

SECTION 07 42 13.23 - ALUMINUM COMPOSITE MATERIAL (ACM) SYSTEM SPECIFICATION

PART I – GENERAL

I.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this section.

I.02 SUMMARY

A. Definitions:

- 1. An Aluminum Composite Material (ACM) Panel System includes ACM panels, joints, attachment system components and miscellaneous materials as appropriate for the design of the project to provide a weather-resistant exterior veneer system.
- 2. A “Shop-Fabricated” ACM Panel System is designed with components that permit the complete fabrication in the shop and the subsequent installation of the system in the field.

B. Section Includes:

- 1. Exterior installation and performance of ACM panels and ACM Panel System components.

C. Related Sections:

- 1. Division 03 – Concrete: Cast-In-Place Concrete
- 2. Division 04 – Masonry: Unit Masonry
- 3. Division 05 – Metals: Cold-Formed Metal Framing
- 4. Division 05 – Metals: Structural Aluminum Framing
- 5. Division 06 – Wood, Plastics, and Composites: Sheathing
- 6. Division 07 – Thermal and Moisture Protection: Continuous Insulation on ACM
- 7. Division 07 – Thermal and Moisture Protection: Fluid-Applied Membrane Air Barriers
- 8. Division 07 – Thermal and Moisture Protection: Sheet Metal Flashing and Trim
- 9. Division 07 – Thermal and Moisture Protection: Joint Sealants
- 10. Division 08 – Openings: Aluminum Windows

11. Division 08 – Openings: Glazing

12. Division 08 – Openings: Glazed Aluminum Curtain Walls

I.03 REFERENCES

- A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to the extent indicated. Standards listed have either been identified by the International Building Code (IBC) or local building code or are specific requirements for this building construction type.
- B. Aluminum Association (AA):
 - 1. Aluminum Design Manual (ADM)
 - 2. AA-M12C23A31: Anodized – Clear Coating
 - 3. AA-M12C23A34: Anodized – Color Coating
- C. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 501.1 Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure
 - 2. AAMA 501.2 Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls and Sloped Glazing Systems
 - 3. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- D. ASTM International:
 - 1. ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - 2. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
 - 3. ASTM C920 Standard Specification for Elastomeric Joint Sealants
 - 4. ASTM C1193 Standard Guide for Use of Joint Sealants
 - 5. ASTM D635 Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
 - 6. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials

7. ASTM E283 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
 8. ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls By Uniform Static Air Pressure Difference
- E. National Fire Protection Association (NFPA):
- I. NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components

I.04 SYSTEM DESCRIPTION

A. Performance Requirements:

- I. Provide installed ACM Panel System designed to withstand project-specific design loads while maintaining System Requirements; Deflection and Thermal Movement; and Fire Performance without defects, damage, or failure as defined by the [**Manufacturer**] [**Fabricator**] and required by this section.

B. System Requirements:

I. Wet Seal System

- a. ASTM E283 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen – Air flow measurement across the ACM Panel System (excluding jamb conditions) shall not be more than 0.06 cfm per sf of wall area when tested to a pressure difference of 6.24 psf.
- b. ASTM E330 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls By Uniform Static Air Pressure Difference – ACM Panel System must be engineered to meet the project-specific design loads for strength and serviceability requirements. In addition, the ACM Panel System must meet or exceed the Deflection and Thermal Movement criteria when tested to a minimum pressure of 40.0 psf.
- c. ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls By Uniform Static Air Pressure Difference – Water penetration across the ACM Panel System shall not occur when tested to a pressure difference of 12.0 psf.

2. Pressure-Equalized Rainscreen (PER) System

- a. AAMA 508 Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems
 - i. ASTM E283 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen – The air flow measurement across the ACM Panel System

(excluding jamb conditions) shall not be more than 0.12 cfm per sf of wall area when tested to a pressure difference of 1.57 psf.

- ii. ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls By Uniform Static Air Pressure Difference – When tested to a pressure difference of 6.24 psf:
 - 1) All water that penetrates the exterior rainscreen cladding, including condensation, shall be controlled and drained to the exterior.
 - 2) Water mist or droplets that contact(s) the air/water barrier shall not exceed 5% of the surface.
 - 3) There shall not be any continuous streaming of water on the air/water barrier surface.
- iii. AAMA 501.1 Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure – When tested to a pressure difference of 6.24 psf:
 - 1) All water that penetrates the exterior rainscreen cladding, including condensation, shall be controlled and drained to the exterior.
 - 2) Water mist or droplets that contact(s) the air/water barrier shall not exceed 5% of the surface.
 - 3) There shall not be any continuous streaming of water on the air/water barrier surface.
- iv. ASTM E1233 Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Cyclic Air Pressure Differential – When tested from a positive pressure loading of 5 psf to 25 psf to 5 psf based on a maximum average of 100 three-second cycles:
 - 1) The lag between the cavity and cyclic wind pressure shall not exceed 0.08 seconds.
 - 2) The maximum differential between the cavity and cyclic wind pressure shall not exceed 50% of the maximum test pressure.

C. Deflection and Thermal Movement: Provide installed ACM Panel System that has been designed to resist project-specific wind loads, acting both inward and outward:

1. Perimeter Framing Deflection: Deflection of the panel perimeter framing member shall not exceed $L/175$ normal to plane of the wall, where L is the unsupported span of the perimeter framing member between fastener locations.
2. Panel Deflection: Deflection of the panel face shall not exceed $L/60$ normal to plane of the wall, where L is the unsupported span of the panel between load transfer locations.

3. At 150% pressure, no permanent deformation exceeding L/1000 or failure to structural members is permitted.
 4. Thermal Movements: Allow for free and noiseless horizontal and vertical thermal movement due to expansion and contraction of component parts over a temperature range of -20°F to +180°F at the material surface.
 - a. Buckling, opening of joints, undue stress on fasteners, failure of sealants, or any other detrimental effects of thermal movement are not permitted.
 - b. Field-fabrication and installation procedures shall take into account the ambient temperature range at the time of the respective operation.
- D. Fire Performance: Wall assemblies containing ACM Panel System shall meet the requirements of NFPA 285 using the Intermediate-Scale Multi-Story Test Apparatus (ISMA), where required by code based on the design of this project.

I.05 SUBMITTALS

- A. General: Provide submittals in accordance with Conditions of the Contract and Division 01 Submittal Procedures Section as follows:
- B. Product Data: Submit material descriptions, dimensions of individual components and profiles, and finishes for each type of ACM Panel System.
- C. ACM Panel System:
 1. Submit system-specific design details including, but not limited to, ACM panel, clip, extrusion, stiffener, adhesive, fastener, and sealant components.
 2. Submit design data including, but not limited to, material properties, section properties, and capacities for each ACM Panel System component. Design data shall be supported by a qualified Design Professional licensed in the state of primary research and development, design, and manufacturing of the ACM Panel System.
 3. Submit system-specific installation guide information.
 4. Submit Shop Drawings indicating, but not limited to, elevations and reflected ceiling plans with joint locations and panel sizes; sections with thicknesses and dimensions of components; edge conditions; interfaces with dissimilar materials; corners and transitions; flashings, trims, venting, fasteners, sealants, caulks, and adhesives; accessories; and/or colors.
- D. Samples:
 1. Selected Samples: Submit Manufacturer's color charts or chips illustrating full range of colors, finishes, patterns, and textures available for ACM panels with factory-applied finishes. Custom color

selection requires color sample to be submitted for approval. Approval signature(s) are required by **[Architect]**.

2. Verification Samples:

- a. ACM Panel System assembly: Submit 12 inches x 12 inches, or size as required, demonstrating system assembly. Samples to be provided in thickness specified, including ACM panel, molding, clip, adhesive, fastener, and sealant components. Sample need not be provided in the specified color.
- b. Submit two samples of each color or finish selected that measure approximately 3 inches x 4 inches, minimum.

E. Quality Assurance Submittals:

1. ACM Panel System Certification: Submit an official written statement from the Manufacturer documenting that the ACM Panel System complies with specified Performance Requirements indicated in this specification. Certification shall be backed by test reports.

F. Closeout Submittals:

1. Warranty: Submit Manufacturer and Installer warranty documents as specified within the Warranty section of this specification.
2. Maintenance: Submit Manufacturer's recommendations document for Cleaning and Maintenance of the ACM Panel System.

I.06 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer Qualifications: Company with a minimum of 20 years of continuous experience manufacturing ACM panels in the United States of America of the type specified:
 - a. Able to provide specified warranty on finish.
 - b. Able to provide a list of other projects of similar size including approximate date of installation for each.
2. Fabricator Qualifications:
 - a. The Fabricator shall have:
 - i. Been in business of a similar trade and under the present company name for at least five (5) years prior to the start of this project, and

- ii. Experience with similar sized ACM Panel System projects, and
 - iii. Fabricated at least three (3) successful projects of the specified ACM Panel System within the last five (5) years
 - 1) Acceptable, varying combinations of successful projects and/or years of experience shall be determined at the discretion of the Manufacturer.
 - b. The Fabricator must be capable of providing field service representation during installation.
3. Installer Qualifications:
- a. The Installer shall have:
 - i. Been in business of a similar trade and under the present company name for at least five (5) years prior to the start of this project, and
 - ii. Experience with similar sized ACM Panel System projects, and
 - iii. Installed at least three (3) successful projects of the specified ACM Panel System within the last five (5) years
 - 1) Acceptable, varying combinations of successful projects and/or years of experience shall be determined at the discretion of the **[Manufacturer]** **[Fabricator]**.
 - b. The Installer must be capable of providing field service representation during installation.
 - B. Regulatory Code Agencies Requirements: Provide ACM Panel System that has been evaluated and is in compliance with the following, where required:
 - 1. International Code Council (ICC)
 - C. Mock-Ups: Install a mock-up at the project jobsite using acceptable products and **[Manufacturer]** **[Fabricator]**-approved details. Obtain **[Architect's]** acceptance of finish color (drawdown samples to be used for color approval of nonstandard coil coated colors), texture and pattern, and workmanship standard. Comply with Division 01 Quality Control, Mock-Up Requirements Section.
 - 1. Mock-Up Size: Provide as detailed in the construction documents if a stand-alone Mock-Up is required.
 - 2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
 - 3. Incorporation: Mock-up may be incorporated into final construction upon Owner's approval.
 - 4. Additional Cost: Material required for custom color mock-ups may require special small quantity runs that increase cost and require additional time to obtain material.

- D. Pre-installation Meeting: Conduct pre-installation meeting to verify project requirements, substrate conditions, and system [**Manufacturer's**] [**Fabricator's**] installation details.

I.07 DELIVERY AND STORAGE

- A. Upon receipt, perform visual inspection of ACM panels and inventory to identify any damages that may have occurred during shipping or any missing panels.
- B. Storage:
 - 1. Store ACM panels horizontally on pallets in a dry, well-ventilated environment under the protection of a temporary or permanent structure. If required to be stored in an exterior area, ACM panels must be placed under a well-ventilated, waterproof covering.
 - 2. Store ACM panels a minimum of 4" above ground level to avoid contact with standing moisture (e.g. water, snow, etc.).
 - 3. Store ACM panels in an area protected from other construction activities and associated debris.
 - 4. Storage temperatures are not to exceed 120°F. Protect ACM panels from moisture and direct sunlight while on the job-site.
 - 5. Do not stack more than 1500 pounds of ACM panels on one pallet. Other materials shall not be stacked on, or placed in contact with, ACM panels to prevent staining, denting, or other damages.

I.08 PROJECT CONDITIONS

- A. Substrate Tolerances: The General Contractor is responsible for providing an acceptable substrate per [**Manufacturer's**] [**Fabricator's**] requirements including:
 - 1. Adjacent substrate faces out-of-plane offset: +/- 1/8 inch, and
 - 2. Level, plumb, and location control lines as indicated: 1/4 inch in any 20 feet, and
 - 3. Any building elevation direction deviation: +/- 1/2 inch
- B. Field Measurements: Verify locations of wall framing members and wall opening dimensions by field measurements prior to the shop-fabrication of the ACM Panel System. Field measurements to be taken once all substrate materials and adjacent materials are installed.

I.09 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. ACM Manufacturer's Material Warranty: Submit, to the Owner, the Manufacturer's standard warranty.

I. Warranty Period:

- a. Material and Product Integrity: Five (5) years against delamination at any manufactured bond line
- b. Coil-Coated PVDF/Kynar 500 Painted Finish: Thirty (30) years against:
 - i. Chalking in excess of a numerical rating of eight (8) when measured in accordance with ASTM D4214, Method A
 - ii. Fading or change color in excess of five (5) E units (NBS) when calculated in accordance with ASTM D2244, paragraph 6.3
 - iii. Cracking, chipping, splitting, blistering, peeling, or loss of adhesion. Minute fracturing (i.e. crazing or cracking) as a result of routing and bending of the ACM panels shall be excluded.
- c. Spray-Applied PVDF/Kynar 500 Painted Finish: Five to Twenty (5-20) years against:
 - i. Chalking in excess of a numerical rating of eight (8) when measured in accordance with ASTM D4214, Method A
 - ii. Fading or change color in excess of five (5) E units (NBS) when calculated in accordance with ASTM D2244, paragraph 6.3
 - iii. Cracking, chipping, splitting, blistering, peeling, or loss of adhesion. Minute fracturing (i.e. crazing or cracking) as a result of routing and bending of the ACM panels shall be excluded.
- d. Polyester Painted Finish: Ten (10) years against:
 - i. Chalking in excess of a numerical rating of eight (8) when measured in accordance with ASTM D4214, Method A
 - ii. Fading or change color in excess of five (5) E units (NBS) when calculated in accordance with ASTM D2244, paragraph 6.3
 - iii. Cracking, chipping, splitting, blistering, peeling, or loss of adhesion. Minute fracturing (i.e. crazing or cracking) as a result of routing and bending of the ACM panels shall be excluded.
- e. Anodized Aluminum Finish:
 - i. Ten (10) years against fading or change color in excess of six (6) E units (NBS) when calculated in accordance with ASTM D2244, paragraph 6.3

- ii. Twenty (20) years against cracking, chipping, splitting, blistering, peeling, or loss of adhesion. Minute fracturing (i.e. crazing or cracking) as a result of routing and bending of the ACM panels shall be excluded.
- C. Shop-Fabrication Warranty: Fabricator shall submit to the Owner a standard warranty document executed by an authorized company official. The warranty shall be in addition to, and not a limitation of, other rights Owner may have under the Contract Documents.
 - I. Warranty Period:
 - a. Workmanship: One (1) year warranty period commencing on Date of Substantial Completion.
- D. Installation Warranty: Installer shall submit to the Owner a standard warranty document executed by an authorized company official. The warranty shall be in addition to, and not a limitation of, other rights Owner may have under the Contract Documents.
 - I. Warranty Period:
 - a. Workmanship: One (1) year warranty period commencing on Date of Substantial Completion.

PART 2 – PRODUCTS

2.01 ACM MANUFACTURERS AND SHOP-FABRICATED ACM PANEL SYSTEM SUPPLIERS

- A. ACM Manufacturers:
 1. Omega-Lite panels manufactured by Laminators Inc. – www.laminatorsinc.com
 2. Other ACM manufacturer who meets the requirements of this specification
- B. Shop-Fabricated ACM Panel System Suppliers:
 1. Laminators Inc. – www.laminatorsinc.com
 2. Other Field-Fabricated ACM Panel System supplier who meets the requirements of this specification

2.02 ALUMINUM COMPOSITE MATERIAL (ACM)

- A. ACM Panel Description
 - I. Construction:
 - a. Two sheets of aluminum bonded to a core of extruded thermoplastic manufactured in a laminated batch (i.e. discontinuous) process using adhesive(s) between dissimilar materials. The core material shall not contain foam plastic insulation.

2. Thickness: 0.236 inch (6 mm)
3. Sheets:
 - a. Face Thickness: 0.020 inch nominal or thicker
 - b. Backer Thickness: 0.0125 inch nominal or thicker
 - c. Combined Minimum Thickness: 0.0365 inch nominal (Face + Backer)
4. Product:
 - a. On Types I, II, III, and IV Construction to any height above grade in accordance with the provisions of IBC Section 1407.10.
5. Fire Performance: Class A Material
 - a. ASTM E84: ACM panels shall have a Flame Spread Index (FSI) of not more than 25 when tested in the maximum thickness intended for use.
 - b. ASTM E84: ACM panels shall have a Smoke Developed Index (SDI) of not more than 450 when tested in the maximum thickness intended for use.
6. Bond Integrity:
 - a. ASTM D1781 Climbing Drum Peel Strength: 22.5 in-lb/in minimum as manufactured
 - b. Chemically-bonded to the core material in a laminated batch process

2.03 FINISH

- A. Exterior Finish: Finish shall meet the performance criteria of AAMA 2605.
 - I. Standard and Standard Metallic Finishes:
 - a. Selected from a Manufacturer's standard color chart – **dark bronze**
- B. Exterior Finish: Finish shall meet the performance criteria of the AA.
 - I. Anodized:
 - a. Clear Coating: AA-M12C23A31 Architectural Class
 - b. Color Coating: AA-M12C23A34 Architectural Class

2.04 SYSTEM COMPONENTS

- A. General: Provide Manufacturer's standard ACM Panel System-specific components, including, but not limited to, mountings, adhesives, connections, and fasteners for specific applications indicated on contract documents.

2.05 RELATED MATERIALS

- A. General: Refer to Related Sections specified herein for other materials, including concrete, masonry, framing, sheathing, barriers, flashing and trim, sealants, windows, glazing, and/or curtain walls.

2.06 SHOP-FABRICATION

A. General:

1. Fabricate panels to sizes and joint configurations indicated on approved Shop Drawings based on an assumed design temperature of 70°F. Allow for ambient temperature range at time of fabrication.
2. Fabricate panels with sharply cut edges and no displacement of face or backer sheets or protrusion of core. Form panel angles, breaks, corners, lines, and returns to be sharp, true, and free of buckle and/or warp.

B. Fabrication Tolerances:

1. Width: +/- 1/16- inch @ 70°F
2. Length: +/- 1/16 inch @ 70°F
3. Squareness: +/- 1/16 inch @ 70°F

C. System Type:

1. A wet seal system shall provide caulked panel joints and a means for water to drain to the exterior face in order to address any leakage at joints and/or condensation that may occur within the drainage cavity. The system shall be tested per AAMA 501.1. The sealant type shall be as specified in Section 079200; in conformance with Manufacturer's recommendations; and combined with foam type backer rod, as indicated on architectural drawings.
2. A Pressure-Equalized Rainscreen (PER) system shall allow air to quickly pass through panel joints while minimizing and controlling water infiltration at the air/water barrier. The system must be properly compartmentalized to prevent internal cavity air from moving between different pressure zones of the building surfaces. The system shall be tested per AAMA 508.

D. System Components:

1. Panel perimeter components shall be extruded or formed aluminum as indicated on system-specific design details to meet the Performance Requirements according to the **[Manufacturer's]**

[**Fabricator's**] design. Galvanized cold-formed steel clips or staggered aluminum angles are not acceptable for panel to panel attachment.

PART 3 – EXECUTION

3.01 INSTALLER INSTRUCTIONS

- A. Compliance: Comply with Manufacturer's product data, including, but not limited to, installation guides, design details, product technical bulletins, supplemental technical instructions, and any other product packaging instructions.

3.02 PREPARATION

- A. Site Verification of Conditions: Verify that conditions of substrate previously installed under other sections are acceptable for the ACM Panel System installation. Documentation should be provided to the Architect & **General Contractor** indicating any conditions detrimental to the performance of the ACM Panel System.
- B. Field measurements of site conditions shall be verified with approved Shop Drawings prior to beginning of installation. Notification of any product modifications and resulting schedule adjustment shall be documented to the [**Architect & General Contractor**].

3.03 INSTALLATION

- A. General:

- I. Handling:

- a. Protective masking should be left on the field of each ACM panel during installation to minimize potential damages from construction activities. Note that all masking must be removed within 2 weeks of installation.
 - b. Handle ACM panels with clean work gloves to avoid hand injury from any sharp edges and to prevent staining of surfaces with contaminants.
 - c. Glazing suction cups are recommended to handle ACM panels whenever possible.
 - 2. Install the ACM Panel System plumb, level, and true in accordance with [**Manufacturer's**] [**Fabricator's**] Installation Requirements and approved Shop Drawings.
 - 3. Comply with [**Manufacturer's**] [**Fabricator's**] instructions for installation of concealed fasteners; provisions of Section 079200; and recommendations for installation of joint sealants.
 - 4. Panel stiffeners shall be extruded or formed aluminum or cold-formed steel as indicated on system-specific design details to meet the Performance Requirements according to the [**Manufacturer's**] [**Fabricator's**] design. Unless required during shop-fabrication, stiffeners shall be mechanically

fastened to the substrate and secured to the rear face of ACM panels with adhesive of sufficient size and strength.

5. Installation Tolerances:

- a. Adjacent vertical or horizontal panel out-of-plane offset: +/- 1/16 inch
- b. Vertical or horizontal joint width: +/- 1/16 inch
- c. Adjacent vertical or horizontal panel edge alignment: +/- 1/16 inch
- d. Adjacent vertical or horizontal joint deviation: +/- 1/16 inch
- e. Maximum vertical or horizontal joint deviation: 1/4 inch in any 20 feet

6. Do not cut, trim, weld, or braze ACM Panel System-specific components during installation in a manner which would damage the finish, decrease strength, or result in visual imperfection or a failure in performance.

7. Separate contact of dissimilar metals with approved methods as defined by the **[Manufacturer]** **[Fabricator]** in order to eliminate the possibility of corrosive or electrolytic action between metals.

B. Related Products Installation Requirements: Refer to other sections in Related Sections for installation of related products.

3.04 FIELD QUALITY REQUIREMENTS

A. Field Quality Control: When required, mock-up shall be constructed and tested at the direction of the **[Owner]** **[Architect]** **[General Contractor]**. Water-spray testing on the mock-up of the ACM Panel System shall be in accordance with AAMA 501.2.

B. Testing Agency: If required, the **[Owner]** **[Architect]** **[General Contractor]** shall engage a qualified testing agency to perform tests and inspections.

3.05 REMEDIATION AND CLEANING

A. Remediation:

1. Remove and replace ACM Panel System-specific components damaged as a direct result of activities in the Panel Installation section.
2. Remove protective masking immediately after installation of ACM Panel System. Masking intentionally left in place after Panel Installation on an elevation at the direction of the General Contractor shall become the responsibility of the General Contractor.

3. Panel Installation completion shall be agreed-upon between the Installer and the General Contractor.
4. Following Panel Installation completion, any determination of repair or replacement of ACM Panel System-specific components is at the discretion of the Architect. Such repair or replacement shall become the responsibility of the General Contractor.
 - a. At the discretion of the Architect, repair damaged ACM Panel System-specific components such that repairs are not discernible at a distance of 10 feet from the surface at a 90° angle per AAMA 2605.
5. Removal and replacement of ACM Panel System-specific components damaged by other trades shall be the responsibility of the General Contractor.
6. If required after Panel Installation, any additional protection of the ACM Panel System shall be the responsibility of the General Contractor.
7. Remove from project site damaged ACM Panel System-specific components, protective masking, and other debris attributable to work of this section.

B. Cleaning:

1. Final Cleaning shall not be part of the work of this section.
2. Cleaning and Maintenance of the BD&V ACM Panel System shall be performed at least once a year in accordance with AAMA 609 & 610.

END OF SECTION