

Table 10.2.: Requirements for HVAC Systems

ITEMS	REQUIREMENTS
4. SHAFTS	<ul style="list-style-type: none"> i. Shafts shall be 1 hour fire resistance rated for Lowrise buildings. ii. Shafts shall be 2 hours fire resistance rated for non lowrise buildings. iii. Shafts used for air ducts shall not accommodate the following, <ul style="list-style-type: none"> a. Exhaust ducts used for the removal of smoke- and grease-laden vapors from cooking equipment b. Ducts used for the removal of flammable vapors c. Ducts used for moving, conveying, or transporting stock, vapor, or dust d. Ducts used for the removal of nonflammable corrosive fumes and vapors e. Refuse and linen chutes f. Piping, except for noncombustible piping conveying water or other nonhazardous or nontoxic materials g. Combustible storage
5. WIRING	<ul style="list-style-type: none"> i. The installation of electrical wiring and equipment associated with HVAC and smoke control systems shall be in accordance with NFPA 70, National Electrical Code. See Section 6. for cable fire rating.
6. MANUAL OPERATION	<ul style="list-style-type: none"> i. Each air distribution system shall be provided with at least one manually operable means for stopping the operation of the supply, return and exhaust fan(s) in an emergency. ii. The means of manual operation shall be located next to smoke control panel or HVAC panel or FACP.
7. AIR DUCT SMOKE DETECTORS	<ul style="list-style-type: none"> i. Listed and approved air duct smoke detectors shall be installed at <ul style="list-style-type: none"> a. Downstream of the air filters and ahead of any branch connections in air supply systems having a capacity greater than 944 L/sec (2000 ft³/min) b. At each story prior to the connection to a common return and prior to any recirculation or fresh air inlet connection in air return systems having a capacity greater than 7080 L/sec (15,000 ft³/min) and serving more than one story. ii. Smoke detectors shall automatically stop their respective fan(s) when detecting the presence of smoke, unless they are required not to stop the fan by a smoke control logic.