

NFPA 130

Fixed Guideway Transit and Passenger Rail Systems
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From Chapter 5, Stations

5.4 Wiring Requirements.

5.4.1 All wiring materials and installations within stations other than for traction power shall conform to requirements of NFPA 70 and, in addition, shall satisfy the requirements of 5.4.2 through 5.4.9.

5.4.2 Conduits, raceways, ducts, boxes, cabinets, and equipment enclosures shall be constructed of noncombustible materials in accordance with the requirements of ASTM E136

5.4.2.1 Other materials when encased in concrete shall be acceptable.

5.4.3 All conductors shall be insulated.

5.4.3.1 Ground wires installed in a metallic raceway shall be insulated.

5.4.3.2 Other ground wires shall be permitted to be bare.

5.4.4 All insulations shall conform to NFPA 70 and shall be moisture- and heat-resistant types carrying temperature ratings corresponding to either of the following conditions:

- (1) 75°C (167°F) for listed fire-resistive cables
- (2) 90°C (194°F) for all other application

From Chapter 6, Trainways

6.3.3 Wiring Requirements. *(See Section 5.4.)*

6.3.3.2 Underground (Subways).

6.3.3.2.1 All wiring materials and installations within trainways, other than for traction power, shall conform to the requirements of NFPA 70 and, in addition, shall satisfy the requirements of 6.3.3.2.2 through 6.3.3.2.9.

6.3.3.2.2 Conduits, raceways, ducts, boxes, cabinets, and equipment enclosures shall be constructed of noncombustible materials in accordance with the requirements of ASTM E136.

6.3.3.2.3 All conductors shall be insulated.

6.3.3.2.3.1 Ground wires installed in a metallic raceway shall be insulated.

6.3.3.2.3.2 Other ground wires shall be permitted to be bare.

6.3.3.2.4 All insulations shall conform to NFPA 70 and shall be moisture- and heat-resistant types carrying temperature ratings corresponding to either of the following conditions:

- (1) 75°C (167°F) for listed fire-resistive cables
- (2) 90°C (194°F) for all other application.

From Chapter 7, Emergency Ventilation System

7.7 Power and Wiring.

7.7.1 The design of the power for the emergency ventilation system shall comply with the requirements of Article 700 of NFPA 70.

7.7.1.1 Alternately, the design of the power for the emergency ventilation system shall be permitted to be based upon the results of the electrical reliability analysis as per 7.2.3(6) as approved.

7.7.2 All wiring materials and installations shall conform to the requirements of NFPA 70 and, in addition, shall satisfy the requirements of 7.7.3 through 7.7.8.

7.7.3 Conduits, raceways, ducts, boxes, cabinets, and equipment enclosures shall be constructed of noncombustible materials in accordance with the requirements of ASTM E136.

7.7.4 All conductors shall be insulated.

7.7.4.1 Ground wires installed in a metallic raceway shall be insulated.

7.7.4.2 Other ground wires shall be permitted to be bare.

7.7.4.3 All thicknesses of jackets shall conform to NFPA 70

7.7.5 All insulations shall conform to NFPA 70 and shall be moisture- and heat-resistant types carrying temperature ratings corresponding to either of the following conditions:

- (1) 75°C (167°F) for listed fire-resistive cables
- (2) 90°C (194°F) for all other application

Annex A Explanatory Material

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

A.6.3.3.2.6 and A.7.7.7

The trainway, although used for ventilation, should not be considered as an air plenum for purposes of mounting electrical appurtenances.