Table 8.6: Heat Detection System

ITEMS	REQUIREMENTS
6. ELECTRONIC SPOT TYPE HEAT DETECTORS	i. A thermoelectric effect detector is a device that utilizes a sensing element consisting of one or more thermistors, which produce a change in electrical resistance in response to an increase in temperature. This change in resistance is monitored by associated electronic circuitry, and the detector responds when the resistance changes at an abnormal rate (rate-of-rise type) or when the resistance reaches a specific value (fixed-temperature type).
7. COLOR CODING OF HEAT DETECTORS	i. Heat-sensing fire detectors of the fixed temperature or rate-compensated, spot type shall be marked with a color code in accordance with **Table 8.6.a.** ii. If the overall color of a heat-sensing fire detector is the same as the color code marking required for that detector, one of the following arrangements, applied in a contrasting color and visible after installation, shall be employed: a. Ring on the surface of the detector b. Temperature rating in numerals at least 9.5mm high. iii. Detectors having fixed-temperature or rate-compensated elements shall be selected in accordance with **Table 8.6.a.,** for the maximum expected ambient ceiling temperature. The temperature rating of the detector shall be at least 11°C above the maximum expected temperature at the ceiling.

Table 8.6.a.: Color Coding of Heat Detectors

TEMPERATURE CLASSIFICATION	HEAT DETECTOR TEMPERATURE RATING RANGE	MAXIMUM CEILING TEMPERATURE	COLOR CODE
1. Low	39 ^{0}C—57 ^{0}C	28 ^{O}C	Uncolored
2. Ordinary	58 ^{0}C—79 ^{0}C	47 ^{O}C	Uncolored
3. Intermediate	80 ^{0}C—121 ^{0}C	69 ^{O}C	White
4. High	122 ^{0}C—162 ^{0}C	111 ^{O}C	Blue
5. Extra High	163 ^{0}C—204 ^{0}C	152 ^{O}C	Red
6. Very Extra High	205 ^{0}C—259 ^{0}C	194 ^{O}C	Green
7. Ultra High	260 ^{0}C—302 ^{0}C	249 ^{O}C	Orange

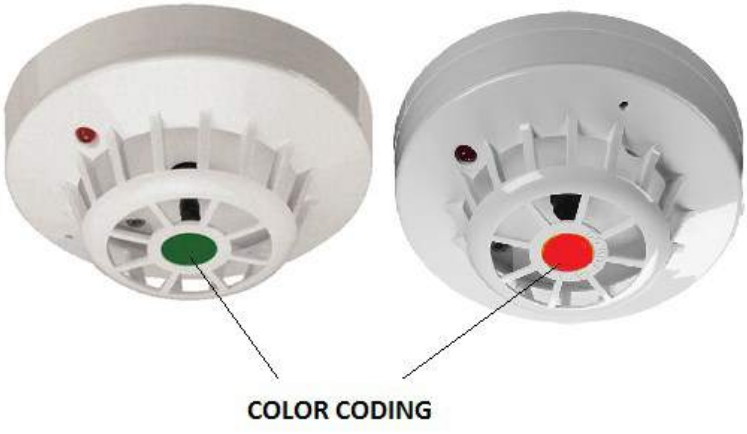

Figure 8.18.: Spot Type Heat Detector Color Coding and Marking