

# Description of in-home energy efficiency assessment

## On-Ground Energy Efficiency Assessment Project



In order to complete the in-home energy efficiency assessment four assessors will visit your house for a **total of 2-3 hours**. It may be necessary to split the assessment across two appointments depending upon the availability of the different assessors. The in-home assessment will consist of the following elements, some of which will take place at the same time:

- An in-home energy efficiency assessment
- Photographs of house design features, major appliances
- A house measure-up used to draw a floor plan
- An air leakage test

At the conclusion of the project (expected to be December 2010), each household will receive an Energy Efficiency Improvement report. Each element of the in-home assessment is explained in further detail below. The assessment will be non-intrusive and nothing will be moved, altered or unplugged in your house.

### Energy Efficiency Assessment

An energy assessor will visit your house to record the following information:

- Information about your fridge, freezer, water heater, clothes washer, clothes dryer, heaters, air-conditioners, dishwasher, television/s, electronic equipment and computers. The type of information collected will be the age, size, manufacturer, model number, energy rating etc.
- Flow rate of any showerheads
- The type of lighting installed throughout your home
- Construction features of your house (e.g. type of wall construction, roofing material etc.)
- Insulation levels in the ceiling, walls and floors (where applicable)
- Heating and cooling systems installed
- Usage patterns of appliances

The information gathered will be used to assist us identify how energy efficient your house is, and to inform the calculation of costs and savings associated with a range of energy efficiency upgrades. This will take approximately 1 hour.

### Photography of house design features, appliances and bills

The assessor will take photographs of the following:

- House design features such as windows, sub-floor and wall construction etc.

- Fridges, freezers, water heater, clothes washer, clothes dryer and dishwasher
- Showerheads
- Heating and cooling systems
- Insulation installed
- Heating and cooling duct work
- Lighting
- Electronic equipment, such as computers, televisions, and entertainment systems
- Any electricity, gas and water bills you can provide when the assessment team is at your house

These photographs will make it easier to identify appliances and determine their level of efficiency, and will assist in determining the most appropriate energy efficiency upgrades to the house.

### House measure-up

An assessor will measure your house and record key construction details in order to draw a floor plan. The floor plan and construction information will be used to complete thermal modelling of your house to determine the existing star rating of your home and the potential energy star rating after a range of energy efficiency upgrades are applied. This will take approximately 1.5 hours.

### Air Leakage Test

An air leakage test will be undertaken to determine the rate at which your house leaks air and the major sources of draughts. The fan pressurisation method will be used and it is an internationally used method to determine how air tight a building is.

This test is non-intrusive and will not disturb anything in your house. A false door with a fan will be fitted to your front door and this will be used to pressurise your house. Your front door will not be removed and the air flow through your house during the test will hardly be noticeable, being only equivalent to a light breeze. A picture of the door fan to be used is below. This will take approximately 1.5 hours to complete. The company undertaking the air pressure testing is Air Barrier Technologies.



Source: [www.onestopgreenhome.com/faq/blower\\_door\\_test.htm](http://www.onestopgreenhome.com/faq/blower_door_test.htm)