

## **Energy Efficiency Assessment Description**

### **Perspective**

New England has some of the oldest housing stock, often with additions compounding the energy efficiency. A lack of understanding of the importance of air sealing details has created millions of buildings in need of improvement. Building science has developed dramatically in the last few decades, particularly regarding energy efficiency and indoor air quality. We are committed to applying this understanding to improving the comfort and efficiency of your home.

### **Description**

An Energy Efficiency Assessment includes a thorough investigation of the building to determine the most cost effective improvements. The building is pressurized using a Blower Door apparatus which enables the inspector to identify air infiltration leaks which are the primary sources of heat loss. The blower door test is an objective quantifiable measure of the air tightness of a building. The apparatus, which includes a large fan and a set of instruments, is set up in an exterior door frame and the building is depressurized to 50 pascals. The instrument then produces a measurement of the air flow rate of the air tightness of the building. The 50 pascal air flow rate is a direct measure of the tightness of the building. A measurement of less than 1000 is very tight and typical of a new Energy Star home. The higher this number is the more leaks there are and the greater the opportunity to improve the comfort and efficiency.

The building components are evaluated including doors, windows, insulation, attic and basement. The major systems are assessed including heating, hot water, lighting and appliances.

An objective report is prepared that identifies the most cost effective improvements recommended and the relative payback in \$ and CO2 reduction for each. This report enables the owner to address the easiest and most cost effective improvements first. This service costs \$200 for up to a 2000 square foot house, larger homes are scaled up from there.

An Energy Audit is more detailed, comprehensive and expensive than an Assessment and is used for Energy Star certifications and Energy Efficient mortgages.



Serving the Monadnock Region and Windham County VT