## Chapter 1: Ventilation and Air Quality

## 401.01 Minimum Ventilation Requirements for Adequate Indoor Air Quality

All new and existing air conditioned buildings must be mechanically or mixed mode ventilated and must comply with the minimum requirements of ASHRAE Standard 62-2007.

Occupancy density for each space is determined based on its activity in accordance with the requirements of Dubai Municipality if available or using the default occupancy density values in ASHRAE 62-2007

## 401.02 Air Quality during Construction, Renovation or Decoration

For all buildings under construction or renovation, building occupant and systems must be protected from airborne contaminants which are generated or spread during construction or renovation inside the buildings. Including toxic substances or substances harmful to the human body, such as asbestos, lead, pesticides, heavy metals, mold, dust, fumes, paint, ...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 other related air distribution component openings must be covered with tape, plastic, sheet metal or other 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 a Minimum Efficiency Reporting Value (MERV) in accordance with ASHRAE Standard 52.2-2007 or an equivalent standard.

Immediately prior to occupancy, the temporary return air filters must be removed and replaced with permanent filters having Minimum Efficiency Reporting Value (MERV) in accordance with ASHRAE Standard 52.2-2007 or an equivalent standard.

## 401.03 Air Inlets and Exhausts

For all new and existing buildings:

All ventilation system outdoor air intakes, including doors and operable windows, that are part of a mixed mode ventilation system, must be located at suitable distance from potential sources of contamination to reduce the possibility of odor, smoke or other air contaminants entering the ventilation system as required by Dubai Municipality, if any, or refer to ASHRAE Standard 62-2007 Table (5.1)

Exhausted air must be discharged in a manner to avoid it being drawn back into the building or the building ventilation system and to ensure that it does not become a nuisance to the building occupants or other buildings occupants or pedestrians.