END OF SECTION 05500

SECTION 06100 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
1. Wood blocking.
2. Wood nailers.
3. Wood sheathing.
4. Plywood backing panels.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive stained or natural finish, mark grade stamp on end or back of each piece.
3. Provide dressed lumber, S4S, unless otherwise indicated.
4. Provide dry lumber with 15 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

B. Wood Structural Panels:
1. Plywood: DOC PS 1.
2. Oriented Strand Board: DOC PS 2.

2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

A. Preservative Treatment by Pressure Process: AWPA C2 (lumber) and AWPA C9 (plywood), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).

B. Application: Treat items indicated on Drawings, and the following:
1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
3. Wood framing members less than 18 inches above grade.
4. Wood floor plates that are installed over concrete slabs directly in contact with earth.

2.3 FIRE-RETARDANT-TREATED MATERIALS

A. General: Where fire-retardant-treated materials are indicated, provide materials that comply with performance requirements in AWPA C20 (lumber) and AWPA C27 (plywood). Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.
1. Use treatment for which chemical manufacturer publishes physical properties of treated wood after exposure to elevated temperatures, when tested by a qualified independent testing agency according to ASTM D 5664, for lumber and ASTM D 5516, for plywood.
2. Use treatment that does not promote corrosion of metal fasteners.
3. Use Exterior type for exterior locations and where indicated.
4. Use Interior Type A High Temperature (HT), unless otherwise indicated.

2.4 DIMENSION LUMBER

A. General: Of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.

B. Non-Load-Bearing Interior Partitions: Construction, Stud, or No. 2 grade and any of the following species:
1. Mixed southern pine; SPIB.
2. Eastern softwoods; NELMA.

C. Exposed Framing: Hand select material for uniformity of appearance and freedom from characteristics that would impair finish appearance.
1. Species and Grade: As indicated above for load-bearing construction of same type.
2. Species and Grade: Hem-fir or Hem-fir (north), Select Structural grade; NLGA, WCLIB, or WWPA.
3. Species and Grade: Southern pine, Select Structural No. 1 grade; SPIB.
4. Species and Grade: Spruce-pine-fir or Spruce-pine-fir (south), Select Structural No. 1 grade; NELMA, NLGA, WCLIB, or WWPA

2.5 SHEATHING

A. Plywood Wall Sheathing: Exterior, Structural I sheathing.

B. Paper-Surfaced Gypsum Wall Sheathing: ASTM C 79/C 79M, with water-resistant material incorporated into core and with water-repellent paper bonded to core's face, back, and long edges.
1. Manufacturers:
a. American Gypsum Co.
b. G-P Gypsum Corporation.
c. National Gypsum Company.
d. United States Gypsum Co.
2. Type and Thickness: Regular, 1/2 inch and Type X, 5/8 inch thick as indicated on drawings.

C. Glass-Mat Gypsum Wall Sheathing: ASTM C 1177/C 1177M.
1. Product: Subject to compliance with requirements, provide "Dens-Glass Gold" by G-P Gypsum Corp.
2. Type and Thickness: Regular, 1/2 inch and Type X, 5/8 inch thick as indicated on drawings.

D. Extruded-Polystyrene-Foam Wall Sheathing: ASTM C 578, Type IV, in manufacturer's standard lengths and widths with tongue-and-groove or shiplap long edges as standard with manufacturer.
1. Manufacturers:
a. DiversiFoam Products
b. Dow Chemical Company (The).
c. Owens Corning.
d. Tenneco Building Products.

E. Plywood Roof Sheathing: Exterior, Structural I sheathing.

F. Oriented-Strand-Board Roof Sheathing: Exposure 1, Structural I sheathing.

2.6 PLYWOOD BACKING PANELS

A. Telephone and Electrical Equipment Backing Panels: DOC PS 1, Exposure 1, C-D Plugged, fire-retardant treated, in thickness indicated or, if not indicated, not less than 1/2 inch thick.

2.7 MISCELLANEOUS MATERIALS

A. Fasteners:
1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
2. Power-Driven Fasteners: CABO NER-272.
3. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.

B. Framing Anchors: Made from hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.

C. Building Paper: Asphalt-saturated organic felt complying with ASTM D 226, Type I (No. 15 asphalt felt), unperforated.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate [furring,] nailers, blocking, and similar supports to comply with requirements for attaching other construction.

B. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.

C. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
1. CABO NER-272 for power-driven fasteners.
2. Published requirements of metal framing anchor manufacturer.

D. Apply building paper horizontally with 2-inch overlap and 6-inch end lap; fasten to sheathing with galvanized staples or roofing nails. Cover upstanding flashing with 4-inch overlap.

E. Apply sheathing tape to joints between sheathing panels and at items penetrating sheathing. Apply at upstanding flashing to overlap both flashing and sheathing.

END OF SECTION 06100

SECTION 07210 - BUILDING INSULATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
1. Concealed building insulation.
2. Loose-fill building insulation.
3. Vapor retarders.

1.2 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Provide insulation and related materials with the fire-test-response characteristics indicated, as determined by testing identical products per ASTM E 84 for surface-burning characteristics, by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.

PART 2 - PRODUCTS

2.1 INSULATING MATERIALS

A. General: Provide insulating materials that comply with requirements and with referenced standards.

B. Molded-Polystyrene Insulation: ASTM C 578, Type I, 0.90 lb/cu. ft., with maximum flame-spread and smoke-developed indices of 75 and 450, respectively. For use in rounded masonry walls.

C. Mineral-fiber blanket insulation consisting of fibers manufactured from glass:
1. Faced Mineral-Fiber Blanket Insulation: ASTM C 665, Type III, Class A; Category 1, faced with foil-scrim-kraft, foil-scrim, or foil-scrim-polyethylene vapor-retarder membrane on one face.

D. Perlite Loose-Fill Insulation: ASTM C 549, Type II or Type IV, with a thermal resistance for 4.1- to 7.4-lb/cu. ft. insulation of 3.3 to 2.8 deg F x h x sq. ft/Btu at 75 deg F for 1-inch thickness. For use in rated masonry walls.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the Producer Members of Perlite Institute Inc.

2.2 VAPOR RETARDERS

A. Polyethylene Vapor Retarder: ASTM D 4397, 6 mils thick, with maximum permeance rating of 0.13 perm.

B. Vapor-Retarder Tape: Pressure-sensitive tape of type recommended by vapor-retarder manufacturer for sealing joints and penetrations in vapor retarder.

2.3 AUXILIARY INSULATING MATERIALS

A. Adhesive for Bonding Insulation: Product with demonstrated capability to bond insulation securely to substrates indicated without damaging insulation and substrates.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Install insulation to comply with insulation manufacturer's written instructions applicable to products and application indicated. Extend insulation to thickness indicated to envelop entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

B. Pour granular insulation into cavities indicated to receive insulation and into miscellaneous voids to fill voids completely. Maintain inspection ports to show precise fill of insulation at bottom of each pour area. Close ports after confirming complete coverage. Limit height of insulation fill per stage of pour, but not exceeding 20 feet.

C. Installation of Mineral Building Insulation: Apply insulation units to substrates by method indicated, complying with manufacturer's written instructions. If no method is indicated, bond units to substrate with adhesive or use mechanical anchorage to provide permanent placement and support of units.
1. Seal joints between closed-cell (nonbreathing) insulation units by applying adhesive, mastic, or sealant to edges of each unit to form a tight seal as units are shoved into place. Fill voids in completed installation with adhesive, mastic, or sealant.
2. Install mineral-fiber blankets in cavities formed by framing members according to the following requirements:
a. Use longest lengths and widths that fill the cavities formed by framing members. If more than one length is required to fill cavity, provide lengths that will produce a snug fit between ends.
b. Butt blankets in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.
3. For metal-framed wall cavities where cavity heights exceed 96 inches support unfaced blankets midheight between framing members on support faced blankets by taping stapling flanges to flanges of metal studs.
4. Retain insulation in place by metal clips and straps or integral pockets within window frames, spaced at intervals recommended in writing by insulation manufacturer to hold insulation securely in place without touching spandrel glass. Maintain cavity width of dimension indicated between insulation and glass.
5. Install insulation where it contacts perimeter fire-containment system to prevent insulation from bowing under pressure from perimeter fire-containment system.
6. Place loose-fill insulation into spaces and onto surfaces as shown, either by pouring or by machine blowing to comply with ASTM C 1015. Level horizontal applications to uniform thickness as indicated, lightly settle to uniform density, but do not compact excessively.
7. Stuff glass-fiber insulation into miscellaneous voids and cavity spaces where shown. Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft.

D. Installation of Vapor Retarders: Extend vapor retarder to extremities of areas to be protected from vapor transmission. Secure in place with adhesives or other anchorage system as indicated. Extend vapor retarder to cover miscellaneous voids in insulated substrates, including those filled with loose-fiber insulation.
1. Seal vertical joints in vapor retarders over framing by lapping not less than two wall studs. Fasten vapor retarders to framing at top, end, and bottom edges; at perimeter of wall openings; and at lap joints. Space fasteners 16 inches o.c.
2. Seal overlapping joints in vapor retarders with adhesives or vapor-retarder tape according to vapor-retarder manufacturer's instructions. Seal butt joints and fastener penetrations with vapor-retarder tape. Locate all joints over framing members or other solid substrates.
3. Firmly attach vapor retarders to substrates with mechanical fasteners or adhesives as recommended by vapor-retarder manufacturer.
4. Seal joints caused by pipes, conduits, electrical boxes, and similar items penetrating vapor retarders with vapor-retarder tape to create an airtight seal between penetrating objects and vapor retarder.
5. Repair any tears or punctures in vapor retarders immediately before concealment by other work. Cover with vapor-retarder tape or another layer of vapor retarder.

END OF SECTION 07210

SECTION 07241 - EXTERIOR INSULATION AND FINISH SYSTEMS - CLASS PB

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes Class PB exterior insulation and finish system (EIFS) applied over CMU or Glass-Mat Gypsum Sheathing Board.

1.2 PERFORMANCE REQUIREMENTS

A. Class PB EIFS: Comply with performance characteristics in EIMA's "EIMA Guideline Specification for Exterior Insulation and Finish Systems, Class PB."
1. Impact Resistance: Standard and Ultra-High.
2. Positive and Negative Wind-Load Performance: Capability to withstand wind loads indicated when tested per ASTM E 330. Provide test reports indicating compliance with wind load standard of authority having jurisdiction over all substrates indicated.

1.3 SUBMITTALS

A. Product Data: For each product indicated.

B. Shop Drawings: Include plans, elevations, sections, details, penetrations, terminations, fasteners, and attachments to other work.

C. Samples: For each EIFS and for each color and texture required.

D. Field quality-control test reports.

E. Product test reports.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Certified in writing by EIFS manufacturer to install manufacturer's system using trained workers.

B. Source Limitations: Obtain EIFS through one source from a single EIFS manufacturer and from sources approved by EIFS manufacturer as compatible with system components.

C. Fire-Test-Response Characteristics: Where indicated, provide EIFS and system components identical to those of EIFS and system components tested per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing and inspecting agency.
1. Fire-Resistance Characteristics: ASTM E 119.
2. Full-Scale Fire Test: Tested mockup per ASTM E 108.
3. Radiant Heat Exposure: No ignition of EIFS when tested according to NFPA 268. Surface-Burning Characteristics: Insulation board, adhesives, base coats, and finish coats with flame-spread index of 25 or less and smoke-developed index of 450 or less, per ASTM E 84.

D. Mockup: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Dryvit Systems, Inc.
2. Senergy Inc.; SKW-MBT Construction Chemicals.
3. Sto Corp.

2.2 MATERIALS

A. Compatibility: Provide substrates, adhesive, fasteners, base coats, insulation, reinforcing meshes, base- and finish-coat systems, sealants, and accessories that are compatible with one another and approved for use by EIFS manufacturer for Project.

B. Substrate: Oriented strand gypsum sheathing board ASTM C 931/C 931M at thickness indicated on drawings from the following manufacturers:
1. G-P Gypsum Corporation; Dens-Glass Gold Sheathing.

C. Water-Resistive Barrier Coating: Formulation and accessories designed for indicated use.

D. Primer: Substrate conditioner designed to seal substrates from moisture penetration and to improve the bond between substrate of type indicated and adhesive used for application of insulation.

E. Spacers: Furring strips; EIFS manufacturer's standard or product recommended in writing by EIFS manufacturer.

F. Adhesive for Application of Insulation: Factory-mixed adhesive recommended by system manufacturer.

G. Molded, Rigid Cellular Polystyrene Board Insulation: Comply with EIFS manufacturer's requirements, ASTM C 578 for Type I, and EIMA's "EIMA Guideline Specification for Expanded Polystyrene (EPS) Insulation Board."

H. Reinforcing Mesh: Balanced, alkali-resistant, open-weave glass-fiber mesh treated for compatibility with other EIFS materials and complying with EIMA 105.01 and ASTM D 578.
1. Standard-Impact Reinforcing Mesh: Not less than 4.0 oz./sq. yd.
2. Heavy-Duty Reinforcing Mesh: Not less than 20 oz./sq. yd.
3. Strip Reinforcing Mesh: Not less than 3.75 oz./sq. yd.
4. Detail Reinforcing Mesh: Not less than 4.0 oz./sq. yd
5. Corner Reinforcing Mesh: Not less than 7.2 oz./sq. yd.

I. Base-Coat Materials: Standard mixture: Manufacturer's standard.

J. Waterproof Adhesive/Base-Coat Materials: Waterproof mixture.

K. Primer: Factory-mixed elastomeric-polymer primer for preparing base-coat surface for application of finish coat.

L. Finish-Coat Materials: Standard acrylic-based coating.
1. Colors, Textures, and Patterns: As indicated on Drawings.

M. Mechanical Fasteners: Corrosion-resistant fasteners consisting of thermal cap, standard washer and shaft attachments, and fastener suitable for substrate.

N Trim Accessories: Manufactured from UV-stabilized PVC and complying with ASTM D 1784 and ASTM C 1063.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with ASTM C 1397 and EIFS manufacturer's written instructions for installation of EIFS as applicable to each type of substrate indicated.

B. Insulation: Adhesively or mechanically attach to substrate.
1. Expansion Joints: Apply adhesive to insulation by notched-trowel method to coat entire surface of gypsum sheathing with adhesive once insulation is adhered to sheathing, unless system manufacturer's written instructions specify using primer-sealer with ribbon-and-dab method. Apply adhesive to a height of not less than 1/4 inch (6.4 mm) for factory mixed and not less than 3/8 inch (9.6 mm) for field mixed, measured from surface of insulation board before placement.
2. Install top surface of fastener head flush with plane of insulation. Install fasteners into or through substrates with minimum penetration according to ASTM PS 49 or system manufacturer's written recommendations, whichever are more stringent. Space fasteners according to system manufacturer's written recommendations.
3. Apply insulation boards over dry substrates in courses with long edges oriented horizontally and working upward.
4. Stagger vertical joints in successive courses to produce running bond pattern. Locate joints so no piece of insulation is less than 12 inches (300 mm) wide or 6 inches (150 mm) high. Offset joints not less than 6 inches (150 mm) from corners of window and door openings.
a. Offset joints of insulation not less than 6 inches (150 mm) from horizontal and 4 inches (100 mm) from vertical joints in sheathing.
b. Offset joints of insulation not less than 4 inches (100 mm) from horizontal joints in sheathing.
c. Offset joints of insulation not less than 4 inches (100 mm) from aesthetic reveals.
5. Interlock ends at internal and external corners.
6. Abut boards tightly at joints within and between each course to produce flush, continuously even surfaces without gaps or raised edges between insulation boards. If gaps greater than 1/16 inch (1.6 mm) occur, fill with insulation cut to fit gaps exactly; insert insulation without using adhesive or other material.
7. Cut insulation to fit openings, corners, and projections precisely and to produce edges and shapes complying with details indicated.
8. Rasp or sand flush entire surface of insulation to remove irregularities projecting more than 1/32 inch (0.8 mm) from surface of insulation and to remove yellowed areas due to sun exposure; do not create depressions deeper than 1/16 inch (1.6 mm).
9. Cut aesthetic reveals in outside face of insulation with high-speed router and bit configured to produce grooves, rabbets, and other features that comply with profiles and locations indicated. Do not reduce insulation thickness at features to less than 3/4 inch (19 mm).
10. Install foam shapes attached to supporting substrate, where indicated.
11. Interrupt insulation at expansion joints.
12. Form joints for sealant application by leaving gaps between adjoining insulation edges and between insulation edges and dissimilar adjoining surfaces. Make gaps wide enough to produce joint widths indicated after encapsulating joint substrates with base coat and reinforcing mesh.
13. Form joints for sealant application with back-to-back casing beads for joints within system and with perimeter casing beads at dissimilar adjoining surfaces. Make gaps between casing beads and between perimeter casing beads and adjoining surfaces of width indicated.
14. Treat exposed edges of insulation board as follows:
a. Wrap edges after installing insulation board and before applying field-applied reinforcing mesh.
b. Wrap mesh of width required to extend not less than 2-1/2 inches (63 mm) onto substrate behind insulation board, cover insulation board edge, and extend not less than 2-1/2 inches (63 mm) onto insulation board face.
c. Wrap edges of insulation board, except those forming substrates of sealant joints, by encapsulating with base coat, reinforcing mesh, and finish coat.
d. Wrap edges of insulation board forming substrates of sealant joints within system or between system and other work by encapsulating with base coat and reinforcing mesh.
15. Treat edges of insulation board at trim accessories by extending base coat, reinforcing mesh, and finish coat over face leg of accessories.

C. Coordinate flashing installation with installation of insulation to produce a wall system that does not allow water to penetrate behind protective coating at locations indicated; where required by EIFS manufacturer; where expansion joints are indicated in substrates behind EIFS; where EIFS adjoin dissimilar substrates, materials, and construction; at floor lines in multilevel wood-framed construction; and where wall height changes.

D. Base Coat: Apply to exposed surfaces of insulation in minimum thickness recommended in writing by EIFS manufacturer, but not less than 1/16-inch dry-coat thickness.

E. Reinforcing Mesh: Completely embed mesh in wet base coat, applying additional base-coat material if necessary, so reinforcing-mesh color and pattern are not visible.

F. Double-Layer Reinforcing Mesh Application: Where indicated, apply second base coat and embed layer of standard impact reinforcing mesh.

G. Double Base-Coat Application: Where indicated, apply [same material and] thickness as first application except without reinforcing mesh.

H. Finish Coat: After maintaining a wet edge, apply finish coat to uniform appearance, in thickness required by EIFS manufacturer to produce a [smooth] finish [color and] texture matching approved sample and free of cold joints, shadow lines, application patterns, and variations in color.

I. Joint-Sealant Installation:
1. Prepare joints and apply sealants to type and dimensions indicated, to comply with applicable requirements in [Division 7 Section "Joint Sealants"] and in "EIMA Guide for Use of Sealants with Exterior Insulation and Finish Systems, Class PB."

3.2 WARRANTY

A. Manufacturer's standard material warranty (3-year minimum) from date of Owner Final Acceptance.

END OF SECTION 07241

SECTION 07416 - METAL ROOF PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
1. Factory-formed and field-assembled, standing-seam prefinished aluminum roof panels.

1.2 PERFORMANCE REQUIREMENTS

A. Wind-Uplift Resistance: Comply with UL 580 and regulatory requirements of the authority having jurisdiction for wind-uplift resistance class indicated.

B. Structural Performance: Capable of withstanding the effects of gravity loads and the following loads and stresses, based on testing according to ASTM E 330:
1. Wind Loads: Minimum design wind pressures as required by authority having jurisdiction, acting inward or outward, testing in accordance with approved testing methods.

C. Seismic Performance: Provide metal roof panel assemblies capable of withstanding the effects of earthquake motions determined according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 9, "Earthquake Loads."

1.3 SUBMITTALS

A. Product Data: For each type of metal roof panel and accessory indicated.

B. Shop Drawings: Show layouts of metal roof panels, including plans, elevations, sections, details, and attachments to other work.
1. Include details of edge conditions, joints, panel profiles, corners, anchorages, trim, flashings, closures, and accessories.

C. Samples: For each exposed finish.

D. Product test reports. Provide test reports indicating compliance with applicable wind loading requirements in accordances with approved testing methods of the authority having jurisdiction, including signed and sealed calculations from a Florida registered engineer showing the product submitted complies with the local wind speed rating.

1.4 WARRANTY

A. Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal roof panel assemblies that fail in materials or workmanship within two years from date of Substantial Completion.
1. Failures include, but are not limited to, the following:
a. Structural failures, including rupturing, cracking, or puncturing
b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal roof panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
1. Fluoropolymer Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified.
2. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 PANEL MATERIALS

A. Aluminum Sheet Prepainted:
1. Aluminum Sheet: ASTM B209, aluminum and aluminum alloy 3105 with H14 temper in accord with manufacturer's standard to suit forming operations and finish specified. 1. Thickness .040 (.1 mm).
2. Surface: Smooth, flat finish.
3. Exposed Finishes:
a. High-Performance Organic Finish: Two-coat, thermocured system with fluoropolymer coats containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with physical properties and coating performance requirements of AAMA 2604, except as modified below:
1) Humidity Resistance: 1000 hours.
2) Water Resistance: 1000 hours.

B. Panel Sealants:
1. Sealant Tape: Pressure-sensitive, gray polyisobutylene compound sealant tape with release-paper backing; 1/2 inch wide and 1/8 inch thick, as recommended in writing by metal roof panel manufacturer.
2. Joint Sealant: ASTM C 920; as recommended in writing by metal roof panel manufacturer.
3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311, as recommended in writing by metal roof panel manufacturer.

2.3 UNDERLAYMENT MATERIALS

A. Polyethylene Sheet: 6-mil- thick polyethylene sheet complying with ASTM D 4397, as recommended by metal roof panel manufacturer.

B. Felts: ASTM D 226, Type II (No. 30), asphalt-saturated organic felts.

C Self-Adhering, Granular-Faced Sheet: ASTM D 1970, 55 mils thick minimum, consisting of glass-fiber-mat reinforcing and SBS-modified asphalt, granule faced, with release-paper backing; cold applied.

Order Plans Now

Cuzzi & Peterson
Architects, Engineers, Planners
A Corporation
1 Corporate Center Ste 100 Orlando, FL 32814
407.740.3100 FAX 407.740.1101
www.cpk.com

CLIENT NAME
White Development Company
1801 South Keene Rd.
Clearwater, FL 33756

PROJECT NAME
Retail @ Tattersall Park
US Highway 280 & Highway 119
Hoover, AL

SHEET TITLE
Specifications

RELEASE
Issued for Bid & Permit 07-26-18

PROJECT NO. 2180080
DATE 07-26-18
DRAWN CRT
CHECKED CRT

CHRISTOPHER RYAN THE
76681
STATE OF ALABAMA
REGISTERED ARCHITECT

A-005

COPYRIGHT © All goods, plans, specifications, and designs furnished by Cuzzi & Peterson, A.E.P.C. are instruments of service prepared by Cuzzi & Peterson, A.E.P.C. and are and shall remain the property of A.E.P.C. A.E.P.C. shall retain all common law, statutory and other reserved rights, including the copyright thereto. Any use or reproduction of this document without the permission from A.E.P.C. is prohibited.