8.006

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## 1 Purpose

- 1.1 To establish a standard procedure for measuring VAV air outlet(s) to comply with design requirement.
- 2 Scope
  - 2.1 This procedure applies to VAV system(s).
- 3 References
  - 3.1 NEBB Testing Adjusting Balancing Manual for Technicians, First Edition, 1986.
- 4 Definition
  - 4.1 CFM Cubic Feet per Minute
  - 4.2 TAB Test, Adjust, and Balance
  - 4.3 VAV Variable Air Volume
- 5 Responsibility
  - 5.1 TAB technicians shall record all test readings on Form FN 8.006.1 (VAV Air Outlet Test).
  - 5.2 All test reports shall be saved in files, located in the TAB Department of Therma.
  - 5.3 All test equipment utilized shall be in calibration in accordance with NEBB Standards and traceable to the National Institute of Standards and Technology (NIST).
- 6 Materials Requirement
  - 6.1 None

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- 7 Test Equipment
  - 7.1 Flow Hood Kit
  - 7.2 Tape Measure
- 8 General Procedures
  - 8.1 Record all design values of maximum cooling, minimum cooling and heat air volume in CFM on the Form FN 8.006.1 (VAV Air Outlet Test).
  - 8.2 Measure the length, width, and neck size of air outlet(s) using tape measure.
  - 8.3 Balance the VAV box to the final design conditions.
  - 8.4 Measure the outlet airflow with VAV box set at the maximum cool flow rate, using a flow hood with the appropriate sized top set to the appropriate scale for the required airflow.
  - 8.5 Record all measured data on the Form FN 8.006.1 (VAV Air Outlet Test).
  - 8.6 Repeat Steps 8.4 and 8.5 with the VAV box set to the minimum cool flow rate (the hot side of dual duct boxes must be closed during this measurement by temporarily applying the necessary control signal to the hot duct actuator motor).
  - 8.7 Repeat Steps 8.4 and 8.5 with the VAV box set to the maximum cool flow rate (the cold side of dual duct boxes must be closed during this measurement by temporarily applying the necessary control signal to the cold duct actuator motor).
- 9 Review and Approval
  - 9.1 Return the Form FN 8.006.1 (VAV Air Outlet Test) to the TAB Department for review.

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**Document Approval** 

General Foreman

Service Manager

Quality Assurance Manager

-15-Date

-9 Date

<u>4-16-97</u> Date

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