

SECTION 15880
FUME HOODS, GREASE HOODS

A. FUME HOODS

1. Use variable volume control to control face velocity across the hood opening. Provide indication of face velocity (units fpm) at hood to meet OSHA requirement. Provide controls to set face velocity in the range 50 to 150 fpm. Face velocity should be 80 fpm with sash 100% open. Provide local alarm at hood to indicate inadequate air flow.
2. Avoid locating hoods in traffic areas. Locate supply air and room exhaust terminals such that air turbulence is not created at hood sash opening.
3. Provide constant volume fan for single hood. Use variable speed fan with static pressure controller for single fan serving multiple hoods. The fan motor shall be located outside the air stream.
4. Ensure pressure of room containing fume hoods is negative with respect to adjacent space at all operating conditions.

B. GREASE HOODS

1. Design all systems as new without reuse of any existing components. Comply with all local, and state codes.
2. Required design elements:
 - a. Consult IU Engineering Services for hood style and details. Hood selected must meet NFPA 96 requirements and be labeled and listed. Provide fire suppression system. Where gas fired equipment is used, provide "gas fuse" valves in the gas supply ahead of flexible connectors.
 - b. Exhaust duct must meet requirements of the mechanical code and NFPA 96.
 - c. Exhaust fan must be UL listed and labeled for grease hood service, including motor and wiring out of the air stream.
 - d. Make-up air must be provided.
 - e. Required interlocks must be provided. These include interlocks between make-up and exhaust fans, energy cut-offs for cooking equipment under the hood, and alarm connections. Time clock operation to conserve energy should be considered.
 - f. Provide for performance testing. This will include a TAB test of the air

velocities and quantities and an operational test and demonstration of the fire suppression system.

- g. Contract documents should show all necessary dimensions, materials, cleanouts, clearances, and equipment and air balance schedules.
- h. Coordinate with Architect the need for fire resistive chase and construction.
- l. Provide appropriate grease filters.
- j. Provide vaporproof fluorescent light.
- k. Provide access for cleaning in ductwork at reasonable distances (20 feet).