

SECTION 07 46 16

METAL SIDING

** NOTE TO SPECIFIER ** APROWOOD® – SYSTEM AW 150.

This section is based on a product of APROWOOD®, which is located at:

3223 Dell Avenue

North Bergen, NJ 07047

Tel: [1-888-520-8800](tel:1-888-520-8800)

Email: info@aprowood.com

Web: www.aprowood.com

PART 1 GENERAL

1.1. SECTION INCLUDES

** NOTE TO SPECIFIER ** Delete items below not required for project.

- A. Metal Siding.
- B. Related Sections:

** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.

- 1. [Refer to Division 05 Section “Cold-Formed Metal Framing: Metal framing for support of aluminum soffits”.]
- 2. [Refer to Division 01 Section “Construction/Demolition Waste management and Disposal”.]
- 3. [Refer to Division 06 Section “Rough Carpentry”.]
- 4. [Refer to Division 07 Section “Sheet Metal Flashing and Trim”]
- 5. [Refer to Division 07 Section “Joint Sealants”.]
- C. References
 - 1. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - 2. ASTM D 958 - Practice for Determining Temperatures of Standard ASTM Molds for Test Specimens of Plastics.
 - 3. ASTM E2768-11 – Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min Tunnel Test). Results: Zero Flame Spread, Smoke Developed Index of 5. Meets criteria for Class A fire rating
 - 4. ASTM E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
 - 5. AAMA 2606-05 Voluntary Specification, Performance requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
 - 6. AAMA 2604 - Voluntary Specification, Performance requirements and Test Procedures for High Performing Organic Coatings on Aluminum Extrusions and Panels.

7. AAMA 2603 - Voluntary Specification, Performance requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
8. CAN/CGSB-51.32, Sheathing, Membrane, Breather Type.
9. CAN/CGSB-93.2, Prefinished Aluminum Siding, Soffits and Fascia, for Residential Use.
10. CAN/CGSB-93.3, Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use.
11. CAN/CGSB-93.4, Galvanized and Aluminum-Zinc Alloy Coated Steel Siding Soffits and Fascia, Prefinished, Residential.
12. CGSB 93.5, Installation of Metal Residential Siding, Soffits and Fascia.
13. CAN/ULC S114, Standard method of test for determination of non-combustibility in building materials.

1.2. SYSTEM DESCRIPTION

**** NOTE TO SPECIFIER **** Delete any sections below not relevant to this project; add others as required.

- A. System assembly shall include the following components.
 1. Wall assembly [Substrate or structure of approved mounting surface for metal siding].
 2. Weather Resistant/Air Barrier [over wall assembly OR over continuous insulation].
 3. Continuous insulation.
 4. Cladding support system.
 5. Interior and/or exterior cladding.

1.3. SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Manufacturer Qualifications.
- C. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Product literature and testing performance.
 2. Submit siding material samples (6 inches x 6 inches) of color and profile specified.
 3. Storage and handling requirements and recommendations.
 4. Installation instructions and recommendations.
- D. Shop Drawings: Show profile, layout and elevations, dimensions, connections, details and location of joints, method of anchorage, number of anchors, supports, and accessories.
 1. Indicate wall assembly and adjacent work with which the wall system must be coordinated.
 2. Include large-scale details of anchorages and connecting elements.
 3. Include large-scale details or schematic, exploded, or isometric diagrams to fully explain flashing at a scale of not less than 1-1/2" per 12".
 4. Provide Installation drawings and details.
- E. Maintenance Data: Care of finishes and warranty requirements.
- F. Executed Warranty: Submit warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.4. QUALITY ASSURANCE

- A. Manufacturer Qualifications: Not less than three years of documented experience manufacturing similar products.
- B. Design Engineer's Qualifications: A registered design professional with experience in the design of cladding support systems.
- C. Installer Qualifications: Not less than three years of documented experience with installation of similar products.

**** NOTE TO SPECIFIER **** Include a pre-installation meeting and mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

- D. Pre-Installation Meeting:
 - 1. Discuss sequence and scheduling of work and interface with other trades.
 - 2. Review wall framing assemblies for potential conflicts and coordinate layout and support provisions for interfacing work.
 - 3. Review and manufacturer's installation guidelines and safety procedures for wall assembly.
- E. Mock-Ups: Coordinate mock-up materials and requirements with mock-up specified in Division 01 [and interior or exterior cladding specification].

1.5. DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact.
 - 1. Protect products against transportation damage.
 - 2. Provide markings to identify components consistently with drawings.
 - 3. Exercise care in unloading, storing and installing panels to prevent bending, warping, twisting and surface damage.
- B. Store products protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
 - 1. Store in well ventilated space out of direct sunlight.
 - 2. Protect from moisture and condensation with tarpaulins or other suitable weather-tight covering installed to provide ventilation.
 - 3. Store at a slope to ensure positive drainage of any accumulated water.
 - 4. Do not store in any enclosed space where ambient temperature can exceed 120°F.
 - 5. Avoid contact with any other materials that might cause staining, denting, or other surface damage.

1.6. PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.7. SEQUENCING

- A. Ordering: Comply with manufacturers' ordering instructions and lead time requirements to avoid construction delays.
- B. Coordinate construction to ensure that assemblies fit properly to supporting and adjoining construction; coordinate schedule with construction progress to avoid delaying work.

1.8. WARRANTY

- A. Warranty: Manufacturer warrants that its products are manufactured in accordance with its applicable material specifications and are free from defects in materials and workmanship.
 - 1. Only products that are installed and used in accordance with applicable manufacturer's instructions and specifications are warranted.
 - 2. The warranty is applicable only to claims made in writing and received by the manufacturer within thirty days after the defect was discovered and within twenty years after the date of the shipment of the product by the manufacturer.

PART 2 PRODUCTS

2.1. MANUFACTURERS

Metal Siding Manufacturer: APROWOOD®; www.aprowood.com; Phone number: 1-888-520-8800.

**** NOTE TO SPECIFIER **** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

Substitutions: Not permitted.

Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2. METAL SIDING

- A. APROWOOD® AW 150 Shiplap 6 inch coverage extruded aluminum alloy 6063 temper T5.
 - 1. Finish coating: Qualicoat powder coated finish
 - 2. Color:

**** NOTE TO SPECIFIER **** Delete any colors below not relevant to this project.

- a. Maple AW 9510
- b. Golden Oak AW 5131
- c. Teak AW 3181
- d. Pine AW 2522
- e. Dark Oak AW 9391
- f. Tilia AW 7161
- g. Oak AW 9111
- h. Afromozya Teak AW 93093
- i. Dark Walnut AW 7163

- j. Light Walnut AW 9310
- k. Light Wenge AW 9396
- l. Chery AW 9405
- m. Special custom color 3.
Gloss: 35 ± 7 .
- 4. Shiplap thickness: 1.52 mm base metal thickness
- 5. Shiplap profile coverage 6 inch (150mm)
- 6. Shiplap profile length 18.5 ft. (5640mm)
- B. APROWOOD® AW 150 Attachments and Caps
 - 1. AW 101 J Mold Starter Attachment (extruded 6063-T5 aluminum profile)
 - 2. AW 102A Joint Attachment Cap (extruded 6063-T5 aluminum profile)
 - 3. AW 102 B Joint Attachment Base (extruded 6063-T5 aluminum profile)
 - 4. AW 103 A Jamb Attachment Cap (extruded 6063-T5 aluminum profile)
 - 5. AW 103 B Jamb Attachment Base (extruded 6063-T5 aluminum profile)
 - 6. AW 104 A Outside Corner Female Attachment Cap (extruded 6063-T5 aluminum profile)
 - 7. AW 104 B Outside Corner Male Attachment Base (extruded 6063-T5 aluminum profile)
 - 8. AW 105 One Piece Inside Corner Attachment (extruded 6063-T5 aluminum profile)
 - 9. AW 106 Starter (extruded 6063-T5 aluminum profile)
 - 10. AW 107 Fixing Bracket (extruded 6063-T5 aluminum profile)
 - 11. AW 150 Shiplap Cladding (extruded 6063-T5 aluminum profile)

Anchorage materials and design shall be compliant with applicable building codes such as *the International Building Code (IBC)*, *International Residential Code (IRC)*, *American Concrete Institute (ACI)*, *American Institute of Steel Construction (AISC)*, *American Iron and Steel Institute (AISI)*, *National Design Specification (NDS) for Wood Construction*, or other relevant standards.

PART 3 EXECUTION

3.1. EXAMINATION

- A. Verify dimensions, tolerances, and interfaces with other work.
- B. Verify wall assembly on-site to determine that conditions are acceptable for product installation in accordance with manufacturers written instructions.
- C. If wall assembly preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- D. Notify Architect in writing of conditions detrimental to proper and timely completion of work.

3.2. PREPARATION

- A. Clear installation area of all debris and obstructions.
- B. Clean surfaces thoroughly prior to installation.
- C. Apply moisture barrier.

3.3. INSTALLATION

- A. Do not install products that are defective, including warped, bowed, dented, and broken members.
- B. Install in accordance with manufacturer's instructions and approved submittals, and in proper relationship with adjacent construction.

** NOTE TO SPECIFIER ** Delete if not required.

3.4. PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION