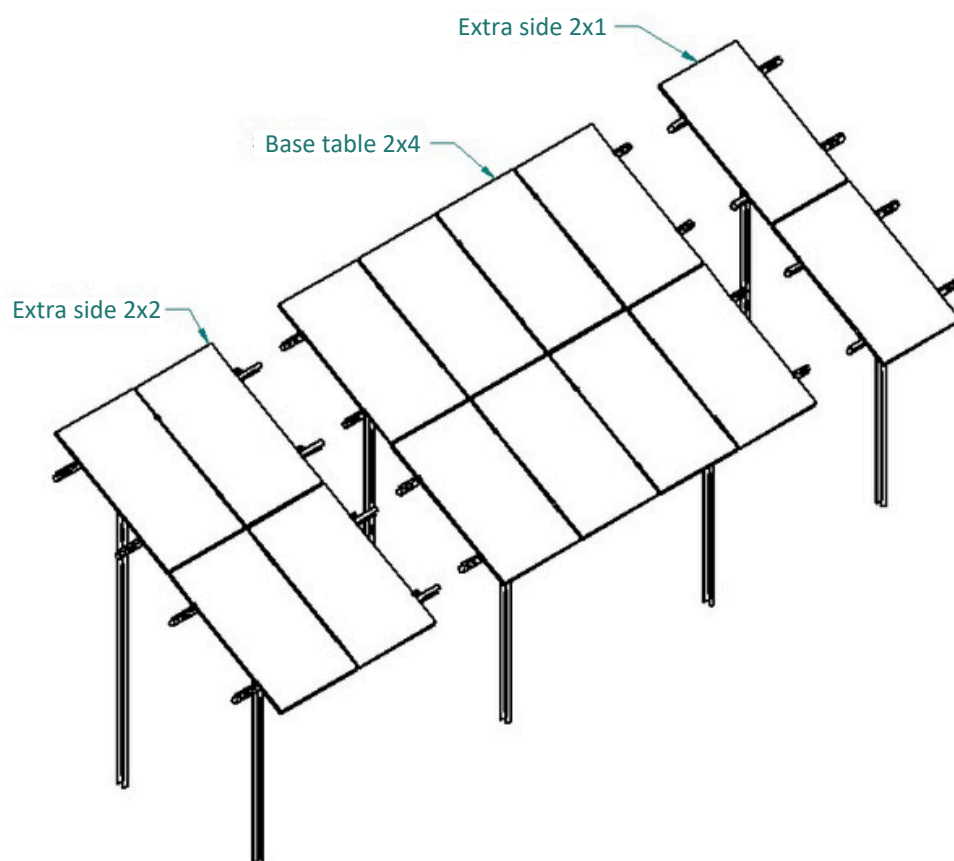


*Assembly Instructions for Universal Structures  
for Photovoltaic Panels V2-C-U.  
Roof Pitch - 30°*



**CONSTRUCTION V2-C-U**



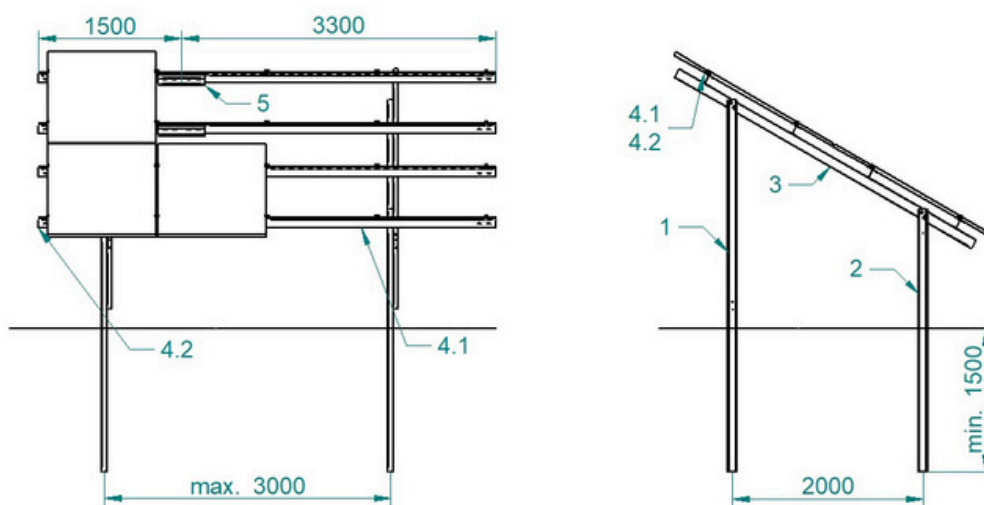
Zestawienie elementów:

Lp.	Name	Element colors	Profile	Lenght [mm]
1	NT01-2,5-3900 – back leg	Blue	C15-60-100-60-15	3900
2	NP01-2,5-2750 – front leg	Blue	C15-60-100-60-15	2750
3	KR03-2,5-4000 (panels from 2200 to 2500)	Red	C15-50-100-50-15	4000
4.1	Pł01-1,5-3300 – purlin (panels up to width 1225)	Green	C15-60-100-60-15	3300
4.2	Pł01-1,5-3300 – purlin (panels up to width 1225)	Green	C15-60-100-60-15	1500
4.3	Pł02-1,5-2700 – purlin (panels up to width 1225)	Green	C15-60-100-60-15	2700
4.4	Pł03-1,5-1200 – purlin (panels up to width 1225)	Green	C15-60-100-60-15	1200
5	LC-3,0-250 – connector	-	L90x45	500
6	ZS01-1,5-2230 – strut	Yellow	C15-50-100-50-15	2230
7	ZS02-1,5 – back strut	-	L55x30	3650

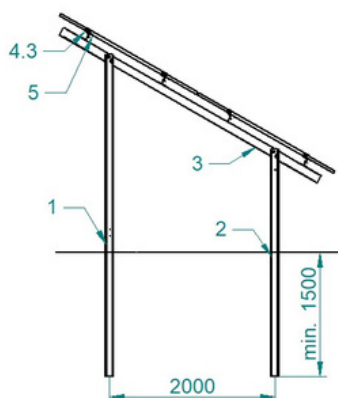
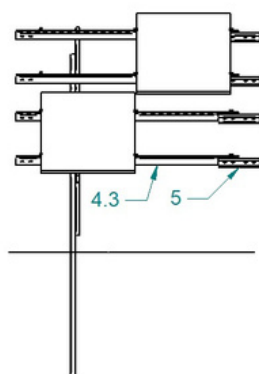
Purlin	
Rafter	
Front leg / back leg	

<p>Connectors</p>	
<p>Strut</p>	

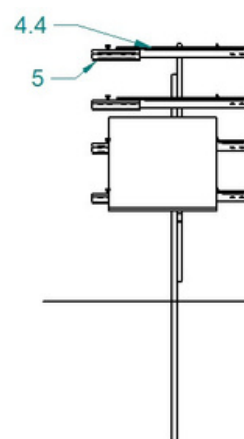
Base table 2x4



Extra side 2x2



Extra side 2x1



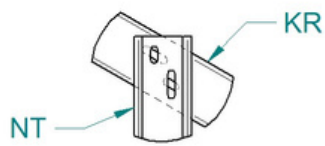
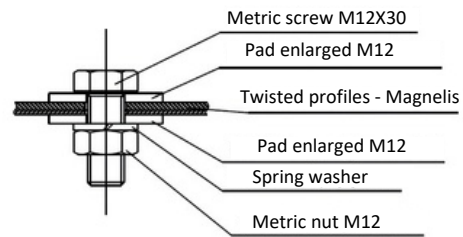
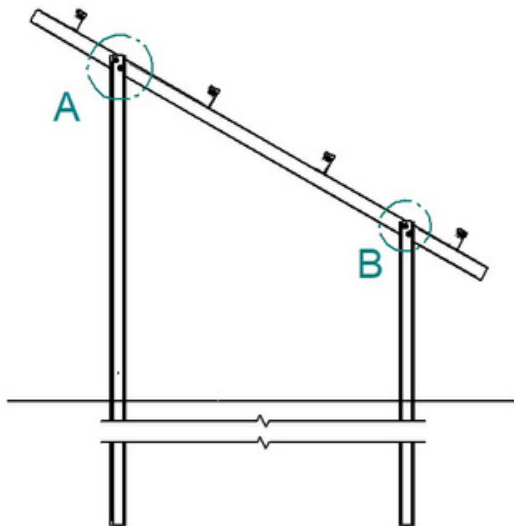
Installation sequence:

1. Determine the main axes of the structure.
2. Mark the axes in a permanent way, using rods, pins, routing cords.
3. When using extensions, the main frames of the structure should be spaced evenly.
4. Drive the first row of supports (NT) to a depth of 1.5m, taking into account the unevenness of the terrain.
5. Verify the permissible deviations for the supports.
6. Drive the next row of supports (NP), remembering to maintain perpendicularity between the front and rear supports.
7. Pre-install rafters (KR) and stirrups (ZS) on supports, if any.
8. Adjust the alignment of the rafters.
9. Pre-install purlins (P<sup>3</sup>) on the rafters. Connect the purlins with the LC-500 connector. If the purlins are too long, cut the purlins on the extensions, not on the base tables (if you cut the purlins in the base tables, it will not be possible to connect the base table to the extension).  
Tighten all bolted connections to the required torque.
10. Required bolt torques:
  - M8: 10 – 13 Nm (installation of middle and end clamps)
  - M10 – 29 Nm
  - M12 – 55 Nm

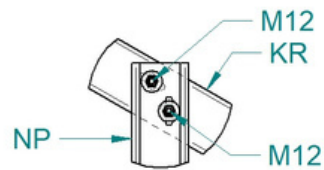
**IMPORTANT:**

- In the base table, the purlin must not extend more than 90 cm beyond the leg.
- In the case of sandy soil with a pullout force of less than 12kN the legs should be concreted

Installing the rafters to the legs - the version without a brace

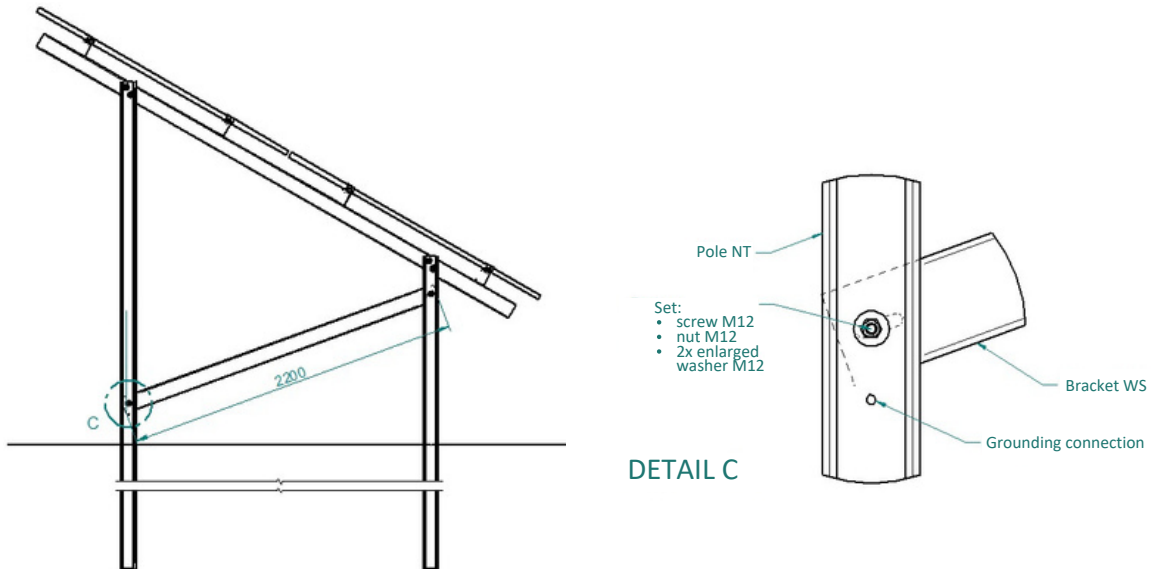


DETAIL A  
View of connection without screws

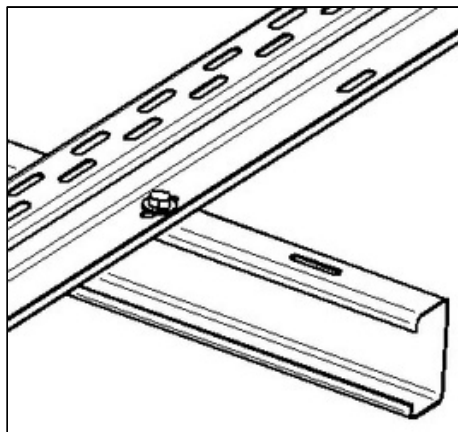


DETAIL B

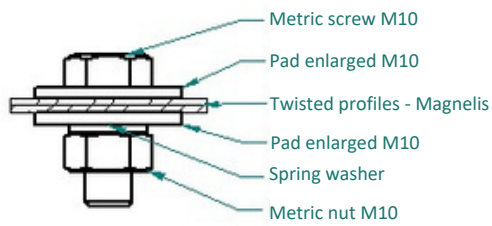
Installing the rafters to the legs - bracketed version



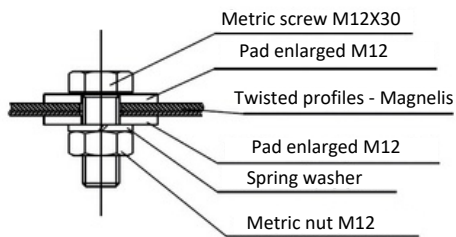
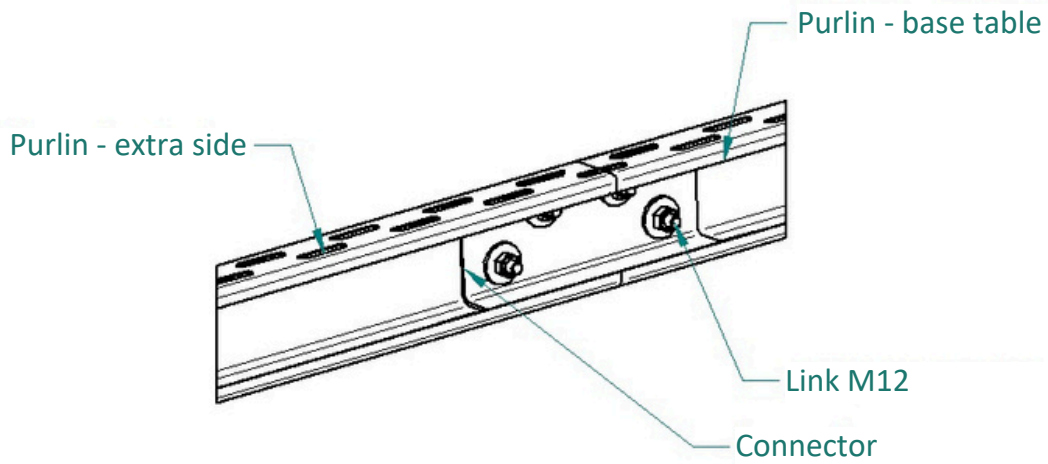
Installation of purlins to rafters



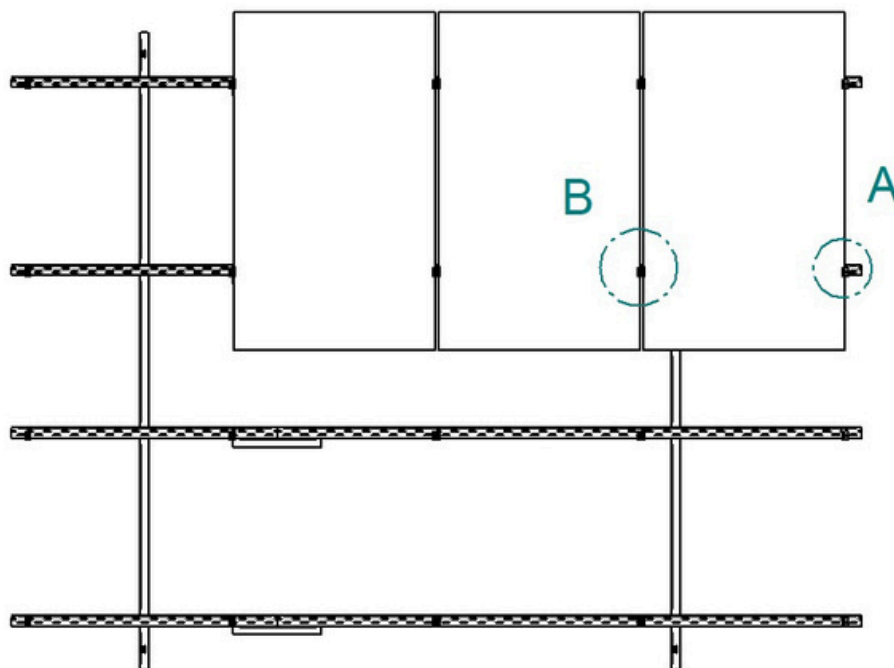
Connecting profiles



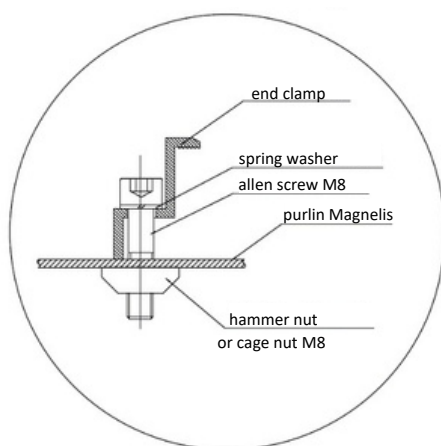
Joining the purlins of the base table and the extensions



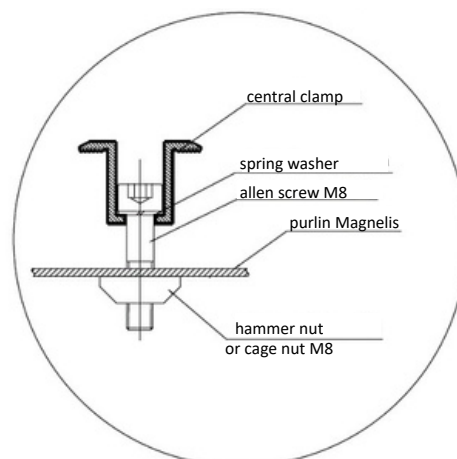
Installation of photovoltaic panels



DETAIL A (1:10)  
installation of the end clamp

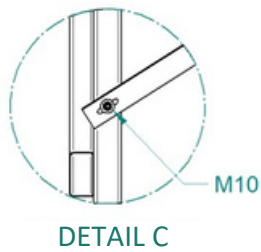
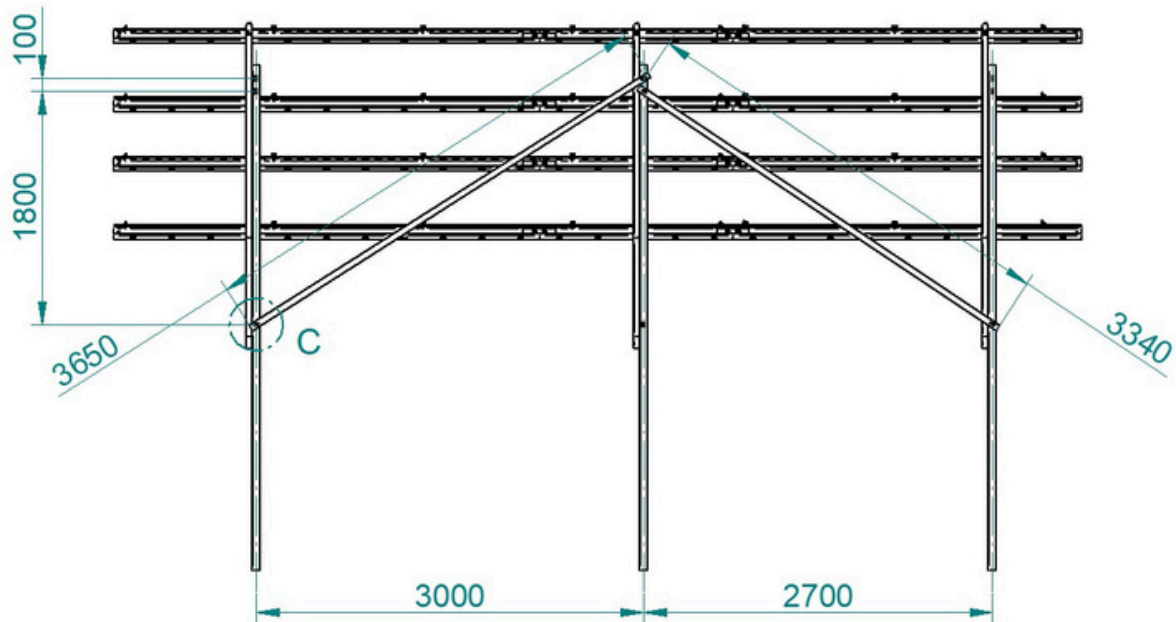


DETAIL B (1:10)  
installation of the central clamp





Stiffening braces made of angle iron



The angle bar has been prepared for frame spacing of 3.0m, 2.7m, 2.4m.  
The profile should be cut to the appropriate length.