

# SLEMCO

## Specifications for Residential Overhead Service Requirements

Applicable to residential and small noncommercial services receiving single-phase power at 120/240 volts through a 200 Amp meter base attached to building requiring service. The meter base service conductors enter through a weather head from an overhead source.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (NEC) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations. According to National Electric Safety Code (NESC) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade. A sufficient drip loop shall be present to prevent water ingress.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ❶ are indicated on Drawing No.1 – *Single-Phase Overhead Service Requirements*.

- A. Service cable from transformer to weather head (*Point of Connection*) are furnished and installed by SLEMCO. ❶
- B. Service entrance conductors from the weather head (*Point of Connection*) to the meter base are furnished and installed by customer. ❶ Service entrance conductors shall be copper and sized according to the load, as required by the NEC or Governing Authority. Termination of conductors at the weather head (*Point of Connection*) performed by SLEMCO.

All service entrance conductors into and out of a self-contained meter base shall be single conductors. Parallel conductors are not allowed. An extension of at least 18" of service entrance conductors is required at the weather head. ❶

The neutral of the service entrance conductors shall be sized no smaller than two sizes less than the other conductors and shall be identified with gray or white tape at the weather head and in the meter base.

- C. The main disconnect (*service panel*) and customer conductors (*from the meter base to the main disconnect*) are furnished and installed by customer. The main disconnect shall be sized for 200 amps and located within 3' of the meter base. The customer conductors shall be copper and have a minimum size of #2/0 copper. The main disconnect and or other electrical equipment may be mounted on the outside of the building. However, it must be of weather proof and watertight design to be mounted on the outside. ❶
- D. If the Service Mast installation is utilized, then the Service Mast and associated weather head are furnished and installed by customer. The Service Mast conduit shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. One (1) strap will be required installed no more than 12" (*NEC 230.51A*) from the weather head. The Service Mast conduit shall be galvanized metal rigid conduit or electrical schedule 40 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ❶

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Items marked with ❶ are indicated on Drawing No.1 – *Single-Phase Overhead Service Requirements*.

- E. If the Roof Jack installation is utilized, then the Roof Jack and associated weather head are furnished and installed by customer. The conduit shall be mounted galvanized metal rigid conduit. The conduit shall be securely mounted with conduit straps with a maximum of 30" (*NEC 230.51A*) apart. It will be the customer's responsibility to provide, adequate strength in, or support to, the Roof Jack to safely withstand the strain imposed by the service conductors. ❶
- F. The meter base is furnished and installed by customer. The meter base shall be mounted on the outside of the building such that the center of the meter socket window is between 5' and 6' above finished grade. ❶ The meter base shall conform to SLEMCO's standards and shall be compatible with SLEMCO metering and include a weatherproof hub. The meter base shall be rated for 200 Amps.
- G. If the Service Mast installation is utilized, then the K10C is furnished and installed by customer. The K10C shall be mounted at a minimum height of 12' (*NESC Table 232-1, Item 5*) above finished grade. ❶ Pre-drilling a pilot hole for the K10C is recommended.
- If the Roof Jack installation is utilized, then the Point of Attachment shall be at 6" below the weather head, a minimum of 36" (*NESC 234C3d(1)(b)*) above the roof line, and a minimum height of 12' (*NESC Table 232-1, Item 5*) above finished grade. The Roof Jack must be installed no more than 48" (*NESC 234C3d(1)(b)*) from edge of the roof. The service conductor (*drip loop*) must be at least 18" above the roof. ❶
- H. The customer will be responsible to furnish the meter base ground wire (*minimum #6 soft drawn copper*) and install this wire in electrical conduit from the meter base to the ground rod. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. The meter base ground wire shall be connected in the ground wire lug, where provided, and not in the service neutral lug. ❶
- I. Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Ground rod is to be set 1" below finished grade. ❶ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- J. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- K. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ❶