Application of the 2020 State Electrical Code with Respect to the Scope of the Residential Code for One- and Two-Family Dwellings

Code: 2020 Electrical Code  Date: November 1, 2021
Sections: 10.1 & 10.2

Question 1:
Sections 10.1 and 10.2 of the 2020 State Electrical Code (2020 NEC with 2020 North Carolina adopted Amendments) exclude one- and two-family dwellings by North Carolina Amendment. Are townhouses and accessory buildings for one- and two-family dwellings also excluded by Amendment from the provisions of the 2020 State Electrical Code?

Answer 1:
The text within sections 10.1 and 10.2 of the Amendments that exclude one- and two-family dwellings was adopted to ensure compliance with the N.C. General Statute 143-138(d); which prohibits revision of the Residential Code for One- and Two-Family Dwellings until January 1, 2025. It is the opinion of the State Electrical Division that the intent of the statute and the Amendment is to require that all structures within the scope of the Residential Code for One- and Two-Family Dwellings are regulated by the electrical code that was applicable at the current Residential Code’s time of adoption, which was the 2017 State Electrical Code (2017 NEC with 2017 North Carolina adopted Amendments).

Therefore, the electrical systems of all structures described in the scope of section R101.2 of the Residential Code for One- and Two-Family Dwellings are regulated by the 2017 State Electrical Code. Such scope includes townhouses that are not more than three stories above grade plane in height with a separate means of egress, and accessory structures that are not more than three stories above grade plane in height. Common accessory structures which typically include electrical equipment are detached garages and storage buildings, swimming pools, spas, and docks. Accessory structures must be an accessory to a structure or future structure that is also regulated by the Residential Code for One- and Two-Family Dwellings. Residential multifamily structures, such as triplexes, condominiums, apartments, are not within the scope of the Residential Code for One- and Two-Family Dwellings and therefore subjected to the requirements of the 2020 State Electrical Code.

A reprint of the scope of the Residential Code for One- and Two-Family Dwellings (section R101.2) as applicable at the time of this interpretation is provided on the last page of this document.
Question 2:
Are the 2017 North Carolina adopted Amendments applicable to one- and two-family dwellings?

Answer 2:
Yes. All structures within the scope of the Residential Code for One- and Two-Family Dwellings (section R101.2) are regulated by the 2017 State Electrical Code. When the phrase “State Electrical Code” is used, that phrase is specific to both an adopted version of the NEC and the Amendments that are approved by the Building Code Council and Rules Review Commission. Amendments are not automatically rolled into each Code cycle; the Amendments are written specific for each Code cycle.

Question 3:
As of November 1, 2021, does North Carolina possess more than one official State Electrical Code?

Answer 3:
No. As of November 1, 2021, the one and only official electrical code is the 2020 State Electrical Code (2020 NEC with 2020 North Carolina adopted Amendments). The Amendments of the 2020 State Electrical Code dictate that another standard shall be used to regulate the electrical system for one- and two-family dwellings. That standard just happens to be the 2017 State Electrical Code (2017 NEC with 2017 North Carolina adopted Amendments).
Exception: Porch(e) (Exception 4) Porch(e) not exceeding 40 square feet (3.75 m²) or 12 feet (3660 mm) mean roof height.

7. Doors. (R333.1.2) Exterior doors, and doors to habitable rooms, see Section R333.

6. Deck(e) (R332.1) Deck(e) (R332.1)

5. Stairs and Stairways. (R332.2) Stairs and stairways shall be not less than 5 feet (1525 mm) long, unless otherwise permitted by the International Building Code.

4. Building Walls (R332.3) Building walls shall be not less than 10 feet (3048 mm) in height from the floor of the building to the top of the roof of the building.

3. Windows (R332.4) Windows shall be not less than 0.5 square feet (0.046 m²) in area to each 100 square feet (9.29 m²) of horizontal floor area of the porch.