

SECTION 074213 METAL WALL PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A Manufactured metal panels for exterior wall panels, with related flashings and accessory components.

1.02 RELATED REQUIREMENTS

- A Section 054000 - Cold-Formed Metal Framing: Wall panel substrate.
- B Section 072700 - Air Barriers: Air barrier under wall panels.

1.03 REFERENCE STANDARDS

- A AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix) 2022.
- B ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate 2021a.

1.04 SUBMITTALS

- A Product Data - Wall System: Manufacturer's data sheets on each product to be used, including:
 - 1. Physical characteristics of components shown on shop drawings.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation instructions and recommendations.
- B Shop Drawings: Indicate dimensions, layout, joints, construction details, support clips, and methods of anchorage.
- C Samples: Submit two samples of wall panel, 12 inches by 12 inches in size illustrating finish color, sheen, and texture.
- D Manufacturer's qualification statement.

1.05 QUALITY ASSURANCE

- A Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.
- B Store prefinished material off the ground and protected from weather; prevent twisting, bending, or abrasion; provide ventilation; slope metal sheets to ensure proper drainage.
- C Prevent contact with materials that may cause discoloration or staining of products.

1.07 FIELD CONDITIONS

- A Do not install wall panels when air temperature or relative humidity are outside manufacturer's limits.

1.08 WARRANTY

- A Finish Warranty: Provide 5-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A Metal Wall Panels - Concealed Fasteners:

1. ATAS International, Inc; Multi-Purpose Panels Grand V: www.atas.com/#sle.
2. Or Approved equal.

2.02 METAL WALL PANEL SYSTEM

A Wall Panel System: Factory fabricated prefinished metal panel system, site assembled.

1. Provide exterior wall panels.
2. Design and size components to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of wall.
3. Maximum Allowable Deflection of Panel: $L/180$ for length(L) of span.
4. Movement: Accommodate movement within system without damage to components or deterioration of seals, movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; and deflection of structural support framing.
5. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
6. Fabrication: Formed true to shape, accurate in size, square, and free from distortion or defects; pieces of longest practical lengths.
7. Corners: Factory-fabricated in one continuous piece with minimum 2-inch returns.

B Exterior Wall Panels: Composite panel consisting of polypropylene core between two finished aluminum sheets.

1. Profile: Vertical.
2. Material: Precoated aluminum sheet, 20 gauge, 0.032 inch minimum thickness.
3. Panel Size: 32 inch coverage and 1/2 inch depth.
4. Concealed Fastener: Provide H Molding Extrusion at all panel joints with concealed fasteners.
5. Panel Adhesive: Provide manufacturer's panel adhesive per manufacturer's installation instructions.
6. Foam Tape: Provide manufacturer's foam tape between adhesive areas per manufacturer's installation instructions.
7. Color: As selected by Architect from manufacturer's full line.

C Anchors: Galvanized steel.

2.03 MATERIALS

A Precoated Aluminum Sheet: ASTM B209/B209M, 3105 alloy, O temper, with smooth surface texture; continuous-coil-coated on exposed surfaces with specified finish coating and on panel back with specified panel back coating.

2.04 FINISHES

A Exposed Surface Finish: Panel manufacturer's standard polyvinylidene fluoride (PVDF) coating, top coat over epoxy primer.

- B Fluoropolymer Coil Coating System: Manufacturer's standard multi-coat metal coil coating system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected from manufacturer's standards.

2.05 ACCESSORIES

- A Fasteners: Manufacturer's standard type to suit application; steel, hot dip galvanized.

PART 3 EXECUTION

3.01 EXAMINATION

- A Verify that building framing members are ready to receive panels.
- B Verify air barrier, see Section 072700, has been installed over wall panel substrate.

3.02 PREPARATION

- A Protect surrounding areas and adjacent surfaces from damage during execution of this work.

3.03 INSTALLATION

- A Install panels on walls in accordance with manufacturer's instructions.
- B Fasten panels to structural supports; aligned, level, and plumb.
- C Use concealed fasteners unless otherwise indicated by Architect.

3.04 TOLERANCES

- A Offset From True Alignment Between Adjacent Members Abutting or In Line: 1/16 inch, maximum.
- B Variation from Plane or Location As Indicated on Drawings: 1/4 inch, maximum.

3.05 CLEANING

- A Remove site cuttings from finish surfaces.
- B Remove protective material from wall panel surfaces.
- C Clean and wash prefinished surfaces with mild soap and water; rinse with clean water.

3.06 PROTECTION

- A Protect metal wall panels until completion of project.
- B Touch-up, repair, or replace damaged wall panels or accessories before Date of Substantial Completion.

END OF SECTION