



# METERING REQUIREMENTS

# KUA Metering Requirements

**KUA** will not accept a “non-securable” service trough entrance. That is, all enclosed conductors prior to the meter (line side) will be securable by and accessible to KUA personnel only. The service trough must be UL listed. The securable junction box, service through, raceway, and conduit will remain the property of, and be maintained by the customer. Electricians may access by obtaining PRIOR permission from the utility.

As of April 1, 1993, multiple services will be fed from a bus fed meter center, a secondary junction box, or securable service raceway. Never shall metered and un-metered energy be allowed to pass through the same raceway or service trough. There will be no readily accessible troughs prior to a metering device. A bus fed meter center may be used for multiple unit services in the same building. Each main breaker and associated meter housing will be labeled with appropriate suite or addresses meter housing will be labeled with appropriate suite or addresses.

Regardless of the method used the electric service will have adequate means to allow the utility to secure all associated equipment on the line side of, or before the point to metering.

If it is necessary to cut a utility sealing device to perform the necessary repairs, it is mandatory for the electrician to notify KUA at extension 3120 prior to doing so. Failure to comply could result in tampering charges.

## **Labeling:**

Any commercial service (including multi-service apartment units) will have the meter can clearly marked with a permanent label, showing service address. Secure the label with rivets or screws to insure that the label cannot be removed.

The lettering will be a minimum of one-half inch (1/2”) high and either an engraved plastic or embossed metal tag.

The service address must also be displayed on the building or permanent structure per 911 requirements.

## **Meter Height:**

All single or double meter installations shall have a meter height of 48” (inches) to 66” (inches) above final grade to the center of the meter.

All multi-unit meter center type installations shall be a minimum of 22” (inches) to the bottom meter and a maximum of 72” (inches) to the top meter from finish grade.

The measured meter height shall be taken two feet away from the meter socket.

## **Pulse Meter:**

If the customer plans on having an energy management system which utilizes meter output pulses, they must request a pulse meter from KUA.

All metering conduits supplied and installed by the contractor/customer.

## KUA Metering Requirements

Index for Meter Base Installations						
Phases	Service	Service Size Amps	Service Type	Socket Type	Meter Form	Reference Notes
1	Residential	0 – 200	3 wire 120/240	4 jaw 200-Amp	2S	1
1	Residential	201 – 300	3 wire 120/240	4 jaw 320-Amp	2SE	1
1	Residential	301 – 400	3 wire 120/240	K-4 400 Amps	2K	2
1	Residential (CTs)	>400	3 wire 120/240	8 jaw 20 Amps	5S	4
1	Commercial Self-Contained	0 – 200	3 wire 120/240	4 jaw 200-Amp 4 jaw 200-Amp	2S	3 3, 6
1	Commercial Self-Contained	201 – 400	3 wire 240/480	K-4 400 Amps	2K	2
1	Commercial (CTs)	>400	3 wire 120/240	8 jaw 20 Amps	5S	4
3	Commercial Self-Contained	0 – 200	3 wire 120/208	5 jaw 200-Amps	12S	3
3	Commercial Self-Contained	201 – 600	3 wire 120/208 Y	K-7 600 Amps	12K	5
3	Commercial Self-Contained	0 – 200	4 wire 120/208 Y	7 jaw 200-Amps	15/16S	3
			4 wire 120/240 Delta	7 jaw 200-Amps	15/16S	3, 7
			4 wire 277/480 Y	7 jaw 200-Amps	15/16S	3, 6
			4 wire 240/480	7 jaw 200-Amps	15/16S	3, 6, 7
3	Commercial Self-Contained	201 – 600	4 wire 120/208 Y	K-7 600-Amps	15/16K	5
			4 wire 120/240 Delta	K-7 600-Amps	15/16K	5, 7
			4 wire 277/480 Y	K-7 600-Amps	15/16K	5, 6
3	Commercial (CTs)	>600	4 wire 120/208 Y	13 jaws 20-Amps	8/9S	4
			4 wire 120/240 Delta	13 jaws 20-Amps	8/9S	4, 7
			4 wire 277/480 Y	13 jaws 20-Amps	8/9S	4

# KUA Metering Requirements

## NOTE 1

### Residential Bypass

- Residential services do not require a bypass device unless the customer requires one.

## NOTE 2

### 1 Phase K Base

- This type socket allows for up to 400 amps continuous (UL rated) in a self-contained profile. This type metering equipment is available at the KUA warehouse.
- Parallel conductor connectors with a wire size range of #6 through 350 mcm are standard with the "K" socket. In addition #6 through 800 mcm single conductor connectors is available for purchase through the warehouse.

## NOTE 3

### Bypass

- All self-contained Commercial service except for the K-4 and K-7 Socket Type shall incorporate a lever type jaw tension release (make before break), type bypass device. Meter sockets equal to or greater than all Landis & Gyr "HQ" models, Mil-bank model 1797x, S9551-0 or greater will be accepted. Sockets with Aluminum "jaws" will not be permitted.
- Fifty amp services may use a less expensive socket but should also incorporate a bypass if the customer will require uninterrupted service. Services for irrigation, ticket booths, and small illuminated signs do not require a bypass.

## NOTE 4

### CT Service

- CT Cabinets will be required. Must be UL listed. Size to be determined per application by customer.
- CTs will be mounted left to right (A B C) and the WHITE POLARITY DOT will always be toward the INCOMING or LINE SIDE.
- The meter socket shall NOT be greater than 3' (three feet) from the location of the current transformers (CTs). The meter socket and CTs shall be mounted outside. The meter socket, test switch and CTs shall be purchased from KUA and maintained by KUA. All metering equipment (excluding the meter) shall be mounted between 3' (three feet) and 6' (six feet) above finished grade. New CT services can be completed in most cases on a next day basis. (Provided all proper documentation and inspection have been approved and received) However, due to workloads, the lead time could be three to four days.
- Meter wiring must be in its own conduit: it cannot share conduit with service wiring. Conduit from CT location to meter socket/can must be 1 ¼" diameter.
- It is suggested that the meter division be contacted at the earliest possible date after the installation of the meter center. This will allow for a timely completion of

our job to enable the service technicians to complete the service installation and apply voltage.

## **KUA Metering Requirements**

### **NOTE 5**

#### **3 Phase K-Base**

- This type socket allows for up to 600 amps continuous (UL rated) in a self-contained profile.
- This type metering equipment is available at the KUA warehouse.
- Parallel conductor connectors with a wire size range of #6 through 350 mcm are standard with the "K" socket. In addition #6 through 800 mcm single conductor connectors is available for purchase through the warehouse.

### **NOTE 6**

#### **480 or 480/277 Volt Services**

- A non-fused disconnect is required to be installed before the meter. This enclosure must be capable of being sealed and Locked.

### **NOTE 7**

#### **High Leg**

- Reminder even though the electrical code may require that the HIGH LEG be in the center of the customer's equipment, it is still required to be on the right side in ALL METER RELATED EQUIPMENT and marked with orange tape.