

(D) Overcurrent Protection. Tap connections from conductors in auxiliary gutters shall be provided with overcurrent protection as required in 240.21.

366.58 Insulated Conductors.

(A) Deflected Insulated Conductors. Where insulated conductors are deflected within an auxiliary gutter, either at the ends or where conduits, fittings, or other raceways or cables enter or leave the gutter, or where the direction of the gutter is deflected greater than 30 degrees, dimensions corresponding to one wire per terminal in Table 312.6(A) shall apply.

(B) Auxiliary Gutters Used as Pull Boxes. Where insulated conductors 4 AWG or larger are pulled through an auxiliary gutter, the distance between raceway and cable entries enclosing the same conductor shall not be less than that required in 314.28(A) (1) for straight pulls and 314.28(A)(2) for angle pulls.

366.60 Grounding. Metal auxiliary gutters shall be connected to an equipment grounding conductor(s), to an equipment bonding jumper, or to the grounded conductor where permitted or required by 250.92(B)(1) or 250.142.

Part III. Construction Specifications

366.100 Construction.

(A) Electrical and Mechanical Continuity. Gutters shall be constructed and installed so that adequate electrical and mechanical continuity of the complete system is secured.

(B) Substantial Construction. Gutters shall be of substantial construction and shall provide a complete enclosure for the contained conductors. All surfaces, both interior and exterior, shall be suitably protected from corrosion. Corner joints shall be made tight, and where the assembly is held together by rivets, bolts, or screws, such fasteners shall be spaced not more than 300 mm (12 in.) apart.

(C) Smooth Rounded Edges. Suitable bushings, shields, or fittings having smooth, rounded edges shall be provided where conductors pass between gutters, through partitions, around bends, between gutters and cabinets or junction boxes, and at other locations where necessary to prevent abrasion of the insulation of the conductors.

(D) Covers. Covers shall be securely fastened to the gutter.

(E) Clearance of Bare Live Parts. Bare conductors shall be securely and rigidly supported so that the minimum clearance between bare current-carrying metal parts of different voltages mounted on the same surface will not be less than 50 mm (2 in.), nor less than 25 mm (1 in.) for parts that are held free in the air. A clearance not less than 25 mm (1 in.) shall be secured between bare current-carrying metal parts and any metal surface. Adequate provisions shall be made for the expansion and contraction of busbars.

366.120 Marking.

(A) Outdoors. Nonmetallic auxiliary gutters installed outdoors shall have the following markings:

- (1) Suitable for exposure to sunlight
- (2) Suitable for use in wet locations
- (3) Installed conductor insulation temperature rating

(B) Indoors. Nonmetallic auxiliary gutters installed indoors shall be marked with the installed conductor insulation temperature rating.

ARTICLE 368

Busways

Part I. General

368.1 Scope. This article covers service-entrance, feeder, and branch-circuit busways and associated fittings.

Exhibit 368.1 illustrates a section of busway with a plug-in device covered by this article. Busway of this type typically is used as a feeder to supply other feeders or to supply branch circuits for utilization equipment. The plug-in devices provide the means to connect feeders and branch circuits to the busway and contain the overcurrent protection for the connected feeder or branch circuit.

In addition to the power distribution busway illustrated in Exhibit 368.1, there are four special application busway designs covered by UL 857, *Standard for Safety for Busways*:

1. Lighting busway, with a maximum current rating of 50 amperes, supplies and supports industrial and commercial luminaires.
2. Trolley busway allows continuous contact with a trolley through a slot in the enclosure and might be marked as "Lighting Busway" if intended for use with industrial and commercial luminaires.
3. Continuous plug-in busway allows for the insertion of plug-in devices at any point along its length. This busway, limited to a maximum current rating of 225 amperes, is intended for general use and is permitted to be installed within reach of persons.
4. Short-run busway is intended primarily to feed switchboards and is limited to a run of 30 feet horizontal or 10 feet vertical.

Part II. Installation

368.10 Uses Permitted. Busways shall be permitted to be installed where they are located in accordance with 368.10(A) through (C).

Informational Note: See 300.21 for information concerning the spread of fire or products of combustion.

Busways are commonly used as feeders. They either are installed horizontally or, where used for power distribution in high-rise