

SECTION 01010

Panther Flat and Patrick's Creek Campground Bathroom Roof Replacement

SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. Description:

1. The work consists of furnishing all labor, supervision, equipment, transportation and materials for the replacement of roofing on three forest-owned buildings at the Smith River NRA.
2. The Contractor should carefully review all sections of the Specifications in order to completely understand the work and all constraints including schedule, and material requirements.
3. The Contractor is encouraged to proceed in an orderly and expeditious manner according to a construction schedule developed by the Contractor and mutually agreed upon with the Forest Service prior to the commencement of the work. All work is to be constructed in strict accordance with the plans and specifications and subject to the terms and conditions of the contract.

B. Contractor's duties:

1. Except as specifically noted, provide and pay for:
 - a. Labor, materials and equipment.
 - b. Tools, construction equipment and machinery.
 - c. Phone and utilities required for construction.
 - d. All other facilities and services necessary for proper execution and completion of work.
2. Pay legally required sales, consumer and use taxes.
3. Give required notices.
4. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities which bear on performance of the work.

5. Promptly submit written notice to Contracting Officer of observed variance of contract documents from legal requirements.
6. If any subcontractor or person employed by the Contractor shall appear to the Contracting Officer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the requisition of the Contracting Officer, and such person shall not again be employed on the work.
7. It is the Contractor's responsibility to obtain all necessary permits and comply with same.

1.02 CONTRACTS

- A. All work is contained in this contract. The limits of work are shown in the Plans and described in these Specifications. It will be the Contractor's responsibility to coordinate their activities to resolve conflicts.

1.03 WORK SEQUENCE

- A. The first order of business is submission of submittals. See Section 01300 for information on timing of Submittals.

1.04 CONTRACT TIME

- A. Contract time is 180 calendar days.

1.05 SITE VISIT

- A. There will be no pre-bid site tour however it is strongly advised that the Contractor thoroughly investigate the site to determine the full extent of the work and the quantities of materials needed. To make an appointment for a site visit contact Jerry McCluskey on the Six Rivers National Forest at (707) 672-3217.

1.06 CONTRACTOR USE OF PREMISES

- A. Construction storage areas for materials and equipment shall be approved by the Contracting Officer.
- B. Confine operations at site to the construction areas specified under this contract.
- C. The Contractor shall coordinate the work to minimize disturbance to Forest Service personnel and guest staying and working at Forest Service Camps. The Contractor shall schedule their work between 0800 and 1630, Monday through Friday. The Contractor may not work during weekends or federal holidays.

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- D. Water and electrical power are available at the Panther Flat Campground project site for the Contractor's use. There is only Water at the Patrick's Creek Campground, the contractor will have to supply their own electrical power.
- E. Do not encumber site with materials or equipment.
- F. Do not load structure or roadway with weight that will endanger or render unusable any structures or roadways.
- G. Assume full responsibility for protection and safekeeping of products stored on premises.
- H. Move any stored products which interfere with operations of Forest Service or other Contractor.
- I. Return all surface areas to their original condition upon completion of the work.

END OF SECTION 01010

SECTION 01020

SHOP DRAWINGS AND SUBMITTALS

PART 1 - GENERAL

1.01 SCOPE:

- A. Perform all work necessary and required for the construction of the project as indicated. Such work includes but is not limited to the following:
 - 1. Shop Drawings
 - 2. Samples
 - 3. Catalog Data

1.02 SUBMITTALS

- A. Submittals shall include all pertinent data required to understand the quality of components, dimensional relationships, integration with other materials, assembly techniques, structural aspects, color, finish, texture, and other such characteristics as may be necessary to fully describe the item and its intended use.

PART 2 - PRODUCTS

2.01 SUBSTITUTIONS

- A. Contracting Officer's approval required:
 - 1. The Contract is based on the materials, equipment, and methods described in the Contract Documents.
 - 2. The Contracting Officer will consider proposals for substitution of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Contracting Officer to evaluate the proposed substitution.
 - 3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the Contracting Officer.
- B. "Or equal":
 - 1. Where the phrase "or equal" occurs in the Contract Documents, do not assume

that material, equipment, or methods will be approved as equal by the Contracting Officer unless the item has been specifically approved for this work by the Contracting Officer.

2. The decision of the Contracting Officer shall be final.

C. Availability of specified items:

1. Verify prior to bidding that all specified items will be available in time for installation during orderly and timely progress of the work.
2. In the event specified item or items will not be available, so notify the Contracting Officer prior to receipt of proposals.
3. Costs of delays because of non-availability of specified items, which such delays could have been avoided by the Contractor, shall be the responsibility of the Contractor.

PART 3 - EXECUTION

3.01 SUBMITTALS

A. Submittals and shop drawings shall be submitted in a timely fashion to allow 7 days for review by the Government. "No work shall begin until shops drawings and submittals are approved".

3.02 SHOP DRAWINGS

- A. Original Submittal: A reproducible and four copies of all shop drawings shall be submitted for approval as required under 3.01 above prior to fabrication, installation or order placement to allow for checking and coordination. The Contracting Officer will retain the reproducible.
- B. Resubmittal: When a resubmittal is required, one print so indicating will be returned to the Contractor. After revision of the original, a new reproducible and four copies shall be submitted for approval.
- C. Approval: Once approved, stamped documents shall be returned to the Contractor and shall be complied with as noted. Variation from the approved documents shall be likewise submitted and approved before being carried out.

3.03 SAMPLES

A. Original Submittal: Two samples of each item for which samples are required, unless otherwise specified, shall be furnished for approval. Approval shall be obtained prior to delivery of the material to the project site. These samples shall be representative of the

actual material proposed for use in the project and of sufficient size to demonstrate design, color, texture and finish as they will appear in the completed installation.

- B. Resubmittals: All rejected samples will be returned upon request and any or all resubmittals required shall consist of two new samples.
- C. Approval: Upon approval, one sample so noted will be returned and the Contracting Officer will retain the remainder until completion of the work. When requested, all approved samples will be returned for installation providing identity is maintained in an approved manner until final acceptance of the project.

3.04 CATALOG DATA

- A. Submittals: Four copies of catalog data are required for the original submittal and each resubmittal. Catalog data shall be submitted along with shop drawings. One copy will be returned unless additional copies are requested.
- B. Data: Each submittal shall have all pertinent data contained therein that is applicable to the item submitted for approval.

3.05 IDENTIFICATION

- A. Catalog Data: Each separate catalog brochure or page submitted shall have the identification shown. Catalog of brochures submitted containing multiple items for approval need have only cover identification. In such cases the identification shall include page and catalog item numbers.
- B. In the event one or more of the multiple items are not approved in any submittal, the additional copies required will not be requested until all items are approved.

PART 4 – MEASUREMENT AND PAYMENT

Not Used

END OF SECTION 01020

SECTION 01030

MOBILIZATION

PART 1 - GENERAL

1.01 SCOPE:

- A. This work consists of preparatory work and operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, and for all other work and operations that must be performed or that cause costs to be incurred prior to beginning work on the various items on the project site.

1.02 MEASUREMENT AND PAYMENT

- A. The accepted quantities will be paid for at the contract unit price for item 01900 Mobilization.
- B. Progress payments will be made as follows:
 - 1. The Government will pay to the Contractor in the first progress payment the total premium paid by the Contractor to obtain bonds. This payment shall not be in addition to the contract price and will be included in Item 01900, Mobilization.
 - 2. When 5 percent or more of the original contract amount is earned from other pay items, 50 percent of the amount for mobilization, or 5 percent of the original contract amount, whichever is less, will be paid.
 - 3. When 10 percent or more of the original contract amount is earned from other pay items, 100 percent of the amount for mobilization, or 10 percent of the original contract amount, whichever is less, will be paid.
 - 4. Upon completion of all work on the project, any unpaid amount for item 01900, Mobilization, will be paid.
- C. The total of all payments will not exceed the original contract amount for item 01900, Mobilization.

PART 2 - PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

PART 4 – MEASUREMENT AND PAYMENT

- 4.01 Measurement and Payment - Payment will be made for work included under this section. Payment for this work will be included in the contract unit price for Section 01900 - Mobilization.

END OF SECTION 01030

SECTION 02010

DEMOLITION

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Strip off all the existing roof shingles, nails, felt or membrane underlayment, metal drip edge, existing ridge vents, gutters, downspouts and other flashing on all buildings listed in the Schedule of Items and legally dispose of all debris. Verify that the existing sheathing is in good condition, identifying for examination by the Forest Service all areas that show evidence of damaged sheathing. Should there be areas of sheathing or framing deterioration as determined by direct examination and in consultation with the Forest Service the damage areas shall be replaced by the Contractor.
- B. Existing roof vents shall be removed. Replacement of roof vents shall all be new.
- C. Patching and Repairs- Perform all necessary patching and repairs to the items scheduled to remain.

1.02 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: Perform demolition work in accordance with applicable rules, regulations, codes, and ordinances of local, state and federal authorities, and in accordance with the requirements of public utility corporations having jurisdiction over the work.
- B. Obtain and pay for necessary permits, licenses and certificates and give notices as required during the performance of the demolition work.

PART 2 – PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 PREPARATION AND PROTECTION

- A. The Panther Flat and Patrick's Creek Campgrounds will be always occupied during this contract.
- B. Provide, erect and maintain catch platforms, lights, barriers, weather protection, warning signs and other items as required for the protection of the workers engaged

in demolition operations, public, adjacent construction and occupants of the campground.

- C. Provide fire protection in accordance with US Forest C-7 PAL Fire Plan requirements.
- D. Do not close or obstruct streets or sidewalks. Conduct operations with minimum traffic interference.
- E. Buildings shall have always at least one unobstructed means of egress. The contract shall sequence the work to always insure this.
- F. Protect public and private property adjacent to and on the job site, including landscaping, vents, utility lines, streets, sidewalks, light standards, hydrants, street signs, mailboxes and fences. Make repairs to the complete satisfaction of the owner of the damaged property. Contractor is responsible for all repair costs due to negligence.
- G. Provide and maintain temporary protection of the existing structure where demolition and removal work are being done, connections made, materials handled or equipment moved, including but not limited to protecting areas where roofing has been re-moved and new work has not yet been made. At the end of the workday ensure the building is weather tight.

3.02 DEMOLITION

- A. Perform demolition and removal work as indicated.
- B. Remove from the government property and legally dispose of materials or items demolished and not designated to become the property of the Forest Service.
- C. The project site will be occupied by employees and guests at all times during this contract. Execute the work in a careful and orderly manner, with the least possible disturbances to the public.
- D. The Contractor shall have at least one person in charge of operations on the ground below shingle and other roof material removal operations. This person shall be cognizant of residents and other persons in the work area and shall remove debris that may obstruct passage or otherwise present a danger to employees or residents.

PART 4 – MEASUREMENT AND PAYMENT

- 4.01 Measurement and Payment - Work included under this section shall be incidental to the pay items for each building listed in the Schedule of Items.

END OF SECTION 02010

SECTION 03010

SITE AND AREA CLEANUP

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Maintain work areas free from accumulations of waste, debris, dust and mud caused by Contractor's operations.
- B. At completion of Work, remove all waste materials, tools, equipment, machinery, surplus materials; leave property clean; leave all rights of ways in a condition equal to that at the beginning of Work.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute cleaning to ensure that any private property, grounds and especially access roads and public properties are maintained free from accumulation of waste materials, dust, mud and debris.
- B. The Contractor shall keep all access roads clean and free of dust, mud and debris resulting from his own operations.
- C. All waste materials, debris and rubbish shall be recycled or disposed of at legal solid waste facilities to be chosen and paid for by the Contractor.
- D. If the Contractor does not properly clean up (in the opinion of the Contracting Officer), then either the Contracting Officer shall have the option of using outside equipment to perform the work and such cost will be withheld from the Contract.

PART 4 – MEASUREMENT AND PAYMENT

- 4.01 Measurement and Payment - Work included under this section shall be incidental to the pay items for each building listed in the Schedule of Items.

END OF SECTION 03010

SECTION 04010

CARPENTRY

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The Contractor is responsible for verifying that roof components are sound and do not require replacement due to rot or damage. Roof components include but are not limited to roof deck, rafters, purlins, soffits, fascia, eaves and rakes.
- B. Fasten existing sheathing to ensure substrate meets the roofing manufacturer's requirements and that it is fastened in accordance with the requirements of the most recent version of the California Building Code.

1.02 REFERENCES

Where the Specifications refer to a specific standard, other authoritative standards which ensure an equal or higher quality than the standards mentioned will also be acceptable.

1.03 STANDARDS

All material and workmanship shall be in accordance with the latest issue of the applicable standards of the U.S. Department of Commerce, Voluntary Product Standards (PS), American Wood-Preservers' Association (AWPA) for quality standard for each type of woodwork and quality grade indicated.

1.04 PRODUCT HANDLING

Keep rough carpentry material and work dry during delivery, storage and installation, until finish is applied, and building is enclosed. Provide for air circulation in stacks of lumber and plywood.

PART 2 - PRODUCTS

2.01 LUMBER:

- A. Lumber Size: - Provide dressed or worked and dressed lumber, as applicable, manufactured to the actual sizes and pattern to match the existing lumber to be replaced, unless otherwise indicated.
- B. Moisture Content - Softwood Lumber: Provide kiln dried lumber having a moisture content from time of manufacture until time of installation not greater than values

required by the applicable grading rules of the respective grading and inspection agency for the species and product indicated.

- C. Lumber – Wood Stain Finish: Use pieces which are made of solid lumber stock. Wood Stain material for exterior wood shall be by a manufacturer such as Sherwin Williams, Benjamin Moore and Co., Glidden, or other approved equal. Prepare and Stain wood upon delivery to job site; stain edges, ends, faces, undersides, and backsides of wood. Apply finish stain to provide opaque, uniform finish, color, and coverage. Color to be determined.
- D. Lumber Species: Use same species and grade of lumber for same items throughout work, do not mix different species or grade.

2.02 PLYWOOD

- A. Roof deck must be dry, APA rated sheathing (exposure 1): minimum 3/8" plywood.
- B. Plywood Grading: Comply with Product Standard PS 1, "Construction and Industrial Plywood".
- C. Certification and Marking: The producer shall include a Certificate of Inspection with each shipment. Grade mark each panel in compliance with applicable standards of Product Standard PS 1.
- D. Moisture Content: Provide plywood which has been seasoned by kiln drying to a moisture content not to exceed 19%.

PART 3 - EXECUTION

3.01 CONDITION OF SURFACE

- A. Examine substrates, adjoining construction, and conditions under which the work is to be installed. Notify the Owner of any deteriorated condition. Do not proceed with the work until unsatisfactory conditions detrimental to the proper and timely completion of the work have been corrected.
- B. Whenever rough carpentry is fitted to other work, obtain measurements of such other work.

3.02 BLOCKING AND NAILERS

Provide blocking and nailers between framing members as required for fastening of sheathing, roofing, roof accessories, or attachment of fixtures, equipment and other such items.

3.03 PLYWOOD SHEATHING REPLACEMENT

- A. Replacement sheathing shall be installed in accordance with the recommendations of the APA the Engineered Wood Association and the requirements of the most recent edition of the California Building Code.
- B. Panel Size: Replacement panels shall be a minimum of 12" wide and shall span a minimum of two rafter/truss bays
- C. Spacing: Perimeter space around new panels shall be a minimum of the diameter of a 10d common nail.
- D. Fasteners: Minimum 8d common nails spaced at least 6" on center at the support edges and 12" on center at intermediate supports. Fasteners shall be a minimum 3/8" from all panel edges. In high wind areas additional fasteners shall be installed if requested by the Contracting Officer.
- E. All panels shall be properly oriented so that panel grain runs perpendicular to the supports. Check trusses and rafters so that all new panels are install true and in a level plane. Shim Trusses and rafters as required preventing bows, bellies or other out of plane installations.

PART 4 – MEASUREMENT AND PAYMENT

- 4.01 Measurement and Payment - Work included under this section shall be incidental to the pay items for each building listed in the Schedule of Items.

END OF SECTION 04010

SECTION 05010

Standing Seam Metal Roofing Panels

PART 1 – GENERAL

1.01 DESCRIPTION

Install new Standing Seam Metal Roof Panels according to the following specifications.

1.02 RELATED SECTIONS

A. Section 06100 – Rough Carpentry; Section 07620 - Sheet Metal Flashings & Trim.

1.03 REFERENCES

Applicable Standards and Codes:

A. Reference Standards:

1. ASTM A653: Steel Sheet, Zinc Coated (Galvanized) Class G90 by the Hot Dip Process.
2. ASTM E1680: Rate of Air Leakage Through Exterior Metal Roof Panel Systems
3. ASTM E1592: Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
4. ASTM E1646: Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference.
5. SMACNA Architectural Sheet Metal Manual.
6. UL 580: Standard for Tests for Uplift Resistance of Roof Assemblies

1.04 SUBMITTALS

A. Submit copies of manufacturer's product data sheets, detail drawings and samples for each type of roofing product.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Storage and Handling Requirements:

1. Keep panels and accessory items dry.
2. Protect against damage and discoloration.
3. Handle panels with non-marring slings.
4. Support panels to prevent permanent deformation.
5. Store panels above ground, with one end elevated for drainage.
6. Protect panels against standing water and condensation between adjacent surfaces.
7. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and keep

sheets separate for air-drying.

8. Painted panels shall be shipped with protective plastic sheeting or a strippable film coating between panels. Remove strippable film coating prior to installation. Do not allow strippable film coating to remain on panels in extreme heat, cold, or direct sunlight or another UV source.
9. Do not allow panels to contact treated lumber.

B. Installer Qualifications:

1. Installer must follow manufacturers published installation instructions
2. Installer shall be licensed as a General Building Contractor as defined by Business & Professions Code Division 3, Chapter 9. Contractors, Article 4. Classifications.

1.06 WARRANTY

A. Manufacturer's Warranty: Manufacturer's standard 20-year performance warranty, stating the following:

1. Architectural fluorocarbon finish:

- a. Will be free of fading or color change in excess of 5 Hunter delta-E units as determined by ASTM D2244-02.
 - b. Will not chalk in excess of numerical rating of 8 when measured in accordance with standard procedures specified in ASTM D4214-98 method D659.
 - c. Will not peel, crack, chip, or delaminate.
2. Metal substrate will not rupture, fail structurally, or perforate.

B. Installer's Warranty: Warrant panels, flashings, sealants, fasteners and accessories against defective materials and/or workmanship, covering repairs required to maintain roof panels watertight and weatherproof with normal usage for two years following Project Substantial Completion date.

1. Furnish written warranty, signed by installer.

C. Weathertight Performance Warranty: Manufacturer's standard warranty in which manufacturer agrees to repair or replace metal roof panel assemblies that fail to remain weather tight within 2 years from Date of Substantial Completion.

1.07 WEATHER CONDITIONS

Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturer's recommendations.

PART 2 – PRODUCTS

2.01 ROOFING PANELS

A. Products: Versa Span 1. Manufacture a. Taylor Metal Products: 4566 Ridge Drive NE, Salem OR: 800-574-1388: Taylormetal.com

B. Panels: 1.75" Snap Seam Metal Roof Panel

1. Material: Steel

a. 24 Gauge: minimum thickness of .0236"

2. Thickness and yield strength as required for performance indicated: ASTM A653: Steel Sheet, Zinc Coated (Galvanized) Class G90 by the Hot Dip Process. For projects with multiple profiles of varied combinations of profiles, rib patterns and finishes, show on drawing.

3. Panel Width and Pattern: 18". With striated pattern.

4. Panel Seam Height: 1.75".

5. Panel Finish:

a. Polyvinylidene Fluoride, full 70 percent Kynar 500® consisting of a baked on 0.15-0.20 mil corrosion resistant primer and a baked-on 0.70-0.80 mil finish coat with a specular gloss of 8 to 15 when tested in accordance with ASTM D523 at 60 degrees.

b. Color: Choose from full range of manufacturer's standard colors

6. Seam Sealant: Factory apply high-grade butyl mastic sealant within the confines of panel's female leg, designed to seal against adjacent male panel leg.

2.02 CLIPS AND FASTENERS

A. Clips: Provide clip designed to allow panels to thermally expand and contract. UL90 Rated Clips. Provide clip attachment schedule from manufacturer.

B. Fasteners: As recommended by manufacturer for performance indicated

2.5 ACCESSORIES

A. Trims and Flashings: Material, metal thickness, and finish to match panels. Profiles indicated in Drawings.

1. Provide manufacturer's standard accessories and other items essential to completeness of standing seam roof installation.

B. Panel Penetration Flashings: As recommended by panel manufacturer; designed to provide sufficient movement to prevent creation of points of fixity at penetrations.

C. Sealant for Field Application: high grade non-curing butyl or curing urethane sealant as

recommended by panel manufacturer.

2.6 FABRICATION

A. Fabrication, General:

1. Unless otherwise shown on Drawings or specified herein, fabricate panels in continuous lengths and fabricate flashings and accessories in longest practical lengths.

B. Panels:

1. Provide panels in full length from ridge to eave. Transverse seams not allowed.

2. Roof panels shall have flush horizontal and vertical surfaces to facilitate sealing at terminations. Panel configurations which create voids and requiring supplemental closure devices shall not be considered acceptable.

3. Engineer panels to use concealed anchors that permit expansion and contraction, except at eaves, end laps, ridges, valleys, hips and gables.

C. Seams:

1. Panel seams shall interlock entire length of seam.

2. Design standing seam to lock up and resist joint disengagement during design wind uplift conditions as calculated according to local building codes.

3. Provide pre-installed sealant within confines of panel's female leg to aid in resistance of leaks and provide panel-to-panel seal while allowing expansion and contraction movement.

4. Seams shall be continuously locked or crimped together by mechanical means during installation. Seaming tools shall be sourced from manufacturer.

D. Fabrication Tolerances:

1. Flat metal surfaces will display waviness commonly referred to as "oil canning". This is caused by steel mill tolerances and is a characteristic, not a defect, of panels manufactured from light gauge metal. Panels are factory correctively leveled to minimize the occurrence of "oil canning". As such, "oil canning" will not be accepted as cause for rejection.

PART 3: EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: With Installer present.

1. Examine conditions and substrates on which metal panels are to be installed. Structural support or substrate shall be flat and plumb to avoid panel stresses and distortion.

2. Prior to starting work, correct defects.

B. Field Measurements:

1. Coordinate field measurements and fabrication schedule with construction progress.

2. Field measure prior to fabrication. Show recorded dimensions on shop drawings, including locations of shop-fabricated openings.

3.02 PREPARATION

- A. Remove all existing roofing down to the roof deck. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover with sheet metal, all holes over 1 inch in diameter, cracks over 1/2 inch in width, loose knots and excessively resinous areas.
- B. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.
- C. Verify that the deck is structurally sound and free of deteriorated decking. All deteriorated decking shall be removed and replaced with new materials.

3.03 INSTALLATION

- A. Panels and Trim: Comply with manufacturer's instructions for assembly, installation and erection for weather tight installation.
 - 1. Install according to approved shop drawings.
 - 2. Install panels in accordance with manufacturer's instructions and recommendations. Anchor securely in place using clips and fasteners spaced in accordance with manufacturer's recommendations for design wind load criteria.
 - 3. Comply with methods and recommendations of SMACNA Architectural Sheet Metal Manual for flashing configurations required.
 - 4. Discrepancies between job site conditions and shop drawings shall be brought to the attention of the Contracting Officer for resolution.
 - 5. Cutting and Fitting:
 - a. Cut panels neat, square, and true with shearing action cutters.
 - b. Openings 6 inches and larger: Shop fabricate and reinforce to maintain original load capacity.
 - c. Openings less than 6 inches: Field cutting is acceptable.
 - 6. Dissimilar Metals or Materials:
 - a. Where panel or trim may come in contact with dissimilar metals or treated lumber, fabricate transition to facilitate drainage and minimize possibility of galvanic action. Galvanic action can cause panels and trim to fail prematurely.
 - b. At points of contact with dissimilar metal or treated lumber, coat panel and trim with protective paint or separate materials with a weatherproof underlayment.
 - c. Direct contact or run-off from CCA, ACQ, CA, or other treated lumber (outdoor wood) or fire retardant impregnated, or treated wood shakes or siding can cause panels and trim to fail prematurely. Avoid contact with these materials.
- B. Accessories: Install trims, flashings, and roofing specialties according to Drawings and manufacturer's recommended details.
- C. Sealant Installation: Apply according to approved shop drawings and SMACNA Architectural Sheet Metal Manual recommendations.
 - 1. Provide airtight and waterproof installation.

3.04 ROOFING

REPAIRS:

1. Touch up paint is not required for panels with scratches that do not expose metal.
2. Panels or flashings with finish damage exposing metal or with substrate damage shall be replaced.

Penetrations

- A. Vent pipes: Install a 24-inch square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.

3.05 SUBMITTALS

- A. Manufacturer color sample showing full range of colors available for specified products.
- B. Product literature and recommended installation procedures.
- C. Manufacturer's warranty.

PART 4 – MEASUREMENT AND PAYMENT

- 4.01 Measurement and Payment - Work included under this section shall be incidental to the pay items for each building listed in the Schedule of Items.

END OF SECTION 05010

SECTION 06010

Stain All Exterior Wood Surfaces

1.01 PREPARATION

Sand and prep exterior wood for stain.

1.02 STAIN ALL EXTERIOR WOOD SURFACES

Wood Stain material for exterior wood shall be by a manufacturer such as Sherwin Williams, Benjamin Moore and Co., Glidden, or other approved equal.

1.03 CLEANING

All equipment, brushes, rollers, empty stain cans, etcetera, shall be cleaned and disposed of according to California State EPA Regulations.

END SECTION 06010