## A100 STAR

22.02.22\_rev. 00

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mm







# A100 STAR





Solar shading with cover sheet fixed on crossbars and foldable with horizontal packing, by means of trolleys and guides.

The maximum dimensions allowed are 1300x500 and 1150x550 with 260 cm. high pillars. 65 mq coverage area.

The profiles are made of EN AW-6060 extruded aluminium alloy (with 6x11 cm guides and columns). The structure can be wall-mounted via steel brackets and hardware.

The painting of the interested parties is carried out with epoxy powders based on polyester resin.

The standard colors are RAL 9010 White, RAL 1013 Off-white, RAL 7016 Iron, rough Carbon and rough Corten.

Précontraint 602 and 622 Blockout are the fabrics available as standard.

Additional options include other RAL colors and KE fabbric in the samples, motorised or winch movement. It is possible to install lighting on the guide and the installation of light sensors and anemometers with the possibility of remote management through connection devices.

Possibility of installing lateral closures and glabes.

Wind resistance guaranteed up to class 6 (EN 13561:2015).

GTOT solar shading class (EN 14501:2006) assigned to the fabric.

Product certified with CE marking according to EN 13561:2015

#### **OPTIONAL**





GABLES



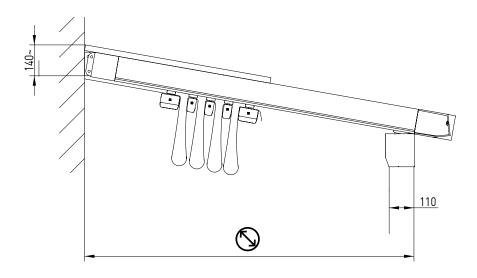


GLASS DOORS

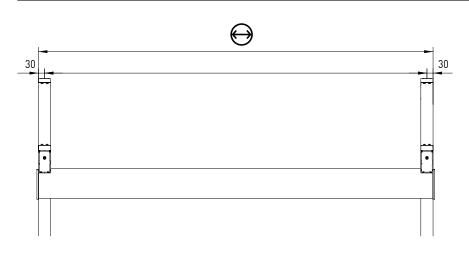


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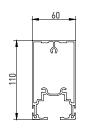
#### General technical plan



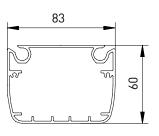
#### Guides interaxis width

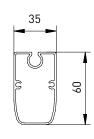


#### **Profiles dimensions**



Guide



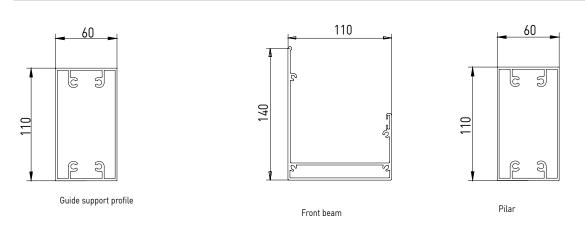


Terminal bar profile

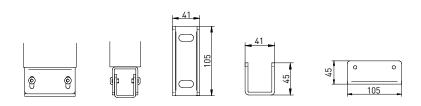
Fabric carrying Crossbar profile



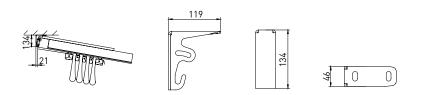
#### Girder section



#### Ground connection



#### Ceiling installation

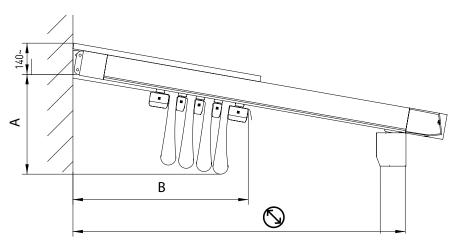


#### Wall installation





#### **Cloth dimensions**



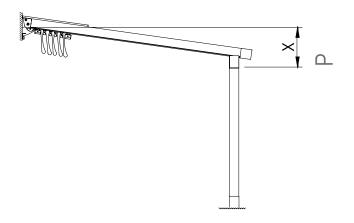
Indicative values of the fabric encumbrance and the number of the fabric carrying crossbar profiles. Attention: the values shown may vary according to the slope.

#### Traverse movement

$\bigcirc$	A cm	B cm	N
250	39	50	5
300	40	55	5
350	41	60	6
400	42	66	7
450	43	71	8
500	44	71	9
550	45	76	10
600	45	81	10

Crossbar profile numbers (terminals included). Maximum interaxis fabric carrying cross bar profiles measure cm 58.

#### SLOPES



					-		
2 GUIDES				*	€		
	cm	250	300	350	400	450	500
		STD / 1	STD / 1 1	STD / 1	STD / 1	STD / 1	STD / 1
	150	26 /	28 /	30 /	32 / 25	34/26	38 / 27
	200	30 /	33 /	36 /	38 / 29	41/31	46 / 32
	250	34 /	38 /	41/	45/34	48/35	54 / 37
	300	39 /	43 /	47 /	52 / 38	56/40	63 / 42
	350	43 /	48 /	53 /	58 / 43	63/45	73 / 47
	400	48 /	54 /	59 /	65/47	71/50	82 / 52
ß	450	53 /	59/	66 /	72 / 52	79 / 55	93 / 58
U)	500	58 /	65 /	72 /	79 / 57	86 / 61	103 / 64
	550	63 /	71/	79 /	87 / 62	94/66	112 / 70
	600	69 /	77 /	85 /	94 / 67	103 / 72	122 / 76
	650	74 /	83 /	92 /	102 / 72	111/78	
	700	80 /	89 /	99/	109 / 78	119/84	
	750	85 /	96 /	106 /	117 / 83	128 / 90	
	800	91/	102 /	114 /	125 / 89	136/97	

						0				
3 GUIDES	cm	500	550	600	650	↔ 700	750	800	850	900
		STD / III								
	150	27 /	29 /	30 / 25	31/26	32 / 27	34 / 27	35 / 28	36/29	37/30
	200	32 /	34 /	35 / 29	37/30	39/31	40 / 32	42/33	44/34	45 / 35
	250	37 /	39/	41/33	43 / 35	45/36	47/37	49 / 38	51/39	53 / 41
	300	42 /	45 /	47 / 38	49/39	52/41	54 / 42	56 / 43	59/45	61/46
	350	47 /	50 /	53 / 42	56/44	58/45	61/47	64 / 49	67 / 51	70 / 52
	400	53 /	56 /	59/47	62/49	65/51	68 / 52	72 / 54	75 / 56	78 / 58
$\odot$	450	58 /	62 /	65/51	69 / 54	72/56	76 / 58	79 / 60	83 / 62	86 / 65
C.	500	64 /	68 /	72 / 56	76 / 59	79/61	83 / 63	87 / 66	91/68	95 / 71
	550	70 /	74 /	78 / 61	82 / 64	87 / 66	91/69	95 / 72	99 / 75	103 / 77
	600	76 /	80 /	85 / 66	89 / 69	94 / 72	98 / 75	103 / 78	108 / 81	112 / 84
	650	82 /	87 /	92 / 71	97 / 74	101 / 78	106 / 81	111 / 84	116 / 88	121/91
	700	88 /	94 /	99 / 77	104 / 80	109 / 84	114 / 87	119 / 91	125 / 94	130 / 98
	750	95 /	100 /	106 / 82	111 / 86	117/90	122 / 93	128 / 97	133 / 101	139 / 105
	800	102 /	107 /	113 / 88	119/92	125/96	130 / 100	136 / 104	142 / 108	148 / 112

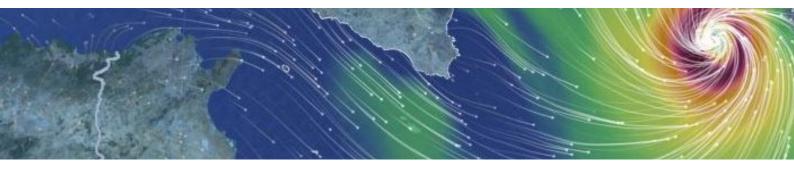
4 GUIDES					(	⊖			
	cm	950	1000	1050	1100	1150	1200	1250	1300
		STD / I	STD / 1	STD / 1	STD / 1	STD / 1	STD / 1	STD / 1	STD / 1
	150	30 / 27	31/27	31 / 28	32 / 28	33 / 29	34 / 29	35 / 30	35 / 31
	200	35 / 31	36 / 32	37 / 33	39/33	40/34	41/35	42 / 36	43 / 36
	250	41/36	42/37	44 / 38	45/39	46 / 40	48 / 41	49 / 42	50/42
	300	47 / 40	49/42	50 / 43	52/44	53 / 45	55 / 46	56 / 48	58/49
	350	53 / 45	55/47	57 / 48	59 / 50	60 / 51	62 / 52	64 / 54	66 / 55
	400	59 / 50	61/52	63 / 54	65 / 55	68 / 57	70 / 58	72 / 60	74 / 62
$\bigcirc$	450	66 / 56	68 / 57	70 / 59	73 / 61	75 / 63	77 / 65	80 / 67	82 / 68
U)	500	72 / 61	75 / 63	77 / 65	80 / 67	82/69	85 / 71	88 / 73	90 / 75
	550	79 / 66	82 / 69	84 / 71	87 / 73	90 / 76	93 / 78	96 / 80	99 / 83
	600	85 / 72	89 / 74	92 / 77	95 / 79	98 / 82	101 / 85	104 / 87	108 / 90
	650	92 / 77	96 / 80	99 / 83	103 / 86	106 / 89	109 / 92	113 / 94	116/97
	700	99 / 83	103 / 86	107 / 89	110 / 93	114/96	118 / 99	122 / 102	125 / 105
	750	107 / 89	111/93	115/96	118 / 99	122 / 103	126 / 106	130 / 109	134 / 113
	800	114 / 95	118 / 99	122 / 103	127 / 106	131 / 110	135 / 113	139 / 117	144 / 121

$\odot$	$\Theta$
Projection	Width

STD III Standard Added module

P= Minimum inclination for a correct water outflow

## WIND CERTIFICATION



#### WIND RESISTANCE

The wind resistance of exterior shade system is characterized by its ability an loads to support defined by simulating wind with positive or negative pressure. In order to define a correlation between the wind resistance class according to the classes defined by the technical standard EN 13561 and the wind speed expressed in Km / h, a comparative table with the Beaufort scale is used. The Beaufort Scale classifies winds according to the speed at which they blow. Wind speed is measured in kilometers per hour (km / h) or in nodes using a measuring instrument, called anemometer, at a height of about 10 meters above the ground.

	TERMINE DESCRITTIVO	VELOCITA' VENTO m/sec	VELOCITA' VENTO m/sec	VELOCITA' VENTO Nodi	EFFETTI DEL VENTO SULLA TERRA	EN 13561
4	Vento moderato	5,5 - 7,9	20 - 28	11 - 16	Si sollevano polvere e pezzi di carta; si muovono i rami piccoli degli alberi.	Classe 1
5	Vento teso	8,0 - 10,7	29 - 38	17 - 21	Gli arbusti con foglie iniziano a ondeggiare; le acque interne s'increspano.	Classe 2
6	Vento fresco	10,8 - 13,8	39 - 49	22 - 27	Si muovono anche i rami grossi; gli ombrelli si usano con difficoltà.	Classe 3
7	Vento forte	13,9 - 17,1	50 - 61	28 - 33	Gli alberi iniziano a ondeggiare; si cammina con difficoltà contro vento.	Classe 4
8	Burrasca	17,2 - 20,7	62 - 74	34 - 40	Si staccano rami dagli alberi; generalmente è impossibile camminare contro vento.	Classe 5
9	Burrasca forte	20,8 - 24,4	75 - 88	41-47	Possono verificarsi leggeri danni strutturali agli edifici (caduta di tegole o di coperchi dei camini).	Classe 6

Please note: inwind above the maximum class rating, it is necessary to retract the fabric or move blades to upright. For the evaluation of wind resistance of the perimeter closures (Vertika, Vertika Prime, Line glass) refer to the performance declarations of the products themselves. The opening and closing of the screens can be controlled by installing sensors (sun, wind, rain). These aids do not replace the need for visual monitoring and taking manual action to make the awning safe when winds or loads exceed the product's limits. Therefore, the safety of the product is not guaranteed by the use of sensors.

cm \ominus	250	300	350	400	450	500	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
S 250	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
300	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
350	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	9	9	9	9	9	8	8	8
400	9	9	9	9	9	9	9	9	9	8	8	8	8	8	7	8	8	8	8	8	8	8	8
450	9	9	9	9	9	8	8	8	8	8	7	7	7	7	7	8	8	7	7	7	7	7	7
500	9	9	9	8	8	8	8	8	7	7	7	7	7	7	6	7	7	7	7	7	7	7	6
550	9	9	8	8	8	7	7	7	7	7	7					7	7	7	6	6			
600	9	8	8	7	7	7																	

#### SURFACE FINISHING



The KE painting process includes high quality standards, with an 8-stage pre-treatment that includes degreasing, deoxidation, and protective treatments before painting. Thanks to this last phase, components and profiles are further guaranteed against particularly severe environmental situations. At the end of the process the profiles and components are painted with polyester resin-based epoxy powders.

. Treated components are periodically tested in salt spray according to the ISO 9227 standard to confirm conformity and constistency of the process.

The European product standard EN 13561: 2015 defines corrosion resistance classes of the metal parts that make up the product according to the table below.

Tests performed on the painted components and profiles allow us to classify the product in the maximum class achievable according to EN 13561: 2015, C2 / 4 (48 h - internal components, 240 h - external components).

Equipped with the most modern process control systems including continuous monitoring in which the working parameters are recorded and corrected every 2 minutes, the new painting process guarantees the high quality characteristics of the product while minimizing the risk of environmental pollution.

This is a choice born from the desire to always keep up with technology while guaranteeing operator safety and low environmental impact.

Thanks to nanotechnologies, the implemented coating constitutes an excellent base for anchoring paints, ensuring excellent adhesion and resisting corrosion.

The plant in which aluminum or galvanized steel products with a length of up to 7 meters can be treated, includes 7 treatment tanks, 1 double compartment drying oven, 1 polymerization oven and 1 purification plant for waste water treatment.

The real focus of the plant, however, is the two powder coating booths, each with 4 stations for manual retouching. The booths allow greater production continuity, thanks to a drastic reduction in required stops for color changes.

#### CORROSION RESISTANCE

Classes	1	2	3	4
Internal components	24	48		
External components		48	96	240



When working with color, we know that our whole world is defined by light. And color is nothing more than a breakdown of light. Objects reflect back to our eyes only the color that defines it. This is why it is so important to recognize the close link between color and matter. For this project, there are three keywords that guide the research: Words, Places, Matters. WORDS: Naming colors is important to make them familiar and easily recognizable. places PLACES: Places define colors. Recognizing different of types point defining is starting for and suggesting color combinations. а MATERIALS: Objects do not exist in isolation, but rather match the environment around them: analyzing the materials that make up the environment itself helps us to make decisions; to decide, for example, if the character of a place is false or if instead it is genuinely artistic.



Ral standard (without supplement)



#### ENERGY SAVING \_ G TOT



There increasing demand for high-performance buildings that have is very а low consumption and use energy derived from renewable energy sources. In particular, the limitation of solar heat gain is one of the most important aspects of summer thermal comfort. Solar shading plays an essential role in this concept. The gtot value determines the ability of the solar shield to maintain, in an environment directly exposed to solar radiation, a more comfortable temperature than that which would occur with the presence of glass alone. directly proportional to the The solar heat gains are total transmittance of solar energy gtot, a value that depends on the glazing and external shielding. The European product standard EN 13561: 2015 and the EN 14501 standard identify 5 energy performance classes as shown in the table below.

	Effec	t of GTOT or	n thermal c	omfort	
Gtot value	>= 0,50	>= 0,35 e < 0,50	>= 0,15 e < 0,35	>= 0,10 e <0,15	< 0,10
Class	0	1	2	3	4
	very mild effect	Mild effect	Moderate effect	good effect	very good effect

Each KE product has a Gtot value according to the shading fabric / profiles used. For details, refer to the information provided with the technical data sheet of the fabric and the CE label.

## OPTIONAL\_VERTIKA

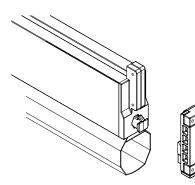


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Vertika is a vertical closure that provides protection from sun and rain. It can be equipped with WIND BLOCK, a locking tensioning system for the fabric. With Vertika you can use blackout and filtering fabrics to better manage solar radiation.

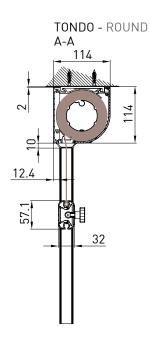
- AVAILABLE:
  - 110 GPR 110 GPZ

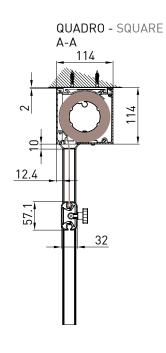
#### **Technical Details**

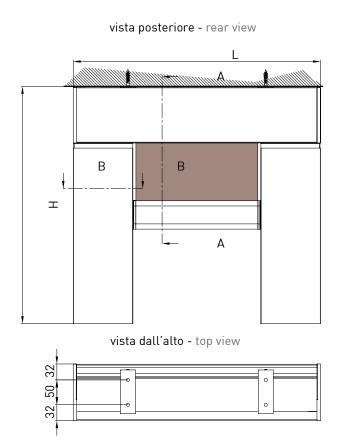


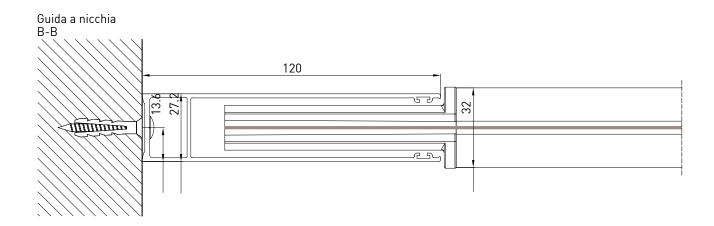
WIND BLOCK: Front bar Interlock device to be used on 100 and 130 Screeny GPZ guide, GPZ I and Gpz Unica. In wind, front bar stays locked in the low position and fabric is steadily tightened when the awning is opened completely.

## VERTIKA\_110 GPR

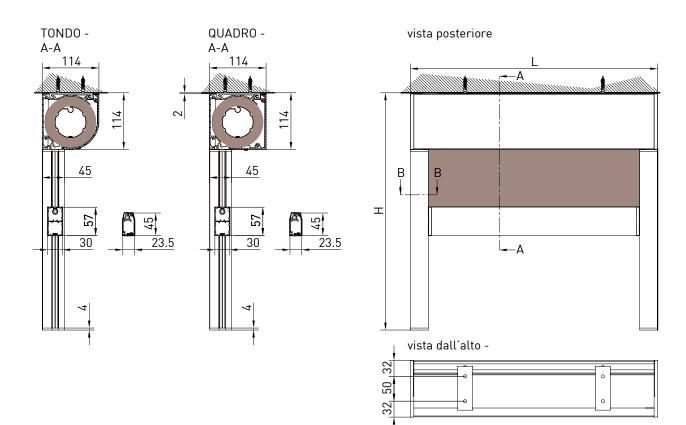






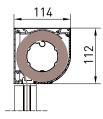


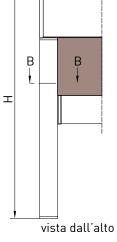
## VERTIKA\_110 GPZ



AUTOPORTANTE -QUADRO -

TONDO -A-A

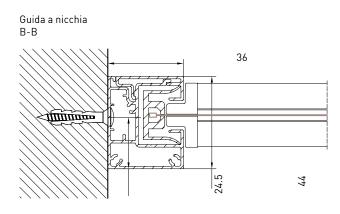




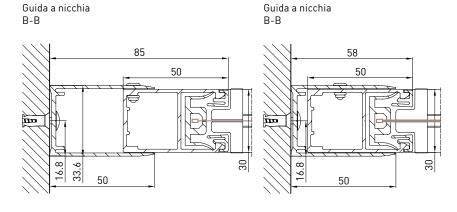




## VERTIKA\_110 GPZ

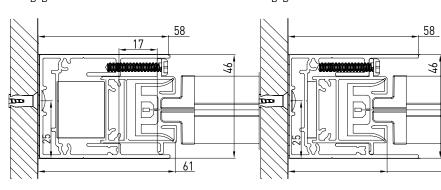


#### VERSIONE GPZ C



VERSIONE GPZ I Guida a nicchia B-B

Guida a nicchia B-B





## OPTIONAL SIDE CLOSURES \_ DOORS AND CURTAINS



The doors have been designed to provide protection from water and wind. They are made from extruded aluminum alloy profiles (EN-AW 6060-T6) and 4 + 4 pvd 0.76 safety and shatterproof laminated glass in accordance with UNI 7697 2014. Doors are available in either one or two door versions.

The interior of the structure can be enhanced with decorative curtains. That extra romantic touch which will surely be appreciated by anyone looking for a little privacy or who want "a room all to themselves".

## **SPECIAL STRUCTURES**

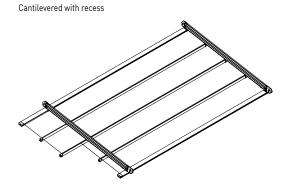
The technical office is available for assistance with non-standard structures such as some examples shown below. KE can also produce special brackets on request.





Cantilevered with recess





Slanting



Slanting







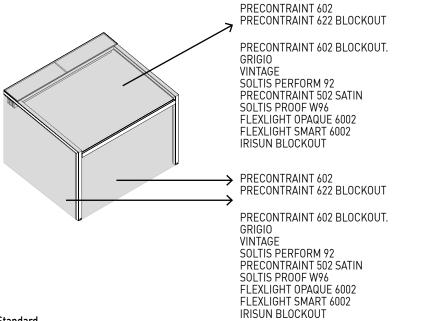
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#### **FABRICS**



Thermal comfort blends perfectly with beautiful style thanks to the more than 500 high performance fabrics available. A wide variety of colors, styles and solar shading factors allow for a system that meets your specific needs. All fabrics are CE Certified according to the EN 13561 and EN 14501 technical standards.

## $\ensuremath{\mathsf{N.B.}}$ See the Fabric Guide for further fabric specifications.



#### Standard

PRECONTRAINT 602
 PRECONTRAINT 622 BLOCKOUT

#### Optional

 PRECONTRAINT 602 BLOCKOUT. GRIGIO VINTAGE SOLTIS PERFORM 92 PRECONTRAINT 502 SATIN SOLTIS PROOF W96 FLEXLIGHT OPAQUE 6002 FLEXLIGHT SMART 6002 IRISUN BLOCKOUT



rePorto III del veRolamento (OE) III 202/2011 del 2 Walso S011 modificato dal Regolamento Delegato (UE) n.574/2014 del 21 febbraio 2014

Codice di identificazione del prodotto: GENNIUS A100 STAR

Uso previsto del prodotto: Impiego esterno in edifici e altre costruzioni Nome e indirizzo del fabbricante: KE PROTEZIONI SOLARI S.r.I., Via Calnova 160/a, Noventa di Piave (VE) - Italia Sistema di valutazione e verifica della costanza di prestazione: 4

Classificazione secondo Prospetto 1 - §4.1 EN 13561:2015:

Classi di resistenza al vento	0	1	2	3	4	5	6
Pressione di sicurezza del vento ps (N/m <sup>2</sup> )	<48	48	84	132	204	324	480
Velocità massima del vento [km/h]	<25	25	35	45	55	70	90

Prestazione dichiarata:

		Resis	tenza ai carichi	da vento – Co	onfigurazione a	a 2 guide	
				Larghea	zza (cm)		
		250	300	350	400	450	500
	250	6	6	6	6	6	6
	300	6	6	6	6	6	6
(cm)	350	6	6	6	6	6	6
	400	6	6	6	6	6	6
Sporgenza	450	6	6	6	6	6	5
Spo	500	6	6	6	5	5	5
	550	6	6	5	5	5	-
	600	6	5	5	4	4	-

			Re	sistenza ai c	arichi da ven	to – Configu	razione a 3 g	guide								
			Larghezza (cm)													
		500	550	600	650	700	750	800	850	900						
	250	6	6	6	6	6	6	6	6	6						
(cm)	300	6	6	6	6	6	6	6	6	6						
	350	6	6	6	6	6	6	5	5	5						
Sporgenza	400	6	6	6	5	5	5	5	5	4						
org	450	5	5	5	5	4	4	4	4	4						
Sp	500	5	5	4	4	4	4	4	4	3						
	550	4	4	4	4	4	-									

			Resistenza	a ai carichi da	vento - Con	figurazione a	4 guide				
		Larghezza (cm)									
		950	1000	1050	1100	1150	1200	1250	1300		
a (cm)	250	6	6	6	6	6	6	6	6		
	300	6	6	6	6	6	6	6	6		
	350	6	6	6	6	6	5	5	5		
cuz	400	5	5	5	5	5	5	5	5		
Sporgenza	450	5	5	4	4	4	4	4	4		
	500	4	4	4	4	4	4	4	3		
	550	4	4	4	3	3		-			

Trasmittanza totale di energia solare gtot: fare riferimento al valore riportato in etichetta CE in base al tipo di tessuto utilizzato. La fornitura dei prodotti sopra indicati è conforme all'insieme delle prestazioni dichiarate. Si rilascia la presente dichiarazione di prestazione in conformità al regolamento (UE) n.305/2011 sotto la responsabilità esclusiva del fabbricante sopra indentificato.



EN 13561:2015

Noventa di Piave, 22 Gennaio 2022

KE PROTEZIONI SOLARI S.r.I. Simone Mazzoh inistrato

## OPTIONAL\_LIGHT



Lighting plays a very important role in allowing our pergolas to be used at any time of day. KE uses LED lights, perfectly integrated into the profiles of the structures. LED technology allows for low energy consumption, multiple applications and changes to light color and intensity using a simple remote control.

## N.B. See the Fabric Guide for further fabric specifications.

#### DATI\_TECNICI:

STRIP LED					
Watt	10W				
volt	24V				
flow	830lm				
Color temperature	3400 K				
LED/m	98 led/m				



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#### EN ISO 9001

KE has adopted a Quality Management System compliant with EN ISO 9001 requirements in order to maintain and increase quality and meet the highest customer expectations. This continuous improvement, through the control of all processes and careful evaluation of risks and opportunities, engages the entire organization in the development of systems to ensure the safety and reliability of the product and in the search for innovative solutions and technologies.

#### **OHSAS 18001**

KE has activated a Safety Management System as an integral part of its work organization, committing itself to organizing the entire structure in order to pursue the objectives of continuous improvement in terms of safety and health protection. Training, knowledge and compliance with current legislation on health and safety at work, cooperation and collaboration and preventive activities are actively pursued in order to minimize the prossibility of non-compliance.

#### EN ISO 14001

KE is ISO 14001 certified for environmental management and strives to be an example of respect for environmental resources and for the continuous improvement of its environmental management system. It is committed to continuous improvement and pollution prevention in compliance with applicable laws, regulations and standards; systematically detects any environmental impact of manufacturing processes, promotes the culture of recovery and recycling in the company and in the related production chain.

## CE MARK \_ EN 13561

The CE marking of outdoor awnings is a signal to the Consumer that the product can be sold freely in the EU single market, as it complies with Community provisions which recognize safety as the priority of every product that has this agreed upon reference standard. Verification of wind resistance capacity and the clear indication of the ability of the awning to contribute to the energy savings of the building (Gtot), are some of the commitments that the manufacturer makes to a product that has earned the CE marking. The name of the manufacturer, the reference standard (in our case EN 13561) accompany a product that is properly adapted to European indications.

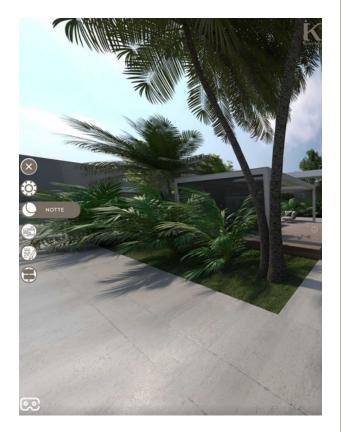
## CE MARK \_ EN 1090-1

KE extended the CE marking in 2015 to stationary awnings, which are among the aluminum structural components covered by the international standard EN 1090-1. This marking reflects our use of rigorous structural design and manufacturing with qualified processes, adequate industrial resources and qualified personnel.

## **VIRTUAL SHOW ROOM**

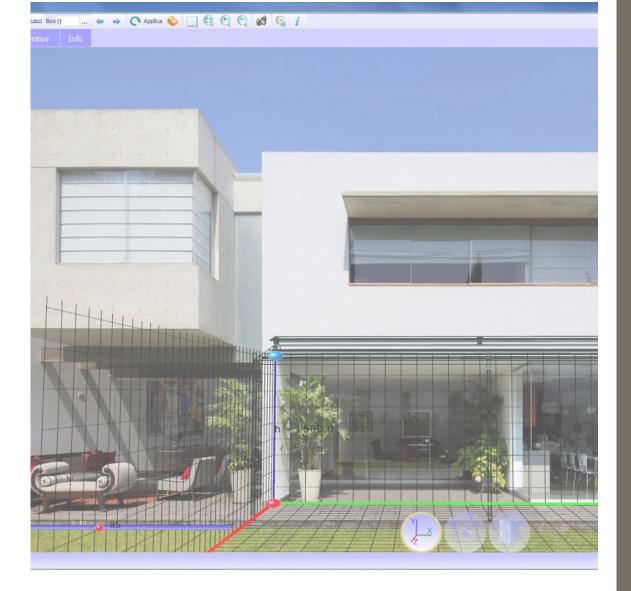


KE has adapted to the new ways of using the product by working on a digital showroom that is able to give the user a high-impact visual experience, a functional space where they can move around freely, receive detailed information on products with a simple click, and access content of interest quickly and intuitively. There is viewable content such as augmented reality and downloadable files such as data sheets, brochures and 3D models.

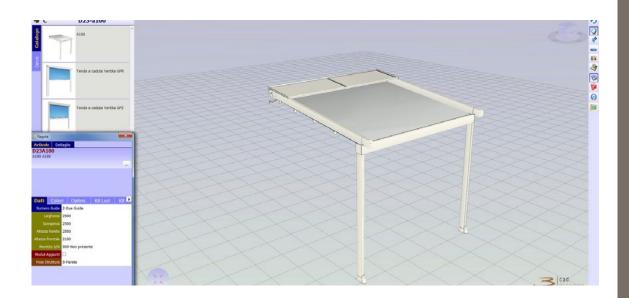




# ENJOY THE OUTDOORS



The KE B2B order system is a simple and intuitive service for placing orders conveniently online. An attractive graphic design, numerous functionalities and an easy and intuitive use mode that allows to access in real time to all the information related to the history of the orders and to the processing of the current ones. With the Cad Lite 3D Configurator you can configure Gennius and Bioclimatica models thanks to a constantly updated online catalogue. Thanks to an easy-to-use interface, it also allows you to formulate a complete quote with minimal error.

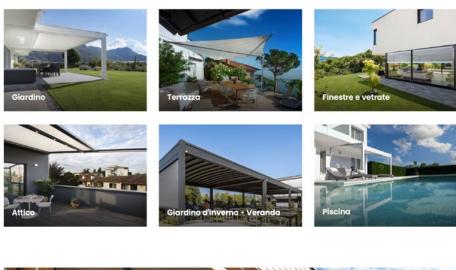


#### SITO - BIM





La nostra missione è creare nuovi spazi outdoor da vivere in totale armonia. Grazie alle nostre **coperture solari e alle strutture per esterni personalizzate, potrai arredare con stile il tuo terrazzo, giardino, attico, ma anche modulare...** Leggi di **più** 

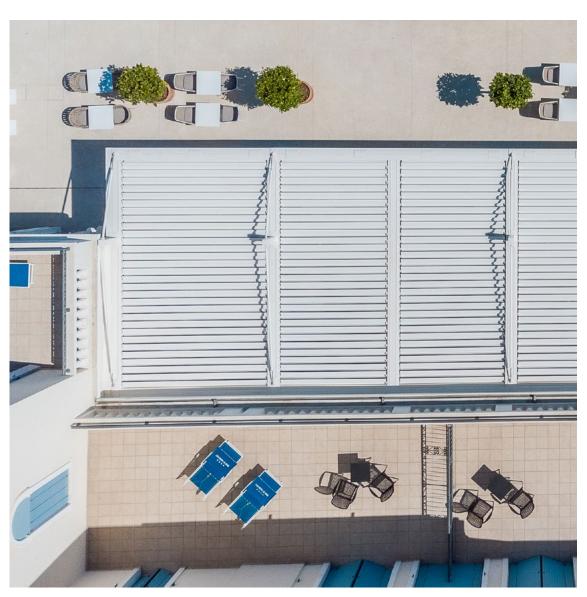




BIM technology improves the working method of designers and is now the main source of information for the realisation of a project. With BIM the model is generated in a "parametric 3D" from which a series of information such as 2D views, elevations, sections but also metric calculations and much more can be automatically derived. On the KE website you can find the BIM gallery of the main KE models, the certifications and all the useful technical documentation for each product: www.keoutdoordesign.com

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BIM & 3D Models Biog Nows Video		
News Video	SYNCRO	
	Kedry Skylle KE SCREENY	
85 - SINGLE BOX GOLD UNIT VERSION	85 - SINGLE UNIT VERSION	

keoutdoordesign.com



## A GROUP, A VISION, A GROUP IN EVOLUTION

Since 1987, KE has been designing and manufacturing arm awnings, cassette awnings, drop awnings, canopies, shelters and is specialised in shading structures that enhance the liveability of outdoor spaces, up to the redesign and restyling of urban furniture. Both for the variety of the range and the depth of the configurations, KE is a manufacturing reality able to satisfy the most demanding requests the most demanding requirements of designers, architects, window and door manufacturers, upholsterers and outdoor professionals.



#### Improving the experience

With KE's professionalism and experience you can rely on quality products designed to enhance your customers' outdoor experience. With KE it will be easier to live the outdoor space in perfect harmony with the surrounding environment, widening the viewpoints and ensuring maximum comfort in all seasons. all seasons.

