

# Construction indoor air quality management plan

Possible 1 point

## Intent

To promote the well-being of construction workers and building occupants by minimizing indoor air quality problems associated with construction and renovation.

## Requirements

**Moisture.** Develop and implement a moisture control plan to protect stored on-site and installed absorptive materials from moisture damage. Immediately remove from site and properly dispose of any materials susceptible to microbial growth and replace with new, undamaged materials. Also include strategies for protecting the building from moisture intrusion and preventing occupants' exposure to mold spores.

**Particulates.** Do not operate permanently installed air-handling equipment during construction unless filtration media with a minimum efficiency reporting value (MERV) of 8, as determined by ASHRAE 52.2–2007, with errata (or equivalent filtration media class of F5 or higher, as defined by CEN Standard EN 779–2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance, [\[East Asia ACP: Construction IAQ Equivalent\]](#)), are installed at each return air grille and return or transfer duct inlet opening such that there is no bypass around the filtration media. Immediately before occupancy, replace all filtration media with the final design filtration media, installed in accordance with the manufacturer's recommendations.

**VOCs.** Schedule construction procedures to minimize exposure of absorbent materials to VOC emissions. Complete painting and sealing before storing or installing "dry" materials, which may accumulate pollutants and release them over time. Store fuels, solvents, and other sources of VOCs separately from absorbent materials.

**Outdoor emissions.** For renovation projects involving waterproofing, repairing asphalt roofing, sealing parking lots, or other outdoor activities that generate high VOC emissions, develop a plan to manage fumes and avoid infiltration to occupied spaces. Comply with the procedures established by NIOSH, Asphalt Fume Exposures during the Application of Hot Asphalt to Roofs (Publication 2003–112).

**Tobacco.** Prohibit the use of tobacco products inside the building and within 25 feet (8 meters) of the building entrance during construction.

**Noise and vibration.** Develop a plan based on the British Standard (BS 5228) to reduce noise emissions and vibrations from construction equipment and other nonroad engines by specifying low-noise emission design or the lowest decibel level available that meets performance requirements in the British Standard. Construction crews must wear ear protection in areas where sound levels exceed 85 dB for extended periods.

**Infection control.** For renovations and additions adjacent to occupied facilities or phased occupancy in new construction, follow the FGI 2010 Guidelines for Design and Construction of Health Care Facilities and the Joint Commission on Standards to establish an integrative infection control team comprising the owner, designer, and contractor to evaluate infection control risk and document the required precautions in a project-specific plan. Use the infection control risk assessment standard published by the American Society of Healthcare Engineering and the U.S. Centers for Disease Control and Prevention (CDC) as a guideline to assess risk and to select mitigation procedures for construction activities [\[Canada ACP\]](#).

## Alternative Compliance Paths (ACPs)

### Canada ACP

Projects in Canada may consider the CSA standard Z317.13 (Sections 7-8) as an equivalent to the FGI 2010 Guidelines for Design and Construction of Health Care Facilities and the infection control risk assessment standard published by the American Society of Healthcare Engineering and the U.S. Centers for Disease Control and Prevention (CDC) for the purposes of this credit.

### East Asia ACP: Construction IAQ Equivalent

Projects in East Asia may use filtration media classified as medium efficiency ( ) or higher as defined by Chinese standard GB/T 14295-2008 .