Division 11

Equipment

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Section 11A

Kitchenette Unit

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DIVISION 11

SECTION 11A

KITCHENETTE UNIT

1.0 SCOPE

This Specification Section includes the furnishing and installation of the kitchenette unit all as indicated on the drawings and described in the specification.

2.0 GENERAL

2.1 Codes and Standards

The Work shall conform to the latest edition and latest addenda thereto, as of date of award, of the following codes and standards.

.1 Federal Specification Refrigerators, Mechanical Household (Electrical,, Self Contained)

3.0 DETAILED REQUIREMENTS

3.1 Type and Manufacturer

- .1 The Kitchenette unit furnished under this section of the specifications shall be model number E39 SC, manufactured by Dwyer Products Corporation, Michigan City, Indiana or equal approved by Engineer.
- .2 Unit shall be complete with deep bowl sink with swing spout faucet, two burner electric range, 6.1 cubic foot refrigerator, undersink storage cabinet, backsplash, end splashes, upper cabinets and closed end panel.
- .3 Unit shall be of heavy steel construction with white porcelain finish. Operating voltage for unit shall be 115/230 volt, 3 wire, single phase alternating current.

4.0 <u>INSTALLATION</u>

Installation shall be in strict accordance with manufacturers printed instructions.

5.0 TESTING

No additional tests beyond those normally employed either in manufacturing, installation or construction processes or as called for by the specified codes and standards are required under this article.

6.0 INFORMATION TO BE SUBMITTED

The following information and data shall be submitted 30 days after award of contract.

6.1 <u>Drawings</u>

Drawing of unit shall be submitted to Engineer for approval. The drawings shall show dimensions and details of construction, installation, and relation to adjoining and related work.

Section 11B

Laboratory Furniture

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DIVISION 11

SECTION 11B

LABORATORY FURNITURE

1.0 SCOPE

This Specification includes the furnishing and installation of laboratory furniture all as indicated on the drawings and described in the specification.

2.0 GENERAL

2.1 Codes and Standards

The Work shall conform to the latest edition and latest-.addenda thereto, as of date of award, of the following codes and standards.

.1 Federal Specifications

QQ-A-200/8c	Aluminum Alloy & Bar, Rod, Shapes, Tube & Wire, Extruded, & Structural, Shapes
TT-C-490	Cleaning Methods and Preparation of Ferrous Surfaces for Organic Coatings.
TT-P-636	Primer Coating, Alkyd, Wood or Ferrous Metal

3.0 <u>DETAILED REQUIREMENTS</u>

3.1 Materials

All furniture shall be constructed of heavy gage cold-rolled prime steel, free from scale, ragged edges, scratches, and internal defects. Cupboard bottoms, doors, drawers and shelves shall be not thinner than 20 gage metal, body proper and drawer suspensions not thinner than 18 gage metal; front rails and case suspensions not thinner than 16 gage metal; hinge reinforcements not thinner than 14 gage metal; and corner gussets for leveling bolts not thinner than 12 gage metal. Tops shall be 1-/ inches thick, of specially pro-

cessed composition stone consisting of asbestos fibre, portland cement, inert binders and special chemically resistant colorings and fillings formed under high compression, heat and steam into dense homogeneous sheets of required thickness having uniform hardness and smoothness. Color shall be charcoal grey.

3.1.1 Castings, Fastening Devices, Plating

Workmanship shall be of the highest grade throughout and in accordance with the best standard practice for this type of furniture. Castings and other parts shall fit accurately and shall be tight where necessary. In joining pieces of similar metal, fastening devices and metal used for welding shall be of the same material as the metal being joined. When stainless steel is joined to a dissimilar metal, fastening devices and metal used for welding shall be stainless steel. Chromium plating, where used, shall be applied over nickel plating. In addition-to the above, the following construction features shall be required:

3.1.2 Sinks

Stainless steel sinks shall be of 18/8 type 302 stainless steel with a No. 4 finish.

3.1.3 Drawers

Drawers shall be provided with nylon ball-bearing rollers and safety stops.

3.1.4 Legs

Furniture shall be provided with leveling legs to permit fine adjustment.

3.1.5 Toe Space

Furniture shall be provided with recessed toe space and rubber core moulding for sealing cracks at floor.

3.1.6 Rear Panel

Removable rear panel shall be provided on cupboard units for checking utilities.

3.1.7 Edges and Corners

Edges and corners of all furniture shall be interlocked and welded and entire unit shall be bonderized before painting.

3.2 Protection

All laboratory furniture shall be protected against damage while in transit and during erection. All items shall be stored on the site and protected in such manner as to keep them clean and dry while in storage. Laboratory furniture that is damaged and cannot be repaired in a manner satisfactory to Engineer shall not be used in the work.

3.3 Finish

All furniture units shall be fully immersed in a phosphate bath. (Bonderized) Units shall then receive a coat of phenolic primer, which shall be baked out completely at 350 degrees F and sanded. A finish coat of fortified alkydurea (Or equal) shall then be sprayed on and baked out at 370 degrees F. After the finish coat has been applied, two coats of clear unpigmented vinyl shall be applied. Final color of furniture shall be metallic gray.

3.4 Laboratory Furniture List

Laboratory furniture units shall be manufactured by NII Laboratory Furniture, Inc., Hicksville, New York, 11802, whose model numbers are listed below for information purposes; or equal manufacture approved by Engineer. Item numbers listed below correspond with item numbers shown on Burns and Roe, Inc., Drawing 4152.

Item No. Description

- #1 #K233 Sink Assembly (4'1" 1 x 2'6" w x 3'1" h) with K915A Sink Cupboard with half depth removable shelve. Single drainboard on left size, Sink furnished with #F-402 hot-cold water fixture with swing spout.
- #2 #847-Eight Drawer Unit (47" 1 x 22" w x 35-3/4" h) with Type A Table Top (30" wide x 1-/" thick) 30P70 Abberene Stone Table Top.

Item No.	Description
#3	#347-Two Drawer Cupboard (47" 1 x 22" w x 35-3/4" h) with Type A Table Top (30" wide x 1-3/4" thick) #30P70 Abberene Stone Table Top
#4	#C-37 Corner Unit (32" 1 x 35-3/4" h x 28" w)
#5	Two (2) - #837 Eight Drawer Units (35" x 35-3/4" x 22") with one (1) #137 Cupboard Units (35" x 35-3/4" x 22")
#6	Four (4) - #837 Eight Drawer Units(35" x 35-3/4" x 22") with Two (2) #137 Cupboard Units (35" x 35-3/4" x 22")
#7	Two (2) #R154-R4 Type I Glazed Side Door Storage Cabinet Floor Unit (59" 1 x 84" h x 16" d)

4.0 INSTALLATION

4.1 Field Measurements

Prior to fabrication, Contractor shall verify all conditions at the building site for dimensions, fitting, and attachment of all items directly connected with the laboratory furniture specified herein.

4.2 General

Contractor shall secure the services of a competent representative of the laboratory furniture manufacturer who shall properly supervise, coordinate and expedite the work in the field, until the work is completed and accepted. Contractor shall also provide all service connections between furniture units and work of other trades in a neat workmanlike manner, and install so that work of other trades will not be injured. Secure laboratory furniture in an approved manner.

5.0 TESTING

5.1 Finish Tests

Finish shall withstand the following tests:

5.1.1 Test No. 1

No effect on surface, except bleaching, when samples

are placed in a closed jar containing no less than / inch of 1-N nitric or 1-B hydrochloric acid. (Provided fresh for each run of 14 days)

5.1.2 Test No. 2

Fifteen minutes exposure to the following chemicals; each chemical falling 2 inches to the 45 degree inclined sample at the rate of one drop per second or 50 ml in all.

- 1. Glacial acetic acid
- 2. 50% nitric acid
- 3. 77% sulfuric acid
- 4. Concentrated hydrochloric acid
- 5. 10% sodium hydroxide

6.0 <u>INFORMATION TO BE SUBMITTED</u>

The following information and data shall be submitted 30 days after award of contract.

6.1 <u>Drawings</u>

Drawings for all items specified herein shall be submitted for approval by Engineer. The drawings shall show dimensions and details of construction, installation, and relation to adjoining and related work which will require cutting or close fitting and shall show reinforcement, anchorage, and other work required for complete installation.