

BuildingName
The Description of the Project
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SPECIFICATION DIVISION 11

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SECTION 11615 - LABORATORY EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

USE THIS SECTION TO SPECIFY EQUIPMENT RELATED TO LABORATORIES

- A. Extent of laboratory equipment is indicated on drawings and in schedules.
- B. Type of laboratory equipment includes:
 - 1. Undercounter dishwashers.
 - 2. Undercounter freezers.
 - 3. Undercounter refrigerators.
 - 4. Undercounter icemakers.

1.2 SUBMITTALS

- A. Product Literature: Submit manufacturer's product literature indicating compliance with requirements for each specific type of laboratory equipment.
 - 1. Submit manufacturer's printed installation instructions, maintenance manual and warranty certificate.

1.3 QUALITY ASSURANCE

- A. Provide only UL listed and labeled equipment and components.
- B. Provide the following equipment with NSF (National Sanitation Foundation) approval:

EDIT THE FOLLOWING TO SUIT PROJECT. USUALLY REQUIRE NSF SEAL FOR DISHWASHER, ICEMAKER, AND REFRIGERATORS

- 1. Dishwasher.
- 2. Ice maker.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Coordinate delivery with supplier of laboratory casework specified in Division 12 Section "Laboratory Casework and Fixtures". Time equipment delivery to prevent delay in laboratory casework installation.

PART 2 - PRODUCTS

2.1 UNDERCOUNTER DISHWASHERS

- A. Glassware Washer: Provide front loading glassware washer for undercounter installation, with not less than 4 independent wash/dry cycles, automatic safety switch to interrupt operation when door is open, low water cut-off device, and as follows:

1. Exterior Dimensions: 24-inches wide by 34-3/4-inches high by 25-1/2-inches deep.
 2. Interior Dimensions: 22-inches wide by 24-inches high by 21-inches deep.
 3. Cabinet Construction: AISI Type 308 18-8 stainless steel interior and exterior.
 4. Controls: Solid state electronic timers and push button controls for individual programming and automatic operation of cycles. Wash water temperature selectable to 99 deg. C. and displayed by manufacturer's standard LED indicator or gage.
 5. Available Power: 110V, 20A, 1 phase.
- B. Accessories: Provide units with roll-out baskets sized and arranged to accommodate both beakers, test tubes and other small items, and larger items with minimum 10-inch clearance height.
- C. Manufacturer/Model: Hotpack Corp.; Model UC2B, or equivalent products of Labconco, or Forma Scientific.

2.2 UNDERCOUNTER FREEZER

NOT PREPARED

2.3 UNDERCOUNTER FREEZER (EXPLOSION PROOF)

NOT PREPARED

2.4 UNDERCOUNTER REFRIGERATOR

NOT PREPARED

2.5 UNDERCOUNTER REFRIGERATOR (EXPLOSION PROOF)

NOT PREPARED

2.6 UNDERCOUNTER FLAKE ICE MAKER

THE FOLLOWING UNIT HAS THE ADVANTAGE OF BEING AN UNDERCOUNTER TYPE UNIT - NO CURRENTLY KNOWN EQUIVALENTS EXIST

- A. Undercounter Icemaker: Provide ice maker unit for undercounter installation complete with built-in 40-lb. capacity storage bin.
1. Exterior Dimensions: 24-inches wide by 24-inches deep by 34-inches high.
 2. Cabinet Construction: Provide units with face panels constructed of manufacturer's standard grade of satin finish stainless steel. Coat concealed portions of units with thermosetting epoxy.
- B. Accessories: Include four, 6-inch adjustable legs.
- C. Manufacturer/Model: Crystal Tips Ice Systems, model as follows:

SELECT ONE OF THE FOLLOWING. IN GENERAL PROVIDE UNITS WITH AIR COOLED CONDENSER AND 115 V. POWER REQUIREMENT - COORDINATE WITH MECHANICAL AND ELECTRICAL

1. 350-FAV-161 (air cooled condenser).
 - a. Power requirement: 115 V., 8.8 A., 1 P.
2. 350-FAV-251 (air cooled condenser).
 - a. Power Requirement: 220 V., 5.3 A., 1 P.
3. 350-FWVS-251 (water cooled condenser).
 - a. Power Requirement: 220V., 4.4 A., 1 P.

PART 3 - EXECUTION

3.1 INSTALLATION

INCLUDE PARAGRAPH BELOW WHERE APPLICABLE

- A. Coordinate installation activities with installer of laboratory casework specified in Division 12 Section "Laboratory Casework and Fixtures".
- B. Install units in accordance with manufacturer's recommendations and printed instructions.

3.2 TESTING AND ADJUSTMENT

- A. Test installed equipment for proper operation. Demonstrate operation and features to Owner's Representative and Owner's personnel.
- B. Repair malfunctioning equipment to comply with manufacturer's specifications.

3.3 CLEANING AND PROTECTION

- A. Protect installed units from dirt, dust, and damage caused by subsequent construction operations.
- B. Clean units within 7 calendar days prior to Owner's inspection for Substantial Completion.

END OF SECTION 11615