

## 805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS

*(Adopted 11-22-13)*

The Standard Specifications are revised as follows:

SECTION 805, AFTER LINE 30, INSERT AS FOLLOWS:

*Pedestrian push buttons shall be the type designated in the contract documents, APS or Non-APS.*

SECTION 805, AFTER LINE 216, INSERT AS FOLLOWS:

*When installing push buttons with accessible pedestrian signal, APS, features the Contractor shall verify that the audible tone is discernible from the mid-point of the crosswalk.*

SECTION 805, BEGIN LINE 735, DELETE AS FOLLOWS:

The cost of the push button, pedestrian actuated signal sign, any accessible pedestrian signal components ~~as shown on the plans~~, and all hardware required to complete the installation shall be included in the cost of pedestrian push button.

SECTION 922, BEGIN LINE 816, DELETE AND INSERT AS FOLLOWS:

**(b) Pedestrian Push-Button**

Pedestrian push-button assemblies shall ~~be ADA compliant~~ *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.*

*A type D certification in accordance with 916 shall be provided. Such 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.*

**1. Housing**

The pedestrian push-button housing shall be constructed of cast aluminum or stainless steel and powder coated yellow, and furnished with suitable mounting hardware.

**2. Latching LED**

The normal state of the LED shall be off. When the push-button is pressure activated, the LED shall be lighted and remain on until the beginning of the walk phase. The latching relay shall be mounted in the signal cabinet, controlling two pedestrian phases.

**3. Actuator**

The actuator shall be stainless steel with *a minimum diameter of 2 in. and a solid state electronic Piezo switch rated for a minimum of 20 million cycles with no moving plunger or moving electrical contacts. The operating voltage shall be 12-24V AC/DC. The actuator's nominal operating force shall be approximately 4 not exceed 5 lb.*

**4. Sign**

The pedestrian information sign shall be according to the *R10-3e* in accordance with the MUTCD, unless a different MUTCD sign code is indicated on the plans. ~~The legend on the sign shall either be all words or a combination of words and symbol to match the pedestrian signal.~~ The sign base shall be sheet aluminum in accordance with 919.01(b).

### **5. Accessible Pedestrian Push Buttons**

When accessible pedestrian signals, APS, are specified the push-button shall have audible and tactile features. The push-button shall activate both the Walk interval and the APS. The color of the actuator shall contrast visually with the housing or mounting. A standard manufacturer's warranty shall be provided.

#### **a. Audible Features**

The pedestrian push-button assembly shall include an audible indication of the Walk interval by either tone or voice and shall be audible from the near side of the associated crosswalk. If the tone for the Walk interval is the same as the locator tone of the push-button it shall have a faster repetition rate than the associated locator tone. The volume of the audible features shall have automatic volume adjustment based on the ambient noise levels. Audible features shall be at least 2 dB but no more than 5 dB louder than ambient sound up to a maximum volume of 89 dB measured at 36 in. from the device. Audible features may be integral to the pedestrian push-button assembly or through a separate speaker housing.

When push buttons are separated by 10 ft or more, the audible indication shall be a tone.

When push buttons are separated by less than 10 ft, the indication shall be a voice message. When voice messages are used, they shall include a clear message that the walk interval is in effect and shall indicate to which crossing it applies.

The pedestrian push button shall have an audible locator tone feature. The locator tone shall have a duration of 0.15 seconds or less and shall repeat at 1 second intervals.

#### **b. Tactile Features**

The push button assembly shall incorporate a raised arrow. The arrow shall be raised 0.03125 in. minimum and shall be 1.5 in. minimum in length. The arrow color shall contrast with the background. The push button shall vibrate to indicate that the walk interval is in effect.