



Safety First



# Electric Service and Meter Manual

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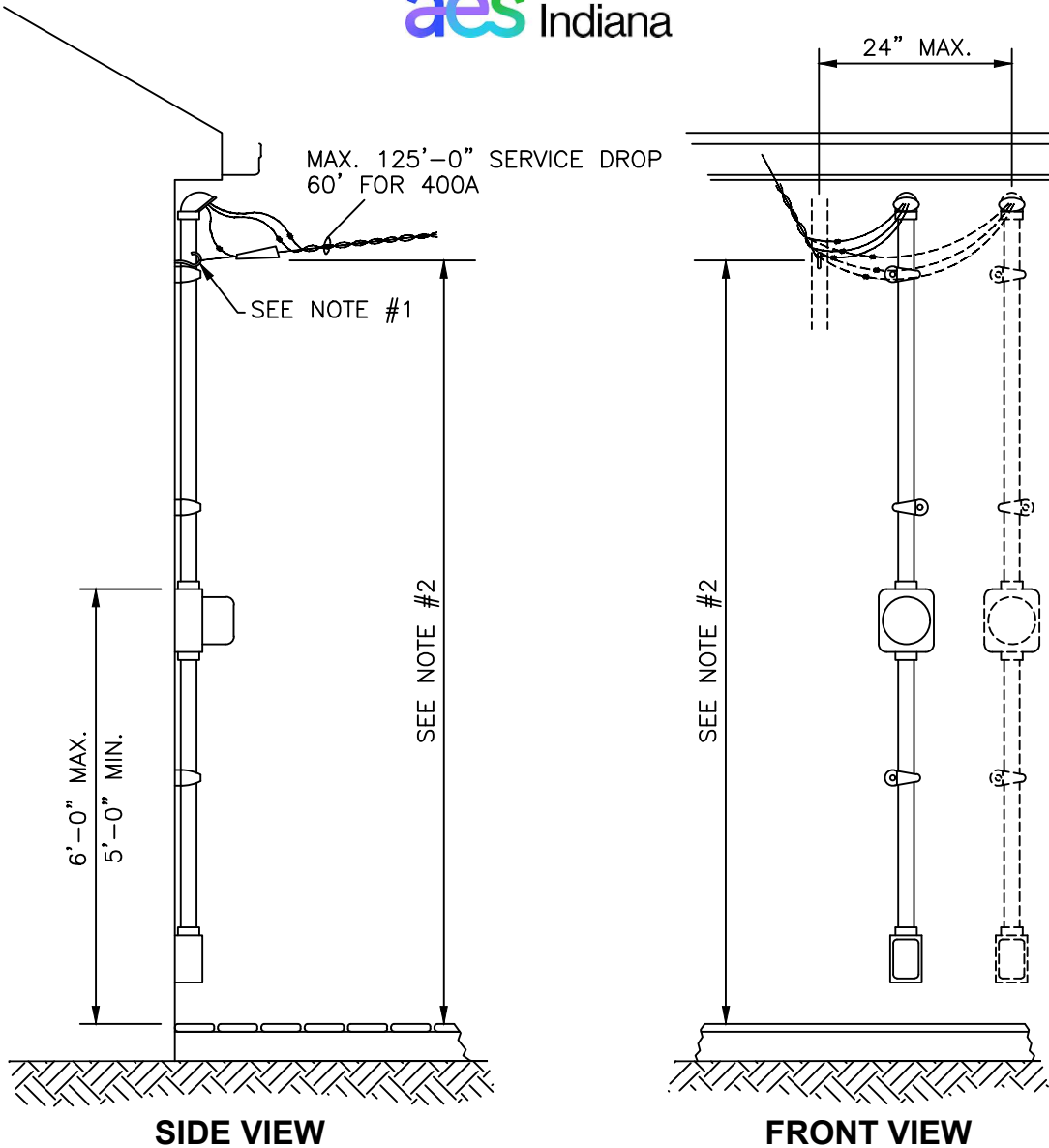
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## 310 Special requirements

- A. An individual main switch shall be installed ahead of each meter. No tap shall be allowed on the line side of the main switch. This applies to all services and metered feeders. Individual services larger than 1200 ampere shall be free standing switchgear with the cold sequence metering compartment an integral part of the switchgear.
- B. All service entrance conductors shall be copper and no smaller than #4 AWG. For 200 ampere and larger services, the only acceptable wire sizes are 3/0, 350 kcmil and 500 kcmil. Switchgear bus shall be copper.
- C. Specific requirements for the short circuit capacity at each location shall be obtained from the Engineering Department.
- D. Shop drawings for all free-standing switchgear shall be approved in writing by the Major Underground Distribution Projects Engineering Division in advance of any firm commitments on each individual installation. This will ensure proper spacing and bracing of the bus, that the bus is copper, adequate auxiliary enclosure for cable limiters when required, and proper switch metering sequence. (See Section 550 for Meter Department Approval.)
- E. Space for a transformer vault on public or private property adjoining the main service entrance equipment generally will be required when the demand is 500 kVA and larger.
- F. At the cable entrance to a customer's premises the contractor shall install a metal junction box (sized and located by the Major Underground Distribution Projects Engineering Division) to enclose the service cables and splices. The Major Underground Distribution Projects Engineering Division will designate the location at which the service conductors shall be installed. (See GB6-070)
- G. Customer-owned underground secondary service cables, 3/0, 350 kcmil, and 500 kcmil entering Company manholes or transformer vaults, shall be protected with cable limiters. These cable limiters shall be provided and installed by the Company at the point of connection to Company lines.
- H. In the event more than two cables per phase are required, cable limiters shall be installed at both ends of the service cables. The customer shall provide and install cable limiters on all ungrounded conductors at the line side of the service switch.
- I. Normally, the Company will own the cable to the property line and the customer will own the cable from the property line to the service.



NOTES:

- ▶ 1. CONTRACTOR TO FURNISH AND INSTALL A MINIMUM SIZE 3/8" GALVANIZED LAG SCREW EYE OR EYE BOLT FOR ATTACHMENT OF SERVICE DROP FOR LESS THAN 400 AMPERE SERVICES. FOR 400 AMPERE SERVICES, INSTALL A MINIMUM SIZE 5/8" GALVANIZED LAG SCREW EYE OR EYE BOLT FOR ATTACHMENT OF SERVICE DROP.
- 2. 10'-0" MINIMUM ABOVE DECK, PATIO, GRADE, OR OTHER AREAS OF PEDESTRIAN TRAFFIC TO THE ATTACHMENT POINT. (SEE ALSO GB4-007)
- 3. THE SERVICE DROP SHALL NOT MAKE A SMALLER ANGLE THAN 30° WITH THE SIDE OF THE BUILDING.
- 4. FOR VERTICAL CLEARANCES, SEE DRAWING GB4-005.
- 5. WHERE MORE THAN ONE SERVICE RISER IS INSTALLED, THE SERVICE HEADS SHALL BE NO FURTHER FROM THE SERVICE DROP THAN 24 INCHES WITH SUFFICIENT SERVICE ENTRANCE CONDUCTORS TO REACH THE SERVICE DROP.

**SERVICE  
CONNECTION BELOW ROOF  
400 A MAXIMUM SERVICE**