



VILLAGE OF SWANSEA, ILLINOIS

PUBLIC NOTICE REQUEST FOR BIDS

EDPM ROOF REPLACEMENT

Notice is hereby given that the Village of Swansea, IL is seeking sealed bids from licensed, experienced and competent roofing companies to replace the EDPM roof on the Village owned building at 1400 N. Illinois St., Swansea, IL. Bid packets are available at the office of the Village Administrator, 1444 Boul Ave, Swansea, IL 62226, by email request to Swanadm@swanseail.org, or by calling 618-234-0044. Hard-copy bids will be received at the same address above until 10:00am on January 30, 2018, at which time they will be publically opened and read. The Village reserves the right to accept or reject any and all bids at the sole discretion of the Board of Trustees.

Any questions, requests for clarification, or for other information, should be directed to the Village Administrator, via email to Ljoost@swanseail.org.

By Order of the Village of Swansea

Barb Kimutis
Deputy Village Clerk

REQUEST FOR BIDS

EDPM ROOF REPLACEMENT

AT SWANSEA POLICE DEPARTMENT, 1400 N. ILLINOIS STREET

Issued: January 10, 2018

The attached Contract Agreement serves as the Bid Package, in the form of the proposed Contract format, as well as the Scope of Work and Specifications for the performance of the Work.

All bids must be prepared in accordance with these documents, to perform the Work specified in the attached contract document, and under the terms, conditions and specifications contained in both, and submitted on the forms provided with the specifications. By submitting a bid, you represent that you have developed a familiarity with the project, site and necessary materials and labor associated with the Work, so that you have sufficient information to submit a fix price bid and you therefore agree that your submittal will remain valid for a period of no less than sixty (60) days.

The Village of Swansea reserves the right to waive, or not to waive, any irregularities in the bidding process and to reject any or all submitted bids.

Note that Illinois Law requires that CONTRACTORS pay prevailing wage rates as determined by the Department of Labor.

The Village Administrator of the Village of Swansea, or his designated representative, serves as the representative of the Owner, Village of Swansea, Illinois. Any questions regarding the process or contract specifications should be directed to the Village Administrator by email at Ljoost@swanseail.org. No questions or requests for clarification will be received by telephone or in person.

VILLAGE OF SWANSEA, ILLINOIS

CONTRACT AGREEMENT

EDPM ROOF REPLACEMENT

AT SWANSEA POLICE DEPARTMENT, 1400 N. ILLINOIS STREET

This CONTRACT, made this _____ day of _____, _____, by and between the Village of Swansea, Illinois and _____, "CONTRACTOR".

WITNESSETH:

That _____ of _____ ("CONTRACTOR"), for and in consideration of mutual undertakings herein named, agrees to perform the following scope of work in accordance with the specifications herein.

General Scope of Work and Specifications

1. The Work involves EDPM roof replacement on the Village owned building located at 1400 N. Illinois Street in Swansea, IL.
 - A. CONTRACTOR shall:
 - Remove the existing roofing system to the roof deck and replace with new EDMP roof per the specifications contained herein,
 - Replace any plywood decking found to be damaged at the bid price per sheet, matching the type and thickness of the existing decking
 - Replace existing drip edge with new, all aluminum drip edge to match color of existing Fascia
 - Replace all roof mounted gravity vents
 - Replace vent pipe flashings with lead flashings
 - Thoroughly clean all debris from gutters
 - Thoroughly clean ground of any and all debris / nails
 - Thoroughly clean all parking lots, dragging with magnet to ensure removal of all nails
 - Remove and legally dispose of removed roofing material and other debris from the site
 - B. CONTRACTOR shall, at all times, observe and comply with all Federal and State laws, local ordinances, and regulations which affect the conduct of this Work, and shall be solely responsible for all claims and liabilities arising from or based upon the violation of any such laws, ordinances or regulations whether by himself or his employees.
 - C. The operations of CONTRACTOR shall be done in such a manner as to avoid hazards to persons and property and interference with the use of adjacent properties or the interruption of free passage to and from such properties.

Warranty

1. Warranty is to be in writing and provided by the manufacturer.
 - A. Base warranty is to be for 20 years and cover the replacement cost of all materials, in full, and without proration for that full 20-year period.
 - B. CONTRACTOR to also provide at the time of proposal, the additional cost, if any, of an alternate 20-year warranty, covering both the replacement cost of all materials, and the cost of all labor required to install said replacement materials, without proration for that full 20-year period.

Differing Site Conditions

1. If CONTRACTOR encounters any condition at or contiguous to the site which he believes is not within the scope of the project; or differs materially from that shown or indicated in the Contract Documents; or is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents; then CONTRACTOR shall immediately notify the Village of Swansea in writing about such conditions. CONTRACTOR shall not further disturb such conditions or perform any Work in connection therewith until receipt of written order to proceed.

Utilities

1. Where applicable, CONTRACTOR shall be responsible for contacting J.U.L.I.E. (1-800-892-0123) in order to notify all utility companies of the project and determine the locations of all existing utilities prior to beginning the project.

Clean Up

1. The site shall be left orderly, clean, and free of debris and/or building materials. Any unauthorized material remaining on the premises at the completion of the Work will delay final acceptance and payment until after such material has been removed.
2. CONTRACTOR shall be responsible for repairing any and all Village of Swansea infrastructure or improvements that may be damaged during the project, including – but not limited to – structures, building glass, lawn and shrubs, parking lot, curbs, signage, sidewalks, or utility lines.

Prevailing Rate of Wages

1. It shall be mandatory upon CONTRACTOR, to pay the general prevailing rate of wages for each craft or type of worker or mechanic needed to execute the contract (including holiday and overtime work, if applicable); as ascertained for the Village of Swansea in compliance with the Prevailing Wage Act 820 ILCS 130 et seq.
2. Prevailing wage rates for St. Clair County have been determined by the Illinois Department of Labor and the most current rates can be found on the department's website. It is CONTRACTOR's responsibility to ensure that wages paid are based on the most current version of the Illinois Department of Labor Prevailing Wage Rates for St. Clair County.
3. With each Request for Payment, or at a minimum on a monthly basis, CONTRACTOR must submit Certified Payroll information, showing that prevailing wages have been paid.

Safety and Protection

1. CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - C. All employees on the Work and other persons and organizations who may be affected thereby;
 - D. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
 - E. Other property at the site adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities.
2. CONTRACTOR shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons and property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed.
3. Any damage, injury or loss to any adjacent property, utilities or public infrastructure caused, directly or indirectly, in whole or in part, by CONTRACTOR, or any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts they may be liable, shall be remedied by CONTRACTOR.
4. CONTRACTOR shall designate a responsible representative at the site whose duties shall include the prevention of accidents. This person shall be CONTRACTOR's superintendent, unless otherwise designated in writing by CONTRACTOR to the Village of Swansea.
5. In an emergency affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR without special instructions or authorization from the ADMINISTRATOR or the Village of Swansea, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ADMINISTRATOR prompt, written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ADMINISTRATOR determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Change Order will be issued to document the consequences of the changes or variations.

Insurance Requirements

1. Certificates of Insurance, on form ACORD 25 (2010/05) or its equivalent, showing coverage as specified below, shall be submitted by CONTRACTOR after the Notice of Award is received, and shall provide for a 30 day notice of cancellation.
2. CONTRACTOR shall also have the Village of Swansea named as "additional insured" for this contract, and shall submit evidence thereof after the Notice of Award is received. Acceptable forms of evidence include copies of CONTRACTOR'S policy language indicating such coverage is generally in effect and applies to the Village, or specific endorsement with the Village named as additional insured on both ISO Form CG 20 10 10 01 and ISO Form CG 20 37. Endorsements must be signed by the insurance companies or an agent authorized to alter coverage through such endorsement.
3. CONTRACTOR shall purchase and maintain in force the coverage required in this section from a company licensed to do business in the State of Illinois. Further, CONTRACTOR shall not allow any subcontractors to commence work on any portion of the project without evidence that the subcontractor has insurance coverage equal to the coverage and terms required in this section.

4. **Minimum** insurance required:

<u>Type of Coverage:</u>	<u>Limits:</u>
A. Comprehensive General Liability	
Bodily Injury	\$1,000,000 each Occurrence \$2,000,000 Aggregate
Property Damage	\$1,000,000 each Occurrence \$2,000,000 Aggregate
	Or
	\$1,000,000 Combined Single Limit
B. Worker's Compensation	Statutory Limits
Employer's Liability	
Bodily Injury	\$1,000,000 each Occurrence
C. Comprehensive Automobile Liability	
Bodily Injury	\$1,000,000 each Person \$1,000,000 each Occurrence
Property Damage	\$1,000,000 each Occurrence

Subcontractors

1. If CONTRACTOR plans to utilize any Subcontractors or other persons or organizations to perform any of the Work, at the time a quote is submitted CONTRACTOR must identify all such subcontractors, and the specific Work each is proposed to provide. Any Subcontractor, other person or organization so listed and to whom Village of Swansea does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Village of Swansea.
2. It shall be mandatory that any and all Subcontractors pay the general prevailing rate of wages for each craft or type of worker or mechanic needed to execute the contract (including holiday and overtime work, if applicable); as ascertained for the Village of Swansea in compliance with the Prevailing Wage Act 820 ILCS 130 et seq. and to comply with the Prevailing Wage section of this CONTRACT in the same manner as CONTRACTOR.

Inspections of Work

1. The Village of Swansea may make inspections during the contract period. This may be done with or without notification to CONTRACTOR. In addition, CONTRACTOR shall notify the Village of the anticipated date of completion so that final inspection can be scheduled.

Contract Time

1. While a contract for the Work is expected to be awarded in February 2018, CONTRACTOR shall not schedule work to begin until after March 15, 2018, thereby allowing for coordination with the HVAC contractor will need to first extend new flues through the existing roof.
2. Work is thereafter to be completed and ready for final payment no later than May 11, 2018. Working days are considered to be Monday through Friday excluding federally recognized Holidays. Work may be done Monday through Friday between the hours of 7:00 a.m. and 7:00 p.m. Work done at any other time must be scheduled with the Administrator at least two (2) working days prior.

Payment Procedures

1. Upon notice from CONTRACTOR that the entire Work is complete, the Village will make a final inspection and identify any deficiencies or defective Work. CONTRACTOR shall immediately take such measures as are necessary to replace, remove, or correct all such deficiencies or defective Work. Final payment will be withheld until Work is accepted by the Village of Swansea.
2. The Village will make monthly progress payments on the basis of work actually performed, provided CONTRACTOR invoices for said payments. Each Application for Payment must include the following:
 - a. Certified Payroll;
 - b. Lien Waivers, from Suppliers and Subcontractors, executed by CONTRACTOR and each Supplier and Subcontractor and covering all labor and materials in full; and
 - c. Proof of proper landfill or disposal procedures.
3. Payment will be made by the Village of Swansea within thirty (30) days after receipt of the above documentation.
4. Final payment shall be contingent upon inspection by the Village and CONTRACTOR'S correction of any and all noted deficiencies or defective Work. The Village of Swansea may retain up to 10% of the amount approved for payment to ensure the completion of any final Work required of CONTRACTOR.

Notice

1. Any notice or communication required or permitted by this Contract shall be deemed sufficiently given if in writing and when delivered personally or upon receipt of registered or certified mail, postage prepaid with the U.S. Postal Service, and addressed as follows:

IF TO VILLAGE:

Village of Swansea
 Attn: Village Administrator
 1400 N. Illinois Street, Swansea, Illinois 62226

IF TO CONTRACTOR:

XXXXX
 XXXXX
 XXXXX

or to such other address as the party to whom notice is to be given has furnished by the receiving party in writing.

SIGNATURES

The undersigned parties have caused this Contract to be executed effective on the _____ day of _____, 2018, by their duly designated officials, as authorized by their respective governing bodies.

VILLAGE OF SWANSEA, ILLINOIS

XXXXX

 BY: Michael W. Leopold
 TITLE: President, Board of Trustees

 BY: XXXXX
 TITLE: President

Date: _____

Date: _____

BID FORM

VILLAGE OF SWANSEA
OFFICE OF THE VILLAGE ADMINISTRATOR
1444 Boul Avenue, Swansea, IL 62226
(618) 234-0044

PROJECT: EDPM ROOF REPLACEMENT
AT SWANSEA POLICE DEPARTMENT, 1400 N. ILLINOIS STREET

Company Name: _____

Address: _____

Phone: _____ Fax: _____

Lump Sum Bid shall include all labor and materials associated with the complete performance of the Work as described in the Contract and Specifications for this project.

TOTAL BID \$ _____

Additional cost per 4' x 8' sheet of plywood if needed..... \$ _____ / sheet

Additional cost, if any, of an alternate 20-year warranty, covering both the replacement cost of all materials, and the cost of all labor required to install said replacement materials, without proration for that full 20-year period \$ _____

I have attached the required Certifications Form

Company Owner (Please Print) _____

Company Owner's Signature _____ **Date** _____

The Village of Swansea reserves the right to reject any and all bids.

CERTIFICATIONS FORM

Company Name: _____

Address: _____

Federal ID Number: _____

I, _____, a principal owner of the above named company hereby certify under oath to the following:

1. That neither I, nor my company, nor any employee or agent of my company has been convicted of bribery or of attempting to bribe an employee of a unit of State or local government, nor have I, or my company, or any employee or agent of my company made an admission of guilt of such conduct which is a matter of record.
2. That neither I, nor my company, nor any employee or agent of my company, is barred from bidding on this CONTRACT as a result of a violation of either Section 33 E-3 (Bid Rigging) or 33 E-4 (Bid Rotating) of the Criminal Code of 2012. (720 ILCS 5/Art. 33E/PUBLIC CONTRACTS)
3. That neither I, nor my company, is delinquent in the payment of any tax administered by the Illinois Department of Revenue, or if delinquent, is currently contesting the liability or the amount of such tax in accordance with the procedures established by the appropriate Taxing Act. A person is not considered delinquent in the payment of a tax for the purposes of this certification if such person has entered into an Agreement with the Illinois Department of Revenue for the payment of all taxes claimed delinquent, and is in compliance with that Agreement. If such is the case with the undersigned, the undersigned certifies that he/she/it has made such an Agreement and is in compliance therewith. (Section 11-42.1-1 of the Illinois Municipal Code)

Signature of Principal Owner

Title

Date

Signed and sworn to before me this _____ day of _____, 2018.

[SEAL]

Notary Public

SPECIFICATIONS

SECTION 07 54 23 – EPDM ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Removal of existing roofing materials and edge metal (gutters to remain). Installation of new wood nailers to accommodate height of new roofing materials.
 - a. **Base Bid**
 - 1) Mechanically fasten ½" Securock Gypsum Fiber to plywood deck
 - 2) Adhere .090 EPDM
 - b. **Alternate Bid**
 - 1) Mechanically attach ½" Securshield HD Iso to plywood deck
 - 2) Adhere ½" Securock Gypsum Fiber with Flexible Dash Adhesive
 - 3) Adhere .090 EPDM

1.3 DEFINITIONS

- A. Roofing Terminology: Definitions in ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.

1.4 PREINSTALLATION MEETINGS

- A. Preliminary Roofing Conference: Thursday, January 18, 2018, at 2:00 p.m.
 - 1. Meet with Owner, roofing Installer, roofing system manufacturer's representative and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
 - 2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
 - 3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review deck substrate requirements for conditions and finishes, including flatness and fastening.
 - 5. Review structural loading limitations of roof deck during and after roofing.
 - 6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
 - 7. Review governing regulations and requirements for insurance and certificates if applicable.

8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other work, including:
 1. Base flashings and membrane terminations.
 2. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
- C. Samples for Verification: For the following products:
 1. Sheet roofing, of color required.
 2. Walkway pads or rolls, of color required.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and manufacturer.
- B. Product Test Reports: For components of roofing system, tests performed by manufacturer and witnessed by a qualified testing agency.
- C. Research/Evaluation Reports: For components of roofing system, from ICC-ES.
- D. Field quality-control reports.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For roofing system to include in maintenance manuals.

1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that specializes in manufacturing EPDM for roofing system identical to that used for this project and that has manufactured EPDM for a minimum of 30 years.
- B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty. Contractor shall have minimum 25 documented installations of similar type and size.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - 1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.10 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.11 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period. Manufacturers Total Systems Warranty, without monetary limitation and backed by a certifiable warranty fund shall cover roofing system for a period of 20 years from substantial completion and wind speeds up to 90 mph. Alternate Bid to include hail coverage of up to 2" in diameter.
 - 1. Special warranty includes roofing membrane, base flashings, roof insulation, fasteners, cover boards, roofing accessories, metal edging and other components of roofing system.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: **Versico Roofing Systems**
- B. Source Limitations: Obtain components including roof insulation, fasteners, and accessories for roofing system from same manufacturer as membrane roofing.
- C. Any proposer may propose another roofing system which is equal to, or superior to, the Versico Roofing System used as the basis for these specifications, provided however, that any such proposal for substitution must be made during the bid phase, and must be reviewed and approved by Owner. It is incumbent upon any such proposer to provide any and all documentation sufficient to ensure "equality".

2.2 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roofing and base flashings shall remain watertight.
 - 1. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A; for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
- D. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.

2.3 EPDM ROOFING

- A. Non-reinforced Ethylene Propylene-Diene Monomer (EPDM)
 - 1. Thickness: .090 mils, nominal.
 - 2. Exposed Face Color: Black

2.4 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by Versico Roofing Systems for intended use and compatible with roofing.
 - 1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.
- B. Sheet Flashing: Manufacturer's standard unreinforced EPDM sheet flashing, 60 mils (1.4 mm) thick, minimum, of same color as EPDM sheet.
- C. Bonding Adhesive: Versico G-200
- D. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.
- E. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Global 4470, designed for fastening roofing to substrate, and acceptable to roofing system manufacturer.
- F. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

2.5 ROOF INSULATION

- A. General: Preformed roof insulation boards manufactured by Versico Roofing Systems, selected from manufacturer's standard sizes suitable for application, of thicknesses indicated.
- B. Polyisocyanurate Board Insulation (**Alt. Bid-Mechanically Fastened**): ASTM C 1289, Type II, Class 4, Grade 1, felt or glass-fiber mat facer on both major surfaces.
 - 1. Versico Securshield HD

2.6 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with roofing.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Global 4470, designed for fastening roof insulation and cover boards to substrate, and acceptable to roofing system manufacturer.
- C. Insulation Adhesive: Versico's Flexible Dash Adhesive
 - 1. Bead-applied, low-rise, one-component or multicomponent urethane adhesive installed at 6" on center minimum.
- D. Cover Board (**Base Bid, Mechanically Attached, Alternate Bid, Adhered**): ASTM C 1278/C 1278M, cellulosic-fiber-reinforced, water-resistant gypsum substrate, 1/2 inch (13 mm) thick.
 - 1. Basis of Design: USG Securock Gypsum Fiber

2.7 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads, approximately 3/16 inch (5 mm) thick and acceptable to roofing system manufacturer. Located on service side of rooftop units.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work:
 - 1. Verify that roof openings and penetrations are in place, curbs are set and braced
 - 2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove existing roofing materials and flashing including roof edge terminations. Gutters to remain.
- B. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- C. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to roofing system manufacturer's written instructions.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.4 INSULATION AND COVER BOARD INSTALLATION

- A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.
- C. **Base Bid:** Mechanically attach ½" Securock Gypsum Fiber cover board over plywood decking at a rate of 12 fasteners per 4 x 8 board.
- D. **Alternate Bid:** Mechanically attach ½" Securshield HD Polyiso to ply wood deck at a rate of 16 fasteners per 4 x 8 board. Adhere ½" Securock Gypsum Fiber cover board to ½' HD Polyiso using Versico Flexible Dash adhesive. Adhesive bead spacing shall be 6" on center throughout entire project.
- E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- F. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
 - 1. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.

3.5 ADHERED ROOFING INSTALLATION

- A. Adhere roofing over area to receive roofing according to Versico's written instructions. Unroll roofing and allow to relax before retaining.
- B. Accurately align roofing, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

- C. Bonding Adhesive: Apply to substrate and underside of roofing at rate required by Versico, and allow to partially dry before installing roofing. Do not apply to splice area of roofing.
- D. Apply roofing with side laps shingled with slope of roof deck where possible.
- E. Seams: Clean seam areas, overlap roofing, splice membrane together using 3" factory applied seam tape. End laps of roofing and sheet flashings shall be seamed using 6" field applied seam tape according to manufacturer's written instructions, to ensure a watertight seam installation.

3.6 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to Versico's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with uncured sheet flashing.
- D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive.
- E. Terminate and seal top of sheet flashings.

3.7 WALKWAY INSTALLATION

- A. Flexible Walkways: Install walkway products at service side of all rooftop units. Adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

3.8 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion.
- B. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.

3.9 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07 54 23

SPECIFICATIONS

SECTION 076200(A4) - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Formed low-slope roof edge flashing and trim.

1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Show layouts, profiles, shapes, seams, dimensions, and details for fastening, joining, supporting, and anchoring sheet metal flashing and trim.
- C. Samples: For each type of sheet metal flashing and trim.

1.3 QUALITY ASSURANCE

- A. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual." Conform to dimensions and profiles shown unless more stringent requirements are indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by manufacturers specified.
 - a. Basis of Design; Versico Verstrim 2000
 - 1) 24ga. steel cover
 - 2) Color to be selected by owner from standard colors.

2.2 SHEET METALS

- A. Galvanized Steel Sheet: ASTM B 209, Alloy 3003, 3004, 3105, or 5005, Temper suitable for forming and structural performance required, but not less than H14, finished as follows:
 - 1. High-Performance Organic Finish: Two-coat, thermocured system containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604.
 - a. As selected by owner from manufacturers standard colors.

2.3 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads.
 - 1. Exposed Fasteners: Heads matching color of sheet metal by means of plastic caps or factory-applied coating.
 - 2. Fasteners for Flashing and Trim: Blind fasteners or self-drilling screws, gasketed, with hex washer head.
 - 3. Blind Fasteners: High-strength aluminum or stainless-steel rivets.
- C. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- D. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant, polyisobutylene plasticized, heavy bodied for hooked-type expansion joints with limited movement.

2.4 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated. Shop fabricate items where practicable. Obtain field measurements for accurate fit before shop fabrication.
- B. Fabricate sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
- C. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant to comply with SMACNA recommendations.
- D. Expansion Provisions: Where lapped or bayonet-type expansion provisions in the Work cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with elastomeric sealant concealed within joints.
- E. Conceal fasteners and expansion provisions where possible on exposed-to-view sheet metal flashing and trim, unless otherwise indicated.

- F. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal, and in thickness not less than that of metal being secured.

2.5 ROOF SHEET METAL FABRICATIONS

- A. Roof Edge Flashing: Two-piece snap on fascia with an extruded aluminum cleat, concealed fasteners and a free-floating cover. Pre-manufactured in 12-foot-long sections.
 - 1. Fabricate from the following material:
 - a. Kynar Steel: 24 ga.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 - 1. Torch cutting of sheet metal flashing and trim is not permitted.
- B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturers of dissimilar metals.
- C. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
- D. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and elastomeric sealant.
- E. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 - 1. Space cleats not more than 12 inches apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
- F. Fasteners: Use fasteners of sizes that will penetrate substrate not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.
 - 1. Galvanized or Prepainted, Metallic-Coated Steel: Use stainless-steel fasteners.
 - 2. Aluminum: Use aluminum or stainless-steel fasteners.
- G. Seal joints with elastomeric sealant as required for watertight construction.

3.2 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal roof flashing and trim to comply with performance requirements and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where

possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight.

- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in FMG Loss Prevention Data Sheet 1-49.
 - 1. Interlock bottom edge of roof edge flashing with continuous cleats anchored to substrate per manufacturer's requirements.

3.3 WALL FLASHING INSTALLATION

- A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to SMACNA recommendations and as indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.
- B. Openings Flashing in Frame Construction: Install continuous head, sill, and similar flashings to extend 4 inches beyond wall openings.

END OF SECTION 076200(A4)