



Construction IAQ management plan - during construction

EQc3.1 | Possible 1 point

Intent

To reduce indoor air quality (IAQ) problems resulting from construction or renovation and promote the comfort and well-being of construction workers and building occupants.

Requirements

Develop and implement an IAQ management plan for the construction and preoccupancy phases of the building as follows:

- During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3).
- Protect stored on-site and installed absorptive materials from moisture damage.
- If permanently installed air handlers are used during construction, filtration media with a minimum efficiency reporting value (MERV) of 8 must be used at each return air grille, as determined by ASHRAE Standard 52.2-1999 (with errata but without addenda²⁸). Replace all filtration media immediately prior to occupancy.

OR

Develop and implement an IAQ management plan for the construction and preoccupancy phases of the building as follows:

- During construction, address the following project-specific issues:

HVAC Protection

- a. Avoid using permanently installed HVAC systems if possible. Use temporary systems where possible.
- b. If permanently installed air handlers are used during construction, filtration media must be used at each return air grille. Filtration must have a minimum efficiency of 30% or an arrestance of greater than 90%. Replace all filtration media immediately prior to occupancy.
- c. Store equipment in a clean, dry location. Protect ducts and equipment by sealing openings with plastic.
- d. Clean air plenums before use.

Source Control

- a. Avoid finish materials with high VOC and formaldehyde levels.
- b. Recover, isolate and ventilate as appropriate when using any toxic materials or creating exhaust fumes.
- c. Protect stored on-site and installed absorptive materials from moisture damage. Do not install moisture-damaged materials unless they have been properly dried.
- d. Implement measures to avoid the tracking of pollutants into work area and occupied portions of the building.

Pathway Interruption

- a. Isolate areas to prevent contamination of clean or occupied spaces using physical separation and depressurization.

Housekeeping

- a. Implement practices to ensure a clean job site to control potential contaminants such as dirt, dust and debris.
- b. Clean up spills, and keep work areas dry.

Scheduling

- a. Coordinate construction activities to minimize disruption of occupied spaces.
 - b. Carefully sequence construction activities to minimize IAQ issues.
- Protect stored on-site and installed absorptive materials from moisture damage.
 - If permanently installed air handlers are used during construction, one of the following filtration media must be used at each return air grille. Replace all filtration media immediately prior to occupancy.
- a. Filtration media with a minimum efficiency reporting value (MERV) of 8 or higher, as determined by ASHRAE Standard 52.2-1999 (with errata but without addenda).
 - b. Equivalent filtration media Class F5 or higher, as defined by CEN Standard EN 779-2002, Particulate air filters for general ventilation, Determination of the filtration performance.
 - c. Equivalent filtration media with a minimum duct spot efficiency of 30% or higher and greater than 90% arrestance on a particle size of 3–10 µg.

²⁸ Project teams wishing to use ASHRAE approved addenda for the purposes of this credit may do so at their discretion. Addenda must be applied consistently across all LEED credits.

