Table 16.1: Smart Monitoring System Specifications

ITEMS	REQUIREMENTS
2. PROVISIONS REQUIRED IN THE BUILDING	**3. HIGHRISE AND SUPERHIGH RISE BUILDINGS** **3.a. SMART BUILDINGS WITH OPEN PROTOCOLS** i. Where buildings are provided with FACP's, Smoke control panel, Gas detection panel, Fire pump controllers and elevator control panels with state of the art Internet or things (IoT) features OR building has 'Smart' features OR building has BMS (Building Management Systems), open protocols shall be made available to achieve the required signal annunciation and communication as per **Table 16.1.1.** ii. The acceptable open protocols shall be such as following a. BACnet IP b. BACnet MSTP c. Modbus TCP d. Modbust RTU with RS485 ports e. Lonworks **3.b. BUILDINGS WITHOUT OPEN PROTOCOLS** i. Dedicated volt free contacts (VFC) in the FACP shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during alarm condition, for a. Common fire alarm from FACP b. Common fire alarm system fault from FACP ii. Dedicated volt free contacts (VFC) in the Fire Pump Controller shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during alarm condition, for a. Fire Pump in operation b. Common fire pump system fault from controller c. System Pressure Low d. Diesel fuel low e. Water tank level low iii. Dedicated volt free contacts (VFC) in the Gas control panel shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during alarm condition, for a. Gas leak detection b. Common gas detection system fault from control panel iv. Dedicated volt free contacts (VFC) in the Smoke control panel shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during fault condition, for a. Common system fault from control panel v. Dedicated volt free contacts (VFC) in the Elevator control panel shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during fault condition, for a. Common elevator fault from control panel b. Passenger Alarm from elevator control panel vi. Dedicated volt free contacts (VFC) in the Emergency lighting control panel shall be available. The state of the VFC should ideally be normally closed (NC) during normal condition and open (NO) during fault condition, for a. Common system fault from control panel