



Solar Carports
Steel Constructions

DESIGN
PRODUCTION
INSTALLATION

**Altek Europe
creates sustainable solutions
for your business**



MODEL W

Construction type
L-Type (one row)

Multiples of 2 parking spaces

4,3 kW

maximum DC power
per 1 parking space

10

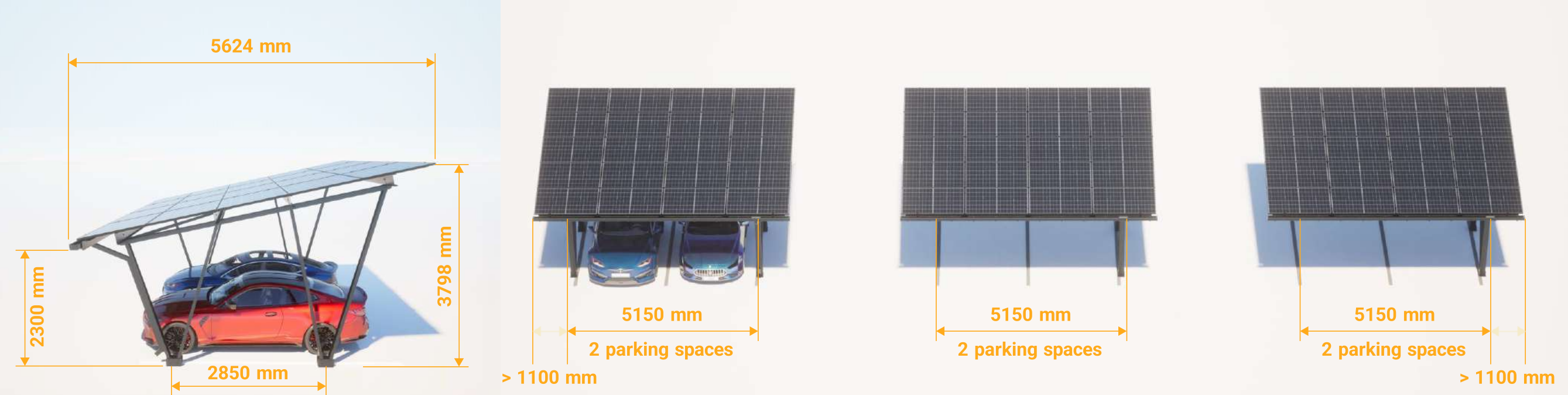
maximum number
of PVs per 1
parking space

2,5 x 5,3

parking
space (m)

10

years
warranty



Structural Parameters

PV dimensions	PV dimensions - 1722 mm x 1134 mm
PV layout	Horizontally 5 rows
Tilt angle	12 degrees
Snow load, wind load	Snow: 2.0 kPa / wind: 0.5 kPa - (higher loads possible)
Service life	25 years
Water proof	✓
Inverter mount	✓
Foundation	Ground screws with HDG corrosion protection ISO 1461 standart or concrete bored pile
Structure elements	Columns, beams - pre-galvanized steel profiles, grade S350GD + Z275-600g/m² Column bases - steel grade S235JR + HDG
Structure fixing hardware	Stainless steel or DELTA
PV module fixing hardware (for aluminium clamps)	Stainless steel A2-70
OPTIONALS	Foundation on ground screws
	Foundation for concreting
	Waterproofing and water drainage
	Lighting
	Vehicle impact protection
	Covering screws with metal caps
	Hot-dip galvanized coating (60 µ)
	Powder coatings RAL XXXX
	Designing a structure for a higher loads

MODEL W

Construction type

Y-Type (two rows)

Multiples of 4 parking spaces

4,3 kW

maximum DC power
per 1 parking space

10

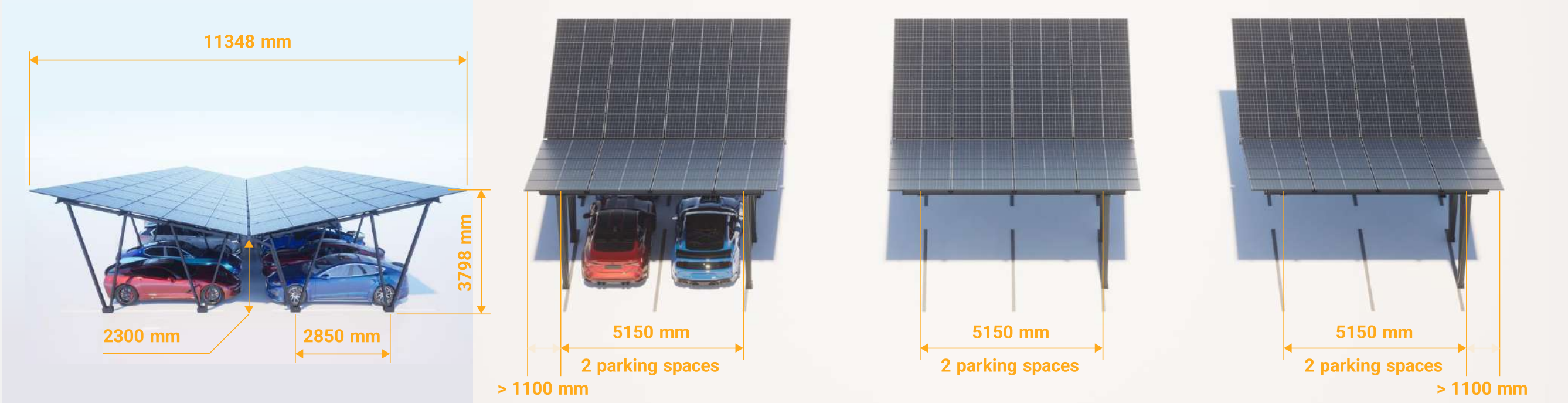
maximum number
of PVs per 1
parking space

2,5 x 5,3

parking
space (m)

10

years
warranty



Structural Parameters

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	Waterproofing and water drainage
	Lighting
	Vehicle impact protection
	Covering screws with metal caps
	Hot-dip galvanized coating (60 µ)
	Powder coatings RAL XXXX
	Designing a structure for a higher loads

MODEL W

Construction type

T-Type (two rows)

Multiples of 4 parking spaces

4,3 kW

maximum DC power
per 1 parking space

10

maximum number
of PVs per 1
parking space

2,5 x 5,3

parking
space (m)

10

years
warranty



Structural Parameters

PV dimensions	PV dimensions - 1722 mm x 1134 mm
PV layout	Horizontally 5 rows
Tilt angle	12 degrees
Snow load, wind load	Snow: 2.0 kPa / wind: 0.5 kPa - (higher loads possible)
Service life	25 years
Water proof	✓
Inverter mount	✓
Foundation	Ground screws with HDG corrosion protection ISO 1461 standart or concrete bored pile
Structure elements	Columns, beams - pre-galvanized steel profiles, grade S350GD + Z275-600g/m² Column bases - steel grade S235JR + HDG
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	Foundation for concreting
	Waterproofing and water drainage
	Lighting
	Vehicle impact protection
	Covering screws with metal caps
	Hot-dip galvanized coating (60 µ)
	Powder coatings RAL XXXX
	Designing a structure for a higher loads

SOLAR CARPORT W Model **TYPES**

Power of different types of carports (kWt)

L - type		
Parking spaces	PV	kWt
2	20	8,60
4	35	15,05
6	50	21,50
8	65	27,95
10	80	34,40
12	95	40,85
14	110	47,30
16	125	53,75
18	140	60,20
20	155	66,65
22	170	73,10
24	185	79,55
26	200	86,00
28	215	92,45
30	230	98,90
32	245	105,35
34	260	111,80
36	275	118,25
38	290	124,70
40	305	131,15
42	320	137,60
44	335	144,05
46	350	150,50
48	365	156,95
50	380	163,40

T(Y) - type		
Parking spaces	PV	kWt
4	40	17,2
8	70	30,1
12	100	43
16	130	55,9
20	160	68,8
24	190	81,7
28	220	94,6
32	250	107,5
36	280	120,4
40	310	133,3
44	340	146,2
48	370	159,1
52	400	172
56	430	184,9
60	460	197,8
64	490	210,7
68	520	223,6
72	550	236,5
76	580	249,4
80	610	262,3
84	640	275,2
88	670	288,1
92	700	301
96	730	313,9
100	760	326,8



L

type



- For the rows by the walls and fences of the parking lots

T

type



«**South**» design with peak electricity production in the midday

Y

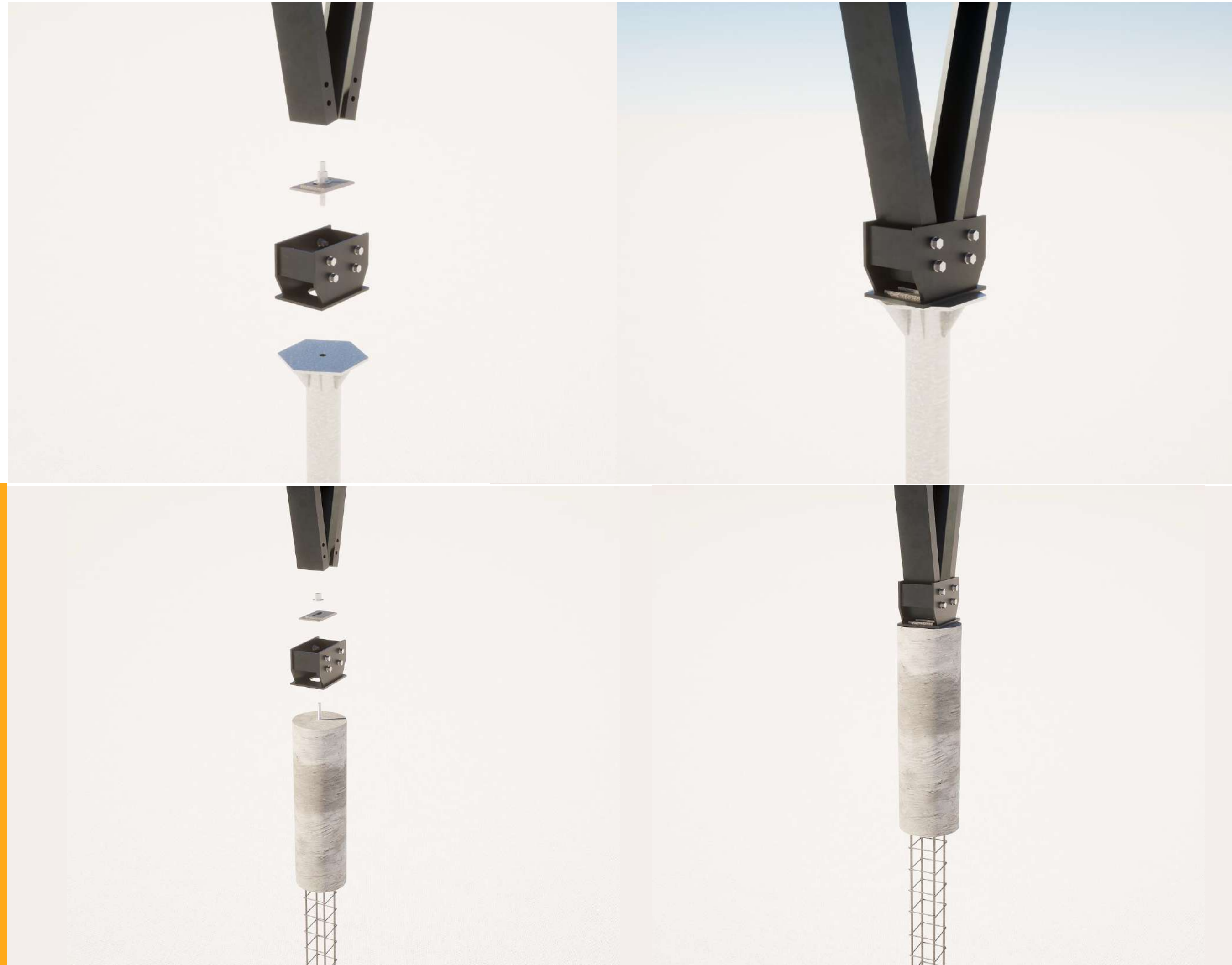
type



«**East-West**» design with plane daily electricity production

BASEMENT SOLUTIONS

**Provided by
Ground screws or
Concreted bored piles**



INSTALLATION SURFACE

**Asphalt
Concrete
Paving tiles
Soil**



RELIABLE AND SIMPLE WATERPROOFING SOLUTION

- along vertical gaps with anodized aluminum W 157x55 profiles
- along horizontal gaps with anodized aluminum Omega 37x20 profiles with a silicone seal

**An integrated drainage system
that fits harmoniously
into the design**



Water drainage
profile W 157x55

Omega 37x20 profiles with a silicone seal



WATER DRAINAGE SYSTEM

**The drainage system can be provided
as galvanized or PVC gutter, pipe and
additional elements**

**Drainage passes through the
columns of the carport:**


Budmat
Flamingo IQ



 **KROP**

CRASH PROTECTION

**Provided by
curb barrier placement**



INVERTER PLACEMENT

Cable lines installation



ELECTRICAL EQUIPMENT INTEGRATION

- LED strip for 24V color (glow)
4000 K in an aluminum case
- water protection class IP68
- power for 1 parking space 28.8 W
complete with a 220 V power supply

LIGHTING

**Lighting solution meets the
International Standard
DIN 67528**



COVERING OF SCREWS WITH METAL CAPS

**This ground screw decoration
is designed for parking lots
with a slope**



CONTACTS

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CERTIFICATES

ISO 9001:2015

certification

**EN 1090-1:2012
EN 1090-2:2018**

DIN EN ISO 3834-3

