

# Specifying a VACUU·LAN® local vacuum systems

Depending on your role in a lab design and construction or renovation project – whether as the lab planner, architect, engineer or owner – you may need to make clear your decision to include a VACUU·LAN local vacuum system. The following content offers suggestions for detailing this intent in the basis of design and project documents.



## In defining a basis of design, describe VACUU·LAN systems as follows:

Laboratory vacuum for lab benches, fume hoods and biosafety cabinets in this project will be supplied by VACUU·LAN local vacuum systems. VACUU·LAN systems are integrated systems consisting of (1) in-lab, oil-free, corrosion-resistant pumps, (2) specialized turrets with integral check valves, (3) PTFE (chemical-resistant fluoropolymer) system tubing instead of copper; and, (4) chemical resistant compression fittings designed specifically for vacuum applications. All listed components are supplied by VACUUBRAND, INC. Substitution of alternative pumps, valves, tubing or fittings will compromise system performance.

Installation is performed by the project plumbing contractor. Because this is a proprietary technology, we suggest that the technology be included within the project plumbing scope-of-work, and be a part of the plumbing bid. VACUUBRAND will bid to all competing plumbing contractors.

## To reference VACUU·LAN systems on drawings and project documents:

### **We suggest a construction drawing note such as the following:**

Vacuum local area system consists of VACUU·LAN vacuum pump with vacuum controller located in base cabinetry, with NEMA 5-15 electrical outlet. with VACUU·LAN lab bench turrets and fume hood flow control modules at locations noted. Contact equipment manufacturer's rep for components and installation requirements. Equipment manufacturer's rep is at [info@vacuubrand.net](mailto:info@vacuubrand.net).

All interconnecting piping (vacuum and exhaust side) shall be 10 mm OD PTFE tubing. Vacuum pump exhaust is to be routed through the fume hood to exhaust ductwork. Submit shop drawings of all equipment for review.

*See chart on reverse page*



For the equipment schedule, we suggest something similar to the following:

| LABORATORY VACUUM PUMP SYSTEM SCHEDULE |                        |   |              |                |             |                   |                  |              |                           |              |              |              |              |              |              |   |
|--|------------------------|---|--------------|----------------|-------------|-------------------|------------------|--------------|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---|
| SYMBOL                                 | DESCRIPTION            | CHARACTERISTICS                                 | LOCATION     | SERIALS NUMBER |             | DESIGN CAPACITY   |                  |              | EQUIPMENT CHARACTERISTICS |              |              |              |              | STATUS       |              | REMARKS   |
|  |                        |   |              | MANUFACTURER   | ACQUISITION | U.L. INCL. (PSIA) | U.S. FLUID (CFM) | U.S. (L/SEC) | SP. (L/SEC)               | U.S. (L/SEC) | U.S. (L/SEC) | U.S. (L/SEC) | U.S. (L/SEC) | U.S. (L/SEC) | U.S. (L/SEC) |   |
| W-1                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | FIRST FLOOR  | W-1000001      | W-1000002   | 30                | 11.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           | ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF VACUUBRAND. ALL RIGHTS ARE RESERVED. THIS DOCUMENT IS UNCLASSIFIED. INFORMATION IS IN THE PUBLIC DOMAIN AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM VACUUBRAND. |
| W-2                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | MIDDLE FLOOR | W-2000001      | W-2000002   | 30                | 20.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-3                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | FIRST FLOOR  | W-3000001      | W-3000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-4                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | FIRST FLOOR  | W-4000001      | W-4000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-5                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | THIRD FLOOR  | W-5000001      | W-5000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-6                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | FIRST FLOOR  | W-6000001      | W-6000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-7                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | FIRST FLOOR  | W-7000001      | W-7000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |
| W-8                                    | LABORATORY VACUUM PUMP | SCIENTIFIC PERFORMANCE-CORDED MEDICAL EQUIPMENT | THIRD FLOOR  | W-8000001      | W-8000002   | 30                | 10.0             | 47           | 0.01                      | 1200         | 100          | 0            | 0A           | 0A           | 0A           |   |

## How we work with you...to include VACUU·LAN vacuum systems in your project

### Provide VACUUBRAND a lab floor plan, identifying...

- Number and location of labs needing vacuum
- Scientific discipline planned for each lab
- Teaching or research use
- Preferred vacuum pump & port locations
- Exhaust points for pumps

### VACUUBRAND will...

- Provide a model specification, if needed (2004 Master Format 22 62 13 – Vacuum piping for laboratories – and 22 62 19 – Vacuum equipment for laboratories)
- Recommend pumps needed
- Recommend tubing routings
- Provide budget estimates and quotes
- Provide all pumps, turrets, tubing and vacuum fittings specified
- Provide bid documents with drawings and specifications
- Provide training materials to installation contractor

