

SolarRoofs.com.

A Division of ACR Solar International Corp.

A socially responsible, innovative technology company

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“Fireball 2001” 10 Year Limited Warranty

SolarRoofs.com warrants its exclusive solar water heating systems to be free from defects in material and workmanship as set forth under the terms of this warranty when correctly installed according to manufacturers installation instructions. If any defects due to faulty materials or workmanship are found, and SolarRoofs.com is notified within ninety (90) days of discovery of such defects, SolarRoofs.com will, at its option, either repair or replace the covered part or parts within a reasonable time, subject to the limitation and conditions set forth herein. A replacement may consist of a new or factory rebuilt component or part of at least the same quality. Replacements are warranted only for the unexpired term of the original warranty. This warranty applies to the first retail

buyer at the original site of installation however transfers can be made for up to 5 years after purchase.

Due to the high level of variability, open loop system collector absorbers can not be warranted against freeze damage. At the factories discretion, and as a service to customers, SolarRoofs.com will make repairs at the factory at no charge and with no time limitations, when the freeze damaged section is returned to the factory, transportation prepaid. SolarRoofs.com wishes to keep all systems in operation for decades and will do all it reasonably can do to aid the customer. The UPS shipped absorber is in 5 easy to remove sections so removal, shipment and repair is facilitated in the rare case of freeze damage.

TERMS OF LIMITED WARRANTY

TEN YEAR COLLECTOR LIMITED WARRANTY

SolarRoofs.com warrants the collector for a ten year period subject to the following limitations and conditions. The sole obligation of SolarRoofs.com is expressly limited to replacement or repair of the defective component and/or part. SolarRoofs.com will either repair or replace the defective component and/or part at SolarRoofs.com's discretion. The replacement is expressly con-

tingent upon the purchaser paying to SolarRoofs.com or it's dealer the difference between the suggested retail price of the replacement materials at the time the warranty claim is made and the pro-rated portion of the then current suggested retail price in accordance with the following schedule:

Year of Claim

1-5
6-7
7-8
9-10

Percent of Original Suggested Retail Price Pro-Rated Towards Replacement

100%
90%
80%
60%

FIVE YEAR COLLECTOR LIMITED WARRANTY

INCLUDING TRANSPORTATION

SolarRoofs.com warrants the solar collector to be free from defects in material and workmanship when installed in accordance with industry standards and the SolarRoofs.com installation manual 100% for a full five years from the date of original installation. If a defect occurs under normal use and service during the first through fifth years and that part is returned to the factory or dealer,

SolarRoofs.com will, at its option, either repair or replace the covered component and/or part within a reasonable time without charge for parts, transportation (by UPS ground), or reasonable labor costs. The costs of any field inspection necessary to determine the extent of any damage is also included within the scope of this warranty. If a product defect is found otherwise normal service charges apply.

LIMITED TEN YEAR COMPONENT WARRANTY

SolarRoofs.com Warrants its' "Quick Connect" unit, Heat Exchanger, Drainback Tank, and other components manufactured by SolarRoofs.com for a ten year period from the date of original installation. The sole obligation of SolarRoofs.com is expressly limited to replacement or repair of the defective part, at

SolarRoofs.com's discretion, with replacement expressly contingent upon the purchaser paying to SolarRoofs.com the difference between the suggested retail price of new materials at the time the warranty claim is made and the pro-rated portion of the original suggested retail price in accordance with the following schedule:

Year of Claim

1-5
6-10

Percent of Original Suggested Retail Price Pro-Rated Towards Replacement

100%
50%

SolarRoofs.com will not be responsible for any labor for removal, reinstallation, or transportation to SolarRoofs.com, of any components and/or parts under the limited component warranty. Non SolarRoofs.com manufactured valves, vents, circulators, controls, sensors, timers, switches, expansion tanks, vents, pressure relief valves are covered 100% for one year.

SolarRoofs.com has an extremely strong **commitment to very high customer satisfaction** and the cost effectiveness of its products, thus, at its' sole discretion, it may make exceptions to any of the above limitations to solve any unusual problems.

LIMITATIONS AND EXCLUSIONS

This warranty does not cover defects of any kind resulting from exposure to harmful materials, fire, flood, lightning, hurricane, tornado, hailstorm, windstorm, earthquake, or other acts of God, vandalism, explosions, acetic, caustic or highly mineralized water or other fluids, operation of the collector under excessive pressure or excessive flow rates, alteration, abuse, negligence, accident, misuse, falling objects or any other cause beyond the control of SolarRoofs.com or the contractor.

SolarRoofs.com's sole responsibility is to repair or replace defective parts as stipulated above and in no way accepts any responsibility for consequential or incidental damages resulting from failure of any part of the solar water heating system. **THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.** No person is authorized to make any representation or warranty on behalf of SolarRoofs.com or any of its dealers other than as set forth herein.

COLLECTOR TEMPERATURE CONSIDERATIONS, LIMITATIONS, CONDITIONS and INSTRUCTIONS:

FREEZE CONDITIONS: The SolarRoofs.com's closed loop Propylene Glycol Antifreeze or Drainback heat exchange system's collector as well as feed and return lines, when properly installed, will not be damaged by (ambient) hard freeze temperatures as low as 60 degrees F below zero. In freezing situations, the

solar storage tank (and drainback tank if included) must be kept in an area above 32 degrees F.

All open loop system (street pressurized water in the collector) collectors, components and lines, whether they include freeze protection devices or not, are not covered for freeze damage and their solar loop should be fully drained in hard freeze conditions.

Open loop (collector continually open to street pressure water), serpentine copper absorber collectors with "Thermal Freeze Valves" are generally considered to be protected in light and very infrequent (1 to 4 times per year) freeze conditions for temperatures as low as 30 degrees F. Serpentine copper absorber collectors with "Thermal Freeze Valves" and Differential Control Recirculation freeze protection are generally considered to be protected in light and infrequent (4 to 12 times per year) freeze conditions for temperatures as low as 20 degrees F as long as 110v power remains on.

The "serpentine" absorber in a "Fireball 2001" is much less likely to freeze than a "parallel flow" absorber with multiple risers. This is because equal flow is present in all tubes where it could be unequal to non existent in some of the tubes in the multiple risers of a parallel flow system.

A "Thermal Freeze Valve" starts to open at about 38 degrees F allowing a small amount of water to flow out on the roof thus causing water to flow up from the bottom of the storage tank, through the absorber, and out onto the roof as long as temperatures remain low.

A "Thermal Freeze Valves" including a Differential Control Recirculation freeze protection system also causes water to flow out onto the roof as above but in addition causes the pump to continuously circulate water at a greater rate of flow in the entire solar loop from the bottom of the tank and back to the lower part of the tank as long as the power is on. Naturally the lower part of the tank can get very cold in the process. Having the element on gives further protection in freezing temperatures.

If unusual freeze conditions are predicted, it is recommended that the solar the pump turned off, solar loop isolation valves be closed, the solar hose bibs opened and fully drained into a bucket. After this, connect a short section of laundry hose to the "hot return line" hose bib and blow into it until all residual water in the absorber is out and air flows freely out the "cool feed line" hose bib. See Installation Manual as well as Operation and Maintenance Manual for further details.

HIGH TEMPERATURES

The Fireball 2001 collector will not be damaged by stagnation in ambient temperatures as high as 116 F.