ADDENDUM NO. 3

FOR THE CONSTRUCTION OF

JEFFERSON ELEMENTARY SCHOOL RENOVATION
JEFFERSON CITY, TENNESSEE



November 2, 2026

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents, dated September 01, 2026, as noted above.

CHANGES TO THE PROJECT MANUAL

ITEM 1 **DELETE** "Jefferson Invitation to Bid Packet" in its entirety.
ADD "Jefferson Invitation to Bid Packet" Added second bid delivery location and bid opening location. Additions are highlighted.

ITEM 2 **DELETE** Specification section "Section 07 55 00 - Modified Bituminous Membrane Roofing" in its entirety.
ADD Specification section "Section 07 55 00 - Modified Bituminous Membrane Roofing". Change to Bituminous Roofing type.

CHANGES TO THE PROJECT DRAWINGS

No changes to the Project Drawings.

.

END OF ADDENDUM

November 2, 2026 - Addendum No. 3 Attachments:

Invitation to Bid Package

Section 07 55 00 – Modified Bituminous Membrane Roofing

CLARIFICATIONS

No Clarifications in this addendum

JEFFERSON COUNTY

BOARD OF EDUCATION & FINANCE DEPARTMENT

Invitation to Bid (ITB)
Jefferson Elementary School (JES) Renovation

Prepared in accordance with Tennessee Code Annotated (T.C.A.) and applicable requirements governing 1981 Act counties. Jefferson County Purchasing is receiving sealed bids for the above-mentioned project. Bids shall be identified on the exterior of the sealed envelope with all the information requested in the specifications included in this bid packet. Bids are to be addressed to the Jefferson County Finance Department and mailed or delivered to the following address:

Jefferson County Finance Department
Attn: Purchasing Agent
1244 Gay St./P.O. Box 1749
Dandridge, TN 37725

OR Via HAND DELIVERY ONLY to:

Jefferson City Library Conference Hall
108 City Center Drive
Jefferson City, TN 37760

Bids will be received until 2:00 pm on 11/12/26. Date/Time Stamps of 2:00 pm or later will be rejected. Late bids will not be considered under any circumstances nor returned. Jefferson County Board of Education is not responsible for any delays due to weather, traffic conditions, nor postal services.

Hand delivery will be accepted at the library the day of bid opening **Beginning** at 1:30pm. Hand deliver to Julie Anglea (Purchasing Agent), Curits Elswick, or Erick Bustos.

During the evaluation process Jefferson County Board of Education reserves the right, where it may serve the school's best interest, to request additional information or clarifications from suppliers/vendors.

Questions and requests for clarification or additional information should be directed by email to:

Brett Stone
Blankenship & Partners, LLC
bstone@bpdesigners.com
865-251-2585

With copies to:

Julie Anglea, Purchasing Agent
Janglea@jeffersoncountytn.gov

Erick Bustos, Owner's Representative
erick.bustos@skanska.com

Jefferson County Board of Education will consider all submittals that meet bid requirements as specified within the bid packet herein and to award contracts to the lowest, responsive, responsible bidder. Jefferson County Board of Education reserves the right to reject any and all bids, to waive irregularities or informalities in any proposal, and to make an award in any manner, consistent with law, deemed in the best interest of the schools.

SECTION 1: GENERAL TERMS AND CONDITIONS

General administrative, submission, and evaluation requirements applicable to all solicitations issued by Jefferson County and Jefferson County Board of Education.

1.1 General Information/Intent

Sealed bids are invited for the Jefferson Elementary School Renovation Project in Jefferson City, TN to include all renovation work required per specifications and contract documents.

1.2 Timeline (All Times are Eastern Standard Time):

1.2.1 ITB Issued: 10/13/2026

1.2.2 Mandatory Pre-Bid: 10/29/2026 at 2:00pm. Location: Jefferson Elementary School located at 321 W. Broadway Blvd., Jefferson City, TN 37760

1.2.3 Last Day for Questions: 11/5/2026 by 2:00pm

1.2.4 Addendum Issued (if applicable): TBD

1.2.5 Bid Opening: 11/12/2026 at Jefferson City Library Conference Hall, 108 City Center Drive, Jefferson City, TN 37760 at 2:00pm

1.2.6 Anticipated Start Date: On or before 1/4/2027

1.3 Additional Information

Information about the Jefferson County Finance Department, ITB, specifications, and scope of work for this project can be obtained on the Jefferson County website at www.jeffersoncountytn.gov/finance-department.

1.4 Required Bonds/Retainage/Liquidated Damages (Construction Projects Only):

1.4.1 Bid Bond: equal to 10% of the bid is required on all construction bids as described in T.C.A 62-6-129.

1.4.2 Payment Bond: equal to 100% of a construction contract is required on all contracts above $100,000.00 as described in T.C.A. 12-4-201.

1.4.3 Performance Bond: equal to 100% of a contract is required for all construction contracts above $100,000.00. The awarded supplier(s)/vendor(s) must provide performance bonds from a Surety Company before signing a contract.

1.4.4 Actual Damages: Actual damages may accrue if work is not completed in agreed upon timeframe and to Jefferson County Board of Education 's satisfaction.

1.4.5 Retainage: A retainage account, not to exceed 5% of the contract, is required for all construction projects above $500,000 as described in T.C.A §66-34-103-104. This should be established by the contractor when the contract is signed.

1.4.6 Contractor License: certain contractor license information must be placed on the outside of the bid envelope for construction projects. When the amount of the bid exceeds $50,000.00. The name, license number, expiration date, and license classification of the contractors applying for the prime contract and for electrical, plumbing, heating, ventilation, and air condition contracts. T.C.A. §62-6-119-120.

1.5 Copies of Bids: Jefferson County Board of Education requires that submitted bids include two (2) identical copies one marked "original" and one marked "copy". Bid pages must be single sided.

1.6 Bid Submittal: Vendors shall hold their price firm and subject to acceptance by Jefferson County Board of Education for a period of forty-five (45) days from the date of bid opening, unless otherwise indicated in the bid proposal. Any bid submittal may be withdrawn prior to the scheduled time for the opening of bids, otherwise, bids will be reviewed as submitted. Jefferson County Board of Education reserves the right to reject any and or all bids and to waive any informality, technical defect, or clerical error in any bid submittal.

1.7 Bidder Obligation: Each bidder shall become fully acquainted with conditions relating to the scope and restrictions attending the execution of the work specified. Failure or omission of a vendor to become acquainted with existing conditions shall in no way relieve the bidder of any obligations with respect to the specifications or the contract.

1.8 Bid Delivery: Jefferson County Board of Education requires all bids/proposals to be submitted in sealed envelopes, addressed to the Jefferson County Finance Department, and clearly marked with the bid name by time of opening of the specified bid. Bid/proposal must be mailed or hand delivered. No bids/proposals will be accepted electronically, by fax, or by email. All bids will be opened at the specified time, and all suppliers/vendors and other people shall be invited to be present. Jefferson County Board of Education will not be responsible for any lost or misdirect mail sent by common carriers, delivery to addresses other than the one listed in solicitation, or for any late bid submissions received after the time and/or date specified. Not properly sealed and/or not properly labeled bids will not be accepted. Any bid/proposal may be withdrawn prior to the scheduled time of bid opening.

1.9 Signing Bids/Proposals & Use of Bid Forms: To be considered the bid proposal must be signed. By signing the bid proposal, the vendor acknowledges and accepts the terms and conditions stated in the document and bid packet. Vendors must complete the requested forms contained in the bid packet. Failure to complete requested forms may result inrejection of their bid proposal.

1.10 Bid Acceptance/Award: Jefferson County Board of Education reserves the right to use all, part, or none of the submitted proposal or bid in order to provide the broadest coverage of requested parts, equipment, products, or services. Awards may be based on categories. Award will be made to the lowest, best, responsive, responsible bidder(s) meeting specifications that present the product or service that is most advantageous to Jefferson County Schools. Jefferson County Board of Education reserves the right to award this bid on an all or none basis, or by multiple awards, whichever is in the best interest of the schools. Award of specified bid (if any) should be made within thirty (30) days of bid opening. Bidders will be notified by email of the results regarding specified bid. The bidder(s) to whom the award is given may be required to enter a written contract.

1.11 Anticipated Contract Term: This contract will begin once contract is signed and all required bonds and retainage have been received. **The expected Substantial Completion of said project is 510 calendar days from start of work or by 5/28/2028. Final Completion shall be reached within 30 calendar days or by 6/27/2028.** Actual damages may accrue if work is not completed in agreed upon timeframe and to Jefferson County Board of Education's Satisfaction.

1.12 Rejection of Bids: Jefferson County Board of Education reserves the right to reject any and all bids received and to waive any informality, technical defect or clerical error in any bid. Non-acceptance of any bid will be devoid of any criticism of the bid and of any implication that the bid is deficient in any manner. Non-acceptance of a bid shall be construed as meaning simply Jefferson County Board of Education does not deem the bid acceptable or that another bid was deemed to be more advantageous for the services or goods proposed.

1.13 Evaluation Review: Jefferson County Board of Education reserves the right to use all pertinent information that might affect the school's judgement as to the appropriateness of an award to the best evaluated supplier/vendor. This information may be appended to the

bids evaluation process results. Information on a service provider from reliable sources, and not within the service provider's bid proposal, may also be noted and made part of the evaluation file. Jefferson County Board of Education shall have sole responsibility for determining a reliable source. Jefferson County Board of Education reserves the right to conduct written and/or oral discussions/interviews after bid opening. The purpose of such discussions/interviews is to provide clarification and/or additional information to make an award that is in the best interest of the schools.

1.14 Restrictive or Ambiguous Specifications: It is the responsibility of the prospective bidder to review the entire bid packet and to notify the Jefferson County Finance Department Purchasing Agent if the specifications are formulated in a manner that would unnecessarily restrict competition. Any such protest or question regarding specifications or bid procedures must be received in the Jefferson County Finance Dept. no later than seven (7) business days prior to bid opening to provide ample time, if necessary, to issue an addendum to the bid specifications. These requirements also apply to specifications that are ambiguous.

1.14.1 No oral interpretation will be made to any supplier/vendor regarding the meaning of specifications. All questions are to be submitted electronically by email and will be answered in the form of an Addendum to the solicitation by the Jefferson County Purchasing Agent.

1.14.2 Bidders taking exception to any part or section of bid specifications shall indicate such exceptions or deviations in their bid response. Failure to indicate any exceptions shall be interpreted as the bidder's intent to fully comply with the specifications as written. Conditional or qualified offers are subject to rejection in whole or in part. Exceptions will be negotiated for a mutual resolution.

1.15 Questions and Addendum: Vendor(s) shall carefully examine the ITB and any addenda. Vendor(s) are responsible for seeking clarification of any ambiguity, conflict, omission, or other errors in this specified bid writing. If the answer materially affects the specified bid the information will be incorporated into an addendum and provided to all bidders and will also be posted on the county website. An addendum will be issued, if necessary, to address questions or clarifications that result in changes to the bid scope or specifications, in accordance with Section 1.2.

1.16 Vendor Default: Jefferson County Board of Education reserves the right, in case of vendor default, to procure the articles or services from other sources and hold the defaulting vendor responsible for any excess costs occasioned thereby. Should the vendor default be due to failure to perform or because of a request for a price increase, Jefferson County Board of Education reserves the right to remove the vendor from the school's bidder list for twenty-four (24) months.

1.17 Term Bid Agreements: If this bid results in a term bid contract with the supplier/vendor, Jefferson County Board of Education must receive all general price

decreases that other similar customers receive.

1.18 Alternative Bids: Jefferson County Board of Education will not accept alternate bids (those not equal to specifications) unless authorized by Jefferson County Board of Education and/or the Purchasing Agent.

1.19 Additions and/or Deletions: Jefferson County Board of Education reserves the right to consider adding goods and/or services to this bid or deleting goods and/or services that are deemed necessary and/or unnecessary. Any additions and/or deletions must be approved in writing by the Jefferson County Finance Department prior to any changes in service.

1.20 Declarative Statement: Any statement or words (e.g.: must, shall, will) are declarative statements that the vendor/supplier must comply with the condition. Failure to comply with any such condition may result in their bid being non-responsive and disqualified.

1.21 Incurred Costs: Jefferson County Board of Education will not be responsible for any costs incurred in the preparation, submission, nor to procure or contract for any services or goods.

1.22 Taxes: Jefferson County Board of Education purchases are not subject to taxation. Tax exemption certificates will be provided upon request.

1.23 Proof of Financial and Business Capability: Bidder must, upon request, furnish satisfactory evidence of the ability to furnish products or services in accordance with the terms and conditions of these specifications. Jefferson County Board of Education will make the final determination as to the bidder's ability.

1.24 Public Records Act: Jefferson County Board of Education is subject to the Tennessee Public Records Act 10-7-503 et seq. Bidders are cautioned that all documents submitted on behalf of this solicitation shall be open to the public for viewing and inspection and Jefferson County Board of Education will comply with all legitimate requests.

1.25 Removal of Vendor's Employees: The successful contractor(s) agrees to utilize only experienced licensed, responsible, and capable people in the performance of the work specified under contract. Jefferson County Board of Education may require that the contractor remove employees who endanger persons or property, or whose continued employment under this contract is inconsistent with the interest of the schools.

1.26 State Licensing Requirements: Vendors must be properly licensed, if applicable, by the State of Tennessee for the type of work requested. Bidders should submit a copy of the required license with their bid. If a copy is not included at the time of submission, the awarded vendor must provide a valid license prior to commencing any work. All licensing must be in accordance with the Tennessee Code Annotated (T.C.A) §62-6-119.

1.27 News Releases by Vendors/Suppliers: As a matter of policy, Jefferson County Board of Education does not endorse the services of a vendor/supplier. A vendor/supplier will not make news releases concerning any resultant contract from this solicitation without prior written approval of Jefferson County Board of Education.

1.28 Closures: During periods of closure due to unforeseen circumstances or inclement weather in Jefferson County or closures at the direction of the School Superintendent, Jefferson County Mayor; the Jefferson County Finance Department/Purchasing Department will enact the following procedures in regard to solicitations, pre-bid meetings, and closures:

1.28.1 If the mayor and/or School Superintendent close the administrative offices prior to the time set for solicitation opening of any business day, all solicitations due that same day will be moved to the next operational business day.

1.28.2 Pre-Bid Meetings may be cancelled if closures occur. If a change is required due to unforeseen circumstances or inclement weather, an addendum will be issued for any changes and can be found on the county website. You may also contact the Purchasing Agent for any updates by email or telephone.

1.28.3 Other unforeseen circumstances shall be at the sole discretion of the Jefferson County Finance Director.

1.28.4 Jefferson County and/or Jefferson County Board of Education shall not be liable for any commercial carrier's decision regarding deliveries during any unforeseen circumstances.

1.29 Communications: The successful execution of this contract will require extensive communication between all parties involved. While information may be transmitted via telephone, it should always be followed up with an email. It is essential that the Vendor(s) have email capabilities.

1.30 Compliance with all Applicable Regulations: Vendor agrees and covenants that the company, its agents, and employees will comply with all city, county, state and federal codes, laws, rules, and regulations applicable to the business to be conducted under this contract. If the vendor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, the vendor shall bear all costs arising from them.

1.31 Contact Personnel: It shall be essential to the success of this contract to develop a good working relationship with the vendor(s). It is imperative that the Jefferson County Board of Education account be handled efficiently and professionally. Jefferson County Board of Education should be assigned no more than two (2) vendor contacts to handle billing inquiries and service-related issues. In the event one (1) or both contacts leave the Jefferson County Board of Education account, the vendor shall formally introduce the new contacts to school personnel. These contacts must be knowledgeable of the Jefferson County

Board of Education account to avoid any interruption of services.

1.32 Pricing: The vendor(s) warrants that the unit price stated for all items shall remain firm for a period of twelve (12) months from the first day of the contract period or until June 30 (the end of the government fiscal year) whichever comes first. If the vendor's price is increased after the initial year, Jefferson County Board of Education must be given written notice 30 days prior to contract end to consider continuation of services. Such a request shall include as a minimum 1) the cause for the adjustment; 2) the amount of the change requested with documentation to support the requested adjustment. Price increases will only be considered at renewal period(s). If the price increase is rejected the vendor may:

1.32.1 Continue with existing prices.

1.32.2 Request a lower price increase.

1.32.3 Not accept the renewal offer.

1.32.4 Re-submit a bid once the product/service goes back out to bid.

1.32.5 Vendor(s) must submit proof of price increase. If a price increase is approved by the Jefferson County Finance Department and the requesting department the approval notification will be made in writing and the vendor(s) will be notified of the new price schedule and the effective date of the increase. This documentation will become part of the bid file. No approvals will be authorized verbally.

1.33 Invoice Detail: Jefferson County Board of Education requests invoices show the following details to help expedite review for payment. The vendor(s) may be required to modify invoicing procedures to show detail. All potential vendor(s) are hereby cautioned that Jefferson County Board of Education will only pay from the original invoices and not facsimiles or copies. Invoices which do not adhere to these details may be returned to the vendor(s). Vendor(s) may be asked to submit a sample copy of their invoice for review during evaluation of this solicitation. Account information may be deleted.

1.33.1 The invoice must show the amount due to the vendor(s) by Jefferson County Board of Education.

1.33.2 The invoice must show an itemized detailed part and material count including dates of service, location of service, type of part, the associated unit price for the materials, parts, and/or services provided, and the total price for materials, parts, and/or services provided.

1.33.3 Invoices are to be original and uniquely pre-numbered.

1.33.4 Invoices should indicate PO number and/or department ordering.

1.34 Invoice Review: Pay applications must be submitted to the architect and Owner's

project manager for review before they are fully signed and submitted to the Jefferson County Board of Education for processing payment. All invoices must adhere to the terms and conditions of the contract. Variations from the contract and contract pricing are strictly prohibited. Any variations found in the invoice will result in the rejection of those invoices. Rejected invoices will be returned to the vendor for correction.

1.35 Processing Time for Payment: Vendor(s) are advised that a minimum of thirty (30) days is required to process payment. This begins once the invoice has been submitted & approved by the architect and Owner's project manager and received in the Finance Dept. for payment.

1.36 Payment: Payment will be issued for goods received and/or services completed after final inspection and approval. Payment will be issued in full unless otherwise stated in the contract.

> **1.36.1 Payment Draws (Construction Projects Only):** Unless otherwise stated, vendor(s) may request payment draws based on the amount of the project and work completed. Payment draws must be approved by the Jefferson County Finance Director. Retainage will be returned after work has been completed and approved by Jefferson County Board of Education Administration and the final draw has been issued.

Section 2: Obligations, Rights, and Remedies

These terms and conditions shall be part of the contract. Jefferson County Board of Education reserves the right to negotiate other terms and conditions it deems appropriate and necessary under the circumstances to protect the public's trust.

2.1 Alterations or Amendments: No alterations, amendments, changes, modifications, or deletions to this contract shall be binding without the prior written approval by Jefferson County Board of Education.

2.2 Appropriation: In the event no funds are appropriated by Jefferson County Board of Education for the goods or services in any fiscal year or insufficient funds exist to purchase the goods or services, then the contract shall expire upon the expenditure of previously appropriated funds or the end of the current fiscal year, whichever occurs first, with no further obligations owed to or by either party.

2.3 Assignment: Vendor shall no assign or sub-contract this agreement, its obligations or rights hereunder to any party, company, partnership, incorporation, or person without the prior written specific consent of Jefferson County Board of Education.

2.4 Books and Records: Vendor shall maintain all relevant records for a minimum of three (3) years and make them available for audit or inspection.

2.5 Public Records Act: Jefferson County Board of Education is subject to the Tennessee Public Records Act T.C.A. § 10-7-503 et seq. Vendors are cautioned that all documents submitted on behalf of this solicitation shall be open to the public for viewing and inspection and Jefferson County Board of Education will comply with all legitimate requests.

2.6 Compliance with All Laws: Vendors shall comply with all applicable federal, state, and local laws, regulations, and licensing requirements affecting the provision of goods and/or services.

2.7 Default: Failure to perform or comply with any provision of this contract or the terms and conditions of any documents referenced and made a part hereof, Jefferson County Board of Education may terminate the contract, in whole or in part, and may consider such failure or noncompliance a breach of contract. Jefferson County Board of Education expressly retains all its rights and remedies provided by law in case of such breach, and no action by Jefferson County Board of Education shall constitute a waiver of any such rights or remedies. In the event of termination for default, Jefferson County Board of Education reserves the right to purchase requirements elsewhere.

2.8 Governing Law: This agreement shall be governed by the laws of the State of Tennessee with venue in Jefferson County. The Chancery Court and/or Circuit Court of Jefferson County, TN shall have exclusive and concurrent jurisdiction of any disputes which arise hereunder.

2.9 Indemnification/Hold Harmless: Vendor shall indemnify and hold harmless Jefferson County and/or Jefferson County Board of Education, its officials, and employees from all claims arising out of vendor performance, negligent act, occurrence, omission, or commission of vendor, its sub-vendors, suppliers, agents, or employees.

2.10 Non-Collusion: By submission of a signed bid/proposal the vendor certifies the proposal is made without collusion with any other person or company engaged in the same line of business or commence, or fraudulent act punishable under TN or US law

2.11 Title VI of the Civil Rights Act: Non-discrimination in Federally Assisted Programs- No person in the US shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal Financial Assistance 42 U.S.C. Section 2000d. It is the policy of Jefferson County Board of Education that all its services and activities be administered in conformance with the requirements of Title VI.

2.12 Independent Contractor: Vendor/Contractor acknowledges that it is an independent vendor/contractor and not an employee or agent of Jefferson County, TN.

2.13 Criminal History Check: Any and all contractors, subcontractors, vendors, vendor employees, agree to comply with T.C.A. § 49-5-413 requiring that all parties providing services for Jefferson County Board of Education must submit a criminal history records

check at their expense. The criminal history check is to be conducted by the TN Bureau of Investigation and the Federal Bureau of Investigation.

2.14 No Boycott of Israel: Pursuant to TCA Title 12, Chapter 4, Part 1, by submission of a response to this solicitation, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint response each party thereto as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each person is not currently engaged in, and will not for the duration of the agreement engage in, a Boycott of Israel.

2.15 Iran Divestment Act: By submission of this solicitation, each vendor and each person signing on behalf of any vendor certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each vendor is not on the list created pursuant to T.C.A. § 12-12-106.

2.16 Non-Discrimination and Non-Conflict Statement: Vendor shall comply with all non-discrimination laws including Title VI. Vendors shall comply with the Fair Wage and Hour Laws, the National Labor Relations Act, and other federal and state employment laws as

applicable. Vendors covenant that it does not engage in any illegal employment practices. The vendor covenants that it has no public or private interest and shall not acquire directly or indirectly any interest, which would conflict in any manner with the provision of its goods or the performance of its services. Vendor warrants that no part of the total contract amount provided herein shall be paid directly or indirectly to any officer or employee of Jefferson County Board of Education as wages, compensation, or gifts in exchange for acting as officer, agent, employee, sub-vendor, or consultant to vendor in connection with any goods provided or work contemplated or performed relative to the agreement.

2.17 Drug-Free Affidavit: Construction bidders in Tennessee with five (5) or more employees must submit a notarized affidavit (T.C.A. § 50-9-113) with their bid, certifying they have a drug-free workplace program in effect. The affidavit must affirm compliance with Tennessee Code Annotated Title 50, Chapter 9.

2.18 Warranty/Inspection/Acceptance: Vendor warrants all goods and services are of merchantable quality, fit for purpose, and conform to specifications. Warranty periods shall not commence until Jefferson County Board of Education inspects and formally accepts goods and/or services. Acceptance of goods or services does not constitute a waiver of latent or hidden defects or defects not readily detectable by a reasonable person under the circumstances. Jefferson County Board of Education reserves the right to reject any or all items or services not in conformance to applicable specifications. Vendor assumes the costs associated with such nonconformance.

2.19 Limitations of Liability: In no event shall Jefferson County Board of Education be liable for any indirect, incidental, consequential, special, exemplary damage, or lost profits

even if Jefferson County Board of Education has been advised of the possibility of such damages.

2.20 Order of Precedence: In the event of inconsistent or conflicting provisions the following order shall prevail: Change Orders and Written Amendments (executed after the contract), Contract, Addenda, RFP/ITB, Award, Supplementary Terms and Conditions, General Terms and Conditions, Specifications, Drawings/Plans, Vendor Bid/Proposal response.

2.21 Remedies: Jefferson County Board of Education retains all remedies available under Tennessee Law, including damages and termination.

2.22 Right to Inspect: Jefferson County Board of Education reserves the right to inspect work, services, and materials at any time.

2.23 Severability: If any provision is invalid, remaining provisions remain in effect.

2.24 Tax Compliance: Vendor acknowledges, by submission of bid and signature, that it is current in its respective Federal, State, County, and City taxes of whatever kind or nature and is not delinquent in any way. Delinquent status must be disclosed or risk debarment by Jefferson County and Jefferson County Board of Education.

2.25 Gratuities and Kickbacks: It shall be a breach of ethical standards for any person or company to offer, give, or agree to give any employee or former employee, or for any employee or formal employee to solicit, demand, accept, or agree to accept from another person or company gratuities or kickbacks. Breach of these provisions is a breach of contract & ethical standards and will result in disqualification, legal action, and/or debarment or suspension from being a vendor or sub-vendor under Jefferson County Board of Education contracts.

2.26 Insurance: Vendor shall maintain required insurance and provide proof of insurance. A copy of COI may be requested for proof of insurance. The successful vendor will be required to submit a COI with the specified coverage and listing Jefferson County Board of Education as additional insured; endorsement pages shall be included. It shall be the successful vendor's responsibility to keep current COI and endorsement pages on file with the Jefferson County Finance Department if the contract is in effect. The contractor shall, at its sole cost and expense, carry and maintain statutory workers' compensation insurance, employer's liability insurance, and professional liability insurance (if applicable) for any and all persons employed directly or indirectly by the contractor for the duration of the contract. The limits of liability therein shall meet, at a minimum, the limits of liability stated within the Standard Liability Insurance Requirements.

2.27 Environmental Liability: Vendor assumes responsibility for proper handling and disposal of materials in accordance with TN law.

2.28 Notice to Proceed (Construction Projects Only): Once the notice to proceed is

issued, the construction completion timeframe begins with the agreed upon completion date. A written request must be received thirty (30) days prior to the expected completion date if unable to complete during given timeframe. At the discretion of Jefferson County Board of Education an extension may be granted without penalty. If a written request is not received thirty (30) days prior or Jefferson County Board of Education does not grant an extension, actual damages will begin to be assessed until the work has been completed to Jefferson County Board of Education's satisfaction.

Section 3: Specifications and Scope of Work

3.1 Refer to Project Manual & Drawings for additional details & requirements.

Section 4: Checklist

This section is provided for reference only and is not intended to represent a complete list of all documents or items that may be required as part of the bid submission.

4.1 Vendor Information Sheet

4.2 Iran Divestment Act Affidavit

4.3 Title VI Contract Assurance

4.4 Non-Collusion Affidavit

4.5 Non-Discrimination, Non-Debarment, & Lobbying Affidavit

4.6 Addendum Acknowledgement (If Applicable)

4.7 Drug-Free Workplace Affidavit

4.8 No Contact/No Advocacy Affidavit

4.9 Copy of Contractor License

4.10 Proof of Insurance and Liability

4.11 Bid Form – Price Sheet

4.12 Signature on Bid and on all required documents.

4.13 Properly Seal and Label envelope as described in ITB.

4.14 Contractor License Information From Attached to Outside of Envelope

4.15 Include two single sided copies of bid marked original and copy.

4.16 Pages one (1) through thirteen (13) do not need to be included in bid packet.

Vendor Information Sheet

Company Name: _____

Company Address:_____

Billing Address:_____

Contact Name:_____

Phone Number:_____

Email Address:_____

List of References (List at least 3 references: Name, Phone Number, Email)

_____
_____
_____
_____
_____

Signature: Title: Date:

_____

Print Name: Title:

_____

The undersigned certifies that he/she has the authority to bind this company in an agreement/contract to supply the commodity or service in accordance with all terms, conditions, and pricing specified. By signing and submitting this proposal, the vendor acknowledges that they have read, understand, and agree to all aspects of the specifications and proposal requirements as presented without reservation or alteration. This proposal, if accepted, will constitute an agreement and contract with Jefferson County Board of Education. Prices are firm during this agreement term, unless agreed upon in writing by the BOE.



Iran Divestment Act Affidavit

Iran Divestment Act Affidavit as per Tennessee Code Annotated, Title 12, and effective July 1, 2016: By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to 12-12-106.

Authorized Signature:_____Date:
_____

Print Name: _____

Date Bid Submitted:_____

Title:_____

Company Name:_____

Address:_____

Phone Number:_____

Email Address:_____

Title VI Contract Assurance

It is the policy of Jefferson County Board of Education not to discriminate on the basis of race, color, national origin, age, sex, or disability in its hiring practices; or in admission to, access to, or operation of its programs services or activities. With regard to all aspects of this contract, Contractor certifies and warrants it will comply with this policy.

Please print: _____

Vendor Name

_____

Street Address

_____

City State Zip Code

_____

Phone Number Email

I_____, hereby agree to abide by the Title VI regulations.

Signature_____Date_____

Ownership Type (please check all that apply)

	African American Owned Business		Asian Owned Business
	Women Minority Owned Business		Disabled Owned Business
	Native American Owned Business		All Others
	Hispanic Owned Business		



Non-Collusion Affidavit

_____, being first duly sworn, deposes and says that:

1) He/She is_____of_____, the bidder that has submitted the attached proposal;

2) He/She is fully informed respecting the preparation and contents of the attached proposal and of all pertinent circumstances respecting such proposal;

3) Such proposal is genuine and is not a collusive or sham proposal;

4) Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees, or partied interest, including this affiant, has in any way colluded, conspired, connived, or agree, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached proposal has been submitted or to retain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm, or person to fix the price of prices in the attached proposal, or of any other bidder, or to fix any overhead, profit, or cost element or the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against Jefferson County or any person interested in the proposed contract; and

5) The price or prices quoted in the attached proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties of interest, including this affiant.

Signature_____

Print Name_____

Title_____

Date_____



Non-Discrimination, Non-Debarment, & Lobbying Affidavit

I do hereby certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud.

I understand that collusive pricing is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards and that no collusion with another firm was used in preparation of this bid.

I also certify that this firm does not discriminate against any employee or applicant for employment on the grounds of race, color, national origin or sex; and does not and will not maintain or provide for his employees any segregated facilities at any of its establishments, and further, that the firm does not and will not permit their employees to perform their services at any location under this contract where segregated facilities are maintained.

By submission of this bid, the bidder certifies that neither it or its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State department or agency.

I further certify that during the Invitation to Bid solicitation and/or during the performance of this contract that neither it nor its principals will participate in lobbying activities in conjunction with this project.

I agree to abide by all terms and conditions of this Invitation to Bid and certify that I am authorized to sign this affidavit for the vendor.

Please indicate which of the following apply to your company. This information is requested for information purposes only. Jefferson County currently has no policy that allows for set asides or preferences for woman owned or minority owned businesses.

_____ African American _____ Native American Owned _____ Hispanic Owned

_____ Caucasian Owned _____ Asian Owned _____ Women Owned _____Other Owned

Signature:_____Title_____Date_____



Addendum Acknowledgement (if applicable)

If applicable, please complete and return this with bid proposal response.

I the undersigned acknowledge the receipt of the following addenda to this solicitation.

Addendum #1- Date Received_____

Addendum #2- Date Received_____

Addendum #3- Date Received_____

Addendum #4- Date Received_____

Signature_____

Print Name_____

Title_____

Company Name_____

Email_____

Phone Number_____

Drug-Free Workplace Affidavit

State of _____

County of_____

The undersigned, principal officer of_____, an employer of five (5) or more employees contracting with Jefferson County Government and Board of Education to provide construction services, hereby states under oath as follows:

1) The undersigned is a principal officer of _____ (hereinafter referred to as the "Company") and is duly authorized to execute this Affidavit on behalf of the Company.

2) The Company submits this Affidavit pursuant to T.C.A. § 50-9-113, which requires each employer with no less than five (5) employees receiving pay who contracts with the state or any local government to provide construction services to submit an affidavit stating that such employer has a drug-free workplace program that complies with Title 50, Chapter 9,of the Tennessee Code Annotated.

3) The Company is in compliance with T.C.A. . § 50-9-113. Further affiant saith not.

_____

Principal Officer

State of_____

County of_____

Before me personally appeared_____, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who acknowledged that such person executed the foregoing affidavit for the purpose of therein contained.

Witness my hand and seal at office this _____day of _____, 2026

Notary Public_____My Commission Expires_____

No Contact/No Advocacy Affidavit

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

(1) He/She is the owner, partner, officer, representative, or agent of _____ _____, the Proposer that has submitted the attached Proposal;

(2) The Proposer _____ swears or affirms that he/she will abide by the following "No Contact" and "No Advocacy" clauses:

a) NO CONTACT POLICY: After the posting of this solicitation to the Purchasing Division's website, any contact initiated by any proposer with any Jefferson County and/or Jefferson County Schools representative concerning this proposal is strictly prohibited, unless such contact is made with the Jefferson County Purchasing Agent. Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

b) NO ADVOCATING POLICY: To ensure the integrity of the review and evaluation process, companies and/or individuals submitting proposals for any part of this project, as well as those persons and/or companies representing such proposers, may not lobby or advocate to Jefferson County and/or Jefferson County Schools staff including, but not limited to, members of Jefferson County Commission, Jefferson County Offices, Office of the Mayor, Jefferson County School Board or any other Jefferson County staff.

Any company and/or individual who does not comply with the above stated "No Contact" and "NO Advocating" policies may be subject to having their proposal rejected from consideration.

Signed: _____

Title: _____

Subscribed and sworn to before me this _____ day of _____, 2026

Notary Public_____
My Commission expires: _____

To:	Jefferson County Purchasing Attn: Julie Anglea P.O. Box 1749/1244 Gay St. Dandridge, TN 37725	Project:	
Date:		Time:	
Site Location:		Bid Opening:	

Name of Bidder:		Bidder's License Classification:	
License No.:		Expiration Date: Monetary Limits:	

*If the Bid involves: Electrical, Plumbing, HVAC, Masonry, Roofing, or Geothermal Work, complete below section. If not enter "NONE" in the space provided under Section (A) for each work of service. *

Electrical	Plumbing	HVAC	Masonry	Roofing	Geothermal
A. Name of Sub holding electrical license	Name of Sub holding plumbing license	Name of Sub holding HVAC license	Name of Sub holding Masonry license	Name of Sub holding Roofing license	Name of Sub holding Geothermal license
B. License No. of Contractor holding Electrical License	License No. of Contractor holding Plumbing License	License No. of Contractor holding HVAC License	License No. of Contractor holding Masonry License	License No. of Contractor holding Roofing License	License No. of Contractor holding Geothermal License
C. License Classification & Limits	License Classification & Limits	License Classification & Limits	License Classification & Limits	License Classification & Limits	License Classification & Limits
D. Expiration Date of Electrical License	Expiration Date of Plumbing License	Expiration Date of HVAC License	Expiration Date of Masonry License	Expiration Date of Roofing License	Expiration Date of Geothermal License

SECTION 07 55 00 - MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Hot Applied 2-Ply Asphalt Roofing

1.2 RELATED SECTIONS

A. Section 07 22 00 - Insulation Board: Insulation and fastening.

B. Section 07 62 00 - Sheet Metal Flashing and Trim: Weather protection for base flashings.

1.3 REFERENCES

A. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants.

B. ASTM D 41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.

C. ASTM D 312 - Standard Specification for Asphalt used in Roofing.

D. ASTM D 412 - Tensile Test on Rubber and Elastomers.

E. ASTM D 2824 Standard Specification for Aluminum-Pigmented Asphalt Roof Coating.

F. ASTM D 4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free.

G. ASTM D 4601 Standard Specification for Asphalt Coated Glass Fiber Base Sheet Used in Roofing.

H. ASTM D 5147 Standard Test Method for Sampling and Testing Modified Bituminous Sheet Materials.

I. ASTM D 6162 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements.

J. ASTM D 6163 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.

K. ASTM D 6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements.

L. ASTM E 108 - Standard Test Methods for Fire Test of Roof Coverings

M. Factory Mutual Research (FM): Roof Assembly Classifications.

N. National Roofing Contractors Association (NRCA): Roofing and Waterproofing Manual.

O. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - Architectural Sheet Metal Manual.

P. Underwriters Laboratories, Inc. (UL): Fire Hazard Classifications.

Q. Intertek/Warnock Hersey (WH): Fire Hazard Classifications.

R. ANSI-SPRI ES-1 Wind Design Standard for Edge Systems used with Low Slope Roofing Systems.

S. ASCE 7, Minimum Design Loads for Buildings and Other Structures

T. UL - Fire Resistance Directory.

U. FM Approvals - Roof Coverings and/or RoofNav assembly database.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

A. Perform work in accordance with all federal, state and local codes.

B. Exterior Fire Test Exposure: Roof system shall achieve a UL, FM or WH Class rating for roof slopes indicated on the Drawings as follows:
1. Factory Mutual Class A Rating.
2. Underwriters Laboratory Class A Rating.
3. Intertek/Warnock Hersey Class A Rating.

C. Design Requirements:
1. Uniform Wind Uplift Load Capacity
a. Installed roof system shall withstand negative (uplift) design wind loading pressures complying with the following criteria.
1) Design Code: ASCE 7, Method 2 for Components and Cladding.
2) Importance Category:
a) IV
3) Importance Factor of:
a) 1.0
4) Wind Speed: 117 mph
5) Exposure Category:
a) C.
6) Design Roof Height: 20 feet.
7) Minimum Building Width: 340 feet.
8) Roof Pitch: ¼" :12.
9) Roof Area Design Uplift Pressure:
a) Zone 1' Interior Field of Roof 23.4 psf
b) Zone 1 - Field of roof 36.3 psf
c) Zone 2 - Eaves, ridges, hips and rakes 46.0 psf
d) Zone 3 - Corners 60.5 psf
2. Live Load: Not to exceed original building design.
3. Dead Load:
a. Installation of new roofing materials shall not exceed the dead load capacity of the existing roof structure.

A. Energy Star: Roof System shall comply with the initial and aged reflectivity required by the U.S. Federal Government's Energy Star program.

B. LEED: Roof system shall meet the reflectivity and emissivity criteria to qualify for one point under the LEED credit category, Credit 7.2, Landscape & Exterior Design to Reduce Heat Island - Roof.

C. Roof System membranes containing recycled or bio-based materials shall be third party certified through UL Environment.

1.5 SUBMITTALS

A. All substitution submittals are due to the architect/owner within 72 hours after the mandatory pre-bid meeting.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation instructions.

C. Shop Drawings: Submit shop drawings including installation details of roofing, flashing, fastening, insulation and vapor barrier, including notation of roof slopes and fastening patterns of insulation and base modified bitumen membrane, prior to job start.

D. Design Pressure Calculations: Submit design pressure calculations for the roof area in accordance with ASCE 7 and local Building Code requirements. Include a roof system attachment analysis report, certifying the system's compliance with applicable wind load requirements before Work begins. Report shall be signed and sealed by a Professional Engineer registered in the State of the Project who has provided roof system attachment analysis for not less than 5 consecutive years.

E. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
3. Product reflectivity and emissivity criteria to qualify for one point under the LEED credit category, Credit 7.2, Landscape & Exterior Design to Reduce Heat Island - Roof.

F. Recycled or Bio-Based Materials: Provide third party certification through UL Environment of roof System membranes containing recycled or bio based materials

G. Verification Samples: For each modified bituminous membrane ply product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

H. Manufacturer's Certificates: Provide to certify products meet or exceed specified requirements.

I. Test Reports: Submit test reports, prepared by an independent testing agency, for all modified bituminous sheet roofing, indicating compliance with ASTM D5147. Testing must be performed at 77 deg. F. Tests at 0 deg. F will not be considered.

J. Manufacturer's Fire Compliance Certificate: Certify that the roof system furnished is approved by Factory Mutual (FM), Underwriters Laboratories (UL), Warnock Hersey (WH) or approved third party testing facility in accordance with ASTM E108, Class A for external fire and meets local or nationally recognized building codes.

K. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic inspection and maintenance of all completed roofing work. Provide product warranty executed by the manufacturer. Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

L. Substitutions

1. Substitutions will not be accepted from a roofing contractor whom did not attend the mandatory pre-bid meeting. The materials outlined herein are the type of materials that should be used in this project. When a particular make or trade name is specified, it shall be indicative of the minimum standard required. The bidder must disclose in his/her bid package the

manufacturer that is intended to be used on this Project if other than the listed manufacturers. If no manufacturer is listed, the bidder's bid is accepted only with the use of the Basis of Design manufacturer and the bidder must use the Basis of Design manufacturer.

2. Bidder will not be allowed to change materials after the bid opening date.

3. If an alternate material is bid, the material must be equal or exceed the specifications, and submitted by the bidding Roofing Contractor to the Architect for approval within 72 hours after the pre-bid meeting and include the following:

a. Written Application with explanation of why it should be considered

b. Material Product Data sheet

c. A certificate from an accredited testing laboratory comparing the physical and performance attributes of the proposed material with those materials denoted as pre-approved systems or the characteristics noted in the material specification section. Private-label manufacturer substitutions are not allowed.

d. A list of at least five (5) jobs where the proposed alternate material was used under similar conditions. These jobs shall be located within fifty (50) miles of the current project. Each job must be at least five (5) years old, and each must be available for inspection by the Owner.

e. The manufacturer must have a current ratio of 5:1 (current assets to current liabilities) and demonstrate such with an audited financial statement supported by an affidavit from a third party. Manufacturer must not have been in Chapter 11 bankruptcy during the last five (5) years or settled litigation or paid fines to a public agency in excess of $20 million dollars. The manufacturer must also have current ISO 9001:2000 certification for the manufacturing of the products to be utilized on this project.

f. The Roofing manufacturer's inspector must have a minimum of 7-year experience with said roofing manufacturer and be an employee of the manufacturer warranting the roof system. A signed affidavit should be submitted as to the hire date of said employee of roofing manufacturer in submittals from contractor.

g. A sample warranty by the manufacturer of the roofing system. The manufacturer must be the organization that physically manufacturers and guarantees the roofing system. Bidding contractor, if making a request for substitution, represents that he/she personally investigated the proposed product or method and determined that it is equal or superior in all respects to that specified. He/she will provide the same guarantee for substitution as the products specified, waives all claims for additional cost related to substitution, and will reimburse the owner for all redesign cost for accommodation of the substitute

M. The Owner reserves the right to be the final authority on the acceptance or rejection of any or all bids, proposed alternate roofing systems or materials that has met ALL specified requirement criteria.

N. Alternate material submissions shall be sent to the Architect/Owner by the bidding Roofing Contractor within 72 hours after the mandatory pre-bid meeting. Only substitutes approved in writing by the Owner will be considered.

1.6 QUALITY ASSURANCE

A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.

B. Manufacturer Qualifications: Company specializing in manufacturing products specified with documented ISO 9001 certification and minimum of twelve years of documented experience and must not have been in Chapter 11 bankruptcy during the last five years.

C. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience and a certified Pre-Approved Garland Contractor.

D. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress.

E. Manufacturer's Field Supervision: A representative of the roof system manufacturer must be present (three) days per week during the roof system installation.

F. Product Certification: Provide manufacturer's certification that materials are manufactured in the United States and conform to requirements specified herein, are chemically and physically compatible with each other, and are suitable for inclusion within the total roof system specified herein.

G. Source Limitations: Obtain all components of roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing system Manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.

1.7 PRE-INSTALLATION MEETINGS

A. Convene minimum two weeks prior to commencing Work of this section.

B. Review installation procedures and coordination required with related Work.

C. Inspect and make notes of job conditions prior to installation:
1. Record minutes of the conference and provide copies to all parties present.
2. Identify all outstanding issues in writing designating the responsible party for follow-up action and the timetable for completion.
3. Installation of roofing system shall not begin until all outstanding issues are resolved to the satisfaction of the Architect.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging with labels intact until ready for installation.

B. Store all roofing materials in a dry place, on pallets or raised platforms, out of direct exposure to the elements until time of application. Store materials at least 4 inches above ground level and covered with "breathable" tarpaulins.

C. Stored in accordance with the instructions of the manufacturer prior to their application or installation. Store roll goods on end on a clean flat surface except store KEE-Stone HP and FB 60 rolls flat on a clean flat surface. No wet or damaged materials will be used in the application.

D. Store at room temperature wherever possible, until immediately prior to installing the roll. During winter, store materials in a heated location with a 50-degree F (10 degree C) minimum temperature, removed only as needed for immediate use. Keep materials away from open flame or welding sparks.

E. Avoid stockpiling of materials on roofs without first obtaining acceptance from the Architect/Engineer.

F. Adhesive storage shall be between the range of above 50-degree F (10 degree C) and below 80-degree F (27 degree C). Area of storage shall be constructed for flammable storage.

1.9 COORDINATION

A. Coordinate Work with installing associated metal flashings as work of this section proceeds.

1.10 PROJECT CONDITIONS AND MANUFACTURERS INSPECTIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. When the project is in progress, the roofing system manufacturer will provide the following:
   1. Keep the Architect/Owner informed as to the progress and quality of the work as observed.
   2. Provide daily job site inspections a minimum of day (3) days a week with reports to the Architect/Owner. The reports will include pictures of the days progress made by the contractor and a detailed written report as to the work performed that day.
   3. Roofing manufacturer’s inspector must have a minimum of 7-year experience with said roofing manufacturer and be an employee of the manufacturer warranting the roof system. A signed affidavit should be submitted as to the hire date of said employee of roofing manufacturer.
   4. Report to the Architect/Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor’s attention.
   5. Confirm after completion that manufacturer has observed no application procedures in conflict with the specifications other than those that may have been previously reported and corrected.
   6. Provide a final report from the roofing manufacturing inspector, certifying that the roofing system has been satisfactorily installed according to the project specifications, approved details and good general roofing practice.

1.11 WARRANTY

A. Upon completion of the work, provide the Manufacturer's written and signed Edge-To-Edge NDL System Warranty, warranting that, if a leak develops in the roof during the term of this warranty, due either to defective material or defective workmanship by the installer, the manufacturer shall provide the Owner, at the Manufacturer's expense, with the labor and material necessary to return the defective area to a watertight condition including Garland Metal Components.
   1. Warranty Period:
      a. 30 years from date of acceptance.
      b. Warranty at no additional cost to the owner
      c. Manufacturer warranty terms require approval from the owner before award.

B. Installer is to guarantee all work against defects in materials and workmanship for a period indicated following final acceptance of the Work.
   1. Warranty Period:
      a. 5 years from date of acceptance.

C. All metal components shall be manufactured by the roofing manufacturer.

D. The material manufacturer will provide an annual inspection for the duration of the warranty at the request of the owner at no additional charge.

E. The warranty shall cover all roof-related components installed under this specification and shall not be limited to only those materials supplied by the material supplier issuing the warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Garland Company, Inc. (The)

A. Alternate Manufacturers if the design/substitution requirements are met
   1. Ecology
   2. Polyglass

B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

C. The Products specified are intended and the Standard of Quality for the products required for this project. If other products are proposed the bidder must disclose in the bid the manufacturer and the products that they intend to use on the Project. If no manufacturer and products are listed, the bid may be accepted only with the use of products specified.
   1. Bidder will not be allowed to change materials after the bid opening date.
   2. If alternate products are included in the bid, the products must be equal to or exceed the products specified. Supporting technical data shall be submitted to the Architect/ Owner for approval prior to acceptance.
   3. In making a request for substitution, the Bidder/Roofing Contractor represents that it has:
      a. Personally investigated the proposed product or method, and determined that it is equal or superior in all respects to that specified.
      b. Will provide the same guarantee for substitution as for the product and method specified.
      c. Will coordinate installation of accepted substitution in work, making such changes as may be required for work to be completed in all respects.
      d. Will waive all claims for additional cost related to substitution, which consequently become apparent.
      e. Cost data is complete and includes all related cost under his/her contract or other contracts, which may be affected by the substitution.
      f. Will reimburse the Owner for all redesign cost by the Architect for accommodation of the substitution.
   4. Architect/ Owner reserves the right to act as the final authority on the acceptance or rejection of any or all bids, proposed alternate roofing systems or materials that have met ALL specified requirement criteria.
   5. Failure to submit substitution package, or any portion thereof requested, will result in immediate disqualification and consideration for that particular contractor's request for manufacturer substitution.

2.2 HOT APPLIED 2-PLY ASPHALT ROOFING - STRESSPLY, OPTIMAX, OR VERSIPLY

A. Base (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive.

B. Modified Cap (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive.

C. Interply Adhesive: (1 and 2)
   1. Generic Type IV Asphalt

D. Flashing Base Ply: One ply bonded to the prepared substrate with Interply Adhesive

E. Flashing Cap (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive

F. Flashing Ply Adhesive

G. Surfacing:
   1. Surface Coatings:

H. Walk Pads: Install fluid applied walkway system to roof system

2.3 ACCESSORIES:

A. Sealant component 100% solids structural adhesive as furnished and recommended by the membrane manufacturer.
1. Elongation, ASTM D 412: 300%
2. Hardness, Shore A, ASTM C 920: 53-59
3. Shear Strength, ASTM D 1002: 120 psi

B. Pitch Pocket Sealer - Two part, 100% solids, self-leveling, polyurethane sealant for filling pitch pans as recommended and furnished by the membrane manufacturer.
1. Durometer, ASTM D 2240: 40-50 Shore
2. Elongation, ASTM D 412: 250%
3. Tensile Strength, ASTM D 412: 200 psi @ 100 mil

C. Glass Fiber Cant - Glass Cant: Continuous triangular cross Section made of inorganic fibrous glass used as a cant strip as recommended and furnished by the membrane manufacturer.

2.4 EDGE TREATMENT AND ROOF PENETRATION FLASHINGS

A. Pre-Manufactured Edge Metal: Drip Edge Fascia.
1. 22-gauge steel.

B. Pre-Manufactured Gutters and Downspouts
1. 22-gauge steel

C. Pre-Manufactured Edge Metal Finishes:
1. Exposed and unexposed surfaces for mill finish flashing, fascia, and coping cap, as shipped from the mill.
2. Exposed surfaces for coated panels:
a. Steel Finishes: fluorocarbon finish. Epoxy primer baked both sides, .2-.25 mils thickness as approved by finish coat manufacturer.
Weathering finish as referred by National Coil Coaters Association (NCCA). Provided with the following properties.
1) Pencil Hardness: ASTM D3363, HB-H / NCCA II-2.
2) Bend: ASTM D-4145, O-T / NCCA II-19.
3) Cross-Hatch Adhesion: ASTM D3359, no loss of adhesion.
4) Gloss (60 deg. angle): ASTM D523, 25+/-5%
5) Reverse Bend: ASTM D2794, no cracking or loss of adhesion.
6) Nominal Thickness: ASTM D1005.
a) Primer: 0.2 mils.
b) Topcoat: 0.7 mils min.
c) Clear Coat 0.3 mils.
7) Color: Provide as specified. (Standard color selection)

D. Pitch pans, Rain Collar 24 gauge stainless or 20oz (567gram) copper. All joints should be welded/soldered watertight. See details for design.

E. Plumbing stacks should be 4lb (1.8kg) sheet lead formed and rolled.

F. Liquid Flashing - Tuff-Flash Plus LO: An asphaltic-polyurethane, low odor, liquid flashing material designed for specialized details unable to be waterproofed with typical modified membrane flashings.
1. Tensile Strength, ASTM D 412: 650 psi.
2. Elongation, ASTM D 412: 325%
3. Density @77 deg. F 8.3 lb/gal typical.

G. Fabricated Flashings: Fabricated flashings and trim are specified in Section 07 62 00 - Sheet Metal Flashing and Trim.
1. Fabricated flashings and trim shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the CDA Copper Development Association "Copper in Architecture - Handbook" as applicable.

H. Manufactured Roof Specialties: Shop fabricated copings, fascia, gravel stops, control joints, expansion joints, joint covers and related flashings and trim are specified in Section 07 72 00.
1. Manufactured roof specialties shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the NRCA "Roofing and Waterproofing Manual" as applicable.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. Inspect and approve the deck condition, slopes and fastener backing if applicable, parapet walls, expansion joints, roof drains, stack vents, vent outlets, nailers and surfaces and elements.

C. Verify that work penetrating the roof deck, or which may otherwise affect the roofing, has been properly completed.

D. If substrate preparation and other conditions are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. General: Clean surfaces thoroughly prior to installation.
1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
2. Fill substrate surface voids that are greater than 1/4 inch wide with an acceptable fill material.
3. Roof surface to receive roofing system shall be smooth, clean, free from loose gravel, dirt and debris, dry and structurally sound.
4. Wherever necessary, all surfaces to receive roofing materials shall be power broom and vacuumed to remove debris and loose matter prior to starting work.
5. Do not apply roofing during inclement weather. Do not apply roofing membrane to damp, frozen, dirty, or dusty surfaces.
6. Fasteners and plates for fastening components mechanically to the substrate shall provide a minimum pull-out capacity of 300 lbs. (136 k) per fastener. Base or ply sheets attached with cap nails require a minimum pullout capacity of 40 lb. per nail.
7. Prime decks where required, in accordance with requirements and recommendations of the primer and deck manufacturer.

B. Metal Deck: Metal deck shall be installed as specified in Section
1. Fastening of the deck should comply with the anticipated live and dead loads pertaining to the building as well as applicable Code.
2. Steel decks shall be minimum 22-gauge factory galvanized or zinc alloy coated for protection against corrosion.
3. Suitable insulation shall be mechanically attached as recommended by the insulation manufacturer.
4. Decks shall comply with the gauge and span requirements in the current Factory Mutual FM Approval Guide and be installed in accordance with Loss Prevention Data Sheet 1-28 or specific FM approval.
5. When re-roofing over steel decks, surface corrosion shall be removed, and repairs to severely

corroded areas made. Loose or inadequately secured decking shall be fastened, and irreparable or otherwise defective decking shall be replaced.

3.3 INSTALLATION - GENERAL

A. Install modified bitumen membranes and flashings in accordance with manufacturer's instructions and with the recommendations provided by the National Roofing Contractors Association's Roofing & Waterproofing Manual, the Asphalt Roofing Manufacturers Association, and applicable codes.

B. General: Avoid installation of modified bitumen membranes at temperatures lower than 40-45 degrees F. When work at such temperatures unavoidable use the following precautions:
1. Take extra care during cold weather installation and when ambient temperatures are affected by wind or humidity, to ensure adequate bonding is achieved between the surfaces to be joined. Use extra care at material seam welds and where adhesion of the applied product to the appropriately prepared substrate as the substrate can be affected by such temperature constraints as well.
2. Unrolling of cold materials, under low ambient conditions must be avoided to prevent the likelihood of unnecessary stress cracking. Rolls must be at least 40 degrees F at the time of application. If the membrane roll becomes stiff or difficult to install, it must be replaced with roll from a heated storage area.

C. Commence installation of the roofing system at the lowest point of the roof (or roof area), working up the slope toward the highest point. Lap sheets shingle fashion so as to constantly shed water

D. All slopes greater than 2:12 require back-nailing to prevent slippage of the ply sheets. Use ring or spiral-shank 1 inch cap nails, or screws and plates at a rate of 1 fastener per ply (including the membrane) at each insulation stop. Place insulation stops at 16 ft o.c. for slopes less than 3:12 and 4 feet o.c. for slopes greater than 3:12. On non-insulated systems, nail each ply directly into the deck at the rate specified above. When slope exceeds 2:12, install all plies parallel to the slope (strapping) to facilitate backnailing. Install 4 additional fasteners at the upper edge of the membrane when strapping the plies.

3.4 INSTALLATION HOT APPLIED ROOF SYSTEM

A. Base/Felt Ply(s): Install base sheet or felt plies in twenty-five (25) lbs (11.3kg) per square of bitumen shingled uniformly to achieve one or more plies over the entire prepared substrate. Shingle in direction of slope of roof to shed water on each area of roof. Do not step on base rolls until asphalt has cooled, fish mouths should be cut and patched.
1. Lap ply sheet ends 8 inches (203 mm). Stagger end laps 2 inches (304mm) minimum.
2. Install base flashing ply to all perimeter and projection details after membrane application.
3. Extend plies 2 inches beyond top edges of cants at wall and projection bases.
4. Install base flashing ply to all perimeter and projection details.
5. Allow the one ply of base sheet to cure at least 30 minutes before installing the modified membrane. However, the modified membrane must be installed the same day as the base plies.

B. Modified Cap Ply(s): Solidly bond the modified membrane to the base layers with specified material at the rate of 25 to (30). (11-13kg) per 100 square feet.
1. Roll must push a puddle of hot material in front of it with material slightly visible at all side laps. Use care to eliminate air entrapment under the membrane. Exercise care during application to eliminate air entrapment under the membrane.
2. Apply pressure to all seams to ensure that the laps are solidly bonded to substrate.
3. Install subsequent rolls of modified membrane as above with a minimum of 4-inch (101 mm) side laps and 8-inch (203 mm) end laps. Stagger end laps. Apply membrane in the same direction as the previous layers but stagger the laps so they do not coincide with the laps of the base layers.
4. Apply hot material no more than 5 feet (1.5 m) ahead of each roll being embedded.

5. Extend membrane 2 inches (50 mm) beyond top edge of all cants in full moppings of the specified hot material.

C. Fibrous Cant Strips: Provide non-combustible perlite or glass fiber cant strips at all wall/curb detail treatments where angle changes are greater than 45 degrees. Cant may be set in approved cold adhesives, hot asphalt or mechanically attached with approved plates and fasteners.

D. Wood Blocking, Nailers and Cant Strips: Provide wood blocking, nailers and cant strips as specified in Section 06 11 00.
1. Provide nailers at all roof perimeters and penetrations for fastening membrane flashings and sheet metal components.
2. Wood nailers should match the height of any insulation, providing a smooth and even transition between flashing and insulation areas.
3. Nailer lengths should be spaced with a minimum 1/8-inch gap for expansion and contraction between each length or change of direction.
4. Nailers and flashings should be fastened in accordance with Factory Mutual "Loss Prevention Data Sheet 1 -49, Perimeter Flashing" and be designed to be capable of resisting a minimum force of 200 lbs/lineal foot in any direction.

E. Metal Work: Provide metal flashings, counter flashings, parapet coping caps and thru-wall flashings as specified in Section 07 62 00.

F. Install in accordance with the SMACNA "Architectural Sheet Metal Manual" or the NRCA Roofing Waterproofing manual.

G. Termination Bar: Provide a metal termination bar or approved top edge securement at the terminus of all flashing sheets at walls and curbs. Fasten the bar a minimum of 8 inches (203 mm) o/c to achieve constant compression. Provide suitable, sealant at the top edge if required.

H. Flashing Base Ply: Install flashing sheets by the same application method used for the base ply.
1. Seal curb, wall and parapet flashings with an application of mastic and mesh on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.
2. Prepare all walls, penetrations, expansion joints and surfaces to be flashed with required primer at the rate of 100 square feet per gallon. Allow primer to dry tack free.
3. Adhere to the underlying base flashing ply with specified hot material unless otherwise noted in these specifications. Nail off at a minimum of 8 inches (203 mm) o.c. from the finished roof at all vertical surfaces.
4. Solidly adhere the entire sheet of flashing membrane to the substrate.
5. Coordinate counter flashing, cap flashings, expansion joints, and similar work with modified bitumen roofing work as specified.
6. Coordinate roof accessories, miscellaneous sheet metal accessory items, including piping vents and other devices with the roofing system work.

I. Flashing Cap Ply: Install flashing cap sheets by the same application method used for the cap ply.
1. Seal curb, wall, and parapet flashings with an application of mastic and mesh on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.
2. Prepare all walls, penetrations, expansion joints and where shown on the Drawings to be flashed with required primer at the rate of 100 square feet per gallon. Allow primer to dry tack free.
3. Adhere to the underlying base flashing ply with specified flashing ply adhesive unless otherwise specified. Nail off at a minimum of 8 inches (203 mm) o.c. from the finished roof at all vertical surfaces.
4. Coordinate counter flashing, cap flashings, expansion joints and similar work with modified bitumen roofing work as specified.

5. Coordinate roof accessories, miscellaneous sheet metal accessory items with the roofing system work.
6. All stripping shall be installed prior to flashing cap sheet installation.
7. Heat and scrape granules when welding or adhering at cut areas and seams to granular surfaces at all flashings.
8. Secure the top edge of the flashing sheet using a termination bar only when the wall surface above is waterproofed or nailed 4 inches o.c. and covered with an acceptable counter flashing.
9. Seal all vertical laps of cap flashing ply with a three-course application of trowel-grade mastic and fiberglass mesh.

J. Surface Coatings: Apply roof coatings in strict conformance with the manufacturer's recommended procedures.

K. Roof Walkways: Provide walkways in areas indicated on the Drawings.

3.5 INSTALLATION EDGE TREATMENT AND ROOF PENETRATION FLASHING

A. Fabricated Flashings: Fabricated flashings and trim are provided as specified in Section 07 62 00.
1. Fabricated flashings and trim shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the Copper Development Association "Copper in Architecture - Handbook" as applicable.

B. Metal Edge:
1. Inspect the nailers to ensure proper attachment and configuration.
2. Run one ply over the edge. Assure coverage of all wood nailers. Fasten plies with ring shank nails at 8 inches (203 mm) o.c.
3. Install continuous cleat and fasten at 6 inches (152 mm) o.c.
4. Install new metal edge hooked to continuous cleat and set in bed of roof cement. Fasten flange to wood nailers every 3 inches (76 mm) o.c. staggered.
5. Prime metal edge at a rate of 100 square feet per gallon and allow to dry. Do not prime for Green-Lock System lightly sand metal to improve bond.
6. Strip in flange with base flashing ply covering entire flange in bitumen with 6 inches (152 mm) on to the field of roof. Assure ply laps do not coincide with metal laps.
7. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Seal outside edge with rubberized cement.

C. Roof Edge With Gutter:
1. Inspect the nailer to ensure proper attachment and configuration. Increase slope at metal edge by additional degree of slope in first board.
2. Run one ply over the edge. Assure coverage of all wood nailers. Fasten plies with ring shank nails at 8 inches (203 mm) o.c.
3. Install gutter and strapping.
4. Install continuous cleat and fasten at 6 inches (152 mm) o.c.
5. Install new metal edge hooked to continuous cleat and set in bed of roof cement. Fasten flange to wood nailer every 3 inches (76 mm) o.c. staggered.
6. Prime metal edge at a rate of 100 square feet per gallon and allow to dry. Do not prime for Green-Lock System lightly sand metal to improve bond.
7. Strip in flange with base flashing ply covering entire flange in bitumen with 6 inches (152 mm) onto the field of the roof. Assure ply laps do not coincide with metal laps.
8. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof.

D. Surface Mounted Counterflashing:
1. Minimum flashing height is 8 inches (203 mm) above finished roof height. Maximum flashing height is 24 inches (609 mm). Prime vertical wall at a rate of 100 square feet per gallon and allow to dry.

2. Set cant in bitumen. Run all field plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering wall set in bitumen with 6 inches (152 mm) on to field of the roof.
4. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Apply butyl tape to wall behind flashing. Secure termination bar through flashing, butyl tape and into wall. Alternatively use caulk to replace the butyl tape.
6. Secure counterflashing set on butyl tape above flashing at 8 inches (203 mm) o.c. and caulk top of counterflashing.

E. Reglet Mounted Counterflashing:
1. Minimum flashing height is 8 inches (203 mm) above finished roof height. Maximum flashing height is 24 inches. Prime vertical wall at a rate of 100 square feet per gallon and allow to dry.
2. Set cant in bitumen. Run all field plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering wall set in bitumen with 6 inches (152 mm) on to field of the roof.
4. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Apply butyl tape to wall behind flashing. Secure termination bar through flashing, butyl tape and into wall. Alternatively use caulk to replace the butyl tape.
6. Cut reglet in masonry one joint above flashing.
7. Secure reglet counterflashing with expansion fasteners and caulk reglet opening.

F. Area Divider:
1. Minimum curb height is 8 inches (203 mm) above finished roof height. Prime vertical curb at a rate of 100 square feet per gallon and allow to dry.
2. Set cant in bitumen. Run all field plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering curb set in bitumen with 6 inches (152 mm)on to field of the roof.
4. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Attach top of membrane to top of curb and nail at 8 inches (203 mm) o.c. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Install pre-manufactured cover. Fasten sides at 24 inches (609 mm) o.c. with fasteners and neoprene washers through slotted holes. Furnish all joint cover laps with butyl tape between metal covers.

G. Equipment Support:
1. Minimum curb height is 8 inches (203 mm) above finished roof height. Prime vertical at a rate of 100 square feet per gallon and allow to dry.
2. Set cant in bitumen. Run all field plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering curb set in bitumen with 6 inches (152 mm) on to field of the roof.
4. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Attach top of membrane to top of curb and nail at 8 inches (203 mm) o.c. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Install pre-manufactured cover. Fasten sides at 24 inches (609 mm) o.c. with fasteners and neoprene washers. Furnish all joint cover laps with butyl tape between metal covers.
6. Set equipment on neoprene pad and fasten as required by equipment manufacturer.

H. Curb Detail/Air Handling Station:
1. Minimum curb height is 8 inches (203 mm) above finished roof height. Prime vertical at a rate of 100 square feet per gallon and allow to dry.

2. Set cant in bitumen. Run all field plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering curb set in bitumen with 6 inches (152 mm) on to field of the roof.
4. Install a second ply of modified flashing ply in bitumen over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Install pre-manufactured counterflashing with fasteners and neoprene washers or per manufacturer's recommendations.
6. Set equipment on neoprene pad and fasten as required by equipment manufacturer.

I. Exhaust Fan:
1. Minimum curb height is 8 inches (203 mm) above finished roof height. Prime vertical at a rate of 100 square feet per gallon and allow to dry.
2. Set cant in bitumen. Run all plies over cant a minimum of 2 inches (50 mm).
3. Install base flashing ply covering curb with 6 inches (152 mm) on to field of the roof.
4. Install a second ply of modified flashing ply installed over the base flashing ply, 9 inches (228 mm) on to field of the roof. Attach top of membrane to top of wood curb and nail at 8 inches (203 mm) o.c. Apply a three-course application of mastic and mesh at all vertical seams and allow to cure and aluminize.
5. Install metal exhaust fan over the wood nailers and flashing to act as counterflashing. Fasten per manufacturer's recommendation.

J. Plumbing Stack:
1. Minimum stack height is 12 inches (609 mm).
2. Run roof system over the entire surface of the roof. Seal the base of the stack with elastomeric sealant.
3. Prime flange of new sleeve. Install properly sized sleeves set in 1/4-inch (6 mm) bed of roof cement.
4. Install base flashing ply in bitumen.
5. Install membrane in bitumen.
6. Caulk the intersection of the membrane with elastomeric sealant.
7. Turn sleeve a minimum of 1 inch (25 mm) down inside of stack.

K. Heat Stack:
1. Minimum stack height is 12 inches (609 mm).
2. Run roof system over the entire surface of the roof. Seal the base of the stack with elastomeric sealant.
3. Prime flange of new sleeve. Install properly sized sleeves set in 1/4-inch (6 mm) bed of roof cement.
4. Install base flashing ply in bitumen.
5. Install modified membrane in bitumen.
6. Caulk the intersection of the membrane with elastomeric sealant.
7. Install new collar over cape. Weld collar or install stainless steel draw brand.

L. Pitch Pocket:
1. Run all plies up to the penetration.
2. Place the pitch pocket over the penetration and prime all flanges.
3. Strip in flange of pitch pocket with one ply of base flashing ply. Extend 6 inches (152 mm) onto field of roof.
4. Install second layer of modified membrane extending 9 inches (228 mm) onto field of the roof.
5. Fill pitch pocket half full with non-shrink grout. Let this cure and top off with pourable sealant.
6. Caulk joint between roof system and pitch pocket with roof cement.

M. Liquid Flashing:
1. Mask target area on roof membrane with tape.
2. Clean all non-porous areas with isopropyl alcohol.

3. Apply 32 wet mil base coat of liquid flashing over masked area.
4. Embed polyester reinforcement fabric into the base coat of the liquid flashing.
5. Apply 48-64 wet mil topcoat of the liquid flashing material over the fabric extending 2 inches (51 mm) past the scrim in all directions.
6. Apply minerals immediately or allow the liquid flashing material to cure 15-30 days and then install reflective coating.

N. Metal Edge:
1. Inspect the nailers to ensure proper attachment and configuration.
2. Run base ply over the edge. Assure coverage of all wood nailers.
3. Install continuous cleat and fasten at 6 inches (152 mm) o.c.
4. Install new metal edge hooked to continuous cleat and set in bed of roof cement. Fasten flange to wood nailers every 3 inches (76 mm) o.c. staggered.
5. Prime metal edge and allow to dry. Do not prime when Green-Lock Plus is used for the base ply lightly sand metal to improve bond.
6. Strip in flange with base flashing ply covering entire flange in bitumen with 6 inches (152 mm) on to the field of roof. Assure ply laps do not coincide with metal laps.
7. Install the thermoplastic Cap Ply in bitumen or foam adhesive over the base flashing ply, 9 inches (228 mm) on to the field of the roof. Heat weld outside edge of the membrane to the Thermoplastic Cap Ply of the field.

3.6 CLEANING

A. Clean-up and remove daily from the site all wrappings, empty containers, paper, loose particles and other debris resulting from these operations.

B. Remove asphalt markings from finished surfaces.

C. Repair or replace defaced or disfigured finishes caused by Work of this section.

3.7 PROTECTION

A. Provide traffic ways, erect barriers, fences, guards, rails, enclosures, chutes, and the like to protect personnel, roofs and structures, vehicles and utilities.

B. Protect exposed surfaces of finished walls with tarps to prevent damage.

C. Plywood for traffic ways required for material movement over existing roofs shall be not less than 5/8 inch (16 mm) thick.

D. In addition to the plywood listed above, an underlayment of minimum 1/2 inch (13 mm) recover board is required on new roofing.

E. Special permission shall be obtained from the Manufacturer before any traffic shall be permitted over new roofing.

3.8 SCHEDULES

A. Base (Ply) Sheet:
1. 80 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing base sheet reinforced with a fiberglass and polyester composite scrim. ASTM D 6162, Type III.
   a. Tensile Strength, ASTM D5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 310 lbf/in XD 310 lbf/in
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 54.25 kN/m XD 54.25 kN/m
   b. Tear Strength, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 650 lbf XD 650 lbf
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 2891 N XD 2891 N

c. Elongation at Maximum Tensile, ASTM D5147
   1) 2 in/min. @ 73.4 +/- 3.6F MD 8% XD 8%
   2) 50 mm/min. @ 23 +/- 2 deg. C MD 8% XD 8%
d. Low Temperature Flexibility, ASTM D 5147, Passes -30 deg. F (-34.4 deg. C)

B. Thermoplastic/Modified Cap (Ply) Sheet:
1. 160 mil SBS (Styrene-Butadiene-Styrene) rubber modified membrane incorporating post-consumer recycled rubber and reinforced with a fiberglass and polyester composite scrim. ASTM D 6162 Type III Grade G
   a. Tensile Strength, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 550 lbf/in XD 500 lbf/in
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 96.25 kN/m XD 87.5 kNm
   b. Tear Strength, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 900 lbf XD 950 lbf
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 2557 N XD 2535 N
   c. Elongation at Maximum Tensile, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 10% XD 10%
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 10% XD 10%
   d. Low Temperature Flexibility, ASTM D 5147, Passes -30 deg. F (-34.44 deg. C)
   e. Recycled Content (Pre-Consumer): 2%
   f. Recycled Content (Post-Consumer): 12%
   g. Bio-Based Content: 1%

C. Interply Adhesive:
1. Generic Type IV Asphalt: Hot Bitumen, ASTM D 312, Type IV special steep asphalt having the following characteristics:
   a. Softening Point 210 deg. F - 225 deg. F
   b. Flash Point 500 deg. F
   c. Penetration @ 77 deg. F 15-25 units
   d. Ductility @ 77 deg. F 1.5 cm

D. Flashing Base Ply:
1. 80 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing base sheet reinforced with a fiberglass and polyester composite scrim. ASTM D 6162, Type III.
   a. Tensile Strength, ASTM D5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 310 lbf/in XD 310 lbf/in
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 54.25 kN/m XD 54.25 kN/m
   b. Tear Strength, ASTM D5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 500 lbf XD 500 lbf
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 2224 N XD 2224 N
   c. Elongation at Maximum Tensile, ASTM D5147
      1) 2 in/min. @ 73.4 +/- 3.6F MD 8% XD 8%
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 8% XD 8%
   d. Low Temperature Flexibility, ASTM D 5147, Passes -30 deg. F (-34.4 deg. C)

E. Flashing Cap (Ply) Sheet:
1. 160 mil SBS (Styrene-Butadiene-Styrene) rubber modified membrane incorporating post-consumer recycled rubber and reinforced with a fiberglass and polyester composite scrim. ASTM D 6162 Type III Grade G.
   a. Tensile Strength, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 550 lbf/in XD 500 lbf/in
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 96.25 kN/m XD 87.5 kNm
   b. Tear Strength, ASTM D 5147
      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 900 lbf XD 950 lbf
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 4002 N XD 4225 N
   c. Elongation at Maximum Tensile, ASTM D 5147

1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 10% XD 10%
2) 50 mm/min. @ 23 +/- 2 deg. C MD 10% XD 10%

d. Low Temperature Flexibility, ASTM D 5147, Passes -30 deg. F (-34.44 deg. C)

F. Flashing Ply Adhesive:
1. Asphalt roofing mastic V.O.C. compliant, ASTM D 4586, Type II trowel grade flashing adhesive.
a. Non-Volatile Content ASTM D 4479 70% min.
b. Density ASTM D 1475 8.3 lbs./gal. (1kg/l)
c. Flash Point ASTM D 93 103 deg. F (39 deg. C)

G. Surfacing:
1. Surface Coatings:
a. Surfacing:
1) ASTM D 2824 aluminum coating non-fibered aluminum roof coating non-fibered aluminum roof coating having the following characteristics:
a) Flash Point 103 deg. F (39 deg. C) min.
b) Weight/Gallon 8.51 lbs./gal. (1.0 g/cm3)

H. Walk Way Surface:
1. Coating: Yellow Silicone Coating (Roller Grade): Single-component 100% silicone, liquid waterproofing membrane.
a. Tensile Strength: ASTM D 412, 350 psi
b. Elongation: ASTM D 412, 174%
c. Flash Point: ASTM D 93, 141 degrees F min. (60.6 degrees C)
d. Solids Content: ASTM D 2369, Typical 95%
e. VOC: <50 g/l
2. Yellow Walkway Granules: Yellow granules designed to enhance the impact resistance of the roof surface when embedded in Cool-Sil Yellow Walkway Coating,
a. Specific Gravity, ASTM C 128, 2.65
b. Bulk Density: ASTM C29, 90-100 lbs./Cu. Ft.

END OF SECTION 07 55 00