



SOLAR POWERED SOFFIT FANS LLC

Savings Example

We measured the attic temperature in 2 test houses on identical 90+ degree days in the summer of 2010, between 9 AM and 6 PM. Temperatures were measured with a calibrated digital thermometer located on top of the ceiling insulation, in the bottom-middle of the attic, away from the fans. Neither house had radiant barriers. Temperatures were first measured with the SpSF fans disconnected, then measured again on the next day, *under identical conditions*, with the fans connected. See the data on the following pages. See "Test Results 2010". We saw a 20 degree F lower temperature, within 10 degrees F of the outside temperature, with the solar powered soffit fans.

We then calculated the heat BTUs flowing from the attic through the R19 ceiling insulation (2010 Florida Building Code) into the 75 degree air conditioned living area for each test. This is the same heat flowing through the ceiling from the attic that the air conditioning would have to remove to maintain 75 degrees in the living area. Comparing the heat BTUs, the solar powered soffit fans reduced this heat flow through the ceiling during the test hours by up to 38%.

We do not expect, and the customer should not expect, to see a 38% savings on the electric bills of houses with solar powered soffit fans for several reasons, including changes in wind, cloud cover, outdoor temperature, off-hour conditions, wall/ window/ ceiling/ door insulation, roof color and pitch, air conditioner efficiency and condition, house and ceiling seal efficiency, changes in thermostat settings, indoor activity, opening and closing of doors, and other conditions that vary from house-to-house, occupant-to-occupant, day-to-day. *These same conditions exist for all attic ventilation systems and equipment, and any claims otherwise should be considered appropriately.* We do expect the attic air, typically, to be cooler (not as hot) and drier, and this typically makes a house more comfortable and efficient.

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