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Measuring Building Insulation<sup>1</sup> BETH PARKS, Colgate University — Currently, the only way for homeowners to learn about the effectiveness of their home insulation is to hire an energy auditor. This difficulty deters homeowners from taking action to improve energy efficiency. In principle, measuring the temperature difference between a wall surface and the interior of a home is sufficient to determine the wall insulation, but in practice, temperature cycles from the heating system make a single measurement unreliable. I will describe a simple and inexpensive thermocouple-based device to measure this temperature difference and report results obtained by monitoring this temperature difference over multiple heating cycles in a range of buildings.

<sup>1</sup>Patent application 12/555371

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