CHAPTER 1 - VENTILATION AND AIR QUALITY

401.01 MINIMUM VENTILATION REQUIREMENTS FOR ADEQUATE INDOOR AIR QUALITY

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INTENT

To maintain healthy internal environment for occupants by providing minimum ventilation requirements.

REQUIREMENT

All new and existing buildings which are air conditioned must be mechanically or mixed mode ventilated and also must comply with the minimum requirements of latest edition of ASHRAE Standards 62.1, 62.2 and 170.

Occupancy density for each space shall be determined based on its activity and shall be in accordance with Dubai Municipality's requirements. If the occupancy density values are not mentioned then, default occupancy density values stated in the latest edition of ASHRAE Standards 62.1, 62.2 and 170 shall be considered.

SIGNIFICANCE

Indoor Air Quality (IAQ) of a building affects the occupant comfort, well-being and productivity. Providing adequate ventilation in indoor spaces will reduce the contaminant within the building while maintaining comfortable environment for the occupants.

ASHRAE standard requires ventilation systems are designed to provide indoor air quality that will be acceptable to human occupants and is intended to minimise the potential for adverse health effects. It also prevents uptake of contaminants, minimises growth of microorganisms and removal of particulates. Building functionality is one of the factors that determine indoor air quality.

APPLICABILITY

This regulation is applicable to all building types. Refer to Table 101.07 (1) in Section One - Administration for detailed applicability levels.

IMPLEMENTATION

ASHRAE Standard 62.1 shall be applied to spaces intended for human occupancy within buildings except those within dwelling units in residential occupancies in which occupants are non-transient. ASHRAE 62.2 shall be applied to dwelling units in residential occupancies in which the occupants are non-transient.

ASHRAE Standard 170 shall be applied to healthcare facilities.