

DNHKE-WZ CONSTRUCTION ASSEMBLY INSTRUCTIONS



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Steel structure for flat roof in anchored version.

Mounting of PV panels in a horizontal arrangement (horizontally).



1. Necessary tools for assembling the structure

- Allen spanner (ampoule spanner) size 6
- Cordless screwdriver with speed and torque control
- Hexagon socket wrench, hexagon size 6 for screwdriver head
- Combination spanners in sizes 13, 15, 17 mm
- Ratchet spanner with sockets in sizes 13, 15, 17 mm
- Extension piece 100-120mm for socket spanners
- Rubber mallet
- Torque spanner, range 10-45 Nm

2. General information:

- Structures can be used in wind and snow zones in accordance with the following standards: **EN 1991-1-3** and **EN 1991-1-4**
- **Before assembling the structure, please read the installation instructions for the photovoltaic panels.**
- Ballast values and locations to be determined individually by the authorized constructor
- Tighten **SAM8x...E** screws and **NKZM8E** nuts to a torque of 12-14 Nm.
- When tightening the **SGKFM8x20** and **SGKFM10x20PV** screw, hold the head of the screw in such a position that the underlay is blocked on the walls of the hole in which the screw is installed, and then, using a screwdriver, tighten the screw slowly until it is blocked in the hole. At the final stage, tighten the screw with the screwdriver successively with a torque of: M8 - 22 Nm; M10 - 42 Nm
- Tighten **SRM10x...F** screws to a torque of 20 Nm



3. Summary of components of the DP-DNHKE-WZ construction

| No. | Product | Name of product | Designation in construction |
|-----|--|-----------------|---|
| 1 | Support Channel | CMP41H41/...MC | Support profile |
| 2 | Bottom holder | UPDMC | Panel support |
| 3 | Top holder | UPG...MC | Panel support |
| 4 | Side holder | BUFK... | Side panel mounting clamp |
| 5 | Middle holder | PUFK | Middle clamp for mounting the panels |
| 6 | Vibration-insulating rubber | SBV... | Separation between the elements of the substructure between support structure elements and roof sheathing |
| 7 | Mushroom head screw | SGKFM... | Screw + flange nut |
| 8 | Anchor | PSRM10x90F | Example of an anchor to fix a structure |
| 9 | Screw with rhomboid nut | SRM10x30F | Mounting of UPG and UPDC holders |
| 10 | Channel base with vibration isolating rubber | PC50P | Prevents pressing of the steel profiles endings against the roof sheathing |
| 11 | Grounding washer | PUPK | Panel grounding |
| 12 | Protective cap | NOWPAL40x40SR | Protects steel profiles endings |

4. Assembly of DP-DNHKE-WZ structure

The A and B dimensions (dimension B is the module length + 20mm) depend on the size of the modules to be fitted. This must be determined by physically fitting the module onto the mounted UPG...MC and UPDMC holders.

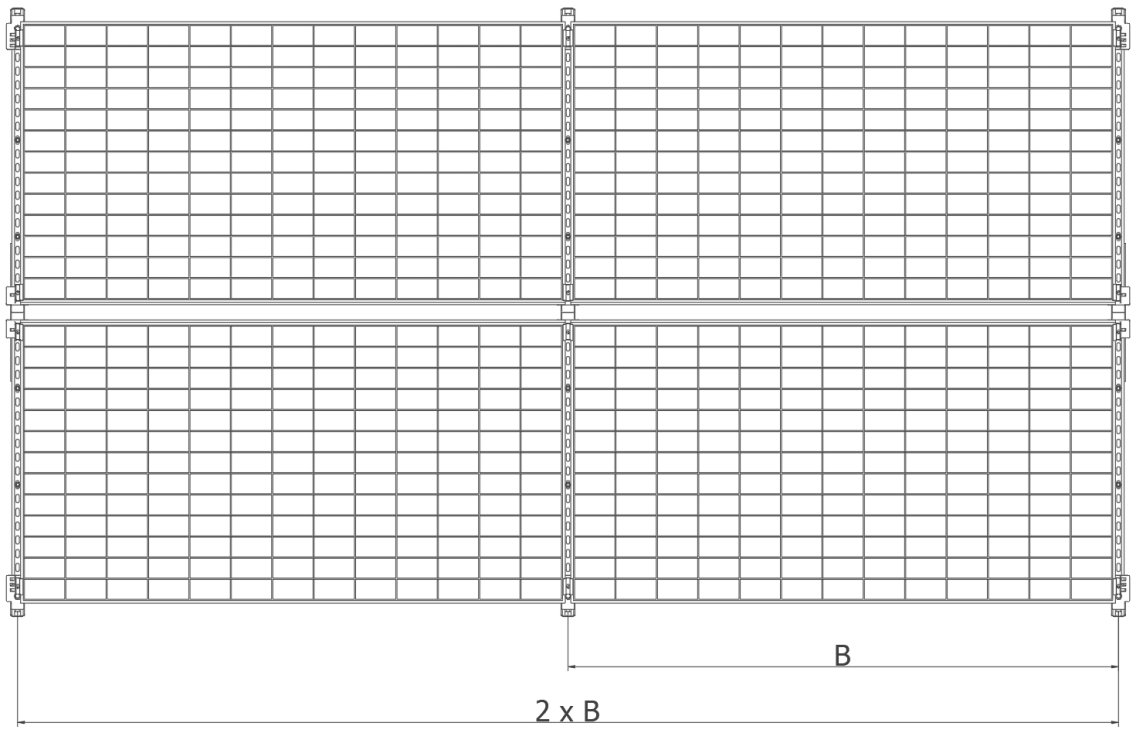
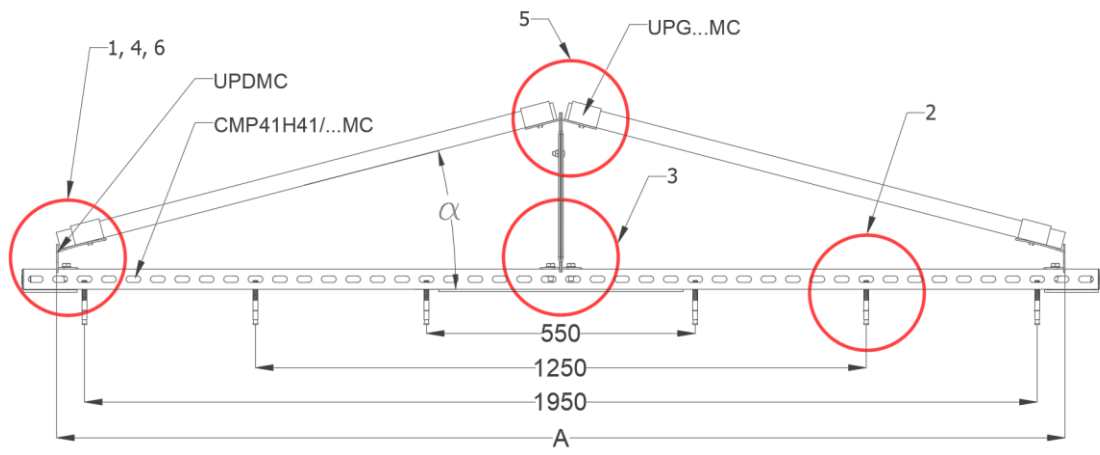
The maximum size of modules that can be correctly mounted on a DP-DNHKE-WZ structure is: 2100mm long x 1150mm wide (to be verified with module manufacturer)

Grounding washers of the PUPK type should be placed at the mounting points of the PUFK middle holders.

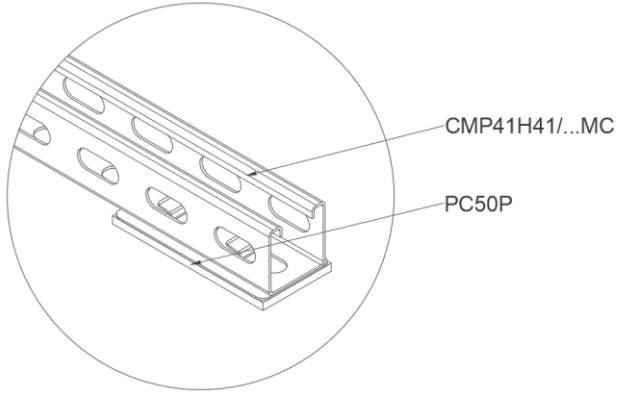
Where there are an even number of modules in a single row of construction, grounding washers are fitted every second pair of modules.

In the case of an odd number of modules, grounding washers must additionally be added under the extreme PUFK holders to ensure that the last module is also grounded.

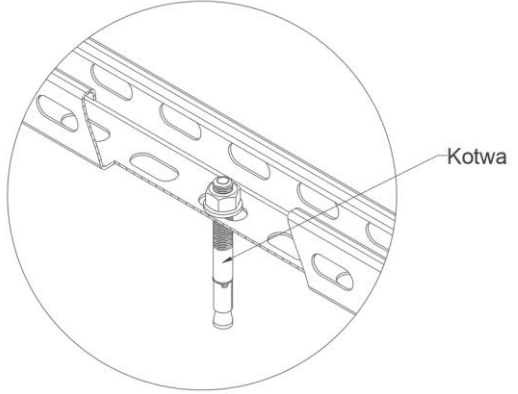




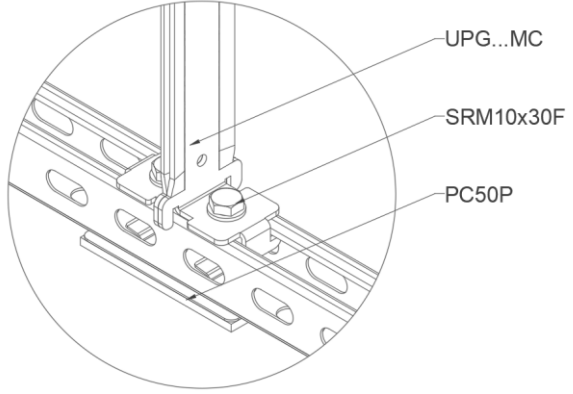
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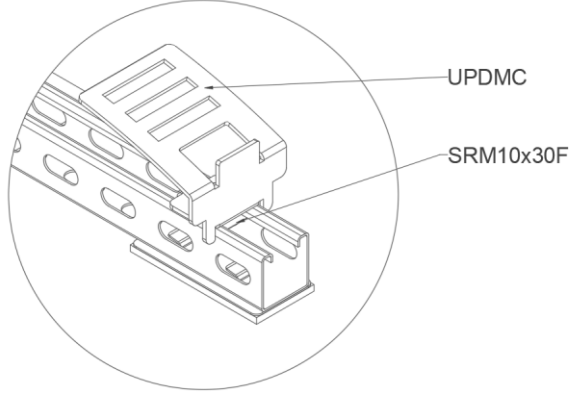
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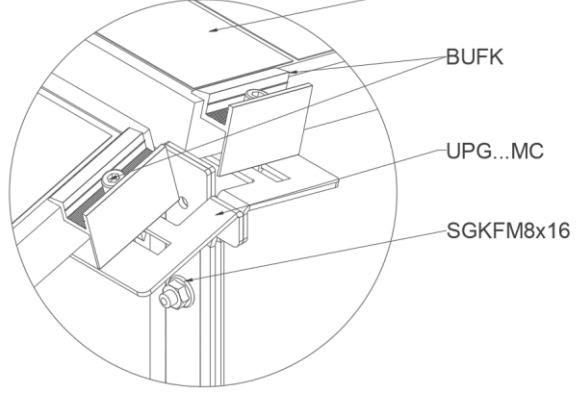
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