

## SECTION 01 78 23

### OPERATION, MAINTENANCE, AND WARRANTY DATA

#### PART 1 - GENERAL

##### 1.01 PROCESS AND SEQUENCE

- A. At the completion of the project, the Contractor shall submit to the Architect informational literature on the proper operation, maintenance, manufacturer's adjustment and repair of all equipment installed under this Contract which may require routine adjustment and/or maintenance.
- B. Literature for each equipment item shall be identified with product manufacturer, item name, item number, serial number, general location, electrical circuit number (if applicable), and name, address, and telephone number of the nearest manufacturer's representative for product service.
- C. Roofing maintenance insurance and repair instructions.
  - 1. At the completion of the project, submit copies of manufacturer's standard literature describing the care, maintenance, and repair of the installed roofing system.
  - 2. Include guidelines to assure validity of warranty coverage.
  - 3. Include names, addresses, and telephone numbers of the Contractor, Manufacturer, Regional Distributor, and Manufacturer "hotline".
- D. Refer to Division 23 - Mechanical and Division 26 - Electrical for supplemental requirements for Operation and Maintenance Data.

##### 1.02 SUBMITTALS

- A. Where projects include work at multiple properties/buildings, O&M manuals shall be required to be produced for each property including only those documents that relate to the specific properties.
- B. Provide (1) complete set of printed operations and maintenance instructions in a 3-ring binder or comparable delivery method as well as (1) complete electronic set in PDF format on CD or flash drive for all identified components of the work. (One set for school building and one set for Space Management)
- C. Instruction manuals shall be delivered to the Architect at one time for review and approval.

##### 1.03 FORM OF SUBMITTAL

- A. Format:
  - 1. Operation and Maintenance Data shall be 8 1/2 x 11 inches or proportional increment.
  - 2. AutoCAD (.DWG) format submittals (AutoCAD current compatible version per DPS Space Management Office. See section 01 78 39 – Project Records Documents)
    - (a.) Irrigation plans
    - (b.) Fire Alarm shop drawings corrected to reflect actual installation.
    - (c.) Mechanical Control Drawings
    - (d.) Fire Sprinkler Shop Drawings.
  - 3. All files shall be submitted in PDF format in addition to all CAD files.
  - 4. Materials shall be bound at the full length of the left edge.

5. Include covers and backs with identification data.
  - (a.) Official BUILDING name shall be used if changed during original working title. (\*Note: DO NOT use program/school name or construction name
- B. General Contractor Guarantee:
  1. Submit original executed copies to the architect with project closeout materials.
- C. Manufacturer Guarantee/Warranty:
  1. Submit sample copies to the architect prior to ordering warranted products.
  2. Submit original executed copies to the architect with project closeout materials.
- D. Extended Warranties:
  1. Submit sample copies to the architect prior to ordering warranted products.
  2. Submit original executed copies to the architect with project closeout materials.

#### **1.04 CONTENT OF MANUAL**

- A. Product Data-refer to individual specification sections for additional requirements.
- B. General Warranty:
  1. General contractor twenty-four (24) month guarantee of materials and workmanship.
  2. The Contractor shall guarantee in writing to the Owner that all work performed and all materials and equipment furnished under this contract are new and in accordance with the Contract Documents, are free from defects in equipment, materials or design furnished, or workmanship performed by the Contractor or any of his subcontractors or suppliers at any tier. Such guarantee shall continue for a period of twenty-four (24) months from the date of Final Completion of the work.
  3. Under this guarantee, the Contractor shall agree to remedy at his own expense any inferior or defective equipment, materials, workmanship, or design that should develop during the guarantee period, or in restoring any other work damaged in fulfilling the terms of the guarantee.
  4. The Contractor shall not perform any work that shall void any Manufacturer Guarantee and Warranty.
- C. Manufacturer Guarantee And Warranty:
  1. As identified in other Sections of these Specifications, the Contractor shall provide written manufacturer's guarantees and/or warranties for specific materials, products, and equipment furnished under this contract.
  2. Such guarantees and warranties shall be valid for the period of time stated in each applicable specification from the date of Final Completion of the work but not less than twenty-four (24) months.
- D. Extended Warranties:
  1. As identified in other Sections of these Specifications, the Contractor shall provide written manufacturer's guarantees and/or warranties for specific materials, products, and equipment furnished and installed under this Contract.
  2. Such guarantees/warranties shall be valid for the stated extended period beyond twenty-four (24) months from the date of Final Completion of the work.
- E. Warranty Exclusions:
  1. Warranty requirements contained in these Specifications take precedence. Exclusion clauses shall be superseded by warranty coverage requirements of the Specifications.

2. The Contractor shall notify the Architect of design conditions which cannot be fully warranted. Such notice shall be in writing prior to purchase of the affected product or system.
3. Failure to provide such notice shall not be grounds for waiver of warranty requirements contained in the Specifications.
4. Upon receipt of such notice, the Architect will consider modifications necessary to assure that final construction is warrantable to the full extent of Contract requirements.

**END OF SECTION 01 78 23**