

SECTION 01640**MANUFACTURER SERVICES****PART 1 GENERAL**

1.1 DEFINITIONS

- A. Person-Day: One person for 8 hours within regular CONTRACTOR working hours.

1.2 SUBMITTALS

- A. Informational Submittals:
 - 1. Training Schedule: Submit not less than 14 days prior to start of equipment installation and revise as necessary for acceptance.
 - 2. Lesson Plan: Submit proposed lesson plan (as applicable) not less than 14 days prior to scheduled training and revise as necessary for acceptance.

1.3 QUALIFICATION OF MANUFACTURER'S REPRESENTATIVE

- A. Authorized representative of the manufacturer, factory trained, and experienced in the technical applications, installation, operation, and maintenance of respective equipment, subsystem, or system, with full authority by the equipment manufacturer to issue the certifications required of the manufacturer. Additional qualifications may be specified elsewhere.
- B. Representative subject to acceptance by CITY. No substitute representatives will be allowed unless prior written approval by such has been given.

PART 2 PRODUCTS (NOT USED)**PART 3 EXECUTION**

3.1 FULFILLMENT OF SPECIFIED MINIMUM SERVICES

- A. Furnish manufacturers' services when required by an individual specification section, to meet the requirements of this Section.
- B. Where time is necessary in excess of that stated in the Specifications for manufacturers' services, or when a minimum time is not specified, the time required to perform the specified services shall be considered incidental.
- C. Schedule manufacturers' services to avoid conflict with other onsite testing or other manufacturers' onsite services.
- D. Determine, before scheduling services, that all conditions necessary to allow successful testing have been met.

- E. Only those days of service approved by CITY will be credited to fulfill the specified minimum services.
- F. When specified in individual specification sections, manufacturer's onsite services shall include:
 1. Assistance during product (system, subsystem, or component) installation to include observation, guidance, instruction of CONTRACTOR's assembly, erection, installation or application procedures.
 2. Inspection, checking, and adjustment as required for product (system, subsystem, or component) to function as warranted by manufacturer and necessary to furnish Manufacturer's Certificate of Proper Installation.
 3. Providing, on a daily basis, copies of all manufacturers' representatives' field notes and data to CITY.
 4. Revisiting the site as required to correct problems and until installation and operation are acceptable to CITY.
 5. Resolution of assembly or installation problems attributable to, or associated with, respective manufacturer's products and systems.
 6. Assistance during functional and performance testing, and facility startup and evaluation.
 7. Training of CITY's personnel in the operation and maintenance of respective product as required.
 8. Additional requirements may be specified elsewhere.

3.2 MANUFACTURER'S CERTIFICATE OF COMPLIANCE

- A. When specified in individual Specification section, submit prior to shipment of product or material.
- B. CITY may permit use of certain materials or assemblies prior to sampling and testing if accompanied by accepted certification of compliance.
- C. Signed by product manufacturer certifying that product or material specified conforms to or exceeds specified. Attach supporting reference data, affidavits, and certifications as appropriate.
- D. May reflect recent or previous test results on material or product, if acceptable to CITY.

3.3 MANUFACTURER'S CERTIFICATE OF PROPER INSTALLATION

- A. When so specified, a Manufacturer's Certificate of Proper Installation shall be completed and signed by the equipment manufacturer's representative.
- B. Such certificate shall certify that the signing party is a duly authorized representative of the manufacturer, is empowered by the manufacturer to inspect, approve, and operate their equipment and is authorized to make

recommendations required to assure that the equipment is complete and operational.

3.4 TRAINING

A. General:

1. Furnish manufacturers' representatives for detailed classroom and hands-on training to CITY's personnel on operation and maintenance of specified product (system, subsystem, component) and as may be required in applicable Specifications.
2. Furnish trained, articulate personnel to coordinate and expedite training, to be present during training coordination meetings with CITY, and familiar with operation and maintenance manual information.
3. Manufacturer's representative shall be familiar with facility operation and maintenance requirements as well as with specified equipment.
4. Furnish complete training materials, to include operation and maintenance data, to be retained by each trainee.

B. Training Schedule:

1. List specified equipment and systems that require training services and show:
 - a. Respective manufacturer.
 - b. Estimated dates for installation completion.
 - c. Estimated training dates.
2. Allow for multiple sessions when several shifts are involved.
3. Adjust schedule to ensure training of appropriate personnel as deemed necessary by CITY, and to allow full participation by manufacturers' representatives. Adjust schedule for interruptions in operability of equipment.

C. Lesson Plan: When manufacturer or vendor training of CITY personnel is specified, prepare for each required course, containing the following minimum information:

1. Title and objectives.
2. Recommended types of attendees (e.g., managers, engineers, operators, maintenance).
3. Course description and outline of course content.
4. Format (e.g., lecture, self-study, demonstration, hands-on).
5. Instruction materials and equipment requirements.
6. Resumes of instructors providing the training.

D. Pre-startup Training:

1. Coordinate training sessions with CITY's operating personnel and manufacturers' representatives.

2. Complete at least 14 days (if feasible) prior to beginning of facility startup.
- E. Post-startup Training: If required in Specifications, furnish and coordinate training of CITY's operating personnel by respective manufacturer's representatives.

END OF SECTION