

# ALABAMA DEPARTMENT OF TRANSPORTATION

DATE: August 7, 2012

Special Provision No. 12-0220

EFFECTIVE DATE: November 1, 2012

SUBJECT: Roadway Signs.

Alabama Standard Specifications, 2012 Edition, Section 710 and Section 880 shall be amended as follows:

## SECTION 710 ROADWAY SIGNS

### 710.01 Description

*This Article (710.01) shall be replaced by the following:*

### 710.01 Description

This Section shall cover the work of furnishing and erecting roadway signs of the various types, sizes, wording, marking, etc., detailed by the plans in accordance with the latest edition of the MUTCD except as modified herein or by the plan details. The type and number of signs, sign supports, backing frames when required, foundations and reflectorization to be furnished and installed shall be as detailed on the plans. Concrete foundations, when required, shall be constructed as shown on the plans or as directed by the Engineer.

The items of work for Roadway Signs will indicate whether the sign is of a reflectorized or non-reflectorized type, and the kind of backing material.

Sheeting used in the fabrication of sign faces shall be one of the following types unless required otherwise on the plans or in the proposal:

TYPES AND DESCRIPTIONS OF SIGN SHEETING	
Type I	Medium-intensity retroreflective sheeting, "engineering grade"
Type I-N	Non-reflective sheeting
Type II	Medium-high-intensity retroreflective sheeting, "super engineering grade"
Type III	High-intensity retroreflective sheeting
Type IV	High-intensity retroreflective sheeting, "microprismatic"
Type V	Super-high-intensity retroreflective sheeting, "microprismatic"
Type VI	Elastomeric high-intensity retroreflective sheeting without adhesive, "microprismatic"
Type VII	Sheeting previously classified as Type VII has been reclassified as Type VIII. The designation of Type VII has been discontinued. (ASTM D 4956-09)
Type VIII	Super-high-intensity retroreflective sheeting (ASTM D 4956 Table 2) , "microprismatic"
Type IX	Very-high-intensity retroreflective sheeting, "microprismatic"
Type X	Sheeting previously classified as Type X has been reclassified as Type VIII. The designation of Type X has been discontinued. (ASTM D 4956-09)
Type XI	Super-high-intensity unmetalized cube corner microprismatic retroreflective sheeting. (ASTM D 4956-09, Table 10)

CLASSES AND DESCRIPTIONS OF SIGNS	
Class 1	Non-reflectorized Background with Type III Reflectorized Demountable Copy
Class 1A	Non-reflectorized Background with Non-Reflectorized Demountable Copy
Class 2	Type III or IV Reflectorized Sheeting Background with the same Type Reflectorized Sheeting Demountable or Cut-Out Copy
Class 2A	Type III or IV Reflectorized Sheeting Background with Non-Reflectorized Demountable or Cut-Out Copy. For Multiple Extruded Panels, Type XI Reflectorized Sheeting Background with Digital Printing is also allowable.
Class 3	Non-reflectorized Background with Screen Copy
Class 4	Type III or IV Reflectorized Background with Screen Copy
Class 5	Type IV, or VIII Reflectorized Sheeting Background with Screen Copy
Class 6	Type III or IV Reflectorized Sheeting Background with Type VIII or IX Reflectorized Sheeting Demountable or Cut-out Copy. For Multiple Extruded Panels, Type XI Reflectorized Sheeting Background with Digital Printing is also allowable.
Class 7	Type IV, VIII, or IX Reflectorized Sheeting Background with Screen Copy
Class 8	Type VIII or IX Reflectorized Sheeting Background with Screen Copy

When the Contractor has the choice of selecting the sheeting Type within a respective Class, the mixing of different sheeting types on signs on the same project will not be allowed unless shown otherwise on the plans or in the proposal.

In addition to the Classes noted above, signs will be designated by the method of fabrication as follows:

Flat Panel.

A sign face which can be fabricated from a single sheet of material normally not in excess of 4 feet {1200 mm} in width.

Multiple Flat Panel.

A sign face which because of size can not be fabricated from a single sheet of material. These panel sections shall be fabricated from sheets not less than 4 feet {1200 mm} in width, except that only one sheet for any one sign may be cut to less than 4 feet {1200 mm} in width to fabricate signs which are not multiples of 4 feet {1200 mm} in width. Multiple flat panel sign sections shall run from top edge to bottom edge of sign face without horizontal joints, except that signs greater than 11 feet {3.4 m} in height may have a horizontal joint but no sign shall have more than one horizontal joint.

The use of material sheets of greater width than the minimum 4 feet {1200 mm} noted to form sign panels will be acceptable; however, the backing, support, etc. must conform to the plan requirements for this classification of panel.

All panel joints shall be provided with backing strips firmly affixed to the sign to keep the panel sections in proper alignment as detailed on the plans.

Multiple Extruded Panels

Multiple panel signs may be made of extruded sections. All extruded sections shall be 12 inches {300 mm} wide mounted horizontally and shall have no vertical joints. All panels shall be flat and straight. Multiple extruded panel signs shall be limited to Class 6 and Class 2A signs. Exceptions will be made to allow 6 inch {150 mm} wide extruded sections in cases where the height of a sign or exit panel dictates. There shall not be more than one 6 inch {150 mm} wide panel allowed per individual sign or exit panel.

Aluminum Laminated Panels.

These sign face panels shall consist of sheet aluminum laminated to a honeycomb core, sealed completely around the perimeter with an extruded aluminum frame to form a surface of the length, width and depth required.

Aluminum Louvered Panels.

These sign face panels shall consist of aluminum louvers assembled in such a manner as to provide a rigid sign panel which will have a wind loading normal to the face of the sign of at least 50 percent less than that of a solid panel of the same size and yet provide an opaque background when viewed from an angle of 10° or less below the horizontal line of sight.

**710.05 Basis of Payment.**

(b) PAYMENT WILL BE MADE UNDER ITEM NO.:

***Subarticle 710.05(b) shall be replaced by the following:***

(b) PAYMENT WILL BE MADE UNDER ITEM NO.:

710-A Class \*, \*\* Sign Panels \*\*\* - per square foot {square meter}

710-B Roadway Sign Post (Description & Size) - per linear foot {meter}

710-C Removal of Existing Roadway Signs - per lump sum

\* Appropriate Class

\*\* Aluminum Flat

Steel Flat

Aluminum Multiple Flat

Aluminum Multiple Extruded

Steel Multiple Flat

Aluminum Laminated

Aluminum Louvered

\*\*\* Approximate thickness of panel material desired.

## SECTION 880 SIGN MATERIALS

**880.04 Sign Supports.**

(a) GROUND MOUNTED SIGN SUPPORTS.

2. STEEL POSTS.

d. Post Finish.

***Subitem 880.04(a)2d shall be replaced with the following:***

d. Post Finish.

Standard posts shall be hot dipped zinc galvanized after fabrication in accordance with ASTM A 123 for beam shape and ASTM A 53 for tubular shape.

Light weight {mass} or bendaway posts shall be zinc galvanized in accordance with the following:

"U" Channel Section - ASTM A 123 after fabrication.

Tubular Section - ASTM A 653, Grade G90 or better. An alternate coating may be an in-line hot dip galvanized zinc coating per **ASTM B 6**, followed by a chromate conversion coating and cross-linked polyurethane acrylic exterior coating, with the inside surface given a double in-line application of a full zinc-based organic coating.