

ROOFINGPROJECTS-COM

ROOF REPLACEMENT SPECIFICATION

ACME #2450- 261 S. Ridge Street, Rye Brook, NY - Roof Sections: A, B, C & D

ADHERED PVC THERMOPLASTIC ROOFING SECTION 075419

PART 1 - GENERAL

1.1 SUMMARY

A. Scope of Work:

1. The existing roof system is as follows: Sections A & B: Smooth Surfaced BUR Membrane followed by 2 inches Perlite followed by a Steel Deck. Section C: Asphalt Shingles followed by Underlayment followed by Plywood Deck. Section D: Adhered Single Ply Membrane followed by metal roof panels. Contractor is responsible to verify core information prior to submitting their bid.
2. Tear off designated wet/damaged insulation roof areas identified during the course of the work. **Contractor must carry 2,500 Sq. Ft. of removals and infill in their Base Bid.** 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. The contract will be adjusted if more or less area than the allowance area is removed 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.
3. 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 membrane. Cut existing membrane every 10 feet on center.
4. Sections A & B: Adhere 60 mil thick Felt Backed Polyvinyl Chloride (PVC) roof membrane directly over the prepared BUR surface.
5. Section C: Refer to separate specification for shingle replacement.
6. Section D: Remove existing adhered single ply membrane, adhere new 1" isocyanurate cover board in between raised metal panel ribs, adhere 60 mil thick Felt Backed Polyvinyl Chloride (PVC) roof membrane.
7. Adhere 60 mil thick Polyvinyl Chloride (PVC) Flashing membrane.
8. The building is not FM insured, however, as a design standard, adhere membrane to meet FM-1-90 guidelines including requirements for and increased adhesive rates in the perimeter and corner zones.
9. Install specified sheet metal flashings and accessories – include all clips, sealants, fasteners, and connections to make watertight.
10. Coordinate all necessary disconnects and reconnection of roof top equipment required to install new roof system with Owner provided electrician and HVAC contractor.
11. The perimeter edge conditions are to be addressed as noted on the roof plan drawing and as detailed on the detail drawings.
12. Install tapered insulation crickets to the up slope side of all Roof Top Units as specified and as noted on the roof plan drawing.
13. 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 if required.
14. Replace the existing gutters and downspouts associated with the project. Gutter system shall be shop fabricated 24 G Kynar coated steel or .040 Kynar coated Aluminum (Contractor's choice). Expansion Joints shall be spaced a maximum of 50 feet on center and shall be comprised of two end caps with a slip splice over the joint. The gutter sections are to be 20 feet long, minimizing the number of joints between ends and expansion joints. Hidden top hanger straps are to be installed at 24 inches on center. All new gutters and leaders are to match the existing size, profile and routing as the existing system unless otherwise noted on the roof plan drawing. Provide a five year warranty on the new gutter system.

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15. Remove abandoned items as noted on the roof plan drawing. Close opening in deck, infill opening w/ isocyanurate insulation to match existing roof thickness and roof over area.
16. Install manufacturers walk pads at roof access points and at all serviceable sides of roof top units. A lineal foot price is available on the bid form for additional walk pads to be determined later.
17. Re-use of existing pre-manufactured pipe supports is allowed – all wood blocking must be replaced with new pressure treated wood blocking and secured with strapping. All supports must have slip sheets installed beneath them.
18. Install new hatch rail System at the existing roof hatch included in the base bid price. “Bilco” 2.0 roof hatch safety railing system – sized to coordinate with existing hatch size.
19. **Contractor to include in their lump sum pricing a Contingency Allowance of \$5,000.** All contingency allowance expenditures must be authorized in writing by Owners 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.
20. Provide a manufacturer’s 20 Year Labor and Material, NO Dollar Limit (NDL) watertightness warranty with a 74 mph wind speed coverage and a contractor’s 5 year workmanship warranty. Contractor to provide at Pre-Construction meeting the Warranty Reference Number assigned when the contractor registers the project with the Material Manufacturer providing the Long-term Warranty.
21. All required municipal permits, project fees and taxes are to be included in the contractors base bid price.
22. All contractor payment applications are to be submitted to Roofingprojects.com for approval and certification to Owners Representative for payment on standard AIA forms. Contractors are to include copies of itemized material supplier invoices and release of liens with all payment applications.

1.2 DEFINITIONS

- A. Roofing Terminology: Definition in ASTM D 1079 and glossary in NHRCA’s “The NRCA Roofing and Waterproofing Manual” apply to work of this section.

1.3 PRE-INSTALLATION MEETINGS

- A. Preinstallation Roofing Conference at Project site.

1.4 SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For roofing system. Including plans, elevations, sections, details and attachments to other work.
 1. Include sheet and adhesive layout plan for each roof area showing dimensions and layout of single ply membrane sheets and the spacing of adhesive ribbons in the field, perimeter and corner areas of each roof section.
- C. Roofing Installers Warranty filled out and signed by the roofing installer.
- D. Maintenance Data: For roofing system to be included in Site maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install Sikaplan or Sarnafil, and is a member of manufacturer’s experienced warranty group as listed:
 1. Sika Sarnafil Inc: Elite or Alliance recognized roofing contractor.
- B. Field Reports: Manufacturer’s technical representative shall document site conditions in field reports and provide to the Roofing Contractor. These documents shall be provided to the Owner and/or the Roof Consultant from the Roofing Contractor upon request.

1.6 WARRANTY

- A. Roofing Manufacturer's Warranty: Manufacturer's standard no dollar limit (NDL), single source responsibility, total system guarantee in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within 20 years from date of Substantial Completion.
 - 1. Special warranty includes roofing, base flashings, roof insulation, fasteners, roofing accessories and other components of roofing system provided or approved by the Roofing Manufacturer.
 - 2. Wind speed coverage shall meet project specific classification with a minimum of 74 miles per hour (MPH).
- B. Applicator's Warranty: Submit roofing Installer's warranty, on warranty form at the end of this Section, signed by Installer, covering the Work of this Section, including all components of roofing system such as roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, roof pavers and walkway products, for the 5 years from date of Substantial Completion.
- 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.

PART 2 - PRODUCTS

2.1 NATIONAL VENDOR

- A. National Vendor material listed in this Article shall be received and installed by the Roofing Contractor Roofing Contractor shall be responsible for repair of damages and replacement of missing materials upon his signed receipt of material. Related material not listed in this Article shall be Furnished by the Roofing Contractor and provided with a manufacturer warranty.
 - 1. The following is a list of the material and contacts provided by Owner's National Vendor, Sika Sarnafil. Materials to be purchased as noted on the project Responsibility Matrix and confirmed with the Owner's Representative. Contact: Sika Sarnafil /Tom Obrien/781-883-8692/obrien.tom@us.sika.com or Steve Moosman/801-201-6269/moosman.steve@us.sika.com.
 - a. PVC Roofing Membrane:
 - 1) Overlay: 60 mil Felt Backed PVC, Sikaplan FB by Sika Sarnafil.
 - 2. Flashing Membrane:
 - a. Standard: 60 mil PVC, Sikaplan 60 by Sika Sarnafil.
 - b. Self Adhered: 60 mil PVC, G-410 SA by Sika Sarnafil.
 - c. Chemically Resistive Membrane: G-459 by Sika Sarnafil.
 - 3. Insulation: 1" Thick Polyisocyanurate (Polyiso): Sarnatherm by Sika Sarnafil.
 - 4. Flexible Walkways: Sarnatred V by Sika Sarnafil.
 - 5. Coated Metal Flashing: Sarnaclad by Sika Sarnafil. (Color shall be white unless otherwise directed)
 - 6. Attachment Fasteners:
 - a. Wood: Sikaplan #14 Fasteners by Sika Sarnafil.
 - b. Metal: Sikaplan #15 Fasteners by Sika Sarnafil.
 - c. Bars: Aluminum Peel-stop by Sika Sarnafil.
Steel Sarnabar by Sika Sarnafil.
 - d. As required to satisfy project conditions.
 - 7. Additional Material: as required for project conditions by Sika Sarnafil.
- B. Source Limitations: Obtain all components and accessories for roofing system from National Vendor. Use of alternate manufacturer requires approval of National Vendor and Owner's Representative.

2.2 PERFORMANCE REQUIREMENTS

- A. Accelerated Weathering (UV Exposure): Roofing system shall withstand 5000 hours of exposure when tested per ASTM G 154, or ASTM G 155.

- B. Impact Resistance: Roofing system shall resist impact damage when tested per ASTM D 3746 or ASTM 4434 or ASTM 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 (determined and provided by a design professional), but assembly pressures shall not be less than 60 lbs./square foot.
- D. Exterior Fire -Test Exposure: ASTM E 108 or UL 790, Class A; for application and slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

2.3.1 PVC THERMOPLASTIC ROOFING

- E. All roofing overlay system details and project scope shall be approved by the National Vendor and Owner's Representative.
- F. Types of Owner approved Overlay assemblies:
 - 1. Existing Smooth Surfaced BUR Membrane:
 - a. Sikaplan Adhered 60 FB. 9 ounce 60 mil Felt Backed membrane.

2.3 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended and provided by roofing system manufacturer for intended use and compatible with roofing.
 - 1. Liquid-type auxiliary materials shall comply with VOC limits of authority's jurisdiction and be part of the National Vendors Warranty agreement.
- B. Sheet Flashing: Manufacturers standard reinforced PVC sheet flashing, 60 mils thick of the same color and PVC sheet. Bare back or self adhered flashing membrane.
- C. Adhesive:
 - 1. Adhesive shall be Sika Sarnafil Sarnacol OM Board low rise foam adhesive.
- D. Miscellaneous Accessories: Provided metal termination bars, metal battens, coated metal flashing, pourable sealers, preformed cone and vent sheet flashings, performed 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 pads, approximately 3/16 inch thick, and acceptable to roofing system manufacturer.

2.4 ROOF INSULATION

- A. Polyisocyanurate Board Insulation: 48" x 48" x 1" inch thick ASTM C 1289, Type II, Class 1, Grade 1 (20 psi), felt or glass-fiber mat facer on both major surfaces. Compatible with selected adhesive(s).

2.5 INSULATION ACCESSORIES

- A. Adhesive: As supplied by roofing manufacturer for adhering roof insulation board to substrate, and acceptable to roofing system manufacturer.

PART 3 - EXECUTION

3.1 EXISTING ROOFING PREPARATION

- A. A no-cost adhesive test is required to determine the rate of adhesive required for this installation.

- B. All roofing activity shall be in strict compliance with Federal, State and Local Health and Safety requirements.
- C. Sweep surface of debris to provide an acceptable surface for new roofing to adhere to.
- D. Remove and replace loose, wet and deteriorated and damaged roofing as identified prior to installation of the new roofing system.
- E. Hidden structural deficiencies, contaminants and non-compatible material shall be reported to Owner and remediated prior to continuing roofing installation.

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 projections. Prime if required to enhance adhesion.
- C. Prevent materials from entering and clogging roof drains or flashing. And from spilling or migrating onto surfaces of other construction. Remove roof drain plus 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 cover boards are not exposed to precipitations or other sources of moisture during the project.

3.3 NATIONAL VENDOR SITE VISIT

- A. National Vendor shall provide a minimum of two (2) site visits during the roofing 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 the National Vendor Warranty requirements. Owner or Owner’s Roofing Consultant may require additional site visits based on project conditions.

3.4 INSULATION INSTALLATION

- A. Coordinate installing roofing system components, so the insulation is not exposed to precipitation or left exposed at the end of the work day.
- B. Insulation:
 1. Applicator shall apply low rise foam adhesive directly to the metal panel surface spaced at 12 inch ribbons in the field, 6 inch ribbons in the perimeters and 4 inch ribbons in the corners to satisfy the 74 mph wind speed warranty and adhesion requirements.
 2. Place insulation boards into the foam adhesive beads then weight each board until the foam adhesive has cured. Do not allow gaps between each insulation boards or penetrations greater than 1/8”. Trim and remove any foam adhesive that extrudes above the new insulation board finished surface.
 3. Taper insulation into roof drains (Sump).

3.5 ADHERED ROOF MEMBRANE

- A. Do not allow adhesive to contaminate membrane seams. Keep all membrane overlaps clean.
- B. During membrane installation, a worker using a 100 pound steel flooring roller shall roll the roof membrane surface pushing out air pockets and ensuring 100 percent membrane adhesion.
- C. Install adhered membrane as directed and required by membrane manufacturer.

- D. Seams: Clean sheet seam areas, overlap roofing, and hot air weld side and end laps of roofing and sheet flashing per manufacturers written instructions to ensure a watertight seam installation.
1. Test lap edges with probe to verify seam weld continuity.
 2. Verify field strength of seams a minimum of twice daily, repair seam sample areas.
 3. Repair tears, voids, and lapped seams in roofing that do not comply with requirements.
- E. Spread sealant bed over deck flange at roof drains, and securely seal roofing in place with clamping ring.
- 3.6 FLASHING
- A. Install Sheet Flashings and preformed flashings accessories and adhere to substrates per roofing system manufacturer's most current requirements.
1. Flash penetrations and field formed inside and outside corners with reinforced or unreinforced sheet flashing.
 2. Terminate and seal top of sheet flashing.
- B. Base & Curb Flashing: Trim flashing membrane to conform over substrate.
1. Adhesive Adhered Flashing: Apply bonding adhesive to substrate and allow to cure as directed by membrane manufacturer then apply adhesive to the underside of sheet flashing at required rate and allow to partially dry. Do not apply adhesive to seam areas of flashing. Set flashing sheet onto adhesive and hand roll flashing to ensure adhesive bond.
 2. Self-Adhered Membrane: Cut and fabricate self-adhered flashing membrane to ensure proper side and overlaps. Remove release film and set flashing in place. Hand roll flashing surface to ensure adhesive bond.
 3. Hot air weld membrane overlaps.
- C. Drip Edge Flashing:
1. Roofing with a gravel type edge detail shall require a mechanically fastened 22 gauge galvanized hold down cleat with a Multi-purpose sealant air dam, coated metal drip edge, foil joint tape and a hot air welded cover strip.
- 3.7 LIQUID APPLIED MEMBRANE FLASHING: To be used to flash unique flashing applications only:
- A. All surfaces should be clean, dry free from dirt, dust, debris, loose particles, loose coatings, rust and other contaminants.
- B. Prepare surfaces to receive LAM as directed by membrane manufacturer.
- C. Prime substrate and/or membrane surface as required by membrane manufacturer.
- D. Apply a minimum of two coats of liquid flashing. Coating applications shall be reinforced with a flashing fabric reinforcement.
- E. Complex and irregular shapes such a nuts, bolts etc. may require additional mastic and coating applications per manufacturers recommendations.
- 3.8 WALKWAY INSTALLATION
- A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate and adhere and heat weld walkway products to substrate with compatible adhesive per roofing manufacturer's written instructions.
1. Leave a minimum of 1 inch and maximum of 6 inches between walkway sections.
 2. Keep sections a minimum of 10 feet from roof edges. Do not install walkways over membrane seams.
- 3.9 PROTECTING AND CLEANING
- A. General Contractor/Roofing Installer:

1. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing for deterioration and damage, describing nature and extent in a written report, with copies to Architect and Owner.
2. Correct deficiencies 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.
3. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by roofing manufacturer of affected construction.
4. 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.
5. Clean all drains and drainage systems. Test all drains to ensure unrestricted flow into drains and drainage systems.
6. Install "Warranty Notification Sign" on roof as described at end of this section.

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:

- B. Lightning.
- C. Hail.
- D. Fire.
- E. Wind speed exceeding project specific membrane selection with documentation that roofing system wind speed was approved by Owner, Roofing Consultant and National Vendor.
- F. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition.
- G. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of Work.
- H. 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: _____

CAUTION: ROOF & WALKWAYS MAY BE SLIPPERY	

THIS ROOF WAS INSTALLED BY:	
_____	_____
STORE NUMBER:	ROOF COMPLETION DATE:
_____	_____
MANUFACTURER SYSTEM WARRANTY EXPIRATION	INSTALLER'S WARRANTY EXPIRATION
<i>PLACE REQUESTS FOR ROOF REPAIRS USING STANDARD OPERATING PROCEDURE AND THE WARRANTY VENDOR WILL BE DISPATCHED</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).

END OF SECTION 075419