SOLARBLOC®

PRETENSADOSDURÁN

SOLAR FARMS

H-S/18

PIONEERS IN INNOVATION AND DEVELOPMENT OF CONCRETE STRUCTURES FOR SOLAR PANELS.

www.solarbloc.es
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SOLARBLOC® H-S/18 FOUNDATION AND STRUCTURE FOR SOLAR FARMS

The new and patented structure SOLARBLOC® H-S/18 has been developed to replace and simplify our previous block for solar farms.

As for all our SOLARBLOC® supports and structures, the main objective is to ease the installation, shorten the execution time and lessen the necessary components for the installation of photovoltaic modules.

FEATURES

1st | *SOLARBLOC® H-S/18* is a large format model intended for the construction of solar farms. It allows the fixation of the panel directly **avoiding the need for foundation or driving.**

2nd | The *SOLARBLOC®* range can be distinguished by being made of **high-density concrete that resists** chemical and weathering agents. All this equips the blocks with a great durability.

3rd | Each *SOLARBLOC® H-S/18* structure weights 560 kg. This weight is needed to counter the wind and external agents' effects. SOLARBLOC® H-S/18 **relies on a low gravitational centre to provide stability** for all the block and this way consider it as a superficial foundation.

4th | **Installation is immediate** thanks to the new *SOLARBLOC® H-S/18*. The SOLARBLOC® blocks are unloaded from the lorry and placed into the final site, ready to fix the modules with their anchoring.

5th | As well as the rest of our products, *SOLARBLOC® H-S/18* **includes** concrete **rails for fixing the modules using standardised screws.** This SOLARBLOC® model is made in four different inclination degrees (15º, 20º, 25º and 30º).

6th | *SOLARBLOC® H-S/18* counts on two cross openings to be manipulated by means of a forklift **at no risk.**

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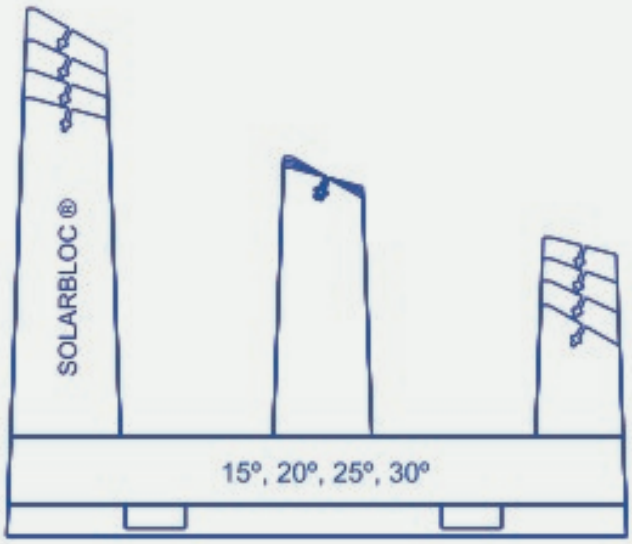
EASY TO ASSEMBLE

SOLARBLOC® H-S/18 allows to build tables composed of two modules in horizontal positioning. This enables to optimise the space and minimise the shaded areas.

ASSEMBLY INSTRUCTIONS AND FEATURES.

1st Choose the SOLARBLOC® H-S/18 structure with the proper inclination.

SOLARBLOC® H-S/18 structures are manufactured in four different degrees: **15º, 20º, 25º and 30º.** The right inclination of the support should be chosen considering the installation requirements.



2nd Prepare and mark the working zone.

Once the angle has been chosen, it is necessary to know and prepare the surface where the SOLARBLOC® H-S/18 are going to be placed.
The surface where SOLARBLOC® H-S/18 will be placed should be as flat as possible. For this reason, it is necessary to know the height differences between the different SOLARBLOC® H-S/18 blocks to pose the required actions in the surface or over the attachment fittings of the modules.

The separation among SOLARBLOC® H-S/18 structures will be different depending on the module proportions.

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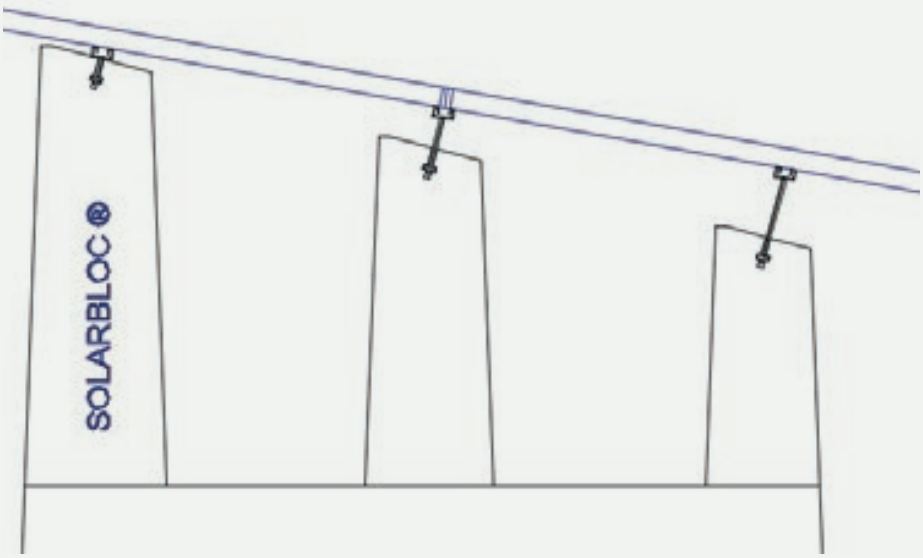
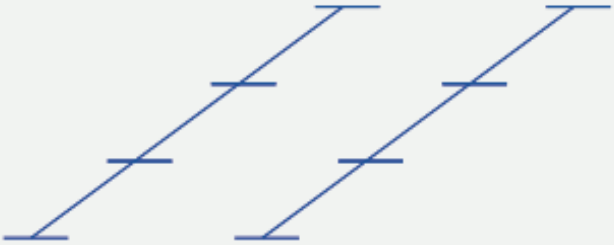
SOLARBLOC® H-S accepts a height difference among supporting plans of 4% the length of the module, with no need to level the attachment fittings of the modules.



The attachment fittings of the modules will be levelled by levelling screws in surfaces with changes in the plans of supporting points of every SOLARBLOC® H-S/18 piece.

Mark the placement of each SOLARBLOC® H-S/18 and measure the height differences that will be present at each structure baseline. This is needed to determine the actions that will be carried out before the final positioning of the structures depending on the tolerance. These actions will take place over the surface o later over the attachment fittings.



For this step, it is advisable to make a template or matrix with the required separation depending on each structure. This template will be used hereinafter for the placement in situ of each SOLARBLOC® H-S/18.

3rd Place SOLARBLOC® H-S/18 structures on the established areas.

The structures weight around 560kg. SOLARBLOC® H-S/18 blocks are delivered by lorry **with pieces crossed to distribute the load weight.** For unloading and placing on site, one forklift is enough.

3.1. Support manipulation

1. **Move the structures** to the chosen place at ground level.
2. Place the structures forming **rows depending on the established** setting out.

We can use a template or matrix with the necessary separation among each support. With this tool, the final placement of the structures SOLARBLOC® H-S/18 is made faster and more accurate.

It is advisable to make the final positioning with the SOLARBLOC® H-S/18 structures being suspended by slings to obtain greater precision in the positioning step.

Attach all the SOLARBLOC® H-S/18 with a setting out string by the central pillar rail will be useful to visually verify the levelling and the alignment. **(Follow the steps outlined in the document Assembly Guidelines.)**

4th Mount the fittings to the SOLARBLOC® H-S/18 structure to fix the solar panels.

After positioning the SOLARBLOC® H-S/18 blocks, the modules attachment fittings should be mounted over the concrete rails of the structure.

Each SOLARBLOC® H-S/18 structure relies on two side pillars and a central pillar:

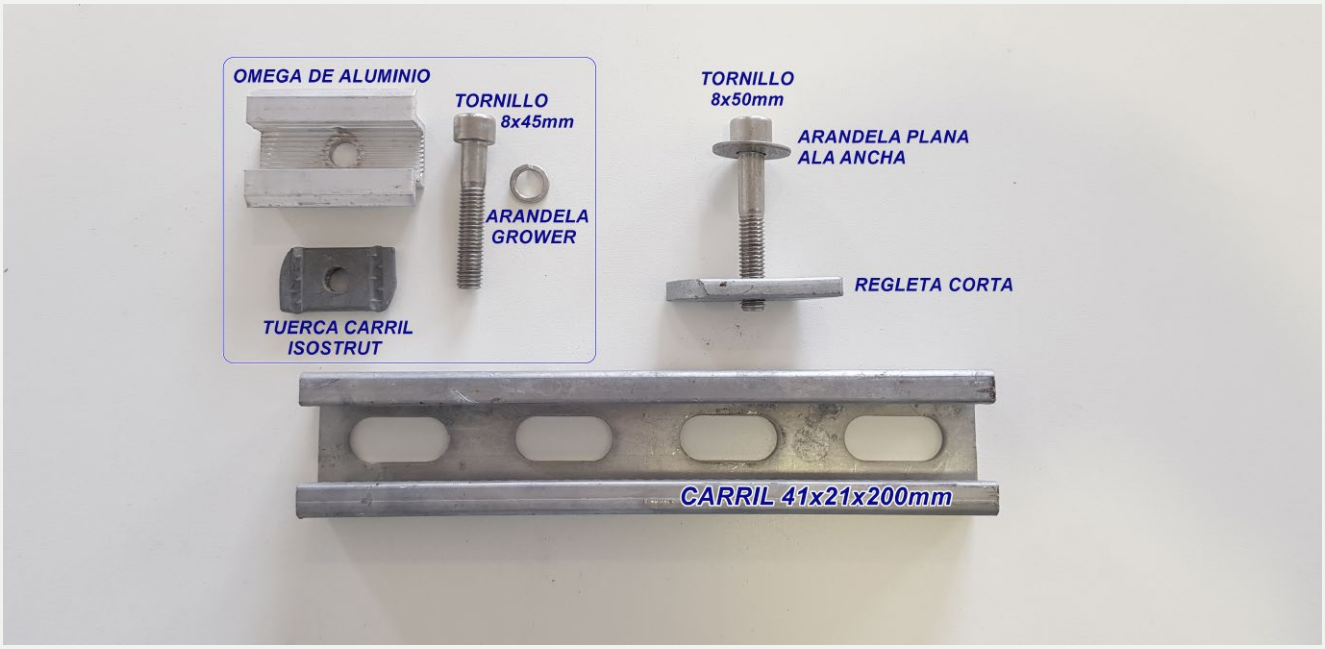
- **The short metal rails** of 200mm should be placed **over the side pillars.** *Each SOLARBLOC® H-S/18 structure counts on 2.*

- **The long metal rails** *of 800mm should be placed* **over the central pillars.** *Each SOLARBLOC® H-S/18 structure counts on 1.*

These metal rails (the short and the long ones) are screwed through its midpoints to each pillar head. Levelling screws are used for this action.

4.1. 800 mm metal rail with Omega Aluminium Clamp for central pillars:

4.2. 200 mm metal rail with Omega Aluminium Clamp for side pillars:



FITTINGS OVER INTERMEDIATE SOLARBLOC® H-S/18 IN ROWS OR TABLES.

All the rails with Omega Aluminium Clamp.

4.3 200 mm metal rail with final fixation clamp for side pillars:

FITTINGS OVER FINAL SOLARBLOC® H-S/18 IN ROWS OR TABLES.

Short rails with final fixation clamp.
Long rail with Omega Aluminium Clamp.

(Follow the steps outlined in the document Assembly Guidelines.)

5th Install the modules over SOLARBLOC® H-S/18.

Modules will rely on metal rails (the short and the long ones) and will be foxed by aluminium clamps (Omega and Final) screwed into the metal rails with its related screws.

1. Base the bottom raw module.

2.Place the upper row module and **adjust the anchors** to the panel framework.

3.Lastly, **repeat the operation in the next structure** and tighten the anchors to fix the modules.

* Tightening torque: 15Nm at most

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PRODUCTO PATENTADO POR SOLARBLOC®

SOLARBLOC® mounting system is an innovative solution exclusively designed, manufactured, and patented by PRETENSADOS DURÁN S.L.

PRETENSADOS DURÁN S.L.
We look forward to serving you in case of any doubt related to SOLARBLOC® products.

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Follow the steps outlined in the document Assembly Guidelines.)

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