

Roth UK Ltd Unit 1a Berkeley Business Park, Wainwright Rd, Worcester WR4 9FA, UK

## SAFETY NOTICE

Regarding Roth Solar Panel, type Heliostar 252/252 S4 and 218/218 S4 manufactured in the period from 01/2008 until 05/2011 and sold up until 05/2012.

Dear Customer,

It has come to our attention that in very rare instances – and after our 10 year product guarantee period has expired – changes to the above mentioned solar panels can occur. The changes could in isolated cases led to quality failures, as set out below.

#### Background:

Roth Heliostar solar panels, type 252/252 S4 and 218/218 S4, are long lasting products with a low degree of maintenance required. However, as the product ages and in combination with local conditions such as extreme weather, changes to the solar panel can occur - e.g., the aluminium frame loosening.

This could, if not detected over time, lead to the glass on the panel coming loose, with the risk of the glass sliding down the panel (see pictures 3, 4, 5 and 6). As far as we can tell these changes happen very slowly, and by conducting maintenance on a regular basis, the changes will be visible long before any critical failure occurs.

The glass is glued directly on to the solar panel's plastic tub and the aluminium frame is not the primary means of holding the glass in place.

Therefore, it must be stressed that the abovementioned structural changes on the aluminium frame only in the rarest of cases results in a risk of the glass falling down.



The Assembly Instructions which accompanied the product advise that regular maintenance (ideally as part of the annual heating maintenance) should be performed and include visual inspection of the collectors.

You should contact your customers/end users to verify that the collectors have been inspected recently and if they have not, to advise or arrange that such inspection takes place at the earliest opportunity.

We would recommend that if on visual inspection, structural changes to the aluminium frame are found (see pages [4, 5 and 6] below), action is taken as set out below.

#### Heliostar's construction:

The Roth Heliostar solar panel consists of a plastic tub with a "sun catcher" inside and a glued on solar cell glass made of hardened safety glass. An aluminium frame is glued all around the plastic tub to protect the panel from water and other external factors.





### Inspection:

As mentioned, we recommend that a visual inspection of the panels be conducted to check for any of the structural changes described on the following pages 4, 5 and 6.

If the panels are accessible/viewable from the ground using binoculars, or a camera with zoom etc., and the changes described on pages 4, 5 and 6 are not identified then no further action is required.

The areas to be checked are as follows:

- The corners/miter cuts (blue marking)
- The bottom aluminium frame (green marking)
- The top part of the solar panel (yellow marking)





Working at heights and/or on the roof are high risk activities.

DO NOT attempt or conduct such work on your own without the proper safety measures in place!



# Changes that would require further inspection or action (i-iii):

(i)

An early indication that further action could be required is that a corner joint of the aluminium frame has opened (For reference see pictures 3 and 4)

Picture 1



Picture 2



Picture 3



Picture 4





(ii)

The bottom part of the aluminium frame has come loose or has already fallen off. If the aluminium frame falls off, it will rarely fall to the ground but will instead, due to its geometry and low weight, end up in the gutter or stay on the roof structure. This will make it hard to detect as the frame will not be on the ground, but the changes can easily be seen through binoculars, a camera, or similar devices (For reference see pictures 5 and 6).

Picture 5







(iii)

The clearest indication of a possible flaw in the solar panel is that the glass has slid down making a visible hole/crack on the top part of the solar panel. (For reference see picture 7)



#### Picture 7



If changes on the solar panel consistent with picture 7 are detected the solar panel must be taken out of operation and secured safely by a competent person (your attention is drawn to the warnings above regarding working at height) - or the area at ground level below the panel should be taken out of use - until remediation has been performed. Fastening brackets and assembly instructions are available free of charge should remediation be required and can be obtain ed by contacting us as follows: graham.moore@roth-uk.com or telephone: 01905453424



In case of further questions or if in any doubt, please contact us on e-mail or by telephone as follows.

Roth UK Ltd. Unit 1a Berkeley Business Park Wainwright Rd, Worcester, WR4 9FA, UK

Telephone: 01905453424 E-mail: graham.moore@roth-uk.com