



**STEEL POLE DETAIL**

SEE NOTE 3

**WOOD POLE DETAIL**

**NOTES**

1. Vehicular signal heads shall utilize mounting brackets similar to those shown for pedestrian signal heads.
  2. Signal head conduit brackets and conduit fittings shall be galvanized and painted (except pole clamps or bands) to match the body of the signal head.
  3. For embedded steel poles, external conduit shall be similar to that shown in wood pole detail. External grounding will not be required unless specifically noted on the plans.
  4. The signal head bracket arms shall be attached to steel poles by one of the following methods:
    - a. 1-1/2" (38 mm) blind half coupling welded into the pole prior to galvanizing.
    - b. Bracket arm hub plates attached to the pole as per note 7.
    - c. Pole clamp with threaded hub.
- Field installation of the wiring holes for signal heads and pushbuttons will be permitted provided that the holes are drilled or hole sawn. No torch cutting or field welding will be permitted. Cut surfaces shall be filed smooth and covered with two coats of zinc rich paint. Grommets or wiring guides shall be installed in the holes.
5. Vertical spacing between bracket fittings shall be determined by the Contractor, and shall be the dimension from centerline to centerline of the bracket arms necessary to accommodate the vertical height of the signal head plus not more than 10" (250 mm).
  6. The following minimum size fasteners shall be used for the attachment of the indicated hardware to wood poles:
    - a. CONDUIT BRACKET ARM HUB PLATES: 1/2" (13 mm) dia. x 3" (127 mm) long lag screws (two screws per hub plate).
    - b. CONDUIT STRAPS (two hole): 1/4" x 3" (6.4 mm x 76 mm) long lag screws, #14 x 3" (76 mm) long round head wood screws, or 20d spikes.
    - c. PUSHBUTTON SIGN: with brackets - 3/8" x 3" (10 mm x 76 mm) long lag screws (two per bracket); without brackets - 3/8" x 3" (10 mm x 76 mm) long lag screws with 7/16" (11 mm) I.D. x 1" (25 mm) O.D. flat washer between the sign and pole (two per sign).
    - d. PUSHBUTTON: #14 x 3" (76 mm) long round head wood screws or 1/4" x 3" (6.4 mm x 76 mm) long lag screws (two per pushbutton).
  7. The following minimum size fasteners shall be used for the attachment of the indicated hardware to steel poles:
    - a. CONDUIT BRACKET ARM HUB PLATES: 1/2" (13 mm) dia. screw or 3/4" (19 mm) wide passivated stainless steelband (two fasteners or bands per hub plate).
    - b. CONDUIT: two hole conduit straps with 1/4" (6.4 mm) dia. screws or 3/4" (19 mm) wide passivated stainless steelbands.
    - c. PUSHBUTTON SIGN: 3/8" (10 mm) dia. screws (two per sign).
    - d. PUSHBUTTON: 1/4" (6.4 mm) dia. screws (two per pushbutton).
- The screws shall utilize a drilled and tapped hole or be the self-tapping type.