

Notify Occupants:

Prior to the commencement of work, notify potentially affected building occupants (through the construction project manager and the building monitor) with a brief description of planned work and precautions taken to protect air quality.

Ongoing Management:

1. After work has begun, monitor and enforce plan specifications for keeping dusts and odorous or hazardous volatile substances out of occupied areas.
2. Provide periodic progress updates to occupants through the construction project manager and the building monitor.

References:

(available upon request)

UA Manual of Design and Specification Standards, Section 15000, Part 1-General, Codes.

IAQ Guidelines for Occupied Buildings Under Construction, Sheet Metal and Air Conditions Contractors' National Association, Inc., SMACNA, 1995.

ASHRAE Standard 62-1989R, Ventilation for Acceptable Indoor Air Quality, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1996.

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Indoor Air Quality

Undertaking Construction or Remodeling Activities?

Here are some things to think about **before** you start

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Things To Think About Before Undertaking Construction Or Remodeling Activities

Poor indoor air quality is more likely to be present during construction and renovation activities. Dust and odors migrating out of the work area and into occupied spaces can disrupt normal building operations, degrade the facility and, under worst case scenarios, cause injury or illness to occupants. The mere presence of detectable dust or odors from a project, even at harmless levels, may trigger occupant concerns based on perceived hazards.

When performing or coordinating construction or remodeling activities, follow these common sense guidelines to minimize indoor air quality complaints:

Initial Planning:

1. Identify potential work-related airborne contaminants (i.e. particulates and odorous or hazardous volatile substances such as dusts and fibers, volatile organic compounds, combustion products and biological materials). These contaminants may be produced from disturbance of building materials or demolition (e.g., drywall, plaster, ceiling panels, flooring), from products used in the construction process (e.g., paints, adhesives, carpeting, cleaning agents), from equipment used in the construction process (e.g., generators, compressors, welders, motor vehicles), and when building systems are disrupted (e.g., natural gas, water, sewer, ventilation).

2. Identify how contaminants may spread through the building. Contaminants move from high pressure areas to low pressure areas via conduits such as: Heating, Ventilating and Air-Conditioning (HVAC) returns, HVAC system intakes, open doors, utility chases, wall penetrations, etc.
3. Identify how building occupants may be affected by the spread of contaminants.
4. Identify available control options such as: containing the work area, modifying HVAC operation, reducing emissions, intensifying housekeeping, rescheduling work hours, moving occupants, defining re-occupancy criteria, etc.
5. Design specific control measures into the project to keep dusts and odorous or hazardous volatile substances out of occupied areas. Consult SMACNA guidelines (see "References" section at end of flier), the building monitor, the construction project manager and Risk Management & Safety.

Isolate Major Construction Areas:

1. Construction areas in occupied buildings must be isolated from adjacent non-construction areas using temporary walls, plastic sheeting or other vapor retarding barriers.
2. Construction areas must be maintained at a negative air pressure to surrounding non-construction areas.

3. Recirculating air ducts must be temporarily capped and sealed (appropriate filters may be used if nuisance particulates are the only contaminant of concern).

Protect The Ventilation System From Dust And Moisture:

1. Do not operate supply air systems without filters in place (minimum 60% efficiency for a 3 μm particle).
2. Building materials subject to degradation from ambient environmental exposure must be protected or replaced, if damaged.
3. Ductwork and air handling equipment must be stored in a clean, dry location prior to installation and openings must be securely covered to prevent entry of dust, moisture and general construction debris/dirt.
4. Utilize the air handling units (AHU's) to "flush" the building to reduce off gassing of interior furnishings and finishes at least 48 hours prior to occupancy. Fully open outside air intakes and fit AHU's with temporary filters during this period. Replace filters after system flushing.