

ASSET RE-ROOFS

Laurel Gardens Apartments
1775 W. 12th Ave.
Eugene, Oregon

Jacob's Lane Apartments
3450 Jacobs Ln
Eugene, OR 97402

Willakenzie Townhouses
3202-3250 Willakenzie Rd
Eugene, OR 97401

SPECIFICATIONS INDEX

GENERAL REQUIREMENTS SUBGROUP

[Division 01]

DIVISION 01 - GENERAL REQUIREMENTS

01-33 00	Submittal Procedures
01-60 00	Product Requirements

FACILITY CONSTRUCTION SUBGROUP

[Divisions 02 - 19]

DIVISION 02 - 06 Not Used

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07-31 13	Asphalt Shingle Roofing (System)
07-62 00	Metal Flashing

DIVISION 08 - 19 Not Used

DRAWINGS INDEX

SITE PLAN

Jacob's Lane
Laurel Gardens
Willakenzie Townhouses

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 CONTRACT CONDITIONS and RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General Conditions and Special Conditions, Division-01 Specification Sections, and Addendum, apply to this Section.

1.2 SECTION INCLUDES

- A. Submittal procedures and requirements for:
 - 1. Product data.
 - 2. Shop Drawings.
 - 3. Certificates and copies of warranties.

1.4 SUBMITTAL PROCEDURES

- A. Submittals shall not be sent via eMail. Deliver to Contract Administrator or mail to:

Homes for Good
Attn: Jared Young
100 W 13th Ave
Eugene, OR 97401
- B. Transmit each submittal with Cover Form (Submittal Transmittal).
 - 1. Submit separate Cover Form for each Specification Section or Shop Drawing submitted.
- C. Transmittal Forms shall have the following information:
 - 1. The Submittal Transmittal form shall identify the Project, identify Contractor and/or Subcontractor, and identify Specification Section number.
 - 2. The Submittal Transmittal form shall be on Contractor's letterhead or shall have Contractor's identifying stamp and shall be signed or initialed by the Contractor.
 - 3. The Submittal Transmittal form shall note if the information submitted or any part of the information submitted is different than the products or product criteria specified in the Contract Specifications.
 - 4. The Submittal Transmittal form shall provide space for Contract Administrator's review stamp or Contract Administrator's review notes.
 - 5. The Submittal Transmittal shall be dated with the date of delivery to the Contract Administrator's offices at Homes for Good.
- D. Submit data and other items required and noted at each Specification Section.
- E. Allow 7 working days total for review of submittal by Owner and Contract Administrator, excluding delivery time to and from the General Contractor.
- F. Revise and resubmit submittals when required.
 - 1. Re-submittals shall be at the expense of the Contractor, with no additional cost to Owner.

SUBMITTAL PROCEDURES

1.5 PRODUCT DATA

- A. Submit the number of copies which the Contractor requires, plus three copies which will be retained by the Owner and Contract Administrator.
 - 1. See individual sections for data required.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.
- C. Clearly note any changes in dimensions or material that is different than noted on Manual, Site Plans or in Specifications.

1.6 MANUFACTURER'S CERTIFICATES AND SAMPLES OF WARRANTIES

- A. When specified in individual specification Sections, submit manufacturers' certificates to Contract Administrator for review, in quantities specified for Product Data.
 - 1. See individual sections for items required.
- B. When specified in individual specification Sections, submit copy of manufacturers' Warranty or Warranties to Contract Administrator for review.

1.7 SUBMITTAL REVIEW

- A. Review does not relieve Contractor of any Contractual responsibilities.
 - 1. Changes or incomplete submittal items not "caught" by Contract Administrator in the submittal review shall not relieve contractor from compliance with Contract Documents.
- B. Definitions of comments used in submittal review:
 - 1. **"Approved"**; The meaning and intent of this statement is that the Contract Administrator finds no objection (except those noted thereon or in correspondence) to inclusion of items or Work indicated in construction provided that it:
 - a) Fundamentally complies with Contract Drawings and Specifications as to quantities, space requirements, and dimensions.
 - b) Any dimensional changes between Contract Drawings and Shop Drawing submittal are high-lighted or noted for Contract Administrator's review. Dimensional changes not "caught" by Contract Administrator in the review shall not relieve contractor from compliance with Contract Documents.
 - c) Does not interfere with other trades and is not the cause of union tradesmen disputes.
 - d) Does not infringe on patent rights.
 - e) Is not the cause of injury or damage to persons or property.
 - f) Complies with OSHA regulations.
 - 2. **"Approved as Noted"**; The meaning and intent of this statement is that the Contract Administrator finds substantial compliance with minor corrections.

SUBMITTAL PROCEDURES

- a) Work referenced in Submittal may proceed only if the corrections noted on the returned submittal are made. ``Approved as Noted`` submittal shall also comply with paragraph 1.7 B. 1., items a) through f) listed above.
3. **"Unclear" or "Incomplete"**; The meaning and intent of this statement is that the submitted material appears to not conform to plans and specifications or that all the required submittal materials have not been received or only partially received. Re-submittal of the specified product data, required shop drawings, etc. is required.
4. **"Rejected"**; **The** meaning and intent of this statement is that the submitted material does not conform to plans and specifications. Submittal of the specified product data, required shop drawings, etc. is required.
5. **"Resubmit"**; **This** statement is used if the submitted material varies in brand, dimension, accessories, etc. from what is required and does not conform to Contract specifications. Re-submittal is required.
6. **"Provide Additional Information"**; **This** statement is used when the submittal appears to be in compliance but there is additional information, samples, shop drawings, etc. required before ``Approval`` can be made.
7. **"Confirm"**; **This** statement is used when the Contract Administrator requests written acknowledgement that proposed changes, or questions noted on Submittal Review Notes are received and understood by Contractor.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not used

END OF SECTION

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 CONTRACT CONDITIONS and RELATED DOCUMENTS

- A. Manuals, Site Plans, and general provisions of Contract, including General and Special Conditions, Division-1 Specification Sections, and Addendum, apply to work of this Section.

1.2 SECTION INCLUDES

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product Options.
- E. Proposed Substitutions.
- F. Product Substitution Request form

1.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying, and erection of the Work. Products may also include existing materials or components required for reuse where specified.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

1.4 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions, requirements, and recommendations.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products using methods to prevent soiling, disfigurement, or damage.

1.5 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, requirements, and recommendations, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.

1.6 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

PRODUCT REQUIREMENTS

- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named, and meeting specifications shall be used. Options or substitutions are not allowed when proposed after the award of Contract, except Options may be considered when it is in the Owner's (Homes for Good) best interest -or- if there is a benefit to Homes for Good to approve a change.
- C. Products Specified by Naming One or More Manufacturers with a Provision for "or equal": Products of manufacturers named, and meeting specifications shall be used, unless a proposed product or material is approved through the Substitution Request process.
 - 1. Submit a request for substitution for any manufacturer not named prior to Bid. For consideration of proposed substitution, it must meet or exceed all warranties, technical specifications, and criteria listed. Substitution requests must be submitted prior to bid as described below in article 1.7 "Proposed Substitutions".
- D. Products that are no longer available - or - are not available in time for scheduled project completion are to be brought to the attention of the Owner, in writing, prior to bid.

1.7 PROPOSED SUBSTITUTIONS

- A. Owner (Homes for Good) will consider requests for Substitutions prior to bid opening in accordance with this Section and in accordance with Instructions to Bidders.
- B. Submit proposed Substitution Request at least seven (7) working days prior to bid opening. Late requests will not be reviewed.
- C. A request constitutes a representation that the Bidder:
 - 1. Has investigated the proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same or better warranty for the Substitution as for the specified product.
 - 3. Will coordinate installation and pay for changes to other Work which may be required for the Work to be complete, with no additional cost to Owner, if such changes become apparent later.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 - 5. Will reimburse Owner and Contract Administrator for review or redesign services associated with re-approval by authorities.
 - 6. Will reimburse Owner and Contract Administrator for redesign services required for use of approved substituted product.
 - 7. An equal or greater choice of colors, finishes, textures, and other attributes is available at no additional cost, and is available with no delay in Contract Time.
- D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- E. Substitutions will not be considered when they are indicated or implied on Shop Drawings or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Requests that do not contain adequate data to make a determination of "equal" will be deemed incomplete - and therefore may not be considered for review.

PRODUCT REQUIREMENTS

1. Lack of information such as manufacturer ' s performance data, product sizes, installation requirements, copies of warranties, test results or certifications, Building or Fire Code approval, etc. shall be deemed incomplete - and therefore may not be considered for review.
- G. Substitution Submittal Procedure:
1. Submit two signed copies of "Product Substitution Request" form for consideration. At least one of the "Product Substitution Request" forms must have original signature. Limit each request to one proposed Substitution.
 - a. The form is included at the end of this Section.
 - b. A blank form may be requested to be faxed or eMailed.
 2. Submit drawings, dimensions, product data, copies of warranties, and certified test results attesting to the proposed product equivalence.
 3. The Owner will notify all known plan holders, in writing, of decision to accept request. The written notice shall appear in the last Contract Addenda issued.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

Copy of "Product Substitution Request" form on other side of this page.

PRODUCT REQUIREMENTS

PRODUCT SUBSTITUTION REQUEST

Homes for Good Job JOB # 20-C-0055

Homes for Good JOB NAME: Asset Reroofs DATE _____

WE HEREBY SUBMIT FOR YOUR CONSIDERATION, THE FOLLOWING PRODUCT INSTEAD OF THE SPECIFIED ITEM FOR THE PROJECT LISTED ABOVE:

SPECIFICATION SECTION: _____ SPECIFIED ITEM: _____

PROPOSED SUBSTITUTION:

Attach complete product description, drawings, photographs, performance and test data, sample of warranties, color and finish options, and other information necessary for evaluation.

- A. What differences exist between proposed substitution and specified item?
- B. Will changes be required to design or dimensions in order to properly install proposed substitution?
 NO YES If yes, explain
- C. Does the Manufacturer's warranty of proposed substitution differ from that specified?
 No YES If yes, explain:
- D. Will substitution affect Progress Schedule?
 NO YES If yes, explain
- E. What affect does substitution have on other trades?
- F. Will substitution replacement parts cost more than specified Product?
 NO YES If yes, how much?
- G. Will maintenance and service parts be locally available for proposed substitution?
 NO YES If NO, Explain:
- H. Will substitution require more license fees or royalties than specified product?
 NO YES, Explain

By submitting this request, I certify that I have read, understand, and agree to the stipulations listed in Section 01-60 00 – Product Requirements, Article 1.7 - “Proposed Substitutions”.

Submitted By: _____ **Name of Company:** _____

Contact name and phone number: _____

Address: _____

Signature of Representative: _____ **Title:** _____ **Date:** _____

Note: Original Signature on this form is required for review by Owner’s representatives.

ASPHALT SHINGLE ROOFING (SYSTEM)

PART 1 - GENERAL

1.1 CONTRACT CONDITIONS and RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions, Division-1 Specification Sections, and Addendum, apply to work of this Section.

1.2 SECTION INCLUDES:

- A. Removal and disposal of existing roofing
- B. Asphalt shingles.
- C. Underlayments:
 - 1. Roofing Felt Underlayment
 - 2. Membrane Underlayment
- D. Roof Vent Caps and Roofing Accessories
- E. See Section 07-62 00 - Metal Flashing for pre-finished metal roof flashing.

1.3 RELATED SECTIONS:

- A. Section 01-60 00 – Product Requirements
- B. Section 07-62 00 - Metal Flashing

1.4 REFERENCES

- A. ARMA (Asphalt Roofing Manufacturer's Association)
 - 1. Residential Asphalt Roofing Manual.
 - 2. Figures and articles referenced are from the 1997 edition.
 - 3. Phone: (301) 348-2002
- B. OSSC, Oregon Structural Specialty Code, current edition.

1.5 QUALITY ASSURANCE

- A. Installer's required qualifications: Company specializing in installing sloped roofing with minimum of five years of experience.

1.6 SUBMITTALS

- A. Submit per Section 01-33 00.
- B. Submit Color Samples:
 - 1. Submit actual samples of shingle colors and type on Manufacturer's sample board to Owner (Homes for Good).

ASPHALT SHINGLE ROOFING (SYSTEM)

- C. Submit Manufacturer Data:
 - 1. Submit Manufacturer ' s data on Membrane Underlayment.
 - 2. Submit Manufacturer ' s data on Roof Vent Caps.

- D. Warranties:
 - 1. Submit copy of Manufacturer's Material Warranty.
 - 2. Submit copy of Installer's Warranty.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Packing, Shipping, Handling, and Unloading:
 - 1. Deliver materials with manufacturer's labels intact and legible.
 - 2. Deliver materials in sealed packages, with labels from UL, or other accredited independent third-party testing and labeling agency.
- B. Storage and Protection:
 - 1. Store materials on raised platform or pallets and protect with coverings if stored in weather. Keep dry.
 - 2. Store rolled goods on end. Keep dry.
 - 3. Store and protect per Manufacturer ' s instructions and recommendations.

1.8 WARRANTY

- A. Installer's Warranty:
 - 1. Provide two (2) year written warranty covering materials and installation for asphalt roofing and flashing from installer.
 - a. Warranty: Include coverage of watertight condition.
 - b. Warranty shall be non-prorated with no dollar limit for entire two years.
 - c. Warranty to begin upon Owner ' s acceptance of work.
- B. Manufacturer's Warranty:
 - 1. Provide thirty (30) year written Manufacturer's material warranty.
 - 2. Provide written Manufacturer's minimum 10 year algae resistance.

1.9 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Install per Manufacturer ' s instructions, requirements, and recommendations.
 - 2. Do not install underlayment or shingles on wet surfaces.
 - 3. Follow Manufacturer ' s procedures when air temperature is below 40 degrees F.

1.10 MAINTENANCE (EXTRA) STOCK

- A. Extra Materials: Provide unopened replacement shingles of same type and color in the amount of 100 square feet (one square).

ASPHALT SHINGLE ROOFING (SYSTEM)

PART 2 - PRODUCTS

2.1 ASPHALT SHINGLES

- A. Type: Laminated, with minimum 30-year Manufacturer Warranty, and 10 year Manufacturer's algae resistance Warranty.
- B. Approved Manufacturers and style:
 - 1. Owens Corning, "Duration Premium"
Minimum 30-Year Warranty
Minimum 70 mph Wind Warranty
Minimum 10 year algae resistance
www.owenscorning.com
 - 2. Certainteed, "Landmark" or "XT 30"
Minimum 30-Year Warranty
Minimum 70 mph Wind Warranty
Minimum 10 year algae resistance
www.certainteed.com
 - 3. GAF Timberline, "Ultra HD"
Minimum 30-Year Warranty
Minimum 70 mph Wind Warranty
Minimum 10 year algae resistance
www.gaf.com
 - 4. "Or equal", Substitution Requests, 10 days prior to Bid, in accordance with Section 01-60 00, 1.6 and Section 01-60 00, 1.7.
- C. Criteria and Standards:
 - 1. Size: Approximate 915 mm (36 inches) wide by 305 mm (12 inches).
 - 2. Exposure: 127 mm (5 inches) or as recommended by shingle manufacturer.
 - 3. Wind Resistance: ASTM D3161, Type I, self-sealing.
 - 4. Minimum 70 mph Wind Warranty
 - 5. Testing compliance:
 - a. ASTM D3018 - Class A Shingles Surfaced with Mineral Granules.
 - b. ASTM D3161 - Wind-Resistance of Asphalt Shingles.
 - c. ASTM D3462 - Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
 - d. ASTM E108 - Fire Tests of Roof Coverings.
 - 6. Minimum manufacturer's 10-year algae resistance
- D. Color: As selected by Homes for Good (Owner), from full range of Manufacturer's selection.
 - 1. See submittal requirements above.

ASPHALT SHINGLE ROOFING (SYSTEM)

2.2 TYPICAL UNDERLAYMENT

- A. Underlayment at typical conditions:
 - 2. Asphalt Saturated Roofing Felt: ASTM D226, Type I (No. 15) or Type II (No. 30), unperforated, 914 mm (36 inches wide).

2.3 MEMBRANE UNDERLAYMENT

- A. Underlayment at valleys and where noted.
 - 3. Certaineed; WinterGuard Waterproofing Shingle Underlayment, Phone: (800) 233-8990, FAX: (610) 341-7940, www.certainteed.com
 - 2. Owens Corning; Weatherlock M: Phone: 1-800-GET-PINK, www.owenscorning.com
 - 3. "Or equal", Substitution Requests, 10 days prior to Bid, in accordance with Section 01-60 00, 1.6 and Section 01-60 00, 1.7.

2.4 CEMENTS

- A. As required and recommended by approved roofing manufacturer.
- B. Asphalt Plastic Cement: ASTM D2822 - Type II, or ASTM D 4586

2.5 FASTENERS

- A. Fasteners for Asphalt Shingles:
 - 2. Nails: Hot galvanized 11 or 12 gage barbed shank, 10 mm (3/8 inch) head, sharp pointed conventional, of sufficient length to penetrate at least 19 mm (3/4 inch) into or through sheathing.
 - 2. Galvanized roofing gun nails (3/8" round head) of sufficient length to penetrate at least 19 mm (3/4 inch) into or through sheathing, as manufactured by Senco,
 - 3. Galvanized 3/8" x 1/2" (flattened) wide head roofing staples of sufficient length to penetrate at least 19 mm (3/4 inch) into or through sheathing, as manufactured by Senco,
 - 4. "Or equal", substitution requests in accordance with Section 01-60 00, 1.6 and Section 01-60 00, 1.7.
 - 5. Staples other than as noted above are forbidden.

2.6 ROOF VENT CAP

- A. Roof Vent Caps for Kitchens, Bathrooms, and Toilet Room exhaust venting:
 - 1. Broan, model 634 M
 - 2. Black color: Black electrically-bonded epoxy finish
 - 3. Accepts 6" duct.
 - 4. Spring-loaded backdraft damper and bird screen

ASPHALT SHINGLE ROOFING (SYSTEM)

2.7 VENT PIPE FLASHING

- A. NorWesCo., Conductor Flashing, Phone: (800) 426-0940
- B. Or approved, upon submittal.

2.8 PRE-FINISHED SHEET METAL FLASHING

- A. See Section 07-62 00-Metal Flashing

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: Examine substrate before beginning installation.
- B. Verify carpentry work at rakes, eaves, fascia, sloped areas, etc. are complete, prior to roofing.
- C. Roof Surfaces: Verify fully 'nailed-off', firm, sound, dry, and broom-cleaned before any roofing is applied.
- D. Notify, in writing, areas that require correction, or of existing deteriorated roof sheathing.

3.2 PROTECTION

- A. Protect residents and dwellings from consequences of roofing work.
- A. Verify location of utilities in and around buildings.
- C. Protect building exterior, structure, interior, and contents from weather.
- D. Provide temporary tarps, weather coverings, etc. as required to protect building exterior, structure, building interior, and contents.
- E. Protect landscaped areas from consequences of work.
- F. Protect existing gutters and downspouts to remain.

3.3 PREPARATION

- A. Contractor: Responsible to protect buildings completely, (exterior surfaces, interior surfaces, contents, and Owner's property) at all times from weather while contract work is in progress.
- B. Substrate Preparation: Prepare substrate in accordance with ARMA Residential Asphalt Roofing Manual.

3.4 FELT UNDERLAYMENT

- A. Apply in accordance with ARMA Residential Asphalt Roofing Manual.
 - 1. Apply in accordance with roofing shingle manufacturer's instructions, requirements, and recommendations.
 - 2. Surface must be dry.

ASPHALT SHINGLE ROOFING (SYSTEM)

3.5 MEMBRANE UNDERLAYMENT

- A. Install in accordance with manufacturer's instructions, requirements, and recommendations.
- B. Surface must be dry.
- C. Membrane Underlayment: Apply in accordance with ARMA Residential Asphalt Roofing Manual and applicable codes at all valleys, at rake walls, and where shown on Drawings.
 - 1. Avoid laps. Where laps are required, comply with manufacturer's instructions for specified self-adhering, polymer modified, bituminous sheet.
- D. Provide membrane underlayment at all valleys, the full length of valley.
- E. Provide membrane underlayment at all crickets and slopes less than 4:12.
- F. Provide membrane underlayment up side wall under flashings at all rake walls.

3.6 ASPHALT SHINGLES

- A. Asphalt Shingles - General: Install in accordance with ARMA Residential Asphalt Roofing Manual, applicable codes, and manufacturer's instructions, requirements, and recommendations.
 - 1. Lay in horizontal courses with exposure and head lap as recommended by Manufacturer.
 - 2. Eaves: Install starter strip as first course.
 - 3. Each Course: Break joints with preceding one.
 - 4. Nails: Install fasteners in number and in locations as recommended by ARMA Residential Asphalt Roofing Manual and shingle manufacturer.
 - 5. Each Fastener: Located to drive through shingle and lapped shingle below.
 - 6. Nails: Oriented parallel to length of shingles.
 - 7. Exposed Fasteners: Locations of exposed fasteners to be coordinated with Contract Administrator prior to installation. Permissible only in top course where unavoidable. Cover exposed heads with asphalt plastic cement spread thickly over exposed surface of under-courses of shingles, nailed securely in place and pointed with asphalt plastic cement.
 - 8. Neatly fit shingles around any pipes, ventilators, etc.
 - 9. Shingles Overlapping Sheet Metal Work or Flexible Flashing: Place nails to avoid puncturing flashing wherever possible.
- B. Vent Pipes: Install in accordance with ARMA Residential Asphalt Roofing Manual, applicable codes, and manufacturer's instructions and recommendations.
 - 1. After underlayment is installed, extend shingles up past vent pipe. Cut out shingle for vent pipe per Figure 36 and recommendations of article on "Soil Stacks and Vent Pipes" of the ARMA Residential Asphalt Roofing Manual.
 - 2. Install galvanized vent pipe flashing per Figure 37 and recommendations of article on "Soil Stacks and Vent Pipes" of the ARMA Residential Asphalt Roofing Manual. Point with asphalt plastic cement.
 - 3. Install top shingles per Figure 38 and recommendations of article on "Soil Stacks and Vent Pipes" of the ARMA Residential Asphalt Roofing Manual.
 - 4. Exposed fasteners in vent pipe flashing are forbidden.

ASPHALT SHINGLE ROOFING (SYSTEM)

- C. Ridges: Install in accordance with ARMA Residential Asphalt Roofing Manual, applicable codes, and manufacturer's instructions and recommendations.
 - 1. Lap underlayment over top of ridges.
 - 2. Install per recommendations of the ARMA Residential Asphalt Roofing Manual.
- D. Completed Roofing: Shingles sound, whole and clean, and roof watertight.

3.7 METAL FLASHING

- A. Coordinate with Section 07-62 00 – Metal Flashing. Coordinate installation with Asphalt Shingle System.
- B. Provide metal flashing at gable ends, rake conditions, 'shed' conditions, and and drip edges (into gutters).
- B. Point with asphalt plastic cement in accordance with ARMA Residential Asphalt Roofing Manual.

3.8 MECHANICAL SYSTEM ROOF (VENT) PENETRATIONS

- A. Coordinate location of new Roof Vent Caps with locations of existing mechanical exhaust vents.

3.9 DISPOSAL AND CLEANING

- A. Contractor is to dispose of waste materials in lawful manner.
- B. Contractor to pay for disposal with no additional cost to Owner.

END OF SECTION

METAL FLASHING

PART 1 GENERAL

1.1 CONTRACT CONDITIONS and RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions, Division-1 Specification Sections, and Addendum, apply to work of this Section.

1.2 SECTION INCLUDES

- A. Custom bent pre-finished sheet metal for roofing.

1.3 RELATED SECTIONS

- A. Section 01-60 00 - Product Requirements
- B. Section 07-31 13 - Asphalt Shingle Roofing (System)

1.4 SUBMITTALS:

- A. Submit per Section 01-33 00.
- B. Provide color chart from approved Manufacturers for roof flashing.
- C. Manufacturer's data on color finish over G90 galvanizing or over Galvalume.
- D. Shop Drawings:
 - 1. Indicate profiles, dimensions, tolerances, anchorage and fasteners.
 - 2. Contractor to site verify existing dimensions and conditions prior to submittal.

1.6 WARRANTY

- A. Installer's Warranty:
The Contractor shall submit a two (2) year warranty guaranteeing installation is free from defective materials and workmanship.
 - 1. Warranty shall begin upon final acceptance of the installation.
 - 2. Warranty shall be "no-dollar limit" and shall be non-prorated.
- B. Manufacturer Warranty: Pre-finished metal Warranty: 20 years minimum.

1.7 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Store, protect and handle products to site under provisions of Section 01-60 00.
- B. Comply with all Sheet Metal Manufacturer's instructions, requirements, and recommendations for delivery, storage and handling of materials.
- C. Handling: Handle material carefully to avoid damage to surface, edges and ends.
- D. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather.

METAL FLASHING

1.8 FIELD MEASUREMENTS

- A. The contractor shall verify all measurements at the site, and shall be responsible for dimensions and proper installation of all materials.

1.9 COORDINATION

- A. Coordinate custom bent pre-finished roof flashing with work of Section 07-31 00 – Asphalt Shingle Roofing (System).

PART 2 PRODUCTS

2.1 PRE-FINISHED SHEET METAL ROOF FLASHING AND TRIM

- A. Approved Manufacturers:

1. Custom-Built Metals
Oregon Rep / 7433 N. Leadbetter Road / Portland, OR 97203
(503) 256-3328 / (800) 228-3143 / Fax: (503) 256-4572
www.custombiltmetals.com
 - a. 24 gauge (.0236)
 - b. Base metal: ASTM A653 G90 Galvanized, or ASTM A792 Zinc/Aluminum
 - c. 20 year finish Warranty minimum
 - d. Color Choice by Contract Administrator from full range of manufacturer's colors.
2. Pacific Metal "Weathercote 2000" (pre-painted over galvanized sheet metal)
Pacific Metal Company
920 S. Danebo Avenue / Eugene, OR 97402
(541) 485-1876 / (800) 666-8202 / Fax: (541) 485-8217 / www.pacificmetal.com
 - a. 24 gauge (.0236)
 - b. Base metal: ASTM A653 G90 Galvanized, or ASTM A792 Zinc/Aluminum
 - c. 20-year finish Warranty
Polyester - Melamine
Nominal Film Thickness: 1.0 mil including primer
 - d. Color Choice by Contract Administrator from full range of manufacturer's colors.
3. "Or equal", Proposed Substitution Requests, 10 days prior to bid, in accordance with Section 01-60 00, articles 1.6 and 1.7.

2.6 FASTENERS –GENERAL:

- A. Fasteners for anchorage at roof flashing and other locations.
 1. **Hot-dip galvanized**, in sufficient length to penetrate minimum of 1 inch into substrate. (Electro-galvanized fasteners are forbidden).
 2. Pre-drill as required to prevent distortion of metal surface.

METAL FLASHING

PART 3 - EXECUTION

3.1 INSPECTION AND COORDINATION

- A. Inspect surfaces to receive Flashings.
- B. Substrate shall be plumb and true, clean, even, smooth, and dry.
- C. Substrate shall be free from defects and projections, which might affect the installation.
- D. Do not start work until conditions are satisfactory.
- E. Report adverse conditions in writing, prior to installation.

3.2 GENERAL FABRICATION and INSTALLATION

- A. Form to shapes and dimensions shown on Owner's signed, approved Shop Drawings.
- B. Provide pre-drilled fastener holes for field anchorage as required to prevent distortion.
- C. Allow for sheet metal expansion and contraction at joints.
- D. Install work without waves, warps, buckles, distortions, fastening stresses, tool marks, or defects which impair or mar appearance.
- E. Maintain dimensional tolerances, aligning with adjacent work. Align free of warp or twist.
- F. Install and secure to provide permanent anchorage.
- G. Coordinate installation of Metal Flashings with installation of Asphalt Shingle Roof System,
- H. Prevent water seepage into the wood structure.
- I. Remove protective material from finished surfaces. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths.

END OF SECTION