

---

## LR Bracket Installation

---

### 1. Scope

This standard covers the information necessary to install LR brackets on wood poles that support overhead neutrals; and 600 V secondary and service drop conductors. Requirements for vertical spacing of the hardware and installation instructions are included.

LR brackets are also known as neutral, or secondary, brackets.

Installation of LR brackets on composite, steel, laminated or other non-wood poles is outside the scope of this standard.

---

### 2. Application

This standard provides direction to Seattle City Light (SCL) engineers, crews and contractors for the installation of LR brackets on poles for properly supporting the system neutral(s) and 600 V secondary and service conductors.

---

### 3. General Requirements

For a tangent installation, the LR bracket shall be installed on the street side of the pole at 31 ft above grade as shown in Figure 3a.

If two neutrals are required, the second neutral shall be mounted on the street side 1 ft below the top bolt hole of the original neutral.

If a secondary or service drop is needed on the opposite side of the pole as the neutral or for a double dead end, a second LR bracket shall be installed at the same height as the neutral using the same bolt as shown in Figure 3b.

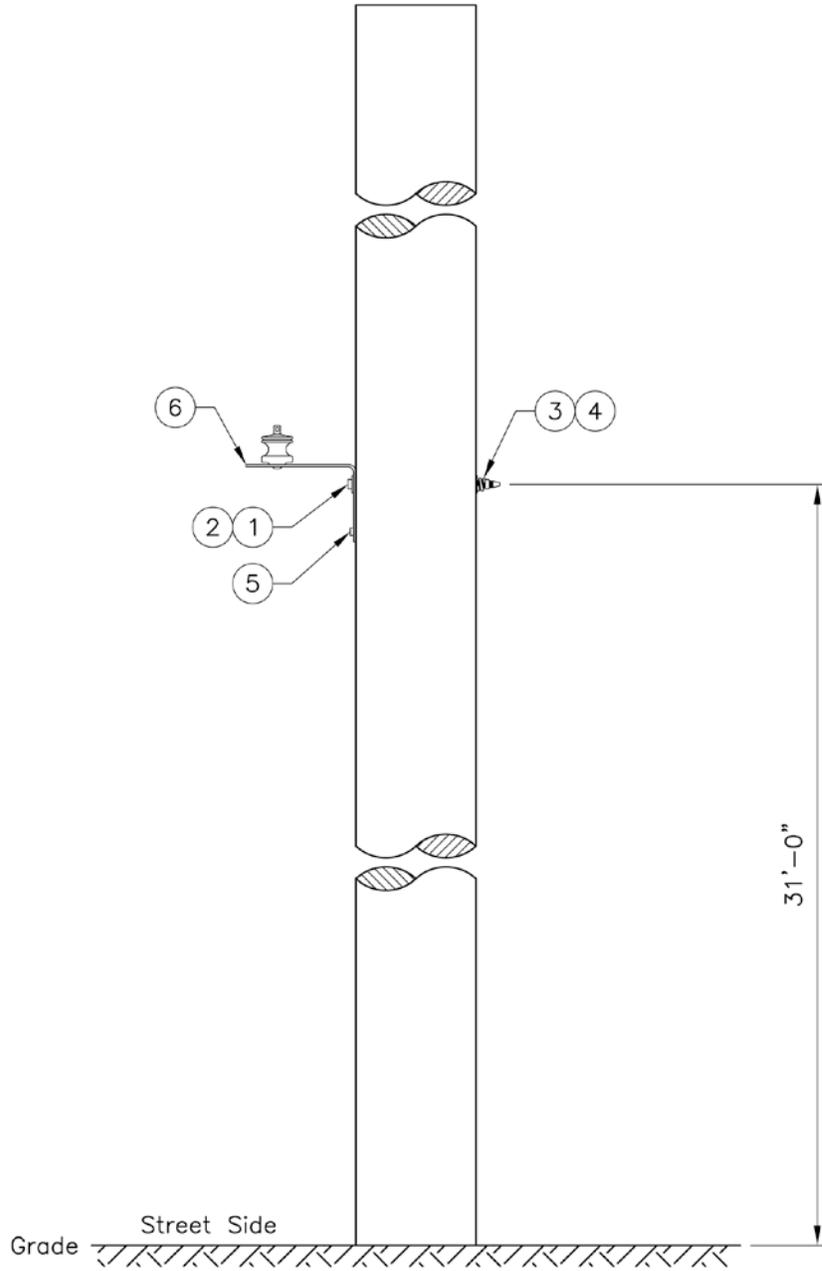
The first wire attached to the spool insulator shall be on the pole-side of the spool.

For a corner installation, use two single LR brackets and install the second single LR bracket on the adjacent face of the pole 3 inches below as shown in Figure 3c. If there are multiple gains, the upper LR bracket shall be installed on the street side of the upper gain.

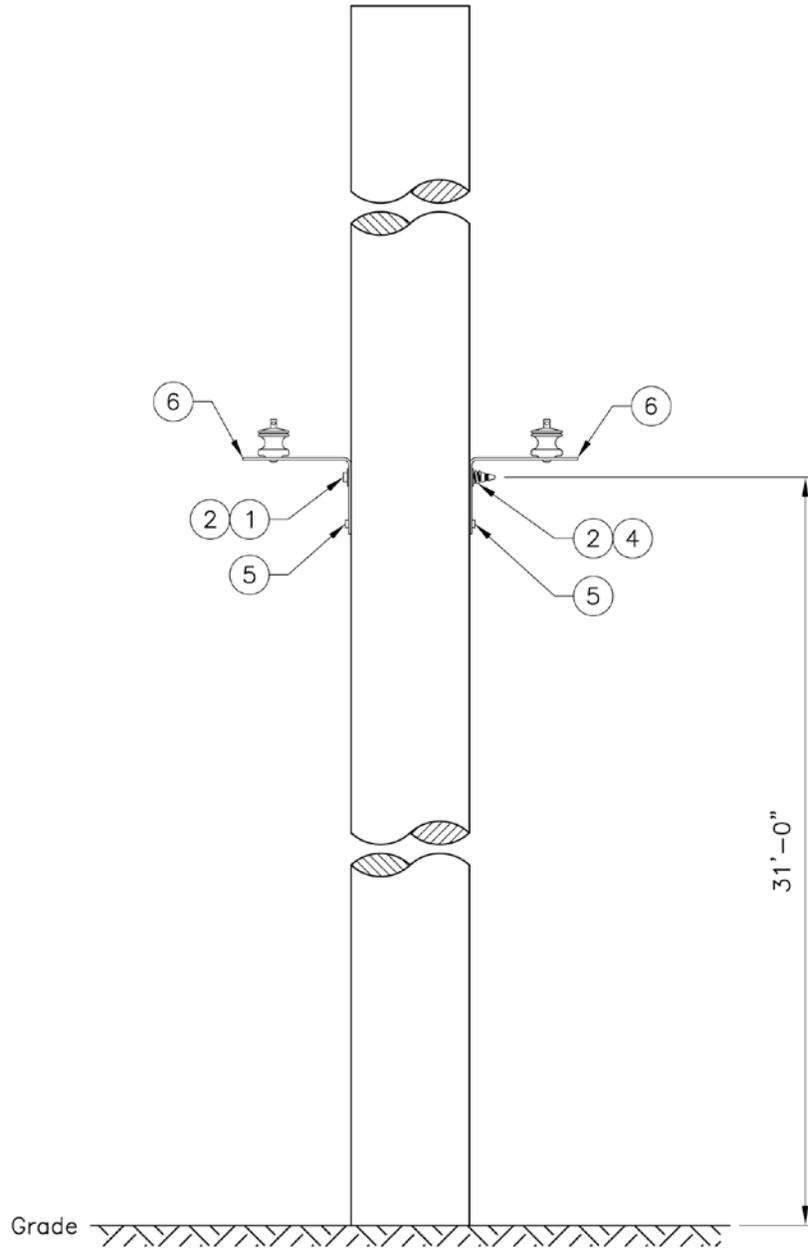
The highest communication attachment shall be located at a minimum of 40 in below the lowest secondary and neutral.



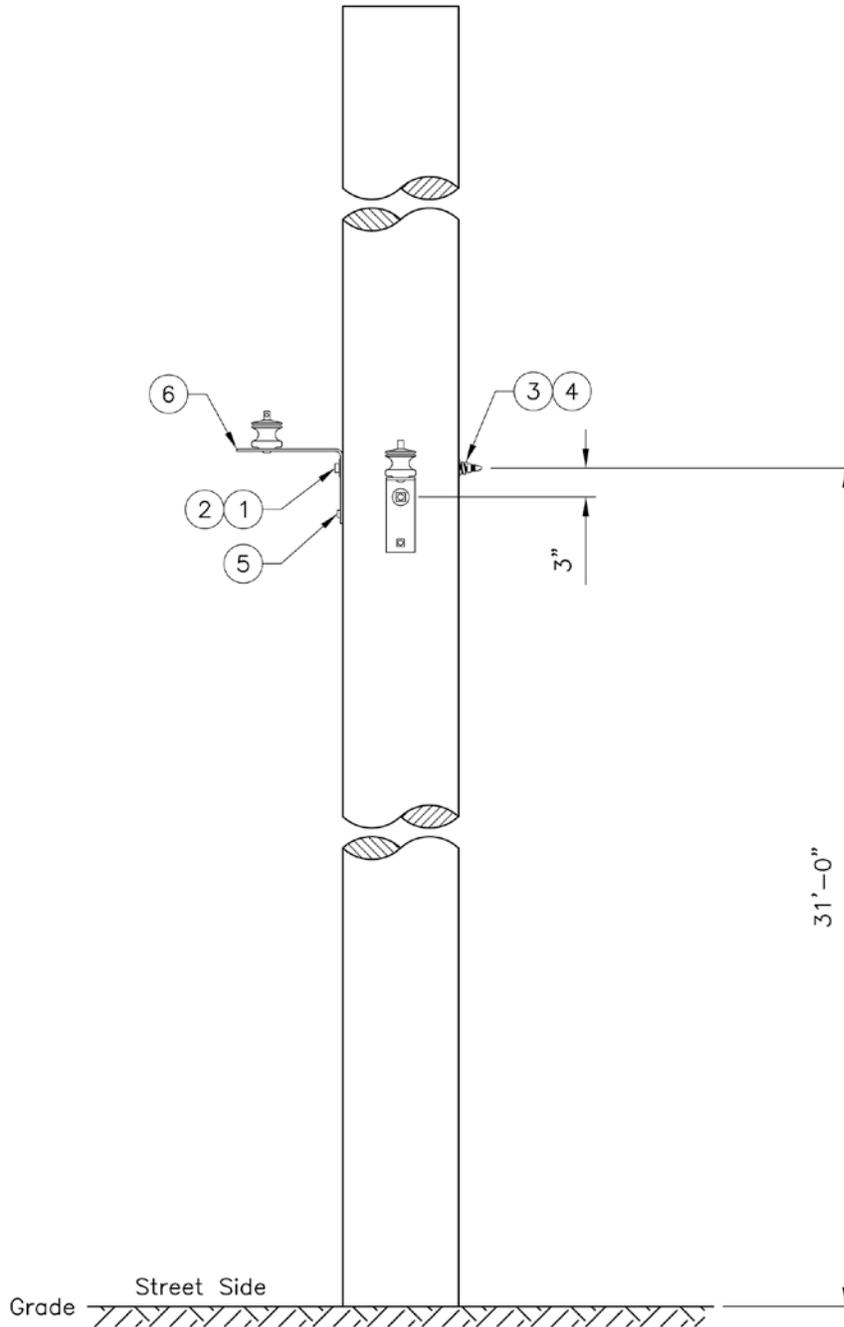
**Figure 3a. Single LR Bracket Installation**



**Figure 3b. Double LR Bracket Installation**



**Figure 3c. Corner LR Bracket Installation**

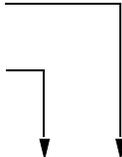


**4. Construction Notes**

Service drop wires may be attached to the same spool insulator as the neutral or secondary wire.

**5. Material List**

**Table 5. Materials for LR Bracket(s)**

| Fig | Compatible Unit                       | ID      | Quantity  |   |
|-----|---------------------------------------|---------|---|---|
| 3a  | LR bracket, single                    | PLT-LR1 |  |   |
| 3b  | LR bracket, double                    | PLT-LR2 |   |   |
| #   | Material Description                  | ID      |   |   |
| 1   | Bolt, machine, galvanized, 5/8" x 14" | 780846  | 1   | 1 |
| 2   | Washer, round, flat, 5/8"             | 585030  | 2   | 1 |
| 3   | Washer, square, flat, 2-1/4" x 2-1/4" | 585135  | –   | 1 |
| 4   | Washer, coil, spring lock, 5/8"       | 584261  | 1   | 1 |
| 5   | Screw, lag, 1/2" x 4"                 | 785261  | 2   | 1 |
| 6   | LR bracket                            | 690404  | 2   | 1 |

**6. Sources**

**Hall, Alan;** SCL Engineer and subject matter expert for 0100.11 (alan.hall@seattle.gov)

**Lu, Curtis;** SCL Standards Engineer and originator of 0100.11 (curtis.lu@seattle.gov)

**SCL Construction Standard D9-8.5;** “Common Secondary Neutral Deadening Details for Aluminum Neutral Conductor” (canceled)

**SCL Construction Standard D9-9;** “Rack Secondary Corner Details” (canceled)