

Minneapolis Duct Blaster® Duct Airtightness Testing System

- Test and measure the airtightness of forced air duct systems in both houses and light commercial buildings
- Works by pressurizing or depressurizing the duct system and precisely measuring the fan flow and duct pressure



- Diagnose air leakage problems
- Estimate efficiency losses from duct leakage
- Certify the quality of duct system installation
- Code compliance

Performance Testing Tools

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ETEC™
The Energy Conservatory

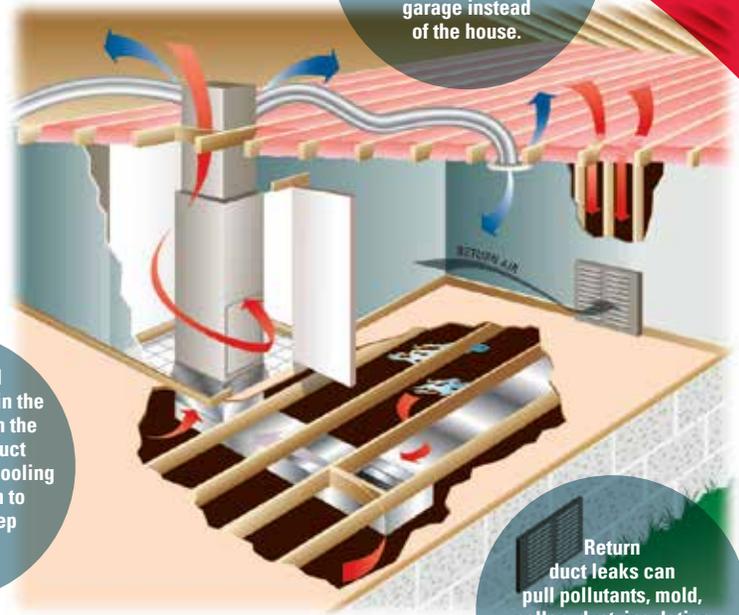
The **Minneapolis Duct Blaster®** System has revolutionized performance testing of forced air distribution systems for builders, HVAC contractors, and utility DSM programs. It connects to the duct system at a central return or at the air handler cabinet. You temporarily tape off the remaining registers and grills and airtightness is measured by measuring fan flow and duct pressure.

The Duct Blaster® is the preferred system for Title 24 testing in California, IECC Compliance Building Codes, as well as compliance testing for Energy Star and other performance-based programs throughout the country.

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

Supply duct leaks cause expensive conditioned air to be dumped into the attic, crawlspace or garage instead of the house.

Return duct leaks can pull pollutants, mold, pollen, dust, insulation fibers and other irritants directly into the house.



Minneapolis Duct Blaster® Features

- The lightweight 7-pound (3.18 kg) fan delivers enough air flow (1,500 CFM, 708 l/s, 2,548 m³/h) to test the leakiest duct systems.
- Quickly and accurately measures airtightness 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.
- New Cruise Control feature automatically controls the speed of the fan during testing.
- Standard instrumentation includes the DG-700 Pressure and Flow Gauge. The DG-700 gauge contains 2 precision pressure sensors that provide simultaneous display of both duct pressure and fan flow. Its specialized “CFM@25” feature makes it easy to get quick and accurate total leakage test results.
- Includes a padded nylon carrying case with shoulder strap.



The fan can mount directly to the HVAC system when pressuring the ductwork.



The Duct Blaster® can measure the total amount of air moving through the air handler.

Minneapolis Duct Blaster® Kit

The standard kit includes:

- Duct Blaster Fan with Fan Speed Controller
- DG-700 Digital Pressure and Flow Gauge
- Three flow rings
- Twelve feet (3.7 m) of 10 in. (25 cm) diameter flex duct
- Padded nylon carrying case
- Static pressure probe



- Sample roll of DuctMask™ Temporary Register Seal
- Duct Blaster® training video and manual
- Software CD

Duct Blaster® Training Video

This video, which can also be downloaded from The Energy Conservatory website, shows:

- A complete overview of all components of the Duct Blaster® System
- How to set-up the Duct Blaster® System
- How to seal registers using DuctMask™ Temporary Register Seal
- How to conduct a one-point total duct leakage pressurization test



Duct Blaster® System Accessories

Standard Duct Blaster® System Accessories include:

Duct Mask™ Temporary Register Seal

- Provides a quick, temporary seal on registers and grills when measuring duct airtightness.
- Reduces the time to seal off the duct system.
- This adhesive backed film comes in 8 in. (20 cm) and 24 in. (61 cm) wide rolls. An easy-to-use belt dispenser comes with the 8 in. wide rolls.



- Provides a quick, custom one-step installation. Comes perforated every 4 in. (10 cm) for 8 in. wide rolls, and every 24 in. for 24 in. wide rolls.
- Affordable, so you can use it with every test.

TECBLAST™ Duct Airtightness Test Software



- Easy data entry.
- Calculates and displays duct airtightness test results. Includes leakage rate in CFM, square inches and as a percent of system airflow.

Estimates annual system efficiency loss from the measured leakage rate.

- Built-in report generator. You choose a one-page home owner report, or a two-page technical report.
- TECBLAST lets you print your company logo directly on the reports for a professional image.
- Available for free download.

FlowBlaster® Capture Hood Accessory

- Turns the Duct Blaster® fan into a battery powered capture hood to measure supply and exhaust flow through register grills and exhaust fans.
- Includes flow conditioner section with fabric hood.
- New, combination fan speed controller and rechargeable battery pack.
- Runs for up to 60 minutes on a full charge.
- Measures from 10 to 300 CFM.
- All cables, parts and manual included.



Duct Blaster® Specifications

Maximum Flow	1,500 CFM at free air (708 l/s, 2,548 m³/h) 1,350 CFM at 50 Pa (637 l/s, 2,293 m³/h)
With flex duct attached	1,250 CFM at free air (590 l/s, 2,123 m³/h) 1,000 CFM at 50 Pa (472 l/s, 1,700 m³/h)
Minimum Flow	10 CFM (Ring 3) (5 l/s, 17 m³/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% using DG-700
Calibration	Meets ASTM Standard E779-03, E1554-07, CGSB-149.10-M86, EN 3829, ATTMA Technical Standard 1, NFPA 2001, ASHRAE 152, RESNET and USACE
Power	110V or 220V

Specifications subject to change without notice.

Duct Blaster® and TrueFlow are registered trademarks of The Energy Conservatory. Minneapolis Blower Door™, FlowBlaster™, Duct Mask™ and TECBLAST™ are trademarks of The Energy Conservatory.



The Minneapolis Blower Door™ airtightness testing system.



FLIR® Infrared Cameras help speed up diagnostic work, especially when used with a Blower Door.



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

Complete service and technical support is built in.

All of our products come with a full two-year warranty on parts and labor, and access to the most knowledgeable customer service staff in the industry. If you have questions on the use of our products or how to handle unusual situations, you can count on us to give dependable answers. We always stock a complete line of replacement parts and can respond quickly to any service or equipment problem.

Our nearly 30 years of expertise goes beyond simply knowing about equipment. The Energy Conservatory's on-going research, active participation with technical associations, and close working relationships with the world's leading building scientists keeps us involved in the development and field testing of many of the performance testing industry's techniques. This means you always have the most up-to-date information and testing procedures.



To order, or for more information contact:

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