UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

The Grainger College of Engineering

Office of Safety 303 Engineering Hall, MC-266 1308 W. Green St. Urbana, IL 61801

Worksheet for Specifying and Ordering Fume Hoods and Their Accessories

Fume hoods should be sited appropriately in a space with the necessary ventilation system (once-through air, 6 air changes per hour minimum, exhaust stack and sufficient makeup air) along with shower and eyewash facilities that conform with University Facilities Standards.

Fume hoods intended for work with certain hazards like radioactive material, perchloric acid and acid digestions have specific requirements—always consult with DRS for these cases.

| L. | Select the fume hood width . These are typically 4 ft., 5 ft., 6 ft. and 8 ft. Internal depth is 23" to 30", depending on model. |
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| 2. | Select the desired options and accessories : Work surface type: The default is chemical-resistant epoxy resin. See pages 2 and 3 for work surface configuration options. Work with certain hazards such as those mentioned above may require special work surfaces, please consult with DRS for these situations. |
| | Fume hood base: E.g., solvent (flammable) storage cabinet, corrosives storage cabinet, regular cabinets, or open base only. See page 4 for representative acid and solvent cabinets. |
| | ☐ Cup Sink: Yes or No. If present, cup sinks must be plumbed. ☐ Service fixture kits: Turrets for cold water, gas, air, vacuum, etc. ☐ Duplex electrical outlets: Most fume hoods come with at least one exterior outlet, however additional exterior outlets can be added when ordering. |
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- 3. Determine the **type of fume hood** and **alarm**, which will depend on your building's HVAC and laboratory exhaust system:
 - Constant Air Volume (CAV) fume hoods require only an exhaust fan with fixed flow rate and a face velocity monitor
 with alarm.

Ventilation components: Fans, duct collars, dampers (please work with F&S or contractor to determine the needs).

- Variable Air Volume (VAV) fume hoods are appropriate for buildings with Direct Digital Controls for energy efficiency. VAV fume hoods will require a VAV air terminal unit, digital sash height sensor and alarm, and controls tied into the building automation system (BAS). Please consult with F&S or contractor as this will need the involvement of DDC electricians (F&S shop 55) and/or temperature control (F&S shop 41).
- Make sure to specify an airflow monitor with alarm to be added to the fume hood quote, as it is required by U of I
 Facilities Standards—vendors can help determine the appropriate airflow monitor model.
- 4. Once the requirements have been determined, communicate the specifications to university-approved vendors and obtain quotes. The VWR REDISHIP program can have lead times for fume hoods and related accessories as short as 2 weeks. VWR carries two University Facilities Standards-approved vendors: Kewaunee and Labconco. Their contact information is below.

VWR Lab Furniture Specialist – Midwest
Callie Wilkinson
847.917.0676
callie.wilkinson@avantorsciences.com
us.vwr.com

Labconco Technical Sales Representative:

Andrew Urdiales

872.242.6725

aurdiales@labconco.com

NOTE: Callie will assist with fume hood features that the researchers need like cup sinks, water faucets, and gas turrets, which can all be added to the quote. You may share the quote to project contractors and let them know to contact Callie, so they can avail of the University (IPHEC) price for your fume hood. Andrew can assist with technical questions about fume hoods.