



The Energy Conservatory

EXHAUST FAN FLOW METER AND TRUEFLOW® AIR HANDLER FLOW METER



PERFORMANCE TESTING TOOLS

MOST WIDELY USED DIAGNOSTIC TOOLS BY:

Weatherization Auditors and Crews

Home Performance Contractors

Home Energy Raters

Trainers



Exhaust Fan Flow Meter

The Energy Conservatory's Exhaust Fan Flow Meter makes quick and accurate low flow measurements of airflow through residential bathroom fans, whole house ventilation fans and other exhaust devices.

Smaller, lighter and easier to use than conventional flow measuring hoods, the Exhaust Fan Flow Meter is engineered to measure flow down to 10 CFM, with an effective range of 10 to 124 CFM. When placed over a fan grille, air is drawn through the calibrated opening. The opening is adjusted to minimize back pressure while maximizing accuracy.

When used with our DG-1000 or DG-700 Digital Pressure and Flow Gauge, you can display air flow values directly in CFM. A handle with heavy duty Velcro® fastener provides a secure connection to the Exhaust Fan Flow Meter. The threaded handle fits most standard painter's poles.



The lightweight Exhaust Fan Flow Meter makes easy work of low flow airflow measurements.

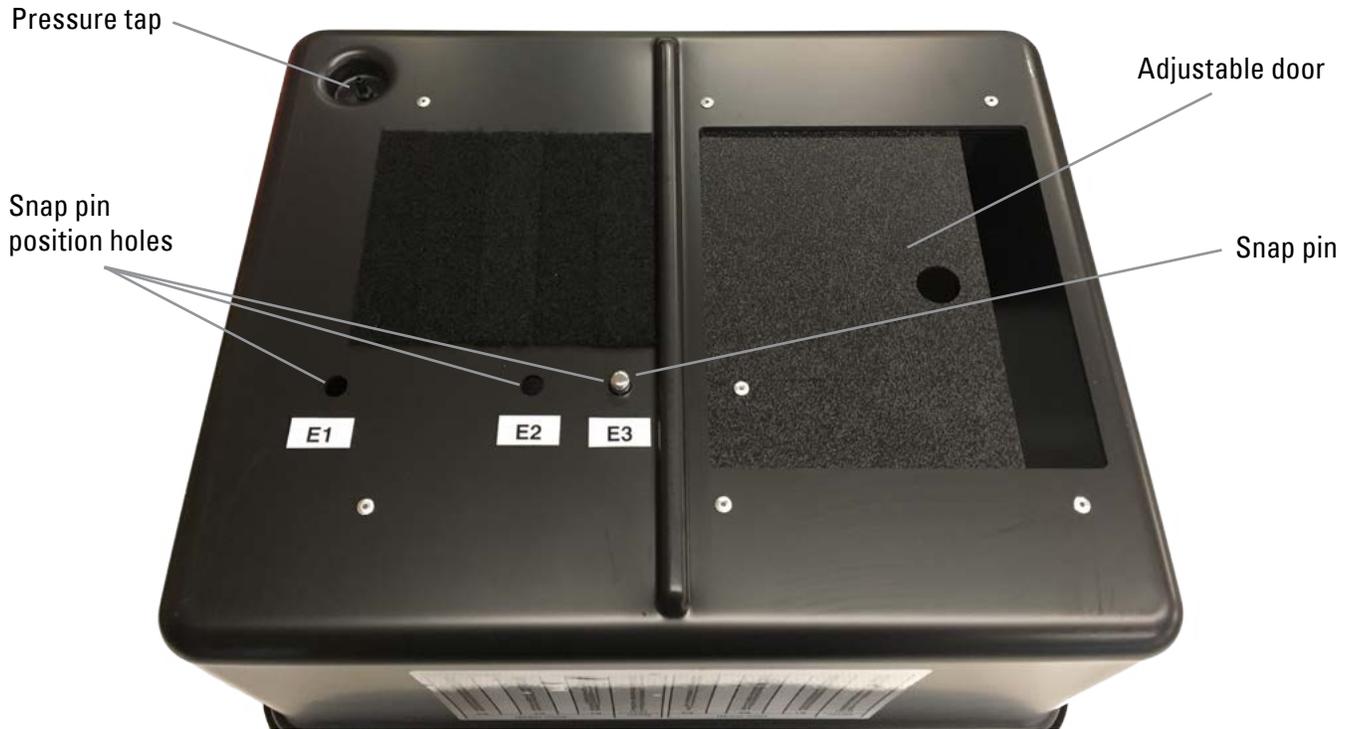


The pressure reading taken from the metering box can easily be converted to air flow using a flow table attached to the side of the metering box.

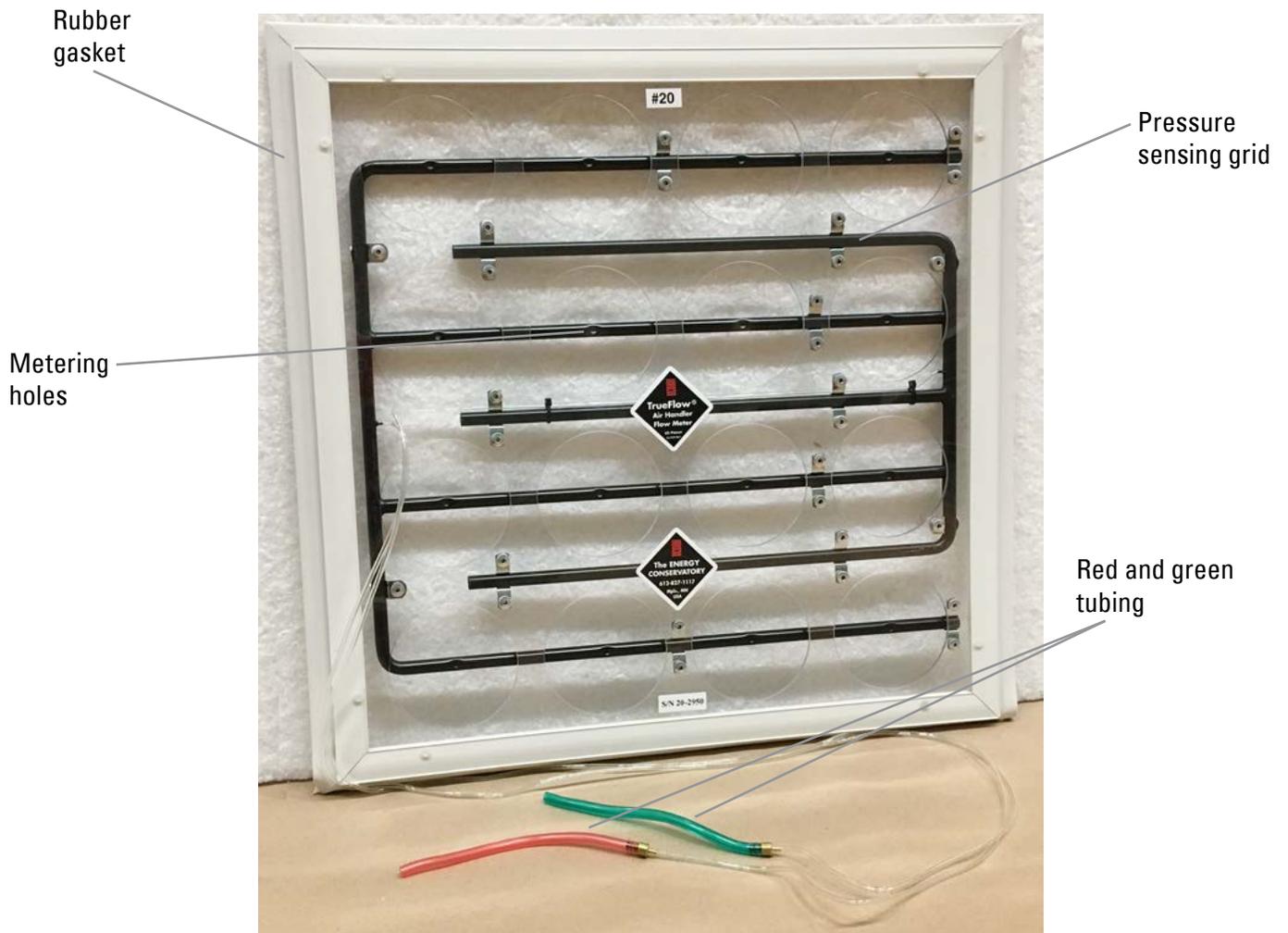


Comes with a threaded handle that can attach to most painter's poles to reach high- or ceiling- mounted grilles.

Parts of the Exhaust Fan Flow Meter



Parts of the TrueFlow Air Handler Flow Meter





TrueFlow Air Handler Flow Meter

The Energy Conservatory's TrueFlow Air Handler Flow Meter provides a simple and accurate measurement of air flow through residential air handlers and filter grills.

The TrueFlow plate temporarily replaces the filter in a typical air handler system to measure air flow. It can be installed in a filter slot directly adjacent to the air handler or remotely at a single central return grill.

Other methods for estimating the air handler flow rate, such as the temperature rise method, static pressure and fan curve method, and the Duct Blaster® isolated return method, have been found to be problematic or time-consuming.

Extensive field testing has shown that the TrueFlow

- Measures flow through air handlers rated from one ton to five tons, 400 to 2,000 CFM.
- Works in a wide range of return plenum and air handler fan configurations.
- Is four times more accurate than the single point temperature rise method.
- Changes size quickly to fit standard and custom filter slots.
- Works with any manometer having a resolution of 1 Pa or 0.005 inches of water.
- Has a flow accuracy of $\pm 7\%$ for most applications when used with a 1% accurate pressure gauge.
- Direct cubic feet per minute (CFM) values are delivered in two to three minutes without extensive calculations.



A variety of plate spacer sizes are available for the TrueFlow. When using these spacers, the TrueFlow will fit in most standard size filter slots.



The carrying case included with the TrueFlow kit has a variety of pockets for keeping the plate spacers organized.



The white gasket on the outer edge of the TrueFlow ensures a tight fit free of air leaks.

EXHAUST FAN FLOW METER SPECIFICATIONS

FLOW ACCURACY

±10% of reading when used with a 1% accurate pressure gauge (such as a DG-700) with a display resolution of 0.1 Pa (0.0004 inches of water)

FLOW RANGE

Door position E1: 44 - 124 CFM

Door position E2: 21 - 59 CFM

Door position E3: 10 - 28 CFM

DIMENSIONS (INSIDE)

16 in. L x 13 in. W x 8 in. D

WEIGHT

3 lbs. including handle

TRUEFLOW SPECIFICATIONS

ACCURACY OF FLOW USING THE DG-700 OR DG-1000 DIGITAL PRESSURE AND FLOW GAUGE

+/- 7% of indicated reading

RANGE OF FLOW: #14 METERING PLATE

365 - 1,565 CFM (620 - 2,600 cmh, 172 - 740 l/s)

RANGE OF FLOW: #20 METERING PLATE

485 - 2,100 CFM (825 - 3,570 cmh, 225 - 990 l/s)

STORAGE AND OPERATING TEMPERATURE RANGE

-40°F - 150°F (-40°C - 65°C)

NOMINAL SIZES OF PLATES WITH GASKET MATERIAL CONNECTED: #14 METERING PLATE

14.5" x 20.5" (37 cm x 52 cm)

NOMINAL SIZES OF PLATES WITH GASKET MATERIAL CONNECTED: #20 METERING PLATE

20" x 20" (50.8 cm x 50.8 cm)

WEIGHT - METERING PLATES, SPACERS AND CASE

13 lbs (5.9 kg)

COMPATIBLE FILTER SIZES WITH #14 METERING PLATE

14 x 20, 14 x 25, 16 x 20, 16 x 24, 16 x 25, 18 x 20

COMPATIBLE FILTER SIZES WITH #20 METERING PLATE

20 x 20, 20 x 22, 20 x 24, 20 x 25, 20 x 30, 24 x 24

Specifications subject to change without notice.

Minneapolis Blower Door™ and TECTITE™ are trademarks of The Energy Conservatory. Duct Blaster® and TrueFlow® are registered trademarks of The Energy Conservatory.

Stylized images of the Blower Door is also a Registered Trademark.

For nearly 40 years, TEC products have been the first choice for energy raters, HVAC contractors, builders, insulation contractors, weatherization professionals and utility programs.



The **Minneapolis Duct Blaster®** is used to measure the airtightness of ductwork.



The **Mini Fan Blower Door System** uses the Duct Blaster fan and can be used to conduct blower door tests on small or tighter apartments and homes.



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

COMPLETE SERVICE AND USER SUPPORT

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 40 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.

✓ **The most accurate**

✓ **Easy to use**

✓ **Dependable**

✓ **Backed by industry-leading tech support**

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