

TOPIC 5. PIPE BASEMENTS

1. GENERAL: Evaluate the use of full or partial pipe basements on an individual project basis through a design analysis of the most efficient and economical method of adapting piping, duct, and electrical conduit systems to the building. Design pipe basements to provide a minimum clearance of 1200 mm (4 ft.) under pipes, ducts, and electrical conduits for access to these systems for maintenance and repair. Provide pipe basements with two means of egress. Provide a means of access for personnel and equipment.

2. CONSTRUCTION

- a. Insulate the exterior pipe basement walls to prevent freezing temperatures for locations where ambient temperatures are -7°C (20°F) or below.
- b. Provide access to the pipe basement at stairwells and emergency egress to the exterior through the use of areaways where necessary.

3. HEATING AND VENTILATION

- a. Provide thermostatically controlled mechanical ventilation to prevent excessive rise in basement temperature and/or prevent moisture problems.
- b. Provide intake louvers with dampers of sufficient size to satisfy fan requirements.
- c. Screen all ventilator and louver openings to prevent entry of insects and small animals.
- d. As dictated by design computations for maintaining slab at 21°C (70°F), provide heating in the pipe basement or insulate the slab or both.