# ENG-FM-011 – Specification

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<th>Specification Document Control No.:</th>
<th>382519-SPEC-013</th>
<th>Revision No.:</th>
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<td>Project:</td>
<td>382519.ZP</td>
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<td>Engineering Discipline:</td>
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<td>Specification Division:</td>
<td>01 43 33.LLE</td>
<td>Date:</td>
<td>6/12/2009</td>
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<tr>
<td>Specification Title &amp; Description:</td>
<td>(List attached Specifications by Section number, revision, date, and number of pages for each Section Specification compiled under this cover page. Attached Specifications are to have sequentially numbered pages.)</td>
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<td>Manufacturers’ Field Services</td>
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## Revision History:

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<tr>
<th>Revision No.</th>
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<td>Issued for Bid</td>
<td>6/12/09</td>
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<td>INITIAL RELEASE FOR CHPRC LLE</td>
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### Document Review & Approval:

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PART 1 GENERAL

1.01 SCOPE

A. When required by individual specification sections, manufacturer shall provide field services to assist the installation, operation, and maintenance of supplied equipment.

1.02 DEFINITIONS

A. Person-Day: One person for 8 to 10 hours normally; however, work schedule will be determined by Site Contractor.

1.03 SUBMITTALS

A. For Information Only Submittals:

1. Training Schedule: Submit, in accordance with requirements of this specification, not less than 21 days prior to start of equipment installation and revise as necessary for acceptance.
2. Lesson Plan: Submit, in accordance with requirements of this specification, proposed lesson plan not less than 21 days prior to scheduled training and revise as necessary for acceptance.
3. BTR reserves the right to video record the training sessions.

1.04 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 Buyer’s Technical Representative (BTR). No substitute representatives will be allowed unless prior written approval by such has been given.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 FULFILLMENT OF SPECIFIED MINIMUM SERVICES

A. Furnish manufacturers’ services when required by an individual specification section, to meet the requirements of this section.
B. Only those days of service approved by BTR will be credited to fulfill the specified minimum services.

C. When specified in individual specification sections, manufacturer’s onsite services may include:

1. Provide oversight during product (system, subsystem, or component) installation to include observation, guidance, instruction of Contractor’s assembly, erection, installation or application procedures.
2. Provide oversight for 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 BTR.
4. Revisiting the Site as required to provide oversight, correct problems and until installation and operation are acceptable to Engineer.
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 Facility’s personnel in the operation and maintenance of respective product as required.
8. Additional requirements may be specified elsewhere.

3.02 MANUFACTURER’S CERTIFICATE OF COMPLIANCE

A. When so specified, a Manufacturer’s Certificate of Compliance, a copy of which is attached to this section, shall be completed in full, signed by the entity supplying the product, material, or service, and submitted prior to shipment of product or material or the execution of the services.

B. Such form shall certify that the proposed product, material, or service complies with that specified. Attach supporting reference data, affidavits, and certifications as appropriate.

C. May reflect recent or previous test results on material or product, if acceptable to BTR.

3.03 MANUFACTURER’S CERTIFICATE OF PROPER INSTALLATION

A. When so specified, a Manufacturer’s Certificate of Proper Installation form, a copy of which is attached to this section, shall be completed and signed by the equipment manufacturer’s representative.
B. Such form 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.

3.04 TRAINING

A. General:

1. Furnish manufacturers’ representatives for detailed classroom and hands-on training to Facility’s personnel on operation and maintenance of specified product (system, subsystem, component) and as may be required.
2. Furnish trained, articulate personnel to coordinate and expedite training, to be present during training coordination meetings with BTR, and familiar with operation and maintenance manual information specified in Section 01 78 23.LLE, Operation and Maintenance Data.
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 and training manual, to be retained by each trainee.

B. Training Schedule:

1. The BTR will coordinate and schedule training with the Manufacturer’s Representative.

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

1. Title and objectives, outline and establish objectives to be approved by BTR.
2. Recommended attendees (e.g., managers, engineers, operators, maintenance).
3. Course description, outline of course content, and estimated class duration.
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. BTR will coordinate training sessions with Facility’s operating personnel and manufacturers’ representatives, and with submission of operation and maintenance manuals in accordance with Section 01 78 23.LLE, Operation and Maintenance Data.
2. Complete at least 21 days prior to beginning of facility startup.
3. Utilize equipment simulation or mock-up as appropriate.

E. Post-startup Training: If required in Specifications, furnish and coordinate training of Facility’s operating personnel by respective manufacturer’s representatives.

3.05 SUPPLEMENTS

A. The supplements listed below, following “End of Section”, are part of this Specification.

   1. Form: Manufacturer’s Certificate of Compliance.
   2. Form: Manufacturer’s Certificate of Proper Installation.

END OF SECTION
MANUFACTURER’S CERTIFICATE OF COMPLIANCE

BTR:  

PRODUCT, MATERIAL, OR SERVICE SUBMITTED:

PROJECT NAME:

PROJECT NO:

Comments:

I hereby certify that the above-referenced product, material, or service called for by the contract for the named project will be furnished in accordance with all applicable requirements. I further certify that the product, material, or service are of the quality specified and conform in all respects with the contract requirements, and are in the quantity shown.

Date of Execution: ________________________________ , 20__

Manufacturer:

Manufacturer’s Authorized Representative (print): ________________________________

__________________________________________

(Authorized Signature)
MANUFACTURER’S CERTIFICATE OF PROPER INSTALLATION

BTR _____________________________  EQPT SERIAL NO: _____________________________

EQPT TAG NO: _____________________________  EQPT/SYSTEM: _____________________________

PROJECT NO: _____________________________  SPEC. SECTION: _____________________________

I hereby certify that the above-referenced equipment/system has been:

(Check Applicable)

☐ Installed in accordance with Manufacturer’s recommendations.

☐ Inspected, checked, and adjusted.

☐ Serviced with proper initial lubricants.

☐ Electrical and mechanical connections meet quality and safety standards.

☐ All applicable safety equipment has been properly installed.

☐ Functional tests.

☐ System has been performance tested, and meets or exceeds specified performance requirements. (When complete system of one manufacturer)

Note: Attach any performance test documentation from manufacturer.

Comments:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

I, the undersigned Manufacturer’s Representative, hereby certify that I am (i) a duly authorized representative of the manufacturer, (ii) empowered by the manufacturer to inspect, approve, and operate his equipment and (iii) authorized to make recommendations required to assure that the equipment furnished by the manufacturer is complete and operational, except as may be otherwise indicated herein. I further certify that all information contained herein is true and accurate.

Date: _________________________________, 20___

Manufacturer: ________________________________________________________________

By Manufacturer’s Authorized Representative: ________________________________

(Authorized Signature)