

# Georgia State Amendments to the National Electrical Code

(2002 Edition)



Georgia Department of Community Affairs Office of Coordinated Planning 60 Executive Park South, N.E. Atlanta, Georgia 30329-2231 (404) 679-3118 www.dca.state.ga.us

**Revised January 1, 2003** 

# GEORGIA STATE MINIMUM STANDARD ELECTRICAL CODE

The National Electrical Code, 2002 Edition, published by the National Fire Protection Association, when used in conjunction with these Georgia Amendments, shall constitute the official *Georgia State Minimum Standard Electrical Code*.

#### Appendices

Appendices are not enforceable unless they are specifically referenced in the body of the code or adopted for enforcement in the ordinance of the authority having jurisdiction.

# GEORGIA STATE AMENDMENTS

\* Revise the National Electrical Code, 2002 Edition, as follows:

# CHAPTER 2 WIRING AND PROTECTION

#### ARTICLE 210 Branch Circuits

# 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.

\* Revise Article 210.8 (B) to read as follows:

(B) Other Than Dwelling Units. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in (1), (2), (3) and (4) shall have ground-fault circuit interrupter protection for personnel.

- (1) Bathrooms
- (2) Rooftops
- (3) Kitchens

(4) Within 6 feet of a sink or basin, excluding those listed in Section 517.21.

Exception: Receptacles that are not readily accessible and are supplied from a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with the applicable provisions of Article 426.

#### ARTICLE 220

# Branch-Circuit, Feeder, and Service Calculations III. Optional Calculations for Computing Feeder and Service Loads 220.30 Optional Calculation – Dwelling Unit.

\* Delete Section 220.30 (C) Heating and Air Conditioning Load and substitute as follows:

(C) Heating and Air-Conditioning Load. The largest of the following five selections (load in kVA) shall be included:

- (1) 100 percent of the nameplate rating(s) of the air conditioning and cooling including heat pump compressors.
- (2) 100 percent of the nameplate rating(s) of electric thermal storage and other heating systems where the usual load is expected to be continuous at the full nameplate value. Systems qualifying under this selection shall not be calculated under any other selection in 220.30(C).
- (3) 65 percent of the nameplate rating(s) of the total central electric space heating including heat pump compressors. If the heat pump compressor is prevented from operating at the same time as the supplementary heat, it does not need to be added to the supplementary heat for the total central space heat load.
- (4) 65 percent of the nameplate rating(s) of electric space heating if less than four separately controlled units.
- (5) 40 percent of the nameplate rating(s) of electric space heating if four or more separately controlled units.

#### ANNEX D EXAMPLES

# Example D2(c) Optional Calculation for One-Family Dwelling

with Heat Pump (Single-Phase, 240/120-Volt Service)

(see 220.30)

\* Revise parts of Example D2 (c) to read as follows:

#### **15-kW Electric Heat:**

5760 VA + 15,000 VA = 20,760 VA or = 20.76 kVA

20.76 kVA x 65% = 13.49 kVA

\*If supplementary heat is not on at same time as heat pump, heat pump kVA need not be added to total.

Totals		
Net general load		19,280 VA
Heat pump and supplementary heat		<u>13,490 VA</u>
	Total	32,770 VA

#### **Calculated Load for Service**

```
32.77 \text{ kVA x } 1000 \div 240 \text{ V} = 136.5 \text{ A}
```

Therefore, this dwelling unit would be permitted to be served by a 150-A service.

#### End of Amendments.