

CHAPTER 24.1-06-03 WIRING METHODS AND MATERIALS

Section

24.1-06-03-01	(NEC 300) Wiring Methods
24.1-06-03-02	[Reserved]
24.1-06-03-03	[Reserved]
24.1-06-03-04	[Reserved]
24.1-06-03-05	[Reserved]
24.1-06-03-06	[Reserved]
24.1-06-03-07	[Reserved]
24.1-06-03-08	[Reserved]
24.1-06-03-09	[Reserved]
24.1-06-03-10	[Reserved]
24.1-06-03-11	[Reserved]
24.1-06-03-12	[Reserved]
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24.1-06-03-14	(NEC 314) Boxes and Fittings

24.1-06-03-01. (NEC 300) Wiring methods.

1. Agricultural buildings. This section covers all buildings housing livestock, poultry, and other areas of similar or like nature. All electrical panel boards, wiring devices, and equipment shall be installed in accordance with the provisions of article 547, 2023 edition, National Electrical Code (first version, printed in 2022).

A site-isolating device shall be permitted to be installed at the distribution point where two or more agricultural building structures are supplied from the distribution point.

2. Electric metallic tubing shall not be used in concrete below grade, in concrete slab or masonry in direct contact with earth. A vapor barrier, if used, will have no effect on the requirements of the section. Electric metallic tubing shall not be embedded in earth or fill.
3. Aluminum conduit shall not be installed in contact with earth or embedded in concrete.
4. The installation of rigid nonmetallic conduit shall comply with the provision of article 352, 2023 edition, National Electrical Code (first version, printed in 2022). Expansion fittings for rigid nonmetallic conduit shall be provided to compensate for thermal expansion and contraction in accordance with article 352.44, 2023 edition, National Electrical Code (first version, printed in 2022). When installed outdoors and above grade, one hundred forty degrees Fahrenheit [60 degrees Celsius] shall be considered the minimum change in degrees.
5. Fertilizer rooms, meatpacking plants, salt processing plants, and similar locations are judged to be occupancies where severe corrosive conditions are likely to be present. It is recommended that nonmetallic conduit with nonmetallic boxes and fittings be used as the wiring method for such occupancies. Ferrous and nonferrous metal raceways shall be used providing the raceway, boxes, and fittings are properly protected against corrosion.
6. Metal raceways or metal clad cable (type MC) rated for the environment shall be installed in the following occupancies:
 - a. Hospitals;
 - b. Nursing homes;
 - c. Related patient care areas; and

d. Places of assembly.

Metal raceways or metal clad cable (type MC) shall be used in fixed wiring methods including fire alarms along with metal boxes or nonmetallic raceways encased in not less than two inches of concrete.

Exception 1: As provided in article 640, 2023 edition, National Electrical Code (first version, printed in 2022), sound reproduction and similar equipment; in article 800, 2023 edition, National Electrical Code (first version, printed in 2022), communication circuits; and in article 725, 2023 edition, National Electrical Code (first version, printed in 2022), for class 2 and class 3 remote control and signaling circuits.

Exception 2: Listed two-hour fire-rated cables as permitted in article 695.6, and article 760, 2023 edition, National Electrical Code (first version, printed in 2022).

Adjacent areas separated by an approved fire barrier may be wired in any approved wiring method in chapter 3 of the 2023 edition, National Electrical Code (first version, printed in 2022). For the purpose of this section, a fire barrier is defined as a continuous assembly, vertical or horizontal, in accordance with locally adopted codes or the State Building Code.

History: Effective April 1, 2017; amended effective October 1, 2020; July 1, 2024.

General Authority: NDCC 43-09-05

Law Implemented: NDCC 43-09-21, 43-09-22

24.1-06-03-02. [Reserved].

24.1-06-03-03. [Reserved].

24.1-06-03-04. [Reserved].

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24.1-06-03-06. [Reserved].

24.1-06-03-07. [Reserved].

24.1-06-03-08. [Reserved].

24.1-06-03-09. [Reserved].

24.1-06-03-10. [Reserved].

24.1-06-03-11. [Reserved].

24.1-06-03-12. [Reserved].

24.1-06-03-13. [Reserved].

24.1-06-03-14. (NEC 314) Boxes and fittings.

1. Not more than one extension ring may be used on outlet boxes unless special permission has been obtained from the electrical inspector having jurisdiction.
2. Boxes or conduit bodies shall be installed at each opening, splice, or connection, except as provided in article 604, 2023 edition, National Electrical Code (first version, printed in 2022).

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