

## SolarSheat Installation Manual

Thank you for purchasing the SolarSheat. We hope you will get many years of solar heating from the SolarSheat 1500 and 1500S. The instructions below are for a do-it-yourself system with a second person assisting. You may choose to hire a contractor or SolarSheat installer as well. We have provided additional drawings for wall mounting the SolarSheat and venting into a room and a forced air connection drawing. The forced air connection drawing can be used for connecting the SolarSheat to our solar HRV.

### **Unpacking the SolarSheat Mount**

Cut the end corner of the container and gently pull out the SolarSheat mount out of the box. There may be different sizes of mounts in the containers depending on how many SolarSheats you have purchased. There is usually more than one mount facing each other inside the container. Be careful of the ends of the mounts. Watch for sharp corners if there are diagonal corners.



### **Installing the SolarSheat Mount**

Next, determine where the mount is going to be installed on the wall. **Note:** (The SolarSheat should be installed on a south facing wall for optimal performance).

The mount should be installed high enough from the ground to prevent snow load in the winter time. This should be based on prior winter observation of snow load. If this is the first winter you have been in the property then the mount should be 16" above the

ground. You may have to clear snow from the collector in the winter time if you cannot place the mount at this height.

Have someone hold the mount with you in the position where it is going to be fastened. This will allow you trace the end position with a pencil or chalk. This becomes a template for placing the mount over so you can line up the holes in the wall and mount. Next, drill a hole with a power drill through the wall or brick. Make sure you use the right type of bit for the wall that you are drilling. Please also make sure you are not drilling into any wires, ductwork etc. that may be inside the wall. If you have building drawings this can help with this process.

Place the mount with hole over top of the building hole and fasten with screw. The screw can be self tapping or you can use a wall plug for a more secure hold. Fasten the mount on either end. **Note:** If the mount is longer than a single collector, i.e. mount for three collectors, then you will have to have more than one screw at each end holding the mount in position.

### Unpacking the SolarSheat Collector

Remove the plastic straps from the SolarSheat box. (If you have someone to assist with unpacking the product from the box, it will be much easier). Remove the top portion of the box. You will notice the bubble wrap protecting the photo voltaic panel. This can be left until the mounting process begins if you desire.

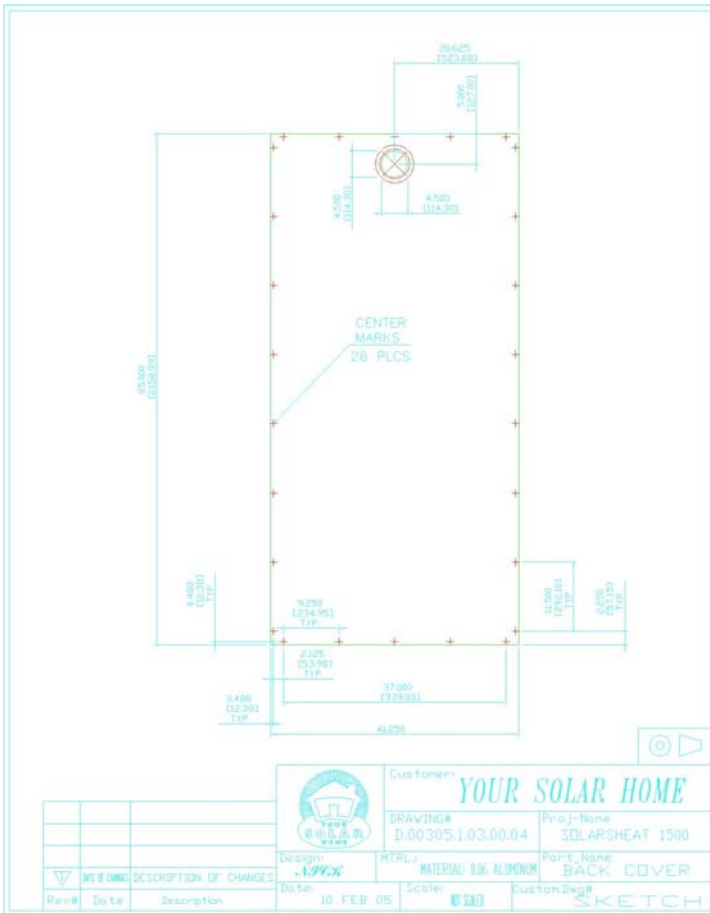


### Installing the SolarSheat Mount

Next, gently lift the panel out of the container at each end. **Watch for the sharp corners on panel.** Lift the panel into position on to the bottom mount. Take the second mount for the top of the SolarSheat and place into position so it mirrors the bottom mount. Mark the end positions with an assistant so you know where to drill the top mount holes. Remove the SolarSheat from the bottom mount temporarily. Measure the distance between each end of the top mount and where you want the holes. The holes for the top mount should be in alignment with the bottom mount. Drill the holes on the building wall for the top mount. Drill the holes on the top mount. Position the mount in place on the building and fasten.

### Cutting the duct for the SolarSheat

Next you need to template or measure the hole for the duct. **Note: See detailed engineering drawing below for exact dimensions of the hole and distance for measuring.**



### **Installation the SolarSheat**

Lift the SolarSheat into position on the mount and fasten with the coloured nylon head self tapping screws. One self tapping screw should be used for each side of the collector. The SolarSheat should sit over the top of the mount. See below.



Self tapping Nylon head screw

### **Mounting Multiple SolarSheats in the Same Mount**

The SolarSheat mount allows for a maximum of three SolarSheats to be added to one 11 ft. mount. Follow the steps above to install the mount on the wall. You can add more SolarSheats in a vertical row but will require some additional mounts. The middle SolarSheat 1500 primary panel or 1500S secondary panel should be overlapping the two side panels.

### **Using the SolarSheat**

The SolarSheat can be used in two modes. The first is ventilation mode. Moving the two way switch to the left of the middle position puts the SolarSheat in ventilation mode.



The fan will immediately turn on when the sun shining on the panel. This will allow the system to ventilate whenever there is sunlight. The second mode is for supplemental heating. Moving the switch to the right of the middle position will activate the SolarSheat only when the panel reaches 19° C (70° F).



This will allow the panel to work only when it reaches an average room temperature. If the panel drops below this temperature, the fan will automatically turn off. The SolarSheat has a built in thermostat sensor that is calibrated to 19 degrees Celsius. To turn the SolarSheat to an off position for the summer time, make sure the switch is in the middle position. **Note: The switch is located under the PV panel in the middle.**

### **Maintenance**

The SolarSheat is designed for long life. The coating on the collector is a very high quality Kynar coating. It should last for many years. The PV (Photovoltaic Panel) is also rated for many years of use. You only need to clean the collector should it become dirty with a soap and water combination. Never use heavy chemical compounds, solvents or sprays. Using these types of products could damage the collector.

The silicone that holds the PV panel in place should last many years. Should the PV Panel become loose or the silicone breaks away use an industrial grade silicone to caulk the areas where the PV sits in the collector. You should not have to do this because there a large amount of high quality silicone applied to the product during the time of manufacturing.

We hope you enjoy using your SolarSheat!  
Todd Kirkpatrick  
President