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D. Clearance of Drip Loops of Luminaire or Traffic Signal Brackets

If a drip loop of conductors entering a luminaire bracket or traffic signal bracket from the surface of the structure is above a communication cable, the lowest point of the loop shall be at least 12 in (300 mm) above communication cable or through bolt.

EXCEPTION: The above clearance may be reduced to 3 in (75 mm) if the loop is covered by a suitable nonmetallic covering that extends at least 2 in (50 mm) beyond the loop.

239. Clearance of Vertical and Lateral Facilities From Other Facilities and Surfaces on the Same Support

Vertical and lateral conductors shall have the clearances and separations required by this rule from other facilities or surfaces on the same support.

A. General

1. Grounding conductors, neutral conductors meeting Rule 230E1, supply cables meeting Rule 230C1, or conduits enclosing conductors may be placed directly on the support.
2. Supply circuits of the same or next voltage classification may be placed in the same duct, if each circuit or set of wires is enclosed in a metal sheath.
3. Paired communication conductors in rings may be attached directly to a structure or messenger.
4. Insulated supply circuits of 600 V or less and not exceeding 5000 W may be placed in the same cable with control circuits with which they are associated.

B. Location of Vertical or Lateral Conductors Relative to Climbing Spaces, Working Spaces, and Pole Steps

Vertical or lateral conductors shall be located so that they do not obstruct climbing spaces, or lateral working spaces between line conductors at different levels, or interfere with the safe use of pole steps.

EXCEPTION: This rule does not apply to portions of the structure that workers do not ascend while the conductors in question are alive.

C. Conductors Not in Conduit

Conductors not encased in conduit shall have the same clearances from conduits as from other surfaces of structures.

D. Mechanical Protection Near Ground

Where within 8 ft (2.45 m) of the ground, all vertical conductors, cables, and grounding wires shall be protected by a covering that gives suitable mechanical protection.

EXCEPTION 1: This covering may be omitted from armored cables or cables installed in a grounded metal conduit.

EXCEPTION 2: This covering may be omitted from lead-sheathed cables used in rural districts.

EXCEPTION 3: This covering may be omitted from vertical runs of communication cables or conductors.

EXCEPTION 4: This covering may be omitted from grounding wires used in rural districts or in any area where the grounding wire is one of a number of grounding wires used to provide multiple grounds.

EXCEPTION 5: This covering may be omitted from wires that are used solely to protect poles from lightning.

NOTE: See Rule 93D for grounding conductors.

E. Requirements for Vertical and Lateral Supply Conductors on Supply Line Structures or Within Supply Space on Jointly Used Structures

1. General Clearances

In general, clearances shall be not less than the values specified in Table 239-1 or Rule 235E.

239. Clearance of Vertical and Lateral Facilities From Other Facilities and Surfaces on the Same Supporting Structure

Vertical and lateral conductors shall have the clearances and separations required by this rule from other facilities or surfaces on the same supporting structure.

A. General

1. Grounding conductors, surge-protection wires, neutral conductors meeting Rule 230E1, insulated communication conductors and cables, supply cables meeting Rule 230C1, insulated supply cables of 0 to 750 V, or conduits may be placed directly on the supporting structure. These conductors, wires, cables, and conduits shall be securely attached to the surface of the structure. Cables not in conduit shall be installed in such a manner as to avoid abrasion at the point of attachment.
2. Supply circuits of the same or next voltage classification may be placed in the same duct, if each circuit or set of wires is enclosed in a metal sheath.
3. Paired communication conductors in rings may be attached directly to a structure or messenger.
4. Insulated supply circuits of 600 V or less and not exceeding 5000 W may be placed in the same cable with control circuits with which they are associated.
5. The term nonmetallic covering as used in Rule 239 refers to material other than a cable jacket that provides an additional barrier against physical contact.

B. Location of Vertical or Lateral Conductors Relative to Climbing Spaces, Working Spaces, and Pole Steps

Vertical or lateral conductors shall be located so that they do not obstruct climbing spaces, or lateral working spaces between line conductors at different levels, or interfere with the safe use of pole steps. *EXCEPTION:* This rule does not apply to portions of the structure that workers do not ascend while the conductors in question are energized.

NOTE: See Rule 236H for vertical runs in conduit or other protective covering.

C. Conductors Not in Conduit

Conductors not encased in conduit shall have the same clearances from conduits as from other surfaces of structures.

D. Guarding and Protection Near Ground

1. Where within 2.45 m (8 ft) of the ground, or other areas readily accessible to the public, all vertical conductors and cables shall be guarded. *EXCEPTION:* This guarding may be omitted from grounding conductors used to ground multi-grounded circuits or equipment (communications or supply); communication cables or conductors; armored cables; or conductors used solely to protect structures from lightning.
2. Where guarding is required, conductors and cables shall be protected by covering or conduit that gives suitable mechanical protection.
3. When guarding is not required, conductors and cables shall be securely attached to the surface of the structure or to standoff brackets and located, where practical, on the portion of the structure having the least exposure to mechanical damage.
4. Guards that completely enclose grounding conductors of lightning-protection equipment shall be of nonmetallic materials or shall be bonded at both ends to the grounding conductor.

E. Requirements for Vertical and Lateral Supply Conductors on Supply Line Structures or Within Supply Space on Jointly Used Structures

1. General Clearances

In general, clearances shall be not less than the values specified in Table 239-1 or Rule 235E.

2. Special Cases

The following requirements apply only to portions of a structure that workers ascend while the conductors in question are energized.

a. General

If open-wire conductors are within 1.20 m (4 ft) of the pole, vertical conductors shall be run in one of the following ways: