# SECTION 01 79 00 DEMONSTRATION AND TRAINING

## **PART 1 - GENERAL**

#### 1.1 SECTION INCLUDES

- A. Demonstrating equipment.
- B. Instruction and training of owner's personnel.

### 1.2 DEMONSTRATING EQUIPMENT

- A. Demonstrate operation and maintenance of Products to Owner's personnel 2 weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start -up, operation, control, adjustment, trouble -shooting, servicing, maintenance, and shutdown of each item of equipment at agreed -upon times, at equipment location.
- E. Prepare and insert additional data in operations and maintenance manuals specified under Section 01 78 00 CLOSEOUT SUBMITTALS when need for additional data becomes apparent during instruction.

## 1.3 INSTRUCTION AND TRAINING OF OWNER'S PERSONNEL

- A. Before final inspection, instruct Owner's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems, at agreed upon times.
- B. For equipment requiring seasonal operation, perform instructions for other seasons within six months.
- C. Use operation and maintenance manuals as basis for instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Formal instructional time for training Owner's personnel:
  - 1. General overview of Record Documents: Not less than 3 hours, which shall include:
    - a. Record Drawings.
    - b. Record Project Manual.
    - c. Operation and Maintenance Manuals.
    - d. Finishes Manuals.
    - e. Warranty and maintenance agreements.
    - f. Test reports and inspections.
  - 2. Fire protection systems and equipment: Not less than 6 hours.
  - 3. Fire alarms systems and equipment: Not less than 8 hours.
  - 4. HVAC systems and equipment: Not less than 32 hours.
  - 5. Plumbing systems and equipment: Not less than 6 hours.
  - Electrical systems and equipment (including emergency generator): Not less than 32 hours.

- 7. Audio-visual systems, sound systems and similar equipment: Not less than 4 hours.
- 8. Other utility connected systems, control systems, security systems, and similar equipment: Not less than 8 hours.
- E. Construction Manager's personnel designated for owner training shall be competent and knowledgeable and have good communication skills.
  - 1. Instructors shall arrive at scheduled training sessions on time and be fully prepared to teach using a preplanned training program.
  - 2. All instructors are subject to the Owner's approval. Replace unacceptable instructors and reschedule training as directed by the Owner at no increase cost to the Owner.
- F. Video Training Record: Video record the instruction and training of the Owner's personnel.
  - 1. Submit 2 DVD copies to Owner upon completion of training sessions.
- G. Final payment is condition precedent on completion of Owner training (instruction).
   Construction Manager is required to submit affidavit that training and instruction of Owner's personnel is completed.

## PART 2 - PRODUCTS (NOT USED)

## **PART 3 - EXECUTION (NOT USED)**

**END OF SECTION**