SECTION 15990

- 3.8 If the TAB Contractor is prevented from completing his work in a timely and continuous manner (according to the established HVAC/TAB schedule) due to non-operable and/or incomplete HVAC systems, all additional fees for TAB work shall be the responsibility of the Mechanical Contractor.
- 3.9 Florida Tech shall not release the Mechanical Contractor's 10% retainage until notified, in a Certified Report, by the TAB Contractor that all HVAC systems have been successfully TABed in accordance with Contract Documents and Section 15991.
- 3.10 The Mechanical Contractor shall verify the following items to ensure proper start-up and preliminary adjustments of air distribution systems.
  - A. Verify that air grilles (supply, return, exhaust, etc.) are installed and connected to the duct system.
  - B. Verify that duct systems are clean of debris.
  - C. Verify that ducts attached with flexible connectors are aligned (longitudinal) within  $\pm$  0.25", have a uniform gap within  $\pm$  0.25", and have a nominal gap width of 2.0". Flexible duct connectors shall not leak.
  - D. Verify that filters are clean, and filter pull strips and spacers are installed. Filter module shall NOT allow leaks around the filters.
  - E. Verify that balancing dampers are operational and fully opened. For externally insulated ductwork, verify that 2" high standoff brackets for the locking quadrants are installed.
  - F. Verify that fire and/or smoke dampers are fully opened.
  - G. Verify proper fan rotation.
  - H. Verify proper belt drive alignment.
  - I. Verify capacity of fan motor overload elements (1.25\*FLA).
- 3.11 The Mechanical Contractor shall verify the following items to ensure proper start-up and preliminary adjustments of hydronic systems.
  - A. Verify that the hydronic systems are properly flushed, filled, purged and chemically treated.
  - B. Verify that the strainer baskets/screens are clean.
  - C. Verify that pump/motor shaft is correctly aligned.
  - D. Verify proper pump rotation.
  - E. Verify that all balancing valves are fully opened and are equipped with adjustable memory stops.
  - F. Verify that gage cocks, pressure gages and thermometers are properly installed at coils, pumps, chillers, heat exchangers, etc. Extensions to allow for pipe insulation are required. Gage cocks and pressure gages at pumps shall utilize pump flange taps y t t t

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