

Consumer Information on Radiant Barriers

Glenn Langan Gulf Power Mass Market

New Products (Prodex Radiant Barrier Test)

Prodex is a product that has emerged in the building community as a "new" radiant barrier with many uses. It is being promoted for use in the walls and attic. Prodex has been installed in the walls and attic of a home built by Wyatt, Inc. in Ft. Walton Beach FL.

Data loggers were placed in this test house as well as a second control house. The two houses of similar size were built using vinyl siding with R-13 fiberglass batts in the walls and R-38 blown fiberglass in the attic. The test house used Prodex High R Insulation in addition to the standard insulation package and was applied both in the walls as a house wrap (in lieu of Tyvek) and under the rafters as an attic radiant barrier.

The air-conditioners were set at 72 degrees in both houses and all other appliances were turned off. Electric meter readings were taken to measure energy used by each house. The 17-day test time frame was very short, and the weather was unfortunately mild with daily highs and lows ranging from 84 degrees to 46 degrees. The average temperature was 66 degrees.

The Prodex house maintained an average temperature of 69.8 degrees and 49.8 relative humidity. The control house maintained an average temperature of 69.2 degrees and 40.2 relative humidity. The house with Prodex High R Insulation had power usage of 130 Kilowatthours, while the control house had usage of 283 kilowatthours over the same 17-day test period. Although the conditions for testing were not ideal and far from the normal scientific methodology, the results appear to be in line with other radiant barrier tests.

While Gulf Power does not endorse any particular brand of radiant barrier material, we do recognize the potential energy saving benefits of radiant barrier systems in Northwest Florida. We suggest that you look for a few common-sense characteristics when comparing different radiant barrier brands:

- · Emissivity (the lower the better)
- Fire rating (as required by building codes)
- Ease of handling
- · Strength of reinforcement
- Width appropriate for installation