

## CHAPTER 12 HYDRONIC PIPING

**SECTION 1204** is amended as follows:

**1204.1 Insulation characteristics.** Pipe insulation installed in buildings shall conform to the requirements of the *International Energy Conservation Building Code*, shall be tested in accordance with ASTM E 84, using the specimen preparation and mounting procedures of ASTM E 2231; and shall have a maximum flame spread index of 25 and a smoke-developed index not exceeding 450. Insulation installed in an air plenum shall comply with Section 602.2.1.

**1204.2 Required thickness.** Hydronic piping shall be insulated to the thickness required by the *International Energy Conservation Building Code*.

**SECTION 1205** is amended as follows:

**1205.2 Reduced pressure.** A pressure relief valve shall be installed on the low-pressure side of a hydronic piping system that has been reduced in pressure. The relief valve shall be set at the maximum pressure of the system design. The valve shall be installed in accordance with Section ~~4006~~. 1008.

**SECTION 1208** is amended as follows:

**1208.1 General.** Hydronic piping systems ~~other than ground-source heat pump loop systems~~ shall be tested hydrostatically at one and one half times the maximum system design pressure, but not less than 100 psi (689 kPa). The duration of each test shall be not less than 15 minutes. Ground-source heat pump loop systems and cross-linked polyethylene (PEX) tubing systems shall be tested in accordance with Sections 1208.1.1 and 1208.1.2.

**1208.1.2 Cross-linked polyethylene (PEX) tubing systems.** Before a continuous looped systems using PEX tubing is embedded or concealed the assembled system shall be pressure tested at 100 psi (689 kPa) for 30 minutes with no observed leaks.

**SECTION 1209** is amended as follows:

**1209.1 Materials.** Piping for heating panels shall be standard-weight steel pipe, Type L copper tubing, cross-linked polyethylene (PEX) tubing, cross-linked polyethylene/ aluminum/cross-

linked polyethylene (PEX-AL-PEX) pressure pipe or polybutylene –or other approved plastic pipe or tubing rated at 100 psi (689 kPa) at 180°F (82°C).

**1209.3.4 Cross-linked polyethylene joints.** PEX pipe shall be joined using cold expansion, insert or compression fittings.

**1209.3.5 Cross-linked polyethylene/ aluminum/cross-linked polyethylene.** PEX-AL-PEX pipe shall be joined by mechanical, crimp/insert fittings.