

## 2.3. Requirements for HVAC Systems

- 2.3.1.** HVAC Systems shall comply with **Table 10.2.** The relevant components of HVAC systems shall comply with **Table 10.1. Components of Smoke Control and HVAC Systems.**

**Table 10.2.: Requirements for HVAC Systems**

ITEMS	REQUIREMENTS
<b>1. GENERAL</b>	<ul style="list-style-type: none"> <li>i. In a Fire Condition, HVAC Systems in a building shall automatically shut down, unless they are integral part of a Smoke exhaust and Smoke control systems.</li> <li>ii. HVAC Equipment shall be arranged to provide a minimum 600 mm horizontal access with a minimum 2030 mm headroom for inspection, maintenance, and repair.</li> <li>iii. HAVC equipment shall be guarded for personnel protection and against the intake of foreign matter into the system.</li> <li>iv. 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.</li> <li>v. The means of manual operation shall be located in the emergency command center or in a dedicated protected room.</li> <li>vi. Exit passageways, stairs, ramps, and other exits shall not be used as a part of a supply, return, or exhaust air system serving other areas of the building.</li> <li>vii. Egress corridors in health care, detention and correctional, and residential occupancies shall not be used as a portion of a supply, return, or exhaust air system serving adjoining areas.</li> <li>viii. An air transfer opening(s) shall not be permitted in walls or in doors separating egress corridors from adjoining areas.</li> </ul>
<b>2. DUCT INTEGRITY</b>	<ul style="list-style-type: none"> <li>i. Air ducts shall be located where they are not subject to damage or rupture, or they shall be protected to maintain their integrity.</li> <li>ii. Where an air duct is located outdoors, the air duct, together with its covering or lining, shall be protected from harmful elements.</li> <li>iii. The ductwork should not be continuous through a partition opening but instead should connect on each side of the partition to a damper installed in a sleeve or frame secured by perimeter-mounting angles on both sides of the opening, or be installed per the listing of the device.</li> </ul>
<b>3. INLET AND OUTLET LOCATIONS</b>	<ul style="list-style-type: none"> <li>i. Air outlets shall be located at least 76 mm (3 in.) above the floor, unless provisions have been made to prevent dirt and dust accumulations from entering the system.</li> <li>ii. Air outlets, where located less than 2.13 m above the floor, outlet openings shall be protected by a grille or screen having openings through which a 12.7 mm sphere cannot pass.</li> <li>iii. Air inlets shall be located at least 76 mm (3 in.) above the floor, unless provisions have been made to prevent dirt and dust accumulations from entering the system.</li> <li>iv. Where located less than 2.13 m above the floor, inlet openings shall be protected by a grille or screen having openings through which a 12.7 mm sphere cannot pass.</li> </ul>