

MANUFACTURER:
Americlad, LLC
21925 Industrial Blvd.
Rogers, MN 55374
Telephone: (866) 260-4047
Fax: (763) 255-3399
Email: info@americlad.com

**AMERICLAD
AC-2200 Concealed Fastener
Flush Panel System**

SECTION 07 42 13 CONCEALED FASTENER HONEYCOMB CORE FLUSH WALL PANEL SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. The drawings and provisions of the General Conditions, and the sections included under Division 1 specification sections, apply to this section

1.2 SUMMARY

- A. This section includes flat-lock panels that are used as the exterior and interior cladding

1.3 PERFORMANCE REQUIREMENTS

- A. Structural Performance: provide flat-lock panel assemblies capable of withstanding the effects of load and stresses from wind loads, dead loads, snow loads and normal and expected thermal movement without evidence of permanent defects of the assemblies. System design for a mechanically fastened assembly to substructure
1. Dead Load as required by applicable building code
 2. Live Load as required by applicable building code
 3. Wind Load: uniform pressure (define velocity pressure) of (insert design criteria) pound/square foot, acting inward and outward.
 4. Thermal Movements: provide panel assemblies that allow for thermal movements to prevent buckling, opening of joints and other thermal effects
- B. Design the panel for a mechanically fastened assembly to substructure
C. Design panel tolerances to manufacturer's standard tolerances
D. Metal panels to have a maximum allowable deflection of L/60

1.4 SUBMITTALS

- A. Product Data: Manufacturer's product literature
- B. Finish Samples: submit color samples for final approval
- C. Shop Drawings: submit shop drawings showing plans, sections, and details

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum of five years' experience in manufacturing of metal panel products
- B. Installer Qualifications: Acceptable to manufacturer
- C. Engineering Qualifications: Provide engineering calculations for the metal panel assembly to be prepared by an engineer registered in the state the project is located

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery: deliver metal panels in manufacturer's crates packed for long haul transit
- B. Storage: store materials in a dry and safe area
- C. Handling: handle materials to avoid any damage to materials and finishes

1.7 WARRANTY

- A. The contractor must warrant the materials to be free of defects in accordance with the general conditions. Finish warranty shall be extended by paint manufacturer's standard warranty

PART 2 – PRODUCTS**2.1 MANUFACTURER**

- A. Americlad LLC, 21925 Industrial Boulevard, Rogers, Minnesota 55374, Telephone: (866) 260-4047, www.americlad.com
 - 1. AC-2200 Concealed Fastener Honeycomb Core Flush Panel System
- B. Approved equal submitted for approval 10 days prior to bid

2.2 MATERIAL OPTIONS

- 1. Aluminum: (.040"), (.063"), (.080")
- 2. Stainless Steel: (24ga.), (22ga.), (20gau.), (18ga.), (16ga.)

2.3 FABRICATION

- A. Tolerances
 - i. Breaks, bend lines, and angles shall be true and surfaces
 - ii. Panel surfaces shall be free of blemishes, scratches or marks caused during fabrication process

- B. Standard Panel Depth: 1"
- C. Standard Panel Width: (8"), (12"), (16"), (20")
 - 1. *Check with manufacturer for other available options*

2.4 ACCESSORIES

- A. All fasteners shall be non-corrosive type, as recommended by the panel manufacturer. Provide self-tapping screws at mounting flange and side lap joints designed to withstand building design loads.
- B. Weather Resistant Membrane: As recommended by the panel manufacturer.
- C. Flashing: Shall remain the same material and gauge as panels where exposed.
- D. Panel Sealants:
 - 1. Perimeter Joint Sealant are required to seal joints in metal wall panels and remain weathertight; and as recommended in writing by manufacturer.
- E. Sub-grits: Spacing and structural requirements are recommended by the panel manufacturer and in accordance with approved shop drawings; to avoid galvanic reaction and separate dissimilar metals.

2.5 FINISHES

- A. Painted Aluminum
 - 1. Coating shall be a Fluorocarbon Resin Utilizing a 70% Kynar 500/Hylar 5000 resin
 - 2. Color as selected by owner from paint manufacturer's standard colors or custom colors as specified
 - 3. Material to be painted in accordance with either AAMA specification 2605 or 2604
- B. Anodized Aluminum
 - 1. Clear Anodic Finish: AA-M12C22A41, mechanical finish, non-specular as fabricated. Coating to have an anodic coating of 0.7 mil (0.018 mm) thickness
 - 2. Color Anodic Finish: AA-M12C22A42/A44, mechanical finish, nonspecular as fabricated. Color to be determined by Owner. Coating to have an anodic coating of 0.7 mil (0.018) thickness
- C. Stainless Steel:
 - 1. To be mill finished in a brushed finish: (#4 brushed), (#6 brushed), (#8 brushed)
- D. Copper:
 - 1. Mill finish
 - 2. Pre-patinated

E. Zinc:

1. Mill Finish [shiny]
2. Pre-Weathered [Dark Gray], [Charcoal Gray]

PART 3 – EXECUTION

3.1 PREPARATION

- A. Coordinate drawings, diagrams, and instructions for installation

3.2 INSTALLATION

- A. Install panels plumb and level per shop drawing detailing
- B. Isolation tape or shim shall be installed where dissimilar materials come in contact

3.3 CLEANING AND PROTECTION

- A. Clean exposed surfaces after installation per manufacturer's recommendation
- B. Touch up minor abrasions in finish with touch up paint supplied by finish applicator
- C. Protect panels from damage during construction. Use temporary protective coverings where needed as approved by the panel manufacturer.
- D. Panels that are damaged beyond repair must be replaced with new panels to match adjacent undamaged panels

END OF SECTION