

4.8. Installation and Spacing of Line Type Heat Detection System

- 4.8.1.** The Installation and Spacing of Line Type Smoke Detection and Alarm System shall comply with **Table 8.8.**, Heat Detection System as per **Table 8.6.** and the General Requirements for Fire Detection and Alarm System as per **Table 8.1.**

Table 8.8.: Installation and Spacing of Line Type Heat Detection Systems

ITEMS	REQUIREMENTS
1. INSTALLATION AND SPACING OF LINE TYPE HEAT DETECTORS	<u>1. GENERAL</u>
	<ul style="list-style-type: none"> i. The line type detector shall be listed and approved by Civil Defence, including its mounting accessories and hardware as assembly. ii. The location and spacing of heat detectors shall be based upon pre-existing ambient temperature that could exist in the protected compartment. iii. Detector location and spacing shall take into consideration the following features. <ul style="list-style-type: none"> a. Ceiling shape and surface. b. Ceiling height. c. configuration of material content in the area. d. combustion characteristics of the fuel load in the area. e. compartment ventilation. f. Ambient temperature, pressure, altitude, humidity and atmosphere. iv. The detector shall produce trouble signal during short circuits and open ends, not alarm signal. v. If the intent is to protect against specific hazard, detectors shall be placed closer to the hazard, than required by the spacing guidelines vi. In general, line-type heat detectors shall be located on the ceiling or on the sidewalls not more than 510 mm from the ceiling. vii. Maximum spacing of line type detector shall not exceed 15.2 m. up to 3 m of the ceiling height or the hazard protected. viii. Spacing shall be reduced to 9.1 m when installed above 3m from ceiling or the hazard protected.
	<u>2. EXTERIOR INSTALLATIONS</u>
	<ul style="list-style-type: none"> i. Where line type detectors are installed outdoors and exterior areas, the ambient temperature on detector or its mounting surfaces will increase. Shielding of the detector shall be required to comply with detector temperature ratings and its application. ii. Outdoor installations of line type detectors, to safeguard from wind and storms, shall be secured with additional fasteners/hangers/hooks than recommended by the manufacturer in general areas.
	<u>3. OTHER APPLICATIONS</u>
	<ul style="list-style-type: none"> i. Manufacturer's listed design guide and manual shall be followed for spacing, location and installation methods for other applications such as Conveyers, Rack storage, Cable trenches, Fuel oil Tanks etc.