### CONSTRUCTION ASSEMBLY INSTRUCTIONS DS-V6cN



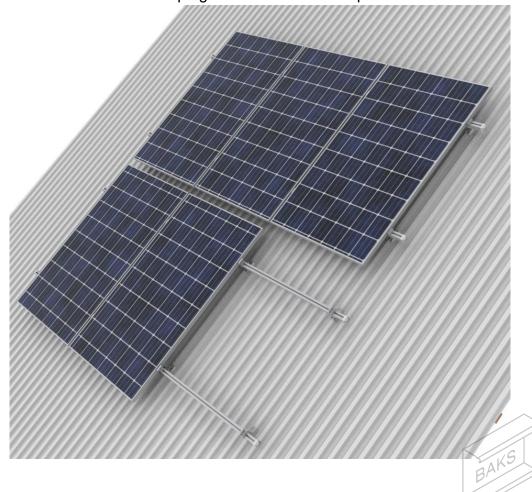
Manufacturer: BAKS – Kazimierz Sielski

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Poland

Construction for panels in a vertical arrangement (vertically). Mounted on a sloping roof covered with trapezoidal sheet.



#### 1. Necessary tools for assembling structures

- Allen key (ampoule) size 6
- Cordless screwdriver with speed and torque control
- Hexagonal bit, Allen size 6 for screwdriver head
- Combination spanners in sizes 13, 15, 17 mm,
- Ratchet wrench with sockets in sizes 13, 15, 17 mm,
- Extension 100-120mm for socket wrenches
- Rubber hammer
- UV-resistant roofing sealant
- Torque wrench, range 10-45 Nm

#### 2. General information:

- The possibility of using the structure in wind and snow zones in accordance with the following standards: EN 1991-1-3 and EN 1991-1-4.
- Before proceeding with the assembly of the structure, you should read the installation instructions for photovoltaic panels
- Minimum thickness of trapezoidal sheet not less than 0,5 mm
- Cutting elements is allowed only with low-speedreciprocating saws and hand saws with tools made of high quality steel, this avoids excessive heating of the material.
- The cut edges of components made of steel with zinc coating must be unconditionally protected sanded with sandpaper, cleaned and degreased again, after drying protect with zinc paste with a minimum of three layers.
- Avoid mounting pressure clamps in the extreme openings of mounting profiles
- SAM8x...E screws with NRM8F nuts should be tightened with a torque of 12-14 Nm
- SAM8x...E screws with NKWSM8A nuts should be tightened with a torque of 12-14 Nm
- When twisting the SGKFM8x20 and SGKFM10x20PV screws, hold the screw head with your handIn such a position that the planting is blocked on the walls of the hole in which we mount the screw, and then with the help of a screwdriver, tighten the screw slowly until it is blocked in the hole. In the final phase, tighten the screwdriver with the following torques: M8 22 Nm; M10 42 Nm.
- SSZ10x20E and SRM10x...F screws... tighten with 20 Nm torque



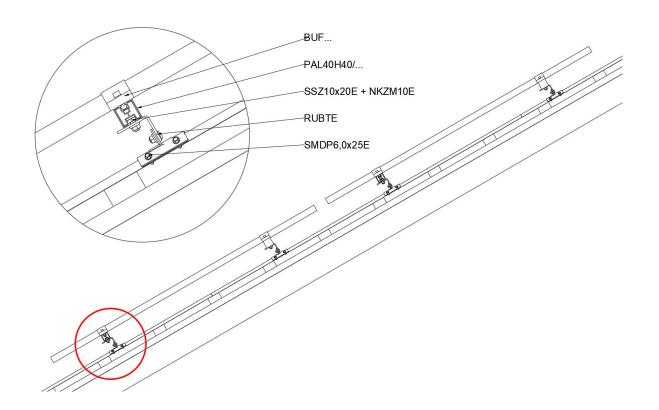
#### 3. Assembly of structures DS-V6cN

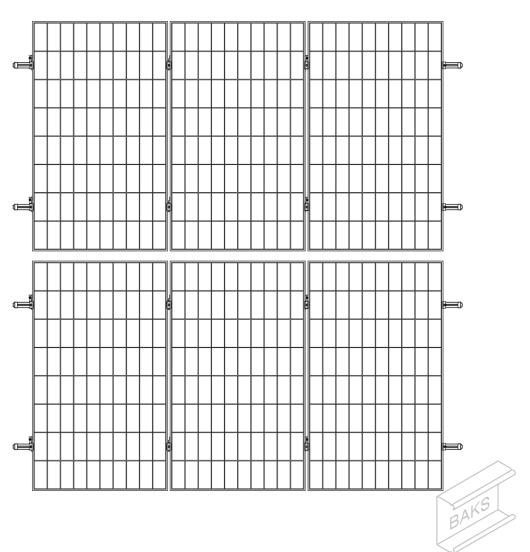
- Determining the position of the roof brackets on the edges, the support profile can protrude up to 300 mm behind the extreme handles.
- The edge of the PV panel must be at least 500 mm from the edge of the roof
- The spacing of subsequent brackets in the vertical axis depends on the mounting zones designated by the manufacturer of the panels used, in the horizontal axis should be mounted in a maximum of 1.2 m.
- All openings in the roof sheathing should be protected with UV-resistant roofing sealant
- **PUP** grounding pads should be placed in the mounting areas of **PUF** intermediate holders
- If there is an even number of modules in a single row of construction, grounding washers are mounted every second pair of modules
- In the case of an odd number of modules, **PUP** washers should be additionally added under the **PUF** handles to ensure grounding of the last module as well

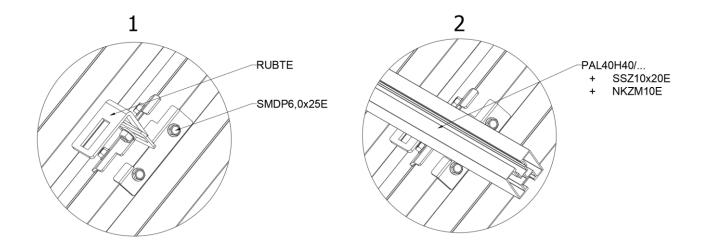
## 4. List of elements included in the DS-V6cN structure in the version on aluminum profiles PAL40H40

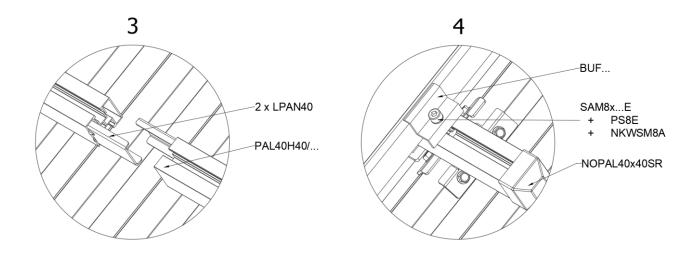
Nr	Name	Product symbol	Purpose in construction
1	Aluminium profile	PAL40H40/	Carrier profile
2	Connector	LPAN40	Aluminium profile connector
3	Adjustable bracket for trapezoidal sheet	RUBTE	Fastening the structure to the roof
4	Self-drilling screw	SMDP6,0x25E	Fastening the structure to the roof
5	Side handle	BUF	Side clamp fixing panels
6	Intermediate handle	PUF	Intermediate clamp fixing the panels
7	Grounding pad	PUP	Grounding of panels
8	Screw	SAM8xE	Clamp mounting screw
9	Sliding nut	NKWSM8A	Nut
10	Spring washer	PS8E	Washer
11	Screw	SSZ10x20E	Attaching the profile to the adjustable handle
12	Channel nut	NKZM10E	Attaching the profile to the adjustable handle

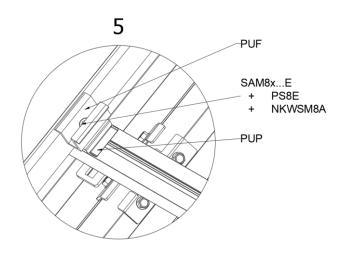














# 5. List of components included in the DS-V6cN design version with alternative profiles, CWP40H35 and PAL30H32

Nr	Name	Product symbol	Purpose in construction
1	Ceownik	CWP40H35/MC	Carrier profile
2	Channel	LC40H35MC	Channel connector
3	Adjustable bracket for trapezoidal sheet	RUBTE	Fastening the structure to the roof
4	Self-drilling screw	SMDP6,0x25E	Fastening the structure to the roof
5	Side handle	BUF	Side clamp fixing panels
6	Intermediate handle	PUF	Intermediate clamp fixing the panels
7	Grounding pad	PUP	Grounding of panels
8	Screw	SAM8xE	Clamp mounting screw
9	Channel Nut	NRM8F	Nut
10	Spring washer	PS8E	Washer
11	Mushroom head screw	SGKFM	Bolt + flange nut

- Aluminium profiles PAL30H32 can be used in 1 wind zone and 1, 2, 3 snow zones
- Spacing of supports not more than 0.8 m

Nr	Name	Product symbol	Purpose in construction
1	Aluminium profile	PAL30H32/	Carrier profile
2	Connector	LPAN30	Aluminium profile connector
3	Adjustable bracket for trapezoidal sheet	RUBTE	Fastening the structure to the roof
4	Self-drilling screw	SMDP6,0x25E	Fastening the structure to the roof
5	Side handle	BUF	Side clamp fixing panels
6	Intermediate handle	PUF	Intermediate clamp fixing the panels
7	Grounding pad	PUP	Grounding of panels
8	Screw	SAM8xE	Clamp mounting screw
9	Sliding nut	NKWSM8A	Nut
10	Spring washer	PS8E	Washer
11	Screw	SSZ10x20E	Attaching the profile to the adjustable handle
12	Channel Nut	NKZM10E	Attaching the profile to the adjustable handle

