Appendix H

- **H 9.4.2** Fixtures other than water closets shall be no more than 3.7m (12 ft.) horizontally from the stack.
- **H 9.4.3** The length of any vertical piping from a fixture trap to a horizontal branch shall not be considered in computing the fixture's horizontal distance from the stack.
- **H 9.5** Maximum Vertical Drops from Fixtures. Vertical drops from fixture traps to horizontal branch piping shall be one size larger than the trap size, but not less than 50mm (2 in.) in diameter. Vertical drops shall not exceed 1.2m (4 ft.) in length. Fixture drains that are not increased in size, or have a vertical drop exceeding 1.2m (4 ft.) shall be individually vented.
- H 9.6 Additional Venting Required. Additional venting shall be provided when more than one water closet is on a horizontal branch and where the distance from a fixture trap to the stack exceeds the limits in Section L 9.4. Where additional venting is required, the fixture(s) shall be vented by individual vents, common vents, wet vents, circuit vents, or a combination waste and vent pipe. The dry vent extensions for the additional venting shall connect to a branch vent, vent stack, stack vent, air admittance valve, or be extended outdoors and terminate to the open air.
- **H 9.7 Stack Offsets.** Where there are no fixture drain connections below a horizontal offset in a stack, the offset does not need to be vented. Where there are fixture drain connections below a horizontal offset in a stack, the offset shall be vented. There shall be no fixture connections to a stack within 60cm (2 ft.) above and below a horizontal offset.
- **H 9.8 Separate Stack Required.** Where stacks are more than two stories high, a separate stack shall be provided for the fixtures on the lower two stories. The stack for the lower two stories shall be permitted to be connected to the branch of the building drain that serves the stack for the upper stories at a point that is not less than ten pipe diameters downstream from the base of the upper stack.
- **H 9.9 Sizing Building Drains and Sewers.** In a single-stack vent system, the building drain and branches thereof shall be sized in accordance with Table 7-4, and the building sewer shall be sized in accordance with Table 7-7.

H 10.0 Air Admittance Valves.

H 10.1 Definition. One-way valves designed to allow air to enter the plumbing drainage system when negative pressures develop in the piping system. The device shall close by gravity and seal the vent termi-

UNIFORM PLUMBING CODE OF ABU DHABI: AN ENVIRONMENTAL GUIDE FOR WATER SUPPLY AND SANITATION

nal at zero differential pressure (no flow conditions) and under positive internal pressures. The purpose of an air admittance valve is to provide a method of allowing air to enter the plumbing drainage system to prevent siphonage of plumbing fixture traps.

- **H 10.2 General.** Vent systems shall be permitted to utilize air admittance valves. The design and installation of air admittance valves shall comply with this section. Stack-type air admittance valves shall conform to ASSE 1050 or equivalent International Standard(s) approved by the Authority Having Jurisdiction. Individual and branch-type air admittance valves shall conform to ASSE 1051 or equivalent International Standard(s) approved by the Authority Having Jurisdiction.
 - **H 10.2.1 Vent Required.** One stack vent or vent stack shall extend outdoors to the open air on every drainage and vent system utilizing air admittance valves.
- **H 10.3 Installation.** Air admittance valves shall be installed in accordance with the manufacturer's installation instructions.
- **H 10.4 Where Permitted.** Individual, branch and circuit vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve. Stack vents and vent stacks shall be permitted to terminate to stack-type air admittance valves. Individual and branch-type air admittance valves shall vent only fixtures that are located on the same floor level and connect to a horizontal branch drain. The horizontal branch drain having individual and branch-type air admittance valves shall conform to Section L 10.4.1 or L 10.4.2. Stack-type air admittance valves shall conform to Section L10.4.3.
 - **H 10.4.1 Location of Branch.** The horizontal branch drain shall connect to the drainage stack or building drain a maximum of five stories from the top of the stack.
 - H 10.4.2 Relief Vent. Where the horizontal branch is located more than five stories from the top of the stack, the horizontal branch shall be provided with a relief vent that shall connect to a vent stack or stack vent, or extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be not less than 50mm (2 in.) in diameter. The relief vent shall be permitted to serve as the vent for other fixtures.
 - **H 10.4.3 Stack.** Stack-type air admittance valves shall not serve as the vent terminal for vent stacks or stack vents that serve drainage stacks exceeding seven stories in height.