



Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

June 25, 2025

Abi Domond
Civil Rights Analysis Intern
Federal Highway Administration
3500 Financial Plaza, Suite 400
Tallahassee, Florida 32312

Re: State Specifications Office
Section: 413
Proposed Specification: **4130302 Sealing Cracks and Concrete Structure Surfaces**

Dear Ms. Domond:

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

The changes are proposed by Ron Simmons to define the shelf life of the monomer and update the material property requirements.

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,

Signature on File

Daniel Strickland, P.E.
State Specifications Engineer

DS/jb

Attachment

cc: Florida Transportation Builders' Assoc.
State Construction Engineer

SEALING CRACKS AND CONCRETE STRUCTURE SURFACES (REV 5-8-25)

SUBARTICLE 413-3.2.1 is deleted and the following substituted:

413-3.2.1 Properties: Use a methacrylate system that meets the following physical and performance requirements:

Table 413-2 Physical Properties of Methacrylate System	
Density (ASTM D1481)	8.5—9.0 lb/gal at 77°F
Flash Point (ASTM D93)	> 200°F (Pensky Martens CC)
Surface Cure	8 Hours @ 73°F (max.)
Gel Time ⁽⁴⁾ (ASTM C881)	60 minutes (max.) @ 73.4 ± 1.8°F
Tack Free Time (finger drag method, no residue)	4-6 Hours (max.) (at 72°F and 50% Relative Humidity)
Compressive Strength (ASTM D695)	6,500 psi (min)
Tensile Strength (ASTM D638)	1,300 psi (min)
Shear Bond Adhesion (ASTM C882)	600 psi (min)
Elongation ⁽²¹⁾ (ASTM D638)	Report
Physical Properties of Methacrylate monomer (Part A)	
Viscosity (ASTM D2196, Method A)	14-20 cps using Ultra Low Adapter
⁴ . Use a test method capable of measuring the gel time to the nearest 0.5 minute. ²¹ . Do not use methacrylate with elongation less than 20% for concrete decks supported by steel girders.	

The monomer shall ~~not be placed after it has passed its shelf life.~~ ~~have a shelf life of no less than 12 months and shall be no more than 8 months old at the time of application.~~ Provide each container shipped to the job site with the following information on a manufacturer's label: manufacturer's name, product name, LOT or batch number, date of production, shelf life, and drum serial number. Identify the catalysts by their generic classification and provide the date of manufacture.

**SEALING CRACKS AND CONCRETE STRUCTURE SURFACES
(REV 5-8-25)**

SUBARTICLE 413-3.2.1 is deleted and the following substituted:

413-3.2.1 Properties: Use a methacrylate system that meets the following physical and performance requirements:

Table 413-2 Physical Properties of Methacrylate System	
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Shear Bond Adhesion (ASTM C882)	600 psi (min)
Elongation ⁽¹⁾ (ASTM D638)	Report
Physical Properties of Methacrylate monomer (Part A)	
Viscosity (ASTM D2196, Method A)	14-20 cps using Ultra Low Adapter
1. Do not use methacrylate with elongation less than 20% for concrete decks supported by steel girders.	

The monomer shall not be placed after it has passed its shelf life. Provide each container shipped to the job site with the following information on a manufacturer's label: manufacturer's name, product name, LOT or batch number, date of production, shelf life, and drum serial number. Identify the catalysts by their generic classification and provide the date of manufacture.