

Table (1) 401.07 - Schedule, Duration of Sampling and Maximum Limit for Contaminants

Sampling Schedule	Type of Samples	Maximum Acceptable	Sampling Duration
Testing should be within 5 years of last compliant test	Formaldehyde	< 0.08 ppm	8- hour continuous monitoring (8 hour time-weighted average [TWA])
	Total Volatile Organic Compound (TVOC)	< 300 micrograms / m ³	
	Respirable Dust (<10 microns)	< 150 micrograms / m ³	
	Ozone	< 0.06 ppm (120 micrograms / m ³)	
	Carbon Dioxide	< 800 ppm (1440 microgram / m ³)	
	Carbon Monoxide	< 9 ppm (10 micrograms / m ³)	
	Bacteria	< 500 CFU / m ³ (Agar plate)	
	Fungi	< 500 CFU / m ³ (Agar plate)	

- B. Air quality testing must be carried out by specialized companies or laboratories.
- C. Air quality testing equipment must have initial and periodical calibration certificate. Calibration certification frequency shall either be annual or as per manufacturer specification and shall be from an external calibration facility, accredited by DM. The initial and periodical calibration certificates must be saved in a special register. The calibration certificate would be checked by DM to validate the accuracy of the readings. This also is a requirement for renewing the indoor air quality certificate of the building.

401.08 Sealing Doors and Window Frames

For all new buildings, doors and window frames on the building exteriors must be sealed from any openings. This must be with a nonflammable materials and with materials that prevent the transmission of air and sound that may occur as a result of difference in pressure across the exterior of the building. Insulation materials selected must be approved by the Dubai Municipality.

401.09 Inspection and Cleaning of HVAC Equipment

For all new and existing buildings, the cleanliness of HVAC equipment and systems must be maintained. All its parts must be inspected and cleaned in accordance with the standard specifications approved by Dubai Municipality and in accordance with the technical guidelines issued by Dubai Municipality. Specialized maintenance companies,

approved by Dubai Municipality must carry out this inspection and cleaning. This can also be carried out by the building operator, if sufficient evidence can be provided on their qualification for carrying out these tasks.

401.10 Parking Ventilation

- For all buildings having enclosed parking:
- A. Mechanical ventilation must be provided, to ensure the Carbon Monoxide (CO) concentration in the enclosed parking area, is maintained below 50 ppm by:
- Providing a minimum of 6 outside air changes per hour, or
 - Installing a variable volume ventilation system that is controlled by a input response from a minimum of one CO sensor per 400 m² floor area of parking.
- B. Outdoor air must be provided for each parking level.
- C. Occupied areas such as offices, shopping centres, hotels, waiting rooms and ticket booths connected to an enclosed parking space, must be supplied with conditioned air under positive pressure when compared with adjoining parking area.
- D. Ventilation systems must be capable of providing 10 air changes per hour, for smoke clearance purposes in case of a fire incident.
- E. CO monitoring equipment must be installed, with a minimum of one CO sensor per 400 m² floor area of parking. Sound alarm should be triggered, when the CO concentration reaches or exceeds 75 ppm, in at least 5% of the monitored locations.
- F. Where a Building Management System (BMS) or Central Control and Monitoring System (CCMS) is installed, CO concentration must be monitored to allow real-time profiling and management of air quality.
- G. CO monitoring equipment must be checked and recalibrated every 6 months or according to manufacturer specification by a specialized calibration company, certified by Dubai Municipality. Test results and calibration certificates must be kept onsite and be readily available for inspection by DM staff.

401.11 Environmental Tobacco Smoke

- A. Smoking is strictly prohibited in all public areas in accordance with Local Order No 11 - 2003, including but not limited to shopping centres, hotels, restaurants, government buildings, hospitals, healthcare facilities, commercial buildings, common accommodation, coffee shops and amusement and entertainment or any other places determined by Dubai Municipality, except for places in which smoking is permitted.
- B. Places where smoking is permitted are determined in accordance with the conditions listed in the Manual of Regulating Smoking in Public Places issued by Dubai Municipality. It defines the public places where smoking is strictly prohibited and places where smoking is permitted under specific conditions.
- C. Designated smoking areas must be at least 7.5m away from the entrances of the building, doors and operable windows and outdoor air intakes of ventilation systems.
- D. An annual permit is issued from the competent department of Dubai Municipality for all places where smoking is permitted, upon submission of all required documents and drawings mentioned in the guideline.