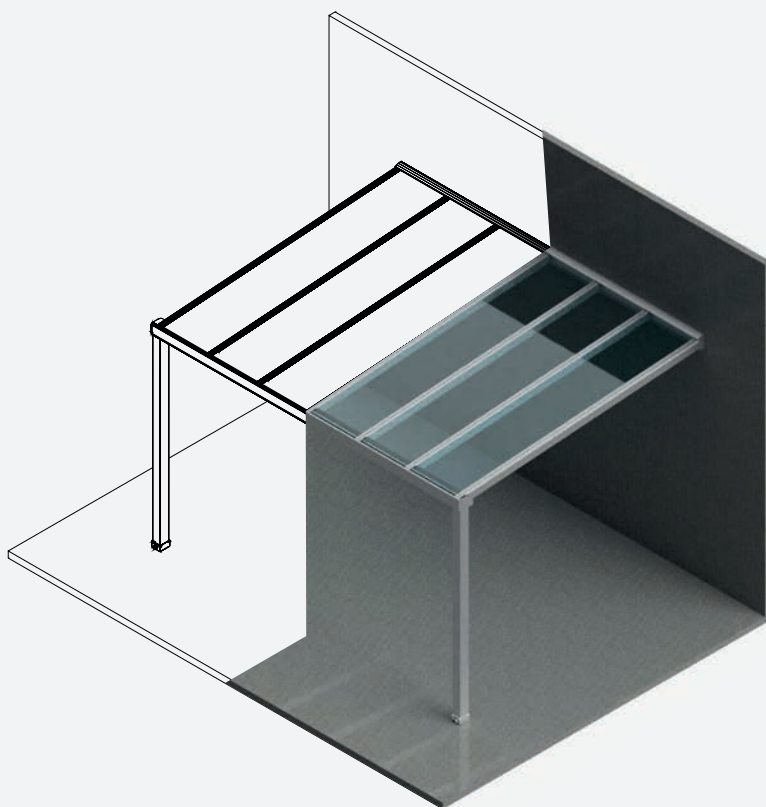


VISION ART ALUMINIUM

PERGOLA & SUNROOM SYSTEMS

TECHNICAL DATASHEET

DOCUMENTS • TECHNICAL • DETAILS • PRESENTATION



Parts



Material



Certificates

www.visionartaluminium.com



Content

Winter Garden

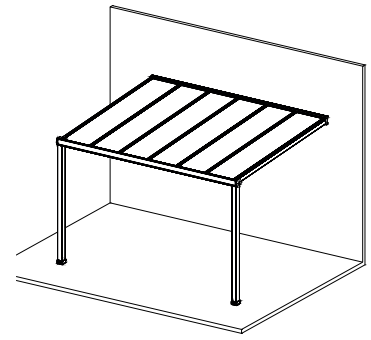
Product Presentation
Connection Points
Aluminum Profiles
Powder Coat
Water Drainage
Lighting
Static Reports
Custom Engineering



About Us

Vision Art Aluminium presents its innovative designs enhanced with high quality-affordable price policies, to the taste of its customers. Today, both domestically and abroad, the company is in a position as the only company that is able to deliver the most economical, secure and fast sales/technical maintenance service via the professional authorized dealers that are positioned as "local. Vision Art Aluminium provides basic services like design, planning, selection of appropriate and affordable materials, resolution of the technical details and conduction of manufacturing with the architect, engineer, designer employees in its payroll each of whom are certified and specialists in their respective fields. The company has executed its studies with its understanding that takes the customer satisfaction as the basis and it has realized its progress with the power of this satisfaction. We pay our respects to you with the desire and wish of seeing you among our satisfied customer portfolio...

I. Description of the product and features



a. "Vision Art Aluminium Pergola Systems"

is a first class product designed to be used with confidence and comfort in four seasons.

b. Sunroom allows you to experience the luxury of a closed space, with either glass or Polycarbonate ceiling panels, while keeping the light and sun always with you.

c. Sunroom will also create a shaded area by combining the "Roof ZIP" with automatic zipscreens, which can be added if desired.

d. Sunroom consists of fixed glass or Polycarbon panels, which are modularly mounted on an aluminum construction carrier body.

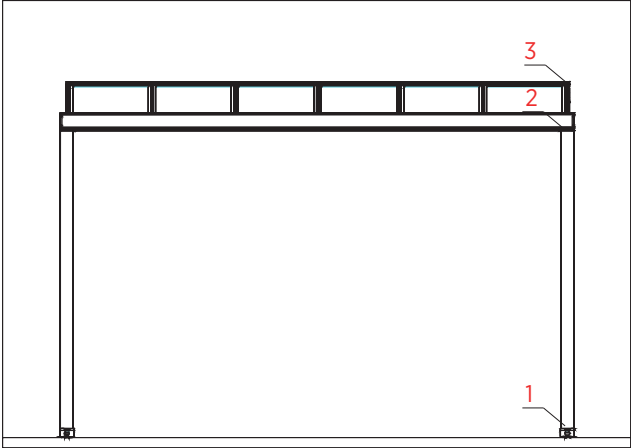
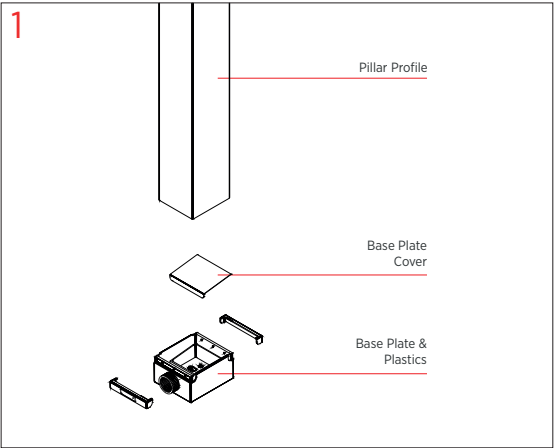
e. Sunroom has been designed to offer you all the features you would expect from a Winter Garden:

- It allows the installation of all kinds of roofing materials between 10 mm - 33 mm.
- With the gutter-pillar combination on the front, it allows the water drainage in a controlled.
- The radius design on both the front and rear profiles provides ceiling formation at an angle that suits your needs.
- It offers an elegant living space with its completely hidden connection details.

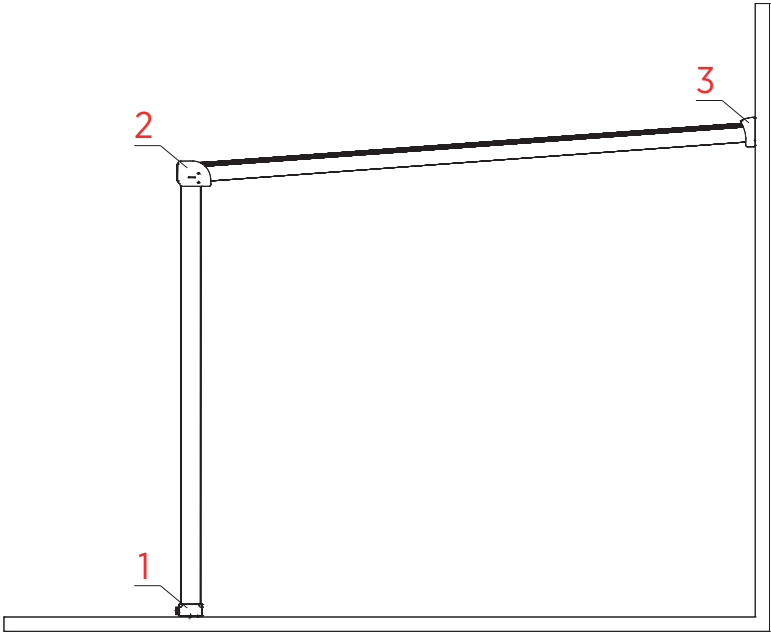
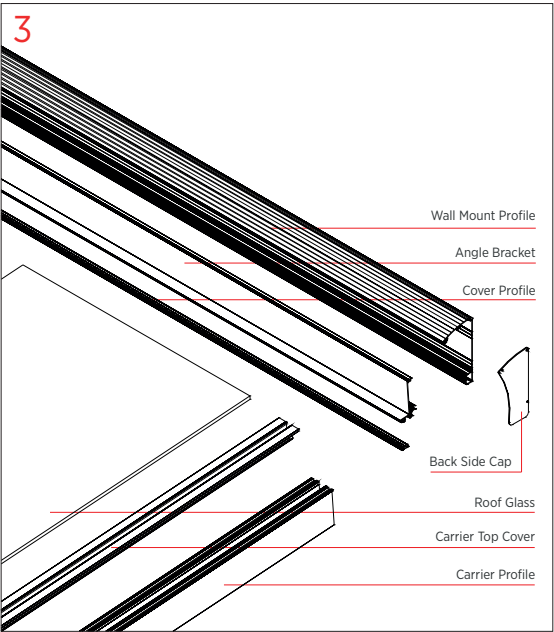
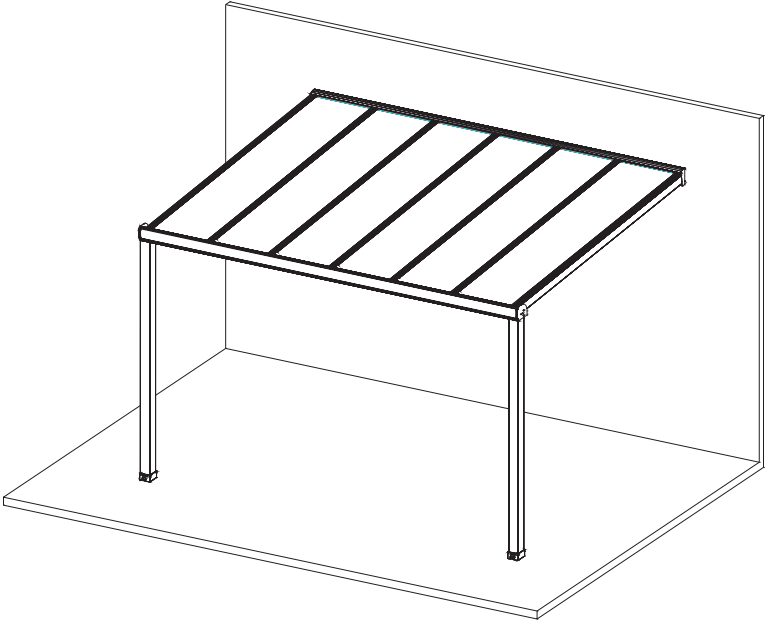
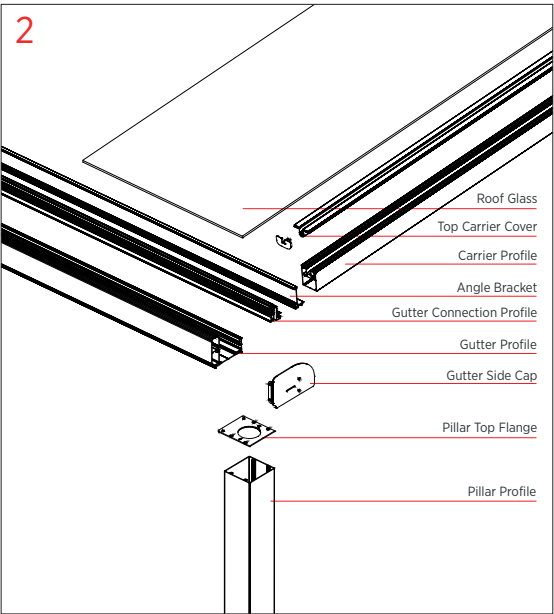
CUSTOM SIZING & ENGINEERED REINFORCEMENT

Vision Art Aluminium sunrooms are custom-fabricated to project-specific dimensions. For larger spans or site-specific structural demands, steel reinforcement may be incorporated as required and reviewed by our licensed structural engineering partner. See Section VIII.

II. Connection Points Details



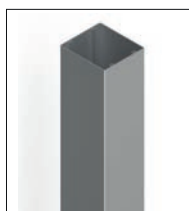
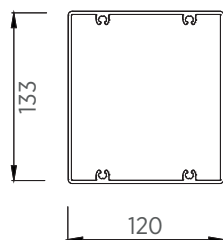
1. Front Pillar - Ground 2. Front Pillar - Glass Carrier Profiles - 3. Rail - Wall Mount



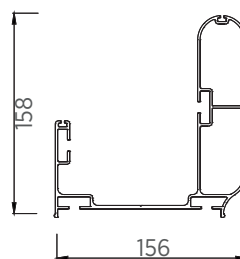
III. Aluminum profiles, sections and properties

Vision Art Aluminium guarantees that all aluminum profiles used in its products are of DIN6060,

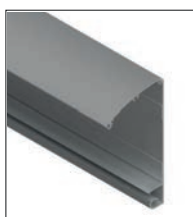
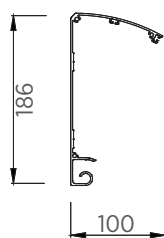
Pillar
Profile



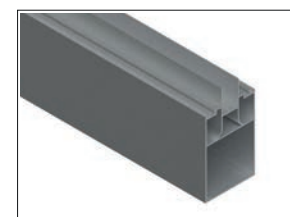
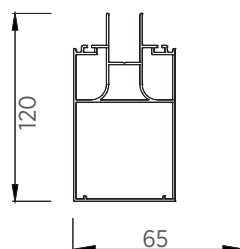
Gutter
Profile



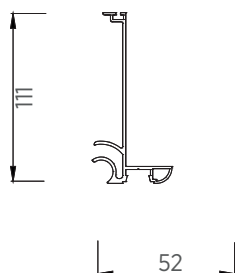
Back
Wall-Mount
Profile



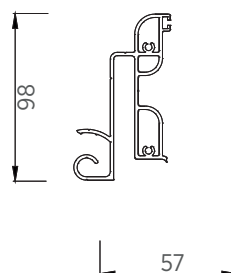
Glass
Carrier
Profile



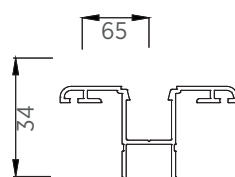
Angle
Bracket



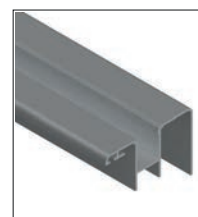
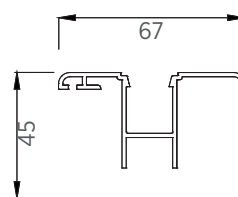
Front
Gutter
Connector



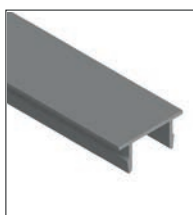
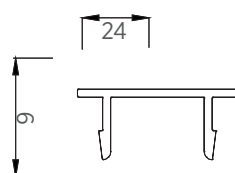
Middle
Carrier
Cover



Side
Carrier
Cover



Cap
Profile



IV. Powder coating and Process properties

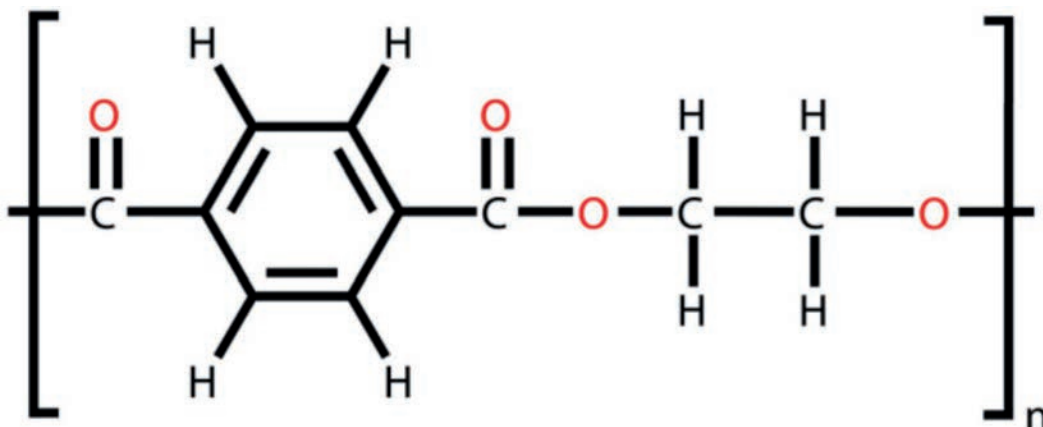
Vision Art Aluminium gives a 5-year paint warranty for its powder coated products. All aluminum and steel materials used in Vision Art Aluminium products are manufactured by painting with PE Electrostatic Powder Paint. Vision Art Aluminium is a manufacturer company that has chemical purification and abrasion facilities, which are an important part of the Zpowder coating process. Vision Art Aluminium uses, on all products, Europe and Turkey's finest manufacturers Powder JOTA's, PULVE and IBA brand's 1.Quality Polyester Powder Coating. Vision Art Aluminium paint quality complies with QUALICOAT standards. Every project produced in the Vision Art Aluminium factory goes through a quality control process based on the experiment and observation staff determined by QUALICOAT. A special "Quality Certificate" is prepared for each order and delivered to our customers. Vision Art Aluminium delivers to its customers test plates and test reports showing that these tests have been performed together with the products.

Test Standards : Within the QUALICOAT admissions, all tests listed below must be passed:

- **Adhesion Test (EN ISO 2409)**
- **Bending Test (EN ISO 1519)**
- **Impact Test (ASTM D2794)**
- **Cupping Test (EN ISO 1520)**
- **Surface Treatment Baths**
 - There are 5 5m³ bathrooms
 - Acidic degreasing
 - Mains rinse
 - DI rinse
 - Passivation Bath
 - DI rinse

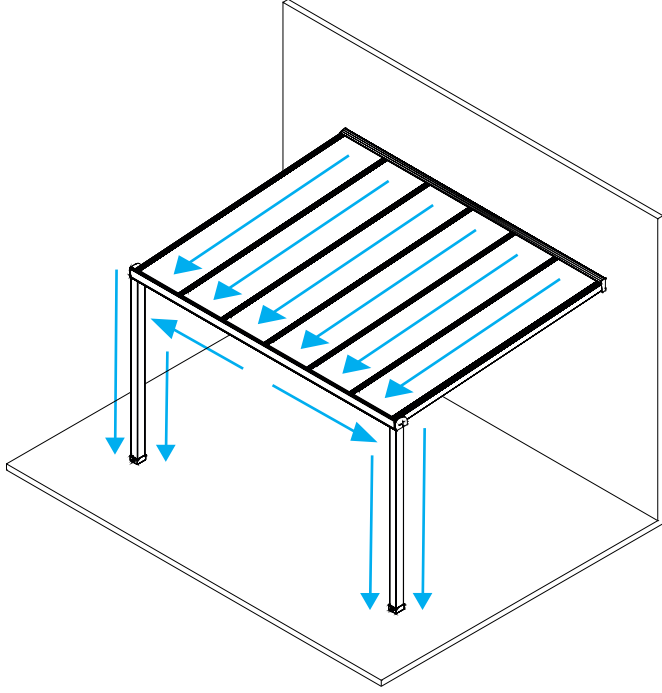


Polyester Chemical Formula



V. Water Drainage System

The system drains the water that falls on it in rainy weather, to the stream profile thanks to its forward slope, and then to the outside via the carrier poles at the front. It is designed to have one pole profile under each rail profile. Floor connection shoes mounted under the poles should be made of Cast Aluminum and protected against rusting with protective anodized coating before powder coating. The ground connections of the pole shoes are completely hidden, no ground connection elements are visible..



Water Discharge Capacity

For each of the 18 m2 fabric area, Vision Art Aluminium - TR "1" unit of leg assy.

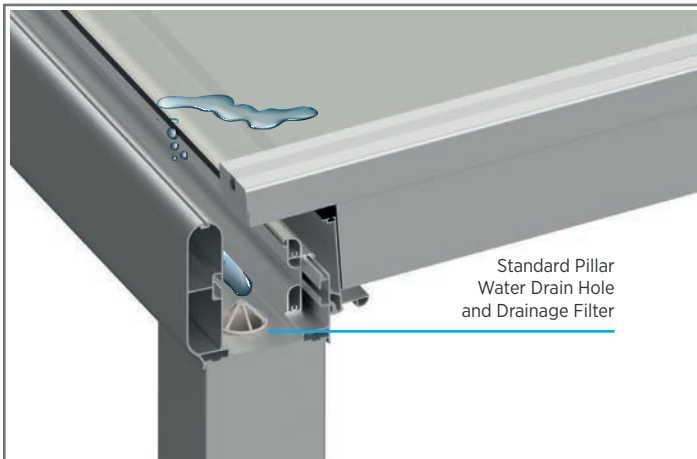
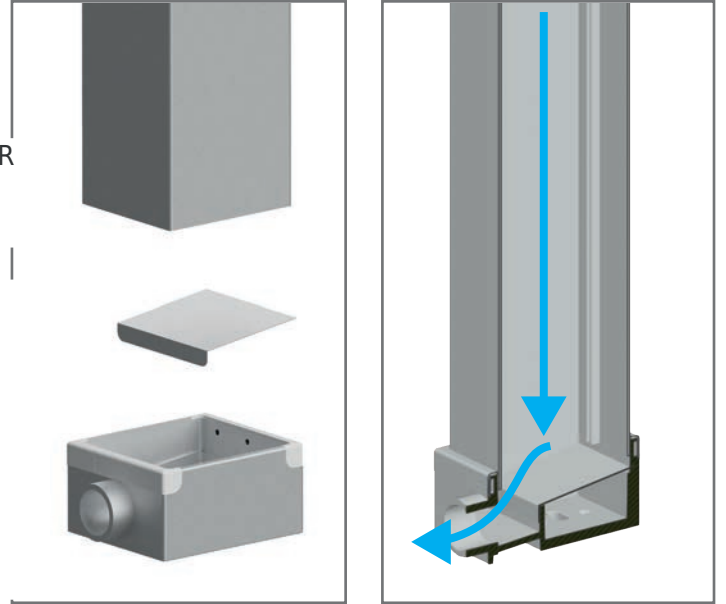
Deşarj Tahliyesi

For the first time in the Glass Systems sector, the "Discharge Evacuation" solution is exclusive to Vision Art Aluminium. In times of sudden and heavy rainfall, the problem of overflow, which you can see in other systems, disappears with the "Discharge Evacuation" and your living space is not affected by the disaster.

Stream Water Transfer and Discharge Capacity (Standard: TS EN 12056-3)

Gutter Capacity	1,20 L/S
Drainage Capacity	1,05 L/S
Drainage Requirement*	18 m2/ 1Piece

Under conditions of heavy rainfall (0,031 liters per hour)



Standard Pillar
Water Drain Hole
and Drainage Filter



Time of Heavy Rain Outdoor
Discharge Evacuation

VI. Lighting System

Our pergola lighting fixtures have 3 pieces, each with 1 Watt power, min. It is manufactured with Samsung or Ostram LED lenses that provide 250 Lumens of light. This system, which is produced by arranging on aluminum PCB, is protected by a transparent plastic cover surrounding the electronic system. All electrical connections are manu-

factured. There are no bare-end connection details. All cables used by Vision Art Aluminium are made of 1st Class, 100% Copper. Vision Art Aluminium cooperates with the world's number 1 manufacturer "Mean Well" as an AC-DC adapter. LPV 100 Series 12V transformers in IP67 standard are used in our products. Vision Art Aluminium offers you the unique and most comprehensive lighting options in the sector, taking into account the value that lighting adds to the visuality of the product.

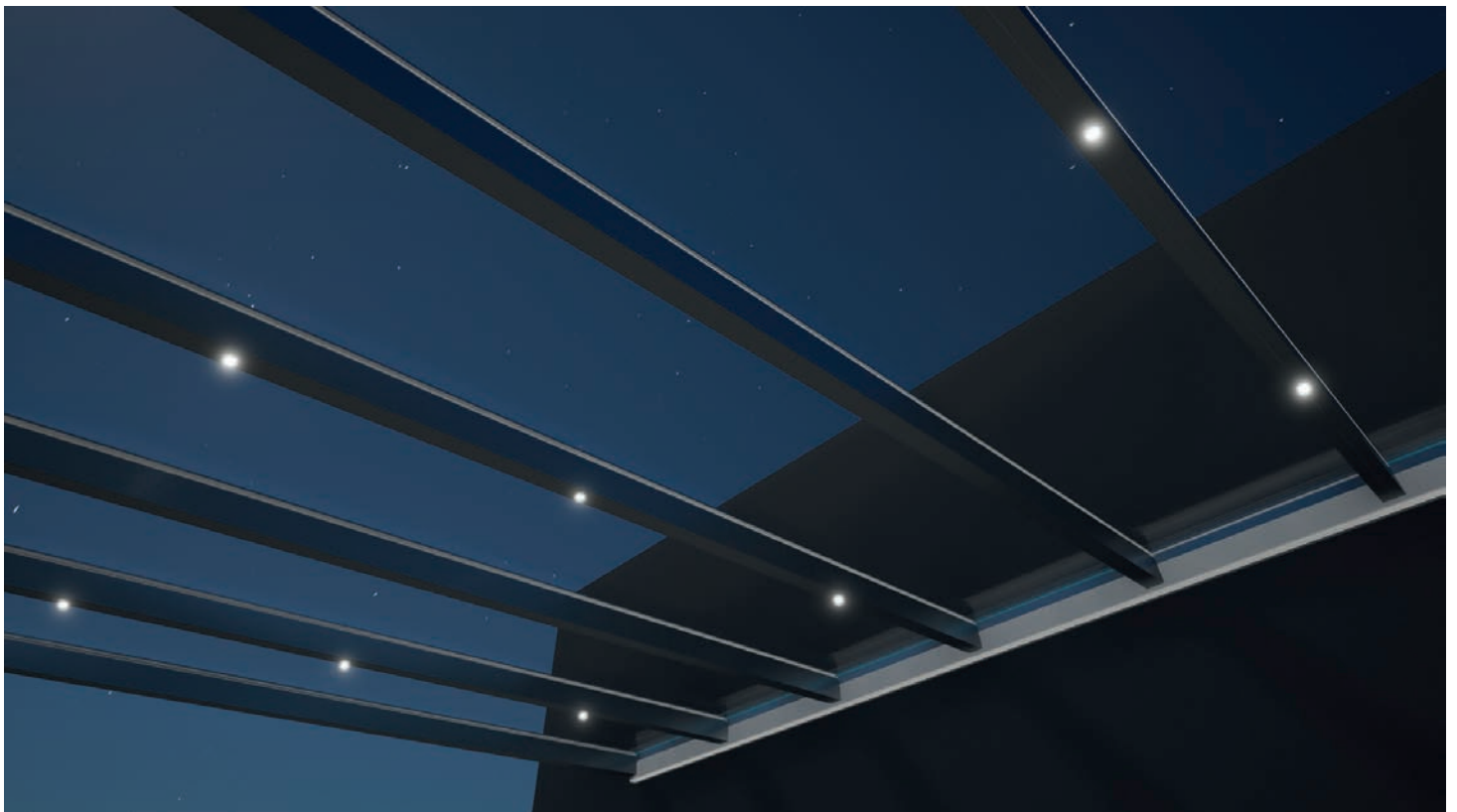
ORIGIN ; Lighting fixtures used in our products are environmentally friendly LED modules are originating in Turkey.

“TRIPLE LIGHT”

Vision Art Aluminium offers the opportunity to choose one of the lighting models that will best suit your living space. Your choice will further help you customize your product. Three lighting options are available exclusively from Vision Art Aluminium.

“RIGHT OF DIM”

Vision Art Aluminium is proud to offer you the Dimmer option as a standard. You no longer have to pay hundreds of Euros for your Dimmer needs.



VII. Static Reports

Snow Load

	SNOW LOAD (kg/m2)										
		120-180	181-240	241-300	301-360	361-420	421-480	481-540	541-600	601-660	661-720
	200-224	1,76	1,16	0,68	0,84	1,20	0,92	0,70	0,52	0,38	0,96
	225-249	1,28	0,85	0,51	0,63	1,12	0,86	0,65	0,48	0,35	0,88
	250-274	0,90	0,60	0,37	0,47	1,04	0,79	0,60	0,44	0,31	0,80
	275-299	0,59	0,40	0,26	0,34	0,96	0,73	0,55	0,40	0,28	0,72
	300-324	0,34	0,24	0,17	0,23	0,76	0,58	0,43	0,31	0,22	0,56
	325-349	0,96	0,67	0,44	0,60	0,68	0,51	0,38	0,27	0,18	0,48
	Pillar	2	2	2	2	3	3	3	3	3	3
	Carrier Profile	3	4	5	6	7	8	9	10	11	12

	SNOW LOAD (kg/m2)										
		120-180	181-240	241-300	301-360	361-420	421-480	481-540	541-600	601-660	661-720
	200-224	176	116	68	84	120	92	70	52	38	96
	225-249	128	85	51	63	112	86	65	48	35	88
	250-274	90	60	37	47	104	79	60	44	31	80
	275-299	59	40	26	34	96	73	55	40	28	72
	300-324	34	24	17	23	76	58	43	31	22	56
	325-349	96	67	44	60	68	51	38	27	18	48
	Pillar	2	2	2	2	3	3	3	3	3	3
	Carrier Profile	3	4	5	6	7	8	9	10	11	12

Wind Resistance (Beufort)

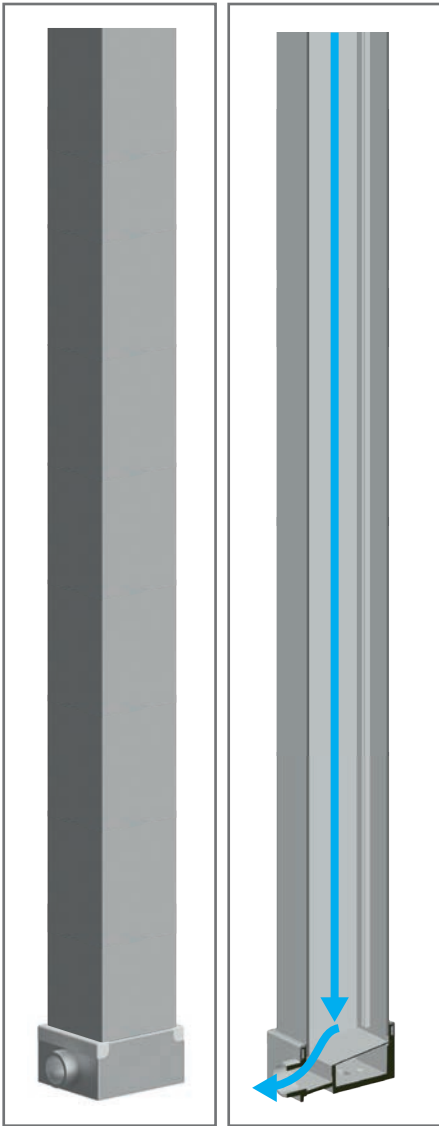
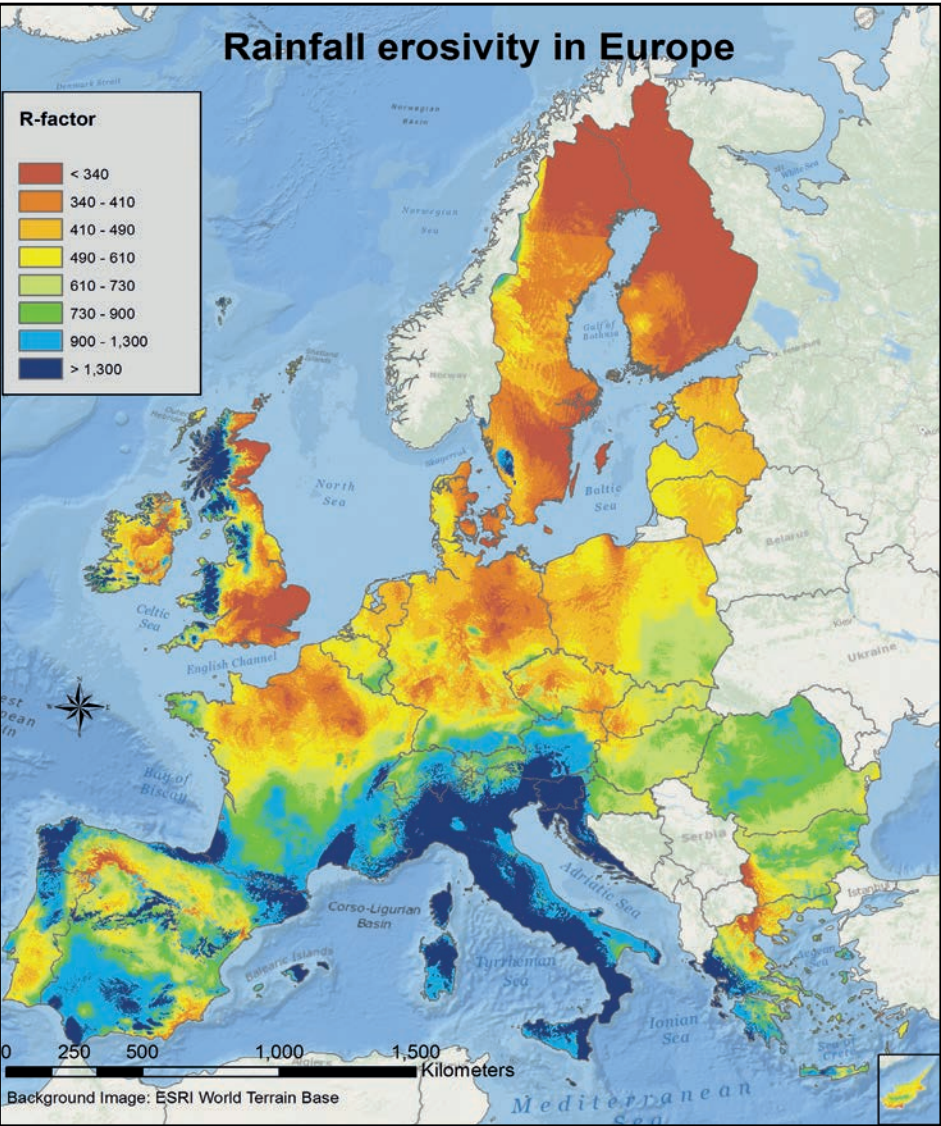


	WIND RESISTANCE (Beufort)										
		120-180	181-240	241-300	301-360	361-420	421-480	481-540	541-600	601-660	661-720
	200-224	28,1	25,7	23,4	21,1	27,3	26,2	25,2	24,1	23,1	22,1
	225-249	26,3	23,9	21,5	19,2	24,2	23,6	23,0	22,4	21,8	21,2
	250-274	23,7	21,9	20,1	18,3	23,2	22,5	21,8	21,1	20,4	19,7
	275-299	21,2	20,0	18,8	17,6	21,1	20,4	19,7	19,1	18,4	17,8
	300-324	18,2	17,6	17,1	16,6	19,2	18,6	17,9	17,3	16,7	16,1
	325-349	16,1	15,8	15,5	15,2	18,3	17,5	16,7	15,9	15,1	14,3
	Pillar	2	2	2	2	3	3	3	3	3	3
	Carrier Profile	3	4	5	6	7	8	9	10	11	12

	WIND RESISTANCE (Beufort)										
		120-180	181-240	241-300	301-360	361-420	421-480	481-540	541-600	601-660	661-720
	200-224	11,0	10,0	9,0	9,0	10,0	10,0	10,0	9,0	9,0	9,0
	225-249	10,0	9,0	9,0	8,0	9,0	9,0	9,0	9,0	9,0	9,0
	250-274	9,0	9,0	8,0	8,0	9,0	9,0	9,0	9,0	8,0	8,0
	275-299	9,0	8,0	8,0	8,0	9,0	8,0	8,0	8,0	8,0	8,0
	300-324	8,0	8,0	7,0	7,0	8,0	8,0	8,0	7,0	7,0	7,0
	325-349	7,0	7,0	7,0	7,0	8,0	8,0	7,0	7,0	7,0	7,0
	Pillar	2	2	2	2	3	3	3	3	3	3
	Carrier Profile	3	4	5	6	7	8	9	10	11	12

Water Drainage Capacity

	Water Drainage Capacity (lt/s ha)										
		120-180	181-240	241-300	301-360	361-420	421-480	481-540	541-600	601-660	661-720
	200-224	4861	3646	2917	2431	3136	2744	2439	2195	1995	1829
	225-249	4373	3280	2624	2187	2821	2468	2194	1975	1795	1645
	250-274	3974	2981	2384	1987	2563	2243	1994	1794	1631	1495
	275-299	3642	2731	2185	1821	2349	2055	1827	1644	1495	1370
	300-324	3361	2521	2016	1680	2168	1897	1686	1517	1380	1265
	325-349	3120	2340	1872	1560	2013	1761	1565	1409	1281	1174
Pillar		2	2	2	2	3	3	3	3	3	3
Carrier Profile		3	4	5	6	7	8	9	10	11	12



Water Discharge Capacity for Single Pillar is 0.98 l / s.

VIII. CUSTOM ENGINEERING & STRUCTURAL REINFORCEMENT

Project-specific sizing. Engineered support. Verified structural performance.

Vision Art Aluminium sunroom systems are custom-designed and fabricated to suit project-specific dimensions, architectural conditions, and opening requirements. Structural configuration is adapted to the size, span, loading conditions, and installation environment of each project.

01

CUSTOM DIMENSIONS

Systems are configured to project-specific sizes rather than a one-size-fits-all format.

02

STEEL REINFORCEMENT

For larger spans or increased structural demand, steel members may be integrated to add strength and stiffness.

03

LICENSED ENGINEERING

Our licensed structural engineering partner reviews project-specific structural requirements where required.

PROJECT-SPECIFIC STRUCTURAL REVIEW

Where engineering review is required, structural calculations and details may consider the following design criteria, based on the project location, geometry, and governing code:

- Design wind speed and wind pressure
- Member spans and deflection
- Snow load and roof loading
- Connections and anchorage
- Dead and live loads
- Applicable local building-code criteria

FINAL ENGINEERING NOTE: Member sizes, steel reinforcement, design loads, and connection details are project-specific. Final requirements depend on dimensions, site conditions, applicable building codes, and licensed structural engineering review.