METER

METER INSTALLATION SPECIFICATIONS HANDBOOK

This booklet is provided to assist customers, architects, engineers, contractors, developers, electricians and inspectors in planning and installing electric distribution and electric service.

It is not intended that any requirement be unduly restrictive or burdensome, but that these regulations and policies will serve to provide safety and expedite service connection by establishing uniform and equitable standards for electric service.

The standards herein are supplementary to and are not intended to conflict with any applicable City, County, or Community Ordinances, the National Electrical Safety Code, or the National Electrical Code.

Santee Cooper policy requirements for some clearances and standards exceed National Electrical Safety Code and National Electrical Code requirements.

No set rule or inspection will cover all conditions. Santee Cooper welcomes and encourages inquiries concerning unusual or special needs of our Customers and to provide clarification of our requirements and standards to serve you. Any and all exceptions to the specifications in this booklet must have prior Santee Cooper approval.

Rev. Date: 7/13/2018
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SECTION 1 GENERAL INFORMATION

100. This booklet is issued by South Carolina Public Service Authority as a guide for obtaining electric service. It contains information on the types of electric service available, conditions for service, and the standards for material and construction in the Customer's service entrance installation.

After reading this booklet if you have any questions concerning your particular situation, you may call either a local Santee Cooper Retail Office, Distribution Design or Area Engineer/Associate (see Appendix A). Your call will be handled courteously and efficiently. Santee Cooper personnel will strive to answer your question(s) to your satisfaction.

The standards herein supersede all previous publications of "Electric Service and Meter Installation Specification" issued by Santee Cooper prior to this date and is subject to change without notice.

101. The term "Customer" when used herein shall mean any person or company applying for, receiving, using, or agreeing to take a class of electric service or other services supplied by Santee Cooper.

102. The term "Santee Cooper" when used herein shall mean the South Carolina Public Service Authority.

103. The term "National Electrical Safety Code", or NESC, when used herein shall mean the current edition of the National Electrical Safety Code as adopted by Santee Cooper at the time of distribution installation.

104. The term "National Electrical Code", or NEC, when used herein shall mean the current edition of the National Electrical Code as adopted by the local authority having jurisdiction at the time of construction.

SECTION 2 ELECTRICAL SAFETY AND CODE CLEARANCES

200. It is the policy of Santee Cooper to operate the Electric Distribution System with the highest degree of care and safety for the public and employees. To ensure the care and safety needed for an Electric Distribution System, the National Electrical Safety Code is used for design, construction, maintenance, and operation of the Electric Distribution System by Santee Cooper as well as any associated activity by the public and private industry. The applicable NESC in effect at the time of distribution installation will apply.

200.1 Santee Cooper shall reserve the right to deny and/or terminate service without prior notice when a hazardous condition exists.

200.2 Illustrations of pertinent current electrical safety code clearances are shown in Drawing Sheets 2 and 3 in the back of this booklet. These drawings are a guide to commonly used data and are not intended to give all the information that may be needed for specific situations. The current edition of the NESC should be consulted for additional clearance information. A copy of the code can be reviewed at any Santee Cooper office.

easily accessible location on or within the premises to be supplied with service, and in accordance with the rules contained herein.

The following items, used in conjunction with Drawing Sheets 2 through 11, serve as guidelines for the installation of the Customer's meter service:

A. Above-ground conduit on the supply side of the meter may be 2" schedule 40 PVC, minimum. Galvanized Rigid Conduit, 2" minimum, is required if the overhead service drop requires physical attachment to the mast. Accessible fittings such as LB's are not permitted.

B.

D. A minimum of four feet (4') working space must be kept in

302.1. Maintenance and Repair of Meter Sockets:

The maintenance and repair of the meter socket(s) is the sole responsibility of the Customer and will require the services of a qualified licensed electrician. Santee Cooper must be contacted for the temporary interruption of electric service while repairs are being made.

302.2. Bonding Meter Sockets:

Service equipment and enclosures could be called on to carry heavy fault currents in the event of a ground-fault. For this reason, it is imperative that meter sockets and metal conduits be adequately bonded to neutral and to ground. Bonding shall be done in accordance with Article 250 of the NEC.

302.3. Meter Socket Wiring:

Customers shall wire all self-contained meter sockets (up to 600 amp single phase, 600 amp three phase) in accordance with the NEC and the appropriate wiring diagram in Drawing Sheet 1. Wiring of CT metering shall be done by Santee Cooper.

303. Current Transformer (CT) Metering:

Generally, current transformers (CTs) are required when load exceeds 600 amps, single-phase, and 600 amps, three-phase. Contact the Technical Supervisor, Metering for assistance with your application.

303.1 CTs in Padmounted Transformers:

When the Customer's load warrants CT metering, the CTs shall be installed by Santee Cooper in the secondary compartment of the transformer and mounted over the secondary bushings. In this case, the Customer shall provide and install the secondary cable to the secondary compartment of the transformer. A maximum of 12 conductors per phase is allowed in the secondary compartment.

303.2 CT Cabinets:

The use of CT cabinets shall have prior approval of the Technical Supervisor, Metering. Where CT cabinets are required, they shall be furnished and installed by the Customer. CT cabinets shall have a suitable latch to be padlocked and sealed by Santee Cooper and shall be installed adjacent to the associated meter socket(s). Working space shall be in accordance with the NEC. The maximum height to top of a CT cabinet shall not exceed seven ft. (7').

304. Detached (Self-Supporting) Meter Mounting:

A. Meter sockets may be mounted on separate self-supporting structures, such as for temporary construction services (see Drawing Sheets 10 and 11) and mobile/modular homes (see Drawing Sheets 6, 7 and 8). When this is necessary, the minimum requirements shall be as follows:
For mobile/modular homes or other overhead residential services, utility grade poles are preferred, or treated 4"x 6" posts set thirty six inches (36") deep, minimum (see Drawing Sheet 6). For underground and/or temporary construction services, treated 4"x 4" posts will suffice (see Drawing Sheets 7, 8, 10 and 12).

B. Where the service is to be overhead, the post(s) or pole(s) shall be of sufficient height for NESC clearance and adequately braced in the direction of the service drop (see Drawing Sheets 6 and 11).

C. If two or more sockets are to be mounted, two posts shall be used with cross members of treated 2"x 4" lumber and/or 3/4" marine grade

SECTION 4 VOLTAGE STANDARDS AND

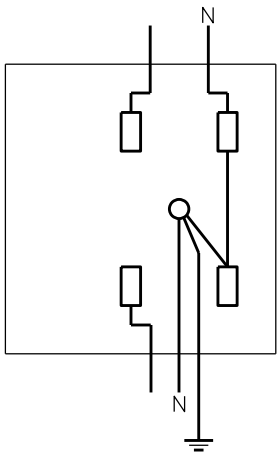
SECTION 5 ELECTRIC SERVICE

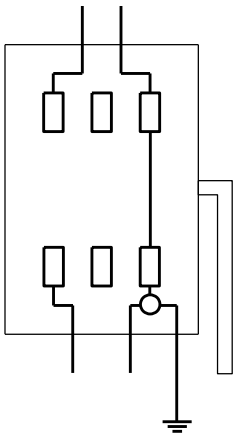
500. In general, electric service is supplied to any Customer within Santee Cooper's service territory who meets

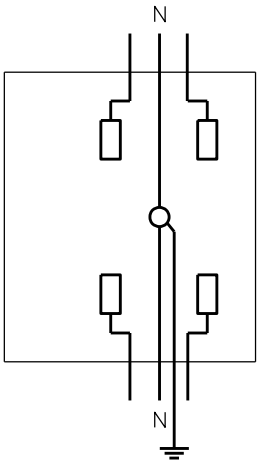
701. General Restrictions of Easements/ Rights-Of-Way:

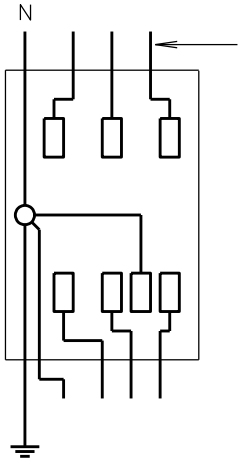
701.1 To comply with the requirements of the NESC, it is necessary that easement and right-of-way grades not change, by way of excavation or filling, by more than six inches (6") without prior written approval of all Utilities involved. Full cost of any alteration or relocation of utility lines will be borne by the Customer requesting the change.

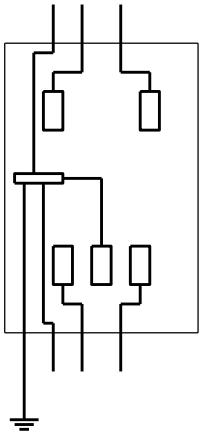
701.2 It is not permissible to install fences



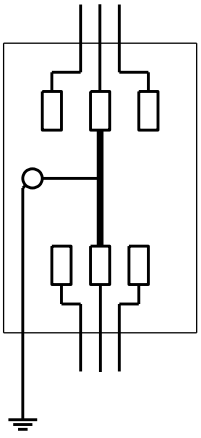








THREE PHASE
3 WIRE (480V ONLY)

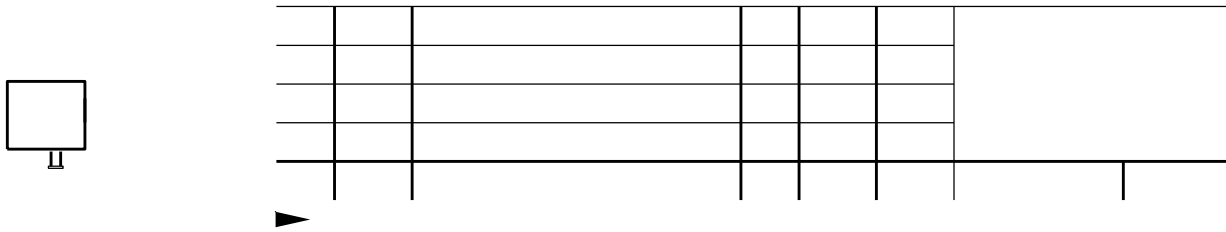


THIS LEG IS REQUIRED BY THE NATIONAL ELECTRIC CODE TO BE IDENTIFIED
THE CENTER TERMINAL POSITION IN ALL OTHER ENCLOSURES, IE. SWITCHGEAR, MAIN PANELS, ETC.

AILS

K READILY

12" MIN.

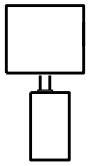


GROUND ROD, SIZE ½" X 10' COPPERWELD BURIED BELOW FINISHED GRADE.

GROUNDING ELECTRODE CONDUCTOR, SIZE NO.6 COPPER (MIN.) IN ½" CONDUIT.

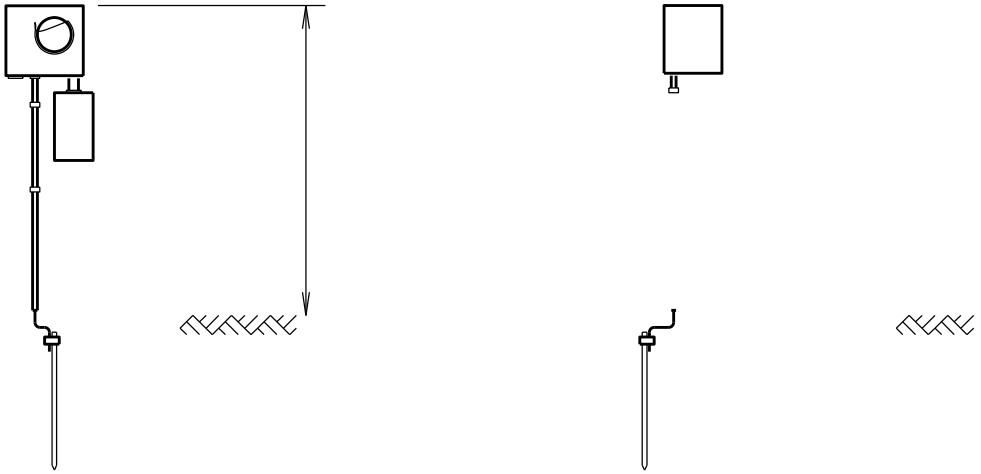
12"– 18"

MUST TAKE INTO CONSIDERATION THE SAG OF THE SERVICE CABLE FOR GROUND CLEARANCE, GENERALLY 1' = 2' ADDITIONAL.



METER SOCKET
ATION TO BE

SINGLE INSTALLATION



6.

7.

NOTES:

ALL CONDUIT CONNECTIONS SHALL BE TIGHT.

STALLATION DETAILS

NOTES:

ALL CONDUIT CONNECTIONS SHALL BE TIGHT.

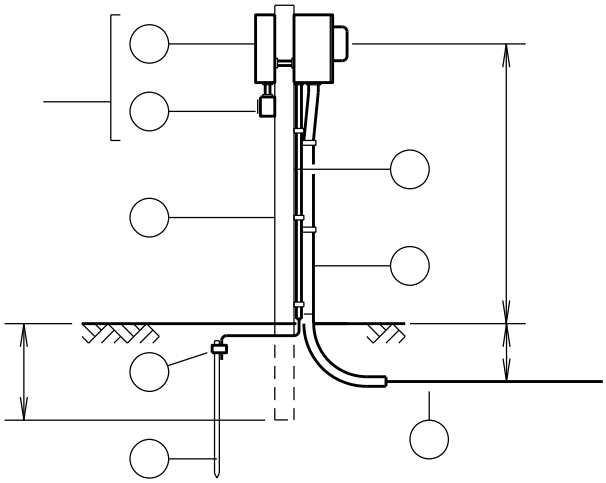
OTHERWISE NONCORROSIVE. 2-HOLE STRAPS ARE REQUIRED ON ALL CONDUIT.

AILS

RF Starnes

TEMPORARY UNDERGROUND SERVICE INSTALLATION

HIN 1



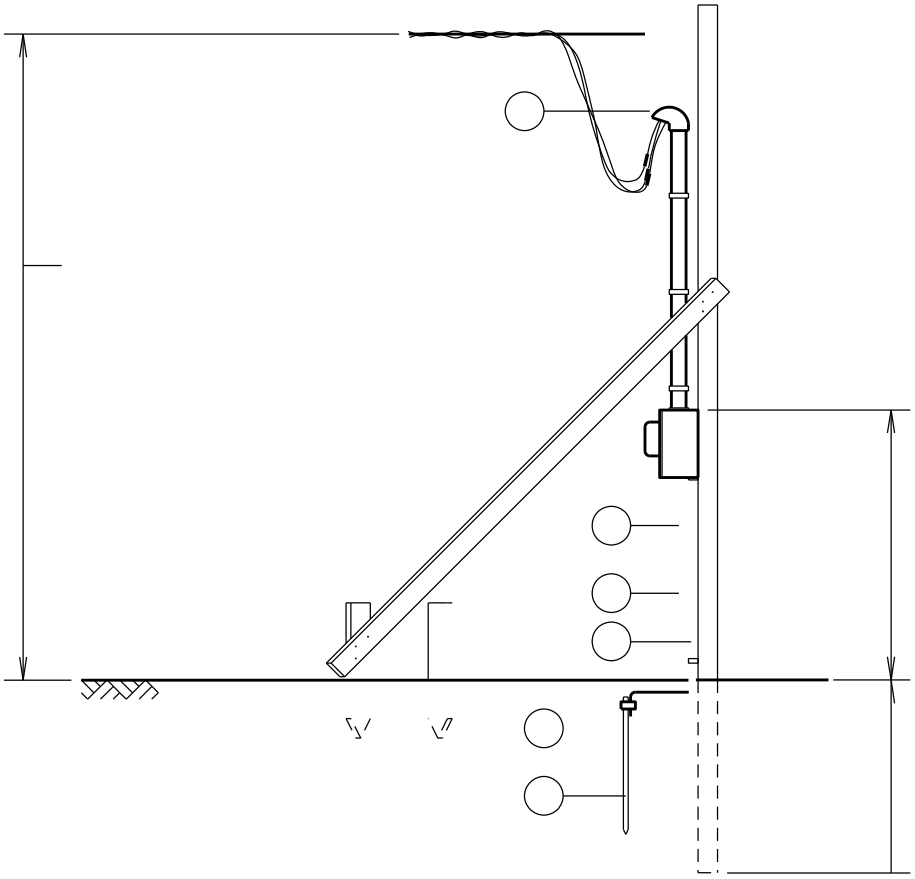
MATERIALS:

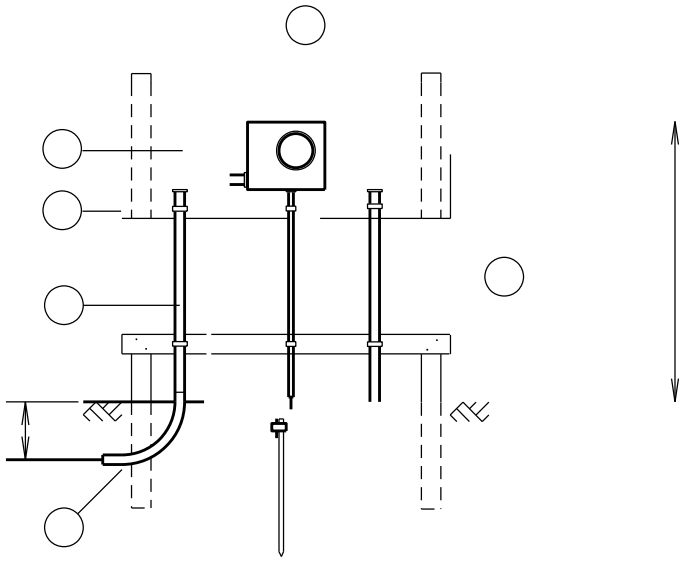
1. SIZE ½" X 10' COPPERWELD BURIED BELOW FINISHED GRADE.
2. GROUND ROD CLAMP, UL APPROVED.
3. GROUNDING ELECTRODE CONDUCTOR, SIZE NO. 6 COPPER (MIN.) IN ½" CONDUIT.

CONDUIT, PVC, SCHEDULE 40 OR SCHEDULE 80 REQUIRED. (PER LOCAL JURISDICTION)
POST, TREATED, 4" X 4" MINIMUM.

ALL CONDUIT AND SOCKET MOUNTING HARDWARE AND FITTINGS SHALL BE GALVANIZED OR OTHERWISE NONCORROSIVE. 2 HOLE STRAPS ARE REQUIRED ON ALL CONDUIT

1		REVISED MATERIALS NOTE 6.							





A. PER SECTION 16 OF THE SANTEE COOPER GENERATOR INTERCONNECTION AGREEMENT, THE DG DISCONNECT SHALL BE:

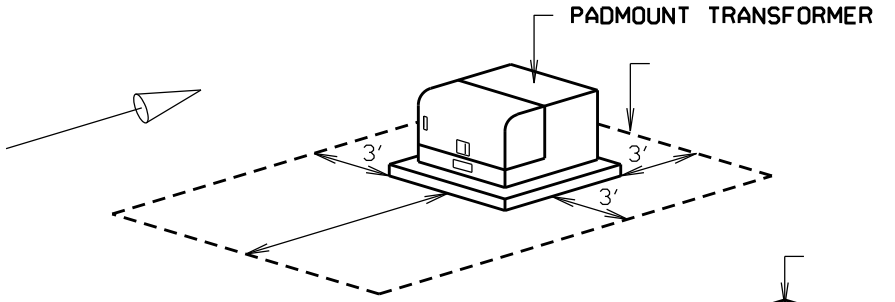
2. LOCKABLE IN THE OPEN/OFF POSITION WITH A STANDARD PADLOCK
3. LOCATED IMMEDIATELY ADJACENT TO THE ELECTRIC SERVICE METER
4. CLEARLY LABELED "GENERATOR DISCONNECT SWITCH"
5. READILY ACCESSIBLE TO SANTEE COOPER PERSONNEL 24/7

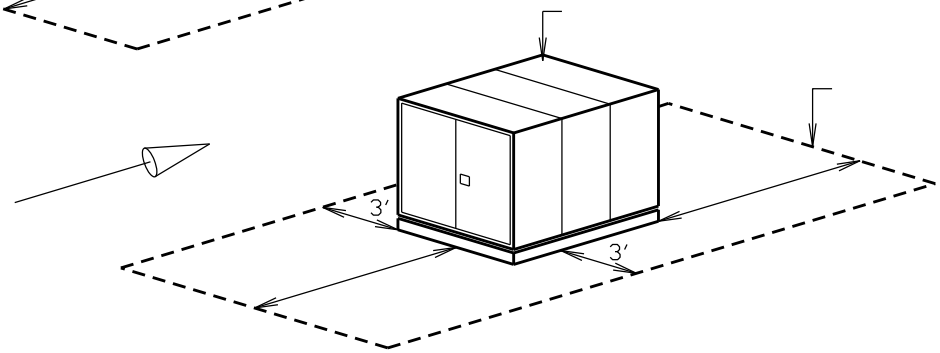
B. ACTUAL EQUIPMENT INSTALLATION DETAILS MAY VARY DEPENDENT UPON:

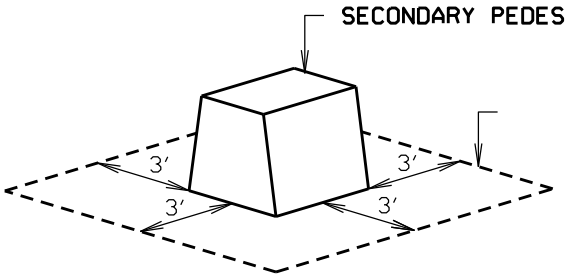
1. NATIONAL ELECTRICAL CODE SPECIFICATIONS

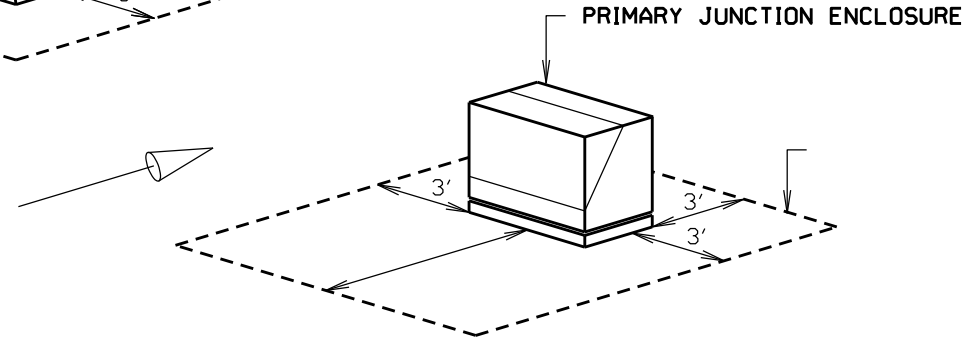
PADMOUNT AND URD EQUIPMENT ACCESS CLEARANCES

2-23-96









NOTES:

						SERVICE INSTALLATION DETAILS			
						RF	Starnes		

APPENDIX A

Santee Cooper Phone Numbers

Project and Design Engineering, Metering
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(ÏÒÒy-'ÅÏÒÇÅÔÏ×Î !òÅa ..... ψτσ-στχ-σσωω
MÏÎÃËÓ #ÏÒÎÅÒ !òÅa ..... ψτσ-χφρ-ψπππ

Customer Service ɟ(ÏÕÒÓ: ψa.Í.-υÐ.Í.,MÏÎÄayÔÈÒÏÕÇÈ &ÒÉÄayɋ
!ÌÌ !òÅaÓ .....ρ-ψππ-ψπτ-χτςτ

Customer Service Locations
(ÏÕÒÓ: ψa.Í.-υÐ.Í.,MÏÎÄayÔÈÒÏÕÇÈ &ÒÉÄay

MÏÎÃËÓ #ÏÒÎÅÒ /ÆÆÉÃÅ
3aÎÔÅÅ #ÏÏÐÅÒ (ÅaÄÑÕaÒÔÅÒÓ
ρ2ÉÖÅÒ×ÏÏÄ $ÒÉÖÅ
MÏÎÃËÓ #ÏÒÎÅÒ, 3# ςωτφρ

MyÒÔÌÅ "ÅaÃÈ /ÆÆÉÃÅ
ρχπσ /aË 3Ô.
MyÒÔÌÅ "ÅaÃÈ, 3# ςωυχχ

EMERGENCY/Power Out ɟ!ÌÌ (ÏÕÒÓɋ
!ÌÌ !òÅaÓ ρ-ψψψ-0/W2/54
.....ɟρ-ψψψ-χφω-χφψψɋ

Underground Cable Locating Service
!ÌÌ !òÅaÓ ..... ψρρ ÏÒ ψψψ-χςρ-χψχχ