SECTION 05 58 13
ALUMINUM COMPOSITE COLUMN COVER
REVEAL JOINT 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 aluminum composite column covers that are used as the exterior and interior cladding

1.3 PERFORMANCE REQUIREMENTS
A. Structural Performance: provide column cover assemblies capable of withstanding the effects of normal stress from thermal movements and load affects from: wind loads, dead loads, and snow loads; without evidence of permanent defects of the assembly.
B. 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 column assemblies that allow for thermal movements to prevent buckling, opening of joints and other thermal effects
C. Design the column for a mechanically fastened assembly to substructure
D. Design column tolerances to manufacturer’s standard tolerances
E. Metal columns to have a maximum allowable deflection of L/60
F. Column joints will be sealed appropriately using backer rod and approved caulk
G. Column shall perform to ASTM E283, Air Infiltration requirements
H. Column shall perform to ASTM E331, Water Penetration requirements

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 column cover products
B. Installer Qualifications: Acceptable to manufacturer

1.6 DELIVERY, STORAGE AND HANDLING
A. Delivery: deliver column covers 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. Quality Metalcrafts, LLC/AMERICLAD, 21925 Industrial Boulevard, Rogers, Minnesota 55374, Telephone: (866) 260-4047, www.americlad.com
   1. AC-10C Aluminum Composite Column Cover Reveal Joint System
I. Approved equal submitted for approval 10 days prior to bid

2.2 MATERIALS
A. Panels shall be 4 mm PE core, Aluminum Composite material unless FR (Fire Resistant) core is required by Architect.

B. Aluminum composite will be composed of a thermoplastic core laminated between two aluminum sheets (.020”) formed in a continuous process with no applied adhesives.

C. Composite panels shall have a Class “A” building material rating when tested in accordance with ASTM E 84 and performed to a flame spread of 15 and a smoke developed rating of 120.

2.3 FABRICATION
A. Tolerances
   1. Column surfaces shall be free of blemishes, scratches or marks caused during fabrication process.
   2. Roll columns to a true radius with return attachment legs formed to accommodate proper installation.

2.4 ACCESSORIES
A. All fasteners shall be stainless steel.

2.5 FINISHES
A. Paint:
   1. Coating shall be a Spray Applied Fluorocarbon Resin Utilizing a 70% Kynar 500/Hylar 5000 resin.
   2. Color as selected by owner from paint manufacturer’s standard colors or Custom color as specified.
   3. Material to be painted in accordance with either AAMA specification 2605 or 2604.

B. Anodized:
   1. Class I, Clear Anodic Finish: AA-M12C22A41, mechanical finish, nonspecular as fabricated. Coating to have an anodic coating of 0.7 mil (0.018 mm) thickness.
   2. Class I, 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.
PART 3 – EXECUTION

3.1 PREPARATION
   A. Coordinate drawings, diagrams, and instructions for installation

3.2 INSTALLATION
   A. Install column covers 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

END OF SECTION
COMPOSITE COLUMN COVER (REVEAL JOINT)

NOTE:
LOAD BEARING WALL COMPONENTS OF EITHER: 16GA STEEL STUDS, STRUCTURAL MEMBERS, MINIMUM 5/8" PLYWOOD OR CONCRETE. GYPSUM BOARD AND CEMENT BOARD ARE NOT A STRUCTURAL COMPONENT.


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21925 Industrial Boulevard  ∙  Rogers, Minnesota  ∙  Toll-Free: 1-866-260-4047  ∙  americlad.com

Architectural Metal Products
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MINIMUM RADIUS  (5 1/2") MAX LENGTH PER PANEL (16'-0")
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RADIUSED - HEAD DETAIL (1)

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BACKER ROD & SEALANT (OPTIONAL)

CEILING (NOT BY Q.M.)

BACKER ROD & SEALANT (NOT BY Q.M.)

COMPOSITE PANEL

CHANNEL STIFFENER ADHERED TO PANEL

RADIUS

VARES

BACKER ROD & SEALANT (OPTIONAL)
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RADIUSED - INTERMEDIATE DETAIL (2) DETAIL H

COMPOSITE PANEL
SUPPORT TUBE ADHERED TO PANEL
SUPPORT TUBE ADHERED TO PANEL
COMPOSITE REVEAL ADHERED TO SUPPORT TUBE
COMPOSITE PANEL

1.033
.813
.062

RADIUS

PLASTIC WELD

VARIES
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FASTEN FRAMING ANGLE 'A' TO EACH SIDE OF STRUCTURAL COLUMN

ANGLE 'A'

ANGLE 'A'

FASTEN FRAMING ANGLE 'B' PLUMB TO EACH ANGLE 'A'
(SHIM AS REQUIRED)

ANGLE 'B'

ANGLE 'B'

FASTEN FIRST COLUMN COVER PANEL TO EACH ANGLE 'B'
USING PANEL CLIPS (SHIPPED LOOSE)

ANGLE 'B'

ANGLE 'B'

FASTEN SECOND COLUMN COVER PANEL TO EACH ANGLE 'B'
USING PANEL CLIPS (SHIPPED LOOSE)

ANGLE 'B'

ANGLE 'B'

WET SEAL JOINTS OR PLACE FINISH CHANNEL INTO JOINTS