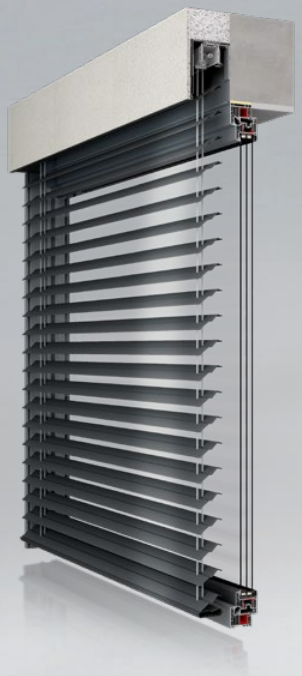
FAÇADE BLINDS



WIŚNIOWSKI
GATES | WINDOWS | DOORS | FENCES

FAÇADE BLINDS
LumiControl

Intended use: Façade blinds are practical sun-shading solutions that protect the interiors from overheating while ensuring visual comfort. The adjustable louvre angle allows you to tailor the level of shading to your individual needs. Together with aluminium cassettes and guide rails, the elegant louvres give the façade a contemporary appearance. Thanks to their robust structure, the blinds can also be used with large glazed areas, making them suitable for both residential and commercial buildings.

INSULATION

The LumiControl façade blinds provide protection against sunlight and excessive heat build-up inside the building. They insulate the home interior from everything that can disturb the peace and security of your family.

SMART CONTROL

Thanks to the smartCONNECTED feature, you can control the automatic LumiControl façade blinds from your phone. You are at work and want to close the blinds so that the strong sun does not overheat the interior? Just do it remotely without having to move one inch.

MODERN DESIGN

The design of the LumiControl façade blinds is all about timeless elegance. That is why they will match any type of architecture. But they will always look their best with WIŚNIOWSKI windows.

LUMICONTROL FAÇADE BLINDS

Technical information

The LumiControl flush-mounted façade blinds have been designed for quick installation in new-build properties, so it is a good idea to plan their installation at the design stage. The aluminium box can be fitted with plaster carriers on both sides, allowing it to be seamlessly finished with any façade material.

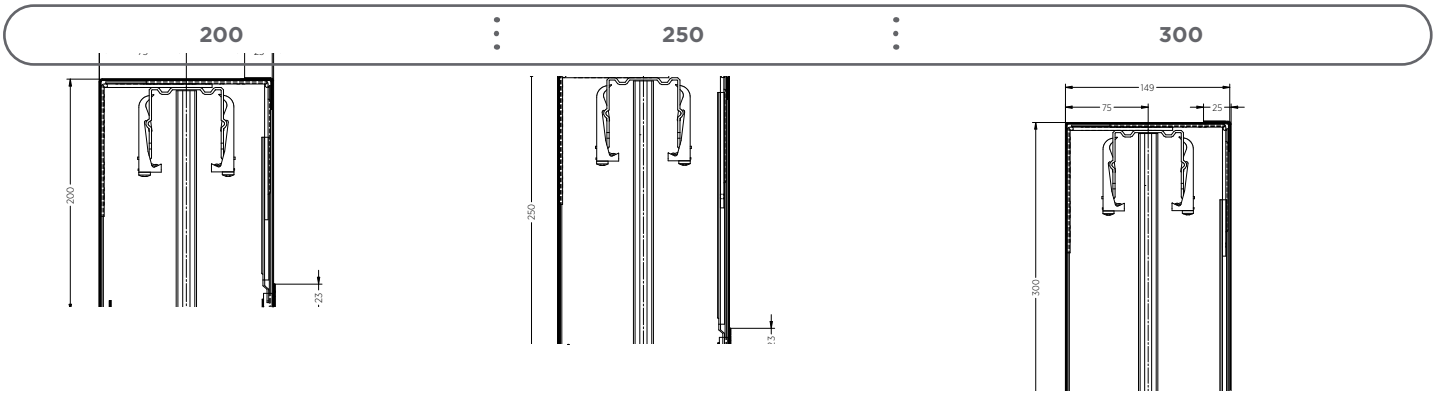
The system includes surface-mounted guide rails in two sizes, cable guides, and corner solutions combining both guide types. “C”- and “Z”-shaped aluminium louvres are available. The “C” louvres are rigid, wind-resistant, and rotate through 0-180°, while the “Z” louvres provide improved blackout performance, feature a noise-reducing seal, and rotate through 0-90°. Durable steel pins riveted to the louvres are fitted as standard. The maximum blind dimensions are 5,000 × 4,500 mm, with a maximum area of 18 m^2 when using guide rails only, or 5,000 × 5,000 mm, with a maximum area of 22.5 m^2 when using guide rails with additional cable reinforcement.



Standard accessories

- Louvres available in two profiles: C, with up to 180° rotation, and Z, with up to 90° rotation
- Steel pins at the ends of the louvres
- Bottom bar matched to the louvre profile
- Textile components made of polyester and heat-set
- Guide rails equipped with special noise-reducing seals
- Blind area of up to 22.5 m^2
- External plaster carrier bracket fitted as standard
- Resilient guide rail bracket
- Connector for fastening the sheet metal to the guide rail and box

Box sizes – LumiControl blinds



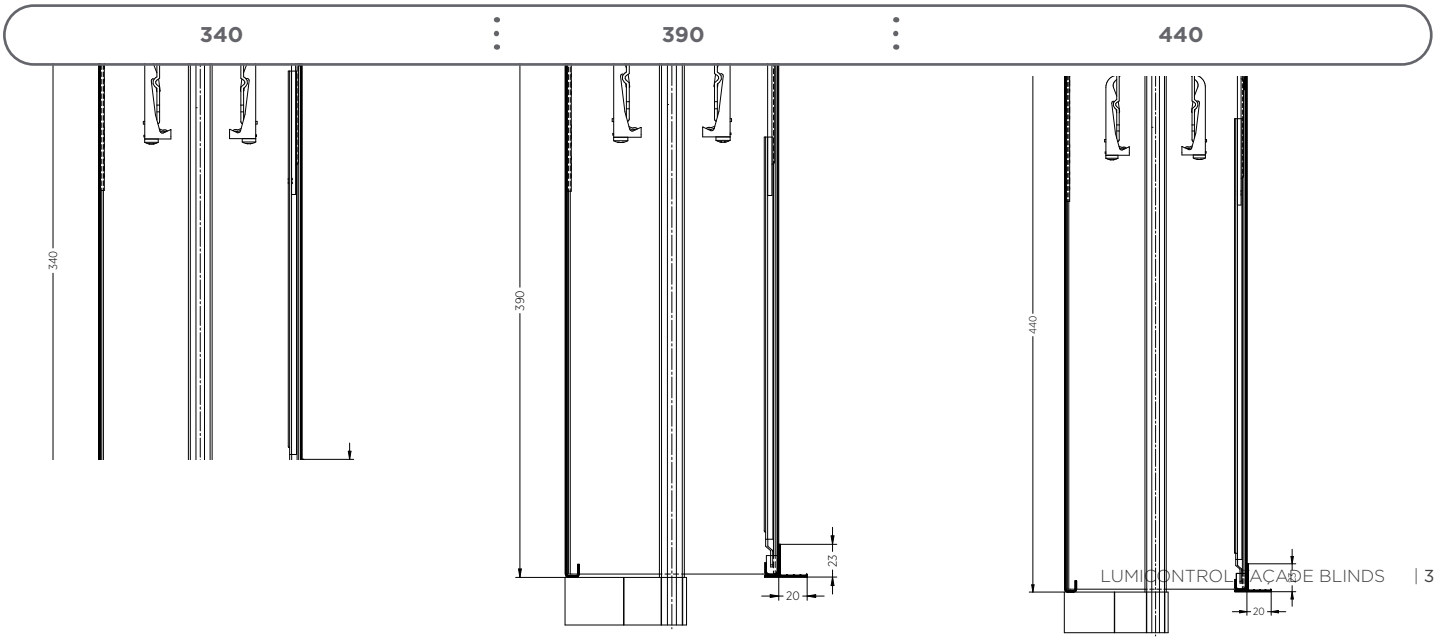
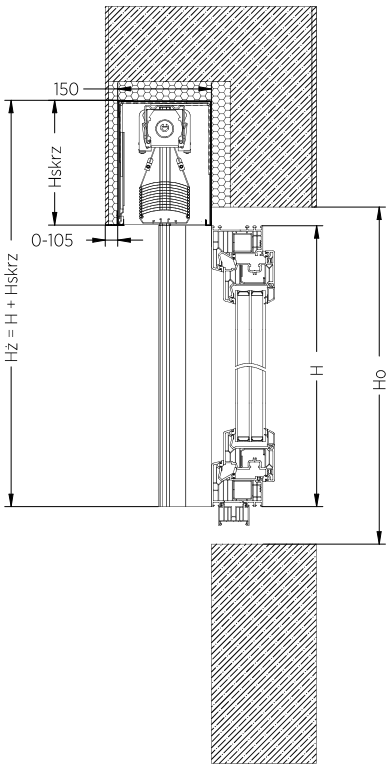


Table for selecting the cover panel height

Box cover panel height for the C80 louvres					
		Blind with guide rails		Blind with cable reinforcement	
	Hż – overall blind height [mm]	**Hskrz – box height [mm]**	**H – window structure height [mm]**	**Hskrz – box height [mm]**	**H – window structure height [mm]**
1.	**600 - 800**	200	400 - 800	200	400 - 800
2.	**801 - 1,000**				
3.	**1,001 - 1,200**	250	751 - 1,550	250	751 - 1,550
4.	**1,201 - 1,400**				
5.	**1,401 - 1,600**				
6.	**1,601 - 1,800**				
7.	**1,801 - 2,000**	300	1,501 - 2,300	300	1,501 - 2,300
8.	**2,001 - 2,200**				
9.	**2,201 - 2,400**				
10.	**2,401 - 2,600**				
11.	**2,601 - 2,800**	340	2,261 - 2,860	340	2,261 - 2,860
12.	**2,801 - 3,000**				
13.	**3,001 - 3,200**				
14.	**3,201 - 3,400**	390	2,811 - 3,410	390	2,811 - 3,410
15.	**3,401 - 3,600**				
16.	**3,601 - 3,800**				
17.	**3,801 - 4,000**	440	3,361 - 3,560	440	3,361 - 5,000
18.	**4,001 - 4,200**				
19.	**4,201 - 4,400**	x	x		
20.	**4,401 - 4,600**				
21.	**4,601 - 4,800**				
22.	**4,801 - 5,000**				

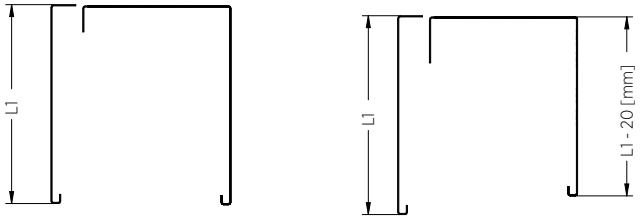


Box cover panel height for the Z90 louvres					
	Hż – overall blind height [mm]	Blind with guide rails		Blind with cable reinforcement	
		Hskrz – box height [mm]	**H – window structure height [mm]**	**Hskrz – box height [mm]**	**H – window structure height [mm]**
1.	**600 - 800**	200	400 - 1,600	200	400 - 1,600
2.	**801 - 1,000**				
3.	**1,001 - 1,200**				
4.	**1,201 - 1,400**				
5.	**1,401 - 1,600**				
6.	**1,601 - 1,800**				
7.	**1,801 - 2,000**	250	1,551 - 2,150	250	1,551 - 2,150
8.	**2,001 - 2,200**				
9.	**2,201 - 2,400**				
10.	**2,401 - 2,600**	300	2,101 - 2,900	300	2,101 - 2,900
11.	**2,601 - 2,800**				
12.	**2,801 - 3,000**				
13.	**3,001 - 3,200**				
14.	**3,201 - 3,400**	340	2,861 - 2,460	340	2,861 - 2,460
15.	**3,401 - 3,600**				
16.	**3,601 - 3,800**				
17.	**3,801 - 4,000**	390	3,411 - 3,610	390	3,411 - 4,010
18.	**4,001 - 4,200**	x	x		
19.	**4,201 - 4,400**				
20.	**4,401 - 4,600**			440	3,961 - 4,560
21.	**4,601 - 4,800**				
22.	**4,801 - 5,000**				



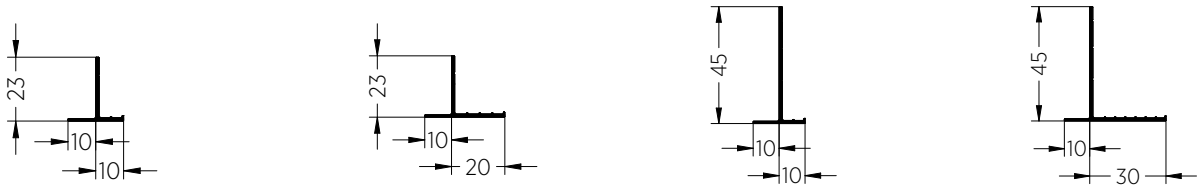
Box types

TYPE 6 | **TYPE 6/A**

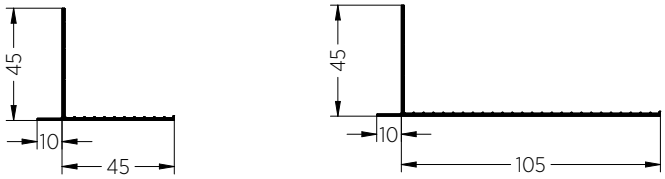


External plaster carrier brackets

NT/23/10/x | **NT/23/20/x** | **NT/45/10/x** | **NT/45/30/x**

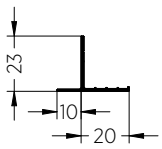


NT/45/45/x | **NT/45/105/x**



External plaster carrier bracket

NT/23/10/x



Dimensional limits for façade blinds

Dimensional limits for the version with a guide rail

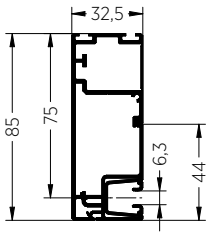
Version with a guide rail					
Minimum		Maximum		Maximum area in [m²]	Drive unit
Width [mm]	Height [mm]	Width [mm]	Height [mm]		
600	600	5,000	4,500	18	Electric

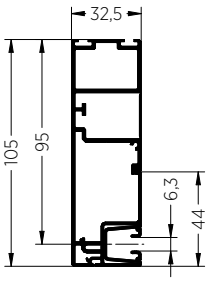
Dimensional limits for the version with a guide rail and cable reinforcement

Version with a guide rail and cable reinforcement					
Minimum		Maximum		Maximum area in [m²]	Drive unit
Width [mm]	Height [mm]	Width [mm]	Height [mm]		
1,000	600	5,000	5,000	22.5	Electric

Guide rails

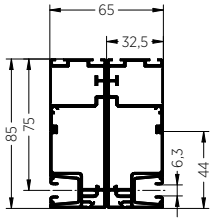
PBX/T2/85 ⋮ **PBX/T2/105**

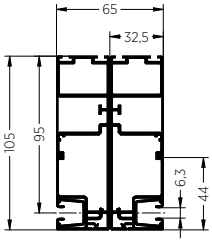


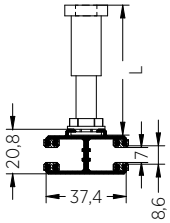


Intermediate guide rails

PBX/T2/85 ⋮ **PBX/T2/105** ⋮ **PPD SZF/1 + UP SZF/2 guide rail bracket**



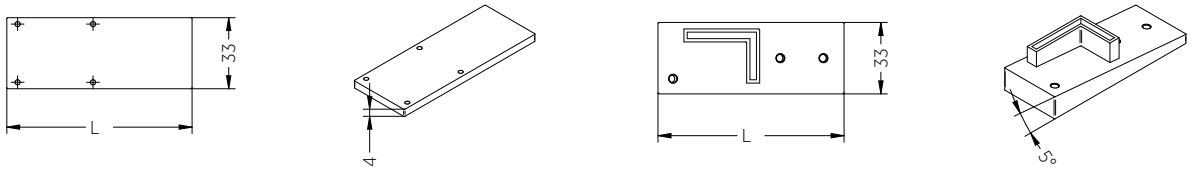




Guide rail bracket dimensions		
	Catalogue code	L [mm]
1.	UP SZF/2/105/x	71 - 105

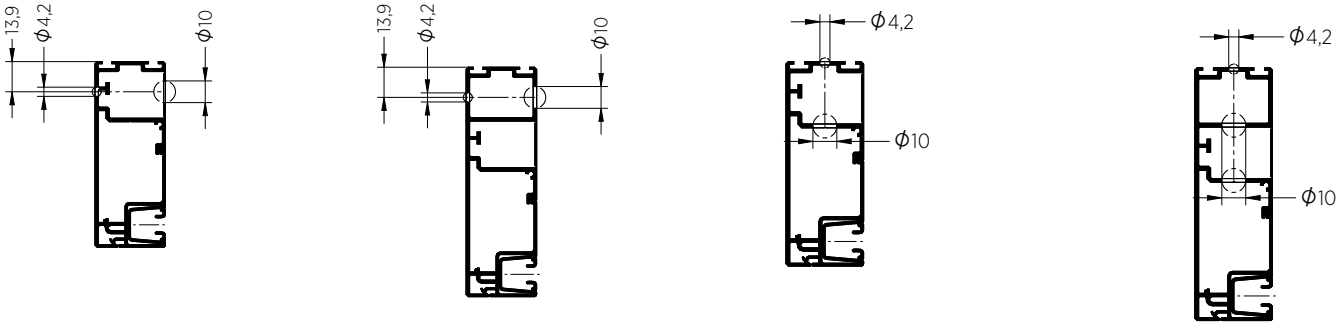
Guide rail caps

PBX T2 aluminium guide rail cap : **PBX T2 PVC guide rail cap**

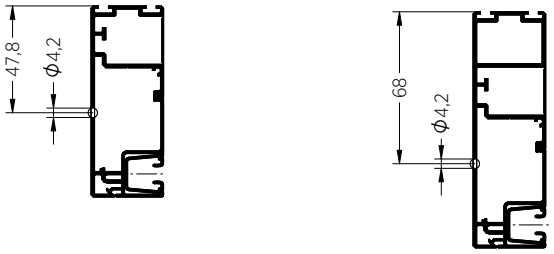


Guide rail drilling options

Drilling type “A”, from the side : **Drilling type “B”, from the face**

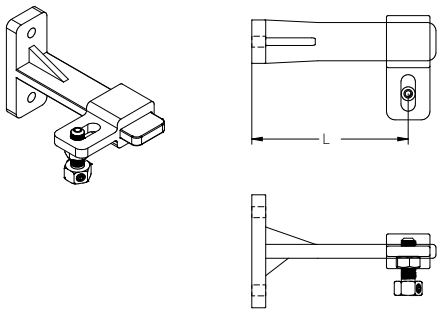


Drilling type “C”, through the adapter



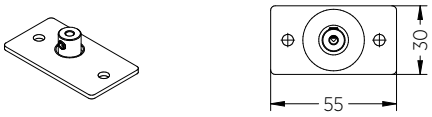
Guide rail cable reinforcement

UDL 1 cable bracket



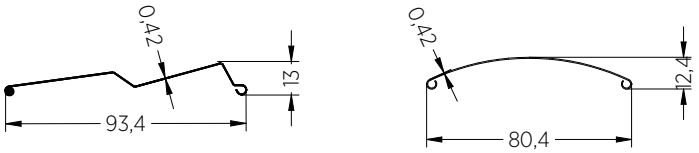
Guide rail cable reinforcement		
	Catalogue code	**L [mm]**
1.	**UDL/1/90/x**	50 - 90
2.	**UDL/1/128/x**	88 - 128

UDL 3 cable bracket



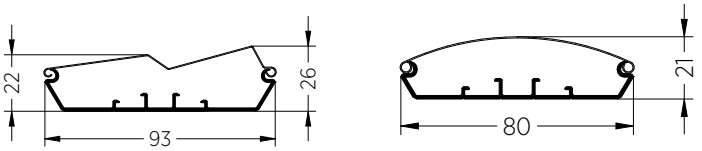
Louvres

Z90 ⋮ **C80**



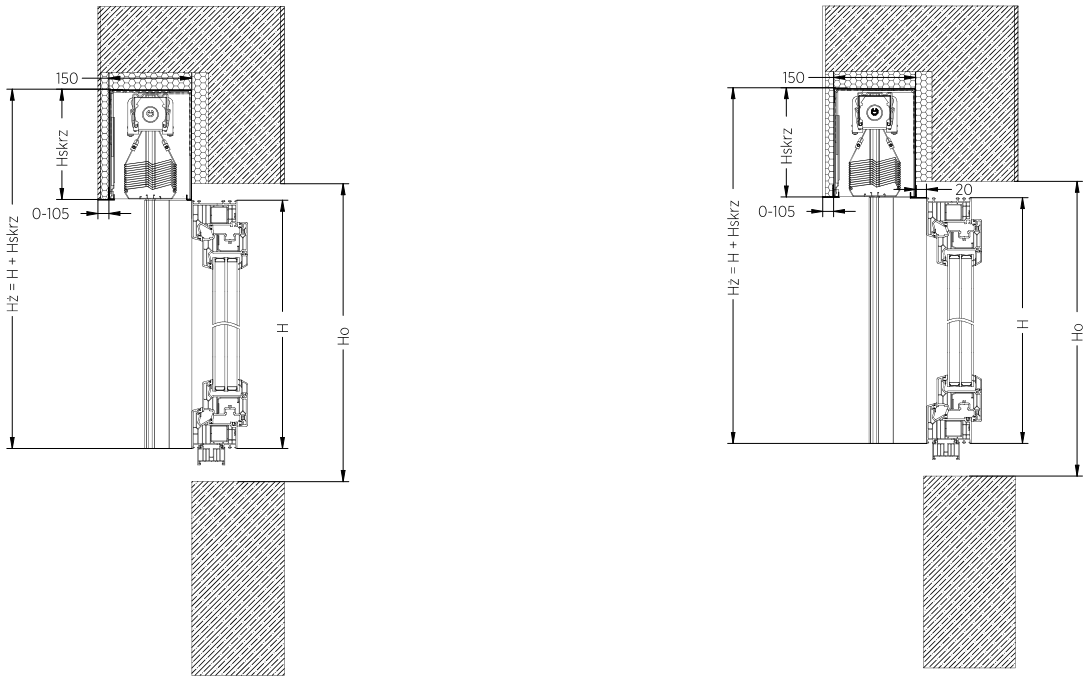
Bottom bars

BOA Z90 ⋮ **BOA C80**

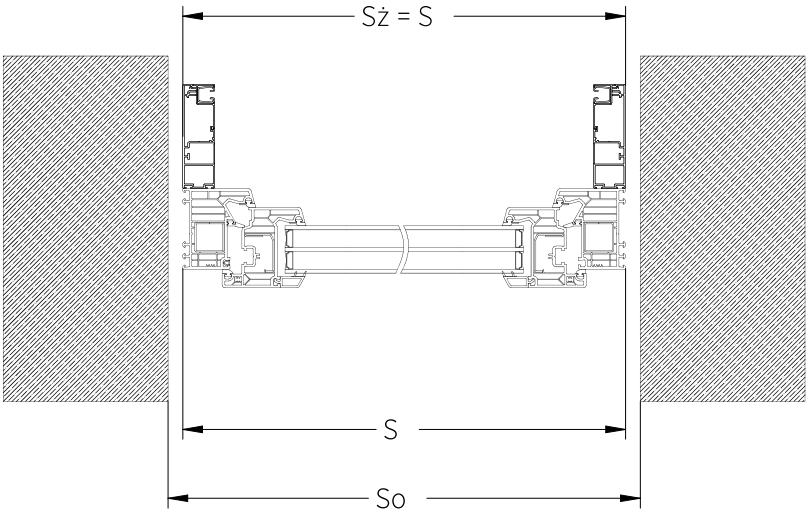


Dimensioning the LumiControl blinds in the lintel

Dimensioning using the PBX/T2/85 guide rail ⋮ **Dimensioning using the PBX/T2/105 guide rail**



Horizontal cross-section



Colours

Box	
Standard colours	
Silver	**1**
Grey	**3**
Brown	**9**
Ivory	**16**
Black	**20**
Black Grey	**21**
Ultra White	**22B**
Anthracite Grey	**23**
Light Beige	**29**
Light Grey	**31B**
Basalt Grey	**33**
Quartz Grey	**34**
Grey Aluminium	**37B**
Beige	**45**
Turner Oak	**49**
Mouse Grey	**73B**
Copper Brown	**74B**
Grey Metallic	**75B**
Graphite Grey	**80B**
Alpine White	**82**

Guide rails	
Standard colours	
Silver	**1**
Grey	**3**
Brown	**9**
Ivory	**16**
Black	**20**
Black Grey	**21**
Ultra White	**22B**
Anthracite Grey	**23**
Light Beige	**29**
Light Grey	**31B**
Basalt Grey	**33**
Quartz Grey	**34**
Grey Aluminium	**37B**
Beige	**45**
Turner Oak	**49**
Mouse Grey	**73B**
Copper Brown	**74B**
Grey Metallic	**75B**
Graphite Grey	**80B**
Alpine White	**82**

Louvres	
Standard colours	
Silver	**1**
Grey	**3**
Brown	**9**
Ivory	**16**
Black	**20**
Black Grey	**21**
Ultra White	**22B**
Anthracite Grey	**23**
Light Beige	**29**
Light Grey	**31B**
Basalt Grey	**33**
Quartz Grey	**34**
Grey Aluminium	**37B**
Beige	**45**
Turner Oak	**49**
Mouse Grey	**73B**
Copper Brown	**74B**
Grey Metallic	**75B**
Graphite Grey	**80B**
Alpine White	**82**

Louvre colours



Somfy automatic operating units



Somfy J4 WT

The J4 WT motor (with electronic limit position adjustment) is designed for the electric operation of external blinds. The upper and lower limit positions are adjusted using a setting cable. The upper limit position can also be set using a mushroom button (installed in the motor). The motor is available in three torque options: 6 Nm, 10 Nm, and 18 Nm. Motor cable: 4 x 0.75 mm^2.



Somfy J4 WT Protect

The J4 WT Protect motor (with electronic limit position adjustment) is designed for the electric operation of external blinds. The upper and lower limit positions are adjusted using a setting cable. The upper limit position can also be set using a mushroom button (installed in the motor). The motor is available in three torque options: 6 Nm, 10 Nm, and 18 Nm. What distinguishes the J4 WT Protect from the standard J4 WT motor is its ice protection function, which protects the motor when it is operated in the upward direction. Motor cable: 4 x 0.75 mm^2.



Somfy J4S io Protect

The best-in-class Somfy motors deliver outstanding quality and performance for external blinds, ensuring smooth operation together with a wide range of advanced features that can be easily integrated and controlled via the TaHoma app. The motor is equipped with additional functions such as ice detection, obstacle detection, stress relief and automatic readjustment, helping to protect your blinds against damage. Available in a 6 Nm and a 10 Nm version with a silent brake, as well as an 18 Nm version without a silent brake. Motor cable: 4 x 0.75 mm^2.

io-homecontrol® control units



TaHoma Switch

One system to control it all

With the TaHoma Switch, you can control the devices at your home with your smartphone, tablet or computer. A clear interface and an intuitive system make it a solution that is easy to use for anyone. Additional immediate feedback gives you certainty that the tasks were performed properly and no obstacles were encountered. The TaHoma system also makes it possible to connect alarm systems, cameras, window opening sensors, and motion sensors. All these devices can be activated manually or automatically. You can freely activate them using individual scenarios, such as “open all roller shutters”, “lighting on” or “arm the alarm”, which effectively scares away potential intruders. The application pushes a notification to your smartphone each time an intruder is present in your home.

- The central control unit is compatible with almost 300 Somfy product types.
- Roller shutters
- Blinds and shutters
- Pergolas and awnings
- Gates, garage doors, and door locks
- Lighting and smart sockets
- Cameras and alarms
- Heating
- Sensors
- Music and voice assistants

This exceptionally simple and intuitive system allows you to create 40 scenarios for over 200 home devices! You can freely modify each scenario and launch it whenever you want or on scheduled days and times. Do it all at a tap of a button on your smartphone, tablet or laptop. Central control unit dimensions: (length x width x height): 110 x 71.25 x 28.13 mm



Situo 1 VAR io II

The Situo 1 VAR io II single-channel remote control features a timeless, elegant design. Its subtle curves and a range of finishes make it easy to match the remote to your interior. Easy to use, it allows you to control one or more io devices, such as external blinds. Control functions are operated using the following buttons: “Up” – sends the command to raise, open or increase the level of natural light (press and hold). “My” – activates the Stop function and allows you to define the preferred comfort position of the blind. “Down” – sends the command to lower, close or reduce the level of natural light (press and hold). Compatible with all io devices, it provides a complete solution that makes everyday operation easier. Available in white.



Situo 5 VAR A/M io II

The remote enables control of up to five devices or groups of devices using the io technology. It allows you to adjust the louvre position, control the level of natural light, and save a favourite blind position. The "My" button allows you to define the preferred comfort position of the blind. Available in white.



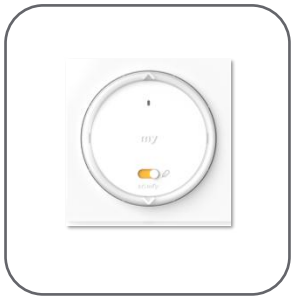
Ysia Patio

A simple, intuitive, high-quality 16-channel io remote control for terrace applications, including roller shutter operation – designed for the most advanced users. The remote enables individual or group control of products, features a screen that is readable both in bright sunlight and at night (automatic brightness adjustment), and provides feedback on low battery and successful command transmission. The easy-to-use, ergonomic rotary controller ensures excellent control over all devices and enables precise management of natural light entering the home. The remote control is available in white.



Amy 1 Mode io

A wall-mounted transmitter for controlling a single io device or one group of io devices, based on temperature measurement from an integrated sensor. An LED indicator provides feedback when commands are sent and displays battery status. Set includes: Amy transmitter, frame, batteries. Available in Pure colour.



Amy 1 Sun Protect Modes io

A modern wall-mounted transmitter for the smart automation of window shading systems. It automatically adjusts the position of the blinds to effectively block sunlight and maintain a comfortable indoor temperature, even on the hottest days. Thanks to its built-in indoor temperature sensor and integrated algorithm, it automatically controls the motorized sun-shading system by lowering it before the interior becomes too warm. Available in white.



Amy 2 Modes io

A wall-mounted transmitter for controlling two io devices or two groups of io devices. Designed for controlling all types of shading system drives. Does not include a built-in temperature sensor. An LED indicator provides feedback when commands are sent and displays battery status. The “my” button allows the device to be set to a previously configured favourite position. Set includes: Amy transmitter, frame, batteries. Available in white.



Amy 4 Modes io

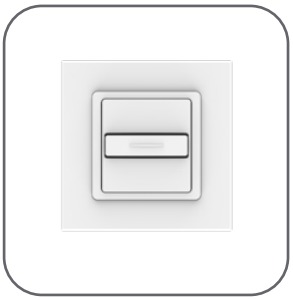
A wall-mounted transmitter for controlling four io devices or four groups of io devices. Designed for controlling all types of shading system drives. Does not include a built-in temperature sensor. An LED indicator provides feedback when commands are sent and displays battery status. The “my” button allows the device to be set to a previously configured favourite position. Set includes: Amy transmitter, frame, batteries. Available in white.



Amy 1 A/M Modes io

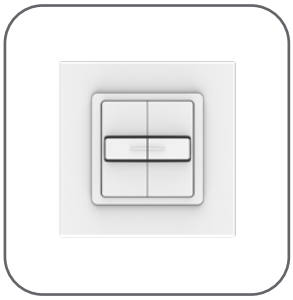
A wall-mounted transmitter for controlling a single io device or one group of io devices. Enables device automation via TaHoma thanks to an integrated temperature sensor. Version dedicated for operating blinds/roller shutters in an automatic or manual mode. The “my” button allows the device to be set to a previously configured favourite position. The indoor temperature sensor, compatible with the TaHoma ecosystem, enables easy creation of advanced scenarios. An LED indicator provides feedback when commands are sent and displays battery status. Set includes: Amy transmitter, frame, batteries. Available in white.

Wired control



Smoove Uno WT

A single switch without impulse maintenance for manual control of a wired drive unit or a wired drive unit with obstacle detection. Control with up–stop–down buttons.



Smoove Duo WT

A double switch without impulse maintenance for manual control of two independent wired drive units or wired drive units with obstacle detection. Control with up–stop–down buttons.

Somfy sensors



Eolis io

A wind sensor featuring the io-homecontrol® radio technology. Connected directly to the io-homecontrol® motors for façade blinds, the Eolis io automatically controls the blinds whenever the wind speed exceeds the preset threshold. The wind sensitivity threshold is factory-set but can be adjusted directly on the sensor to suit individual requirements and local weather conditions.



Eolis 3D WireFree io

The most popular wind sensor for façade blinds. It adapts to different wind conditions by detecting vibrations in three dimensions. Additional features include connection status monitoring (checking the sensor connection every 60 minutes), blind position memory (the blind position is retained when the sensor battery is replaced), and a safety function whereby other sensors cannot operate the blinds if the wind sensor is not functioning.



Sunteis io

Sunteis io – a temperature and sunlight sensor. By continuously analyzing the current weather conditions (sunlight intensity and temperature) and following the programmed operating scenario, the sensor automatically controls the façade blinds, adjusting the level of shading inside the room.

ELERO and ALUPROF accessories



Elero JA 04 Soft DC wired motor

A motor with an EXIT Safe module, rechargeable battery, and motor connector (12 V). The battery is continuously charged by the control unit, ensuring that the motor can open the blinds even in the event of a power failure. Motor cable: 4 x 0.75 mm^2.



Elero JA Soft wired motor

A motor for façade blinds with a soft brake, double-sided drive output, and a mechanical upper/lower limit switch. Operating temperature: –20°C to +60°C. Available in a 6 Nm and a 9 Nm version with a silent brake, and a 10 Nm and a 20 Nm version without a silent brake. Motor cable: 4 x 0.75 mm^2.



Elero JA Comfort wired motor

A motor for façade blinds with an electronic limit switch, slow-speed mode, stall detection, and belt length compensation. It offers precise louvre positioning and an operating temperature range of –20°C to +60°C. Available in a 6 Nm and a 9 Nm version. Motor cable: 4 x 0.75 mm^2.



Elero JA Comfort wired motor

A motor for façade blinds with an electronic limit switch, slow-speed mode, stall detection, and belt length compensation. It offers precise louvre positioning and an operating temperature range of –20°C to +60°C. Available in a 6 Nm and a 9 Nm version. Motor cable: 4 x 0.75 mm^2.



Elero LumeroSon-868 Slide radio transmitter

A single-channel handheld radio transmitter with the Slide function and a manual/automatic mode selector, available in white. It can be used for individual, group or central control. The transmitted signals and feedback are indicated visually using different colours. The louvre angle can be adjusted precisely using the Slide control. It also enables smooth dimming of lighting or adjustment of the output of radiant heaters, provided they are equipped with compatible Elero radio receivers.



Elero VarioSon-868 Slide radio transmitter

A 6-channel handheld radio transmitter with a Slide control and a manual/automatic mode selector. The transmitted signals and feedback are indicated using different colours. The operating mode can also be switched directly on the transmitter. The louvre angle can be adjusted precisely using a slider. It also enables smooth dimming of lighting or adjustment of the output of radiant heaters, provided they are equipped with compatible Elero radio receivers. The new transmitter is available in white.



Elero TempoTel 2 radio transmitter

A 10-channel handheld radio transmitter providing maximum operating convenience. It supports both one-way and two-way communication and features an integrated timer with the Astro function and holiday programmes. The transmitted signals and feedback are indicated by an LED. Available in white.



Elero MultiTel 2 radio transmitter

A handheld transmitter with an intelligent design, featuring 15 individual channels, 5 group channels, and 1 central channel. Commands and position status are displayed on the multi-line display. Available in white.



Elero LumeroSon W-868 radio transmitter

A single-channel wall-mounted radio transmitter with a manual/automatic mode selector. The transmitted signals and feedback are indicated using different colours. The set includes the transmitter, designed to fit a standard 50x50 mm housing, and a matching frame. The set is available in white.



Elero LumeroSon-868 Mini radio transmitter

A 6-channel wall-mounted radio transmitter. The transmitted signals and feedback are indicated using different colours. The operating mode can also be switched directly on the transmitter. This elegant controller is supplied in white together with a frame. Designed to fit a standard 50 x 50 mm housing and compatible with standard switch programmes.



Elero VarioSon W-868 wall-mounted transmitter

A 6-channel wall-mounted radio transmitter. The transmitted signals and feedback are indicated using different colours. The operating mode can also be switched directly on the transmitter. This elegant controller is supplied in white together with a frame. Designed to fit a standard 50 x 50 mm housing and compatible with standard switch programmes.



Elero Aero-868 AC wind and sun sensor

A mains-powered radio wind and sun sensor designed for the automatic control of sun-shading systems such as awnings, façade blinds, roller shutters, and screen systems. The device monitors solar radiation intensity and wind speed, and then transmits radio control signals to compatible Elero system receivers. Its automatic response to changing weather conditions improves user comfort, enhances the building's energy efficiency, and protects sun-shading systems against damage caused by strong winds. The sensor operates on a 230 V AC power supply and communicates wirelessly on the 868 MHz frequency, ensuring reliable signal transmission and stable operation in shading automation systems.



Elero Aero-868 Plus wind and sun sensor

A wireless wind and sun sensor designed for the automatic control of façade blinds. The device monitors solar radiation intensity and wind speed, and then transmits radio control signals to compatible Elero system receivers. The sensor is equipped with integrated photovoltaic cells and an energy storage system, allowing it to operate without a mains power supply. Wireless communication on the 868 MHz frequency ensures reliable signal transmission, while the automatic response to changing weather conditions improves user comfort and protects sun-shading systems against damage caused by strong winds.



Aluprof AC212 flush-mounted radio controller

A radio controller for operating a single motor, designed for installation in a standard flush-mounted electrical box. Stores up to 20 transmitters and is compatible with all the AC series transmitters.



Aluprof AC151-06 wall-mounted transmitter

A 6-channel transmitter with a timer, capable of controlling 6 automation devices (or groups). Custom opening and closing hours can be programmed. Range up to 80 m in open spaces, up to 20 m indoors. Compatible with the following actuators: AM35-E, AM45-E, AM45-ER-P, AM45-ME, AM60-ME, as well as the AC series radio receivers and central control units.



Aluprof AC302-01 sun and wind sensor

A wireless sensor designed for the automatic control of sun-shading systems such as façade blinds. The sensor monitors wind speed and sunlight intensity, transmitting signals to compatible radio-controlled motors to improve user comfort and protect the installation against adverse weather conditions. The device is powered by an integrated rechargeable battery charged via a solar panel. Adjustable sensitivity thresholds allow the sensor to be tailored to individual operating conditions.



Aluprof AC302-02 sun and wind sensor

A mains-powered radio wind and sun sensor designed for the automatic control of sun-shading systems such as façade blinds. The device monitors solar radiation intensity and wind speed, and then transmits radio control signals to compatible Elero system receivers. Its automatic response to changing weather conditions improves user comfort, enhances the building's energy efficiency, and protects sun-shading systems against damage caused by strong winds. The sensor operates on a 230 V AC power supply and communicates wirelessly on the 868 MHz frequency, ensuring reliable signal transmission and stable operation in shading automation systems.



Aluprof AC152-06/20 portable transmitter

A portable transmitter capable of controlling 6 automation devices (or groups). Operating range: up to 200 m in open areas, up to 35 m indoors. Compatible with the following actuators: AM35-E, AM45-E, AM45-ER-P, AM45-ME, AM60-ME, as well as the AC series radio receivers, the AC series central control units, and AL-RSP02.



Aluprof AC268-01 wireless central control unit

A radio control unit for operating a single motor. Easy to install, stores up to 20 transmitters, and is compatible with the AC series transmitters. Rated IP54.

Wind load resistance class in accordance with PN-EN13659

POLAND

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetation and no obstacles
II – Areas with low vegetation such as grass, with or without a few free-standing obstacles (trees, buildings) with a distance between them of at least 20 times their height
III – Area with regular overgrowth or buildings or isolated obstacles with a gap of no more than 20 obstacle heights (e.g. villages, periurban areas, sustainable forests etc.)
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



Wind speeds (PN-EN 1991-1-4)	
Wind zone	V_k (m/s)
I	22
II	26
III	22

Criteria		Blind installation height on a building														
Terrain category	Require-ments	up to 9 m			9 to 18 m			18 to 28 m			28 to 50 m			50 to 100 m		
		Wind zone			Wind zone			Wind zone			Wind zone			Wind zone		
		1	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
IV	Wind load resistance class	1	2	1	2	3	2	2	3	2	3	4	3	3	4	3
III		2	3	2	3	3	3	3	4	3	3	4	3	4	4	4
II		3	3	3	3	4	3	3	4	3	4	4	4	4	5	4
I		3	4	3	4	4	4	4	4	4	4	4	4	4	5	4
0		3	4	3	4	4	4	4	4	4	4	5	4	4	5	4

GERMANY

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetation and no obstacles
II – Areas with low vegetation such as grass, with or without a few free-standing obstacles (trees, buildings) with a distance between them of at least 20 times their height
III – Area with regular overgrowth or buildings or isolated obstacles with a gap of no more than 20 obstacle heights (e.g. villages, periurban areas, sustainable forests etc.)
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m
V – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



Wind speeds (PN-EN 1991-1-4)	
Wind zone	V_k (m/s)
I	22.5
II	25
III	27.5
IV	30

Criteria		Blind installation height on a building																			
Terrain category	Requirements	up to 9 m				9 to 18 m				18 to 28 m				28 to 50 m				50 to 100 m			
		Wind zone				Wind zone				Wind zone				Wind zone				Wind zone			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
IV	Wind load resistance class	1	1	2	2	2	2	3	3	2	3	3	4	3	3	4	4	3	4	4	5
III		2	2	3	3	3	4	4	3	3	4	4	3	4	4	4	5	4	4	5	5
II		3	3	4	4	3	4	4	4	4	4	4	5	4	4	5	5	4	5	5	5
I		3	4	4	4	4	4	4	5	4	4	5	5	4	4	5	5	4	5	5	5
0		3	4	4	5	4	4	4	5	4	4	5	5	4	4	5	5	4	5	5	5

FRANCE

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetation and no obstacles
II – Areas with low vegetation such as grass, with or without a few free-standing obstacles (trees, buildings) with a distance between them of at least 20 times their height
IIIa – Rural area with fences / hedges, vineyards, scattered homes
IIIb – Urbanized or industrial areas; thick groves; orchards
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



Wind speeds (PN-EN 1991-1-4)					
Wind zone		Metropolitan France	Wind zone		Oversea departments
I	V_k (m/s)	22	Guadeloupe	V_k (m/s)	36
II		24	Guyana		17
III		26	Martinique		32
IV		28	Mayotte		30
			Réunion		34

Assignment of blind wind load resistance classes to the wind load zones in France																					
Criteria		**Blind installation height on a building**																			
Terrain category	Requirements	**up to 9 m**				**9 to 18 m**				**18 to 28 m**				**28 to 50 m**				**50 to 100 m**			
		Wind zone				Wind zone				Wind zone				Wind zone				Wind zone			
		I	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**
IV	Wind load resistance class	1	1	2	2	1	2	2	3	2	2	3	3	2	3	3	4	3	4	4	4
IIIb		1	2	2	2	2	2	3	3	2	3	3	4	3	3	4	4	3	4	4	4
IIIa		2	2	3	3	3	3	3	4	3	3	4	4	3	4	4	4	4	4	4	5
II		3	3	4	4	3	4	4	4	3	4	4	4	4	4	4	5	4	4	5	5
0		3	4	4	4	4	4	4	4	4	4	4	5	4	4	5	5	4	4	5	5

CZECH REPUBLIC

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetation and no obstacles
II – Areas with low vegetation such as grass, with or without a few free-standing obstacles (trees, buildings) with a distance between them of at least 20 times their height
III – Area with regular overgrowth or buildings or isolated obstacles with a gap of no more than 20 obstacle heights (e.g. villages, periurban areas, sustainable forests etc.)
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m
V – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



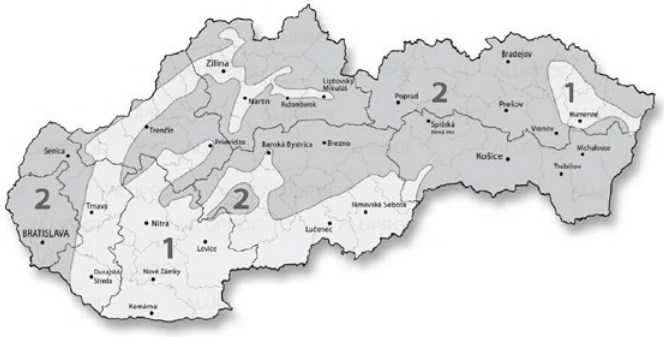
Wind speeds (PN-EN 1991-1-4)	
Wind zone	V_k (m/s)
I	22.5
II	25
III	27.5
IV	30
V	36

Assignment of blind wind load resistance classes to the wind load zones in the Czech Republic																										
Criteria		**Blind installation height on a building**																								
Ter-rain cate-gory	Require-ments	**up to 9 m**					**9 to 18 m**					**18 to 28 m**					**28 to 50 m**					**50 to 100 m**				
		Wind zone					Wind zone					Wind zone					Wind zone					Wind zone				
		I	**II**	**III**	**IV**	**V**	**I**	**II**	**III**	**IV**	**V**	**I**	**II**	**III**	**IV**	**V**	**I**	**II**	**III**	**IV**	**V**	**I**	**II**	**III**	**IV**	**V**
IV	Wind load resistance class	1	1	2	2	4	2	2	3	3	4	2	3	3	4	4	3	3	4	4	5	3	4	4	5	5
III		2	2	3	3	4	3	3	4	4	5	3	3	4	4	5	3	4	4	5	5	4	4	5	5	6
II		3	3	4	4	5	3	4	4	4	5	4	4	4	5	5	4	4	5	5	6	4	4	5	5	6
I		3	4	4	4	5	4	4	4	5	5	4	4	5	5	6	4	4	5	5	6	4	5	5	5	6

SLOVAKIA

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetatio and no obstacles
II – Areas with low vegetation such as grass, with or withou a few free-standing obstacles (trees, buildings) with a distanc between them of at least 20 times their height
III – Area with regular overgrowth or buildings or isolate obstacles with a gap of no more than 20 obstacle heights (e.g villages, periurban areas, sustainable forests etc.)
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



Wind speeds (PN-EN 1991-1-4)	
Wind zone	V_k (m/s)
I	24
II	26
III	30
IV	33

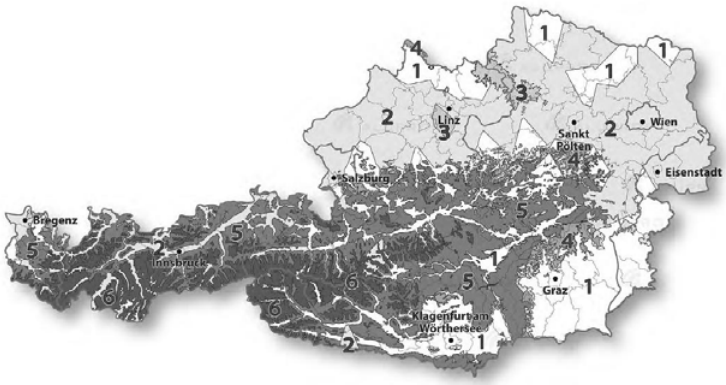
Class 3 – for locations situated at elevations between 700 m and 1,300 m above sea level
Class 4 – for locations situated at elevations above 1,300 m above sea level

Assignment of blind wind load resistance classes to the wind load zones in Slovakia																					
Criteria		**Blind installation height on a building**																			
Terrain category	Requirements	**up to 9 m**				**9 to 18 m**				**18 to 28 m**				**28 to 50 m**				**50 to 100 m**			
		Wind zone				Wind zone				Wind zone				Wind zone				Wind zone			
		I	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**
IV	Wind load resistance class	1	2	2	3	2	2	3	4	3	3	4	4	3	4	4	4	4	4	5	5
III		2	3	3	4	3	3	4	4	3	4	4	5	4	4	5	5	4	4	5	5
II		3	4	4	4	4	4	4	5	4	4	5	5	4	4	5	5	4	5	5	6
I		4	4	4	5	4	4	5	5	4	4	5	5	4	4	5	6	4	4	5	6

AUSTRIA

Terrain categories:

0 – Sea or coastal areas with wind flowing over the open sea
I – Lakes or flat and horizontal area with negligible vegetation and no obstacles
II – Areas with low vegetation such as grass, with or without a few free-standing obstacles (trees, buildings) with a distance between them of at least 20 times their height
III – Area with regular overgrowth or buildings or isolated obstacles with a gap of no more than 20 obstacle heights (e.g. villages, periurban areas, sustainable forests etc.)
IV – Urban areas where at least 15% of the surface area is covered with buildings with an average height of over 15 m



Wind speeds (PN-EN 1991-1-4)	
Wind zone	V_k (m/s)
I	24.2
II	27.5
III	30.8
IV	37.4
V	44
VI	50.6

Assignment of blind wind load resistance classes to the wind load zones in Austria																														
Criteria		**Blind installation height on a building**																												
Terrain category	Requirements	**up to 9 m**						**9 to 18 m**						**18 to 28 m**						**28 to 50 m**						**50 to 100 m**					
		Wind zone						Wind zone						Wind zone						Wind zone						Wind zone					
		I	**II**	**III**	**IV**	**V**	**VI**	**I**	**II**	**III**	**IV**	**V**	**VI**	**I**	**II**	**III**	**IV**	**V**	**VI**	**I**	**II**	**III**	**IV**	**V**	**VI**	**I**	**II**	**III**	**IV**	**V**	**VI**
IV	Wind load resistance class	1	2	3	4	4	5	2	3	3	4	5	5	2	3	4	4	5	6	3	4	4	5	6	6	4	4	5	5	6	6
III		2	3	4	4	5	6	3	4	4	5	5	6	3	4	4	5	6	6	4	4	5	5	6	6	4	4	5	6	6	6
II		3	4	4	5	5	6	3	4	4	5	6	6	4	4	4	5	6	6	4	4	5	6	6	6	4	5	5	6	6	6

PLEASE NOTE

These tables apply to areas situated up to 300 m above sea level and blind installation at the height of up to 100 m. All other cases have to be considered on an individual basis.

Blind resistance classes to wind load							
Class	0	1	2	3	4	5	6
Reference test pressure **p** (N/m^2)	< 50	50	70	100	170	270	400
Safe test pressure **1.5 p** (N/m^2)	< 75	75	100	150	250	400	600

Maximum blind dimensions in accordance with the classes of resistance to wind load

C80 and Z90 with guide rails		**Wind load resistance classes according to EN 13659**					
		Maximum blind width [mm]					
		2,000	2,500	3,000	3,500	4,000	4,500
Maximum blind height [mm]	≤ 2,500	5	3	3	2	2	1
	≤ 4,000	5	3	3	2	2	1
	≤ 5,000	5	3	3	1	1	-

C80 and Z90 with guide rails and cable reinforcement		**Wind load resistance classes according to EN 13659**					
		Maximum blind width [mm]					
		2,000	2,500	3,000	3,500	4,000	4,500
Maximum blind height [mm]	≤ 2,500	5	4	4	3	3	3
	≤ 4,000	5	4	4	3	3	3
	≤ 5,000	5	4	4	3	3	3

* Blinds with an area exceeding 22.5 m^2 may only be ordered following consultation with the Technical Department.

The wind load resistance class of the blind is stated on the CE label and in the Declaration of Performance (DoP) supplied with the product.

C80 and Z90 with guide rails and cable reinforcement	**Safe wind speed**	
	[m/s]	[km/h]
1	< 8.9	< 32.2
2	< 10.6	< 38.1
3	< 12.6	< 45.5
4	< 16.5	< 59.4
5	< 20.8	< 74.8
6	< 25.3	< 91.1

* The blind must be fully raised and retracted into the box (upper limit position) whenever the wind speed exceeds the maximum value specified for its wind load resistance class. Even if a wind sensor is installed, it is recommended that the user also responds manually in such situations.



LumiControl façade blinds

WIŚNIOWSKI

WIŚNIOWSKI Sp. z o.o. S.K.A.
PL 33-311 Wielogłowy 153
tel. +48 18 44 77 111

www.wisniowski.com

Let us inspire you!
See other solutions from WIŚNIOWSKI!

The products shown in this publication often feature special accessories and do not always correspond to their standard versions • The technical data sheet does not constitute an offer within the meaning of the Polish Civil Code • The manufacturer reserves the right to introduce changes without notice • NOTE: The colours shown in the technical data sheet are for reference only • All rights reserved • Copying and use, in part or in full, is prohibited without the consent of WIŚNIOWSKI Sp. z o.o. S.K.A. • LumiControl façade blinds/09.26/EN