PHYSICAL FACILITIES
2020 Consultant’s Handbook
Division 23 HVAC
3800 Non-Laboratory Exhaust Systems

1 Discharge Stack
1.1 At any location with a risk of contaminating service workers, exhaust stacks are to discharge 10'-0" min. above the roof deck.

2 Ducts
2.1 No exhaust duct shall have internal lining.

3 Fans
3.1 Fan vibration need to be isolated from the ductwork with flexible connections.
3.2 Exhaust fans need to be located as close to the point of discharge as possible.
3.3 The duct at the fan discharge of each general exhaust system must be clearly labeled as to use and rooms served.
3.4 Special design consideration shall be given to fan inlet and outlet conditions to prevent excess energy consumption due to an unnecessarily high system effect factor as outlined in AMCA 201-02 (R2007).
3.5 As with any serviceable piece of equipment located on a roof, design layout to provide reasonable accommodations for accessibility and safety should be used.

4 Filters
4.1 If exhaust filtration is required the filter media must be in racks or frames and fully accessible.

5 Restroom Exhaust
5.1 Exhaust systems must be controlled by the campus BAS system.
5.2 Restrooms shall be exhausted from a source or sources opposite the air supplied into the space to avoid short-circuiting ventilation air from the breathable zone.
5.3 Follow the ASHRAE guidelines for air flow quantities.

6 Shower Room Exhaust
6.1 Install exhaust grilles above each shower stall, in shower rooms with multiple shower stalls that are divided from each other by at least one solid wall from floor to ceiling.

Note: local shower exhaust increases ventilation effectiveness and avoids moisture and condensation build up.

7 Grease Hood Exhaust
7.1 Grease hood exhaust fans may be located on the roof or within a dedicated mechanical space that is negatively pressurized with respect to adjacent spaces.
7.2 Do not run positive pressurized grease duct through chases, ceilings or public spaces.