



AMPACITY	MINIMUM DIMENSIONS		
	W	D	H
0-1,00A	30"	20"	30"
1,001A - 3,000A	36"	30"	30"
> 3,000A	48"	36"	30"

DISTRIBUTION CONSTRUCTION STANDARD
EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

METERING REQUIREMENTS FOR SERVICES 801 AMPS AND LARGER

Approved Jan 20, 2021

EC5-7.6000

**REV
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1.0 SWITCHBOARD AND METER REQUIREMENTS

- 1.1 All services 801 amps and above shall be installed in switchboards with a current transformer (CT) compartment sized as shown.
- 1.2 The service CT compartment shall be provided with the following:
 - 1.2.a Removable bus links and provisions for supporting EWEB provided window type CT's. Bus links shall be sized to fit inside the CT's 5.5 inch window diameter. CT supports shall be made from an insulating, non-tracking material, be bolted to the removable bus links and be equipped with a hole to be used to tie-wrap the CT to the support. For all services of 800 amps or less for which CT's will be mounted in the switchboard, EWEB will provide CT's equipped with bus links. Coordinate with EWEB for CT mounting provisions and CT bus link dimensions.
 - 1.2.b Blank door with hinges that may be installed on either side of the compartment to allow the door swing to be reversed in the field. Door may be in two pieces provided both pieces are bolted together to function as one piece. Neither the meter base nor test switches shall be mounted on the door. EWEB requires meter bases to be mounted remote from the service switchboard, preferably on an accessible exterior wall.
 - 1.2.c Nameplate to read "EWEB CT COMPARTMENT" with 2" lettering.
 - 1.2.d Means to install EWEB seal to prevent opening door without cutting seal.
 - 1.2.e Lug to accommodate 1#10 metering conductor on each phase bus and neutral lug.
 - 1.2.f Ground lug to accommodate 2#10 metering conductors on the bottom of the CT compartment.
 - 1.2.g For a 240/120V three phase delta service terminate the "high leg" on the C phase bus.
 - 1.2.h Bus spacing meeting Electric Utility Service Equipment Requirements Committee (EUSERC) requirements.
- 1.3 If a larger Incoming service termination compartment/pull section than that shown is required, an entire switchboard vertical section adjacent to the service CT compartment is acceptable.
- 1.4 All doors or front panels to the compartments used for terminating or routing service conductors including the service CT compartment shall be provided with a means to install EWEB seals to prevent opening door or removing front panel without cutting the seal.
- 1.5 Prior to ordering the switchboard, the customer shall submit a paper or electronic PDF file format copy of the following to EWEB's Electric Distribution department for meter shop approval:
 - 1.5.a Building plan showing locations of the service switchboard and meter(s).
 - 1.5.b One line diagram of electrical system
 - 1.5.c Service switchboard drawings showing:

- 1.5.c.1 CT section dimensions, width, depth and height
 - 1.5.c.2 EUSERC drawing references, if applicable
 - 1.5.c.3 Elevation of the service switchboard (front view)
 - 1.5.c.4 Service voltage and phase.
 - 1.5.c.5 CT section amperage
 - 1.5.c.6 Short Circuit Rating
- 1.5.d Submittals of the entire electrical equipment package for the job is not acceptable. Submittals that do not clearly show the information requested above will be rejected and a resubmittal requested.
- 1.6 Once drawings are approved, EWEB shall supply CT's to customer for customer installation in switchboard. CT's shall be installed with line or marked side pointing toward the line side. EWEB shall own and maintain CT's.
- 1.7 Provide meter base with provisions for mounting a test switch block with meter clip configuration as directed by EWEB.
- 1.8 Provide metallic conduit of the size shown from the service CT compartment to the meter base. The conduit shall be no longer than 40 feet and contain no condulets (e.g. LB), junction or pull boxes of any kind and no more than a total of 360 degrees of bends. If any portion of conduit is installed under concrete, schedule 40 PVC conduit may be used for this portion. The conduit shall not pass through any section of the switchgear other than the CT compartment and shall terminate in a front corner of the service CT compartment. The conduit shall be nonmetallic flex type from the point of entry in the switchboard to the front corner of the service CT compartment. Provide pull string in conduit.
- 1.9 EWEB shall provide, install, own, and maintain the following:
- 1.9.a Meter
 - 1.9.b Meter sealing ring
 - 1.9.c Test switches for meter wiring in meter base enclosure
 - 1.9.d Wiring from CT's and service bus to meter test switches and meter.
- 1.10 Provide working space clear of obstructions in front of the meter and service CT compartment from the floor or finished grade to a height of 6.5 feet, a depth of 3 feet, and the width of the equipment or 30 inches wide, whichever is greater.
- 1.11 The point of delivery is designated by EWEB and is at the service conductor terminals of the switchboard incoming service termination section.

2.0 REFERENCE STANDARDS

- A Refer to EC5-7.2400 for Metering single phase three wire, with 2 CTS
- B Refer to EC5-7.2600 for Metering three phase four wire with 3 CTS

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METERING REQUIREMENTS FOR SERVICES 801 AMPS AND LARGER	Approved Jan 20, 2021 EC5-7.6000 Page 3 of 3	REV 4