Dear Homeowner,

The House Energy Doctor is a building energy evaluation and analysis program, developed at the School of Architecture since 1986. The program teaches students thermal performance prediction of buildings using state-of-the-art computer simulation techniques, advanced instruments and up-to-date site survey methods. Each semester students of the two advanced technology courses ARC461/561D (Fall) & ARCH461/561E (Spring) apply these approaches to the evaluation of existing residential or commercial buildings in the Southern Arizona region.

The purpose of this letter is to seek parties that are interested in making their building available to this process and are willing to be on a task list from which students may choose projects for their analysis.

If you have lived in a single family detached house, town house, small business complex for a period of one year or more and would like to be visited by the House Energy Doctor team, please sign the enclosed Request forms (1 through 5*) and return them to the address above. Later, you will be contacted by me regarding the selection process, and the site visit scheduling.

The following services will be rendered by the House Energy Doctor team:

- Complete site survey document including material specs, Architectural measurements, interior information, landscape information, envelope leakage, etc.
- Inspection of mechanical heating and cooling systems including efficiency testing and evaluation, and recommendations.
- A simple set of architectural drawings of the building including plans, elevations, sections, 3D views, and detail drawings (optional: computer generated graphics or model).
- Calculation of envelope thermal resistance values and air leakage.
- Computer generated performance prediction forms and graphs.
- Performance validation and compliance with the state energy code requirements.
- Set of low-cost strategies that can greatly reduce operating costs and improve thermal comfort such as: proper envelope insulation, efficient shading devices, maximize landscape use, landscaping, proper thermostat settings, seasonally controlled strategies, minimize air leakage, passive solar systems.
- Economic analysis simple payback years based on interest rate and fuel adjustment method.

Thank you for your participation, Dr. N. V. Chalfoun

* NOTE: If you have a complete set (latest 12 months) of utility bills, you do not need to sign nor return Request Forms 3 to 5.