



Termination less than 10 ft (3.1 m) from ridge, wall, or parapet

FIGURE 4.2(a) Chimney or Vent Termination [Less Than 10 ft (3.1 m)].

Termination more than 10 ft (3.1 m) from ridge, wall, or parapet

FIGURE 4.2(b) Chimney or Vent Termination [More Than 10 ft (3.1 m)].

4.4.2 Above-Ceiling Spaces. Where a venting system passes through a space above a ceiling used as a return air plenum, it shall be installed according to one of the following methods:

- (1) With joints within the above-ceiling return air plenum sealed airtight in a manner approved by the manufacturer of the venting system.
- (2) The venting system shall be a listed positive-pressure venting system.
- (3) Non-airtight venting system installed with no joints or fittings located within the above-ceiling return air plenum.

4.5 Flue Lining.

4.5.1 Resistance Equivalency. Castable or plastic refractories used to line chimneys or connectors shall be the equivalent in resistance to heat and erosion by flue gases to that of the fire-clay brick.

4.5.2 Lining Support. Lining made of castable or plastic refractories shall be secured to the supporting walls by anchors made of corrosion-resistant steel capable of supporting the refractory load at 1500°F (816°C).

4.5.3 Space Surrounding Liner or Vent. The remaining space surrounding a chimney liner, gas vent, special gas vent, or plastic piping installed within a chimney flue shall not be used to vent another appliance.

4.6 Caps and Spark Arresters for Chimneys and Vents.

4.6.1 Design. Chimney or vent caps, where required for the termination of chimneys or vents, shall be designed to prevent the entry of rain, snow, birds, and other animals.

4.6.2 Screening. Screening material attached to chimney or vent caps to prevent the entry of animals and insects shall not adversely affect the chimney or vent draft.

4.6.3 Spark Arresters. Spark arresters, where required by the AHJ for chimneys attached to solid fuel-burning equipment, shall meet the following requirements:

- (1) The net-free area of the arrester shall be not less than three times the net-free area of the outlet of the chimney flue it serves.
- (2) The arrester screen shall have heat and corrosion resistance equivalent to 19-gauge [0.041-in. (1.04-mm)] galvanized steel or 24-gauge [0.024-in. (0.61-mm)] stainless steel.
- (3) Openings shall not allow the passage of spheres having a diameter larger than ½ in. (12.7 mm) or block the passage of spheres having a diameter of less than ⅜ in. (9.5 mm).
- (4) The spark screen shall be accessible for cleaning, and the screen or chimney cap shall be removable to allow cleaning of the chimney flue.

4.6.3.1 Where part of a listed chimney termination system, spark arresters shall be constructed and installed in accordance with the listing.

Chapter 5 Selection of Chimney and Vent Types

5.1 Chimney Types.

5.1.1 Selection. Chimney selection shall be limited to three basic chimney types: factory-built, masonry, and unlisted metal chimneys [see Figure 5.1.1(a) through Figure 5.1.1(c)].