

Public Utility District No. 1 of Klickitat County 75 Years of Service 1938-2013

Residential Service Specifications

It is the customer's responsibility to ensure their installation complies with the most recent edition of the National Electrical Code (NEC) <u>http://catalog.nfpa.org/NFPA-70-National-Electrical-Code-NEC-Softbound-2017-Edition-P16529.aspx?icid=B484</u>, the Washington Administrative Code (WAC) <u>http://apps.leg.wa.gov/WAC/default.aspx?cite=296-46B-230</u>, and any federal, state, or local codes and ordinances that apply to their project. The following are KPUD specific requirements. Single phase only.

Meter Base

- 200 or 400(class 320) amp self-contained or Metered Main services.
- Only Ring style meter sockets, no Ringless sockets allowed.
- Test block Bypass or Manual Circuit Closing (MCC) on 400(Class 320) meter sockets only. No lever bypass.
- 400(class 320) amp services must have line side lugs sized to accept 350 mcm wire, provided and installed by the customer.
- Over 400 amps require a CTed service, Consult with KPUD Engineer for all specifications.
- The center of the meter must be 5'-0" 6'-0" above the finished grade, 5' preferred.

Secondary Conduit/Riser and wire

- Customer must provide the Riser conduit from the meter base down to the ground, the riser must be securely fastened to the structure or post.
- Customer must provide a 90° 36" radius sweep for the meter base riser, do not glue to the riser pipe unless the customer is providing the entire secondary conduit run.
- 2" or 3" for 200 amp, 3" for 400(class 320), UL listed, gray colored, Schedule 40 PVC.
- Maximum Horizontal Length. For a 200 amp service, up to 125 ft. of wire from a District transformer. 400 amp service, up to 150 ft. of wire from a District transformer. If more distance is desired, a KPUD Engineer will have to review and approve the design.
- Sweeps/Bends -Use only manufactured 36" radius bends. Do not form your own bends!
- Maximum Horizontal Bends equal to 270°, for example: 2-45° bends, or 1-90° bend, plus the vertical bend up to the meter and at Klickitat PUD's point of connection.
- Conduit Assembly. All joints must be completely seated and permanently glued with PVC cement. Keep dirt and debris out of the conduit run. Pull string may be required, consult KPUD Engineer
- Customer provided secondary conductor will be Aluminum Conductor only, this is wire from the transformer to your meter, or with Overhead services it is to the drip loop at the weather head.
 - Underground use Triplex URD wire; 200 amp =4/0 4/0 2/0, 400(class 320) = 350 350 4/0, 400 amp consult KPUD
 - Overhead use Triplex wire; 200 amp =1/0, 400(class 320), = 4/0, 400 amp consult KPUD.

Trench (if customer provided) to KPUD specifications, Call before you Dig 811

- Dig no closer than 2 ft. from existing KPUD poles, vaults or hand holes unless authorized by Engineer.
- Depth/width
 - Secondary (transformer to meterbase) 30" to 48" deep, 12" minimum width.
 - Primary (pole or vault to transformer) 40" to 48" deep, 12" minimum width.
- Customer is responsible for keeping the trench clean to appropriate depth prior to KPUD being on site.
- A minimum 20" horizontal or vertical separation is required between the electrical conduit and any other conduits, utility facilities or structures. Consult KPUD engineer on Perpendicular conduit crossings.
- Backfill
 - KPUD supplied Terra (warning) tape installed 12" below finished grade.
 - Native material less than 2" in diameter for the first 6" above conduit.
 - Road/driveway crossings backfill completely with gravel, compact in 6" lifts
- A KPUD Engineer must inspect the trench, conduit and Terra Tape prior to backfill. Final inspection and backfill must be complete prior to energizing the service.

Meter Pole (overhead services)

- Permanent service poles to be 25' class 6 or better round commercially treated poles Buried 5' in the ground.
- Temporary service poles to be 20' and 6"x6" or better, buried a minimum 4' in the ground. Unless otherwise approved by the Engineer.
- The center of the meter must be 5'-0'' 6'-0'' above the finished grade, 5' is preferred.

General New Service Process Procedure

- Customer makes contact with KPUD Engineering and starts application for new service and sets appointment with an Engineer to meet onsite. Appointment scheduling may be up to five business days depending on workload.
- Customer sends in their completed application or has it ready when they meet the Engineer for the site visit. At the site visit the Engineer determines route of service and preliminary design.
- Engineer produces a design of the installation and develops a Quote for charges. Up to five business days should be allowed for engineering and Quote.
- Customer pays applicable charges at either the Goldendale or White Salmon PUD office, by mail, or credit card over the phone.
- Customer sets up an account with KPUD Customer Service department, who verifies identity and evaluates if a deposit will be required. Customer Service can be reached at (509) 773-5891 in Goldendale or (509) 493-2255 in White Salmon.
- Customer obtains WA State Labor and Industries electrical work permit and installs meter base, then requests L&I inspection and approval of the installation. Or hires a licensed electrician to do the work.
- If customer is providing trenching, the customer will need to call 811 for locates prior to digging. Locate companies are allowed two full working days to perform the locate request.
- If easements are required they need to be signed, notarized and back to the Engineer.
- The customer needs to notify the Engineer of completion of ditching, conduit and meter base installations. The customer must complete backfilling of ditches prior to the buried lines being energized.
- Work Scheduling normally happens on Tuesday mornings in the Goldendale District and Wednesday mornings in the White Salmon District. Work is normally scheduled two to three weeks out, depending on KPUD workload.