regular thickness of around 0.01 microns and grants it very slight anti-oxidation and

anti-corrosion properties.

There is an electrolytic chemical process known as anodising that allows us to artificially obtain oxide films that are much thicker and offer better protection than naturally-formed layers.

Depending on the desired layer thickness, there are two anodising processes:

- Decorative, coloured anodising.
- Surface-strengthening anodising.

The advantages of anodising are:

- An anodised outer layer is more durable than one obtained via painting.
- An anodised layer cannot peel, as it is part of the metal itself.
- Anodising gives aluminium highly variable, decorative looks by allowing it to be coloured in whatever shades you wish.
- Sunlight doesn't affect anodised layers and as such, cannot damage them.

LACQUER

Lacquer, which is applied to aluminium profiles, consists of a powdered paint applied to the aluminium surface via an electrostatic process. The most popular paints for such applications are polyester-based, due to their high resistance to light and corrosion.

There is an infinite variety of colour and textures.



PVC

■ PVC SPECIFICATIONS

PVC is the result of the polymerisation of vinyl chloride monomer to polyvinyl chloride.

It is the most versatile plastic derivative and can be produced via four different processes: suspension, emulsion, mass and solution.

It can be characterised as ductile and strong; it offers dimensional stability and environmental resistance, and furthermore is recyclable by various methods.

- It has a high resistance to abrasion, along with a low density, good mechanical strength and impact, meaning it is ideal (and commonly used) for construction.
- It is stable and inert, and as such is often used for applications where hygiene takes priority.
- Highly resistant and durable.
- Because of the chlorine atoms that make up PVC polymer, it does not catch fire easily or burn independently, and stops burning once the heat source is removed. PVC profiles are used in construction for coatings, ceilings, doors and windows, due to their low flammability.
- An excellent thermal and electrical insulator.
- A wide range of hardnesses.
- It is highly resistant to corrosion.

■ REGULATION APPLIED to the manufacture of PVC slats

UNE 53141:2008 - Characteristics of non-plasticised polyvinyl chloride (PVC-U) profiles for rolling shutter slats.

This standard applies to all rolling shutter slats, blinds and doors, whatever their design, made by PVC-U extrusion, which are normally used in construction.

All our PVC slats are manufactured in compliance with the minimum requirements that must be met by non-plasticised polyvinyl chloride (PVC-U) profiles for the manufacture of rolling shutter slats, as well as some of the internal tests and methods used to determine such characteristics.

■ PVC SLAT TESTS

Determination of appearance and UNE colour: 53141:2008.

Determination of UNE height: 53141:2008.

Determination of weight per UNE unit of length: 53141:2008.

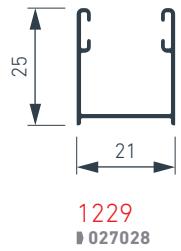
Determination of resistance to UNE coupling: 53141:2008.

Determination of thermal shrinkage UNE EN 479:1996.

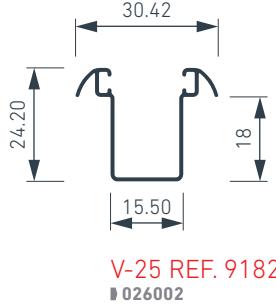
Determination of impact properties via Charpy tests UNE EN ISO 179-1:2011.

Determination of resistance to aging in artificial weather UNE EN 513:2000.

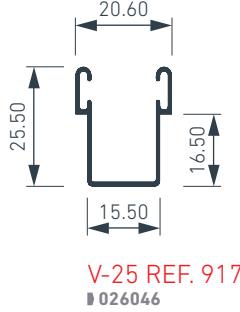
ALUMINIUM GUIDE CHANNELS



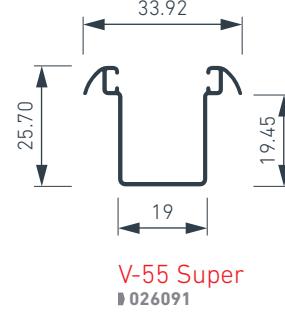
1229
■ 027028



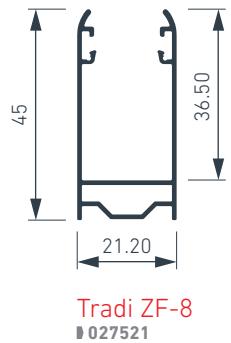
V-25 REF. 9182
■ 026002



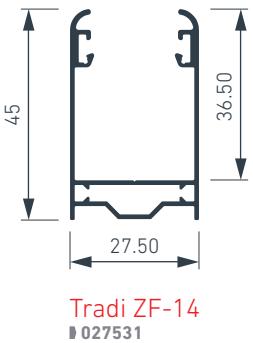
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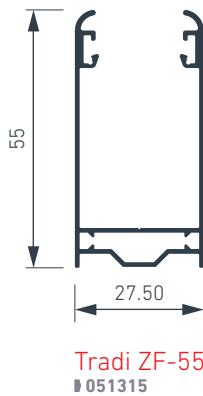
V-55 Super
■ 026091



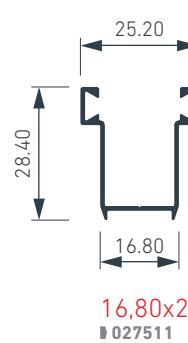
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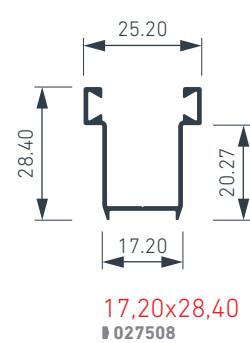
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■ 027531



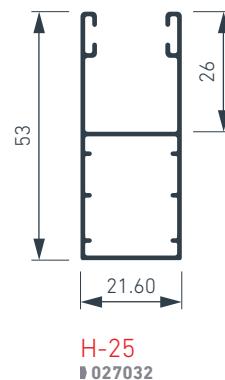
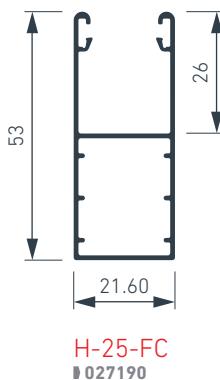
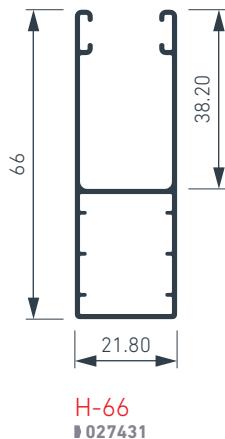
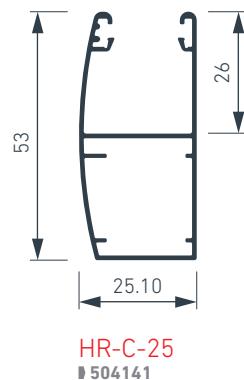
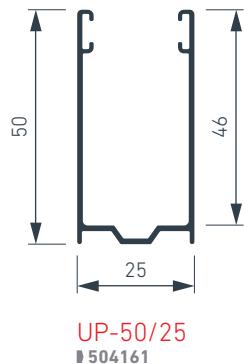
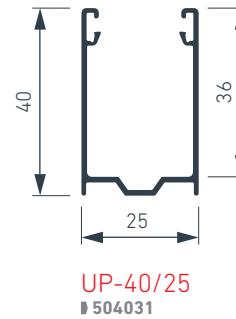
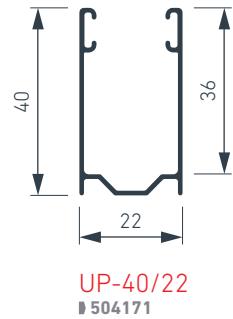
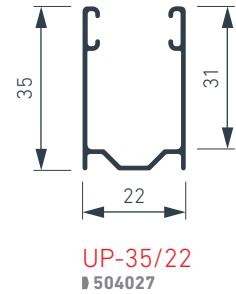
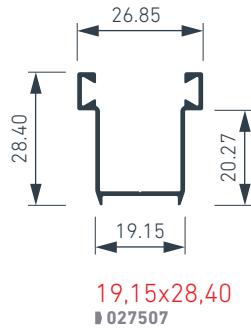
Tradi ZF-55
■ 051315



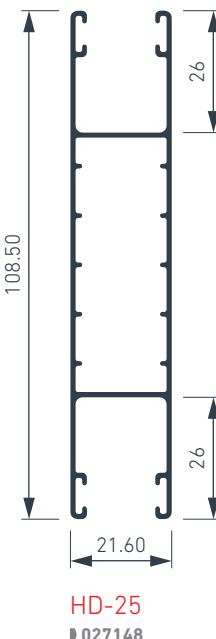
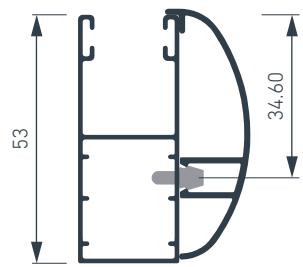
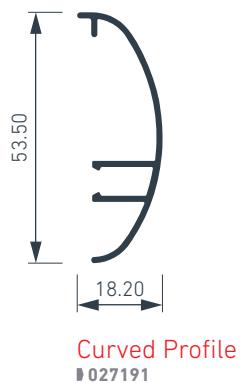
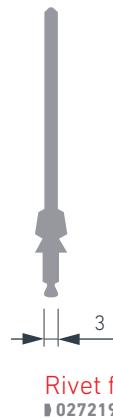
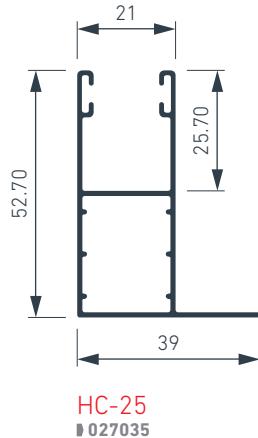
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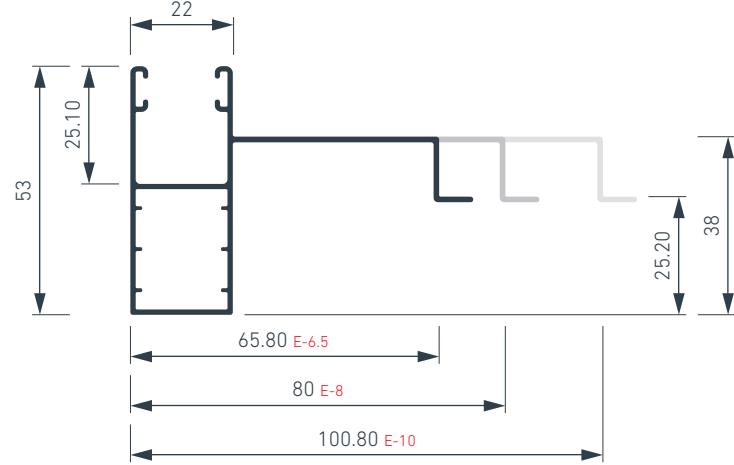
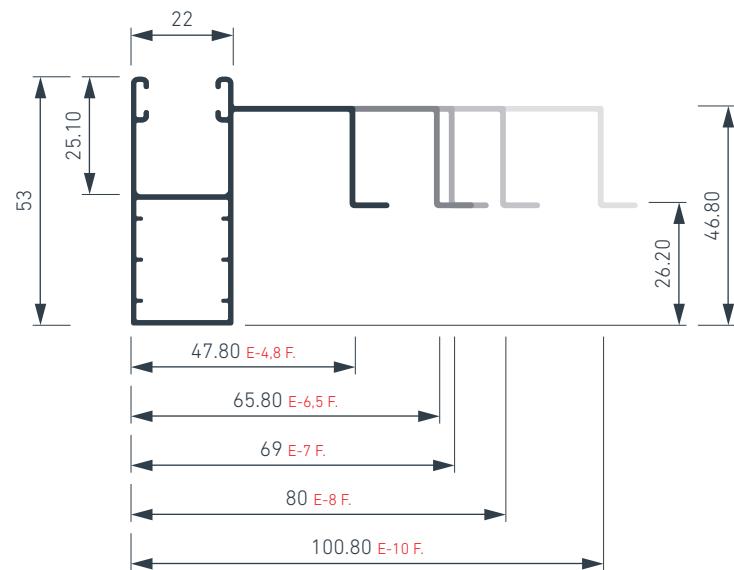
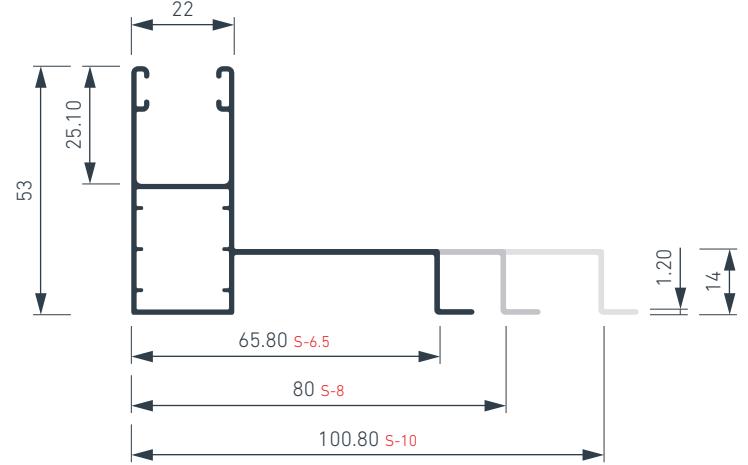
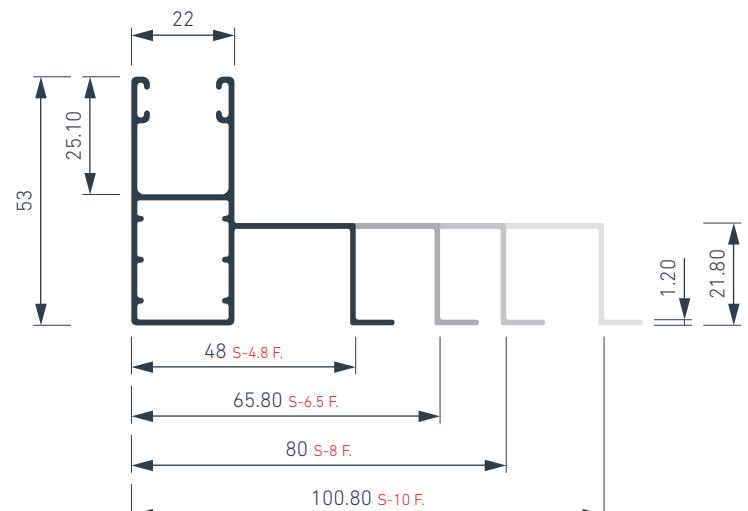


17,20x28,40
■ 027508

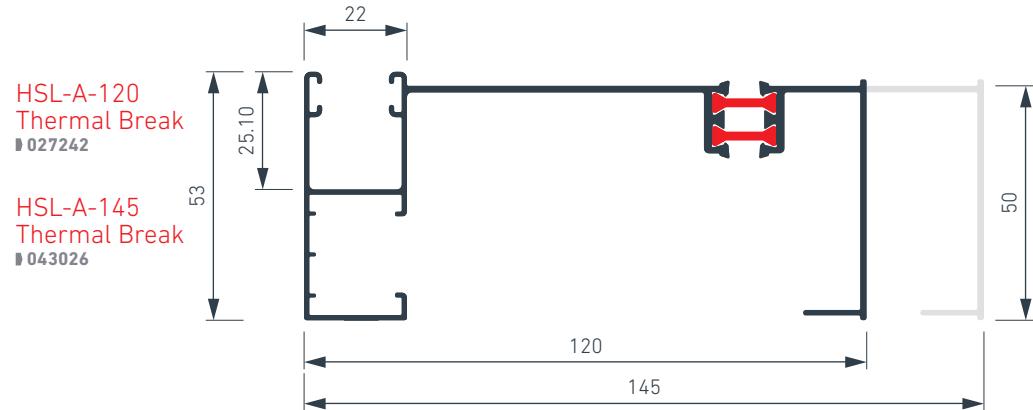
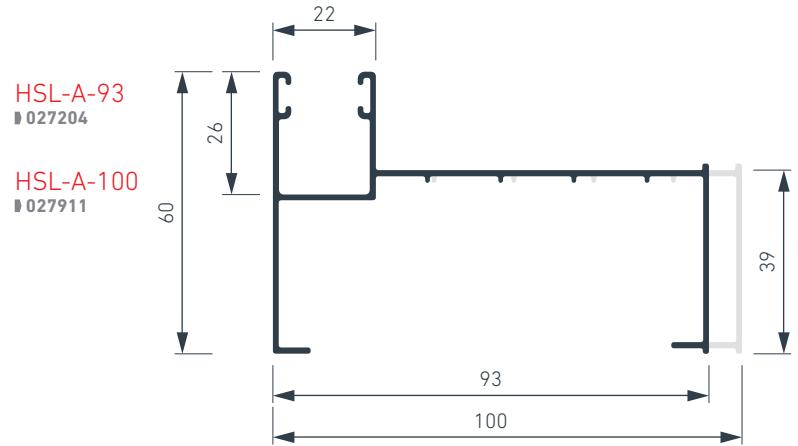
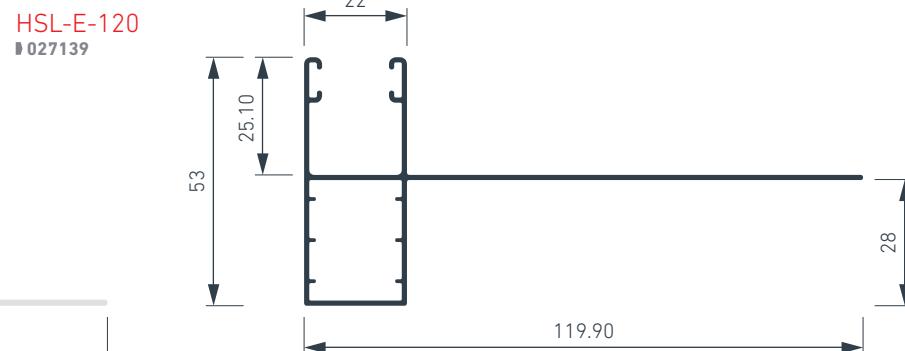
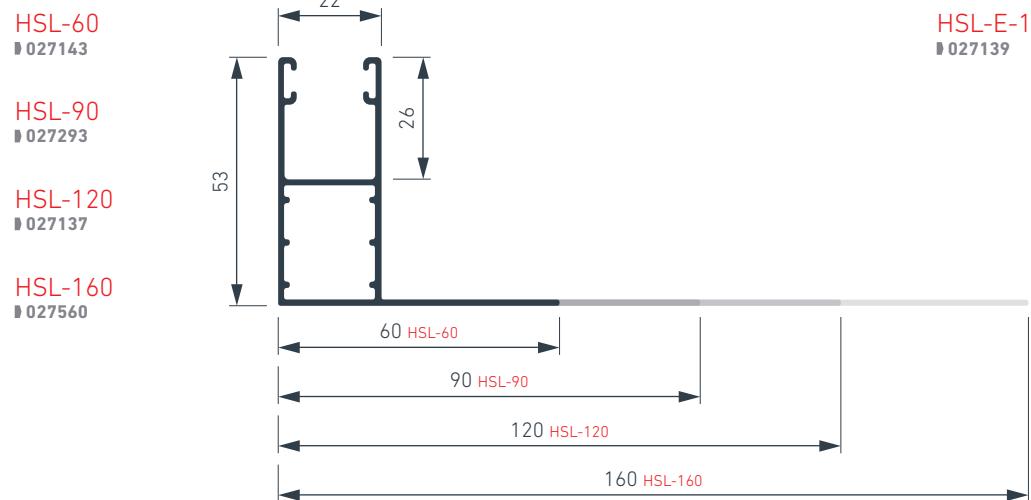


ALUMINIUM GUIDE CHANNELS



E-6.5
027108E-8
027084E-10
027093E-4.8
Framework
027135E-6.5
Framework
027471E-7
Framework
027621E-8
Framework
027286E-10
Framework
027481S-6.5
027105S-8
027089S-10
027103S-4.8
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027402S-6.5
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027491S-10
Framework
027510

ALUMINIUM GUIDE CHANNELS



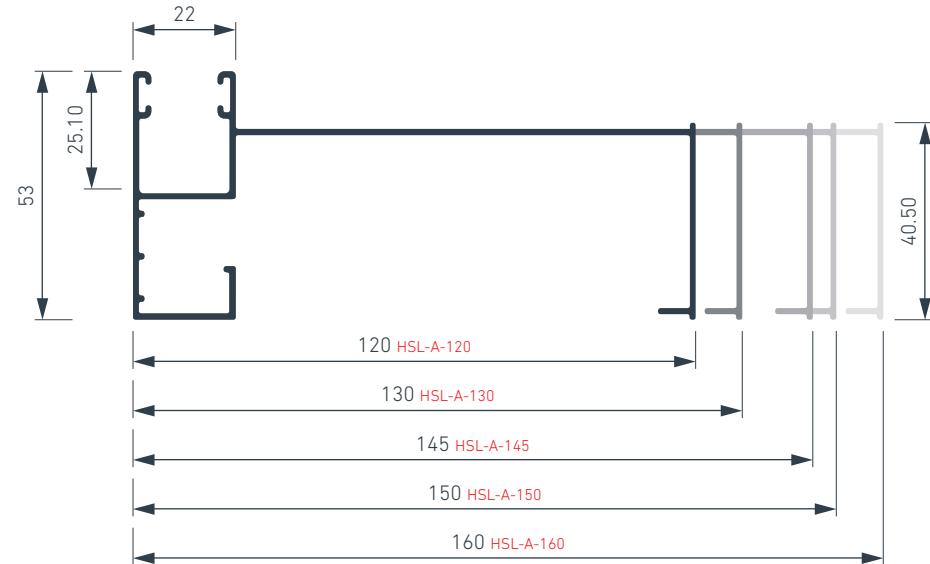
HSL-A-120
■ 027118

HSL-A-130
■ 027550

HSL-A-145
■ 027581

HSL-A-150
■ 027291

HSL-A-160
■ 027186

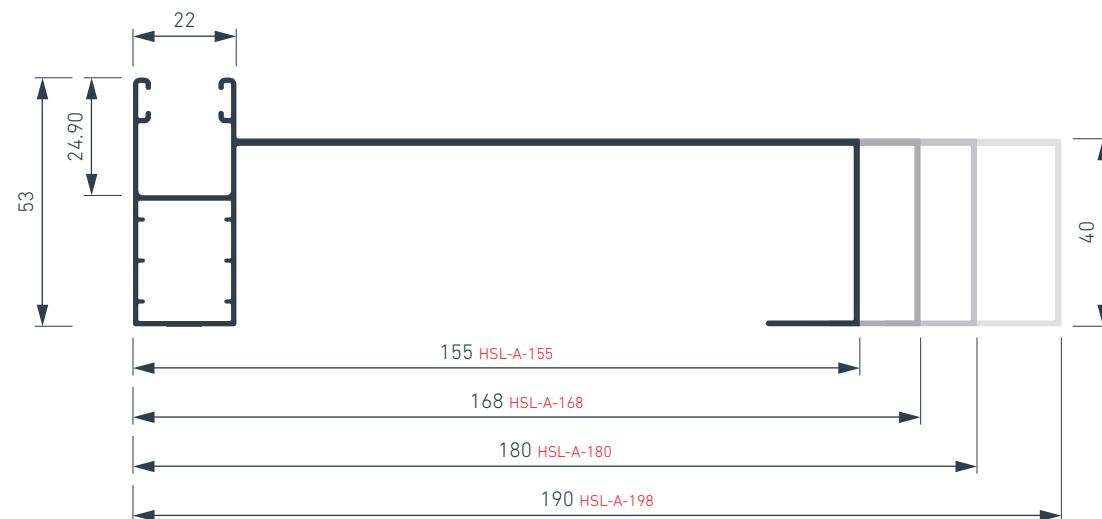


HSL-A-155
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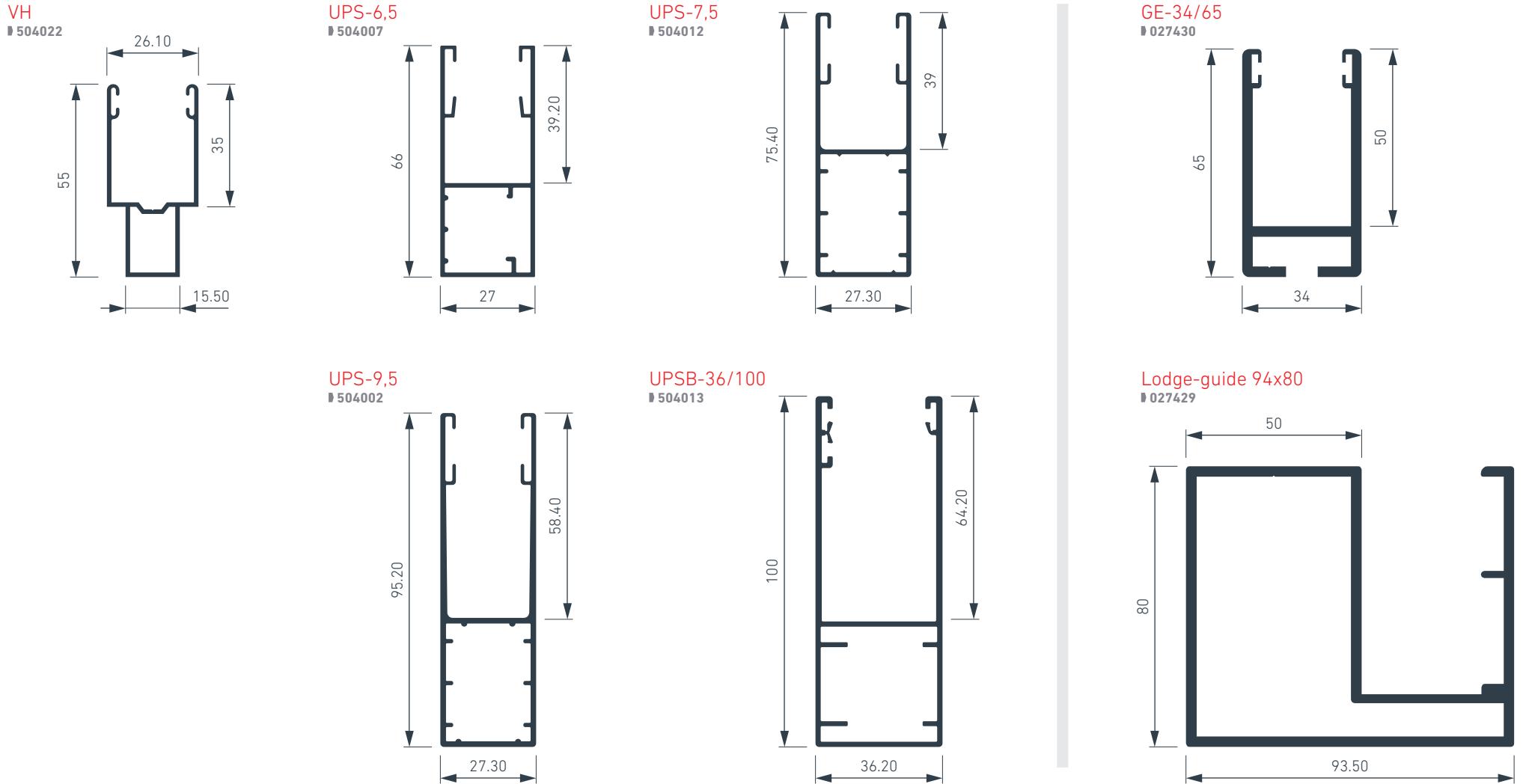
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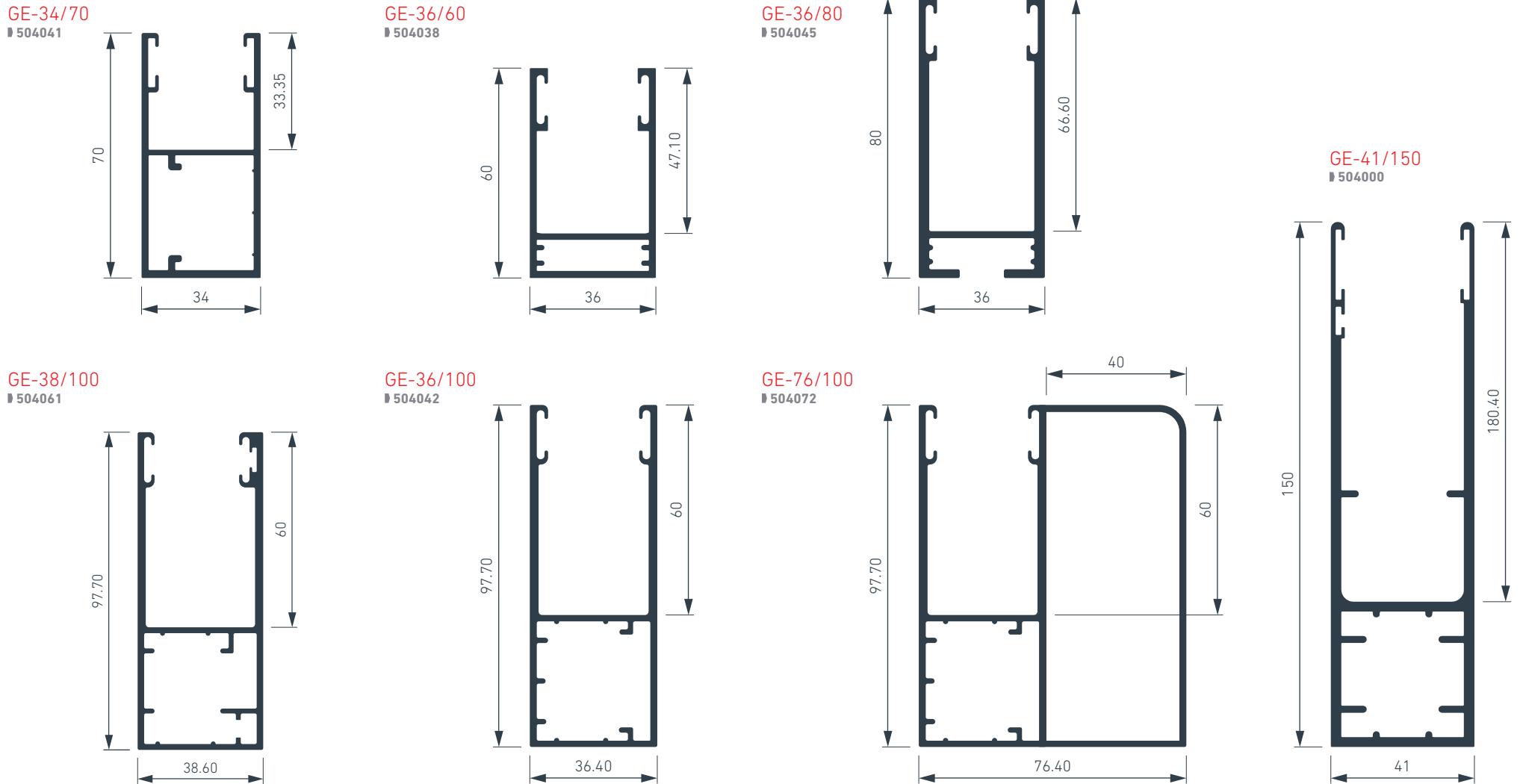
HSL-A-180
■ 027570

HSL-A-198
■ 027571

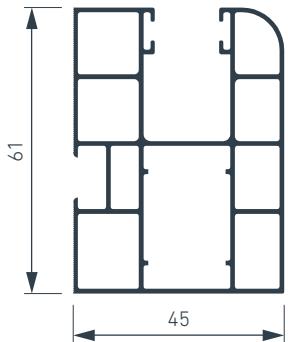


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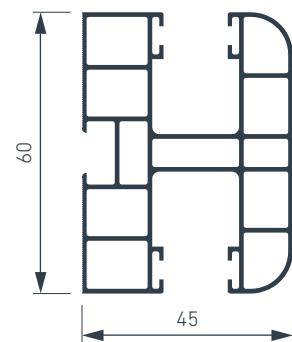




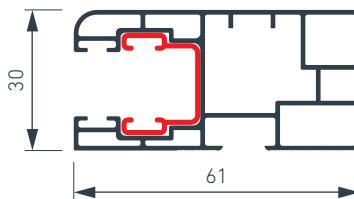
PVC GUIDE CHANNELS AND EXTENSIONS



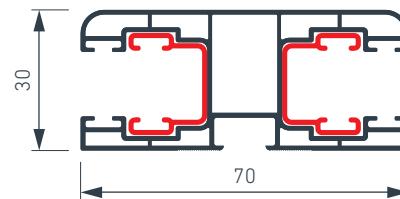
60x45
Comp. with Central 60x45
■ 041150



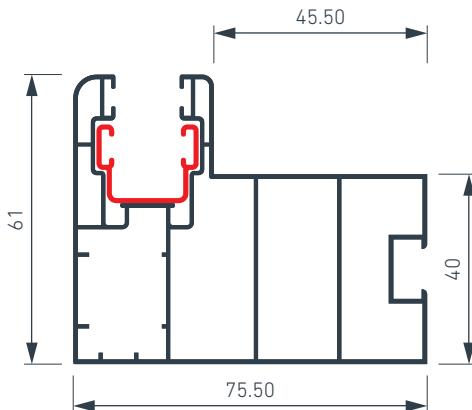
CENTRAL 60x45
Comp. with 55x45/60x45
■ 041152



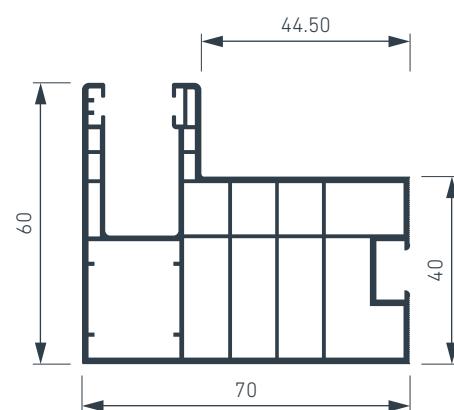
60x30
Compatible with Central 70x30
■ 041008



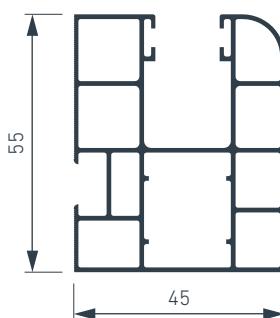
CENTRAL 70x30
Compatible with 60x30/60x75,5
■ 041017



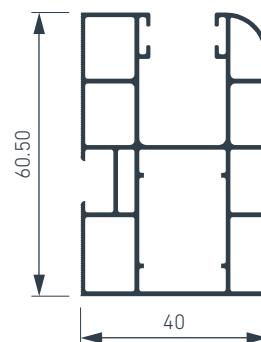
60x75,5
Compatible with Central 70x30
■ 041203



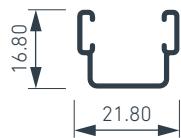
60x70
Compatible with Central 70x30
■ 041011



55x45
Comp. with Central 60x45
■ 041001



60x40
■ 049020



V-15 (Optional)
Comp. with Central 60x75,5/Central 70x30/60x30
■ 026006



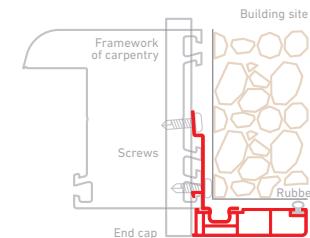
Big head screw (Optional)
Compatible with guides PVC
■ 046160



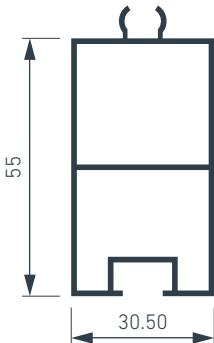
Flashing PVC 45
■ 041010



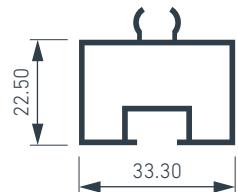
Alum. Closing Flashing
■ 041012



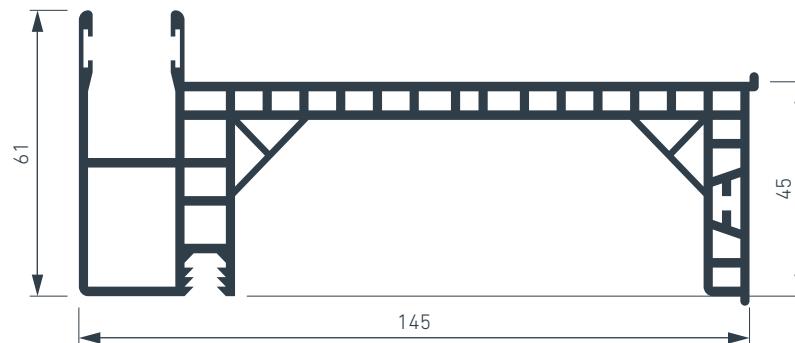
Top View Flashing PVC 45 and Alum. Closing Flashing within the framework of carpentry



Fly Screen
Ext. PVC 30x55
■ 041111

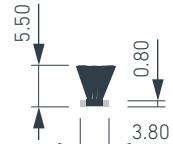


Fly Screen
Ext. PVC 33x22,5
■ 041112

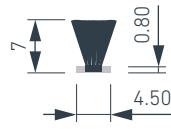


W-25
■ 041200

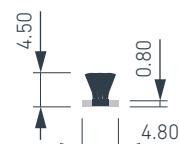
BRUSHES

 Brushes


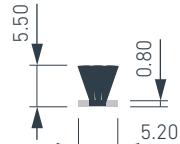
38-550
■ 026005



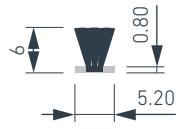
45-700
■ 026210



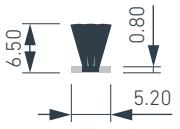
4.8-4.5
NOT AVAILABLE



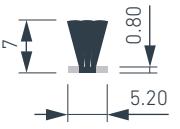
5.2-550
NOT AVAILABLE



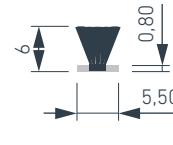
5.2-600
NOT AVAILABLE



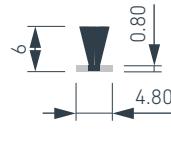
5.2-650
NOT AVAILABLE



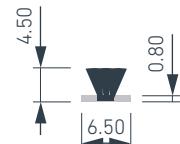
5.2-700
NOT AVAILABLE



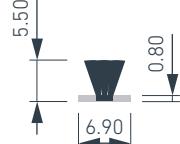
5.5x6-3P
■ 008780



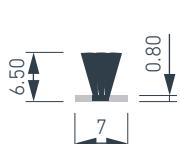
PB-48-600-2P2LB
Soft
■ 026207



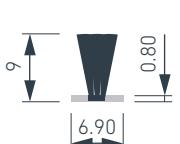
65-450
■ 026083



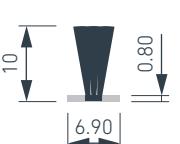
69-550
■ 026015



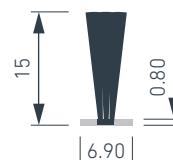
7x6.5-3P
NOT AVAILABLE



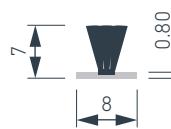
69-900
■ 026211



69-1000
■ 041068



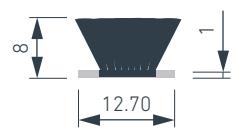
69-1500-3PB
■ 026206



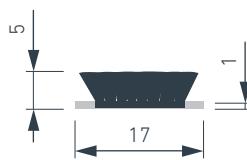
80-700
■ 041054



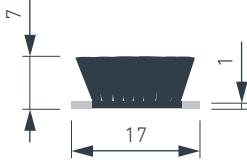
PB-127-700-6P
■ 507151



PB-127-800-8P
■ 507153



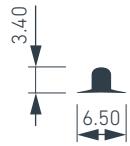
170-500-8P
■ 507137



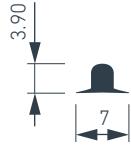
170-700-8P
NOT AVAILABLE

RUBBER BANDS

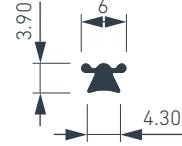
■ Rubber bands



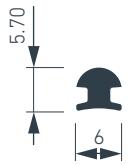
PS-40 SELF-LOCKING
PS-48 SELF-LOCKING
■ 027341



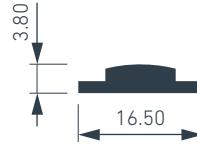
PS-45 SELF-LOCKING
■ 033005



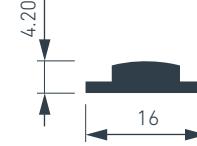
SUP. PVC PROFILE
■ 505061



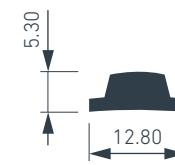
GUIDE 34-65
■ 027447



165-38
■ 507147



160-40
■ 507145



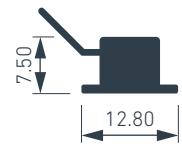
120-50
■ 507139



120-60
■ 507142



128-75
■ 507068



128-75 S
■ 507042



41-150
■ 507152

GUIDE CHANNELS COMPATIBILITY WITH BRUSH AND RUBBER BAND FOAM FILLED ROLL FORMED ALUMINIUM SLATS

GUIDE CHANNELS	ALUGIX-39.5	E-45	ALUGIX-45	ALUGAN-45	ALUGIX-50	ALUGIX-55
¹ UP-#/22	■ 69-550	■ 69-550	■ 69-550	■ 69-550	■ 65-450	
UP-40/25					■ 5.5x6-3P	■ 4.8-4.5 *
UP-50/25						■ 65-450
ZF-8	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	■ PB-48-600-2P2LB	
ZF-14 / ZF-55						■ PB-48-600-2P2LB
H-25-FC / HR-C-25	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	■ PB-48-600-2P2LB	
² H / HSL / HSL-A / HSL-E / E / S	■ 69-550	■ 69-550	■ 69-550	■ 69-550	■ 65-450	
H-66	■ 69-550	■ 69-550	■ 69-550	■ 69-550	■ 65-450	
REF. 1229	■ 69-550	■ 69-550	■ 69-550	■ 69-550		
16.80x28.40 / 17.20x28.40	■ 5.2-750 *	■ 5.2-750 *	■ 5.2-750 *	■ 5.2-750 *	■ 5.2-650 *	
19.15x28.40						■ 5.2-600 *
V-25 REF. 9178	■ 69-550	■ 69-550	■ 69-550	■ 69-550		
V-25 REF. 9182	■ 38-550	■ 38-550	■ 38-550	■ 38-550		
V-45	■ 69-550	■ 69-550	■ 69-550	■ 69-550	■ 65-450	
V-55						■ 38-550
³ PVC	■ 69-550	■ 69-550	■ 65-450	■ 69-550		
W-25 / 60x70	■ 69-550	■ 69-550	■ 69-550	■ 69-550	■ 65-450	
⁴ UPS						■ 170-500-8P
VH						
GE-34/65						
GE-34/70						
⁵ GE-36/#						
GE-38/100						
GE-41/150						
UPSB-36/100						

ALUGIX-546	ALUGIX-56	ALUGIX-56 2L PG	PS-78
■ PB-48-600-2P2LB ■ 69-550	■ PB-48-600-2P2LB ■ 69-550	■ PB-48-600-2P2LB ■ 69-550	
■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	
■ 5.2-550 * ■ 5.2-650 *	■ 5.2-550 * ■ 5.2-650 *	■ 5.2-550 * ■ 5.2-650 *	
■ 38-550	■ 38-550	■ 38-550	
■ 170-500-8P	■ 170-500-8P	■ 170-500-8P	
		■ PB-127-700-6P ■ PB-127-800-8P ■ PB-127-800-8P ■ 69-1500-3PB ■ 69-1000	■ 41/150

* Articles not available.
 Brushes with sizes recommended to use for guide channels 16.80x28.40 / 17.20x28.40 / 19.15x28.40 according to schedule.

¹ UP-#/22 = UP-35/22 / UP-40/22 / UP-45/22

² H / HSL / HSL-A/E = H-25 / HC-25 / HD-25 / HSL / HSL-A / HSL-E / E / S

³ PVC = CENTRAL 70x30 / CENTRAL 60x45 / 60x30 / 60x40 / 55x45 / 60x45 / 60x75.5

⁴ UPS = UPS-6.5 / UPS-7.5 / UPS-9.5

⁵ GE-36/# = GE-36/60 / GE-36/80 / GE-36/100 / GE-76/100

■ Brushes ■ Rubber bands

GUIDE CHANNELS COMPATIBILITY WITH BRUSH AND RUBBER BAND EXTRUDED ALUMINIUM SLATS

GUIDE CHANNELS	PS-40	PS-40 S. L.	PS-45 S. L.	PM-45	PS-45 FLAT	PS-48 S. L.	PM-49	PS-53	PS-55 S
¹ UP-#/22	■ 69-550	■ PS-40/48 S. L.	■ PS-45 S. L.	■ PS-40/48 S. L.	■ 65-450	■ PS-40/48 S. L.	■ 69-550		
UP-40/25									■ PB-48-600-2P2LB
UP-50/25									■ 69-550
ZF-8		■ 5.5x6-3P					■ 5.5x6-3P		
ZF-14 / ZF-55									■ 5.5x6-3P
H-25-FC / HR-C-25	■ 5.5x6-3P						■ 5.5x6-3P		
² H / HSL / HSL-A / HSL-E / E / S	■ 69-550	■ PS-40/48 S. L.	■ PS-45 S. L.	■ PS-40/48 S. L.	■ 65-450	■ PS-40/48 S. L.	■ 69-550		
H-66	■ 69-550				■ 65-450		■ 69-550		
REF. 1229	■ 69-550				■ 65-450		■ 69-550		
16.80x28.40 / 17.20x28.40	■ 5.2-750 *				■ 5.2-650 *		■ 5.2-750 *		■ 5.2-550 *
19.15x28.40								■ SUP. PVC PROFILE	■ 5.2-650 *
V-25 REF. 9178	■ 69-550				■ 65-450		■ 69-550		
V-25 REF. 9182	■ 38-550						■ 38-550		
V-45	■ 69-550	■ PS-40/48 S. L.	■ PS-45 S. L.	■ PS-40/48 S. L.	■ 65-450	■ PS-40/48 S. L.	■ 69-550		
V-55									
³ PVC	■ 69-550	(+ V-15) PS-40/48 S. L.	(+ V-15) PS-45 S. L.	(+ V-15) PS-40/48 S. L.	■ (+V-15) 65-450	(+ V-15) PS-40/48 S. L.	■ 69-550		
W-25 / 60x70	■ 69-550				■ 65-450		■ 69-550		
⁴ UPS								■ 165-38	■ 170-700-8P *
VH								■ PS-40/48 S. L.	
GE-34/65									
GE-34/70									
⁵ GE-36/#									
GE-38/100									
GE-41/150									
UPSB-36/100									

PS-64 **PS-64 M** **PS-65 S.L.** **TL-77** **PS-79** **PS-80 S.L.** **PS-85 FLAT** **PS-100** **PS-100 FLAT**

■ 4.8-4.5 *
■ 65-450 ■ 65-450

■ 5.2-550 * ■ 5.2-550 *

■ 160-40 ■ 160-40 ■ 160-40

■ PS-40/48 S. L. ■ PS-40/48 S. L.
■ GUIDE 34-65 ■ GUIDE 34-65

■ PB-127-700-6P

■ PB-127-700-6P

■ 128-58 ■ 120-60 ■ 120-50
■ 128-58 ■ 120-60 ■ 120-50

■ 128-75
■ 128-75 S ■ 120-60 ■ 128-75
■ 128-75 S ■ 120-60 ■ 128-75
■ 128-75 S ■ 120-60 ■ 128-75
■ 128-75 S

* Articles not available.
Brushes with sizes recommended to use for guide channels 16.80x28.40 / 17.20x28.40 / 19.15x28.40 according to schedule.

¹ H / HSL / HSL-A/E = H-25 / HC-25 / HD-25 / HSL / HSL-A / HSL-E / E / S

² PVC = CENTRAL 70x30 / 60x30 / 60x75.5 (Compatibles with Guide V-15)

³ UPS = UPS-6.5 / UPS-7.5 / UPS-9.5

⁴ GE-36/# = GE-36/60 / GE-36/80 / GE-36/100 / GE-76/100

■ Brushes ■ Rubber bands

GUIDE CHANNELS COMPATIBILITY WITH BRUSH AND RUBBER BAND PVC SLATS

GUIDE CHANNELS	MINI-39	MINI-40 SPECIAL	MINI-47	R-50
¹ UP-#/22	■ 7x6.5-3P *	■ 69-550	■ 69-550	
UP-40/25				■ 4.8-4.5 *
UP-50/25				■ 65-450
ZF-8	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	
ZF-14 / ZF-55				■ 4.8-4.5 *
H-25-FC / HR-C-25	■ 5.5x6-3P	■ 5.5x6-3P	■ 5.5x6-3P	
² H / HSL / HSL-A / HSL-E / E / S	■ 7x6.5-3P *	■ 69-550	■ 69-550	
H-66	■ 7x6.5-3P *	■ 69-550	■ 69-550	
REF. 1229	■ 7x6.5-3P *	■ 69-550	■ 69-550	
16.80x28.40 / 17.20x28.40	■ 5.2-750 *	■ 5.2-750 *	■ 5.2-750 *	
19.15x28.40				■ 5.2-550 *
V-25 REF. 9178	■ 7x6.5-3P *	■ 69-550	■ 69-550	
V-25 REF. 9182	■ 38-550	■ 38-550	■ 38-550	
V-45	■ 7x6.5-3P *	■ 69-550	■ 69-550	
V-55				
³ PVC	■ 7x6.5-3P *	■ 69-550	■ 69-550	
W-25 / 60x70	■ 7x6.5-3P *	■ 69-550	■ 69-550	
⁴ UPS				■ 170-500-8P
VH				
GE-34/65				
GE-34/70				
⁵ GE-36/#				
GE-38/100				
GE-41/150				
UPSB-36/100				

P-50	P-55	P-60
■ PB-48-600-2P2LB ■ 65-450	■ 4.8-4.5 * ■ 65-450	■ 4.8-4.5 * ■ 65-450
■ PB-48-600-2P2LB	■ PB-48-600-2P2LB	■ PB-48-600-2P2LB
■ 5.2-600 *	■ 5.2-550 *	■ 5.2-550 *
■ 38-550	■ 38-550	■ 38-550
■ 170-500-8P	■ 170-500-8P	■ 170-500-8P

* Articles not available.
Brushes with sizes recommended to use for guide channels 16.80x28.40 / 17.20x28.40 / 19.15x28.40 according to schedule.

¹ UP-#/22 = UP-35/22 / UP-40/22 / UP-45/22

² H / HSL / HSL-A/E = H-25 / HC-25 / HD-25 / HSL / HSL-A / HSL-E / E / S

³ PVC = CENTRAL 70x30 / CENTRAL 60x45 / 60x30 / 60x40 / 55x45 / 60x45 / 60x75.5

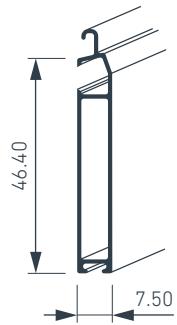
⁴ UPS = UPS-6.5 / UPS-7.5 / UPS-9.5

⁵ GE-36/# = GE-36/60 / GE-36/80 / GE-36/100 / GE-76/100

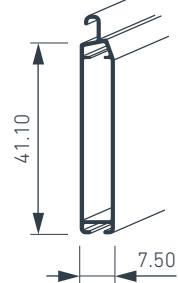
■ Brushes ■ Rubber bands

END SLATS

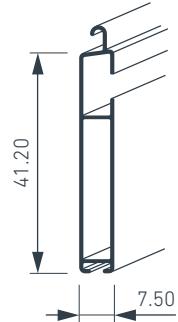
End slat A
interior
026006



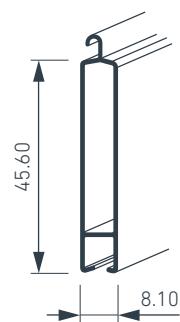
End slat B
blind
026087



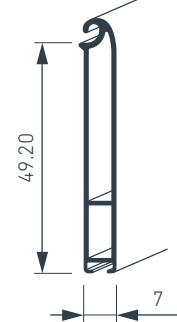
End slat C
exterior
026026



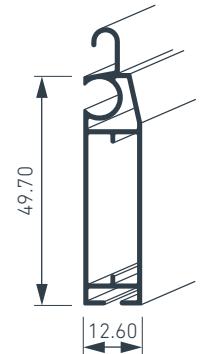
End slat
Intermediate
026124



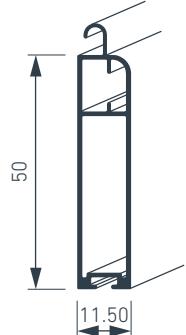
End slat E
033021



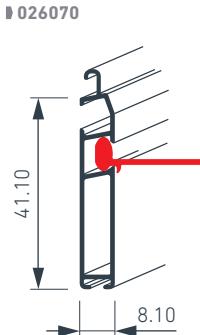
End slat G
interior
026063



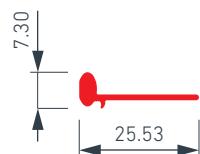
End slat H
033406



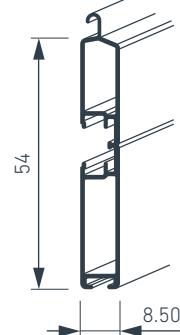
End slat D
2 sides
026070



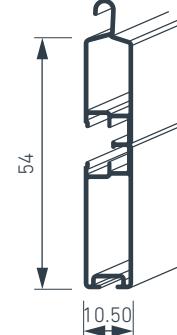
End stopper
profile
026111



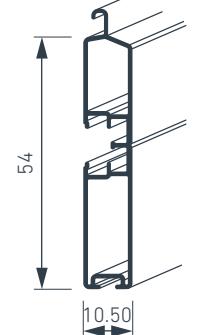
End slat AC
026075

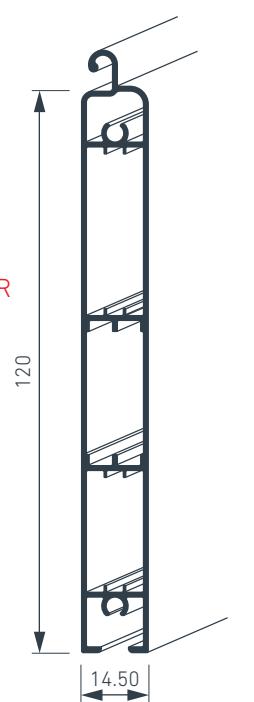
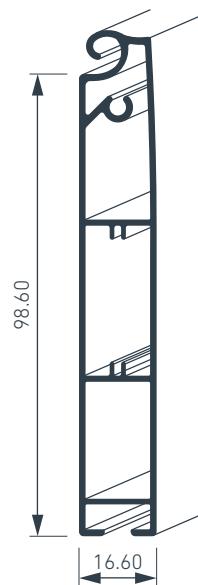
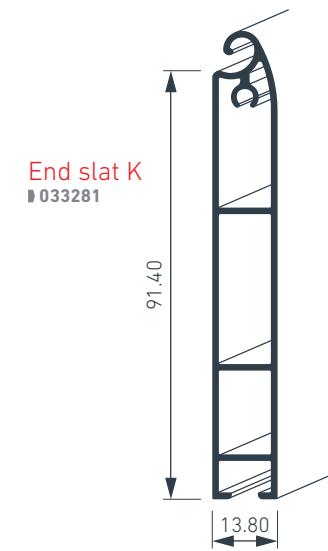
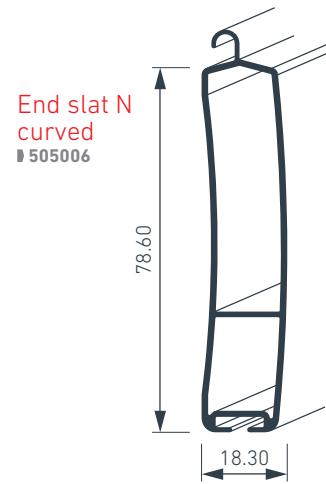
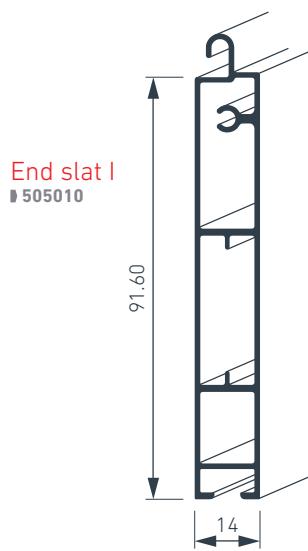
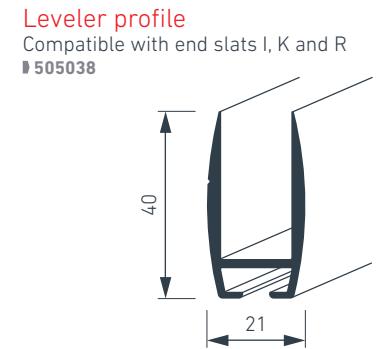
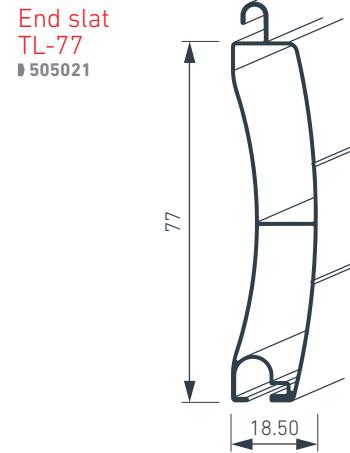
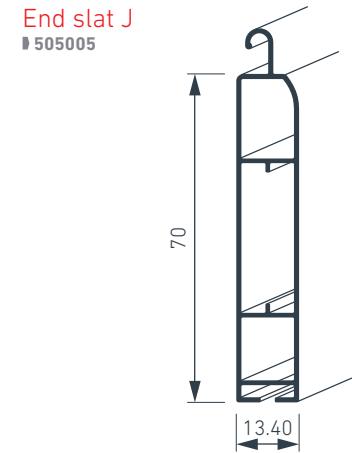
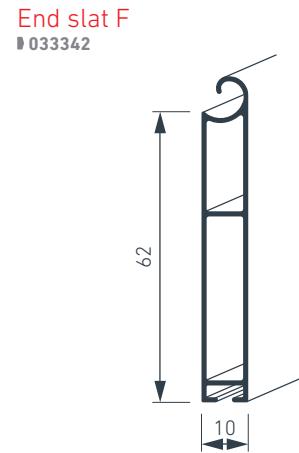
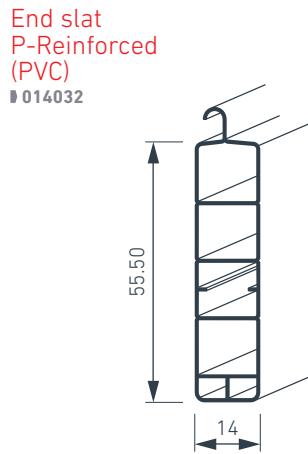


End slat SP
026042



End slat TBT
026050





END SLATS AND GUIDE CHANNELS COLOURS

STANDARD RAL		LACQUERED WOOD	
1013	7012	8014	Textured Embero
1015	7016	8017	European Dark Walnut
3005	7022	8019	
3007	7024	9011	
6005	7038	9016	
6009	7040		
6015	8003		
7011	8007		

* Consult stock and delivery time

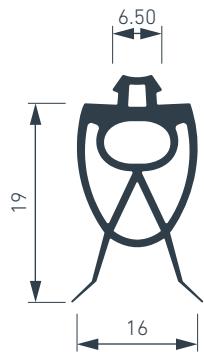
The colours available for end slats and extruded aluminium guide channels belong to the **standard lacquered RAL** and **imitation wood**. Availability **satin, matte, anodized** and **special RAL**.

RUBBER BANDS FOR END SLATS

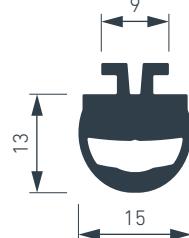
COMPATIBILITY WITH END SLATS

I, K, M and R	I, K, M and R	N and TL-77	G, J and F	ALUGIX-55 PS-45 FLAT	ALUGIX-39'5 ALUGIX-45 ALUGAN-45	INTERMEDIATE, E, H, SP, TBT and AC	A, B, C and D
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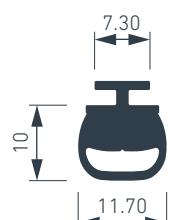
Sensitive band
■ 502015



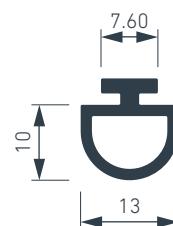
R. B. 150/180
■ 507148



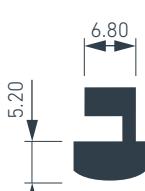
R. B. 150/150
■ 507149



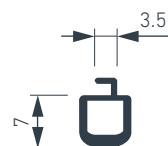
R. B. 80/130
■ 505062



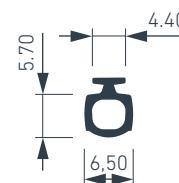
R. B. Alugix-55
■ 026049



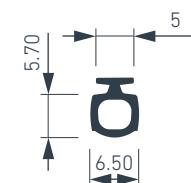
R. B. Alugix-39'5
R. B. Alugix-45
R. B. Alugan-45
■ 026004



R. B. 1050
■ 026058



R. B. 1044



50
ALUGIX-39.5

52
E-45

54
ALUGIX-45

56
ALUGAN-45

58
ALUGIX-50

60
ALUGIX-55

62
ALUGIX-546

64
ALUGIX-56

66
ALUGIX-56 2L PG

68
PS-78

FOAM FILLED ROLL FORMED ALUMINIUM SLATS

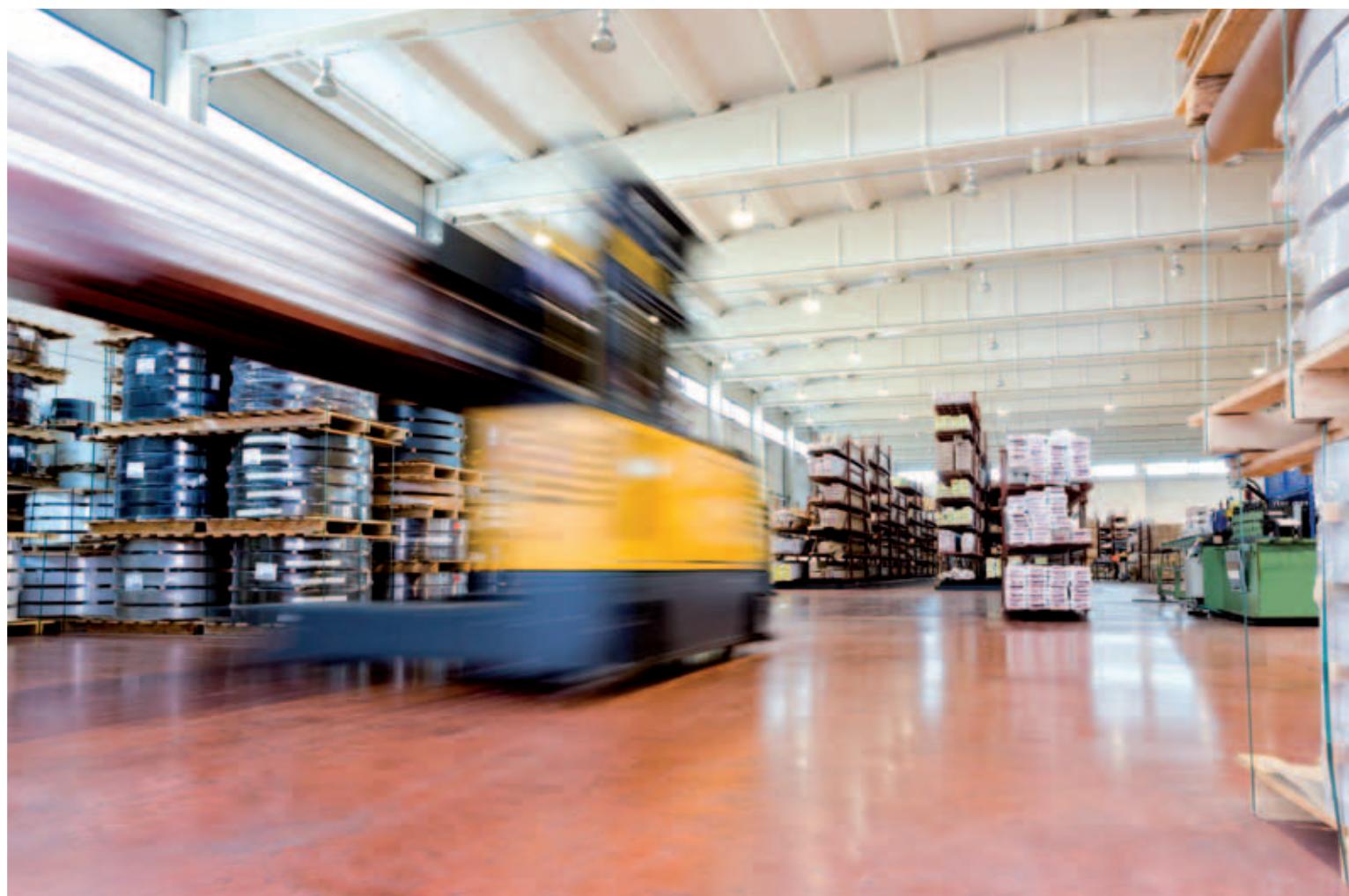
Today, energetic efficiency has become a priority at people's homes.

To this end, profiled aluminium slats guarantee total control over solar light, and great thermal insulation thanks to their technical characteristics.

Additionally, the polyurethane foam inside makes the material robust and resistant to atmospheric phenomena.

Diversity in models aids in the appropriate selection for each window frame, thereby adjusting to the dwelling's finishes.

Blind or punched slats, along with the broad RAL colour selection, help to achieve the desired finish.



ALUGIX-39.5

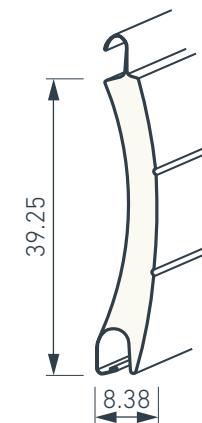
015039 Alugix-39.5



Slats in colour
ROUGE 300 SABLE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	8.38 mm
Area of covering	39.25 mm
Number slats by meter	25.47 units
Maximum recommended width	3,050 mm
Weight density (75 kg/m ³)	2.52 kg/m ²
Weight high density (250 kg/m ³)	3.15 kg/m ²
Packaging unit standard	390 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugix-39.5 S (code 015069)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	110	115	120	130	140	145	150	155	160	165	170	175	180	185
	AXLE 60	115	120	130	140	145	150	155	160	165	170	175	180	185	190
SPRING LOCK ZF 1 ELEMENT	AXLE 54	115	120	125	130	140	145	150	155	160	165	170	175	180	185
	AXLE 60	120	125	130	140	145	150	155	160	165	170	175	180	185	190
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	115	120	130	135	140	145	150	160	165	170	175	180	185	190
	AXLE 60	120	125	130	140	145	150	155	160	165	170	175	180	185	190

Sizes are in mm

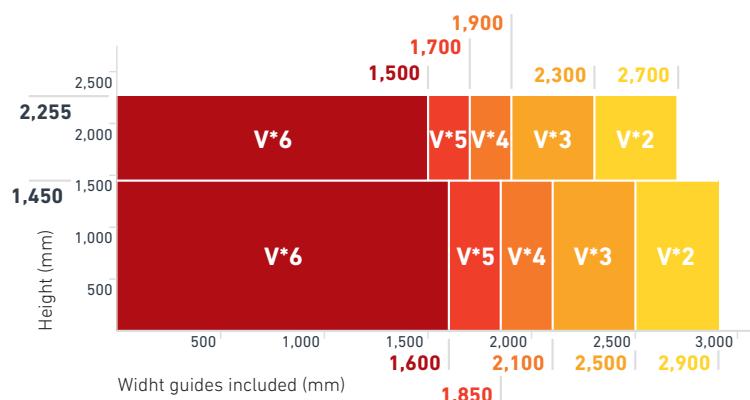
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK		
		155	170	185	200	225	137	150	165	180	205	155	200	230
MIXED SPRING LOCK	AXLE 60	1,800	2,050	2,700	3,250	4,840	1,440	1,965	2,480	2,900	4,040	1,625	3,210	4,880

Sizes are in mm

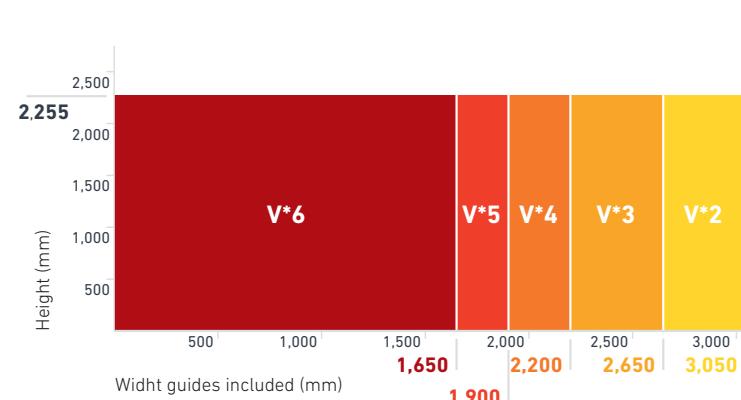
WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.15 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

E-45

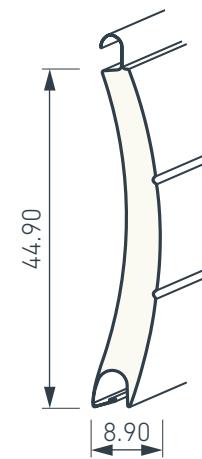
015201 E-45



Slats in colour
RAL 7040

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.23 mm
Nominal thickness	8.90 mm
Area of covering	44.90 mm
Number slats by meter	22.27 units
Maximum recommended width	3,000 mm
Weight density (75 kg/m ³)	2.08 kg/m ²
Weight high density (250 kg/m ³)	2.87 kg/m ²
Packaging unit standard	450 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap E-45 S (code 015077)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3,5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16,80x28,40 | 17,20x28,40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75,5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	110	120	125	135	140	145	155	160	165	170	170	180	180	190
	AXLE 60	120	125	135	140	145	150	160	160	170	170	180	180	190	190
SPRING LOCK ZF 1 ELEMENT	AXLE 54	115	120	130	135	140	150	155	160	160	165	175	175	185	185
	AXLE 60	120	130	135	140	145	150	155	165	165	175	175	180	190	190
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	115	120	130	135	145	145	155	160	165	165	175	175	185	190
	AXLE 60	120	130	130	140	145	150	155	165	165	175	175	185	190	190

Sizes are in mm

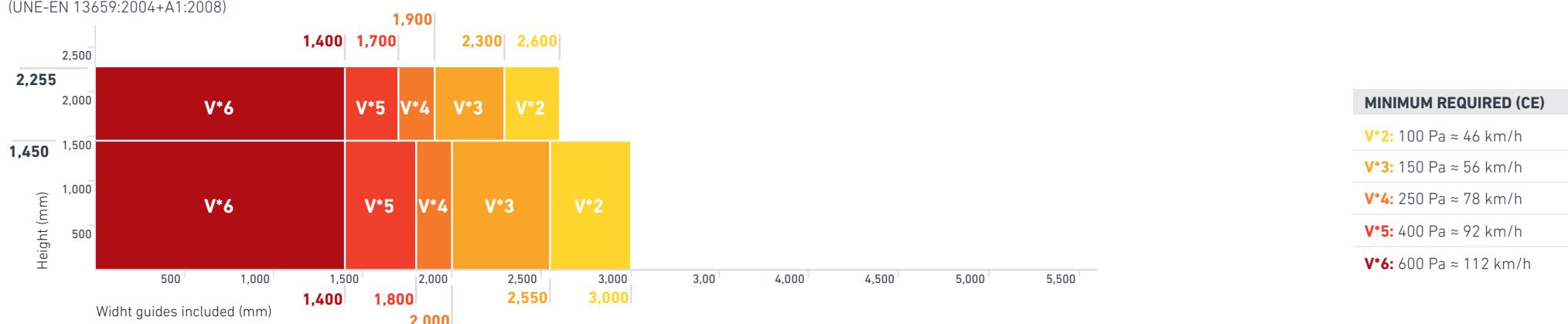
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK			
		155	170	185	200	225	137	150	165	180	205	155	200	230	
MIXED SPRING LOCK	AXLE 42	1,830	2,555	3,055	3,620	4,900	-	-	-	-	-	-	-	-	
	AXLE 60	1,700	2,120	2,900	3,400	4,540	1,400	2,020	2,595	3,040	4,550	1,560	3,500	5,050	

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.15 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

ALUGIX-45

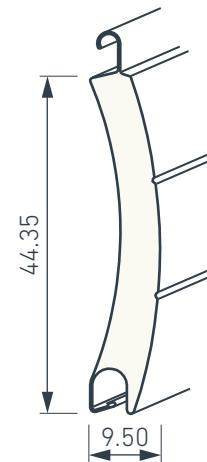
015150 Alugix-45



Slats in colour
GRAPHITE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.25 mm
Nominal thickness	9.50 mm
Area of covering	44.35 mm
Number slats by meter	22.54 units
Maximum recommended width	3,800 mm
Weight density (75 kg/m ³)	2.52 kg/m ²
Weight high density (250 kg/m ³)	3.40 kg/m ²
Packaging unit standard	390 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate | TBT | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugix-45 S (code 015072)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	120	130	140	150	160	165	170	175	180	185	190	195	205	210
	AXLE 60	120	130	140	150	160	165	170	175	180	185	190	200	205	210
SPRING LOCK ZF 1 ELEMENT	AXLE 54	120	130	135	145	150	160	165	170	175	185	195	200	205	210
	AXLE 60	130	135	140	150	160	165	170	175	180	190	195	200	205	210
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	120	130	140	150	155	160	170	180	185	190	195	200	205	210
	AXLE 60	125	135	140	150	155	160	170	180	185	190	195	200	205	210

Sizes are in mm

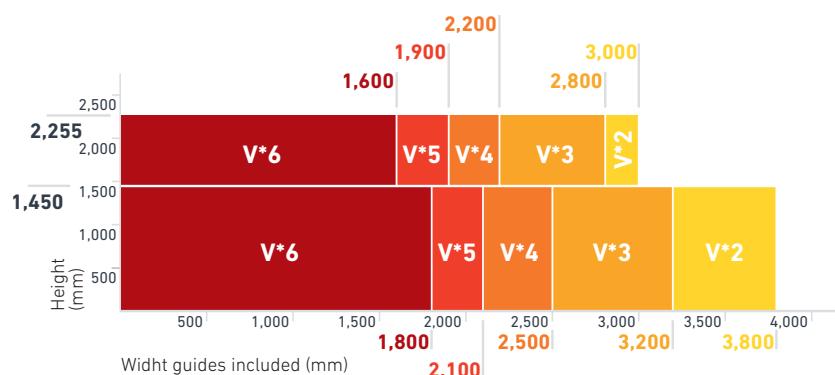
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK		
		155	170	185	200	225	137	150	165	180	205	155	200	230
MIXED SPRING LOCK	AXLE 60	1,540	1,980	2,425	2,935	4,110	1,370	1,740	2,200	2,670	3,760	1,370	2,890	4,270

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)

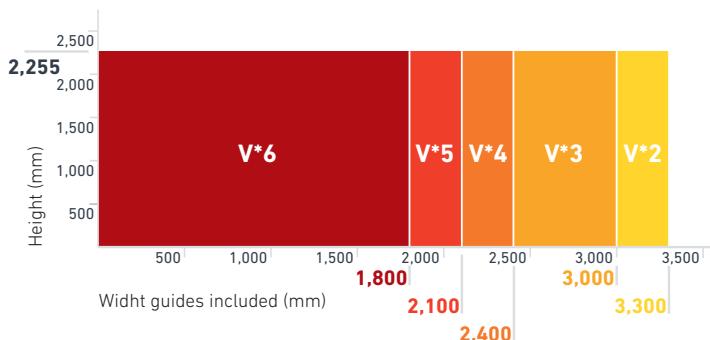


Width guides included (mm)

Width guides included (mm)

WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

Width guides included (mm)

MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

THERMAL TRANSMITTANCE

REF. PRODUCT Alugix-45 - Bicolour

REF. SAMPLE CPM 11/260-35318

SIDE Aluminium

TRANSMITTANCE %25

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.15 m² K/WΔR Class 4 (Bicolour) = 0.25 m² K/W

MECHANICAL DURABILITY NORMA NF

CLASSIFICATION E*4 14,000 Cycles (>14,847 Cycles)

TRANSMITTANCE OF TOTAL SOLAR ENERGY

(g_{tot})

See page 15

ALUGAN-45

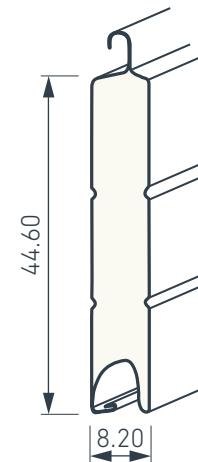
015065 Alugan-45



Slats in colour
SILVER (RAL 9006)

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	8.20 mm
Area of covering	44.60 mm
Number slats by meter	22.42 units
Maximum recommended width	3,800 mm
Weight density (75 kg/m ³)	2.96 kg/m ²
Weight high density (250 kg/m ³)	4.30 kg/m ²
Packaging unit standard	360 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugan-45 (code 015003)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	130	150	160	170	185	190	195	205	210	220	225	230	235	245
	AXLE 60	140	160	165	180	190	195	200	205	215	220	230	235	240	250
SPRING LOCK ZF 1 ELEMENT	AXLE 54	140	150	160	170	180	185	190	200	210	220	230	235	240	245
	AXLE 60	145	155	165	175	185	190	200	210	215	220	230	235	240	245
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	140	150	160	170	180	185	190	200	210	215	220	225	230	240
	AXLE 60	150	155	165	170	185	190	200	205	210	215	220	230	240	245

Sizes are in mm

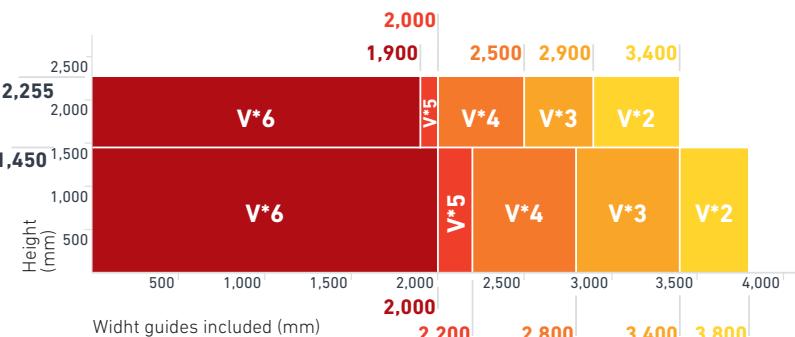
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK		
		155	170	185	200	225	137	150	165	180	205	155	200	230
MIXED SPRING LOCK	AXLE 60	1,120	1,350	1,640	2,150	2,700	1,020	1,160	1,500	1,950	2,700	970	1,970	3,010

Sizes are in mm

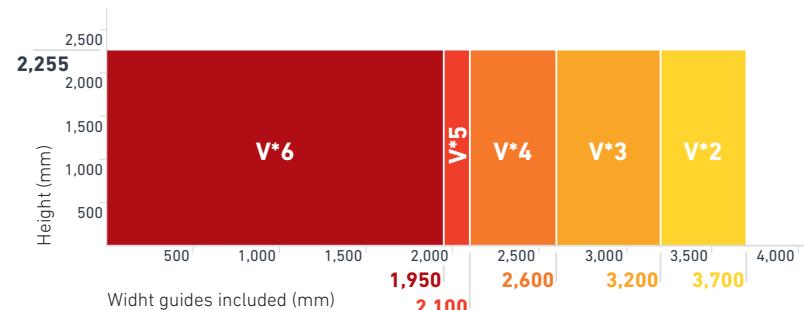
WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

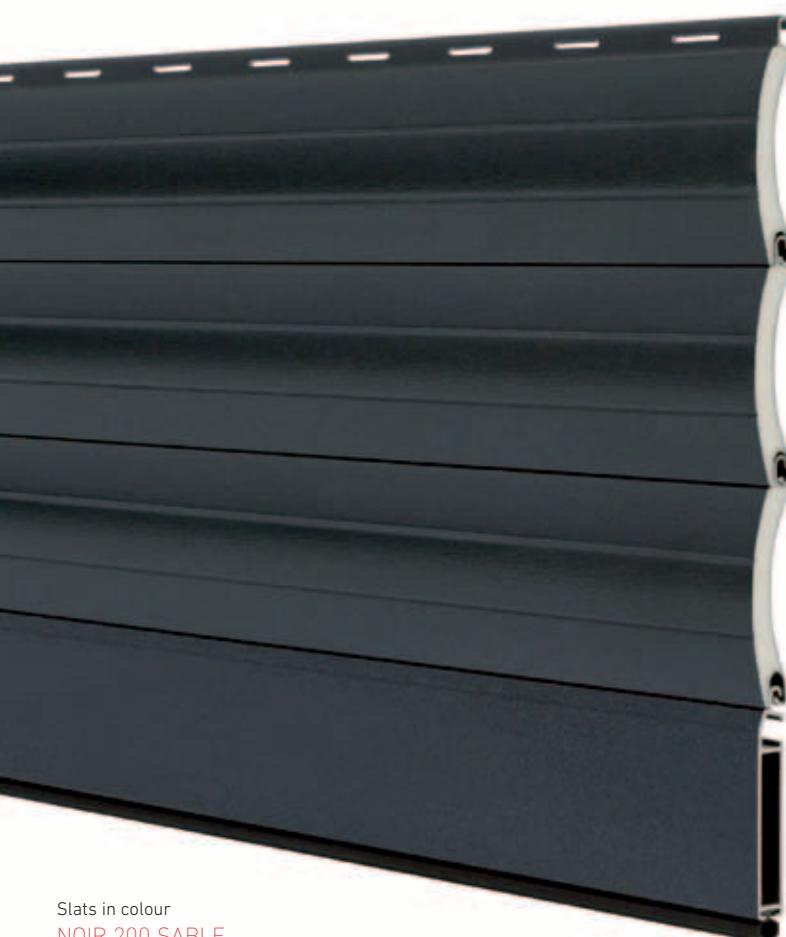
V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

ALUGIX-50

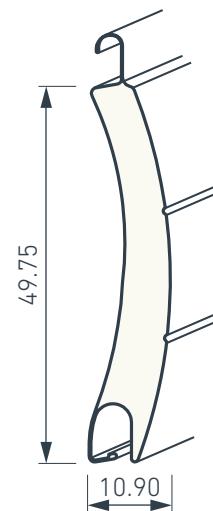
015120 Alugix-50



Slats in colour
NOIR 200 SABLE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	10.90 mm
Area of covering	49.75 mm
Number slats by meter	20.10 units
Maximum recommended width	4,000 mm
Weight density (75 kg/m ³)	2.64 kg/m ²
Weight high density (250 kg/m ³)	3.71 kg/m ²
Packaging unit standard	288 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate | TBT | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugix-50 S (code 015073) | Set of cap Alugix-50 H. D. with screw (code 015081)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | UP-40/25 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A
HSL-E | E | S | H-66 | 16.80x28.40 | 17.20x28.40 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x70 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	130	135	145	150	160	165	175	180	190	195	200	205	210	220
	AXLE 60	135	145	150	160	165	175	180	190	195	200	205	210	220	225
SPRING LOCK ZF 1 ELEMENT	AXLE 54	130	135	140	150	160	165	170	175	185	190	200	205	210	215
	AXLE 60	135	140	150	160	165	170	175	180	190	195	200	205	210	215
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	130	140	145	155	160	170	175	180	185	190	200	205	210	215
	AXLE 60	135	140	150	155	165	170	175	180	190	195	200	205	210	215

Sizes are in mm

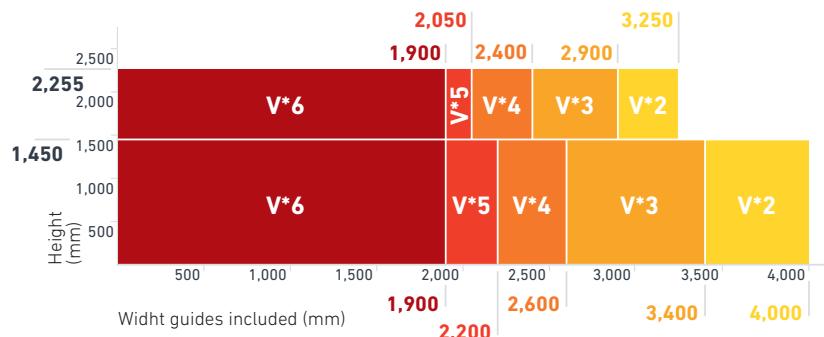
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK		
		155	170	185	200	225	137	150	165	180	205	155	200	230
MIXED SPRING LOCK	AXLE 60	1,300	1,700	2,150	2,500	3,360	1,040	1,360	1,800	2,230	2,900	1,150	2,340	3,460

Sizes are in mm

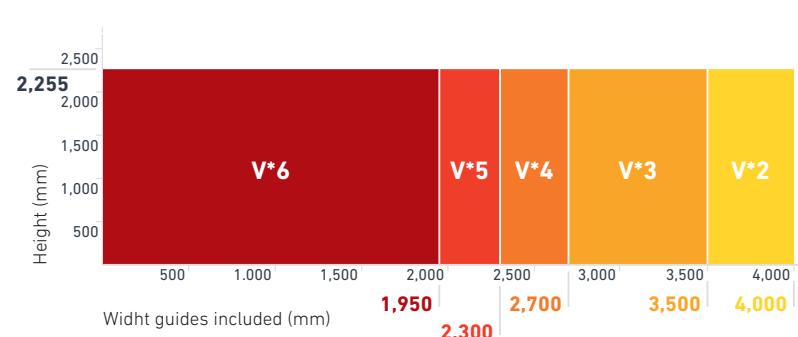
WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.16 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

ALUGIX-55

015090 Alugix-55

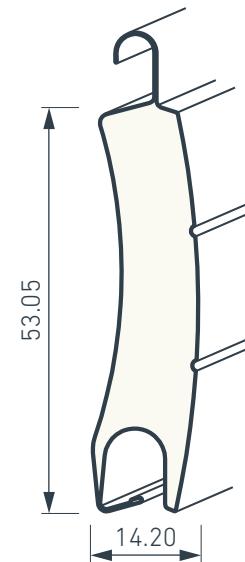


Slats in colour

TESTA DI MORO (RAL 8019)

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.30 mm
Nominal thickness	14.20 mm
Area of covering	53.05 mm
Number slats by meter	18.85 units
Maximum recommended width	5,500 mm
Weight density (75 kg/m ³)	3.67 kg/m ²
Weight high density (250 kg/m ³)	5.32 kg/m ²
Packaging unit standard	192 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

G | J | SP

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugix-55 (code 015004) | Set of cap Alugix-55 H. D. with screw (code 015011)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	160	170	190	200	205	210	230	235	240	250	255	260	270	280
TREATED STEEL G	AXLE 70	165	170	190	200	205	220	230	235	240	255	260	265	270	280
SPRING LOCK ZF 1 ELEMENT	AXLE 54	150	165	180	190	205	210	220	230	240	250	255	260	270	280
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	160	170	180	190	205	215	220	230	240	250	260	265	270	280
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70/80	180	185	190	210	210	215	235	235	235	255	255	275	280	280
MET. SP. LOCK	AXLE 220	275	275	275	285	300	300	300	300	320	320	320	320	340	345

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX			WINBLOCK	ALEX
		250	300	360	230	250
MIXED SPRING LOCK	AXLE 60	-	-	-	2,400	2,770
	AXLE 70	2,500	4,100	-	-	2,500
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 100*	2,590	3,965	6,360	-	2,375
	AXLE 130*	-	3,860	6,210	-	-

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 and 130 with metallic spring

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ALUGIX-546

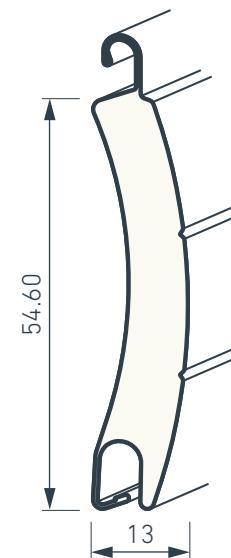
015015 Alugix-546



Slats in colour
NOIR 2100 SABLE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	13 mm
Area of covering	54.60 mm
Number slats by meter	18.32 units
Maximum recommended width	4,800 mm
Weight density (75 kg/m ³)	3.03 kg/m ²
Weight high density (250 kg/m ³)	4.35 kg/m ²
Packaging unit standard	240 m/l
Production lengths	5 to 6.50 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | SP

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0

WITH LIGHT SLITS Class C-s2, d0

SET OF CAP COMPATIBILITY

Set of cap Alugix-56 S (code 015075) | Set of cap Alugix-56 H. D. with screw (code 015019)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 17.20x28.40 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	165	170	185	190	200	205	210	220	225	230	240	245	250	260
TREATED STEEL G	AXLE 70	165	170	185	190	200	205	210	220	225	230	240	245	250	260
SPRING LOCK ZF 1 ELEMENT	AXLE 54	155	165	175	180	190	200	205	215	220	225	235	240	245	255
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	160	170	180	185	190	200	205	215	220	225	235	240	245	255
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 54	160	170	180	190	195	200	205	215	220	230	235	240	245	260
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 60	160	170	180	185	190	200	205	215	220	230	235	240	245	260
MET. SP. LOCK	AXLE 220	265	265	270	280	290	290	290	300	310	310	310	330	330	330

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX				WINBLOCK	ALEX
		180	205	250	300	230	250
MIXED SPRING LOCK G	AXLE 60	**1,300	**1,800	-	-	2,630	3,340
	AXLE 70	**1,300	**1,800	3,530	5,525	2,800	3,500
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 100*	-	-	3,470	5,035	-	3,100

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 with metallic spring

**No guides entries available

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

ALUGIX-56

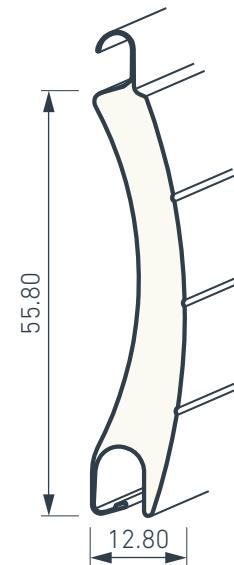
015170 Alugix-56



Slats in colour
CHAMPAGNE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	12.80 mm
Area of covering	55.80 mm
Number slats by meter	17.92 units
Maximum recommended width	4,600 mm
Weight density (75 kg/m ³)	2.94 kg/m ²
Weight high density (250 kg/m ³)	4.19 kg/m ²
Packaging unit standard	240 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | SP

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0 WITH LIGHT SLITS Class C-s2, d0

END SLATS COMPATIBILITY

Set of cap Alugix-56 S (code 015075) | Set of cap Alugix-56 H. D. with screw (code 015019)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 17.20x28.40 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	140	150	160	170	180	185	190	200	210	220	225	230	235	245
TREATED STEEL G	AXLE 70	150	160	170	180	185	190	200	205	210	220	230	235	240	250
SPRING LOCK ZF 1 ELEMENT	AXLE 54	140	150	160	170	180	185	190	200	205	210	220	230	235	240
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	140	150	160	165	170	180	190	200	205	210	220	225	235	240
SP. LOCK ZF 2 AND 3 ELEMENTS	AXLE 60	145	160	165	170	180	190	200	205	210	215	225	230	240	250
MET. SP. LOCK	AXLE 80	175	180	200	205	205	220	225	230	235	240	245	250	250	250
MET. SP. LOCK	AXLE 220	265	265	265	285	290	290	290	305	310	310	320	330	330	330

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX		WINBLOCK	ALEX
		250	300	230	250
MIXED SPRING LOCK G	AXLE 60	-	-	3,100	3,650
	AXLE 70	3,850	5,695	2,740	3,750
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 100*	2,900	5,650	-	3,210

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 with metallic spring

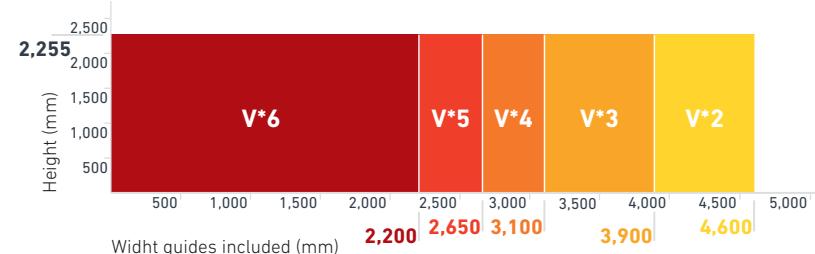
WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ALUGIX-56

2L PG

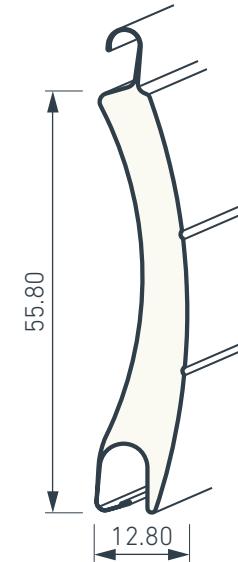
015180 Alugix-56 2L PG



Slats in colour
GREY 007

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.27 mm
Nominal thickness	12.80 mm
Area of covering	55.80 mm
Number slats by meter	17.92 units
Maximum recommended width	4,600 mm
Weight density (75 kg/m ³)	2.94 kg/m ²
Weight high density (250 kg/m ³)	4.19 kg/m ²
Packaging unit standard	240 m/l
Production lengths	5.50 to 6.50 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | SP

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0 WITH LIGHT SLITS Class C-s2, d0

END SLATS COMPATIBILITY

Set of cap Alugix-56 S (code 015075) | Set of cap Alugix-56 H. D. with screw (code 015019)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 17.20x28.40 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	140	150	160	170	180	185	190	200	210	220	225	230	235	245
TREATED STEEL G	AXLE70	150	160	170	180	185	190	200	205	210	220	230	235	240	250
SPRING LOCK ZF 1 ELEMENT	AXLE 54	140	150	160	170	180	185	190	200	205	210	220	230	235	240
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	140	150	160	165	170	180	190	200	205	210	220	225	235	240
SP. LOCK ZF 2 AND 3 ELEMENTS	AXLE 60	145	160	165	170	180	190	200	205	210	215	225	230	240	250
MET. SP. LOCK	AXLE 80	175	180	200	205	205	220	225	230	235	240	245	250	250	250
	AXLE 220	265	265	265	285	290	290	290	305	310	310	320	330	330	330

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX		WINBLOCK	ALEX
		250	300	230	250
MIXED SPRING LOCK G	AXLE 60	-	-	3,100	3,650
	AXLE 70	3,850	5,695	2,740	3,750
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 100*	2,900	5,650	-	3,210

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 with metallic spring

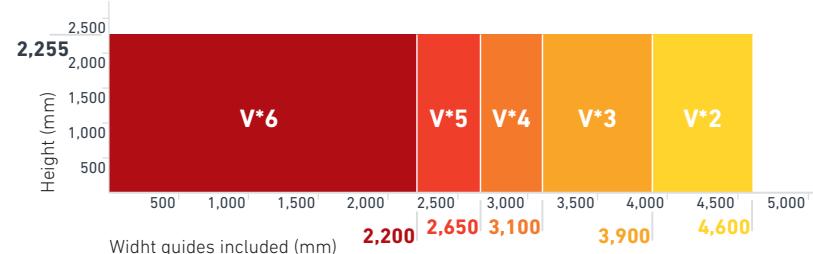
WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE HIGH DENSITY

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

PS-78

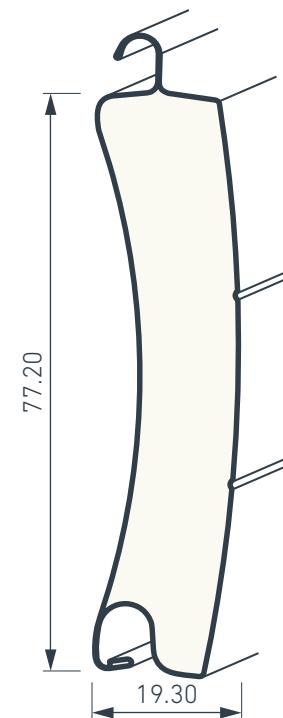
■ 505001 PS-78



Slats in colour
NOIR 100 SABLE

TECHNICAL CHARACTERISTICS

Aluminium thickness	0.48 mm
Nominal thickness	19.30 mm
Area of covering	77.20 mm
Number slats by meter	12.95 units
Maximum recommended width	5,500 mm
Weight density (75 kg/m ³)	5.08 kg/m ²
Packaging unit standard	90 m/l
Production lengths	5.50 to 7 m
Minimum rolling diameter	70 mm



END SLATS COMPATIBILITY

I | N | TL-77

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

WITHOUT LIGHT SLITS Class B-s2, d0 WITH LIGHT SLITS Class C-s2, d0

END SLATS COMPATIBILITY

Set of cap PS-78 (code 505064)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

GE-34/70 | GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100 | GE-41/150 | UPSB-36/100

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 70	200	215	220	230	240	250	260	270	275	280	290	300	310	320
	AXLE 100	200	220	230	240	260	265	270	280	290	300	305	310	320	330
	AXLE 220	280	285	290	300	310	320	325	330	340	345	350	360	370	380
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	190	220	225	240	250	260	260	285	290	295	295	315	320	325
	AXLE 130*	215	230	240	245	250	270	275	280	295	305	310	310	320	340
ARROW SPRING LOCK FOR PULLEY	AXLE 220	300	300	300	305	325	325	325	330	350	355	355	360	360	385
	AXLE 240	310	325	325	325	340	350	350	350	375	380	380	380	380	380

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 with metallic spring

RECOMMENDED BOX ACCORDING TO HEIGHT

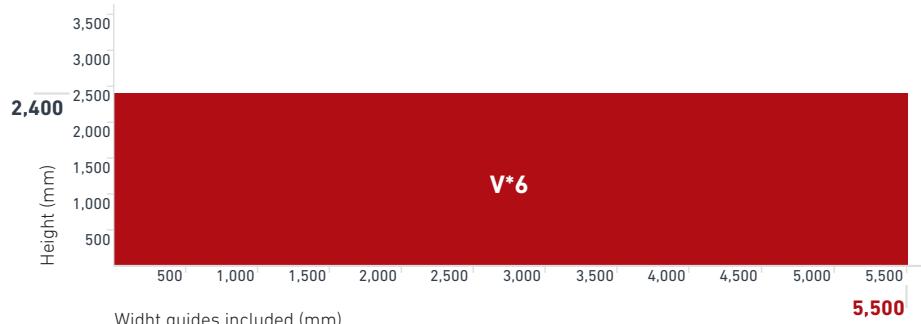
		ALUMINIUM BOX			
		250	300	360	400
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70	1,825	3,035	-	6,185
	AXLE 100*	2,000	3,100	4,885	5,500
	AXLE 130*	-	-	4,420	-
METALLIC SPRING LOCK	AXLE 220	-	-	3,070	3,900

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements / Axle 100 with metallic spring

WIND RESISTANCE

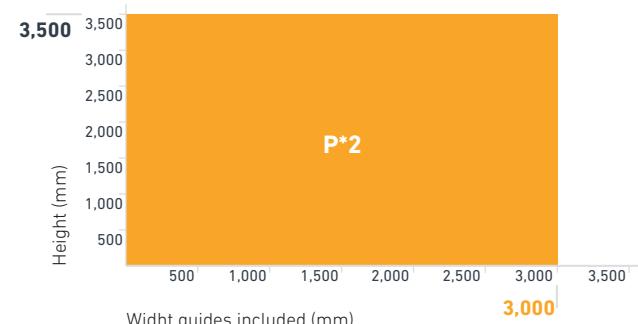
(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

WIND RESISTANCE HIGH DENSITY²

(UNE-EN 13241-1:2003+A1:2011)



Width guides included (mm)

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.18 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

MINIMUM REQUIRED (CE)¹

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

MINIMUM REQUIRED (CE)²

P*1: ≥ 415 Pa ≈ 93.7 km/h

P*2: ≥ 620 Pa ≈ 114.5 km/h

P*3: ≥ 965 Pa ≈ 142.9 km/h

P*4: ≥ 1,375 Pa ≈ 170.6 km/h

P*5: d. l. x 1.25 ≈ 170.6 km/h

Colours of foam filled roll formed aluminium slats



In addition to the colours indicated in the schedule, **the product can be manufactured in any RAL colour**, depending on the quantity supplied. However, **consult stock and delivery time**.

	ALUGIX-39.5	E-45	ALUGIX-45	ALUGAN-45	ALUGIX-50	ALUGIX-55	ALUGIX-546	ALUGIX-56	ALUGIX-56 2L PG	PS-78
White	■	■	■	■	■	■	■	■	■	■
White (RAL 9016)	■	■	■	■	■	■	■	■	■	■
Papyrus White						■	■	■	■	
Black (RAL 9005)	■		■							
Black (RAL 9011)	■		■	■	■	■	■	■	■	
Ivory	■	■	■	■		■	■	■	■	
Silver (RAL 9006)	■	■	■	■	■	■	■	■	■	■
RAL 1013	■		■			■	■	■	■	
RAL 1015	■	■	■	■	■	■	■	■	■	■
RAL 3004	■		■		■	■	■	■	■	
RAL 3005		■	■			■	■	■	■	
RAL 5003	■		■							
RAL 5010			■		■					
RAL 5011	■		■		■		■	■	■	
RAL 5013	■	■	■				■	■	■	
RAL 5024	■		■		■					
RAL 6005		■	■	■	■	■	■	■	■	■
RAL 6009	■									
RAL 6021			■		■		■	■	■	
Gris 007							■	■	■	
RAL 7011	■	■	■	■	■	■	■	■	■	
RAL 7012	■	■	■	■	■	■	■	■	■	
RAL 7016	■	■	■		■	■	■	■	■	■
RAL 7022	■		■		■					
RAL 7024			■							
RAL 7035	■		■		■	■	■	■	■	
RAL 7038	■		■	■	■	■	■	■	■	
RAL 7040		■				■				
Green Flag										

74
PS-40

76
PS-40 SELF-LOCKING

78
PS-45 SELF-LOCKING

80
PM-45

82
PS-45 FLAT

84
PS-48 SELF-LOCKING

86
PM-49

88
PS-53

90
PS-55 S

92
PS-64

94
PS-64 M

96
PS-65 SELF-LOCKING

98
TL-77

100
PS-79

102
PS-80 SELF-LOCKING

104
PS-85 FLAT

106
PS-100

108
PS-100 FLAT

Extruded aluminium slats

Giménez Ganga offers a broad catalogue of rolling doors and blinds that are an ideal solution, both for residential use in single-family dwellings or chalets and for garages and industrial warehouses.

In order to guarantee safety and comfort, all of our systems have modern automation systems that bring innovation and design together, in addition to easy installation.

A wide variety of models with different sizes and services have a high level of resistance, safety and aesthetics. Our slats may be perforated, micro-perforated, etc., and may all be combined together.

All rolling doors offered by Giménez Ganga are available with a wide range of finishes in the entire RAL colour range, exclusively anodised and lacquered with wood.



PS-40

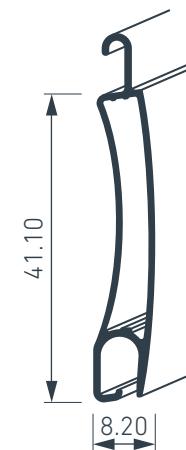
■ 015012 PS-40 Vented
■ 015014 PS-40 Blind



Slats in colour
BRONZE

TECHNICAL CHARACTERISTICS

Nominal thickness	8.20 mm
Area of covering	41.10 mm
Number slats by meter	24.33 units
Maximum recommended width	3,000 mm
Weight	6.66 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	5,80 m / 6 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides

SET OF CAP COMPATIBILITY

Set of cap PS-40 (code 015005)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCKS	AXLE 42	120	130	140	150	155	165	170	180	185	190	195	200	210	215
	AXLE 60	130	140	150	155	170	175	180	185	190	195	200	210	215	220
	AXLE 70	130	140	150	155	160	170	175	185	190	195	200	205	210	215
SPRING LOCK ZF 1 ELEMENT	AXLE 54	130	135	145	150	160	165	170	175	180	185	190	200	205	210
	AXLE 60	135	145	150	160	165	170	175	180	190	195	200	205	210	215
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	130	135	140	150	160	165	170	180	185	190	200	205	210	215
	AXLE 60	130	145	150	160	165	170	175	180	185	190	200	205	210	215

Sizes are in mm

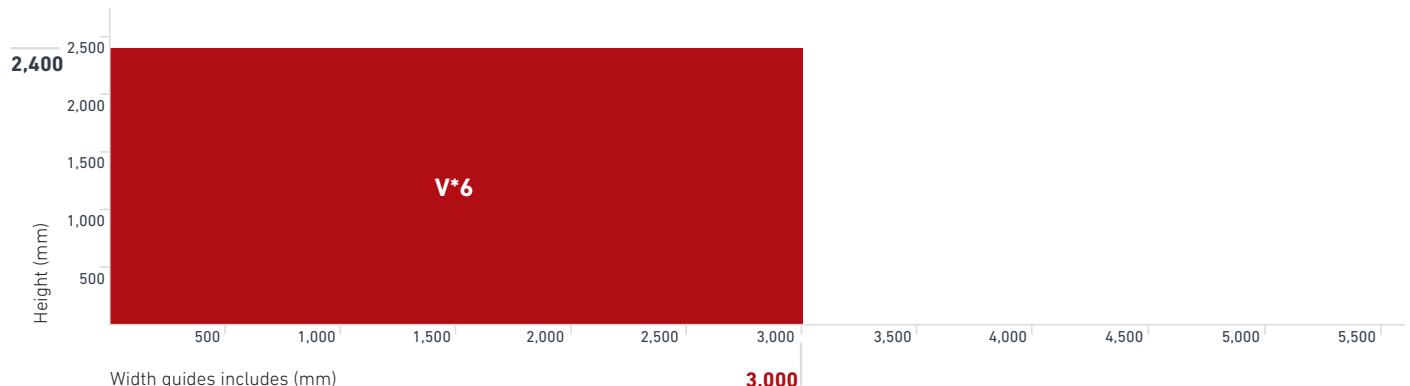
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK			ALEX
		155	170	185	200	225	137	150	165	180	205	155	200	230	250
METALLIC SPRING LOCKS	AXLE 60	1,300	1,650	2,150	2,550	3,550	1,300	1,500	1,850	2,150	3,100	1,200	2,550	3,650	4,300
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	-	-	-	-	-	-	-	-	-	-	-	-	-	3,800

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PS-40 SELF-LOCKING

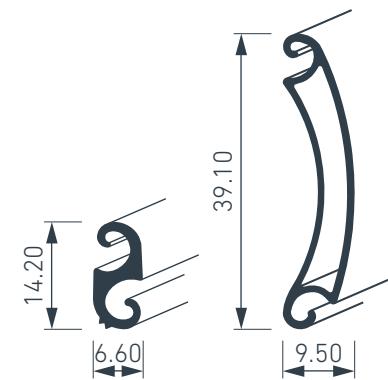
■ 015216 PS-40 Self-Locking
■ 015226 Intermediate Profile



Slats in colour
RAL 7016

TECHNICAL CHARACTERISTICS

Nominal thickness	9.50 mm
Area of covering	41.90 mm
Number slats by meter	23.90 units
Maximum recommended width	3,000 mm
Weight	8.60 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	6 m
Minimum rolling diameter	42 mm



END SLAT COMPATIBILITY

B - Blind

SET OF CAP COMPATIBILITY

Set of cap PS-40 Self-Locking (code 015250)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3,5/22 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x75,5 | Central 70x30

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCKS	AXLE 60	125	130	140	145	160	165	175	180	190	195	200	205	210	215
	AXLE 70	125	135	140	155	160	175	180	185	190	195	205	210	215	220

Sizes are in mm

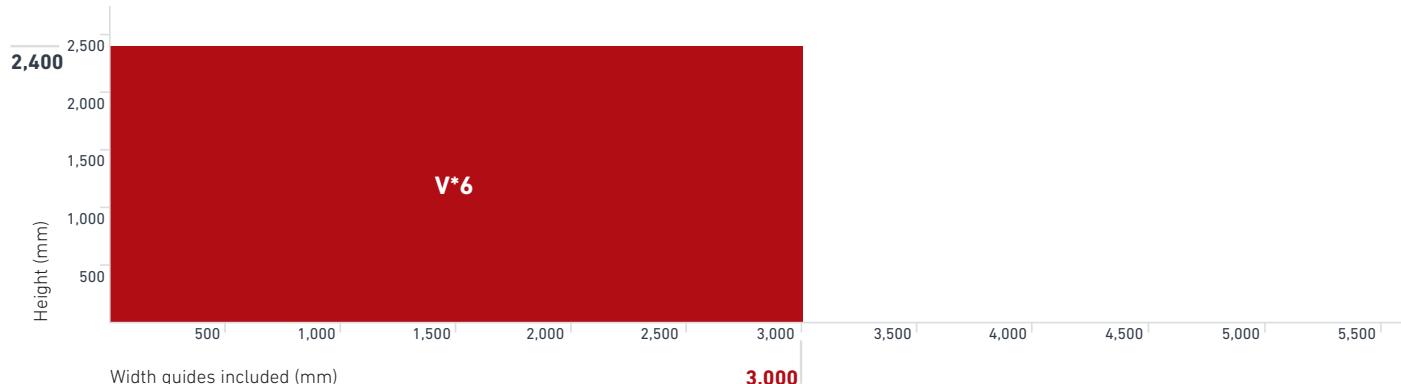
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX				WINBLOCK		ALEX
		155	170	185	200	225	137	165	180	205	200	230	250
METALLIC SPRING LOCKS	AXLE 60	1,450	1,800	2,250	2,650	3,600	1,300	1,900	2,400	3,250	2,600	3,600	4,250
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	-	-	-	-	-	-	-	-	-	-	-	3,700

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PS-45 SELF-LOCKING

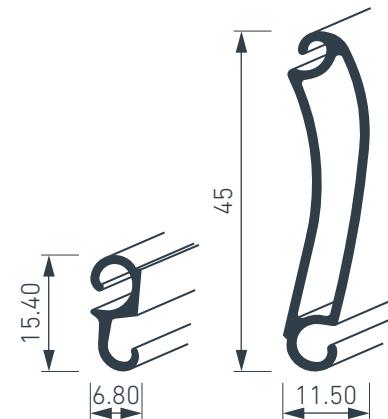
■ 033011 PS-45 Self-Locking
■ 033016 Intermediate Profile



Slats in colour
SILVER (RAL 9006)

TECHNICAL CHARACTERISTICS

Nominal thickness	11.50 mm
Area of covering	45 mm
Number slats by meter	22.22 units
Maximum recommended width	3,000 mm
Weight	9.90 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

E

SET OF CAP COMPATIBILITY

Set of cap PS-45 Self-Locking (code 033004)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x75.5 | Central 70x30

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCK	AXLE 60	140	145	150	160	165	170	180	190	195	200	210	215	220	225
	AXLE 70	145	155	160	170	175	180	190	195	200	210	215	220	225	230

Sizes are in mm

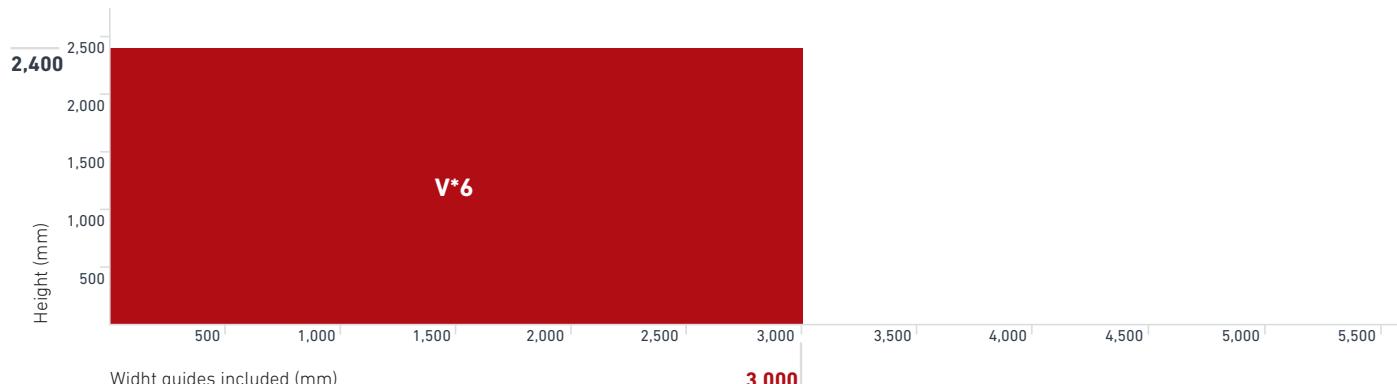
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK		
		155	170	185	200	225	137	150	165	180	205	155	200	230
METALLIC SPRING LOCK	AXLE 60	1,250	1,850	2,000	2,300	3,215	1,200	1,340	1,850	2,200	2,600	1,150	2,350	3,000

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PM-45

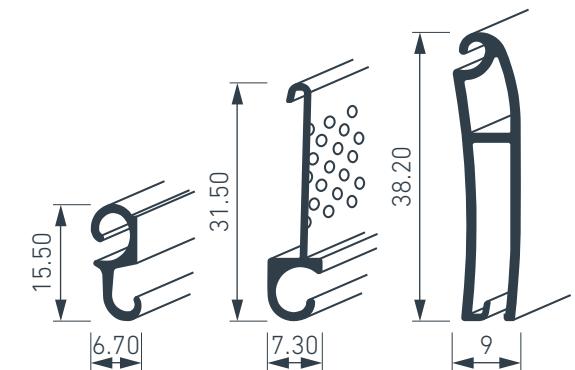
- 015060 PM-45 Microperforated
- 015061 PM-45 Empty
- 015062 Intermediate Profile



Slats in colour
RAL 7038

TECHNICAL CHARACTERISTICS

Nominal thickness	9 mm
Area of covering (closed)	48.80 mm
Area of covering (deployed)	71.30 mm
Free ventilation area (deployed)	8.85 %
Number slats by meter	20.50 ud
Maximum recommended width	3,000 mm
Weight	13.50 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	5,80 m / 6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

E

SET OF CAP COMPATIBILITY

Set of cap PM-45 (code 015064)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3,5/22 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x75,5 | Central 70x30

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCK	AXLE 60	150	155	165	180	185	200	210	220	225	235	240	245	250	255
	AXLE 70	155	160	170	185	195	205	215	225	230	240	245	250	255	265

Sizes are in mm

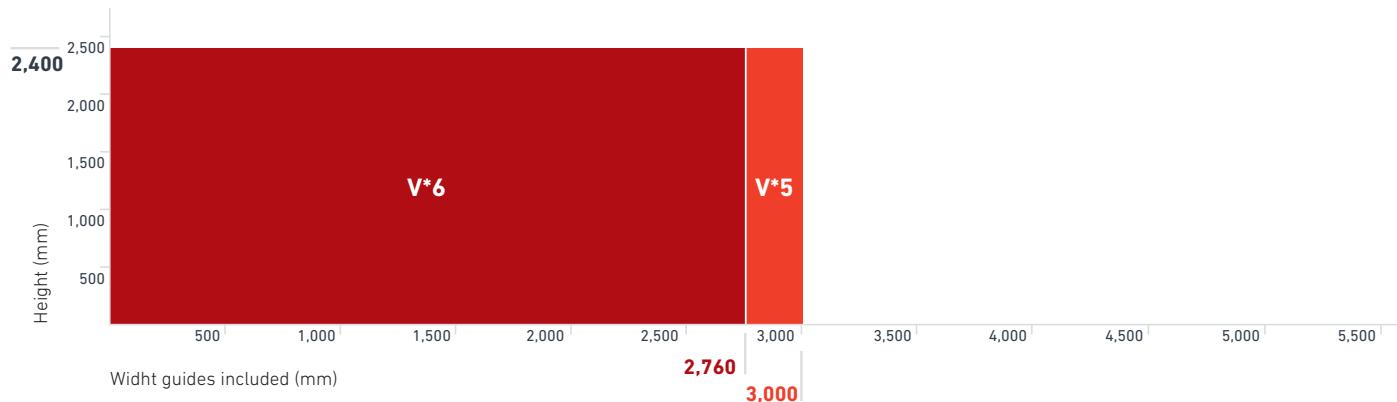
RECOMMENDED BOX ACCORDING TO HEIGHT

	EUROBLOCK / EURODECOR			ALUMINIUM BOX			WINBLOCK		ALEX	
	185	200	225	165	180	205	200	230	250	
METALLIC SPRING LOCK	AXLE 60	1,450	1,700	2,400	1,150	1,450	1,900	1,700	2,600	3,000
	AXLE 70	-	-	-	-	-	-	-	-	3,000

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PS-45 FLAT

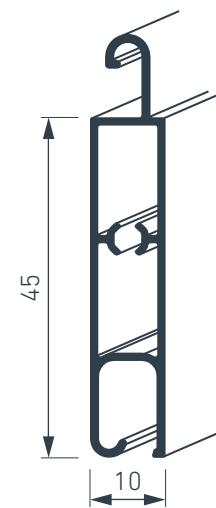
■ 015018 PS-45 Flat Vented
■ 015053 PS-45 Flat Blind



Slats in colour
SILVER MATTE 101

TECHNICAL CHARACTERISTICS

Nominal thickness	10 mm
Area of covering	45 mm
Number slats by meter	22.22 ud
Maximum recommended width	4,164 mm
Weight	9.49 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

PS-45 Flat with end slat rubber to slat Alugix-55

SET OF CAP COMPATIBILITY

Set of cap PS-45 Flat (code 033009)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S | Ref. 1229 | 16.80x28.40
17.20x28.40 | V-25 Ref. 9178 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x70 | 60x75.5 | Central 70x30 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCKS	AXLE 60	170	180	190	195	210	220	230	240	245	250	265	270	280	290
	AXLE 70	170	180	190	195	210	220	230	240	245	250	265	270	280	290
MET. SPRING LOCK	AXLE 100	180	185	195	205	220	225	230	235	240	250	260	270	-	-
	SPRING LOCK ZF 1 ELEMENT	AXLE 54	160	170	180	190	200	210	220	225	230	240	250	260	265
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	170	180	190	200	210	215	220	230	240	245	255	265	270	280
	AXLE 54	160	170	180	190	200	210	220	230	240	245	250	255	260	270
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	165	170	185	190	200	215	225	230	240	245	250	265	270	275

Sizes are in mm

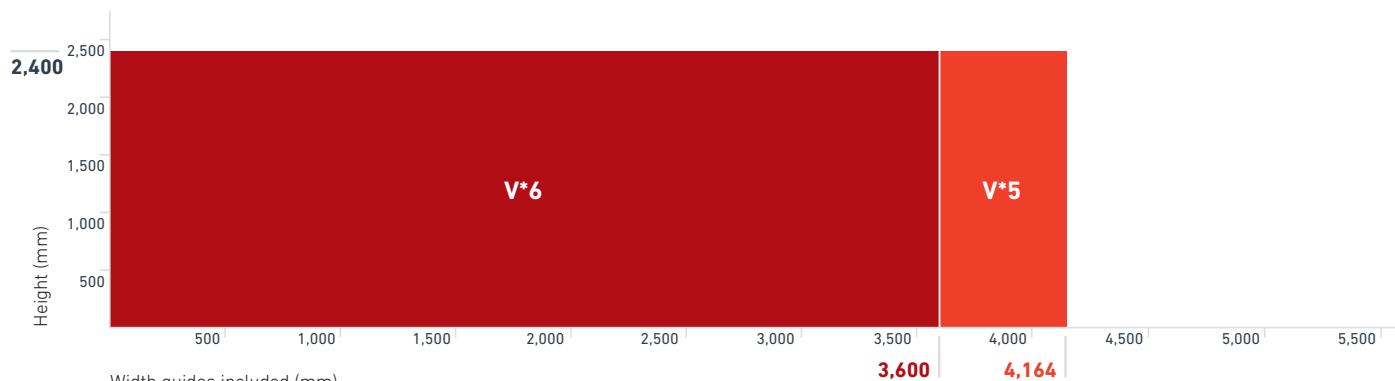
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR		ALUMINIUM BOX		WINBLOCK		ALEX	
		200	225	180	205	200	230	250	
METALLIC SPRING LOCKS	AXLE 60	1,230	1,730	1,650	1,690	1,460	1,820	2,350	
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70	-	-	-	-	-	-	2,550	

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PS-48 SELF-LOCKING

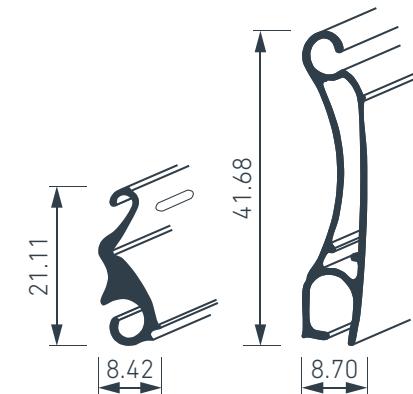
- 015227 PS-48 Self-Locking
- 015228 Intermediate Profile Vented
- 015229 Intermediate Profile Blind



Slats in colour
RAL 7022

TECHNICAL CHARACTERISTICS

Nominal thickness	8.70 mm
Area of covering	47.80 mm
Number slats by meter	20.90 units
Maximum recommended width	3,000 mm
Weight	8.60 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	5,80 m / 6 m
Minimum rolling diameter	50 mm



END SLATS COMPATIBILITY

B - Blind

SET OF CAP COMPATIBILITY

Set of cap PS-48 Self-Locking with screw (code 505024)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x75.5 | Central 70x30

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCKS	AXLE 60	125	130	145	150	155	160	170	180	185	190	195	200	210	215
	AXLE 70	130	145	150	155	160	175	180	185	190	200	205	210	215	220

Sizes are in mm

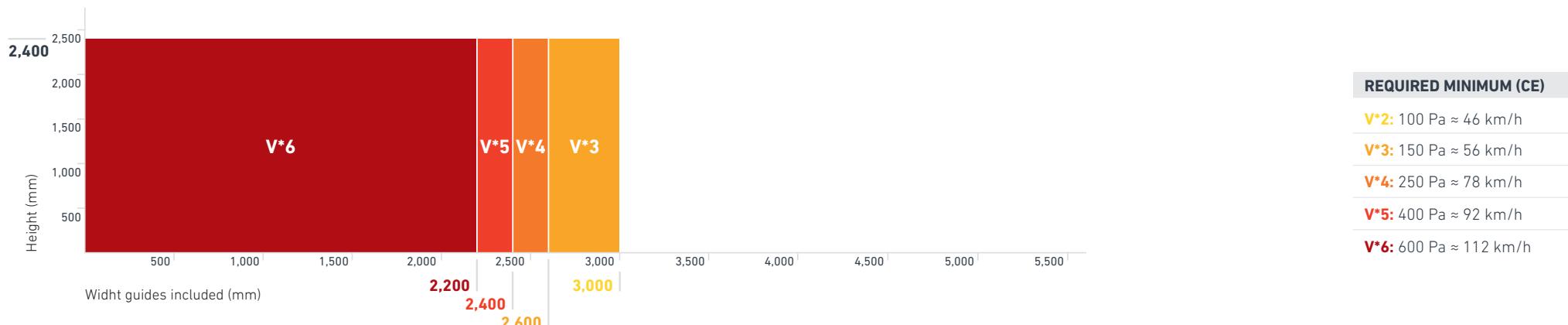
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR				ALUMINIUM BOX					WINBLOCK	ALEX
		155	185	200	225	137	150	165	180	205	230	250
METALLIC SPRING LOCKS	AXLE 60	1,345	2,305	2,770	3,630	1,057	1,350	2,017	2,449	2,893	3,800	4,500
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 60	-	-	-	-	-	-	-	-	-	-	4,000

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

PM-49

015084 PM-49

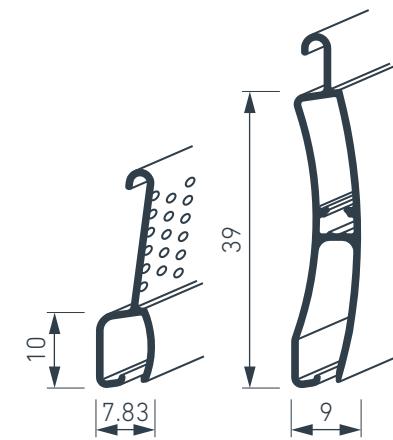
015091 Intermediate Profile Microperforated



Slats in colour
ALESTA 3020

TECHNICAL CHARACTERISTICS

Nominal thickness	9.27 mm
Area of covering (closed)	49 mm
Area of covering (deployed)	68.30 mm
Free ventilation area (deployed)	8.05 %
Number slats by meter	20.40 units
Maximum recommended width	3,000 mm
Weight	8.60 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	5,80 m / 6 m
Minimum rolling diameter	50 mm



END SLATS COMPATIBILITY

B - Blind

SET OF CAP COMPATIBILITY

Set of cap PM-49 with screw (code 505082)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	140	155	160	175	185	190	200	205	215	220	225	230	235	245
TREATED STEEL	AXLE 70	145	155	160	175	180	190	195	205	210	220	225	230	235	240
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	165	170	175	180	195	200	210	215	225	230	240	245	250	255
SPRING LOCK ZF 2 ELEMENTS	AXLE 70	165	180	185	200	205	215	220	230	235	245	250	255	260	265
UNION L&P 2 LINKS	AXLE 60	145	150	160	175	180	190	195	205	210	220	225	230	235	240

Sizes are in mm

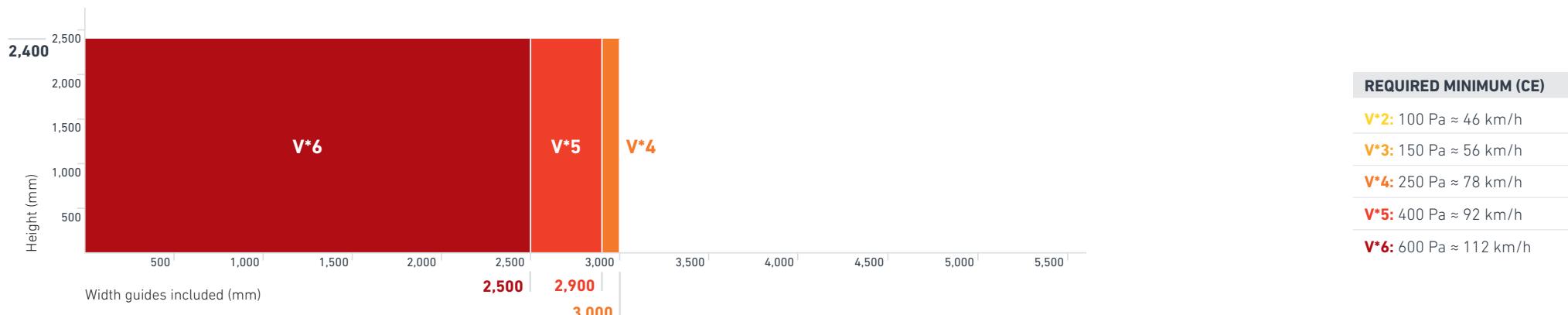
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX					WINBLOCK			ALEX	
		155	170	185	200	225	137	150	165	180	205	155	200	230	250	
MIXED SPRING LOCK	AXLE 60	1,130	1,430	1,800	2,150	2,970	970	1,130	1,485	1,845	2,655	3,265	1,020	2,110	3,070	3,600
TREATED STEEL	AXLE 70	-	-	-	1,960	2,430	-	-	-	1,845	2,410	3,120	-	2,160	2,925	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	930	1,300	1,650	1,960	2,525	630	930	1,260	1,650	2,460	2,925	830	1,910	2,825	3,150
SPRING LOCK ZF 2 ELEMENTS	AXLE 70	-	-	-	1,130	2,280	-	-	-	1,110	1,870	2,310	-	1,375	2,335	-
UNION L&P 2 LINKS	AXLE 60	1,130	1,390	1,700	2,050	2,970	870	1,130	1,430	1,840	2,655	3,170	930	2,060	2,970	-

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



PS-53

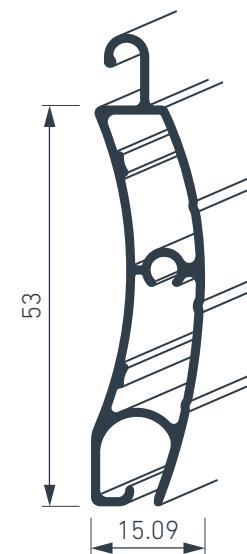
■ 033396 PS-53 Vented
■ 033397 PS-53 Blind



Slats in colour
TESTA DI MORO (RAL 8019)

TECHNICAL CHARACTERISTICS

Nominal thickness	15.09 mm
Area of covering	53 mm
Number slats by meter	18.87 units
Maximum recommended width	5,000 mm
Weight	10.34 kg/m ²
Packaging unit standard	32.50 m/l
Stock lengths	6.50 m
Minimum rolling diameter	80 mm



END SLATS COMPATIBILITY

G | J

SET OF CAP COMPATIBILITY

Set of cap PS-53 with screw (code 505077)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

19.15x28.40 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT																											
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000	
SMALL MET. SP. LOCK	AXLE 70	160	170	180	190	200	210	220	225	230	240	250	260	270	280	-	-	-	-	-	-	-	-	-	-	-	-	-	
BIG METALLIC SPRING LOCK	AXLE 70	160	170	180	190	200	210	220	230	240	250	255	260	270	280	280	-	-	-	-	-	-	-	-	-	-	-	-	
	AXLE 100	180	185	190	200	210	220	230	240	250	255	260	270	280	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 220	275	275	275	300	300	300	325	325	325	325	325	335	350	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 100*	175	175	200	200	200	225	225	230	250	250	250	275	275	275	290	300	300	-	-	-	-	-	-	-	-	-	-	-
ARROW SPRING LOCK FOR PULLEY	AXLE 130*	185	210	210	225	230	230	245	255	255	255	280	280	280	295	305	305	305	310	330	330	330	330	345	355	355	355	355	355
	AXLE 240	275	275	275	300	300	305	325	325	325	325	345	345	345	350	350	355	365	380	380	380	380	400	405	405	405	405	405	405

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

RECOMMENDED BOX ACCORDING TO HEIGHT

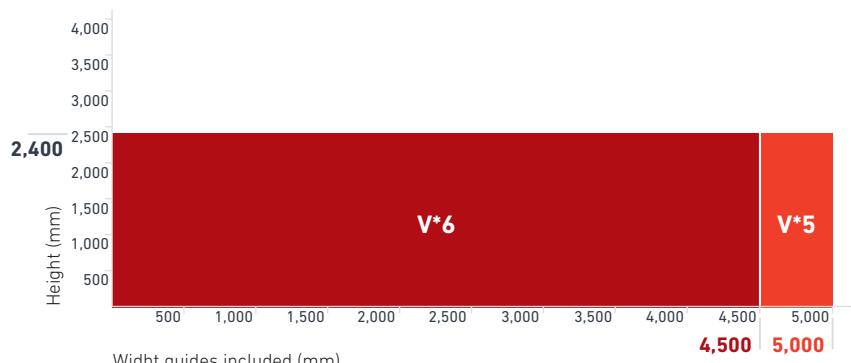
		ALUMINIUM BOX			WINBLOCK	ALEX
		250	300	360	230	250
SMALL MET. SP. LOCK	AXLE 70	3.000	4.450	6.890	2.300	2.950
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70	-	-	-	-	2.650
	AXLE 100*	2.590	4.400	6.470	-	-
	AXLE 130*	-	-	6.260	-	-
BIG MET. SPRING LOCK	AXLE 220	-	-	3.800	-	-

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE¹

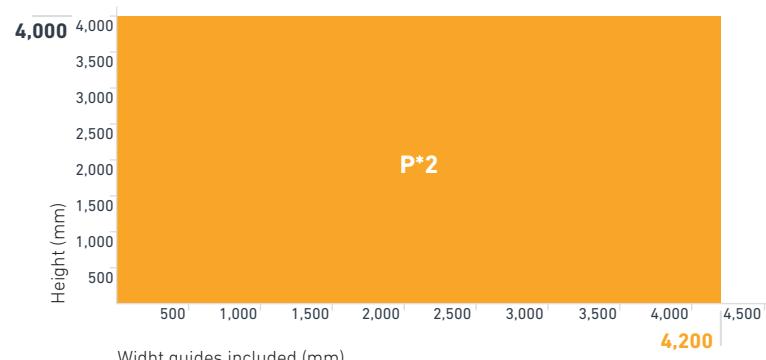
(UNE-EN 13659:2004+A1:2008)



Widht guides included (mm)

WIND RESISTANCE²

(UNE-EN 13241-1:2003+A1:2011)



Widht guides included (mm)

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0,14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

REQUIRED MINIMUM (CE)¹

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

REQUIRED MINIMUM (CE)²

P*1: ≥ 415 Pa ≈ 93.7 km/h

P*2: ≥ 620 Pa ≈ 114.5 km/h

P*3: ≥ 965 Pa ≈ 142.9 km/h

P*4: ≥ 1,375 Pa ≈ 170.6 km/h

P*5: d. l. x 1.25 ≈ 170.6 km/h

PS-55 S

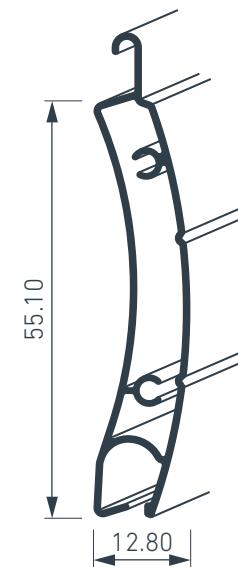
- 505041 PS-55 S Vented
- 505040 PS-55 S Blind



Slats in colour
RAL 3020

TECHNICAL CHARACTERISTICS

Nominal thickness	12.80 mm
Area of covering	55.10 mm
Number slats by meter	18.15 ud
Maximum recommended width	4,000 mm
Weight	7.90 kg/m ²
Packaging unit standard	30.00 m/l
Stock lengths	6,20 m
Minimum rolling diameter	60.00 mm



END SLATS COMPATIBILITY

H | SP

SET OF CAP COMPATIBILITY

Set of caps PS-55 with screw (code 505044)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 17.20x28.40 | 19.15x28.40 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 60	145	160	165	175	185	185	200	210	215	225	225	230	245	245
TREATED STEEL	AXLE 70	155	160	170	170	190	190	205	210	210	230	230	230	250	250
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	160	160	180	180	195	195	200	215	215	230	240	240	245	260
	AXLE 80	170	170	185	190	190	210	210	215	230	230	235	250	250	250

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W

RECOMMENDED BOX ACCORDING TO HEIGHT

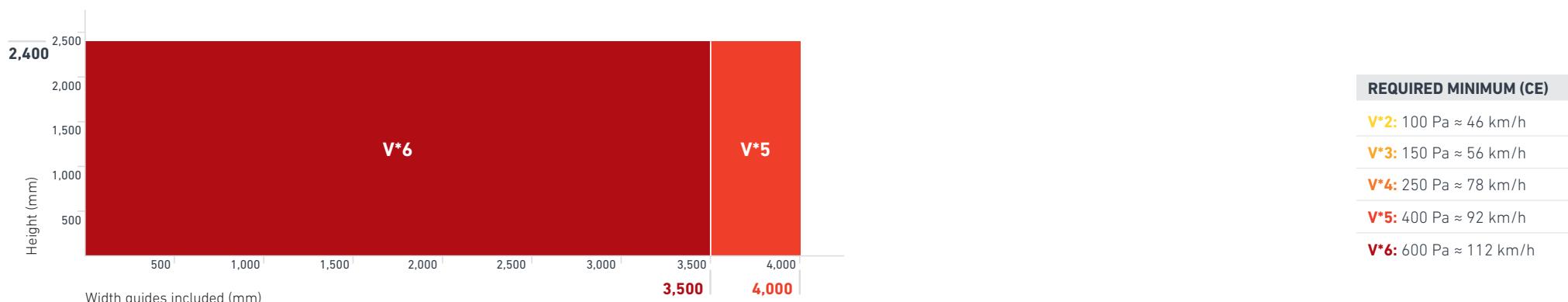
		ALUMINIUM BOX			WINBLOCK	ALEX
		205	250	300	230	250
MIXED SPRING LOCK	AXLE 60	*2,635	-	-	2,665	3,300
TREATED STEEL	AXLE 70	*2,300	3,520	5,470	2,790	3,020
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	*2,300	3,520	5,580	2,665	3,070
	AXLE 80	*1,970	3,240	5,250	2,510	2,760

Sizes are in mm

*Rolling made without guide entries with the openings made in the guides

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



PS-64

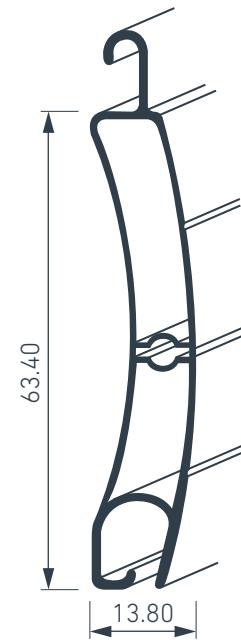
■ 033401 PS-64 Vented
■ 033399 PS-64 Blind



Slats in colour
RAL 7016

TECHNICAL CHARACTERISTICS

Nominal thickness	13.80 mm
Area of covering	63.40 mm
Number slats by meter	15.77 units
Maximum recommended width	5,500 mm
Weight	8.31 kg/m ²
Packaging unit standard	32.50 m/l
Stock lengths	5,80 m / 6,50 m
Minimum rolling diameter	80 mm



END SLATS COMPATIBILITY

G | J

SET OF CAP COMPATIBILITY

Set of cap PS-64 with screw (code 505076)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

19.15x28.40 | UP-40/25 | UP-50/25 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
SMALL MET. SP. LOCK	AXLE 70	170	180	190	195	200	210	215	220	230	235	240	250	260	270	-	-	-	-	-	-	-	-	-	-	-	-	-
BIG METALLIC SPRING LOCK	AXLE 70	180	190	195	200	210	220	230	235	240	250	255	260	265	270	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 100	190	195	200	210	220	230	240	245	250	260	265	270	280	290	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 220	255	260	265	270	275	280	285	290	295	300	305	310	315	325	-	-	-	-	-	-	-	-	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	185	185	195	205	205	225	230	230	245	250	255	255	270	270	275	280	290	-	-	-	-	-	-	-	-	-	-
	AXLE 130*	185	210	210	215	230	230	245	250	255	255	270	275	275	285	290	295	300	305	310	320	320	320	330	340	340	340	350
ARROW SPRING LOCK FOR PULLEY	AXLE 220	275	275	275	295	295	295	305	315	320	320	320	320	335	340	345	345	355	360	365	365	365	370	380	390	390	390	390
	AXLE 240	295	295	295	295	315	315	315	315	335	335	340	340	340	360	365	365	365	365	380	385	385	385	385	390	405	410	410

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

RECOMMENDED BOX ACCORDING TO HEIGHT

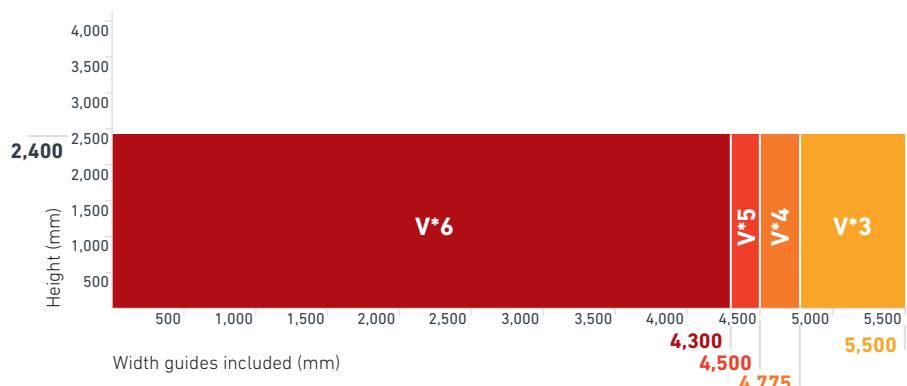
		ALUMINIUM BOX			WINBLOCK	ALEX
		250	300	360	230	250
SMALL MET. SP. LOCK	AXLE 70	3.000	4.650	7.080	2.400	2.800
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70	-	-	-	-	2.600
	AXLE 100*	2.800	4.600	7.080	-	-
	AXLE 130*	-	4.300	6.643	-	-
BIG MET. SP. LOCK	AXLE 220	-	2.600	4.540	-	-

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE¹

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0,14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

REQUIRED MINIMUM (CE)¹

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

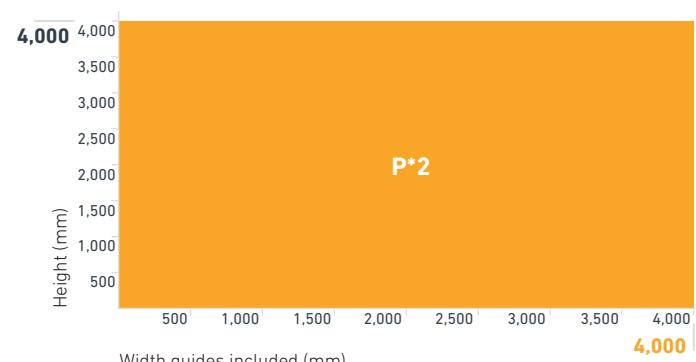
V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

WIND RESISTANCE²

(UNE-EN 13241-1:2003+A1:2011)



REQUIRED MINIMUM (CE)²

P*1: ≥ 415 Pa ≈ 93.7 km/h

P*2: ≥ 620 Pa ≈ 114.5 km/h

P*3: ≥ 965 Pa ≈ 142.9 km/h

P*4: ≥ 1.375 Pa ≈ 170.6 km/h

P*5: d. l. x 1.25 ≈ 170.6 km/h

PS-64 M

- 505025 PS-64 M Blind
- 505030 PS-64 M Vented
- 505031 PS-64 M Perforated
- 505027 PS-64 M Microporforated

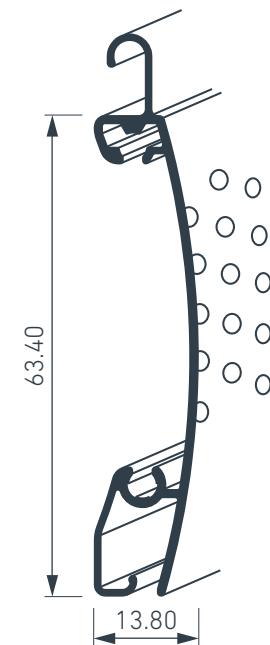


Slats in colour
ALESTA 3020

TECHNICAL CHARACTERISTICS

Nominal thickness	13.80 mm
Area of covering (closed)	63.40 mm
Area of covering (deployed)	68.50 mm
*Free ventilation area of perforated	27.30 %
*Free ventilation area of microporforated	13.20 %
Number slats by meter	15.77 units
Maximum recommended width	3,600 mm
Weight	7 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	6,50 m
Minimum rolling diameter	70 mm
Opening size, perforated slat	23x120 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

G | J

SET OF CAP COMPATIBILITY

Set of cap PS-64 M with screw (code 505029)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

19.15x28.40 | UP-50/25 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
SMALL MET. SP. LOCK	AXLE 70	180	190	195	200	210	220	230	235	240	250	255	260	265	270
BIG METALLIC SPRING LOCK	AXLE 100	190	195	200	210	220	230	240	245	250	260	265	270	280	290
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	185	185	195	205	205	225	230	230	245	250	255	255	270	270
ARROW SPRING LOCK FOR PULLEY	AXLE 130*	180	210	210	215	230	230	240	250	255	255	270	275	280	285
	AXLE 220	275	275	275	295	295	295	315	315	315	320	335	335	340	
	AXLE 240	290	290	290	290	310	310	310	310	335	335	335	345	360	

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

RECOMMENDED BOX ACCORDING TO HEIGHT

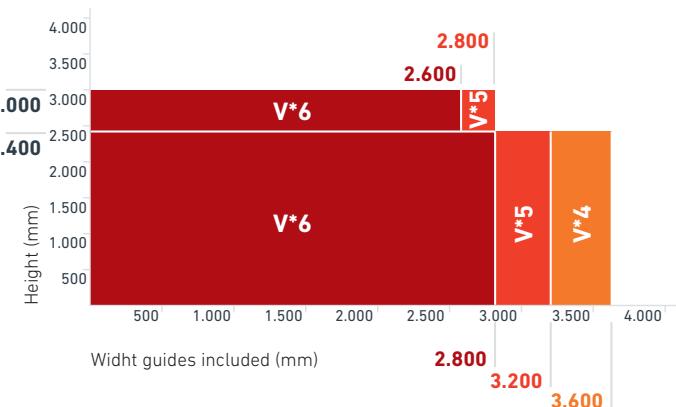
		ALUMINIUM BOX			WINBLOCK	ALEX
		250	300	360	230	250
SMALL MET. SP. LOCK	AXLE 70	3,000	4,650	7,080	2,400	2,800
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	2,800	4,600	7,080	-	2,600
	AXLE 130*	-	4,300	6,643	-	-
ARROW SPRING LOCK FOR PULLEY	AXLE 220	-	2,600	4,540	-	-

Dimensiones expresadas en mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W*

*Except perforated and microperforated formats:

ΔR Class 4 = 0.08 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

(g_{tot})

See page 15

PS-65 SELF-L.

- 033302 PS-65 Self-Locking Tubular
- 033311 PS-65 Self-Locking Blind
- 033312 PS-65 Self-Locking Perforated
- 033322 Intermediate Profile

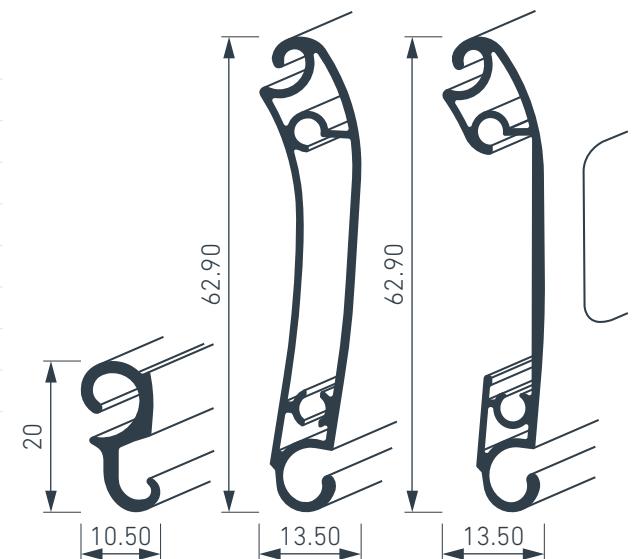


Slats in colour
Inox 343

TECHNICAL CHARACTERISTICS

Nominal thickness	13.50 mm
Area of covering	65.10 mm
*Free ventilation area of perforated	26.50 %
Number slats by meter	15.40 units
Maximum recommended width	4,500 mm
Weight	11 kg/m ²
Packaging unit standard	60 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	80 mm
Opening size, perforated slat	23x120 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

F

SET OF CAP COMPATIBILITY

Set of cap PS-65 Self-Locking with screw (code 033361)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
METALLIC SPRING LOCK	AXLE 70	180	190	195	200	210	215	220	230	240	245	250	255	260	270	-	-	-	-	-	-	-	-	-	-	-	-	
	AXLE 100	190	200	205	210	215	220	230	240	245	250	255	260	270	280	285	290	295	310	-	-	-	-	-	-	-	-	
	AXLE 130	-	-	-	-	215	225	230	235	245	250	260	270	280	285	290	295	300	310	-	-	-	-	-	-	-	-	
SPRING LOCK ZF 2 ELEMENTS	AXLE 130	195	215	215	215	240	240	240	260	260	260	280	280	285	285	305	305	310	310	330	330	330	330	335	350	355	355	355

Sizes are in mm

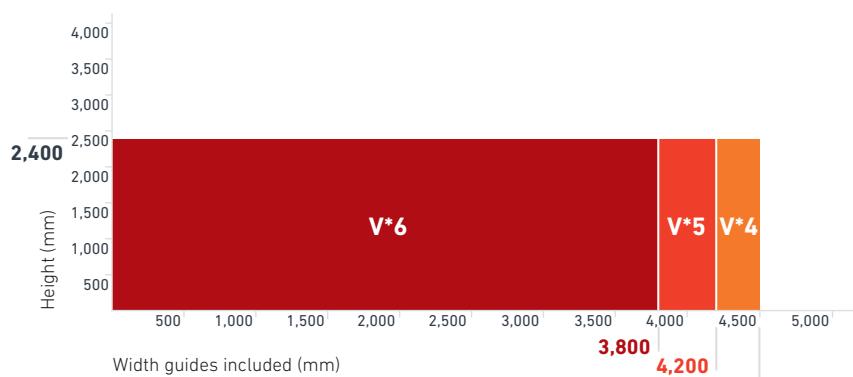
RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX			WINBLOCK	ALEX
		250	300	360	230	250
SPRING LOCK ZF 2 AND 3 ELEMENTS	AXLE 70	-	-	-	-	2.450
METALLIC SPRING LOCK	AXLE 70	2.800	4.000	6.250	2.300	2.550
	AXLE 100	2.600	3.800	6.250	-	-
	AXLE 130	2.400	3.600	6.532	-	-

Sizes are in mm

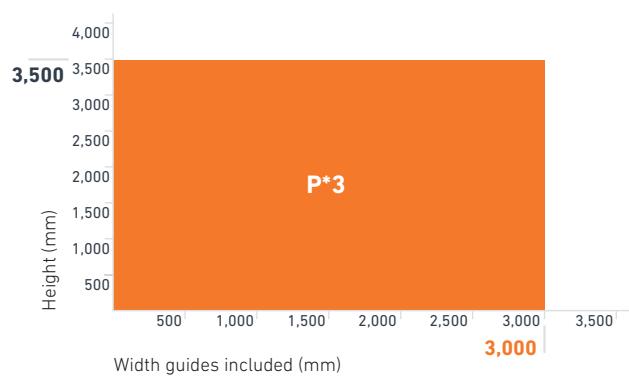
WIND RESISTANCE¹

(UNE-EN 13659:2004+A1:2008)



WIND RESISTANCE²

(UNE-EN 13241-1:2003+A1:2011)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W*

*Except perforated and microperforated formats:

ΔR Class 4 = 0.08 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

REQUIRED MINIMUM (CE)¹

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

REQUIRED MINIMUM (CE)²

P*1: ≥ 415 Pa ≈ 93.7 km/h**P*2:** ≥ 620 Pa ≈ 114.5 km/h**P*3:** ≥ 965 Pa ≈ 142.9 km/h**P*4:** ≥ 1.375 Pa ≈ 170.6 km/h**P*5:** d. l. x 1.25 ≈ 170.6 km/h

TL-77

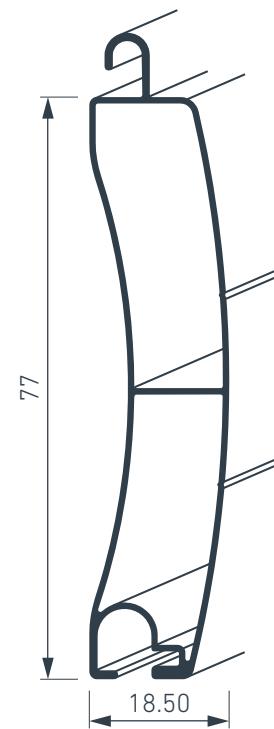
505021 TL-77



Slats in colour
BRONZE

TECHNICAL CHARACTERISTICS

Nominal thickness	18.50 mm
Area of covering	77 mm
Number slats by meter	12.99 units
Maximum recommended width	4,500 mm
Weight	7.20 kg/m ²
Packaging unit standard	18 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	100 mm



END SLATS COMPATIBILITY

TL-77

SET OF CAP COMPATIBILITY

Set of cap TL-77 with screw (code 507418)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCK	AXLE 100	200	215	220	225	245	250	250	275	275	280	280	310	310	310
	AXLE 130	205	230	235	240	255	270	270	275	300	300	300	305	310	325
	AXLE 220	300	300	300	300	325	330	330	330	340	360	360	360	360	370

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

RECOMMENDED BOX ACCORDING TO HEIGHT

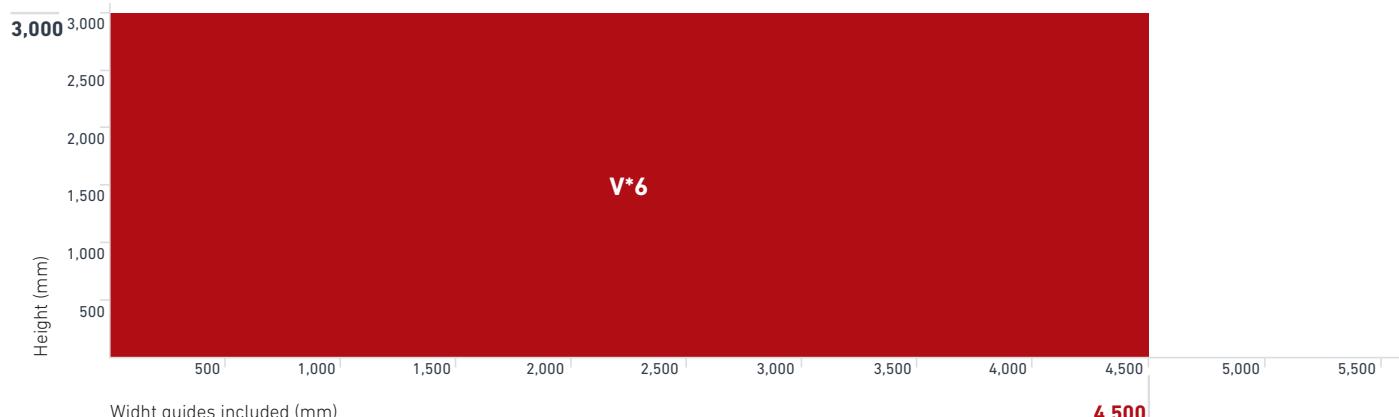
	ALUMINIUM BOX				
	250	300	360	400	
	AXLE 100*	1,720	3,150	5,060	6,180
METALLIC SPRING LOCK	AXLE 130*	-	-	4,980	-
	AXLE 220	-	-	3,430	-

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



MINIMUM REQUIRED (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

PS-79

- 505012 PS-79 Blind
- 505022 PS-79 Perforated
- 505016 PS-79 Tubular

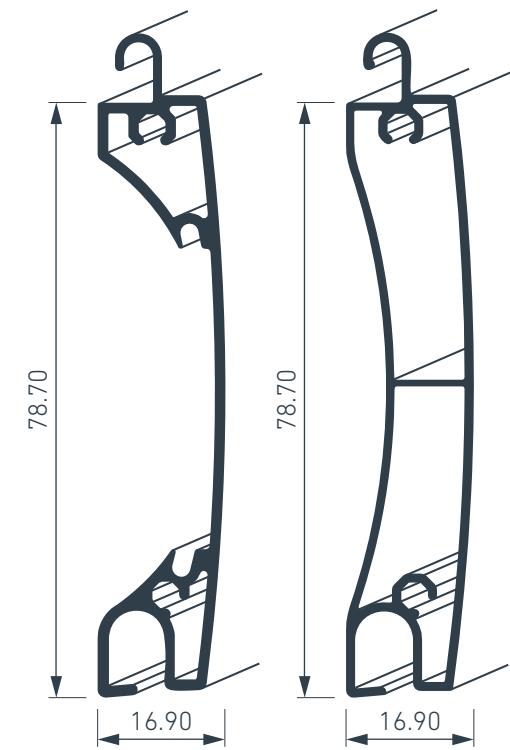


Slats in colour
SILVER MATTE 101

TECHNICAL CHARACTERISTICS

Nominal thickness	16.90 mm
Area of covering	78.70 mm
*Free ventilation area of perforated	31.40 %
Number slats by meter	12.70 units
Maximum recommended width	4,000 mm
Weight blind	8.82 kg/m ²
Weight tubular	9.60 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	100 mm
Opening size, perforated slat	31x85 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

I I N

SET OF CAP COMPATIBILITY

Set of cap PS-79 with screw (code 505075) | Set of cap PS-79 Tubular with screw (code 505074)

ALUMINUM GUIDE CHANNELS COMPATIBILITY

GE-34/70 | GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
METALLIC SPRING LOCK	AXLE 100	175	185	195	200	210	220	230	240	250	255	260	265	270	310	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 130	190	200	210	220	230	240	245	255	265	270	280	285	290	325	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 220	270	290	295	300	305	320	325	330	340	345	350	355	370	370	-	-	-	-	-	-	-	-	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	205	220	225	230	255	260	260	280	280	290	290	315	320	320	320	340	345	-	-	-	-	-	-	-	-	-	-
	AXLE 130*	215	245	245	245	265	275	275	275	295	305	305	305	325	335	335	335	335	335	360	365	365	370	370	395	395	395	395
ARROW SPRING LOCK FOR PULLEY	AXLE 220	295	295	295	295	325	325	325	355	355	355	355	355	385	385	385	385	385	400	410	410	410	410	415	440	440	440	440
	AXLE 240	315	315	315	315	345	345	345	345	365	375	375	375	395	405	405	405	405	430	430	430	430	430	430	430	430	430	450

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

RECOMMENDED BOX ACCORDING TO HEIGHT

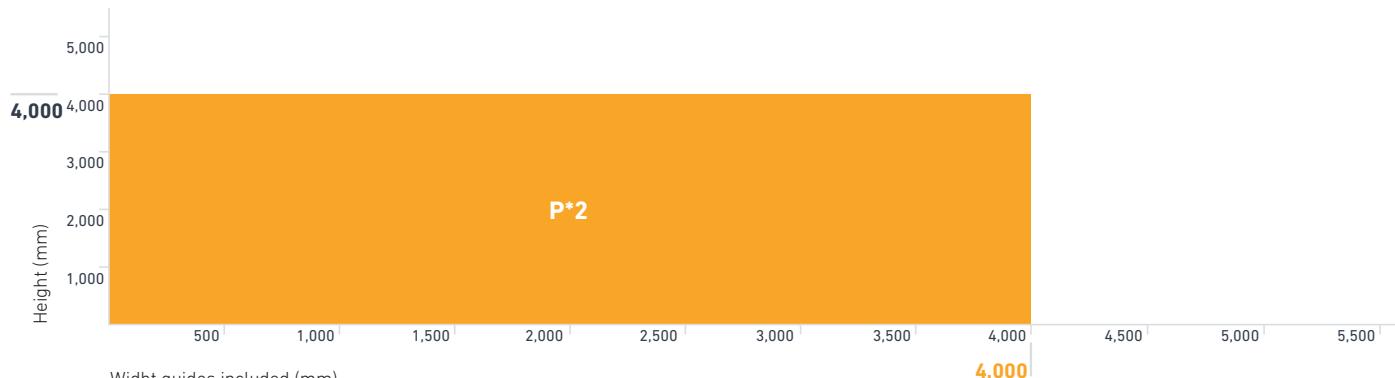
METALLIC SPRING LOCK	ALUMINIUM BOX			
	250	300	360	400
	AXLE 100*	1.920	3.300	5.050
AXLE 130*	1.860	3.200	4.575	5.600
AXLE 220	-	-	3.260	4.400

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE

(UNE-EN 13241-1:2003+A1:2011)



Width guides included (mm)

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W*

*Except perforated and microperforated formats:

ΔR Class 4 = 0.08 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

MINIMUM REQUIRED (CE)

P*1: $\geq 415 \text{ Pa} \approx 93.7 \text{ km/h}$ **P*2:** $\geq 620 \text{ Pa} \approx 114.5 \text{ km/h}$ **P*3:** $\geq 965 \text{ Pa} \approx 142.9 \text{ km/h}$ **P*4:** $\geq 1,375 \text{ Pa} \approx 170.6 \text{ km/h}$ **P*5:** $d \cdot l \times 1.25 \approx 170.6 \text{ km/h}$

PS-80 SELF-LOCKING

- 033261 PS-80 Self-Locking Tubular
- 033266 PS-80 Self-Locking Perforated
- 033276 Intermediate Profile

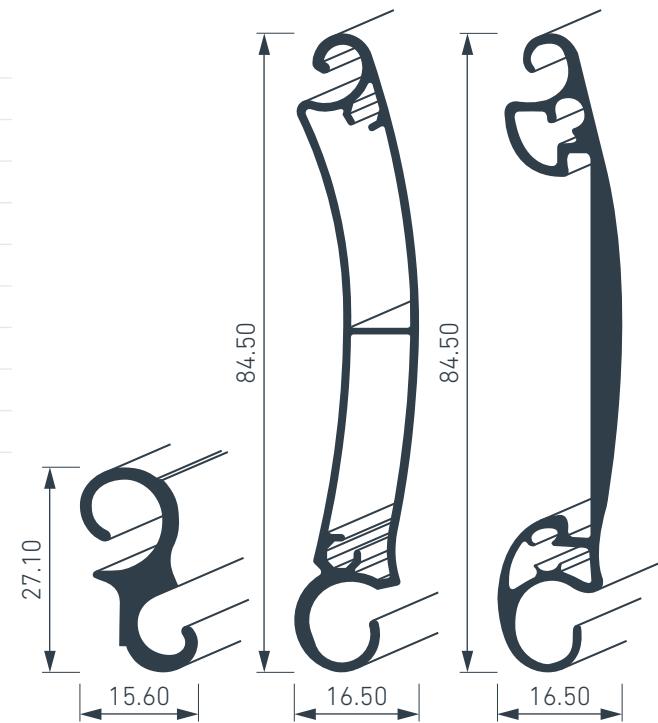


Slats in colour
RAL 9007

TECHNICAL CHARACTERISTICS

Nominal thickness	16.50 mm
Area of covering	87.30 mm
*Free ventilation area of perforated	33.20 %
Number slats by meter	12.50 units
Maximum recommended width	4,000 mm
Weight blind	12.93 kg/m ²
Weight tubular	16.88 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	100 mm
Opening size, perforated slat	38x150 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

K

SET OF CAP COMPATIBILITY

Set of cap PS-80 Self-Locking with screw (code 033291)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
METALLIC SPRING LOCK	AXLE 100	-	-	-	-	215	230	235	240	255	255	265	270	275	280	290	300	305	310	315	320	330	340	-	-	-	-	-
	AXLE 130	-	-	-	-	235	240	245	255	265	270	275	280	290	295	305	310	315	325	330	335	340	350	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 130	195	230	230	255	255	255	280	280	280	295	305	305	330	330	330	330	335	355	355	355	375	385	385	385	385	400	

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX			
		250	300	360	400
METALLIC SPRING LOCK	AXLE 100	2.200	3.500	5.810	7.200
	AXLE 130	1.800	3.000	4.880	6.200

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.14 m² K/W*

*Except perforated and microperforated formats:

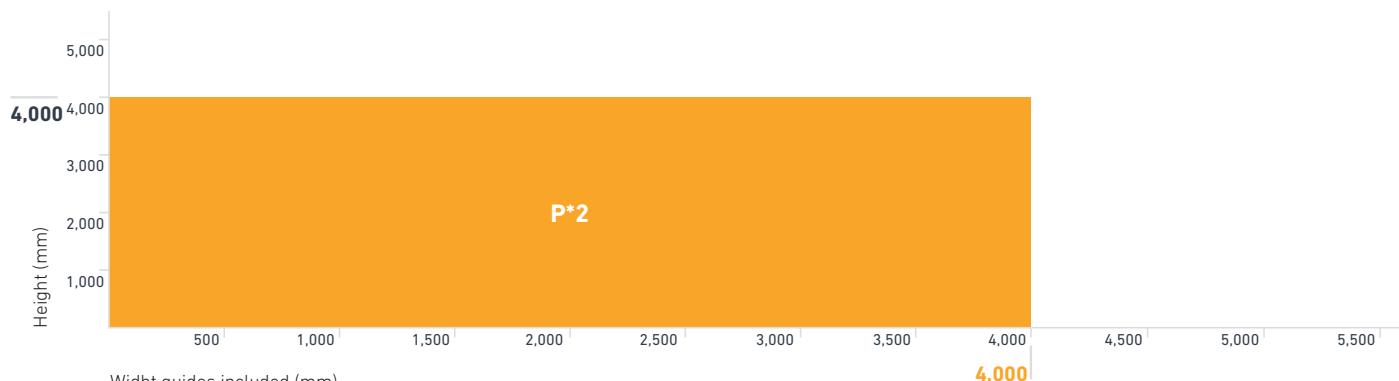
ΔR Class 4 = 0.08 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

WIND RESISTANCE

(UNE-EN 13241-1:2003+A1:2011)



MINIMUM REQUIRED (CE)

P*1: $\geq 415 \text{ Pa} \approx 93.7 \text{ km/h}$ **P*2:** $\geq 620 \text{ Pa} \approx 114.5 \text{ km/h}$ **P*3:** $\geq 965 \text{ Pa} \approx 142.9 \text{ km/h}$ **P*4:** $\geq 1,375 \text{ Pa} \approx 170.6 \text{ km/h}$ **P*5:** $d \cdot l \times 1.25 \approx 170.6 \text{ km/h}$

PS-85 FLAT

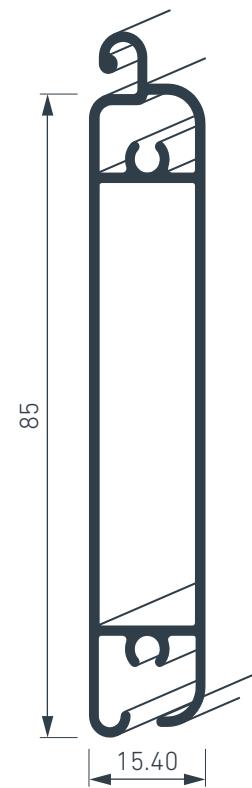
033272 PS-85 Flat



Slats in colour
BRONZE

TECHNICAL CHARACTERISTICS

Nominal thickness	15.40 mm
Area of covering	85 mm
Number slats by meter	11.80 units
Maximum recommended width	5,000 mm
Weight	10.17 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	100 mm



END SLATS COMPATIBILITY

R

SET OF CAP COMPATIBILITY

Set of cap PS-85 Flat with screw (code 505019)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

VH | GE-34/65 + Lodge-guide 94x80 | GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
METALLIC SPRING LOCK	AXLE 100	-	240	250	260	265	275	285	290	300	310	318	325	335	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 130	-	245	255	265	270	280	290	300	310	317	327	335	345	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 220	-	305	310	315	325	330	340	345	355	360	365	375	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	210	240	245	250	270	285	290	290	300	320	325	325	325	350	360	365	365	-	-	-	-	-	-	-	-	-	-
	AXLE 130*	230	230	270	270	270	270	310	310	310	335	345	345	345	345	385	385	385	385	400	420	420	420	420	420	420	440	440
ARROW SPRING LOCK FOR PULLEY	AXLE 220	310	325	325	325	325	365	365	365	365	405	405	405	405	405	415	415	415	415	445	460	460	460	460	460	460	460	460
	AXLE 240	325	335	335	335	335	360	375	375	375	375	420	420	420	420	420	440	440	440	440	440	480	480	480	480	480	480	

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

RECOMMENDED BOX ACCORDING TO HEIGHT

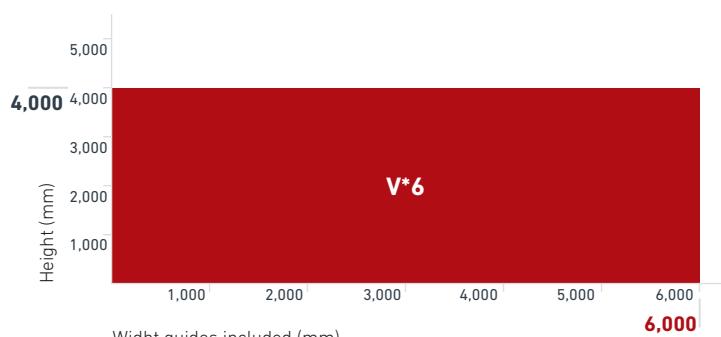
METALLIC SPRING LOCK	ALUMINIUM BOX			
	300	360	400	
	AXLE 100*	2.600	4.140	4.300
	AXLE 130*	2.350	3.970	4.200
	AXLE 220	-	2.900	3.700

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

WIND RESISTANCE¹

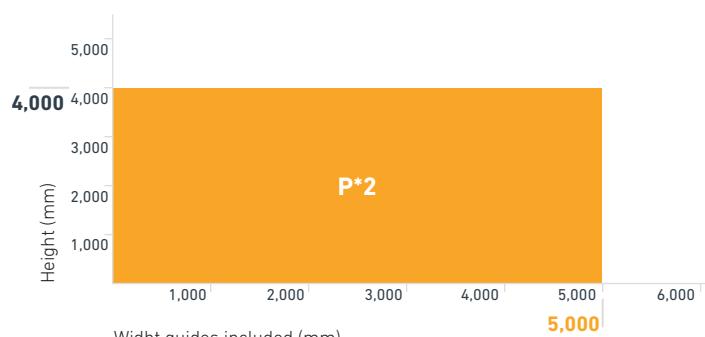
(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

WIND RESISTANCE²

(UNE-EN 13241-1:2003+A1:2011)



Width guides included (mm)

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0,14 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

MINIMUM REQUIRED (CE)¹

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

MINIMUM REQUIRED (CE)²

P*1: ≥ 415 Pa ≈ 93,7 km/h

P*2: ≥ 620 Pa ≈ 114,5 km/h

P*3: ≥ 965 Pa ≈ 142,9 km/h

P*4: ≥ 1.375 Pa ≈ 170,6 km/h

P*5: d.l. x 1,25 ≈ 170,6 km/h

PS-100

- 503182 PS-100 Tubular
- 503151 PS-100 Blind
- 503156 PS-100 Perforated
- 503166 PS-100 Microperforated

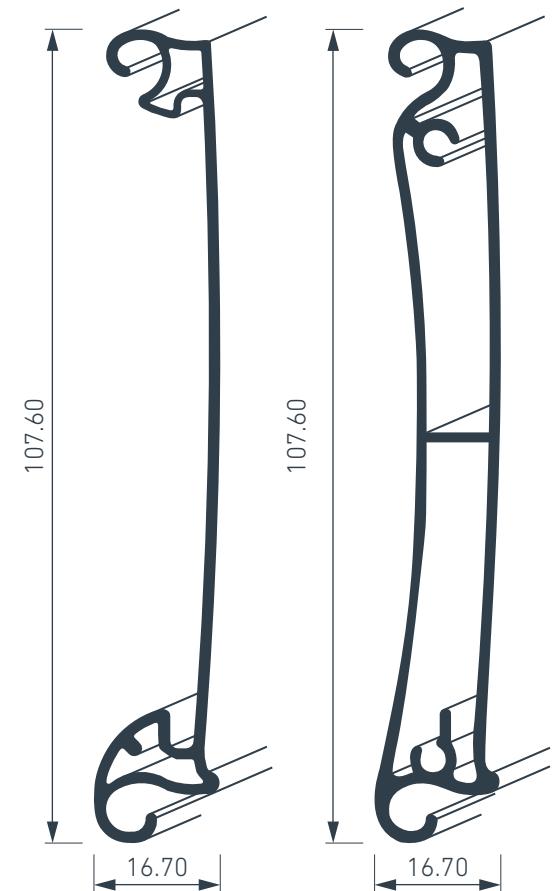


Slats in colour
RAL 9011

TECHNICAL CHARACTERISTICS

Nominal thickness	16.70 mm
Area of covering	100 mm
*Free ventilation area of perforated	53.50 %
*Free ventilation area of microperforated	19.30 %
Number slats by meter	10 ud
Maximum recommended width	6,000 mm
Weight blind	7.10 kg/m ²
Weight tubular	9.21 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	- about order -
Minimum rolling diameter	130 mm
Opening size, perforated slat	70x190 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

M

SET OF CAP COMPATIBILITY

Set of cap PS-100 with screw (code 503185) | Set of cap PS-100 Tubular with screw (code 503178)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

GE-34/70 | GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT												
		1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
METALLIC SPRING LOCK	AXLE 130	210	235	240	245	250	270	278	285	290	300	305	310	325
	AXLE 220	280	295	300	305	310	320	330	335	340	345	350	360	365

Sizes are in mm

RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX			
		250	300	360	400
METALLIC SPRING LOCK	AXLE 130	1,600	2,600	3,800	4,500
	AXLE 220	-	-	3,050	4,500

Sizes are in mm

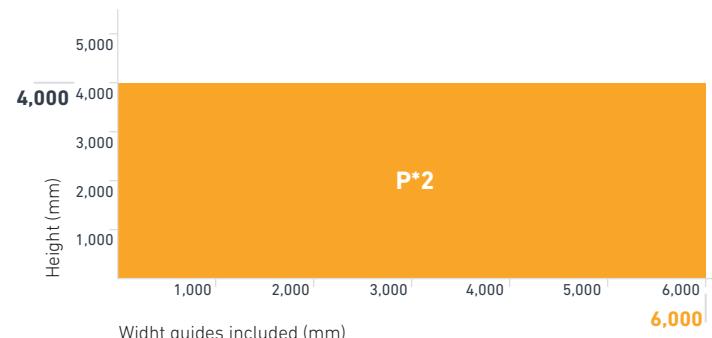
WIND RESISTANCE

(UNE-EN 13241-1:2003+A1:2011)



WIND RESISTANCE (DOUBLE WALL)

(UNE-EN 13241-1:2003+A1:2011)



MINIMUM REQUIRED (CE)

- P*1: $\geq 415 \text{ Pa} \approx 93.7 \text{ km/h}$
- P*2: $\geq 620 \text{ Pa} \approx 114.5 \text{ km/h}$
- P*3: $\geq 965 \text{ Pa} \approx 142.9 \text{ km/h}$
- P*4: $\geq 1,375 \text{ Pa} \approx 170.6 \text{ km/h}$
- P*5: $d \cdot l \times 1.25 \approx 170.6 \text{ km/h}$

PS-100 FLAT

- 033273 PS-100 Flat Blind
- 033275 PS-100 Flat Perforated
- 033274 PS-100 Flat Microperforated

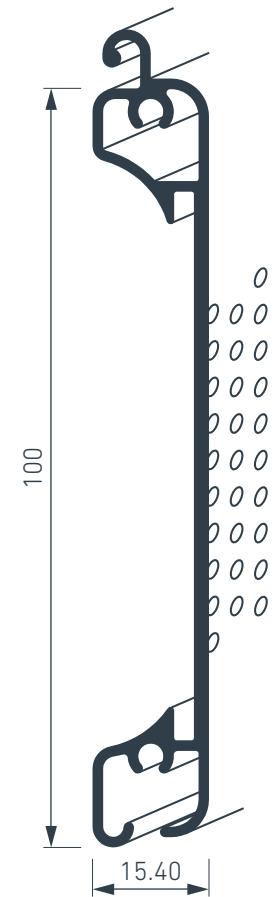


Slats in colour
WHITE RAL 9016

TECHNICAL CHARACTERISTICS

Nominal thickness	15.40 mm
Area of covering	100 mm
*Free ventilation area of perforated	39.20 %
*Free ventilation area of microperforated	16.00 %
Number slats by meter	10 units
Maximum recommended width	4,200 mm
Weight blind	8.35 kg/m ²
Packaging unit standard	30 m/l
Stock lengths	5,80 m / 7 m
Minimum rolling diameter	130 mm
Opening size, perforated slat	55x175 mm

*Aproximate value of the total overall door spaces excluding end slat



END SLATS COMPATIBILITY

R

SET OF CAP COMPATIBILITY

Set of cap PS-100 Flat with screw (code 503184)

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

VH | GE-34/65 + Lodge-guide 94x80 | GE-36/60 | GE-36/80 | GE-36/100 | GE-38/100 | GE-76/100

ROLLING DIAMETER CHART

		HEIGHT																										
		800	1.000	1.200	1.400	1.600	1.800	2.000	2.200	2.400	2.600	2.800	3.000	3.200	3.400	3.600	3.800	4.000	4.200	4.400	4.600	4.800	5.000	5.200	5.400	5.600	5.800	6.000
METALLIC SPRING LOCK	AXLE 130	-	220	235	260	265	270	290	295	300	310	325	330	335	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	AXLE 220	-	290	295	300	320	330	335	340	345	350	360	365	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPRING LOCK ZF 2 ELEMENTS	AXLE 100*	195	215	225	235	235	240	245	245	260	275	275	280	280	295	315	315	315	-	-	-	-	-	-	-	-	-	-
	AXLE 130*	195	215	225	225	255	255	265	275	275	295	295	305	305	315	315	325	325	325	340	350	350	350	355	380	380	380	
ARROW SPRING LOCK FOR PULLEY	AXLE 220	285	305	305	305	325	325	325	345	355	355	355	365	365	365	365	380	385	385	385	405	415	415	415	415	425	440	
	AXLE 240	315	325	325	325	325	355	355	355	375	375	375	375	375	375	385	395	395	395	405	415	415	415	415	415	415	415	

Sizes are in mm

*Equivalent to axles of 70 and 80 with ZF spring locks 2 and 3 elements

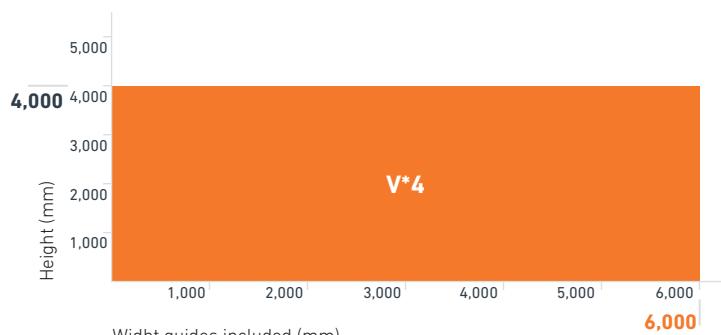
RECOMMENDED BOX ACCORDING TO HEIGHT

		ALUMINIUM BOX		
		300	360	400
METALLIC SPRING LOCK	AXLE 130	2.300	4.395	4.400
	AXLE 220	-	3.045	3.800

Sizes are in mm

WIND RESISTANCE¹

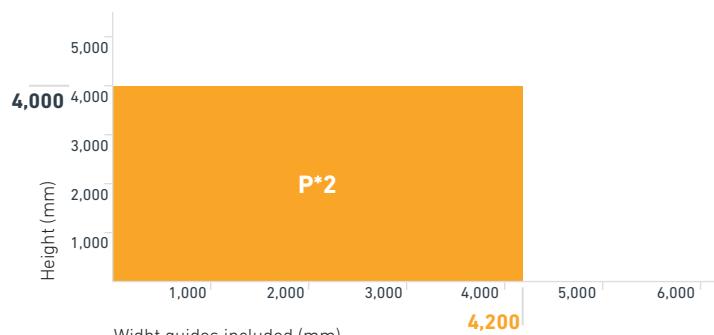
(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

WIND RESISTANCE²

(UNE-EN 13241-1:2003+A1:2011)



Width guides included (mm)

ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.14 m² K/W*

*Except perforated and microperforated formats:

 ΔR Class 4 = 0.08 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY (g_{tot})

See page 15

MINIMUM REQUIRED (CE)¹

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

MINIMUM REQUIRED (CE)²

P*1: ≥ 415 Pa ≈ 93,7 km/h

P*2: ≥ 620 Pa ≈ 114,5 km/h

P*3: ≥ 965 Pa ≈ 142,9 km/h

P*4: ≥ 1.375 Pa ≈ 170,6 km/h

P*5: d.l. × 1,25 ≈ 170,6 km/h

Colours of extruded aluminium slats



The colours available for extruded aluminium slats belong to **the standard RAL lacquered wood**. Availability **satin, matt, anodized** and **special RAL finishes**.

STANDARD RAL		LACQUERED WOOD	
1013	7012	8014	Textured Embero
1015	7016	8017	European Dark Walnut
3005	7022	8019	
3007	7024	9011	
6005	7038	9016	
6009	7040		
6015	8003		
7011	8007		

* Consult stock and delivery time



114

MINI-39

116

MINI-40 SPECIAL

118

MINI-47

120

R-50

122

P-50

124

P-55

126

P-60

PVC slats

Our PVC model design is studied to meet current requirements. With this selection of profiles, we offer the possibility of solving any type of facility where a "roll-up blind" is needed, both technically and aesthetically.

Their articulation and operation makes it easy to adjust solar light entry at will, completely eliminating it, in addition to keeping control over aeration.





MINI-39

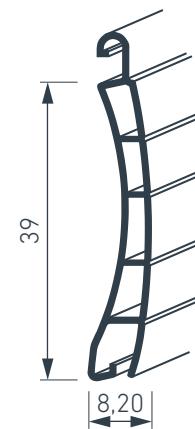
014007 Mini-39



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	8.20 mm
Area of covering	39 mm
Number slats by meter	25.64 units
Maximum recommended width	1,600 mm
Weight	2.82 kg/m ²
Packaging unit standard	300 m/l
Production lengths	6 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Clase B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT														
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400	
MIXED SPRING LOCK		AXLE 42	110	115	120	125	130	140	145	150	155	160	165	170	175	180
		AXLE 60	120	125	130	135	140	145	150	155	160	165	170	175	180	185
SPRING LOCK ZF 1 ELEMENTS		AXLE 54	115	120	125	130	135	140	145	150	155	160	165	170	175	180
		AXLE 60	120	125	130	135	140	145	150	155	160	165	170	175	180	185
SPRING LOCK ZF 2 ELEMENTS		AXLE 54	115	120	125	130	135	140	145	150	155	160	165	170	175	180
		AXLE 60	120	125	130	135	140	145	150	155	160	165	170	175	180	185

Sizes are in mm

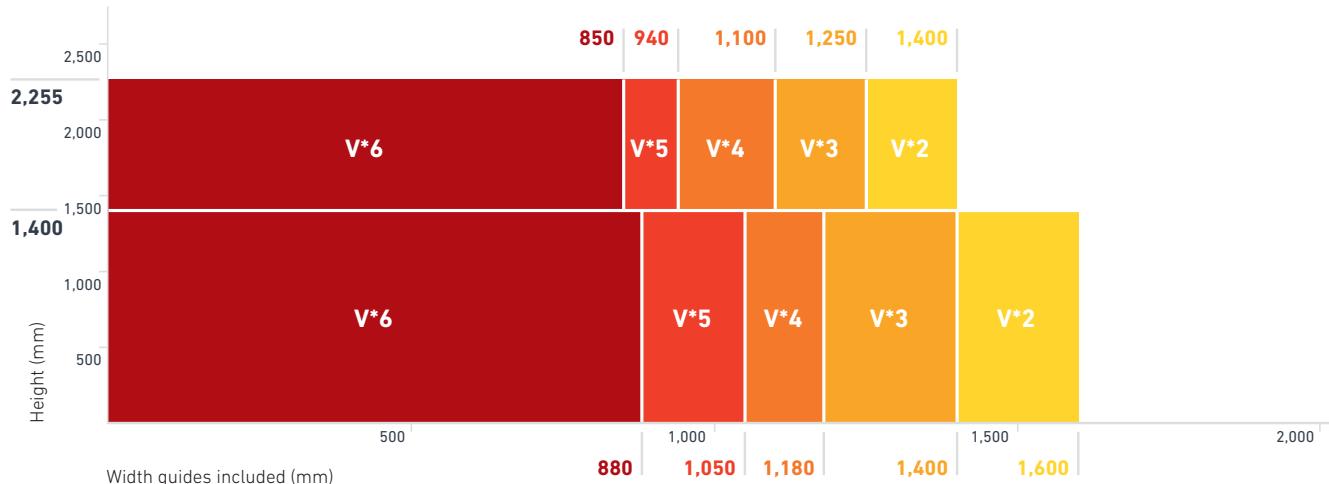
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX				WINBLOCK	
		155	170	185	200	225	137	165	180	205	200	230
MIXED SPRING LOCK	AXLE 60	1,755	2,350	3,000	3,725	5,100	1,670	2,860	3,500	4,800	3,840	5,500

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0.19 m² K/W

ΔR Class 5 = 0.23 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

(g_{tot})

See page 15

MINI-40 SPECIAL

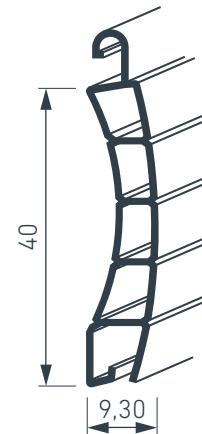
014014 Mini-40 Special



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	9,30 mm
Area of covering	40 mm
Number slats by meter	25 units
Maximum recommended width	1,850 mm
Weight	3 kg/m ²
Packaging unit standard	300 m/l
Production lengths	6 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermedio | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Clase B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3,5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75,5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	115	120	130	140	150	155	160	170	175	180	185	190	200	210
TREATED STEEL G	AXLE 60	120	130	140	150	155	160	170	175	180	190	195	200	205	210
SPRING LOCK ZF 1 ELEMENT	AXLE 54	120	130	140	145	150	160	165	170	175	180	190	195	200	210
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	125	130	140	150	160	165	170	180	185	190	195	200	210	215
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	120	130	140	150	155	165	170	175	180	185	190	200	205	210
	AXLE 60	120	135	140	150	160	165	170	175	180	190	195	200	205	210

Sizes are in mm

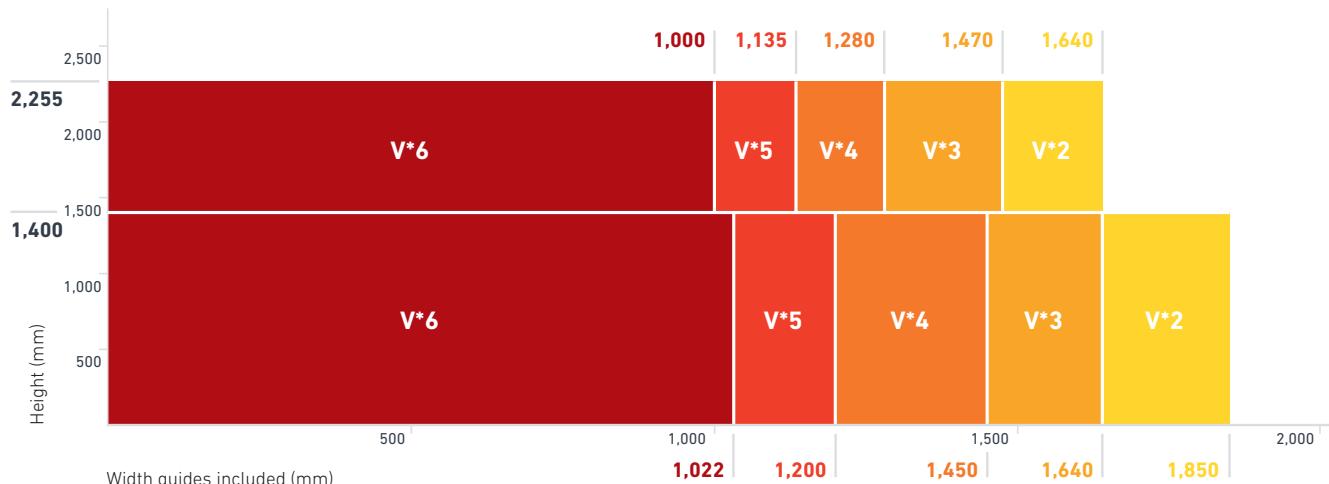
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX				WINBLOCK	
		155	170	185	200	225	137	165	180	205	200	230
MIXED SPRING LOCK	AXLE 42	1,520	1,960	2,360	2,800	3,855	-	-	-	-	-	-
TREATED STEEL G	AXLE 60	1,400	1,760	2,200	2,620	3,700	1,320	2,120	2,310	3,300	2,660	3,850

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.21 m² K/W ΔR Class 5 = 0.25 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h**V*3:** 150 Pa ≈ 56 km/h**V*4:** 250 Pa ≈ 78 km/h**V*5:** 400 Pa ≈ 92 km/h**V*6:** 600 Pa ≈ 112 km/h

MINI-47

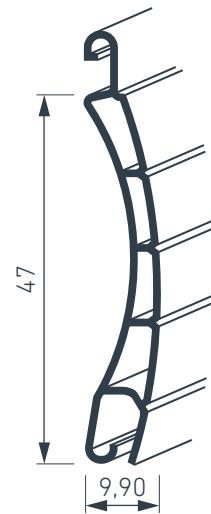
014004 Mini-47



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	9.90 mm
Area of covering	47 mm
Number slats by meter	21.30 units
Maximum recommended width	1,750 mm
Weight	3.24 kg/m ²
Packaging unit standard	192 m/l
Production lengths	6 m
Minimum rolling diameter	42 mm



END SLATS COMPATIBILITY

A - Interior | B - Blind | C - Exterior | D - 2 Sides
Intermediate | AC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Class B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-3.5/22 | UP-40/22 | UP-45/22 | ZF-8 | H-25-FC | HR-C-25 | H-25 | HC-25 | HD-25 | HSL | HSL-A | HSL-E | E | S
H-66 | Ref. 1229 | 16.80x28.40 | 17.20x28.40 | V-25 Ref. 9178 | V-25 Ref. 9182 | V-45

PVC GUIDE CHANNELS COMPATIBILITY

60x30 | 60x40 | 55x45 | 60x45 | 60x70 | 60x75.5 | Central 70x30 | Central 60x45 | W-25

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK	AXLE 42	125	130	135	140	145	155	160	165	170	180	185	190	195	200
TREATED STEEL G	AXLE 60	130	135	140	145	150	160	165	170	175	180	185	190	200	205
SPRING LOCK ZF 1 ELEMENT	AXLE 54	125	130	135	140	150	155	160	165	170	175	180	185	190	195
SPRING LOCK ZF 2 ELEMENTS	AXLE 60	125	130	135	140	150	155	160	165	170	175	180	185	190	195
	AXLE 54	125	130	140	145	150	155	160	165	170	175	180	185	190	195
	AXLE 60	125	135	140	145	150	155	160	165	170	175	180	185	190	200

Sizes are in mm

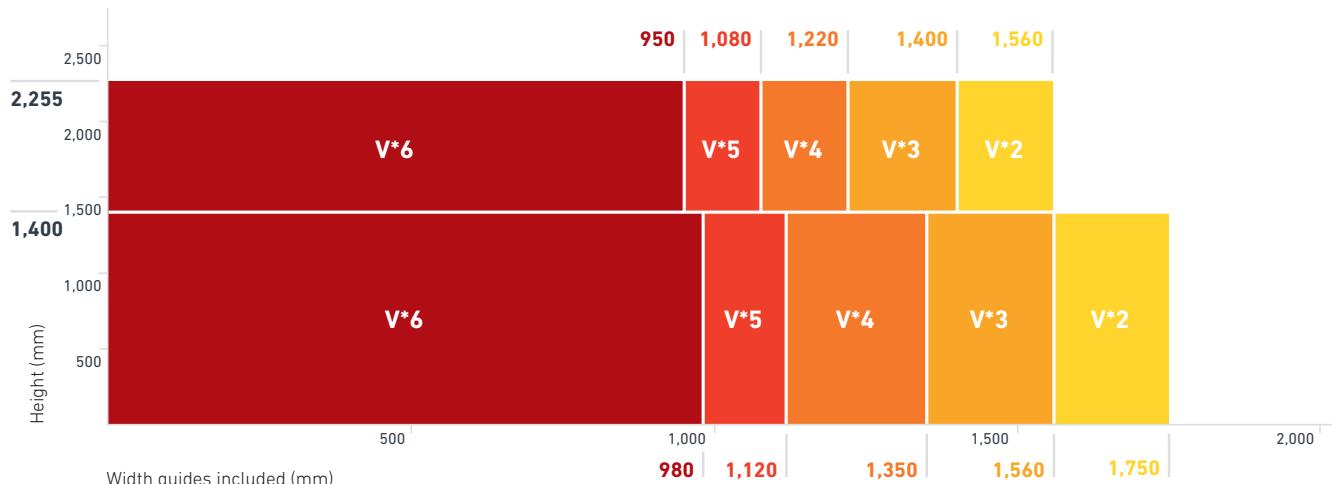
RECOMMENDED BOX ACCORDING TO HEIGHT

		EUROBLOCK / EURODECOR					ALUMINIUM BOX				WINBLOCK	
		155	170	185	200	225	137	165	180	205	200	230
MIXED SPRING LOCK TREATED STEEL G	AXLE 60	1,580	2,065	2,525	2,950	3,717	1,330	2,240	2,645	4,080	3,000	4,500

Sizes are in mm

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



ADDITIONAL THERMAL RESISTANCE

(ACCORDING TO EN 13125:2001)

 ΔR Class 4 = 0.19 m² K/W ΔR Class 5 = 0.23 m² K/W

TRANSMITTANCE OF TOTAL SOLAR ENERGY

 (g_{tot})

See page 15

R-50

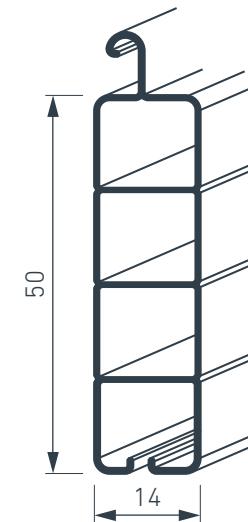
014031 R-50



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	14 mm
Area of covering	50 mm
Number slats by meter	20 units
Maximum recommended width	2,920 mm
Weight	3.60 kg/m ²
Packaging unit standard	120 m/l
Production lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | P- Reinforced PVC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Class B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 19.15x28.40 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK TREATED STEEL G	AXLE 60	180	190	210	220	230	240	250	260	270	280	285	295	300	310
SPRING LOCK ZF 1 ELEMENT	AXLE 54	180	190	200	210	220	230	240	250	260	270	280	285	290	300
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	180	190	200	210	220	230	240	250	260	270	280	290	300	310
	AXLE 60	180	190	200	220	230	240	250	265	270	280	285	290	305	315

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

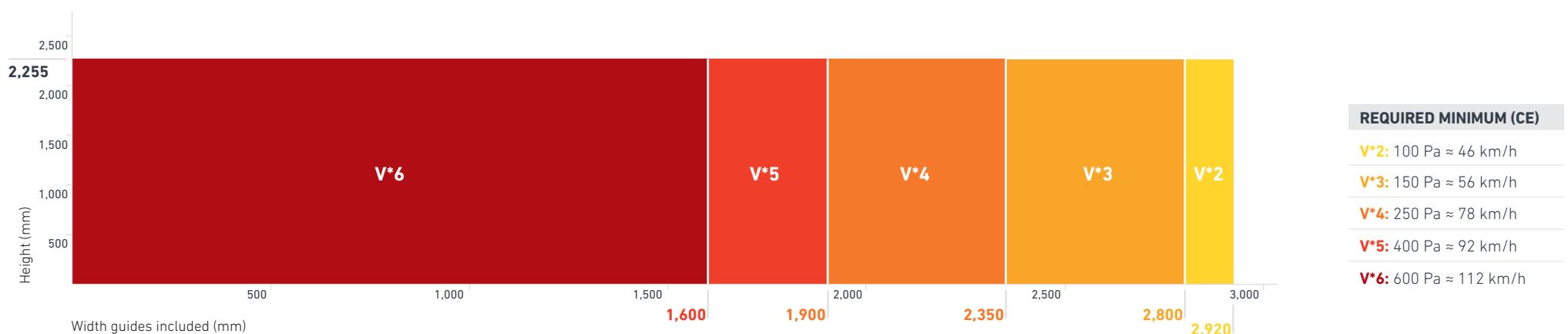
(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0,26 m² K/w

ΔR Class 5 = 0,32 m² K/w

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



P-50

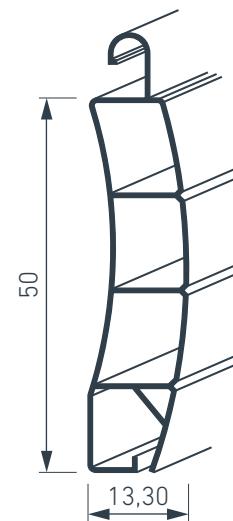
014017 P-50



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	13.30 mm
Area of covering	50 mm
Number slats by meter	20 units
Maximum recommended width	2,650 mm
Weight	3.22 kg/m ²
Packaging unit standard	120 m/l
Production lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

P- Reinforced PVC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Class B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK TREATED STEEL G	AXLE 60	150	165	170	180	190	200	210	215	220	230	235	240	250	260
SPRING LOCK ZF 1 ELEMENT	AXLE 54	150	160	170	180	190	195	205	210	220	230	235	240	250	255
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	150	155	165	175	185	195	205	215	220	225	230	240	245	250
	AXLE 60	150	160	170	180	190	200	210	220	225	230	240	245	250	255

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

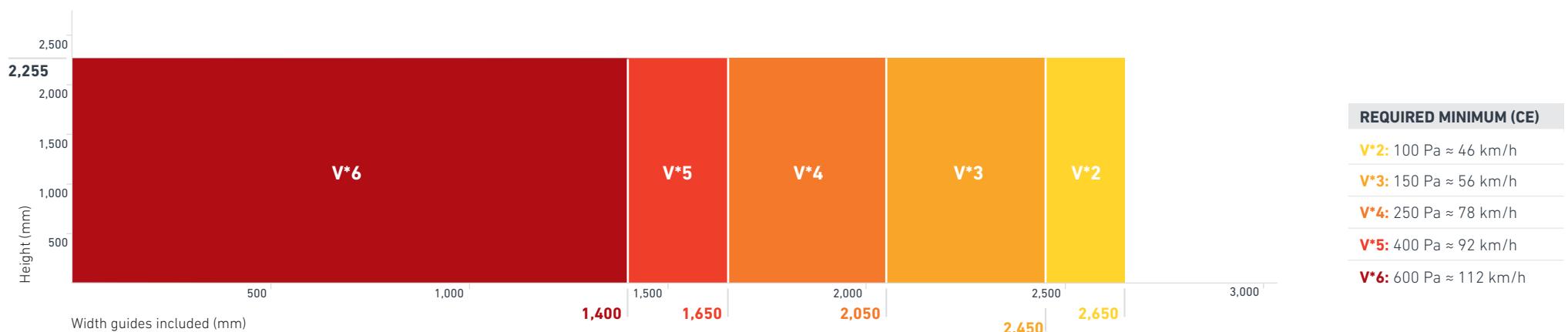
(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0,24 m² K/W

ΔR Class 5 = 0,29 m² K/W

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



TRANSMITTANCE OF TOTAL SOLAR ENERGY

(g_{tot})

See page 15

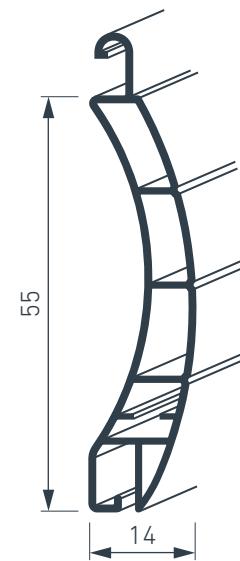
P-55

014005 P-55



TECHNICAL CHARACTERISTICS

Nominal thickness	14 mm
Area of covering	55 mm
Number slats by meter	18.20 units
Maximum recommended width	2,400 mm
Weight	3.46 kg/m ²
Packaging unit standard	120 m/l
Production lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | P- Reinforced PVC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Class B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

Slats in colour
WHITE

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK TREATED STEEL G	AXLE 60	140	150	160	170	180	185	190	200	210	215	220	230	240	245
SPRING LOCK ZF 1 ELEMENT	AXLE 54	130	140	150	160	170	180	190	200	205	210	220	230	240	250
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	130	140	150	160	170	180	190	200	205	210	220	230	235	240
	AXLE 60	135	140	150	160	165	170	185	190	200	210	220	230	235	240

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

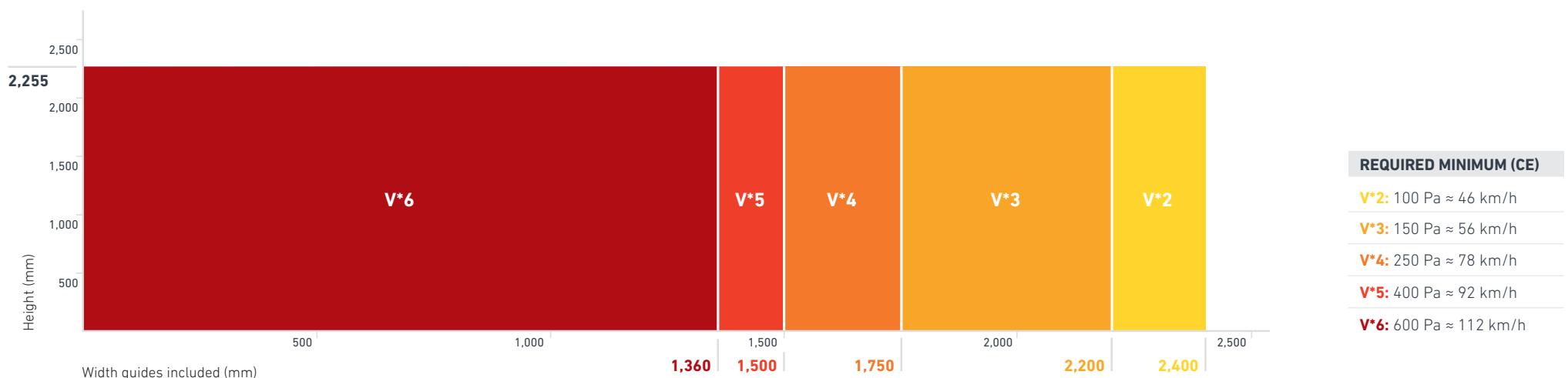
(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0,21 m² K/W

ΔR Class 5 = 0,25 m² K/W

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



Width guides included (mm)

P-60

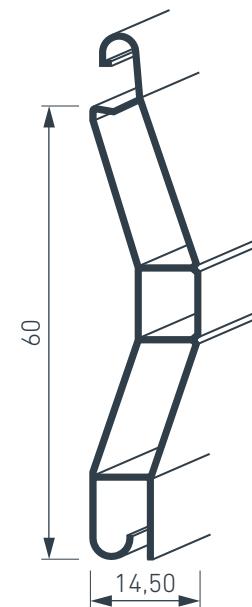
■ 014006 P-60



Slats in colour
WHITE

TECHNICAL CHARACTERISTICS

Nominal thickness	14.50 mm
Area of covering	60 mm
Number slats by meter	16.67 units
Maximum recommended width	2,340 mm
Weight	3.17 kg/m ²
Packaging unit standard	120 m/l
Production lengths	6 m
Minimum rolling diameter	60 mm



END SLATS COMPATIBILITY

H | P- Reinforced PVC

FIRE REACTION

(UNE-EN 13501-1:2007+A1:2010)

Class B-s3, d0

ALUMINIUM GUIDE CHANNELS COMPATIBILITY

UP-40/25 | UP-50/25 | ZF-14 | 19.15x28.40 | V-55 | UPS-6.5 | UPS-7.5 | UPS-9.5

ROLLING DIAMETER CHART

		HEIGHT													
		800	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400
MIXED SPRING LOCK TREATED STEEL G	AXLE 60	150	160	170	180	190	200	210	220	230	235	240	245	250	260
SPRING LOCK ZF 1 ELEMENT	AXLE 54	150	160	170	180	190	195	200	210	220	225	230	240	245	250
SPRING LOCK ZF 2 ELEMENTS	AXLE 54	150	160	170	180	190	200	205	210	215	220	230	240	245	250
	AXLE 60	155	160	170	180	190	195	200	210	220	230	235	240	250	260

Sizes are in mm

ADDITIONAL THERMAL RESISTANCE

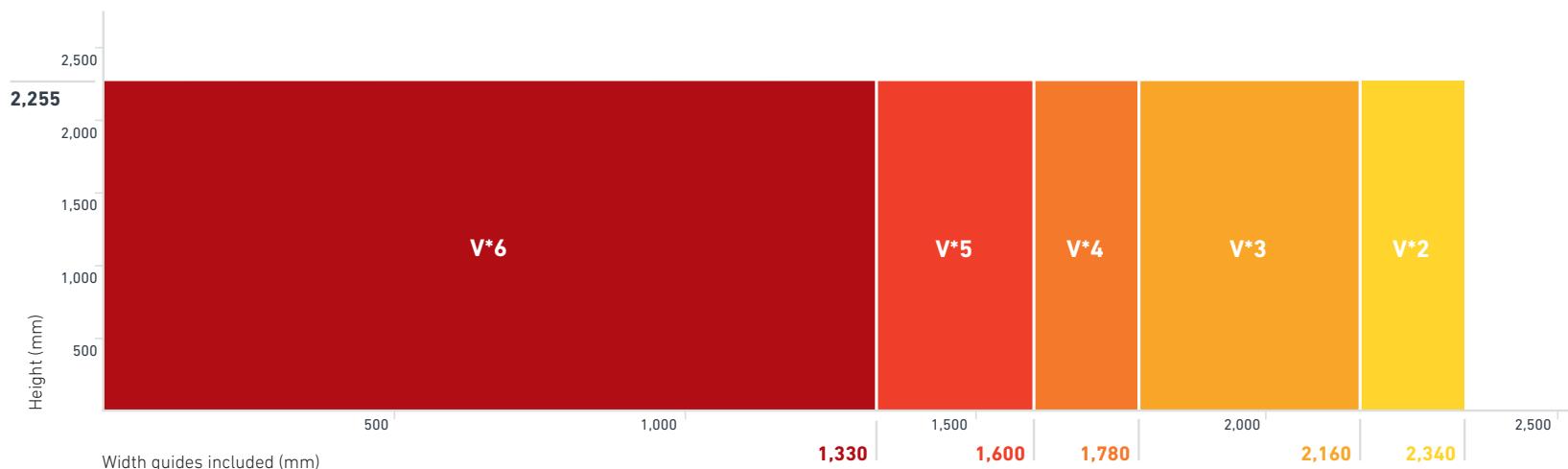
(ACCORDING TO EN 13125:2001)

ΔR Class 4 = 0,22 m² K/W

ΔR Class 5 = 0,27 m² K/W

WIND RESISTANCE

(UNE-EN 13659:2004+A1:2008)



TRANSMITTANCE OF TOTAL SOLAR ENERGY

(g_{tot})

See page 15

REQUIRED MINIMUM (CE)

V*2: 100 Pa ≈ 46 km/h

V*3: 150 Pa ≈ 56 km/h

V*4: 250 Pa ≈ 78 km/h

V*5: 400 Pa ≈ 92 km/h

V*6: 600 Pa ≈ 112 km/h

Colours of PVC slats



The colours available for PVC slats are homogeneous for all models.

	MINI-39	MINI-40 SPECIAL	MINI-47	R-50	P-50	P-55	P-60
White	■	■	■	■	■	■	■
Ivory	■	■	■	■	■	■	■
Grey	■	■	■	■	■	■	■
Lacquered Wood	■	■	■	■	■	■	■

* Consult stock and delivery time

