Re: Nominal Projection of Energy Savings Opportunities on Different Size Residential Homes

October 6, 2008

To Whom it may concern:

Energy Wise Structures provides a wide range of services for building owners, including the engineering of heating and ventilating systems for optimum energy efficiency, specifying equipment sizing, air volumes, and not-to-exceed, guaranteed energy requirements. Through much experience of calculating and auditing the actual results, Energy Wise Structures has determined that:

- 1. On the average, all electric homes in the areas of Oklahoma and Texas, built of conventional stick built construction, will have normal energy bills that equate to \$0.10 per square foot per month.
- 2. Homes of energy efficient construction, specifically including Timber Frame Homes and others using *Structural Insulated Panels (SIPS)* for walls and roof enclosure, will have energy bills that equate to around \$0.03 per square foot per month, or a savings of about \$.07/SF or about 70% compared with conventional construction, using R-19 Fiberglass Insulation in a six (6) inch wall.

For the of the square footage indicated below, assuming a Timber Frame and SIPS Panel construction, the probable energy savings would be according to the above ratios and the following table:

Comparison of Typical Energy Cost and Typical Savings Per Month for Different Size Homes

Typical Home	Building Area/SF	Typ.Cost/Mo. Stick Const.	Typ. Cost/Mo. TF/SIPS	Typical Savings/Mo.	Savings/Yr @ 12 mo Oper.
Very Large	19,000 SF	\$1900	\$570	\$1,330	\$15,960
Large	6.000 SF (1)	\$600	\$180	\$ 420	\$ 5,040
Medium	3,000 SF	\$300	\$90	\$ 210	\$ 2,520
Small	1,500	\$150	\$45	\$ 105	\$ 1,260

Actual costs/savings for these Homes may be determined and compared with these projections, by a formal review of the drawings, location, specified materials and other information. The engineered savings should be relatively close to these projections, which are very typical and usually found to be true on the average for this type of construction.

Energy Wise Structures routinely provides the material specifications, confirmation of Home performance, maximum energy levels, savings at today's rates, often before construction starts. Energy Wise can provide an engineered, written and insured guarantee of energy requirement, equipment performance (sizing) and energy savings vs. conventional construction with this service.

Energy Wise may be contacted for further information or services at 972-540-5365 or the website:

http://www.energywisestructures.com

Respectfully submitted,

Richard Rue