

Quality Standards

Pages 6K-93 – 6K-108

Quality Standards

Methods to determine whether the various traffic control devices are Acceptable, Marginal, or Unacceptable.



Quality Classifications and Requirements

- All TTC devices (except category 4 trailer mounted devices) used in work zones shall be crash worthy.

Yield on impact?



Evaluation Guide: Warning Signs Acceptable

- Message legible both day and night
- Sign face should be approximately perpendicular to the road and no more than 3" out-of-plumb for entire height of sign
- Back side free of reflective materials
- Sign is crashworthy

Examples of "Acceptable" warning signs



Evaluation Guide: Warning Signs Marginal

- Many surface abrasions
 - Only a few within individual letters of the message
- Some color fading evident
 - Still legible at night

Examples of "Marginal" warning signs



Evaluation Guide: Warning Signs Unacceptable

- Excessive asphalt splatter, cement slurry, or abrasions – throughout sign face
- Sign does not have the correct shape
- Message is illegible or defaced
- Noticeable color fading or loss of reflectivity
- Sign is not perpendicular to roadway or more than 3” per foot out-of-plumb for height of sign

Examples of "Unacceptable" warning signs



Evaluation Guide: Type A & B Channelizing Devices

Acceptable



Marginal



Unacceptable



6K-99 6K-100

Panel Evaluation

EVALUATION GUIDE: Type I, II, or III Barricade Panels or Vertical Panels

Acceptable

To be acceptable, the panel shall meet all of the following conditions:

- Panels are not deformed to an extent so as to decrease the panels target value.
- There may be several abrasions on the surface but very little loss of retroreflective sheeting.
- The orange is vivid and the stripes provide contrast.
- The Type III barricade has been fabricated according to the approved crashworthy requirements.



Marginal

The panel is considered marginal if it meets any of the following conditions:

- Panels are not deformed to an extent so as to decrease the panels target value.
- There are numerous surface abrasions through the panel surface.
- Some color fading is evident; however, it has no large areas of residue or missing retroreflective material.
- The Type III barricade has been fabricated according to the approved crashworthy requirements.



Unacceptable

A panel is considered unacceptable if it meets any of the following conditions:

- The surface is marred over a high percentage of the panel area.
- There is a noticeable loss of retroreflectivity and obvious color fading.
- Panels with asphalt splatter, cement slurry, and/or other residue or any combination of missing and covered retroreflective material.
- Barricades have bent or twisted legs, or deformation of the support assembly to the extent that the barricade panel is not reasonably parallel to the roadway surface.



EVALUATION GUIDE: Trailer-Mounted Electronic Traffic Control Devices

This includes devices such as Automated Flagger Assistance Devices (AFADs), Portable Traffic Signals, and Dynamic Speed Display Signs.

Acceptable

An electronic traffic control device is acceptable if it meets all of the following conditions:

- The device shall be operating correctly for its intended usage within allowable tolerances and with all fail-safes properly functioning.
- All lamps, LED displays, and signs are properly aligned for the intended driver's line of vision. Any operating lamp, LED display, or sign which is out of alignment shall be considered not functioning properly.
- One hundred percent (100%) of the LED pixels per character module are operating properly.
- One hundred percent (100%) of the lamps are operational.
- All lamps and LED displays dim properly.
- The signs meet or exceed the quality standards for acceptable "Warning Signs".
- The device's leveling stands shall be adjusted to properly plumb the device.
- The bottom of any overhead signal head shall be between 17 and 19 feet above the roadway surface.

Marginal

An electronic traffic control device is marginal if it meets the following conditions:

- At least ninety percent (90%) of the LED pixels per character module are operating properly.
- The signs meet the quality standards for marginal "Warning Signs".

Unacceptable

An electronic traffic control device is unacceptable if it meets any of the following conditions:

- The device is malfunctioning for any of its intended functions including but not limited to signal operations, radio communications, detection, or message display.
- Any of the lamps are burned out.
- Less than ninety percent (90%) of the LED pixels per character module are operating properly.
- The device is not properly aligned for the intended driver's line of vision.
- The lamps and LED displays are not dimming properly.
- The device is not within 3 inches of plumb for the height of the device (excluding an overhead signal head mast).
- The bottom of any overhead signal head is lower than 17 feet or higher than 19 feet above the roadway surface.