(B) Location. This nameplate shall be located so as to be visible or accessible after installation.

424.29 Marking of Heating Elements. All heating elements that are replaceable in the field and are part of an electric heater shall be legibly marked with the ratings in volts and watts or in volts and amperes.

Part V. Electric Space-Heating Cables

424.34 Heating Cable Construction. Factory-assembled nonheating leads of heating cables, if any, shall be at least 2.1 m (7 ft) in length.

424.35 Marking of Heating Cables. Each unit shall be marked with the identifying name or identification symbol, catalog number, and ratings in volts and watts or in volts and amperes.

424.36 Clearances of Wiring in Ceilings. Wiring located above heated ceilings shall be spaced not less than 50 mm (2 in.) above the heated ceiling. The ampacity of conductors shall be calculated on the basis of an assumed ambient temperature of not less than 50°C (122°F), applying the correction factors in accordance with 310.15(B)(1). If this wiring is located above thermal insulation having a minimum thickness of 50 mm (2 in.), it shall be subject to the ambient correction in accordance with 310.15(B)(1).

424.38 Area Restrictions.

(A) Extending Beyond the Room or Area. Heating cables shall be permitted to extend beyond the room or area in which they originate unless prohibited by 424.38(B).

(B) Uses Not Permitted. Heating cables shall not be installed as follows:

(1) In closets, other than as noted in 424.38(C)
(2) Over the top of walls where the wall intersects the ceiling
(3) Over partitions that extend to the ceiling, unless they are isolated single runs of embedded cable
(4) Under or through walls
(5) Over cabinets whose clearance from the ceiling is less than the minimum horizontal dimension of the cabinet to the nearest cabinet edge that is open to the room or area
(6) In tub and shower walls
(7) Under cabinets or similar built-ins having no clearance to the floor

(C) In Closet Ceilings as Low-Temperature Heat Sources to Control Relative Humidity. The provisions of 424.38(B) shall not prevent the use of cable in closet ceilings as low-temperature heat sources to control relative humidity, provided they are used only in those portions of the ceiling that are unobstructed to the floor.

424.39 Clearance from Other Objects and Openings. Heating elements of cables installed in ceilings shall be separated at least 200 mm (8 in.) from the edge of outlet boxes and junction boxes that are to be used for mounting surface luminaires. A clearance of not less than 50 mm (2 in.) shall be provided from recessed luminaires and their trims, ventilating openings, and other such openings in room surfaces. No heating cable shall be covered by any ceiling surface-mounted equipment.

424.40 Splices. The length of heating cable shall only be altered using splices identified in the manufacturer's instructions.

424.41 Ceiling Installation of Heating Cables on Dry Board, in Plaster, and on Concrete.

(A) In Walls. Heating cables identified only for use in ceiling installations shall not be installed in walls unless it is necessary for an isolated single run of cable to be installed down a vertical surface to reach a dropped ceiling.

(B) Adjacent Runs. Adjacent runs of heating cable shall be installed in accordance with the manufacturer's instructions.

Δ **(C) Surfaces to Be Applied.** Heating cables shall be applied only to gypsum board, plaster lath, or other fire-resistant material. With metal lath or other electrically conductive surfaces, a coat of plaster or other means employed in accordance with the heating cable manufacturer's instructions shall be applied to completely separate the metal lath or conductive surface from the cable.

Informational Note: See 424.41(F).

(D) Splices. All heating cables, the splice between the heating cable and nonheating leads, and 75-mm (3-in.) minimum of the nonheating lead at the splice shall be embedded in plaster or dry board in the same manner as the heating cable.

(E) Ceiling Surface. The entire ceiling surface shall have a finish of thermally noninsulating sand plaster that has a nominal thickness of 13 mm (½ in.), or other noninsulating material identified as suitable for this use and applied according to specified thickness and directions.

(F) Secured. Cables shall be secured by means of approved stapling, tape, plaster, nonmetallic spreaders, or other approved means either at intervals not exceeding 400 mm (16 in.) or at intervals not exceeding 1.8 m (6 ft) for cables identified for such use. Staples or metal fasteners that straddle the cable shall not be used with metal lath or other electrically conductive surfaces.

(G) Dry Board Installations. In dry board installations, the entire ceiling below the heating cable shall be covered with gypsum board not exceeding 13 mm (½ in.) thickness. The void between the upper layer of gypsum board, plaster lath, or other fire-resistant material and the surface layer of gypsum board shall be completely filled with thermally conductive, nonshrinking plaster or other approved material or equivalent thermal conductivity.