

CHAPTER 1 - VENTILATION AND AIR QUALITY

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401.02 INDOOR AIR QUALITY DURING CONSTRUCTION, RENOVATION OR DECORATION



INTENT

Reduce indoor air quality problems arising during construction, renovation and decoration works.

REQUIREMENT

For all the buildings under construction or renovation, building occupants and systems must be protected from airborne contaminants that are generated or spread during construction or renovation works, carried out inside the buildings. These contaminants include toxic substances or substances that are harmful to the human body, such as asbestos, lead, pesticides, heavy metals, mold, dust, fumes, paints, etc.

Unless it is required to provide ventilation during construction, the supply and return heating, ventilation and air conditioning (HVAC) system openings must be closed and protected from contamination. All duct and related air distribution component openings, must be covered with tape, plastic, sheet metal or other suitable methods to prevent dust or debris from collecting in the system.

If the HVAC system is used during construction or renovation, temporary return air filters must be installed with at least a Minimum Efficiency Reporting Value of 8 (MERV 8).

Prior to occupancy, all temporary return air filters must be removed and replaced with permanent filters having at least Minimum Efficiency Reporting Value of 8 (MERV 8).

SIGNIFICANCE

During construction and renovation works, large quantities of dust and other debris are generated and if ducts and air handlers, fan coil units and vents are not adequately protected, they will get contaminated by dusts and other debris. This can lead to mechanical damage to equipment, reduction in equipment efficiency and increased cost for equipment maintenance. This air contamination will also affect occupant's health.

Implementation of construction indoor air quality management plan will help protecting the building occupant's health. This shall also aid in reducing damage of equipment and cost for their maintenance.