



**Neudorfer Engineers. Inc.**  
Washington - Oregon - California



***Neudorfer Engineers  
Team Responsibilities***  
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## **NEBB STANDARDS SECTION-3 RESPONSIBILITIES**

### **3.1 INTRODUCTION**

Many approaches can be taken to deliver a successful TAB project. In order to maximize value and benefits from a system balance, it is important to understand that the design professionals and other construction team members have responsibilities that will affect the outcome of the TAB process.

### **3.2 DESIGN AND CONSTRUCTION TEAM RESPONSIBILITIES**

#### **3.2.1 DESIGN PROFESSIONALS RESPONSIBILITIES**

It is recommended that the contract documents shall:

- a) Specify the equipment and systems to be tested, adjusted, and balanced, the parameters to be measured and the acceptable tolerances. NEBB standards and procedures define industry best practices to perform the TAB.
- b) Define who retains the services of the NEBB Certified TAB Firm and require that the NEBB Certified TAB Firm be retained early in the construction process.
- c) Clearly identify on the mechanical plans the system components required for successful balancing; i.e. main, branch and final volume dampers, flow measuring stations, pressure and / or temperature test ports, other applicable balancing devices, etc.
- d) Specify that the building and / or HVAC control system firm commission and document their work before the TAB work begins.
- e) Specify that the building control system firm provides access to hardware and software, or onsite technical support required to assist the TAB effort. The hardware and software or the onsite technical support shall be provided at no cost to the NEBB Certified TAB Firm.
- f) Provide adequate access to all equipment and components required by the TAB process.
- g) Completely define commissioning support responsibilities for the NEBB Certified TAB Firm.

#### **3.2.2 CONSTRUCTION TEAM RESPONSIBILITIES**

It is recommended that the construction team shall:

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- a) Provide the NEBB Certified TAB Firm with a conformed set of contract documents (drawings, specifications, and approved submittals), including all current approved change orders and contract modifications.
- b) Develop a project schedule, with the input of the NEBB Certified TAB Firm, that coordinates the work of other disciplines and provides *adequate* time in the construction process to allow successful completion of the TAB work.
- c) Notify the NEBB Certified TAB Firm of *all* schedule changes.
- d) Ensure that the building enclosure is complete, including but not limited to, all structural components, windows and doors installed, door hardware complete, ceilings complete, stair, elevator and mechanical shafts complete, roof systems complete, all plenums sealed, etc.
- e) Ensure that all necessary mechanical and HVAC work is complete and is safe to operate. This includes, but is not limited to, duct leakage testing and hydrostatic testing. The piping systems should be flushed, filled, vented, and chemically treated. All strainers should be cleaned and the correct screens installed. The duct systems and all related equipment should be cleaned and the specified *clean* air filters installed. For additional requirements see the NEBB pre-TAB checklist in the Appendix.
- f) Complete the installation of permanent electrical power systems serving the HVAC equipment and systems. Such electrical systems shall be properly installed in accordance with all applicable codes to ensure the safety of all construction personnel.
- g) Perform start up of all HVAC equipment and systems in accordance with manufacturers' recommendations.
- h) Complete the installation, programming (including design parameters and graphics), calibration, and startup of all building control systems. Verify that the building control system provider has commissioned and documented their work before balancing begins
- i) Require that the building control system firm provide access to hardware and software, or onsite technical support required to assist the TAB effort. The hardware and software or the onsite technical support shall be provided at no cost to the NEBB Certified TAB Firm.
- j) Furnish and install all drive changes as required.

### **3.2.3 NEBB CERTIFIED TAB FIRM RESPONSIBILITIES**

The NEBB Certified TAB Firm shall:

- a) Follow the current NEBB standards and procedures when performing the TAB work.

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- b) Communicate on a regular basis, through proper channels, items relating to design, installation, or function that prevent the NEBB Certified TAB Firm from achieving completion of the TAB work in accordance with the current edition of the NEBB *Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems*.
- c) Perform the specified commissioning support requirements.
- d) Publish a NEBB Certified TAB Report of final conditions that accurately reflect the HVAC system(s) final air and hydronic flow conditions.

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