

# Hatfield Nursing Home Solar PV Installation: Design & Access Statement

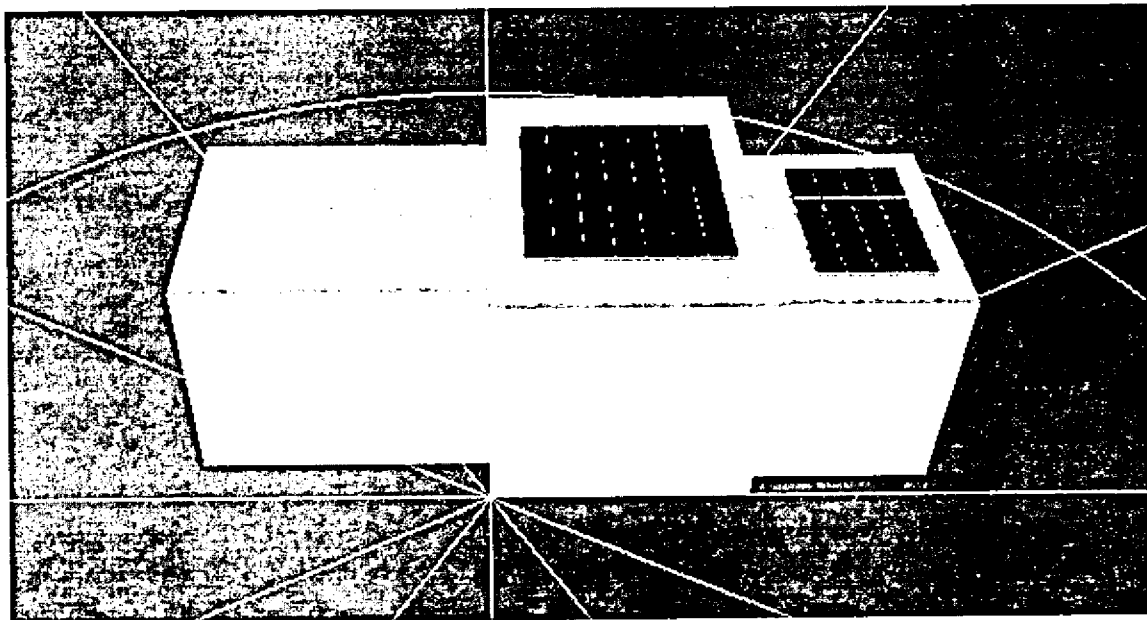
## Introduction:

This statement is provided to explain the design, access and planning considerations for the proposed solar PV System at Hatfield Nursing Home.

## Design:

The proposed solar system will be installed on flat roof pitch on the building. The solar array will be installed in two blocks of panels consisting of one array of 91 modules; in 31 rows, Landscape Fashion and one array of 40 modules, in ten rows; landscape Fashion.

A plan of the roof and the PV Orientation using PV sol Simulation Software is attached below. The solar arrays will have a total rated output of 32.75kWp. The arrays will be made up of Suntech STP250S – 20/Wd 250 watt modules with an individual panel output of 250W. The dimensions of each module are 1665mm Long x 991mm Wide x 50mm Thick with a weight of 19.8kgs. A specification sheet for the Suntech STP250S – 20/Wd 250 watt modules will be attached to this document.



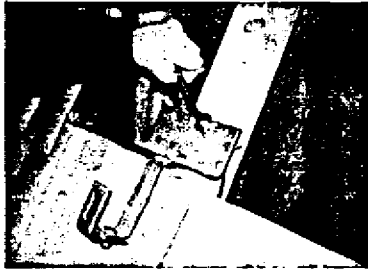
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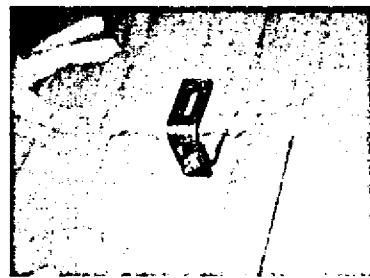
**Installation:**

The panels will be connected to the roof using consoles. The Solar arrays will be positioned on the roof so that the modules are south facing. This ensures that the energy generation of the system is maximised. We will supply, erect and dismantle an independent scaffold to the building c/w edge protection. This is to allow access onto the roof space to install the solar panels. Each scaffold will consist of a fully boarded and railed platform at eaves height with relevant hand rails to gable ends etc. for fall protection all scaffolds will comply with all current health and safety regulations to include debris netting, protection around all uprights, and protection over entrance and exit doors etc.

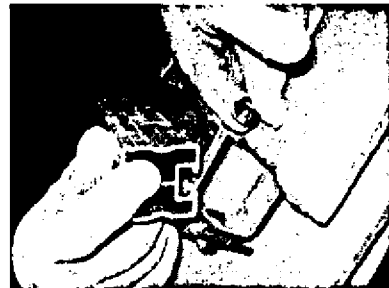
## Installation of structure : the different steps



After removing the tiles where necessary, assemble the hooks to the frame with the relevant screws. Respect a distance of 1,20 m maximum between two hooks.



Assemble the top tile : depending on the type of the tile, if necessary, slightly tool it to ease the proper positioning of the tile on the hook.

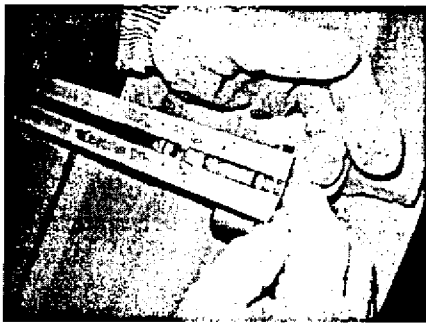
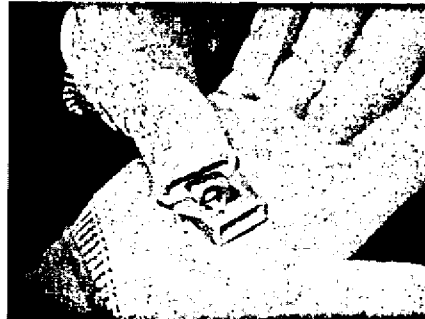


Assemble the whole profile horizontally. Insert the head of the screws into the groove of the profile. Then fix it to the hooks with the nuts

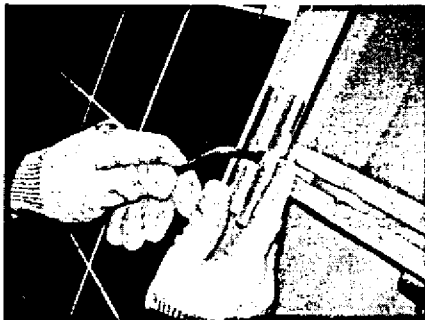
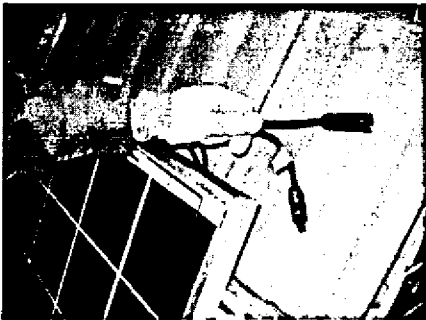
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Insert the nuts and plastic dedicated device into the front groove of the profile



Clamp the module to the profile. Don't forget to interconnect the modules strings step by step

Appearance:

Mono-Crystalline solar PV Modules have a dark blue appearance – see below application photograph from a similar installation we have recently completed.



Access:

The solar PV will be positioned on the roof and therefore will have no effect on vehicle movements or parking. The roof is currently unused and is not accessible by the public.

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