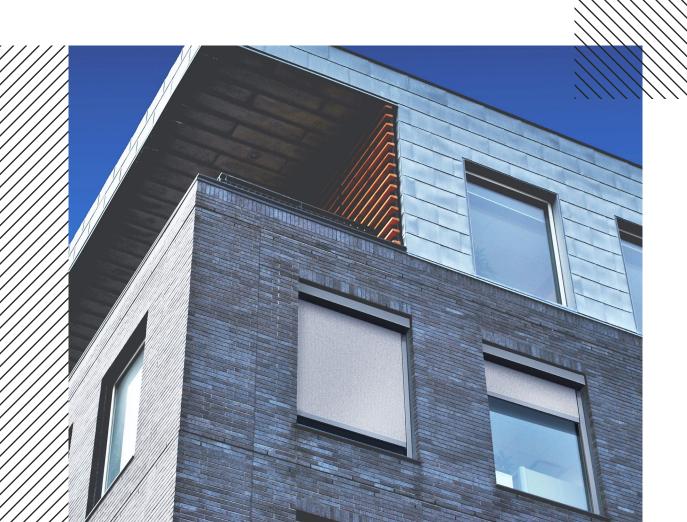
SCLARBREAKER

NEXT
GENERATION
OF SCREEN
AND ZIP
SCREEN
SYSTEMS
2021





Quality for years

When designing and manufacturing our products, we pay special attention to their quality. That is why all elements of the system undergo rigorous quality control, thanks to which we know that they will serve you for years. See why it's so important.



High-end & well-designed components

- * Aluminium tubes in different sizes
- * Aluminium inlay
- * Stainless steel fasteners
- * Unified components
- * Improved end-caps



Automatic & repeatable production process

Automation speeds up production time and eliminates process errors

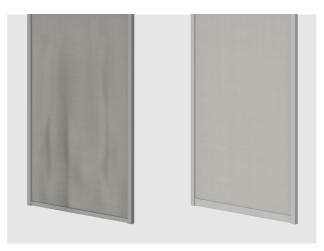


Extensive quality control

All products undergo detailed and stringent quality control.

Perfectly flat and durable fabrics for years

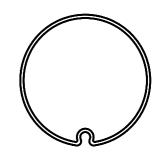
We use aluminum tubes in all Solar Breaker systems.



Problems with plainness of fabric with steel pipes

We use aluminum tubes in all Solar Breaker systems.

Extruded in 3 sizes (65, 78, 95 mm), they ensure great flexibility of use - and the special design allows the use of the same adapter for each of them.



Improved performance thanks to aluminium tubes

QUALITY FOR YEARS

Aluminum tubes do not stain fabrics, are resistant to weather conditions, do not rust, do not require additional protective coatings. Thanks to the use of special ribbing, they achieve better parameters in deflection and lower weight.

Steel pipe 0.5mm

Aluminium pipe 2mm



Comparing steel pipe & aluminium pipe

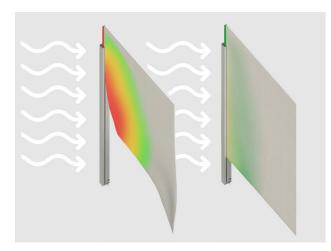
The minimal deformation of the tube means that the fabric rolls up evenly on it without causing wrinkles. This allows the production of very wide systems without the risk that the fabric will be creased.

Aluminium tube in:

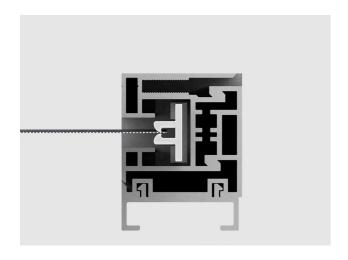
- ✓ Screen Standard
- **✓** ZIP Standard
- ✓ ZIP Pro
- **✓** ZIP Pro Inboud
- ✓ ZIP Solar

Aluminium inlay. Quiet operation and top on the market stability

Thanks to the use of an inlay made of extruded aluminum and then subjected to machining, we obtain an extremely stable strip in which the zip moves.



Comparison of the load of an plastic zip to an aluminium one.



Standard solution for all Solar Breaker systems

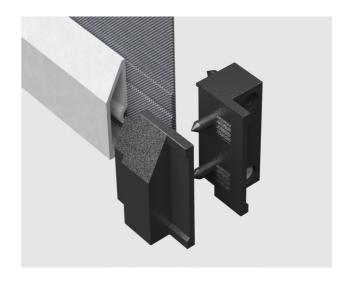
Aluminum does not deform and holds the zipper firmly, stretching the zip fabric and ensuring its resistance to impacts and strong winds. Inlay is cushioned in the guide thanks to the TPU cover. The movement of the zipper in the aluminum inlay is noiseless, which increases the comfort of its use.

Aluminum inlay is used in all systems offered by Solar Breaker.

Aluminium tube in:

- **✓** Screen Standard
- ✓ ZIP Standard
- ✓ ZIP Pro
- **✓** ZIP Pro Inboud
- ✓ ZIP Solar

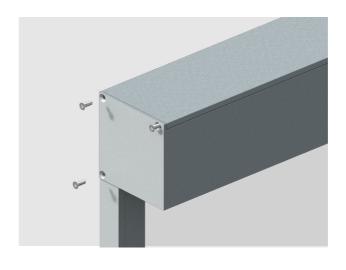
Improved lower end-caps



QUALITY FOR YEARS

We have designed new bottom bar caps from scratch to improve their operation and assembly. Special tabs position the fabric and prevent it from moving. Their shape prevents the fabric from wrinkling, thanks to which it is perfectly flat, even near the assembly places.

Stainless steel elements as a standard



All fasteners in Solar Breaker systems are made of stainless steel (A2 class austenitic steel). As a result, the system components are corrosion-resistant and retain their highest properties for a long time. The aesthetics of the product is preserved even after many years, and if in the future there is a need for service - you will be able to unscrew each screw without any problems.

Improved caps and stainless steel elements in:

- **✓** Screen Standard
- ✓ ZIP Standard
- ✓ ZIP Pro
- **✓** ZIP Pro Inboud
- ✓ ZIP Solar

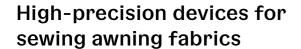
Automated production process - quality and repeatability

A modern production plant is equipped with automatic devices for processing fabrics and profiles.



Multifunctional fabric cutting plotters

In production, we use two high-performance plotters that allow us to process fabrics into any shape. SMRE SM-400-TA automatic cutting machine with ultrasonic and electric rotary knife is designed for cutting awning fabrics with high accuracy. SMRE SM-375-TA multiple tool static bed cutting plotter for technical fabrics with a working surface of 8x4 meters uses such technologies as a circular knife, drag knife, ultrasonic knife or laser.



Uni-3 sewing machine with Durkopp Adler 867 head and Durkopp Adler sewing machine ensure a secure and even stitch, thanks to which the fabrics do not wrinkle and retain their properties for a long time.



Precise fabric welding equipment for ZIP and SCREEN systems

Thanks to the use of machines for welding fabrics in two technologies - high frequency (Balacchi High Frequency welding machine) and hot air (SMRE SM-16-SA hot air welding machine), we gain great freedom in welding fabrics and perfect and durable welds.

A modern powder paint shop

Powder coating plant with a 3-stage automatic washer, equipped with a Proton II V applicator, an oil furnace with circulation and a circulation dryer, allowing for painting profiles up to 6 meters in length.





Numerous profile processing stations

Cutting saws, column drills, automatic machines for processing profiles by Emmegi - thanks to this, each cassette fits perfectly and the holes are precisely drilled.

Production management system

In production, we have implemented a system that minimizes the time from ordering the product to starting production. We provide our clients with an intuitive configurator that allows you to define the order and minimize the risk of errors. After the supervisor confirms the order with one click, the order goes to production. The customer has the ability to track the order throughout the production process - he is also informed on an ongoing basis about changes in the order status - from acceptance for production, through quality control, to shipment.





Quality Control

All our products undergo rigorous quality control at every stage of production. The components that go to the warehouse are assessed, and the quality of the component product is assessed at each stage of production. New products and components that we introduce to our offer are checked in terms of their durability, quality and repeatability.





Aesthetics

When designing our systems, we pay special attention to their appearance and aesthetics, but also to make them easy to install, use and maintain.

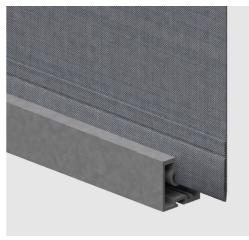


Aesthetics

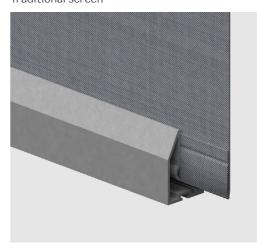
- * Refined side guides
- * Bottom bar hiding in the cassette
- * No fasteners visible
- * Invisible welds

No visible welds

Each fabric in the ZIP system requires processing by cutting it to size, welding the side zipper and fixing places on the pipe and the bottom bar.



Traditional screen



Solar Breaker screen



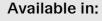
Traditional screens with bottom weld

In standard screen systems available on the market, the places where fabrics are welded are visible to the user and, despite their aesthetic design, disturb the appearance of the entire product. In the case of transparent fabrics, the weld point is visible from the inside of the building.

Innovative Solar Breaker screen - no visible welding

When designing our system, we paid special attention to ensure that the places of welds were invisible to the end customer - that is why we placed the fabric fastening deep in the bottom strip so that it could cover the weld. The same applies to the side guides - the location of the inlay in their depth makes the zipper invisible, but only the aesthetic surface of the shading fabric.

We have redesigned the bottom bar in a way that allows you to hide the weld inside it.

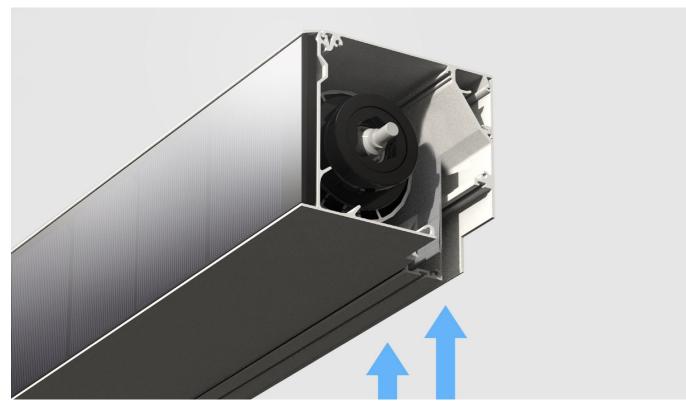


- **✓** Screen Standard
- **✓** ZIP Standard
- ✓ ZIP Pro
- **✓** ZIP Pro Inboud
- ✓ ZIP Solar

AESTHETICS

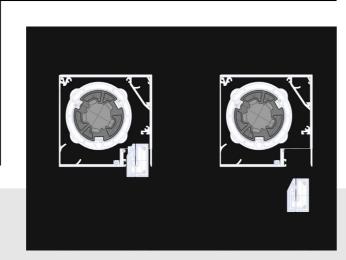
Bottom bar hidden in the cassette

The ZIP Pro system is designed in such a way that it allows the bottom bar to hide in the cassette when the fabric is fully rolled up. This significantly increases the aesthetics of the system and makes it completely invisible when exposed.



Bottom bar hiding in the cassette.

The use of seals and brushes makes the system silent during operation, and additionally prevents the accumulation of dirt in the cassette and guides.



Available in:

- ✓ ZIP Pro
- ✓ ZIP Pro Inboud
- ✓ ZIP Solar

No screws visible

In the ZIP Pro system, we made sure that all fasteners, such as bolts or screws, are invisible to the user, so that the whole fits perfectly in the building and forms one whole with it.



Other screen

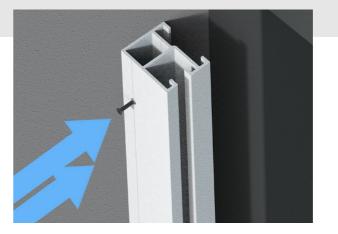
Solar Breaker ZIP Pro

Refined side guides

The guides for Standard and Pro systems are adapted to be mounted on both sides - thanks to this, you can attach them in many configurations, regardless of the type of wall on which you hang the system. In addition, the double system of guides in the Premium system makes the places of attaching the system to the wall completely invisible. The guide end cap in the Pro system is clicked on, making its assembly extremely simple and intuitive.



- ✓ ZIP Pro Inboud
- ✓ ZIP Solar





AESTHETICS



Ease of assembly & maintenance

It is important for us that the sunshading systems we design and manufacture are not only easy to use for their users, but also for installers and people who maintain and service them.



Ease of assembly & maintenance

- * Unified elements of the system
- * Click-on / click-out systems
- * Click-on cassette
- * Click-on double side guide



Solar powered

- *Custom made solar panels
- *Integrated battery & charging management system



Click-on / click-out

In order to shorten the installation time as much as possible, we try to limit the activities performed to a minimum. Therefore, in many places in our systems, we use a click instead of screwing elements.



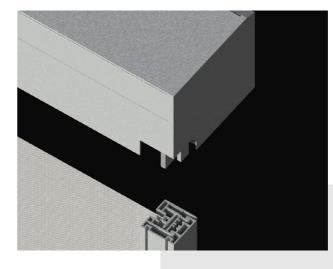
Innovative locking system of the tube

The locking system of the tube in the ZIP Pro system facilitates installation and makes service activities extremely simple, even with a flush-mounted system.



Way of disassembling tube in ZIP $\ensuremath{\mathsf{Pro}}.$

A special spring system during the operation ensures its stable position, and additional bearings allow the operator to tilt the pipe and easily remove it from the cassette to carry out the required maintenance.



Click-on cassette & side guide

The snap system is used not only when assembling the tube, but also the cassette and two-piece side guides. As a result, their assembly is quick and stable, and can be carried out by one installer.

Available in:

- ✓ Screen Standard
- ✓ ZIP Standard
- ✓ ZIP Pro
- **✓** ZIP Pro Inboud
- ✓ ZIP Solar

Unified elements of the system



We use the same bearing and positioning components for each of the system sizes from 85 to 125. Thanks to this, both the production process as well as assembly and service is much simpler, and our partners can reduce the number of service components that they have in stock. It also eliminates the risk of production errors, ensuring that each of the ZIP systems will work properly and for a long time.

Universal spare parts



Due to the fact that the individual components are compatible between the systems, the installer and service technician can have fewer spare parts with them in the event of the need to replace any of the components. It also speeds up the learning process to operate and maintain systems.

Available in:

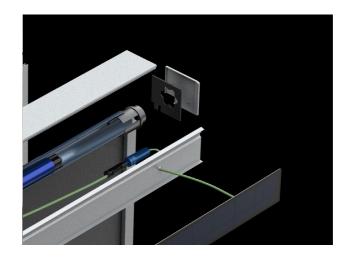
- **✓** Screen Standard
- ✓ ZIP Standard
- ✓ ZIP Pro
- ✓ ZIP Pro Inboud
- ✓ ZIP Solar



Solar powered

We use our expertise in the production of micro photovoltaic panels to offer the world's first shutter solution equipped with a customized photovoltaic panel. The panel, unlike currently used solutions, covers the entire surface of the cassette, creating an aesthetic tailormade solution. The number of photovoltaic cells is adjusted to the capacious battery

integrated in the cassette. All components, such as the battery charge management system, radio communication system and batteries are positioned in a way that makes them invisible to the user, and at the same time allows for easy disassembly and replacement.



Battery and power management system

EASE OF ASSEMBLY & MAINTENANCE

In solar products, we use batteries based on NiMH technology - it allows us to ensure continuous operation of products even in difficult conditions such as low or high temperatures. The energy management system ensures proper charging of the battery from the panel and protects it from excessive discharge.

Custom-made solar panels

Our own production line of photovoltaic micropanels allows us to create solar products tailored to individual needs. Thanks to this, each element of the ZIP Solar system is unique, just like the external roller shutter that you install in your window. For the production of photovoltaic panels, we use monocrystalline cells with dimensions of 78x78mm. These links form strings of a certain length, depending on the dimensions of the cover system. The entire panel production process is automated, the cells are stacked and joined into specific matrices, and then laminated in a special vacuum laminator under controlled conditions. Each panel undergoes stringent quality control before it is included in the final product.



Systems overview

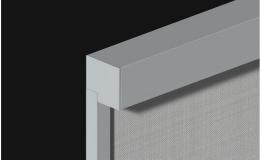
Screen standard



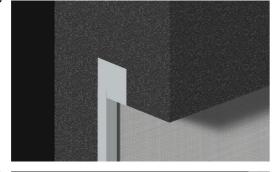
ZIP standard



ZIP pro



ZIP pro inboud



ZIP solar



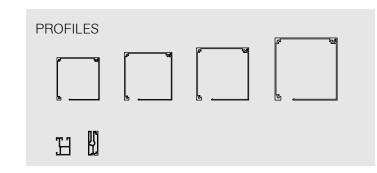
Systems overview

		SCREEN	ZIP standard	ZIP pro	ZIP pro inboud	ZIP solar
Cassette sizes		85	85			
		95	95	95		95
		105	105	105	105	105
		125	125	125	125	125
	Aluminium tube	O O O 65 78 95	O O O 65 78 95	O O O 65 78 95	O O O 65 78 95	O O O 65 78 95
	Aluminium inlay					_اگالے
	End slat			hidden in the cassette	hidden in the cassette	hidden in the cassette
	Slide guides	FF		double side-guide	double side-guide	double side-guide
	tubes from extruded aluminium	②	⊗	②	②	⊗
Σ	inlay from extruded aluminium	⊘	②	⊘	②	②
QUALITY	stainless steel mounting elements	②	⊗	⊗	⊘	⊗
	improved lower bar endcaps	⊘	②	②	⊘	⊘
ý	hidden lower welding	②	②	②	②	②
ÆTIC	hidden lower bar in the cassette			②	②	⊘
AESTHETIC	no screws visible			⊘	⊘	⊗
∢	beautiful full black glass cassette front			flat front, no glass		⊘
TION	click-on cassette			⊘	②	⊘
4LLA	modular spacers and universal spare parts	②	②	②	②	⊘
OF INSTALLATION	click-on side guides			②	②	②
E OF	click-on / click-out tube			②	•	②
EASE	no wires, no electrical connection needed					⊘

Screen Standard







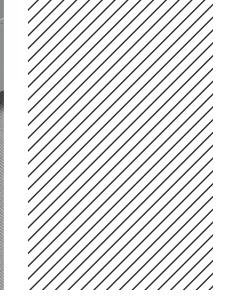
Due to the fact that the individual components are compatible between the systems, the installer and service technician can have fewer spare parts with them in the event of the need to replace any of the components. It also speeds up the learning process to operate and maintain systems.

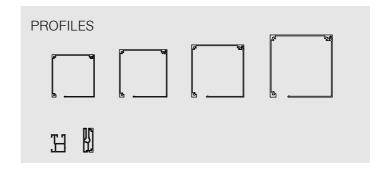
Cassette colors



ZIP Standard







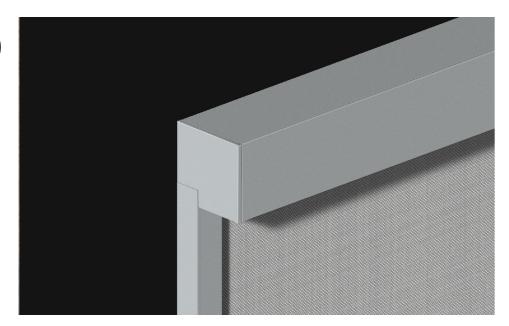
Cassette colors

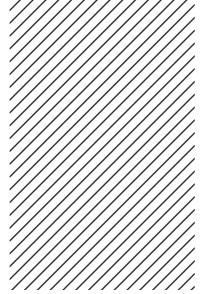
RAL 7016 Anthracite	included
RAL 9016 White	included
RAL 9006 Bright Aluminium	included
RAL 9001 Cream	included
Other RAL	+ 10%

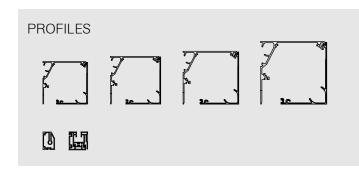
ZIP STANDARD is a high-quality zip system that uses our aluminum inlay technology to stretch the fabric and hold it in place even in high winds. ZIP STANDARD is available in 4 sizes of cassettes, with a one-piece guide and uses a system of aluminum pipes on which the fabrics are wound. As standard, all fasteners in the system are made of stainless steel. The end caps of the lower rail and the rails are made of black plastic, thanks to which they perfectly harmonize with the system, regardless of the color version chosen by the user

ZIP Pro

ZIP Pro Inboud



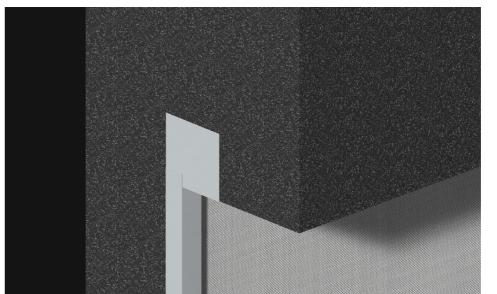


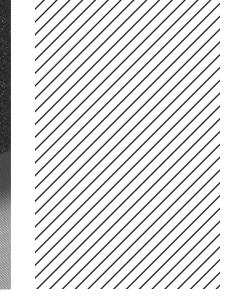


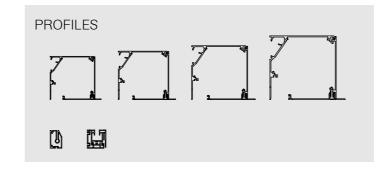
ZIP PRO is the most advanced ZIP system in our offer. It uses aluminum inlay technology, thanks to which the fabrics are always taut and stay in place even in strong winds. All elements of the system are made of aluminum, even the end caps of the bottom bar and side guides - so we can deliver them in the same color as the rest of the system. The fasteners are made of stainless steel, but thanks to special solutions, they are invisible to the user. In ZIP PRO we used a double side guide, which facilitates assembly and is more aesthetic.

Cassette colors

RAL 7016 Anthracite	included
RAL 9016 White	included
RAL 9006 Bright Aluminium	included
RAL 9001 Cream	included
Other RAL	+ 10%





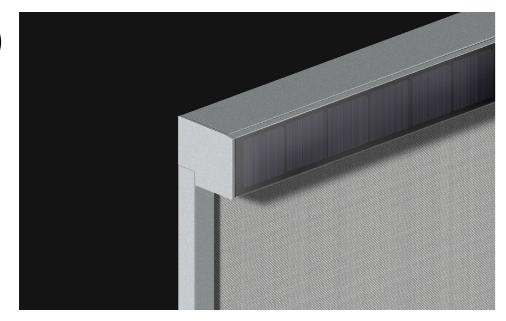


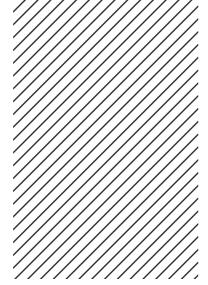
The ZIP PRO F-M is based on the ZIP PRO system, using the same components, and additionally offering a cassette box with access from the bottom. This makes it ideal for flush-mounted installations. The system of removing the pipe with the wound material facilitates assembly and service of the ZIP PRO F-M. When the material is rolled up, the bottom rail is completely hidden in the cassette, thanks to which it creates an aesthetic whole with it. Its well-thought-out design additionally means that no welds on the fabric are visible.

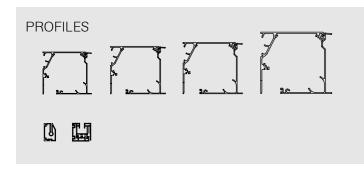
Cassette colors

RAL 7016 Anthracite	included
RAL 9016 White	included
RAL 9006 Bright Aluminium	included
RAL 9001 Cream	included
Other RAL	+ 10%

ZIP Solar







ZIP SOLAR is the most advanced shutter solution in our offer. It uses a photovoltaic panel across the entire width of the cassette for power supply. The integrated battery bank allows for trouble-free motor operation, even in cloudy weather. It does not require a power connection, so its installation on the window takes only a few minutes.

The ZIP SOLAR system is based on the ZIP PRO system and offers all its advantages.

Cassette colors

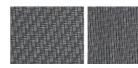
RAL 7016 Anthracite	included
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RAL 9006 Bright Aluminium	included
RAL 9001 Cream	included
Other RAL	+ 10%

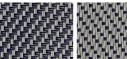
Fabrics

Opennes Factor

Black Out OF 0%	Serge BO Solar Serge BO Lunar	Soltis B92	
OF 1%	Serge 1%		
OF 3%			Livorno
OF 4%		Soltis 92	Bergamo
OF 5%	Serge 600	Soltis EAZip	
OF 8%		Soltis 88	
OF 10%	Serge 10%		
OF 14%		Soltis 86	

Popular Fabrics







Serge Ferrari



swela





Soltis 92 Anthracite

Bergamo 31708 ALU

copaco





Bergamo 31728





Serge 010011 - charcoal | bronze



Soltis 88 Black

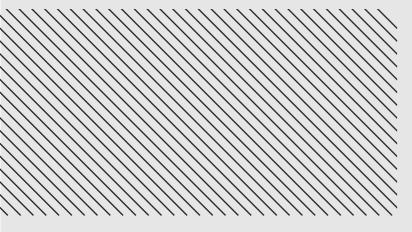


Bergamo 31718 ALU

Fabric Parameters

Collection		Openess factor %	As = Solar Absorptance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %
	Serge 1%	1	15,9 - 66,6	31,2 - 71,32	,2 - 12,8
antanta	Serge 10%	10	9,5 - 90,23	,7 - 60,54	,6 - 29,2
copaco	Serge 600	5	87,9 - 90,43	,7 - 8,4	3,9 - 6,1
	Serge 600 BO Lunar	0	66,6 - 93,86	,2 - 33,70	
	Serge 600 BO Solar	0	28,4 - 76,9	18,2 - 67,34	,3 - 11
	Soltis 86	14	12 - 81	5 - 60	14 - 31
	Soltis 88	8	11 -866	- 658	- 24
Serge Ferrari	Soltis 92	4	10 - 91	6 - 70	2 - 20
	Soltis B920		30 - 94	6 -700	
s swela	Bergamo4		32 - 60	28 - 49	10 - 19
3Welu	Livorno	3	16 - 67	23 - 62	10 - 21

SCLARBREAKER



WWW.SOLARBREAKER.COM SALES@SOLARBREAKER.COM