

of the circuit overcurrent protective device. This requirement shall not apply to an appliance with a nameplate in compliance with 422.60 where both the minimum supply circuit conductor ampacity and maximum rating of the circuit overcurrent protective device are not more than 15 amperes.

(2) Alternate Marking Method. An alternate marking method shall be permitted to specify the rating of the largest motor in volts and amperes, and the additional load(s) in volts and amperes, or volts and watts in addition to the marking required in 422.60. The ampere rating of a motor $\frac{1}{8}$ horsepower or less or a nonmotor load 1 ampere or less shall be permitted to be omitted unless such loads constitute the principal load.

ARTICLE

424

Fixed Electric Space-Heating Equipment

Part I. General

424.1 Scope. This article covers fixed electric equipment used for space heating. For the purpose of this article, heating equipment includes heating cables, unit heaters, boilers, central heating systems, or other fixed electric space-heating equipment. This article does not apply to process heating and room air conditioning.

Δ **424.3 Other Articles.** Fixed electric space-heating equipment incorporating a hermetic refrigerant motor-compressor shall additionally comply with Table 424.3 unless amended by this article.

N TABLE 424.3 Other Articles

Equipment	Article
Air-conditioning and refrigerating equipment	440 (Parts I, II, III, IV, V, VI)

424.4 Branch Circuits.

(A) Branch-Circuit Requirements. An individual branch circuit shall be permitted to supply any volt-ampere or wattage rating of fixed electric space-heating equipment for which the branch circuit is rated.

Branch circuits supplying two or more outlets for fixed electric space-heating equipment shall be rated not over 30 amperes. In other than a dwelling unit, fixed infrared heating equipment shall be permitted to be supplied from branch circuits rated not over 50 amperes.

(B) Branch-Circuit Conductor Sizing. The branch-circuit conductor(s) ampacity shall not be less than 125 percent of the load of the fixed electric space-heating equipment and any associated motor(s).

Branch-circuit conductors supplying fixed electric space-heating equipment must be sized at 125 percent of the total load of the heaters (and motors) to protect conductors from overheating during periods of prolonged operation.

424.6 Listed Equipment. Electric baseboard heaters, heating cables, duct heaters, and radiant heating systems shall be listed and labeled.

Part II. Installation

424.10 General. Factory-installed receptacle outlets that are part of a permanently installed electric baseboard heater, or outlets provided as a separate listed assembly of an electric baseboard heater, shall be permitted in lieu of a receptacle outlet(s) that is required by 210.52. Such receptacle outlets shall not be connected to the baseboard heater circuits.

Informational Note: Listed baseboard heaters include instructions that may not permit their installation below receptacle outlets.

This restates the permission granted in the second paragraph of 210.52 — that is, it allows factory-installed receptacle outlets in electric baseboard heaters to satisfy the spacing requirements for receptacle outlets in dwelling units according to 210.52(A).

Heating equipment and systems often have special installation instructions for spacings, types of supply wires, or special control equipment, which must be considered in determining the installation's suitability.

424.11 Supply Conductors. Fixed electric space-heating equipment requiring supply conductors with an insulation rating greater than 60°C shall be clearly and permanently marked. This marking shall be plainly visible after installation and shall be permitted to be adjacent to the field connection box.

Fixed electric space-heating equipment may require supply conductors with a temperature rating greater than 60°C, due to their proximity to the heating elements and the installation instructions provided with a listed product.

424.12 Locations.

(A) Exposed to Physical Damage. Where subject to physical damage, fixed electric space-heating equipment shall be protected in an approved manner.

Δ **(B) Damp or Wet Locations.** Heaters and related equipment installed in damp or wet locations shall be listed for such locations.

Informational Note No. 1: See 110.11 for equipment exposed to deteriorating agents.

Informational Note No. 2: See 680.27(C) for pool deck areas.

424.13 Spacing from Combustible Materials. Fixed electric space-heating equipment shall be installed to provide the required spacing between the equipment and adjacent combustible