## **Rogers City Area Schools**

## Request for Proposal (RFP)

### **Roof Replacement – Commons Area Roof Section**

RFP Issued By:

Rogers City Area Schools 1033 W Huron Ave, Suite B Rogers City, MI 49779

Contact: Mr. Aaron Spens, Transportation & Maintenance Supervisor

Phone: (989) 734-9100

Email: aaron.spens@rcashurons.org

## 1. Project Overview

Rogers City Area Schools is soliciting sealed proposals from qualified roofing contractors for the removal and replacement of the Commons Area roof, approximately 11,099 square feet, located at 1033 W Huron Ave, Rogers City, Michigan. Work must be performed in accordance with all specifications outlined in the attached scope of work and bid documents.

## 2. Scope of Work

The project consists of:

- Complete removal of the existing roof system(s) down to deck.
- Installation of Versico's 60-mil Gray TPO roofing system with RhinoBond attachment.
- New tapered insulation system to ensure positive drainage.
- New 24-gauge galvanized Kynar 500 finish edge metal.
- Installation of tapered drain sets.
- All related flashings, drainage, and finishing to provide a complete and warrantied system.
- 20-Year No Dollar Limit (NDL) Manufacturer's Warranty is required.

#### **Contractors must:**

- Be a licensed and insured contractor in the State of Michigan.
- Be a Versico Gold Metal or Kings Court authorized contractor.
- Have a staffed office located within 100 miles or 1 hour of the project site.
- Obtain all necessary permits and comply with all applicable local, state, and federal requirements.

## 3. Mandatory Pre-Bid Meeting

A mandatory pre-bid meeting and site inspection will be held on:

Date: Friday, May 9, 2025

Time: 11:00 a.m.

Location: East side of the high school by the maintenance garage

## 4. Proposal Requirements

All proposals must include the following:

- Completed Bid Form (attached) including total bid amount in figures and words.
- Detailed description of roofing system, type, and manufacturer.
- Confirmation of authorized installer status (Gold Metal or Excalibur Contractor).
- Letter(s) of reference for past comparable projects.
- Tapered insulation design prints.
- Warranty response time statement.
- Signed acknowledgment that all requirements have been read and understood.
- Bonds covering the faithful performance of the contract and payment of obligations arising thereunder. MCL 129.201. The amount of each performance and payment bond shall be equal to 100% of the Contract Sum. The contractor shall deliver the required bonds to the District before the date an agreement can be executed and work commenced.
- Completed Iran Economic Sanctions Act Compliance and No Familial Relation Affidavit (attached)

Proposals must be submitted in a sealed envelope, clearly marked: SEALED BID – ROOF REPLACEMENT PROJECT Attn: Mrs. Vicki Paull

Rogers City Area Schools 1033 W Huron Ave, Suite B Rogers City, MI 49779

## 5. Submission Deadline and Bid Opening

Deadline: All proposals must be received no later than 11:00 a.m. on Friday, May 16, 2025. Bid Opening: Sealed bids will be opened publicly on Friday, May 16, 2025 at 11:00 a.m. at the district office. Late or incomplete submittals will not be accepted.

## 6. Evaluation Criteria

Proposals will be evaluated based on:

- Compliance with specifications
- Total cost
- Contractor qualifications and certifications
- References and past project performance
- Warranty details and response times

## 7. Terms and Conditions

Rogers City Area Schools reserves the right to accept or reject any or all proposals. No substitutions from the specified materials and manufacturer are permitted. Contractors must comply with all OSHA safety regulations and federal labor standards. The successful bidder will be required to furnish all necessary insurance documentation, including liability and worker's compensation coverage.

## **Attachments:**

- Scope of Work
- Iran Economic Sanctions Act Compliance and No Familial Relation Affidavit
- Specifications Document
- Bid Form



Rogers City Area Schools,

Located at 1033 W Huron Ave Rogers City Michigan 49779 is seeking estimates based on the following for an upcoming roof replacement project.

#### All contractors must:

Obtain all applicable permits and inspections.

Remove and properly dispose of all existing roofing materials as specified per roof section.

Verify existing roof deck is a suitable substrate to accept new roof system.

Mechanically fasten polyisocyanurate and tapered polyisocyanurate to promote positive drainage as per section specifications.

Install 60 - mil Gray Versico TPO using the RHINOBOND attachment system.

Confirm all existing roof penetrations meet manufacture's height requirements above the roof deck.

Furnish and install new 24ga edge metal as required. (choice of standard colors)

Install prefabricated tapered drain sets at all existing drain locations.

Provide 20yr No Dollar Limit (NDL) manufacturer's warranty.

## Contractor must meet the following requirements

- Be licensed and insured in the State of Michigan
- Be a Versico Gold Metal or Kings Court contractor.
- Have a staffed office within 1hr or 100 miles of project location
- Be able to provide tapered insulation layout prints
  - \*\* No Substitutions Permitted\*\*

## **Roof Section scope of work**

## Commons Area Roof Section Approximately 11,099sqft

- Remove and properly dispose of existing roofing system (s) in their entirety down to the existing roof deck.
- Furnish and install complete tapered polyisocyanurate insulation system to promote positive drainage.
- Furnish and mechanically fasten two (2) layers of 2" Polyisocyanurate Insulation.
- Furnish and install prefabricated tapered polyisocyanurate drain sets at all drain locations.
- Furnish and Rhinobond attach Versico Gray 60 mil TPO membrane.
- Furnish and install new 24ga. Galvanized Kynar 500 finish edge metal as required.
- Furnish Versico 20yr NDL warranty.



#### PART 1 GENERAL

#### 1.01 DESCRIPTION

- A. Rogers City Area Schools is located at 1033 W Huron Ave STE B., in Rogers City, Mi 49779. Mr. Aaron Spens, Transportation and Maintenance Supervisor, is the Owner's Representative and may be contacted regarding any questions or for a pre-bid job site inspection, phone (989)734-9100
- B. The project consists of installing Versico's VersiWeld TPO Mechanically Fastened Roofing System as outlined below:

Apply the VersiWeld Mechanically Attached Roofing System with the RhinoBond TPO Welding Plate in conjunction with Polyisocyanurate after tearing off of the existing roofing system(s) to expose the existing deck for verification of suitable substrate as specified in this specification.

## 1.02 EXTENT OF WORK

- A. Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of the VersiWeld reinforced TPO (Thermoplastic Polyolefin) membrane Mechanically Attached Roofing System including flashings and insulation as specified herein and as indicated on the drawings in accordance with the manufacturer's most current specifications and details.
- B. The roofing contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.
- C. The roofing contractor shall confirm all given information and advise the building owner, prior to bid, of any conflicts that will affect their cost proposal.
- D. It is the owner's intent to rid as much ponding water as possible without raising.

  mechanical equipment or altering any existing roof top units. Provide detailed drawings on proposed designs.

## 1.03 SUBMITTALS

- A. Prior to starting work, the roofing contractor must submit the following:
  - 1. Shop drawings showing layout, details of construction and identification of materials.
  - 2. Sample of the manufacturer's Membrane System Warranty.
  - 3. Submit a letter of certification from the manufacturer which certifies the roofing contractor is a gold metal contractor authorized to install the manufacturer's roofing system and lists supervisors who have received training from the manufacturer along with the dates training was received.
  - 4. Certification from the membrane manufacturer indicating the fasteners are capable of providing a static backout resistance of 10-inch pounds minimum is required.

- 5. Certification from the membrane manufacturer indicating the membrane thickness over the reinforcing scrim (top ply membrane thickness) is nominal .15-mil or thicker.
- 6. Certification of the manufacturer's warranty reserve.
- B. Upon completion of the installed work, submit copies of the manufacturer's final inspection to the specifier prior to the issuance of the manufacturer's warranty.

## 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact and legible. Deliver in sufficient quantity to permit work to continue without interruption.
- B. Comply with the manufacturer's written instructions for proper material storage.
  - Store VersiWeld membrane in the original undisturbed plastic wrap in a cool, shaded area and cover
    with light-colored, breathable, waterproof tarpaulins. VersiWeld membrane that has been exposed
    to the elements for approximately 7 days must be prepared with Versico's Weathered Membrane
    Cleaner prior to hot air welding.
  - 2. Store curable materials (adhesives and sealants) between 60°F and 80°F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60°F minimum temperature before using.
  - 3. Store materials containing solvents in dry, well-ventilated spaces with proper fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.
- C. Insulation must be on pallets, off the ground and tightly covered with waterproof materials.
- D. Any materials which are found to be damaged shall be removed and replaced at the applicator's expense.

## 1.05 WORK SEQUENCE

- A. Schedule and execute work to prevent leaks and excessive traffic on completed roof sections. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath any completed sections of the membrane system.
- B. Do not disrupt activities in occupied spaces.

## 1.06 USE OF THE PREMISES

- A. Before beginning work, the roofing contractor must secure approval from the building owner's representative for the following:
  - 1. Areas permitted for personnel parking.
  - 2. Access to the site.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.
- B. Interior stairs or elevators may not be used for removing debris or delivering materials, except as authorized by the building superintendent.

## 1.07 EXISTING CONDITIONS

If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the owner's representative by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building watertight until the discrepancies are resolved.

## 1.08 PRE-CONSTRUCTION CONFERENCE

- A. A mandatory pre-bid meeting will be held on Friday, May 9<sup>th</sup> at 11:00 AM. Meet on the east side of the high school by the maintenance garage. Contact the owner's representative, Mr. Aaron Spens, at (989)734-9100 if there are any questions.
- B. Prior to bid submittal, the roofing contractor is encouraged to perform a job site inspection to observe actual conditions and verify all dimensions on the roof.
- C. Any conditions which are not shown on the shop drawings should be indicated on a copy of the shop drawing and included with bid submittal if necessary to clarify any conditions not shown.

## 1.09 TEMPORARY FACILITIES AND CONTROLS

- A. Temporary Utilities:
  - 1. Water, power for construction purposes and lighting are not\_available at the site and will not be made available to the roofing contractor.
  - Provide all hoses, valves and connections for water from source designated by the owner when made available.
  - 3. When available, electrical power should be extended as required from the source. Provide all trailers, connections and fused disconnects.
- B. Temporary Sanitary Facilities

Sanitary facilities will not be available at the job site. The roofing contractor shall be responsible for the provision and maintenance of portable toilets or their equal.

- C. Building Site:
  - 1. The roofing contractor shall use reasonable care and responsibility to protect the building and site against damage. The contractor shall be responsible for the correction of any damage incurred as a result of the performance of the contract.
  - 2. The roofing contractor shall remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the building.
- D. Security:

Obey the owner's requirements for personnel identification, inspection, and other security measures.

## 1.10 JOB SITE PROTECTION

A. The roofing contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards, and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be

responsible for costs to repair all property damaged during the roofing application.

- B. During the roofing contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The roofing contractor shall provide labor and materials to construct, maintain and remove necessary temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.
- C. Do not overload any portion of the building, either by use of or placement of equipment, storage of debris, or storage of materials.
- D. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- E. Take precautions to prevent drains from clogging during the roofing application. Remove debris at the completion of each day's work and clean drains, if required. At completion, test drains to ensure the system is free running and drains are watertight. Remove strainers and plug drains in areas where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and screen drain.
- F. Store moisture susceptible materials above ground and protect with waterproof coverings.
- G. Remove all traces of piled bulk materials and return the job site to its original condition upon completion of the work.

## **1.11 SAFETY**

The roofing contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable local, state, and federal requirements that are safety related. **Safety shall be the responsibility of the roofing contractor.** All related personnel shall be instructed daily to be mindful of the full-time requirement to maintain a safe environment for the facility's occupants including staff, visitors, customers and the occurrence of the general public on or near the site.

## 1.12 WORKMANSHIP

- A. Applicators installing new roof, flashing and related work shall be factory trained and approved by the manufacturer they are representing.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's satisfaction.
- C. There shall be a supervisor on the job site at all times while work is in progress.

## 1.13 QUALITY ASSURANCE

- A. The VersiWeld Roofing System must achieve a UL Class C rating.
- B. The specified roofing assembly must have been successfully tested by a qualified testing agency to resist the design uplift pressures calculated according to

ANSI/SPRI WD-1 "Wind Design Standard Practice for Roofing Assemblies" American Society of Civil Engineers (ASCE 7) International Building Code (IBC)

- C. The membrane must be manufactured by the material supplier. Manufacturer's supplying membrane made by others are not acceptable.
- D. Unless otherwise noted in this specification, the roofing contractor must comply with the manufacturer's

current specifications and details.

- E. The roofing system must be installed by an applicator authorized and trained by the manufacturer in compliance with shop drawings as approved by the manufacturer. The Roofing Contractor shall be thoroughly experienced and upon request be able to provide evidence of having at least five (5) years successful experience installing single-ply TPO roofing systems and having installed at least five (5) roofing application or several similar systems of equal or greater size within one year.
- F. Provide adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified. Provide at least one thoroughly trained and experienced superintendent on the job at all times roofing work is in progress.
- G. There shall be no deviations made from this specification or the approved shop drawings without the prior written approval of the specifier. Any deviation from the manufacturer's installation procedures must be supported by a written certification on the manufacturer's letterhead and presented for the specifier's consideration.
- H. Upon completion of the installation, the applicator shall arrange for an inspection to be made by a non-sales technical representative of the membrane manufacturer in order to determine whether or not corrective work will be required before the warranty will be issued. Notify the building owner seventy-two (72) hours prior to the manufacturer's final inspection.

## 1.14 JOB CONDITIONS, CAUTIONS AND WARNINGS

Refer to Versico's VersiWeld Roofing System specification for General Job Site Considerations.

- A. Safety Data Sheets (SDS) must be on location at all times during the transportation, storage and application of materials.
- B. When positioning membrane sheets, exercise care to locate all field splices away from low spots and out of drain sumps. All field splices should be shingled to prevent bucking of water.
- C. When loading materials onto the roof, Versico's Authorized Roofing Contractor must comply with the requirements of the building owner to prevent overloading and possible disturbance to the building structure.
- D. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- E. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- F. Provide protection, such as 3/4-inch-thick plywood, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters.
- G. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil, and grease.
- H. New roofing shall be complete and weathertight at the end of the workday.
- I. Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.

## 1.15 WARRANTY

A. Provide manufacturer's 20-year Total System Warranty covering both labor and material with no dollar

limitation. The maximum wind speed coverage shall be peak gusts of 55 mph measured at 10 meters above ground level. Certification is required with bid submittal indicating the manufacturer has reviewed and agreed to such wind coverage.

- B. Pro-rated System Warranties shall not be accepted.
- C. Evidence of the manufacturer's warranty reserve shall be included as part of the project submittals for the specifier's approval.

## PART 2 PRODUCTS

#### 2.01 GENERAL

- A. All components of the specified roofing system shall be products of Versico or accepted by Versico as compatible.
- C. All products (including insulation, fasteners, fastening plates, prefabricated accessories, and edgings) must be **manufactured and/or supplied** by the roofing system manufacturer and covered by the warranty.
- D. No Substitutions permitted.

## 2.02 MEMBRANE

Furnish VersiWeld 60-mil thick gray, reinforced TPO (Thermoplastic Polyolefin) membrane as needed to complete the roofing system. Membrane thickness over the reinforcing scrim (top-ply thickness) shall be nominal 15-mil or thicker. Membrane sheets in rolls 6', 12', 10' or 8' wide by 100' long.

## 2.03 INSULATION/UNDERLAYMENT

- A. When applicable, insulation shall be installed in multiple layers. The first and second layer of insulation shall be mechanically fastened to the substrate in accordance with the manufacturer's published specifications.
- B. Insulation shall be Polyisocyanurate as supplied by Versico. Minimum R-value as specified in the scope of work related to that area.
  - 1. **Versico's Versicore MP-H Polyiso** A foam core insulation board covered on both sides with a medium weight fiber-reinforced felt facer meeting ASTM C 1289-06, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 8' standard size with a thickness from 1 to 4 inches. 4' x 4' tapered panels are also available.
  - 2. **Versico's SecurShield Polyisocyanurate** A foam core insulation board covered on both sides with a coasted glass fiber mat facer meeting ASTM C 1289-06, Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 8' standard size with a thickness from 1 to 4 inches. 4' x 4' tapered panels are also available.
  - 3. **Versico SecurShield Eco** A bio-based (5%), rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded to high performance, coated glass facers (CGF). Achieves a UL Class A fire rating direct to combustible deck. ASTM C 1289, Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi), available in 4' x 8' standard size with a thickness from 1 to 4 inches. 4' x 4' tapered panels are also available.
  - 4. **Versico's SecurShield HD Composite** Composite insulation panel comprised of ½-inch high-density Polyiso cover board (109 psi max) laminated during the manufacturing process to SecurShield rigid Polyiso roof insulation meeting ASTM C1289 Type II, Class2, Grade 2 (20 psi)

- or Grade 3 (25 psi). Available in 4' x 8' boards with thickness from 2" to 4.5". 4' x 4' panels are also available.
- 5. **Versico SecurShield HD Cover Board** a rigid insulation panel composed of a high-density, closed-cell polyisocyanurate foam core laminated to moisture resistant coated-glass fiber-mat facer for use as a cover board or recover board meeting ASTM 1289-06, Type II, Class 2 (109 psi max). Available 1/2" thick 4' x 8' panel weight 11 lbs with an R-value of 2.5.
- 6. **Versico SecurShield HD Eco** A bio-based (5%), rigid roof insulation panel composed of ½" high-density (109 psi max), closed-cell polyisocyanurate foam core bonded to a coated glass facer (CGF), meeting ASTM C1289, Type II, Class 4, Grade 1. Specifically designed for use as a cover board. Achieves a UL Class A fire rating direct to combustible deck. Available in 1/2" thick, 4' x 4' (5.5 lbs) and 4' x 8' (11 lbs) panels with an R-value of 2.5.
- 7. **Versico SecurShield HD Plus** a rigid insulation panel composed of a high-density (109 psi max), closed-cell polyisocyanurate foam core laminated to premium-performance coated-glass fiber-mat facer for use as a cover board or recover board. Available 1/2" thick 4' x 8' panel weight 11 lbs with an R-value of 2.5. Meets an FM 1-90 using only 8 fasteners per 4' x 8' board.
- 8. **Versico VersiCore HD** a closed-cell polyisocyanurate foam core insulation board covered on both sides with glass-reinforced felt (GRF) facer meeting ASTM C 1289, Type II, Class 1, Grade 3. The product is available in 4' x 4' and 4' x 8' standard sizes with a thickness of one-half inch.
- 9. **Versico VersiCore HD Eco** A bio-based (5%), polyisocyanurate insulation product, InsulBase HD Eco is a high-density (80 psi), rigid roof insulation cover board composed of a high-density closed-cell polyisocyanurate foam core bonded to glass-reinforced felt (GRF) facers, meeting ASTM C1289, Type II, Class 1, Grade 3. UL and FM approved for direct application over steel decks. Available in 1/2" thick, 4' x 4' and 4' x 8' panels with an R-value of 2.5.
- 10. **InsulFoam SP** A closed-cell lightweight expanded polystyrene (EPS) with a factory-laminated fiber glass facer. Nominal density of 1.25 lbs/cubic ft (pcf), and meets ASTM C578, Type VIII. Designed for low-sloped roof applications that employ mechanically fastened or ballasted membranes.
- 11. **Versico Durafacer Polyiso Composite (OSB)** Polyiso insulation bonded on the bottom side with a medium weight fiber reinforced felt facer and laminated with a top surface of 7/16" or 5/8" thick Oriented Strand Board (OSB) meeting ASTM C 1289-06, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi). Available in 4' x 8' boards with a thickness from 1-1/2" to 4".
- 12. **InsulFoam I (EPS: Expanded Polystyrene)** A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type I. Nominal density of 1.0 lbs/cubic ft (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from ½" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico Recovery Board, Dens-Deck Prime or Securock.
- 13. **InsulFoam VIII (EPS: Expanded Polystyrene)** A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type VIII. Nominal density of 1.25 lbs/cubic ft (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from 1/4" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico Recovery Board, Dens-Deck Prime or Securock.
- 14. **InsulFoam II (EPS: Expanded Polystyrene)** A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type II. Nominal density of 1.5 lbs/cubic ft (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from 1/4" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico Recovery Board, Dens-Deck Prime or Securock.
- 15. **InsulFoam IX (EPS: Expanded Polystyrene)** A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type IX. Nominal density of 2.0 lbs/cubic ft (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from 1/4" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico Recovery Board, Dens-Deck Prime or Securock.

- 16. **InsulFoam HD Composite** InsulFoam expanded polystyrene (EPS) insulation laminated with a top surface of 1/2" thick SecurShield HD. Available in 4' x 8' boards with thickness from 1-1/2" to 7".
- 17. **InsulLam** InsulFoam expanded polystyrene (EPS) insulation laminated with a top surface of 1/2" Dens Deck Prime, 1/2" Securock, or 1/2" Recovery Board. Available in 4' x 8' boards with thickness from 1-1/2" to 7".
- 18. **XPS:** Extruded Polystyrene Available through Versico's is dimensionally stable with high thermal and low water absorption performance capability. XPS is available in varying compressive strengths thicknesses and sizes. Refer to specific product data sheets for physical properties and additional technical information. Specified beneath Versico Recovery Board, Dens-Deck Prime or Securock
  - a. Thermapink 18 or 25 Extruded Polystyrene
  - b. Foamular 400 or Durapink Extruded Polystyrene
  - c. Dow Recovermate, Dow Styrofoam Deckmate, or Dow Styrofoam Deckmate Plus Extruded Polystyrene
- 19. **Securock Cover Board** A uniform composition of fiber-reinforced with no facer for use as a cover board or a thermal barrier. Available in ½" to 5/8" thick and 4' x 4' or 4' x 8' size boards. Long uninterrupted runs (>200') may require slight gapping due to thermal expansion.
- 20. **Versico Recovery Board** A 1/2" or 1" thick high-density wood fiberboard with an asphalt coated facer for use as a cover board or recover board. Available ½" or 1" thick and 4' x 4' or 4' x 8' size boards.
- 21. **DensDeck Prime** –gypsum core that incorporates glass-mat facings on the top and bottom side. Available in ¼" to 5/8" and 4' x 4' or 4' x 8' size boards.
- 22. **DensDeck StormX Prime** a reinforced gypsum cover board with an enhanced, moisture-resistant core and coated glass mat facers on the top and bottom side. The top surface is pre-primed and provides excellent bond strength for adhered membrane for use as a cover board. DensDeck StormX Prime is extremely durable and is approved for use in assemblies meeting FM's Very Severe Hail (VSH) Classification. Available in 5/8" thickness and 4' x 4' or 4' x 8' size boards.
- 23. **DensDeck Cover Board** –gypsum core that incorporates glass-mat facings on the top and bottom side for use as a cover board. Available in ½" to 5/8" and 4' x 4' or 4' x 8' size boards.
- 24. **R-Tech Fanfold Recover Board** Closed-cell lightweight expanded polystyrene (EPS) with polymeric laminated faces which meets ASTM C 578 for use as a recover board. Available in thicknesses of 3/8" to 3/4" with coverage 4' x 50' (2 squares). 4' x 8' units are also available.

## 2.04 ADHESIVES AND CLEANERS

All products shall be furnished by Versico's and specifically formulated for the intended purpose.

- A. **VersiWeld Bonding Adhesive:** A high-strength, synthetic rubber adhesive used for bonding VersiWeld membrane to various surfaces. The adhesive is applied to both the membrane and the substrate at a coverage rate of approximately 60 square feet per gallon per finished surface (includes coverage on both surfaces).
- B. Low VOC Bonding Adhesive for TPO: This product meets the <250 gpl VOC (volatile organic compound) content requirements of the OTC Model Rule for Single-Ply Roofing Adhesives. A high strength, solvent-based contact adhesive that allows bonding of TPO membrane to various porous and non-porous substrates. Apply at a rate of 60 ft2 per gallon finished surface. Available in 5-gallon pails. This product does not comply with southern California counties with additional restrictions on solvents. See Versico's Technical Data Bulletin for a listing of the counties involved.

- C. Low VOC Bonding Adhesive 1168: This product meets the <250 gpl VOC (volatile organic compound) content requirements of the OTC Model Rule for Single Ply Roofing Adhesives. A high strength, solvent-based contact adhesive the allows bonding of TPO membrane to various porous and non-porous substrates. Apply at a rate of 60 ft2 per gallon finished surface. Available in 5-gallon cans. This product complies with southern California counties with additional restrictions on solvents. See Versico's Technical Data Bulletin for a listing of the counties involved.
- D. **Aqua Base 120 Bonding Adhesive:** A semi pressure-sensitive, water-based adhesive used as a two-sided contact adhesive. Coverage rate is 120 square feet per gallon finished surface (applied to membrane and substrate). Refer to Spec Supplement G-09-17 "Aqua Base 120 Bonding Adhesive" for Warranty limitations and other considerations.
- E. **Cut-Edge Sealant:** A white or clear colored sealant used to seal cut edges of reinforced VersiWeld membrane. A coverage rate of approximately 225 275 linear feet per squeeze bottle can be achieved when a 1/8" diameter bead is applied.
- F. **Water Cut-Off Mastic:** Used as a mastic to prevent moisture migration at drains, compression terminations and beneath conventional metal edging (at a coverage rate of approximately 10' per tube or 100' per gallon).
- G. Universal Single-Ply Sealant: A 100% solids, solvent free, voc free, one part polyether sealant that provides a weather tight seal to a variety of building materials. It is white in color and is used for general caulking such as above termination bars and metal counter flashings and at scuppers.
- H. **Thermoplastic One-Part Pourable Sealer:** A one-part, moisture curing, elastomeric polyether sealant used to fill TPO Molded Pourable Sealant Pockets. Packaged in 4, 2-liter foil pouches inside a reusable plastic bucket. 1 pouch will fill 2 TPO Molded Pourable Sealant Pockets.
- I. **Weathered Membrane Cleaner:** Used to prepare membrane for heat welding that has been exposed to the elements or to remove general construction dirt at an approximate coverage rate of 400 square feet per gallon (one surface).
- J. **TPO Primer:** A solvent-based primer used to prepare the surface of VersiWeld Membrane prior to application of Pressure-Sensitive Coverstrip and TPO Pressure-Sensitive RUSS.
- K. **TPO Low VOC Primer:** A solvent-based, low solids primer used to prepare the surface of VersiWeld Membrane prior to application of Pressure-Sensitive Coverstrip and TPO Pressure-Sensitive RUSS. This low VOC product is ideal for use in states where environmental issues are a concern.
- L. CCW 702 WB: a high-tack, water-based contact adhesive for promoting adhesion of Versico air/vapor barrier membranes and an approved substrate (i.e., concrete, Dens-Deck Prime and Securock). Applied by roller, brush, or spray with an application rate of approximately 200 sq. ft. per gallon. Available in 5-gallon containers. CCW 702 WB Primer contains 57g/L VOCs and meets South Coast Air Quality Management District (SCAQMD) and Leadership in Energy and Environmental Design (LEED) Requirements for Volatile Organic Compounds.
- M. **Cav-Grip Primer:** a low VOC contact adhesive used to prime surfaces **prior to** the application of 725TR.
- N. CAV-GRIP 3V Low-VOC Aerosol Contact Adhesive/Primer: a low-VOC, methylene chloride-free adhesive that can be used for a variety of applications including: bonding VersiWeld membrane to various surfaces, enhancing the bond between Versico's VapAir Seal 725TR and various substrates, priming unexposed asphalt prior to applying Flexible DASH Adhesive and for adhering VersiGard FleeceBACK and VersiGard EPDM membrane to vertical walls. Coverage rate is approximately 2,000-2,500 sq. ft. per #40 cylinder and 4,000-5,000 sq. ft. per #85 cylinder as a primer, in a single-sided application and 750 sq. ft. per #40 cylinder and 1,500 sq. ft. per #85 cylinder as an adhesive for vertical walls, in a double-sided application.

## 2.05 FASTENERS AND PLATES

- A. **HPVX Fasteners**: A heavy duty #15 threaded fastener with a #3 Phillips drive used for membrane or insulation securement into steel, wood plank or minimum 15/32-inch-thick plywood.
- B. **Rhinobond TPO Welding Plate:** A 3" diameter, 0.028" thick, corrosion-resistant steel plate with high solids coating on the top surface. The plate is secured with Versico's HPVX Fastener or Purlin Fastener and the membrane is welded to the top surface using the Rhinobond Induction Welding Tool.

## 2.06 METAL EDGING AND MEMBRANE TERMINATIONS

- A. **General:** All metal edging shall be tested and meet ANSI/SPRI ES-1 standards and comply with International Building Code.
- B. **Drip Edge**: a metal fascia/edge system with a 22- or 24-gauge continuous anchor cleat and .032-inch-thick aluminum or 24-gauge steel fascia. Metal fascia color shall be as designated by the Owner's Representative.
- C. **VersiTrim Coping:** incorporates a 20 gauge anchor cleat with 4 pre-slotted holes, a concealed joint cover and 10 foot continuous sections of coping cap; can accommodate minimum 5 "wide parapet walls. Metal coping cap color shall be as designated by the Owner's Representative.
- **D. Termination Bar**: a 1" wide and .098" thick extruded aluminum bar pre-punched 6" on center; incorporates a sealant ledge to support Lap Sealant and provide increased stability for membrane terminations.
- E. VersiTrim Term Bar Fascia: A 1.75" wide formed aluminum termination bar with pre-slotted fastening holes for ease of locating and installing. The decorative cover is available in 0.040" aluminum or 24-gauge galvanized steel. VersiTrim Term Bar Fascia is manufactured in 12' lengths for fewer joints/seams, fewer sections to handle and faster installation.

### 2.07 WALKWAYS

Protective surfacing for roof traffic shall be VersiWeld TPO Walkway Rolls installed per manufacturer's requirements or concrete pavers loose laid over an approved slip sheet (pavers not recommended for slopes greater than 2" in 12").

#### 2.08 OTHER PRODUCTS / TOOLS

- A. **RhinoBond Portable Induction Welding Tool**: An induction heating tool is used to emit the magnetic field that activates the high solid coating on the top surface of the RhinoBond Welding Plate to fuse with the roofing membrane.
- B. Magnet: A stand-up device that allows the weld to cool as it holds the membrane to the heated plate.
- C. **Versico VapAir Seal 725TR Air & Vapor Barrier** / **Temporary Roof:** 725TR is a 40-mil composite consisting of 35-mils of self-adhering rubberized asphalt factory laminated to a 5-mil polyethylene film with an adhesion textured surface. 725TR roll dimensions are 39" x 100' and the product is applied after priming an acceptable substrate with CCW 702, 702-LV, Cav-Grip Primer or Cav-Grip 3V primer.
- D. **Versico VapAir Seal MD Air and Vapor Barrier:** a reinforced composite aluminum foil with self-adhesive SBS backing and removable poly release film. Used for direct application over metal decks. Available in rolls 42.5" wide by 131.23" long (460 square feet).

#### PART 3 EXECUTION

#### 3.01 GENERAL

- A. Comply with the manufacturer's published instructions for the installation of the membrane roofing system including proper substrate preparation, jobsite considerations and weather restrictions.
- B. Position sheets to accommodate contours of the roof deck and shingle splices to avoid bucking water.

### 3.02 VAPOR RETARDERS

#### A. General:

The use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly should be investigated, especially on projects with high interior humidity, such as, swimming pools, breweries, pulp mills, etc.

## 3.03 INSULATION PLACEMENT AND ATTACHMENT

- A. Install insulation or membrane underlayment over the substrate with boards butted tightly together with no joints or gaps greater than 1/4 inch. Stagger joints both horizontally and vertically if multiple layers are provided.
- C. Secure insulation to the substrate with the required Versico's fasteners and RhinoBond TPO Welding Plate in accordance with manufacturers specifications.

## 3.04 RHINOBOND INDUCTION TOOL CALIBRATION

Prior to proceeding with membrane attachment to the plate, the RhinoBond Induction Tool must be calibrated. Follow calibration process as published by manufacture with the specified insulation thickness and type and specified membrane thickness.

## 3.05 MEMBRANE PLACEMENT AND INDUCTION WELDING

A. After placement of insulation on substrate, secure the insulation at a rate of six HP-X Fasteners and RhinoBond Plates per 4' x 8' board in the designated field and eight HP-X Fasteners and RhinoBond Plates around the perimeter. Refer to appropriate Versico detail for patterns and depth of perimeter area.

Note: Avoiding fastener overdrive to prevent plate from deforming.

- B. Place VersiWeld membrane over the appropriate RhinoBond plates and allow membrane to relax.
- C. Place RhinoBond Induction Tool over the RhinoBond TPO Welding Plate, under the roofing membrane.
- D. Activate induction welding tool and leave in place until heating cycle is complete.
- E. Immediately place Magnet on the membrane over the plate and leave in place for at least 60 seconds.
- F. Resume process ensuring membrane is attached to all plates.

Note: Additional securement must be provided at the perimeter of each roof level, roof section, expansion joint, curb flashing, skylight, interior wall, penthouse, etc., at any inside angle change where slope exceeds 2" in one horizontal foot, and at other penetrations in accordance with membrane manufacture's published details.

## 3.06 MEMBRANE HOT AIR WELDING PROCEDURES

A. Hot air weld the VersiWeld membrane using an Automatic Hot Air Welding Machine or Hot Air Hand

Welder in accordance with the manufacturer's specifications. At all splice intersections, roll the seam with a silicone roller immediately after welder crossed the membrane step-off to ensure a continuous hot air welded seam.

Note: When using 60-mil thick or thicker membrane, all splice intersections shall be overlaid with VersiWeld non-reinforced flashing or TPO T-Joint covers.

- B. Probe all seams once the hot air welds have thoroughly cooled (approximately 30 minutes).
- C. Repair all seam deficiencies the same day they are discovered.
- D. Apply Cut Edge Sealant on all cut edges of reinforced membrane (where the scrim reinforcement is exposed) after seam probing is complete. Cut edge sealant is not required on vertical splices.

## 3.07 FLASHING

- A. Flashing of parapets, curbs, expansion joints and other parts of the roof must be performed using VersiWeld reinforced membrane. VersiWeld non-reinforced membrane can be used for flashing pipe penetrations, Sealant Pockets, scuppers, as well as inside and outside corners when the use of prefabricated accessories is not feasible.
- B. Follow manufacturer's typical flashing procedures for all wall, curb, and penetration flashing including metal edging/coping and roof drain applications.

## 3.08 WALKWAYS

- A. Install walkways at all traffic concentration points (such as roof hatches, access doors, rooftop ladders, etc.) and all locations as identified on the specifier's drawing.
- B. Hot air weld walkway material to the membrane in accordance with the manufacturer's specifications.

## 3.09 DAILY SEAL

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the workday, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Complete an acceptable membrane seal in accordance with the manufacturer's requirements.

#### 3.10 CLEAN UP

- A. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.
- B. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking.

#### END OF SPECIFICATION

# IRAN ECONOMIC SANCTIONS ACT COMPLIANCE AND NO FAMILIAL RELATION AFFIDAVIT

Effective April 1, 2013, all Bids and/or Proposals received by public entities in the State of Michigan must comply with the Iran Economic Sanctions Act, Act 517 of 2012. As a condition to compliance with the Act, the following certification must be submitted with the Bid.

certifies under civil penalty for false certification, that the Bidder is not an "Iran Linked Business", as

defined in the Act, and is eligible to submit a Bid.	
NO FAMILIAL RELATIONSHIP	
Further, there is no familial relation between the Ow School Superintendent, or other Employee of the S	rner of the Company and any School Board Member, chool.
Ву:	_
lts:	_
State of Michigan ) SS County of )	
This instrument was acknowledged before me on th	neday of,by
	,Notary Public
	,County, Michigan
	My Commission Expires:

Acting in the County of:



Full Company Name:	
(legal) Address:	
Phone Number:	
Email:	
Name of representative:	
Describe roofing type, manufacturer, and system in det	ail:
Response time to Warranty Issues:	
I have completely read, understand and able to meet al	I requirements set forth.
	(print)
	(Signature)
Total Bid Amount (figures) \$	
(words)	
(words)	

BID packet must Include the following: Tapered insulation design, Authorized Installer, Gold Metal or Excalibur Contractor, Iran Economic Sanctions Act Compliance and No Familial Relation Affidavit, Performance and Payment Bonds, and past comparable work letters.