

SERVICE - OVERHEAD

Attachment Customer's Premises

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USE: Requirements for overhead attachments at the customer's premises.

PREVIOUS REVISION	ORIGINATED	PREVIOUS NUMBER
10-01-08	03-94	ER 1-305-A, 08-01-89

LATEST REVISION:Add specifications regarding rain tight service head from ER 5-550. Revised and clarified overhead service clearances to comply with IEC/NEC & NESC.

REFERENCE: National Electric Code (NEC), latest revision

National Electrical Safety Code (NESC), latest revision

SPECIFICATION:

1. SERVICE BRACKET OR RACK:

The Company (NIPSCO) will furnish and install a service bracket or rack on all buildings with wooden exteriors. The contractor or the customer shall install and provide a safe and adequate anchorage for the service drop attachment on building constructed of tile, stucco, concrete, asbestos shingles, plastered metal lath, brick or stone veneer, sheet iron, vinyl, aluminum, or insulite. The Company will furnish the service bracket or rack for the customer or contractor to install.

2. SERVICE DROP CLEARANCE:

- 2.1 The rain tight service head shall be so located above the service bracket or rack. Where this is impracticable, the service bracket or rack shall not be more than twenty-four (24) inches from the rain tight service head. The service bracket or rack attaching the service drop to the house or service mast shall be so located as to obtain the required clearances for Service Drop Conductors. (See 2.5)
- 2.2 On buildings, two story or higher, the rain tight service head shall be located not more than thirty (30) feet from the ground, and should be as high as the second floor-ceiling, unless special permission is obtained from the Company.
- 2.3 The rain tight service head shall be so located that there will be at least two (2) feet clearance between it and any telephone or signal wires attached to the building. The fitting shall be placed so that conductors have a clearance of not less that three (3) feet from windows, doors, porches, fire escapes, or similar locations.
- 2.4 The service bracket or rack shall be so placed as to maintain a clearance of at least twelve (12) inches between the service drop conductors and any existing CATV, telephone, signal wires, cables, and three (3) feet from building fixtures such as fire escapes, porches, windows, doors, stairways, and so forth.
- 2.5 The service drop conductors and lowest point of the drip loop, must clear ground, sidewalks, and all platforms and projections accessible only to pedestrians from which they may be reached, by at least ten (10) feet where the voltage does not exceed 150 volts to ground; residential driveways by at least twelve (12) feet where the voltage does not exceed 300 volts to ground and at least fifteen (15) feet where the voltage exceeds 300 volts to ground; and driveways on other than residential property, alleys and public roads, parking areas subject to truck traffic, and other land

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such as cultivated, grazing, forest, and orchard by at least eighteen (18) feet; also they must have a clearance of at least ten (10) feet from the highest point of roofs, balconies, porches, or attached decks over which they may pass, except where the voltage between conductors does not exceed 300 volts and the roof, balcony, porch, or attached deck cannot be readily accessible, and the roof has a slope of 4 inches in 12 inches or greater, a reduction in clearance to three (3) feet shall be permitted.

- 2.6 The area above a roof surface subject to pedestrian or vehicular traffic shall have a vertical clearance from the roof surface in accordance with the clearance requirements stated in the above specification (2.5).
- 2.7 A roof, balcony, porch, or attached deck is considered readily accessible to pedestrians if it can be casually accessed through a doorway, window, ramp, stairway, or permanently mounted ladder by a person, on foot, who neither exerts extraordinary physical effort nor employs tools or devices to gain entry. A permanently mounted ladder is not considered a means of access if its bottom rung is eight (8) feet or more from the ground or other permanently installed accessible surface.

3. SERVICE MAST:

- 3.1 If due to the wall height or the position of eaves the service bracket or rack cannot be mounted on the wall at sufficient height to provide the service drop conductor clearance stated above. Then a suitable support for the service drop conductors of ample strength to hold the strain of the Company's wires shall be provided by the customer. A service mast or service entrance riser should be used for this purpose. The mast or riser shall consist of an underwriter's approved galvanized steel assembly or may be field constructed with rigid galvanized steel conduit and other approved materials and fittings. The mast or riser will constitute the entrance run and a rainproof service head must be used at the top.
- 3.2 The mast shall be solidly blocked with 2 in. x 6 in. notched blocks spiked to the roof rafters or clamped to a steel plate that is securely fastened to the roof rafters. The mast shall be flashed where it passes through the roof with metal flashing and flashing compound.
- 3.3 Service drop conductors shall not be attached to a service mast between a weatherhead of the end of the conduit and a coupling, where the coupling is located above the last point of securement to the building or other structure or is located above the building or other structure.
- 3.4 Only service drop conductors shall be permitted to be attached to a service mast. Communication conductors such as those for CATV or telephone service are not permitted to be attached to the service mast.
- 3.5 The size of the service mast shall be determined from the table below. Depending upon the size of the service entrance, distance from the company pole, and the height of the service drop attachment above the top mast support.



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SERVICE MAST - MINIMUM SIZE

Maximum Height of Service Drop Attachment Above Top Mast Support	Maximum Distance Mast to Nearest Pole	Minimum Service Mast Inside Diameter for Service Entrance	
		100 Amp or less	200 Amp
Inches	Feet	Inches	Inches
18	50	1-1/2	2
	75	1-1/2	2
	100	2	2
	125	2	2-1/2
	135	2	2-1/2
	50	1-1/2	2
24	75	2	2-1/2
	100	2	2-1/2
	125	2-1/2	2-1/2
	135	2-1/2	2-1/2
30	50	2	2-1/2
	75	2	2-1/2
	100	2-1/2	2-1/2
	125	2-1/2	3
	135	2-1/2	3
36	50	2	2-1/2
	75	2-1/2	2-1/2
	100	2-1/2	3
	125	2-1/2	3
	135	3	-
42	50	2	2-1/2
	75	2-1/2	3
	100	2-1/2	3
	125	3	-
	135	3	-