

ORINATION FORM

Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date: Specification Section:

Originator: Articles/Subarticles:

Telephone:

email:

Will the proposed revision involve Design Standard Index changes? Yes No

Roadway Design staff contacted (name):

Structures Design staff contacted (name):

Will the proposed revision involve PPM changes? Yes No

Roadway Design staff contacted (name):

Will the proposed revision involve CPAM changes? Yes No

Construction staff contacted (name):

Will the proposed revision involve Pay Item changes? Yes No

Estimates staff contacted (name):

Will the proposed revision involve SDG changes? Yes No

Structures staff contacted (name):

Will the proposed revision involve APL changes? Yes No

Product Evaluation staff contacted (name):

Will the proposed revision involve Material Manual changes? Yes No

State Materials Office staff contacted (name):

Will this revision necessitate any of the following:

Design Bulletin Construction Bulletin Estimates Bulletin Materials Bulletin

Are all references to external publications current? Yes No

If not, what references need to be updated? (Please include changes in the redline document.)

Why does the existing language need to be changed?

Summary of the changes:

Are these changes applicable to all Department jobs? Yes No

If not, what are the restrictions?

Contact the State Specifications Office for assistance in completing this form.

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M E M O R A N D U M

DATE: September 15, 2016

TO: Specification Review Distribution List

FROM: Dan Hurtado, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **5270000 Detectable Warnings.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Dean Perkins of the State Production Support Office to modify the language to include installation acceptance criteria.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at

<http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx> .

Comments received after **October 13, 2016**, may not be considered. Your input is encouraged.

DH/dt

Attachment

DETECTABLE WARNINGS.

(REV ~~8-31-16~~9-8-16)

SECTION 527 is deleted and the following substituted:

**SECTION 527
DETECTABLE WARNINGS**

527-1 Description.

Furnish and install detectable warnings on newly constructed and/or existing concrete or asphalt walking surfaces (sidewalk curb ramps, sidewalks, shared use paths, etc.) constructed in accordance with the Design Standards, Index No. 304.

527-2 Materials.

527-2.1 Detectable Warnings: Provide detectable warnings in accordance with Section 705 of the Americans with Disabilities Act (ADA) Standards for Transportation Facilities, ~~Section 705~~. Use detectable warnings consisting of materials intended for exterior use subject to routine pedestrian traffic and occasional vehicular traffic. Use detectable warnings with size and pattern shown in the Plans comprised of truncated domes aligned in parallel rows in accordance with the Design Standards, Index No. 304. Do not use detectable warnings with a diagonal pattern.

527-2.1.1 Preformed Materials: Use detectable warnings consisting of weather-resistant tiles or pavers that are cast into concrete, ~~or~~ tiles or mats that are surface-applied to concrete or asphalt surfaces with adhesives and mechanical fasteners, or torch-applied preformed thermoplastic.

527-2.1.2 Field-Formed Materials: Use detectable warnings applied as a secondary application to the substrate.

527-2.2 Material Properties: Provide detectable warnings that meet the following minimum material property requirements when tested in accordance with the following:

PROPERTY	STANDARD	TEST VALUE
Slip Resistance	FM 3-C1028	Dry Coefficient of Friction – 0.8 min. Wet Coefficient of Friction – 0.65 min. (include recessed areas between truncated domes)
Wear Resistance	FM 5-594	Average Volume Loss: no more than 0.06 cm ³
Water Absorption*	ASTM D570	Not to exceed 5%.
Adhesion/Bond Strength**	FM 5-589	150 psi min. tensile adhesion strength
Non-Hazardous Classification	Submit Material Safety Data Sheet (SDS)	Non-Hazardous, per RCRA Subtitle C

* Applies only to plastic materials.

** Applies only to surface-applied materials.

527-2.3 Color/Contrast: Use safety yellow, brick red or black colored detectable warnings on concrete walking surfaces. Use safety yellow colored detectable warnings on asphalt walking surfaces. Acceptable detectable warnings shall meet the following criteria for a duration of three years.

COLOR	LIGHT REFLECTANCE VALUES (LRV) CAP Y*
Safety Yellow	25 – 45
Brick Red	5 – 15
Black	0 – 5

*When measured with a spectrophotometer

527-2.4 Approved Product List: Methods or products used to form detectable warnings in wet concrete will not be permitted. Use detectable warnings listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of products for inclusion on the APL shall submit an application in accordance with Section 6 and include certified test reports from an independent lab showing the product meets the requirements of this Section and the [Design Standards, Index No. 304 Acceptance Criteria](#) and manufacturer's drawings, specifications and procedures for materials and installation, including touch-up and repair.

527-3 Installation Procedures.

527-3.1 Surface Preparation and Installation: Prepare the surface in accordance with the manufacturer's recommendations. Use only products and materials appropriate for the surface on which they will be applied. Install in accordance with the manufacturer's instructions, using materials and equipment recommended and approved by the manufacturer. For surface-applied tiles or mats, use adhesives applied over the entire surface and mechanical fasteners.

527-4 Acceptance.

The Engineer will base acceptance of installed detectable warnings on determining the material, installation, and the following requirements of this Section have been met.

1. Color and texture is complete and uniform.
2. 90% of the individual truncated domes are in accordance with Section 705 of the ADA Standards for Transportation Facilities.
3. No more than four non-compliant domes are located in any one square foot.
4. Non-compliant domes are not located adjacent to other non-compliant domes.

527-4~~5~~ Method of Measurement.

Detectable warnings will be paid by plan quantity, per square foot, furnished, installed and accepted.

527-5~~6~~ Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, including all labor, surface preparation, materials and incidentals necessary to complete the work

Payment will be made under:

Item No. 527- 2- Detectable Warnings– square foot.