

226000 SECONDARY SYSTEMS FOR LABORATORIES

Part 1 – GENERAL

1.1 Description

A. This section details the guidelines and expectations for design and installation of any equipment or new systems for laboratory use on Johns Hopkins University Homewood Campus. Project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification and approval from the JHFRE Engineering and Energy Department, it is expected that these guidelines will govern the design and specifications.

B. Before renovating or installing any secondary system in a laboratory, consult the JHU Green Lab Standards for the latest updates.

1.2 Submittals

A. Natural gas, vacuum, and compressed air shall be designed to provide services to the lab facilities of the building.

1.3 Quality Assurance

N/A

1.4 Delivery and storage

A. Material deliveries and storage areas to be approved by Owner.

B. Material storage to comply with manufacturer's recommendations.

Part 2 – PRODUCTS

2.1 New equipment shall not be installed in any laboratory without review of the effects on utility loops and approval from JHFRE.

2.2 One-pass lab equipment is not allowed. All new equipment must be incorporated into the existing utility loops and need for metering to be evaluated by JHFRE.

Part 3 – EXECUTION

3.1 Where distribution services exist, connect to the existing mains at a point having sufficient capacity for current and new loads.

3.2 Provide maintenance isolation valves where any new piping is connected to bulk mains and at the end of new mains where it would be feasible to extend them in the future.



Standards

3.3 Gases such as nitrogen, O2, CO2, etc. will be provided by the lab users. Provide bottle storage locations, manifolds and distribution piping to meet the specific needs of the lab.

3.4 Vacuum systems that consume domestic water should not be used.

3.5 Utilize collaborative work areas whenever possible. Research and consider the potential needs of neighboring laboratories before proceeding with new equipment acquisitions.