

SECTION 230593 - TESTING, ADJUSTING, AND BALANCING

PART 1-GENERAL

1.1 SECTION INCLUDES

- A. The testing, adjusting, and balancing of the HVAC air and water systems.
- B. The performing contractor's certification requirements.

1.2 SUBMITTALS

- A. Submittals are required and shall include the complete certified report for all air and water system pressure testing and balancing including all electrical performance of each piece of HVAC equipment.
- B. Prior to commencement of the work described in this Section, the testing, adjusting, and balancing contractor shall submit verification of his AABC or NEBB certification to the Design Professional for acceptance.

1.3 QUALITY ASSURANCE

- A. The testing, adjusting, and balancing contractor shall be either AABC or NEBB certified for the work described herein.

1.4 WARRANTY

- A. Contractor shall warranty entire systems and equipment for a period of one (1) year.

PART 2-PRODUCT

2.1 COMPONENTS

- A. The Contractor shall provide his own properly calibrated equipment to pressure test, air balance, water balance and to measure electrical characteristics of each piece of HVAC equipment.

PART 3-EXECUTION

3.1 REQUIREMENTS

- A. Testing, adjusting, and balancing plan.
- B. Systems readiness checks.
- C. Testing, Adjusting, and Balancing Procedures: AABC's National Standards or NEBB's Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems.
- D. Equipment settings marked to show final settings.

- E. Balancing shall be performed to meet the requirements of ASHRAE standard 90.1
- F. The owner has a right to request up to 25% of all the balanced systems to be verified during the warranty period of the project.

3.2 HVAC SYSTEMS AIRFLOW AND WATER FLOW RATE TOLERANCES

- A. Supply, Return, and Exhaust Fans: Minus 5 percent to plus 10 percent.
- B. Air Outlets and Inlets: 0 to minus 10 percent.
- C. Heating Water Flow Rate: 0 to minus 10 percent.
- D. Cooling Water Flow Rate: 0 to minus 5 percent.

3.3 REPORTING

- A. Initial Construction Phase Report: Based on examination of Contract Documents, on adequacy of design for systems balancing devices.
- B. Status Reports: As Work progresses.
- C. Final Report: Certification sheet, with content and format according to AABC or NEBB standard forms.

END OF SECTION 230593