

ROOF REPLACEMENT SPECIFICATION

Shaws #3544 – South Portland, ME - Roof Sections: A, B, C, D & E

SECTION 075419 - POLYVINYL CHLORIDE (PVC) ROOFING - MECHANICALLY ATTACHED

PART 1 - GENERAL

1.1 SUMMARY SCOPE OF WORK

1. Refer to separate specification for sloped shingle roof system replacement (Sections D & E).
2. Existing roof assembly remains in place and is prepared as required by roofing manufacturer to receive a mechanically attached 60 mil Sikaplan Polyvinyl Chloride (PVC)(FeltBacked) roofing membrane.
3. Contractor is required to contact Lisa Andrukonis of Sika Sarnafil SSI for material quotes. No other contact at Sika Sarnafil can be used to obtain material quotes. Her contact information is listed in section 1.6 (D) of this specification.
4. The existing roof system is as follows: Single Ply Membrane followed by 3 inches Isocyanurate Insulation followed by a Steel Deck. Note that sections B & C are ballasted.
5. Tear off designated wet/damaged insulation roof areas identified during the course of the work. Non-Destructive moisture testing to be provided by others – (not in contractors scope or bid price) Fill in removed insulation areas to match the height of the existing adjacent roof area. A unit price line item on the bid form will address wet or damaged insulation removal and infill. Wet area removals will be treated as a change order based on the cost per square foot unit price provided on the bid form by the contractor. All removal areas are to be documented by the contractor through markup drawing and photos confirming the conditions. Property management and Roofingprojects.com to be notified and made aware of the conditions as they are encountered.
6. Sweep the roof surface of all debris and dirt. Prepare existing roof surface: cut, set down and/or remove any blisters or ridges, walkway pads, etc. that would prevent a level and uniform application of the new roof system. Cut existing membrane every 10 feet on center. On sections B & C, remove existing ballast stone.
7. In all areas, Install 60 mil thick Polyvinyl Chloride roof membrane (Sikaplan Fastened 60)(Felt Backed) (mechanically attached) directly over the existing membrane surface without separator board. The building is not FM insured, however, as a design standard, attach membrane to meet FM-1-90 guidelines (FM 100 mph wind zone) Confirm sheet width, maximum fastener spacing in the membrane seam areas, half sheets and increased fastener rates in the perimeter and corner zones with manufacturer prior to submitting bid. Note that the membrane sheets must be installed perpendicular to the steel deck flutes and that “picture framing” half sheets in the perimeter and corner zones is not an acceptable method to achieve the increased fastener rates required in these zones on mechanically attached installation.
8. Install Sarnafil G459 Grease resistant membrane around all sides of grease machines and kitchen exhaust fan units with the tan side up, fully welded at all sides as a sacrificial layer over base membrane (3’-0” wide in all directions).
9. Remove all existing flashings and adhere 60 mil thick Polyvinyl Chloride (PVC) Flashing membrane.
10. Install specified sheet metal flashings and accessories – include all clips, sealants, fasteners, and connections to make watertight. All edge metal flashings to be as specified in section 2.9 of this specification.
11. Coordinate all necessary disconnects and reconnection of roof top equipment required to install new roof system with Owner provided electrician and HVAC contractor.
12. The perimeter edge conditions are to be addressed as noted on the roof plan drawing and as detailed on the detail drawings. Curbs and any parapet walls are to be completely flashed with new 60 mil PVC membrane.
13. Install tapered insulation crickets to the up-slope side of all Roof Top Units as specified and as may be noted on the roof plan drawing.
14. Remove all existing drain strainers and clamping collars and replace with new cast iron. Roof drain body and piping to remain. A line item on the bid form will address drain bowl replacement and drain insert installation if required.
15. Remove existing metal scupper housing including all flashings. **Install new PVC coated metal scupper housing** and flash into new roof system. Where collector heads & leaders exist, replace with new units to match existing size and configuration (Refer to section 2.9 of this specification).

16. Remove abandoned items as indicated on the roof plan drawing. Close opening in deck, infill opening w/ isocyanurate insulation to match existing roof thickness and roof over area. All obsolete satellite dishes are to be removed during the course of work (include in the bid price). Coordinate with on site contact to confirm that the dish is obsolete prior to removal.
17. Remove and replace the existing roof hatch (size to match existing) Type S Roof Hatch by The BILCO Company, P.O. Box 1203, New Haven, CT 06505, 1-800-366-6530, Web: www.BILCO.com. Where alarm system is existing, include re-connection of alarm system components on new hatch.
18. Install new hatch rail System at the roof hatch included in the base bid price. (Refer to section 2.10 of this specification)
19. Install manufacturers walk pads at roof access points and at all sides of access hatches, serviceable RTU units and all sides of air cooled condensers. Install 4'x4' area of hardboard under membrane at all walkpad areas. A lineal foot price is available on the bid form for additional walk pads to be determined later.
20. All pipe supports to be replaced. (Refer to section 2.11 and Part 3 of this specification)
21. Wood equipment support sleepers or dunnage: Replace with same size pressure treated lumber and fully wrap with membrane flashing screwed in place.
22. Install perimeter safety demarcation on roof surface at perimeter (Refer to section 2.8 and part 3 of this specification)
23. **Contractor to include in their lump sum pricing a Contingency Allowance of \$5,000.** All contingency allowance expenditures must be authorized in writing by Owner's representative and Roofingprojects.com prior to being performed. Payment will not be made on any unauthorized contingency expenditures. Any allowance value not approved during the course of the project will be credited back to the Owner.
24. All required municipal permits, project fees and taxes are to be included in the contractors base bid price.
25. All contractor payment applications are required to be submitted to the owner for payment processing. The awarded contractor will be given specific instructions regarding payment applications.
26. Unless otherwise specified, the roof and flashing membrane color is to be Energy Smart White.
27. A Twenty (20) year Manufacturer's Systems Warranty shall be provided to the Owner upon completion. (Refer to section 1.7 of this specification)
28. A Five (5) year Installer's workmanship and material warranty shall be provided to the Owner upon completion. Note: A leak response provision is included as part of the installer's obligation.

A. Section Includes:

- A. Mechanically attached Polyvinyl Chloride (PVC)(Felt Backed) roofing membrane
- B. Re-roofing system guidelines shall be one of the following:
 1. New low sloped roof assembly as specified.
 2. Preparation of existing roofing overlayed with membrane.
- C. Albertson Stores, Manufacturer's Twenty (20) year performance warranty as specified.
- D. Installer's Five (5) year workmanship and materials warranty as specified.

1.2 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.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Roofing Conference: Consultant to conduct conference at Project site.

1.4 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.
 - A. Include tapered insulation layout plan as specified.
 - B. Include sheet and fastener layout plan from the roofing manufacturer for each roof area showing dimensions and layout of single ply membrane sheets and the spacing of fasteners in the field, perimeter, and corner areas of each roof.
- C. Notice of Award (NOA) & Accepted Notice of Award (ANOA): Before starting this project, the roofer shall provide the Owner's Representative with copies of both their supplied Notice of Award (NOA) and the Manufacturer's

Accepted Notice of Award (ANOVA). These documents shall verify that the proposed roofing assembly has been submitted as expected and reviewed by the manufacturer's technical department and satisfies the following:

- A. Wood deck fastener pull out values shall determine required fastener density of the specified roofing assembly.
- B. Adhesive test to determine adhesive type and density when used in the specified roofing assembly.
- C. A 20-year NOAA Weather history for the County where this project will take place. Roofing wind requirements shall be as specified in the project scope of work. A minimum of 60 miles per hour (mph) Manufacturer's wind speed warranty is required in roofing warranty.
- D. Roofing where the new roof will overlay existing roofing, require non-destructive moisture investigation.
- E. A fastener pull-out test is required by the Owner for wood decks. The fastener manufacturer shall perform fastener pull out testing. Sika Roofing primary fastener manufacturer is OMG and they perform free testing that require someone to patch the holes that the fasteners leave (in the existing roof from the test). There is a pull-out test form that needs to be completed by the Owner's representative for each location then submitted to an OMG field representative for scheduling. The following OMG Regional Manager can provide you with the fastener pull out form and contact information for the specific location a test is required:
 - West: Andrew Deering – 317-938-1143 adeering@omginc.com: Alaska, Western Canada, Washington, Oregon, Idaho, Montana, Wyoming, California, Nevada, Utah, Colorado, Arizona, New Mexico.
 - Midwest: Drew Nehrenz – 260-444-1228 anehrenz@omginc.com: Minnesota, Nebraska, Indiana, North & South Dakota, Illinois, Missouri, Michigan, Wisconsin.
 - Gulf: Matt Duncan – 512-797-5548 mduncan@omginc.com: Florida, Puerto Rico, Texas, Oklahoma, Mexico, Louisiana, Mississippi, Arkansas.
 - Mid-Atlantic: Russell Quick – 256-343-5242 rquick@omginc.com: North & South Carolina, Virginia, Maryland, Tennessee, Kentucky, Alabama, Georgia.
 - Northeast: Jon Surratt – 916-303-3645 jsurratt@omginc.com: Massachusetts, Maine, Rhode Island, Connecticut, Vermont, New York, New Jersey, Pennsylvania, Delaware, Long Island, West Virginia, Ohio.
- F. A protective grease resistant membrane is required over new roof membrane around kitchen and roof exhaust that vents and drains onto the finished roof surface.
- G. Some properties have Anhydrous Ammonia lines that run across the roof. These lines should be checked for leaks at connections. If the joints are not sealed after reroofing and they start to leak ammonia, the applicator is responsible to install a chemical resistant buffer membrane (G459) under concrete splash blocks, under leaky lines.
- H. Existing flashing surfaces to be removed and prepared to receive specified flashing.
- I. Traffic matting at roof access locations and around all serviceable roof equipment is required. Walkway matting shall be installed around all (4) sides of roof equipment.

1.5 CLOSEOUT SUBMITTALS

- A. Roofing Installers Warranty filled out and signed by the roofing installer.
- B. Maintenance Data: Roofing system included in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Sika applicators shall be approved by Albertson Stores and Sika Roofing in advance of bidding.
 - 1). Sika Sarnafil: For approved applicator list contact Albertson Stores National Account representatives Tom Obrien @ 781.883.8692 (Obrien.tom@us.sika.com) or Steve Moosman @ 801.201.6269. (moosman.steve@us.sika.com).
 - 2). This roofing project shall be installed by the Sika Sarnafil certified contractor selected and contracted by the Owner or Owner's representative. The roofing installation will not be subcontracted to a different roofing applicator by the awarded contractor unless approved in advance by the Owner, the Owner's representative, and Sika Sarnafil.
- B. Technical Direction:
 - 1). The following National Technical managers should be contacted regarding roofing clarification and consultation for projects within their regions. Additionally, these managers can provide contact information

regarding Sika field technicians responsible for visiting specific Albertson Stores roofing projects. Current Sika National Technical Managers include:

West North: Gary Hite - 707-628-9669 hite.gary@us.sika.com: California North, Hawaii, Nevada (except Las Vegas), Oregon, Washington, Alaska.

West South: Raul Vasquez - 562-504-8464 vasquez.raul@us.sika.com: California South, Las Vegas, Arizona.

Mountain: Alan Ford - 801-949-9243 ford.alan@us.sika.com: Utah, Idaho, Montana, Wyoming, Colorado, New Mexico.

Midwest: Phil DeRuiter - 641-750-7006 deruiter.phil@us.sika.com: North & South Dakota, Nebraska, Kansas, Minnesota, Indiana, Missouri, Iowa, Wisconsin, Illinois, Michigan, Kentucky, Ohio.

Southwest: Craig Pahl – 713-545-8469 pahl.craig@us.sika.com: Texas, Oklahoma, Louisiana, Arkansas.

New England: Bryan Chelkonas – 774-287-3706 chelkonas.bryan@us.sika.com: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

East: Sezair DeStani – 201-410-6055 destani.sezair@us.sika.com: District of Columbia, Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia.

Southeast: Ricardo Hartley – 678-672-7993 hartley.ricardo@us.sika.com: Alabama, Florida, Georgia, Mississippi, North & South Carolina, Tennessee.

- C. Field Reports: Manufacturer's Technical or Technical Sales representative shall document site visits and observed conditions in field reports. Pictures of conditions included. Reports shall be provided to the Roofing Contractor. Field reports can be provided to the Owner from the Roofing Contractor upon Owner's request.
- D. Material Purchases: All roofing materials for this project shall be purchased at same time from Sika Sarnafil. No previous purchased or left over materials from other orders or projects will be allowed on this project. To ensure compliance with this direction, materials shall be quoted through Lisa Andrukonis 781.332.3212, andrukonis.lisa@us.sika.com. Orders shall be placed and monitored through Rachelle Charlemagne 781.328.2503 x 6669, Charlemagne.rachelle@us.sika.com.
- E. Roof membrane must satisfy the following as specified by the Owner's representative:
 - A. Standard Roof Installation: 20-year warranty, Sikaplan 60 mil, reinforced PVC membrane, white with a 60-mph wind speed warranty. Available with a 9 oz. felt backing when installing directly over an existing roofing system. (Note: Wind speed warranties up to 99 mph are available if required by Owner or Owner's representative as specified in these documents).
 - B. Grease or asphalt resistant conditions: Sarnafil G-459 60 mil reinforced, chemically resistant PVC membrane, white. Used when in contact with asphalt, grease, animal fats or non-compatible materials.
- F. When overlaying the existing roof, the following is required:
 - A. All reroofing system details and project scope shall be approved per project by the Manufacturer's Technical manager and Owner's representative.
 - B. Roofing overlays require Non Destructive moisture testing to help determine if moisture is in the existing roof assembly.
 - C. Existing Thermoplastic Polyolefin (TPO) roof: Prepare existing TPO roof and flashings for recover as required by local Sika Roofing Technical Department. Mechanically fasten Sikaplan 60 FB9: 9 ounce felt backed membrane.
 - D. Existing Ethylene Propylene Diene Terpolymer (EPDM) roof: Prepare existing roof and flashings for recover as required by local Sika Roofing Technical Department. Mechanically fasten Sikaplan 60 FB9: 9 ounce felt backed membrane.
- G. HVAC and mechanical work including removal and disposal, shall be provided by the Albertson Stores Mechanical Contractor. Units to be removed shall be identified with a red painted X. Any necessary plumbing and/or electrical work shall be provided by Albertsons unless the selected roofing contractor can perform the necessary task. Plumbing and electrical contractor contact information will be provided by Albertson Stores. Note that abandoned items to be remove are cataloged on the roof plan.

1.7 WARRANTY

- A. System Warranty: Manufacturer's standard no dollar limit, single source responsibility, total system guarantee in which manufacturer agrees to repair or replace components of roofing system that fail within 20 years from date of Substantial Completion and include the cost of materials and labor.
 - A. System warranty includes roofing, flashings, roof insulation, fasteners, roofing accessories, and other components of roofing system provided by and warranted by the Roofing Manufacturer.
 - B. The roofing manufacturer shall provide a minimum of 60 mile per hour wind speed warranty coverage.
- B. Roofing Installer's Warranty: Installer to sign and submit warranty form at end of this Section, covering all work related to the roofing system for 5 years from date of Substantial Completion. Installer's Warranty shall include labor, components, and material of the new roof system. As part of the manufacturer's warranty and Albertson Stores warranty obligation, the installer agrees to subscribe to Albertson Stores/JLL Corrigo property management platform.
- C. Maintenance: Along with the issuance of the warranty, a set of instructions shall be included detailing preventative maintenance and noting a list of harmful substances which may damage the thermoplastic roofing membrane.
- D. A sign identifying the installer, date of installation and other additional information is required to be provided by the roofer. The sign is addressed in the documents following this bid document.
- E. Paper copies of all warrant documents to be sent to the Albertsons Division Management team and electronic copies to be sent to Albertsons Corporate Management. Specific addresses to be provided to the contractor during the pre-construction meeting prior to the start of work.

PART 2 - PRODUCTS

2.1 NATIONAL VENDOR

- A. Upon request, the National Vendor listed in this Article shall provide a list of approved applicators. Roofing Contractor shall be responsible for repair of damages and replacement of missing material upon his signed receipt of material. Related materials not listed in this Article shall be furnished by the Roofing Contractor and provided with a manufacturer warranty. Roofer is obligated to subscribe to 'Corrigo' repair and maintenance program to participate in Albertson's roofing program.
- B. The following installation and materials shall be provided by Albertson Stores National Vendor: Sika Sarnafil. Materials to be purchased as noted on the project Responsibility Matrix and confirmed with the Owner's Representative. Sika Sarnafil's Primary Contacts are Tom O'Brien 781-883-8692 obrien.tom@us.sika.com and/or Steve Moosman 801-201-6269.

2.2 PERFORMANCE REQUIREMENTS

- A. Membrane Accelerated Weathering: Roof membrane shall withstand 5000 hours of exposure when tested per ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Impact Resistance: Roofing system shall resist impact damage when tested per ASTM D 3746 or ASTM D 4434 or ASTM D 6878.
- C. Roofing Assembly Wind Uplift: Tested by a qualified testing agency to design indicated on drawings for corner, perimeter, and field of roof following ANSI 4474 to resist uplift pressures calculated per the American Society of Civil Engineers (ASCE) 7-10 and after multiplying the results with a safety factor (Refer to scope of work for wind uplift rating requirements).
 - A. Albertson Stores require a minimum 60 mph Manufacturers wind speed warranty for all their roofing properties. Fastener pull out test and reports are required when fastening to wood substrates.
- D. 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.

2.3 MEMBRANES

- A. Reinforced PVC Sheet: ASTM D4434, internally fabric - or scrim-reinforced, uniform, flexible sheet.
 - A. Membrane thickness and type as described in Part 1.6, D of this Bid Document.
 - B. Exposed Face Color: White meeting Cool Roof Standards.
 - C. Unless otherwise specified, 60 mil Sikaplan is Albertson Stores standard roof membrane.

D. Standard sheet Membrane options:

1. Standard Membrane: White Sikaplan 60 mil, reinforced. 9 oz. felt backing.
2. Self-Adhered: White G-410 SA 60 mil, reinforced with self-adhesive backing.
3. Chemical Resistance: White G-459 60 mil, reinforced asphalt and grease resistant.

E. Sheet Membrane adhesives:

1. Standard Membrane: Sarnacol 2170 solvent based reactive adhesive.
Sarnacol 2121 latex-based adhesive.
Sarnacol 2170 VC solvent based reactive adhesive for use in VOC limited applications.
Stabond VOC compliant adhesive for use in VOC limited applications.
Sikafast 3341 adhesive for use when adhering membrane flashing to Kynar/Hylar finished metals. (edge metal)
Sika D-100 sheet adhesive for use on unique applications where odors and application limits the use of a liquid applied adhesive.

B. Liquid Applied Flashing Membrane options:

1. 20-year Curb/Wall/Equipment LAM flashing that ties onto PVC membrane roofing:
 - a. Primer, reinforcement, and Sikalastic Roof Pro, white as required.
 - b. Primer, reinforcement, and PMMA, white as required.
 - c. 20-year wall flashing only: Primer & three (3) coats Sikalastic 515

2.4 AIR AND VAPOR RETARDER (N.I.C.)

2.5 COVER BOARD: (N.I.C.)

2.6 INSULATION BOARD

- A. Insulation Board: Polyisocyanurate (Polyiso) Sarnatherm Iso. ASTM C 1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces. (For existing damaged materials removal infill)
- B. Tapered Insulation: Provide factory-tapered insulation boards, fabricated to have a finished roof slope of 1/4 inch per 12 inches unless otherwise indicated.
- C. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes as indicated for sloping roof to drain. Fabricate to slopes indicated on drawings.

2.7 Attachment Hardware:

- A. Fasteners: Factory-coated steel fasteners and metal plates complying with corrosion-resistance provisions in FM Global 4470, designed for fastening roofing/flashing to substrate, and acceptable to roofing system manufacturer. Miscellaneous fastener accessories include but not limited to: Metal termination bars, metal battens, coated metal flashing, termination reglets, and other accessories as required. Fasteners: Factory-coated steel fasteners and plates complying with corrosion-resistance provisions in FM Global 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer. Includes Rhino Bond plates with PVC coating use for induction welded installations, etc.
 1. Attachment Plates: Sikaplan or Sarnadisc securement plates.
 2. Wood Deck: Sikaplan #14 Fasteners.
 3. Metal Deck: Sikaplan #15 Fasteners.
 4. Induction Weld: RhinoBond plates.

2.8 Safety Demarcation Membrane:

- A. OSHA Perimeter Safety Warning membrane:
 1. Sarnafil 4" x 100' wide OSHA Yellow Perimeter warning membrane.
 2. Sika perimeter warning tape is not an acceptable substitute for the membrane.

2.9 Sheet Metal Flashing:

- A. Metal Flashing:
 1. All Sheet metal shall satisfy ES-1 (Flashing) or GT (Gutter) certification requirements.
 2. **Fascia/Coping** (Select the following):

- 1). Fascia - One Edge 24 ga. galvanized clip and cover with prefabricated cover, inside and outside angles and end caps. Fascia clip color as selected by Albertson Stores. Must be purchased through Sika Sarnafil to be included in the Albertson Store warranty.
- 2). Coping - One Edge 24 ga. galvanized base clip with flat, tapered, existing slope coping cap including inside and outside angles and end caps. Coping color as selected by Albertson Stores. Must be purchased through Sika Sarnafil to be included in the Albertson Stores warranty.

b. **Scupper/Collector Box/Gutter:**

- 1). 24 ga. galvanized steel with Kynar finish scupper & collector box. Color as selected by Albertson Stores. Includes 5-year material warranty and must be purchased through Sika Sarnafil to be included in the Albertson Stores warranty.
- 2). Seal-Tite Gold Industrial Gutter. 24 ga. galvanized steel with Kynar finish. Color as selected by Albertson Stores. Must be purchased through Sika Sarnafil to be included in the Albertson Stores warranty.
- 3). 24 ga. galvanized steel with Kynar finish down spout in either an open or closed faced configuration. Must be purchased through Sika Sarnafil to be included in the Albertson Stores warranty.

c. **Drip Edge:**

- 1). 24 ga. galvanized steel with a PVC coated membrane finish, foil release tape and a heat weldable membrane cover strip. Color shall be white unless otherwise selected by Albertson Stores. Sarnafil must be purchased through Sika Sarnafil to be included in the Albertson Stores warranty.

2.10 Safety Rails:

- A. Safety Rails: Roof Hatch Safety Rail by SafePro. Complies or exceeds OSHA standard CFR 29 1910.28 and CFR 29 1910.29. 42" high railing when mounted per instructions on standard cap flashing. 1 1/2" OD .075 wall cold rolled electric welded (CREW) steel. Powder coated safety yellow or Thermo-Galv, other colors available. Mounting and assembly components included. As Manufactured by Rooftop Anchor, Inc. Heber City, Utah USA. Contact for pricing is Brian Shores bshores@fallprotect.com 440-249-0751.

2.11 Gas and Mechanical Piping, Conduits and supports:

- A. Miro Industries – Heber City, Utah 84032. Product as selected from one of Miro Industries supports and specified by Owner or Owner's representative.
- B. 4" x 4" redwood blocking with length as required for support, fully wrapped with Sikaplan membrane with all overlaps welded. Incapsulate redwood blocking from exposure to weather. A 24-gauge galvanized sheet metal strap shall be fastened to the blocking and over the piping/conduit to allow support to remain stationary under the piping/conduit. A polyester reinforced membrane strap welded to the wrapped membrane block can be used.

2.12 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with roofing.
- B. Bonding Adhesive: Manufacturer's standard latex or solvent based in compliance with local VOC regulations and project requirements.
- C. Slip Sheet: Manufacturer's standard, of thickness required for application.
- D. Miscellaneous Accessories: Provide metal termination bars, metal battens, coated metal flashing, pourable sealers, preformed cone, and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, and other accessories.
- E. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway, approximately 3/16 inch thick, and acceptable to membrane roofing system manufacturer.
- F. As required by Owner or Owner's representative and approved by Sika Roofing.

2.13 WARRANTY / INSTALLATION SIGN

- A. A 24-inch-wide x 18" tall sign addressing the roofing installation and warranty information is required to be provided by the installer. Refer to the sign at end of this bid document (Page 15).

- B. The installer can either provide a sign including the information shown on this sign or by contacting Jason Maxwell of Sika Roofing 801-910-9905 maxwell.jason@us.sika.com to get order information. The cost of the sign shown in this document was under \$115.00 without shipping.

PART 3 - EXECUTION

3.1 EXISTING ROOFING PREPARATION

- A. Replace loose, deteriorated, and damaged materials prior to installation of the new roofing system.
- B. Projects with wood decking and existing roof insulation require Non Destructive moisture testing to identify hidden or trapped moisture within the existing roofing. Material with moisture damage shall be removed and replaced with rigid insulation to match the type and level of the surrounding board insulation. Fastener pull test are required to confirm wood deck condition and to engineer required attachment spacing requirements.
- C. Hidden structural deficiencies, contaminates and non-compatible material shall be reported to Owner's representative and remediated prior to continuing roofing installation.
- D. Removed items: Dispose of all roofing membrane, flashings, and related accessories in accordance with Health and Safety regulations of the Authority having Jurisdiction.
- E. Remove and dispose of existing base and wall flashing to provide an acceptable substrate/surface to flash to. Owner and manufacturer shall approve existing flashing surfaces in advance of application. Flashing options include adhered reinforced sheet membrane (self-adhered and/or adhesively attached) or compatible liquid applied flashing membrane (Polyurethane or PMMA Liquid Applied Membrane).

3.2 ROOFING INSTALLATION, GENERAL

- A. Install roofing system per roofing system manufacturer's written instructions.
- B. Clean substrate of dust, debris, and other substances detrimental to roofing system installation according to National Vendor's most current requirements. Remove all sharp objects/projections.
- C. Prevent materials from entering and clogging roof drains or flashing and from spilling or migrating onto surfaces of other construction. Remove roof drain plugs when no work is taking place or when rain is in forecast.
- D. 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.
- E. Coordinate installation so insulation and protection boards are not exposed to precipitation or other sources of moisture during the project.

3.3 NATIONAL VENDOR SITE VISITS

- A. National Vendor shall provide a minimum of two (2) site visits during the roofing system installation (additional visits may be required based on complexity). One visit shall occur early in the installation process and another to close out the project and verify compliance with National Vendor Warranty requirements. Owner or Owner's Roofing Consultant may require additional site visits based on project conditions. Note: This requirement could vary depending on the geographical location of project. For example, States and providences of Alaska and/or Hawaii etc. Contact manufacturer for remote areas of access.
- B. Site visits during the roofing system installation may be performed by the following:
 - A. During Installation: Local Sika Roofing Technical Sale's Representative.
 - B. Final Inspection: Sika Roofing full time Technical Representative.
- C. When installation questions come up on the jobsite, Sika Technical has a service referred to as a Video Call where the applicator, Store Manager, Consultant can face time the issues and/or conditions to get an immediate answer to the question. Additionally, if intermediate roof access by a Sika Technical / Sales representative is limited by timing or location etc. the applicator will engage Sika Technical for installation progress review by video conferencing. This Video Call will be documented by Sika Technical and reported to the applicator.

- 3.4 INSULATION BOARD (N.I.C)
- 3.5 COVER BOARD (N.I.C.)
- 3.6 AIR AND VAPOR RETARDER (N.I.C.)
- 3.7 MECHANICALLY FASTENED MEMBRANE
 - A. Mechanically fasten roofing over area to receive. 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. Mechanically fasten or adhere roofing securely at terminations, penetrations, and perimeter of roofing.
 - D. Apply roofing with side laps shingled with slope of roof deck where possible.
 - E. Membrane Attachment:
 - A. In-Seam Attachment: Secure one edge of PVC sheet using fastening plates centered within seam, and mechanically fasten membrane to roof deck. Membrane fastening plates shall be spaced to satisfy specified wind and deck requirements based on fastener pull out values but not greater than:
 - 1. Steel Deck - Twelve (12) inches on center Note that this is the maximum allowable spacing, projects requiring a wind uplift requirement of 1-90 or greater will most likely require (6) inches on center spacing depending on sheet width – confirm with manufacturer prior to submitting bid.
 - 2. Wood Deck – Six (6) inches on center.
 - 3. Fastener spacing must satisfy wind speed coverage warranty and local codes. Fastener spacing shall be as directed by Sika Roofing Technical representative and wood decking as verified by fastener pull out testing.
 - B. It is recommended that the Owner’s representative provide the roofing manufacturers regional technical manager with ASCE data and request ASCE calculation for project verification.
 - F. Seams: Clean seam areas, overlap roofing, and hot-air weld side and end laps of roofing and sheet flashings per manufacturer's written instructions to ensure a watertight seam installation.
 - A. Test lap edges with probe to verify seam weld continuity.
 - B. Verify field strength of seam welds, a minimum of twice daily. Patch and repair seam sample areas following seam strength test. Record test results for field technician.
 - C. Repair tears, voids, and lapped seams in roofing that do not comply with manufacturers requirements.
 - G. Spread sealant bed over deck-drain flange at roof drains, and securely seal roofing in place with drain clamping ring.
 - H. Flexible Walkways: Install walkway products in locations indicated. At a minimum, walkways shall be installed around all four sides of roof top units and as required by Owner or Owners representative. Heat weld to substrate or adhere walkway products to membrane surface per roofing system manufacturer's written instructions.
 - A. Leave a minimum of 1 inch and maximum of 6 inches space between pads.
 - B. When possible, leave roof seams exposed (do not install walkway over membrane seams).
- 3.8 FLASHINGS AND PROTECTIVE MEMBRANE
 - A. Prepare surfaces to an acceptable condition to receive flashing materials. Install liquid and sheet flashings and preformed flashing accessories and adhere to substrates per roofing system manufacturer's written instructions.
 - A. Approve flashing application as directed by membrane manufacturers technical representative.
 - B. Remove existing flashing materials that are not approved as acceptable or compatible with selected flashing option.
 - C. Flash penetrations, field-formed inside and outside corners and other conditions with reinforced membrane (including liquid membrane) or unreinforced sheet flashing.
 - D. Mechanically fasten and seal top of sheet flashings.
 - B. Release Film Adhered Curb Flashing:
 - A. Confirm adhesive compatibility to substrate.
 - 1. Trim flashing membrane to conform to substrate including membrane overlaps.

2. Trim film adhesive to conform to adhered area. Remove release film from adhesive. Set flashing/adhesive onto substrate and hand roll membrane to set adhesive and secure in place. Remove top release film to expose adhesive.
 3. Set sheet membrane in place and hand roller membrane surface to set adhesive and secure in place. Ensure adequate membrane to membrane overlap to complete a satisfactory hot air weld.
 4. Mechanically fasten and seal top of sheet flashings.
- C. Bonding Adhesive Curb Flashing:
- A. Installations which require adhesive applied adhered flashing:
 1. Prime substrate surface such as cement block with adhesive prior to application of primary adhesive coat(s) to ensure proper bond strength. Allow to cure.
 2. Apply adhesive to underside of membrane and allow to cure then set membrane onto previously applied adhesive and firmly roll membrane into the adhesive. Adhesive should not be present when membrane seams are to be welded. Hot-air weld side and end laps to ensure a watertight seam installation.
 3. Mechanically fasten and seal top of sheet flashing.
- D. Protective Membrane:
- A. Grease vents shall require a chemically resistant membrane (G459) to be installed 'inverted' around exhaust curbs and exhaust vents. G459 shall be installed over newly applied roof membrane.
 - B. If the roof exhaust vent(s) drains grease away from the unit and into a valley, the valley shall also be covered to limit non-compatible grease/oil contact direct to roof / flashing membrane. Shingle lap over lapping seams.
 - C. In reroof applications where asphalt residue from previous roofing exists, the chemically resistant membrane (G459) shall be installed with direct contact to the residue.
- E. Roof and Flashing Terminations:
- A. Flashing terminations, such as drip edges and parapets shall be a high wind edge detail utilizing a mechanically fastened 22-gauge galvanized hold down cleat, a sealant air dam or added fasteners and Sarnacelad coated metal. Additionally, factory prefabricated metal flashing purchased through Sika Roofing can be used.
 - B. As noted above, installer has the option of using prefabricated flashing terminations purchased from the roofing manufacturer as directed by Owner or Owner's representative.
- F. Liquid Flashing – Unique flashing conditions require prior approval from National Vendor.
- A. All flashing surfaces should be clean, dry, free of dirt, dust, debris, loose particles, loose coatings, and other contaminants. Preparation could include grinding or removal of non-acceptable surfaces.
 - B. Clean and prime substrate and membrane surface as required by Membrane Manufacturer.
 - C. Apply required coats of liquid flashing. Coating applications shall be reinforced with a flashing fabric as directed by manufacturer.
 - D. Complex and irregular shapes, such as nuts, bolts etc. may require additional applications of sealants and/or liquid flashing per manufacturer recommendation.

3.9 PERIMETER SAFETY DEMARCATION

- A. OSHA Yellow Safety membrane: Roof sections with perimeters (parapets) that are less than 45 inches above the finished roof surface require a roof demarcation six (6) feet inside roof perimeters. Note: Sika yellow safety tape is not allowed for this application.
- B. After identifying line of demarcation, clean roof surface in preparation to weld OSHA yellow membrane parallel to the roof perimeter.
- C. Hot air weld OSHA membrane in place.
- D. Albertsons shall instruct all trades entering the roof that access to areas between the warning demarcation and perimeter edge will require OSHA safety compliance.

3.10 WALKWAY INSTALLATION

- A. Flexible Walkways: Install walkway products in locations indicated. Walk pads are required on all four (4) sides of identified roof equipment and in locations shown or noted on roof plan drawing. Adhere and heat weld walkway perimeter edge to finished roof membrane surface per roofing system manufacturer's written instructions.

- A. Leave a minimum of 1 inch and maximum of 6 inches between walkway products.
- B. When possible do not install walkway products over membrane seams.

3.11 SAFETY RAIL

- A. Ensure the roof hatch / parapet curb is in satisfactory condition and will support safety rail attachment.
- B. Follow SafePro Roof Hatch Safety Rail installation instructions included with each system.

3.12 PIPE / CONDUIT SUPPORT

- A. No pipe or conduits running across the finished roof shall rest directly onto the surface of the roof membrane. Pipe supports whether cradled or suspended are required. A Sikaplan buffer membrane shall be hot air welded to finished roof surface and centered under the pipe support base or blocking. Support spacing shall be as directed by Owner's representative.
- B. Wrapped and welded redwood block supports require either a membrane loop over the pipe/conduit and welded to the wrapped redwood block or a metal strap.

3.13 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during 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 Owner and Owners representative.
- 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 per warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.
- D. Clean all work areas. Clean interior exterior surfaces exposed to view; remove stains and foreign substances. Clean equipment supplied and installed by others as required.
- E. Clean all drains and drainage systems. Test all drains to ensure unrestricted flow into drains and drainage systems.
- F. Install "Warranty Notification Sign" on roof as described at end of this Section.

3.14 ATTACHMENTS

- A. Roofing Installer's Warranty
- B. Warranty Notification Sign

END OF SECTION 075419

ROOFING INSTALLER'S WARRANTY

WHEREAS _____ of _____, herein called "Roofing Installer," has performed roofing and associated Work including roofing membrane, base flashing, flashing of penetrations and curbs, roof insulation, fasteners, and walkway products ("Work") on the following Project:

Owner: _____

Address: _____

Building Name/Type: _____

Address: _____

Intersection: _____

Grand Opening Date: _____

Five Year Warranty Expiration Date: _____

AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a Subcontractor) to warrant said Work weather-tight against leaks and faulty or defective materials and workmanship for designated Warranty Period,

NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period of 5 years after Grand Opening, Roofing Installer shall, at Installer's own cost and expense, make or cause to be made such repairs to or replacements of said Work as are necessary to correct faulty and defective Work and as are necessary to maintain said Work in a watertight condition.

ADDITIONALLY Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period Roofing Installer shall, upon notification by written or verbal to Installer's person, staff, or owned recording device by Owner's Store Manager or Assistant Manager of a failure of weather-tightness of roofing system, shall within 24 hours respond with staff and materials as required to seal and correct such failures to roofing system. Failure to respond within identified time conditions will allow Owner to contract with another roof installer to make such repairs as necessary to protect Owner's interest and limit damages to building and contents. Roof Installer under this warranty shall compensate Owner for costs of the other roofing installer's Work and what additional damages result due to delay of required repairs. This warranty shall remain in full effect for time duration stated, including repairs made for Roofing Installers failure to respond within 24-hour period.

This Warranty is made subject to the following terms and conditions. Specifically excluded from this Warranty are damages to Work and other parts of building, and to building contents caused by:

- A. Lightning.
- B. Hail exceeding project specified requirements.
- C. Fire.
- D. Wind speed exceeding project specific membrane selection with documentation that roofing system wind speed was approved by Owner, Roofing Consultant and National Vendor.
- E. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition.
- F. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of Work.
- G. Activity on roofing by others, including Contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner (except as noted for failure to respond to loss of weather-tight conditions as noted above).



When Work has been damaged by foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until Roofing Installer has been paid for repairs. Payment will be based on standard time and material basis.

Roofing Installer is responsible for damage to Work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of Work.

During Warranty Period, if Owner allows alteration of Work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other Work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to extent said alterations affect Work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said Work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate Work, thereby reasonably justifying a limitation or termination of this Warranty.

During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to extent said change affects work covered by this Warranty.

This Warranty is recognized to be the only warranty of Roofing Installer on said Work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original Work per requirements of Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

Company: _____

Authorized Signature: _____

Name: _____

Title: _____

WARRANTY NOTIFICATION SIGN



Attention		
 BUILDING TRUST	This is a Sika Sarnafil PVC roofing system installed at this location. Only Sika approved applicators may conduct roofing related work at this site.	
Store Location: _____Store Number: _____		
Roofing Applicator Contact Information Company: _____ Address: _____ City: _____ State: _____ Phone: _____ Applicators Warranty Expiration: _____ Sika Sarnafil Warranty Information Sika Membrane: _____ Mil. _____ Warranty System: _____ Warranty #: _____ Warranty Date Issued: _____ Warranty System Expiration Date: _____		
ALL ROOFING REPAIRS - PLACE REQUESTS USING STANDARD OPERATING PROCEDURE AND THE WARRANTY VENDOR WILL BE DISPATCHED. CONTACT THE SIKAWARRANTY DEPARTMENT FOR ALL ROOF INSPECTIONS AND QUESTIONS. USA.SIKA.COM		
<i>Please exercise caution while accessing the roofing system and follow all OSHA safety requirements while working.</i> Albertsons Companies Warranty Notification		

Contractor to provide a 24-inch wide by 18-inch-tall sign including all information shown on the above graphic. The sign graphic shall be adhered to a solid substrate and mechanically fastened to a wall. Locate sign in direct line-of-sight from the bottom of the roof access ladder (inside the building).