(January 7, 2019)

Rapid Flashing Beacons

Rapid Flashing Beacon (RFB) indications shall comply with the dimensional, operational, and flash pattern requirements of Federal Highway Administration (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f; https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm). RFB systems shall be capable of providing, at a minimum, the following two-channel flashing patterns:

1. NEMA Standard 50-50:
   - Channel one is ON and channel two is OFF for 0.5 seconds.
   - Channel one is OFF and channel two is ON for 0.5 seconds.
   (Cycle repeats; the total flashing pattern cycle length is 1.00 second.)

2. RFB “WW+S” Pattern (IA-21 Condition 5b):
   - Channel one is ON and channel two is OFF for 0.05 seconds.
   - Both channels are OFF for 0.05 seconds.
   - Channel one is OFF and channel two is ON for 0.05 seconds.
   - Both channels are OFF for 0.05 seconds.
   - Channel one is ON and channel two is OFF for 0.05 seconds.
   - Both channels are OFF for 0.05 seconds.
   - Channel one is OFF and channel two is ON for 0.05 seconds.
   - Both channels are OFF for 0.05 seconds.
   - Both channels are ON for 0.05 seconds.
   - Both channels are OFF for 0.25 seconds.
   (Cycle repeats; the total flashing pattern cycle length is 0.80 seconds.)

The flashing pattern shall be user-selectable in the field.

RFB system pushbuttons shall include a locator tone, but shall not include tactile arrows, speech messages, or vibrotactile indications. RFB system pushbuttons may include speech message and vibrotactile functionality, provided these features can be deactivated. RFB system pushbuttons shall use a 9” x 12” R10-25 sign. The R10-25 sign may include integral yellow warning lights.