**SECTION 09 96 73**

**FIELD-APPLIED FEVE FLUOROPOLYMER COATINGS**

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by the following method in Microsoft Word:

 Display the FILE tab on the ribbon, click OPTIONS, then DISPLAY. Select or deselect HIDDEN TEXT.

This master specification section has been prepared by AGC Chemicals Americas for use in the preparation of a project specification section covering field-applied fluoroethylene vinyl ether (FEVE) coatings utilizing Lumiflon FEVE fluoropolymer resins, for use on architectural components.

AGC Chemicals Americas produces the FEVE resins, but does not provide specific coating formulations. Therefore, specific coating properties should be verified with a manufacturer of these coatings prior to editing this section.

Coatings based on Lumiflon FEVE fluoropolymer resins are also available in formulations that can be shop-applied to components such as for windows, curtain walls, metal roofs, and metal facades. Refer to Section 05 05 13 - Shop-Applied FEVE Fluoropolymer Coatings for Metal, available from AGC Chemicals Americas.

The following should be noted in using this specification:

Hypertext links to specific websites are included after manufacturer names and names of organizations whose standards are referenced within the text, to assist in product selection and further research. Hypertext links are contained in parenthesis and shown in blue, e.g.:

 [(www.astm.com](http://(www.astm.com))

Optional text requiring a selection by the user is enclosed within brackets and as red text, e.g.: “Color: [Red.] [Black.] [\_\_\_\_\_.]"

Items requiring user input are enclosed within brackets and as red text, e.g.: "Section [\_\_\_\_\_ - \_\_\_\_\_\_\_\_]."

For assistance on the use of the products in this section, contact AGC Chemicals Americas by calling 610-423-4300, by email at info@lumiflonusa.com, or visit their website at [www.lumiflonusa.com](http://www.lumiflonusa.com).

1. **GENERAL**
	1. SUMMARY

Edit the following paragraphs to include only those items specified in this section.

* + 1. Section Includes:
			1. Field-applied FEVE fluoropolymer coatings for [cast-in-place concrete] precast concrete] [railings] [architectural metalwork] [roof panels] [wall panels] [doors] [fiber-cement panels] [entrances] [storefronts] [windows] [curtain walls] [translucent panel systems] [louvers] [skylights] [sun screens] [HVAC equipment] [light fixtures] [fencing] [and] [\_\_\_\_].
		2. Related Sections:
			1. Division 01: Administrative, procedural, and temporary work requirements.
	1. REFERENCES
		1. American Architectural Manufacturers Association (AAMA) ([www.aamanet.org](http://www.aamanet.org)) 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Architectural Extrusions and Panels.
		2. American Waterworks Association (AWWA) [(www.awwa.org)](http://www.awwa.org) D102 - Coating Steel Water-Storage Tanks.
		3. International Organization for Standardization (ISO) [(www.iso.org)](http://www.iso.org) 2813 - Paints and Varnishes - Determination of Gloss Value at 20 Degrees, 60 Degrees and 85 Degrees.
		4. Society for Protective Coatings (SSPC) ([www.sspc.org](http://www.sspc.org)) - Painting Manual.
	2. SUBMITTALS

Retain the following for submittals requiring the Design Professional’s review.

* + 1. Action Submittals:
			1. Product Data: Coating manufacturer’s descriptive data and test results for coatings.
			2. Samples: [3 x 3] [\_\_ x \_\_] inch coating samples [showing available colors,] [in specified color,] on representative backing.

Retain the following for submission of informational submittals. These submittals are intended for the Owner's record purposes and are not intended to be reviewed by the Design Professional.

* + 1. Informational Submittals:
			1. Certificate of Compliance: Coating manufacturer’s certification that coatings applied on Project components comply with referenced AAMA standard.

Retain the following for submission of closeout submittals for the Owner's record purposes.

* + 1. Closeout Submittals:
			1. Maintenance Data: Provide information regarding touch-up, cleaning, and maintenance of coatings.

Retain the following for projects requiring sustainable documentation.

* + 1. Sustainable Design Submittals: Refer to Division 01.
	1. QUALITY ASSURANCE

The following paragraph specifies a minimum level of experience required of the parties performing the work of this section. Retain if required, and edit to suit project requirements.

* + 1. Coating Applicator Qualifications: Minimum [\_\_] years [documented] experience in work of this Section.

Include the following for full size mockups for review of surface preparation and application of coatings. Minimize mockups on smaller, less complex projects.

* + 1. Mockup:
			1. Provide mockup of coatings applied to [\_\_\_\_].
			2. Size: [\_\_\_\_].
			3. Show: Surface preparation, primer, intermediate, and top coats.
			4. Locate [where directed.] [\_\_\_\_.]
			5. Approved mockup may [not] remain as part of the Work.
	1. PROJECT CONDITIONS
		1. Apply coatings under dry and dust free conditions.
		2. Ambient Temperature and Humidity Limitations: In accordance with coating manufacturer’s recommendations.
		3. Lighting level: Minimum [80] [\_\_] footcandles measured mid-height at substrate surface.
	2. MAINTENANCE

Include the following for extra materials for the Owner's use in performing maintenance after completion.

* + 1. Extra Materials: [1 gallon] [[\_\_] gallons] of each coating.
	1. WARRANTIES

Coating warranties vary between coating manufacturers. Verify coating warranties with specific coating manufacturers.

* + 1. Furnish coating manufacturer’s written warranty providing coverage for following time periods:
			1. Color and gloss retention: [\_\_].
			2. Film integrity: [\_\_].
1. **PRODUCTS**
	1. MATERIALS
		1. Field-Applied FEVE Fluoropolymer Coatings:
			1. Formulated using Lumiflon FEVE fluoropolymer resins by AGC Chemicals Americas, [www.lumiflonusa.com,](http://www.lumiflonusa.com) to suit specific application.
			2. Resin type: Fluoroethylene vinyl ether (FEVE).
			3. Meet or exceed coating performance requirements of AAMA 2605.
			4. Meet or exceed requirements of AWWA D102.

Gloss rating vary depending on the specific formulation, ranging from matte to high gloss. Verify available gloss ratings with specific coating manufacturer.

* + - 1. Gloss: [\_\_] tested to ISO 2813.

Delete the following if colors are specified in the Schedule at the end of this section or on the Drawings.

* + - 1. Color: [Custom color.] [[\_\_\_\_] color.] [To be selected from manufacturer's full color range.]
	1. ACCESSORIES
		1. Thinners and Cleaners: Types recommended by coating manufacturer.
	2. MIXES
		1. Mix materials in accordance with manufacturer's instructions.
1. **EXECUTION**
	1. PREPARATION
		1. Surface Preparation: Comply with coating manufacturer’s recommendations or following requirements, whichever is more restrictive:

Include ASTM D4258 for standard concrete surface preparation and D4259 for abraded surface preparation.

* + - 1. Concrete: Clean substrate to ASTM [D4258.] [D4259.]
			2. Aluminum: Clean by SSPC SP1 - Solvent Cleaning method.
			3. Steel: Clean by SSPC SP-6 - Commercial Blast Cleaning method.
			4. Galvanized steel: Clean by SSPC SP-6 - Commercial Blast Cleaning method.
			5. Fiber cement panels: Clean surfaces by pressure washing; remove dirt, dust, and surface contaminants.
	1. APPLICATION
		1. Apply coatings in accordance with manufacturer's instructions.
		2. Apply primer immediately after surface preparation to prevent contamination of surface.
		3. Apply coatings uniformly without visible laps, sags, curtains, holidays, and objectionable brush marks.
		4. Allow each coat to cure completely before applying additional coats.
		5. Ensure that each coat is undamaged prior to applying succeeding coat.
	2. ADJUSTING
		1. Touch up minor damage or refinish as required.
	3. CLEANING
		1. Remove coatings from adjacent surfaces.

END OF SECTION