

# Principles of Sustainable Design: HVAC Testing, Adjusting, and Balancing

Testing, adjusting, and balancing of all HVAC systems is needed to complete the installation and to make the system perform as the designer intended. The purpose of testing, adjusting, and balancing (TAB) is to assure that an HVAC system is providing optimal performance at the lowest energy cost possible. This is extremely important in this era of rising energy costs. Most industrial and commercial projects require a licensed air balancing report before they are able to receive a certificate of occupancy.



Building owners and tenants should be concerned that the environmental performance of their buildings be optimal while the operating cost should be minimal. These goals can only be accomplished when a building's HVAC and hydronic systems are properly balanced. Three major steps used to achieve the proper operation of the HVAC and hydronic systems and a desirable climate are Testing, Adjusting, and Balancing (TAB). Energy Transfer Solutions, LLC is proud to be National Environmental Balancing Bureau (NEBB) Certified in Testing, Adjusting, and Balancing of Environmental Systems.

### Our Services

ADJUST SYSTEM ACCORDING TO MECHANICAL DRAWINGS

PROVIDE NEBB CERTIFIED T.A.B. REPORT

AIR CHANGES PER HOUR VERIFICATION

**HUMIDITY TESTING** 

HVAC SYSTEM DIAGNOSTICS

SPACE PRESSURE TESTING

SYSTEM COMMISSIONING

PRESSURE DROP ANALYSIS

PIPE AND DUCT SIZE VERIFICATION

## **Specialties**

LAB & RESEARCH FACILITY ENVIRONMENTS

HOSPITAL INFECTIOUS DISEASE SPACES VERIFICATION

NEW OR EXISTING BUILDING BALANCING AND VERIFICATION

NEW COMMERICIAL BUILDINGS AND INDUSTRIAL SPACES



#### What is Air Balancing?

HVAC Testing, Adjusting and Air Balancing (TAB) are the three major steps used to achieve proper operation of HVAC (heating, ventilation, and air conditioning) systems. The NEBB Certified Air Balance insures that all components of the HVAC system are working in harmony, at their optimum performance, providing total occupant comfort. During this process, a mechanical engineer develops specifications and a set of mechanical drawings from a mix of occupant desires, local codes, ASHRAE standards, and many years of training. The correct ducting, airflow, registers, and unit performance are brought together with consideration for ventilation requirements and building exhaust needs. During the air balancing process, our certified technician measures the inflow and out-flow of the air and makes fine tune adjustments to the HVAC system. The most important part of the mechanical plans used by the certified balance company is the list of "cfm" requirements next to each supply, return, intake, exhaust and ventilation opening.



Ask how our NEBB
Technicians are helping clients
deal with COVID-19

# Why Air Balancing?

Set yourself apart from the competition — have our NEBB certified technicians test, adjust and balance your HVAC systems to ensure optimal air quality and energy efficiency. We can help you meet code officials' requirements for balancing reports.

Optimal energy efficiency

Best air quality

Create a comfortable environment

Produce balancing reports

Meet building codes and requirements



