

SECTION 15955
BUILDING AUTOMATION SYSTEM
(Applicable to all campuses except IUPUI)

A. GENERAL

1. Indiana University, the Owner, will pre-purchase directly from Siemens Building Technologies or Johnson Controls the following equipment for the building automation system:
 - Direct Digital Control panels
 - Auxiliary panels with internal components pre-wired
 - All required sensing devices (ie: temperature, humidity sensors)
 - Safety devices: low temperature detectors
 - Valves, valve actuators
 - Dampers, damper actuators
 - Pneumatic transducers
 - Relays
 - Transformers
 - Thermostats
 - Variable Frequency Drives
 - Air Flow Measuring Stations
 - Flowmeters
 - Air compressor, filter, refrigerated air dryer
 - Fiber optic interfaces
 - Fiber optic hub assemblies
 - All necessary design engineering labor
 - All necessary technician labor to verify point wiring, program and start up all DDC panels, perform acceptance testing.
 - Project management labor required to direct the CIC and attend job meetings.

2. All products pre-purchased by the Owner, as listed above, will be shipped to the (CIC) Control Installation Contractor for installation, wiring and/or tubing. The CIC shall receive, handle and store all material to be installed under this contract. The CIC shall be responsible for verification of quantity received.

3. CIC shall install all control equipment provided by the Owner. The CIC shall furnish, install, and terminate all necessary wiring, pneumatic tubing, conduit, hangers, etc. to provide a complete control system installation.

4. Upon completion of all installation, wiring and tubing by the CIC, the Owners agent (Siemens Building Technologies or Johnson Controls) will conduct verification of point to point wiring and pneumatic tubing. The CIC will be responsible to make any necessary corrections.
5. Upon approval by the Owners Construction Inspection Department, the Owner's agent shall program all DDC panels, create necessary graphics and provide any interface between the building automation system and the campus environmental control system.