



## **ASSEMBLY INSTRUCTIONS**

Solar carport

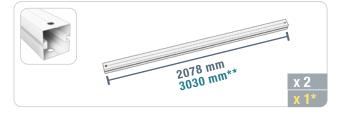
SP40/5-1 | SP40/5-1A | SP40/5-1W | SP40/5-1AW SPG5 | SPG5-A | SPG5-W | SPG5-AW SPG | SPG-A | SPG-W | SPG-AW



## PARTS LIST

#### A Support post 1

**B** Support post 2





#### **D** Support post 4

#### C Support post 3



3195 mm 3972 mm\*\* x 2 x 1\*

#### ${\bf E}$ Longitudinal beam

F Base





### ${\bf G}$ M16 x 130 hexagon head screw



### H Cross beam



#### I Cross beam clamp



#### J Cross clamp



Quantity for an extension \*\* Quantity and dimensions for SPG-W, SPG-AW, SP40/5-1W, SP40/5-1AW, SPG5-W, SPG5-AW

# K Longitudinal beam with rain gutter (short / long) 00 mm 5800 mm

#### M Solar module





#### 0 Center clamp



L Rain gutter connection

N Outer clamp



#### ${\bm Q}$ Rain gutter

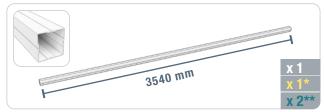


#### S Bracket for square profile (R)



#### R Square profile

P Ground clamp



T Cover for longitudinal beam (E)



\*\* Quantity and dimensions for SPG-W, SPG-AW, SP40/5-1W, SP40/5-1AW, SPG5-W, SPG5-AW

#### U Electrical cabinet

x 1

#### V LED light



#### W Motion detector

#### X Ground spike





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For the installation instructions for the extensions, see page 10.

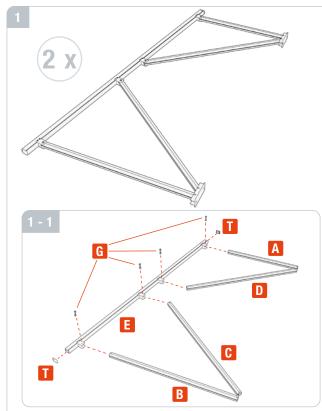


Before setting up the carport, it must be ensured that the location has a level and stable ground condition. After installation, the carport must be fixed to the ground. It must be ensured that the ground is suitable for anchoring.

Wear suitable personal protective equipment (PPE) such as safety shoes, gloves, helmet and safety goggles during assembly.

\* Quantity for an extension \*\* Quantity and dimensions for SPG-W, SPG-AW, SP40/5-1W, SP40/5-1AW, SPG5-W, SPG5-AW

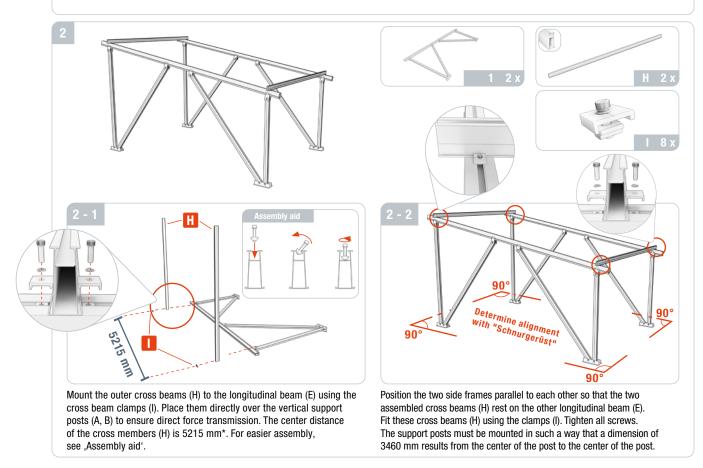
### ASSEMBLY BASE FIELD



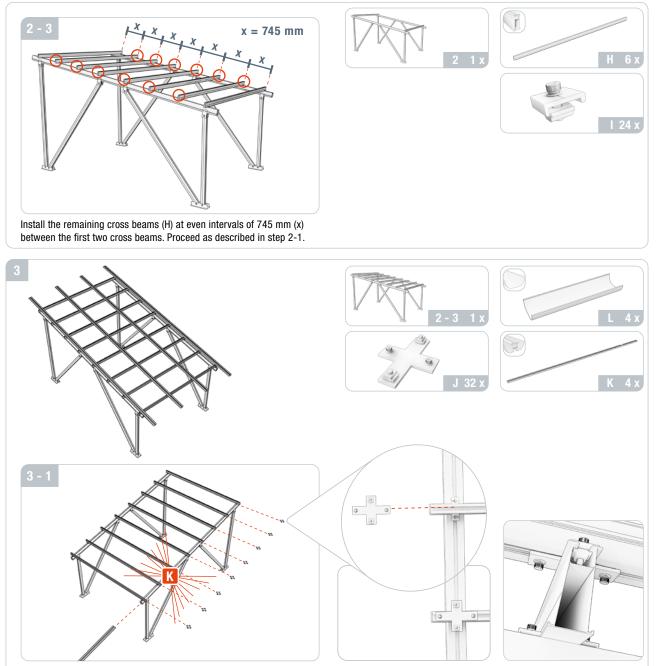
Place the aluminum profiles for the side frame on the ground. Attach the support posts (A, B, C, D) to the longitudinal beam (E). Use the enclosed M16 x 130 hexagon head screws (G) for this and tighten them hand-tight. Fit the covers (T) onto the ends of the longitudinal beams (E).



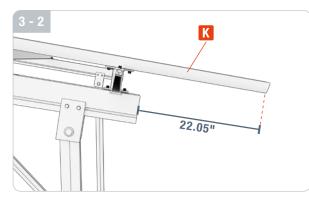
Attach the bases (F) to the free ends of the support posts (A, B, C, D). Use the enclosed M16 x 130 hexagon head screws (G) for this.



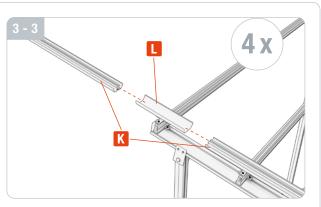
\* Measured from the center of the post to the center of the post



Insert the long side of the cross clamps (J) into the cross beams (H). Guide the long side rail piece (K) through the mounted cross clamps. Slide the longitudinal beam with rain gutter (K) from below into the upper area of the carport.



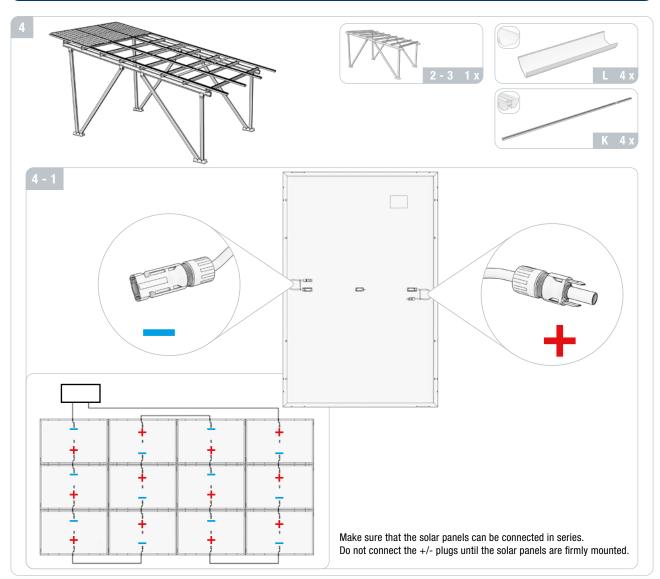
The longitudinal beams with gutter (K) should protrude 22.05" at the deep end of the carport. Align the first outer longitudinal beam with rain gutter (K) with the end of the cross beam and fit the 3 other long longitudinal beams with rain gutters (K) pieces according to the width of the solar panels. Tighten the hexagon socket screws of the cross clamps (J) in alignment with the cross beams for each longitudinal beam.

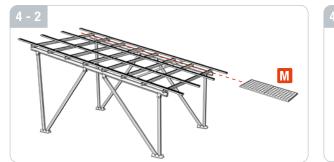


Connect the longitudinal beam with rain gutter (K) to the connecting piece (L). Slide the short and long piece of the longitudinal beam with rain gutter (K) onto the connecting piece (L). Repeat this process for all longitudinal beams with rain gutter (K). Tighten the hexagon socket screws of the cross clamps (J) in alignment on the cross beams for each longitudinal beam.



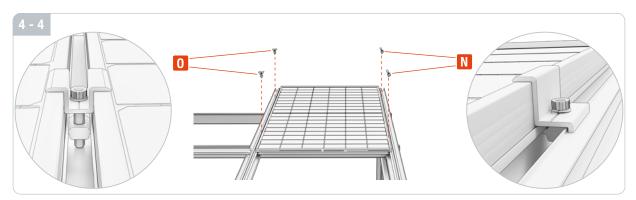
When attaching the solar modules, it is advantageous to slightly loosen one of the middle longitudinal beams with rain gutter (K+L) again in order to have more room for maneuver during installation. Make sure that the longitudinal beams with rain gutter (K+L) cannot slip out.



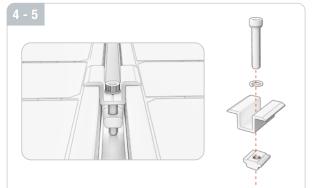


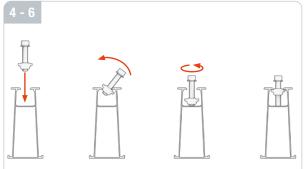


Slide the first solar module (M) from bottom to top onto the longitudinal beams with rain gutter (K). Align the inner longitudinal beam according to the width of the solar module and tighten the cross clamps (J) firmly.

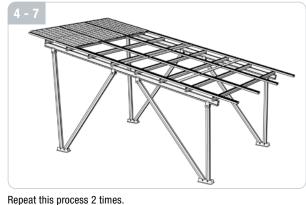


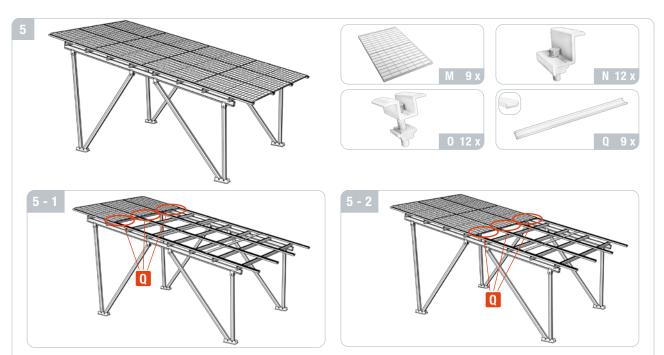
Attach the solar panel to the outer longitudinal beams with rain gutters (K) using the outer clamps (N). Fasten the solar panel with the center clamps (0), see step 4-5.



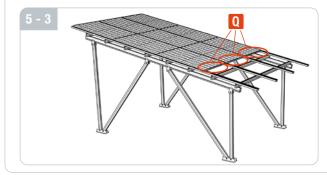


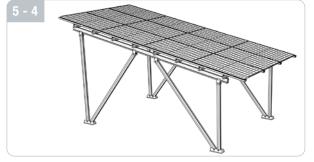
Install the center clamps (0) as shown in the illustration.

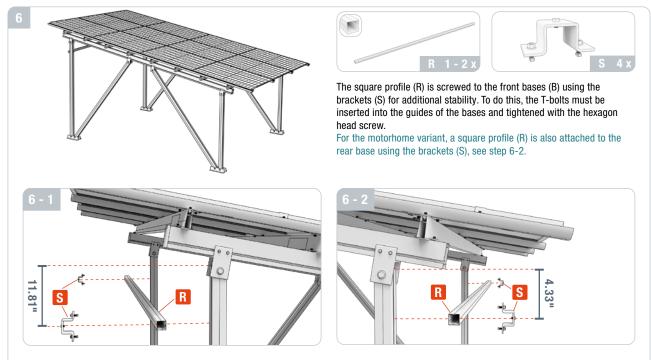




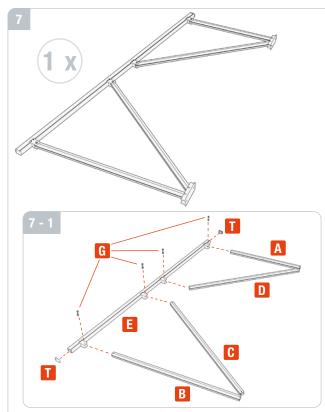
Align the upper longitudinal beams with rain gutter (K) parallel again. After each row, insert three rain gutters (Q) at right angles to the longitudinal beams by carefully lifting the solar panels and sliding the rain gutters (Q) underneath. Tighten the clamps (N+0).



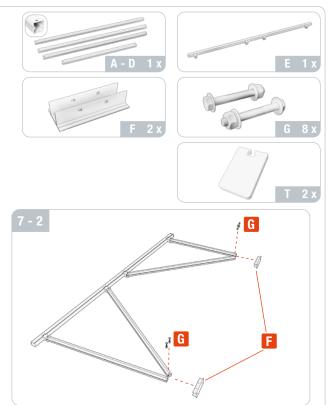




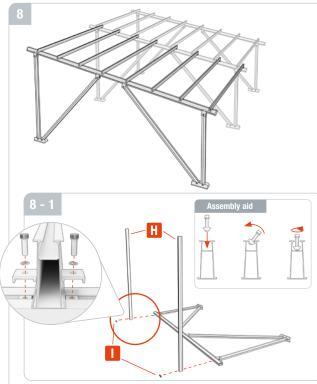
## ASSEMBLY EXTENSION



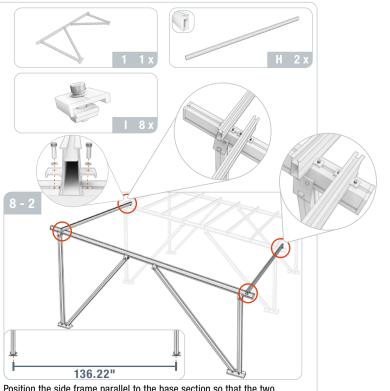
Place the aluminum profiles for the side frame on the ground. Attach the support posts (A, B, C, D) to the longitudinal beam (E). Use the enclosed M16 x 130 hexagon head screws (G) for this and tighten them hand-tight. Fit the covers (T) onto the ends of the longitudinal beams (E).



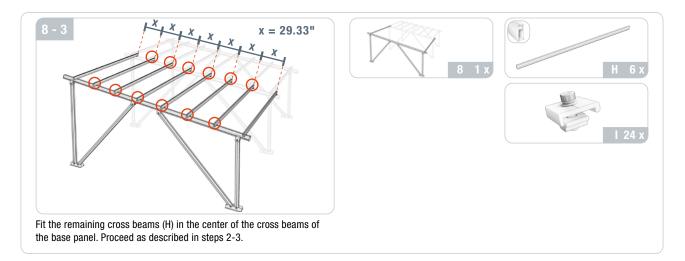
Attach the bases (F) to the free ends of the support posts (A, B, C, D). Use the enclosed M16 x 130 hexagon head screws (G) for this.



Mount the outer cross beams (H) to the longitudinal beam (E) using the cross beam clamps (I). Position them 5.91" offset to the vertical support posts (A, B) so that they can be mounted next to the cross beams of the already assembled carport.

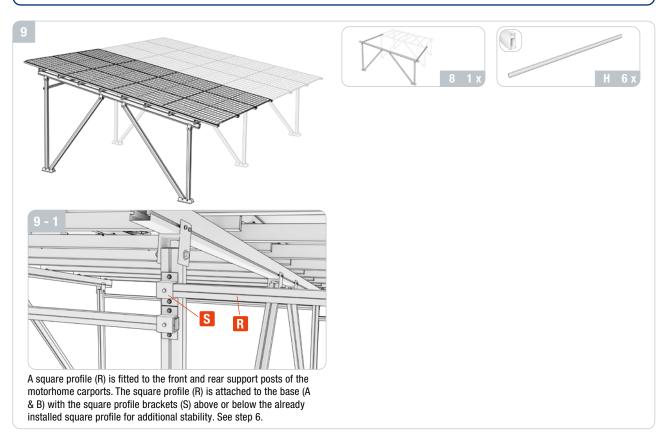


Position the side frame parallel to the base section so that the two mounted cross beams (H) rest on the other longitudinal beam (E). The rear cross beam is placed behind the last cross beam (H) of the base section. Fit the cross beams (H) using the clamps (I). Tighten all screws.

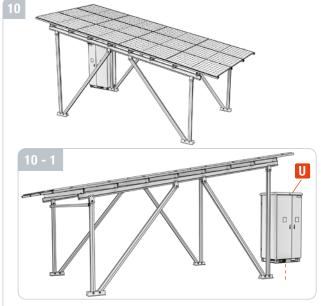


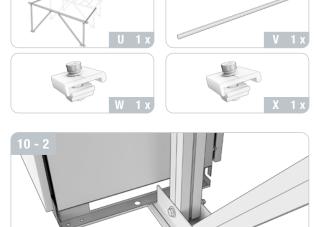
G

All other steps can be derived from the installation steps for the base field. See page 6, from step 3.



## ASSEMBLY OF ELECTRIC CABINET, LED LIGHT AND GROUND SPIKE

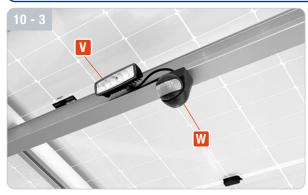




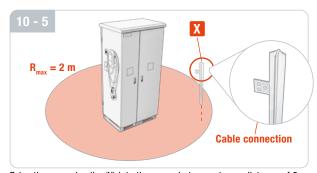
Position the electric cabinet (U) on one of the outer posts (A or B).

Attach the bases (F) to the free ends of the support posts (A, B, C, D). Use the enclosed M16 x 130 hexagon head screws (G) for this.

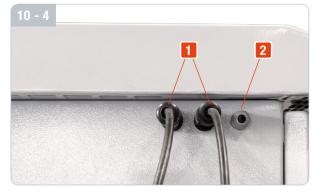
- You can flexibly select the position of the LED light and the motion detector.
- The LED light, motion detector and power cable are located inside the electric cabinet.
- De-energize the electric cabinet before assembly of the LED light.



- 1. Find a suitable position on one of the cross beams of the carport to install the light and motion detector.
- 2. Before assembly, check whether the 6 m cable is long enough to pull it from the electric cabinet to the desired position.
- 3. Screw the U-profile to the mounting position of the LED light.
- Attach the motion detector in the immediate vicinity of the U-profile.
- Screw the light to the U-profile. You can choose the desired beam angle yourself.
- 6. Lay the power cable over the cross beams to the electric cabinet.



Drive the ground spike (X) into the ground at a maximum distance of 2 m from the electric cabinet. Attach the cable to the upper end.



Plug in the cables of the solar modules and the power cable of the light once assembly is complete. Plug the cables of the solar modules into 1 and the cable of the light into connection 2.



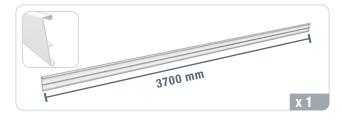
Connect the other end of the cable to the equipotential bonding bar. This can be found inside the electric cabinet.

## PARTS LIST - RAIN GUTTER

#### A Rain gutter brackets



 $\boldsymbol{C}$  Rain gutter - upper part



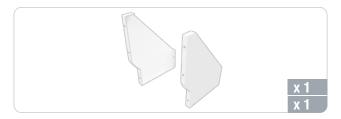
#### **B** Rain gutter - lower part



#### **D** Rain gutter clamp



#### E Side panels left / right



#### F Water collection container



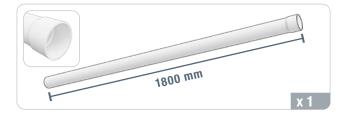
#### ${\bf G}$ Downpipe bend $65^\circ$







#### J Downpipe



#### I Downpipe intermediate piece



#### K Pipe clamp



## **SERVICE & CONTACT**

Contact our product experts and find help and solutions for your product. Here you will find all contact information listed by country and language: <u>www.topregal.co.uk/en/service</u>

Responsible for the content: TOPREGAL GmbH Industriestrasse 3 70794 Filderstadt GERMANY www.topregal.com

