

11600 Laboratory Equipment

Part 1: General

- 1.01 Select and specify lab equipment based on the specific lab requirements and these general guidelines.

Part 2: Design Guidelines

- 2.01 **Accessibility Requirements** - A minimum of 5%, or at least one of each type of station, of laboratory furniture, benches, fume-hoods, and other lab equipment shall be accessible.
- 2.02 See Section 15850 Industrial/Chemical Exhaust Systems for information on exhaust devices including fume hoods, bio-safety cabinets, spot exhaust (snorkels), downdraft tables, and gas cabinets.

2.03 **Specific Equipment:**

Autoclaves – Shall conform to appropriate standards of construction. Local exhaust ventilation shall be provided. All autoclaves shall be reported to Facilities Operations for inclusion in the University pressure vessel database and for arrangements for inspection prior to use.

Safety showers – Should meet ANSI requirements. Tempered water shall be supplied where feasible, particularly in outdoor locations. Showers will typically be located in hallway alcoves and must be handicapped accessible with activation alarms provided. Suggested models are shown in Appendix __.

Eyewashes – Should meet ANSI requirements. Eyewashes shall be provided in each work area where corrosive chemicals are in use. Suggested models are shown in Appendix __.

Refrigerators – Unless located in a Class 1 Division 1 areas (e.g. flammable liquid storage rooms which require explosion proof refrigerators), lab refrigerators that are approved by UL for flammable materials storage should be utilized.

Flammable liquid storage cabinets - These should be NFPA approved and should have self-closing doors. These cabinets shall not be connected to the exhaust ventilation system unless specifically approved by NC State EH&S. In no cases will flash arrestors be removed.

Shelving – Should include retaining lips

Counter tops – Shall be impervious, stain resistant, seamless, chemical-resistant, and easy to clean and decontaminate.