

TEXAS DEPARTMENT OF TRANSPORTATION
DEPARTMENTAL SPECIFICATION
TO-7062
SYMBOLIC PEDESTRIAN SIGNAL HEAD

1.0 GENERAL

- 1.1 This specification describes the minimum acceptable requirements for a pedestrian signal head with housing and doors made of die cast aluminum alloy or polycarbonate resin material.
- 1.2 The design, material, and construction of the pedestrian signal heads shall be in accordance with the requirements for the signal set forth in the latest "Adjustable Face Pedestrian Signal Head Standard" of the Institute of Traffic Engineers.
- 1.3 These signals may be used alone or in conjunction with traffic signals in a complete assembly.

2.0 DESIGN REQUIREMENTS

2.1 HOUSING CASE AND DOOR

- 2.1.1 The front of the signal shall be approximately square and no larger than necessary to accommodate the message.
- 2.1.2 The signal head shall be a one piece assembly constructed of die cast aluminum alloy, or molded polycarbonate. Polycarbonate housing cases shall be a minimum of $\frac{1}{4}$ in. thick and shall be ribbed for strength. Polycarbonate cases and doors shall have ultraviolet inhibitors to reduce deterioration due to exposure to light. Openings in the top and bottom of the signal head shall accommodate a standard $1\frac{1}{2}$ in. bracket arm.
- 2.1.3 The electrical system of the signal head shall be designed to operate from a 115 volt, single phase, 60 Hz alternating current power.
- 2.1.4 The signal head shall contain one (1) four point terminal with the two common points wired together by the supplier. The terminal block shall accommodate AWG 12 field wires.
- 2.1.5 For incandescent type, the assembly shall provide a dustproof and weatherproof enclosure and shall provide easy access to all components. All gaskets shall be continuous neoprene gaskets.
- 2.1.6 For LED type pedestrian signals, continuous neoprene gasket is not required.

2.1.7 Aluminum doors shall be a one-piece corrosion resistant, aluminum alloy casting with two hinged lugs cast at the bottom and two latch slots cast at the top of each door. Two stainless steel wing screws or wing nuts shall be used to open and close the door. Latching or unlatching the door shall not require tools.

2.1.8 Polycarbonate doors shall be one piece and shall be a minimum of $\frac{1}{4}$ in. thick with two hinged lugs at the bottom and two latch slots at the top of each door. Two stainless steel wing screws or wing nuts shall be used to open and close the door. Latching or unlatching the door shall not require tools.

2.2 ENVIRONMENTAL

2.2.1 The Pedestrian Signal Head and all components shall be rated for use in the ambient operating temperature range of -40 degrees C to +74 degrees C.

3.0 MOUNTING ATTACHMENTS

3.1 The type of mounting attachments shall be hinged (clam shell) unless otherwise specified.

3.2 HINGED MOUNTING ASSEMBLY

3.2.1 Mounting hardware (clam shell) shall be a two piece cast aluminum alloy assembly which shall be joined in the final assembly by stainless steel hinge pins on the back of the unit and a tamper proof bolt on the front of the unit.

3.2.2 The pole half of the assembly shall have two spring pins which shall act as a hinge for the assembly and be capable of being mounted banded on a steel or wood strain pole, lag screwing into a wood pole, or bolted directly to a 4 in. steel pole.

3.2.3 The head half of the assembly shall contain a terminal compartment and shall have hinged ears for mating with the pole half. It shall have provisions for mounting to the side of the pedestrian signal head with all necessary wiring with a weatherproof and dustproof seal. The terminal block shall accommodate AWG 12 field wires.

3.2.4 When pedestrian heads and hinged mounting assemblies are ordered together, the mounting assembly shall be attached and wired to the signal head on the left side (when viewed from the front) and easily removable. Holes shall be drilled on the right side on the head for reinstalling hinged mounting assemblies for right side mount. All unused holes shall be plugged. If top and bottom holes exist on the signal head, they shall be plugged as part of the hinged mounting assembly installation.

3.2.5 The mating surfaces of the two halves shall have a gasket to provide a weatherproof and dustproof assembly. The assembly must have provisions to minimize the chance of vandalism.

4.0 PAINT / PAINTING

4.1 All exposed metal surfaces of the assembled pedestrian traffic signal head with mounting attachments shall be given two (2) coats of high grade yellow enamel as used by the manufacturer of the signal equipment. Each coat shall be separately baked. Powder coating is acceptable.

5.0 SHIPMENT AND DELIVERY

5.1 Each pedestrian signal head shall be delivered completely assembled. Each signal head shall be ready for immediate installation.

5.2 Each signal head assembly shall be individually packaged. The crate and the signal head shall be tagged showing manufacturer, type, and catalog number. The crate tag shall also display the requisition and purchase order on which the item was delivered.

6.0 WARRANTY

6.1 Each pedestrian signal head shall be warranted against failure due to workmanship or material defects within the first 60 months of field operation.

7.0 MEASUREMENT

7.1 Measurement shall be made of each complete "Symbolic Pedestrian Signal Head" as specified in this specification and delivered f.o.b. to the point specified in the invitation for bids.