



GEPLAST
Building



Lame Bioclimatique®

TRADEMARK & DESIGN REGISTRATED

A Geplast Building innovation



ALU



PVC



ADVANTGES

◆ Solar gain management

Control of solar gain with **4 times more light and ventilation** in the home than a standard slat for optimal comfort in summer.

Exceptional visibility toward outside in the open position.

Regular micro-punching diffusing a soft and soothing light within the living rooms.

◆ New functionalities

Safety functions and total opacity in the closed position for optimum sleeping comfort thanks to the development of our rubber seals integrated into our sliders.

Improved acoustic comfort when raising / lowering the apron.

Integrated insect screen and blind functions.

Available in PVC or aluminium.

◆ Easy to implement

Manufacture and installation identical to a standard slat.

Ideal for large widths bay.

AVAILABLE COLOURS

Lame Bioclimatique® & final slat

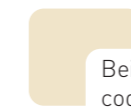
Please contact us to discover the other colors.

ALU

LAQUERED COLOURS



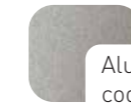
Umber grey | RAL 7022
code : VR040AJ_AL7022



Beige | RAL 1015
code : VR040AJ_AL1015



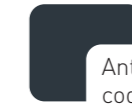
Black 2100 sanded
code : VR040AJ_AL2100S



Alu natural | RAL 9006
code : VR040AJ_AL9006



White | RAL 9016
code : VR040AJ_AL9016



Anthracite grey | RAL 7016
code : VR040AJ_AL7016



Grey 2900 sanded
code : VR040AJ_AL2900S



Dark brown | RAL 8019
code : VR040AJ_AL8019



Black 9005
code : VR040AJ_AL9005



Light grey | RAL 7035
code : VR040AJ_AL7035

PVC

COLORS MASS COLOURED

White | RAL 9016
code : VR040AJ_BL012

PERFORMANCES

PVC

THERMAL



Rsh = 0,101 m².K/W
Classe 4 : Δr = 0,22 m².K/W
Classe 5 : Δr = 0,27 m².K/W

ALU

THERMAL



Rsh = 0,01 m².K/W
Classe 4 : ΔR = 0,15 m².K/W
Classe 5 : ΔR = 0,18 m².K/W

AERAULICS

Safety pressure classes 1.5p (N/m²)
Tests as an indication

| Height | Width | 1000 | 1200 | 1400 | 1600 |
|---------|-------|------|------|------|------|
| 2250 mm | | V*6 | V*5 | V*4 | V*3 |
| 1400 mm | | V*6 | V*5 | V*4 | V*3 |

AERAULICS

Safety pressure classes 1.5p (N/m²)
Tests as an indication

| Width | 0 to 2000 | 2100 | 2200 | 2300 to 2400 | 2500 | 2600 to 2800 | 2900 | 3000 |
|---------|-----------|------|------|--------------|------|--------------|------|------|
| Height | | | | | | | | |
| 2250 mm | V*6 | V*5 | V*5 | V*5 | V*4 | V*4 | V*3 | V*3 |
| 1400 mm | V*6 | V*6 | V*6 | V*5 | V*5 | V*4 | V*4 | V*4 |

REGISTERED TRADEMARK AND MODEL



The shape and aesthetics of Lame Bioclimatique® are protected at European level by the European Union Intellectual Property Office (EUIPO).



Lame Bioclimatique® is a trademark of Geplast Building and is registered with the Institut National de la Propriété Industrielle (INPI).

LIGHT TRANSMISSION



Normal / hemispheric light transmission factor :
 $T_v^{nh} = 3\%$ (PV CSTB)

The bioclimatic slat, in the openwork position, is comparable to a awning fabric or ZIP blind in terms of light comfort and provides excellent glare control.

| Solar radiation transmittance inside the building, roller shutter closed | | |
|--|----------|------------|
| Light colours (white, light grey...) | (L* ≥82) | Sws = 0,05 |
| Dark colours (brown, black, ...) | (L* ≤82) | Sws = 0,10 |

AIR PERMEABILITY



The bioclimatic slat allows an airflow (over-ventilation that allows the air in the house to be cooled):

Qa = 939m³/h per m² of deck (PV CSTB)

CORROSION RESISTANT

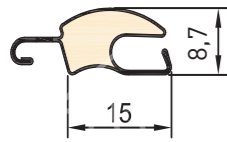
New, more corrosion-resistant ALU strip.
Salt spray test (PV CSTB).

REFERENCES AND PACK SIZE

■ The apron must be tested vertically upwards and downwards before being installed on the customer's premises.

Lame Bioclimatique®

ALU



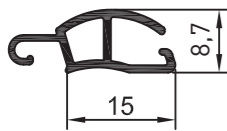
NEW

New 0.30mm strip, achieved with 99.5% recycled aluminium & more resistant to corrosion. New high density foam 115Kg/m³ for exceptional rigidity

VR040AJ_ALU

Bioclimatic slat ALU openwork roller shutter 15 x 8,7mm
65 bars of 6 ml / pack or 5 trays of 13 slides

PVC



VR040AJ

Bioclimatic slat ALU openwork roller shutter 15 x 8.7 mm
65 bars of 6 ml / pack or 5 trays of 13 slides
1950 bars of 6 ml / container or 150 trays of 13 slides

| | |
|---------------------|---------------------|
| Nominal thickness | 8,7 mm |
| Working height | 15 mm |
| Number of slats / m | 67 |
| Weight | 5 Kg/m ² |
| Max width | 3 m |
| Max surface area | 7 m ² |
| Standard length | 6 m |

| | |
|---------------------|---------------------|
| Nominal thickness | 8,7 mm |
| Working height | 15 mm |
| Number of slats / m | 67 |
| Weight | 5 Kg/m ² |
| Max width | 1,6 m |
| Max surface area | 3 m ² |
| Standard length | 6 m |

Final slat

VR081F_AL

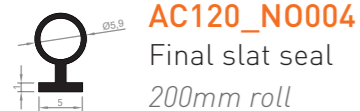
Final slat 49 x 8,5 mm
10 bars of 6 ml / pack



LACQUERED COLORS IN STOCK



Gross + other colours available, similar to those of Bioclimatic slat from 60ml upwards



AC120_N0004
Final slat seal
200mm roll

COLOR



Black

Installation



FoKus 235 box
Timber frame assembly
ALU bioclimatic slat
ntracite grey 7016

WINDING DIAMETERS IN BOXES

| | Maximum number of slats | Maximum height under box | Maximum winding Ø |
|-----------|-------------------------|--------------------------|-------------------|
| IrYs | 164 | 2450 | Ø 200 |
| FoKus 235 | 180 | 2700 | Ø 200 |
| FoKus 205 | 130 | 1950 | Ø 180 |
| FoKus 168 | 90 | 1350 | Ø 145 |
| GVR.e | 150 | 2250 | Ø 185 |
| GVR.dL | 150 | 2250 | Ø 185 |
| Reno City | 100 | 1500 | Ø 170 |
| GVR.r | 103 | 1550 | Ø 160 |

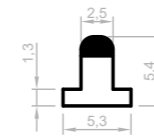
The heights under the box are given as an indication and must be verified by tests in situ at the assembler's.

Rails and rubber seals

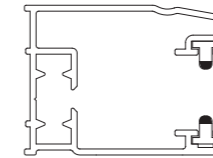
■ It is imperative to use the PVC/ALU guides, rubber seals and end slats without which GEPLAST declines all responsibility.

Designed and extruded in ABS and soft PVC for better resistance to heat and shrinkage, our rubber seals can be integrated with Geplast's PVC or ALU guiderails as well as with traditional and renovation guiderails on the market.

With Geplast ALU guide :

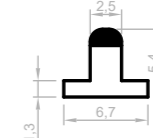


AC101_N0004
Black rubber seals
5,3 x 5,4 mm
50 bars of 6 ml / pack

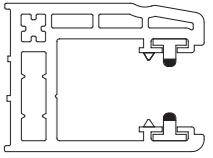


Mounting plan on ALU runner

With Geplast PVC guide :

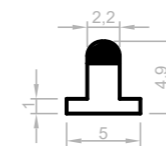


AC102_N0004
Black rubber seals
6,7 x 5,4 mm
50 bars of 6 ml / pack

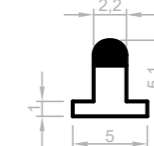


Mounting plan on PVC runner

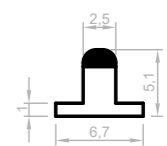
With traditional ALU guiderails and market renovations :



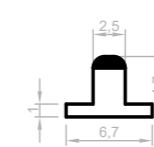
AC100_N0004
Black rubber seals
5 x 4,9 mm
50 bars of 6 ml / pack



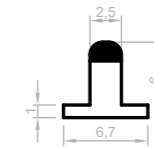
AC103_N0004
Black rubber seals
5 x 5,1 mm
50 bars of 6 ml / pack



AC117_N0004
Black rubber seals
6,7 x 5,1 mm
50 bars of 6 ml / pack

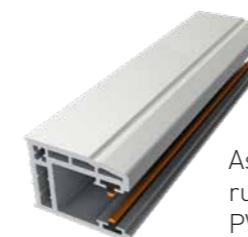


AC118_N0004
Black rubber seals
6,7 x 4,7 mm
50 bars of 6 ml / pack

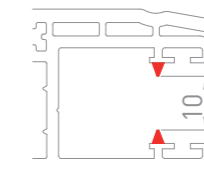


AC119_N0004
Black rubber seals
6,7 x 6 mm
50 bars of 6 ml / pack

ALU



Assembly of the rubber seal on PVC guiderail



NB : the bioclimatic slat is used with the PVC guide and the coextruded joint : **JC10**

In accordance with FFB guidelines, roller shutters, when deployed, can sometimes present a wavy appearance. This phenomenon is accentuated for large products. Find out more about the Quality Assessment Guide for roller shutters, available and downloadable from the websites : www.geplast.fr and www.groupe-actibaie.org.

SPECIFIC MACHINES

Geplast has set up a partnership with manufacturers of machines and roller shutter end caps. These end caps, to be placed at the edges of the slats, offer many advantages :

- ◆ Reduced manufacturing time
- ◆ Easier to roll up the apron
- ◆ Keeping the slats in place against translation
- ◆ Anti-noise and anti-friction clamping system



Machine for cutting and assembling aluminium roller shutter apron



Manual stapler



Automatic stapler



END CAP FOR 15 MM BIOCLIMATIC SLAT

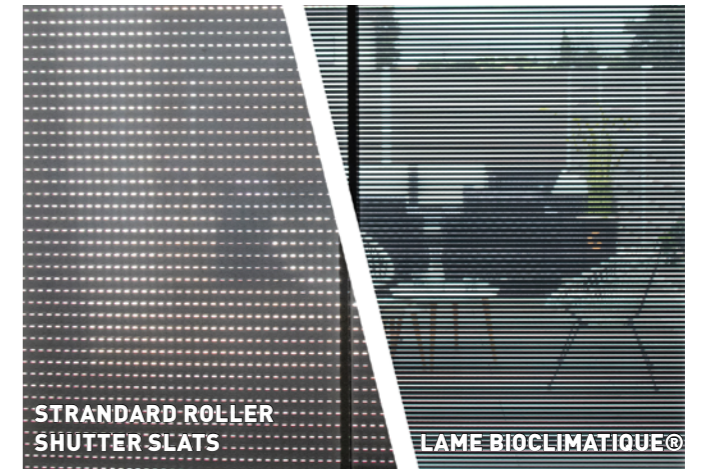
AC079
10 000 pieces/box



The end cap is attached to the left and right ends of the PVC and ALU slats. Its role is to stop the horizontal translation of the slats in order to guarantee an optimal operation of the bioclimatic roller shutter.

COMPARISON ROLLER SHUTTER SLATS

VIDÉO
BIOCLIMATIC SLAT



STRANDARD ROLLER
SHUTTER SLATS

LAME BIOCLIMATIQUE®



"Classic" blade
43 mm

0.8 x 12mm openings
312mm² for 1m of slats
22 openwork slats for 1m height
=
6,900mm² for 1m²,
0.7 % of openings



"Micro-perforated" blade
43 mm

Holes 1.5mm diameter
588mm² for 1m slats
22 openwork slats for 1m height
=
12 900mm² for 1m²,
1.3 % of openings



Lame Bioclimatique®
15 mm

Holes 1.5mm diameter
588mm² for 1m of slats
52 openwork slats for 1m height
=
30 600mm² for 1m²,
3% openings

$3/0,7 = 4,3$
Bioclimatique slat therefore has 4x more light and air than a «conventional» blade.
Normal/hemispherical light transmission factor hemispherical: $T_{vnh} = 3\%$ (PV CSTB)

RE 2020
RÈGLEMENTATION ENVIRONNEMENTALE

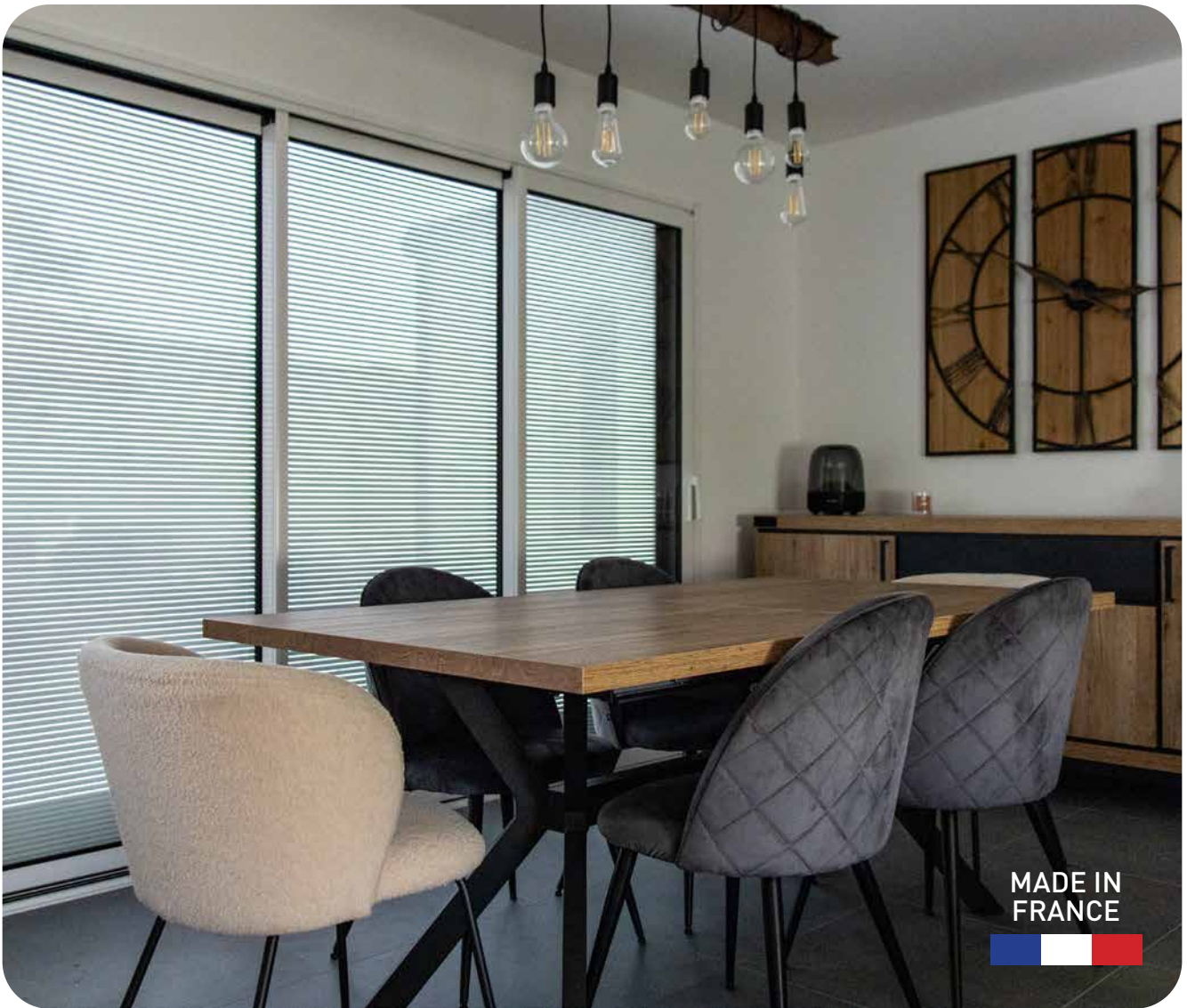
ALU SLAT FORMING MACHINE

"This integration will enabled us to acquire new technical skills in-house and to fully control the production of our bioclimatic slat.

Made from 99,5% recycled aluminium strip, the Lame Bioclimatique® is part of a "responsible" approach. It enables us to meet the challenges of the RE2020, which now requires the control of ventilation and solar gain within homes".

Maxime Grimault
Sales & Marketing Director





GEPLAST SAS

Z.I. Actipôle Nord 249
6, rue de Beauséjour
Saint-André-de-la-Marche
49450 SÈVREMOINE

Tel : 02.41.49.80.90
Fax : 02.41.46.42.07



GEPLAST

L'avenir se profile ensemble



www.geplast.fr

The data contained in this documentation is for information purposes only and only takes into account the wind resistance of the slats manufactured by Geplast in accordance with the test procedures on this subject in the European standard NF EN 13659:2004. Geplast can in no way be held responsible for the manufacture or installation of its products and/or their inappropriate use. Geplast cannot be held responsible for any interpretation of these results without verification by the assembler, taking into account his own manufacturing and/or the imposed installation context. It is the assembler's responsibility to check the compatibility of the boards with DTU 34-2 FD P 25-202 and EN 13659:2004 available from AFNOR and CSTB. The present information does not release the assembler from the duty to carry out the tests requested in the NF EN 1369 standard on his products in order to affix the CE mark.

Non-binding document. We reserve the right to make any changes we deem necessary at any time in order to improve our profiles.