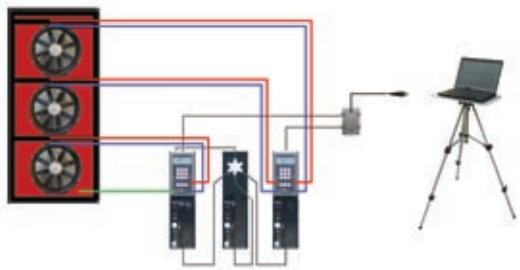
The Minneapolis BlowerDoor for Universal Use

State of the art: The airtight building envelope

The airtightness of the building envelope is an important prerequisite for realizing modern energy concepts in new buildings, as much as for construction projects on existing buildings. It is also an essential aspect of quality assurance. Leaks in the building envelope increase ventilation heat losses. If ventilation equipment is installed in a building, an airtight building envelope is necessary to ensure flawless functioning of the installations, as uncontrolled air flow in the building prevents the optimal use of heat recovery systems and interferes with fresh and exhaust air supply. Preventing drafts significantly increases the indoor comfort level. Structural damage caused by convective moisture transport into the building construction can be avoided. When rehabilitating existing buildings, an air barrier can be implemented to achieve current low-energy or even passive-house standards.

One for all: The Minneapolis BlowerDoor

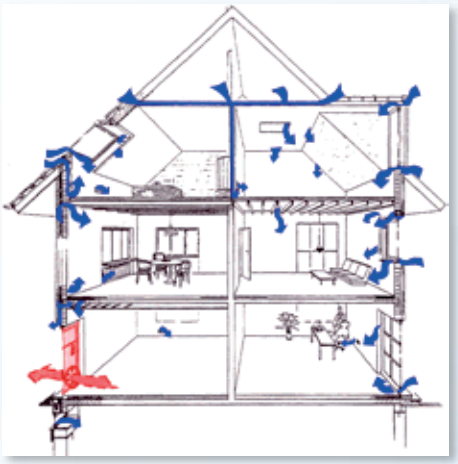
Minneapolis BlowerDoor is a modular measuring system. With its measuring range from 19 m³/h to 7,200 m³/h and the possibility to combine several BlowerDoor Systems (MultipleFan), there are no limits to its use in Passive Houses, in newly constructed buildings in accordance with the German Energy Savings Regulation (EnEV), and in existing buildings and apartment buildings, as well as in industrial and administrative buildings.



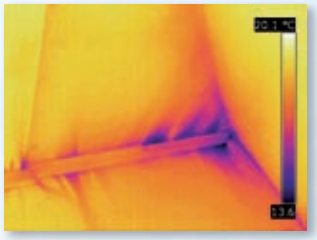
Synergies in engineering, product development, and training have made the Minneapolis BlowerDoor one of the most successful devices for airtightness measurement worldwide.

BlowerDoor measurements according to German Industrial and European Standard DIN EN 13829

For the measurement, a BlowerDoor fan is installed in an external door or window of the building. All other outside doors and windows are closed. All inside doors of the building remain open. The fan generates pressurization or depressurization. The air exchange in the building is determined. Air change rates provide information on leaks in the building envelope that can be located and systematically eliminated during the BlowerDoor measurement. This improves the energy efficiency of the building as well as the quality of the building construction. The BlowerDoor measurement has been an acknowledged rule of technology since 1998. The airtight building envelope is one of the requirements prescribed by the German Energy Savings Regulation (EnEV).



The principle of the BlowerDoor measurement



Thermogram at depressurization during the BlowerDoor test

Typical leakages in small and large buildings occur in the area of

- junctions and joint butts of building components
- pipe and cable penetrations through the air barrier
- floor junctions at doors and windows at floor level in converted attics
- connections of different building materials (e.g. massive/light construction)
- building extensions and bay windows, window jambs and external door jambs
- skylights and dormers as well as floor hatches

BlowerDoor GmbH: Experts in measuring technology for airtightness

Today, the Minneapolis BlowerDoor is the leading airtightness measurement device in Germany and one of the most successful worldwide. With its measuring range from 19 m³/h to 7,200 m³/h and the possibility to combine several BlowerDoor Systems (MultipleFan), there are no limits to its use. Our highly precise measuring devices and the transparent measuring process underline the outstanding quality of the BlowerDoor measuring system. Our customers benefit not only from excellent consulting and sales services of state-of-the-art measuring technology for airtightness testing, but also from the know-how we provide in training sessions, as well as from the continuous development of hard and software.

BlowerDoor GmbH
MessSysteme für Luftdichtheit

BlowerDoor GmbH
MessSysteme für Luftdichtheit

THERMOLAB

Z.I. Le Trési 6 D - 1028 Préverenges
Tél 021 637 12 37 - Fax 021 637 12 38
www.thermolab.ch
info@thermolab.ch

The modern training center philbus on the premises of the Energie- und Umweltzentrum