

22 60 00 Gas and Vacuum Systems for Laboratory

Revision 01/04/2019

Purpose:

The Architect and/or Engineer shall incorporate the Rice specific requirements indicated in this standard's section into their design. The Architect and/or Engineer shall further produce project specifications in line with industry standards that are updated to reflect these Rice specific requirements.

1. General requirements.

- a. All gas piping to receive color-coded identification labels attached by installing plumbing subcontractor.
 - b. Ensure dielectric unions at connections between dissimilar metals
 - c. Vacuum Copper pipe or Stainless Steel.
 - d. Compressed air Copper pipe, Type L.
 - i. Lab Critical spaces to have source of redundant compressed air.
 - e. Hydrogen Stainless steel tubing.
 - f. Natural Gas Black steel, sch. 40, screwed fittings for below 2 ½", welded 3" and above.
 - g. Nitrogen Copper, Type L.
 - h. Lab Air Copper, Type L.
 - i. All non-listed gases shall be determined by Rice Project Manager and University EH&S during Schematic Design.
 - j. Isolation valves for each lab gas service should be installed at every lab. Labs should have ability to be completely isolated from the rest of the floor.
2. Programming
- a. Architect shall coordinate with Rice Project Manager to gather information regarding intended lab equipment to be purchased (whether by Contractor or by Owner).
 - b. The Architect shall provide an equipment plan for review and approval of layout to coordinate utilities infrastructure needed.