PHOTOVOLTAIC LABELING

AMC 4-705.1 All manual disconnects, including the service disconnect, are to be labeled “Fire Disconnect.”

CEC 110.21 Field Applied Hazards Markings. Where caution, warning, or danger signs or labels are required by this Code, the labels shall meet the following requirements:

(1) The marking shall adequately warn of the hazard using effective language and/or colors and/or symbols.

(2) The label shall be permanently affixed to the equipment or wiring method and shall not be hand written. Exception to (2): Portions of labels or markings that are variable, or that could be subject to changes, shall be permitted to be hand written and shall be legible.

(3) The label shall be of sufficient durability to withstand the environment involved. Informational note: ANSI Z535.4-2011, Product Safety Signs and Labels, provides guidelines for the design and durability of safety signs and labels.

CEC 690.5(C) Labels and Marking. A warning label shall appear on the utility-interactive inverter or be applied by the installer near the ground-fault indicator at a visible location, stating the following:

WARNING
ELECTRIC SHOCK HAZARD
IF A GROUND FAULT IS INDICATED,
NORMALY GROUNDED CONDUCTORS
MAY BE UNGROUNDED AND ENERGIZED

When the photovoltaic system has batteries, the same warning shall also be applied by the installer in a visible location at the batteries.

CEC 690.16 Fuses. Non-load-break-rated disconnecting means shall be marked “Do not open under load.”

CEC 690.17 Switch or Circuit Breaker. Where all terminals of the disconnecting means may be energized in the open position, a warning sign shall be mounted on or adjacent to the disconnecting means. The sign shall be clearly legible and have the following words or equivalent:

WARNING
ELECTRIC SHOCK HAZARD.
DO NOT TOUCH TERMINALS. TERMINALS
ON BOTH THE LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION.

CEC 690.31(G) Direct-Current Photovoltaic Source and Direct-Current Output Circuits on or Inside a Building. (3) Marking and Labeling Required. Wiring methods and enclosures that contain PV power source conductors shall be marked with the wording WARNING: PHOTOVOLTAIC POWER SOURCE by means of permanently affixed labels or other approved permanent marking. The labels shall be reflective, and all letters shall be capitalized and shall be a minimum height of 3/8” in white on a red background. PV power circuit labels shall appear on every section of the wiring system that is separated by enclosures, walls, partitions, ceilings, or floors. Spacing between labels and markings shall not be more than 10’.
CEC 690.35(F) Ungrounded Photovoltaic Power Systems. The photovoltaic power source shall be labeled with the following at each junction box, combiner box, disconnect, and device where ungrounded circuits may be exposed during service:

WARNING
ELECTRIC SHOCK HAZARD
THE DC CONDUCTORS OF THIS
PHOTOVOLTAIC SYSTEM ARE UNGROUNDED
AND MAY BE ENERGIZED

CEC 690.53 Direct-Current Photovoltaic Power Source. A permanent label for the direct-current photovoltaic power source indicating items (1) through (5) shall be provided by the installer at the photovoltaic disconnecting means:

(1) Rated maximum power-point current
(2) Rated maximum power-point voltage
(3) Maximum system voltage
(4) Short-circuit current
(5) Maximum rated output current of charge controller (if installed)

CEC 690.54 Interactive System Point of Interconnect. All interactive system(s) points of interconnection with other sources shall also be marked at an accessible location at the disconnecting means as a power source with the rated ac output current and the nominal operating ac voltage.

CEC 690.56(C) Facilities with Rapid Shutdown. Buildings or structures with both utility service and a PV system complying with 690.12 shall have a permanent plaque or directory including the following wording:

PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN

The plaque or directory shall be reflective, with all letters capitalized and having a minimum height of 9.5mm (3/8 in.) in white on red background.

CEC 705.10 Directory. A permanent plaque or directory, denoting all electric power sources on or in the premises, shall be installed at each service equipment location and at locations of all electric power production sources capable of being interconnected.

CEC 705.12(D)(7) Inverter Output Connection. Unless the panelboard is rated not less than the sum of the ampere ratings of all overcurrent devices supplying it, a connection in the panelboard shall be positioned at the opposite (load) end from the input feeder location or main circuit location. A permanent warning label shall be applied to the distribution equipment with the following or equivalent wording:

WARNING
INVERTER OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT DEVICE

NOT INCLUDED ABOVE ARE THE LABELING REQUIREMENTS FOR: MODULES (CEC 690.51), ALTERNATING-CURRENT PHOTOVOLTAIC MODULES (CEC 690.52), AND FACILITIES WITH STAND-ALONE SYSTEMS (CEC 690.56(A)).