Dubai Municipality Building Works Specification – Sample Test Document

Project: High-Rise Mixed-Use Tower – Sample Project

Version: 2025 Edition

Prepared By: Building Regulations Department (Sample Only)

# Section 1: General Requirements

1.1 Scope: This specification sets forth the minimum standards for the design, construction, and safety of building works within the Emirate of Dubai. It shall be read in conjunction with applicable UAE Fire & Life Safety Code of Practice, Dubai Green Building Regulations, and all relevant standards issued by Dubai Municipality (DM) and Dubai Civil Defence (DCD).

1.2 Reference Standards: UAE Fire & Life Safety Code – 2024 Edition; Dubai Green Building Regulations – 2023; BS EN ISO 9001:2015 – Quality Management Systems.

# Section 2: Fire Protection Requirements

2.1 Fire Alarm System: All occupied floors shall be provided with an addressable fire alarm system complying with NFPA 72 and approved by Dubai Civil Defence. Control panels shall be located in the fire command center on the ground floor. Visual and audible alarms shall be installed at intervals not exceeding 30 meters.

2.2 Sprinkler System: Automatic sprinkler systems shall be provided in all occupiable spaces except electrical rooms. Sprinkler heads shall comply with NFPA 13 and have a minimum coverage area of 21 m² per head.

2.3 Emergency Lighting: Lighting fixtures must provide illumination of at least 1 lux along the center line of the escape route for a duration of not less than 90 minutes.

2.4 Fire Extinguishers: Portable fire extinguishers shall be installed in accordance with NFPA 10 and be accessible within 25 meters travel distance.

# Section 3: Structural Requirements

3.1 Concrete Works: Concrete grade for structural members shall not be less than C40/50 as per BS EN 206. Maximum water-cement ratio shall be 0.45. All concrete shall be tested for compressive strength at 7 and 28 days.

3.2 Steel Reinforcement: Steel bars shall conform to BS 4449 Grade B500B. All reinforcement must be free from rust, oil, and other deleterious materials before placing.

3.3 Structural Load Testing: All load-bearing members must be tested to 1.5 times the design load before occupancy approval.

# Section 4: Plumbing Requirements

4.1 Potable Water System: All materials in contact with potable water shall be DM-approved and certified for safe human consumption. Minimum water pressure at the highest fixture shall be 1.5 bar.

4.2 Drainage System: All drainage pipes shall be uPVC conforming to BS EN 1329. Floor drains shall be provided in all wet areas.

4.3 Water Heater Installation: All water heaters must comply with Dubai Electricity & Water Authority (DEWA) standards and be fitted with safety valves.

# Section 5: Electrical Requirements

5.1 Wiring: All electrical wiring shall comply with BS 7671 (IET Wiring Regulations). Cables shall be fire-resistant in accordance with IEC 60331.

5.2 Earthing & Bonding: Earthing resistance shall not exceed 1 ohm. All metallic parts of the installation shall be bonded to the main earthing terminal.

5.3 Emergency Power Supply: A generator with sufficient capacity shall be provided to maintain essential systems for a minimum of 2 hours in case of power failure.

# Section 6: Sustainability Requirements

6.1 Energy Efficiency: Lighting power density shall not exceed 10 W/m² in commercial areas. All HVAC equipment must meet Dubai Green Building Regulation efficiency ratings.

6.2 Water Conservation: Low-flow fixtures shall be installed with a maximum flow rate of 6 liters per minute for washbasin faucets.

6.3 Waste Management: Construction waste shall be segregated into recyclable and non-recyclable categories and disposed of as per DM waste management guidelines.

# Section 7: Health & Safety Requirements

7.1 Site Safety: All contractors must prepare and follow a Health, Safety, and Environment (HSE) plan approved by DM.

7.2 Personal Protective Equipment (PPE): All workers must wear appropriate PPE, including helmets, safety shoes, and high-visibility vests.

7.3 First Aid Facilities: At least one trained first-aid responder must be present on-site at all times, and first-aid kits must be available within 50 meters of any work area.