

**TOWN OF ORO VALLEY AMENDMENTS TO THE
NATIONAL ELECTRICAL CODE, 2017 EDITION**

The following provision of the National Electrical Code, 2017 Edition, as published by the National Fire Protection Association, is hereby amended as follows:

Revise Article 210.5 by deleting paragraph (C)(1) and replacing it with the following:

(C)(1) UNGROUNDED CONDUCTORS. BRANCH CIRCUITS SHALL CONFORM TO THE FOLLOWING COLOR CODE.

<u>VOLTS</u>	<u>PHASE</u>	<u>SYSTEM</u>	<u>PHASE A</u>	<u>PHASE B</u>	<u>PHASE C</u>	<u>GROUNDING CONDUCTOR</u>
120/208	3	WYE	BLACK	RED	BLUE	WHITE
277/480	3	WYE	BROWN	ORANGE	YELLOW	GREY
120/240	3	DELTA	BLACK	ORANGE	RED	WHITE

EXCEPTIONS:

- 1) THIS COLOR CODING IS NOT REQUIRED IN RESIDENTIAL OCCUPANCIES.
- 2) ADDITIONS TO EXISTING ELECTRICAL SYSTEMS WHERE A PREVIOUSLY APPROVED COLOR CODING SYSTEM EXISTS, THE EXISTING COLOR CODING SYSTEM MAY BE CONTINUED.
- 3) INDUSTRIAL OCCUPANCIES WITH AN ANNUAL PERMIT IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, SECTION 105.1.1 MAY USE THEIR OWN COLOR CODING SYSTEM.

At Article 210.11 (C), add new Sub-section (5) as follows:

(5) DISHWASHER AND GARBAGE DISPOSAL BRANCH CIRCUITS IN DWELLING UNITS. IN RESIDENTIAL OCCUPANCIES, A DISHWASHER AND GARBAGE DISPOSAL MAY BE ON THE SAME 20 AMPERE BRANCH CIRCUIT.

Revise Article 225.32 by adding Exception No. 5 as follows:

EXCEPTION NO. 5: FOR FREESTANDING CANOPIES, CARPORTS, TOWERS, AND SIMILAR STRUCTURES, AN INDIVIDUAL OR MULTI-WIRE BRANCH CIRCUIT DISCONNECTING MEANS SHALL BE PERMITTED TO BE LOCATED ELSEWHERE ON THE PREMISES. A BONDING CONDUCTOR SIZED PER SECTION 250.122 SHALL BE RUN WITH THE CIRCUIT CONDUCTORS. THE DISCONNECTING MEANS SHALL BE LOCATED WITHIN SIGHT OF THE STRUCTURE OR SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION.

Revise Article 230.70(B) by adding the following text at the end of the sentence:

MARKINGS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT. IDENTIFYING LABELS FOR DISCONNECTING MEANS SHALL HAVE ENGRAVED OR RAISED LETTERS AND BE SECURED BY SCREWS OR RIVETS.

Revise Article 300.4 (D) Exception No. 1: by striking rigid **non-metallic conduit and electrical metal tubing** from the exception.

At Article 312.5 (C) add an exception (8) as follows:

(8) FOR SURFACE-MOUNTED PANELBOARDS, WHERE THE ENTRY OF CONDUCTORS THROUGH THE TOP OR BOTTOM IS IMPRACTICAL, ENTRY THROUGH THE BACK OF THE PANELBOARD SHALL BE ALLOWED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:

- (1) CONDUCTORS SHALL BE PROTECTED FROM ABRASION WHERE THEY PASS THROUGH THE PANEL ENCLOSURE.**
- (2) CONDUCTORS SHALL REMAIN FULLY SHEATHED AND EXTEND NOT LESS THAN 1/4 INCH (6 MM) INSIDE THE PANEL ENCLOSURE.**
- (3) CONDUCTORS SHALL BE SECURED WITHIN 8 INCHES (200 MM) OF THE OPENING INTO THE PANELBOARD.**
- (4) THE OPENING TO THE PANELBOARD SHALL BE SEALED WITH A FIRE-RATED MATERIAL LISTED FOR NOT LESS THAN ONE HOUR.**