



*Florida Department of Transportation*

RON DESANTIS  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.  
SECRETARY

October 5, 2023

Khoa Nguyen  
Director, Office of Technical Services  
Federal Highway Administration  
3500 Financial Plaza, Suite 400  
Tallahassee, Florida 32312

Re: State Specifications Office  
Section: 995  
Proposed Specification: **9951401 Traffic Control Signal and Device Materials.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Dana Knox to convert the dimensions of sign panels to width rather than length format to align with the MUTCD.

Please review and transmit your comments, if any, within two weeks (10 business days). Comments should be sent via email [daniel.strickland@dot.state.fl.us](mailto:daniel.strickland@dot.state.fl.us).

If you have any questions relating to this specification change, please call me at (850) 414-4130.

Sincerely,

Signature on File

Daniel Strickland, P.E.  
State Specifications Engineer

DS/dh

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

**TRAFFIC CONTROL SIGNAL AND DEVICE MATERIALS.**  
**(REV 7-19-23)**

SUBARTICLE 995-14.1 is deleted and the following substituted:

**995-14 Internally Illuminated Signs.**

**995-14.1 General:** Marking must be accomplished by permanently affixing an indelible label, identification plate, dot peen type stamp, casting, or metal-marking. Signs must not exceed 9 feet in length-width or be larger than 18.0 square feet or less in area, and must not weigh more than 144 pounds. Internally illuminated sign assemblies must be listed to the requirements of UL48 listed. Light emitting diode (LED) retrofit kits must be listed on the APL.

**995-14.2 Housing:** The sign housing must be constructed of continuous 5052 or 6063-T5 aluminum. All housing, corners, and door seams must be continuously welded. All exterior surfaces of the assembly must be powder-coat painted in accordance with Military Standard MIL-PRF-24712A or AAMA-2603-02. Finish must meet the requirements of ASTM D3359, ASTM D3363, and ASTM D522. Sign housings with any interior airspace must consist of a box type enclosure and separate hinged door assembly. The sign housing must include provisions to prevent water from entering the sign housing. Drain holes in the sign larger than 0.125 inch must be covered by a screen.

Signs must have removable sign faces. The sign face must be secured by a method that holds the sign face securely in place. Slide-in grooves are allowed to secure the sign face if the sign is edge lit.

The sign face must be a translucent lens constructed of 0.125-inch thick high impact strength polycarbonate or acrylic meeting UL48. Background must be translucent retroreflective sheeting coated with a transparent, pressure-sensitive adhesive film. Color must meet the criteria as detailed in Section 994. Retroreflective sheeting must meet the requirements of Section 994 and be listed on the APL.

If a door opens upward, it must have a bracket on each side to secure the door in the open position during maintenance. Doors must be permanently and continuously sealed with a foam gasket listed to UL157 to prevent the entry of water into the sign housing. Each door must be secured from opening by stainless steel rotary action draw latches as follows:

Signs of 5 feet up to 7 feet in length-width must have a minimum of three latches for each sign door.

Signs over 7 feet up to 9 feet in length-width must have a minimum of four latches for each door.

The rotary action draw latch must be captive and will not become detached or allow the door to open when the sign housing is torqued or twisted

The sign assembly must be designed and constructed to withstand 150 mph wind loads meeting the requirements of the Department's Structures Manual.

SUBARTICLE 995-16.2.1 is deleted and the following substituted:

**995-16.2.1 Sign Housing for Walk-In DMS:** Exterior seams and joints, except the finish coated face pieces, must be continuously welded using an inert gas welding method.

Limit the number of seams on the top of the housing to a maximum of three. Stitch weld the exterior housing panel material to the internal structural members to form a unitized structure.

The exterior mounting assemblies must be fabricated from aluminum alloy 6061-T6 extrusions a minimum of 0.1875 inch thick. Include a minimum of three 6061-T6 structural aluminum Z members on the rear of the sign housing in accordance with the Standard Plans. The structural aluminum Z members must run parallel to the top and bottom of the sign housing and are each a single piece of material that spans the full length-width of the sign. The structural aluminum Z members must be attached to the internal framework of the sign.

The hoist points must be attached directly to structural frame members by the sign manufacturer.

Housing access must be provided through an access door that meets the requirements of NEMA TS 4-2016, Section 3.2.8.1. The access door must include a keyed tumbler lock and a door handle with a hasp for a padlock. The door must include a closed-cell neoprene gasket and stainless steel hinges.

The sign housing must meet the requirements of NEMA TS 4-2016, Section 3.2.8.3 for service lighting. If incandescent lamps are provided, they must be fully enclosed in heavy-duty shatterproof, protective fixtures. The incandescent fixtures must include aluminum housing and base, a porcelain socket, and clear glass inner cover. All removable components must be secured with set screws. If fluorescent lamps are provided, they must be fitted with shatter proof protective guards.

The sign housing must include emergency lighting that automatically illuminates the interior in the event of a power outage. Emergency lighting must be capable of operation without power for at least 90 minutes.

**995-16.2.1.1 Walk-In DMS Work Area:** The walk-in DMS must have a work area that meets the requirements of NEMA TS 4-2016, Section 3.2.8.2. All edges of the walkway are finished to eliminate sharp edges or protrusions.

SUBARTICLE 995-19.3 is deleted and the following substituted:

**995-19.3 Vertical Panel Messages:** Fabricate vertical panel messages in accordance with Section 994. Vertical panels of 98 inches wide-in width x 278 inches tall-in height or 12 inches x 36 inches are acceptable. See Standard Plans Section 700-102.

**TRAFFIC CONTROL SIGNAL AND DEVICE MATERIALS.****(REV 7-19-23)**

SUBARTICLE 995-14.1 is deleted and the following substituted:

**995-14 Internally Illuminated Signs.**

**995-14.1 General:** Marking must be accomplished by permanently affixing an indelible label, identification plate, dot peen type stamp, casting, or metal-marking. Signs must not exceed 9 feet in width or be larger than 18.0 square feet or less in area, and must not weigh more than 144 pounds. Internally illuminated sign assemblies must be listed to the requirements of UL48 listed. Light emitting diode (LED) retrofit kits must be listed on the APL.

**995-14.2 Housing:** The sign housing must be constructed of continuous 5052 or 6063-T5 aluminum. All housing, corners, and door seams must be continuously welded. All exterior surfaces of the assembly must be powder-coat painted in accordance with Military Standard MIL-PRF-24712A or AAMA-2603-02. Finish must meet the requirements of ASTM D3359, ASTM D3363, and ASTM D522. Sign housings with any interior airspace must consist of a box type enclosure and separate hinged door assembly. The sign housing must include provisions to prevent water from entering the sign housing. Drain holes in the sign larger than 0.125 inch must be covered by a screen.

Signs must have removable sign faces. The sign face must be secured by a method that holds the sign face securely in place. Slide-in grooves are allowed to secure the sign face if the sign is edge lit.

The sign face must be a translucent lens constructed of 0.125-inch thick high impact strength polycarbonate or acrylic meeting UL48. Background must be translucent retroreflective sheeting coated with a transparent, pressure-sensitive adhesive film. Color must meet the criteria as detailed in Section 994. Retroreflective sheeting must meet the requirements of Section 994 and be listed on the APL.

If a door opens upward, it must have a bracket on each side to secure the door in the open position during maintenance. Doors must be permanently and continuously sealed with a foam gasket listed to UL157 to prevent the entry of water into the sign housing. Each door must be secured from opening by stainless steel rotary action draw latches as follows:

Signs of 5 feet up to 7 feet in width must have a minimum of three latches for each sign door.

Signs over 7 feet up to 9 feet in width must have a minimum of four latches for each door.

The rotary action draw latch must be captive and will not become detached or allow the door to open when the sign housing is torqued or twisted

The sign assembly must be designed and constructed to withstand 150 mph wind loads meeting the requirements of the Department's Structures Manual.

SUBARTICLE 995-16.2.1 is deleted and the following substituted:

**995-16.2.1 Sign Housing for Walk-In DMS:** Exterior seams and joints, except the finish coated face pieces, must be continuously welded using an inert gas welding method. Limit the number of seams on the top of the housing to a maximum of three. Stitch weld the exterior housing panel material to the internal structural members to form a unitized structure.

The exterior mounting assemblies must be fabricated from aluminum alloy 6061-T6 extrusions a minimum of 0.1875 inch thick. Include a minimum of three 6061-T6 structural aluminum Z members on the rear of the sign housing in accordance with the Standard Plans. The structural aluminum Z members must run parallel to the top and bottom of the sign housing and are each a single piece of material that spans the full width of the sign. The structural aluminum Z members must be attached to the internal framework of the sign.

The hoist points must be attached directly to structural frame members by the sign manufacturer.

Housing access must be provided through an access door that meets the requirements of NEMA TS 4-2016, Section 3.2.8.1. The access door must include a keyed tumbler lock and a door handle with a hasp for a padlock. The door must include a closed-cell neoprene gasket and stainless steel hinges.

The sign housing must meet the requirements of NEMA TS 4-2016, Section 3.2.8.3 for service lighting. If incandescent lamps are provided, they must be fully enclosed in heavy-duty shatterproof, protective fixtures. The incandescent fixtures must include aluminum housing and base, a porcelain socket, and clear glass inner cover. All removable components must be secured with set screws. If fluorescent lamps are provided, they must be fitted with shatter proof protective guards.

The sign housing must include emergency lighting that automatically illuminates the interior in the event of a power outage. Emergency lighting must be capable of operation without power for at least 90 minutes.

**995-16.2.1.1 Walk-In DMS Work Area:** The walk-in DMS must have a work area that meets the requirements of NEMA TS 4-2016, Section 3.2.8.2. All edges of the walkway are finished to eliminate sharp edges or protrusions.

SUBARTICLE 995-19.3 is deleted and the following substituted:

**995-19.3 Vertical Panel Messages:** Fabricate vertical panel messages in accordance with Section 994. Vertical panels of 9 inches in width x 27 inches in height or 12 inches x 36 inches are acceptable. See Standard Plans Section 700-102.