



The **ENERGY**
CONSERVATORY

Diagnostic Tools to Measure Building Performance

Minneapolis Duct Blaster®

Duct Airtightness
Testing System

Duct Blaster®



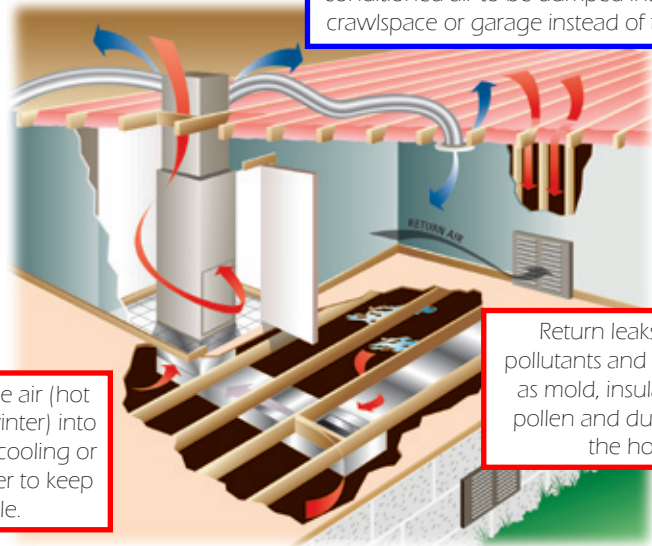
minneapolis duct blaster®



The development of the Minneapolis Duct Blaster more than 15 years ago has revolutionized performance testing of forced air distribution systems for builders, HVAC contractors, and utility DSM programs. The Minneapolis Duct Blaster is a calibrated air flow measurement system used to test and document the airtightness of forced air duct systems in both houses and light commercial buildings. The Duct Blaster fan is directly connected to the duct system, typically at a central return, or at the air handler cabinet. With the remaining registers and grills temporarily taped off, duct airtightness is measured by either pressurizing or depressurizing the duct system and precisely measuring the fan flow and duct pressure.

Duct airtightness measurements are used to diagnose and demonstrate leakage problems, estimate efficiency

losses from duct leakage, and certify the quality of duct system installation. The Duct Blaster is the preferred system for Title 24 testing in California, as well as compliance testing in Florida, Texas and for Energy Star testing throughout the country.



Leaks in supply ducts cause expensive conditioned air to be dumped into the attic, crawlspace or garage instead of the house.

Return duct leaks pull outside air (hot in the summer, cold in the winter) into the duct system, forcing the cooling or heating systems to run longer to keep the house comfortable.

Return leaks can pull pollutants and irritants such as mold, insulation fibers, pollen and dust directly in the house.

Minneapolis Duct Blaster Features

- The lightweight Duct Blaster fan weighs just 7 pounds (3.18 kg), but delivers enough air flow (1,500 CFM, 708 l/s, 2,548 m³/h) to test the leakiest duct systems.
- Quick and accurate airtightness measurements from 10 CFM (5 l/s, 17 m³/h) to 1,500 CFM (708 l/s, 2,548 m³/h).
- Compatible with both pressurization and depressurization testing.
- Standard instrumentation includes the DG-700 Pressure and Flow Gauge. The DG-700 gauge contains 2 precision pressure sensors which provide simultaneous display of both duct pressure and Duct Blaster fan flow readings. It's specialized "CFM@25" feature makes it extremely easy to get quick and accurate total leakage test results.
- The Duct Blaster can also be used as a powered flow measuring hood to accurately measure air flows through air handler fans, registers and grills, and exhaust fans.
- Solid state variable speed fan control.
- Padded nylon carrying case with shoulder strap for easy transport to the job.



When pressurizing the ductwork, the Duct Blaster fan can be mounted directly to the HVAC System.

The Duct Blaster can also be used to measure the total amount of air moving through the air handler.



Minneapolis Duct Blaster Kit includes

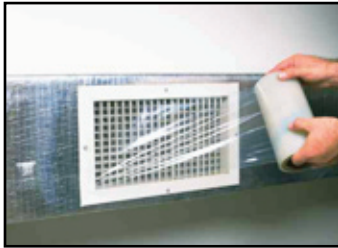
- Duct Blaster Fan.
- DG-700 Digital Pressure and Flow Gauge.
- Three Flow Rings.
- Twelve feet (3.7 m) of 10 in. (25 cm) diameter flex duct.
- Heavy Duty Carrying Case.
- Duct Blaster Training Video and Manual.
- Static pressure probe.
- Sample roll of 8" wide DuctMask™ Temporary Register Seal.



Duct Blaster Training Video

- Overview of all components of the Duct Blaster System.
- Walk-through of how to set-up the Duct Blaster.
- How to seal registers using Duct Mask.
- Conducting a one-point total duct leakage pressurization test.
- Video can also be downloaded from The Energy Conservatory website.

Duct Blaster Accessories



Duct Mask™ Temporary Register Seal

- Duct Mask is used to provide a quick temporary seal on registers and grills when measuring duct airtightness with a Duct Blaster or Blower Door.
- With Duct Mask you can reduce the time and hassle of sealing off the duct system, and look more professional to your customers.
- Duct Mask is an adhesive backed film that comes in both 8 in. (20 cm) and 24 in. (61 cm) wide rolls. An easy to use belt dispenser is provided with the 8 in. wide rolls.
- Duct Mask is perforated every 4 in. (10 cm) for 8 in. wide rolls, or every 24 in. for 24 in. wide rolls, to provide a quick, custom, one-step installation.
- Duct Mask is affordable enough to be used with every test.

TECBLAST™ Duct Airtightness Test Software

- Easy entry of test data on user friendly entry screens.
- Calculation and display of duct airtightness test results including leakage rate in CFM, leakage area in square inches, leakage as a percent of system airflow, and estimated annual system efficiency loss from the measured leakage rate.
- Built-in report generator includes the choice of a one page easy-to-read homeowner report, or a two page technical report.
- TECBLAST lets you print your company logo directly on the reports for a professional image.
- Compatible with all Windows computers.
- A 30 day demo version of TECBLAST is available



duct blaster specifications

Maximum Flow:	1,500 CFM at free air (708 l/s, 2,548 m ³ /h). 1,350 CFM at 50 Pa (637 l/s, 2,293 m ³ /h).
With flex duct attached:	1,250 CFM at free air (590 l/s, 2,123 m ³ /h). 1,000 CFM at 50 Pa (472 l/s, 1,700 m ³ /h).
Minimum Flow:	10 CFM (Ring 3) (5 l/s, 17 m ³ /h).
Fan Dimensions:	10 in. (25 cm) inlet diameter, 7 in. (17.8 cm) length.
Fan Weight:	7 lbs. (3.18 kg), 8.5 lbs. (3.86 kg) with 3 flow rings.
Flow Accuracy:	+/- 3% of reading or +/- 1 CFM, whichever is greater, using a DG-700.
Calibration:	Meets both ASTM Standards E779-87, ASHRAE 152 and CGSB-149.10-M86.
Power:	110V or 220V.

Specifications subject to change without notice.

Duct Blaster® is a registered trademark of The Energy Conservatory. Minneapolis Blower Door™, Duct Mask™ and TECBLAST™ are trademarks of The Energy Conservatory. Windows® is a registered trademark of Microsoft Corporation

Other building diagnostic products available



The Minneapolis Blower Door™ is used to measure the airtightness of buildings.



The TrueFlow® Air Handler Flow Meter (shown with DG-700 Gauge) is used to measure the total amount of air moving through an air handler.

For further information call:-

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