



## Installation Guide

**READY**SOLAR

If installing on a rooftop please make sure that adequate safety precautions are in place i.e safety harness, scaffold towers etc. We would advise that a minimum of two people are used to install the solar collector.

ReadySolar should give you years of trouble free heating - Enjoy.



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**SITE LOCATION** The ReadySolar solar collectors should be positioned facing the sun as much as possible for a maximum efficiency, ideally 30 deg (above horizontal) facing North/West.

**FILTRATION - MAXIMUM WORKING PRESSURE SHOULD NOT BE ABOVE 1.5 BAR (22 PSI)**

**A solar heat retention cover should be applied to swimming pool overnight and when the pool is not in use to prevent heat loss.**

If installing ReadySolar on a ground surface i.e. for small above ground or splasher type pools please be aware that ReadySolar is not designed for heavy foot traffic.

We would recommend the use of a time clock to automatically turn off the filtration system at night. Alternatively an optional Solar Controller (Standard or Digital) can be installed to control pool temperature.

### TOOLS AND PLUMBING REQUIREMENTS

**Tools Required:-** Drill / Extruder Gun (for adhesive tubes) / Mini Wallpaper Roller / Screw Drivers / Hacksaw Knife

**Fittings Required and Optional Accessories - (available from your plumbing supplier and/or dealer)**

ABS/PVC Glue / 40mm Pressure Pipe / Threaded Adaptors 40mm / Teflon Tape / PVC Fittings

Manual 2-way Valve



Vacuum Breaker- Air release Valve



Non Return Valve.



Booster Pump



Solar Controller (Standard)



Solar Controller (Digital with Winter mode)



Roof Fixing Glue (for tiled roof) or Strapping and Screws (for metal roof).



Pipe Saddles



# PARTS LIST

ReadySolar is supplied in a 4 or 5m kit boxes and contains all the necessary components for you to install solar collector to your roof. In addition to this you will require pool plumbing, roof adhesive (for tiled roof) or strapping (for metal roof).

## THE 4m<sup>2</sup> BOX CONTAINS

- 4 units of solar collectors, each 33cm x 3m (4 m<sup>2</sup>) (and o-rings)
- 8 metre nylon band to attach the headers and the absorber
- repair set and lubricant
- left click-stop and left threaded adaptor
- right click-stop and right threaded adaptor
- two reducing sockets in black ABS
- tie-wraps
- installation guide

## THE 5 m<sup>2</sup> BOX CONTAINS

- 3 units of solar collectors , each 33cm x 5m (5 m<sup>2</sup>) (and o-rings)
- 10 metre nylon band to attach the headers and the absorber
- repair set and lubricant
- left click-stop and left threaded adaptor
- right click-stop and right threaded adaptor
- two reducing sockets in black ABS
- tie-wraps
- installation guide

Lay out the contents of your kit as below and check all components

Use threaded adaptors for fixed plumbing

Use reducing adaptors for flexible plumbing.



# INSTALLATION GUIDE

**STEP 1** Remove solar collectors from the box and place side by side in front of you with the narrow part of the headers to the left on a clean, flat surface. The header with the word "ReadySolar" must be visible. To check if the matting is the right way up, look at the rubber that connects the absorber tubes together; the material should arch upwards.



**STEP 2** Join the polypropylene headers together applying a liberal amount of lubricant (provided) to the header o-ring. Make sure that the o-ring doesn't bulge out after clicking the headers together. Do not attempt to glue headers together.



**STEP 3** Push the rubber edges together so the absorbers (EPDM matting) are united as a whole.

**Tip** - use a mini wallpaper roller to push the absorbers together!



**STEP 4** Before applying to the roof, make sure that the "ReadySolar" is the right way up. Small holes are located along the length of the absorbers to allow rain water to be drained. Make sure that the holes are not blocked especially on a flat roof. Do not use screws in these holes to fix the absorbers.

Roll up the entire collector, starting with the headers showing "ReadySolar" (When they are unrolled on the roof you should be able to see the word ReadySolar on the manifolds only).

You are now ready to apply the ReadySolar onto roof structure.





## FIXING METHODS TO ROOF

### TILED ROOF

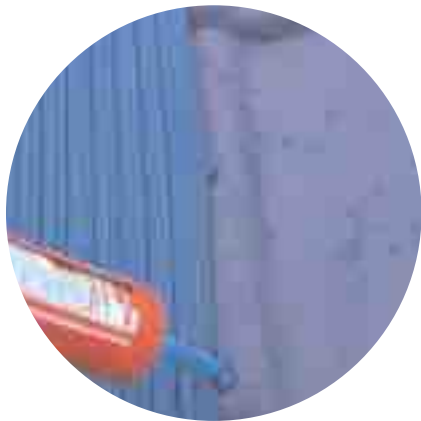
Fix 50 cm long nylon strips on the roof support batton every 66 cm. Afterwards put the roof tiles back in place so the nylon strips stick out 30 cm. Attach the nylon strips that stick out of the roof around the manifold pipes. Attach 2 cable ties to every nylon strip.



Nylon strapping can also be used (horizontally) across the width of matting to secure it to the roof structure. Place straps 1 metre apart.



We highly recommend that adhesive is used where possible in addition to the nylon straps especially in high wind situations.



### METAL ROOF

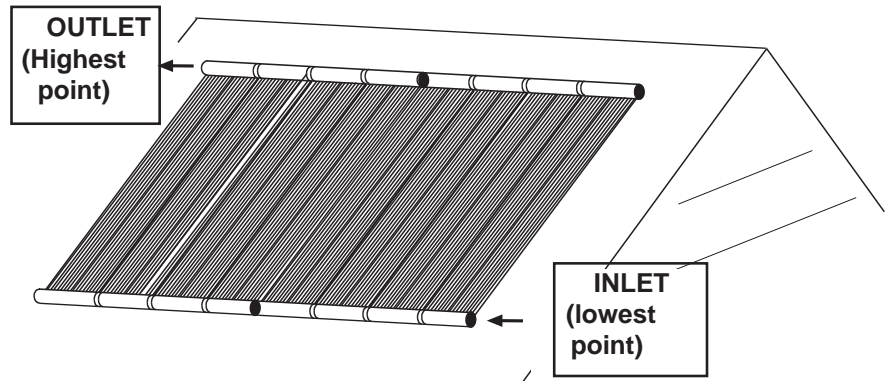
For a metal roof it is recommended that optional EPDM roof strapping is used approximately 500mm apart and fixed to metal with self drilling roofing screws. Saddles can be used to support the pipework to roof.

## Pool Plumbing Important Notes-

1/Ensure plumbing is connected with the inlet connected at the lowest point and the outlet connected at the highest point

2/Use Teflon Tape to connect threaded 40mm male adaptors (not supplied) to ReadySolar threaded fittings

3/Use 40mm Pressure pipe (not domestic waste pipe) as it has been manufactured to accept water pressure produced by your filtration system.

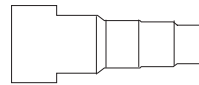


NOTE: The extra supplied parts are made in ABS and can be glued with PVC-gluе. The headers (B) are made in PP (polypropylene) and CANNOT BE GLUED.

IMPORTANT: The part of the adaptor(s) that is connected directly to the polypropylene headers must be connected using a lubricant only (provided).

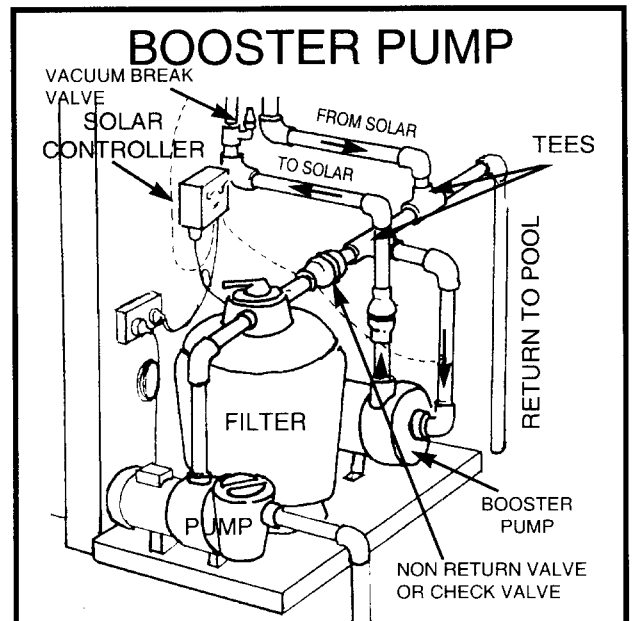
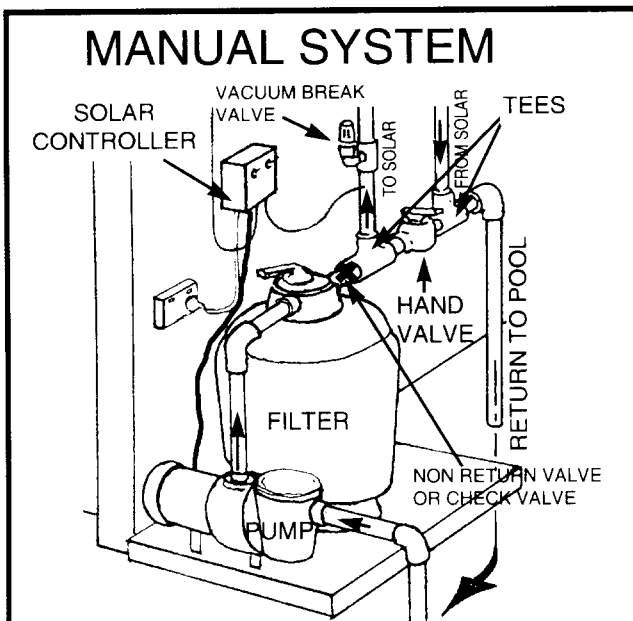


Connection  
40mm pipe



Connection  
Flexible Hose

# PLUMBING DESIGN



**MANUAL system** is operated by closing hand valve which diverts water to solar collector - this system must be cut in before any other pool equipment eg: gas heater, chlorinate. This system should be used on single story as it puts extra load on pump and filter (solar controller or time clock can be used to switch on and off.

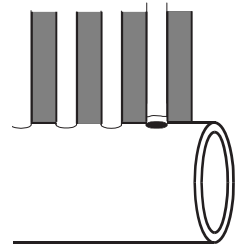
**BOOSTER PUMP.** This system removes load on pump and filter and can be made fully automatic by adding a solar controller - suitable for two story installation.

# REPAIRING READYSOLAR

## REPAIRING READYSOLAR 'HEADER' ( MANIFOLD NOZZLE).

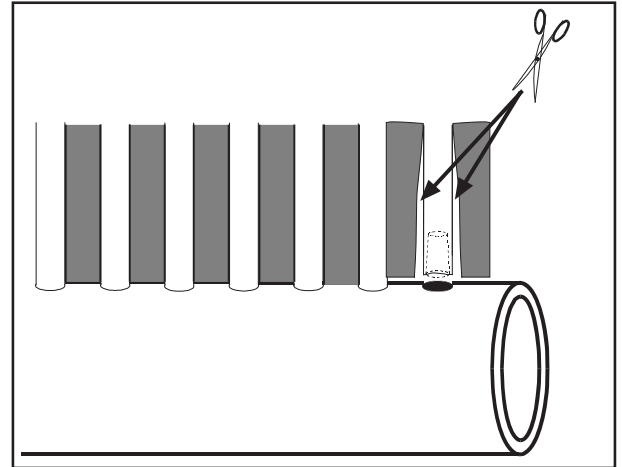
You will need - Drill. 8 & 10mm Drill Bit, Scissors, Pliers, Plastic Repair Tube(s) (30mm x 6mm - provided), Lubricant (provided), Cable Ties (small)

In the event a nozzle is damaged or breaks off the header, carry out the following repair procedure. Do not attempt to glue the nozzle(s) back into the header. The header is made from polypropylene and will not adhere.



### Step 1

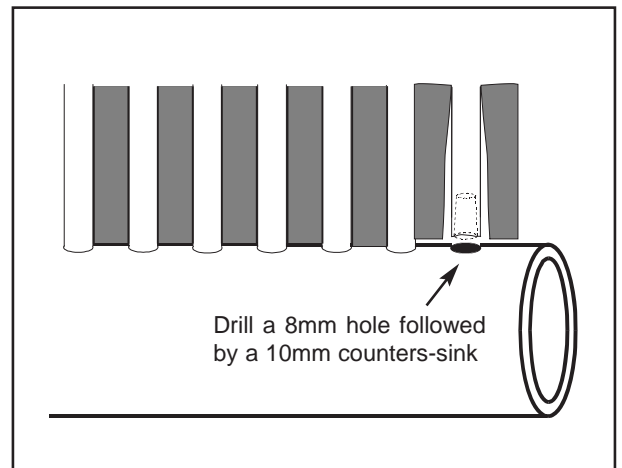
The rubber that joins the tubes together to form the solar matting needs to be cut away either side of the tubing (approximately 10cm) using a pair of scissors. Be careful not to cut the tubing!



### Step 2

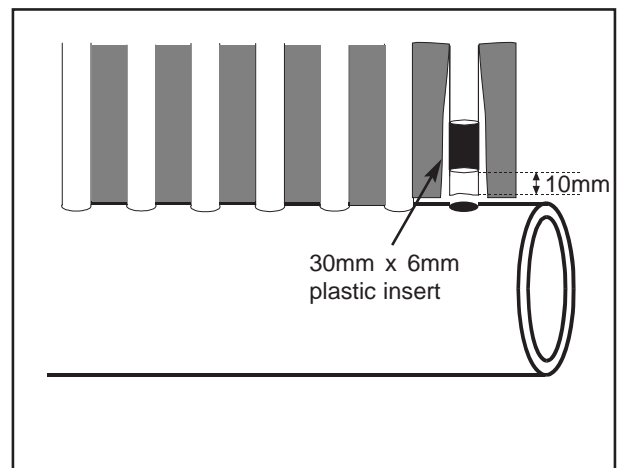
Remove and discard broken or damaged nozzle from rubber tubing. Drill an 8mm hole into the existing nozzle hole (on header) to slightly enlarge it.

**Tip** - Once the 8mm hole has been drilled, lightly use a 10mm drill to form a slight counter-sink. This will enable the rubber tubing in step 4 to enter manifold much easier!



### Step 3

Insert a plastic repair tube (30mm x 6mm - provided) using lubricant into rubber tubing. Leave 10mm of rubber protruding from the end of the plastic tube.





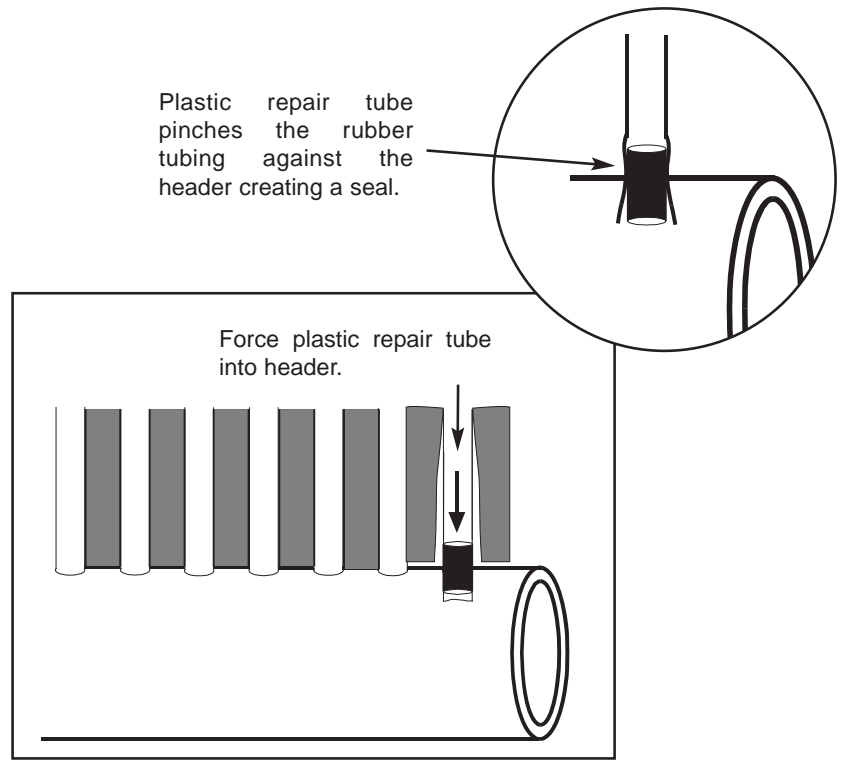
## Step 4

Stretch the rubber tube with the inserted repair nozzle and force it into the pre-drilled hole (step 2). Use pliers and lubricant to do this.

The objective is to force the plastic repair tube down the rubber tubing and create a seal against the sides of the pre-drilled hole!

15mm of plastic repair tube should be inserted into the header.

The repair is now complete.



## REPAIRING READYSOLAR MATTING.

You will need - Scissors, Pliers, Plastic Repair Tube(s) (30mm x 6mm - provided), Lubricant (provided).  
Cable Ties (small)

In the event a tube is punctured, carry out the following repair procedure. Do not attempt to glue the tubing back together. The tubing is made from EPDM and cannot be glued.

### Step 1

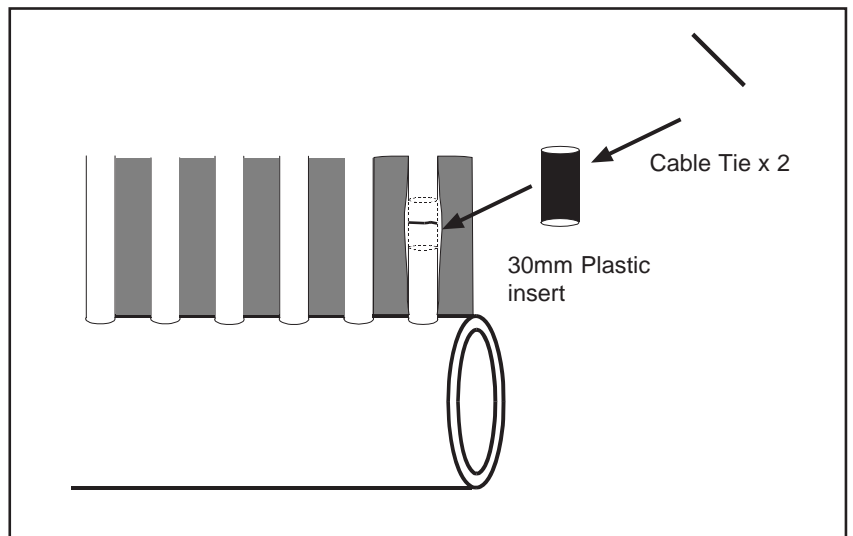
The rubber that joins the tubes together to form the solar matting needs to be cut away either side of the tubing (approximately 2cm) using a pair of scissors. Be careful not to cut the tubing!

### Step 2

Insert a plastic repair tube (30mm x 6mm - provided) using lubricant into rubber tubing.

Apply Cable Tie to either side of the plastic repair tube.

The repair is now complete.



# READY SOLAR

## 10 YEAR WARRANTY

ReadySolar agrees at its option to replace or repair, but without installation, any solar collector which fails due to U.V degradation within a period of 10 years from the date of purchase subject to the following conditions:

1. The owner must notify ReadySolar in writing of the date such failure occurred.
2. All transportation charges in connection with the return, replacement or repair of solar collector shall be paid for by the owner.
3. If solar collector requires replacement due to U.V degradation, it shall be replaced on a pro rata basis of 10% of the current retail price for each year the solar collector has been in place.
4. Proof of date of purchase is required when lodging claim.

### 5. CORROSIVE WATER VOIDS WARRANTY

For your health and protection of your pool it is essential that your water be chemically balanced.

<b>Recommended maintenance levels</b>	<b>Fiberglass pools</b>	<b>Fiberglass Spas</b>	<b>other pool/spa types</b>
Water temp (deg c)	20 - 31	32 - 40	20 - 40
PH	7.3 - 7.4	7.3 - 7.4	7.6 - 7.8
Total alkalinity (ppm)	120 - 150	120 - 150	150 - 200
Calcium hardness (ppm)	200 - 300	150 - 200	80 - 100
Salt	6000 max	6000 max	6000 max
Free chlorine*	2 to 3	2 to 3	2 to 3

\*Free chlorine must not exceed 3 ppm. Automatic chemical dosing devices and salt chlorinators are usually more efficient in heated water and can result in the production of excessive chlorine levels: unless using an RH controller which will accurately control chlorine levels, damage can result with your heater – such chlorine burn is not covered under this warranty.

6. If you are intending on covering your swimming pool and using an automatic chemical dosing device it is essential that an RH controller is fitted, please contact your pool builder, pool shop or distributor for further information and guidance for maintaining an indoor pool. Failure to have these instructions in writing will result in warranty being void in the event of damage due to chlorine excesses.

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