







Construction Safety Guidelines No. 26

Fire Safety In High Rise Construction

		
<p>RESPONSIBILITY & SCOPE</p> <ul style="list-style-type: none"> It is the responsibility of the main contractor to take adequate fire safety measures during the construction of the tower. Application for COC III must be made once the building height reaches 24 metres but before the building height exceeds 30 metres. The main contractor must develop and regularly update a construction fire safety plan. This guidance note does not change any existing regulatory requirements placed on consultants or contractors 	<p>TANK, PUMP & WET RISER</p> <ul style="list-style-type: none"> Provide a sufficient supply of water to ensure that the wet riser system can deliver water for a minimum of 45 minutes. Install a pump with discharge capacity of a minimum 350 GPM and ensure backup is available in the event of power failure. Provide a charged wet riser with a minimum diameter of 100mm reaching top of the building. 	<p>LANDING VALVES, HOSE REELS & PRESSURE</p> <ul style="list-style-type: none"> Provide landing valves of 75 mm diameter on all floors. Valves should be easily accessible & convenient to operate. Hose reels of approved quality 30 metres long must be provided for fire department use. Ensure that minimum pressure of 6.9 Bar is achieved at any point in the building. Use pressure regulating valves to achieve pressures in accordance with fire department requirements.
		
<p>FIRE DOORS / SHAFT</p> <ul style="list-style-type: none"> Provide a fire rated stair core to facilitate emergency escape and fire department access. Fire doors should be able to provide a minimum of 30 minutes fire and smoke protection. All openings in the staircase should be fire stopped using fire retardant material. Complete fire stopping on service penetrations as soon as it is practical to do so. Emergency lighting must be installed with backup. 	<p>FIRE EXTINGUISHERS / FIRE MARSHALS</p> <ul style="list-style-type: none"> Install adequate fire extinguishers approved by Civil Defense. Travel distance to the nearest fire extinguisher should be between 9.15 m and 15.25 m. Appoint adequate numbers of Fire Marshals at the site (trained through EHS approved third party). An alarm system must be provided to ensure that a warning can be given in the event of an emergency. Alarm must be audible throughout the tower with an adequate number of sounders provided. 	<p>APPROVAL FROM EHS</p> <ul style="list-style-type: none"> After necessary safety measures, apply for COC III to get necessary approval from EHS. Application for COC III must be made in accordance with COC procedure. A letter of conformity will be given by EHS after satisfactory compliance. The main contractor is responsible for maintaining compliance with Civil Defense and EHS requirements until the tower is handed over to the owner.