AMERACORE® FR

Fire-Resistant Metal Composite Material

Manufacturer's Guide Specification

SECTION 07 42 13
METAL WALL PANELS

About This Document

This Manufacturer's Guide Specification has been prepared by Alumanate, LLC, for the proprietary specification of AMERACORE® FR fire-resistant metal composite material (MCM). The document follows the Construction Specifications Institute (CSI) three-part SectionFormat and MasterFormat® numbering convention for Section 07 42 13 — Metal Wall Panels.

Bracketed text [ ] indicates information to be selected or completed by the specifier. Italicized SPECIFIER NOTES are guidance only and should be deleted from the final issued specification. Imperial units govern; metric values are shown in soft conversion.

Alumanate, LLC does not serve as the design professional of record for any project. The architect or engineer of record is solely responsible for adapting this guide to the requirements of the project, the governing code, and the contract documents.

MANUFACTURER	Alumanate, LLC
ADDRESS	Houston, Texas, USA
WEB	alumanate.com
PRODUCT	AMERACORE® FR — Fire-Resistant Metal Composite Material
SECTION	07 42 13 — Metal Wall Panels
DOCUMENT	Manufacturer's Guide Specification (ManuSpec) — Version 2

PART 1 — GENERAL

1.01 Scope

A. Section Includes:
   1. MCM — fire-resistant metal composite material panels.
   2. Panel system requirements for fire-resistant MCM, including exterior and interior installations together with the associated assemblies, components, and accessories required for a complete installation.

SPECIFIER NOTE: *Edit the list of related sections below to suit the actual divisions used on the Project. Coordinate scope boundaries with adjacent trades.*

B. Related Sections:
   1. Division 05 — Cold-Formed Metal Framing.
   2. Division 07 — Air, Weather, and Vapor Barriers.
   3. Division 07 — Sheet Metal Flashing and Trim.
   4. Division 07 — Joint Sealants.
   5. Division 08 — Aluminum Windows.
   6. Division 08 — Glass and Glazing.
   7. Division 08 — Glazed Aluminum Curtain Walls.

1.02 References

A. General: Standards cited in this Section, as revised by the issuing authority, form a part of this Section to the extent referenced. Where this Section establishes a more stringent requirement than that of the cited standard, this Section shall govern. Cited standards have been identified by the International Building Code (IBC), the locally adopted building code, or by the project-specific requirements applicable to the construction type.

B. Aluminum Association (AA):
   1. Aluminum Design Manual.
   2. AA-M12C22A41 — Anodized, Clear Coating.
   3. AA-M12C22A44 — Anodized, Color Coating.

C. ASTM International:
   1. ASTM B117 — Salt Spray (Fog) Apparatus.
   2. ASTM B209 — Aluminum and Aluminum-Alloy Sheet and Plate.
   3. ASTM D635 — Rate of Burning and Extent of Burning of Plastics in a Horizontal Position.
   4. ASTM D1308 — Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
   5. ASTM D1781 — Climbing Drum Peel Test for Adhesives.
   6. ASTM D1929 — Ignition Properties of Plastics.
   7. ASTM D2244 — Calculation of Color Tolerances and Color Differences.
   8. ASTM D2247 — Water Resistance of Coatings in 100 Percent Relative Humidity.
   9. ASTM D2794 — Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
   10. ASTM D3359 — Adhesion by Tape Test.
   11. ASTM D3363 — Film Hardness by Pencil Test.
   12. ASTM D4214 — Evaluating Degree of Chalking of Exterior Paint Films.
   13. ASTM E84 — Surface Burning Characteristics of Building Materials.
   14. ASTM E283 — Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
   15. ASTM E330 — Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
   16. ASTM E331 — Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

D. American Architectural Manufacturers Association (AAMA):
   1. AAMA 501.1 — Dynamic Water Penetration Test Method.
   2. AAMA 509 — Voluntary Test and Classification Method for Drained and Back-Ventilated Rainscreen Wall Cladding Systems.
   3. AAMA 2605 — Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
E. National Fire Protection Association (NFPA):
   1. NFPA 285 — Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components.
F. International Organization for Standardization (ISO):
   1. ISO 9001 — Quality Management Systems.

1.03 System Description

A. Performance Requirements: Provide an installed MCM system designed and engineered to withstand the specified design loads and environmental exposures while maintaining the allowable deflection and thermal-movement criteria established by the Manufacturer and by this Section, without defects, damage, or failure of any component.
B. Deflection and Thermal Movement: Provide MCM systems engineered to resist positive and negative wind pressures determined in accordance with the governing building code, and meeting the following:
   1. Perimeter Framing Deflection: Deflection of the panel perimeter framing member, measured normal to the plane of the wall, shall not exceed L/175 of the unsupported span (L).
   2. Panel Face Deflection: Deflection of the panel face at design load shall not exceed L/60 of the unsupported span (L).
   3. Anchor Deflection: At the connection points of framing members to anchors, deflection in any direction shall not exceed 0.0625 in. (1.6 mm).
   4. Overload Performance: When tested to 150 percent of design pressure, no permanent deformation exceeding L/1000 of span and no failure of structural members shall occur.
   5. Thermal Movements: The system shall accommodate free and noiseless horizontal and vertical thermal expansion and contraction of component parts across a material-surface temperature range of -20 °F to +180 °F (-29 °C to +82 °C).
      a. Buckling, opening of joints, undue stress on fasteners, failure of sealants, and any other detrimental effects of thermal movement shall not be permitted.
      b. Fabrication, assembly, and erection procedures shall account for the ambient temperature range at the time of the respective operation.
C. Water and Air Leakage: Provide systems tested and certified to the following criteria:
   1. ASTM E283 — Air Leakage: Not more than 0.06 cfm per ft² (0.30 L/s·m²) of wall area when tested at a pressure differential of 6.24 psf (300 Pa).
   2. ASTM E331 — Static Water Penetration: When tested at a static pressure differential of not less than 12.0 psf (575 Pa) for a duration of fifteen (15) minutes, the MCM system shall exhibit no uncontrolled water leakage to the room side of the assembly.
   3. AAMA 501.1 — Dynamic Water Penetration: When tested at a wall pressure equivalent to 12.0 psf (575 Pa) for a duration of fifteen (15) minutes, the MCM system shall exhibit no uncontrolled water leakage to the room side of the assembly as defined by the test procedure.
   4. ASTM E330 — Structural Performance: The MCM system shall be engineered to meet the project-specific design loads and shall, in any event, meet or exceed the deflection criteria of Article 1.03.B when tested at a minimum pressure of 30.0 psf (1436 Pa).
D. Fire Performance: Where required by the governing code, provide fire-resistant MCM that has been evaluated and is in compliance with the code requirements specified herein.
   1. Wall assemblies containing the MCM system shall meet the requirements of the intermediate-scale multi-story test, NFPA 285, where required by the code applicable to the design of the

Project. AMERACORE® FR has passed NFPA 285 as a component of one or more tested wall assemblies; the Manufacturer will, on request, furnish documentation of the specific tested assembly or a qualified engineering judgment applicable to the project conditions.

1.04 Submittals

A. Submit in accordance with the Conditions of the Contract and Division 01 Submittal Procedures Sections.
B. Product Data: Submit current Manufacturer's published product literature, brochures, and Spec-Data sheets for each component to be incorporated into the Work.
C. Shop Drawings: Submit Shop Drawings showing project layout and elevations; fastening and anchoring methods; the detail and location of joints, sealants, and gaskets, including the joints required to accommodate thermal movement; trim; flashing; and accessories.
D. Samples: Submit selection and verification samples for finishes, colors, and textures:
    1. Selected Samples: Manufacturer's color charts or chips illustrating the full range of standard colors, finishes, and patterns available for MCM with factory-applied finishes.
    2. Verification Samples:
        a. Panel System Assembly: Two samples of each assembly, minimum 12 in. × 12 in. (305 mm × 305 mm), showing the proposed attachment system, joint configuration, and visible finish.
        b. Two samples of each selected color, either as coil-coated production samples or as draw-down samples on aluminum substrate, of size not less than 3 in. × 4 in. (76 mm × 102 mm).
E. Quality Assurance Submittals — submit the following:
    1. Product Test Reports: Certified test reports demonstrating compliance with the specified performance characteristics and physical properties, or a qualified third-party listing documenting compliance to a comparable code section.
    2. Product Certificates: Product certificates signed by the Manufacturer certifying that the materials supplied comply with the specified performance characteristics and physical requirements.
    3. Manufacturer's Product Literature.
    4. Manufacturer's Field Reports, where applicable.
F. Closeout Submittals — submit the following:
    1. Executed Warranty as required by Article 1.07.
    2. Manufacturer's written cleaning and maintenance instructions for the installed finish.

1.05 Quality Assurance

A. MCM Manufacturer Qualifications: The MCM Manufacturer shall be a company with a minimum of five (5) years of continuous experience manufacturing MCM of the type specified, and shall:
    1. Be able to provide the painted-finish warranty required by Article 1.07.
    2. Be able to furnish, on request, a list of other completed projects of similar scope, including the project name, approximate date of installation, and the name of the architect of record.
    3. Produce the MCM in-house in a continuous-process operation, with the compounding and extrusion of the fire-resistant core and the bonding of the face sheets to the core performed by the Manufacturer and not outsourced to a third party.
    4. Manufacture the product within the United States.
B. MCM Fabricator Qualifications: The MCM Fabricator shall:
    1. Have not fewer than three (3) years of continuous, documented experience fabricating MCM panel systems of the type specified.
    2. Have operated under its present business name for not fewer than five (5) years prior to the start of the Project.
    3. Be capable of providing qualified field-service representation during the course of construction.

4. Not be operating under, and shall not within the prior twenty-four (24) months have filed for protection from creditors under, any state or federal insolvency or debtor-relief statute or code.

C. MCM System Installer Qualifications: The MCM System Installer shall:
   1. Have operated under its present business name for not fewer than five (5) years prior to the start of the Project, and shall have completed projects of MCM scope comparable to the Work of this Section.
   2. Be capable of providing qualified field representation during the course of construction.
   3. Be an Installer approved in writing by the MCM Fabricator for the installation of the specified MCM system, and shall have completed training in the Fabricator's installation methods for that system.

D. Mock-Up:
   1. At a location on the building and to an extent directed by the Architect, install a mock-up using the specified MCM, support framing, flashing, trim, and accessories, sufficient to demonstrate:
      a. Substrate preparation.
      b. Support framing, furring, and flashing.
      c. Clearances and gaps between members.
      d. Fastening methods.
      e. Trim details.
      f. Joint protection.
      g. Workmanship.
   2. Obtain the Architect's acceptance of the mock-up prior to commencing the wall panel Work. Prepare additional mock-ups, if required by the Architect, until accepted.
   3. Maintain the accepted mock-up during construction as the required standard of workmanship and the basis of comparison for the installation of the wall panel Work. The accepted mock-up may, at the Architect's discretion, remain as a portion of the finished Work.

E. Installation Documents On-Site: Maintain at the project site current copies of the Manufacturer's installation instructions, the approved Submittals, and the Approved Shop Drawings; make these available as needed to confirm proper installation.

1.06 Delivery, Storage, and Handling

A. Comply with the Manufacturer's ordering instructions and published lead-time requirements to avoid construction delay.
B. Deliver materials to the Fabricator in the Manufacturer's original, unopened, undamaged containers, with identification labels intact.
C. Protect the visible finish of the panels with a heavy-duty removable protective film applied at the time of production.
D. Following fabrication, package the panels for protection against transportation damage.
E. Store materials in accordance with the Manufacturer's published guidelines:
   1. Exercise care during unloading, storage, and installation to prevent bending, warping, twisting, and surface damage to the factory-applied finish.
   2. Store materials protected from harmful weather conditions, out of direct sunlight when unpackaged, and at temperatures not exceeding 120 °F (49 °C).
   3. Protect panels from moisture and condensation with tarpaulins or other suitable weather-tight coverings installed to provide ventilation.
   4. Slope panels and crates to ensure positive drainage of any accumulated water.
   5. Avoid contact with any other materials that may cause staining, denting, or other surface damage to the factory-applied finish.

1.07 Warranty

A. Manufacturer's Warranty: Submit, for the Owner's acceptance, the Manufacturer's standard warranty document executed by an authorized officer of the Manufacturer. The Manufacturer's warranty is in addition to, and not in limitation of, any other rights the Owner may have under the Contract Documents.
B. Warranty Periods (commencing on the Date of Substantial Completion):
   1. Panel Integrity: ten (10) years.
   2. Painted Finish (PVDF / FEVE coating systems): thirty (30) years, subject to the published terms and exposure conditions of the Manufacturer's standard finish warranty.
   3. MCM Natural Metals and Mill Finishes: no finish warranty.

PART 2 — PRODUCTS

2.01 Fire-Resistant Metal Composite Material (MCM)

A. MCM Manufacturer:
   1. Alumanate, LLC
   Houston, Texas, USA
   Web: alumanate.com

2.02 Basis of Design

A. AMERACORE® FR — fire-resistant metal composite material as manufactured by Alumanate, LLC.
B. Description: AMERACORE® FR consists of two sheets of aluminum continuously bonded under tension to a solid core of extruded, mineral-filled, fire-resistant thermoplastic material. The composite is formed in a continuous process. The core shall be free of voids and air pockets and shall not contain foamed insulation material. MCM products laminated sheet-by-sheet in a batch process shall not be acceptable as equal.
C. MCM Thickness:
   1. 4 mm (0.157 in.).
   2. 6 mm (0.236 in.).
D. MCM Composition:
   1. Front Face Sheet: 0.5 mm (0.020 in.) nominal.
   2. Fire-Resistant Mineral Core:
      a. 3.0 mm (0.117 in.) nominal — 4 mm panel.
      b. 5.0 mm (0.196 in.) nominal — 6 mm panel.
   3. Back Face Sheet: 0.5 mm (0.020 in.) nominal.
E. Aluminum Alloy: 3000-series aluminum alloy, temper as required for coil coating and post-form fabrication.
F. Nominal Weight:
   1. 4 mm panel: 1.55 lb/ft² (7.57 kg/m²).
   2. 6 mm panel: 2.15 lb/ft² (10.50 kg/m²).
G. Finishes:
   1. Coil-applied KYNAR® 500 or HYLAR® 5000-based polyvinylidene fluoride (PVDF) resin, or fluoroethylene vinyl ether (FEVE) resin, meeting or exceeding the requirements of AAMA 2605 where applicable to coil coatings.

SPECIFIER NOTE: *Select one color option from the list below. Delete unused options.*

      a. Color (select one of the following):
         1) Standard color selected by the Owner / Architect / Engineer from the Manufacturer's published standard color line:
            a) 2-coat solid.
            b) 2-coat mica.
            c) 3-coat metallic.
            d) [_____].
         2) Custom color matched by the Manufacturer to an approved color reference, in the following finish family:
            a) 2-coat solid.
            b) 2-coat mica.
            c) 3-coat metallic.
            d) [_____].
         3) Clear coat over hairline-brushed aluminum substrate.

b. Dry Film Thickness:
   1) 2-coat system: 1.0 mil (± 0.2 mil).
   2) 3-coat system: 1.0 mil (± 0.2 mil), plus a 0.5 mil (± 0.1 mil) clear coat.
c. Hardness: ASTM D3363 — F to 2H minimum.
d. Impact Resistance:
   1) Test Method: ASTM D2794, Gardner Variable Impact Tester, 5/8 in. mandrel.
   2) The coating shall withstand reverse impact of 1.5 in.-lb per mil of substrate thickness.
   3) The coating shall adhere tightly to the substrate when subjected to a No. 600 cellophane-tape pick-off test. Minute cracking is permissible; no removal of the film to the substrate is permitted.
e. Adhesion:
   1) Test Method: ASTM D3359. No coating pick-off shall occur when subjected to a 1 in. × 1 in. × 1/16 in. cross-hatch grid and No. 600 cellophane tape.
f. Humidity Resistance:
   1) Test Method: ASTM D2247.
   2) No formation of blisters when subjected to condensing water fog at 100 percent relative humidity and 100 °F (38 °C) for 4,000 hours.
g. Salt Spray Resistance:
   1) Test Method: ASTM B117. Expose the coating system to 4,000 hours of a 5 percent NaCl solution at 95 °F (35 °C).
   2) Corrosion creepage from scribe line: 1/16 in. (1.6 mm) maximum.
   3) Minimum blister rating of 8 within the test specimen field.
h. Weather Exposure (outdoor):
   1) Ten (10) year exposure at a 45-degree angle facing south, South Florida exposure.
   2) Maximum color change of 5 Delta E units as calculated in accordance with ASTM D2244.
   3) Minimum chalk rating of 8 in accordance with ASTM D4214.
   4) No checking, crazing, or adhesion loss.
i. Chemical Resistance:
   1) ASTM D1308, 10 percent muriatic acid, 15-minute exposure: no loss of film adhesion and no visible change observed by the unaided eye.
   2) ASTM D1308, 20 percent sulfuric acid, 18-hour exposure: no loss of film adhesion and no visible change observed by the unaided eye.
   3) AAMA 2605, 70 percent reagent-grade nitric acid vapor, 30-minute exposure: maximum color change of 5 Delta E units as calculated in accordance with ASTM D2244.

2.03 Alternates

SPECIFIER NOTE: *Edit Article 2.03 to suit the procurement strategy for the Project. Where substitutions are not permitted, retain only the Basis of Design above and delete Article 2.03 in its entirety.*

A. Base Bid / Contract Manufacturer: [specify base-bid manufacturer].
   1. Product: [specify base-bid brand or trade name, with attributes and characteristics].
B. Alternate No. [____]: [specify alternate manufacturer].
   1. Product: [specify alternate brand or trade name, with attributes and characteristics].
C. Alternate No. [____]: [specify alternate manufacturer].
   1. Product: [specify alternate brand or trade name, with attributes and characteristics].
D. Proposed alternate products shall match the Basis of Design in panel construction, core composition, fire-performance classification, finish system, bond integrity, dimensional tolerance, and warranty term, and shall be manufactured within the United States.

2.04 MCM Product Performance

A. Bond Integrity — tested for resistance to delamination as follows:
   1. Peel Strength (ASTM D1781): not less than 22.5 in.-lb/in. (100 N·mm/mm) as manufactured.
   2. No measurable degradation of bond performance after eight (8) hours of immersion in boiling water at 212 °F (100 °C).
   3. No measurable degradation of bond performance after twenty-one (21) days of immersion in water at 70 °F (21 °C).
   4. Face sheets thermally bonded to the fire-resistant core in a continuous process under tension.

B. Fire Performance:
   1. Flame Spread Index, ASTM E84: less than 25 (Class A).
   2. Smoke Developed Index, ASTM E84: less than 450 (Class A).
   3. Ignition Temperature:
      a. Flash Ignition, ASTM D1929: 716 °F (380 °C).
      b. Self-Ignition, ASTM D1929: 752 °F (400 °C).
   4. Flammability of Exterior, Non-Load-Bearing Wall Assemblies and Panels, NFPA 285: Pass.

C. Production Tolerances:
   1. Width: ± 0.080 in. (± 2.0 mm).
   2. Length: + 0.197 in. (+ 5 mm) / – 0 in. (– 0 mm).
   3. Thickness:
      a. 4 mm panel: ± 0.008 in. (± 0.2 mm).
      b. 6 mm panel: ± 0.012 in. (± 0.3 mm).
   4. Bow: maximum 0.5 percent of length or width.
   5. Squareness: maximum 0.197 in. (5 mm).

2.05 Fabrication

A. General: Shop-fabricate panels to the sizes and joint configurations indicated on the Approved Shop Drawings.
   1. Fabricate panels to the dimensions indicated on the Approved Shop Drawings based on a reference design temperature of 70 °F (21 °C). Account for the ambient temperature range at the time of fabrication.
   2. Form panel lines, breaks, and angles sharply and true, with surfaces that are free of warps, buckles, and oil-canning.
   3. Trim panel edges sharply and cleanly, with no displacement of the face sheets and no protrusion of the core.

B. Fabrication Tolerances (panel as fabricated, at 70 °F / 21 °C reference temperature):
   1. Width: ± 0.079 in. (± 2.0 mm).
   2. Length: ± 0.079 in. (± 2.0 mm).
   3. Squareness: ± 0.079 in. (± 2.0 mm).

PART 3 — EXECUTION

3.01 Manufacturer's and Fabricator's Instructions

A. Compliance: Comply with the Manufacturer's and the Fabricator's product data, including the current product technical bulletins, the product catalog installation instructions, and any product carton instructions accompanying the materials.

3.02 Examination and Preparation

A. Verify that the substrates and adjacent work installed under other Sections or Divisions are acceptable for the installation of the MCM system. Documentation shall be provided identifying any condition that would be detrimental to the performance or installation of the MCM system.
   1. Notify the Architect in writing of unacceptable conditions upon discovery.
   2. Proceed with preparation and installation only after unacceptable conditions have been corrected.

B. Field Measurements:
   1. Where required by project conditions, take field measurements of the site conditions prior to commencing fabrication. Document any material modification arising from field measurement, including the resulting schedule adjustment.
   2. Take field measurements once all substrate materials and adjacent materials have been installed, verifying the locations of wall framing members and the dimensions of wall openings before commencement of installation. Record measurements on the As-Built Shop Drawings.

C. Project Schedule: Provisions in the project schedule shall accommodate the time interval between field measurement and shop fabrication / installation.

D. Miscellaneous Framing: Install miscellaneous MCM system support members and anchorage in accordance with the written instructions and the drawings supplied by the MCM Fabricator.

3.03 Installation

A. General:
   1. Install panels plumb, level, and true to line in compliance with the Fabricator's recommendations and the Approved Shop Drawings.
   2. Anchor panels securely in accordance with the Fabricator's Approved Shop Drawings.
   3. Comply with the Fabricator's instructions for the installation of concealed fasteners and with the provisions of Section 07 90 00 for the installation of joint sealants.
   4. Installation Tolerances: The maximum deviation from horizontal and vertical alignment of installed panels shall not exceed 0.25 in. in 20 ft (6.4 mm in 6.1 m), non-cumulative.
   5. Separate contact between dissimilar metals using bituminous paint, approved plastic shims, or other methods approved by the Aluminum Design Manual. Use gasketed or approved coated fasteners where required to prevent corrosive or electrolytic action between metals.

B. Related Products: Refer to the Sections listed in Article 1.01.B above for related materials, including cold-formed metal framing, sheet metal flashing and trim, joint sealants, aluminum windows, glass and glazing, and curtain walls.

3.04 Field Quality Requirements

A. Field Quality Control: Comply with the Fabricator's published recommendations and guidelines for field forming of panels.

B. Field Mock-Up Testing: Where field mock-up testing is required by the Contract, the mock-up shall be constructed and tested at the expense of the Architect / Owner / General Contractor.

C. Testing Agency: Where required, the Owner shall engage a qualified independent testing agency to perform tests and inspections.
D. Fabricator's Field Services: Upon the Owner's written request, the Fabricator shall provide field-service representation consisting of product-use recommendations and periodic site visits for observation of installation in accordance with the Fabricator's published instructions.

3.05 Adjusting and Cleaning

A. Adjusting:
   1. Remove and replace panels damaged beyond repair as a direct result of panel installation. After installation, panel repair and replacement shall be the responsibility of the General Contractor.
   2. Removal of panels damaged by other trades shall be the responsibility of the General Contractor.
   3. Repair components of the MCM system that present with minor damage, provided that the repair is not visibly discernible when viewed from a distance of 10 ft (3 m) at a 90-degree angle, in accordance with AAMA 2605.
   4. Remove and replace components of the MCM system damaged beyond the repair criteria above.
   5. Remove the protective film immediately after installation of the MCM and immediately prior to completion of the MCM system Work. Protective film intentionally left in place on any elevation after panel installation at the direction of the General Contractor shall become the responsibility of the General Contractor.
   6. Any additional protection of the installed MCM after installation shall be the responsibility of the General Contractor.
   7. Verify that weep holes and drainage channels are unobstructed and free of dirt and sealant.
   8. Promptly remove from the project site any damaged MCM panels, protective film, and other debris attributable to the MCM system installation, and dispose of these materials legally.
B. Cleaning:
   1. Following MCM installation, remove temporary coverings and protection from adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with the Manufacturer's published instructions prior to the Owner's acceptance.

3.06 Protection

A. Protect the installed products from damage during subsequent construction work, through final inspection and acceptance by the Owner.
B. Institute additional protective measures as required to ensure that the installed panels are turned over to the Owner free of damage.

END OF SECTION 07 42 13

Disclaimer

Building codes and regulations governing the use of metal composite materials vary by jurisdiction and are subject to revision. The architect of record, the design engineer, the general contractor, the fabricator, and the installer are each responsible, consistent with their respective roles, for determining the suitability of AMERACORE® FR for a particular project and for ensuring conformity with all applicable national, state, and local codes. Laboratory test results and tested-assembly listings reflect the specific specimen tested and do not constitute a representation that an as-built assembly will achieve identical performance. Alumanate, LLC reserves the right to revise published product data and specifications without notice.