

SECTION 01655

STARTING SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Starting systems.
- B. Demonstration and instructions.
- C. Testing, adjusting and balancing.

1.02 MEASUREMENT AND PAYMENT

- A. Unless indicated as a bid item, no separate payment will be made for work performed under this Section. Include cost in Bid Items for which this work is a component.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PREPARATION

- A. Coordinate Schedule for start-up of various equipment and systems.
- B. Notify the Owner Representative seven (7) days prior to startup of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other damage-causing conditions.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision in accordance with manufacturer's instructions.
- G. When specified in individual Technical Specification sections, require manufacturer to provide an authorized representative to be present at the site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit written report indicating that equipment or system has been properly installed and is functioning correctly.

3.02 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to the Owner Representative two (2) weeks prior to date of substantial completion.
- B. Utilize O&M manuals as the basis for instruction. Review contents of manual with the Owner Representative in detail to explain aspects of operation and maintenance.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at the equipment location.
- D. Prepare and insert additional data in O&M manuals when the need for additional data becomes apparent during instruction.
- E. At a minimum, the Contractor will demonstrate the following:
 - 1. Products and procedures to be used in maintaining various surfaces, e.g., counter tops, toilet partitions, tile floors and carpeting;
 - 2. Procedures to set and maintain landscape irrigation system;
 - 3. Procedures to set and maintain security and fire alarm systems; and
 - 4. Procedures to set and maintain HVAC systems.

3.03 TESTING, ADJUSTING AND BALANCING

- A. Contractor shall start, test, adjust, balance, and provide reports on all installed equipment as provided for in this section.
- B. Owner may also appoint, employ, and pay for services of an independent firm to perform testing, adjusting, and balancing.
- C. Reports will be submitted by both the Contractor and the independent firm (if utilized) to the Owner indicating observations and results of the tests and indicating compliance or non-compliance with specified requirements and with the requirements of the Contract Documents.
- D. Owner's employment of an independent firm shall not relieve the Contractor's responsibility under this section.

END OF SECTION