

SECTION 270002 - QUALITY ASSURANCE FOR COMMUNICATIONS

PART 1 - GENERAL

1.1 SUBMITTAL REQUIREMENTS

- A. Quality Assurance:
 - 1. Quality Assurance: General Qualifications.
 - 2. Quality Assurance: For Structured Cabling Systems Work.

1.2 SUMMARY

- A. Section Includes:
 - 1. Quality Assurance requirements for Work of this Division.
- B. Related Requirements
 - 1. Related Sections
 - a. All Division 27 Sections.

1.3 QUALITY ASSURANCE

- A. General Qualifications:
 - 1. Business history of the last five (5) contiguous years performing work of similar type, value and scope as that required of the Contract Documents.
 - 2. Capable of demonstrating through valid references and other means that it has successfully completed no less than six (6) projects of similar type, monetary size, and scope of work within the last twenty-four (24) calendar months.
 - 3. A "Factory-authorized" reseller (e.g., distributor, dealer, integration partner, value-added reseller, channel partner) for the products furnished for each Section.
 - 4. House substantial business operations within a 300-mile radius of the project site.
 - 5. Employ full-time service staff based within a 50-mile radius of the project site.
 - 6. Financial Disclosure of the Contractor: Prior to contract award, upon request.
- B. Superintendent/Project Manager Qualifications:
 - 1. Furnish the services of an experienced superintendent/project manager who shall be constantly in charge of the Work, together with a qualified foreman and technical specialists to properly install, connect, adjust, start, operate and test the Work involved.
 - 2. Qualifications are subject to the review and acceptance by the Designer and Owner. Unless the Designer and Owner grant prior permission, the same

superintendent/project manager shall be utilized throughout the duration of the Project and shall remain responsible for the complete scope of the Work.

C. Subcontractor Qualifications:

1. If the Contractor, as a singular entity, does not meet 100-percent of the quality assurance requirements for each specification section, the Contractor shall enlist the services of qualified subcontractors to perform the Work of those specific section(s). This includes, but is not limited to, the supply of the products for the Section and the supply of the project engineering services, preparation of shop drawings and section submittals, technical installation labor, training, warranty, post-installation support and service.
2. The Contractor shall ensure that each subcontractor supplies the services of a project manager to represent its interests at the same project meetings in which the Contractor participates.
3. The Designer and Owner reserve the right to disqualify the use of any subcontractor that does not meet the quality assurance requirements set forth in these specifications. Should a subcontractor be disqualified, the Contractor shall supply the services of a different subcontractor that complies with the published quality assurance requirements. The Contractor is solely responsible for costs incurred as a result. It is therefore incumbent upon the Contractor to pre-qualify subcontractor choice(s) prior to submitting pricing for work.
4. To achieve quality assurance compliance, an equipment vendor that is not performing the technical installation labor associated with work of a Section shall not be considered a subcontractor.

D. Training Qualifications:

1. Personnel conducting training shall be knowledgeable of the product, system and technology on which they train. Personnel shall be factory trained, factory certified and/or otherwise recognized by the Designer as possessing sufficient experience and knowledge in the subject area.

E. Additional Qualifications for Structured Cabling Systems Work:

1. Provide BICSI Certified Registered Communication Distribution Designer (RCDD) and BICSI Certified Technicians who shall be responsible for the Project.
 - a. The RCDD shall be a current BICSI member in good standing. The RCDD shall have sufficient experience in this project type and provide technical support to the field during installation, warranty period, and extended warranty periods and maintenance contracts.
 - b. The lead technician responsible for the Project shall be a BICSI member in good standing and shall be a BICSI Certified Technician.

- c. Installers shall meet minimum certification requirements to meet the cabling and connectivity manufacturers' certifications and warranty requirements, as identified in individual specification sections.
2. The RCDD and Lead Technician(s) on the Project shall have a thorough understanding of the following, and Work performed shall be compliant with the following:
 - a. TIA/EIA-568-C, including TIA/EIA-568-C.0, Generic Telecommunications Cabling for Customer Premises; TIA/EIA-568-C.1, Commercial Building Telecommunications Cabling Standard; TIA/EIA-568-C.2, Balanced Twisted-Pair Telecommunication Cabling and Components Standard; and TIA/EIA-568-C.3, Optical Fiber Cabling Components Standard.
 - b. TIA/EIA-569-C, or most current version, Telecommunications Pathways and Spaces.
 - c. TIA/EIA-590-A, or most current version, Standard for Physical Location and Protection of Below-Ground Fiber Optic Cable Plant.
 - d. TIA/EIA-606-B, or most current version, Administrative Standard for Commercial Telecommunications Infrastructure.
 - e. TIA/EIA-607-B, or most current version, Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications.
 - f. The most current published edition of the "Telecommunications Distribution Methods Manual" published by the Building Industry Consulting Services International (BICSI).
 - g. TIA/EIA-758-B, or most current version, Outside Plant Cabling Systems.
 - h. The most current published edition of the "Outside Plant Design Reference Manual" published by the Building Industry Consulting Services International (BICSI).
3. Staff, including RCDD(s), BICSI Technician(s), and installers, shall be manufacturer-certified to meet the requirements to obtain the warranty specified for the systems.
4. Installation practices shall be compliant with referenced and applicable standards, regulations, and codes.
5. Submittals, including shop drawings, shall be prepared by, or under the direct supervision of the RCDD.
 - a. Each submittal, including shop drawings, shall be reviewed, signed and stamped with the RCDD stamp and signature of the responsible RCDD.
6. Each as-built drawing shall be prepared by, or under the direct supervision of the RCDD.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 QUALITY ASSURANCE SUBMITTALS

- A. Provide documentation that demonstrates the qualification for each requirement articulated in this Section and in compliance with Section 270503 Submittals.

END OF SECTION 270002