



Florida Department of Transportation

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GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

September 11, 2023

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

Re: State Specifications Office
Section: 955
Proposed Specification: **9550100 Timber Treatment (Including Treating Materials).**

Dear Mr. Nguyen:

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

The changes are proposed by Timothy McCullough to remove oversight by the Department for timber production and treatment.

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.

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

Sincerely,

Daniel Strickland, P.E.
State Specifications Engineer

DS/jb
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

TIMBER TREATMENT (INCLUDING TREATING MATERIALS)
(REV 5-5-23)

SECTION 955 is deleted and the following substituted:

955-1 General.

The work specified in this Section is the treating of structural timber, timber piling and timber posts, bracing and railing. The method of treatment and determination of assay results for all such timber materials shall be in accordance with American Wood Protection Association (AWPA) Use Category System (UCS) - U1, with the exceptions and additions as specified herein. ~~Use approved producers listed on the Department's Production Facility Listing for timber components located in <https://mac.fdot.gov/smreports>. Producers seeking inclusion shall meet the requirements of Section 105.~~ All timber products manufactured for incorporation into the work shall be produced by a producer/treater approved through one of the following third-party audit programs:

1. Southern Pine Inspection Bureau (SPIB)
2. Timber Products (TPI)

955-2 Preservative.

955-2.1 Guardrail Post, Fence Post, Bracing and Railing on Pedestrian Bridges, Buildings, and Rest Areas in Above Ground, Ground Contact, Fresh Water Immersion Applications (Pedestrian Use): Provide guardrail post, fence post, bracing and railing in accordance with Table 955-1. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Table 955-1				
Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing, & Railing	Southern Yellow Pine	UC4A	Micronized Copper Azole (MCA)	$\geq 2.4 \text{ kg/m}^3$ or $\geq 0.15 \text{ pcf}$
			Copper Azole Type C (CA-C)	
			Copper Azole Type B (CA-B)	$\geq 3.3 \text{ kg/m}^3$ or $\geq 0.21 \text{ pcf}$
			Alkaline Copper Quat Type A, (ACQ-A)	$\geq 6.4 \text{ kg/m}^3$ or $\geq 0.40 \text{ pcf}$
			Alkaline Copper Quat Type B, (ACQ-B)	
			Alkaline Copper Quat Type C, (ACQ-C)	
			Alkaline Copper Quat Type D, (ACQ-D)	

955-2.2 Guardrail Posts, Fence Posts, Bracing and Sheet Piling in Above Ground, Ground Contact or Fresh Water Immersion Applications (Non-Pedestrian Use): Provide guardrail post, fence post, bracing and sheet piling in accordance with Table 955-2. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing	Southern Yellow Pine	UC4A	MCA	$\geq 2.4 \text{ kg/m}^3$ or $\geq 0.15 \text{ pcf}$
			CA-C	
			CA-B	$\geq 3.3 \text{ kg/m}^3$ or $\geq 0.21 \text{ pcf}$
			Ammoniacal Copper Zinc Arsenate (ACZA)	$\geq 6.4 \text{ kg/m}^3$ or $\geq 0.40 \text{ pcf}$
			Chromated Copper Arsenate Type C (CCA)	
ACQ-A ACQ-B ACQ-C ACQ-D				
Piling	Cypress		None	N/A
	Southern Yellow Pine	UC4B UC4C	ACZA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
			CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
	Pacific Coast Douglas Fir		ACZA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$

955-2.3 Guardrail Post, Fence Post, Bracing and Sheet Piling for Salt and Brackish Water Applications (Non-Pedestrian): Provide guardrail post, fence post, bracing and sheet piling in accordance with this section and Table 955-3. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing	Southern Yellow Pine	UC4C	CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
Piling	Cypress	UC5C	None	N/A
	Southern Yellow Pine		CCA	Zone 1 (Outer): $\geq 40 \text{ kg/m}^3$ or $\geq 2.50 \text{ pcf}$ Zone 2 (Inner): $\geq 24 \text{ kg/m}^3$ or $\geq 1.50 \text{ pcf}$
	Pacific Coast Douglas Fir		ACZA	40 kg/m^3 or $\geq 2.50 \text{ pcf}$

955-2.4 Structural Timber: Provide structural timber in accordance with this section and Table 955-4. Approved producers should provide a certification showing the treatment and assay results with every shipment.

Table 955-4				
Product	Type / Species	Category	Treatment	Assay Results
Boards, Dimensional, Timber	Southern Yellow Pine	UC4B	CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$

955-3 Handling Waterborne Preservative Treated Piling.

In handling of piles that have been treated with chromated copper arsenate (CCA) or ammoniacal copper zinc arsenate (ACZA), cable slings shall be used. Mechanical grabbers or pointed tools shall not be permitted. Rough or careless handling shall be avoided at all times.

955-4 Identification of Treating Plants for Round Piling.

The treating plant shall brand, or place a distinctive permanent mark, on each round pile, approximately 6 feet from the butt end, such that the plant responsible for the treatment can be readily determined at any time during the service life of the piling.

TIMBER TREATMENT (INCLUDING TREATING MATERIALS)
(REV 5-5-23)

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955-1 General.

The work specified in this Section is the treating of structural timber, timber piling and timber posts, bracing and railing. The method of treatment and determination of assay results for all such timber materials shall be in accordance with American Wood Protection Association (AWPA) Use Category System (UCS) - U1, with the exceptions and additions as specified herein. All timber products manufactured for incorporation into the work shall be produced by a producer/treater approved through one of the following third-party audit programs:

1. Southern Pine Inspection Bureau (SPIB)
2. Timber Products (TPI)

955-2 Preservative.

955-2.1 Guardrail Post, Fence Post, Bracing and Railing on Pedestrian Bridges, Buildings, and Rest Areas in Above Ground, Ground Contact, Fresh Water Immersion Applications (Pedestrian Use): Provide guardrail post, fence post, bracing and railing in accordance with Table 955-1. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Table 955-1				
Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing, & Railing	Southern Yellow Pine	UC4A	Micronized Copper Azole (MCA)	$\geq 2.4 \text{ kg/m}^3$ or $\geq 0.15 \text{ pcf}$
			Copper Azole Type C (CA-C)	
			Copper Azole Type B (CA-B)	$\geq 3.3 \text{ kg/m}^3$ or $\geq 0.21 \text{ pcf}$
			Alkaline Copper Quat Type A, (ACQ-A)	$\geq 6.4 \text{ kg/m}^3$ or $\geq 0.40 \text{ pcf}$
			Alkaline Copper Quat Type B, (ACQ-B)	
			Alkaline Copper Quat Type C, (ACQ-C)	
			Alkaline Copper Quat Type D, (ACQ-D)	

955-2.2 Guardrail Posts, Fence Posts, Bracing and Sheet Piling in Above Ground, Ground Contact or Fresh Water Immersion Applications (Non-Pedestrian Use): Provide guardrail post, fence post, bracing and sheet piling in accordance with Table 955-2. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Table 955-2				
Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing	Southern Yellow Pine	UC4A	MCA	$\geq 2.4 \text{ kg/m}^3$ or $\geq 0.15 \text{ pcf}$
			CA-C	
			CA-B	$\geq 3.3 \text{ kg/m}^3$ or $\geq 0.21 \text{ pcf}$
			Ammoniacal Copper Zinc Arsenate (ACZA)	$\geq 6.4 \text{ kg/m}^3$ or $\geq 0.40 \text{ pcf}$
			Chromated Copper Arsenate Type C (CCA)	
ACQ-A ACQ-B ACQ-C ACQ-D				
Piling	Cypress		None	N/A
	Southern Yellow Pine	UC4B UC4C	ACZA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
			CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
	Pacific Coast Douglas Fir		ACZA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$

955-2.3 Guardrail Post, Fence Post, Bracing and Sheet Piling for Salt and Brackish Water Applications (Non-Pedestrian): Provide guardrail post, fence post, bracing and sheet piling in accordance with this section and Table 955-3. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Table 955-3				
Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing	Southern Yellow Pine	UC4C	CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$
Piling	Cypress	UC5C	None	N/A
	Southern Yellow Pine		CCA	Zone 1 (Outer): $\geq 40 \text{ kg/m}^3$ or $\geq 2.50 \text{ pcf}$ Zone 2 (Inner): $\geq 24 \text{ kg/m}^3$ or $\geq 1.50 \text{ pcf}$
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955-2.4 Structural Timber: Provide structural timber in accordance with this section and Table 955-4. Approved producers should provide a certification showing the treatment and assay results with every shipment.

Table 955-4				
Product	Type / Species	Category	Treatment	Assay Results
Boards, Dimensional, Timber	Southern Yellow Pine	UC4B	CCA	$\geq 9.6 \text{ kg/m}^3$ or $\geq 0.60 \text{ pcf}$

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