# DESIGNED FOR COMFORT BUILT FOR DURABILITY

Pergola and Bioclimatic





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# SHADEEX

# HIGH-TECH

Cutting Edge Technology & Excellence in Design





Colors & Lighting Solutions Finishes Page 22 Page 25 Engineering Specifications

Shades have been there for a long time, they have protected us from the sun and the rain, but there is one thing they could not do, and that is mastering the wind. On a hot summer day, having a cool breeze could mean between satisfaction and frustration, the same goes for under extreme sunshine where having the ability to adjust the sun's heat would change the experience significantly. High-Tech Line takes an entirely different approach to create shades and shelter. The blades help to adjust the amount of sunshine and the direction of airflow to provide the complete freedom and best experience. When completely closed, shades shelter the space against weather, dust and all unwanted environmental elements. With the products such as Zipscreen and Guillotine Glass, it could become a fully enclosed area perfect for use as a garage or workshop in your open space.



#### **Best For**

Houses, Private Clubs, Boutique Hotels

#### **Available Structure Shapes**







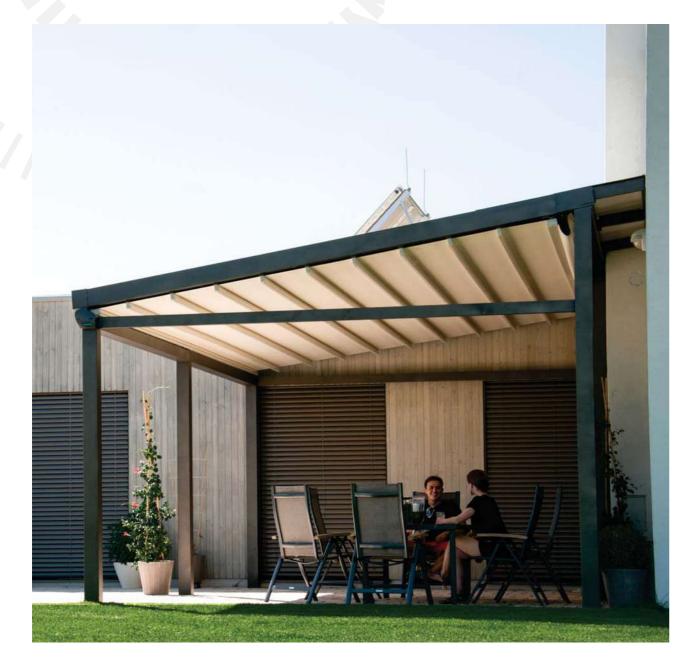






# **PRIVACY**

For Your Home







Colors & Finishes Page 22

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Optional

Products

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Control &

Page 25

The choice between open spaces and privacy has been around for as long as we can remember. Private life always had to happen behind the walls of our homes, especially in properties with not very tall walls we can never be entirely away from the uninvited gaze of neighbours and passers-by. For this reason alone, we cannot feel as comfortable in open spaces of our properties. SHADEEX offers a solution for people who hate tall view-blocking walls but also like their privacy. Our Privacy line is meant for precisely this, coming with complementary products like Zipscreen and Glass Systems, we create a safe and open space in your property with a reasonable budget that doesn't ruin your view. The structures are available in all shapes and colours to make your property look even better, and the grass greener on your side.

 $10.5_{m}$ 

10<sub>m</sub>

 $110_{km/h}$ 

#### **Best For**

Houses, Verandas, Terraces, Private Clubs, Boutique Hotels

#### **Beam Type**

Elegant (page 27) Avantgarde (page 27)

#### Available Structure Shapes (Also available without wall support)



1C - 01









WWW.SHADEEX.COM





# **ECONOMY**

Get the Most Value at a Bargain





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Control & Optional
Automation Products

Adding pergolas to your property shouldn't break your bank. You might have a small cosy coffee-shop on the corner or want to cover some area in front of your property meaning that you don't want to spend too much but also have a fancy shade at your service. We have the Economic Line for this purpose exactly. By using cables and narrower structure, we significantly reduce the cost of the project, and it also might be even necessary given your space. The structures in this Line share the same quality as the other lines and are only a little smaller and are even smarter.

Max Width Max Projection

tion

Wind Resistand

 $90_{\text{km/h}}$ 

#### **Best For**

Houses, Small Cafe & Restaurants, Private Clubs

#### **Beam Type**

Elegant (page 27)

#### **Available Structure Shapes**





1L - 01

L - 02



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# 14 SHADEEX

# STRENGTH

For Extreme Weather Conditions





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Humankind has always thrived against hardships. We build where no building is supposed to be built, and we are proud of it. We accomplish that by utilizing engineering and craftsmanship to its best. There are many properties in mountainous areas with lots of snowfall in the winters and many seaside beach clubs with extreme wind-storms hitting them now and then. At SHADEEX, we have developed the Strength Line to push the limits of the space in harsher environments even further. Taking advantage of an ultra-strong static design along with robust materials in rails, columns and the ceiling, we provide strength and give freedom to property owners to extend their usable space beyond their walls with ease of mind.

Mono-Pitch Max
th Projection Up to

10.5<sub>m</sub> 8<sub>m</sub>

Wind Resistance Up To

 $117_{\text{km/h}} \qquad 75_{\text{kg/m}^2}$ 

Snow Resistance Up to



**Best For** 

Hotels, Restaurants, Swimming Pools

**Beam Type**Avantgarde (page 27)

#### **Available Structure Shapes**



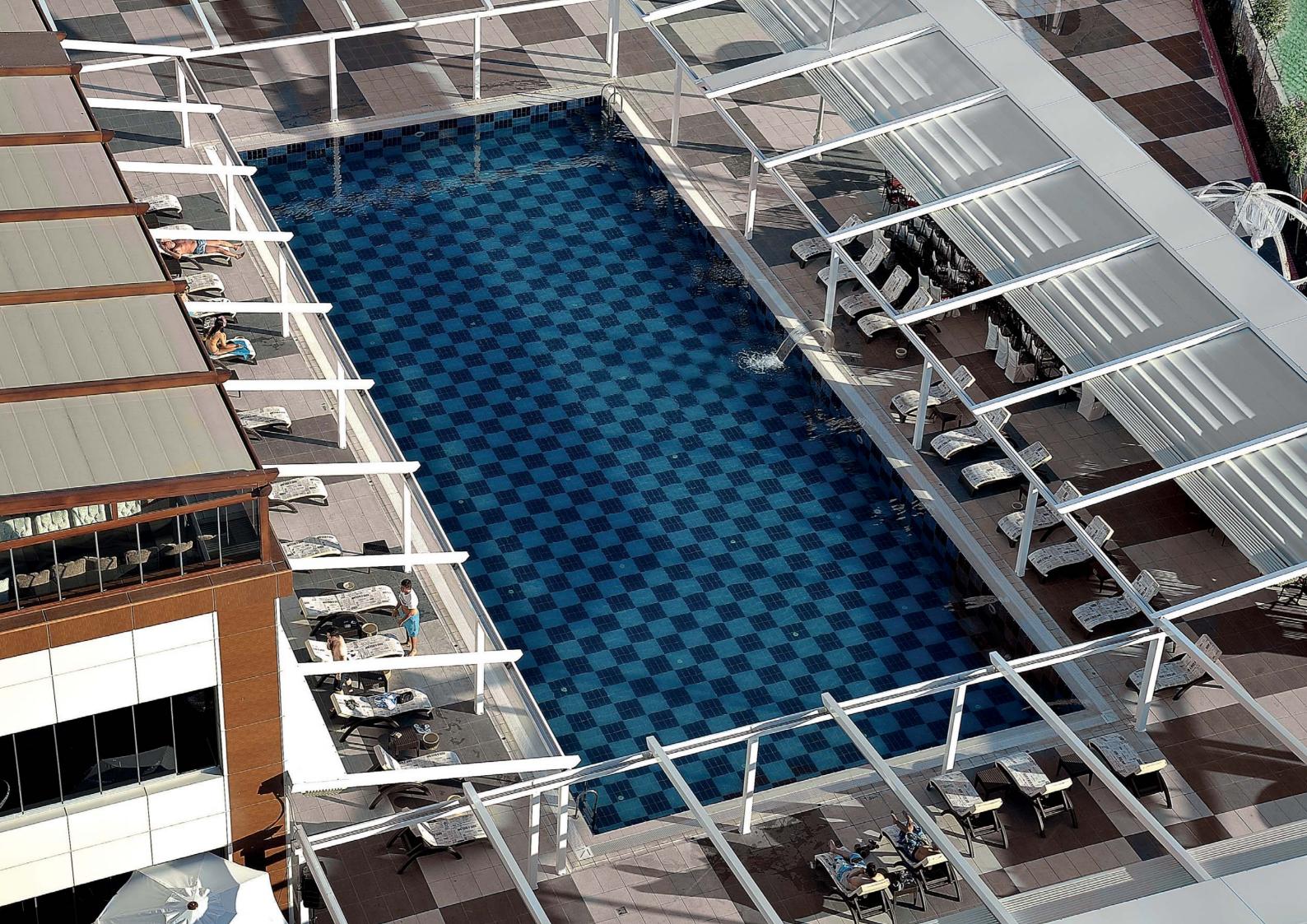








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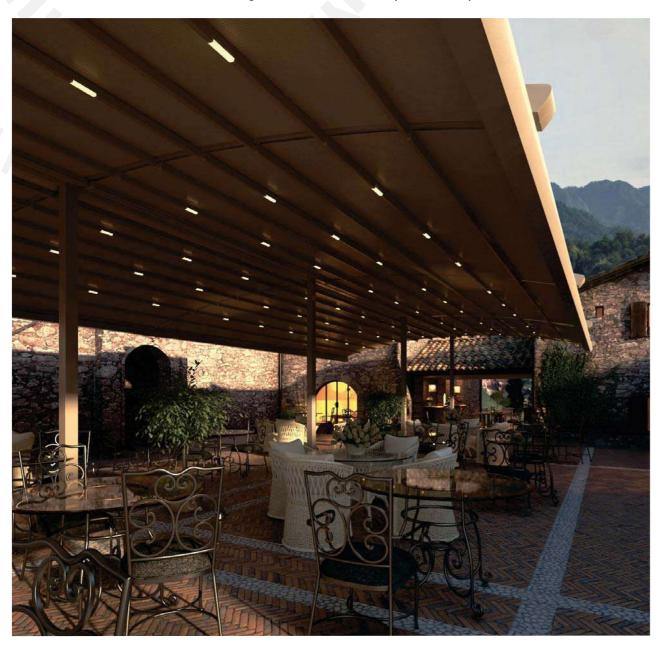
Optional

Products Page 23-25



# SPACE

Maximize the Utility of Your Open Space





Ceiling Fabric Colors & Finishes Page 21 Lighting Solutions

Automation

There is nothing more refreshing than ample, open space, especially when it has an extensive shade on it. It provides a sense of luxury and abundance, which is meditative to most people. Bigger spaces help businesses and properties to provide services to more people and create a sense of grandeur. Having the option to add a roof that can retract whenever the weather agrees, ensures that the flow of experience is never interrupted, which is something businesses would most likely want in their service area. SHADEEX provides unique design and equipment for large areas under its Space Line. Using light and durable materials in addition to designing structures that can cover areas of up to 200 m<sup>2</sup> (per module), we make sure that the shape of the structure matches the customer needs and also creates harmony and unity within the space.

 $10.5_{m}$  $20_{m}$  $90_{\text{km/h}}$ 

#### **Best For**

Roof Tops, Wedding Halls, Restaurants, Swimming Pools

## **Beam Type**

Elegant (page 27) Avantgarde (page 27)

#### **Available Structure Shapes**



2C - 01







2L - 02



# 22 SHADEEX

# Ceiling Fabric By Serge Ferrari

Précontraint 602 Opaque is a fireproof membrane that offers total opacity. This would mean complete thermal comfort and protection from UV light coming from the sun. Made for constant, maintenance-free use along with the many colour choices, it offers designers the freedom to match the surroundings of the structure and bring all the elements together.





Blocking Unit Area Weight Heat Up To EN ISO 2286-2

% ./ J kg

CL-2 EN 13773

Fire Proof

Choices up to



The ceiling fabric is available in three primary colours as the standard, and for custom orders, we can provide the fabric in various other colours.

#### Serge Ferrari Standard Colors

Blackout Précontraint 602 opaque (Available in custom colors)







## Structure Color and Finish

CUSTOMIZATION

We provide an extension to your property and always make sure it looks as if it was always planned to be there. Our Pergolas utilize aluminium all over the structure to ensure lightness and strength at an optimum; however, you can cover the body and the columns with one of our many colours and finish choices as you can see below.

#### **Metal Finishes**



#### **Wood Finishes**







# Zip Screen By Serge Ferrari



Blocking Heat Up To

Max Height  $7_{m}$ 

 $3.7_{m}^{Max}$ 

Fire Proof CL-2 EN 13773

FR

Color Choices up to Unit Area Weight EN ISO 2286-2

 $.75\,{}_{\text{kg/m}^2}$ 

Perfect for creating partial shades and creating privacy for sides the structures, Zip Screen is an affordable, light and practical solution to complete the experience. By blocking only the infrared from the sun, it ensures that natural light finds its way into the structure and offering outward acceptable visibility to also provide privacy when needed. It is made of the same fabric as the ceiling and together with its many choices of colour, it will not only fit the holistic design of the structure, but make it look even more eye-catching.









92-2044



92-2167











# Guillotine

Weather doesn't always agree to our plans, wind, rain, and cold weather, in general, are commonly challenging when it comes to open spaces. To completely take control of the area covered by our structures, we can suggest adding Guillotine to your list. It will be opened and retract using a remote control and isolate your designated area from unwanted environmental factors.



2 Panels







3 Panels



Wind Shield





# Lighting Solutions

For lighting the structure, we offer two solutions, spotlights and beam LED lights. Spotlights provide an ambient, moody environment while beam LED lights fit in the structure seamlessly and create a sophisticated look.









## Control & Automation

Pergolas are there to give us comfort and ease of mind. They provide freedom from the factors that can undermine the experience; therefore, we make sure our shading structures do what they are built to do when they are supposed to. Our pergolas can be equipped with sensors of light, wind and rain to change the settings according to the environmental factors automatically, we also have remote control systems to make your structure work at your will.



TELIS 4 and 16 RTS

Hand-held remote extends control of motorized products up to 4 and 16 different channels within 65 feet of range.



DECOFLEX WIREFREE™ RTS

Battery-powered and a completely wireless wall switch.



ONDEIS ® WIREFREE RTS RAIN AND SUN SENSOR

Solar-powered combined rain and sun sensor. The Sensor is completely wireless and uses optical rain-sensing technology and a sun-level sensor.



THE SOLIRIS RTS SUN AND WIND SENSOR

Automatically controls your RTS motorized products based on current weather conditions.

# Water Drainage

Pergola

Calculation Table

The structures are made to move raindrops of the ceiling as fast as possible, other than standard slope that will cause water to slide down the structure also uses an embedded water draining system that connects the ceiling to the ground and does not let water to slide down from unwanted sections of the structure.

**Drainage System in Pergola** 



**Drainage System in Bioclimatic** 





STRUCTURE MATERIAL & PRACTICAL SPECIFICATIONS 28 SHADEEX

# Pergola Body and Runner Beam

We have two different series of aluminium beams for our pergolas. Elegant is light and well built to achieve optimal budget/utility balance, Avantgarde is heavier and stronger usually used in the process of building over bigger spaces or when the weather conditions call for a more robust structure.

## **ELEGANT**



### AVANTGARDE

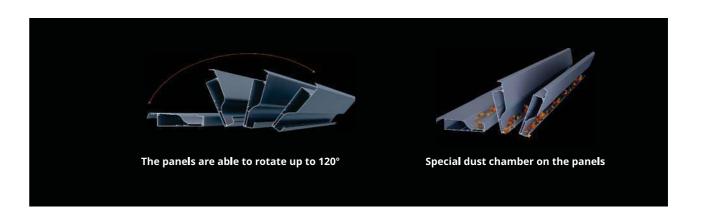


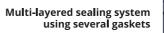
# Bioclimatic Build and Sealing Properties

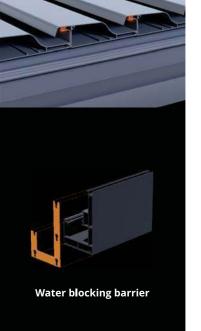
Bioclimatic structures are designed to collect and keep the dust in a small chamber in order to prevent it from falling down when closing the ceiling. Bioclimatic panels also have the ability to completely seal the structures against water or air.



**Panel and Gutter Integrated Sealing** 

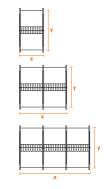


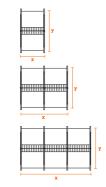


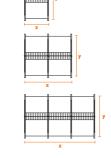


# Double Pitch Pergola Modulation

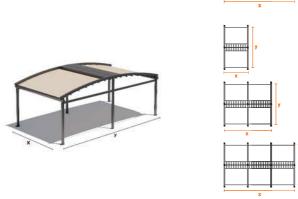












#### ELEGANT AVANTGARDE x: 250 -400cm y: 500 -1200cm

x: 250 -400cm y: 500 **-**1200cm

#### **ELEGANT** x: 400 -800cm y: 500 -1200cm

AVANTGARDE x: 400 -800cm y: 500 -1200cm

#### ELEGANT x: 800 -1050cm y: 500 -1200cm

AVANTGARDE x: 800 -1050cm y: 500 -1200cm

AVANTGARDE

#### ELEGANT x: 250 -400cm

y: 500 -1200cm

#### x: 250 -400cm y: 500 -1200cm

#### ELEGANT x: 400 -800cm y: 500 -1200cm

AVANTGARDE x: 400 -800cm y: 500 -1200cm

#### ELEGANT x: 800 -1050cm y: 500 -1200cm

AVANTGARDE x: 800 -1050cm y: 500 -1200cm

#### ELEGANT x: 250 -450cm y: 500 -1400cm

AVANTGARDE x: 250 -450cm y: 500 -2000cm

#### ELEGANT x: 450 -900cm y: 500 -1400cm

AVANTGARDE x: 450 -900cm y: 500 -2000cm

# ELEGANT

AVANTGARDE x: 900 -1050cm

#### x: 900 -1050cm y: 500 -1400cm

y: 500 -2000cm

#### ELEGANT x: 250 -400cm y: 500 -1400cm

AVANTGARDE x: 250 -400cm y: 500 -2000cm

#### ELEGANT x: 400 -800cm y: 500 -1400cm

AVANTGARDE x: 400 -800cm y: 500 -2000cm

#### ELEGANT x: 800 -1050cm

y: 500 -1400cm y: 500 -2000cm

#### AVANTGARDE x: 800 -1050cm

# Single Pitch Pergola Modulation





#### ELEGANT AVANTGARDE x: 250 -400cm x: 250 -400cm y: 250 **-**600cm y: 250 -700cm







AVANTGARDE

x: 250 -400cm

y: 250 -700cm

AVANTGARDE

x: 400 -800cm

y: 250 **-**700cm

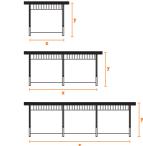
AVANTGARDE

x: 250 -450cm

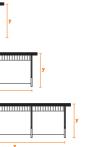
y: 250 -1000cm

y: 250 -1000cm















y: 250 -700cm



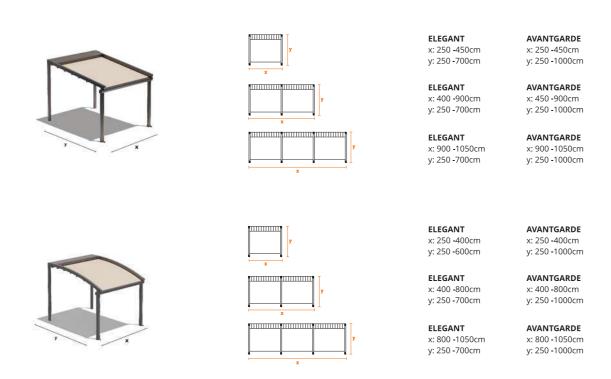


ELEGANT	AVANTGARDE
x: 250 -400cm	x: 250 -400cm
y: 250 -700cm	y: 250 -1000cm

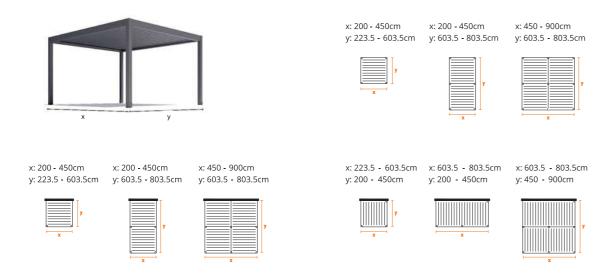
ELEGANT	AVANTGARDE
x: 400 -800cm	x: 400 -800cm
y: 250 <b>-</b> 700cm	y: 250 -1000cm

ELEGANT	AVANTGARDE
x: 800 -1050cm	x: 800 -1050cr
y: 250 -700cm	y: 250 -1000cr

# Single Pitch Pergola Modulation



# Bioclimatic Modulation



# Bioclimatic Wind and Snow Resistance

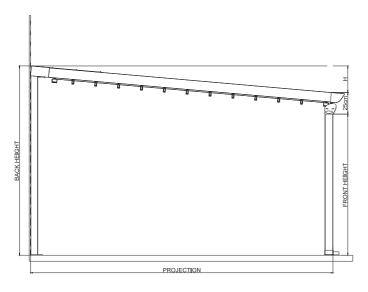
Bioclimatic structures are designed to withstand wind and snow to provide the reliability that is expected from them. You can see the specifications in the below table. The wind resistance values are given according to the Beaufort scale calculated for Products with a front height of 250 cm according to Eurocode EN 1991-1-4 Terrain Category 4.

Sno	w Weight	Width											
	kg/m2	200 cm	225 cm	250 cm	275 cm	300 cm	325 cm	350 cm	375 cm	400 cm	425 cm	450 cm	
	223.5 cm	426	426	426	426	426	421	394	372	354	336	318	
	243.5 cm	421	421	421	412	412	394	372	349	332	314	300	
	263.5 cm	412	412	403	403	390	372	349	332	314	296	282	
	283.5 cm	408	408	399	390	376	354	332	314	296	282	273	
	303.5 cm	403	403	394	376	358	336	314	296	282	269	255	
	323.5 cm	399	399	390	367	340	318	300	282	273	255	246	
	343.5 cm	394	394	381	354	327	305	291	273	264	246	233	
	363.5 cm	376	376	349	323	300	282	264	251	242	228	215	
	383.5 cm	367	363	336	309	282	269	242	228	215	202	188	
	403.5 cm	358	340	305	273	251	228	211	197	184	170	161	
	423.5 cm	336	296	264	237	215	197	184	170	161	148	139	
	443.5 cm	296	260	233	211	188	175	157	148	139	130	121	
	463.5 cm	260	228	202	184	166	152	139	130	121	112	108	
ion	483.5 cm	228	202	179	161	143	134	125	112	103	99	96	
Projection	503.5 cm	179	157	139	125	112	103	96	96	96	96	96	
Proj	523.5 cm	161	139	121	112	99	96	96	96	96	96	96	
	543.5 cm	143	125	108	99	96	96	96	96	96	96	96	
	563.5 cm	125	112	99	96	96	96	96	96	96	96	96	
	583.5 cm	112	99	96	96	96	96	96	96	96	96	96	
	603.5 cm	399	399	390	372	354	332	309	291	278	264	251	
	623.5 cm	394	394	385	363	336	314	296	278	269	251	242	
	643.5 cm	390	390	376	349	323	300	287	269	260	242	228	
	663.5 cm	390	390	376	349	323	300	287	269	260	242	228	
	683.5 cm	381	381	363	332	309	287	273	255	246	233	220	
	703.5 cm	381	381	363	332	309	287	273	255	246	233	220	
	723.5 cm	372	372	345	318	296	278	260	246	237	224	211	
	743.5 cm	372	372	345	318	296	278	260	246	237	224	211	
	763.5 cm	363	358	332	305	278	264	237	224	211	197	184	
	783.5 cm	363	358	332	305	278	264	237	224	211	197	184	
	803.5 cm	354	336	300	269	246	224	206	193	179	166	157	

		Width									
		200 cm	250 cm	300 cm	350 cm	400 cm	450 cm				
	400 cm	11	11	11	11	10	9				
	450 cm	11	11	11	11	10	9				
Projection	500 cm	11	11	10	10	10	9				
	550 cm	11	11	10	10	10	9				
oje	600 cm	11	11	11	11	10	9				
4	650 cm	11	11	11	11	10	9				
	700 cm	11	11	11	11	10	9				
	750 cm	11	11	11	11	10	9				
	800 cm	11	11	11	11	10	9				

BEAUFORT Wind Resistance Table for Bioclimatic Structures

# Pergola Slope Calculation Table



Slope	6,4-7,9%	7,4-8,8%	8,4-9,7%	9,4-10,8%	10,4-12%	11,2-12,7%	12-13,4%	13-14,5%	14-15,7%	15-16,6%	16-17,6%
Rail											
Centers	200	225	250	275	300	325	350	375	400	425	450
						H (cm)					
250	16	19	21	24	26	28	30	33	35	38	40
300	20	23	26	29	31	34	37	40	42	45	48
350	23	27	30	34	37	40	43	46	49	53	56
400	27	31	35	39	42	46	49	53	57	61	64
450	32	36	40	44	48	52	56	60	64	69	73
500	36	41	45	50	54	59	63	68	72	77	81
550	40	45	50	55	60	65	70	75	80	85	90
600	44	50	55	61	66	72	77	83	88	94	99
650	49	55	61	67	72	78	84	90	96	102	108
700	54	60	66	73	79	85	91	98	104	111	117
750	59	66	72	79	85	92	99	106	112	119	126
800	63	70	77	85	92	99	106	114	121	129	136
850	67	75	82	91	99	106	113	122	130	138	146
900	71	79	87	97	106	113	120	130	139	148	156
950	75	84	92	103	113	120	127	138	148	157	166
1000	79	88	97	109	120	127	134	146	157	167	176

# Pergola Wind Resistance

By design, our structures are wind resistant and can withstand winds of up to 117 km/h. You can find the specifications in the table below. The values are given according to the Beaufort scale calculated for Products with a front height of 250 cm according to Eurocode EN 1991-1-4 Terrain Category 4.

BEAUFORT														
	Width (m)	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5
	Rails													
	4.0	11	11	11	11	11	11	11	11	11	11	11	11	11
	4.5	11	11	11	11	11	11	11	11	11	11	11	11	11
	5.0	11	11	11	11	11	11	11	11	11	11	11	11	11
	5.5	11	11	11	11	11	11	11	11	11	11	11	11	11
	6.0	11	11	11	11	11	11	11	11	11	10	11	11	11
,	6.5	11	11	11	11	11	10	10	10	10	10	11	11	10
	7.0	11	11	11	10	10	10	10	9	9	9	10	10	10
	7.5	11	10	10	10	9	9	9	9	9	8	9	9	9
	8.0	10	10	9	9	9	9	8	8	8	8	9	9	9
	8.5	9	9	9	9	8	8	8	8	8	8	8	8	8
	9.0	9	9	8	8	8	8	8	8	7	7	8	8	8
	9.5	9	8	8	8	8	7	7	7	7	7	8	8	7
	10	8	8	8	8	7	7	7	7	7	7	7	7	7

							BEAU	ORT						
	Width (m)	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5
	Rails													4
Ê	4.5	11	11	11	11	11	11	11	11	11	11	11	11	11
±	5.0	11	11	11	11	11	11	11	11	10	10	11	11	11
ength	5.5	11	11	11	11	10	10	10	10	10	9	11	10	10
RailL	6.0	11	10	10	10	10	9	9	9	9	9	10	10	9
~	6.5	10	10	9	9	9	9	9	8	8	8	9	9	9
	7.0	9	9	9	9	8	8	8	8	8	8	8	8	8
	7.0	9	9	9	9	8	8	8	8	8	8	8	8	8

