

Problems with conventional measurement methods and improved methods currently under consideration

Problems with the measurement methods developed so far:

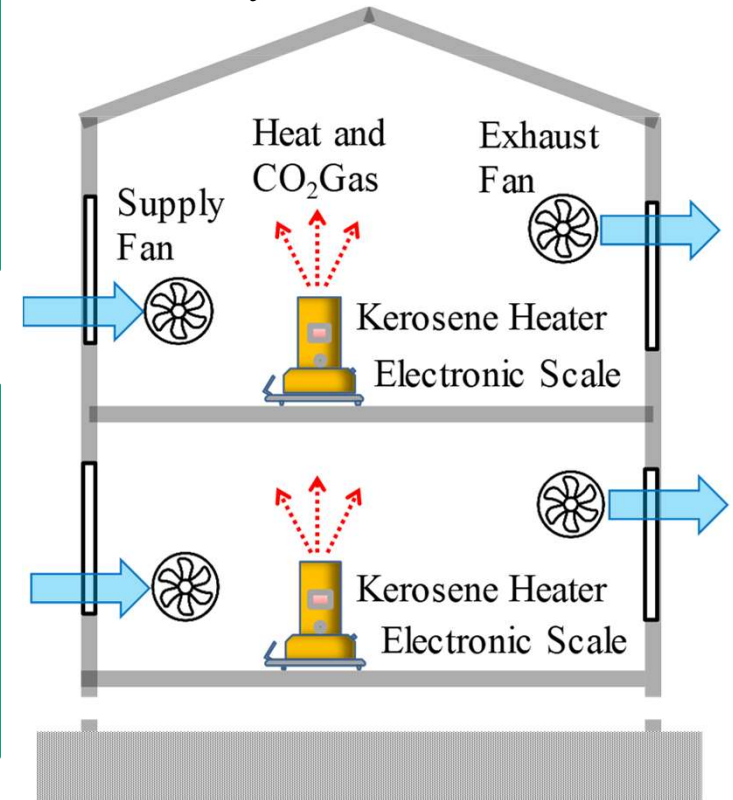
Thermal performance measurement:

In many cases, electric heaters do not provide enough heat to create a sufficient temperature difference between the inside and outside.

Ventilation property measurement:

Gas cylinders, flow control and distribution equipment impair practicality.

Improved measurement methods currently under consideration



Measurement methods currently under research:

Kerosene heater generates heat and carbon dioxide gas:

Measure the fuel loss with a precision electronic scale and estimate the emissions of heat and carbon dioxide gas.

Simultaneous measurement of heat transfer and ventilation:

For proper combustion, supply and exhaust ventilation is required. However, it is possible to measure both simultaneously using the heat and carbon dioxide gas generated by kerosene heaters.

Kerosene Heater

Perform on/off control by manual at intervals of one or two days.



Electronic Weighing Scale

Connect to data logger that measures, records and transmits fuel weight loss



Temperature/Humidity/Carbon dioxide concentration, Measurement/Recording/Transmission device

