



Montana
Department
of Transportation

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Subject: Policy on Sign Sheeting Materials for Permanent Signs

To: All offices

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INTRODUCTION

Traffic signs provide important information to drivers at all times, both day and night. To be effective, their visibility must be maintained. The MUTCD requires that agencies maintain traffic signs to a minimum level of retroreflectivity.

POLICY

The intent of this policy is to ensure that the minimum level of retro-reflectivity can be maintained for a number of years (approximately 10-15 years) before replacement of the sign face is required.

TERMS AND DEFINITIONS

Night Visibility – Is defined for use in this policy as providing the driver a sign visible with the same shape, color, and message at night as it would exist during daylight conditions.

PROCEDURES

Night visibility of traffic control signs shall be provided in compliance with the requirement of the MUTCD and through the use of reflectorized sign sheeting material that has a smooth, sealed outer surface.

Illumination is only an option when the results of an engineering investigation show that reflectorization will not provide that night visibility effectively.

General Traffic Control Sign Sheeting Materials

For purposes of this section, the sign types will be divided into two categories: regulatory/warning signs and guide signs. The minimum type of sign sheeting material to be used is as follows:

The portion of a regulatory/warning sign requiring reflective material for night visibility shall at a minimum be provided through the use of high intensity prismatic sheeting Type IV – ASTM D4956-04.

- 1) Reflective material for guide signs for night visibility shall be provided as follows:
 - a) Ground mounted guide signs shall at a minimum be the high intensity prismatic sheeting Type IV – ASTM D4956-04 for the legend, background, and border.
 - b) Overhead mounted guide signs shall at a minimum be the high intensity prismatic sheeting Type IV – ASTM D4956-04 for the background and Type IX – ASTM D4956-04 for the legends and border.

If as the result of an engineering investigation environmental conditions are such that the standard reflective sheeting normally dictated is rendered ineffective, a sheeting material of higher reflectivity or illumination may be substituted. A primary example of this type of environmental interference would be excessive background lighting or excessive competition with adjacent commercial signs.

School Zone Signing

Reflective material for school zone signing shall at a minimum be the high intensity prismatic sheeting Type IX fluorescent yellow/green for the background. Fluorescent yellow/green is reserved for school zone signing and should not be used at other pedestrian crossing locations or on other warning signs.

Minimum Tolerance Levels for Night Visibility

It is the intent of this policy to provide night visibility of traffic control signs that is in compliance with the Manual on Uniform Traffic Control Devices, which includes minimum functional levels of retroreflectivity of sign legend and background.

When the functional life of the sign sheeting material (legend or background) reaches a point where the level of retroreflectivity falls below the values outlined in those tables then the sign should be replaced.