



# CANOPIES, BALUS- TRADES PORTFENETR, SLIDING DOORS 2016

The Wiper logo, consisting of the word "wiper" in a lowercase, sans-serif font, enclosed within a thin rectangular border.

# MILO



WIPER MILO is an awning which, thanks to its simple style, can be used in virtually any type of building entrance design, without any effect on the general architectural concept. Apart from its artistic value, the main advantage is simple and quick installation.



SET INCLUDES

INSTALLATION SET	Construction support – holder rustless, ground steel; thickness 3 mm – 2 pcs.
	Wall mount, nuts, top mounts rustless steel – 4 sets
AWNING	Acrylic glass; thickness 4mm, resistant to weather conditions, not resistant to hail and falling icicles, resistant to UV sun rays (non-fading).



available colours

colourless  
CLEAR

SNOW WHITE



BLUE SKY

OCEAN  
GREEN

size

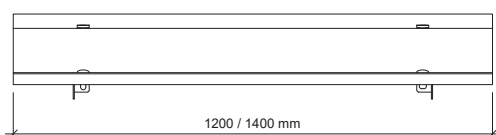
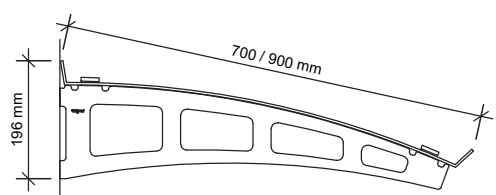
[mm] mini – 700 x 1200

midi – 900 x 1400

surface finish



BRUSHED



ZŁOTY FILAR  
BUDOWNICTWA  
2013





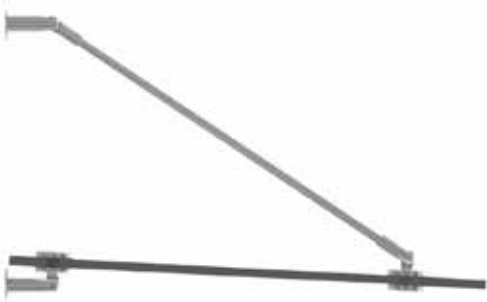
The Wiper logo, featuring the word "wiper" in a white, lowercase, sans-serif font inside a white rectangular border.

# CLASSIC

The CLASSIC canopy is primarily simplicity and functionality. The glass plate is suspended classic steel stays, two or three of them, depending on the dimensions of the plate. This convenient solution for front doors is safe and robust, which ensures long-term durability.



SET INCLUDES	INSTALLATION SET	Construction guy: stainless ground steel – 2 pcs. (3 pcs.)
		Wall mounts: stainless ground steel – 4 sets (6 sets)
		Glass point holders: stainless ground steel – 4 pcs. (6 pcs.)
GLASS PANE	WG and VSG glass (semi-hardened, laminated) clear, polished edges; thickness: 13.52 mm (2x6mm), 17.52 mm (2x8mm)	

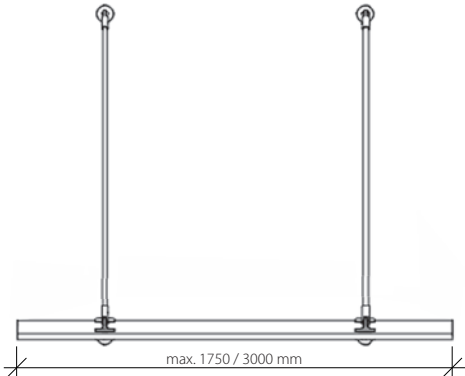
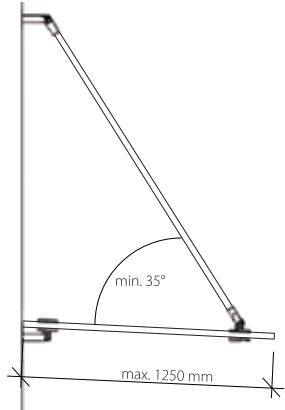


Max. glass pane size  
[mm] 1250 x 1750 – 2 supports  
1250 x 3000 – 3 supports

surface finish



BRUSHED



The Wiper logo, featuring the word "wiper" in a stylized, lowercase font inside a rounded rectangular border.

# AVANTI

The AVANTI canopy, in addition to the utility function, serve a decorative purpose, giving an edge to every building. The glass plate is based on the original steel supports, two or three of them, depending on the dimensions of the plate. This convenient solution for front doors is safe and robust, which ensures long-term durability.





## SET INCLUDES

INSTALLATION SET	Construction support, stainless ground steel, thickness: 8mm – 2 pcs. (3 pcs.)
	Wall mounts: stainless ground steel – 4 sets (6 sets)
	Glass point holders: stainless ground steel - 4 pcs. (6 pcs.)
GLASS PANE	WG and VSG glass (semi-hardened, laminated), clear, polished edges, thickness from 13.52 (2x6mm)

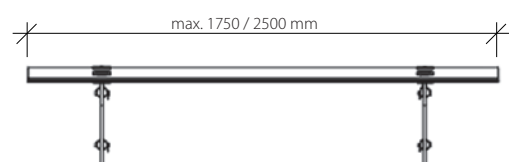
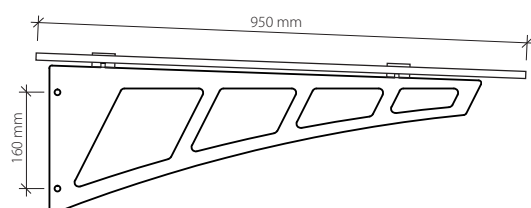


Max. glass pane size  
 [mm] 950 x 1700 – 2 supports  
 950 x 2500 – 3 supports

surface finish



BRUSHED



The Wiper logo, featuring the word "wiper" in a white, lowercase, sans-serif font inside a white rectangular border.

# LUNA

The LUNA canopy, in addition to the utility function, serve a decorative purpose, giving an edge to every building. This convenient solution for front doors is safe and robust, which ensures long-term durability.





SET INCLUDES	INSTALLATION SET	8mm Construction support, stainless ground steel, thickness: 8mm – 2 pcs. (3 pcs.)
		Wall mounts: stainless ground steel – 4 sets (6 sets)
		Glass point holders: stainless ground steel – 4 pcs. (6 pcs.)
	GLASS PANE	WG and VSG glass (semi-hardened, laminated), clear, polished edges, thickness from 13.52 (2x6mm)

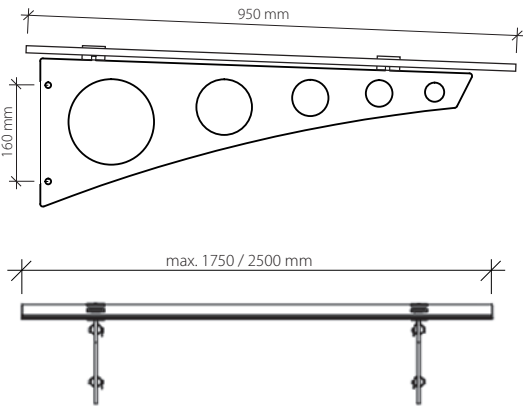


Max. glass pane size  
[mm] 950 x 1700 – 2 supports  
950 x 2500 – 3 supports

surface finish



BRUSHED



# PF CUBE CLASSIC

PF CUBE CLASSIC portfenetr's frame made of profiles 30x50mm, PF RONDA CLASSIC portfenetr's of steel pipe fi 42,4mm. They are filled with horizontal rods fi 12mm. Surface finish is brushed.

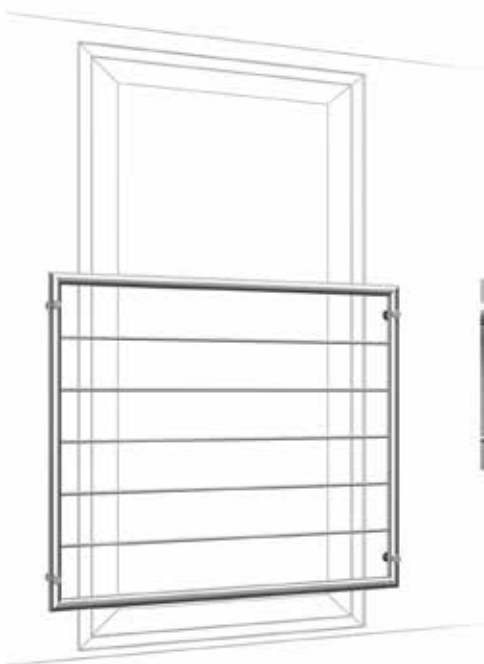
	FRAME	FILLING
PF RONDA CLASSIC	pipe Ø=42,4 mm	rod Ø=12 mm
PF CUBE CLASSIC	profile 30 x 50 mm	

surface finish



BRUSHED

## PF RONDA CLASSIC



## PF CUBE CLASSIC





# PF VERTICAL

PF CUBE VERTICAL portfenetr's frame made of profiles 30x50mm, PF RONDA VERTICAL portfenetr's of steel pipe fi 42,4mm. They are filled with vertical rods fi 12mm. Surface finish is brushed.

	FRAME	FILLING
PF RONDA VERTICAL	pipe $\varnothing=42,4$ mm	rod $\varnothing=12$ mm
PF CUBE VERTICAL	profile 30 x 50 mm	

surface finish



BRUSHED

## PF RONDA VERTICAL



## PF CUBE VERTICAL



# PF GLASS

PF CUBE GLASS portfenetr's frame made of profiles 30x50mm, PF RONDA GLASS portfenetr's of steel pipe fi 42,4mm. They are filled with tempered secure glass ESG VSG 44.2, thickness 9 mm. Surface finish is brushed.



	FRAME	FILLING
PF RONDA GLASS	pipe Ø=42,4 mm	glass thickness 9 mm
PF CUBE GLASS	profile 30 x 50 mm	

surface finish



BRUSHED

## PF RONDA GLASS



## PF CUBE GLASS



# PF GLASS POINT

Portfenetr PF GLASS POINT is a pane of secure glass TVG VSG 66.4, thickness 13 mm. Fastened on point fix fi 50 with 30 mm standoff from wall. There can be a handrail put on the glass. Surface finish is brushed.

## GLASS PANE

PF GLASS POINT	glass TVG VSG 66.4 (thickness 13 mm)
----------------	--------------------------------------

surface finish



BRUSHED

## PF GLASS POINT





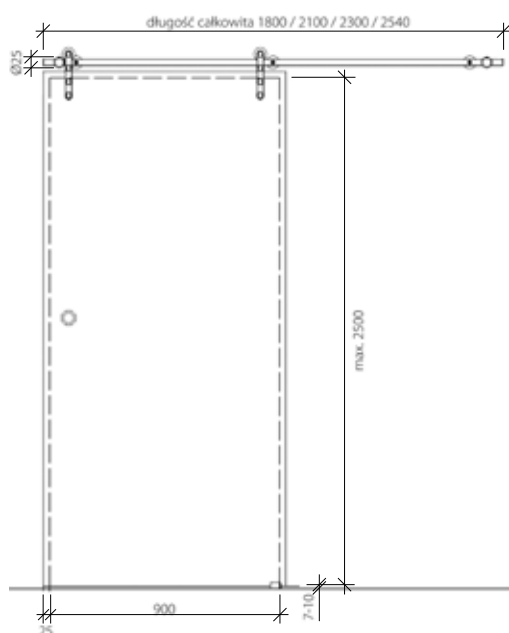
# SLIDING DOORS

Sliding glass door is a high quality frameless structure system. It can be installed as a single or as an element of full- structure. The system is designed for modern interiors as well as traditional ones; it allows you to fill rooms with light and for making rooms optically larger.



## SET INCLUDES

INSTALLATION SET	Running track Ø 25 - 1 pc. (total length 1800, 2100, 2300 or 2540 mm)
	Wall mounts - 3, 4 sets (depending on the length of the track)
	Trolley with adjustable height and protection – 2 pcs.
	Door stopper with shock made of rubber – 2 pcs.
	Floor guide - 1 pc.
	Adjustable spanner - 1 pc.
DOOR HANDLE	Vertical or point handle - depending on request
GLASS PANE	ESG hardened glass, clear, polished edges, thickness: 8-10mm



Max. load  
[kg] 70

Max. glass pane size  
[mm] wysokość – max. 2500  
szerokość – 800-1150

surface finish



BRUSHED

# stainless steel

At the design stage it is necessary to choose required type of steel depending on structure application or location in a given the environment

## TYPES AND USAGE

CATEGORY	DESCRIPTION	304	316
I	Internal low – mild internal environment not exposed to moisture	V	V
II	Internal moderate – internal environment and the atmosphere is humid with moderate aggressiveness	V <sup>1</sup>	V <sup>1</sup>
III	Internal high – swimming pools, chemical factories, industrial companies, environment with a noticeable content of chlorides and sulphur dioxides	X	V <sup>1</sup>
IV	External low – mild external environment, and non-industrial and seaside areas	V <sup>1</sup>	V <sup>1</sup>
V	External moderate – external environment of moderate chloride content and sulphur dioxide, presence of atmospheric dust and traffic dust	X	V <sup>1</sup>
VI	External high – aggressive external environment, industrial areas, environment with industrial pollution, seaside areas	X	V <sup>1, 2</sup>

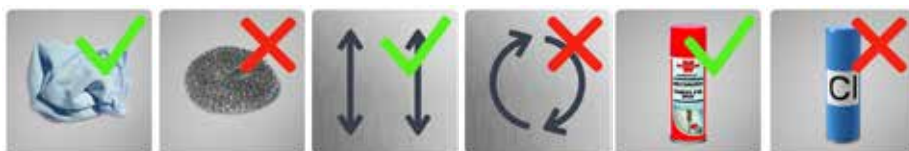
1. It should be cleaned - frequency depends on the degree of contamination, (see below)

2. Specific tables indicating chemical resistance are available on request

EN 10088 European	PN Polish	AISI/ASTM American	DIN German
1.4301	0H18N9	304	X5CrNi18-10
1.4401	0H17N12M2T	316	X5CrNiMo17-12-2

## METHODS OF CLEANING

In most cases, cleaning can be carried out with a soft cloth, microfibre cloth or sponge dampened with mixture of water and cleaning agent. To clean polished surfaces cleaning agents for glass and mirrors can be used. There are commercially available cleaners for rustless steel (e.g. WURTH, 3M). Avoid rough means, particularly made of steel, which can cause scratches. Polished surfaces are to be cleaned along the polish direction and not across it.



## TYPES OF SURFACE

Rustless steel used in the construction industry has a lot of surface finishes, the most common are: polished („mirror” or „gloss”), satin (or „polish”) and matt (mostly details, bars).



BRUSHED



POLISHED



MATT

## FREQUENCY OF CLEANING

The frequency of cleaning of the internal components depends on needs and the degree of dirtiness; external structures, depending on the environment, should be cleaned every 6-12 months if slightly dirty, and every 3-6 months at a considerable influence of external environment; it is generally suggested to clean the surfaces with the same frequency as the frequency of cleaning windows.



# glass

Glass used in construction must be safety glass. Standards refer to two basic types of safety glass, thermally hardened safety glass and laminated safety glass. To keep the glass beautiful and in good condition, it is necessary to clean it regularly, depending on the degree of dirtiness.

## TYPES AND USAGE

Hardened glass (ESG) is a type of glass subjected to additional heat treatment – hardening. This treatment increases glass resistance to impact, mechanical stress and cracks caused by thermal stress. Hardened glass has very hard outer surfaces, and a „soft“ core. The resulting stress in the glass structure causes, at the time of breaking, shattering of glass pane into small pieces with blunt edges, reducing the risk of injury. Hardened glass is about 5 times stronger than normal glass.

Thermally hardened glass (TVG) is commonly referred to as semi-hardened glass and is obtained in the process of burning-in, which is similar to that used for hardening. In the case breaking, semi-hardened glass pane shatters into pieces which are larger than those in case of broken hardened glass. This makes it particularly suitable for use in laminated glass, used for example, in the production of glass awnings – it is more durable than ordinary glass and if broken, bigger pieces stabilise the glass pane.

Multi-layer laminated glass (VSG) consisting of two or more glass panes with one or more layers of clear or coloured film (PVB) between the pane layers. For production of laminated glass, standard glass can be used upon thermal strengthening or hardening. Laminated glass protects against objects falling onto the glass surface; it is as strong as standard glass, however, upon impact, such a pane remains stable and pieces of glass are kept by the PVB film.

hardened glass



laminated glass



## METHODS OF CLEANING AND FREQUENCY

For cleaning, use clean water with low mineralization and ordinary cleaning agents (not basic, without fluorine) available commercially. After cleaning, the entire glass surface is to be dried. Tools used for cleaning should not be sharp so that glass does not get scratched; use soft materials, such as microfibers. To keep the glass beautiful and in good condition, it is necessary to clean it regularly, depending on the degree of dirtiness. It is recommended to wash the glass pane at least twice a year.

## ALLOWABLE DEFECTS IN THE FIELD OF VIEW OF GLASS

(apart from the edge part of the product, of width of 20mm)

In the edge part, there may glass defects of size up to 5mm and thickness up to 10% of the nominal thickness of the glass pane. Corners may have additional dimensional deviation +/- 2mm.

DEFECT	PANE	Acceptable defects for products containing glass pane with cover		Acceptable defects for products containing multilayer glass pane		Acceptable defects for other glass products		
		point from 2,0 to 3,0 mm	scratches up to 75 mm and thickness over 0.2 mm	point * from 1.0 to 3.0 mm	lines over 30 mm	local existence of foreign body, larger than 0.5 mm according to PN-EN 572-2	lines of length of max 15 mm, thickness over 0.2** mm of total length:	closed bubbles smaller than 2 mm:
	up to 1 m <sup>2</sup>	1 piece / m <sup>2</sup>	on the condition that their local accumulation does not constitute visible defect	1	not acceptable	not acceptable	40 mm	2
	up to 2 m <sup>2</sup>			2			45 mm	3
	from 2 to 8 m <sup>2</sup>			3	1 over 5 m <sup>2</sup>		50 mm	5
	over 8 m <sup>2</sup>			4	2		50 mm	5

\* point defects smaller than 0.5 mm are not taken into account; defects of 0.5 mm - 1.0 mm may not be grouped (which means at least four defects at a distance of up to 200 mm from each other for double-layer glass panes)  
 \*\*hairline scratches - allowed, but not in clusters

According to current standards, a visual assessment is carried out with glass pane placed vertically, from a distance of at least 2.0 m (coated glass - min. 3.0 m), on the background of a mat gray screen with bright, natural, diffused lighting. Description can be found in PN-EN ISO 12543-6 and PN-EN 1096 standards glass defects visible in these conditions shall be evaluated for compliance with the standards.

---

Wiper Sp. z o.o.  
ul. Wyzwolenia 27  
43-190 Mikołów

+48 (32) 738 5000  
poczta@wiper.pl

[www.wiper.pl](http://www.wiper.pl)

---