SECTION 074616 - ALUMINUM SIDING

Revise this Section by inserting or deleting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section includes aluminum **[siding] [and] [soffit]**.

Refer to sections listed below for cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections. Sections listed below are for spec editor’s and design team coordination and are to remain as Editor’s Notes. Remove referenced specification sections within the body of the specification if not applicable to the project.

Section 061000 "Rough Carpentry" for wood furring, grounds, nailers, and blocking.

Section 062013 "Exterior Finish Carpentry" for exterior [cellular PVC] [and] [foam-plastic] trim.

Section 072500 "Weather Barriers" for weather-resistive barriers.

* + - 1. COORDINATION
				1. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.
			2. PREINSTALLATION MEETINGS

Retain "Preinstallation Conference" paragraph below if Work of this Section is extensive or complex enough to justify a conference.

* + - * 1. Preinstallation Conference: Conduct conference at Project site
			1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: For each type of product.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

Include manufacturer’s installation instructions.

* + - * 1. Samples for Initial Selection: For aluminum **[siding] [and] [soffit]** including related accessories.
				2. Samples for Verification: **[For each type, color, texture, and pattern required.]**

Retain one of first two subparagraphs below.

12-inch long-by-actual-width Sample of siding.

24-inch wide-by-36-inch high Sample panel of siding assembled on plywood backing.

Retain one or both subparagraphs below if required.

12-inch long-by-actual-width Sample of soffit.

12-inch long-by-actual-width Samples of trim and accessories.

* + - * 1. Quality Control Submittals:

Retain "Product Certificates" paragraph below to require submittal of product certificates from manufacturers.

Design Consultant to review code references and verify that the referenced sections/tables are current. Note that code references shall be based on the current version of the Uniform Code.

Product Certificates: For each type of aluminum **[siding] [and] [soffit].**

Research/Evaluation Reports: For each type of aluminum siding required, from ICC-ES.

Sample Warranty: For special warranty.

* + - * 1. Contract Closeout Submittals:

Maintenance Data: For each type of product, including related accessories, to include in maintenance manuals.

* + - * 1. Maintenance Material Submittals:

Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

Furnish full lengths of aluminum **[siding] [and] [soffit]** including related accessories, in a quantity equal to 2 percent of amount installed.

* + - 1. QUALITY ASSURANCE
				1. Benchmarks: Build Benchmarks to verify selections made under Sample submittals and to demonstrate aesthetic effects and to set quality standards for fabrication and installation.

Retain first subparagraph below for large-scale mockup. Indicate portion of wall represented by Benchmark on Drawings or draw Benchmark as separate element.

Build Benchmark of typical wall area as shown on Drawings.

Retain first subparagraph below for limited mockups.

Build Benchmarks for **[siding] [and] [soffit]** including accessories.

Size: **[48 inches long by 60 inches high] <Insert dimensions>**.

Include outside corner on one end of Benchmark **[and inside corner on other end]**.

Retain first subparagraph below if Benchmarks are not only for establishing appearance factors.

Approval of Benchmarks does not constitute approval of deviations from the Contract Documents contained in Benchmarks unless Director’s Representative specifically approves such deviations in writing.

Retain subparagraph below if the intention is to make an exception to the default requirement for demolishing and removing Benchmarks .

Subject to compliance with requirements, approved Benchmarks may become part of the completed Work if undisturbed at time of Substantial Completion.

* + - 1. DELIVERY, STORAGE, AND HANDLING
				1. Deliver and store packaged materials in original containers with labels intact until time of use.
				2. Store materials on elevated platforms, under cover, and in a dry location.
			2. WARRANTY

When warranties are required, verify with Director’s Representative that warranties stated in this article are not less than remedies available to the Facility under prevailing local laws.

* + - * 1. Special Warranty: Manufacturer agrees to repair or replace products that fail in materials or workmanship within specified warranty period.

Failures include, but are not limited to, the following:

Structural failures including cracking **[ fading,]** and deforming.

Deterioration of metals, metal finishes, and other materials beyond normal weathering.

**<Insert failure modes>**.

Retain ", fading," option above and first subparagraph below if manufacturers cover fading in their warranty. If retaining, also retain one of three options below.

Fading is defined as loss of color, after cleaning with product recommended by manufacturer, of more than [4] [5] [7] Hunter color-difference units as measured according to ASTM D2244.

Verify available warranties and warranty periods for aluminum siding and soffit.

Warranty Period: **[10] [25] [50] <Insert number>** years from date of Substantial Completion.

* + - * 1. Special Warranty: The one year period required by Paragraph 9.8 of the General Conditions is extended to 2 years for the Work of this Section. Refer to Supplementary Conditions.
1. PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about named manufacturers and products. For an explanation of options and Contractor's product selection procedures.

* + - 1. MANUFACTURERS
				1. Source Limitations: Obtain products, including related accessories, from single source from single manufacturer.
			2. ALUMINUM SIDING
				1. Aluminum Siding: Formed and coated product complying with AAMA 1402.

Retain one or more of first four paragraphs below or revise to suit Project.

* + - * 1. Horizontal Pattern: 8-inch exposure in **[plain, single-board] [beaded-edge, single-board] [plain, double, 4-inch board] <Insert requirement>** style.
				2. Horizontal Pattern: 10-inch exposure in **[plain,] [Dutch-lap,] <Insert requirement,>** double, 5-inch board style.
				3. Vertical Pattern: 12-inch exposure in board-and-batten, single-board style.
				4. Vertical Pattern: 16-inch exposure in V-grooved, triple, 5-1/3-inch board style.
				5. Texture: **[Smooth] [Wood grain] <Insert requirement>**.
				6. Nominal Thickness: **[0.019 inch] [0.024 inch] <Insert dimension>**.

Retain "Insulation" paragraph below if required.

* + - * 1. Insulation: Manufacturer's standard integral insulation panels.
				2. Finish: Manufacturer's standard **[three-coat PVDF] [primer and baked-on acrylic] [primer and baked-on polyester] <Insert requirement>**.

Retain one of three options in "Colors" subparagraph below. If retaining first option, indicate colors in a separate schedule.

Colors: **[As indicated by manufacturer's designations] [Match Director’s Representative’s samples] [As selected by Director’s Representative from manufacturer's full range of colors]**.

* + - 1. ALUMINUM SOFFIT
				1. Aluminum Soffit: Formed and coated product complying with AAMA 1402.

Retain one of four "Pattern" paragraphs below or revise to suit Project.

* + - * 1. Pattern: 6-inch exposure in V-grooved, single-board style.
				2. Pattern: 10-inch exposure in V-grooved, double, 5-inch board style.
				3. Pattern: 12-inch exposure in V-grooved, double, 6-inch board style.
				4. Pattern: 16-inch exposure in V-grooved, **[triple, 5-1/3-inch] [quadruple, 4-inch] <Insert requirement>** board style.
				5. Texture: **[Smooth] [Wood grain] <Insert requirement>**.
				6. Ventilation: Provide **[perforated] [unperforated]** soffit **[unless otherwise indicated]**.
				7. Nominal Thickness: **[0.019 inch] [0.024 inch] <Insert dimension>**.
				8. Finish: Manufacturer's standard **[three-coat PVDF] [primer and baked-on acrylic] [primer and baked-on polyester] <Insert requirement>**.

Retain one of four options in "Colors" subparagraph below. If retaining first option, indicate colors in a separate schedule.

Colors: **[As indicated by manufacturer's designations] [Match Director’s Representative’s samples] [As selected by Director’s Representative from manufacturer's full range of colors] [Match adjacent siding].**

* + - 1. ACCESSORIES

Retain "Siding Accessories, General" paragraph below if using aluminum or vinyl siding.

* + - * 1. Siding Accessories, General: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration.

Provide accessories **[made from same material as] [matching color and texture of]** adjacent siding unless otherwise indicated.

* + - * 1. Aluminum Accessories: Where aluminum accessories are indicated, provide accessories complying with AAMA 1402.

Texture: **[Smooth] [Wood grain] <Insert requirement>**.

Nominal Thickness: **[0.019 inch] [0.024 inch] <Insert dimension>**.

Finish: Manufacturer's standard **[three-coat PVDF] [primer and baked-on acrylic] [primer and baked-on polyester] <Insert requirement>**.

Retain "Decorative Accessories" paragraph below if required for Project. Verify availability with manufacturers.

* + - * 1. Decorative Accessories: Provide the following aluminum decorative accessories as indicated:

Retain decorative accessories in subparagraphs below and revise to suit Project. Indicate locations and details on Drawings.

Corner posts **[with fluted faces]**.

Door and window casings **[with fluted faces]**.

Entrance and window head pediments.

Pilasters **[with fluted faces]**.

Shutters with **[paneled] [louvered]** faces.

Louvers.

Fasciae.

Moldings and trim.

**<Insert accessories>**.

Retain one of four options in "Colors for Decorative Accessories" paragraph below. If retaining first option, indicate colors in a separate schedule.

* + - * 1. Colors for Decorative Accessories: **[As indicated by manufacturer's designations] [Match Director’s Representative’s samples] [As selected by Director’s Representative from manufacturer's full range of colors] [Match adjacent siding]**.
				2. Flashing: Provide aluminum flashing complying with Section 076200 "Sheet Metal Flashing and Trim" at window and door heads and where indicated.

Finish for Aluminum Flashing: **[Same as aluminum siding] [Siliconized polyester coating, same color as siding] [High-performance organic finish, same color as siding] [Factory-prime coating] <Insert finish>**.

* + - * 1. Fasteners:

For fastening to wood, use **[siding nails] [ribbed bugle-head screws]** of sufficient length to penetrate a minimum of 1 inch into substrate.

For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1/4 inch, or three screw-threads, into substrate.

For fastening aluminum, use aluminum fasteners. Where fasteners are exposed to view, use prefinished aluminum fasteners in color to match item being fastened.

* + - * 1. Insect Screening for Soffit Vents: **[Aluminum, 18-by-16 mesh] [PVC-coated, glass-fiber fabric, 18-by-14 or 18-by-16 mesh] <Insert requirement>**.
				2. Continuous Soffit Vents: Aluminum, hat-channel shape, with **[stamped louvers] [perforations]**; 2 inches wide and not less than 96 inches long.

Net-Free Area: **[4 sq. in./linear ft.] [6 sq. in./linear ft.] [8 sq. in./linear ft.] <Insert dimension>.**

Finish: **[Mill finish] [White paint] [Brown paint] <Insert requirement>**.

* + - * 1. Round Soffit Vents: Stamped aluminum louvered vents, **[2 inches] [2-1/2 inches] [3 inches] [4 inches] <Insert dimension>** in diameter, made to be inserted in round holes cut into soffit.

Finish: **[Mill finish] [White paint] [Brown paint] <Insert requirement>**.

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of aluminum **[siding] [and] [soffit]** and related accessories.
				2. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. PREPARATION
				1. Clean substrates of projections and substances detrimental to application.
			3. INSTALLATION
				1. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.

Center nails in elongated nailing slots without binding siding to allow for thermal movement.

* + - * 1. Install aluminum **[siding] [and] [soffit]** and related accessories according to AAMA 1402.

Install fasteners no more than **[24 inches] <Insert dimension>** o.c.

* + - * 1. Install joint sealants as specified in Section 079200 "Joint Sealants" and to produce a weathertight installation.
				2. Where aluminum siding contacts dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape or installing nonconductive spacers as recommended by manufacturer for this purpose.
			1. ADJUSTING AND CLEANING
				1. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
				2. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION 074616