

Q&A from Signing Workshop

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Q *Is a vandalism sticker required on a sign? Where can I find town codes for labeling signs?*

Yes, Wisconsin Statute 86.192 requires vandalism stickers on all signs. Generally they are placed on the front of the sign. An identifier code should be placed on the back of the sign. Each town, city or village has a special five digit code based on the county where it is located. For example: 01-20 would be Adams County, Town of New Chester. You can see a list of all municipal codes by clicking on "CVT Index" at www.dot.wisconsin.gov/localgov/highways/gta.htm

Q *On wood sign posts, what are CCA and ACQ? Is it important?*

These abbreviations refer to the copper content of preservatives in the wood post. CCA is Chromated Copper Arsenate; ACQ is for Ammoniacal Copper Quat. ACQ posts have a high copper content (66%). This will quickly corrode a metal sign at the fastener contact, causing the sign to fall off the post in about 6-12 months. In CCA wood posts the copper content is 16% and does not corrode the signs. (See the article, "Wood preservative corrodes signs," in the Winter 2005 *CROSSROADS* for more information.)

If you have already installed ACQ posts, you can eliminate the contact by installing a plastic washer between the post and the sign at the bolt connection.

To determine which type you have in stock look for the ACQ or CCA label on the post end.

Q *I thought we weren't allowed to put street name signs on top of STOP signs?*

You are permitted to do this except at STOP signs on approaches to state highways, according to the MUTCD and Wisconsin Supplement (WMUTCD). It is allowed on STOP signs at

approaches to county highways if you obtain prior approval from the county (Section 2D.38 WMUTCD).

Q *How can I clean signs that have been hit by paint balls?*

While nothing will ultimately clean it 100%, a Mr. Clean eraser pad has been shown to work.

Q *Can I mount signs at a 6-foot mounting height?*

Yes, in a rural area. However, 5 feet, the minimum mounting height in a rural area, is better. It provides optimum breakaway characteristics and the best reflection of driver headlights and thus the best viewing angle.

Mounting height is measured vertically from the bottom of the sign to the edge of the roadway travel lane. It is not measured down the installed post to the ground below. If the post is located downslope, for example, you have to install the sign higher than 5' as measured along the post.

For areas where parked cars and pedestrians are present, the minimum mounting height is 7'. If there is a supplemental plaque under the main sign, you can use 1' less in the mounting height.



Q *If I store a sign, does that time count against how long it will last?*

No. Sign life is based on installation date as long as the sign was stored properly, away from sunlight or other weather effects. The date sticker should use the instal-

lation date. This question relates to FHWA's new minimum retroreflectivity standards which use sign life as a basis for determining when a sign needs to be replaced.

Q *Is a Stop Ahead sign required for a local road?*

Sometimes. On a rural county road approaching a state highway or a rural state highway approaching another state highway, a Stop Ahead sign is always required, regardless of sight distance.

For other situations, the answer depends on travel speed and driver sight lines. Stop Ahead warning signs are required if the STOP sign is not readily visible due to curves, hills, or other obstructions. The Wisconsin Supplement visibility chart (Section 2C.29, WMUTCD) provides minimum distances. For example: if the speed limit is 55 MPH the visibility needed is 495'. For 45 MPH it is 360' (see table).

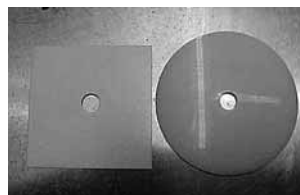
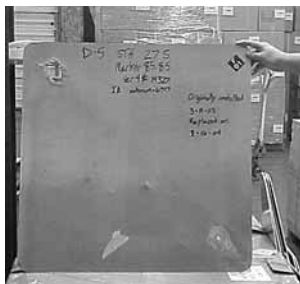
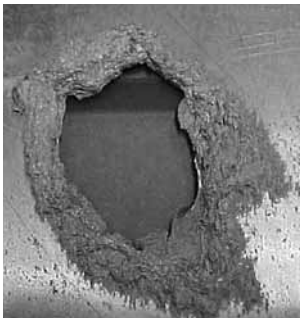
You also can install a Stop Ahead warning sign to improve safety even if there is good sight distance. For example: where the approach is facing east/west and the sun is a problem; or where trees in the background of a T intersection make the STOP sign hard to discern.

Minimum visibility distance to determine need for sign (not for placement)

Posted or 85th percentile speed	Minimum visibility distance
25 mph	155 ft
30 mph	200 ft
35 mph	250 ft
40 mph	305 ft
45 mph	360 ft
50 mph	425 ft
55 mph	495 ft
60 mph	570 ft
65 mph	645 ft

Source: *Signing for Local Roads*, No. 7, TIC.

This table is just to determine if a sign is needed. These are not sign placement distances. Sign placement distances are shown in the TIC bulletin No. 7, Signing for Local Roads, and Table 2C-4 of the WMUTCD.



Q How many children crossing a roadway at a particular location determines whether a school crossing sign is needed?

The MUTCD does not provide a threshold; rather it discusses having a school route plan to develop uniformity in the use of school area traffic controls. Factors to consider include:

- Availability of adequate sidewalks at the crossing
- Age levels of students

A school route plan will identify where children are crossing and will designate preferred locations where signs would encourage children to cross. The Wisconsin Safe Routes to School (SRTS) program has resources, training, and funds for community SRTS projects. (See "Wisconsin opens Safe Routes to School program" in the Winter 2007 *CROSSROADS*.)

Q Can delineators be yellow on a two lane road?

No. If delineators are used, the reflector color is white when located on the outside shoulder. This follows the pavement marking principles. On a two lane roadway edgelines, if used, are white; therefore, delineators must be white. Yellow separates opposing traffic—which is at the centerline of a two-lane road.

Q Is a YIELD sign required on the post of RR crossbucks?



By July 1, 2007, railroad companies are required by statute 192.29 (5)(b) to install a YIELD sign on all passive crossings (those without automatic signals

or automatic gate arms) if the passive crossing does not have a STOP sign. Keep in mind that an engineering study is required before installing a STOP sign at a passive RR crossing. STOP signs are not permitted at active RR crossings.

Q Is the T intersection warning sign allowed on an approach to a T intersection with a Stop sign?

Yes, the W2-4, T intersection warning sign is allowed in this situation. However, this does not negate the requirement for a Stop Ahead sign if there is not sufficient sight distance per the visibility chart in Section 2C.29 *WMUCTD*.



For more information, see *Signing for Local Roads*, TIC Bulletin No. 7.

Easier Web access to WisDOT reference docs

WISDOT has created a Roadway Standards home page on the Web to improve searching and access to its major references. Users no longer need a state-assigned login ID and password to view:

- Facilities Development Manual (FDM)
- Construction & Materials Manual (CMM)
- Standard Specifications for Highway and Structure Construction (Spec)
- Contract Management System Guidance (CMS)
- Guide to Utility Coordination (added in early Dec. 2006)

"We want users to be working with the most accurate and up-to-date information, so we're trying to promote using the online versions of these documents," says David Castleberg, a Supervisor with WisDOT's Bureau of Project Development.

Paper copies of the manuals, which are hundreds of pages, along with updates, supplements, and the like, will no longer be distributed automatically. Instead, e-mails will announce updates and changes. Individuals who prefer hard copy can download and print what they need.

A new feature allows users to search for a topic in one or more documents at the same time. Live links in the text make it easier to jump between related sections within the same document or across documents. These cross references let the user more easily find and review the complete subject topic—design through construction.

Search capabilities will keep improving. "It's a dynamic process," says Castleberg. "As we do updates we'll put more electronic tags into the documents."

"We are excited to offer a one-stop-shop for critical documents," says Castleberg. "It helps when local officials and contractors and consultants all have the same access and the most current versions. Everybody is playing by the same set of rules every time. That makes it a lot easier for a contractor to know how to bid."

To access these electronic documents go to <http://roadwaystandards.dot.wi.gov/standards/>.

(Note that some hypertext links within the documents go to sources that may still require a login ID and password.)

To get e-mail update notifications sign up on the *Roadway Standards* page. Click on "Subscribe to e-mail update service" and follow the instructions.

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If you have questions, send an email to roadwaystandards@dot.state.wi.us.