

Table 8.1: General Requirements of Fire Detection and Alarm Systems

ITEMS	REQUIREMENTS
4. MANUAL CALL POINTS	<ul style="list-style-type: none"> i. The manual call points shall be used only for fire alarm initiation. In addition, all manual call points within an occupancy shall be of similar design. ii. Time from the operation of call point to the actuation of alarm signal shall not exceed (10) seconds. iii. Where call points are installed in combustible, explosive environments these devices shall be listed for the application. iv. Where manual call points are installed in food preparation environment, where breakable parts resulting from operation may cause risks, the designer shall consult with and conform to related approved standards. v. The manual call points shall be installed on all escape routes and in particular beside stairwell entrances and all exits to open air. vi. The manual call points shall be installed so that they are conspicuous, unobstructed and accessible. vii. Distribution of the manual call points should be such that travel distance should not be more than 61 m to reach the nearest manual call point. viii. These figures to be reduced to 25m and 16m in limited mobility areas, and where processes of the area result in a likelihood of rapid fire development. ix. Manual Call Point shall be installed within 1.5 m from exit door opening. x. The manual call points shall be installed generally at the height of 1.2 m, above floor level and in plain, accessible, well lit and free-hindrances places.
5. COVERAGE	<ul style="list-style-type: none"> i. Every building shall be provided with Addressable Fire Detection and Alarm System as per Civil Defence Regulation. Every building, enclosed structure, enclosed occupiable spaces and building under construction shall be provided with Automatic Addressable Fire Detection and Alarm System. ii. Detectors shall not be installed until after the cleanup of all construction works is completed and finalized. Any detectors installed during construction for the purposes of protection during construction, shall be checked to confirm that their sensitivity is within the listed and marked sensitivity range and shall be repaired or replaced as necessary. iii. Detector coverage shall include all rooms, halls, storage areas, basements (unless protected by automatic sprinklers), attics, lofts and other enclosed usable spaces. iv. Detectors shall not be required to cover above false ceiling compartmented spaces on the rooms having less than 5m² area. v. Detectors shall not be required below open grids/cloud ceilings if opening of the grid are 6.4 mm or large and such openings constitute at least 70% of the ceiling or grid material. vi. Detectors shall not be required at non-combustible spaces such as below raised floor or accessible trench areas which do not consist service pipes, electrical wiring and communication cables.
6. STAIRS	<ul style="list-style-type: none"> i. At least one smoke detector shall be installed at the top of the stair of a non-highrise building. ii. In Highrise and Super Highrise buildings, along with one smoke detector at the top of the stair, multiple smoke detectors at intermediate landings, every 23 m, shall be provided. iii. Stairs shall be provided with Voice speakers with clear speech audibility. iv. Sounders shall not be required in stairs.
7. ELEVATOR SHAFT	<ul style="list-style-type: none"> i. At least one smoke detector shall be installed at the top of the elevator shaft of a non-highrise building to initiate elevator recall. ii. In Highrise and Super Highrise buildings, along with one smoke detector at the top of the shaft, multiple smoke detectors at intermediate levels, every 23 m, shall be provided to initiate elevator recall.