

Recurring Special Provisions
DIVISION 900 – MATERIALS DETAILS
City of Fort Wayne
Public Works

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SECTION 922 – TRAFFIC SIGNAL MATERIALS AND EQUIPMENT

922.02 Traffic Signal Control Equipment

(f) NEMA TS2 Cabinet, Auxiliary Equipment, and Terminal and Facilities, TF, Requirements

1. Controller Cabinet Requirements

The NEMA TS2 type A1 controller cabinet shall be in accordance with the following requirements.

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a. General

The cabinet and the shelves shall be fabricated of aluminum. The cabinet shall be 1/8 in. minimum thickness sheet aluminum or 1/4 in. minimum thickness die-cast aluminum. The cabinet exterior and interior including shelves shall have a sandblasted, roughened, or chemically etched finish that reduces gloss, reflection, and glare. The cabinet must be provided with 2 shelves for supporting the control equipment, and shelves must be at least 10 inches in depth.

Provisions provided for positioning shelves to within 12 inches of the bottom of the cabinet and to within 6 inches of the top of the cabinet in increments not more than 1/2 inch must be provided. A pull out drawer/shelf is to be provided mounted below the lower shelf for the P Cabinets.

c. Receptacle

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The cabinet shall contain one ~~duplex~~ quadplex convenience outlet and a lamp receptacle that is actuated and turns on when the door is open and goes off when the door is closed. The cabinet shall also contain an internal On/Off switch to override the lamp receptacle. The convenience outlet shall be duplex, three-prong, NEMA Type 5-15R grounding outlet in accordance with NEMA WD - 6, with ground-fault circuit interruption as defined by the NEC. These units shall be protected with a 15-ampere cartridge fuse wired ahead of the multi breakers. An additional outlet shall be provided in each cabinet and shall be a duplex, three-prong, NEMA Type 5-15R grounding outlet wired after the cabinet surge protection. This unit shall be protected with a 10-ampere cartridge fuse. The additional outlet in master cabinets shall be powered by the 10-ampere circuit breaker and through a separate power interrupt switch providing separate control of the master CU power supply.

922.04 Pedestrian Signal Components

(b) Pedestrian Push-Button

810 Pedestrian push-button assemblies shall meet the standards of the MUTCD and

Americans with Disabilities Act, ADA. Pedestrian push-button assemblies shall be vandal and weather resistant, be pressure activated with minimal movement, and cannot be stuck in a closed or constant call position. A red latching LED and audible tone shall be provided for confirmation of an actuation call. APS shall be a Polara 2-wire unit.

~~A type D certification in accordance with 916 shall be provided. Such~~ Any certification shall contain the contract number, manufacturer's name, model name, supplier's name, location or intersection name, and for a type APS pedestrian push button, the sound level measurement of the audible features of the device.

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922.07 Signal Support Assemblies

(d) Tether Bracket

960 The tether bracket shall attach to a 1/4 in. tether and prevent the bottom of the head from moving side-to-side on the tether. Where backplates are installed on the signal heads, the tether bracket shall be of the proper length for the backplate so that the cable is mounted below the bottom of the backplate to avoid interference with head alignment and damage to the backplate. If a 4-section head is mounted on the span, the the tether cable shall be mounted between the bottom two heads so that the tether wire is level with the bottom of the 3 or 5 section heads. No extensions on the 3 or 5-section heads shall be used in these installations to prevent excessive wear on the cable. Three bolts, nuts, and washers, shall be used to secure the tether bracket to a three-section or four-section signal head. A wire rope clamp in accordance with 922.10(e)4c, shall be used to secure the tether bracket to the tether. The tether bracket shall have predrilled 1/2 in. diameter holes. In lieu of the wire rope clamp and 1/2 in. diameter holes, a beveled tether plate that completely fills in the extruded portion of the tether bracket may be used to secure the tether bracket to the tether. A Crosby fastener should be used on the back side of the brackets to prevent wear on the tether cable. The tether bracket shall not extend more than 2 in. below the tether.