SECTION 11 53 61
CUSTOM FABRICATED LABORATORY EQUIPMENT

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies a laboratory backdraft grossing workstation.

1.2 RELATED WORK

A. Plumbing Connections: Section 22 11 00, FACILITY WATER DISTRIBUTION and Section 22 13 00, FACILITY SANITARY SEWERAGE.

B. Ductwork: Section 23 31 00, HVAC DUCTS AND CASINGS.

C. Electrical Connections: Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.

D. Electrical Devices: Section 26 27 26, WIRING DEVICES.

1.3 QUALITY CONTROL

A. Manufacturer Qualifications: Manufacturer regularly and presently manufactures necropsy equipment.

B. Electrical Components and Devices: UL listed and labeled for intended use.

1.4 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Manufacturer's Literature and Data: Include illustrations and descriptions of equipment.

C. Shop Drawings: Show details of installation, coordination with mechanical and electrical work, anchorage, and other work required for complete installation.

D. Field Test Reports: Indicate dates and times of tests and certify test results.

E. Operating Instructions: Comply with requirements in Section 01 00 00, GENERAL REQUIREMENTS.

1.5 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. ASTM International (ASTM):

E11-09.....Wire Cloth and Sieves for Testing Purposes

C. National Electrical Manufacturers Association (NEMA):

250-08.....Enclosures for Electrical Equipment (1000 Volts Maximum)

D. Scientific Equipment and Furniture Association (SEFA):
   2-10.....Recommended Practices for Installation of Scientific Laboratory Furniture and Equipment
   7-10.....Fixtures

PART 2 - PRODUCTS

2.1 GENERAL

A. Factory install service fixtures and electrical devices in locations shown on drawings.
B. Service Fixtures, General: Heavy-grade designed for laboratory use and complying with relevant requirements in SEFA 7.
C. Water Service Fixtures: With integral vacuum breaker and as follows:
   1. Gooseneck: With minimum clearance of 191 mm (7-1/2 inches) between outlet and top of table. Bend gooseneck 180 degrees to direct water flow vertically into sinks. Attach gooseneck to base with adapter-type connection that will permit field conversion of swing-type to fixed-type gooseneck and fixed-type to swing-type gooseneck.
   2. Operation: Manual with wrist-blade handles, unless otherwise indicated.

2.2 BACKDRAFT GROSSING WORKSTATION

A. Description: Two workstation 10'-0" x 3'-0" 16 gauge #4 T316 stainless-steel table with integral fittings and fixtures and backdraft capability designed to pull air back, away from operator's face, and to protect from odors. Sound deadening applied to bottom of unit.
B. Integral Sink Unit: Equipped with hot- and cold-water fittings, swing spout faucet, and two self-closing trigger control spray heads with 2438 mm (8 feet) of hose.
C. Integral Drain Pan: Equipped with manual flush down manifold, sloped to center to allow for complete drainage.
D. Integral Exhaust Plenum: Equipped with a manually controlled adjustable dampers, and located the full width of the rear of the table.
E. Exhaust Connection: 6 inch x 30 inch flange 2 inches above 8'-0" ceiling for connection to the building exhaust system.
F. Waste Disposer: 1-hp heavy-duty disposer and controls.
G. Electrical Receptacles: Two 120-V, single-phase, 15-A, hospital-grade duplex receptacles with waterproof covers.
H. Task Lamps: Provide two task lamps with magnifier.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install equipment according to manufacturer's written instructions and to comply with relevant requirements in SEFA 2.

B. Install waste disposers to prevent backflow of polluted water or waste into water supply system or on to work surfaces.

C. Install and interconnect electrical controls and switches.

3.2 TESTS

A. Field test installed necropsy equipment after water systems are pressurized for proper operation.

1. Operate each component of equipment. During and after testing, there shall be no evidence of leaks, electrical malfunction, or other symptom of failure.
2. For units that fail testing, make adjustments and corrections to installation, or replace necropsy equipment, and repeat tests until equipment operates properly.

3.3 PROTECTING AND CLEANING

A. Protect equipment from dirt, water, and chemical or mechanical injury during the remainder of the construction period.

B. At the completion of work, clean interior equipment as required to produce ready-for-use condition.

3.4 INSTRUCTIONS

Instruct personnel and transmit operating instructions in accordance with requirements in Section 01 00 00, GENERAL REQUIREMENTS.

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