

## SECTION 16030

### TESTS

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The General and Supplementary Conditions, and General Requirements (Division 1), apply to the work specified in this Section.

##### 1.02 INSPECTION AND TESTS

- A. The electrical installation shall be inspected and tested by this contractor to insure safety to building occupants, operating personnel, conformity to codes and contract documents.
- B. All tests shall be performed using recognized safety procedures during energizing and de-energizing of all equipment to ensure personnel safety and equipment protection.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

- A. Provide all instruments, labor and material required for any essential, intermediate and/or final tests described hereinafter or necessary to prove compliance with these specifications.

#### PART 3 - EXECUTION

##### 3.01 INSTALLATION

- A. Tests: Field tests shall be performed and reports submitted. Approval tests shall include, but not be limited to, the following:
  - 1. All feeders rated below 600 volts shall be megger tested between phase conductors and between phase conductors and ground. Tests shall be made upon completion of all connections, splices and installation of all overcurrent protection devices. Tests shall indicate freedom from short circuits, grounded circuits, reverse polarity, proper phase rotation, etc.
  - 2. All parallel circuits shall be tested for proper phasing or other comparable techniques.
  - 3. The full load running current of all motors shall be recorded and overload heaters selected in accordance with the test results.
  - 4. Full load currents of each feeder shall be measured and circuit rearrangement provided as necessary to achieve a balanced load on each phase.
  - 5. Operation of all control and alarm circuits.
  - 6. AC system ground resistance (refer to Section 16450).

END OF SECTION