

## 230030-H: SUPPLEMENTAL FUME HOOD & LABORATORY VENTILATION DESIGN

### **Related Sections**

Basis Guideline: [230030](#) - "Laboratory Ventilation Design Fume Hood and Laboratory Ventilation"  
For an explanation of the use of these guidelines, see "[Design Guidelines for UMHHC Facilities](#)"

### **General**

#### **Variable Volume Fume Hood Applications:**

- All variable volume fume hood exhaust strategies shall utilize quick-response air control valves (ACV) in the supply, fume hood exhaust and general exhaust air streams to/from the room. Each fume hood exhaust duct shall have a quick-response air control valve (ACV) terminal unit connection in the exhaust that will automatically maintain a constant air velocity across the face of the respective hoods, regardless of sash position.
- Supply, fume hood exhaust and general exhaust ACV boxes shall work in unison to maintain proper fume hood airflow, temperature control and pressurization of the space.

#### **Constant Volume Fume Hood Applications:**

- All constant volume fume hood strategies shall utilize an integral compensating bypass within the fume hood to maintain a constant air velocity across the face of the hood, regardless of sash position.