| TESTING VARIABLES | <u>PASS</u> | <u>FAIL</u> | NOTES |
|---|-------------|-------------|-------|
| a. Verify all required mechanical installation work is successfully completed, and all HVAC equipment is working correctly (or will be by the time the PVT is conducted). | | | |
| b. Verify HVAC motors operate below full- load amperage ratings. | | | |
| c. Verify all required control system components, wiring, and accessories are installed. | | | |
| d. Verify the installed control system architecture matches approved | | | |
| e. Verify all control circuits operate at the proper voltage and are free from grounds or faults. | | | |
| f. Verify all required surge protection is installed. | | | |
| g. Verify the A/C Power Table specified in "CONTROLS SYSTEM OPERATORS MANUALS" | | | |
| is accurate. h. Verify all DDC network communications function properly, including | | | |
| uploading and downloading programming changes. | | | |
| i. Verify each digital controller's programming is backed up. | | | |
| j. Verify all wiring, components, and panels are properly labeled. | | | |
| k. Verify all required points are programmed into devices. | | | |
| 1. Verify all TAB work affecting controls is complete. | | | |
| m. Verify all valve and actuator zero and span adjustments are set properly. | | | |
| n. Verify all sensor readings are accurate and calibrated. | | | |
| o. Verify each control valve and actuator goes to normal position upon | | | |
| loss of power. p. Verify all control loops are tuned for smooth and stable operation. View trend data where applicable. | | | |
| q. Verify each controller works properly in stand-alone mode. | | | |
| verify all safety controls and devices function properly, | | | |

including freeze protection and interfaces
with building fire alarm
systems.

- s. Verify all electrical interlocks work properly.
- t. Verify all workstations, notebooks and maintenance personnel interface tools are delivered, all system and database software is installed, and graphic pages are created for each workstation and notebook.
- u. Verify the as-built (shop) control
 drawings are completed.