

SECTION 11 53 00

LABORATORY EQUIPMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Lab Equipment:
 - 1. Fume Hoods
 - 2. Ice Maker
 - 3. Lab Glassware Washers
 - 4. Acid Storage Cabinet
 - 5. Flammable Storage Cabinet
 - 6. Goggle Cabinet

1.02 QUALITY ASSURANCE

- A. All equipment shall be UL rated. Provide each type of equipment from a single manufacturer, and to the extent possible, provide all equipment by a single manufacturer.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Fume Hoods
 - 1. Vertical sash design.
 - 2. Pre-wired and plumbed for gas, hot/cold water, compressed air, electrical outlets and vapor sealed light fixture and switch.
 - 3. Back-flow prevention device shall be installed on the outside of the cabinet.
 - 4. Integral ventilated base cabinet.
 - 5. All power outlets and switches shall be located on the exterior face of the hood (not internal).
 - 6. Internal hood lights shall be fitted with vapor seal lenses.
 - 7. Minimum velocity – 100 fpm, maximum velocity - 120 fpm
 - 8. Locate 10 feet from building air intake or building openings.
- B. Ice Maker
- C. Lab Glassware Washers
- D. Acid Storage Cabinets:
 - 1. 15 gallon minimum acid cabinet.
 - 2. All steel construction with integral reservoir base.
 - a) Chemical resistant, baked-on enamel coating
 - b) Interior polypropylene lining
 - 3. Locking doors
 - 4. Chemical spill reservoir
 - 5. Acid resistant shelving
 - 6. Self-closing doors
 - 7. OSHA and NFPA-30 approved
 - 8. Separate poly cube to be provided for nitric acid storage.

E. Flammable Storage Cabinets:

1. 43" x 18" x 44"
2. 30 gallon minimum size flammable cabinet.
3. 4-gallon flammable cabinet to be provided where ammonia nitrate is used (typically high schools)
4. All steel construction with intergral reservoir base.
5. Self-Closing locking doors.
6. Spill reservoir.
7. OSHA and NFPA-30 Approved.

F. Goggle Cabinets:

1. 28½" H x 26¼" W x 10¼" D
2. Store minimum of 36 pairs of goggles.
3. Wall mounted.
4. 15 minute timer.
5. OSHA and NFPA-30 Approved.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Laboratory equipment shall be installed in accordance with manufacturer's instructions.

END OF SECTION 11 53 00