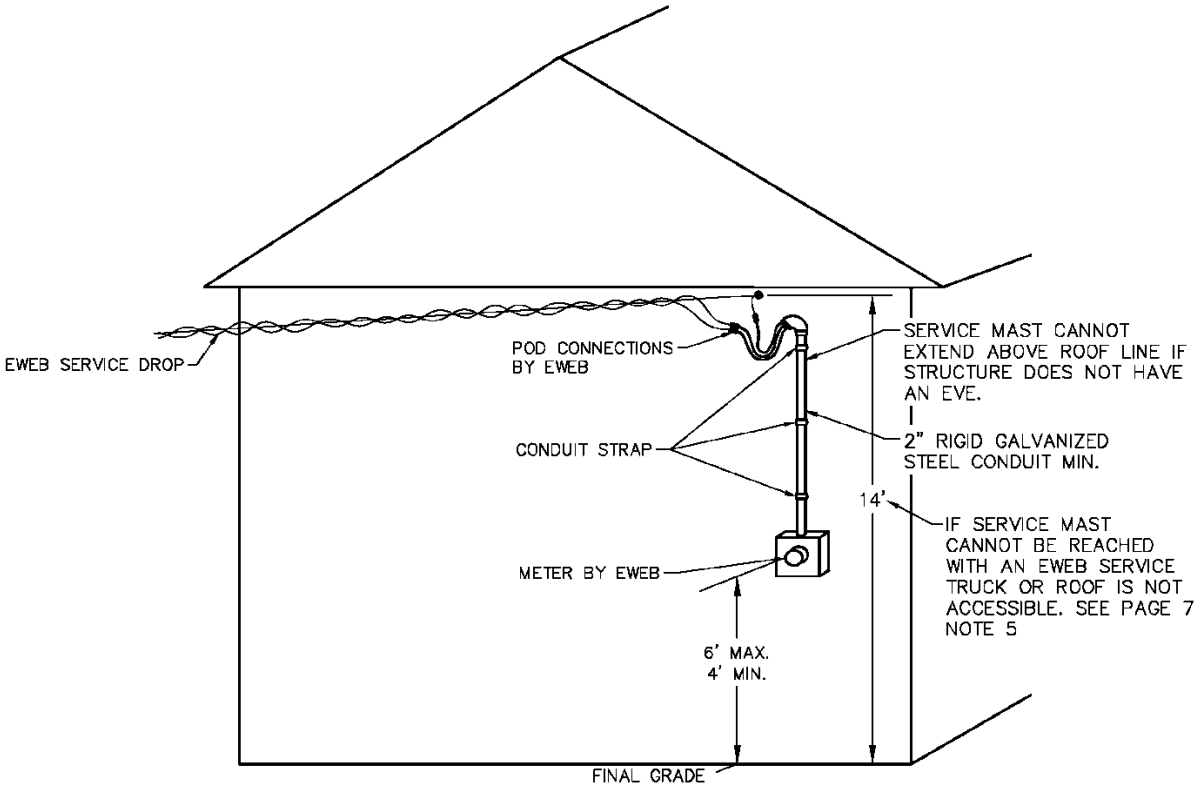
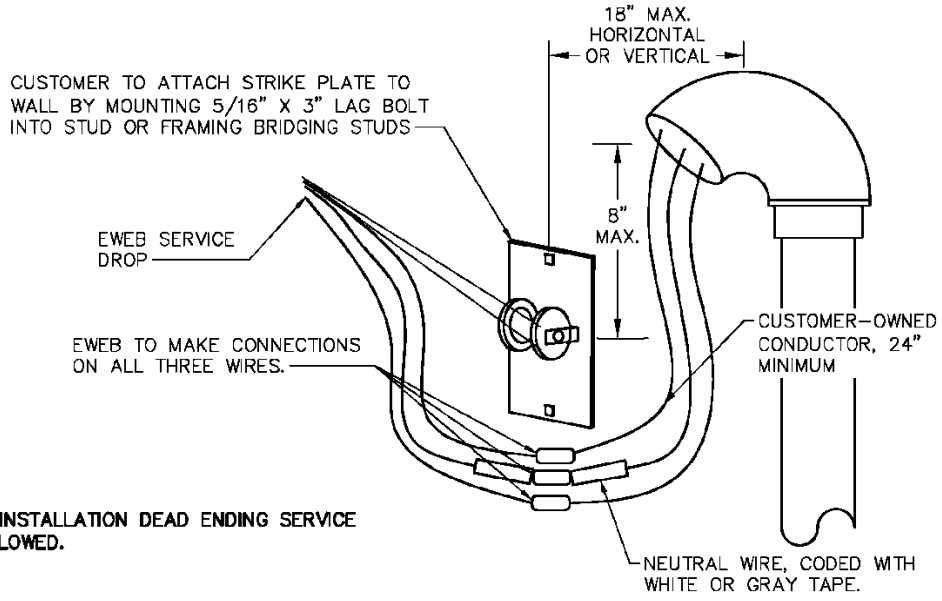


FIGURE 1: WALL ATTACHMENT



NOTE:
ON WALL MOUNT INSTALLATION DEAD ENDING SERVICE ON MAST NOT ALLOWED.

WALL ATTACHMENT DETAIL

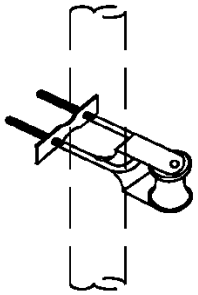


FIGURE 2:
MAST BRACKET
(TRUNNEL)

ALLOWED ONLY ON SERVICE MAST THAT GO THRU THE EAVE OF THE ROOF. EWEB WILL PROVIDE.

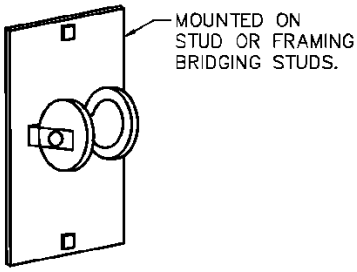


FIGURE 3:
DEADEND PLATE BRACKET
(STRIKE PLATE)

EWEB WILL PROVIDE STRIKE PLATE AND LAG BOLTS

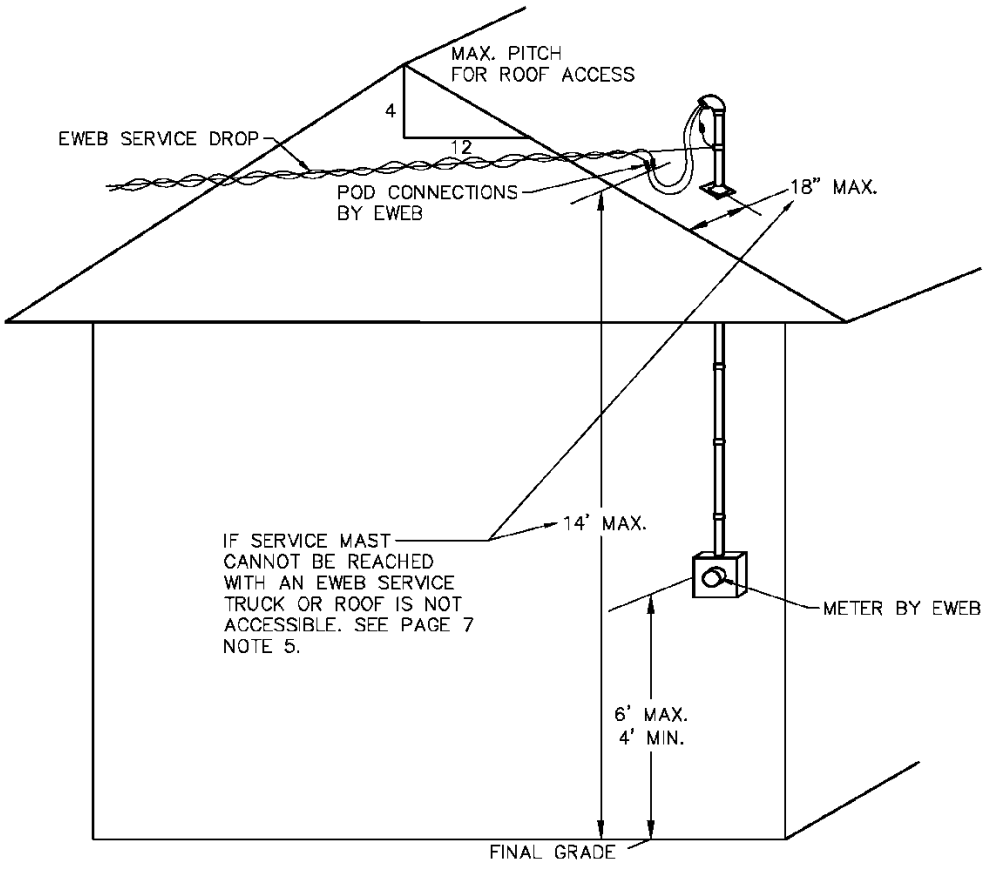


FIGURE 4: MAST LOCATION/ACCESSIBILITY

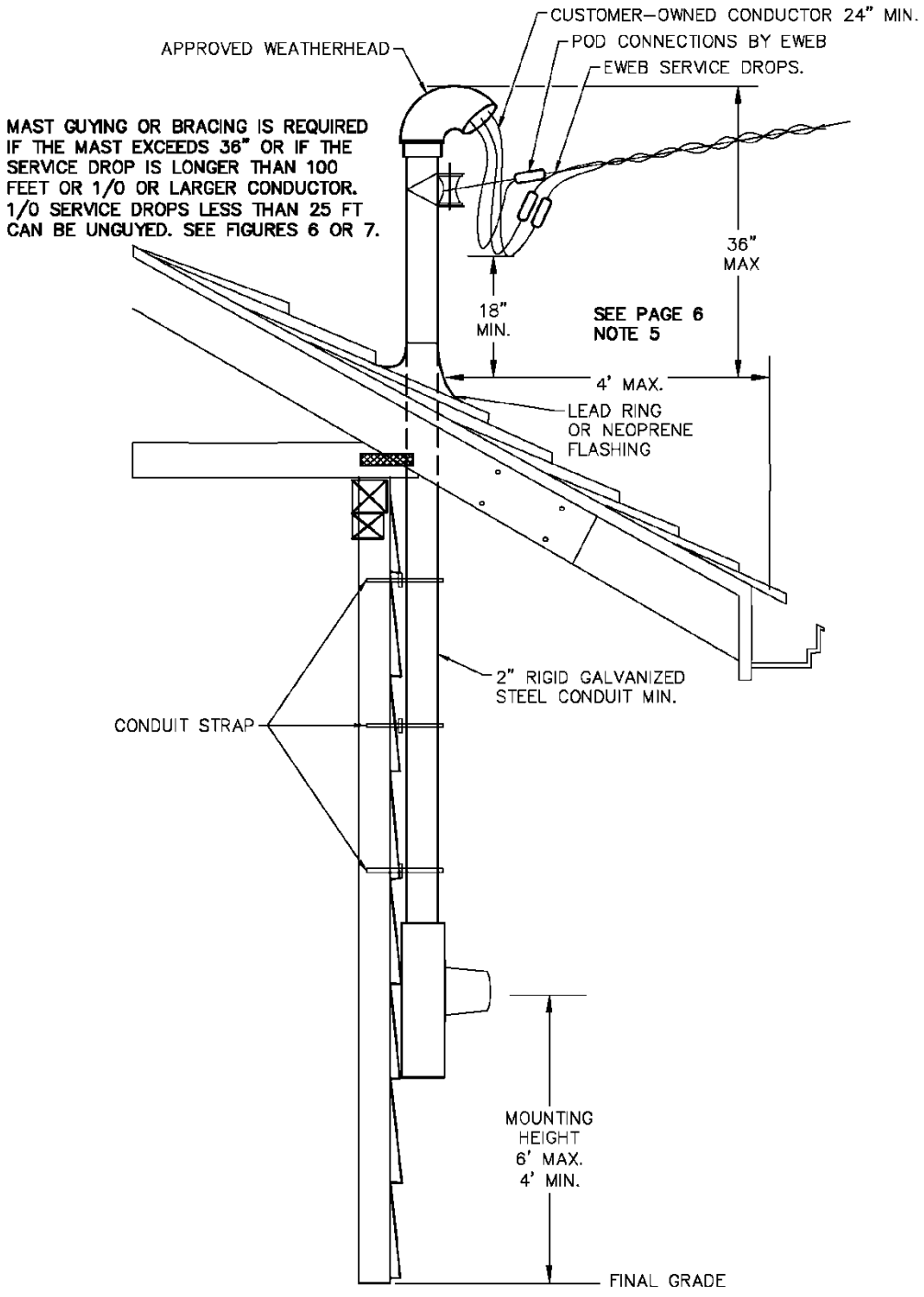
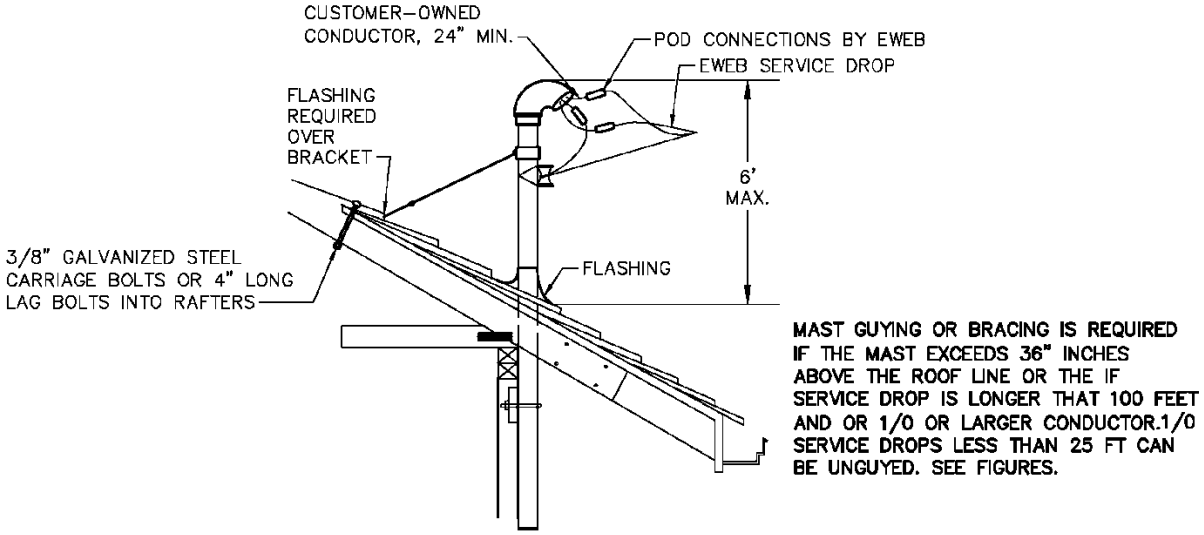
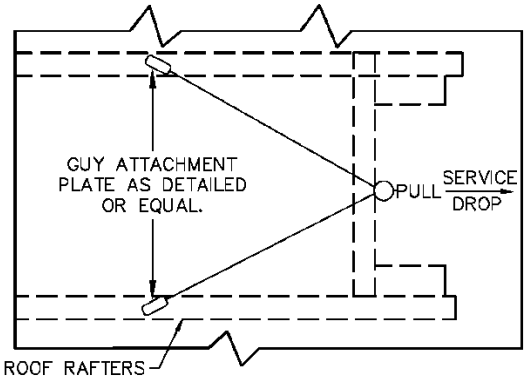
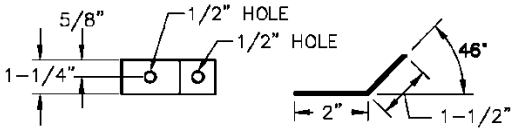


FIGURE 5: SURFACE MOUNT WALL INSTALLATION



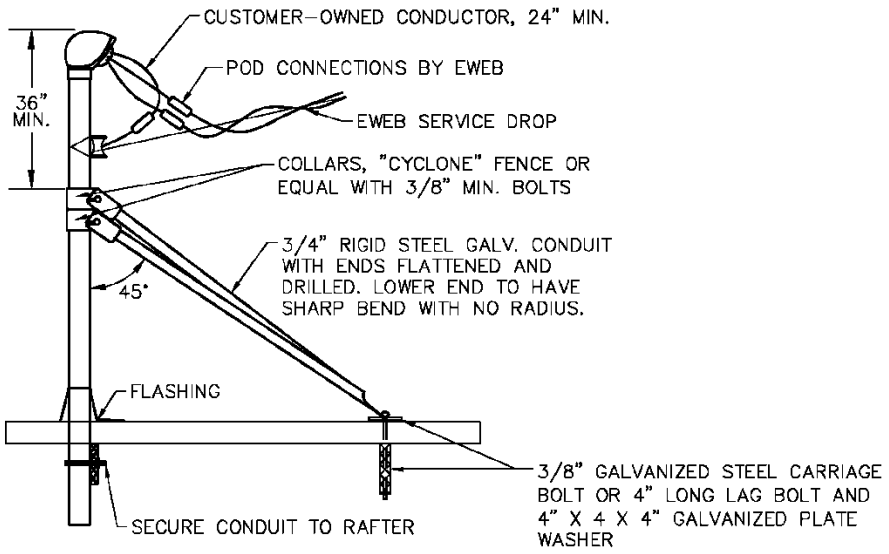


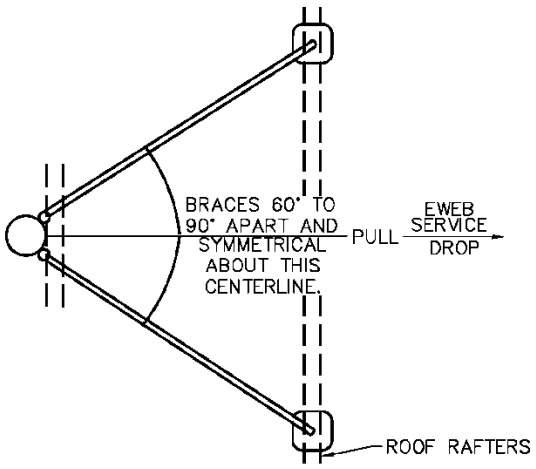
TOP VIEW – GUYING DETAIL



GUY ATTACHMENT PLATE DETAIL
1/4" THICK GALVANIZED STEEL

FIGURE 6: GUYING REQUIREMENTS





TOP VIEW – BRACING DETAIL

FIGURE 7: BRACING REQUIREMENTS

SCOPE

1. This standard contains the requirements for residential overhead services.
2. For single phase services greater than 320 amps, or three phase services greater than 200 amps, continuous, current transformers (CT's) are required. Contact EWEB Electric Distribution Engineering for CT enclosure requirements.
3. Any deviations from any of these requirements must be approved by EWEB Electric Distribution Engineering prior to installation.
4. For the purposes of this standard, point of attachment (POA) refers to the specific location on a structure where EWEB's overhead service conductors are securely connected.

SERVICE REQUIREMENTS

1. For additional electric service requirements see EWEB's Customer Services Policies and Procedures, Electric Utility at http://www.eweb.org/about-us/policies-and-procedures.
2. All service equipment shall comply with the National Electrical Code (NEC) and applicable EWEB construction standards.
3. Customers shall supply, install, own, and maintain everything shown except equipment shown by EWEB.
4. Larger clearances than those shown may be required in some cases. Refer to the National Electrical Safety Code (NESC) and NEC for required clearances, grounding, and service equipment requirements.
5. For overhead services of 240 volt maximum, with the service mast through the roof, the clearance of the drip loop to the roof of 18" is only allowed within a 6'-0" radius from the service mast and within 4'-0" from the edge of the roof. Outside of this area the service conductors including drip loop must be 3'-0" minimum above the roof. For services above 240 volts, the service conductors, including drip loop must be 8'-0" minimum above the roof.
6. Meter base
    a. Meter base location shall be approved by EWEB prior to installation.
    b. Provide working space clear of obstructions in front of the meter from finished grade to a height of 6.5 feet, a depth of 3 feet, and 30 inches wide.
    c. Meter must always be accessible and provided with an unrestricted path from the road to the meter.
        i. If the meter is located behind a gate, the gate must remain unlocked or provided with an EWEB lock which EWEB will provide.
        ii. Meter shall not be obstructed by future building additions or alterations.

SERVICE MAST MOUNTING REQUIREMENTS

1. If a conduit coupling is used, it must be located at least 3 feet below the wall plate or roof penetration. There shall be no couplings above the plate or roof unless the distance between the lower couplings and weatherhead exceeds 10 feet. In such situations, an additional guy attached immediately above the coupling shall be required. Refer to Figures 5, 6, and 7.
2. For a duplex or larger building where only one service to the building is permitted but more than one weatherhead is desired, the weatherheads must be within 18 inches of each other.
3. Weatherheads are required on all overhead service conduits.
4. Attaching a POA to the facia and fanning the conductors above the edge of the roof to connect to a service mast will not be permitted. Strike plate attached directly to the roof is not acceptable.
5. Service masts, weatherheads and POA must be permanently and safely accessible. If a service mast cannot be reached by EWEB service truck, then it must be located:
    a. As shown on page 1 or 2.

    Note: The ground or ladder base below the service mast must be a firm, level surface and enough clearance at the base of the ladder to allow a ratio of 4:1 (1 foot out from the top support or wall for every 4 foot in working length or height) or a 75-degree pitch for ladder safety.

    Or

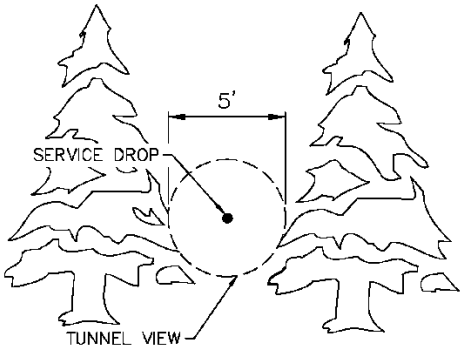
    b. The weatherhead cannot exceed 6 feet above the roof and the roof must be accessible by bucket truck or ladder. Roofs not acceptable to EWEB are roofs with pitches 4:12 or greater. Also, any roof that EWEB considers unsafe, deteriorated or not structurally sound is unacceptable.

If all EWEB and code requirements cannot be met for existing service rewire or upgrades, it will be necessary for the customer to relocate the existing service and install new POA that meets all requirements. Customers shall work with EWEB Distribution Engineering technician to determine new location. Exceptions to any part of this standard will require approval from both Electric Operations and Distribution Engineering.

CLEARANCES

Service Clearing

1. The customer is responsible for removing trees and limbs as needed for a proposed service drop route or if working space is needed by EWEB Electric Operations staff to roll a disconnected service drop back to an EWEB pole. Route will be identified by EWEB Distribution Engineering technician. Refer to Figure 8.
2. It is recommended that the customer remove any trees that may present a future hazard to the service wire (i.e., rotting, dead, or leaning trees that may fall or be blown down).



THE CUSTOMER TO TRIM A CLEAR PATH ON ALL SIDES OF SERVICE DROP FOR SERVICE RELOCATION OR AS NEEDED FOR DISCONNECT.

TUNNEL VIEW

SERVICE DROP CLEARANCE

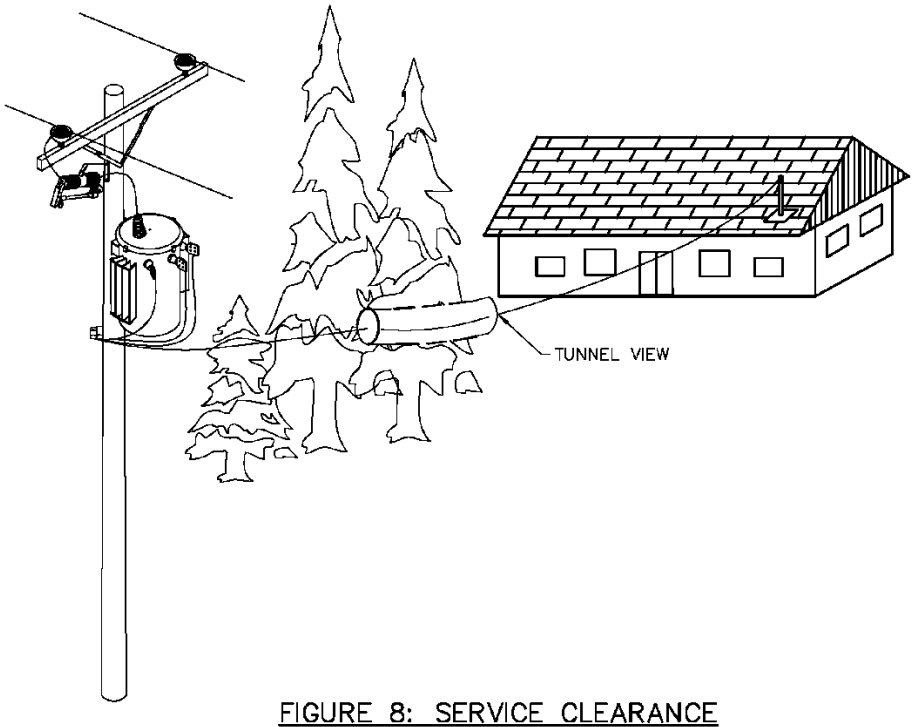
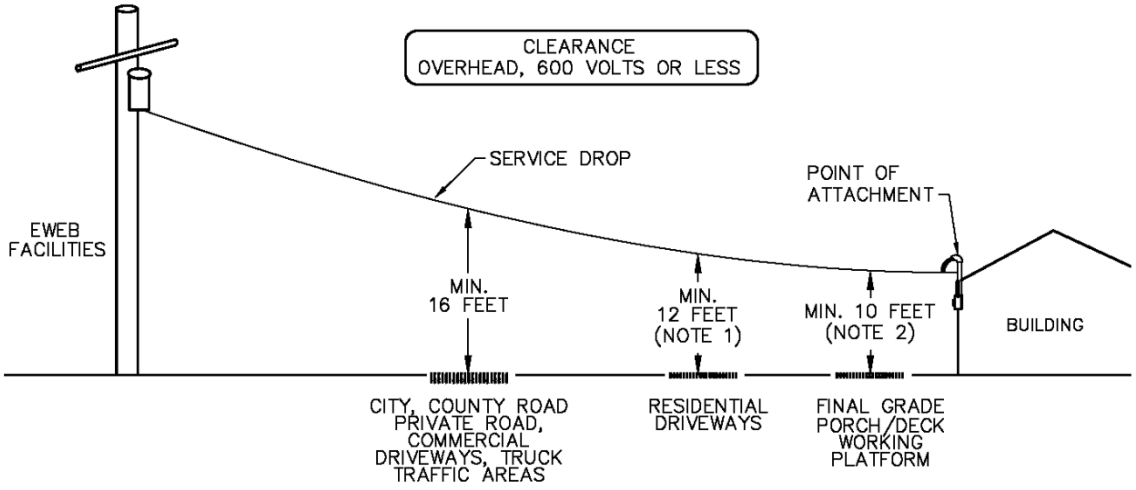


FIGURE 8: SERVICE CLEARANCE

Service Clearance

1. The POA shall be high enough to maintain a service conductor clearance as shown the point of attachment shall not be more than 20 feet above the grade unless specifically approved by the EWEB. Refer to Figure 9 and (NEC 230-24).



NOTES:

1. EXCEPTION: CLEARANCES OVER RESIDENTIAL DRIVEWAYS SHALL BE A MINIMUM OF 16 FEET FOR 480V SERVICE DROPS (NESC 232–1).
2. CLEARANCE SHALL BE 12 FEET MINIMUM FOR 480V SERVICES.

FIGURE 9: MINIMUM SERVICE CLEARANCE

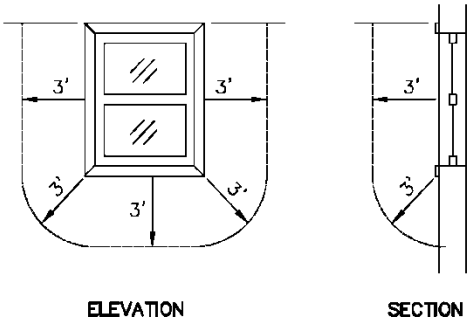
a. Point of Attachment

   i. Point of attachment and weatherhead location for the service drop conductors shall be approved by EWEB prior to installation.

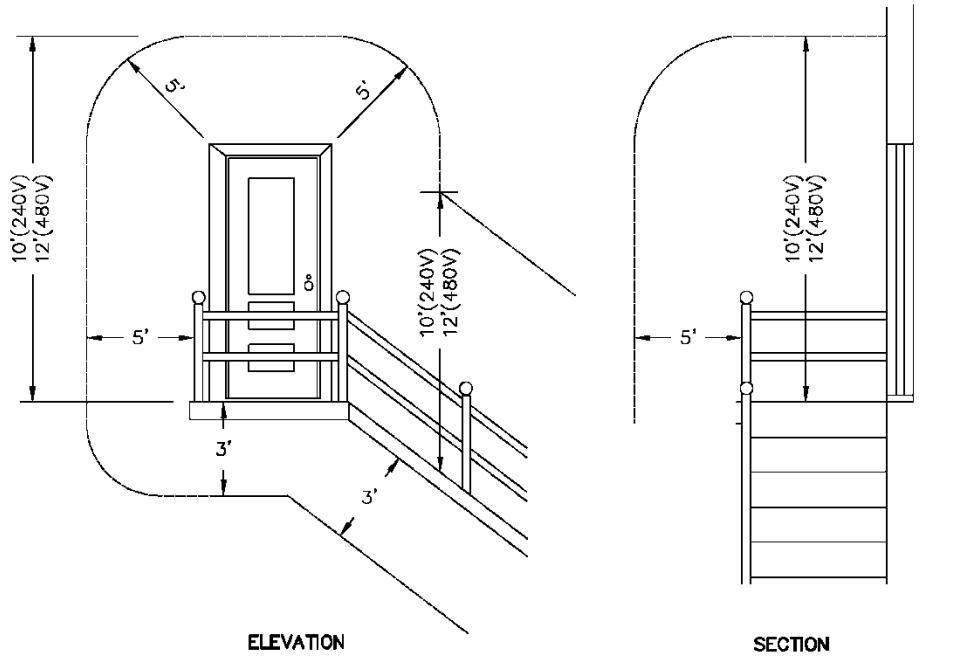
b. Service Drop Location

   i. The path between the service pole and the point of attachment shall be clear of structures and other obstructions and shall not cross adjacent properties without an easement.

   ii. EWEB will not install service conductors through or under porches or carports, nor around chimneys or building corners. The clearances around the service conductors shall be as shown and as required by the NESC and NEC.



WINDOWS DESIGNED TO OPEN



NOTE: MINIMUM CLEARANCE OF SERVICE DROP CONDUCTORS, TO WINDOWS, DOORS, ETC, 480–VOLT MAX

FIGURE 10: DOOR EXIT AND STAIRS

SERVICE INSTALLATION PROCESS

1. Contact EWEB:
2. For additional information see http://www.eweb.org/contractors-and-developers/building-and-renovations/new-or-temporary-service.
3. Electric Distribution Engineering at 541-685-7521 for design questions.
4. Electric Operations at 541-685-7457 to schedule disconnection of service, if applicable, or energization of service.
5. Install service conduit mast, point of service attachment, and meter base per this standard and as directed by EWEB.
6. After the service has passed inspection by the local authority, the contractor shall contact EWEB Operations to schedule energizing service.

QUALIFICATIONS

1. Oregon state licensed electricians shall install service conductors in riser conduit and terminate conductors in meter base. Oregon State law allows homeowner certain rights to work on their own property.
2. Contractors are responsible for wearing proper personal protective equipment (PPE) to meet OSHA and NEC requirements.

REFERENCE STANDARDS

A. Refer to EC5-B.3000 for Temporary Service Requirements.
B. Refer to EC5-B.1000 for Underground Service Conduit and Conductor Requirements.
C. Refer to EC2-8.1200 for Minimum Vertical Clearance of Conductors and Equipment Above Ground, Roadway or Water Surfaces.
D. Refer to EC5-7.0900 for 320 amp metering requirements.