



PROJECT MANUAL

January 23, 2026

ROOFING IMPROVEMENTS AT BOOKER T WASHINGTON, WILL ROGERS HS AND BURROUGHS ELEMENTARY SCHOOLS

BID PACKAGE

**BIDDING DOCUMENTS
PROJECT SPECIFICATIONS**

**INDEPENDENT SCHOOL DISTRICT NO. ONE
TULSA OKLAHOMA**

**Joe Jennings – Chief Information and Operations Officer
Charles C. Mason Education Service Center
3027 South New Haven
Tulsa, Oklahoma 74147-0208
Telephone (918) 746-6428**

TULSA PUBLIC SCHOOLS

BID DOCUMENTS

SPECIFICATIONS AND DETAILS

For

ROOFING IMPROVEMENTS

AT

**BOOKER T WASHINGTON, WILL ROGERS HS AND
BURROUGHS ELEMENTARY**

BID OPENING DATE February 12, 2026

BID TIME..... 1:00 PM

**MANDATORY PRE-BID February 3, 2026 @ 10:00 AM
STARTING AT BOOKER T WASHINGTON**

NOTICE TO BIDDERS

Before submitting a bid, the Contractor shall carefully examine each of the school sites indicated above, paying particular attention to the existing conditions.

The specific bid documents defining the work involved on each project along with Tulsa Public Schools' specifications and details form the basis of the work done and are to be included with the successful bidder.

PROJECT MANUAL
DIVISION 00 - INTRODUCTORY INFORMATION AND BIDDING
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THE FOLLOWING DOCUMENTS ARE NOT FOUND IN THE PROJECT MANUAL BID PACKET BUT ARE REQUIRED TO BE A PART OF THE CONTRACT – ON FILE AT OWNER'S OFFICE FOR BIDDER'S INSPECTION UPON REQUEST.

Owner-Contractor Agreement
Work Order
Tax Exempt State

**SECTION 00010
SOLICITATION AND NOTICE FOR BIDS**

Sealed Bids in duplicate for **TULSA PUBLIC SCHOOLS – ROOFING IMPROVEMENTS AT BOOKER T WASHINGTON, WILL ROGERS HS AND BURROUGHS ELEMENTARY** - will be received and publicly opened and read aloud by INDEPENDENT SCHOOL DISTRICT NUMBER ONE OF TULSA COUNTY, OKLAHOMA, hereinafter referred to as "Owner," in Room 600, Education Service Center, 3027 S. New Haven Ave, Tulsa, OK, 74114 until **1:00 PM, FEBRUARY 12, 2026. Please submit bids prior to 1:00PM in Room 623 at Education Service Center.**

The bidding process will be in compliance with the Public Competitive Bidding Act of 1974. Bids must be accompanied by a bid security in the amount of 5% of the bid. By this notice, all provisions of the act apply to this project and are incorporated into notice by reference.

Upon receipt of an acceptable bid, the contract will be awarded within thirty days after the opening of bids and the written contract executed within sixty days thereafter.

Contractor qualification statement must be submitted **seven (7)** calendar days prior to bid date to the Owner, if not currently on file.

Attention is called to the fact that a designated completion date for this project site will be established based on the number of calendar days, as stated in the accepted bid, required to complete the Project work. There will be a \$2500 Liquidated Damages Clause for each day the contract is not completed. The scheduled completion date will be a very significant and material factor to the owner when selecting the Lowest Responsible Bid. Each Bidder must include (in the space provided on the Bid Form) the number of calendar days, which the Bidder will require to complete the specified Project.

Failure to comply with the above bid requirements will result in the return of unopened Bid Proposal.

Bid Documents may be obtained from:

<http://www.tulsaschools.org/connect-with-us/partner-with-us/bond-bids>

Owner reserves the right to reject any or all bids and to waive informalities or minor irregularities in any bid.

INDEPENDENT SCHOOL DISTRICT NUMBER ONE OF TULSA COUNTY OKLAHOMA

By Ms. Stacey Woolley, Board President

ATTEST:

By Sarah Bozone, Clerk

SECTION 00020

INSURANCE REQUIREMENTS

Contractor shall obtain insurance of the types and in the amounts described below. The insurance shall be written by insurance companies and on forms acceptable to Owner.

1). Commercial General and Excess Liability or Umbrella Liability Insurance:

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial excess liability or umbrella insurance with a limit of not less than \$1,000,000 each occurrence. CGL insurance should contain a general aggregate with a \$2,000,000 limit, and should apply separately to the Project.

- a) CGL insurance shall be written on an ISO occurrence form and shall cover liability arising from premises, operations, independent contractors, at a minimum, contractual liability equivalent to an intermediate form of contractual liability insurance, products/completed operations and personal injury and advertising injury;
- b) Owner shall be included as an additional insured on the CGL policy, using ISO Additional Insured Endorsement CG 20101185 or a substitute providing equivalent coverage, and under the commercial excess liability or umbrella, if any. This insurance, including insurance provided under the commercial excess liability or umbrella, if any, shall apply as primary insurance with respect to any other insurance or self insurance programs afforded to or maintained by Owner;
- c) There shall be no endorsement or modification of the CGL policy limiting the scope of coverage for liability arising from pollution, explosion, collapse or underground property damage;
- d) **Waiver of Subrogation.** Contractor waives all rights against Owner and its agents, officers, directors and employees for recovery of damages to the extent these damagers are covered by the commercial general liability, excess liability or umbrella liability insurance maintained pursuant to this agreement.

2). Business Auto and Excess Liability or Umbrella Liability Insurance:

Contractor shall maintain business auto liability and, if necessary, excess liability or umbrella liability insurance with a limit of not less than \$1,000,000 each accident.

- a) Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos);
- b) Business auto coverage shall be written on an ISO form. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01;
- c) If the Contract Documents require Contractor to remove and haul hazardous waste from the project site or if the Project involves such similar environmental exposure, pollution liability coverage equivalent to that provided on the ISO Pollution Liability Broadened Coverage for Covered Autos Endorsement (CA 99 48) shall be provided, and the Motor Carrier Act Endorsement (MCS 90) shall be attached;
- d) **Waiver of Subrogation.** Contractor waives all rights against the Owner and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability, excess liability or umbrella liability insurance obtained by Contractor pursuant to this Agreement or under any applicable auto physical damage coverage.

3). Workers Compensation Insurance

Contractors shall maintain workers compensation and employers liability insurance.

- a) The employers liability, and if necessary excess liability or umbrella insurance limits shall not be less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease;

- b) The alternate employer endorsement (WC 00 03 01 A) shall be attached showing Owner in the schedule as the alternate employer.

4). Property Insurance

- a) Contractor shall purchase and maintain in force Builders Risk insurance for the entire Work. Such insurance shall be written in an amount at least equal to the initial contract sum as well as subsequent modifications of that sum. The insurance shall apply on a replacement cost basis and shall be written on a completed value form;
- b) The insurance as required in subparagraph (a) shall name as insured the Owner, Contractor and all subcontractors and sub-subcontractors on the Project. The insurance policy shall contain a provision that the insurance will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the Owner;
- c) The insurance as required in Subparagraph (a) shall cover the entire Work as outlined in the project specifications and shall also cover portions of the Work located away from the site but intended for use at the site and shall also cover portions of the Work in transit. The policy shall include as insured property scaffolding, false work and temporary buildings located at the site. The policy shall cover the cost of removing debris, including demolition, as any is made legally necessary by the operation of any law, ordinance or regulation.
- d) The insurance as required by this Paragraph shall be written to cover all risks of physical loss except those specifically excluded in the policy and shall inure at least against the perils of fire, lightning, explosion, windstorm or hail, smoke, aircraft or vehicles, riot or civil commotion, theft, vandalism, malicious mischief and collapse;
- e) Any deductible applicable to the insurance purchased in compliance with this Paragraph shall be paid by Owner;
- f) Before the commencement of Work, Contractor shall provide Owner a copy the insurance policy obtained in compliance with this Paragraph;
- g) **Waiver of Subrogation.** Owner and Contractor waive all rights against each other and each of their subcontractors, sub-subcontractors, officer, directors, agents and employees for recovery for damages caused by fire and other perils to the extent covered by builders risk or property insurance purchased pursuant to the requirements of this Paragraph 4 or any other property insurance applicable to the Work.
- h) Partial occupancy or use of the Work shall not commence until the insurance company or companies providing insurance as required in this Paragraph have consented to such partial occupancy or use. Owner and Contractor shall take reasonable steps to obtain consent of the insurance company or companies and agree to take no action, other than upon mutual written consent, with respect to occupancy or use of the Work that could lead to cancellation, lapse or reduction of insurance;

5). Evidence of Insurance

Prior to commencing the Work, Contractor shall furnish Owner with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, setting out compliance with the insurance requirements set forth above.

- a) All certificates shall provide for 30 days written notice to Owner prior to the cancellation or material change of any insurance referenced to herein;
- b) The words “endeavor to” and “but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives” shall be deleted from the cancellation provision of all certificates provided by the Contractor;
- c) Failure of Owner to demand such certificate or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor’s obligation to maintain such insurance;
- d) Owner shall have the right, but not the obligation to prohibit Contractor or any subcontractor from entering the Project site unit such certificates or other evidence that insurance has been placed in the complete compliance with these requirements is received and approved by the Owner;

- e) Failure to maintain the insurance in this Insurance Requirement Section shall constitute an event of default pursuant to this Agreement and shall allow Owner to terminate this Agreement to Owner's option. If Contractor fails to maintain the insurance set forth herein, Owner shall have the right, but not the obligation, to purchase said insurance at Contractor's expense;
- f) Contractor shall provide certified copies of all insurance policies required above within 10 working days of Owner's written request for said copies.

6). General Insurance Provisions

- a) No Representation of Coverage Adequacy. By requiring the insurance as set out in the Insurance Requirement Section, Owner does not represent that coverage and limits will necessarily be adequate to protect Contractor and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities provided to Owner in this Agreement or any other provision of the Contract documents;
- b) Cross Liability Coverage. If Contractor's liability policies do not contain the standard ISO separation of insureds provision or a substantially similar clause, they shall be endorsed to provide cross liability coverage;
- c) The insurance requirements set out in this Insurance Requirement Section are independent from all other obligations of Contractor under this Agreement and apply whether or not required by any other provision of this Agreement;
- d) Subcontractor's Insurance. Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified in the Insurance Requirement Section. When requested by the Owner, Contractor shall furnish to Owner copies of certificates of insurance evidencing coverage for each subcontractor.

END OF SECTION

SECTION 00100

INSTRUCTIONS TO BIDDERS

SCOPE:

1. GENERAL CONDITIONS:

Standard form "General Conditions of the Contract for Construction," The American Institute of Architects, Document A201, Fourteenth Edition, 1997, ("General Conditions") shall apply to the Work, except insofar as the General Conditions are modified, amended, waived, or changed by these Supplementary General Conditions. The following paragraph numbers refer to the paragraphs in the above referenced "General Conditions":

- (a) Paragraph 1. 1. 1: The last sentence is amended to read as follows: "The Contract Documents include the advertisement or invitation to bid, notice to bidders, instructions to bidders, sample forms, the Contractor's bid or proposal, any addenda relating to the foregoing and any other documents specifically enumerated in the Owner-Contractor Agreement."
- (b) Paragraph 3.7. 1. is amended to read as follows: "When applicable, Contractor shall secure all permits, licenses and inspections necessary for the proper execution and completion of the Work. Owner will not reimburse Contractor for any fees paid by Contractor for permits and inspections."
- (c) Paragraph 13.6.1 is amended to read as follows: "Any moneys not paid within thirty (30) days after they become due and payable under the terms of this Contract shall bear interest at the rate of six percent (6%) per annum from and after said thirty (30) day period."
- (d) Paragraph 8.3.1 is amended to read as follows: "The Contractor shall not be entitled to compensation for any loss, cost or expense, sustained by reason of delay in completion of the Work from any cause whatever."
- (e) Paragraph 11.3.1 is amended to read as follows: "The Contractor shall purchase and maintain, at Contractor's expense, property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of Owner, Contractor, Subcontractor and Sub-subcontractors in the Work and shall insure against perils of fire and extended coverage on a 'broad-form, all risk' basis for physical loss of damage, including theft, vandalism, and malicious mischief. Such insurance shall be purchased from a carrier licensed to do business in the State of Oklahoma. Certificates of such insurance shall be delivered to the Department Manager of Building Planning, Maintenance and Plant Operations of Owner prior to commencement of the Work. Said certificates shall provide that the carrier must give Owner at least thirty (30) days prior written notice before cancellation or reduction of the coverage for any reason. If not covered by the above insurance, Contractor shall also purchase and maintain similar coverage on portions of the Work stored off site or in transit when such portions of the Work are to be included in an Application for Payment under Subparagraph 9.3.2. Until substantial completion of the Work, all risk of loss shall be upon Contractor."
- (f) Paragraph 11.3.4 is eliminated.
- (g) Paragraph 3.6.1 is amended by adding the following "Contractor assumes full responsibility for the payment of all contributions and payroll taxes (State and Federal) for all employees engaged on the Work and provide proof of worker compensation coverage for all employees."

2. DEFINITIONS:

Wherever the words herein defined, or pronouns used in the stead, occur in this contract and these specifications, they shall have the meanings herein given.

- (a) The word "OWNER" shall mean the Independent School District Number One of Tulsa County, Oklahoma, a public corporation.
- (b) The word "CONTRACTOR" shall mean the person, persons, Partnership, company, firm or corporation entering into the contract for the performance of the Work, and the legal representative of said party, or agent appointed to act for said party in the performance of the Work.
- (c) The word "SURETY" or "SURETIES" shall mean the bondsman or party of parties who have made sure the fulfillment of the requirement of the contract by bonds, including the Payment Bond, and whose signatures are attached to said bonds.
- (d) The word "ADVERTISEMENT" shall mean all of the legal publications pertaining to the Work.
- (e) The word "SPECIFICATIONS" shall mean, collectively, all the terms and stipulations contained in those portions of the contract known as Instructions to Bidders, General, Mechanical and Electrical Specifications.
- (f) The word "PLAN" shall mean, collectively, all of the drawings pertaining to the contract and made part thereof, and also such supplementary drawings as may be issued from time to time in order to elucidate the drawings or for the purpose of showing changes in the Work as authorized under the section "Changes and Alterations," or for showing details which are not shown thereon.
- (g) The words "CONTRACT PRICE" shall mean either the unit prices or unit price, or lump sum price, named in the contract or the total of all payments according to schedule or prices in the contract.
- (h) The word "BID" or "BIDS" shall mean the written statements duly filed with the Clerk of Independent School District Number One of Tulsa County, Oklahoma, for the person or persons, partnership, company, firm or corporation proposing to do the Work and furnish materials called for on plans at the prices named on said statement.
- (i) The word "CALENDAR DAYS" shall mean the actual days to complete the contract excluding days due to inclement weather.

3. BONDS:

If the Contract Price is in excess of **\$100,000.00**, Contractor will furnish the following bonds: (i) a Payment Bond (the "statutory" bond required by Section I of Title 6 1, Okla. State, as amended) in an amount equal to 100% of the Contract Price; and (ii) a Performance Bond in such form as directed by Owner in an amount equal to 100% of the Contract Price for work on the project(s) as security for the proper and prompt completion of the Work in accordance with the contract and bidding documents; and (iii) a Warranty Bond in an amount equal to 100% of the Contract Price for work on the project(s) to protect Owner against defects in workmanship and materials for a period of one (1) year from Owner's acceptance of the Project(s). The Surety on all bonds of the successful bidder must be approved in the Treasury Department Circular 570. If the Surety Company is not on the list, those bids shall be rejected.

Where the Contract Price is **\$100,000.00** or less, the above bonds will not be required. However, in lieu of the Payment Bond, as to contracts where the Contract Price is \$25,000.00 or less, Contractor shall submit an affidavit of the payment of all indebtedness incurred by the Contractor, Subcontractors, and all material men for labor, material, rental of machinery or equipment and repair of and parts for equipment as are used or consumed in the performance of the contract. The execution of the affidavit with knowledge that any of the contents of the affidavit are false, upon conviction, shall constitute perjury, punishable as provided by law. Copies of the affidavit form may be obtained from the Bond Office, Charles C. Mason Education Service Center, 3027 South New Haven Avenue, Tulsa, Oklahoma, 74147.

4. CORPORATE SURETY BONDS:

To be acceptable, a corporate surety bond (including both a bid bond and the payment/performance/warranty bonds of the successful bidder) must be signed by BOTH the bidder, as principal, and by a properly authorized representative of the bonding company. If the bonding company is a corporation, the bond must have attached a power of attorney from the corporation authorizing the person signing the bond on behalf of the bonding company to sign bonds for the bonding company. Only original executed instruments will be acceptable.

The corporate surety issuing the bond must be licensed by the Oklahoma State Insurance Commissioner to issue corporate surety bonds in the State of Oklahoma. The Owner reserves the right to require the bidder to submit evidence that the corporate Surety Company is so authorized. The Corporate Surety on all bonds of the successful bidder must be approved in the Treasury Departments Circular 570. If the Surety Company is not on the list, those bids shall be rejected. A bond written by an "offshore" (non-United States) surety company will not be acceptable.

5. SPECIFICATIONS REGARDING EQUALS:

It is not the intent of these documents to have closed specifications and the brand names shown are the desired materials to be used. The name of a certain brand, make or manufacturer does not restrict proposals to the specified brand, make or manufacturer named unless a brand, model or manufacturer is labeled "No Substitution" in the bid. It is not intended to exclude other products, but to convey the type, functional characteristics and quality of the item desired. Any item that the Owner, in its sole discretion, determines and approves to be the equal of that specified considering quality, workmanship, economy of operation and suitability for the purpose intended will be considered. Thus "equal" products of other manufacturers may be considered if the products meet or exceed the stated specifications, and if a detailed explanation of a claim of equivalency is submitted five (5) days prior to the bid opening. It will be the responsibility of the Bidder to provide data on all products so that the Owner can compare.

6. COMPLETION:

Upon completion of the project, the Contractor will notify Owner and Owner's Representative will make a final inspection of the work. The project shall be completed in good and workmanlike manner and to the satisfaction of the Owner.

7. ETHICS IN PUBLIC CONTRACTING:

By submitting their bid, Bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless consideration of substantially equal or greater value was exchanged.

8. NON-DISCRIMINATION:

Contractor agrees Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, or national origin. Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex, age or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff-, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting for the provisions of this non-discrimination clause.

9. ERRORS OR OMISSIONS:

The Bidder shall not be allowed to take advantage of any errors or omissions in the specifications. Where they occur, the Bidder shall promptly notify the contact person listed. Inconsistencies in the specifications are to be reported before bids are submitted.

10. BID FORM:

The bid **MUST** be submitted on the bid form provided in the bid packet. A Xerox copy of this bid form is acceptable. All blanks must be completed.

END OF SECTION

SECTION 00110

SPECIAL CONDITIONS OF THE CONTRACT

The following conditions also apply to this contract:

1. **WORK COVERED UNDER THE CONTRACT:**

The scope of the work consists of all new materials, tools, equipment, labor, and services, to complete the **ROOFING IMPROVEMENTS AT BOOKER T WASHINGTON, WILL ROGERS HS AND BURROUGHS ELEMENTARY SCHOOL** listed in the "Solicitation and Notice for Bids" in accordance with the "Form of Proposal" and as indicated by the Drawings and by the Specifications included in this Project Manual.

2. **MATERIALS AND EQUIPMENT:**

All material and equipment utilized shall be in conformance with these Specifications and with good Standards of practice and shall meet or exceed the latest applicable industry standards such as A.S.T.M., Standards and Specifications along with all applicable local and national codes and ordinances, including B.O.C.A, N.E.C. and N.F.P.A.

Failure to comply with the terms and conditions of this solicitation or to deliver equipment, supplies or services identified in the Solicitation and Contract at the discount quoted will void the contract award. In the case of failure to deliver goods or provide services in accordance with the contract terms and conditions, Owner, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs.

3. **CONTRACT METHOD:**

The method of Contract and Management shall be in accordance with the Owner's requirements and guidelines set forth at the time the Contract is signed, and a Work Order issued.

4. **CONTRACT ADMINISTRATOR:**

This individual shall serve as the monitor of the conditions of the contract and shall work directly with the contractor to schedule and coordinate the performance of services and to provide general direction under the resulting contract. The following individual is identified to use all powers under the contract to enforce its faithful performance for the Owner: **Walt Dean**, Project Manager, (918) 230-6531.

5. **PRIORITIES AND WORK SEQUENCE:**

The priority will be furnished by the Owner to the successful bidder at the Issuance of the Work Order. Completion of the project(s) in a timely manner is critical. The bidder is required to give the actual number of days to complete each project. Timing will be a consideration in determining the successful bidder.

6. **CONTRACTOR'S USE OF PREMISES:**

The contractor shall also furnish a schedule of intended workdays to the owner through the Department of Building Planning prior to commencing the work at any site and keep all parties informed of any adjustments made necessary by changes of shipping schedules or other causes.

Permission must be obtained from the Owner for temporary use of electric power, water, toilet facilities or other utilities. The Owner's approval must also be obtained for the exact on-site location of any storage of materials, tools or equipment. Owner assumes no responsibility for items stored on school property.

Demolition items and/or debris shall be hauled away from the site after each days activity and the site always maintained in a clean condition free of any build-up of objectionable scraps, waste material or refuse.

7. **OWNER OCCUPANCY AND PROTECTION OF PROPERTY:**

The owner's Site-based Personnel may occupy the site. Therefore, it may be necessary to erect a system of barricades or markers to direct traffic away from the area of each day's operations. The Contractor shall protect and safeguard against damage to all adjacent or nearby surfaces, materials, hardware, glass, furnishings, signage or other site improvements and/or vehicles if in the area of intended loading and unloading operations.

8. **SALES TAX:** (None Required)

The Owner will issue such Documents as necessary to exempt the sales tax upon execution of a contract for the Project(s); therefore, the Contractors are advised to omit the State Sales Tax when preparing their Bid.

9. **PROJECT START-UP:**

The contractor is advised to notify the Owner well in advance of commencing the work on the site.

10. **KNOWLEDGE OF SITE AND SCOPE OF WORK REQUIREMENTS:**

All Contractors shall visit the site on which work is proposed and become thoroughly familiar with the existing conditions and with the Bid Documents and the Scope of the Work included prior to submitting their bid. Sign in at the main office when visiting the site(s).

11. **SUBMITTALS AND CLOSING PROCEDURES:**

(Other than Start-up Contract Requirements such as Certificates of Insurance, Bonds, Etc.)

A. Submit Schedules of intended workdays and activity planned for each Site after receiving Owner's Project Priority list prior to commencing work. **Shop drawings and/or product data and samples** shall be submitted to Tulsa Public Schools' Building Planning department covering all Items in the Scope of Work **for approval prior to manufacture** shipment and installation at the project site. Submit the number of copies, which the contractor requires plus one copy, which will be retained by Tulsa Public Schools' Building Planning Department. Furnish information on characteristics of finish materials proposed for use, to ensure compatible prime coats are used. Provide barrier coats over incompatible primers or remove and re-prime as required. Notify the architect in writing of any anticipated problems using specified coating systems with substrates primed by others.

B. Unless the contract stipulates "Payment upon Completion" of the project or another method of payment; during Progress of the work, submit a separate "Application and Certificate for Payment"-AIA Document G702 on or about the 25th day of each month for work performed in that same month. A 10% retainage shall be calculated and withheld from each Pay Application until the project is completed and accepted by Owner.

C. Upon Final Completion and Final Acceptance by Owner, submit the following prepared and properly signed Closing Documents:

1. Certificate of Substantial Completion
(AIA Document G704)
2. Final Application and Certificate for Payment
(AIA Document G702)
3. Contractor's Affidavit of Payment of Debts
and Claims (AIA Document G706)
4. Contractor's Affidavit of Release of Liens
(AIA Document G706A)
5. Consent of Surety Company to Final Payment
(AIA Document G707)
6. Contractor's Affidavit Pursuant to Title 61
O.S.- Optional in lieu of items 3 above.
7. Contractor's Written Warranty for one (1) year against defects in Material or
Workmanship.

12. SUBSTITUTIONS AND DEVIATIONS FROM THE SPECIFICATIONS:

Substitutions prior to Bid are covered under Paragraph 6 "Instructions to Bidders". Any substitution or deviation from the specifications must be by Owner's prior approval and accepted by an approved change order stipulating the change in price and change in construction time, if any.

13. OWNER'S RIGHT TO REJECT BIDS:

The Owner reserves the right to reject any or all bids and to waive minor irregularities in any bid. In addition, Bidders should recognize the right of the Owner to reject a bid if said bidder fails to provide any data required in the bid or if the bid is in any way incomplete.

14. FINAL CLEANING:

- A. Execute prior to final inspection.
- B. Clean surfaces exposed to view; remove temporary labels, stains and foreign substances and polish transparent and glossy surfaces. Clean equipment and fixtures, sweep and vacuum interior areas and rake clean exterior areas. Remove waste and surplus materials, rubbish and construction facilities from the Project and from the site.

15. SPECIAL TERMS AND CONDITIONS:

- 15.1 Testing and Inspections: Owner reserves the right to conduct any test or inspection it may deem advisable to assure supplies and services conform to specifications.
- 15.2 Proprietary Indemnity: Bidder warrants that the system, each part of the system, and all other products and services used by or furnished by bidder, do not infringe upon or violate any patent, copyright, trade, secret, trademark, or any other proprietary right of any third party. In the event of claim against Owner, Owner shall promptly notify vendor and vendor shall defend and indemnify Owner against any loss, cost expense, claim, or liability arising out of such claim, whether such claim is successful.

- 15.3 Patent and Copyright Materials: Unless otherwise expressly provided in a contract, bidder shall be solely responsible for clearing the right to use any patented or copyrighted materials in the performance of this contract.
- 15.4 Audit: Contractor hereby agrees to retain all books, records and other documents relative to this contract for five (5) years after final payment or until audited by the owner, whichever is sooner. Owner, its authorized agents and/or auditors reserve the right to perform or have performed an audit of contractor's records and therefore shall have full access to the right to examine any of said materials within those five years.
- 15.5 Open Records: Ownership of all data, materials and documentation originated and prepared for the owner pursuant to this bid shall belong exclusively to Owner and be subject to inspections in accordance with the Oklahoma Open Records Act.
- 15.6 Contractor Compliance: Contractor shall comply with all procedural instructions that may be issued from time to time by Owner; however, the terms and conditions of the contract will not change:
- 15.7 Lead Based Paint: Contractor shall be certified and follow work practices established under the UPA Renovation, Repairing and Painting Program applicable to schools when performing any work which will disturb interior or exterior lead-based surface coatings in buildings constructed before 1978. All such work shall be performed in compliance with 40 CFR Part 745.

END OF SECTION

SECTION 00120

SUPPLEMENTAL CONDITIONS TO THE CONTRACT

(References are to Articles, Paragraphs, Subparagraphs and Clauses of the General Conditions of the Contract for Construction, AIA Document A201, 1997 Edition)

4.3.1 **Delete** entire Subparagraph, and substitute the following:

"Definition"

"A Claim is any demand or assertion by the Contractor that it should be paid more money than the Contract Sum, as adjusted under the Change Order provisions herein, by the Owner because of action or inaction on the part of Owner, Program Manager, Architect, or any party for whom Owner is responsible, or any party with whom Owner has separately contracted for other portions of the Project, including, but not limited to, any demand or assertion that Contractor's performance has been delayed, interrupted or interfered with, that Contractor's performance has been accelerated or suspended, that Contractor's performance has been wrongfully terminated, that the Contract Documents have been misinterpreted, that there has been a failure of payment, that Contractor has encountered concealed or unknown conditions, that Contractor has encountered hazardous materials, that there are problems with the Contract Documents, or the timing of Architectural approvals or decisions, that actions of the Owner have been intentionally wrongful or deceptive, that Owner is directly or indirectly guilty of negligence or an intentional tort related in any way to the Work, that the amount of time or money granted in a Construction Change Directive is inadequate, that an item treated as a minor change in the Work should have been treated as a Change Order, that a time extension grant was inadequate, or that Contractor is entitled to any other relief, on any legal theory, related to the Work and the Contract."

"Notice Requirement"

"Within five (5) days of the first occurrence of an event that Contractor has any reason to believe might result in a Claim, or within five (5) days of Contractor's discovery of the first occurrence of an event that Contractor has any reason to believe might result in a Claim, if the first occurrence of the event was willfully hidden from the Contractor, the Contractor shall file a written document clearly captioned "Notice of Claim" with Tulsa Public Schools, Program Manager and the Architect. The notice shall clearly set out the specific matter of complaint, and the impact or damages which may occur or have occurred as a result thereof, to the extent the impact or damages can be assessed at the time of the notice. If the impact or damages cannot be assessed as of the date of the notice, the notice shall be amended at the earliest date this is reasonably possible."

Add the following Subparagraph:

"Any claim or portion of a Claim that has not been made the specific subject of a notice strictly in accordance with the requirements of this section shall be waived. It is imperative that Owner have timely, specific notice of any subject, the impact of which Owner may be in a position to mitigate."

4.3.3 **Add** the following sentences:

"Claims Handling During Construction. After receipt of a Notice of Claim, the Owner may elect to refer the matter to the Architect, Program Manager or another party for review. Contractor will attend meetings called to review and discuss the Claims and mitigation of the problem and shall furnish any reasonable factual backup for the Claim requested. The Owner may also elect to defer

consideration of the Claim until the Work is completed, in which case the same review options shall be available to the Owner at the completion of the Work. At any stage the Owner is entitled to refer a Claim to mediation under the Construction Industry Mediation Rules of the American Arbitration Association, and if this reference is made Contractor and the Owner will take part in the mediation process. The filing, mediation or rejection of a Claim does not entitle Contractor to stop performance of the Work. The Contractor shall proceed diligently with performance of the Contract."

4.3.6.1 **Add** the following Subparagraph:

"Calculating Claim Amount"

"In calculating the amount of any Claim, the following standards will apply:

- .1 No indirect or consequential damages will be allowed.
- .2 All damages must be directly and specifically shown to be caused by a proven wrong. No recovery shall be based on a comparison of planned expenditures to total actual expenditures, or on estimated losses of labor efficiency, or on a comparison of planned man loading to actual man loading, or any other analysis that is used to shown damages indirectly.
- .3 Damages are limited to extra costs specifically shown to have been directly caused by a proven wrong.
- .4 The maximum daily limit on any recovery for delay shall be the amount estimated by the Contractor for job overhead costs divided by the total number of calendar days of Contract Time called for in the original Contract."
- .5 No monetary costs shall be allowed for delay.

5.2.1 In the first sentence, delete "as soon as practicable" and substitute "within seventy-two (72) hours."

5.2.5 **Add** this new Subparagraph:

"The Contractor shall not sublet the work as a whole. The approval of Subcontractors in no way relieves the Contractor from full responsibility for performance and completion of the Work and its obligations under the Contract Documents."

5.3.1 **Delete** the remainder of the second sentence beginning with the words "and shall allow to the Subcontractor."

5.4.2 **Delete** entire Subparagraph and substitute the following:

"Owner shall only be responsible for compensating Subcontractors for work done or materials furnished after the date Owner gives written notice of its acceptance of the subcontract agreement."

5.5 **Add** this new Paragraph:

5.5 "RESPONSIBILITY"

5.5.1 "Contractor shall be fully responsible for the performance of its Subcontractors.

6.1.1 **Delete** the entire Subparagraph, and substitute the following:

"The Owner reserves the right to perform other construction work, maintenance and repair work and school program operations at the site and near the site during the time of the Work. Owner may perform other work with separate contractors or with its own forces. On renovation/addition projects, the Owner shall always have access to the site and all buildings on the site. On new construction, the Owner shall have access to the site and all buildings during normal business hours."

10.1.2 **Add** this new Subparagraph:

"The Contractor shall be responsible for the protection and security of the Work and the Project, until he receives written notification that the Substantial Completion of the work has been accepted by the Tulsa Public Schools."

10.2.8 **Add** this new Subparagraph:

"In an emergency affecting the safety of persons or property, the Contractor shall notify the Owner, Program Manager and Architect immediately of the emergency, simultaneously acting at his discretion to prevent damage, injury, or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 4.3 and Article 7."

10.3.1 **Delete** entire Subparagraph and substitute the following:

"Contractor is responsible for reviewing all Asbestos Hazard Emergency Act Management Plans on file with Owner and for obtaining sign-off from Tulsa Public Schools Hazardous Materials Bureau prior to commencing the Work. In no event shall the Contractor engage in the disturbance or removal of asbestos or polychlorinated biphenyl (PCB). In the event the Contractor encounters on the site material reasonably believed to be asbestos or PCB which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the Architect in writing. If the portion of the Work that is stopped is critical to overall completion, the Contractor shall reschedule the Work, if possible, to minimize the impact of the stoppage. The work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or PCB and has not been rendered harmless. The work in the affected area shall be resumed when the asbestos or polychlorinated biphenyl (PCB) has been removed, or when it has been rendered harmless. If the Work is stopped due to the presence of such materials, Owner shall arrange for the removal and/or rendering harmless of such materials prior to Contractor being allowed to proceed. The Owner shall have the option of arranging for removal by a qualified, adequately insured third party tendered to Contractor, and mutually agreed to by both parties, as a Subcontractor in which case a Change Order will be issued for the cost of this subcontract. Any tendered Subcontractor must indemnify the Contractor and the Owner about its work. In the case of such a tender, Owner will not hold Contractor responsible for the work or other actions of the tendered Subcontractor, and Contractor's approval of tendered Subcontractor shall not be unreasonably withheld. In those instances, in which the presence of such materials was set forth in the Hazardous Materials documents or in which Contractor had other notice of such through information given to Contractor by Owner or its representative prior to the commencement of the Work, Contractor shall not be entitled to a Claim for any delays, disruption or interference it encounters. In those instances of work stoppage due to the existence of such hazardous materials which were not set forth in the Hazardous Materials Control plans and of which Contractor had no

other prior notice, Contractor may be entitled to a Claim for extension of time due to the work stoppage.”

11.4 PROPERTY INSURANCE

11.4.1 **Delete** entire Subparagraph, and substitute the following:

"Until the Work is completed and accepted by the Owner, the Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. The property insurance shall also cover portions of the Work stored off site after written approval of the Owner of the value established in the approval, and portions of the Work in transit. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work and shall insure against the perils of fire and extended coverage including flood and earthquake and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism, and malicious mischief. The insurance shall cover reasonable compensation for Architect's and Program Manager's services and expenses required because of an insured loss. This "all risk" policy shall be written incorporating Actual Completed Value Form and General Change Endorsement incorporating the following language:

"Permission is given for the Project insured hereunder to become occupied, the insurance remaining in full force and effect until such time as the Project has been accepted by the Owner, all as currently approved by the Laws for the State of Oklahoma."

"The policy shall include coverage for Explosion, Collapse and Underground (XCU). Such insurance shall be evidenced by the kind of policy which does not have to be adjusted or reported upon periodically but provides constant insurance at full one hundred percent (100%) of all insurable values as they are created during construction by performance of the Contract. The Certificate of Insurance must include the names of the insured Contractor and the Tulsa Public Schools."

11.4.1.2 **Delete** entire Clause, and substitute the following:

"Loss under such All-Risk Builder's Risk Insurance shall be made payable jointly to the Tulsa Public Schools and to the Contractor by name (and, if separate mechanical contracts are awarded to each, by name, of the plumbing, heating, ventilating and electric contractors)."

11.4.1.3 **Delete** entire Clause, and substitute the following:

"In the case of loss under the risks covered, and of collection by insured, the Owner shall act as trustee for all parties concerned as their interests may appear."

12.1.3 **Add** this new Clause:

"Where nonconforming work is found, the entire area of work involved shall be corrected unless the contractor can completely define the limits to the Architect's satisfaction. Additional testing, sampling, or inspecting needed to define nonconforming work shall be at the Contractor's expense. He shall employ the Owner's testing laboratory if such services are reasonably required by the Architect. All connected work shall be retested at the contractor's expense. Extra Architectural or Program Manager Services required to analyze nonconforming work shall be paid for by the Contractor."

13.1.1 **Delete** entire Subparagraph, and substitute the following:

“District Court in and for the County of Tulsa, State of Oklahoma shall have sole jurisdiction in any action brought under this contract.”

14.2.5 **Add** this new Subparagraph:

"If a Performance Bond has been furnished and the Contractor is declared by the Owner to be in default under the Contract, the Surety shall promptly remedy the default by completing the Contract in accordance with its terms and conditions, or by obtaining a bid or bids in accordance with its terms and conditions. Upon determination by the Owner and the Surety of the lowest responsible bidder, the Surety will arrange for a contract between such bidder and the Owner and make available as work progresses sufficient funds to pay the cost of completion less the balance of the Contract Sum, but not exceeding the Penal Sum of the bond and other costs and damages for which the Surety may be liable under the bond. The phrase 'balance of the Contract Sum' as used herein shall mean the total amount payable by the Owner to the Contractor under the Contract and amendments thereto less the amount previously paid by the Owner to the Contractor."

END OF SECTION

BID PACKAGE

FORM OF PROPOSAL

For

ROOFING IMPROVEMENTS

AT

BOOKER T WASHINGTON, WILL ROGERS HS
AND BURROUGHS ELEMENTARY

BID OPENING AT 1:00 PM, THURSDAY, FEBRUARY 12, 2026- ROOM 600

CONTRACTORS WILL NOTE THAT A PROPOSAL MUST BE MADE ON THIS FORM. OTHER PROPOSALS WILL NOT BE ACCEPTED. COMPLETE ALL BLANKS. ALL BID PRICES SHALL BE IN BOTH FIGURES AND IN WRITING. PROPOSALS SHALL BE ENCLOSED IN A SEALED ENVELOPE, MARKED ON THE OUTSIDE “**SEALED BID: ROOFING IMPROVEMENTS AT BOOKER T WASHINGTON, WILL ROGERS HS AND BURROUGHS ELEMENTARY SCHOOL. ALSO INCLUDE COMPANY NAME, ADDRESS & PHONE NUMBER**”

Selection of the successful bidder will be based on the lowest responsible bid taking into consideration the number of calendar days bid to reach substantial completion of the Work. The Owner reserves the right to reject any or all bids and to waive informalities and minor irregularities in any bid.

Independent School District Number One of Tulsa County, Oklahoma
Charles C. Mason Education Service Center
3027 South New Haven
Tulsa, Oklahoma 74147-0208

Dear School Board Members:

The undersigned Contractor, in compliance with your Solicitation and Notice for Bids and Instructions to Bidders contained in the Bid documents for **ROOFING IMPROVEMENTS AT BOOKER T WASHINGTON, WILL ROGERS HS AND BURROUGHS ELEMENTARY SCHOOL** in Tulsa, County, Oklahoma, having examined the Specifications, Drawings, details, and Scope of Work, and areas where the work is proposed, and being familiar with all of the work required at the Project site(s), hereby proposes to furnish all labor, materials, tools, equipment, supplies and services to complete the Project(s) within the time set forth in this Proposal for the price as herein stated. The price(s) indicated is to cover all expenses incurred in performing all of the work required under the Contract Documents of which this Proposal is a part.

If awarded a contract for the Projects, the undersigned agrees as follows:

1. To furnish a Contractor's Written Warranty which will warranty the Project(s) for a period of one (1) year after substantial completion and acceptance by Owner against all defects in materials and workmanship.
2. To furnish all other insurance and Bonds required as indicated in the "Solicitation and Notice for Bids" in the amount equal to the Total Contract Price.
3. To furnish a monthly Application and Certificate for Payment (AIA Documents G702) and Certificate of Substantial Completion (AIA Document G704) for the project(s) based on the contract bid price indicated on this proposal.

The bidder acknowledges the following Addendum: _____, _____, _____, _____.

OUR BID FOR COMPLETING THE REQUIRED WORK DEFINED ABOVE AND DESCRIBED IN THESE BID DOCUMENTS IS AS FOLLOWS:

BID FORM

BASE BID

BOOKER T WASHINGTON	\$ _____	DOLLARS
WILL ROGERS HS	\$ _____	DOLLARS
BURROUGHS ELEMENTARY	\$ _____	DOLLARS
TOTAL BASE BID BOTH SITES	\$ _____	DOLLARS
CALENDAR DAYS TO COMPLETE	_____	DAYS

We have included the following sworn and notarized bid affidavits and bid security. They are attached to this proposal:

1. Bid Bond, Certified Cashier's Check or other approved security as listed in the "Solicitation and Notice for Bids" and "Instructions to Bidders," in the amount of five (5%) of the bid.
2. Non-Collusion Affidavits
3. Business Relationship Affidavit
4. Non-Discrimination Affidavit
5. Felony Statement
6. No Kick Back Statement
7. Contractor's Qualification Statement (**completed and submitted seven days prior to bid**)

In submitting this Bid, the undersigned agrees that the Bid will not be withdrawn for a period of thirty (30) calendar days from the date hereof and it is understood that the right is reserved by the Owner to reject any and all Bids and to waive informalities and irregularities.

Respectfully submitted

Seal if Bid is by
Corporation

Company

By

Title

Address

City, State, Zip

Area Cide & Telephone Number

Company ID

Note: When submitting your bid, all blanks on this form must be filled in.

Bid Bond

THIS DOCUMENT HAS IMPROTANT LEGAL CONSEQUENCES: CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION. AUTHENTICATION OF THIS ELECTRONICALLY DRAFTED AIA DOCUMENT MAY BE MADE BY USING AIA DOCUMENT⁴⁰¹.

KNOW ALL MEN BY THESE PRESENTS, that we *(Here insert full name and address or legal title or Contractor)* as principal, hereinafter called the Principal, and *(Here insert full name and address or legal title of Surety)* a corporation duly organized under the laws of the State of as Surety, hereinafter called the Surety, are held and firmly bound unto *(Here insert full name and address or legal title of Owner)* as Obligee, hereinafter called the Obligee, in the sum of Dollars (\$), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for *(Here insert full name, address, and description of project)*

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this day of 20

(Witness) _____ *(Principal)* _____ *(Seal)*

(Title)

(Surety) _____ *(Seal)*

(Witness)

(Title)

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SECTION 00170 – NON-DISCRIMINATION AFFIDAVIT

The Contractor affirms and states that he/she complies with the following:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, sex, religion, national origin or age. The Contractor will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, sex, religion, national origin or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the requirements of these nondiscrimination provisions.
2. The Contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, color, sex, religion, national origin or age."

Company Representative

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public

My Commission Expires:

5. This Affidavit is made and delivered pursuant to the requirements of **OKLA. STAT. tit. 70, § 6-101.48 (Supp. 2000)** and **OKLA. STAT. tit. 57, § 589 (Supp. 2004)** (the “Acts”). The undersigned further certifies to the School District that the undersigned and/or the entity are in full compliance with the requirements of the Acts.

EXECUTED AND DELIVERED this _____ day of _____,
_____.

AFFIANT’S SIGNATURE

(Print Name and Title)

Representing:

(Name of Entity)

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

Notary Public

(S E A L)

Notary Commission Number: _____

My Commission Expires: _____

SECTION 00191

CONTRACTORS QUALIFICATIONS STATEMENT

This form is required for every project and is to be included with your bid documents. Failure to submit will disqualify the bid. All questions must be answered, the data must be clear and understanding and must be signed and notarized.

1. Name of Bidder: _____
2. Permanent Main Office Address: _____
3. When organized: _____
4. If incorporated, when and where _____
5. How many years have you been engaged in the contracting business under your present firm or trading name? _____
6. List 5 projects of similar size work, references with telephone numbers, cost of project and year completed: _____

(1) Project: _____, Year: _____,
Cost: \$ _____
Reference: _____, Phone: _____

(2) Project: _____, Year: _____,
Cost: \$ _____
Reference: _____, Phone: _____

(3) Project: _____, Year: _____,
Cost: \$ _____
Reference: _____, Phone: _____

(4) Project: _____, Year: _____,
Cost: \$ _____
Reference: _____, Phone: _____

(5) Project: _____, Year: _____,
Cost: \$ _____
Reference: _____, Phone: _____

7. Have you ever failed to complete any work awarded to you? Please explain.

8. Please state the size of your business:

of employee's (total): _____

9. Are any of your job captains bilingual?

10. Financial Information:

a. State the name of the bank with whom you do your principal business:

Name of Bank	Address	City, State	Phone Number
--------------	---------	-------------	--------------

b. State 5 trade references with whom you do business:

1. _____

2. _____

3. _____

4. _____

President of Company

_____, _____
(Notary Public) (Date)

Affix Notary Seal

SECTION 00260

NO KICK-BACK STATEMENT

A duplicate of the following statement is required to be signed, notarized, and submitted with each and every copy of the AIA Document G702, "Application and Certificate for Payment", that is presented to the Owner for payment.

STATE OF OKLAHOMA)
) ss.
COUNTY OF TULSA)

The undersigned Contractor, of lawful age, being first duly sworn, an oath says that this invoice is true and correct. Affiant further states that the services as shown by the invoice have been completed in accordance with the contract. Affiant further states that he has made no payment directly or indirectly to any elected official, officer or employee of the State of Oklahoma, any county or local subdivision of the state, of money or any other things of value to obtain payment.

Contractor

(Title)

By _____

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My Commission Expires:

[SEAL]

END OF SECTION

SECTION 01300
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Administration of Contract: Provide administrative requirements for the proper coordination and completion of work including the following:
 - 1. Supervisory personnel.
 - 2. Preconstruction conference.
 - 3. Project meetings, minimum of two per month; prepare and distribute minutes.
- B. Reports: Submit daily and special reports.
- C. Work Schedule: Submit progress schedule, updated monthly.
- D. Submittal Schedule: Prepare submittal schedule; coordinate with progress schedule.
- E. Schedule of Values: Submit schedule of values.
- F. Schedule of Tests: Submit schedule of required tests including payment and responsibility.
- G. Perform Surveys: Lay out the work and verifying locations during construction. Perform final site survey.
- H. Emergency Contacts: Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.
- I. Record Documents: Submit record drawings and specifications; to be maintained and annotated by Contractor as work progresses.

1.2 SUBMITTALS

- A. Types of Submittals: Provide types of submittals listed in individual sections and number of copies required below.
 - 1. Shop drawings, reviewed and annotated by the Contractor - 3 copies.
 - 2. Product data - 3 copies.
 - 3. Samples - 2, plus extra samples as required to indicate range of color, finish, and texture to be expected.
 - 4. Inspection and test reports - 3 copies.
 - 5. Warranties - 3 copies.
 - 6. Survey data - 3 copies.
 - 7. Closeout submittals – 3 copies.
- B. Submittal Procedures: Comply with project format for submittals. Comply with submittal procedures established by Architect including Architect's submittal and shop drawing stamp. Provide required resubmittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved.
- C. Samples and Shop Drawings: Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note special coordination required. Note any deviations from requirements of the Contract Documents.

- D. Warranties: Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Contractor, supplier or installer responsible for performance of warranty shall sign warranties.

PART 2 PRODUCTS - Not applicable to this Section

PART 3 EXECUTION - Not applicable to this Section

END OF SECTION

SECTION 01600
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Manufacturers: Provide products from one manufacturer for each type or kind as applicable. Provide secondary materials as acceptable to manufacturers of primary materials.
- B. Product Selection: Provide products selected or equal approved by Architect. Products submitted for substitution shall be submitted with complete documentation, and include construction costs of substitution including related work.
- C. Substitutions: Request for substitution must be in writing. Conditions for substitution include:
 - 1. An 'or equal' phrase in the specifications.
 - 2. Specified material cannot be coordinated with other work.
 - 3. Specified material is not acceptable to authorities having jurisdiction.
 - 4. Substantial advantage is offered to the Owner in terms of cost, time, or other valuable consideration.
- D. Substitution Requests: Substitutions shall be submitted prior to award of contract, unless otherwise acceptable. Approval of shop drawings, product data, or samples containing substitutions is not an approval of a substitution unless an item is clearly presented as a substitution at the time of submittal.

PART 2 PRODUCTS - Not applicable to this Section

PART 3 EXECUTION - Not applicable to this Section

END OF SECTION

**SUBMIT QUOTATION FOR ROOF REPAIRS ON THE
FOLLOWING PROJECT SITE:**

TULSA PUBLIC SCHOOLS

**BOOKER T. WASHINGTON HIGH SCHOOL SECTIONS B, C
HISTORIC ELEMENT SECTIONS A, B, C
1514 E. ZION ST
TULSA, OK 74114**

**BURROUGHS ELEMENTARY SCHOOL SECTIONS A, B, D, E
1924 M.L.K. JR BLVD
TULSA, OK 74106**

**WILL ROGERS FIELD HOUSE SECTIONS A, B, C, D, E, F
3909 E 5TH PL
TULSA, OK 74112**

**PREPARED FOR:
WALT DEAN
PROJECT MANAGER – BOND PROJECTS
3027 SOUTH NEW HAVEN AVENUE
TULSA, OKLAHOMA 74147**

JANUARY 2025

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PART I - GENERAL

1.01 RELATED DOCUMENTS

General conditions, Supplementary Conditions, and Division I of these specifications govern the work herein.

1.02 SUMMARY

A. Furnish and install specified roofing and related components to the following Tulsa Public School sites. Roof sections designated for restoration and roof replacement are designated on the attached roof drawings. The work included under these specifications shall consist of furnishing all items, materials, operations, or methods listed, mentioned, indicated, or scheduled in these specifications, including all labor, materials, equipment, insurance, transportation, and incidentals necessary and required for project completion.

B. Work Includes: **TOTAL ROOF RESTORATION & REPLACEMENT AT THE FOLLOWING SITES:**
RESTORATION: BOOKER T. WASHINGTON HIGH SCHOOL ROOF SECTIONS B & C, WILL ROGERS FIELD HOUSE ROOF SECTIONS A, B, C, D, E, F, BURROUGHS ELEMENTARY SCHOOL ROOF SECTIONS A, B, D, E, HISTORIC ELEMENT SECTIONS B & C.
REPLACEMENT: HISTORIC ELEMENT SECTION A.

1. Roof Restoration shall include removing all loose aggregate, asphalt bitumen, dirt, and sediment using a heavy-duty industrial vacuum. Surfaces shall be cleaned thoroughly.
2. Where designated, remove existing roofing, insulation, all flashings, etc., down to the existing decking substrate.
3. Add Alternate: Include Booker T. Washington Roof Section B Roof Restoration as an Add Alternate.
4. Include access ladder for Burroughs Elementary Roof Section D in base bid. Contact Okeeffe's Inc. for pricing. Contractor to provide dimension drawings and photos to Okeeffe's Inc. Refer to photo in "Rooftop Drawings" with area marked for access ladder location and ladder models to be used.
5. Remove and replace all wet insulation identified by infra-red scan and replace with matching type and thickness. Removal and replacement of all wet insulation shall be included in the roof contractor's bid proposal. Roof contractors are to field verify all wet insulated areas and dimensions, deck type, insulation composition and thickness. **It may be necessary, due to contract delays, for the approved and selected contractor or contractors to remark areas to identify wet insulated areas.**
4. Remove and repair blisters, ridges, buckles, and other existing roofing membrane irregularities.
5. Refer to Roof Section 3.06 to determine roof sections that require the

removal of existing aggregate and flood coat, along with roof sections designated for full replacement. Roof Sections not identified under Roof Section 3.06 shall require full restoration.

6. Repair and reinforce perimeter metal edge, wall and curb flashings and all projection flashings and details in strict accordance with roof specifications and manufacturer's requirements. At all locations where new coping metal is specified, install vinyl barrier over coping wood nailer. Where coping metal is to be salvaged, remove sealant at coping metal lap seams and coping metal tie-ins using a wire brush and reseal using sealant as specified. Tool neatly. At any coping metal lap seams or tie-ins where sealant is missing, apply sealant as specified. Tool neatly.
7. Plumbing vents (soil stacks) located within 10' of HVAC units shall be vented away from the unit. Size and install Tyler no hub clamp with 2" PVC piping approximately 10' in length and install horizontal on blocking secure with steel strap and elbow. See the attached photograph for reference.
8. Replace all rotted and/or weathered wood blocking supports and replace them with a new metal strap. All runners are to be replaced.
9. All plumbing, piping, and utility conduit shall be cleaned, primed, and painted safety yellow.
10. Apply final flood coat of restoration coating at 7.5 gallons per 100 sq. ft. and broadcast new and clean aggregate at 500 lbs. per sq. Any steel under units is to be lifted to apply restoration coating.
12. At Burroughs Elementary, remove existing brick chimney down to approximately 8' above the roof surface. Contact Ark Wrecking @ 918-688-4344 for their demolition cost and include in roof contractor's bid proposal. The remaining chimney shall have metal R-panel walls installed with hat channels fabricated and installed by the roofing contractor. Provide necessary trim and metal tapered vented cover.
11. Roof system manufacturer shall provide Ten (10) year Quality Assurance Manufacturer's Warranty on Restoration Roof Sections And Twenty (20) year Quality Assurance Manufacturer's Warranty On Replacement Roof Section.
12. Roof system manufacturer shall provide their Ten (10) year roof system inspection, preventative maintenance, and housekeeping program. See Section 1.11 for coverage requirements.
13. **Roofing Contractors shall include in their bid proposal the following cost for possible contingencies, unknowns such as deck repairs, wood blocking replacement, fascia replacement, roof drains etc. The balance of this fund shall be credited to TPS upon the completion of this project.**
Booker T. Washington High School/Historic Element--
\$ 40,000.00.
Burroughs Elementary School - \$ 10,000.00
Will Rogers Field House - \$5,000.00

1.03 QUALITY CONTROL

A. Roof Contractor shall:

1. Be experienced in roof restoration and roof replacement.
2. Be acceptable by the Tulsa Public Schools.
3. Be located within a 55-mile radius of Tulsa Public Schools.
3. Be a Manufacturer Approved/Certified Contractor experienced with the specified roof restoration and roof replacement system. Obtain written certification from the manufacturer of the BUR system certifying that installer is approved by manufacturer for installation of the specified roofing repairs.
4. Installer's Field Supervision: Installer must maintain full-time supervisor/foreman on jobsite during times that roofing work is in progress. The supervisor must have a minimum of 5 years experience in roofing work like nature and scope of specified roofing.
5. Installer shall have installed a minimum of three (3) projects of the specified restoration system and replacement system on projects of similar design and scope.
6. Roofing contractor shall agree to participate in allowances and adjustments for five (5) years of the warranty period when it is determined that defects are a result of application and workmanship errors. All defects noted during this time will be corrected by the roof contractor at their own expense.
7. Installer shall have in place a formal safety program available for review.

B. Roofing material manufacturer shall:

1. Be Associate Member in good standing with National Roofing Contractors' Association (NRCA) for at least ten (10) years.
2. Be nationally recognized in roofing, waterproofing, and moisture survey industry.
3. Be approved by the Tulsa Public Schools.
4. Has not been in Chapter 11 during the last five (5) years.
5. Be an established roof manufacturing firm with a history of producing and manufacturing roofing systems for at least the manufacturer's longest warranty, and not less than the specified warranty length.
6. Provide Tulsa Public Schools with names of at least 3 local qualified and certified applicators of having experience with specified roof repair systems.
7. Provide a local full-time local Field Technical Services Representative employee available for monitoring project work on a periodic basis. Provide point of contact designated to monitor project. Local full-time Field Technical Services Representative shall have a minimum of Ten (10) years' experience monitoring roof restoration projects of similar design and scope.
8. Employ full-time local Field Technical Services Representative

- available for final roof inspection. Provide point of contact designated for final inspection.
9. Provide a copy of roof manufacturer's formal preventative maintenance Service Agreement detailing yearly roof inspections, preventative maintenance, and general housekeeping services and 24 hour a day toll free leak response hotline described under warranty section of this specification.
 10. The presence and activity of the manufacturer's representative and/or owner's representative shall in no way relieve the roof contractor of their contractual responsibilities or duties.

1.04 PRE-BID INFORMATION

- A. Comply with requirements established by the Tulsa Public Schools.
- B. Submit the following information to the Tulsa Public Schools prior to the scheduled bid date:
 1. Product compatibility:
 - a) Written verification from roofing material supplier that major roofing components, including (but not limited to) coatings, cold process modified adhesives; roofing ply sheets; reinforcement fabric felts and mats; mastics; insulation adhesives and sealants are all compatible with each other.
 - b) Written verification from primary roofing manufacturer that all major roofing components are manufactured by the primary roofing manufacturer for quality assurance and compatibility. Provide notarized statement from Officer of the primary roofing manufacturer verifying this requirement.
 2. Copy of Ten (10) year roof preventative maintenance service agreement for roof maintenance, inspection and 24-hour leak response hotline process.
 3. Letter from roofing contractor that they agree to participate in allowances and adjustments for five (5) years of the warranty service agreement period when it is determined by the roof system manufacturer that defects in the roofing assembly are a result of application and workmanship errors. All defects noted during this time will be corrected by the roof contractor at their own expense.
 4. Letter from the roof system manufacturer that the technical service representative overseeing the project for specification compliance and installation quality is employed by the roof system manufacturer and has been an employee for a minimum of ten (10) years. Technical service representative shall be prepared to respond to problems associated with roofing project within a 2-hour time period.

1.05 SUBSTITUTIONS

- A. When a particular make or trade name is specified, it shall be indicative of the standard required. Bidders/manufacturers seeking approval shall submit

the following **seven (7) days prior to the bid date** to the Tulsa Public Schools:

1. Written application with explanation of why it should be considered.
 2. Accredited testing laboratory certificate comparing substitute's physical/performance attributes to those specified. Test reports shall be no more than one (1) year old and shall show a direct comparison using the same ASTM test standards as specified in Part 2 of this document.
- B. Only substitutes approved in writing by the Tulsa Public Schools prior to the scheduled bid date will be considered.
- C. Notification of approvals will be mailed at least 4 days before bid opening.
- D. Tulsa Public Schools reserves the right to be the final authority on the acceptance or rejection of any substitute.

1.06 ACCEPTABLE ROOF SYSTEM MANUFACTURERS

- A. While these specifications may in some cases describe a specific manufacturer and model number which has been determined as acceptable and suited to the Tulsa Public School needs, they are not intended to eliminate from consideration any comparable material of equal or greater quality which the manufacturer may have available and which will meet the needs of the Tulsa Public Schools.
- B. Pre-qualification of roofing material manufacturer shall be required. Submit all information requested under 1.03 **no later than seven (7) days prior to bid date** for consideration, including, but not limited to, all material and testing documentation as specified, including UL approvals as specified for this project.
- C. Manufacturers seeking approval through substitution must submit all documentation as stated in 1.05 SUBSTITUTIONS to be considered.
- D. Only those manufacturers whose materials comply with the specified standards shall be approved for this project.
- E. Project meetings:
1. **Pre-Bid Conference:**
 - a) A **mandatory** pre-bid meeting is scheduled for **Monday, January 26th, 2026 at 10AM in the Booker T. Washington High School Historic Element Lobby located at 1514 E Zion St, Tulsa, OK 74106**. This pre-bid meeting will commence promptly and will include a walkover of the roof sections listed including the review of the roof specification documents. Response to questions which are not addressed in the bidding documents or require modification will be included in an

addendum and provided to all bidding roof contractors.

2. **Bid Date:**
 - a) **Thursday, February 12th , 2026 at 11AM.**

3. Pre-construction conference and completion schedule.
 - a) Will be scheduled by the Tulsa Public Schools within fifteen (15) days after notice of award to proceed.
 - b) Attendance:
 - (1) Roofing material manufacturer.
 - (2) Roof Contractor and project foreman.
 - (3) Representative of the Tulsa Public Schools.
 - c) Agenda:
 - (1) Payment terms.
 - (2) Tax exemption certificate.
 - (3) Execution of Tulsa Public Schools-Roof Contractor Agreement.
 - (4) Distribution of contract documents.
 - (5) Submittal of list of subcontractors, material submittals, and progress schedule.
 - (6) Designation of responsible personnel.
 - (7) Walkover inspection.

4. Progress meetings:
 - a) Will be scheduled by Tulsa Public Schools as required.
 - b) Attendance:
 - (1) Roofing material manufacturer/roof contractor.
 - (2) Job superintendent.
 - (3) Tulsa Public Schools representative.
 - c) Minimum agenda:
 - (1) Review of work progress.
 - (2) Field observations, problems, and decisions.
 - (3) Identification of problems which impede planned progress.
 - (4) Maintenance of progress schedule.
 - (5) Corrective measures to regain projected schedules.
 - (6) Planned progress during succeeding work period.
 - (7) Coordination of projected progress.
 - (8) Maintenance of quality and work standards.
 - (9) Effect of proposed changes on progress schedule and coordination.
 - (10) Other business relating to work.

5. Final inspection:
 - a) Will be scheduled by the roofing material manufacturer upon job completion.
 - b) Attendance:

- (1) Roof Contractor.
 - (2) Roofing material manufacturer.
 - (3) Tulsa Public Schools representative.
- c) Minimum agenda:
- (1) Walkover inspection.
 - (2) Identification of problems which may impede issuance of service agreement.

F. Random sampling:

1. Roofing material:
 - a. During course of work, Tulsa Public Schools Representative may secure samples according to ASTM D140-88 of materials being used from containers at job site and submit them to an independent laboratory for comparison to specified material.
 - b. Should test results prove that a material is not functionally equal to the specified material:
 - (1) Roof Contractor shall pay for all testing.
 - (2) Roofing installed and found not to comply with the specifications shall be removed and replaced at no change in the contract price.

G. Plans and specifications:

1. Roof Contractor must notify owner and specifier of any omissions, contradictions, or conflicts **seven (7) days before bid date**. Tulsa Public Schools and manufacturer will provide the necessary corrections or additions to plans and specifications by addendum. If the roof contractor does not notify the owner and specifier of any such condition, it will be assumed that the roof contractor has included the necessary items in the bid to complete this specification.
2. It is the intent that these roofing projects be completed by a manufactured certified roof contractor that has met the criteria to provide the long-term service agreement. It is not the intent for these roof projects to bid and later be subcontracted out to an unqualified roofing company and labor personnel. All roofing work completed on the Tulsa Public Schools sites will be performed by the contracted company. The Roof Contractor alone will be held responsible by the Tulsa Public Schools for the completed project.
3. If the roof contractor feels a conflict exists between what is considered good roofing practice and these specifications, roof contractor shall state in writing all objections prior to submitting quotations.
4. It is the contractor's responsibility during the work to bring to the attention of the Tulsa Public Schools representative any defective membrane, insulation or deck discovered where not previously identified.

1.07 REFERENCES

- A. ASTM - American Society for Testing and Materials, Philadelphia, PA.
- B. U.L. – Underwriter’s Laboratory.
- C. SMACNA - Sheet Metal and Air-Conditioning Contractors National.
- D. NRCA - National Roofing Contractors Association, Chicago, IL.
- E. IBC – International Building Code.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Delivery of materials:
 - 1. Deliver materials to job-site in new, dry, unopened, and well-marked containers showing product and manufacturer's name.
 - 2. Deliver materials in sufficient quantities to allow continuity of work.
 - 3. Coordinate delivery with Tulsa Public Schools.
- B. Do not order project materials or start work before receiving Tulsa Public Schools written approval.
- C. Storage of materials:
 - 1. Store roll goods on ends only. Discard rolls which have been flattened, increased, or otherwise damaged. Place materials on pallets. Do not stack pallets.
 - 2. Stack insulation on pallets.
 - 3. Store materials marked "keep from freezing" in areas where temperatures will remain above 40 F.
 - 4. Store metal roof deck on pallets with one end elevated to provide drainage.
 - 5. Remove plastic packaging shrouds. Cover top and sides of all stored materials with tarpaulin (not polyethylene). Secure tarpaulin.
 - 6. Store roofing materials in ventilated water-tight trailers. Remove plastic packaging shrouds.
 - 7. Materials necessary for two (2) days’ work may be stockpiled on the roof. Disperse material to avoid concentrated loading.
 - 8. No materials may be stored in the open or in contact with ground or roof surface.
 - 9. Should the roof contractor be required to quickly cover material temporarily, such as during an unanticipated rain shower, all materials shall be stored on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom.
 - 10. Roof Contractor shall assume full responsibility for the protection and safekeeping of products stored on the Tulsa Public Schools premises.
 - 11. The Tulsa Public Schools reserves the right to stop roof contractor’s

roofing activity during excessively windy days when such weather conditions increase the risk of damage to the grounds, buildings, public automobiles, and property.

- D. Material handling:
1. Handle materials to avoid bending, tearing, or other damage during transportation and installation.
 2. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or situate material handling equipment in locations that will hinder smooth flow of vehicular or pedestrian traffic.
 3. **THE ROOF CONTRACTOR IS NOT TO STORE ROOFING MATERIALS, EQUIPMENT ETC., ON SURROUNDING ROOF SECTIONS NOT INCLUDED IN THESE SPECIFICATIONS. WHERE ROOF SECTIONS ADJOIN ROOF AREAS NOT BEING ADDRESSED IN THESE SPECIFICATIONS, THE ROOF CONTRACTOR SHALL ROPE AND FLAG AREA TO AVOID TRAVERSING ONTO ROOF SYSTEM.**

1.09 SITE CONDITIONS

- A. Field measurements and material quantities:
1. **Roof system applicator shall have SOLE responsibility for accuracy of all measurements, estimates of material quantities and sizes, and site conditions that will affect work.**
- B. Existing conditions:
1. Building space directly under the roof area covered by this specification will be utilized for on-going operations. Do not interrupt the Tulsa Public Schools operations unless prior written approval is received from the Tulsa Public Schools.
 2. Access to the roof shall be from the exterior only. Air-conditioning units, wind screens and other equipment shall be moved as required to install roofing materials completely and in accordance with plans and specifications. When units and equipment are to be moved, they shall be carefully disconnected and removed to a protected area so as not to damage any part or component thereof and shall be reconnected in such a way that they are restored to a prior work operating condition. Appropriate measures shall be taken to prevent dust, vapors, gases, or odors from entering the building during roof removal, replacement, or repair.
 3. All disconnection and reconnection shall be performed by mechanical and/or electrical personnel provided by the roofing contractor.
 4. When wind or decorative screens are to be removed, the roof contractor is required to disassemble components and store them on protective plywood to be reinstalled once the new roof assembly has been completed. All components found deteriorated or otherwise damaged

- shall be replaced to provide appropriate support/bracing.
5. **All HVAC units with PVC condensate piping or missing piping shall be piped with ¾” galvanized piping with Tee overflow. Attached appropriately.**

C. Asbestos:

1. Roof Contractor agrees to exonerate, indemnify, defend, and hold harmless the Tulsa Public Schools and roofing material manufacturer from and against all claims, demands, lawsuits, damages, expenses, and losses incurred by Contractor's removal of asbestos-containing materials from Tulsa Public Schools buildings and work site. Roof Contractor must conduct its operations according to applicable requirements including but not limited to those established by:
 - a) Occupation Safety and Health Administration (OSHA).
 - b) Environmental Protection Agency (EPA).
 - c) Department of Transportation (DOT).
 - d) State or Local Air Pollution Control Authorities/Agencies.
 - e) State or Local Solid Waste or Hazardous Waste Authorities/Agencies.
 - f) State or Local Health Department(s).
 - g) State or Local Building Code Authorities.
 - h) Other federal, state, or local agencies or authorities.
2. Roof Contractor shall perform appropriate inspections, surveys, and file timely notifications to proper authorities prior to starting roof renovation or demolition activities. Inspectors, project planners, project managers, contractors and workers involved in the roof project shall have appropriate training, licenses, and registrations. Roof Contractor shall be responsible for determining and implementing regulatory compliance activities, including but not limited to work practices, engineering controls, personal protection, air monitoring, testing, hazard communication, material handling, record retention, and arranging for waste disposal/handling.
3. Roof Contractor must file a Uniform Hazardous Waste Manifest from proper landfill site for each load of asbestos containing material removed. Copies must be sent to the owner and material manufacturer/specifier. Transportation of waste shall be in accordance with applicable Department of Transportation (DOT) requirements.

D. Safety requirements:

1. All applications, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
2. Comply with federal, state, local and Tulsa Public Schools fire and safety requirements.
3. Advise the Tulsa Public Schools whenever work is expected to be hazardous to Tulsa Public Schools, employees, and/or operators.

4. Maintain a crewman as a floor area guard whenever roof decking is being repaired or replaced.
 5. Maintain fire extinguisher within easy access whenever power tools and torches are being used.
 6. Roof Contractor will post all notices, make all communications, and otherwise comply with California Proposition 65 requirements concerning notification of those who may be exposed to Prop 65 listed chemicals, as revised from time to time. Roof Contractor will also comply with other requirements concerning the safe use and handling of roofing materials, including preventing vapors from entering buildings.
- E. Waste Disposal:
1. Do not re-use, re-cycle or dispose of product containers except in accordance with all applicable regulations. The user of product containers is responsible for proper use and disposal of product containers.
- F. Environmental requirements:
1. Do not work in rain, snow, or in the presence of water.
 2. Do not work in temperatures below 40 F.
 3. Do not install materials marked "keep from freezing" when daily temperatures are scheduled to fall below 40 F.
 4. Do not perform masonry work below 40 F.
 5. Remove any work exposed to freezing.
 6. Advise the Tulsa Public Schools when volatile materials are to be used near air ventilation intakes so that they can be shut down or blocked as required.
- G. Temporary sanitary facilities:
1. Furnish, install, and maintain temporary sanitary facilities for employees' use during project. Remove on project completion.
 2. Place portable toilets in conformance with applicable laws, codes, and regulations.

1.10 UNIT PRICES

- A. Quote unit prices on Unit Price Sheet provided as follows:
1. Steel Deck Repairs - \$/sq. ft.
 2. Steel Deck Overlayment - \$/sq. ft.
 2. Steel Deck Replacement - \$/sq. ft.
 2. Wood blocking replacement - 2' X 4' \$/linear ft.
2' X 6' \$/linear ft.
 3. New drain installation and lineal foot cost for piping.
 4. Lightweight Concrete/Gypsum Deck repair: \$/sq. ft. per 1".
 5. Any additional wet insulation found during the removal process: \$/sq. ft.

5. Repair and reinforce insulation fatigue joints: \$/linear foot.

1.11 WARRANTY/PREVENTATIVE MAINTENANCE SERVICE AGREEMENT

A. Warranty:

1. Upon project completion, and Tulsa Public Schools inspections and restoration/replacement system manufacturer acceptance, Manufacturer shall provide a Twenty (20) year Quality Assurance Warranty on the Roof Section designated for Roof Replacement (Historic Element Roof Section A), and Ten (10) year Quality Assurance Warranty on Roof Sections designated for Roof Restoration (Booker T. Washington High School Roof Sections B & C, Will Rogers Field House Roof Sections A, B, C, D, E, F, Burroughs Elementary Roof Sections A, B, D, E, and Historic Element Roof Sections B & C.).
2. The Manufacturer shall also provide a Ten (10) year roof maintenance service agreement program on the Booker T. Washington High School & Historic Element, Burroughs Elementary School, and Will Rogers Field House completed roof sections included in this project. Burroughs Elementary Roof Section C is to be included in 10-year roof maintenance service agreement program. Roof maintenance program shall cover yearly inspections, proactive preventative maintenance, and housekeeping of the roofs as well as a 24 hour a day leak reporting response and tracking service. The specific areas covered shall be as follows:
 - a. Roof Inspection includes:
 1. Visual inspection of the roof membrane and roof surface conditions.
 2. Inspection of the flashing systems including the metal edges, base flashings on equipment and adjoining walls, counterflashing's and termination details, soil stacks and vents, and inspections of rooftop projections and equipment including, pitch pans, HVAC equipment and access hatches.
 3. Roof manufacturer shall provide reports from these roof inspections. The reports shall become part of the roof database maintained on the roof system. This database shall be updated after each inspection.
 - b. Preventative Roof Maintenance Services shall include:
 1. Metal edge components – tears, splits and breaks in roof membrane flashings will be repaired with appropriate repair mastics and membranes.
 2. Tears and splits in flashing membrane will be repaired with appropriate repair mastics and membranes. Unsecured rooftop equipment will be secured. Exposed fasteners will be sealed. Termination bars and counterflashing's will be

- sealed.
3. Roof membrane repairs shall consist of tears, breaks, and splits in the flashing membrane. All splits and blisters which threaten the roof integrity of the roof membrane will be cleaned, primed, and repaired with appropriate repair materials. Metal projections (hoods and clamps) will be sealed.
- c. Housekeeping shall include:
 1. Removal of incidental debris (i.e., leaves, branches, paper, and similar items).
 2. Removal of debris from roof drains, scuppers, gutters, and downspouts.
 - d. Leak response service shall include:
 1. 24 hour a day toll free leak response phone number.
 2. List of local and qualified roof contractors who will respond to leaks within established timelines.
 3. Roof Manufacturer shall provide quarterly leak reports of leak activity in calendar quarters where leaks have occurred.
 - e. Web-based Information Management System:
 1. To manage roofing assets, the roof system manufacturer shall provide to the Tulsa Public Schools a web-based computerized data management program to monitor all yearly roof inspections, completed maintenance and leak reports, review specifications, drawings, and photographs. Data will always be available in a secure, password-protected environment.

PART II - PRODUCTS

2.01 GENERAL

- A. Comply with quality control, references, specifications, and manufacturer's data. **PRODUCTS CONTAINING ASBESTOS ARE PROHIBITED ON THIS PROJECT. USE ONLY ASBESTOS-FREE PRODUCTS.**
- B. Use products with personal protection. Users must read container labels and material safety data sheets prior to use.

2.02 WOOD BLOCKING & CURBS

- A. Lumber:
 1. Southern Pine; No. 2 grade; free from warping and visible decay; pressure-treated with alkaline copper quaternary (ACQ) to meet AWPB, LP-22, 0.40 retention, and marked.

2.03 INSULATION

- A. Overlay insulation board:
 - 1. Overlay insulation board:
Top Layer: ASTM C208 cellulosic fiber and water resistant binders, Six (6) sided asphalt impregnated, chemically treated for deterioration and manufactured by GAF, Celotex Blue Ridge or approved equal.
Thickness: ½”.

- B. Bottom Layer insulation board:
 - 1. Class 1 Polyisocyanurate insulation with organic/fiberglass facer.
 - 2. Manufactured by Johns Manville, Atlas Energy or approved equal.
Burroughs Elementary Section D Wet Area: Match existing thickness.
Historic Element Roof Section A: Insulation Thickness: Average R-20
 - a) Historic Element Roof Section A to have ¼” tapered insulation

- C. Wet Insulation designated by Infra-red Scan. See below for roof section, deck type and insulation thickness.
BURROUGHS ELEMENTARY
 - a. **Section: D**
Metal Deck
Bottom Layer: 2” ISO
Top Layer: ½” Wood Fiber

2.04 MECHANICAL FASTENERS

- A. Wood to wood:
 - 1. Galvanized, common, annular ring nail.
 - 2. Length: Sufficient to penetrate underlay blocking 1-1/4 inches.

- B. Wood to masonry:
 - 1. Anchor bolts, 1/2-inch diameter with 5/8-inch washer.

- C. Galvanized sheet steel to wood blocking:
 - 1. Type II, Style 20, roofing nails, galvanized steel wire, flat head, diamond point, round, barbed shank.
 - 2. Length: Sufficient to penetrate wood blocking 1-1/4 inches minimum.

- D. Drawband:
 - 1. Gold Seal stainless steel worm gear clamp by Murray Corporation, Cockeysville, MD.
 - 2. Power-Seal stainless steel worm drive clamps by Breeze Clamp Company, Saltsburg, PA.

- E. Lightweight Concrete Fasteners:
 - 1. Twin-lok with disc (max length 1.5”) by Olympic Fasteners.

2.05 ROOFING MATERIALS

- A. Adhesives:
 - 1. Interply adhesive:
 - a) BURmastic cold process adhesive by Tremco or approved equal.

- B. Base sheet and roofing plies:
 - 1. Polyester/Fiberglass Mat/Polyester Trilaminate reinforced high strength ply sheet manufactured by Tremco or approved equal.

- C. TRA Elastomeric Sheeting:
 - 1. 45 mil reinforced EPDM/SBR sheeting.

- D. Restoration Coating:
 - 1. Ecolastic water-based restoration coating for the use with asphalt bitumen and modified roofs by Tremco or approved equal.

- E. Roof Replacement Interply Adhesive and Flood Coat:
 - 1. BURmastic cold process adhesive by Tremco or approved equal.

- F. Related materials:
 - 1. Asphalt mastic:
 - a) ASTM D 4586-86 fibrated asphalt mastic.
 - 2. Asphalt primer:
 - a) ASTM D 41-85.
 - 3. Cant strip:
 - a) ASTM C 208-72 (1982), impregnated fiberboard.
 - 4. Flashing bitumen:
 - a) ELS mastic asphalt.
 - 6. Flashing surfacing:
 - a) Ready-mixed aluminum coating.
 - 7. Flashing membrane:
 - a) 45 Mil TRA elastomeric Sheeting.
 - 9. Pitch pan cement:
 - a) ASTM C 928-89, rapid hardening non shrink grout.
 - 10. Pitch pan mastic:
 - a) ASTM D 4586-86 fibrated asphalt mastic.
 - 11. Roofing aggregate:
 - a) Hard, durable, opaque; washed free of clay, loam, sand, or other foreign substances.
 - b) Do not use: Crushed gravel, white dolomite (marble chips), Joplin chats, scoria, limestone, volcanic rock, crushed oyster and clam shells, crushed brick tile, or cinders.
 - c) ASTM D 1863-86, size six (6).
 - 12. Sealants:
 - a) Draw band sealant:
 - (1) FS TT-S-00230C (2), single component, acrylic sealant.

13. Walkway panels:
 - a) Three (3) ft. by four (4) ft., granule surfaced, fiberglass reinforced panel.
14. Expansion Joint Sheeting:
 - a) 45 mil TRA polyester reinforced flashing membrane by Tremco or approved equal.
15. TRA Sheeting adhesive:
 - a) Black elastomeric sheeting adhesive by Tremco or approved equal.
16. Insulation Adhesive:
 - a). Expandable Foam insulation adhesive by Tremco or approved equal.

2.06 METAL FLASHINGS

- A. Termination bar:
 1. ASTM B 2221-85a - aluminum bar:
 - a) 3/16 x 1 inch.
- B. Perimeter Metal Edge and Ledge, Parapet Coping Covers, Conductor Heads, Gutters, Downspouts:
 1. Pre-painted Galvanized Steel: ASTM A 526-85, sheet steel with 1.25 oz./sq. galvanized coating.
 - a) Gage: Twenty-four (24).
 2. Paint finish at exposed sides: Factory baked-on two (2) coat system comprised of One (1) coat of full 70% resin fluorocarbon (polyvinylidene fluoride PV2) by Kynar 500 or approved equal.
 3. Install commercial grade metal leaf and debris screens at gutters secured with set screws installed at 12" o.c.
 4. Provide overflow outlets at all new conductor head locations. Overflow openings shall follow the current local plumbing code.
- C. Metal Counterflashing and Scupper Inserts:
 1. Galvanized Steel: ASTM A 526-85, sheet steel with 1.25 oz./sq. galvanized coating.
 - a) Gage: Twenty-four (24).
 - b) Solder: ASTM B32-89, alloy grade 50A. Neutralize flux after soldering.
 2. All seams and joints of scupper inserts shall be either soldered or a hem interlock break installed in accordance with the manufacturer's roof detail drawings.
- D. Pitch pans with hood:
 1. Galvanized Steel: ASTM A 526-85, sheet steel with 1.25 oz./sq. galvanized coating.
 - a) Gage: Twenty-four (24).
 - b) Solder: ASTM B32-89, alloy grade 50A. Neutralize flux after

- soldering.
2. All seams and joints shall be either soldered or a hem interlock break installed in accordance with the manufacturer's roof detail drawings.
- E. Piping through roof box:
1. Galvanized Steel: ASTM A 526-85, sheet steel with 1.25 oz./sq. galvanized coating.
 - a) Gage: Twenty-four (24).
 - b) Solder: ASTM B32-89, alloy grade 50A. Neutralize flux after soldering.
- F. Drains:
1. Roof drains shall be 4" and attached to existing drain piping with Tyler no-hub clamp.
 2. All drain components shall be cast iron. Including drain body, clamping ring, underdeck clamp and strainer.
 1. Acceptable manufacturers:
 - a) Donovan Manufacturing Co., North Reading, MA.
 - b) Josam Manufacturing Co., Michigan City, IN.
 - c) Smith Manufacturing Co., Inc., Montgomery, AL.
 - d) Tyler Pipe, Tyler, TX.
 - e) Zurn Industries, Inc., Erie, PA.
- G. Lead Flashings:
1. ASTM B 29-79(1984), four (4) lb. sheet lead.
- H. Work shall be in accordance with Architectural Sheet Metal Manual, as issued by Sheet Metal and Air Conditioning Contractors' National Association, Inc., (SMACNA).

2.07 ROOF SYSTEM PERFORMANCE REQUIREMENTS:

A. THREE-PLY ROOFING SYSTEM CONSISTING OF THREE-PLIES OF POLYESTER/FIBERGLASS MAT/POLYESTER TRILAMINATE REINFORCED HIGH STRENGTH BASE PLIES WITH COLD PROCESS INTERPLY ADHESIVE

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Tensile Strength	495.1 lbf/in MD 386.2 lbf/in XMD	ASTM D 2523
Elongation	3.9% MD 3.5% XMD	ASTM D 2523

B. POLYESTER/FIBERGLASS MAT/POLYESTER TRILAMINATE REINFORCED HIGH STRENGTH BASE PLY

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Thickness	.055 in (1.2mm)	ASTM D 5147-97
Weight	38 lb/100 ft ²	ASTM D 5147
Breaking strength	145 lbf/in MD 135 lbf/in XD	ASTM D 5147
Pliability, 1/2 in. radius bend	No failures	ASTM D 146-78a (1986)
Mass of desaturated polyester/glass mat, min	3.5 lb/100 ft ²	ASTM D 228-78a (1986)
Tear strength	225 lbf MD 190 lbf XMD	ASTM D 5147
Asphalt	10.0 lb/100 ft ²	ASTM D 228-69 (1978)

C. FIBRATED ASPHALT MASTIC

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Asbestos content	None	ASTM D 276-87
Viscosity @ 77 F	480,000 - 1,000,000 cP	ASTM D 2196-86
Density @ 77 F	9.3 lb/gal	ASTM D 1475-85
Nonvolatile Matter	80%	ASTM D 4586-86
Behavior at 140 degrees F.		

D. TRA ELASTOMERIC FLASHING MEMBRANE

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Thickness	0.045 MIL	ASTM D 2136
Breaking strength	261 lbf/in. MD 150 lbf/in. XMD	ASTM D 751
Tear Strength	94 lbf 59 lbf XMD	ASTM D 751

E. BURMASTIC COLD PROCESS INTERPLY ADHESIVE

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Asbestos content	None	EPA 600/R-93/11 6
Viscosity @ 25 deg. C.	25 – 75 Pa s	ASTM D2196
Density @ 25 deg. C	7.2-7.6 lbs/gal	ASTM D6511
Nonvolatile Matter	72%	ASTM D6511

PART III - EXECUTION

3.01 EXAMINATION

- A. Verify conditions as satisfactory to receive work.
- B. Do not begin roofing until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.
- C. Verify that work of other trades penetrating roof deck or requiring men and equipment to traverse roof deck has been approved by the Tulsa Public Schools, roof manufacturer, and roofing contractor.
- D. Check projections, curbs, and deck for inadequate anchorage, foreign material, moisture, or unevenness that would prevent the quality and execution of the new roofing system.

3.02 GENERAL WORKMANSHIP

- A. Substrate: Free of foreign particles prior to laying roof membrane.
- B. Phased application: Not permitted. All plies shall be completed each day.
- C. Traffic and equipment: Kept off completed plies until adhesive has set.
- D. Wrapper and packaging materials: Not to be included in roofing system.
- E. Entrapped aggregate: Not permitted within new membrane. Its discovery is sufficient cause for rejection.
- F. Ply shall never touch ply, even at roof edges, laps, tapered edge strips, and cants.
- G. Fit plies into roof drain rims; install lead flashing and finishing plies; secure clamping collars; install domes.
- H. Extend roofing membrane to top edge of cant at wall and projection bases.
- I. Cut out fishmouths/side laps which are not completely sealed, patch. Replace all sheets which are not fully and continuously bonded.
- J. Cold Process Tanker: Free of contaminants.
- K. Application rates: Bitumen quantities for waterstop/tie-offs, flashings, miscellaneous detail applications, and minimum kettle capacity are not included in application rates. To account for these factors, add approximately twenty-five (25) percent additional bitumen on a total-job average basis.

- L. Mechanical fasteners:
 1. Seated firmly in discs with fastener heads flush or below disc's top surface.

- M. Length: Sufficient to accommodate roof insulation thickness and engage steel deck 3/4 inch.

- N. Insulation:
 1. Install insulation boards in courses parallel to roof edges mopping surface up.
 - a) Firmly butt each insulation board to surrounding boards. Do not jam or deform boards.
 - b) Eliminate open joints and uneven surfaces.
 2. Maximum insulation gap: 1/4 inch.
 3. Fill insulation board joint gaps larger than 1/4 inch with roof insulation.
 4. Maximum elevation variation between boards at joints: 1/8 inch.
 5. Cut and fit insulation boards where roof deck intersects vertical surfaces. Cut the board 1/4 inch from vertical surface.
 6. Stagger joints at least six (6) inches.
 7. Filler size: Eighteen (18) inches in length or width, minimum.

- O. Insulation: Form continuous insulation joints over deck flange. Do not cantilever insulation edges over deck ribs. Minimum bearing surface: 1-1/2 inches.

3.03 PREPARATION

- A. Protection:
 1. The Roof Contractor shall be responsible for the protection of property during the course of work. Lawns, shrubbery, paved areas, and buildings shall be protected from damage. Repair damage at no extra cost to the Tulsa Public Schools.
 2. Provide at jobsite prior to commencing removal of debris, a dumpster or dump truck to be located adjacent to building directed by the Tulsa Public Schools. Where roof elevations extend beyond two stories, roof contractors shall construct an enclosed chute from roof for removal of debris from roof area. Roof contractors shall protect building surfaces at chute/set-up areas with tarpaulin. Secure tarpaulin appropriately to ensure the tarp remains in place throughout project progress. Remove dumpster from premises when full and empty at approved dumping or refuse area. Deliver dumpster to site for further use. Upon job completion, dumpster/chute shall be removed from premises. Spilled or scattered debris shall be cleaned up immediately. Removed material to be disposed from roof as it accumulates.

3. Roofing, flashings, membrane repairs, and insulation shall be installed and sealed in a watertight manner on the same day of installation or before arrival of inclement weather.
4. At the start of each workday drains within the daily work area shall be plugged. Plugs are to be removed at the end of each workday or before the arrival of inclement weather.
5. Preparation work shall be limited to those areas that can be covered with installed roofing material on the same day and before the arrival of inclement weather.
6. Arrange work sequence to avoid use of newly constructed roofing for storage, walking surface, and equipment movement. Move equipment and ground storage areas as work progresses.
7. Protect building surfaces at chute/set-up areas with tarpaulin. Secure tarpaulin. Remove dumpster from premises when full and empty at approved dumping or refuse area. Deliver empty dumpster to site for further use. Upon job completion, the dumpster shall be removed from the premises. Spilled or scattered debris shall be cleaned-up immediately. Removed material to be disposed from roof as it accumulates.
8. At the end of each working day, removal areas shall be sealed with water stops along edges to prevent water entry.
9. Provide clean plywood walkways and take other precautions required to prevent tracking of aggregate/debris from existing membrane into new work area where aggregate/debris pieces can be trapped within new roofing membrane. Contractor shall instruct and police workmen to ensure that aggregate/debris is not tracked into new work areas on workmen's shoes or equipment wheels. Discovery of entrapped aggregate/debris within new membrane is sufficient cause for its rejection.

B. Surface Preparation: Roof Restoration

Wet Insulation Removal (Burroughs Section D):

1. Remove: Where designated by marking paint remove wet insulation discovered by infra-red roof scan conducted by roofing system manufacturer.
2. Remove all dirt, loose aggregate, and asphalt bitumen etc., using a industrial vacuum. Dispose of debris appropriately.
3. Unused skylights and equipment.
4. Abolished skylights and equipment will be marked with colored marking paint and designated during the pre-bid meeting.
5. If applicable, add new drains, where designated.

3.04 CARPENTRY

A. Roof edge:

1. Mechanically attach new wood blocking, where required to equal final insulation thickness along perimeter edge of roof sections

- designated on roof drawing. Offset blocking layers twelve (12) inches, weave corners.
2. Install wood blocking and secure to existing wood blocking with fasteners spaced at twelve (12) inches o.c. staggered.
- B. Low Profile Expansion Joint (If Applicable):
1. Mechanically attach 2 - 2 X 4 wood blocking horizontal to opening. Fasteners shall be installed in two (2) rows staggered. Spacing in anyone (1) row shall not exceed twenty-four (24) inches.

3.05 THERMAL INSULATION

- A. Insulation System (**Historic Element Roof Section A**):
1. Install tapered insulation system in ribbon applications of insulation adhesive as specified. Set boards in bead applied insulation adhesive at the rate of 1.5 gallons or 0.3 gallons per 100 sq. ft., spaced at no more than 12" O.C. within the field of the roof, no more than 6" O.C. within the roof perimeter zone, and no more than 4" O.C. within all corners. Walk boards immediately into adhesive.
 2. Ensure the insulation board joints are staggered a minimum of six (6) inches.
 3. Install ½" tapered crickets and saddles at building corners, between scuppers, high sides of curbs etc., to minimize ponding water conditions. Maintain positive drainage.
- B. Overlayment Installation:
1. Set the specified ½" cover board in ribbon applications of insulation adhesive at the rate of 1.5 gallons or 0.3 gallons per 100 sq. ft. spaced at no more than 12" O.C. within the field of the roof, no more than 6" O.C. within the roof perimeter zone, and no more than 4" O.C. within all corners. Ensure insulation board joints are staggered a minimum of six (6) inches and immediately walk insulation boards into adhesive to ensure complete bond.

3.06 ROOF SYSTEM APPLICATION

- A. Historical Element Roof Section A Replacement: Remove the existing BUR system down to the gypsum deck. Repair any wet or damaged gypsum deck (if applicable) with Securock Gypsum-Concrete Patch or approved equal. Allow the specified time per the manufacturer's guidelines for gypsum repairs to thoroughly dry before installing specified roof system. Nail and secure base sheet through gypsum deck by securing twin lok fasteners 7.5" on the edge of the base sheet and two (2) rows staggered 18" O.C. Ensure fastener head and disc is flush with base sheet. Install ¼" tapered average R-20 insulation and 1/2" cover board in insulation

adhesive as specified. **Contractor to provide tapered layout prior to start of the project.** Apply three-ply of Polyester/Fiberglass Mat/Polyester Trilaminate reinforced high strength ply sheet as specified. Place ply sheets to ensure water will flow over parallel to; but, never against exposed edges.

- B. Burroughs Elementary Roof Section D: after identified wet insulation is removed, replace with dry insulation to match existing thickness. Mechanically attach to steel decking at the rate of One (1) fastener every two (2) sq. ft. Install 50% additional fasteners along perimeter edge and 100% additional along building corners and ensure insulation board is firm under foot. Install ½” cover board in insulation adhesive as specified. Apply three-ply of Polyester/Fiberglass Mat/Polyester Trilaminate reinforced high strength ply sheet as specified. Place ply sheets to ensure water will flow over parallel to; but, never against exposed edges.
- C. Immediately after installation, broom and/or roll ply sheet. Ensure continuous seal and contact between adhesive and felts, including ends, edges, and laps without wrinkles, fish mouths or blisters.
- D. Apply uniform and continuous pressure to exposed edges and end laps to ensure complete adhesion.
- E. Avoid walking on plies until adhesive has set.
- F. Overlap previous day’s work. Provide headers where new roof membrane terminates to the previous day’s work.
- G. Lap ply membrane ends four (4) inches. Stagger end laps three (3) feet minimum.
 - 1. Embed each ply in a uniform and continuous application of interply cold processed adhesive. Interply application Rate: 2 gallons per 100 sq. ft.
 - 2. Apply flood coat of cold processed adhesive as specified at 5 gallons per 100 sq. ft. Broadcast new clean aggregate as specified at a rate of 500 lbs per 100 sq. ft.
- H. Historic Element Roof Section A: Salvage existing coping metal and downspouts. Remove and replace scuppers. Scuppers shall have soldered corners and edges. Drip edge to be hemmed at 45-degree angle. Ensure that there is no build up and water can drain through the scupper. Along South Perimeter, salvage existing reglet joint counterflashing. Remove existing sealant above counterflashing and reseal using sealant as specified. Tool neatly. After flashing installation, install new skirt metal underneath reglet joint counterflashing. Fasten 8” O.C. Where wall panels

exist, remove counterflashing and replace with new counterflashing. At HVAC curbs, cut corners, fold back, and install new corner enclosure details after installing new flashings. Seal corner enclosure details.

3.07 FLASHINGS

A. General flashing requirements:

1. TRA Flashing (All Roof Sections):
 - a) Adhere one (1) ply flashing ply to flashing substrate in a continuous application of flashing bitumen. At Roof Restoration Sections, prime existing flashing substrate prior to installing new flashing ply as specified. Remove wrinkles and voids. Overlap sections four (4) inches.
 - b) Extend flashing ply four (4) inches beyond toe of cant.
 - c) Cut elastomeric flashing sheeting in lengths not to exceed ten (10) feet. Apply sheeting bond adhesive sheeting ply in a continuous 1/16-inch-thick application. Adhere sheeting membrane to bonding adhesive. Lap flashing membrane ends four (4) inches; extend membrane six (6) inches beyond toe of cant; press sheet firmly in place. Ensure complete bond and continuity without wrinkles or voids. Adhere laps with flashing bitumen. Seal vertical laps and base of sheeting membrane with two (2) plies of reinforcing membrane embedded between alternate continuous courses of asphalt mastic.
 - d) Burroughs Elementary: At Roof Section E raised area next to metal screen along South and West Perimeters, scratch 12” on each side and flash with flashing membrane as specified.
2. Base flashing height:
 - a) **Not less than eight (8) inches.**
 - b) Booker T. Washington: At Roof Section C, Where new coping metal is to be installed on North, East, and South Perimeters, run flashing membrane up to top edge of coping.
 - c) Historic Element: At Roof Section A, run flashing membrane up to top edge of coping at all areas except where counterflashing is to be salvaged and where metal wall panels exist.
 - d) Two-Ply Stripping:
 - e) Set flange in asphalt mastic. Seal flange with two (2) plies of trilaminate high strength roofing ply embedded between alternate applications of asphalt mastic. Extend first ply four (4) inches beyond flange; second ply two (2) inches beyond first ply.

3.08 ROOF RESTORATION REPAIRS:

- A. Industrial Power Vacuum Roof Surface:
 - 1. Remove all loose dirt, aggregate, sediment etc., from roof surface using an industrial power vacuum.

- B. At Wall and Curb Flashing:
 - 1. Where applicable, remove loose and delaminated flashing membrane and repair utilizing matching material. Prime flashing surface with asphalt primer and allow to dry tack free.
 - 2. Remove aggregate a minimum of 18" beyond toe of cant. Ensure dirt, dust etc., is removed to promote bonding of mastic.
 - 3. Install elastomeric flashing sheeting in sheeting bond adhesive. Five (5) course vertical laps and toe of cant in asphalt mastic and membrane applied in alternate applications.
 - 4. Allow surface to cure and wait 45 days prior to the application of one (1) coat of the specified aluminum coating.
 - 5. Remove and replace all inappropriately fabricated and installed metal counterflashing and replace with specified metal detail.

- C. Perimeter Metal, Wall Panels, & Counterflashing
 - 1. Booker T. Washington High School:
 - a) At Roof Section C, along West Perimeter, install new skirt metal underneath ledge metal. Fasten 8" O.C. Color match existing wall and ledge metal. Along Southwest perimeter with existing wall panels, remove counterflashing and replace with new counterflashing. Southwest perimeter coping metal and metal wall panels are to be salvaged. Along South, East, North, and Northwest Perimeter, remove existing coping metal and replace with new coping metal. Install 20 ga. continuous cleat fastened 8" O.C. New coping metal is to match existing style and configuration of coping metal on West Perimeter. Install vinyl barrier over coping where new coping metal is to be installed. Fasten to perimeter side of coping wood nailer. At Northwest Perimeter with walls facing East, South, and West, install metal wall panels with hat channels and associated trim pieces. Match wall panel colors with existing wall panels located on Southwest Perimeter wall. Maintain 18" flashing height where wall panels are to be installed. Replace all overflow scuppers.
 - b) At Roof Section B, salvage perimeter coping metal. At coping metal lap seams and tie-ins, remove existing sealant (if applicable) and clean with a wire brush and reseal with sealant as specified. Tool neatly. Replace existing counterflashing and install new counterflashing.

2. Will Rogers Field House:
 - a) At all reglet joint counterflashing, remove caulking above reglet joint counterflashing and reseal using sealant as specified. Tool neatly. Install new skirt metal underneath reglet joint counterflashing. Fasten 8" O.C.
 - b) At Roof Section A, along the North perimeter, remove existing counterflashing and install new counterflashing. Color match existing wall panels.
 - c) At all other perimeter locations where wall panels exist, install new skirt metal underneath existing counterflashing. Fasten 8" O.C. Color match existing wall panels.
 - d) At roof section C, along East masonry wall, remove bottom slip metal counterflashing and install new counterflashing. Seal top of new counterflashing with sealant as specified. Tool neatly.
 - e) At Roof Sections D, E, and F, remove existing two-piece counterflashing and replace with new two-piece counterflashing. Seal top piece of counterflashing with sealant as specified. Tool neatly. Remove and replace existing perimeter coping metal. Match existing color. Coping metal is to be 24 ga. pre-finished. Run flashing membrane over coping and fasten to perimeter of coping wood nailer prior to installing new perimeter coping metal.
3. Burroughs Elementary:
 - a) At Roof Section D, replace existing perimeter metal with pre-finished 24 ga. metal. Color of perimeter metal is to color match existing metal roof panels. Install new eyebrow scuppers to match locations of existing eyebrow scuppers. Put a hem around edges of eyebrow scupper.
 - b) At Roof Section E, install new "L" metal underneath counterflashing to cover brick masonry wall. At perimeter metal tie-in, clean metal and paint to match color of existing roof panels. At existing slip metal at Southeast corner of metal screen, slide skirt metal underneath existing slip metal. Fasten 8" O.C. Remove and replace all gas line pitch pans with metal hood.
 - c) At Roof Section B, apply corner cap enclosure detail to curb after installing new flashings as specified. Seal enclosure details after installation. After priming and installing new flashings at North Perimeter, install new slip metal underneath metal roof panels.
 - d) At Roof Section A, remove existing gutter and downspouts. Fabricate and install new pre-finished commercial gutter and downspout with leaf screen and elbow. Grind vertical and horizontal gutter lap seams, prime, and apply PUMA Base and Top Coat. Remove existing skirt metal and install

new skirt metal around North and East perimeters. Fasten 8" O.C.

- D. At blisters and/or delamination's:
1. Cut away delaminated felts until firmly laminated felts exist along every area to be repaired.
 2. Remove embedded gravel, debris and dust from areas extending a minimum of 18 inches beyond perimeter of depressed area. Square corners. Ensure the area is dry.
 3. Fill depression with alternate layers of asphalt mastic in reinforcing membrane. Match number of plies removed.
 4. Cover layers of mastic/membrane with two (2) layers of reinforcing membrane (one (1) layer of 6 inch and one (1) layer of 12 inch) embedded between trowel applications of asphalt mastic.
 5. Extend repair area at least six (6) inches beyond filled depression. Overlap reinforcing mesh at least two (2) inches. Cover mesh completely with asphalt mastic.
- E. At plumbing vents:
1. Remove embedded aggregate and bitumen from around periphery of plumbing stack.
 2. Trowel asphalt mastic to roof surface in alternate layers of (6" - 12") reinforcing membrane.
 3. Replace cracked lead jacs. Install integral lead cap, where required.
 4. Replace with 4lb. lead flashing, where required.
- F. At roof drains:
1. Prepare roof surface with 36-inch radius of drain. Remove embedded aggregate and bitumen.
 2. Install tapered roof saddles between drains to divert water to drainage sumps. Two (2) ply saddles with composite ply HT and cold process adhesive.
 3. Remove drain flashing collar, where appropriate. Where drain collars, ladder clamps, bolts are found broken or missing, replace with matching component.
 4. Remove dust and dirt and prime the surface with asphalt primer.
 5. Embed two (2) plies of reinforcing membrane (6"-12") in alternate applications of asphalt mastic.
 6. Reinstall collar and secure appropriately.
 7. Cut and remove excess membrane within drain opening.
 8. Remove and replace all drain screens with commercial grade screens installed and secured appropriately.
- G. At perimeter gravel stop assembly:
1. Remove embedded aggregate/asphalt bitumen surfacing a minimum of 18" onto roof surface. Cut back existing stripping

- plies from flange of metal edge a minimum of 3". Clean metal flange and follow flashing requirement below.
2. Install new flashing, if defective, corroded or otherwise unable to be salvaged.
 3. Ensure flange is secured at 3" o.c., staggered with the appropriate roofing nail.
 4. Five (5) course flange of metal assembly with (6") reinforcing membrane set between layers of asphalt mastic. Ensure weave is embedded. Install 12" composite ply in asphalt mastic. Roll in composite ply into mastic for an immediate bond.
 5. Burroughs Elementary: At Roof Section E, salvage perimeter gravel stop at South and West Perimeter.
 5. On roofs associated with this project, where gutters exist, clean gutter laps thoroughly of all existing sealants or coatings from surface. grind surface clean to primer and then apply AG Puma as specified to surface. Seal vertical and horizontal laps. Install new commercial grade gutter screens.
- H. At expansion joints (if applicable):
1. Remove existing aggregate/bitumen from along flange of expansion joint a minimum of 18". Reattach metal flange where fasteners are found to be protruding through stripping plies.
 2. Remove all dirt and debris and prime the surface with an asphalt primer.
 3. Over prepared surface install TRA reinforced sheeting over existing expansion joint in the specified sheeting adhesive. Extend TRA sheeting a minimum of 8" beyond transition of existing expansion joint cover.
 4. Overlap end laps a minimum of eight (8) inches and seal with sheeting adhesive and 6" TRA sheeting membrane.
 5. Seal sheeting edges with two (2) plies of reinforcing membrane set in alternate applications of asphalt mastic. Embed weave completely.
- I. At pitch pans:
1. Remove all existing pitch pans and fabricate and install new pans with hoods and collars. Nail flange appropriately, where required.
 2. Seal flange of pitch pan with five (5) course method.
 3. Fill the pitch pan with specified asphalt mastic to provide watershed.
 4. Fabricate and install sheet metal hood and secure appropriately.
 5. Burroughs Elementary: At Roof Section E, At all metal screen vertical supports on West and South perimeter, install new pitch pans with hood. Fill with non-shrink grout.
- J. At pipe stands and equipment runners:

1. All gas lines greater than 3" shall be resting on 10" X 10" X ¼" steel plating buffered by a protection pad. Install new 4" X 4" pressure treated wood blocking in asphalt mastic and space 5' o.c. Strap piping appropriately. Steel plating shall extend a minimum of 2" beyond the periphery of the wood blocking.
2. Remaining piping smaller than 3" shall be resting on 4" x 4" pressure treated wood blocking and set on new protection pad in asphalt mastic. Rest piping on wood blocking and strap appropriately.
3. Clean existing mastics, asphalt etc., from piping and apply safety yellow paint.

K. Walkways:

1. Remove existing walkway landings and repair membrane appropriately to match existing ply configuration. Install new walkway landings along the working sides of mechanical equipment and at access ladders and hatches.

L. At HVAC Units:

1. All existing HVAC condensate lines shall be piped with 3/4" galvanized steel piping with Tee overflow. Attach appropriately.

M. At Insulation joints: **(Fatigued Joints)**

1. Where designated, remove asphalt flood coat and aggregate from along the periphery of the fatigued insulation joint. Extend this repair to a minimum of 12" beyond each end of repair. Prime surface and install three (3) plies utilizing a 4", 6" and 12" of composite ply HT set in alternate applications of cold process adhesive as specified.

3.09 SURFACING TREATMENT ON FLASHING

- A. Over prepared restoration surfacing, apply one (1) coat of the specified aluminum reflective coating to flashing surfaces, expansion joints, drain domes, plumbing vents, galvanized vent stacks, pitch pans and walk protection landings at an approximate rate of 120 sq. ft. per gallon.

3.10 SURFACING APPLICATION

A. Restoration Final Flood Coat Surfacing:

1. Prior to the application of the surface treatment system, roof contractors shall inspect the roof with the manufacturer's representative. All deficiencies found during this inspection shall be repaired immediately prior to this roof area being accepted.
2. Burroughs Elementary: At Roof Section B, at weathered ply on Southeast Perimeter, scratch gravel back over deteriorated area and apply one (1) ply of specified ply sheet in cold process adhesive.
2. Over the entire roof surface apply a uniform and continuous flood

coat of Ecolastic cold process adhesive at a rate of 7.5 gallons per 100 sq. ft. **NOTE:** Roof sections designated to have wet insulation removed, scratched and three (3) plied shall have the restoration coating applied at 7.5 gallons per square and aggregate imbedded, as specified.

3. Immediately broadcast minimum 500 lbs. of new, clean roofing aggregate per 100 sq. ft. Cover flood coat material completely. Provide additional pours of restoration coating and aggregate to provide for positive drainage.

3.11 WALKWAYS

- A. Install new walkway panels around access doors, ladders and working sides of mechanical equipment. Set landings in solid applications of cold process adhesive.

3.12 ADJUSTING AND CLEANING

- A. Repair of deficiencies:
 1. Installations of details noted as deficient during Final inspection must be repaired and corrected by applicator, and made ready for re-inspection, within five (5) working days.
- B. Clean-up:
 1. Immediately upon job completion, roof membrane and flashing surfaces shall be cleaned of debris.
 2. Clean drains, scuppers, downspouts etc., of all debris and ensure they are free flowing.
 3. Remove all loose trash and debris from surrounding building grounds. Correct grounds around staging area by filling with dirt, packing and spreading neatly.

ROOF DIAGNOSTIC SURVEY FOR TULSA PUBLIC SCHOOLS

TULSA, OKLAHOMA 74106/ 74112

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DRAWINGS

TITLE PAGE	
SHEET A1	BOOKER T. WASHINGTON HIGH-COMPOSITE ROOF PLAN
SHEET A	BOOKER T. WASHINGTON HIGH-MOISTURE SURVEY
SHEET B	BOOKER T. WASHINGTON HIGH-MOISTURE SURVEY
SHEET C	BOOKER T. WASHINGTON HIGH-WET DIMENSIONS & SQ.FT.
SHEET D	BOOKER T. WASHINGTON HIGH-ROOF DATA, THERMOGRAMS, PHOTOS & CORE CUT PHOTOS
SHEET E	BURROUGHS ELEMENTARY-MOISTURE SURVEY
SHEET F	BURROUGHS ELEMENTARY-ROOF DATA, THERMOGRAMS, PHOTOS & CORE CUT PHOTOS
SHEET G	WILL ROGERS FIELD HOUSE-MOISTURE SURVEY
SHEET H	WILL ROGERS FIELD HOUSE-ROOF DATA, THERMOGRAMS, PHOTOS & CORE CUT PHOTOS



BOOKER T. WASHINGTON HIGH SCHOOL

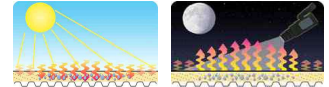


BURROUGHS ELEMENTARY SCHOOL



WILL ROGERS FIELD HOUSE

How An Infrared Survey Works:

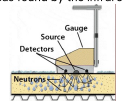


Wet roof insulation absorbs more solar energy from the sun during the day than dry insulation. As the sun sets, the nighttime cools the roof surface. Wet insulation retains more solar energy than dry insulation. These temperature differences are detected by the infrared camera. All full service scans are performed using a mid-wave IR camera with a 2.5 - 5.6 spectral range. Suspected wet insulation is verified through core cuts and/or a Roof Moisture Meter. Core cuts are taken to establish acceptable levels of moisture. Confirmed wet areas are marked out on the roof surface with paint.

How A Moisture Meter Works:

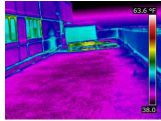
During the daytime, readings are taken and recorded in random locations and at wet areas found by the infrared camera.

Fast neutrons are emitted from the source in the Roof Moisture Meter into the roof system. The presence of hydrogen in the roof system slows the neutrons. These slowed neutrons as well as the fast neutrons are detected by the Roof Moisture Meter. A reading is displayed in the digital readout and gets recorded. Core cuts are taken to determine a baseline for dry roof materials. Wet areas of insulation are marked on the roof surface with paint.

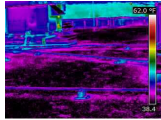


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Thermogram T-09



Thermogram T-10



Core Cut B-1



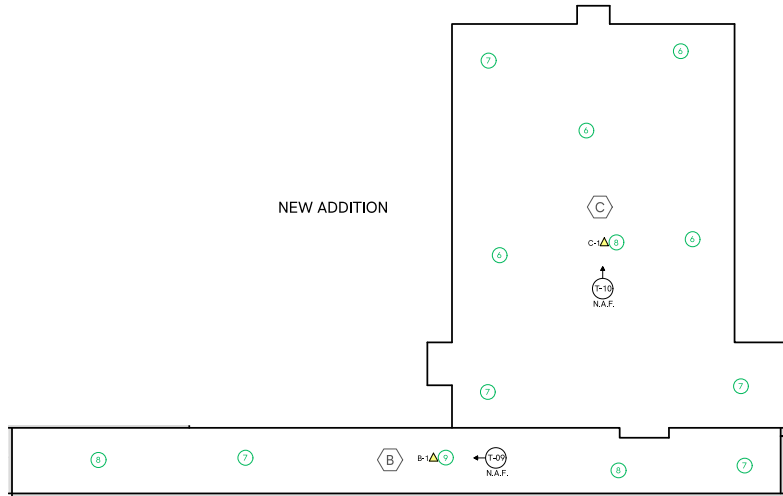
Core Cut C-1

CONSTRUCTION DATA - BOOKER T. WASHINGTON HIGH SCHOOL - NEW ADDITION					
ROOF SECTION	EMISSIVITY	CORE CUT NUMBER	NUC MOISTURE READING	MOISTURE PROBE READING	ROOF CONSTRUCTION
B	HIGH	B-1	9	0	BUILT UP ROOF W/ GRAVEL
				0	1/2" WOOLBLENDED INSULATION
				0	2" POLYISOCYANURATE INSULATION
				N/A	METAL DECK
C	HIGH	C-1	8	0	BUILT UP ROOF W/ GRAVEL
				0	1/2" MOULDED INSULATION
				0	2" POLYISOCYANURATE INSULATION
				N/A	METAL DECK

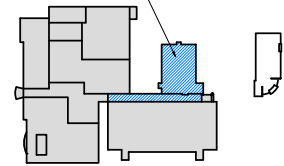
THE MOISTURE PERCENTAGES ARE INTENDED TO BE USED AS A QUALITATIVE MEASUREMENT RATHER THAN AN EXACT READING.

ROOF SECTION DATA - BOOKER T. WASHINGTON HS - NEW ADDITION			
ROOF SECTION	SIZE (S.F.)	WET (S.F.)	% WET
B	4,635	0	0.00%
C	11,244	0	0.00%
TOTALS	15,879	0	0.00%

NEW ADDITION



ENLARGED AREA OF SURVEY



ROOF PLAN
SCALE: NOT SCALE

KEY PLAN
SCALE: NOT SCALE



<ul style="list-style-type: none"> ☐ ROOF SECTION ▲ DRY CORE ▲ WET CORE 	<ul style="list-style-type: none"> 📷 PHOTO 📡 THERMOGRAM N.A.F. (NO ANOMALIES FOUND) 	<p>STANDARD KEY OF SYMBOLS</p> <ul style="list-style-type: none"> 🔴 WET INSULATION 🔴 R.I.M. (RANDOM INTERMITTENT MOISTURE) 	<ul style="list-style-type: none"> ☐ N.I.C. ☐ MOISTURE GRID ☐ TRACE CORE ☐ MOISTURE READING
----------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------



TULSA PUBLIC SCHOOLS
BOOKER T. WASHINGTON HIGH SCHOOL - NEW ADDITION
1514 EAST ZION STREET
TULSA, OKLAHOMA 74106

DESIGNER: T. SCHUBERT	PROJECT NO.: 1906-154
CHECKED: G. HERRANDEZ	DATE: 12/19/2025
DRAWN: B.A.G.C.	SCALE: A

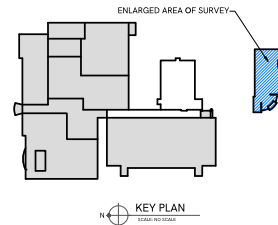
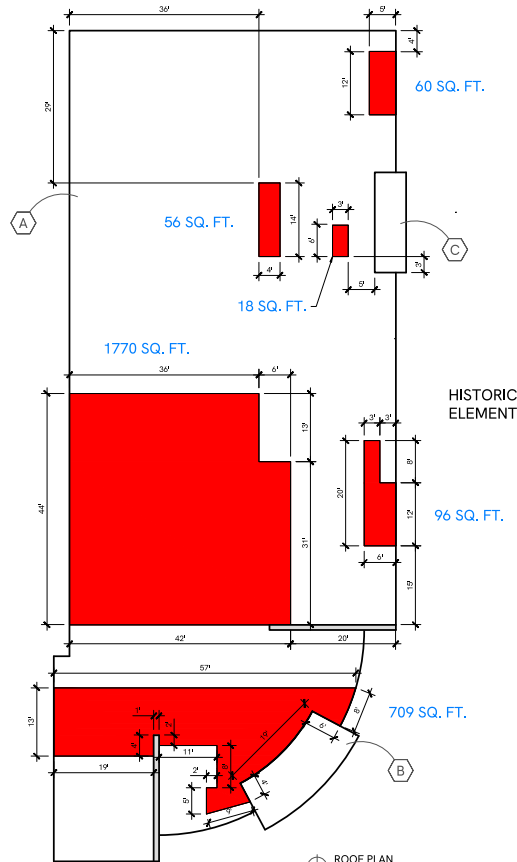


STANDARD KEY OF SYMBOLS	
ROOF SECTION	PHOTO
DRY CORE	THERMOGRAM
WET CORE	N.A.F. (NO ANOMALIES FOUND)
WET INSULATION	R.I.M. (RANDOM INTERMITTENT MOISTURE)
N.I.C.	MOISTURE GRID
TRACE CORE	MOISTURE READING



TULSA PUBLIC SCHOOLS BOOKER T. WASHINGTON HIGH SCHOOL - HISTORIC ELEMENT 1514 EAST ZION STREET TULSA, OKLAHOMA 74106		PROJECT NO. 1906152 / 1906154
DRAWN BY SANC	DATE 12/19/2025	SHEET NO. B

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ROOF PLAN
SCALE: NOT SHOWN

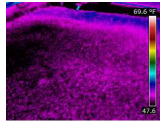


ROOF SECTION		PHOTO		STANDARD KEY OF SYMBOLS		N.I.C.	
▲ DRY CORE	📷 THERMOGRAM	🔴 WET INSULATION	🔲 N.I.C.	🔲 MOISTURE GRID	🔲 TRACE CORE	🔲 MOISTURE READING	
▲ WET CORE	N.A.F. (NO ANOMALIES FOUND)	🔴 R.I.M. (RANDOM INTERMITTENT MOISTURE)					

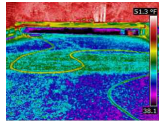


TULSA PUBLIC SCHOOLS
 BOOKER T. WASHINGTON HIGH SCHOOL - HISTORIC ELEMENT
 1514 EAST ZION STREET
 TULSA, OKLAHOMA 74106

DESIGNER/ENGINEER	C. HERNANDEZ	PROJECT NO.	956152 / 956154
DRAWN BY	BAVC	CHECKED BY	
DATE	12/19/2025	SCALE	C



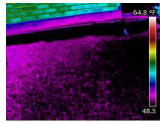
Thermogram T-01



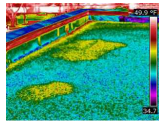
Thermogram T-07



Core Cut A-1



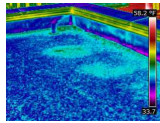
Thermogram T-02



Thermogram T-08



Core Cut A-2



Thermogram T-03

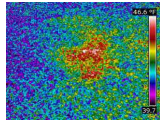


CONSTRUCTION DATA - BOOKER T. WASHINGTON HIGH SCHOOL - HISTORIC ELEMENT						
ROOF SECTION	EMISSIVITY	CORE CUT NUMBER	NUC MOISTURE READINGS	MOISTURE PROBE READINGS	ROOF CONSTRUCTION	
A	HIGH	A-1	30	0	BUILT UP ROOF W/ GRAVEL 1" WOODFIBER INSULATION GYPSUM DECK	
A	HIGH	A-2	19	50	BUILT UP ROOF W/ GRAVEL 1 1/2" WOODFIBER INSULATION GYPSUM DECK	
A	HIGH	A-3	14	30	BUILT UP ROOF W/ GRAVEL 2" WOODFIBER INSULATION GYPSUM DECK	
A	HIGH	A-4	9	0	BUILT UP ROOF W/ GRAVEL 2" WOODFIBER INSULATION GYPSUM DECK	
B	HIGH	B-1	13	0	BUILT UP ROOF W/ GRAVEL 2" WOODFIBER INSULATION CONCRETE SLOK	
C	HIGH	C-1	9	0	BUILT UP ROOF W/ GRAVEL 1" PERLITE INSULATION CONCRETE SLOK	

THE MOISTURE PERCENTAGES ARE INTENDED TO BE USED AS A QUALITATIVE MEASUREMENT RATHER THAN AN EXACT READING.



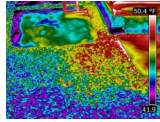
Core Cut A-3



Thermogram T-04



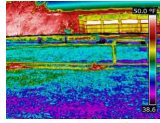
Core Cut A-4



Thermogram T-05



Core Cut B-1



Thermogram T-06



Core Cut C-1

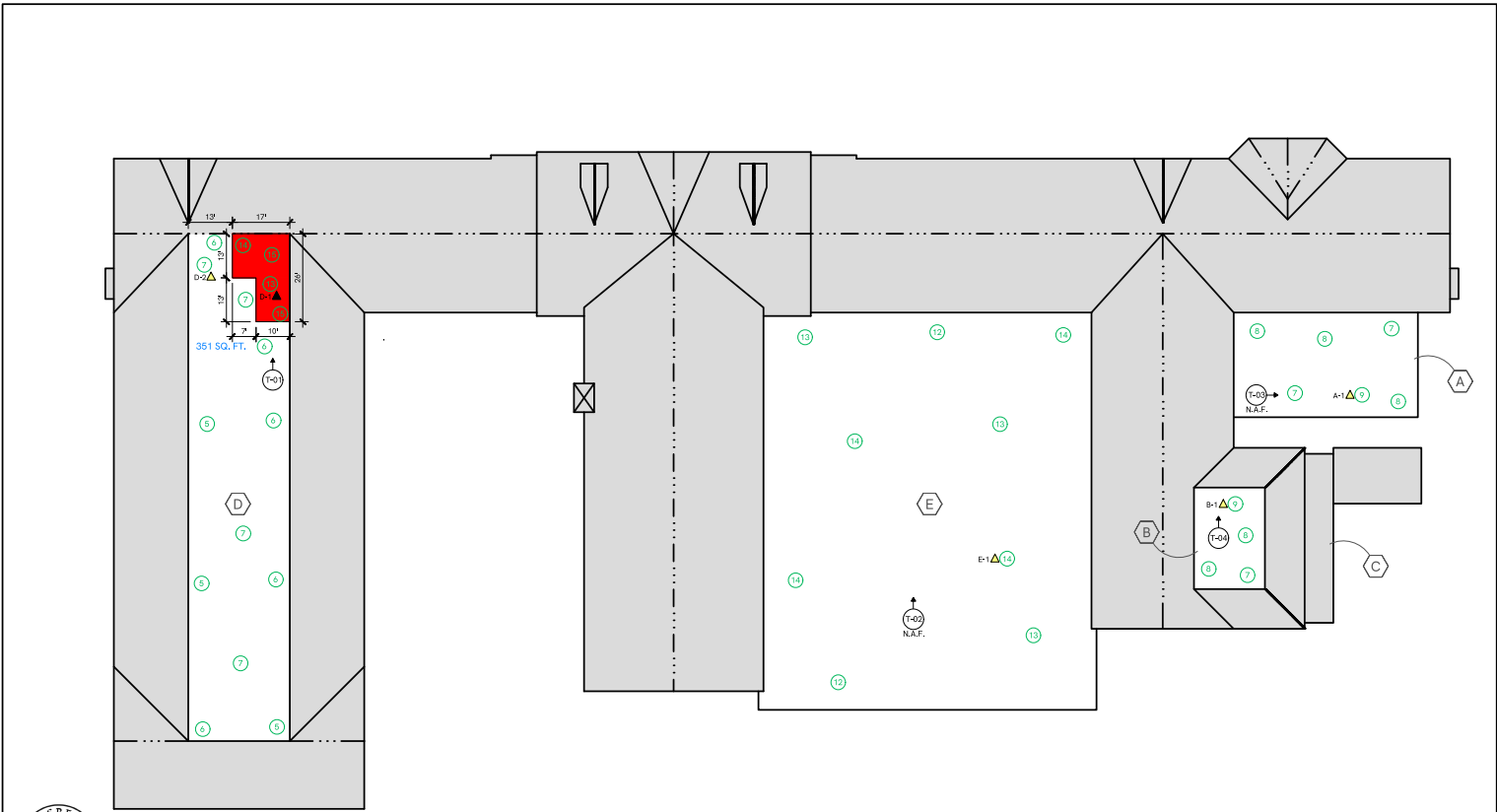
ROOF SECTION DATA - BOOKER T. WASHINGTON HIGH SCHOOL - HISTORIC ELEMENT			
ROOF SECTION	SIZE (S.F.)	WET (S.F.)	% WET
A	9,875	2,709	30.52%
B	227	0	0.00%
C	114	0	0.00%
TOTALS	9,216	2,709	29.39%



ROOF SECTION		PHOTO		STANDARD KEY OF SYMBOLS	
☐	DRY CORE	📷	PHOTO	🔴	WET INSULATION
☐	WET CORE	📷	THERMOGRAM	🔴	R/LM (RANDOM INTERMITTENT MOISTURE)
		📷	N.A.F. (NO ANOMALIES FOUND)	🔵	TRACE CORE
				🔵	MOISTURE READING
				🔵	N.I.C.
				🔵	MOISTURE GRID



TULSA PUBLIC SCHOOLS BOOKER T. WASHINGTON HIGH SCHOOL - HISTORIC ELEMENT			
DESIGNER	TREMBLO	PROJECT NO.	9906-154
DRAWN	BANC	DATE	12/19/2025
DATE	12/19/2025		D



ROOF PLAN

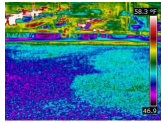
STANDARD KEY OF SYMBOLS	
☐ N.I.C.	☐ MOISTURE GRID
☐ DRY CORE	☐ TRACE CORE
☐ WET CORE	☐ MOISTURE READING
☐ THERMOGRAM	☐ R.I.M. (RANDOM INTERMITTENT MOISTURE)
☐ PHOTO	
☐ N.A.F. (NO ANOMALIES FOUND)	



TULSA PUBLIC SCHOOLS
 BURROUGHS ELEMENTARY SCHOOL
 1924 NORTH MARTIN LUTHER KING JR. BOULEVARD
 TULSA, OKLAHOMA 74106

DESIGNER: G. HERRANDEZ	PROJECT: 906162 / 906164
DRAWN: B.A.G.	DATE: 12/19/2025
DATE: 12/19/2025	E

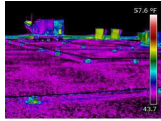
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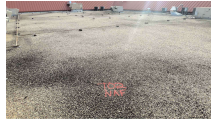
Thermogram T-01



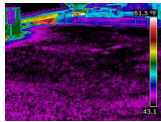
Core Cut A-1



Thermogram T-02



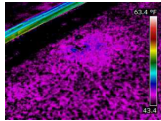
Core Cut B-1



Thermogram T-03



CORE CUT D-1



Thermogram T-04



Core Cut D-2



Core Cut E-1

CONSTRUCTION DATA - BURROUGHS ELEMENTARY SCHOOL					
ROOF SECTION	EMISSIVITY	CORE CUT NUMBER	NUC MOISTURE READING	MOISTURE PROBE READING	ROOF CONSTRUCTION
A	HSH	A-1	9	0	BUILT-UP ROOF W/ GRAVEL
				0	1/2" WOOLFIBER INSULATION
				0	1-1/2" POLYISOCYANURATE INSULATION
				0	WOOD DECK
B	HSH	B-1	9	0	BUILT-UP ROOF W/ GRAVEL
				0	1/2" WOOLFIBER INSULATION
				0	2" POLYISOCYANURATE INSULATION
				0	WOOD DECK
D	HSH	D-1	13	0	BUILT-UP ROOF W/ GRAVEL
				0	1/2" WOOLFIBER INSULATION
				0	2" POLYISOCYANURATE INSULATION
				N/A	METAL DECK
D	HSH	D-2	7	0	BUILT-UP ROOF W/ GRAVEL
				0	1/2" WOOLFIBER INSULATION
				0	2" POLYISOCYANURATE INSULATION
				N/A	METAL DECK
E	HSH	E-1	14	0	BUILT-UP ROOF W/ GRAVEL
				0	1/2" WOOLFIBER INSULATION
				0	4" LIGHTWEIGHT CONCRETE
				0	CONCRETE DECK

THE MOISTURE PERCENTAGES ARE INTENDED TO BE USED AS A QUALITATIVE MEASUREMENT RATHER THAN AN EXACT READING.

ROOF SECTION DATA - BURROUGHS ELEMENTARY SCHOOL			
ROOF SECTION	SIZE (S.F.)	WET (S.F.)	% WET
A	1,670	0	0.00%
B	650	0	0.00%
D	4,500	351	7.80%
E	11,430	0	0.00%
TOTALS	18,250	351	1.92%

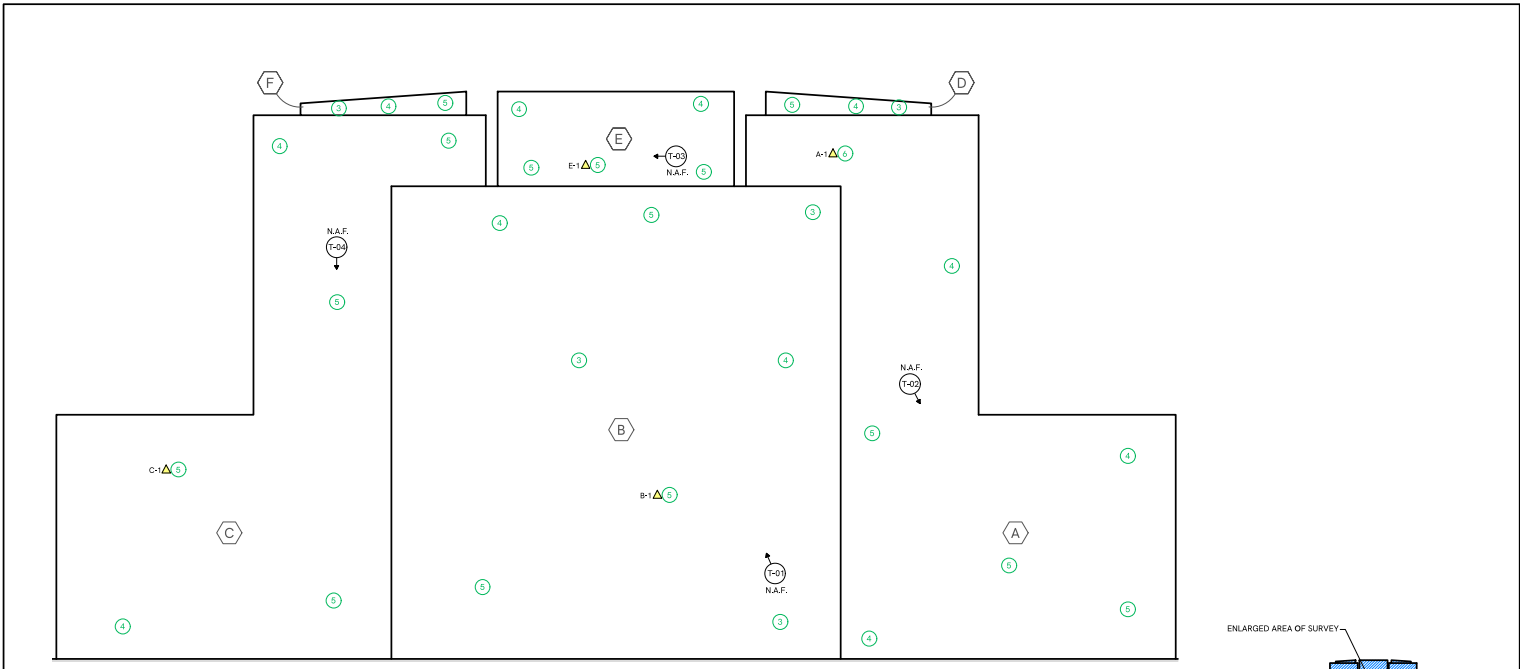


STANDARD KEY OF SYMBOLS	
☐ ROOF SECTION	📷 PHOTO
⚠️ DRY CORE	🌡️ THERMOGRAM
⬆️ WET CORE	N.A.F. (NO ANOMALIES FOUND)
☐ N.I.C.	🔴 WET INSULATION
☐ MOISTURE GRID	🔴 R.I.M. (RANDOM INTERMITTENT MOISTURE)
☐ TRACE CORE	🔵 NUC
☐ MOISTURE READING	🔵 MOISTURE GRID

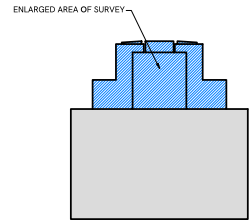


TULSA PUBLIC SCHOOLS
BURROUGHS ELEMENTARY SCHOOL
1924 NORTH MARTIN LUTHER KING JR. BOULEVARD
TULSA, OKLAHOMA 74106

DESIGNER: G. HERNANDEZ	PROJECT NO: 1906102 / 1906104
DRAWN: BANC	CHECKED:
DATE: 12/19/2025	F



N
ROOF PLAN
SCALE: NOT SHOWN



N
KEY PLAN
SCALE: NOT SHOWN



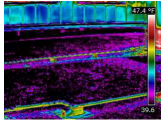
STANDARD KEY OF SYMBOLS	
Ⓜ ROOF SECTION	📷 PHOTO
▲ DRY CORE	🌡️ THERMOGRAM
▲ WET CORE	N.A.F. (NO ANOMALIES FOUND)
☐ N.I.C.	☐ WET INSULATION
☐ MOISTURE GRID	☒ R.I.M. (RANDOM INTERMITTENT MOISTURE)
☐ TRACE CORE	☒ MOISTURE READING



TULSA PUBLIC SCHOOLS
WILL ROGERS FIELD HOUSE
3909 EAST 5TH PLACE
TULSA, OKLAHOMA 74112

DESIGNER: G. HERNANDEZ	PROJECT: 1906102 / 1906104
DRAWN: B.A.G.	CHECKED:
DATE: 12/19/2025	SCALE: G

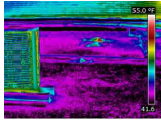
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Thermogram T-01



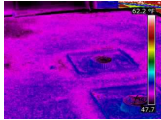
Core Cut A-1



Thermogram T-02



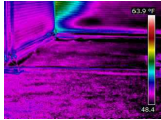
Core Cut B-1



Thermogram T-03



Core Cut C-1



Thermogram T-04



Core Cut E-1

CONSTRUCTION DATA - WILL ROGERS FIELD HOUSE						
ROOF SECTION	EMISSIVITY	CORE CUT NUMBER	NIC MOISTURE READING	MOISTURE PROBE READING	ROOF CONSTRUCTION	
A	HIGH	A-1	6	0	BUILT UP ROOF W/ GRAVEL	
				0	1 1/2" WOODOBLEN INSULATION	
				0	2" POLYISOCYANURATE INSULATION	
				0	METAL DECK	
Roof Section				N/A		
B	HIGH	B-1	5	0	BUILT UP ROOF W/ GRAVEL	
				0	1 1/2" WOODOBLEN INSULATION	
				0	2" POLYISOCYANURATE INSULATION	
				0	METAL DECK	
Roof Section				N/A		
C	HIGH	C-1	5	0	BUILT UP ROOF W/ GRAVEL	
				0	1 1/2" WOODOBLEN INSULATION	
				0	2" POLYISOCYANURATE INSULATION	
				0	METAL DECK	
Roof Section				N/A		
E	HIGH	E-1	5	0	BUILT UP ROOF W/ GRAVEL	
				0	1 1/2" WOODOBLEN INSULATION	
				0	2 1/2" POLYISOCYANURATE INSULATION	
				0	METAL DECK	
Roof Section				N/A		

THE MOISTURE PERCENTAGES ARE INTENDED TO BE USED AS A QUALITATIVE MEASUREMENT RATHER THAN AN EXACT READING.

ROOF SECTION DATA - WILL ROGERS FIELD HOUSE			
ROOF SECTION	SIZE (S.F.)	WET (S.F.)	% WET
A	2,091	0	0.00%
B	3,420	0	0.00%
C	2,091	0	0.00%
D	47	0	0.00%
E	360	0	0.00%
F	47	0	0.00%
TOTALS	8,056	0	0.00%



STANDARD KEY OF SYMBOLS			
☐ ROOF SECTION	📷 PHOTO	☐ N.I.C.	☐ MOISTURE GRID
▲ DRY CORE	📡 THERMOGRAM	☐ TRACE CORE	☐ MOISTURE READING
▲ WET CORE	N.A.F. (NO ANOMALIES FOUND)	☐ R.I.M. (RANDOM INTERMITTENT MOISTURE)	



TULSA PUBLIC SCHOOLS
WILL ROGERS FIELD HOUSE
3909 EAST 5TH PLACE
TULSA, OKLAHOMA 74112

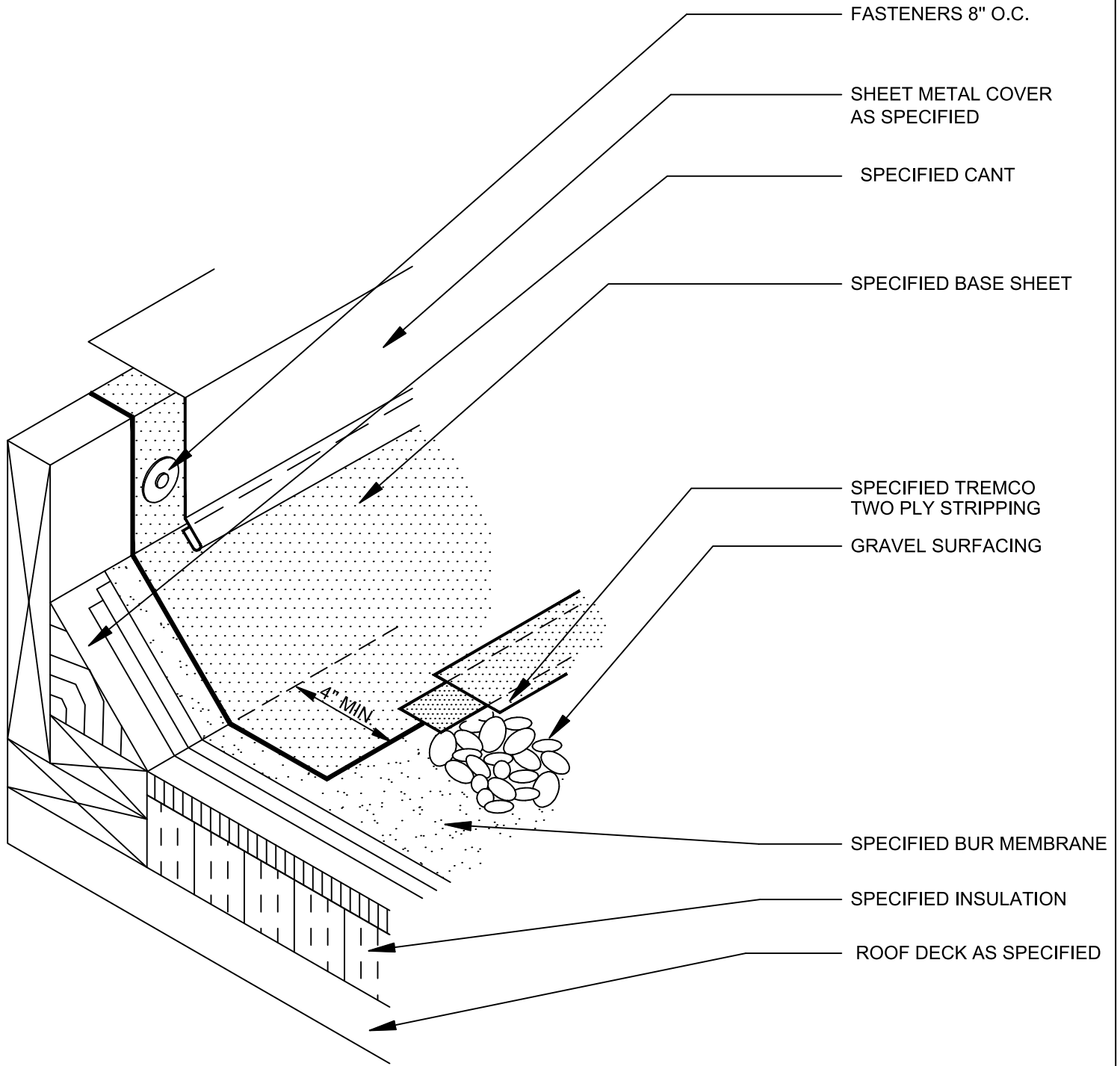
DESIGNER: G. HERNANDEZ	DRAWN: B.A.C.	DATE: 12/19/2025	PROJECT NO: 1906154	ISSUE NO: 1
			H	





521 Ship Ladder

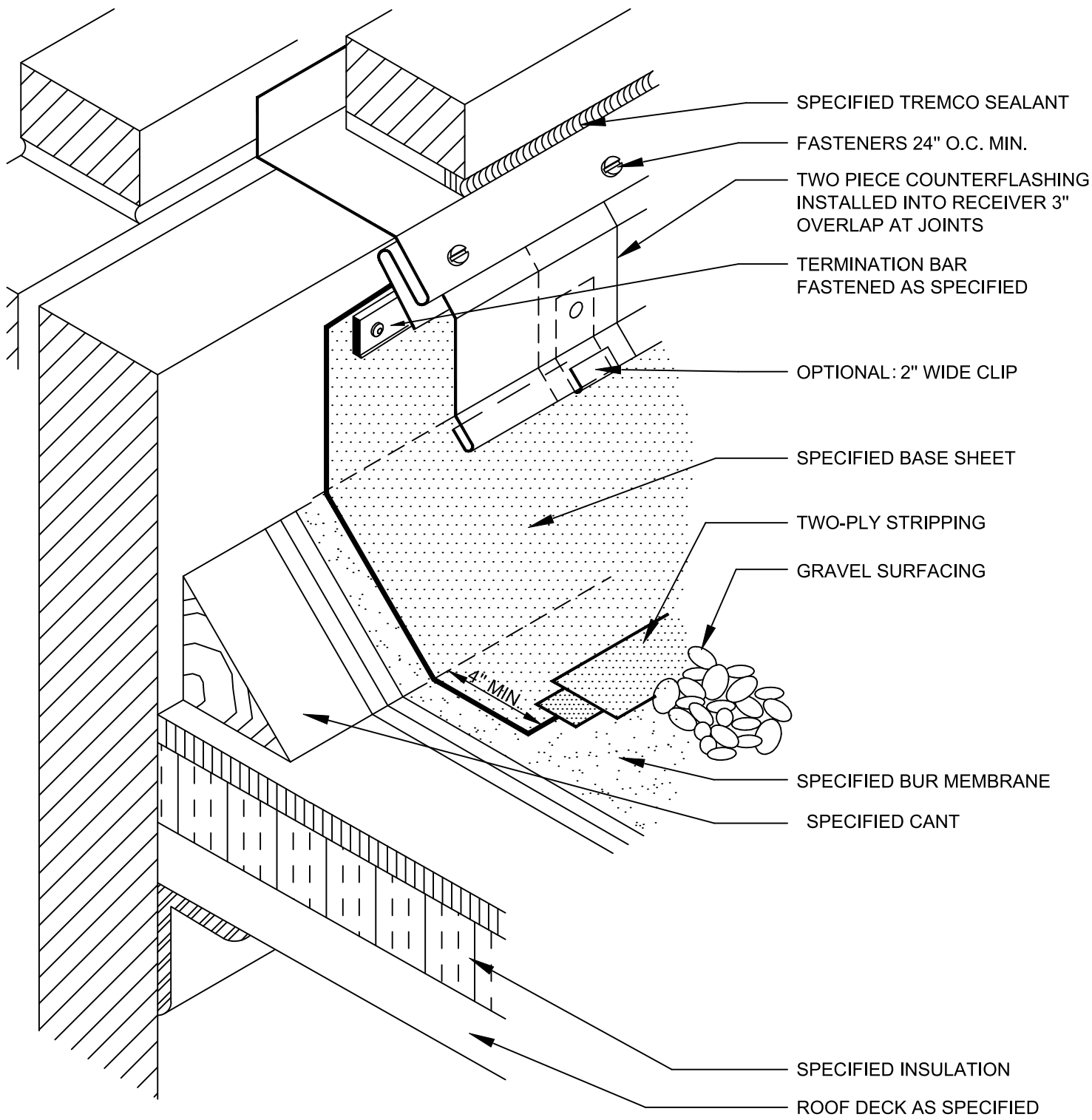
503A Access Ladder
W/Security Door



SHEET TITLE:
 BUILT-UP ROOFING
 HOT/COLD WOOD CURB

SCALE:
 NTS

DRAWING No.:
 DWG NO. 17



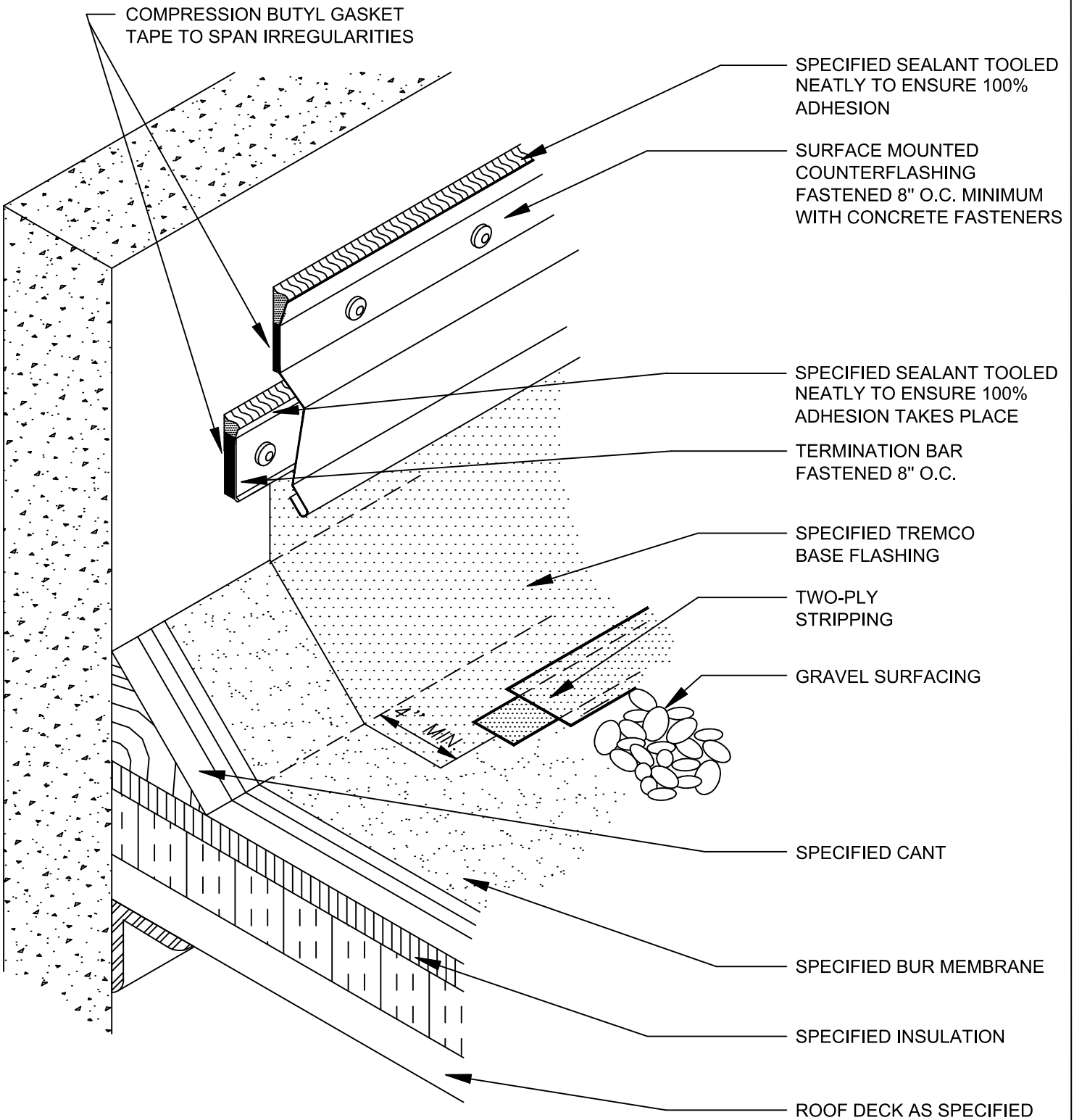
- SPECIFIED TREMCO SEALANT
- FASTENERS 24" O.C. MIN.
- TWO PIECE COUNTERFLASHING
INSTALLED INTO RECEIVER 3"
OVERLAP AT JOINTS
- TERMINATION BAR
FASTENED AS SPECIFIED
- OPTIONAL: 2" WIDE CLIP
- SPECIFIED BASE SHEET
- TWO-PLY STRIPPING
- GRAVEL SURFACING
- SPECIFIED BUR MEMBRANE
- SPECIFIED CANT
- SPECIFIED INSULATION
- ROOF DECK AS SPECIFIED



SHEET TITLE:
**BUILT UP ROOFING HOT/COLD
 WALL FLASHING WALL
 SUPPORTED DECK**

SCALE:
NTS

DRAWING No.:
DWG NO. 38



EXISTING METAL
COUNTERFLASHING

NEW GROMMETED FASTENERS 8" O.C.

INSTALL NEW METAL
COUNTERFLASHING

ELASTOMERIC BASE
FLASHING ADHERED
WITH SPECIFIED
SHEET ADHESIVE

SPECIFIED CANT

TWO-PLY
STRIPPING

GRAVEL SURFACING

SPECIFIED BUR
MEMBRANE

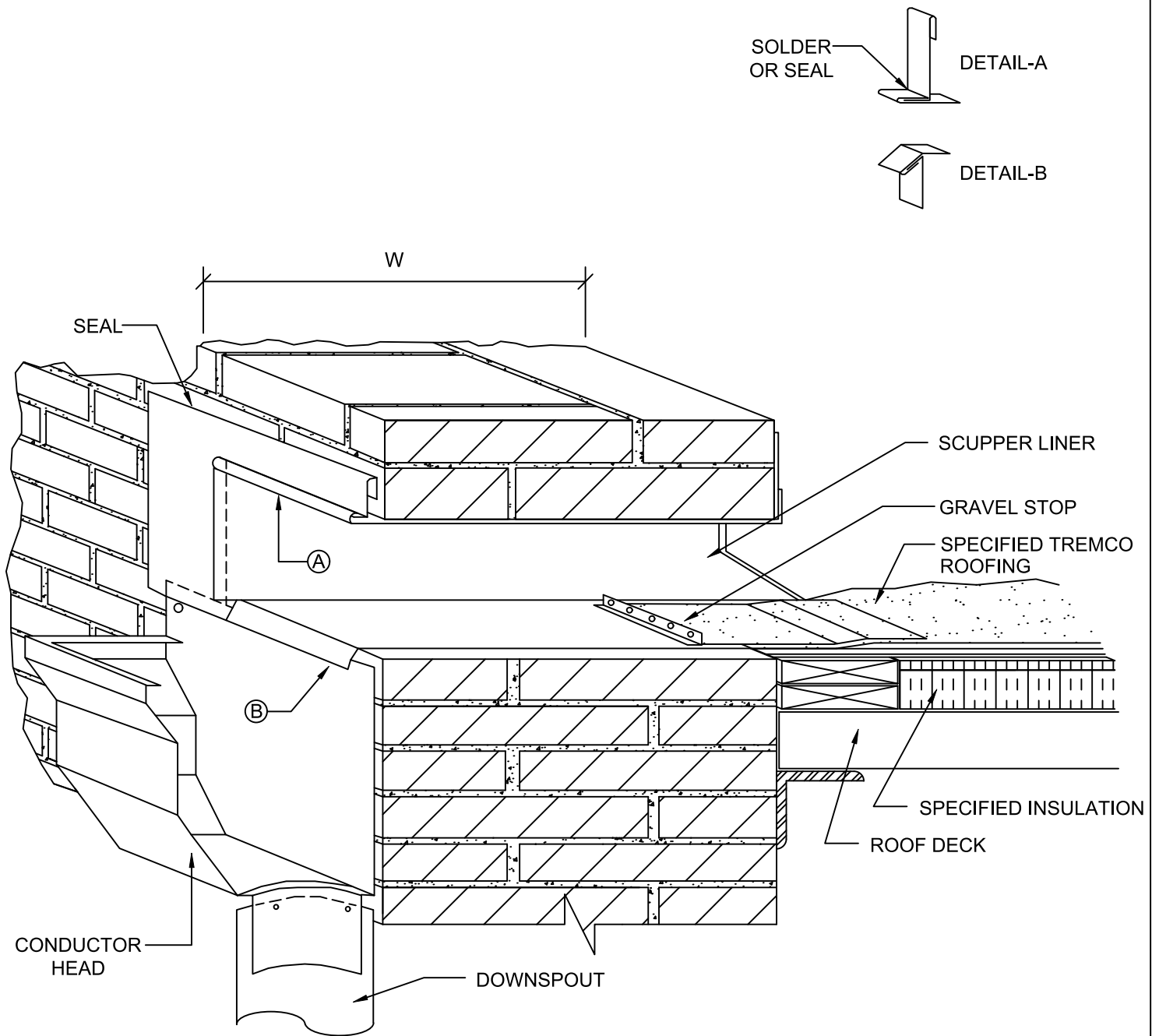
SPECIFIED INSULATION

ROOF DECK AS SPECIFIED



SHEET TITLE:
BUILT UP ROOFING
HOT/COLD SLIP METAL SKIRT FLASHING

SCALE:
NTS
DRAWING No.:
DWG NO. 27



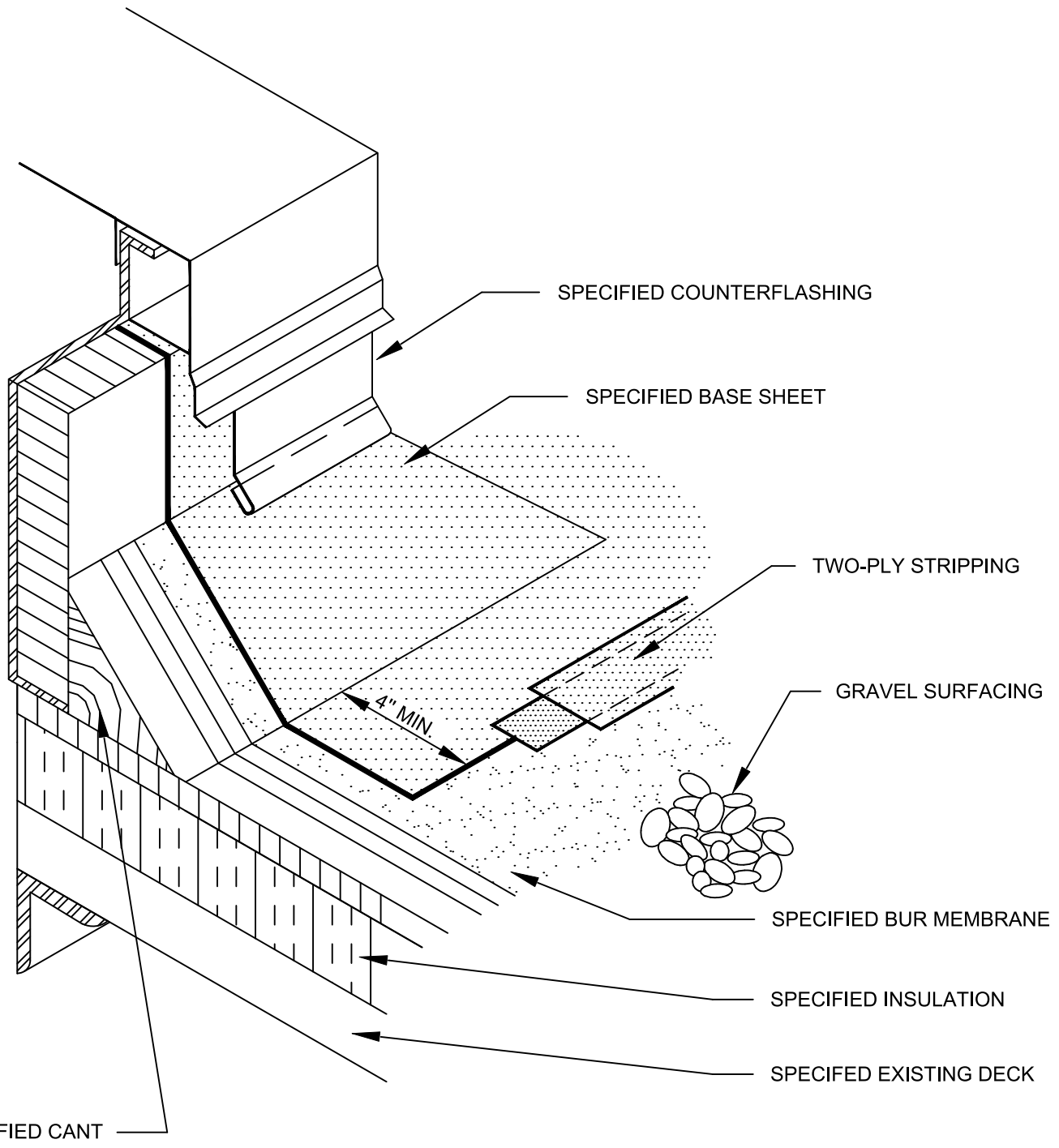
NOTES

1. MATCH EXISTING CONDUCTOR HEAD PROFILE AND SIZE.
2. W = NOMINAL WIDTH OF PARAPET
3. FABRICATE AND INSTALL COMPONENTS IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND SMACNA REQUIREMENTS AND STANDARDS.



SHEET TITLE: BUILT UP ROOFING
HOT/COLD THRU-WALL
SCUPPER WITH CONDUCTOR HEAD

SCALE: NTS
DRAWING No.: DWG NO. 31



SPECIFIED CANT

SPECIFIED COUNTERFLASHING

SPECIFIED BASE SHEET

TWO-PLY STRIPPING

GRAVEL SURFACING

SPECIFIED BUR MEMBRANE

SPECIFIED INSULATION

SPECIFIED EXISTING DECK

SHEET TITLE:

BUILT UP ROOFING
HOT/COLD ROOF HATCH

SCALE:

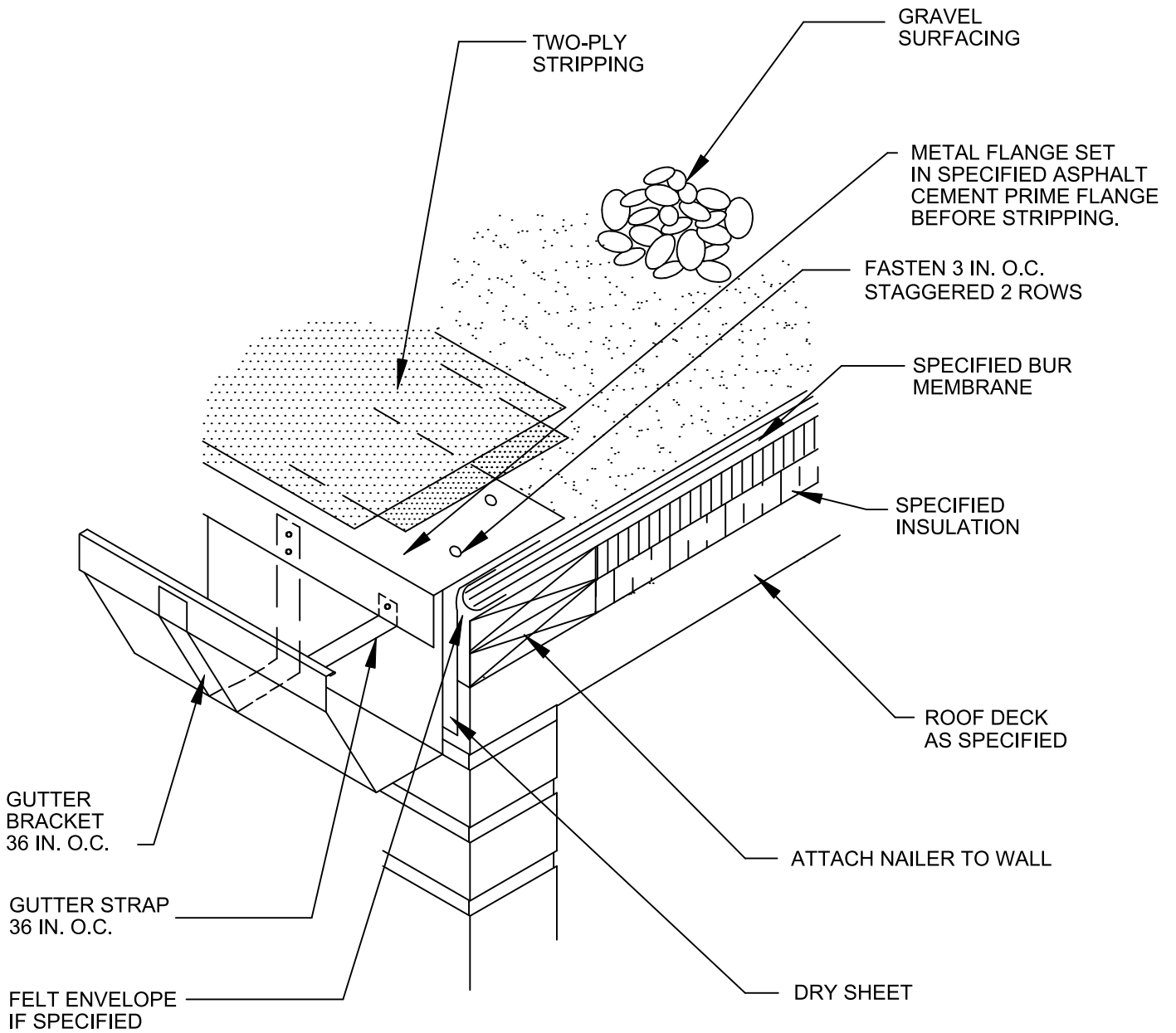
NTS

DRAWING No.:

DWG NO. 25



Roofing & Building Maintenance



NOTES

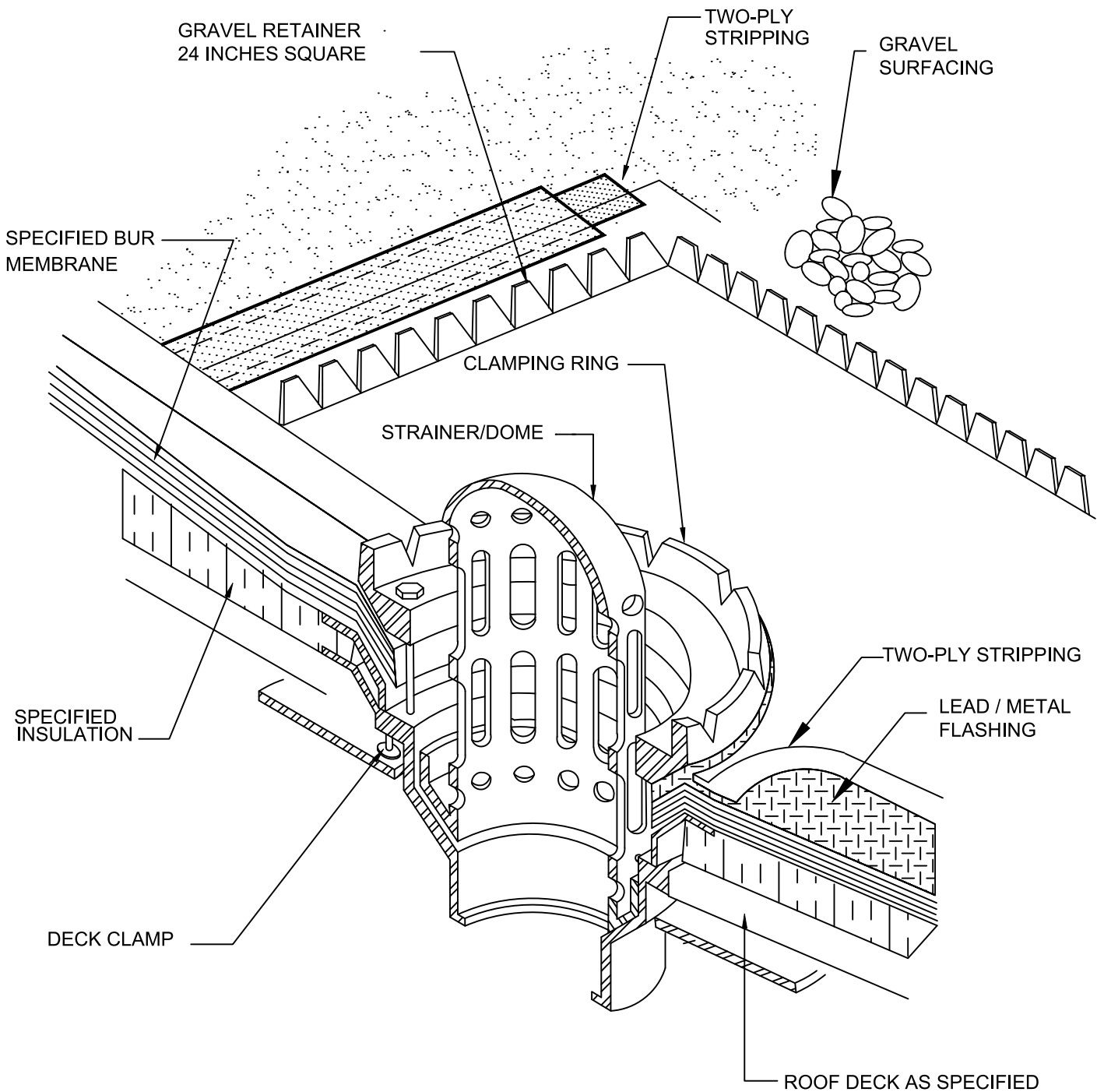
- 1. SLOPE GUTTER TO DOWNSPOUTS
1/4 IN./FT. MINIMUM



SHEET TITLE:
**BUILT-UP ROOFING
 HOT/COLD ROOF EDGE WITH GUTTER**

SCALE:
NTS

DRAWING No.:
DWG NO. 21



NOTES

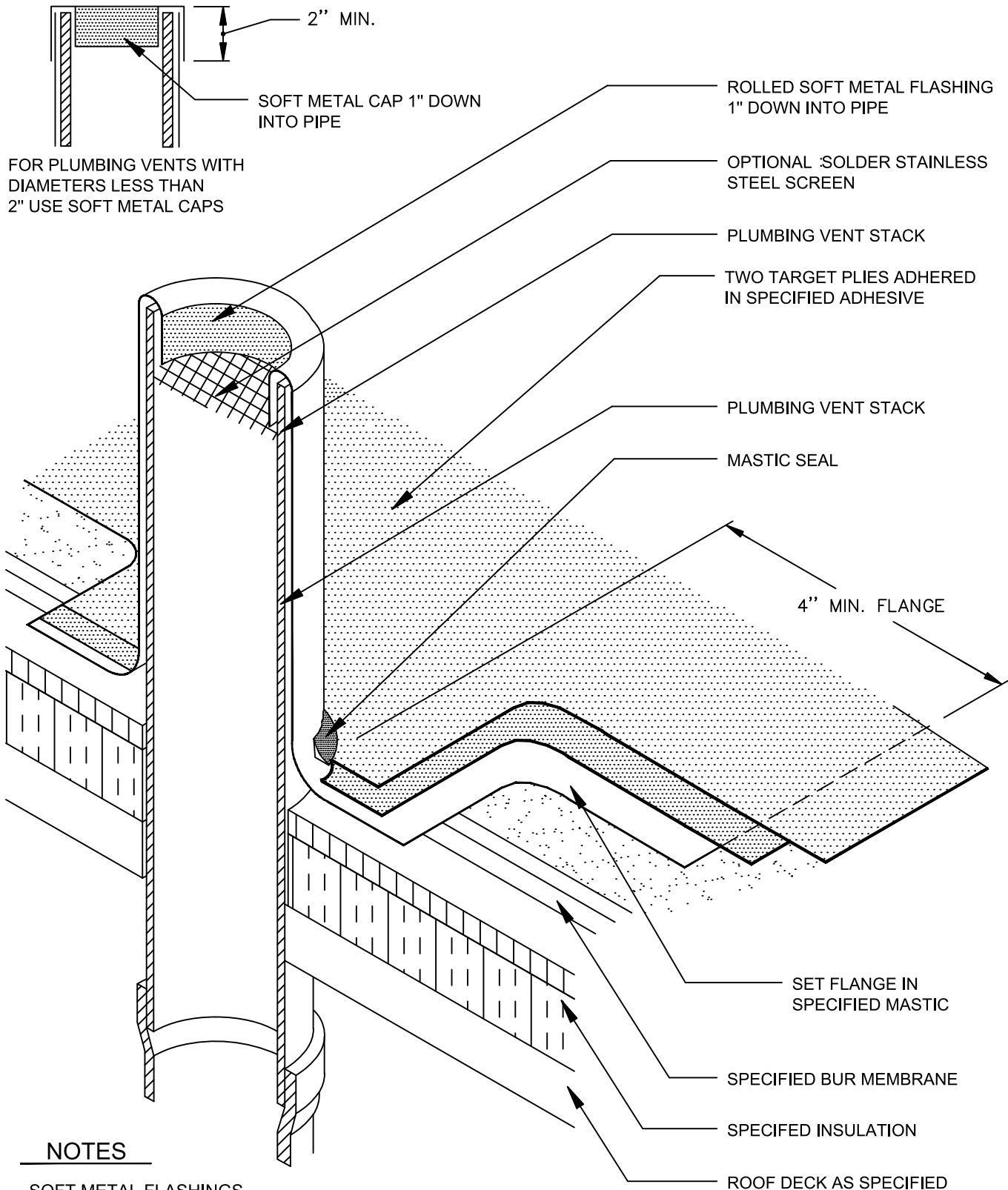
1. PRIME ALL METAL SURFACES THAT WILL COME INTO CONTACT WITH ADHESIVES



SHEET TITLE:
BUILT UP ROOFING
HOT/COLD ROOF DRAIN
WITH GRAVEL GUARD

SCALE:
NTS

DRAWING No.:
DWG NO. 37



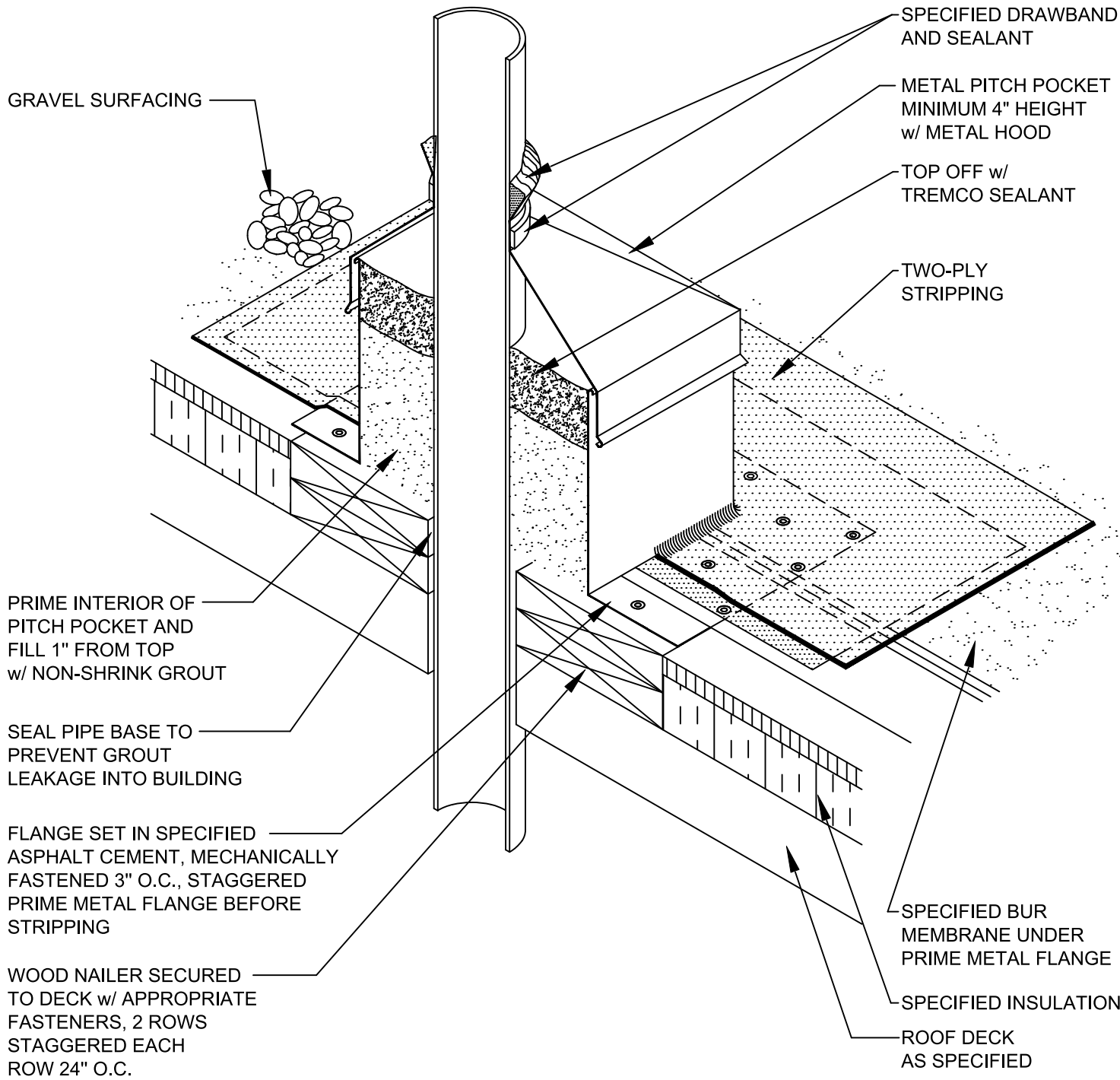
NOTES

SOFT METAL FLASHINGS

1. SHEET LEAD: MINIMUM 4 LB. (20kg²/m) PER SQ.FT.
2. SHEET COPPER: MINIMUM 16 OZ. IF COPPER FLASHING IS INSTALLED OVER AN IRON OR STEEL PIPE, WRAP AN ASPHALT COATED ROOFING FELT TO PREVENT DIRECT CONTACT BETWEEN TWO DISSIMILAR METALS.



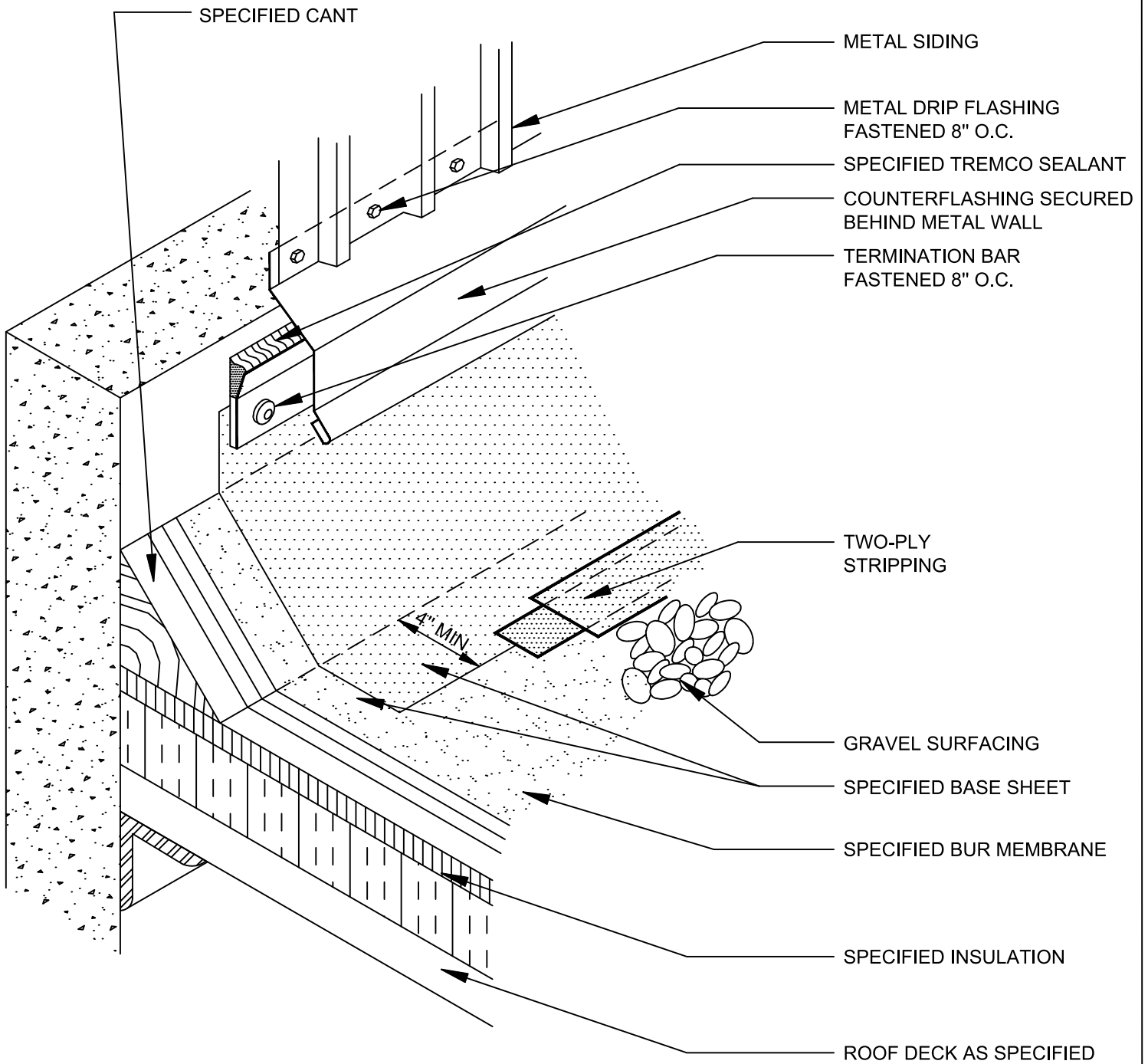
SHEET TITLE: BUILT-UP ROOFING HOT/COLD PLUMBING VENT FLASHING	SCALE: NTS
	DRAWING No.: DWG NO. 08



SHEET TITLE:
**BUILT UP ROOFING
 HOT/COLD PITCH POCKET WITH GROUT**

SCALE:
NTS

DRAWING No.:
DWG NO. 33



SHEET TITLE:
**BUILT UP ROOFING
 HOT/COLD METAL WALL FLASHING**

SCALE:
NTS

DRAWING No.:
DWG NO. 39

GRAVEL SURFACING

CAULK DRAWBAND
w/ SPECIFIED
ELASTOMERIC
SEALANT

STORM COLLAR

METAL SLEEVE

MASTIC SEAL AT
PERIMETER

SET FLANGE IN
SPECIFIED MASTIC
AND MECHANICALLY
FASTEN 3" O.C.
PRIME FLANGE
BEFORE STRIPPING

TWO-PLY STRIPPING

BATTEN INSULATION

WOOD NAILER SECURED
TO DECK w/ APPROPRIATE
FASTENERS, 2 ROWS
STAGGERED EACH
ROW 24" O.C.

PROJECTION

SPECIFIED BUR
MEMBRANE

SPECIFIED INSULATION

ROOF DECK
AS SPECIFIED



SHEET TITLE:

BUILT-UP ROOFING HOT/COLD
METAL SLEEVE AND STORM COLLAR

SCALE:

NTS

DRAWING No.:

DWG NO. 06

JOINT COVER 4"-6" WIDE
 SET IN ASPHALT CEMENT
 AND SECURED USING TWO
 FASTENERS THROUGH THE
 GAP IN THE FASCIA FLANGE

FASTENERS 3" O.C.
 STAGGERED 2 ROWS

FELT
 ENVELOPE

1/2" MIN.
 10'-0" MAX.

TWO-PLY STRIPPING

GRAVEL SURFACING

METAL SET IN ASPHALT
 CEMENT- PRIME FLANGE
 BEFORE STRIPPING

SPECIFIED BUR MEMBRANE

SPECIFIED TREMCO
 ADHESIVE

SPECIFIED INSULATION

ROOF DECK
 AS SPECIFIED

ATTACH WOOD NAILER
 TO WALL

CONTINUOUS CLEAT
 FASTENED 16" O.C.

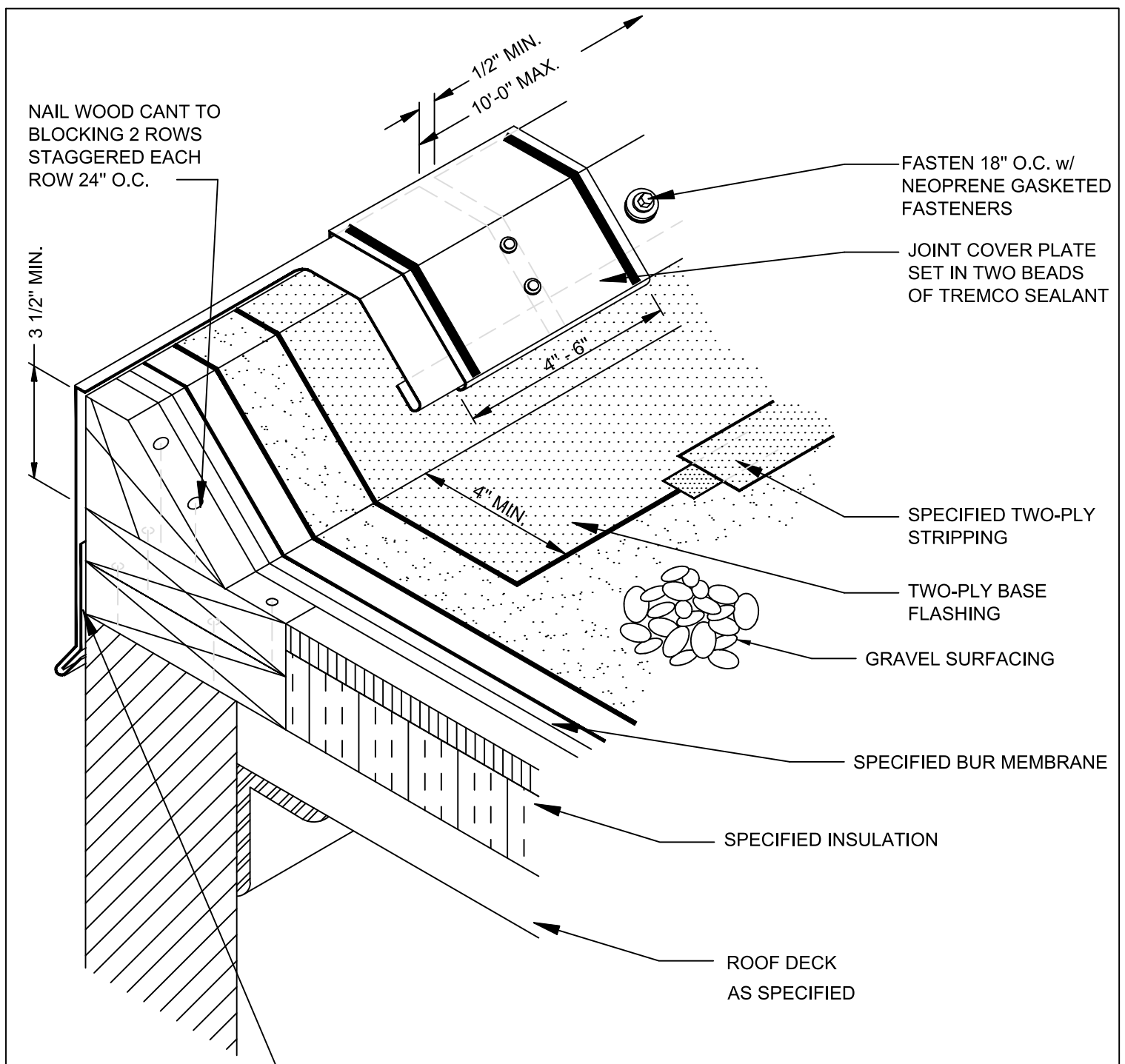
NOTES

1. ALL METAL SURFACES SHALL BE PRIMED BEFORE CONTACT WITH TREMCO PRIMERS



SHEET TITLE:
 BUILT UP ROOFING
 HOT/COLD LIGHT-METAL ROOF EDGE

SCALE:
 NTS
 DRAWING No.:
 DWG NO. 34



NAIL WOOD CANT TO
BLOCKING 2 ROWS
STAGGERED EACH
ROW 24" O.C.

3 1/2" MIN.

1/2" MIN.
10'-0" MAX.

FASTEN 18" O.C. w/
NEOPRENE GASKETED
FASTENERS

JOINT COVER PLATE
SET IN TWO BEADS
OF TREMCO SEALANT

4" - 6"

SPECIFIED TWO-PLY
STRIPPING

4" MIN.

TWO-PLY BASE
FLASHING

GRAVEL SURFACING

SPECIFIED BUR MEMBRANE

SPECIFIED INSULATION

ROOF DECK
AS SPECIFIED

CONTINUOUS CLEAT
FASTENED 16" O.C.

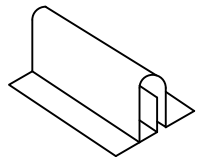
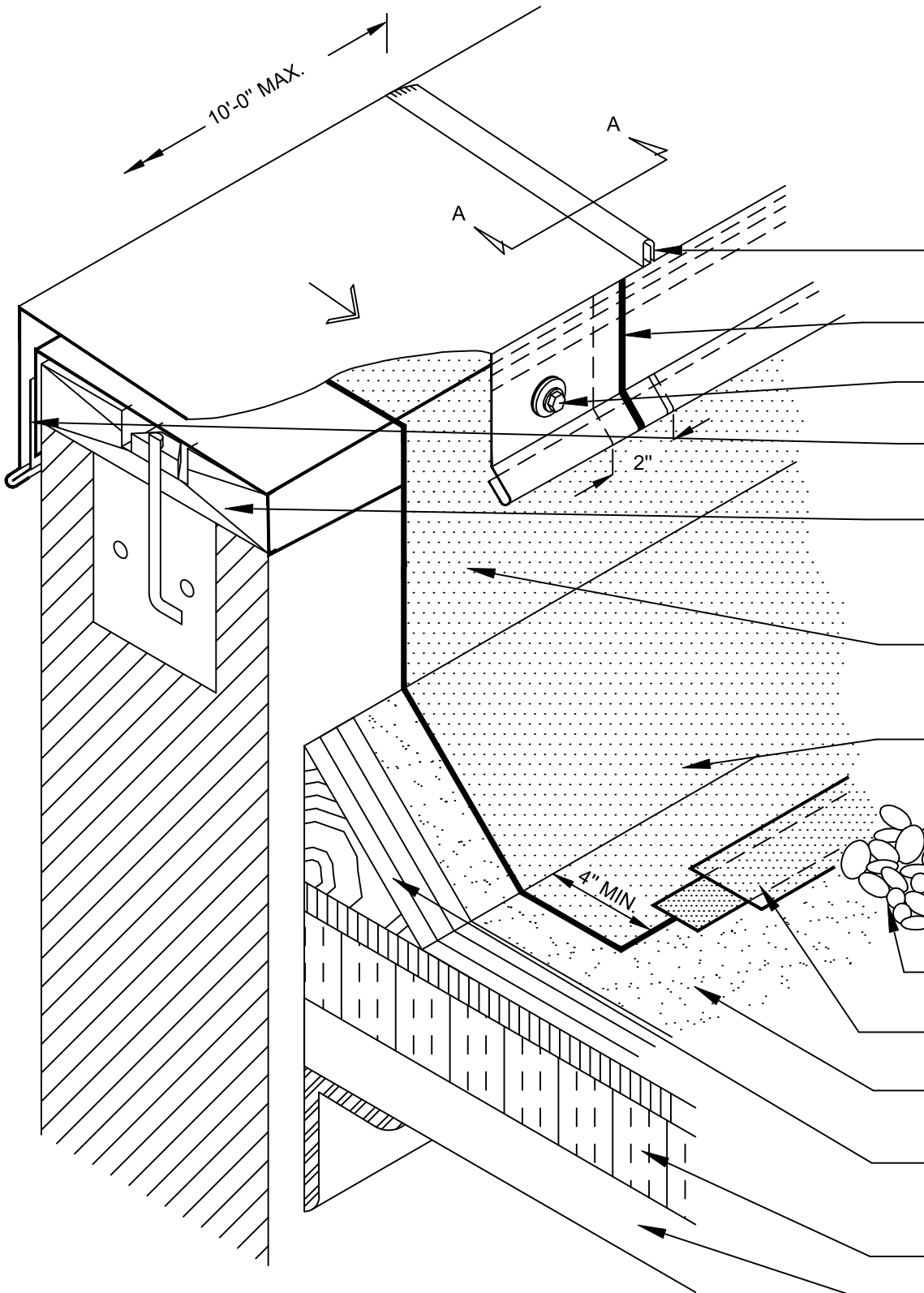
NOTES

1. SECURE COVER PLATE USING TWO FASTENERS WITH NEOPRENE GASKETS AT THE CENTER OF EACH FASCIA SECTION



SHEET TITLE: BUILT UP ROOFING
HOT/COLD LIGHT-METAL ROOF EDGE,
RAISED

SCALE: NTS
DRAWING No.: DWG NO. 35



SECTION A-A

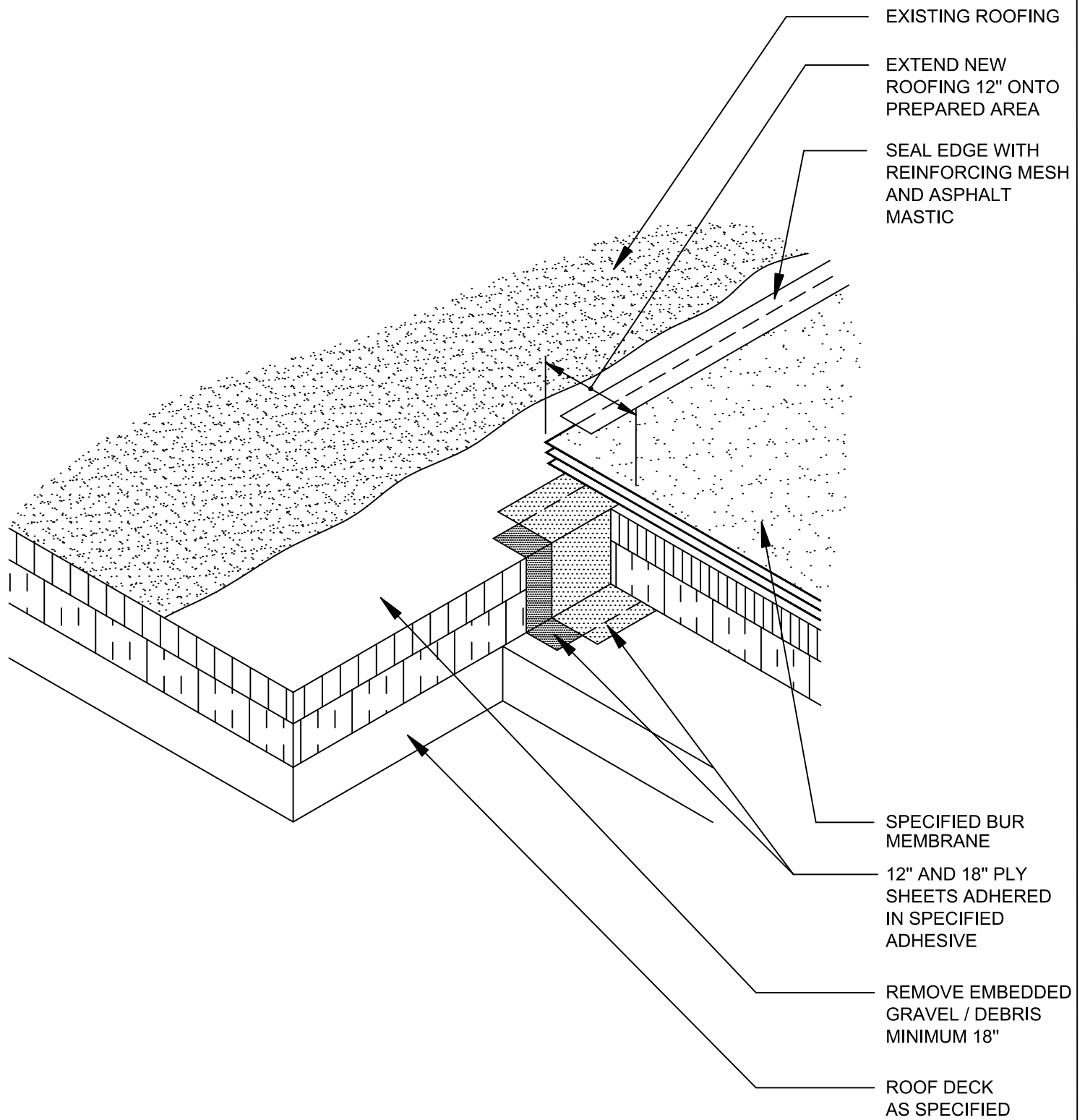
- TURN ENDS DOWN 45° ANGLE
- SEALANT BETWEEN METAL SECTIONS
- NEOPRENE GASKETED FASTENER 24" O.C.
- CONTINUOUS CLEAT FASTENED 16" O.C.
- ATTACH NAILER TO WALL REFER TO FACTORY MUTUAL DATA SHEET I-49
- FLASHING MEMBRANE INSTALLED OVER TREMCO NAILER
- BASE FLASHING AS SPECIFIED
- GRAVEL SURFACING
- TWO-PLY TREMCO STRIPPING
- SPECIFIED BUR MEMBRANE
- SPECIFIED CANT
- INSULATION
- ROOF DECK AS SPECIFIED



SHEET TITLE:
**BUILT UP ROOFING
 HOT/COLD LIGHT METAL PARAPET CAP**

SCALE:
NTS

DRAWING No.:
DWG NO. 36



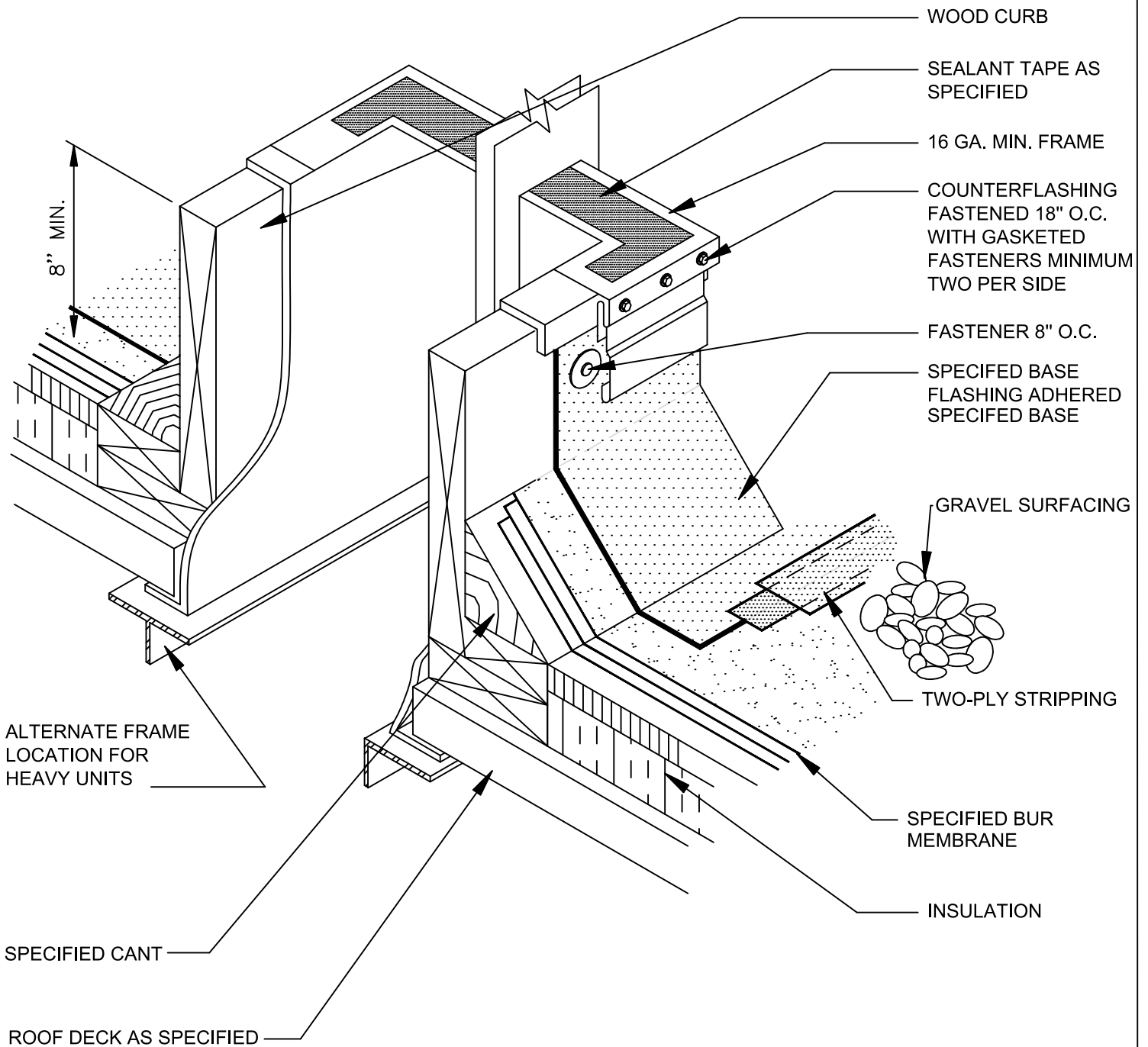
NOTES

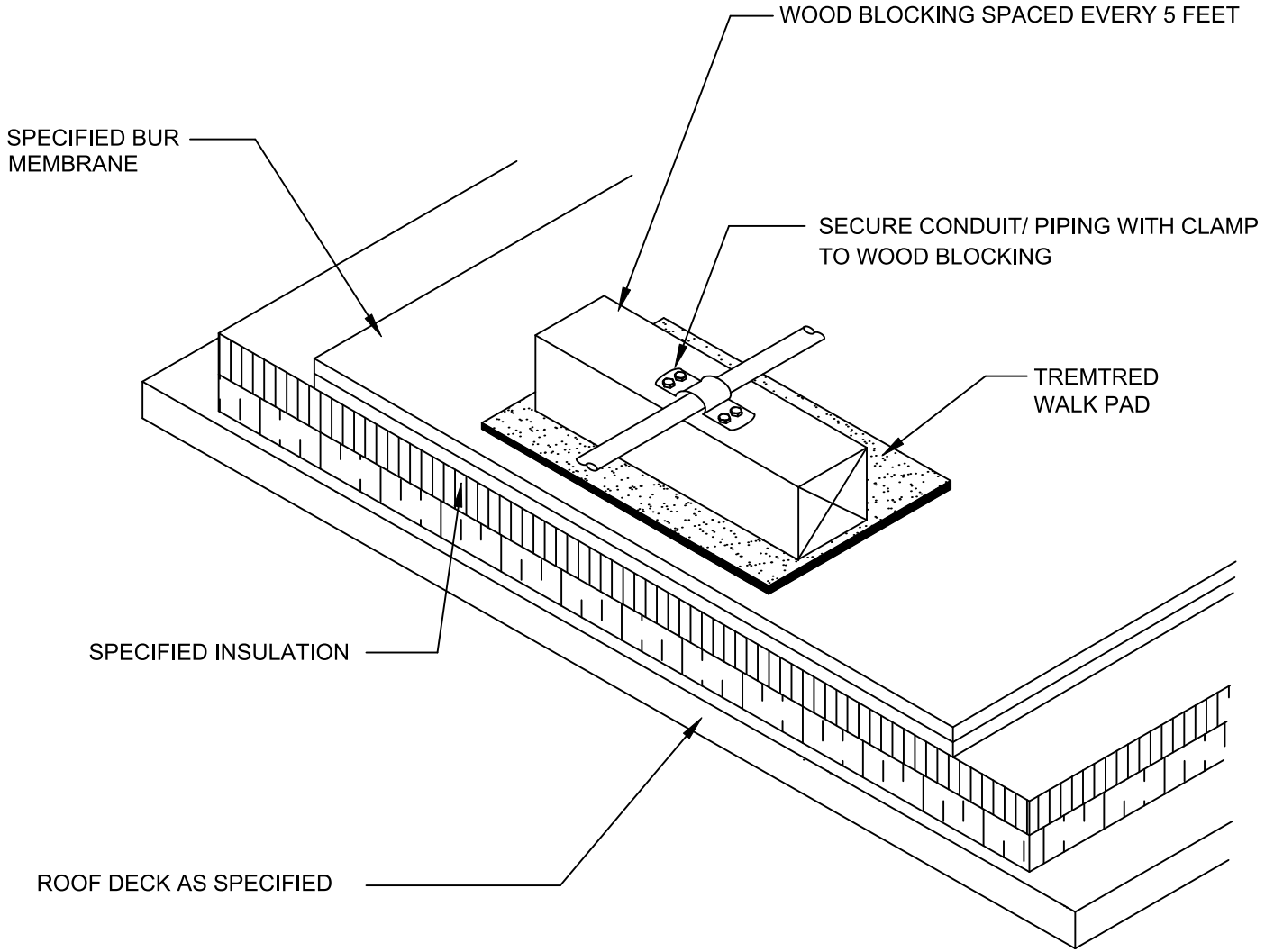
- BEFORE NEXT DAY'S WORK, REMOVE TEMPORARY TIE-IN AND INSULATION FILLERS

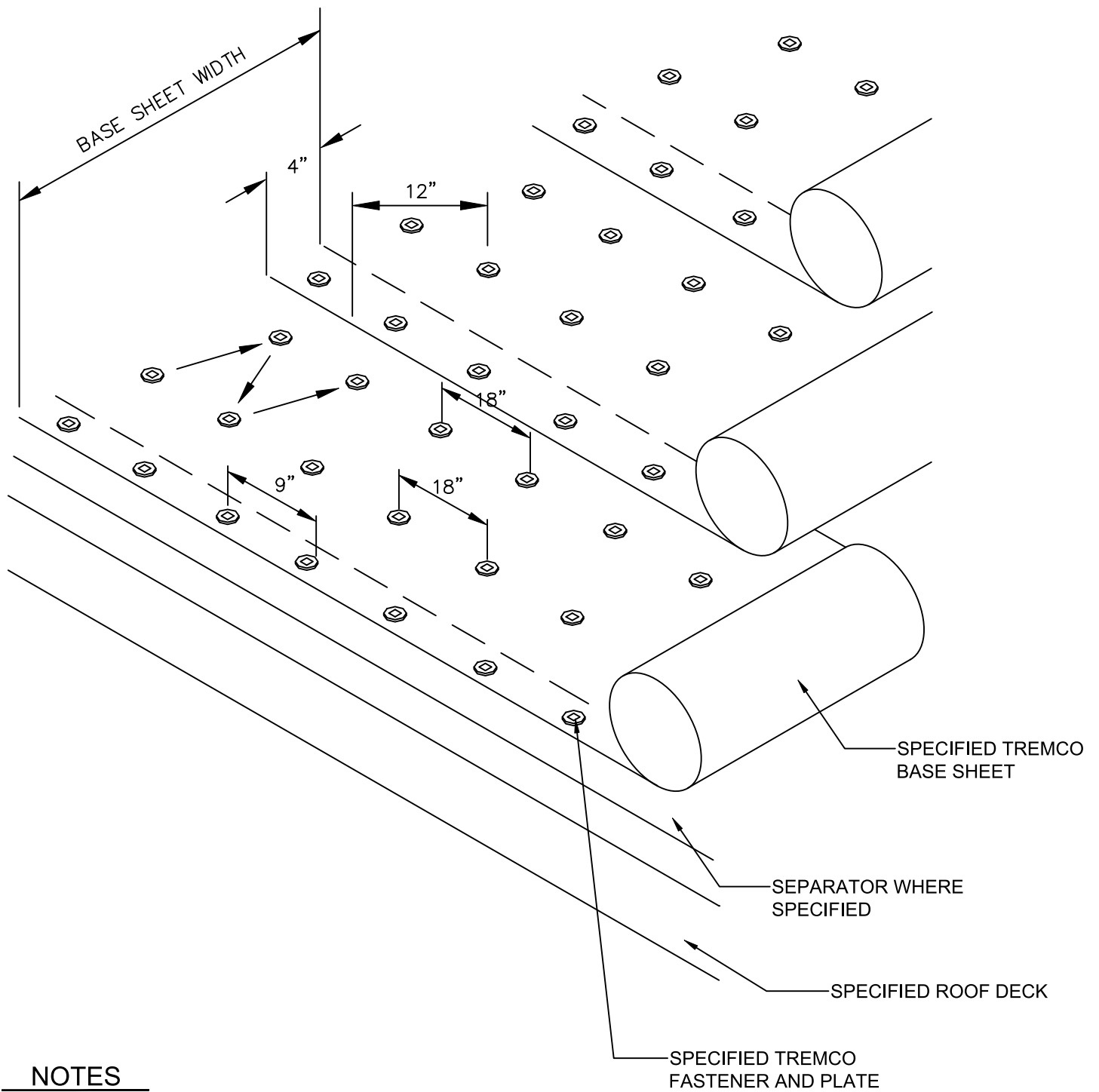


SHEET TITLE:
**BUILT UP ROOFING
 HOT/COLD DAILY WATERSTOP / TIE IN**

SCALE:
NTS
 DRAWING No.:
DWG NO. 30







NOTES

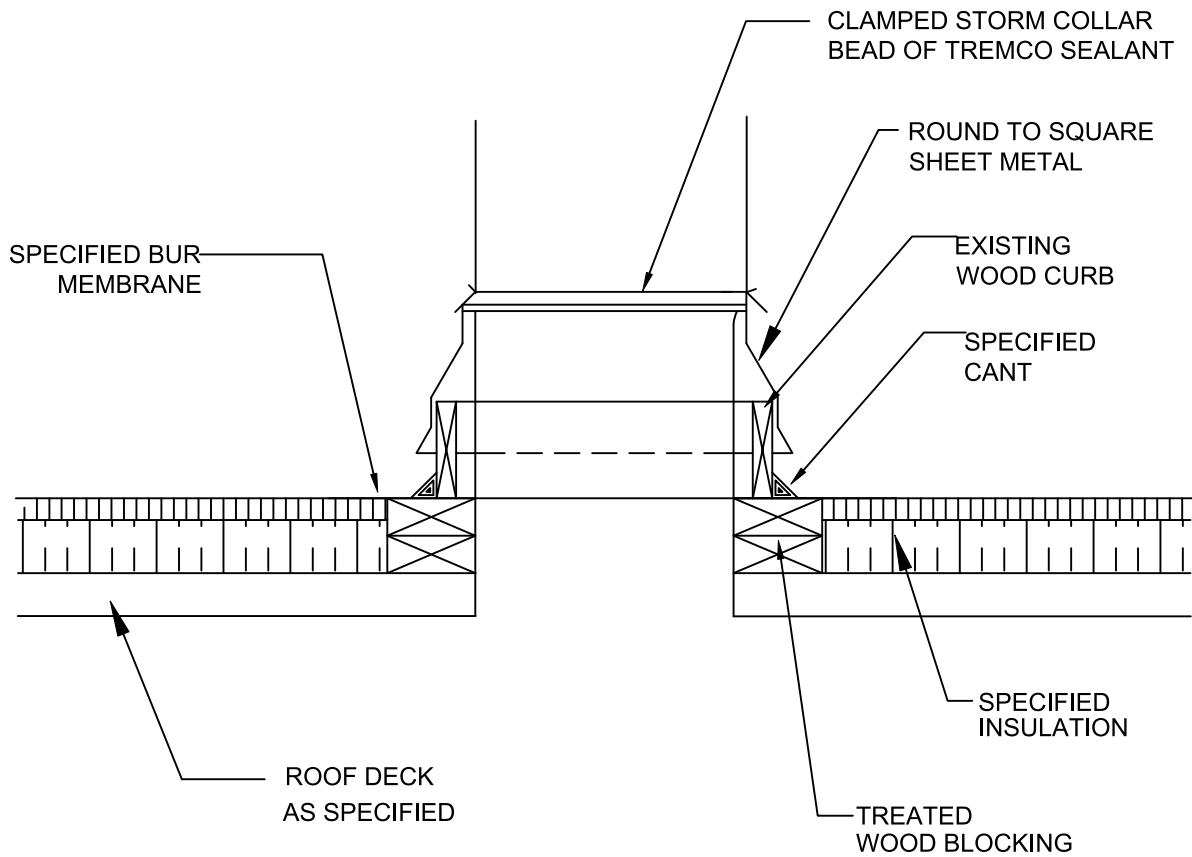
1. ATTACH BASE SHEET TO THE ROOF DECKING WITH APPROVED FASTENERS AND DISCS.
2. SPACE FASTENERS 9 INCHES ON CENTER ALONG SIDELAP AND 18 INCHES ON CENTER IN TWO ROWS EQUALLY STAGGERED DOWN THE LONGITUDINAL CENTER OF THE SHEET (12 INCHES FROM EACH EDGE).
3. INCREASE PERIMETER EDGE FASTENING BY 70% AND CORNER FASTENING BY 160% PER FM GLOBAL LOSS PREVENTION DATA SHEETS 1-28 AND 1-29.
4. DETERMINE FASTENER DENSITY ON A UNIT AREA PER FASTENER BASIS. ADD ADDITIONAL ROWS AND INCREASE FASTENERS PER ROW. DO NOT SPACE FASTENERS CLOSER THAN 4 INCHES ON CENTER.



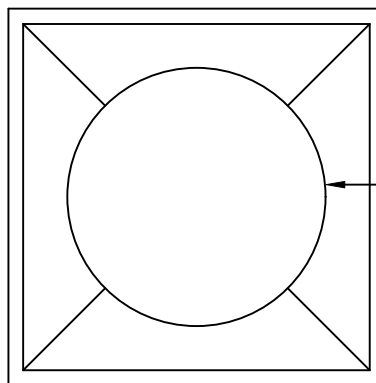
SHEET TITLE: BUILT-UP ROOFING
HOT/COLD BASE SHEET FASTENER
PLACEMENT
FOR GYPSUM AND WOOD DECKING

SCALE:
NTS

DRAWING No.:
DWG NO. 16

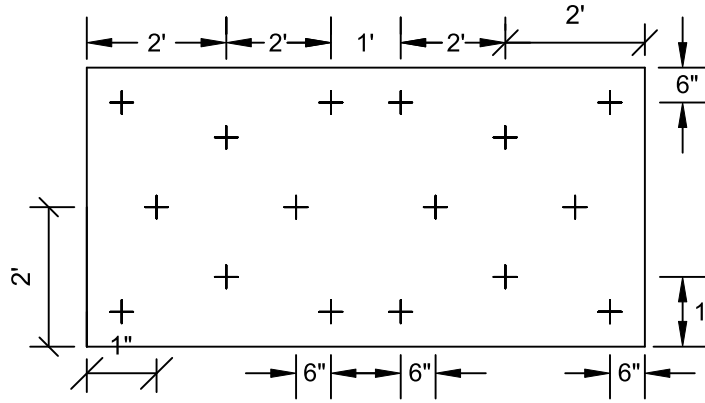


FABRICATED ROUND TO SQUARE SHEET METAL
TWO PIECE SOLDERED IN FIELD.



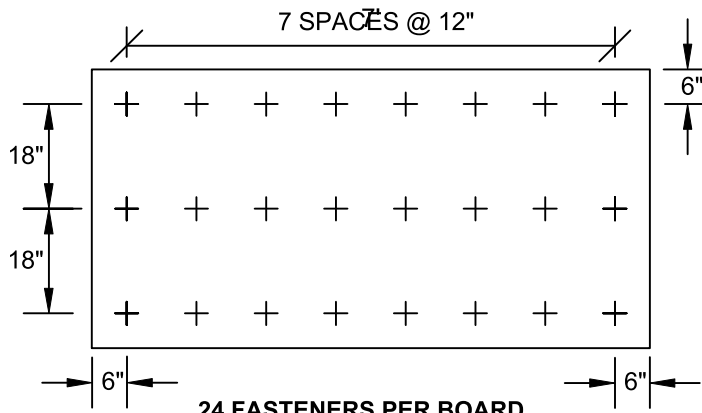
EXISTING ROUND
PENETRATION

FIELD FASTENER PLACEMENT



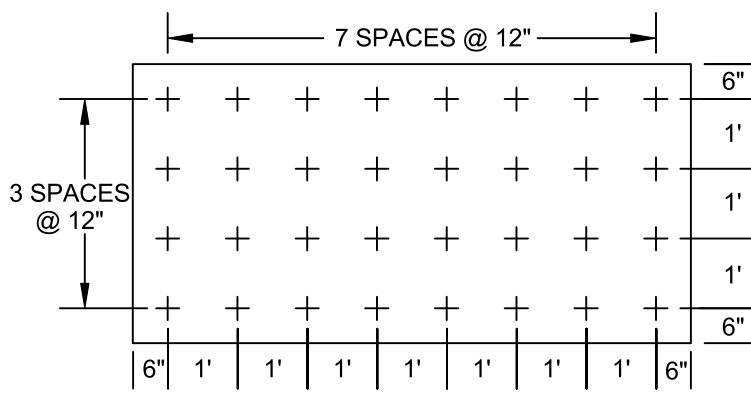
16 FASTENERS PER BOARD

PERIMETER FASTENER PLACEMENT



24 FASTENERS PER BOARD

CORNER FASTENER PLACEMENT



32 FASTENERS PER BOARD

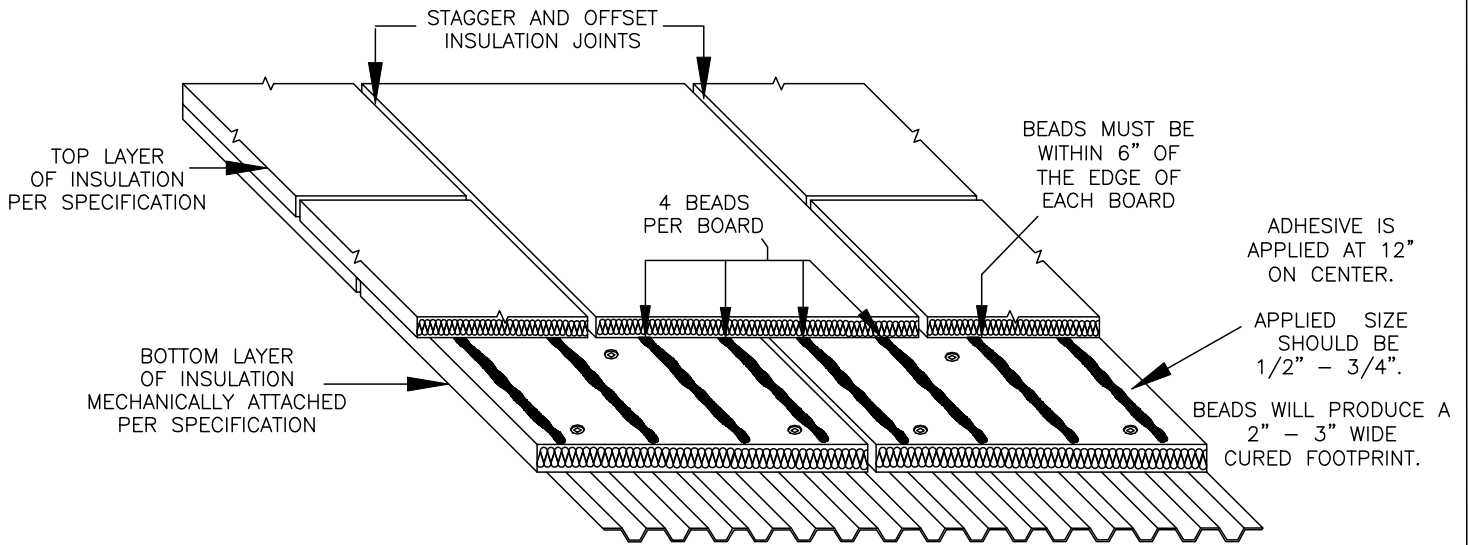
THE FOLLOWING GUIDELINES APPLY FOR FASTENER DENSITIES NOT SHOWN:

1. ENSURE EDGE FASTENERS ARE 6 INCHES FROM THE BOARD EDGES, WITH TOLERANCE AS ABOVE.
2. ENSURE FASTENERS ARE EVENLY DISTRIBUTED OVER THE BOARD AREA.
3. ENSURE ALL FASTENERS ENGAGE THE TOP FLANGE OF STEEL DECKING.
4. REFER TO FM GLOBAL PROPERTY LOSS PREVENTION DATA SHEETS 1-29 FOR FASTENER PLACEMENT RECOMMENDATIONS.



SHEET TITLE: BUILT-UP ROOFING
HOT/COLD INSULATION FASTENER
PLACEMENT FOR 4 FT. X 8 FT. BOARDS

SCALE: NTS
DRAWING No.: DWG NO. 22



NOTE:

1. INSULATION BOARDS MUST BE PLACED INTO THE ADHESIVE AS SOON AS IT STARTS TO FOAM (WITHIN 15 SECONDS). STEP BOARDS INTO PLACE. DO NOT REPOSITION BOARDS ONCE THEY ARE SET. DO NOT PUDDLE OR MOUND THE ADHESIVE AS THIS CAN LEAD TO EXCESSIVE RISE AND BOARD SURFACE UNEVENNESS.
2. IDEAL AMBIENT TEMPERATURE FOR APPLICATION IS 45F AND RISING. MATERIAL TEMPERATURE MUST BE BETWEEN 70F AND 85F.
3. APPLY ADHESIVE AT 12" O.C. AT THE FIELD OF THE ROOF (4 BEADS PER BOARD).
4. APPLY ADHESIVE AT 6" O.C. IN PERIMETER AREAS (8 BEADS PER BOARD) AND 4" O.C. IN CORNER AREAS (12 BEADS PER BOARD).



SHEET TITLE:

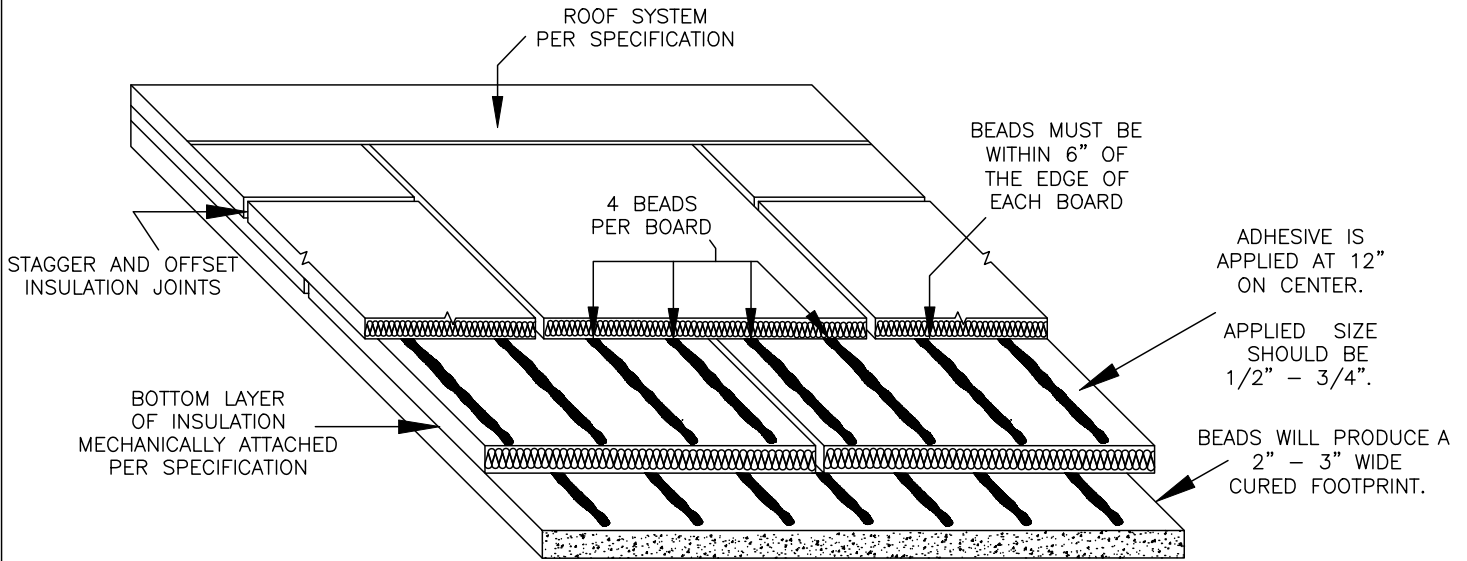
TREMCO LOW RISE FOAM
INSULATION ADHESIVE

SCALE:

NTS

DRAWING No.:

TLRFIA-002



NOTE:

1. INSULATION BOARDS MUST BE PLACED INTO THE ADHESIVE AS SOON AS IT STARTS TO FOAM (WITHIN 15 SECONDS). STEP BOARDS INTO PLACE. DO NOT REPOSITION BOARDS ONCE THEY ARE SET. DO NOT PUDDLE OR MOUND THE ADHESIVE AS THIS CAN LEAD TO EXCESSIVE RISE AND BOARD SURFACE UNEVENNESS.
2. IDEAL AMBIENT TEMPERATURE FOR APPLICATION IS 45F AND RISING. MATERIAL TEMPERATURE MUST BE BETWEEN 70F AND 85F.
3. APPLY ADHESIVE AT 12" O.C. AT THE FIELD OF THE ROOF (4 BEADS PER BOARD).
4. APPLY ADHESIVE AT 6" O.C. IN PERIMETER AREAS (8 BEADS PER BOARD) AND 4" O.C. IN CORNER AREAS (12 BEADS PER BOARD).



SHEET TITLE:

TREMCO LOW RISE FOAM
INSULATION ADHESIVE

SCALE:

NTS

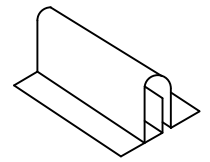
DRAWING No.:

TLRFIA-001

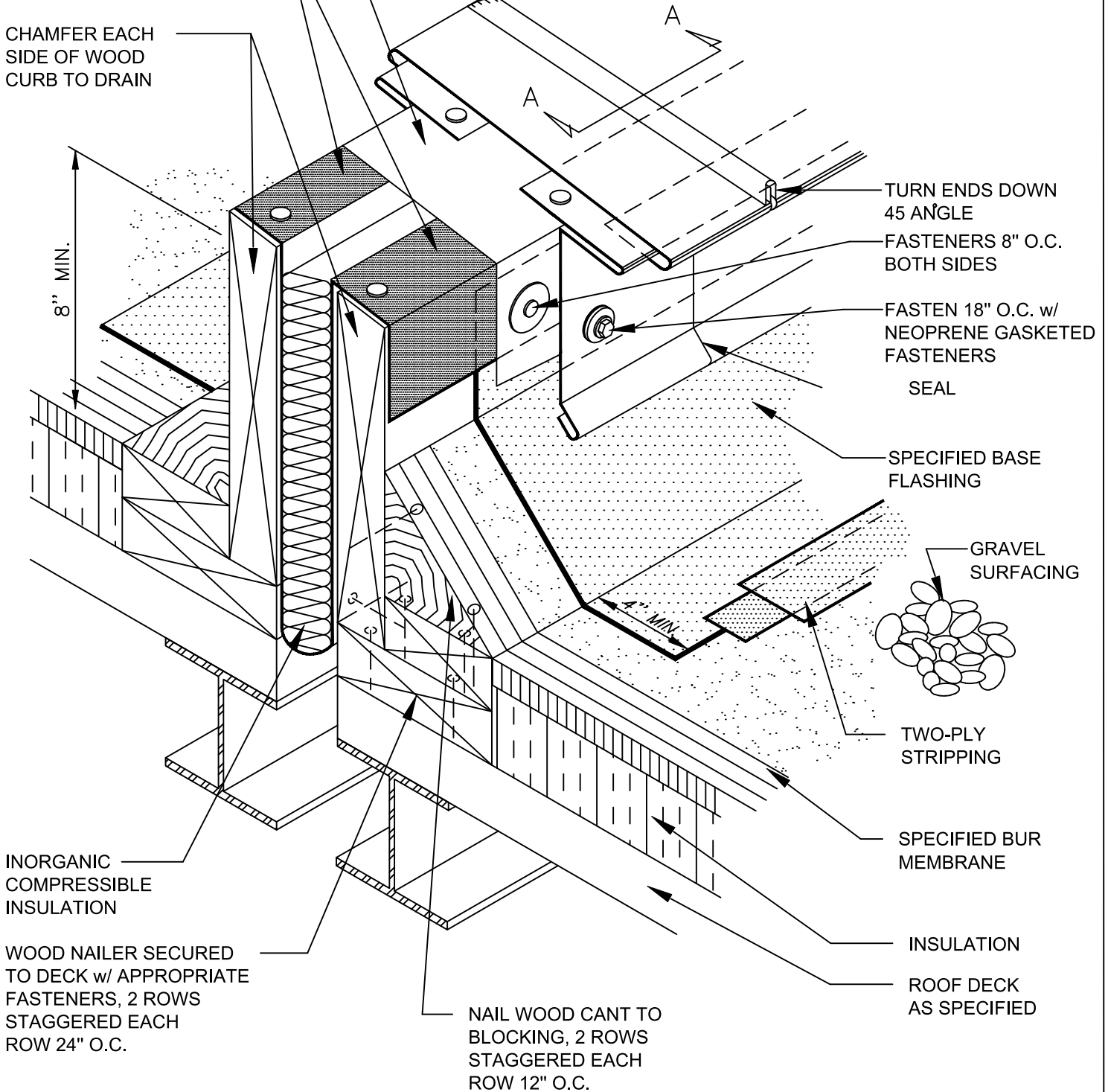
FLEXIBLE IMPERVIOUS
MEMBRANE ADHERED TO
VAPOR RETARDER

FLEXIBLE VAPOR
RETARDER TO SERVE
AS INSULATION RETAINER

CHAMFER EACH
SIDE OF WOOD
CURB TO DRAIN



SECTION A-A



8" MIN.

TURN ENDS DOWN
45 ANGLE

FASTENERS 8" O.C.
BOTH SIDES

FASTEN 18" O.C. w/
NEOPRENE GASKETED
FASTENERS
SEAL

SPECIFIED BASE
FLASHING

GRAVEL
SURFACING

TWO-PLY
STRIPPING

SPECIFIED BUR
MEMBRANE

INSULATION

ROOF DECK
AS SPECIFIED

INORGANIC
COMPRESSIBLE
INSULATION

WOOD NAILER SECURED
TO DECK w/ APPROPRIATE
FASTENERS, 2 ROWS
STAGGERED EACH
ROW 24" O.C.

NAIL WOOD CANT TO
BLOCKING, 2 ROWS
STAGGERED EACH
ROW 12" O.C.



Roofing & Building Maintenance

SHEET TITLE:
BUILT-UP ROOFING
HOT/COLD STANDING SEAM
EXPANSION JOINT

SCALE:
NTS

DRAWING No.:
DWG NO. 05