

Flush mount solar water collector

This energy-saving solar hot water system lets your electric or gas hot water heater...

"Take the Day Off!"

The drainback system was first introduced in a large scale back in the 1990's. They have been proven very reliable and are more efficient than the indirect glycol system. This is a non-pressurized closed loop system using water as the heat transfer fluid. A small drainback reservoir is installed in the collector loop. When this system is filled with water it is only filled to the top of reservoir. Since it is located below the collectors, they remain dry when the pump is not circulating. When the collectors are hotter than the water in storage, the pump circulates the water in the reservoir through the collectors where it is heated. The heat from this water is then transferred to the solar storage tank through a heat exchanger located either in the storage tank or drainback reservoir. When the collectors approach the same temperature as the water in the storage tank or this water has reached a preset temperature, the pump shuts off and all the water drains back the reservoir. The drainback system eliminates all the problems inherent in the other types of systems. First, freeze protection is based on gravity. Second, the pump is shut off when the storage tank reaches its high limit setting and all water is drained from the collectors. And finally, the problems encountered in the collectors in hard water areas are eliminated. The drainback system also uses fewer components than any of the other types of active system, thus the potential of component failure is drastically reduced.

Heres how it works:

