



Operation:

When the heat pump runs, the outdoor fan operates.

Initially outside air is drawn through the coil.

Airflow moves the sail switch to a closed position.

If outside temperatures are cold (heating season) the thermostat will be closed, which activates the solar fan.

Solar heated air is drawn from the solar roof and floods the area around the outdoor coil.

Heated air improves heat pump efficiency and prevents electric resistance heaters from running.

By delivering relatively low temperature solar heated air (~50-80 deg F), the solar roof operates at high efficiency.

In summer, the thermostat will be open and the solar fan will not operate.

Outside air flows around the "fence" posts to cool the outdoor coil in air conditioning mode.

Alternate circuit contacts, controlled by the heat pump controls, can also be supplied.

American Solar, Inc.
 Solar Assisted Heat Pump
 Solar Heating Air for Outdoor Coil
 www.americansolar.com
 703-346-6053 January 12, 2001