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400.0 OVERHEAD SERVICES 0 - 600 VOLTS

400.1 GENERAL

1. APS RESERVES THE RIGHT TO DETERMINE ALL METER LOCATIONS, INCLUDING POINTS OF ATTACHMENT, AND ONLY AUTHORIZED APS PERSONNEL SHALL DETERMINE THIS LOCATION.

2. The height of the point of attachment on the Customer’s building or structure for overhead services shall be adequate to provide vertical clearances between the service drop conductors and the ground as shown in Paragraph 401.0. The service attachment height may have to be higher than the minimums shown in Paragraph 401.0 to maintain proper vertical clearance between service conductors and the ground.

3. Service head and open wires between the service head and point of connection to the service drop (drip loop) shall have proper height above ground as shown in Paragraph 401.0.

4. The point of service drop attachment on a building shall be located on the exterior wall facing and nearest APS pole line. The point of attachment shall be insulated.

5. A solid point of attachment shall be provided to withstand a minimum 200 pounds of tension. The responsibility for furnishing a sufficiently substantial service support rests solely with the Customer. (Lag bolts are not considered acceptable.)

6. Where the service conduit riser is used as a mast for supporting the service drop, it shall be 1 1/2” min. size rigid steel conduit and contain no coupling or fittings which would be subject to strain by the service drop. If necessary to use more than one 10’ length of conduit, the full length (10’) conduit shall be the upper conduit, thereby putting the coupling below any strain.

7. EMT or Plastic shall not be used for riser.

Point of attachment on service conduit risers to be no more than 20” above the top brace for 1-1/2” rigid steel conduit, no more than 30” above the top brace for 2” rigid steel conduit and no more than 50” above the top brace for 2-1/2” and larger rigid steel conduit. See Paragraph 401.4, Paragraph 401.4-1, and Figures 1, 2, 3 and 4. See Paragraph 401.5 for alternative method for point of attachment.

8. In the event a mast type riser is required to attain the required height, it shall be of such construction and so supported that it will withstand the strain imposed by the service drop. Raceway fittings shall be of a type identified for use with service masts.

9. Service riser conduits shall be so located that the corner of the point of attachment for the service drop will be within twelve (12) inches of the center of the weatherhead.

10. When multiple risers are used leave 36” leads for connection by company.

11. A maximum of three (3) service riser conduits may be supplied from one overhead service drop.

12. No foreign attachments shall be permitted on a service riser conduit.

13. Overhead raceway (riser) shall not be enclosed by any wall.

Note: Attachment tensions greater than 200 pounds may be required in special cases, such as for bus duct risers. (Consult APS)

400.2 IDENTIFICATION OF CONDUCTORS

Any neutral or delta power (high) leg of service entrance conductors, provided as required for various classes of service, shall be permanently identified. The identification shall be applied on the open conductors (drip loop) extended from the weatherhead or on the bus-stubs of a bus-duct servicehead, whichever is applicable. The neutral shall be white and the delta power (high) leg shall be orange. (See Section 300, Paragraphs 303.7 and 304.3).
400.3 MAXIMUM SERVICE ENTRANCE CONDUCTOR SIZE IN RISERS (OVERHEAD)

Service entrance conductors installed by the customer shall be sized per NEC requirements. Maximum size conductor shall be 750 MCM with a maximum number of two conductors per phase.

If service riser conductors are to be paralleled, they shall be paralleled in separate conduits. When metallic (ferrous) conduit is used or there is any encirclement of ferrous metal, induced current heating will damage the cable insulation. The only acceptable method is to install one of each phase conductor and neutral in each metallic conduit (e.g. ABCN of a four wire service).

NOTE:
Parallel service may be installed in one riser provided the conduit is sized properly per NEC for the total amount of wire installed. Parallel conductors must terminate on a common bus (e.g. 8 conductors in one conduit for a four wire service, 2 - ABCN).

401.0 CLEARANCES ABOVE GROUND, THOROUGHFARES, DRIVEWAYS, ETC.

Service drop conductors when not in excess of 300 volts phase to ground, shall have the following minimum clearance at the lowest point of the span. (The height of the point of attachment shall be governed by these clearances.) Clearances are based on conductors supported on and cabled together with an effectively grounded messenger.

Crossing over areas accessible to pedestrians only ......................................................... 12.0 ft
Crossing over residential driveways .................................................................................... 12.5 ft
Crossing over non-residential areas, parking lots, agricultural or other areas subject to truck traffic
NOTE 1 ................................................................................................................................................. 18.0 ft
Crossing over non-residential or industrial parking lots, not subject to truck traffic
NOTES 1 & 2 ........................................................................................................................................ 12.5 ft
Crossing over public streets, alleys or roads in urban or rural districts and driveways on other than residential property................................................................. 18.0 ft
Crossing over railroad tracks .............................................................................................. 27.0 ft

NOTES:
1. Trucks are defined as any vehicle exceeding 8 feet in height.
2. Truck height must be physically restricted.
3. Minimum height for Drip Loop shall be 10.5 feet.

SPECIAL NOTE:
Where clearance is questionable, please call APS for instructions before installing service entrance, conduit and other equipment.

It is recommended that an onsite meeting be requested with an APS Representative to determine service attachment height before installation of service entrance, conduit and other equipment.
CLEARANCE ABOVE GROUND - RESIDENTIAL

These minimum clearances apply to the lowest point of service drop sag.

**Figure 1**

1. **Private Driveway**
   - Minimum clearance: 12.5 ft.

2. **Areas Accessible to Pedestrians Only**
   - Minimum clearance: 12 ft.

3. **Curb or Outer Limits of Possible Vehicular Traffic Street or Roadway**
   - Minimum clearance: 18 ft.

**Figure 2**

1. **Areas Accessible to Pedestrians Only**
   - Minimum clearance: 10.5 ft.

2. **Roads, Streets, Alleys, and Other Areas Subject to Truck Traffic**
   - Minimum clearance: 18 ft.
CLEARANCE ABOVE GROUND - INDUSTRIAL & NON-RESIDENTIAL

These minimum clearances apply to the lowest point of service drop sag.

Figure 1

Figure 2

Areas accessible to pedestrians only

Non-residential driveways, parking lots, and other areas subject to truck traffic. See paragraph 401.0
NOTES:

1. TRUCKS ARE DEFINED AS ANY VEHICLE EXCEEDING 8 FEET IN HEIGHT.

2. IF ACCESSIBLE TO EQUESTRIANS, USE FIGURE 1.

3. TRUCK HEIGHT MUST BE PHYSICALLY RESTRICTED.

ROADS, STREETS, ALLEYS, NON-RESIDENTIAL DRIVEWAYS, PARKING LOTS, AND OTHER AREAS SUBJECT TO TRAFFIC.  

RESIDENTIAL DRIVEWAYS, COMMERCIAL AREAS NOT SUBJECT TO TRUCK TRAFFIC—NOTE 1 & 3

SPACES OR WAYS ACCESSIBLE TO PEDESTRIANS ONLY—NOTE 2

TRACK RAILS OF RAILROADS HANDLING FREIGHT CARS ON TOP OF WHICH MEN CAN RIDE.
NOTES:

1. All voltages are phase-to-ground.
2. When Dimension “A” is greater than the sum of Dimension “B” plus the diving platform height, use Dimension “A”.
3. Minimum clearances must be maintained from neighboring services.
4. Clearances indicated are for areas accessible to pedestrians only, when service wires are located more than 10 feet horizontally away from pool’s edge.
5. The swimming pool clearances shown above apply to all types of swimming areas including above and below ground pools, and spas.
6. These dimensions shall also comply with local municipal requirements.
7. Increase clearances 0.4 inch per KV for all voltage in excess of 50KV. This 0.4 inch adder shall be increased 3 percent for each 1000 feet in excess of 3300 feet elevation. Add 5 percent to all nominal voltages over 50KV when calculating increased clearances.
401.2  HORIZONTAL CLEARANCES FROM BUILDINGS
Conductors shall have a horizontal clearance of not less than 3 feet from buildings. For clearances from balconies, windows, fire escapes, doors, etc., see Paragraph 401.7

401.3  CLEARANCES OVER BUILDINGS AND STRUCTURES
Service drop conductors shall not be readily accessible. When not in excess of 600 volts, they shall conform to the following: It shall be the customer’s responsibility to provide a point of attachment so APS service drop conductors meet these requirements.

Clearance Over Roof. Conductors shall have a clearance of not less than 8 ft. from the highest point of roofs over which they pass, with the following exceptions:

Exception No. 1: Where the voltage between conductors does not exceed 300 and the roof has a slope of not less than 4 inches in 12 inches the clearance may be not less than 3 feet.

The intent of this exception is that where the roof has a slope 4 in. in 12 in. or greater it is considered difficult to walk upon and the height of conductors could then be less than 8 ft. from the highest point over which they pass but in no case less than 3 ft. except as permitted in Exception 2.

Exception No. 2: Service drop conductors of 300 volts or less between conductors where not more than 4 ft. of service-drop conductors pass above the roof overhang for the purpose of terminating at a (through-the-roof) service raceway or approved support may be maintained at a minimum of 18 inches from any portion of the roof over which they pass. (Illustrated on Paragraph 401.3-1, Figure 2)
CLEARANCE OVER BUILDINGS AND STRUCTURES

FIGURE 1

Clearance above residential, non-residential or industrial buildings on premises served or adjacent premises; OTHER THAN THE BUILDING SERVED. See Paragraph 401.3 for possible exceptions.

Service entrances shall not be located within a roofed-over area necessitating APS personnel to walk on or place a ladder on roof to make attachment to riser conduit or support and to connect Customer's service.
401.4 POINT OF ATTACHMENT STRUCTURE

An attachment structure is a support for the purpose of providing a higher point of attachment for the service drop than is provided by the building itself. It may be constructed of rigid galvanized steel pipe or galvanized angle iron. When an attachment structure is necessary to maintain the required clearances, it shall be of a type satisfactory to APS and meet all applicable codes. Such a structure shall be installed and maintained at the expense of the property owner or customer and be of sufficient strength to support the service drop wires and service attachment. The service entrance conduit may be used as and considered to be, an attachment structure; in which case the riser shall be not less than 1 1/2” galvanized rigid steel conduit or IMC. (See Paragraph 400.1) EMT or Plastic shall not be used.

401.4-1 ATTACHMENT STRUCTURE (BRACING RISERS)

Where the service conduit riser is used as a mast for supporting the service drop, the point of attachment shall not be higher than 50” above the roof unless substantially braced (not guyed) to provide sufficient strength to support the strain of the service conductors, and to permit a man to work safely from a ladder bearing against the conduit. (See Paragraph 401.5 for alternative to bracing for residential.)
Risers that are required to be braced shall be braced against the pull of the service drop conductors. Bracing shall consist of two steel members installed at approximately a 90 degree spread. Minimum size braces shall be 3/4" rigid galvanized steel pipe or 1 1/4" x 1 1/4" x 1/8" steel angle.

**EXCEPTION:** Residential and non-residential, 200 ampere service or less: 3/4" electrical metallic tubing (EMT) may be used for braces if used to pull against the load as shown in Figure 2 and 4, Paragraph 401.4-1. Push braces must be rigid steel as listed above.
401.5 ALTERNATE METHOD FOR POINT OF ATTACHMENT (BLOCK STRUCTURE)

This method of service attachment is acceptable to APS if point of attachment is no higher than 50” above top support. Check the local municipal inspection agency for acceptance.

NOTES:

1. Riser to be minimum 2-1/2” rigid steel conduit or IMC. EMT or Plastic shall not be used, no thread less connection can be used.
2. No couplings are permitted above the highest brace.
3. APS will not be responsible for any damage to the building caused by rain or structural failure.
4. If point of attachment is higher than 50” above top support then bracing is required. (See Paragraph 401.4-1)
5. Maximum service length for this installation is 100 feet.
6. See Section 300, Paragraph 301.16 for Electric to Gas clearances.
401.5-1  ALTERNATE METHOD FOR POINT OF ATTACHMENT (WOOD FRAME STRUCTURE)

This method of service attachment is acceptable to APS if point of attachment is no higher than 50" top support. Check the local municipal inspection agency for acceptance above.

- **NOTES:**
  1. Riser to be minimum 2-1/2" rigid steel conduit or IMC. EMT or Plastic shall not be used, no thread less connection can be used.
  2. No couplings are permitted above the highest brace.
  3. APS will not be responsible for any damage to the building caused by rain or structural failure.
  4. If point of attachment is higher than 50" above top support then bracing is required. (See Paragraph 401.4-1)
  5. Maximum service length for this installation is 100 feet.
  6. See Section 300, Paragraph 301.6 for Electric to Gas clearances.
Overhead Service Requirements

Clearance from Doors, Windows, Fire Escapes, Balconies, etc.

Detail "A"
OVERHEAD SERVICE REQUIREMENTS
CLEARANCE FROM DOORS, WINDOWS, FIRE ESCAPES, BALONIES, ETC.
401.7 CLEARANCE FROM DOORS, EXITS, WINDOWS, FIRE ESCAPES, BALCONIES, ETC.

The vertical, horizontal and radial service drop conductor clearance from doors, exits, windows, fire escapes, and other openings, at any of which human contact might be expected, shall not be less than that specified and illustrated:

<table>
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<tr>
<td>1. Vertically above and below surfaces of fire escapes, balconies, stairways and walkways</td>
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<tr>
<td>2. Horizontally and radially from doors, exits, windows and other openings</td>
</tr>
<tr>
<td>3. Horizontally and radially from the outer extremities of the fire escapes, balconies, stairways, satellite dishes, antennas, walkways, and other objects</td>
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</tbody>
</table>

CLEARANCE FROM DOORS, EXITS, WINDOWS, FIRE ESCAPES, BALCONIES, ETC.
(For Exposed Service Conductors Only — See Note 3)

NOTES:
1. Service drop conductors not permitted within shaded zones.
2. Dimension “B” may be less than 36 inches, provided it is a minimum of 12 inches above opening and the minimum 8 foot vertical clearances shown are obtained.
3. Conduit and meter cans may be inside shaded areas. Service conductors, drip loops or any wire may not be inside shaded areas.
NOTES:

1. Voltages are phase to ground.
2. Clearance from CATV/TELCO to electric service conductors.
   - 12" ----- multiplex electric service
   - 30" ----- open wire electric service
3. Clearances are for any point in the service span.
4. Clearances must be maintained between electric services and all telephone/CATV cables and services. A higher point of attachment may be necessary to maintain clearances. This is especially important if the electric point of attachment is close to existing APS pole lines. Contact your local APS customer service representative if you are in doubt about proper clearances.
402.0  CUSTOMER SERVICE POLE

402.1  LOCATIONS:
THE LOCATION OF CUSTOMER METER POLES SHALL BE APPROVED BY APS BEFORE SETTING.

Meters or attachments shall not be mounted on APS poles. When it is necessary for the service point of
attachment and service entrance to be made to a pole instead of the residence or building, that pole is to
be provided by the Customer and its height shall be great enough to give sufficient clearance for APS
service wires.

402.2  REQUIREMENTS: (WOOD)
Poles shall comply with the following requirements:
1.  Full length pressure treated as per APS Spec. MS-1900.
   (MS = APS T&D Material Specification)
2.  Framing shall conform to APS Spec. MS-1913, see paragraph 402.2-3.
3.  Temporary service poles may be moved from jobsite to jobsite, but must be inspected and
    approved by APS prior to each setting in place.
4.  For permanent or temporary installations, a used or cutoff pole which is sound and is retreated in
    accordance with APS specifications may be used provided it is inspected and approved by
    authorized APS personnel prior to being installed in place.
5.  Used poles may be used as customer service poles, without being retreated, if,
    (a)  The pole is eight years of age or less, and
    (b)  The butt has not been cut off, or damaged by abrasion or penetration.

If the top of the pole has been cut off, a commercial wood preservative must be applied to the cut to
prevent water penetration and resultant pole deterioration.

If the pole is over eight years old or the butt has been cut off or damaged, the pole must be retreated by a
full length pressure treatment per APS Spec. MS-1900. This can only be done by a commercial plant
especially designed to perform this treatment. Surface applications of preservatives will not meet the
specifications.

Terminology used in the APS T&D Material Specifications is documented in “Definitions for Wood Poles”,
Spec. MS-1901.
1. APS SERVICE WIRES AND POINT OF ATTACHMENT CONNECTION MADE BY APS. WEATHERHEAD MUST BE WITHIN 12" OF POINT OF ATTACHMENT

2. CUSTOMER TO DRILL HOLE THROUGH POLE IN THE DIRECTION OF SERVICE DROP AND INSTALL 1/2" EYEBOLT WITH 2" SQUARE WASHER FOR SERVICE ATTACHMENT.

3. ENTRANCE CONDUIT SHALL NOT BE INSTALLED ON OPPOSITE SIDE OF POLE FROM POINT OF ATTACHMENT

4. PIPE STRAP SUPPORTS NOT OVER 5 6' - 0" APART.

5. POLE FURNISHED BY CUSTOMER. (SEE LOCATION - REQUIREMENTS - SIZES)

6. WIRES TO BE CONNECTED IN METER SOCKET BY CUSTOMER.

7. UNISTRUT

8. NEUTRAL SHALL NOT BE CUT

9. APPROVED ALL-IN-ONE METER PANEL

10. UNDERGROUND CONDUIT TO CUSTOMER'S LOAD

11. APPROVED GROUND WIRE

12. APPROVED GROUND ROD AND CLAMP

NOTES: CUSTOMER'S SERVICE ENTRANCE POLE

1. See Paragraph 401.0 for minimum heights.

2. Drip Loop conductors minimum height is 10 feet 6 inches.

3. See Paragraph 402.3 for wood and steel pole sizes.

4. Weatherhead must be located within 12 inches of point of attachment.

5. Wood poles are exempt from insulated point of attachment requirement.

6. Unistrut shall be mounted to pole using a 1/2" minimum galvanized through bolt with a 1 1/2" backing and a lock nut. Meter panel shall be attached to unistrut using 1/4" minimum through bolts. Pole shall be notched to the depth of the unistrut. (1" unistrut maximum)
NOTES: CUSTOMER'S SERVICE ENTRANCE POLE

1. Minimum clearance from the APS line-side wires to the Customer's load-side wires, or Customer attachments, shall be 18 inches.
2. No Customer facilities shall be located above APS facilities.
3. Wood poles are exempt from insulated point of attachment requirement.
4. Unistrut shall be mounted to pole using a 1/2" minimum galvanized through bolt with a 1 1/2" backing and a lock nut. Meter panel shall be attached to unistrut using 1/4" minimum through bolts. Pole shall be notched to the depth of the unistrut. (1" unistrut maximum)
NOTES:

1. The following information shall be burn branded on the face of the pole at a distance of 10' ± 2" for poles 50' and less and 14' ± 2" for poles 55' and greater from the butt to the bottom of the brand.
   A - Supplier's Code or Trade Mark.
   B - Plant location and the Year of Treatment.
   C - Code letters denoting the pole species and preservative used.
   D - Circumference Class numeral and numerals of showing length of the pole.

2. Burn brand "APS" on the face of the pole 6" maximum above the suppliers trade mark.

3. Poles purchased between May 1958 and December 1991 may have the pole brand stamped at 12 feet from the butt of the pole.

WOOD POLE MARKING
(APS T&D Material Specification MS-1913)
CUSTOMER SERVICE POLE – SIZES

(WOOD POLES)

<table>
<thead>
<tr>
<th>Minimum Attachment Clearance Above Ground (Feet)</th>
<th>Length Of Pole (Feet)</th>
<th>Minimum Circumference At Top (Inches)</th>
<th>Minimum Circumference At 6 Feet From Butt (Inches)</th>
<th>Minimum Setting Depth (Feet)</th>
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(STEEL POLES)

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<thead>
<tr>
<th>Clearance Above Ground (Feet)</th>
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* Minimum setting depth in rock is 3’ when approved by APS.
* * Minimum length for joint use with communications.

NOTES:
1. Steel poles shall be treated with corrosive resistant paint 3” above grade and 3” below grade. Pole is to be centered in 12” diameter hole and encased in concrete to full depth of pole. Point of attachment for steel poles to be insulated.
2. Circumferences are for Class 5 Ponderosa Pine. Other types of poles are acceptable if they meet APS T&D Spec #MS-1900.

402.4 SERVICE RISER CONDUCTORS

Wires from the weatherhead and from the main service switch shall be properly made-up and connected to the meter socket - by the Customer. The neutral wire shall be bonded to the meter socket at the “lay-in” lug on the socket. (It shall not be cut within the socket enclosure. See Paragraph 400.2 for identification of conductors.)
ELECTRIC SERVICE REQUIREMENTS

402.5 TYPICAL POLE-MOUNTED METER INSTALLATION FOR RESIDENTIAL/COMMERCIAL OR TEMPORARY SERVICE
100-225A, 1 Ph, 3W, 120/240 VOLT

Permits and inspections are required. Please contact the governing inspection agency. This is a list of material for a normal pole-mounted meter installation. It is not intended to be all inclusive but gives the more common requirements. All equipment shall comply with EUSERC requirements and all specifications found in the APS Electric Service Requirements Manual (ESRM)

1) Weatherhead-conductor leads to extend a minimum of 36” beyond the weatherhead.
2) 1/2” eyebolt with a 2” backing washer. Must be located within 12” of the weatherhead & shall be point of attachment. Customer to drill hole through pole in the direction of service drop. Insulated point of attachment required if steel pole is used.
3) Conduit support. Not over 6’ apart.
4) Rigid or IMC metal conduit.
5) Approved hub must be rain-tight.
6) Meter socket, breaker panel must be rain-tight equipment. Meter socket jaws or clips shall be free of foreign material (mud, paint, plaster, etc...). RING-LESS METER SOCKETS ARE NOT ACCEPTABLE.
7) Meter box to be bolted to unistrut. Unistrut to be mounted to pole using through bolts. Pole shall be notched to the depth of the unistrut. Minimum 1/4” bolt diameter or box to unistrut & 1/2” minimum for unistrut to pole.
8) Neutral to be a continuous, unbroken conductor from the weatherhead to the neutral landing block.
9) Neutral landing block.
10) Install a bonding jumper or screw if the neutral landing block is insulated from the enclosure.
11) The ground wire (#4 bare, stranded or solid copper) shall be continuous from the neutral landing block to an approved grounding electrode system in compliance with NEC Article 250. The ground wire must be properly supported and attached to the pole at 24” intervals.
12) Approved grounding electrode system. 5/8” x 8’ long ground rod and approved clamp. Entire length of rod to be below grade.

POLE REQUIREMENTS

Only approved poles will be accepted. The pole must be fully commercially pressure treated and branded in accordance with APS specifications. A used or cut-off pole must be approved by a company representative. Minimum pole length is 18’ with 4’ set in the ground. Additional pole length will be required if the pole used is to be used by other utility companies. If a steel pole is used, refer to note 402.3.

GENERAL NOTES:
1. Meter location to be specified by Company Representative.
2. If more than one meter to the premise, each meter shall be permanently identified by the Customer, to properly identify that portion of the premises being served. Metal stamping or metal tag is required. Painted identification is not acceptable.
3. All materials or work furnished by the Customer shall be in accordance with all applicable codes or standards.
4. Minimum service height above ground 9 (phase to ground voltages):
   a) Within Right-of-Way of roads, streets, alleys, non-residential driveways, parking lots, and other areas subject to truck traffic.......................18’-0
   b) Service over residential driveways........................................12’-6
   c) Pedestrian spaces & ways, driveways, commercial areas not subject to truck traffic.....................................................12’-0
5. Minimum attachment height is 12‘- 6”. Additional height may be required according to Authority having Jurisdiction (AHJ).
Permits and inspections are required. Please contact the governing inspection agency. This is a list of material for a normal typical overhead meter installation. All equipment shall comply with EUSERC requirements and all specifications found in the APS Electric Service Requirements Manual (ESRM)

### RESIDENTIAL

<table>
<thead>
<tr>
<th>SERVICE RATING</th>
<th>COPPER</th>
<th>ALUMINUM</th>
<th>WEATHERHEAD &amp; CONDUIT</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>100A</td>
<td>#4</td>
<td>#2</td>
<td>1-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>125A</td>
<td>#2</td>
<td>#1/0</td>
<td>1-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>150A</td>
<td>#1</td>
<td>#2/0</td>
<td>1-1/2&quot; (2&quot; If #3/0)</td>
<td>Minimum size: ( \frac{1}{2} ) the size of the phase conductor</td>
</tr>
<tr>
<td>200A</td>
<td>#2/0</td>
<td>#4/0</td>
<td>2&quot; (2-1/2&quot; If &gt; 4/0)</td>
<td></td>
</tr>
<tr>
<td>225A</td>
<td>#3/0</td>
<td>#250</td>
<td>2&quot; (2-1/2&quot; If &gt; 4/0)</td>
<td></td>
</tr>
</tbody>
</table>

### COMMERCIAL

<table>
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<th>WEATHERHEAD &amp; CONDUIT</th>
<th>Neutral</th>
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</thead>
<tbody>
<tr>
<td>100A</td>
<td>#3</td>
<td>#1</td>
<td>1-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>125A</td>
<td>#1</td>
<td>#2/0</td>
<td>1-1/2&quot;</td>
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</tr>
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<td>2&quot; (2-1/2&quot; If &gt; 4/0)</td>
<td></td>
</tr>
<tr>
<td>225A</td>
<td>#4/0</td>
<td>#300</td>
<td>2&quot; (2-1/2&quot; If &gt; 4/0)</td>
<td></td>
</tr>
</tbody>
</table>
1. Wire and conduit sizes shall be per NEC.
2. When approved bond bushings are used, bond wire may be eliminated.
3. APS furnishes and installs CT’s and test switch. The Customer installs the meter socket and runs customer neutral into meter panel.
4. When used for 3Ø-4W Delta service, high phase shall be on the right hand side and identified.