**PART 1: GENERAL**

1.1 **RELATED SECTIONS**

* **05 40 00** – Cold-Formed Metal Framing: Metal framing used to support aluminum cladding.
* **07 50 00** – Membrane Roofing: Used in conjunction with roof-related aluminum cladding.
* **07 60 00** – Flashing and Sheet Metal: Components used with aluminum siding.
* **07 46 16** – Aluminum Siding: Specifics for aluminum siding applications.
* **05 50 00** – Metal Fabrications: Involves metal workings that are necessary for structural supports and detailed metalwork integral to aluminum cladding installations.

1.2 **REFERENCES**

**Miami-Dade County NOA Approval (NOA No. 24-0408.05)**

* Meets Florida Building Code and High-Velocity Hurricane Zone standards.
* Large and small missile impact resistant, ensuring durability in extreme weather.

**Fire Safety Compliance**

* ASTM E84-24 tested for surface burning characteristics.
	+ - Class A Fire Rating:Flame Spread Index (FSI): 0 (Highest fire resistance rating).
		- Smoke Developed Index (SDI): 35 (Universal 4+4) & 30 (Click 180).

**ISO Standards**:

* ISO 9001:2015 - Quality Management System.
* ISO 14001:2015 - Environmental Management System.
* ISO 45001:2018 - Occupational Health & Safety Management System.
* ISO 50001:2018 - Energy Management System.
* **European Standards / EU Standards**:oEN 515, EN 573-3, EN 755-2, EN 755-9, EN 12020-2, EN 15088:2005.

**Testing and Performance Certifications**:

* Resistance to humid atmospheres containing Sulphur dioxide (ISO 22479).
* Acetic acid salt spray resistance (ISO 9227).
* Accelerated weathering test (Solar box, ISO 16474-2).
* Natural weathering test (Florida exposure, ISO 2810).
* Filiform corrosion test (ISO 4623-2).
* Q-SUN XE-3 HS – Accelerated Weathering Test by SUBLITEX.
* AAMA 2605 - high-performance specification for architectural-grade paint coatings on aluminum extrusions and panels, set by the American Architectural Manufacturers Association (AAMA)

1.3 **SUBMITTALS**

* Product data: Submit manufacturer’s product literature, specifications, and data sheets.
* Samples: Submit duplicate samples of cladding material, of color and profile specified.
* Shop Drawings: Indicate dimensions, profiles, attachment methods, schedule of wall elevations, trim and closure pieces, soffits, fascia, and related work.
* Certifications: Submit proof of compliance with specified tests and standards.

1.4 **WARRANTY**

* Provide a 20-year limited warranty from the date of Substantial Completion covering manufacturing defects such as warping, corrosion, cracking, chalk resistance, and color retention. Warranty applies only to the original owner and is not transferable.

**PART 2: PRODUCTS**

2.1 **ALUMINUM CLADDING AND COMPONENTS**

* Profile: Universal 140 - 5.51”W x 0.70”H x 19’L | 0.047” thickness
* Material: 6063 Alloy, T5, powder-coated, 18 gauge.
* Finish: Powder-coated in standard and custom colors.
* Colors: Espresso, Oak, Pine, Gray, Charcoal Black, Gloss Black; custom colors available for large orders.

2.2 **ACCESSORIES**

* Aluminum Furring Strips and "L Angle" for finishing corners.
* **Ventilation**: The air gap created by the furring strips acts as a rainscreen, allowing moisture behind the cladding to dry and dissipating heat to reduce temperature buildup on the panels.
* **-Drainage**: Any excess water entering the system can drain downward through the gap, preventing water accumulation.
* **-Thermal Isolation**: The furring strips minimize direct heat transfer from the wall to the cladding, further limiting expansion.
* -**Flexibility**: The furring strips allow the cladding system to move slightly as a single unit, accommodating minor thermal expansion without causing stress points or buckling. By spacing the furring strips every 24inches, the panels are effectively divided into smaller sections. Each section undergoes less
* Recommended Tools: Use a 96 teeth aluminum blade for cuts.

**PART 3: EXECUTION**

3.1 **INSTALLATION**

* Install according to manufacturer’s instructions and approved shop drawings.
* Maintain joints true to line, tight-fitting, and with a seamless appearance.

3.2 **CLEANING AND MAINTENANCE**

* Conduct freshwater cleaning and general maintenance quarterly.
* Use a soft cloth or brush with mild soap and warm water for routine cleaning.
* Avoid harsh chemical cleaners and maintain a log of all maintenance activities.