

City of North Little Rock
Amy Smith, Purchasing Manager
Shelia Waid, Purchasing Agent



120 Main Street, North Little Rock, AR 72114
P.O. Box 5757 North Little Rock, AR 72119
501-975-8881 Phone
501-975-8885 Fax

INVITATION TO BID

Bid Number: 25-3900 Date Issued: September 15, 25
Date & Time Bid Opening: September 30, 2025 at 10:00 a.m.

Re-Roof North Little Rock Community Center (2700 Willow, North Little Rock, AR)

Specifications are attached.

Total Project Bid Price: \$ _____

Please direct technical questions to: **Kenny Stephens**
Parks, Traffic and Safety Director
kstephens@nlr.ar.gov
501-791-8538

If you are obtaining this bid from our website, please be reminded that addendums may occur. It is therefore advisable that you review our listings (www.nlr.ar.gov) for attachments including any changes to the bid.

The City of North Little Rock encourages participation of small, minority, and woman own business enterprises in the procurement of goods, services, professional services, and construction, either as a general contractor or sub-contractor. It is further requested that whenever possible, majority contractors who require sub-contractors, seek qualified small, minority, and woman businesses to partner with them.

EXECUTION OF BID

Upon signing this page, the organization certifies that they have read and agree to the requirements set forth in this bid including conditions set forth and pertinent information requests.

Name of Firm: _____ Phone No.: _____

Business Address: _____

Signature of Authorized Person: _____

Title: _____ Date: _____, 2025

UNSIGNED BID COVER SHEET WILL BE REJECTED.

INVITATION FOR BID

Re-Roof PHH Senior Center (401 West Pershing, North Little Rock, AR)

1.0 PURPOSE

The intent of this Invitation For Bid is to secure, on a competitive basis, materials and labor to re-roof the North Little Rock Community Center (hereinafter referred to as the "Community Center") in the City of North Little Rock. The Community Center is located at 2700 Willow, North Little Rock, Arkansas.

2.0 COMPETITION INTENDED

It is the City of North Little Rock's (hereinafter referred to as the "City") intent that this Invitation for Bid (IFB) permit competition. Your company must have at last five years of experience in re-roofing this type of roof as stated in the scope of work.

3.0 INSTRUCTIONS TO BIDDERS

3.1 Submission of Bids

Before submitting a bid, read the ENTIRE solicitation. Failure to read any part of this solicitation will not relieve a bidder of the obligations. The Bidder is responsible for being familiar with all conditions, instructions, and documents governing this project and bid. Failure to make such investigation and preparations shall not excuse the Vendor from performance of the duties and obligations imposed under the terms of this bid. Pricing must be submitted on Invitation For Bid on Bid Sheet only. Include other information, as requested or required. On the front of the envelope when submitting a bid, include Bid number and project title: **Re-Roof North Little Rock Community Center – Bid Number 25-3900**. Bids must be received by the Commerce Department BEFORE the hour specified on the opening date. Bids may be either mailed or hand delivered to:

Commerce Department
City of North Little Rock
700 West 29th Street
North Little Rock, AR 72114

The City is not responsible for delays from the US Post Office or any other courier. *Faxed and emailed bids will not be accepted.*

3.2 Questions and Inquiries

Questions and inquiries, both verbal and written, will be accepted from any and all bidders. The City is the sole point of contact for this solicitation unless otherwise instructed herein. Unauthorized contact with other City staff regarding the IFB may result in the disqualification of the bidder. Inquiries pertaining to the Invitation for Bid must give the IFB number, title and acceptance date. Material questions will be answered in writing with an Addendum provided, however, no

questions will be taken after Friday, September 26, 2025 at 4:00 p.m. It is the responsibility of all bidders to ensure that they have received all Addendums. Addendums can be downloaded from www.nlr.ar.gov. (Click on Government, Commerce and Current Bids and Summaries.)

Contact the following person for questions regarding the bid specifications:

Kenny Stephens
Parks, Traffic and Safety Department Director
501-791-8538

3.3 Firm Pricing for City Acceptance

Bid price must be firm for the City's acceptance for a minimum of sixty (60) days from bid opening date.

3.4 Authority to Bind Firm in Contract

Bids MUST give full firm name and address of bidder. Failure to manually sign bid may disqualify it. Person signing bid should show TITLE or AUTHORITY TO BIND THE FIRM IN AN AGREEMENT. Firm name and authorized signature must appear on cover page of bid.

3.5 Late Bids

LATE bids will not be OPENED.

3.6 Basis for Award

The award will be made to the lowest responsive, qualified and responsible bidder based upon the prices and meeting the specifications.

- a) The City reserves the right to cancel invitations for bids or requests for proposals without penalty when it is in the best interest of the City. Notice of cancellation shall be addressed on the City's website under current Bids.
- b) The City reserves the right to reject any and all bids, to waive any minor informality or irregularity in any bid, to negotiate changes and/or modifications with the lowest responsible bidder and to award the bid to bidder deemed to be the most advantageous to the City. Bidders shall be required to comply with all applicable federal, state and local laws, including those relating to employment of labor without discrimination on the basis of age, race, color, handicap, sex, national origin or religious creed.
- c) Any bid not conforming to the specifications or requirements set forth in the bid request may be rejected.
- d) Bids may also be rejected if they are made by a bidder that is deemed un-responsible due to a lack of qualifications, capacity, skill, character, experience, reliability, financial stability or quality of services, supplies, materials, equipment or labor.

3.7 Negotiation with the Lowest Responsible Bidder

Unless all bids are cancelled or rejected, the City reserves the right to negotiate with the lowest responsive, qualified, responsible bidder to obtain a Contract price within the funds available whenever such low bid exceeds the available

funds. Negotiations with the low bidder may include both modifications of the low price and the specifications/scope of work to be performed.

3.8 Debarment

By submitting a bid, the bidder is certifying that bidder is not currently debarred by the City, or in a procurement involving federal funds, by the Federal Government.

3.9 W-9 Form Required

Each bidder shall submit a completed W-9 form with their bid.

3.10 City Business/Privilege License

Contractor must hold a current Business/Privilege License with the City of North Little Rock or with any City within the State of Arkansas and a copy of the business/privilege license must be provided with the bid.

3.11 Mandatory On-Site Visit

All bidders must attend a mandatory on-site visit at the Community Center located at 2700 Willow, North Little Rock, AR. **The Mandatory On-Site Visit date and time is: Wednesday, September 24, 2025 at 2:00 p.m.** The purpose of the site visit is to see the roof in regards to the scope of work as well as allow you to look at the existing roof.

3.12 Acknowledgement of Contract

Respondents acknowledge and understand that upon award of the winning bid, the selected bidder will be required to review and sign a contract with the City of North Little Rock prior to providing any services to the City.

3.13 Subcontracts

The Contractor is fully responsible for all work performed under this Contract even if some of the work is performed by subcontractors.

No subcontract, which the Contractor entered into with respect to performance under this Contract, shall in any way relieve the Contractor of any responsibility for performance of its duties. Contractor must notify the City if he/she intends to use a subcontractor and get City's approval of the subcontractor.

4.0 SCOPE OF WORK

General Conditions:

4.1 Contractor must be a licensed roofing professional in the State of Arkansas;

4.2 Contractor will provide a 20 year Labor and 20 year Material Warranty;

4.3 Bids must include the total price of the project to include labor, materials, sales tax, freight and cleanup of the project;

- 4.4 Contractor agrees to clean-up both sites and dispose of all waste materials at an appropriate disposal site at no additional cost to the City of North Little Rock;
- 4.5 Contractor will agree to schedule their work to minimally impact the daily operation of the Senior Center; and,
- 4.6 Contractor will attend the mandatory site visit prior to bid closing.
- 4.7 Owner will approve color charts prior to construction.

5.0 Bid Security

- 5.1 Bids shall be accompanied by a certified check upon a national or state bank in a not less than five percent (5% of the total maximum bid price) payable without recourse to the Owner, or a bid bond in the same amount from a reliable surety company, as a guarantee that the Bidder will enter into a contract and execute a performance and payment bonds within fifteen (15) days after notice of award of Contract. Such bid guarantee shall be made payable to the City of North Little Rock.
- 5.2 The **Successful** bidder will be required to furnish a performance and payment bond in the amount of one hundred percent (100%) of the contract price from an approved surety company holding a permit from the State of Arkansas to act as surety, or other surety or sureties acceptable to the Owner.

6.0 Insurance

- 6.1 Contract must provide to the City of North Little Rock a Certificate of Comprehensive General Liability and Workmen's Compensation Insurance if selected.

Please list any options or exceptions here:

GENERAL TERMS AND CONDITIONS FOR THE CITY OF NORTH LITTLE ROCK, AR

1. When submitting an "Invitation to Bid," the bidder warrants that the commodities covered by the bid shall be free from defects in material and workmanship under normal use and service. In addition, bidder must deliver new commodities of the latest design and model, unless otherwise specified in the "Invitation to Bid."
2. Prices quoted are to be net process, and when an error is made in extending total prices, the City may accept the bid for the lesser amount whether reflected by extension or by the correct multiple of the unit price.
3. Discounts offered will be taken when the City qualifies for such. The beginning date for computing discounts will be the date of invoice or the date of delivery and acceptance, whichever is later.
4. When bidding other than the brand and/or model specified in the "Invitation to Bid," the brand and/or model number must be stated by that item in the "Invitation to Bid," and descriptive literature be submitted with the bid.
5. **REJECTION**
 - A. The City reserves the right to reject any or all Bids, to waive any minor informality or irregularity in any Bid, to negotiate changes and/or modifications with the lowest responsible bidder and to make award to the response deemed to be the most advantageous to the City. Bidders shall be required to comply with all applicable federal, state and local laws.
 - B. The City reserves the right to cancel request for bids without penalty with it is in the best interest of the City. Notice of Cancellation shall be inserted on the City's website (www.nlr.ar.gov).
 - C. Any Bid not conforming to the specifications or requirements set forth by the City in this Bid Request may be rejected.
 - D. Bids may be also rejected if they are made by a Bidder that is deemed un-responsible due to lack of qualifications, capacity, skill, character, experience, reliability, financial stability or quality of services, supplies, materials, equipment or labor.
 - E. The City of North Little Rock reserves the right to reject any and all bids, to accept in whole or in part, to waive any Informalities in bids received, to accept bids on materials or equipment with variations from specifications in those cases where efficiency of operation will not be impaired, and unless otherwise specified by the bidder, to accept any item in the bid. If unit prices and extensions thereof do not coincide, the City of North Little Rock may accept the bid for the lesser amount whether reflected by the extension or by the correct multiple of the unit price
6. The Purchasing office reserves the right to award items, all or none, or by line item(s).
7. Quality, time and probability of performance may be factors in making an award.
8. Bid quotes submitted will remain firm for 60 calendar days from bid opening date; however, the prices may remain firm for a longer period of time if mutually agreeable between bidder and the Department of Commerce.
9. Bidder must submit a completed signed copy of the front page of the "Invitation to Bid" and must submit any other information required in the "Invitation to Bid."
10. In the event a contract is entered into pursuant to the "Invitation to Bid," the bidder shall not discriminate against any qualified employee or qualified applicant for employment because of race, sex, color, creed, national origin or ancestry. The bidder must include in any and all subcontracts a provision similar to the above.
11. Sales or use tax is not to be included in the bid price, but is to be added by the vendor to the invoice billing to the City. Although use tax is not to be included in this bid, vendors are to register and pay tax direct to the Arkansas State Revenue

Department.

12. Prices quoted shall be "Free on Board" (F.O.B.) to destination at designated facility in North Little Rock. Charges may not be added after the bid is opened.
13. In the event of two or more identical low bids, the contract may be awarded arbitrarily or for any reason to any of such bidders or split in any proportion between them at the discretion of the Department of Commerce.
14. Specifications furnished with this Invitation are intended to establish a desired quality or performance level, or other minimum dimensions and capacities, which will provide the best product available at the lowest possible price. Other than designated brands and/or models approved as equal to designated products shall receive an equal consideration.
15. Samples of items when required, must be furnished free, and, if not called for within 30 days from date of bid opening, will become property of the City.
16. Bids will not be considered if they are:
 1. Submitted after the bid's opening time.
 2. Submitted electronically or faxed (unless authorized by Purchasing Manager).
17. Guarantees and warranties should be submitted with the bid, as they may be a consideration in making an award.
18. **CONSTRUCTION**
 - A. Contractor is to supply the City with evidence of having and maintaining proper and complete insurance, specifically Workman's Compensation Insurance in accordance with the laws of the State of Arkansas, Public Liability and Property Damage. All premiums and cost shall be paid by the Contractor. In no way will the City be responsible in case of accident.
 - B. When noted, a Certified check or bid bond in the amount of 5% of total bid shall accompany bid.
 - C. A Performance Bond equaling the total amount of any bid exceeding \$50,000.00 must be provided for any contract for the repair, alteration or erection of any public building, public structure or public improvement (pursuant to Arkansas Code Annotated Section 22-9-203).
19. **LIQUIDATED DAMAGES** – Liquidated damages shall be determined at the time of contract negotiations, based upon the construction contract price and stated time period set for completion of the project. Liquidated damages shall be assessed beginning on the first day following the maximum delivery or completion time entered on this bid form and/or provided for by the plans and specifications.
20. **AMBIGUITY IN BID** - Any ambiguity in any bid as the result of omission, error, lack of clarity or non-compliance by the bidder with specifications, instructions, and all conditions of bidding shall be construed in the light most favorable to the City.
21. The bid number should be stated on the face of the sealed bid envelope. If it is not, the envelope will have to be opened to identify.
22. Whenever a bid is sought seeking a source of supply for a specified period of time for materials and services, the quantities of usage shown are estimated ONLY. No guarantee or warranty is given or implied by the participants as to the total amount that may or may not be purchased from any resulting contracts. These quantities are for the bidders information ONLY and will be used for tabulation and presentation of bid and the participant reserves the right to increase or decrease quantities as required.

23. The City of North Little Rock will follow procedures to check bidder eligibility through the federal System for Award Management (S.A.M.) as outlined in 2 C.F.R. § 200. This will be completed prior to the award of any contract in which federal grant funds will be expended.
24. Respondents acknowledge and understand that upon award of the winning Bid, the Respondent will be required to review and sign a contract with the City of North Little Rock, which will contain additional terms and conditions, prior to providing any services to the City. In the event of any discrepancy or contradiction between the bid documents, Terms and Conditions or other such documents, the provisions in the contract shall take precedence.
25. Additional information or bid forms may be obtained from:

COMMERCE DEPARTMENT, 700 West 29th Street, P.O. Box 5757, North Little Rock, Arkansas 72119
(501)975-8881 www.nlr.ar.gov

Bidding documents must be submitted on or before the bid's opening date and time. Unless noted, bids must be sealed and mailed or delivered to:

**Amy Smith, Purchasing Manager
Commerce
700 W. 29th Street, 3rd Floor
North Little Rock, AR 72114**

Note: Unless otherwise stated, the use of a manufacturer's name and product number are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

The City of North Little Rock is committed to fair and equal opportunity in employment and service delivery regardless of race, color religion, gender, age, disability, sexual orientation, gender identity or expression, genetic information, marital status, national origin, or veteran status. This policy statement reinforces and communicates that commitment to employees.



Asbestos Report Summary

By: POLARIZED LIGHT MICROSCOPY

Client Project: 2201019A

Job Number: 00002-B2022-0035

Date Reported: 02/02/2022

METHOD: EPA-600/R-93/116

Location: 2700 Willow Street / North Little Rock, AR

Client Sample ID	Layer	Color	Sample Description		ASBESTOS %
2700-01-01	1	Silver	Roofing Material - Paint	Roof	None Detected
2700-01-01	2	Black	Roofing Material	Roof	None Detected
2700-01-01	3	Brown	Roofing Material - Insulation	Roof	None Detected
2700-01-01	4	White	Roofing Material - Insulation	Roof	None Detected

Client Project: 2201019A
Methodology: EPA-600/R-93/116
Sample(s) Taken From: 2700 Willow Street / North Little Rock, AR
Received: 1/27/2022 **Shipped Via:** FedEx

Job Number: 00002-B2022-0035
Sampled By: Walk-in Sample
Date Sampled: 1/26/2022
Reported: 2/2/2022

Bulk Asbestos Report

Sample #	Client Sample ID:	Layered	Analysis	This material contains approximately	
1	2700-01-01	1	None Detected	Cellulose 3%	Talc <1%
				Particulate Matter 97%	
Sample Description: Silver Roofing Material - Paint Roof					
Sample #	Client Sample ID:	Layered	Analysis	This material contains approximately	
1	2700-01-01	2	None Detected	Cellulose 15%	Fiberglass 30%
				Particulate Matter 55%	
Sample Description: Black Roofing Material Roof					
Sample #	Client Sample ID:	Layered	Analysis	This material contains approximately	
1	2700-01-01	3	None Detected	Gypsum Mortar 100%	
Sample Description: Brown Roofing Material - Insulation Roof					
Sample #	Client Sample ID:	Layered	Analysis	This material contains approximately	
1	2700-01-01	4	None Detected	Foam 100%	
Sample Description: White Roofing Material - Insulation Roof					

Current information listed above applies to the standards or procedures identified and the samples actually tested. The methodology(s) listed in this report is the only methodology(s) used. Each percentage reported above is a visual estimation of total composition, unless otherwise noted in this report. Asbestos detection limit is less than 1 percent. Test measurements are traceable to Standard Reference Material 1866a and 1867. The results are valid only for the materials tested. The information listed above is for the exclusive use of the client listed above. Sample results shall not be reproduced in any form or fashion for advertising or other purposes in connection with EEG's name or signature without consent from EEG. Sample results shall not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. Samples not consumed in analysis will be retained for a maximum of 30 days. Samples may be returned to the client upon request. Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of Accreditation under NVLAP code 101768-0. Eurofins CEI, 730 SE Maynard Road, Cary, NC 27511.



Respectfully Submitted,
EEG, Inc.

Analyst

Reviewed by

NLR COMMUNITY CENTER
NORTH LITTLE ROCK, AR

SECTION 07 54 19 POLYVINYL CHLORIDE ROOFING al

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preparation of Substrate to Receive Roofing Materials*
- B. Temporary Roof Application to Prepared Substrate*
- C. Roof Insulation Application to Prepared Substrate*
- D. Roof Membrane Application*
- E. Roof Flashing Application*
- F. Incorporation of Sheet Metal Flashing Components and Roofing Accessories into the Roof System*

1.02 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

- A. Sheet Metal Flashing and Trim*
- B. Sheet Metal Roofing Specialties*

1.03 RELATED SECTIONS

- A. Section [----] - Rough Carpentry*
- B. Section [----] - Roof Decks*
- C. Section [----] - Sheet Metal Flashing and Trim*
- D. Section [----] - Roof Specialties*

1.04 REFERENCE STANDARDS

References in these specifications to standards, test methods and codes, are implied to mean the latest edition of each such standard adopted. The following is an abbreviated list of associations, institutions, and societies which may be used as references throughout this specification section.

*ASTM American Society for Testing and Materials
 Philadelphia, PA*

*FM Factory Mutual Engineering and Research
 Norwood, MA*

*NRCA National Roofing Contractors Association
 Rosemont, IL*

*OSHA Occupational Safety and Health Administration
 Washington, DC*

*SMACNA Sheet Metal and Air Conditioning Contractors National Association
 Chantilly, VA*

*UL Underwriters Laboratories
 Northbrook, IL*

1.05 SUBMITTALS

All submittals which do not conform to the following requirements will be rejected.

A. Submittals Prior to Contract Award:

- 1. Letter from the proposed primary roofing manufacturer confirming that the bidder is an acceptable Contractor authorized to install the proposed system.*

2. Letter from the primary roofing manufacturer stating that the proposed application will comply with the manufacturer's requirements in order to qualify the project for the specified guarantee.

B. Submittals Prior to Project Close-out:

1. Manufacturer's printed recommendations for proper maintenance of the specified roof system including inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.06 QUALITY ASSURANCE

A. Product Quality Assurance Program: Primary roofing materials shall be manufactured under a quality management system that is monitored regularly by a third party auditor under the ISO 9001 audit process. A certificate of analysis (COA) for reporting/confirming the tested values of the actual material being supplied for the project will be required prior to project close-out.

B. Agency Approvals: The proposed roof system shall conform to the following requirements. No other testing agency approvals will be accepted.

1. Underwriters Laboratories Class A acceptance of the proposed roofing system (including adhesive).
2. Wind Uplift Rating: Submit evidence by an approved third-party testing agency that the roof configuration has been tested to meet the following specified wind uplift design.
 1. Class 1, 1-90 windstorm construction.

C. Acceptable Contractor: Contractor shall have a minimum of 20 years experience in successfully installing the same or similar roofing materials and be certified in writing by the roofing materials manufacturer to install the primary roofing products.

D. Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings and furnish competent and full time supervision, experienced roof mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the roof installation in accordance with this specification. Comply with the latest written application

instructions of the manufacturer of the primary roofing products. In addition, application practice shall comply with requirements and recommendations contained in the latest edition of the National Roofing Contractor's Association (NRCA) Roofing Manual as published by the National Roofing Contractor's Association.

- E. Contractor shall have an up to date CERTA certification from the NRCA's CERTA Program.*
- F. Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction.*
- G. Manufacturer Requirements: Ensure that the primary roofing materials manufacturer provides direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conducts a final inspection upon successful completion of the project.*

1.07 PRODUCT DELIVERY STORAGE AND HANDLING

- A. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.*
- B. Storage: Refer to the manufacturer's published literature for storage guidelines.*
- C. Handling: Handle all materials in such a manner as to preclude damage and contamination with moisture or foreign matter. Handle rolled goods to prevent damage to edges or ends.*
- D. Damaged Material: Any materials that are found to be damaged or stored in any manner other than stated above will be automatically rejected, removed and replaced at the Contractor's expense.*

1.08 PROJECT/SITE CONDITIONS

- A. Requirements Prior to Job Start*

1. *Notification:* Give a minimum of 5 days notice to the Owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.
2. *Permits:* Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.
3. *Safety:* Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NRCA and other industry or local governmental groups.

B. Environmental Requirements

1. *Precipitation:* Do not apply roofing materials during precipitation or in the event there is a probability of precipitation during application. Take adequate precautions to ensure that materials, applied roofing, and building interiors are protected from possible moisture damage or contamination.
2. *Temperature Restrictions - adhesive:* Refer to the manufacturer's published guidelines for temperature restrictions for adhesive applications.

C. Protection Requirements

1. *Membrane Protection:* Provide protection against staining and mechanical damage for newly applied roofing and adjacent surfaces throughout this project.
2. *Limited Access:* Prevent access by the public to materials, tools and equipment during the course of the project.
3. *Debris Removal:* Remove all debris daily from the project site and take to a legal dumping area authorized to receive such materials.
4. *Site Condition:* Complete, to the owner's satisfaction, all job site clean-up including building interior, exterior and landscaping where affected by the construction.

1.09 GUARANTEE/WARRANTY

- A. Roof Membrane/System Guarantee: Upon successful completion of the project, and after all post installation procedures have been completed, furnish the Owner with the manufacturer's 20 year labor and materials guarantee covering the rigid insulation, insulation adhesive, and roof membrane/flashing system. The guarantee shall be a term type, without deductibles or limitations on coverage amount, and shall be issued at no additional cost to the Owner.*

PART 2 PRODUCTS

2.01 ROOFING SYSTEM ASSEMBLY/PRODUCTS

A. Temporary Roof

- 1. Torchable Modified Bitumen Ply Sheet: A fiberglass reinforced, specially modified asphalt coated sheet, having an minimum weight of 85 lb/sq.*

- B. Rigid Roof Insulation: Roof insulation shall be UL and FM approved. Insulation shall be approved in writing by the insulation manufacturer for intended use and for use with the specified roof assembly. Maintain a maximum panel size of 4 feet by 4 feet where polyisocyanurate insulation is specified to be installed in insulation adhesive.*

- 1. Polyisocyanurate Tapered Roof Insulation: Tapered panels and standard fill panels composed of a closed cell, rigid polyisocyanurate foam core material, integrally laminated between glass fiber reinforced organic facers, in full compliance with ASTM C 1289, Type II, Class 1, Grade 2 (20 psi). The tapered system shall provide for a roof slope of 1/4 inch per foot.*

2. *Gypsum Cover Panel: A panel composed of a gypsum based, non-structural water resistant core material integrally bonded with fiberglass mats on both sides having a nominal thickness of 1/4 inch. The panel surface shall be factory primed with a non-asphaltic primer.*

2.02 DESCRIPTION OF SYSTEMS

- A. *Roof Membrane: A roof membrane consisting of one ply of a prefabricated, polyester scrim-reinforced, polyvinyl chloride (PVC) membrane formulated with an Elvaloy® Ketone Ethylene Ester (KEE) copolymer, applied over a prepared substrate. The roof membrane shall have a factory-adhered polyester fleece backing on the bottom side. The roof membrane shall meet or exceed to the minimum criteria established by ASTM D4434 Standard Specification for Poly(Vinyl Chloride) Sheet Roofing (Type III). The minimum thickness of the roof membrane shall be 60 mils (1.52 mm), as established by ASTM D751 Standard Test Method for Coated Fabrics. The minimum thickness of the roof membrane over the reinforcement scrim shall be 27 mils (0.685 mm), as established by ASTM D7635 Standard Test Method for Measurement of Thickness of Coatings Over Fabric Reinforcement.*
- B. *Flashing Stripping and Smooth Flashing Membrane (for use as flashing membrane only when asphalt residue is not present on the flashing substrate): A smooth-surface roof membrane consisting of one ply of a prefabricated, polyester scrim-reinforced, polyvinyl chloride (PVC) membrane formulated with an Elvaloy® Ketone Ethylene Ester (KEE) copolymer, applied over a prepared substrate. The roof system shall meet or exceed to the minimum criteria established by ASTM D4434 Standard Specification for Poly(Vinyl Chloride) Sheet Roofing (Type III). The minimum thickness of the flashing membrane shall be 60 mils (1.52 mm), as established by ASTM D751 Standard Test Method for Coated Fabrics. The minimum thickness of the flashing membrane over the reinforcement scrim shall be 27 mils (0.685 mm), as established by ASTM D7635 Standard Test Method for Measurement of Thickness of Coatings Over Fabric Reinforcement.*

- C. *Catalyzed Acrylic Resin Flashing System for Penetrations:* A specialty flashing system consisting of a liquid-applied, fully reinforced, multi-component acrylic membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The resin and catalyst are pre-mixed immediately prior to installation. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.

* *NOTE: Unistrut supports are not a suitable substrate for the Parapro 123 Flashing System. Any unistrut type penetration that is required to be incorporated into the roofing system should be replaced by a solid square or angle iron penetration with a fully welded plate.*

2.03 ROOFING ACCESSORIES

A. Roofing Adhesives

1. *Insulation and Membrane Adhesive:* A dual component, polyurethane foam adhesive used to adhere the roof membrane to the substrate.
2. *Smooth Flashing Membrane Adhesive:* A solvent-based, low VOC, rubberized adhesive designed for bonding PVC single-ply roofing membranes and flashings to various roofing substrates.
3. *Pourable Sealer:* A single component, moisture cure, self-leveling sealant designed for use around penetrations in pitch pan details.

B. Primer: Asphalt Primer for Asphaltic or SBS Modified Bitumen Vapor Retarder: Primer shall meet ASTM D41 criteria.

C. Sealant: A solvent-based, UV resistant synthetic elastomeric sealant for the completion of details.

D. Water Block: A single component butyl-based high viscosity sealant for sealing the flashing membrane to the substrate behind exposed termination bars and at drain flanges.

E. Membrane Conditioner/Cleaner: A solvent-based agent used to clean exposed or contaminated seams prior to heat welding to remove any residue that may compromise lap welding.

F. PVC Membrane Flashing Accessories

1. Outside Corner Flashing: A molded PVC membrane having a thickness of 0.075 inch (1.9 mm), designed to accommodate outside corners of base and curb flashing details. The molded flashing component shall be hot-air welded directly to the specified PVC membrane.

2. Inside Corner Flashing: A molded PVC membrane designed to accommodate inside corners of base and curb flashing details. The molded flashing component shall be hot-air welded directly to the specified PVC membrane.

3. *Fluted Corner Flashing:* A molded PVC membrane having a thickness of 0.055 inch (1.4 mm), designed to accommodate corners of base and curb flashing details having dimensions that cannot be addressed using standard pre-formed PVC inside or outside corner flashing components. The molded flashing component shall be hot-air welded directly to the specified PVC membrane.
4. *Flashing Strip:* An 8-inch wide molded PVC membrane strip having a thickness of 0.045 inch (1.14 mm), designed for general repairs and to strip-in PVC coated metal flanges.
5. *Termination Bar with Receiver:* An extruded aluminum termination bar with rounded edges and an angled sealant receiver and lower leg bulb stiffener, having factory-punched, slotted holes spaced on 8-inch (203 mm) centers.
6. *Flat Termination Bar:* A flat, extruded aluminum termination bar with rounded edges, having factory-punched, slotted holes spaced on 8-inch (203 mm) centers.
7. *Pre-formed Vent Boots:* A molded PVC membrane used to flash pipe and conduit penetrations having a diameter of 1 to 6 inches (25 to 152 mm). The pre-formed vent boots shall be hot-air welded directly to the PVC roof membrane.
8. *Cover Patches at T-Joints:* A molded PVC membrane used to reinforce the T-joints of the specified PVC membrane system.

G. Fasteners

1. Fasteners for Membrane Perimeter Securement: Membrane fasteners shall be FM Approved, and/or approved by the manufacturer of the primary roofing products. The fasteners shall provide attachment required to meet the specified uplift performance. The fastener spacing for membrane laps shall be as recommended by the manufacturer of the primary roofing products. Acceptable membrane fastener manufacturers for specific deck types are listed below.

a) Metal/Wood/Masonry Substrates: Mechanical fasteners for metal decks shall be factory coated for corrosion resistance. The fasteners shall meet or exceed Factory Mutual Standard 4470 and when subjected to 30 Kesternich cycles, show less than 15% red rust. Acceptable fastener types for metal decks are listed below.

- A fluorocarbon coated screw type roofing fastener having a minimum 0.275 inch thread diameter, used in conjunction with the specified seam plate.*

2. Membrane Plates: Membrane plates shall be FM Approved, and/or approved by the manufacturer of the primary roofing products. The plates shall be used with the specified seam fasteners to provide attachment required to meet the specified uplift performance. Acceptable membrane plate manufacturers are listed below.

- Barbed plates used in conjunction with the fastener shall be a metal type having a minimum 2.375 inch diameter, as supplied by the fastener manufacturer.*

H. Walktread: A prefabricated, extruded and embossed PVC protection pad with a skid-resistant surface.

1. Thickness: 1/8 inch (3.2 mm)

2. Width: 30 in (76.2 cm)

PART 3 EXECUTION

3.01 PREPARATION

A. General: Sweep or vacuum all surfaces, removing all loose aggregate and foreign substances prior to commencement of roofing.

B. Remove All Existing:

- Surface gravel*
- Roof membrane*
- Insulation*
- Base flashings*
- Edge metal*
- Flanged metal flashings*
- Cants*
- Walkways*
- Non functional penetrations/curbs*
- Drain assemblies*
- Vapor retarder*
- Metal trim, counterflashing*

C. Asphaltic Primer for Modified Bitumen Membrane: Prime metal and concrete and masonry surfaces with a uniform coating of the specified asphalt primer.

3.02 SUBSTRATE PREPARATION

A. Temporary Roof Application: Torch apply the ply sheets directly to the prepared substrate, lapping sides and ends a minimum of 3 inches. Apply the sheets free of wrinkles, creases or fishmouths and exert sufficient pressure on the roll during application to ensure the prevention of air pockets. Seal each penetration and

termination using fiberglass tape and the specified plastic cement to ensure that the temporary roof configuration is completely water-tight.

B. *Insulation:* Install insulation panels with end joints offset; edges of the panels shall be in moderate contact without forcing applied in strict accordance with the insulation manufacturer's requirements and the following instructions. Where insulation is installed in two or more layers, stagger joints between layers. Maintain a maximum panel size of 4 feet by 4 feet for polyisocyanurate insulation applied in insulation adhesive. Install only as much insulation as can be made watertight within the same work day.

1. *Insulation - multiple layer:* Install all layers in an application of the specified insulation adhesive in 3/4- to 1-inch wide beads spaced 12 inches on center in the field of the roof, 8 inches on center at the perimeter of the roof, and 6 inches on center in the corners of the roof. Panels may be affected by post-growth of the insulation adhesive. Continuous walking in of the panels is recommended particularly in perimeter/corner areas with reduced bead spacing. Follow the requirements and guidelines of the insulation adhesive manufacturer/supplier. Stagger the panel joints between insulation layers.

3.03 ROOF MEMBRANE INSTALLATION

A. *Membrane Application:* Apply roofing in accordance with roofing system manufacturer's instructions and the following requirements. Application of roofing membrane components shall immediately follow application of base sheet and/or insulation as a continuous operation.

B. *Aesthetic Considerations:* Construction of an aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this project. Make necessary preparations, utilize recommended application techniques, apply the specified materials, and exercise care in ensuring that the finished application is acceptable to the Owner.

C. *Roofing Application:* Apply roofing to be free of wrinkles, creases or fishmouths. Use a blower and/or broom to remove any dirt or debris from the substrate surface.

1. *Unroll the specified fleece-back PVC sheets in place and fold back sheets in the long dimension to allow adhering of membrane, one half of sheet at a time. Alternatively, align a full roll of membrane with the factory-applied lap line on the previously installed sheet. Roll out the roll approximately 20 feet (6.1 m) checking to see that the edge of the new roll is straight with the line. Pick up the tail end of the previously rolled-out membrane and pull back over top of the roll of membrane.*
2. *Apply the specified low-rise foam adhesive in a "spatter pattern" over the substrate to yield a heavily textured, even coating of approximately 1/4- inch (6.2 mm) to 1/2 inch (12 mm) nominal thickness height on the peaks of the spattered adhesive. Extend the adhesive in a full coating completely up to the selvage edge of the adjacent course of PVC roof membrane to be overlapped, taking care to keep the adhesive off of the selvage lap that will be heat welded. Allow the adhesive to rise and apply the roof membrane before the adhesive begins to "skin" over.*
3. *Lay half of the membrane into the wet adhesive and roll into place with a clean 150 lb. roller. Repeat the process for the other half of sheet. If following the alternative method, pull the sheet back to its original position, and roll into place. Make sure that the lap line is followed when re-installing the sheet.*
4. *Where the substrate angle changes in excess of 5 degrees (i.e. 1-inch slope), mechanically attach the membrane into the structural deck on 12-inch centers, keeping the fasteners 1/4 to 3/4 inch from the angle change. At curbs and walls, mechanically attach the membrane into the structural deck on 12-inch centers, keeping the fasteners 1/4 to 3/4 inch from the membrane edge. Alternatively, at walls/curbs extend the membrane a minimum of 3 inches up the vertical flashing substrate and mechanically attach the specified flat termination bar at the top edge of the membrane. The termination bar must be installed within 1.5 to 2 inches (38 to 51 mm) of the horizontal plane of the roof, with a minimum of 1-inch (25 mm) of membrane extending above the termination bar. Prior to mechanical attachment of the termination bar, apply the specified water block sealant on the flashing substrate behind the membrane where the termination bar will be installed.*

5. Install a minimum of 4 fasteners evenly spaced around all round, square, "L"-beam or "H"-beam penetrations, keeping the fasteners 1/4 to 3/4 inches from the penetration. At penetrations having a larger diameter, install fasteners around the penetration on 12-inch centers.
 6. Clean the laps of membrane that have become dirty or contaminated using the specified conditioner. Place a straight 2"x6" or larger board adjacent to the PVC sheet overlap to help reduce lifting of the overlapping sheet beyond the selvage area, inhibiting the potential for entrapped air during heat welding. Lay the board such that the welder nozzle does not extend into the overlap beyond the specified lap width. Heat weld all side and end laps of the membrane during each day's application. All welds must be continuous, without voids, and free of burns and scorch marks. Weld shall be a minimum width of 1 inch (25.4 mm) and a maximum width of 1.5 inches (38 mm). Contact the manufacturer of the heat-welding equipment for specific guidelines on operating the equipment. When hand-welding the laps, hand-roll the side laps, head laps, and T-laps of the membrane behind the hand welder using a 2-inch neoprene roller.
- D. Flashing Application - General: Locate all penetrations at least 24 inches from curbs, walls, and edges to provide access for proper application of the specified flashing materials. Reinforce all coated metal and membrane flashing corners using preformed corners or non-reinforced membrane. Hot-air weld all flashing membranes, accessories, and coated metal to have a minimum 2-inch (51 mm) hand-welded or minimum 1.5-inch (38 mm) automatic machine-welded lap. Overlap side and ends with the adjacent courses of the specified protection layer by a minimum of 6 inches. Reference the manufacturer's standard details for all flashing conditions.
- E. Flashing Application - Coated Metal Flashings: Form coated metal flashings in accordance with SMACNA guidelines and the manufacturer's published specifications and details. Reference the manufacturer's published details for all flashing conditions.
- F. Reinforced Smooth Flashing Application (only for use when asphalt residue is not present): Apply the solvent-based bonding adhesive to both the underside of the membrane and the substrate at the rate published by the manufacturer. Allow the bonding adhesive to dry until tacky to the touch before application of the flashing membrane. Mate the membrane to the flashing substrate coated with the specified adhesive. Roll the membrane to ensure complete bonding of the adhesive between

the flashing substrate and membrane. Heat weld the laps and terminate the top of the flashing membrane in accordance with the manufacturer's standard details.

- G. Flashing Application - Adhered Un-Reinforced Membrane Flashing: Apply un-reinforced membrane at field-fabricated penetrations or as reinforcement flashings in locations where preformed corners and pipe boots cannot be properly installed. Apply un-reinforced flashing in strict accordance with the published details and requirements of the roof membrane manufacturer. Allow the bonding adhesive to dry until tacky to the touch before application of the flashing membrane.*
- H. Catalyzed Acrylic Resin Flashing System (at penetrations): Install the liquid-applied primer and flashing system in accordance with the membrane system manufacturer's printed installer's guidelines and other applicable written recommendations as provided by the manufacturer.*
- I. Water Cut-Off: At end of day's work, or when precipitation is imminent, construct a water cut-off at all open edges. Construct cut-offs to withstand protracted periods of service without leaking using materials and methods compatible with the specified roof membrane system. Cut-offs must be completely removed prior to the resumption of roofing.*

3.04 ROOF SYSTEM INTERFACE WITH RELATED COMPONENTS

- A. Walkway/Protection Pads: Install walkway rolls at all roof access locations and other designated locations including roof-mounted equipment, work locations and areas of repeated rooftop traffic. Cut the walktread into maximum 5 foot lengths and allow to relax until flat. Use a spacing of 6 inches between sheets to allow for proper drainage. Heat-weld walkway rolls to the roof membrane surface continuously around the perimeter of the roll.*
- B. Roof Drains: Fit drains with clamping rings and strainer baskets. Provide a minimum 36-inch by 36-inch sump and a slope within the sump not exceeding 4:12. Extend the roof membrane over the drain opening and cut a hole in the membrane directly over the opening, leaving 1 inch of membrane to extending past the drain flange into the drain opening. Punch holes through the roofing membrane at drain bolt locations. Set the membrane in a full bed (use minimum one full tube) of the specified water*

block sealant over the drain flange prior to securement of the clamping ring. Field welds cannot pass within 9 inches of the clamping ring or within the drain sump itself. Reference the manufacturer's published details for appropriate treatment of roof drain conditions.

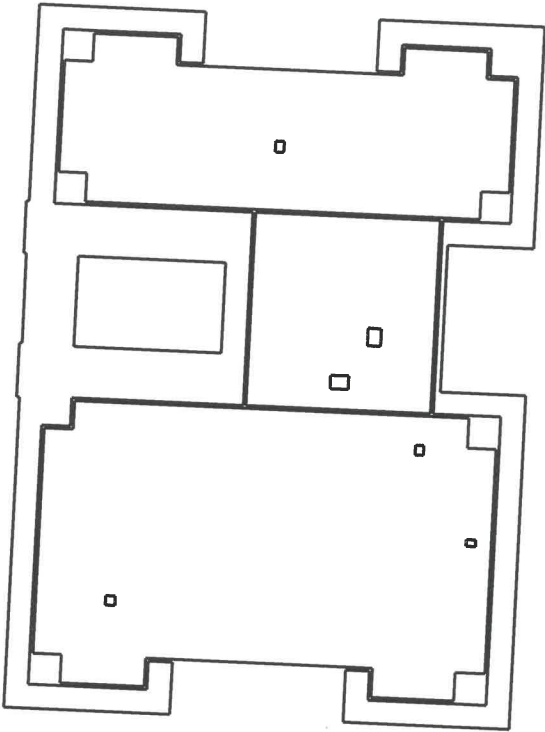
- C. *Termination Bars (securement at top of flashing membrane):* Prior to mechanical attachment of the specified termination bar with receiver, apply the specified water block sealant on the flashing substrate behind the membrane where the termination bar will be installed. Mechanically attach termination bars using the specified fasteners. Apply a continuous bead of the specified sealant at the top of termination bar sealant receiver lip.
- D. *Termination Bars (securement of roof membrane at base of walls or curbs):* Prior to mechanical attachment of the specified flat termination bar, apply the specified water block sealant on the flashing substrate behind the membrane where the termination bar will be installed. Mechanically attach flat termination bars using the specified fasteners.

3.05 FIELD QUALITY CONTROL AND INSPECTIONS

- A. *Site Condition:* Leave all areas around job site free of debris, roofing materials, equipment and related items after completion of job.
- B. *Notification Of Completion:* Notify the manufacturer by means of manufacturer's printed Notification of Completion form of job completion in order to schedule a final inspection date.
- C. *Final Inspection*
 - 1. *Post-Installation Meeting:* Hold a meeting at the completion of the project, attended by all parties that were present at the pre-job conference. A punch list of items required for completion shall be compiled by the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters.

D. Issuance Of The Guarantee: Complete all post installation procedures and meet the manufacturer's final endorsement for issuance of the specified guarantee.

END OF SECTION 07 54 19



Contents

Overview	1
Top View	2
Side Views	3
Lengths	4
Pitches	5
Areas	6
Summary	7
Materials	8

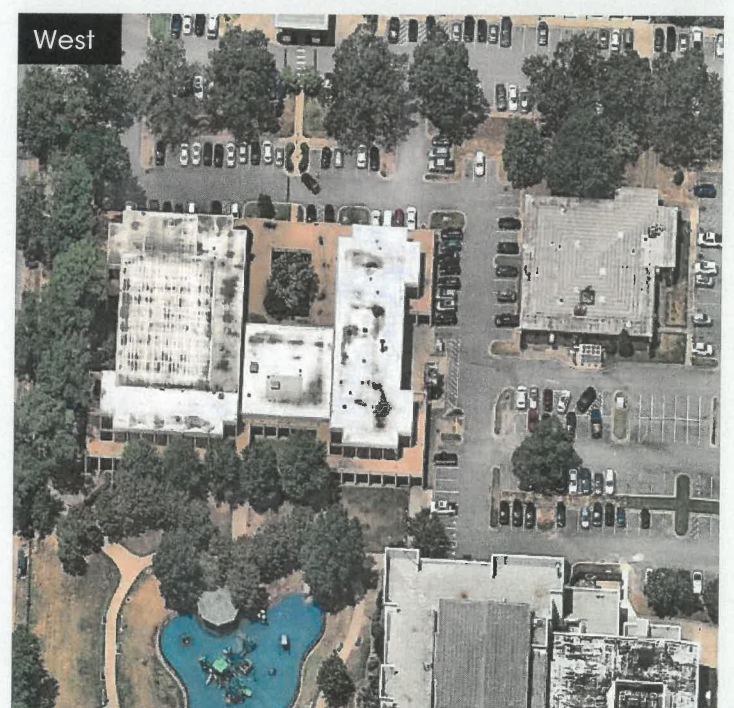
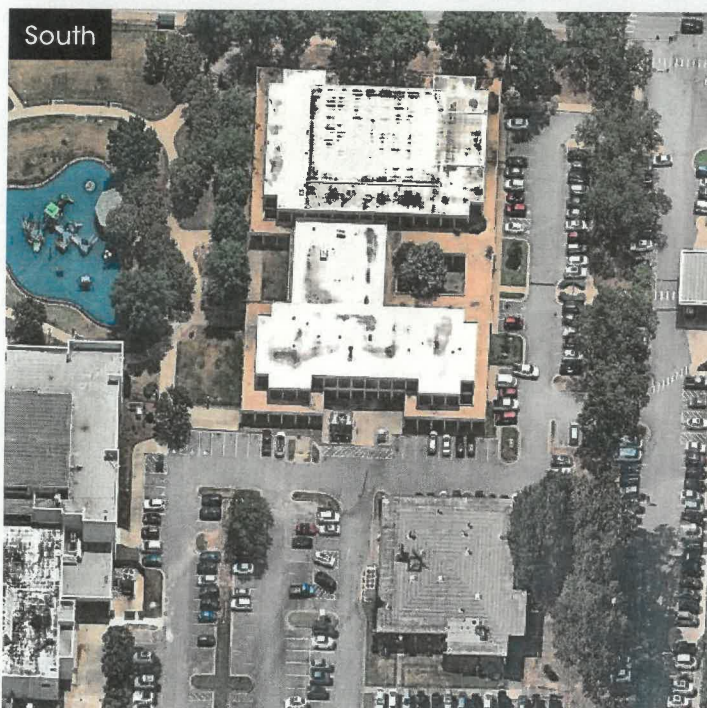
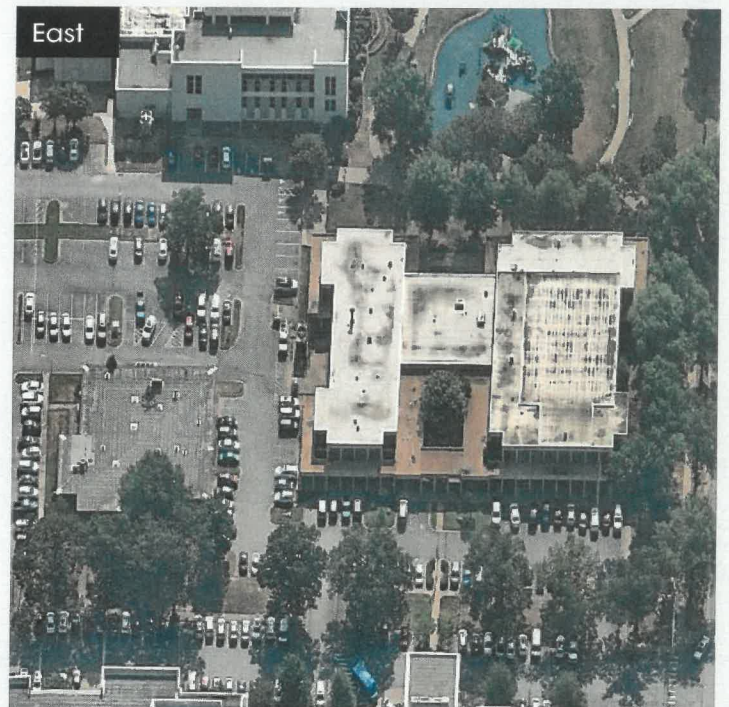
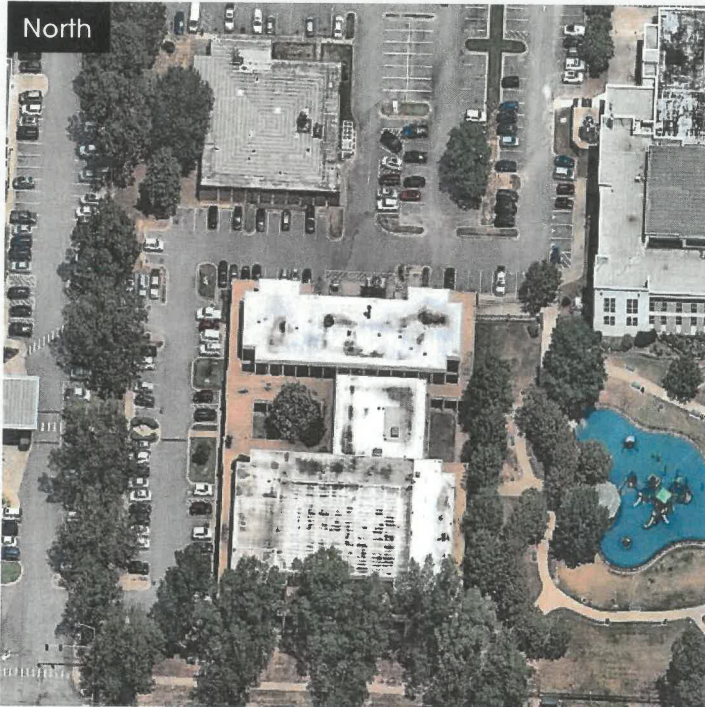
Measurements

Roof Area	36,977 sq ft
Roof Facets	5
Predominant Pitch	0 / 12



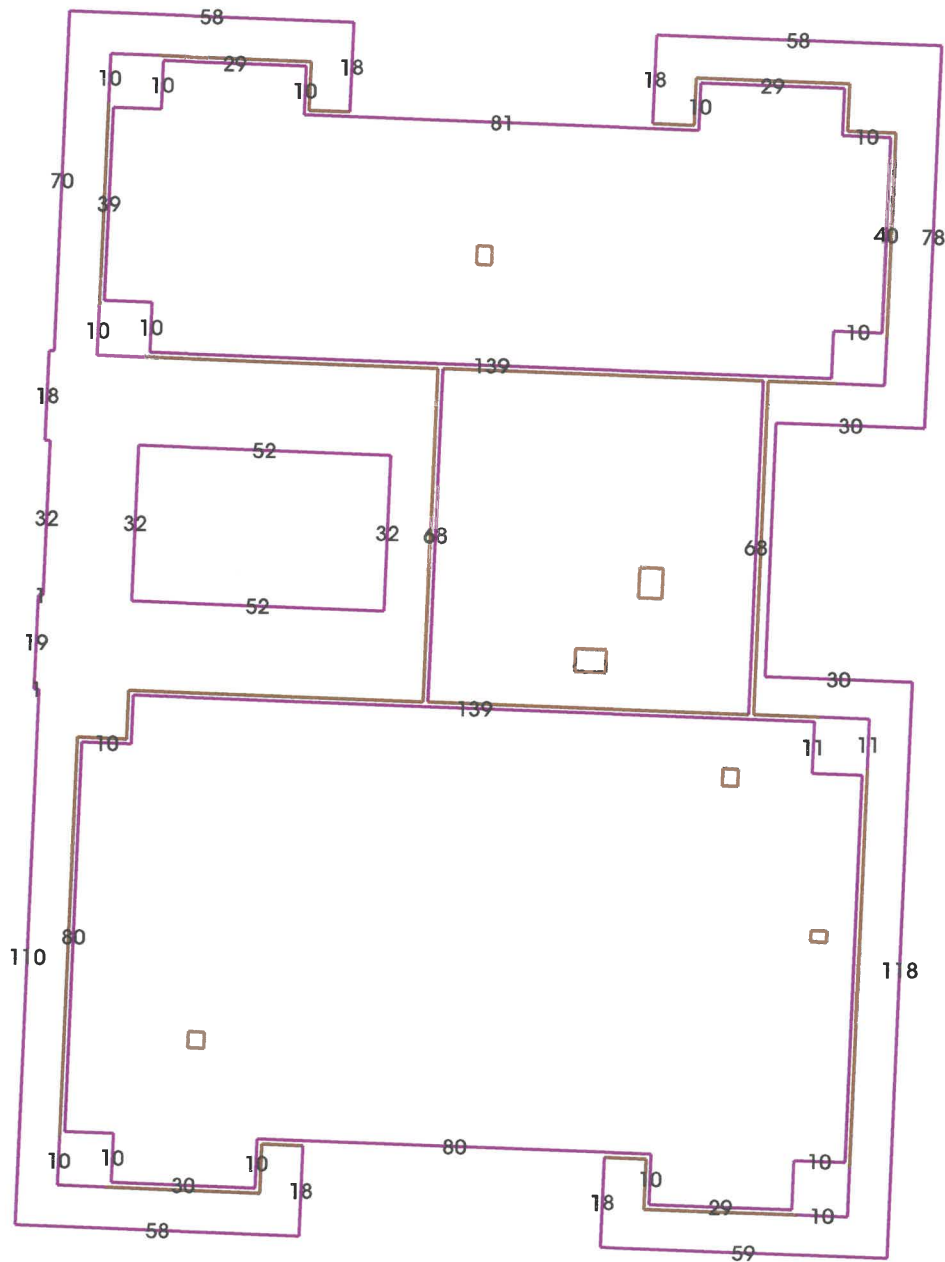
2023-06-30





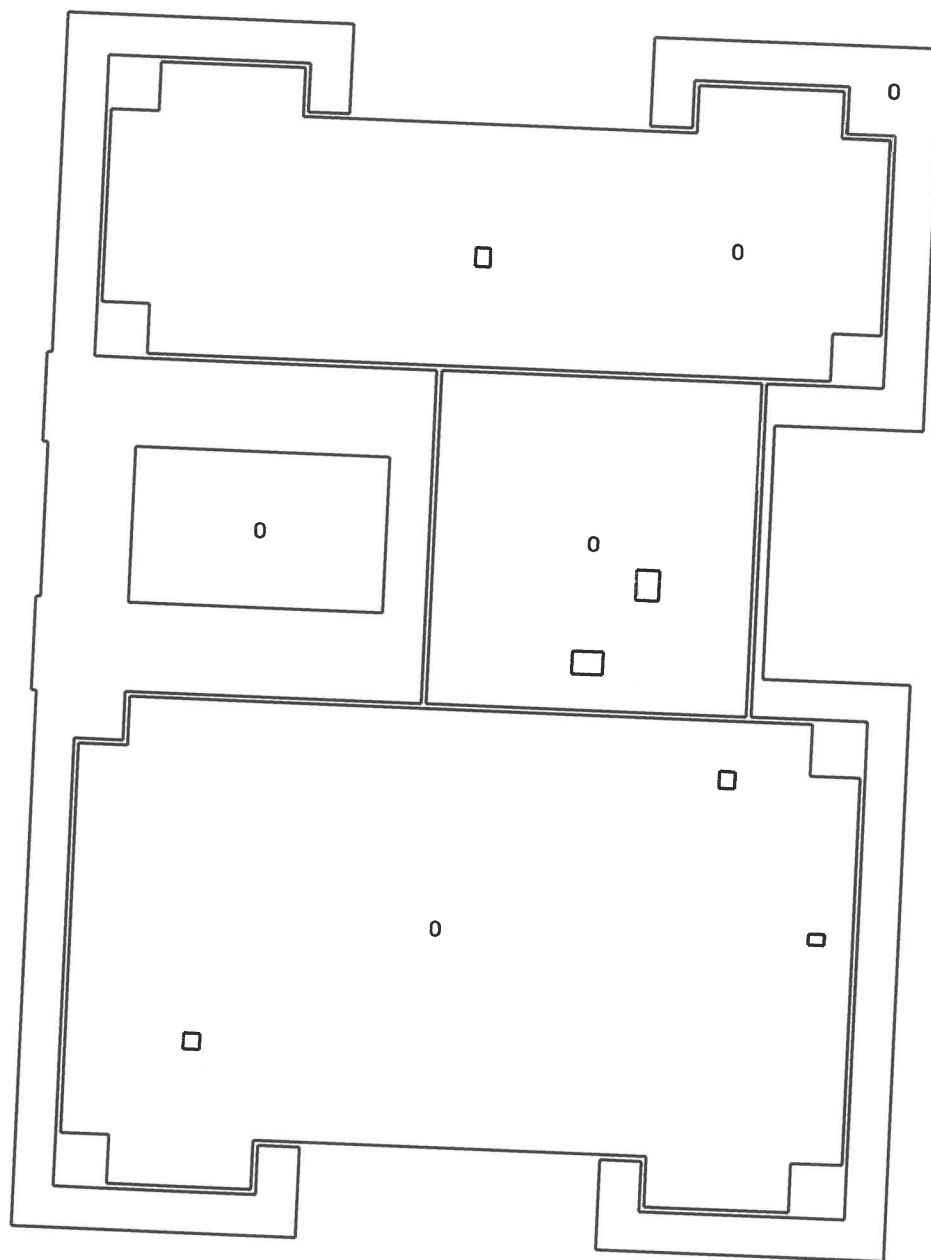


Flash	Step	Drip
993	0	0



■ Parapet
2,287

Lengths in feet



Pitches in inches per foot

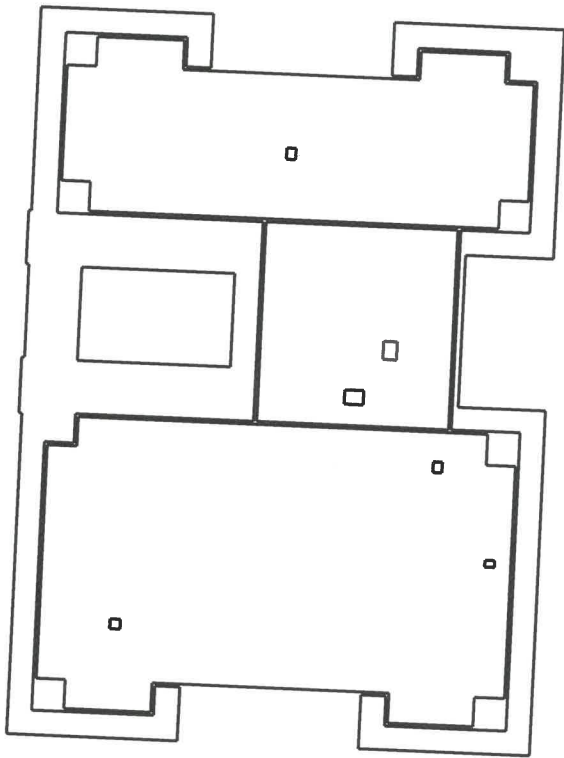


Areas in square feet



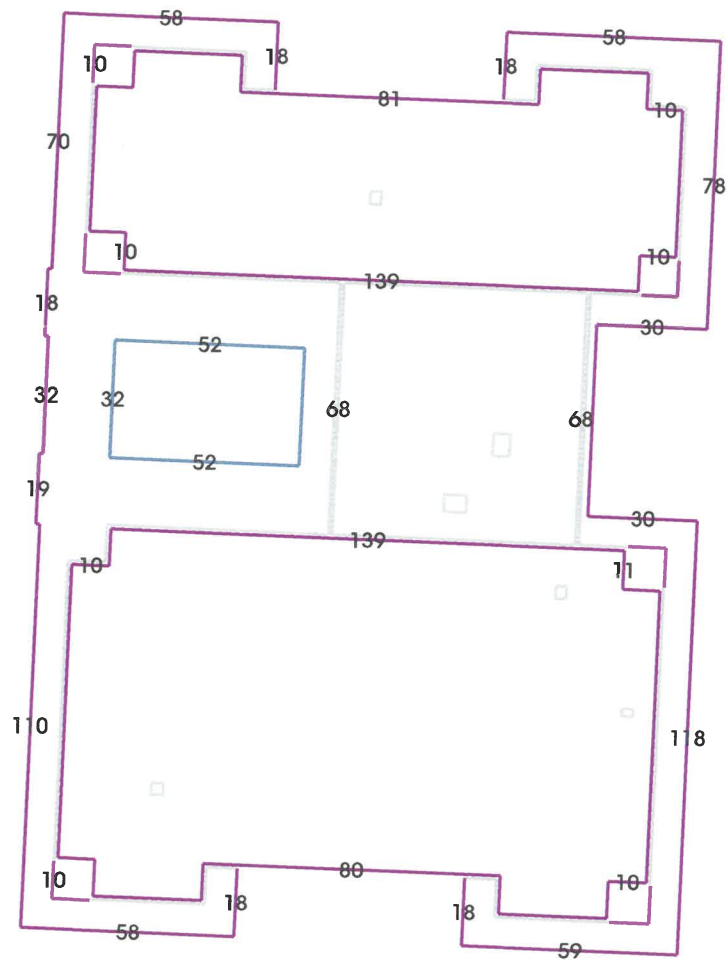
Pitch	0
Area	36,977
Percent	100%

Waste	0%	5%	10%	12%	15%	17%	20%
Area	36,977	38,826	40,675	41,414	42,524	43,263	44,372
Squares	370	389	407	415	426	433	444



Roof Area	36,977 sq ft
Roof Facets	5
Pitch	0 / 12
Flash	993 ft
Parapets	2,287 ft
Penetrations	7
Pen. Area	1,744 sq ft
Pen. Perimeter	260 ft

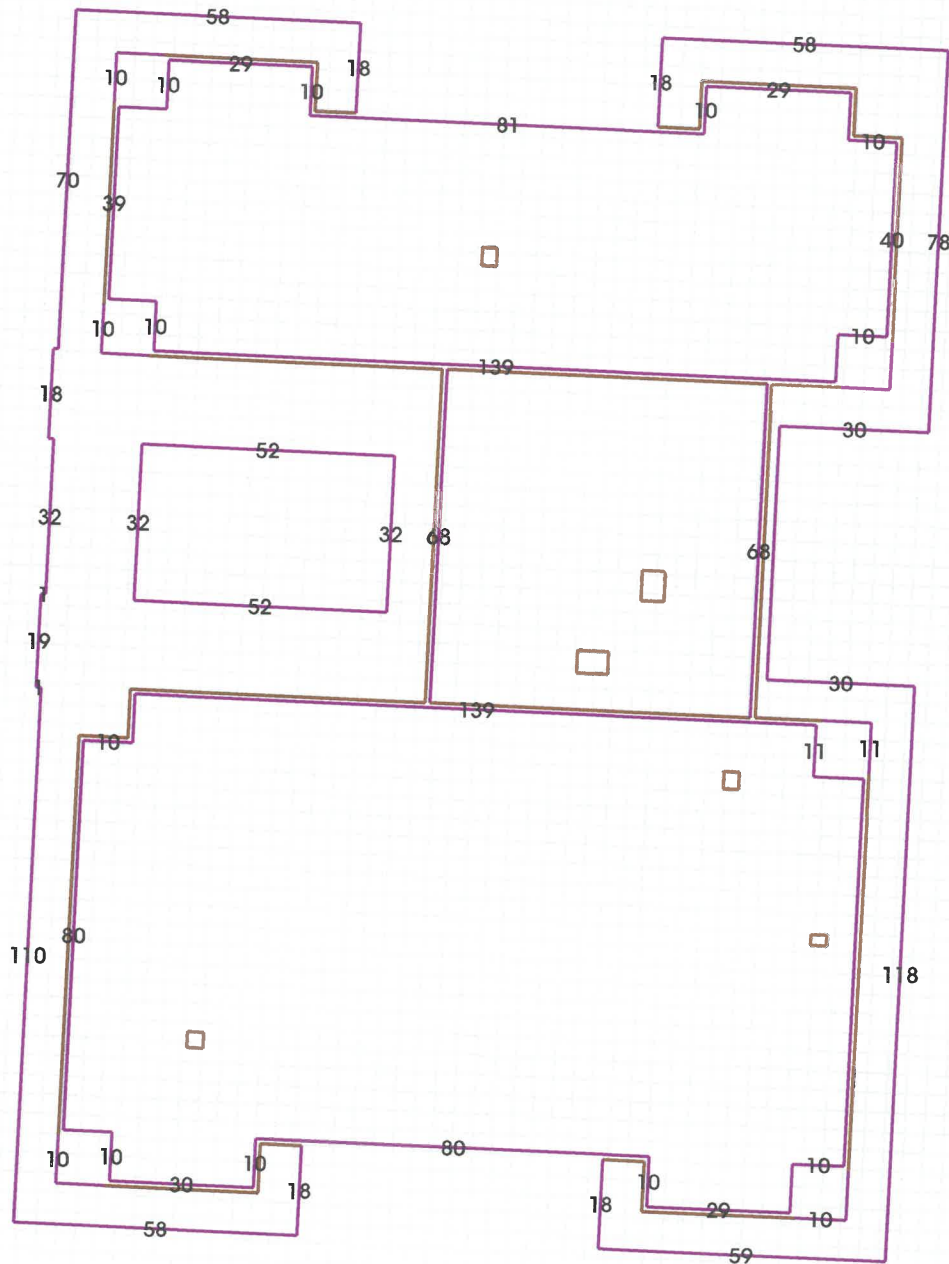
Notes: 1) Measurements are rounded to the nearest whole number. 2) Rakes are defined as sloped roof edges. 3) Eaves are defined as level roof edges. 4) Flashing pertains to level roof edges and excludes valleys. 5) Step flashing pertains to sloped roof edges and excludes areas around penetrations. 6) Drip edge = eaves + rakes. 7) Waste table excludes additional materials needed for ridges, hips, valleys, etc. 8) Suggested waste factor is based on the roof complexity and is provided for guidance purposes only. You should confirm the appropriate waste factor prior to ordering.



	Length (ft)	Height (in)	Vertical Area (sq ft)	Wall Width (in)
■	2,120	18	3,180	12
■	167	6	84	12



Flash	Step	Drip
993	0	0



■ Parapet
2,287

4 ft x 4 ft grid
Lengths in feet

GAF

QuickMeasure
Roof Reports in Under an Hour

Grid



