

**SHORT TERM CONTRACT FOR PUBLIC WORK  
PROJECT: MURDOCK RE-ROOFING PROJECT 2015**

THIS CONTRACT made and entered into on February 5, 2015, by and between WILLOWS UNIFIED SCHOOL DISTRICT (hereinafter "District") and GEORGE ROOFING hereinafter (hereinafter "Contractor") (the District and Contractor are also collectively referred to herein as "Parties" and individually as "Party").

WITNESSETH: The parties do hereby contract and agree as follows:

**A. SPECIFIC TERMS AND CONDITIONS**

**1. The Work**

- 1.1 The Contractor shall furnish to the District for the total contract price of One hundred and ninety-nine thousand Dollars (\$199,000.00) the Work specified in the Bid Form and related bid documents attached as Exhibit A which is incorporated herein as if fully set forth.
- 1.2 The Contractor shall meet all of the requirements set forth in Exhibit A and all of the conditions for the Work set forth in Exhibit A shall apply to the Contractor's performance of his obligations under this Contract.

**2. Term**

- 2.1 The Effective Date of this Contract shall be the date it has been signed by both Parties and approved by the governing Board of the District. This Contract shall terminate when the obligations of both Parties which are set forth therein are fulfilled.
- 2.2 The Work pursuant to this Contract shall begin on Monday, May 18, 2015 and shall be completed on or before Monday, July 20, 2015.
- 2.3 Liquidated damages as set forth in Exhibit A shall apply should Contractor fail to complete the Work within the period set forth in paragraph 2.2 above.

**3. The Contractor shall not commence Work under this Contract until:**

- 3.1 a) the insurance required under Paragraph 23 of the Terms and Conditions set forth below has been obtained; b) satisfactory proof of such insurance has been submitted to the District; and c) said insurance has been approved by the District.
- 3.2 The Contractor has provided to the District:
  - 3.2.1 a performance bond for the Work; and

3.2.2 a payment bond for the Work; and

3.2.3 documentation of all of the required warranties for the Work set forth in Exhibit A.

4. Payment Schedule

4.1 Payment for the Work shall be made in a lump sum upon final completion of the Work and the District's written approval of the Work in accordance with the terms of this Contract (which approval shall not be unreasonably withheld).

4.2 Upon approval of the Work as set forth in paragraph 4.1 above, the Contractor shall provide to the District a final detailed invoice for the Work, along with a release of all liens from all subcontractors who performed or provided material for the Work. The District shall have no obligation to pay for the Work until the Contractor provides such lien release(s).

4.3 The Contractor's invoice shall detail the cost of labor and materials used in performing the Work.

5. Inspection and final approval of the Work shall be performed by the Supervisor of Maintenance (District-wide Maintenance Lead III) for the District, or his authorized representative.

6. In addition to the warranties required in Exhibit A, the Contractor shall guarantee all labor and materials used in the performance of this Contract against all defects in material or workmanship, irrelevant of the cause of the defect, for a period of two (2) years from the date of final written approval by the District. This provision shall survive the termination of the Contract.

7. In case of conflict between this Contract and Exhibit A, the terms of this Contract shall govern.

B. GENERAL TERMS AND CONDITIONS

1. SITE EXAMINATION

Contractor must examine the site where the Work shall be performed and certify all measurements, specifications and conditions affecting the Work to be performed at the site. Contractor warrants that Contractor has made such site examination as deemed necessary as to the condition of the site, it's accessibility for materials, workmen and utilities and ability to protect existing surface and subsurface improvements. No claim for allowance of time or money will be allowed as to such matters or for any other undiscovered conditions on the site.

2. EQUIPMENT AND LABOR

Contractor shall furnish all tools, equipment, apparatus, facilities, transportation, labor, and material necessary to furnish the Work, which shall be performed at such times and places as

directed by and subject to the approval of the authorized District representative designated in this Contract.

### 3. SUBCONTRACTORS

Contractor agrees to bind every subcontractor by terms of this Contract as far as such terms are applicable to subcontractor's work on the Work. If Contractor subcontracts any part of this Contract, Contractor shall be fully responsible to the District for acts and omissions of his subcontractor and of persons either directly or indirectly employed by himself. Nothing contained in the Contract documents shall create any contractual relations between any subcontractor and the District.

### 4. SAFETY AND SECURITY

4.1 It shall be the responsibility of the Contractor to ascertain from the District the rules and regulations pertaining to safety, security and driving on school grounds, particularly when students are present.

4.2 Contractor, and Contractor's employees, subcontractors, and others under Contractor's control, shall abide by the District's rules and regulations at all times while on District property.

### 5. DEFAULT BY CONTRACTOR

5.1 If Contractor, or any subcontractor or vendor, fails to deliver any article or service or shall deliver any article or service which does not conform to the Service specifications, the District may, upon five (5) business days' prior written notice describing the default, at its option, annul and set aside the contract entered into with said Contractor, subcontractor or vendor, either in whole or in part, and make and enter into a new contract in such manner as seems to the Board of Education to be the best advantage of the District in accordance with the law.

5.2 Any failure for furnishing such articles or service by reason of the failure of the Contractor, subcontractor or vendor, as above stated, shall be a liability against the Contractor and his sureties.

5.3 The District Board of Education reserves the right to cancel any articles or services which the Contractor may be unable to furnish because of economic conditions, governmental regulations, or other similar causes beyond the control of the Contractor, provided that satisfactory proof is furnished to the Board of Education, if requested.

### 6. AMENDMENTS AND MODIFICATION

This Contract may be amended or modified only by mutual agreement in writing signed by both Parties.

7. WORKERS

Contractor shall at all times enforce strict discipline and good order among his or her employees and shall not employ any unfit person or anyone not skilled in work assigned to him or her to perform the Work under this Contract. Any person in the employ of the Contractor whom the District may deem incompetent or unfit shall be dismissed from the job site and shall not again be employed at site without written consent from the District.

8. SUBSTITUTIONS

No substitutions of materials from those specified in the Work Specifications shall be made without the prior written approval of the District.

9. CONTRACTOR SUPERVISION

Contractor shall provide competent supervision of personnel employed on the job site, use of equipment, and quality of workmanship.

10. CLEAN-UP

The Contractor shall remove all debris resulting from the Work from the premises. The Contractor shall ensure that the job site is in order at all times when work is not actually being performed and that it is maintained in a reasonably clean condition.

11. ACCESS TO WORK

The District representatives shall at all times have access to the work site wherever the Work is in preparation or progress. The Contractor shall provide safe and proper facilities for such access.

12. PROTECTION OF WORK AND PROPERTY

The Contractor shall erect and properly maintain at all times, as required by conditions of progress of the Work, all necessary safeguards, signs, barriers, lights, and watchmen for protections of workmen and the public, and shall post danger signs warning against hazards created by such features in the course of construction. In an emergency affecting life, or safety of life or of work or of adjoining property, the Contractor, without special instruction or authorization from the District, is permitted to act at his or her discretion to prevent such threatened loss or injury.

13. OCCUPANCY

The District reserves the right to occupy buildings at any time before formal Contract completion and such occupancy shall not constitute final acceptance or approval of any part of the work covered by this Contract nor shall such occupancy extend the date specified for substantial completion of the work.

14. ASSIGNMENT OF CONTRACT AND PURCHASE ORDER;

The Contractor shall not assign, or transfer by operation of law or otherwise, any or all of the Contractor's rights, burdens, duties, or obligations under this contract without the prior written consent of the District.

15. FORCE MAJEURE CLAUSE

The Parties to the Contract shall be excused from performance of their obligations thereunder during the time, and to the extent, that they are prevented from obtaining, delivering, or performing by act of God, fire, strike, loss or shortage of transportation facilities, lock-out, commandeering of materials, products, plants or facilities by the government, when satisfactory evidence thereof is presented to the other Party, provided that it is satisfactorily established that the non-performance is not due to the fault or neglect to the Party not performing.

16. HOLD HARMLESS AGREEMENT

The Contractor shall save, defend, hold harmless and indemnify the District from and against any and all losses, damage, liabilities, claims and costs of whatsoever kind and nature for injury to death of any person and for loss or damage to any property occurring in connection with or in any way incident to or arising out of the occupancy, use, service, operations, or performance of Work under the terms of this Contract, resulting in whole or in part from the negligent acts or omissions, or the willful misconduct, of the Contractor, any subcontractors, or any employee, agent or representative of Contractor and/or its subcontractors. This provision shall survive the termination of this Contract.

17. PAYMENT

17.1 Notwithstanding the terms of paragraph 4 of the Specific Conditions, the Contractor shall render invoices for materials delivered or services performed under the Contract on a bi-weekly basis. These invoices shall be for informational purposes only.

17.2 The District shall make payment for materials, supplies or other services furnished under this Contract in lump sum on completion of the work within thirty (30) days after delivery to and approval by the authorized District representative of all invoices and other documentary evidence reasonably required by the District (which approval shall not be unreasonably withheld).

17.3 The District's obligation to pay the Contractor is subject to the provisions of paragraph 4 of the Specific Conditions above.

## 18. PERMITS AND LICENSES

The Contractor and all of the Contractor's employees, agents, and subcontractors shall secure and maintain in force, at no cost to the District, such licenses and permits as are required by law, in connection with the furnishing of materials, supplies, or services for the Work.

## 19. CONTRACTOR NOT OFFICER, EMPLOYEE, OR AGENT OF DISTRICT

19.1 While engaged in carrying out other terms and conditions of the Contract, the Contractor is an independent Contractor, and not an officer, employee, agent, partner, or joint venture of the District. The Parties acknowledge that this Contract does not create an employer-employee relationship.

19.2 Contractor is responsible for withholding or deducting any taxes required to be withheld or deducted from any payments made by the District to Contractor pursuant to this Contract.

## 21. ANTI-DISCRIMINATION

It is the policy of the District that in connection with all work performed under construction and purchasing contracts, there be no discrimination against any employee engaged in the work because of race, color, sex, ancestry, national origin, or religious creed, and therefore, the Contractor agrees to comply with the applicable Federal and California Laws, including but not limited to: the California Fair Employment Practice Act, beginning with Labor Code, Section 1410 and Labor Code, Section 1735. In addition, the Contractor agrees to require such compliance by all subcontractors employed on the work by him or her.

## 22. LABOR CODE

The Contractor shall comply with the applicable provisions of the California Labor Code, Division 3, Part 7, Chapter 1, Articles 1-5, including the payment of the general prevailing wage rates for public works projects of more than One Thousand Dollars (\$1,000). Copies of the prevailing wage rate of per diem wages are available from the Supervisor of Maintenance.

## 23. CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

The Contractor shall not commence work under this Contract until he or she has obtained the insurance required under this paragraph and satisfactory proof of such insurance has been submitted to the District and said insurance has been approved by the District. Except for worker's compensation insurance, the policy shall not be amended or modified and the coverage amount shall not be reduced without the District's prior written consent. The District shall be named as an additional insured and be furnished thirty (30) days written notice prior to cancellation. The Contractor shall not allow any subcontractor, employee or agent to commence work on this contract or any subcontract until the insurance required of the Contractor, subcontractor or agent has been obtained and the conditions set forth in paragraph 3 of the Specific Conditions above have been met.

### 23.1 WORKER'S COMPENSATION INSURANCE

The Contractor shall procure and shall maintain during the life of this contract Worker's Compensation Insurance on all of his or her employees to be engaged in work on the project under this contract and in case of any such work sublet, the contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.

### 23.2 CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

23.2.1 The Contractor shall procure and shall maintain during the life of this contract, Contractor's Public Liability Insurance in an amount not less than \$1,000,000 for injuries, including accidental death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000 on account of one accident, and Contractor's Property Damage Insurance in an amount no less than \$1,000,000. Any subcontractor employed in connection with the work shall maintain such insurance unless the Contractor's insurance covers the subcontractor and its employees.

23.2.2 Prior to the commencement of the Work, the Contractor shall provide to the District certificates and endorsements of insurance naming the District as an additional insured on the insurance policies required in paragraph 23.2.1.

## 24. COMPLIANCE WITH LAWS

24.1 Contractor shall give all notices and comply with the laws, ordinances, rules and regulationbearing on conduct or the Work as indicated or specified in this Contract or as required by law. If Contractor observes that any of the Work required by this Contract is in conflict with any such laws, ordinances, rules or regulations, Contractor shall notify the District, in writing, and at the sole option of the District, any necessary changes to the scope of Work shall be made and this Contract shall be appropriately amended in writing. In the alternative, the District may terminate this Contract effective upon Contractor's receipt of a written termination notice for the District.

24.2 If Contractor performs any Work knowing it to be in violation of such laws, ordinances, rules or regulations, Contractor shall bear all costs arising therefrom.

## 25. TIME IS OF THE ESSENCE

Time is of the essence in the performance of and compliance with each of the provisions and conditions of this Contract.

26. GOVERNING LAW AND VENUE

This Contract shall be governed by and construed in accordance with the laws of the State of California. Venue shall be in Glenn County, California.

27. ATTORNEYS' FEES

If any action is brought by either Party against the other Party hereunder, the prevailing Party shall be entitled to recover from the other Party reasonable attorneys' fees, costs and expenses incurred in connection with the prosecution or defense of such action.

28. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and cause required by law to be inserted in this Contract shall be deemed to be inserted herein and this Contract shall be read and enforced as though it were included therein.

29. ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)

All contract work that is performed for the District by outside Contractors or workers must meet all of the regulations that have been set forth in the AHERA rule. This means that all work which could disturb the integrity of any Asbestos containing Building Material (A.C.B.M.) needs to be approved by the District. This refers to the sawing, grinding, cutting, or drilling of any A.C.B.M. in occupied areas of District buildings.

30. SMOKING

No smoking is allowed on District property and said policy is to be strictly enforced by the Contractor.

31. FINGER PRINTING

AB2102 requires that Contractors meet one of the following criteria;

- 31.1 Employer and Employees who may come into contact with pupils have submitted finger prints to and been cleared by the Department of Justice.
- 31.2 A physical barrier is installed between the pupils and the work site.
- 31.3 Continuous supervision of employees is provided by a finger printed Contractor employee who has received Department of Justice clearance.
- 31.4 Continuous supervision of employees is provided by a District employee, at the expense of the Contractor.



32. COUNTERPARTS

This Contract may be executed in counterparts, each of which shall be deemed an original, but all of which, together, when signed by all of the Parties hereto, shall constitute one and the same instrument. An electronic or facsimile signature shall be as valid as an original.

33. APPROVAL OF GOVERNING BOARD

This Contract shall not be binding upon the District until the District's Governing Board has approved all the terms and conditions contained herein.

34. WAIVER

Waiver of a breach or default under this Contract shall not constitute a continuing waiver of a subsequent breach of the same or any other provision under this Contract.

35. ENTIRE AGREEMENT

This Contract represents the entire agreement between the Parties concerning the Work and supersedes all prior negotiations, representations or agreements, either written or oral related to the Work.

36. STANDARD OF CARE

The Contractor shall provide and perform the Work specified in Exhibit A in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently operating under similar circumstances, who are specially qualified to provide the services required by the District.

39. SEVERABILITY

In the event that any provision of this Contract is construed to be illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining provisions hereof, but such illegal or invalid provision shall be fully severable, and this Contract shall be construed and enforced as if such illegal or invalid provision had never been included herein, unless to do so would frustrate the intent and purpose of the Parties in entering into this Contract.

40. NOTICE

Any notice under this Contract may be given to the following contacts by: (1) personal service; (2) registered U.S. mail with return receipt requested; (3) courier with tracking and proof of delivery requested; 4) electronic mail; or 5) facsimile. Notice shall be effective on the date it is received.

To the District:

Willows Unified School District  
Attention: Dr. Mort Geivett, Superintendent  
823 West Laurel Street  
Willows, CA 95988  
Phone: (530) 934-6600  
Fax: (530) 934-6609  
Email: mgeivett@willowsunified.org

To the Contractor:

George Roofing  
Attention: Don C. George  
6810 Lincoln Boulevard  
Oroville, CA 95966  
Phone: 530-533-6393  
Fax: 530-533-0287  
Email: don@georgeroofing.net

41. WARRANTY OF AUTHORITY

The individual executing this Contract on behalf of each Party warrants that he/she is authorized to execute the Contract on behalf of that Party and that the Party will be bound by the terms and conditions contained herein.

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self insurance in accordance with provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."

NOTE: Federal Regulations (Code Sections 6041 and 6209) require non-corporate recipients of \$600.00 or more to furnish their taxpayer identification number to the payer. The regulations also provide that a penalty may be imposed for failure to furnish the taxpayer identification number. In order to comply with these regulations, the DISTRICT requires your federal tax identification number or Social Security Number, whichever is applicable.

TYPE OF BUSINESS ENTITY	TAX IDENTIFICATION
<input type="checkbox"/> Individual	____-____-____ Social Security Number
<input type="checkbox"/> Sole Proprietorship	
<input type="checkbox"/> Partnership	
<input type="checkbox"/> Corporation	____-_____ Fed Tax Identification
<input type="checkbox"/> Other	

IN WITNESS WHEREOF, the Parties hereunto have subscribed to this Contract, including all Contract Documents as listed below;

Work Spec/Scope of Work Statement     Non Collusion Affidavit     Insurance Forms

Under penalty of perjury, I certify that the number shown on this form is my correct taxpayer identification number.

CONTRACTOR		DISTRICT	
_____ Authorized Signature	_____ Date	_____ Authorized Signature	_____ Date
Title: _____		Title: _____	

CONTRACTOR LICENSE NUMBER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

CITY&ZIP: \_\_\_\_\_

FAX: \_\_\_\_\_

**NONCOLLUSION AFFIDAVIT**

\_\_\_\_\_ being first duly sworn, deposes and says that he or she is

\_\_\_\_\_ of the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit or cost element of the bid price, or of that any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true: and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

\_\_\_\_\_  
(Signature)

# Exhibit A

✓ M. Hines  
12/18/14

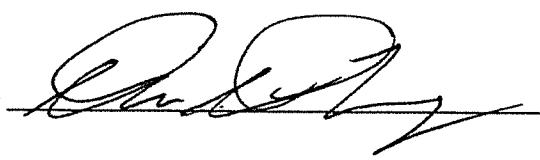
**WILLOWS UNIFIED SCHOOL DISTRICT**  
**MURDOCK SCHOOL 2015 ROOFING PROJECT**  
**ADDENDUM #2 12/15/2014**

**CHANGE**

**ITEM #1 – Specification Replacement**

**Delete - Modified Specification Dated 10-9-2014**

**Add - Modified Specification Dated 12-14-2015**

Signature of acceptance -  Date 12/18/14

Provide signed copy of receipt with bid.

Exhibit A

BID FORM

TO: Willows Unified School District acting by and through its Governing Board, herein called the "The Owner":

1. Pursuant to and in compliance with your Notice to Contractors Calling for Bids and the other documents relating thereto, the undersigned bidder, having thoroughly examined and familiarized himself, herself, or itself with the terms of the contract, the local conditions affecting the performance of the contract and the cost of the work at the place where the work is to be done, and with the drawings and specifications and other contract documents, hereby proposes and agrees to perform, within the time stipulated, the contract, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with

The Willows Unified School District Murdock Re-Roofing Project 2015

all in strict conformity with the drawings and specifications and other contract documents submits the following bid:

**Cafeteria and Kitchen Bid**

EIGHTY-ONE THOUSAND NINE HUNDRED Dollars  
(\$ 81,900.-)

**Office Bid**

FORTY THOUSAND FIVE HUNDRED Dollars  
(\$ 40,500.-)

**100 Wing Bid**

SIXTY THOUSAND EIGHT HUNDRED Dollars  
(\$ 60,800.-)

**Canopy Roof Restoration and Gutter System Bid**

FIFTEEN THOUSAND EIGHT HUNDRED Dollars  
(\$ 15,800.-)

**Add/Alt per sq ft price for plywood replacement**

\_\_\_\_\_ THREE .00/100 Dollars  
(\$ 3.00 )

Amount of **OVERHEAD** (to include bonds, insurance, and supervision) and profit to be added or deducted for change orders: 30 %

**Time for Completion:** The Contractor must complete the contracted work within \_\_\_\_\_

Sixty ( 60 ) days from the date listed on the written Notice to Proceed, unless an extension or extensions of time or suspension of work is authorized as provided in the Contract documents. Should the Contractor fail to perform the work contracted for under this Agreement within the Contract Period, plus, if any, approved extension(s) of time, the Owner will deduct from any money due or that may become due the Contractor under the Contract the sum of five hundred dollars (\$500.00) per day as liquidated damages as fully set forth in the contract documents.

**Supplemental Bid Conditions:**

1. The Owner reserves the right to reject this bid.
2. Contractor's bid, unless timely revoked by Contractor, shall remain open and not be withdrawn for the period specified in the Notice to Contractors Calling for Bids.
3. Contractor guarantees that it will perform the above-referenced construction services in accordance with the attached Lump Sum Bid and Schedule of Values for a period of twelve (12) months from the date that the Board approves the written agreement.
4. Contractor has completed and signed the attached Schedule of Values. The Schedule of Values shall become part of the contract documents and shall be relied upon by the Owner in the event there are revisions in the scope of work in this contract. The Contractor acknowledges that the total value on the Schedule of Values equals the based proposal amount. The Contractor has carefully checked all of the figures on the schedule of values and the Bid Form and understands that the Owner will not be responsible for any errors or omissions on the part of the Contractor in presenting this bid.

5. Contractor shall have ten (10) calendar days, from the date it receives written notice from the Owner or its Architect that the Owner has accepted its proposal, to sign the enclosed Contract documents and furnish the necessary bonds and insurance certificated to the Owner. The Contractor's failure to sign in a timely manner and return the necessary contract documents shall constitute a material breach of the Contractor's obligations.
6. Contractor shall prosecute the work in a prompt, diligent and workmanlike manner. It is understood and agreed that the work shall be completed within the number of calendar days stated on the Proposal Form from the date stipulated on the written Notice to Proceed, unless extension of time or suspension of the work is authorized as provided in the Conditions of the Contract.
7. Contractor has examined the location of the proposed work and is familiar with the Drawings and other Contract Documents and the local conditions at the place where the work is to be done.

**Supplemental Matters**

1. The required bid security is attached hereto.
2. Non-collusion affidavit is attached hereto.
3. The required list of proposed subcontractors is attached hereto.
4. It is understood and agreed that bidder shall provide the addresses, telephone numbers, and license numbers of all listed subcontractors within one business day of bid opening or bidder's bid may be rejected as non-responsive.
5. Notice of acceptance or requests for additional information should be addressed to Contractor at the address stated below.
6. The names of all persons interested in the foregoing proposal as principals are as follows:

Name of Corporation/Partnership/Sole Proprietorship Presenting Bid: \_\_\_\_\_

_____	_____
DON C GEORGE INC. dba GEORGE ROOFING	_____
_____	Title: _____
Dan DeLany	Title: _____
_____	Title: _____
_____	Title: _____
_____	Title: _____
_____	Title: _____



(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof. If the bidder is a partnership, please state true name of firm, also names of all individual partners comprising the firm. If bidder is a sole proprietorship, please state first and last names of owner(s) in full.)

7. Bidder certifies that he is licensed in accordance with the law providing for the registration of Contractors, License No. 452266, Expiration Date 2/29/16, class of license B,C20,C39,C43

I/We, the Corp. Secretary of the bidder, hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted by the bidder in connection with this bid and all of the representations made herein are true and correct.

Executed on this 18th day of December at Placer County, California.



Proper Name of Bidder DON C GEORGE INC. dba GEORGE ROOFING

By [Signature]  
Dan DeLany

Title Corp. Secretary

Signature of Person on Behalf of Bidder Who Has Authorization to Bind Bidder

By ---

Title ---

Signature of Person on Behalf of Bidder Who Has Authorization to Bind Bidder

**NOTE:** If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signatures of authorized officers or agents and the document shall bear the corporate seal. If bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his or her signature shall be placed above.

Business Address: 6810 Lincoln Blvd, Oroville, CA 95966

Place of Residence: 6412 Puffin Ct, Rocklin CA 95765

Telephone: (530) 533-6393

CONTRACTORS STATE LICENSE BOARD NO.: 452266

CLASSIFICATION: B,C20,C39,C43

**Exhibit B**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS: THAT we, Don C. George, Inc. dba George Roofing  
as Principal, and Nationwide Mutual Insurance Company, as Surety, are held and firmly  
bound unto the Willows Unified School District, hereinafter called the Owner, in  
the penal sum of Ten Percent of bid PERCENT ( 10% of bid %) OF THE TOTAL AMOUNT OF  
THE BID of the Principal submitted to the said Owner for the work described below for the payment of  
which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs,  
executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the  
accompanying bid dated

December 18, 2014 for Murcock Re-Roofing Project 2015.

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after  
the opening of the same, or, if no period be specified, within sixty (60) days after said opening; and, if  
the Principal be awarded the contract, and shall within the period specified therefore, or, if no period be  
specified, within five (5) days after the prescribed forms are presented to him for signature, enter into a  
written contract with the Owner, in accordance with the bid as accepted and give bond with good and  
sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of  
such contract and for the payment for labor and materials used for the performance of the contract, or  
in the event of the withdrawal of said bid within the period specified or the failure to enter into such  
contract and give such bonds within the time specified, if the Principal shall pay the Owner the  
difference between the amount specified in said bid and the amount for which the City may procure the  
required work and/or supplies, if the latter amount be in excess of the former, together with all costs  
incurred by the Owner in again calling for bids, then the above obligation shall be void and of no effect,  
otherwise to remain in full force and virtue.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or  
addition to the terms of the contract on the call for bids, or to the work to be performed there under, or  
the specifications accompanying the same, shall in anywise affect its obligation under this bond, and it  
does hereby waive notice of any such change, extension of time, alteration or addition to the terms of  
said contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the Owner and judgment is recovered, the Surety shall  
pay all litigation expenses incurred by the Owner in such suit, including reasonable attorneys' fees, court  
costs, expert witness fees and investigation expenses.

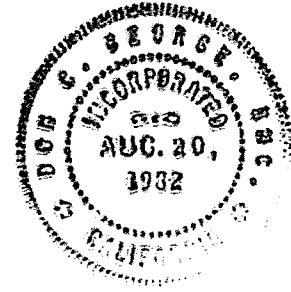
IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this 17th day of December, 2014, the name and corporate seal of each corporate party being hereto affixed and these presents duly assigned by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

PRINCIPAL Don C. George, Inc. dba George Roofing

By: [Signature]

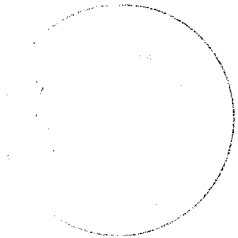
Title: CORP. SEC.



SURETY: Nationwide Mutual Insurance Company

By: [Signature]

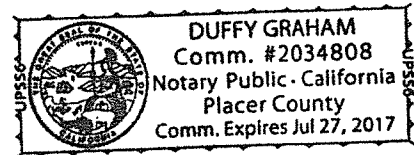
Terry Jarrett  
Attorney-in-Fact



(Attach Attorney-in-Fact Certificate)

State of California, County of Placer  
Subscribed and sworn to (or affirmed) before me this  
17th day of December 2014  
by Terry Jarrett and Daniel Delany  
proved to me on the basis of satisfactory evidence  
to be the person(s) who appears before me

[Signature]  
(Signature of Notary)



Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation
Farmland Mutual Insurance Company, an Iowa corporation
Nationwide Agribusiness Insurance Company, an Iowa corporation

AMCO Insurance Company, an Iowa corporation
Allied Property and Casualty Insurance Company, an Iowa corporation
Depositors Insurance Company, an Iowa corporation

hereinafter referred to severally as the "Company" and collectively as the "Companies," each does hereby make, constitute and appoint:

Terry Jarrett Rocklin, CA

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

Five Hundred Thousand and no/100

\$500,000.00

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 13th day of February, 2014.

[Signature of Terrance Williams]

Terrance Williams, President and Chief Operating Officer of Nationwide Agribusiness Insurance Company and Farmland Mutual Insurance Company; and Vice President of Nationwide Mutual Insurance Company, AMCO Insurance Company, Allied Property and Casualty Insurance Company, and Depositors Insurance Company



ACKNOWLEDGMENT

STATE OF IOWA, COUNTY OF POLK: ss
On this 13th day of February, 2014, before me came the above-named officer for the Companies aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Companies aforesaid, that the seals affixed hereto are the corporate seals of said Companies, and the said corporate seals and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Companies.

Sandy Alitz
Notarial Seal - Iowa
Commission Number 152785
My Commission Expires March, 24, 2017

[Signature of Sandy Alitz]

Notary Public
My Commission Expires
March 24, 2017

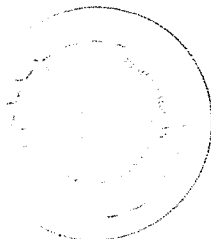
CERTIFICATE

I, Robert W Horner III, Assistant Secretary of the Companies, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Terrance Williams was on the date of the execution of the foregoing power of attorney the duly elected officer of the Companies, and the corporate seals and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seals of said Companies this 17th day of December, 20 14.

[Signature of Robert W Horner III]
Assistant Secretary

This Power of Attorney Expires March 24, 2017



## Exhibit C

### DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (chapter 4 (commencing at section 4100), part 1, division 2 of the Public Contract Code of the State of California) and any amendments thereof, each bidder shall set forth below: (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement to be performed under this contract or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the prime contractor's total bid and (b) the portion of the work which will be done by each subcontractor under this contract. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in this bid.

If a prime contractor fails to specify a subcontractor or if a prime contractor specifies more than one subcontractor for the same portion of work to be performed under the contract in excess of one-half of one percent of the prime contractor's total bid, he shall be deemed to have agreed that he is fully qualified to perform that portion himself, and that he shall perform that portion himself.

No prime contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontract to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the prime contractor's total bid as to which his original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the prime contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the authority awarding this contract setting forth the facts constituting the emergency or necessity.

In addition to providing the information required by this form prior to the bid opening, bidder shall be required to submit the addresses, telephone numbers, and license numbers of all listed subcontractors within one business day of the bid opening. Failure to provide the foregoing information within the time limit specified may result in the rejection of the bid as non-responsive.

Appendix D

CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION

Labor Code Section 3700:

"Every Employer except the State shall secure the payment of compensation in one or more of the following ways:

By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.

By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.


For all political subdivisions of the State, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the State itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before May 31, 1979, a political subdivision of the State, which, on December 31 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702."

I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

DON C GEORGE INC dba GEORGE ROOFING

Proper Name of the Contractor

By: Dan DeLany, Corp. Secretary



Signature of Contractor

(In accordance with Article 5 [commencing at Section 1860], Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this contract\_)

Appendix E

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

State of California)sis

County of PLACER

Daniel DeLany, Being first duly sworn, deposes

and says that he or she is of the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated: 12/18/2014

Signature: 





## SECTION 07500

### MODIFIED BITUMINOUS MEMBRANE ROOFING

#### WILLOWS UNIFIED SCHOOL DISTRICT – MURDOCK SCHOOL

#### PART 1 — GENERAL

##### 1.1 SCOPE OF WORK

- A. Provide all labor, equipment and non-owner supplied materials to install the new roof system over the properly prepared substrate.
  - 1. Remove and dispose of existing roof system (s).
  - 2. Locate and repair/replace all areas of damaged substrate. Roofing manufacturer must have representative inspect structural deck prior to any materials being installed.
  - 3. Install new gutter system.
  - 4. Install new sheet metal on all fascias.
  - 5. Install a Rosin sheet over entire substrate.
  - 6. Install 6 sided recover board over entire substrate per wind up lift requirements.
  - 7. Install 2 ply's of Type VI felts in hot asphalt.
  - 8. Install Versiply mineral per specification.
  - 9. Apply Pyramic and White Knight per specification.
  - 10. Wind uplift calculation per ASCE 7-05. Written calculations to be submitted on roofing system and included with bid package. Building specific calculations for Section 1.14 Design and Performance Criteria; (A, B, and C).

##### 1.2 REFERENCES

- A. American Society of Civil Engineers (ASCE):
  - 1. ASCE 7-05, Minimum Design Loads for Buildings and Other Structures.
- B. American Society for Testing and Materials (ASTM):

1. ASTM D41 Standard Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing.
  2. ASTM D312 Standard Specification for Asphalt Used in Roofing.
  3. ASTM D5147 Standard Test Method for Sampling and Testing Modified Bituminous Sheet Materials.
  4. ASTM E108 Standard Test Methods for Fire Test of Roof Coverings.
- C. Factory Mutual Research (FM):
1. Roof Assembly Classifications.
- D. National Roofing Contractors Association (NRCA):
1. Roofing and Waterproofing Manual.
- E. Underwriters Laboratories, Inc. (UL):
1. Fire Hazard Classifications.
- F. Warnock Hersey (WH):
1. Fire Hazard Classifications.

### 1.3 SUBMITTALS FOR REVIEW

- A. Product Data: Provide manufacturer's technical product data for each type of roofing product specified. Include data substantiating that materials comply with specified requirements. Include data substantiating that materials comply with the minimum specified requirements including rubber content, low temperature flexibility, tensile strength, tear strength, and amount of recycled content (post consumer and post industrial).
- B. Samples: Submit four (4) samples of the following:
1. Cap Sheet
  2. Base Sheet
  3. Ply Sheets
- C. Specimen Warranty: Provide an unexecuted copy of the 30 year No Dollar Limit water tight warranty covering every part of the Built Up Roofing system specified for this Project, identifying the terms and conditions required of the Manufacturer and the Owner.
- D. Any material submitted as equal to or better than the specified material must be accompanied by a report signed and sealed by a professional engineer licensed in the state in which the installation is to take place. This report shall show that the submitted equal meets the Design and Performance criteria in this specification. All items from 1.4 and 1.5 of this section must be provided in substitution request.

- E. Substitution requests submitted without licensed engineer approval will be rejected for non-conformance. Substitution requests will only be considered from prime contractors and must be submitted within 10 days prior to bid time and date.
- F. Design Wind Loads: Submit copy of manufacturer's minimum design load calculations according to ASCE 7-05, Method 2 for Components and Cladding, sealed by a registered professional structural II engineer licensed in California and employed by the system manufacturer as a full-time staff engineer. In no case shall the design loads be taken to be less than those detailed in Design and Performance Criteria article of this specification.

#### **1.4 SUBMITTALS FOR INFORMATION**

- A. Manufacturer's Installation Instructions: Submit installation instructions and recommendations indicating special precautions required for installing the membrane.
- B. Manufacturer's Certificate: Certify that roof system furnished is approved by Factory Mutual, Underwriters Laboratories, Warnock Hersey or approved third party testing facility in accordance with ASTM E108, Class A for external fire and meets local or nationally recognized building codes.
- C. Manufacturer's Certificate: Certify that the roof system furnished is approved or accepted by Factory Mutual Approval Standard 4470.
- D. Manufacturer's Certificate: Submit a certified copy of the roofing manufacturer's ISO 9001 compliance certificate if available.
- E. Test Reports: Submit test reports, prepared by an independent testing agency, for all modified bituminous sheet roofing, indicating compliance with ASTM D5147.
- F. Written certification from the roofing system manufacturer certifying the applicator is currently authorized for the installation of the specified roof system.
- G. Qualification data for firms and individuals identified in Quality Assurance Article below.
- H. Notarized statement from the Roofing System Manufacturer, signed by an Officer of the Corporation with the Corporate Seal affixed there to stating that the Roofing System Manufacturer will provide field inspections a minimum of 3 days per week during the entire period of installation until all construction is completed and to be performed by a full time employee of the manufacturer at no additional cost to the owner.

#### **1.5 CONTRACT CLOSEOUT SUBMITTALS**

- A. General: Comply with Requirements of Division 01 Section - Closeout Submittals.
- B. Special Project Warranty: Provide specified warranty for the Project, executed by the authorized agent of the Manufacturer.
- C. Roofing Maintenance Instructions. Provide a manual of manufacturer's recommendations for maintenance of installed roofing systems.

- D. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.
- E. Demonstration and Training Schedule: Provide a schedule of proposed dates and times for instruction of Owner's personnel in the maintenance requirements for completed roofing work. Refer to Part 3 for additional requirements.

## 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this Section with not less than 12 years documented experience.
- B. Installer Qualifications: Company specializing in modified bituminous roofing installation with not less than 5 years experience and authorized by roofing system manufacturer as qualified to install manufacturer's roofing materials.
- C. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress. Maintain proper supervision of workmen.
- D. Maintain a copy of the Contract Documents in the possession of the Supervisor/Foreman and on the roof at all times.
- E. Source Quality Control: Manufacturer shall have in place a documented, standardized quality control program such as ISO-9001.
- F. Material Manufactures full time Representative to perform three times weekly field inspections and reports. The reports are to be updated every Friday on-line with photo's and job in progress written updates. Reports and inspections will be performed free of charge to the owner.

## 1.7 PRE-INSTALLATION CONFERENCE

- A. Pre-Installation Roofing Conference: Convene a pre-roofing conference approximately two (2) weeks before scheduled commencement of modified bituminous roofing system installation and associated work.
- B. Require attendance of installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing that must precede or follow roofing work (including mechanical work if any), Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of the Work:
  - 1. Review foreseeable methods and procedures related to roofing work, including set up and mobilization areas for stored material and work area.
  - 2. Tour representative areas of roofing substrates (decks), inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by others.

3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
  4. Review roofing system requirements specifications and other contract documents.
  5. Review required submittals both completed and yet to be completed.
  6. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
  7. Review required inspection, testing, certifying and material usage accounting procedures.
  8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not mandatory requirement).
  9. Record discussion of conference including decisions and agreements (or disagreements) reached and furnishes copy of record to each party attending. If substantial disagreements exist at conclusion of conference, determine how disagreements will be resolved and set date for reconvening conference.
  10. Review notification procedures for weather or non-working days.
- C. The Owner's Representative will designate one of the conference participants to record the proceedings and promptly distribute them to the participants for record.
- D. The intent of the conference is to resolve issues affecting the installation and performance of roofing work. Do not proceed with roofing work until such issues are resolved to the satisfaction of the Owner.

## **1.8 DELIVERY, STORAGE AND HANDLING**

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Store and handle roofing sheets in a dry, well-ventilated, weather-tight place to prevent moisture exposure. Store rolls of felt and other sheet materials on pallets or other raised surface. Stand all roll materials on end. Cover roll goods with a canvas tarpaulin or other breathable material (not polyethylene).
- C. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.
- D. Secure all material and equipment on the job site. If any material or equipment is stored on the roof, assure that the integrity of the deck is not compromised at any time. Damage to the deck caused by the Contractor's actions will be the sole responsibility of the Contractor, and the deck will be repaired or replaced at his expense.

## **1.9 MANUFACTURER'S INSPECTIONS**

- A. When the Project is in progress, the roofing system manufacturer will provide the following services at no additional cost to the Owner:
  - 1. Report progress and quality of the work as observed with weekly on-line reports. Reports are due every Monday on-line to the Owner; reports to include photos of work in progress and completed work.
  - 2. Job site inspections by a full time employee of the manufacture a minimum of 3 days per week with photo documentation.
  - 3. Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
  - 4. Confirm after completion that manufacturer has observed no application procedures in conflict with the specifications other than those that may have been previously reported and corrected.

## **1.10 PROJECT CONDITIONS**

- A. Proceed with roofing work only when existing and forecasted weather conditions will permit a unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.
- B. Do not apply roofing insulation or membrane to damp deck surface.
- C. Do not expose materials subject to water or solar damage in quantities greater than can be weatherproofed during same day.

## **1.11 SEQUENCING AND SCHEDULING**

- A. Sequence installation of roofing with related units of work specified in other Sections to ensure that roof assemblies, including roof accessories, flashing, trim and joint sealers, are protected against damage from effects of weather, corrosion and adjacent construction activity.
- B. Complete all roofing field assembly work each day. Phased construction will not be accepted.

## **1.12 WARRANTY**

- A. Upon completion of installation, and acceptance by the Owner the Manufacturer will supply to the Owner a 30 Year No Dollar Limit Warranty. Warranty shall be a single source warranty from one manufacturer (Multiple warranties will not be accepted) covering: modified bitumen roofing,
- B. Installer will submit a (4) four year warranty to the membrane manufacturer with a copy directly to Owner.

## 1.13 DESIGN AND PERFORMANCE CRITERIA

### A. Uniform Wind Uplift Load Capacity

1. Installed roof system shall withstand negative (uplift) design wind loading pressures complying with the following criteria. Attachment shall be installed exactly as given in Part 3. (To be included with bid documents)
  - a. Design Code: ASCE 7-05, Method 2 for Components and Cladding.
  - b. Category III Building with an Importance Factor of 1.15.
  - c. Safety Factor: 1.650 after any load reduction or material stress increase.
  - d. Wind Speed: 95 MPH
  - e. Ultimate Pullout Value: 730 lbs.
  - f. Exposure Category: C
  - g. Design Roof Height: 25 feet.
  - h. Minimum Building Width: 90 feet.
  - i. Roof Pitch: 1/2 inches per foot.
  - j. Topographic Factor: 1.00
    - 1) Roof Area Design Uplift Pressure:
    - 2) Zone 1 - Field of roof: 20.6
    - 3) Zone 2 - Eaves, ridges, hips and rakes
    - 4) Zone 3 - Corners

## PART 2 — PRODUCTS

### 2.1 PRODUCTS, GENERAL

- A. Refer to Division 01 Section Common Product Requirements.
- B. Basis of Design: Materials, manufacturer's product designations, and/or manufacturer's names specified herein shall be regarded as the minimum standard of quality required for work of this Section. Comply with all manufacturer and contractor/fabricator quality and performance criteria specified in Part 1.
- C. Substitutions: Products proposed as equal to the products specified in this Section shall be submitted in accordance with Bidding Requirements and Division 01 provisions.



1. Proposals shall be accompanied by a copy of the manufacturer's standard specification Section.
2. Include a list of five (5) projects of similar type and extent, located within a fifty mile radius from the location of the project. In addition, the three projects must be at least five (5) years old and be available for inspection by the Owner or Owner's Representative.
3. Equivalency of performance criteria, warranty terms, submittal procedures, and contractual terms will constitute the basis of acceptance.
4. Substitution request must be submitted by prime bidding contractor a minimum of 7 business days before Bid Due Date.

## **2.2 DESIGN BASED UPON**

- A. The design is based upon roofing systems engineered and manufactured by The Garland Company or PRE-APPROVED Equal.

## **2.3 DESCRIPTION**

- A. Modified bituminous roofing work including but not limited to:
  1. One ply type II base sheet nailed.
  2. Two ply's of Type VI felts bonded to the prepared substrate with bitumen.
  2. Hot Bitumen: ASTM D312, Type III steep asphalt having the following characteristics:
    - a. Softening Point 185°F - 205°F
    - b. Flash Point 500°F
    - c. Penetration @ 77°F 15-35 units
    - d. Ductility @ 77°F 2.5 cm
  3. Base Flashing Ply: One (1) ply of SBS base flashing ply covered by an additional layer of modified bitumen membrane and set in bitumen.
  4. Modified Membrane: Versi Ply Mineral; 145 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing membrane with fiberglass reinforced scrim.
  5. Surfacing: Apply Pyramic, a white acrylic coating ASTM G26

## **2.4 BITUMINOUS MATERIALS**

- A. Asphalt Primer: V.O.C. compliant, ASTM D41.
- B. Asphalt Roofing Mastic: V.O.C. compliant, ASTM D2822, Type II.

- C. Interply Adhesive: ASTM D312, Type III.

## 2.5 SHEET MATERIALS

- A. Base Ply: Type II base sheet

A. Base Flashing Ply (Versi Ply 40 Sheet): Dual fiberglass reinforced SBS Modified

- B. Modified Flashing Ply:

### 1. VERSIPLY MINERAL

- C. Modified Membrane Properties (Finished Membranes): VERSIPLY MINERAL; ASTM D6163, Type III Grade G

#### 1. Tensile Strength (ASTM D5147)

- a. 2 in/min. @ 73 ± 3.6°F MD 220 lbf/in CMD 220 lbf/in

#### 2. Tear Strength (ASTM D4073)

- a. 2 in/min. @ 73 ± 3.6°F MD 300 lbf CMD 300 lbf

#### 3. Elongation at Maximum Tensile (ASTM D2523)

- a. 2 in/min. @ 73 ± 3.6°F MD 4.5 % CMD 4.5 %

#### 4. Low Temperature Flexibility (ASTM D5147): Passes -30 °F

## 2.6 SURFACINGS

- A. White Elastomeric Roof Coating: Pyramic; Energy Star approved white acrylic roof coating:

- 1. Weight/Gallon 12 lbs./gal. (1.44 g/cm<sup>3</sup>)
- 2. Non-Volatile % (ASTM D 1644) 66 min
- 3. Reflectance 81%

## 2.6 RELATED MATERIALS

- A. Type II base sheet: Follow roof system manufacturer's wind uplift calculations.
- B. Nails: Square head roofing nails.
- C. All roof slopes greater than 2" in 12" all SBS Modified sheets must be back nailed or strapped.
- D. Urethane Sealant: One part, non-sag sealant as recommended and furnished by the membrane manufacturer for moving joints.

- 1. Tensile Strength (ASTM D412) 250 psi
- 2. Elongation (ASTM D412) 950%

3. Hardness, Shore A (ASTM C920) 35
4. Adhesion-in-Peel (ASTM C920) 30 pli

D. Sealant: Single component, 100% solids structural adhesive as furnished and recommended by the membrane manufacturer.

1. Elongation (ASTM D412) 300%
2. Hardness, Shore A (ASTM C920) 50
3. Shear Strength (ASTM D1002) 300 psi

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

## **PART 3 — EXECUTION**

### **3.1 EXECUTION, GENERAL**

- A. Comply with requirements of NRCA, Roofing and Waterproofing.

### **3.2 EXAMINATION**

- A. Verify that deck surfaces and project conditions are ready to receive work of this Section.
- B. Verify that deck is supported and secured to structural members.
- C. Verify that deck is clean and smooth, free of depressions, projections or ripples, and is properly sloped to drains, valleys, or eaves.
- D. Verify that adjacent roof substrate components do not vary more than [1/4] inch in height.
- E. Verify that deck surfaces are dry and free of ice.
- F. Confirm that moisture content does not exceed twelve (12) percent by moisture meter tests. On concrete deck pour hot asphalt on to deck if it bubbles / foams and once cooled does not adhere to the substrate, the moisture levels are too high.
- G. Verify that openings, curbs, pipes, conduit, sleeves, ducts, and other items which penetrate the roof are set solidly, and that wood cant strips, wood nailing strips, and reglets are set in place.

### **3.3 DECK PREPARATION**

- A. Wood Deck
  1. Verify that wood decking is flat and has tight joints.
  2. Seal plywood joints with tape.

3. Fill knot holes with latex filler.

### 3.4 GENERAL INSTALLATION REQUIREMENTS

- A. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.
- B. Insurance/Code Compliance: Where required by code, install and test the roofing system to comply with governing regulation and specified insurance requirements.
- C. Protect other work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore other work damaged by installation of the coal tar modified bituminous roofing system.
- D. Coordinate installation of roofing system components so that insulation and roofing plies are not exposed to precipitation or left exposed overnight. Provide cut-offs at end of each day's work to cover exposed ply sheets and insulation with two (2) plies of #15 organic roofing felt set in full moppings of bitumen and with joints and edges sealed with roofing cement. Remove cut-offs immediately before resuming work.
- E. Asphalt Bitumen Heating: Heat and apply bitumen in accordance with the Equiviscous Temperature (EVT) Method as recommended by National Roofing Contractors Association (NRCA). Do not raise temperature above minimum normal fluid-holding temperature necessary to attain EVT (plus 5°F at point of application) more than one (1) hour prior to time of application. Determine flash point, finished blowing temperature, EVT, and fire-safe handling temperature of bitumen either from information by manufacturer or by suitable test. Do not exceed recommended temperature limits during bitumen heating. Do not heat to a temperature higher than twenty five degrees (25°F) below flash point. Discard bitumen that has been held at temperature exceeding Finishing Blowing Temperature (FBT) for more than three (3) hours. Keep kettle lid closed except when adding bitumen.
- F. Asphalt Bitumen Mopping Rate:
  1. Modified Membrane Mopping: Apply bitumen at the rate of approximately thirty (30) lb. of bitumen per roof square.
- G. Substrate Joint Penetrations: Prevent bitumen from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.
- H. Apply roofing materials as specified by manufacturer's instructions.
  1. Keep roofing materials dry before and during application.
  2. Do not permit phased construction.
  3. Complete application of roofing plies, modified sheet and flashing in a continuous operation.

4. Begin and apply only as much roofing in one day as can be completed that same day.
- I. Cut-Offs (Waterstops): At end of each day's roofing installation, protect exposed edge of incomplete work, including ply sheets and insulation. Provide temporary covering of two (2) plies of #15 organic roofing felt set in full moppings of bitumen with joints and edges sealed.
- J. Broadcast minerals into the bleed out of bitumen while bitumen is at its recommended EVT temperature to achieve uniform color throughout.

### **3.6 BASE PLY INSTALLATION**

- A. Base Ply: Install one (1) base ply sheet in thirty (30) lbs. per square of bitumen shingled uniformly to achieve one ply over the entire prepared substrate. Shingle in direction of slope of roof to shed water on each area of roof.
- B. Lap ply sheet ends eight (8) inches. Stagger end laps twelve (12) inches (304mm) minimum.
- C. Lightly broom in base ply to assure complete adhesion.
- D. Extend ply two (2) inches beyond top edges of cants at wall and roof projections and equipment bases.
- E. Install base flashing ply to all perimeter and projection details after membrane application.

### **3.7 MODIFIED MEMBRANE APPLICATION**

- A. Solidly bond the modified membrane to the base layer with specified asphalt at the rate of twenty five (25) to thirty (30) lbs. per 100 square feet.
- B. The modified membrane roll must push a puddle of asphalt in front of it with asphalt slightly visible at all side laps. Exercise care during application to eliminate air entrapment under the membrane.
- C. Apply pressure to all seams to ensure that the laps are solidly bonded to substrate.
- D. Install subsequent rolls of modified membrane across the roof as above with a minimum of four (4) inch (101mm) side laps and eight (8) inch end laps. Stagger the end laps. Apply the modified membrane in the same direction as the previous layers but stagger the laps so they do not coincide with the laps of the base layers.
- E. Apply asphalt no more than five (5) feet ahead of each roll being embedded.
- F. Extend membrane two (2) inches beyond top edge of all cants in full moppings of the specified asphalt.

### 3.8 FLASHING MEMBRANE INSTALLATION

- A. Seal all curb, wall and parapet flashings with an application of mastic and mesh on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.
- B. Prepare all walls, penetrations, expansion joints to be flashed with asphalt primer at the rate of one hundred (100) square feet per gallon. Allow primer to dry tack free.
- C. Use the modified membrane as the flashing membrane. Adhere to the underlying base flashing ply with specified asphalt unless otherwise noted in these specifications. Nail off at a minimum of eight (8) inches o.c. from the finished roof at all vertical surfaces.
- D. Solidly adhere the entire sheet of flashing membrane to the substrate.
- E. Seal all vertical laps of flashing membrane with a three-course application of trowel-grade mastic and fiberglass mesh.
- F. Coordinate counter flashing, cap flashings, expansion joints, and similar work with modified bitumen roofing work.
- G. Coordinate roof accessories, miscellaneous sheet metal accessory items, including piping vents and other devices with the roofing system work.

### 3.9 FLASHING'S

- A. Three course all flashing's:
  - 1. Trowel grade asphalt based roofing mastic designed for use in repair and patching against leaks in asphalt based roofing systems. Product must contain plasticizing oils and resins which provide low temperature flexibility and ductility.
  - 2. SBR coated woven fiberglass reinforcing fabric to be used in all 3 course applications.

### 3.10 APPLICATION OF SURFACING

- A. Prior to installation of surface, obtain approval from manufacturer as to work completed. 14 days are required prior to final surfacing.
- B. Reflective Coatings
  - 1. Paint all exposed roofing with manufacturer's Energy Star acrylic coating installed at a rate of one and one half (1.5) gallons per square per coat in a two coat application. The first coat must me back-rolled to insure proper coverage.
  - 2. Apply White Knight at a rate of 2 gallons per sq on crickets, drain sumps or anywhere water can potentially pond. Overlap the White Knight with Pyramic by 4".

### **3.11 FIELD QUALITY CONTROL**

- A. Perform field inspection and as required by manufacturer.
- B. Correct defects or irregularities discovered during field inspection.
- C. Require attendance of roofing materials manufacturers' representatives at site during installation of the roofing system. A copy of the specification should also be on site at all times.

### **3.12 CLEANING**

- A. Remove bitumen adhesive drippings from all walls, windows, floors, ladders and finished surfaces.
- B. In areas where finished surfaces are soiled by asphalt or any other sources of soiling caused by work of this Section, consult manufacturer of surfaces for cleaning instructions and conform to their instructions.
- C. Repair or replace defaced or disfigured finishes caused by work of this Section.

### **3.13 CONSTRUCTION WASTE MANAGEMENT**

- A. Remove and properly dispose of waste products generated during roofing procedures. Comply with requirements of authorities having jurisdiction.

### **3.14 FINAL INSPECTION**

- A. At completion of roofing installation and associated work, meet with Contractor, installer, installer of associated work, Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of roofing system.
- B. Walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish copy of list to each party in attendance.
- C. The roofing system manufacturer reserves the right to request a thermographic scan of the roof during final inspection to determine if any damp or wet materials have been installed. The thermographic scan shall be provided by the [Roofing] Contractor.
- D. If core cuts verify the presence of damp or wet materials, the Roofing Contractor shall be required to replace the damaged areas at his own expense.
- E. Repair or replace deteriorated or defective work found at time above inspection as required to produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- F. Notify the Contractor and Owner upon completion of corrections.

- G. Following the final inspection, provide written notice of acceptance of the installation from the roofing system manufacturer.
- H. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner will exercise rights to correct the Work under the terms of the Conditions of the Contract.

### 3.15 OWNER SUPPLIED MATERIALS

Contractor must include in their base bid any additional materials to complete the roofing project. Contractor must provide all labor to install owner supplied materials as part of their bid. All materials not specifically included in the owner supplied materials section will be the responsibility of the contractor to provide and install in compliance with section 07 52 00. Freight charges of Owner supplied materials will be the responsibility of the Owner. Contractor must take delivery of materials, properly cover and store at jobsite or their shop. Contractor must be able to provide certification in writing from roof system manufacturer that the contractor is approved to install the specified roof system and provide all warranty requirements of section 07 52 00. The Owner will supply the following materials and quantities.

Kitchen -

- A. 4369-G Versiply Mineral 75 sq ft cap sheet – 42 rolls
- B. 4123 HPR Premium Glasfelt 500 sq ft ply sheet – 12 rolls
- C. 4363-40-G Versiply 40 200 sq ft flashing ply – 4 rolls
- D. 7469-55-U Pyramic base coat 55 gallon drum – 0
- E. 7469-5-U Pyramic base coat 5 gallon pails - 0
- F. 7467-55-U Pyramic top coat 55 gallon drum – 1
- G. 7467-5-U Pyramic top coat 5 gallon pails – 7
- H. 2135-TRUWHT Tuff Stuff 30 per case - 1
- I. 22 gauge flat stock – 5 sheets

100 Wing -

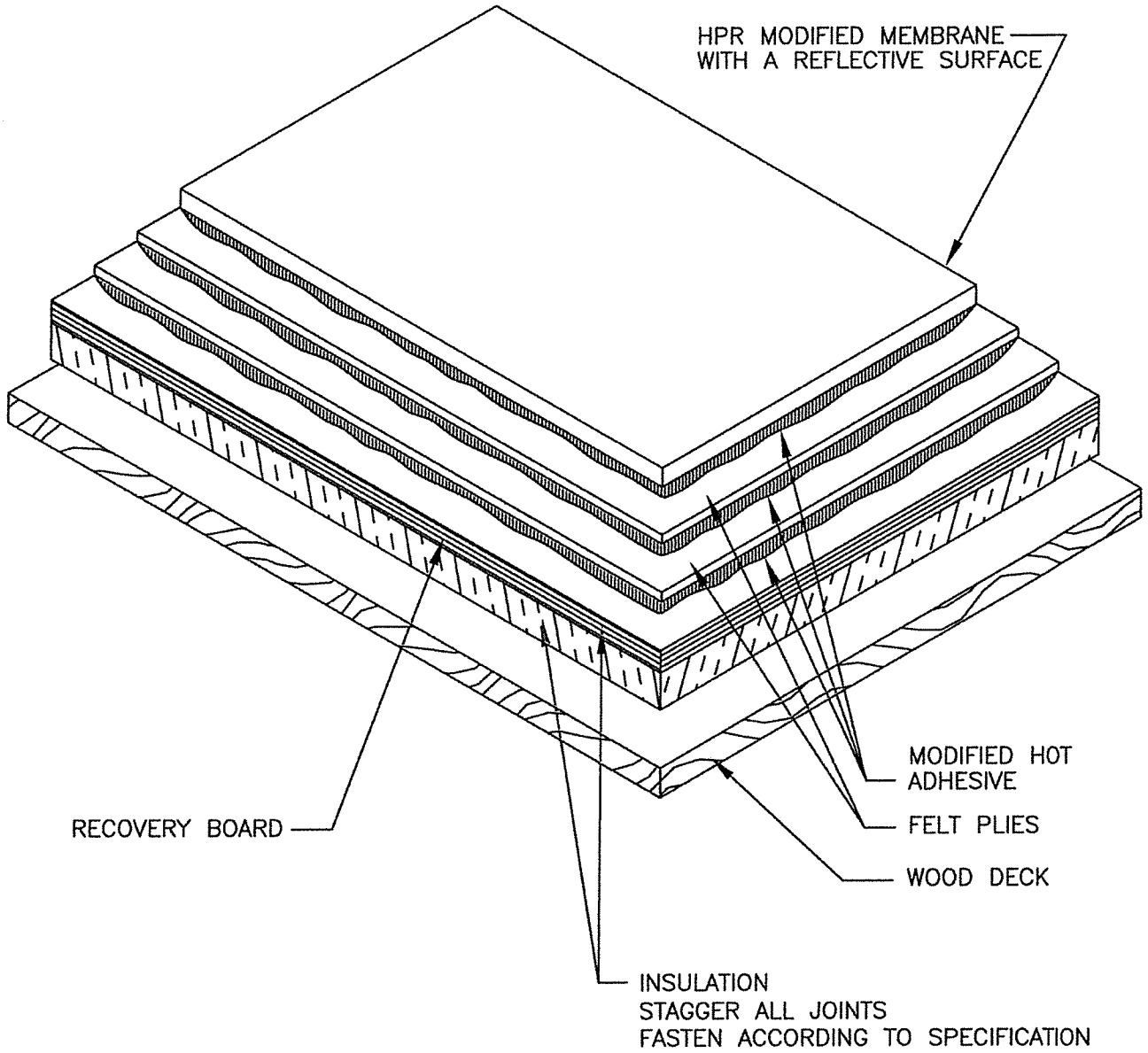


- J. 4369-G Versiply Mineral 75 sq ft cap sheet – 83 rolls
- K. 4123 HPR Premium Glasfelt 500 sq ft ply sheet – 25 rolls
- L. 4363-40-G Versiply 40 200 sq ft flashing ply – 4 rolls
- M. 7469-55-U Pyramic base coat 55 gallon drum – 0
- N. 7469-5-U Pyramic base coat 5 gallon pails - 0
- O. 7467-55-U Pyramic top coat 55 gallon drum – 3
- P. 7467-5-U Pyramic top coat 5 gallon pails – 6
- Q. 2135 - TRUWHT Tuff Stuff 30 per case – 2
- R. 22 gauge flat stock – 8 sheets
- S. 22 gauge R-Mer Wall Pan – 1,100 sq ft

Office –

- T. 4369-G Versiply Mineral 75 sq ft cap sheet – 54 rolls
- U. 4123 HPR Premium Glasfelt 500 sq ft ply sheet – 16 rolls
- V. 4363-40-G Versiply 40 200 sq ft flashing ply – 3 rolls
- W. 7469-55-U Pyramic base coat 55 gallon drum – 0
- X. 7469-5-U Pyramic base coat 5 gallon pails - 0
- Y. 7467-55-U Pyramic top coat 55 gallon drum – 2
- Z. 7467-5-U Pyramic top coat 5 gallon pails – 2
- AA. 2135 - TRUWHT Tuff Stuff 30 per case – 1

#### MODIFIED BITUMINOUS MEMBRANE ROOFING



ALL PLIES SET IN BITUMEN  
SEE SPECIFICATION FOR SURFACING

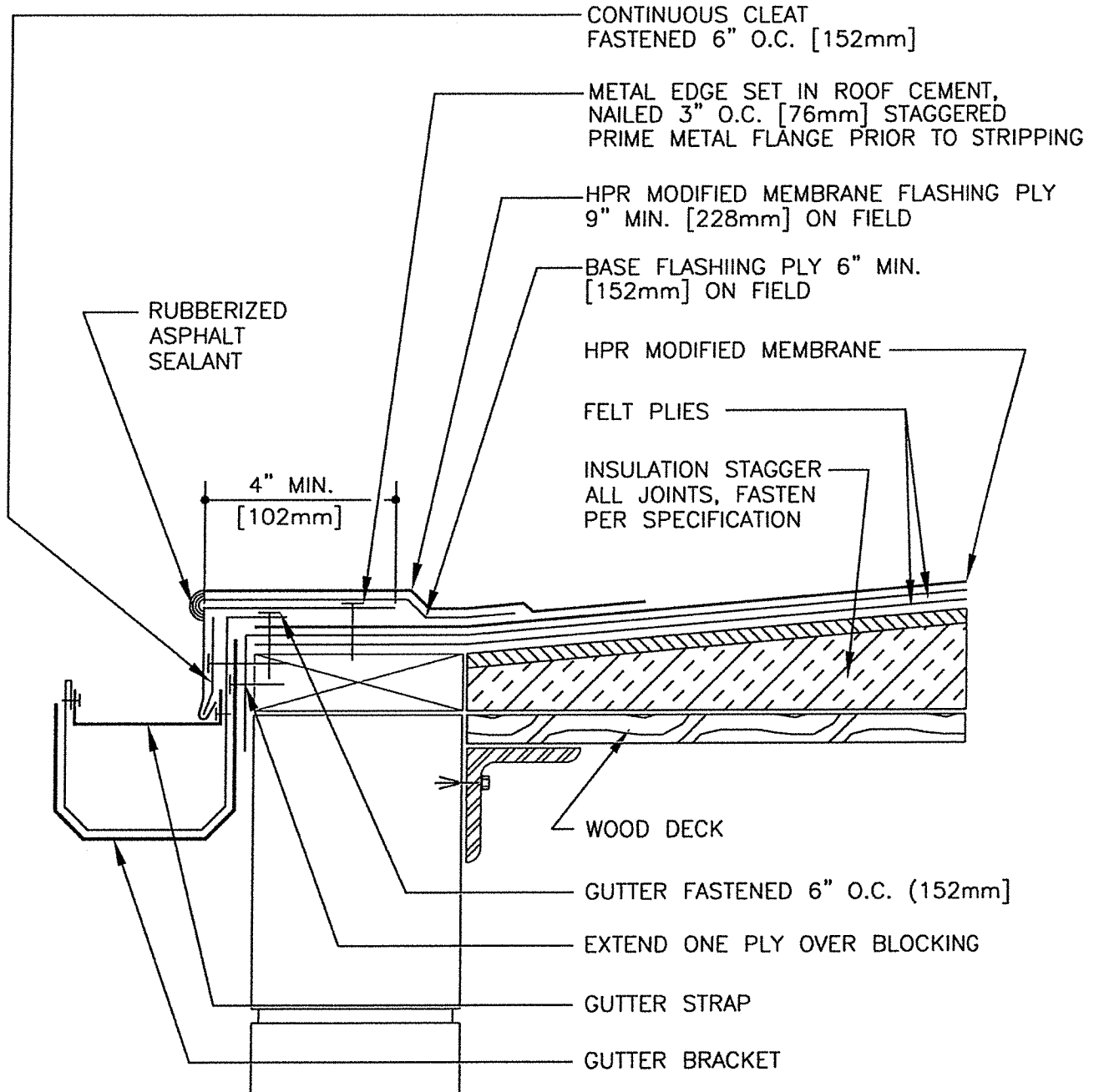


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 THE GARLAND COMPANY UK, LTD

DETAIL:

# COATED FINISH

HOT APPLIED



ALL PLIES SET IN BITUMEN SEE SPECIFICATIONS FOR SURFACING

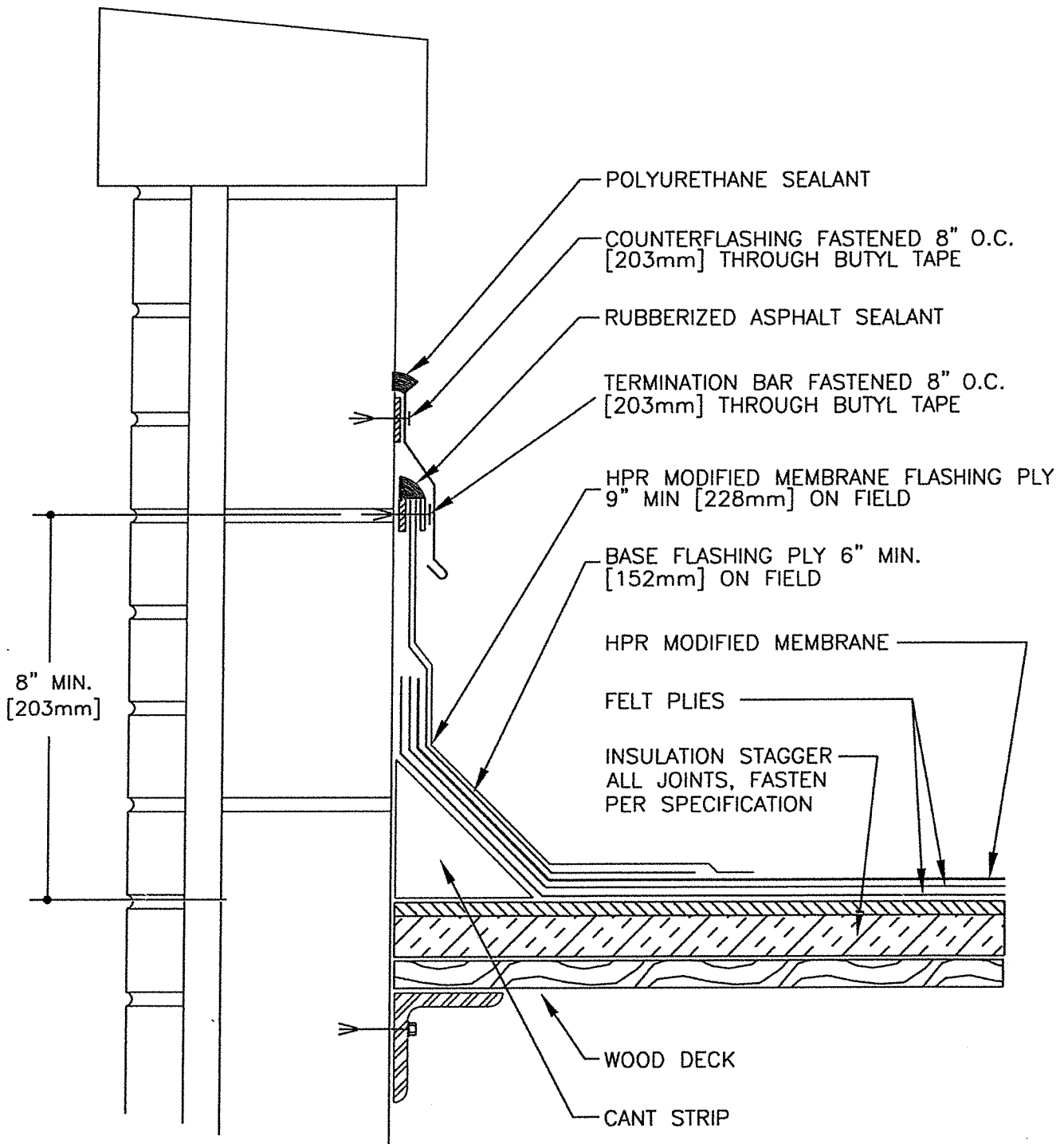


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 GARLAND CANADA, INC.  
 THE GARLAND COMPANY UK, LTD

DETAIL:

ROOF EDGE WITH GUTTER

HOT APPLIED



ALL PLYS SET IN BITUMEN  
SEE SPECIFICATIONS FOR SURFACING



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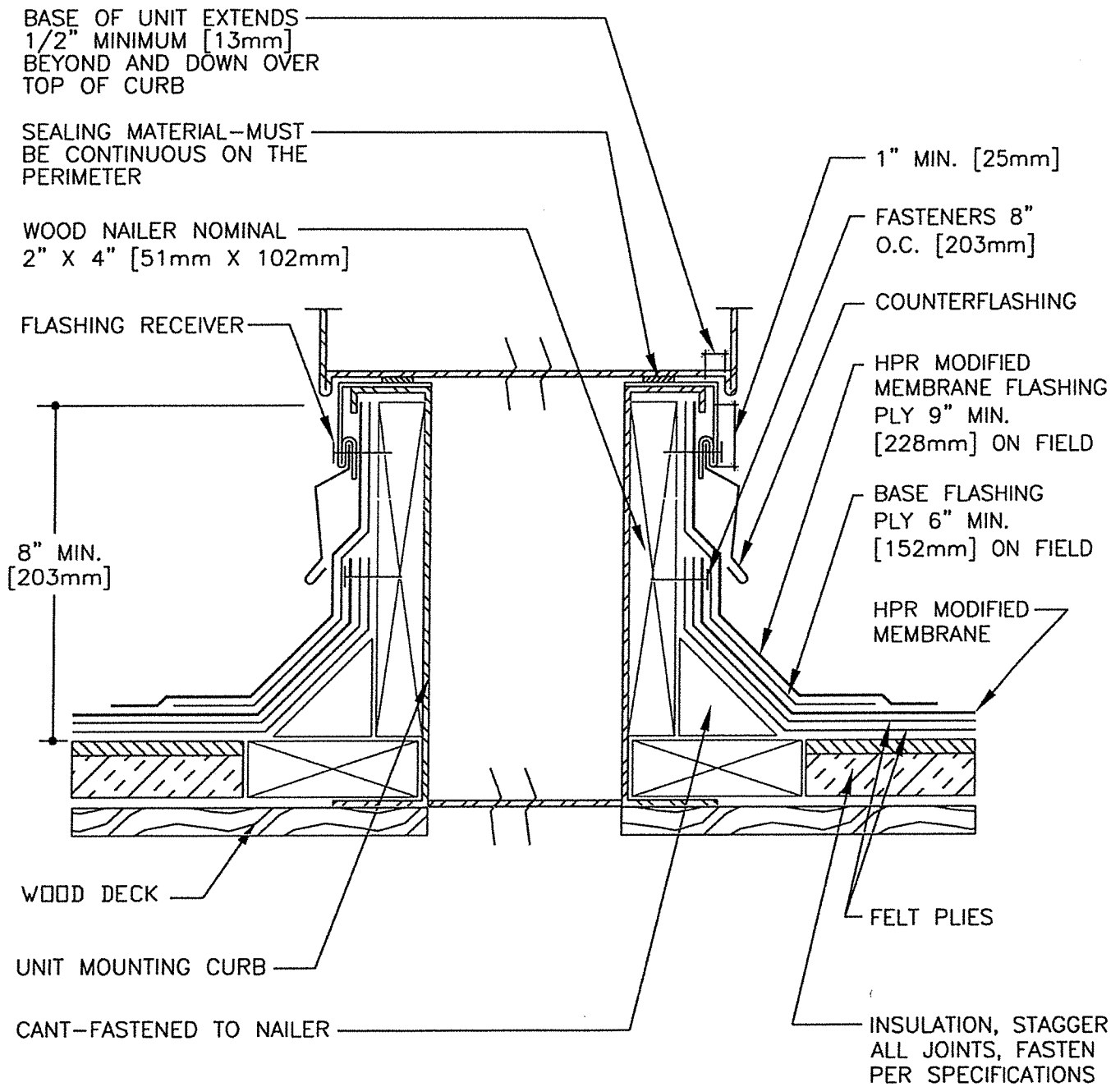
THE GARLAND COMPANY, INC.  
GARLAND CANADA, INC.

THE GARLAND COMPANY UK, LTD

DETAIL:

SURFACE MOUNTED COUNTERFLASHING

HOT APPLIED



ALL PLYS SET IN BITUMEN  
SEE SPECIFICATIONS FOR SURFACING

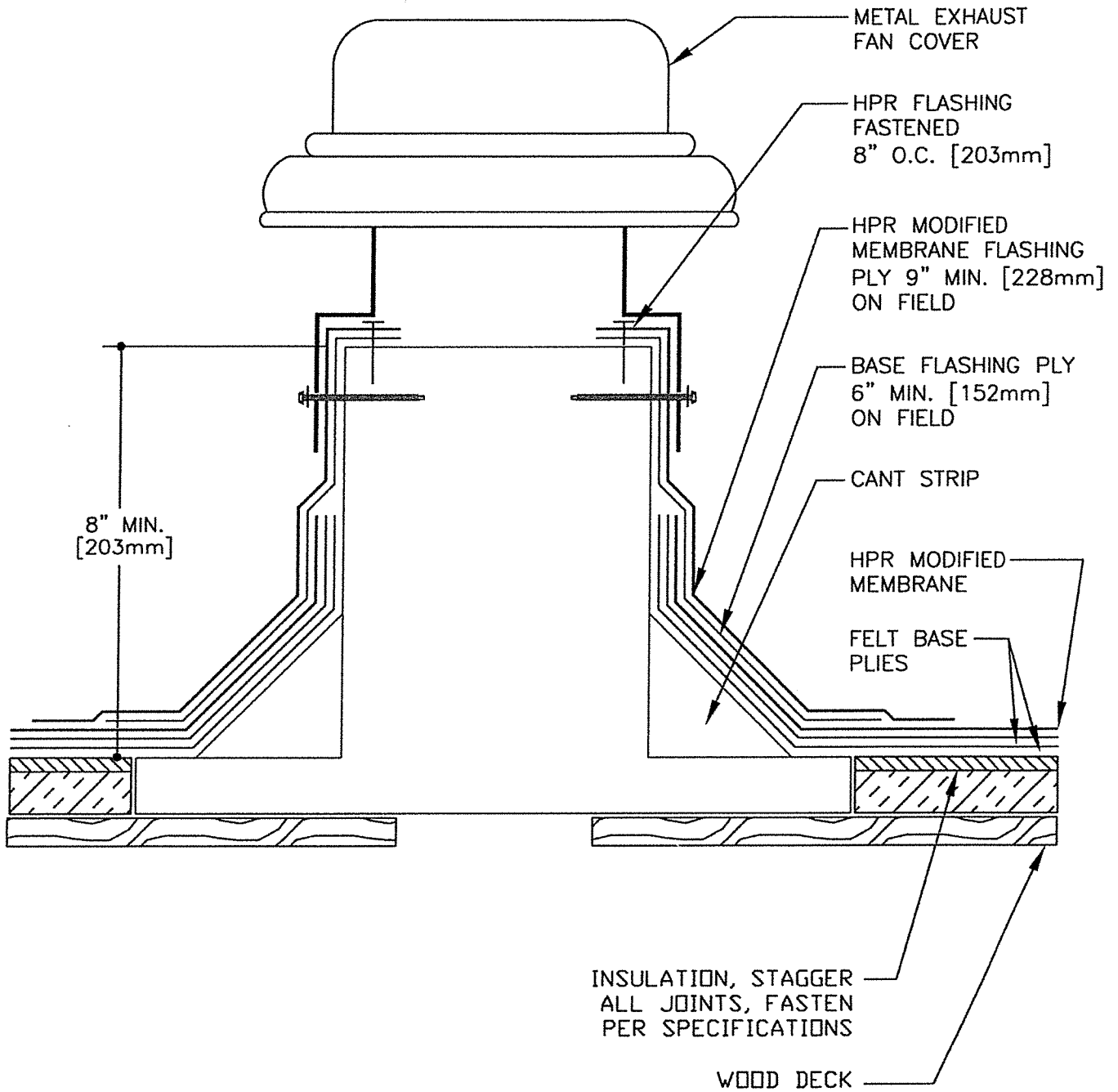


THE GARLAND COMPANY, INC.  
GARLAND CANADA, INC.  
THE GARLAND COMPANY UK, LTD

DETAIL:

CURB DETAIL/AIR HANDLING STATION

HOT APPLIED



ALL PLIES SET IN BITUMEN  
SEE SPECIFICATIONS FOR SURFACING

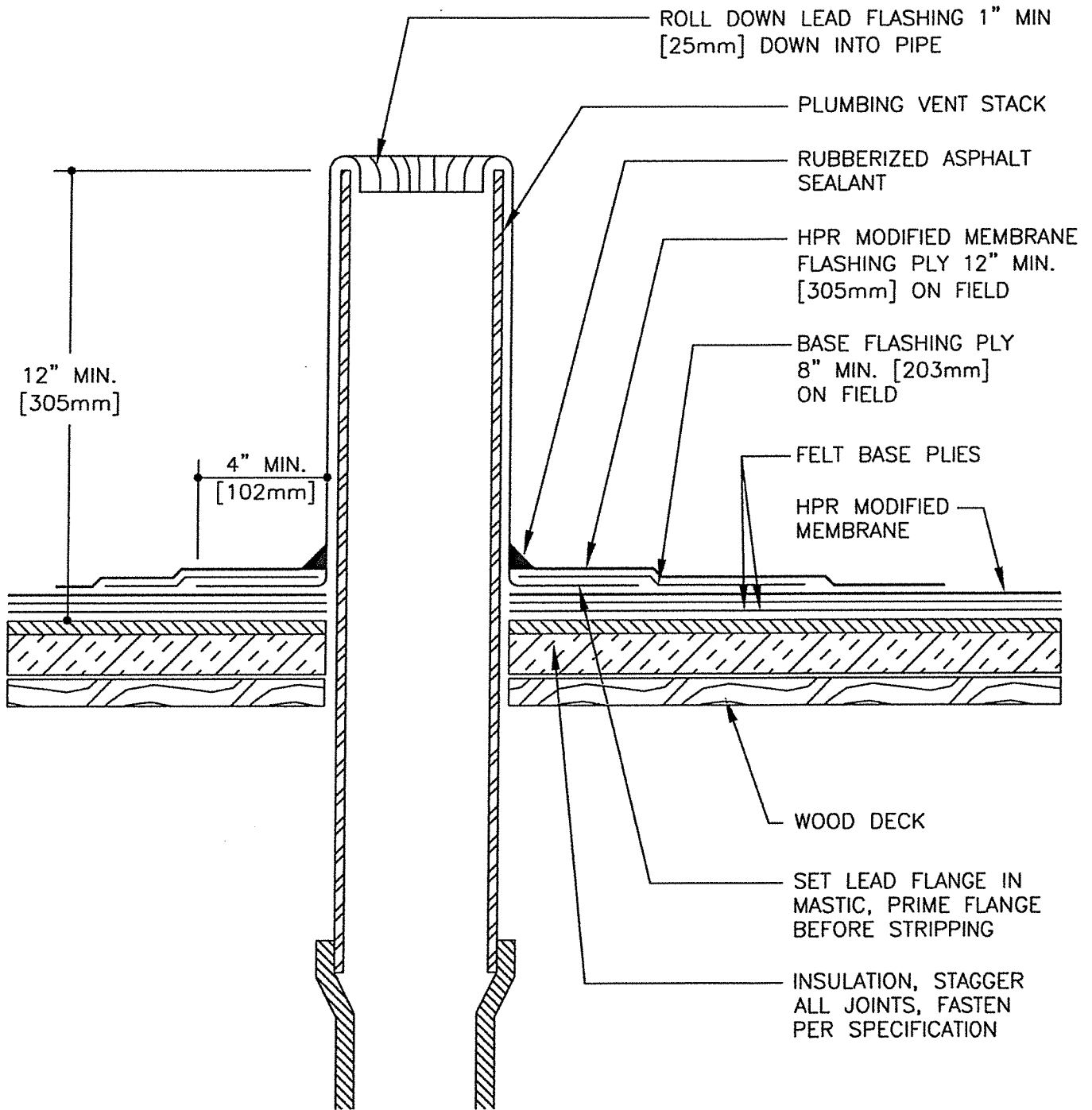


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DETAIL:

EXHAUST FAN DETAIL

HOT APPLIED



ALL PLIES SET IN BITUMEN  
SEE SPECIFICATIONS FOR SURFACING



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DETAIL:

# PLUMBING STACK

HOT APPLIED

**SECTION 07311  
COMPOSITION SHINGLES  
WILLOWS UNIFIED – MURDOCK SCHOOL**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Provide all labor, equipment, non owner supplied materials to install a composition shingle roof system over the properly prepared substrate. The scope of work includes but is not limited to:
1. Full removal and disposal of existing roofing materials.
  2. Locate and repair/replace all areas of damaged substrate.
  3. Installation of HPR Underlayment.
  4. Install new sheet metal components per details.
  5. Install new fascia metal per details.
  6. Install new composition shingles per manufacturers specifications.
  7. Install new skylights. Replace existing with Owners specifications.

**1.2 RELATED SECTION**

- A. General Conditions

**1.3 REFERENCES**

- A. ASTM B209 - Aluminum-Alloy Sheet and Plate
- B. ASTM D226 - Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- C. ASTM D228 - Method of Testing Asphalt Roll Roofing, Cap Sheets and Shingles.
- D. ASTM D4586 - Asphalt Roof Cement, Asbestos Free.
- E. ASTM D3161 - Wind Resistance of Asphalt Shingles
- F. ASTM D3018 - Class A Asphalt Shingles Surfaced with Mineral Granules.
- G. ASTM A361 - Sheet Steel, Zinc Coated (Galvanized) by the Hot-Dip Process for Roofing and Siding.
- H. ASTM B370 - Copper Sheet and Strip for Building Construction.
- I. NRCA - Steep Roofing Manual.



- J. ARMA - Residential Asphalt Roofing Manual.
- K. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
- L. UL 997 - Wind Resistance of Prepared Roof Covering Materials.

#### **1.4 SYSTEM DESCRIPTION**

- A. It is the intent of this specification to install a long-term, quality roof system that meets or exceeds all current NRCA guidelines as stated in the most recent edition of the NRCA Roofing and Waterproofing Manual. Please discuss any concerns with the Architect and Roofing System Manufacturer.

#### **1.5 SUBMITTALS**

- A. Submit under provisions of Section 07311.
- B. Product Data: Provide manufacturer's technical product data for each type of roofing product specified. Include data substantiating that materials comply with specified requirements.
- C. Samples: Submit two (2) samples of each product specified.
- D. Manufacturer's Installation Instructions: Submit installation instructions and recommendations indicating special precautions required.
- E. Submit one color board for color approval from the Owner.
- F. Submit a copy of an unexecuted manufacturer's warranty for review.

#### **1.6 QUALIFICATIONS**

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum 12 years documented experience.
- B. Installer: Company specializing in steep slope roofing installation with a minimum 5 years experience and authorized by roofing system manufacturer as qualified to install manufacturer's roofing materials.
- C. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work and at any time roofing work is in progress. Maintain proper supervision of workmen. Maintain a copy of the specifications in the possession of the Supervisor/Foremen and on the roof at all times.

- D. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner has the right to hire a qualified contractor and back charge the original contractor.

## **1.7 PRE-INSTALLATION CONFERENCE**

- A. Pre-Roofing Conference: Convene a pre-roofing conference approximately two (2) weeks before scheduled commencement of roofing system installation and associated work.
- B. Require attendance of installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing which must precede or follow roofing work (including mechanical work if any), Owner, roofing system manufacturer's representative.
- C. Objectives of conference to include:
  - 1. Review foreseeable methods and procedures related to roofing work.
  - 2. Tour representative areas of roofing substrates (decks), inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by others.
  - 3. Review roofing system requirements (drawings, specifications and other contract documents).
  - 4. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
  - 5. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not mandatory requirement).

## **1.8 DELIVERY, STORAGE AND HANDLING**

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Store and handle roofing in a dry, well-ventilated, weather-tight place to ensure no possibility of significant moisture exposure. Store rolls of felt and other sheet materials on pallets or other raised surface. Stand all roll materials on end. Cover roll goods with a canvas tarpaulin or other breathable material (not polyethylene).

- C. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.
- D. It is the responsibility of the contractor to secure all material and equipment on the job site. If any material or equipment is stored on the roof, the contractor must make sure that the integrity of the deck is not compromised at any time. Damage to the deck caused by the contractor will be the sole responsibility of the contractor and will be repaired or replaced at his expense.

#### **1.9 MANUFACTURER'S INSPECTIONS**

- A. When the project is in progress, the roofing system manufacturer will provide the following at no charge:
  - 1. Keep the Owner and Architect informed as to the progress and quality of the work as observed.
  - 2. Provide job site inspections a minimum of two days a week with photo conformation and reported to the owner.
  - 3. Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
  - 4. Confirm after completion that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

#### **1.10 PROJECT CONDITIONS**

- A. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.
- B. Do not apply roofing materials or membrane to damp deck surface.
- C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- D. Nailing requirements of composition shingles must conform to all applicable local codes.

#### **1.11 SEQUENCING AND SCHEDULING**

- A. Sequence installation of composition roofing with related units of work specified in other sections to ensure that roof assemblies including roof accessories, flashing, trim and joint sealers are protected against damage from effects of weather, corrosion and adjacent construction activity.
- B. Every stage of progress completed must be inspected by owner or owner's representative prior to moving forward to next stage of the installation.

#### **1.12 WARRANTY**

- A. Upon completion of roof installation, and acceptance Manufacturer will supply to the Owner a 30-year manufacturers' composition limited shingle warranty.
- B. Contractor will submit a minimum of a two year workmanship warranty to the Owner with a copy directly to membrane manufacturer.

#### **1.13 PRODUCT OPTIONS AND SUBSTITUTIONS**

- A. Any item or materials submitted as a substitution to the manufacturer specified must comply in all respects as to the quality and performance of the brand name specified. The Owner shall be the sole judge as to whether or not an item submitted as a substitute is truly equal. All items as listed under section 07311 1.5 submittals must be presented to the district a minimum of (10) days prior to the bid date for review.

### **PART 2 PRODUCTS**

#### **2.1 ACCEPTABLE MANUFACTURERS**

- A. When a particular trade name or performance standard is specified it shall be indicative of a standard required.
- B. Provide products as manufactured by
  - The Garland Company – HPR Aqua Shield.
  - Malarkey 30 year dimensional shingle or equal

#### **2.2 DESCRIPTION**

- A. Asphalt Shingles: UL Class A Rating and Wind Resistance Label, glass fiber mat base, mineral surface, color selected by Owner.

#### **2.3 SHEET MATERIALS**

- A. Underlayment: HPR Aqua Shield by The Garland Company, Inc.

## 2.4 RELATED MATERIALS

- A. Nails: Standard round wire shingle type, Zinc coated steel, 10-12 gauge, barbed or deformed shank, with heads 3/8" to 7/16" in diameter. Nails must be long enough to penetrate into solid wood deck at least 3/4" or just through plywood and oriented strand board decks.
- B. Plastic Cement: ASTM D4586 Type I or Type II. Flashing Bond by The Garland Co.
- C. New, non-corrosive, metal step flashing, minimum 24 gauge (or equivalent) to be used as step flashing around chimneys, dormers, and side walls.
- D. New four pound lead roof jacks with factory tops to be used around all plumbing vents. Paint all pipes when completed.
- E. Urethane Sealant: One part, non-sag sealant as recommended and furnished by the membrane manufacturer for moving joints. Tuff Stuff by The Garland Company.
  - 1. Tensile Strength (ASTM D412) 250 psi
  - 2. Elongation (ASM D412) 950%
  - 3. Hardness, Shore A (ASTM C920) 35
  - 4. Adhesion-in-Peel (ASTM C920) 30 pli

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that deck surfaces and project conditions are ready to receive work of this section.
- B. Verify that deck is supported and secured to structural members.
- C. Verify that deck is clean and smooth, free of depressions, projections or ripples, and is properly sloped to drains.
- D. Verify that adjacent roof members do not vary more than 1/4 inch in height.
- E. Verify that deck surfaces are clean and dry.

### **3.2 GENERAL INSTALLATION REQUIREMENTS**

- A. Place one ply of HPR Aqua Shield underlayment as manufactured by The Garland Company and have ends lapped a minimum of 4 inches over itself. Stagger end laps of each consecutive layer a minimum of 3 feet. In valleys, run HPR Aqua Shield minimum 6 inches over valley protection. Nail in place per manufacturer's requirements.
- B. At all vent pipes, install a 2 square foot piece of HPR Aqua Shield underlayment.
- C. At all vertical walls, install HPR Aqua Shield so that it extends at least 6 inches up the vertical wall and 12 inches onto the horizontal roof.
- D. At all chimneys, install HPR Aqua Shield around entire chimney extending up all vertical surfaces at least 6 inches and 12 inches onto the horizontal roof.
- E. Install shingles in accordance with manufacturer's instructions.
- F. Install 6 nails per shingle, as recommended by local building codes. Staples are not acceptable.
- G. Install Hip and Ridge shingles per manufacturer's instructions.

### **3.3 INSTALLATION OF SOFFIT VENTS**

- A. Uniformly install sufficient eave vents to equal or exceed ridge vent area, per the manufacturer's recommendations.

### **3.4 FIELD QUALITY CONTROL**

- A. Perform field inspection and testing as required under provisions of Section 07311.
- B. Correct defects or irregularities discovered during field inspection.
- C. Require attendance of roofing materials manufacturers' representative at site during installation of the roofing system.

### **3.5 CLEANING**

- A. In areas where finished surfaces are soiled by asphalt or any other sources of soiling caused by work of this section, consult manufacturer of surfaces for cleaning instructions and conform to their instructions.

- B. Repair or replace defaced or disfigured finishes caused by work of this section.
- C. Perform daily cleanup around building. Magnet on wheels to be used to pick up all metal shavings, staples, nails, etc.

### **3.6 FINAL INSPECTION**

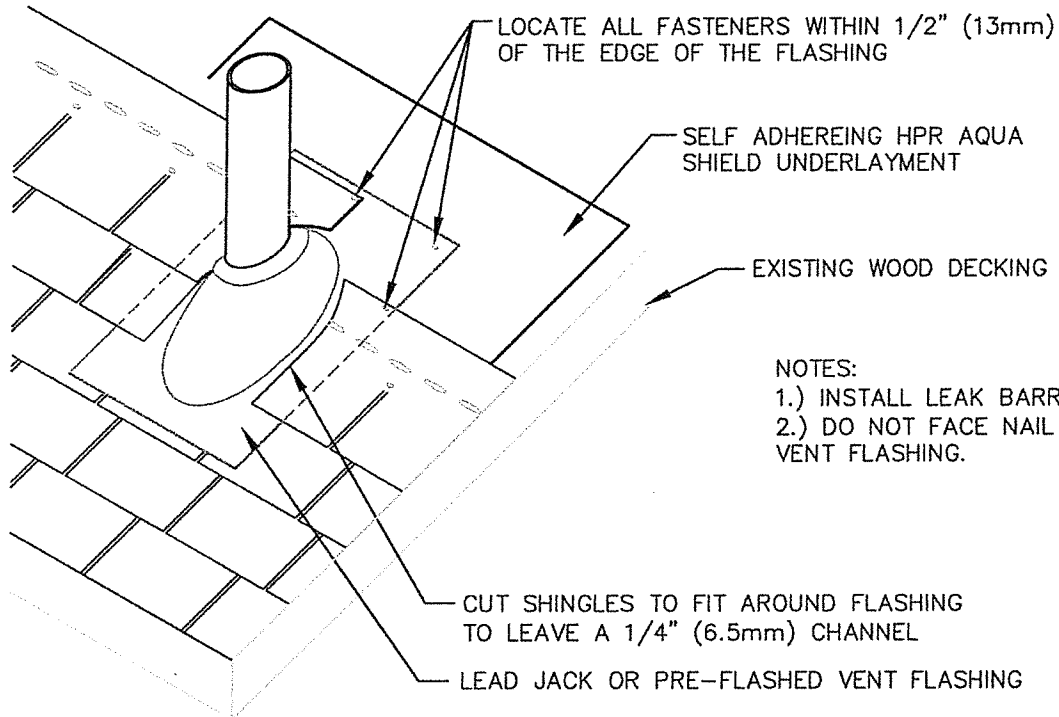
- A. At completion of roofing installation and associated work, meet with Contractor, installer, installer of associated work, Owner, roofing system manufacturer's representative and other representatives directly concerned with performance of roofing system.
- B. Walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish copy of list to each party in attendance.
- C. Repair or replace deteriorated or defective work found at time above inspection as required to produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- D. Notify the material manufacturer and the district upon completion of corrections.
- E. Following the final inspection, provide written notice of acceptance of the installation from the roofing system manufacturer.

### **3.9 OWNER SUPPLIED MATERIALS**

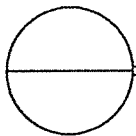
- 1. Contractor must include in their base bid any additional materials to complete the roofing project. Contractor must provide all labor to install owner supplied materials as part of their bid. All materials not specifically included in the owner supplied materials section will be the responsibility of the contractor to provide and install in compliance with section 07 52 00. Freight charges of Owner supplied materials will be the responsibility of the Owner. Contractor must take delivery of materials, properly cover and store at jobsite or their shop. Contractor must be able to provide certification in writing from roof system manufacturer that the contractor is approved to install the specified roof system and provide all warranty requirements of section 07 52 00. The Owner will supply the following materials and quantities.
  - 1. Cafeteria -
    - A. 4131 HPR Aqua Shield 200 sq ft roll – 33 rolls
    - B. 2135 – TRUWHT Tuff Stuff 30 per case – 1
    - C. 22 gauge flat stock – 8 sheets

**END OF SECTION**





- NOTES:  
 1.) INSTALL LEAK BARRIER SHEET.  
 2.) DO NOT FACE NAIL THE PLUMBING VENT FLASHING.



# VENT/PIPE PENETRATION FLASHING DETAIL

SCALE: N.T.S.

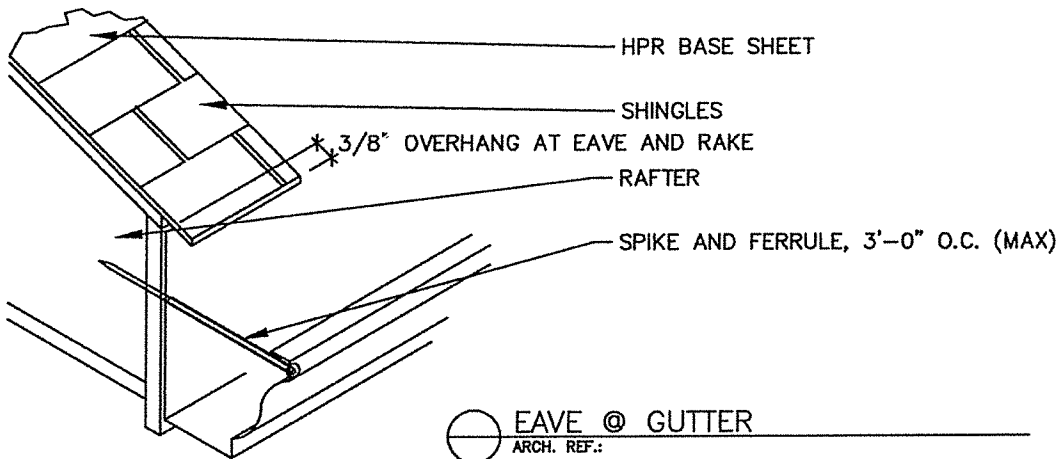
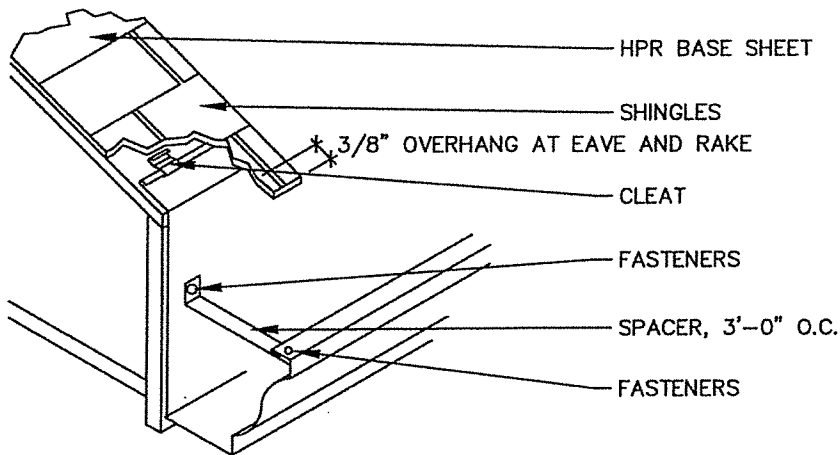
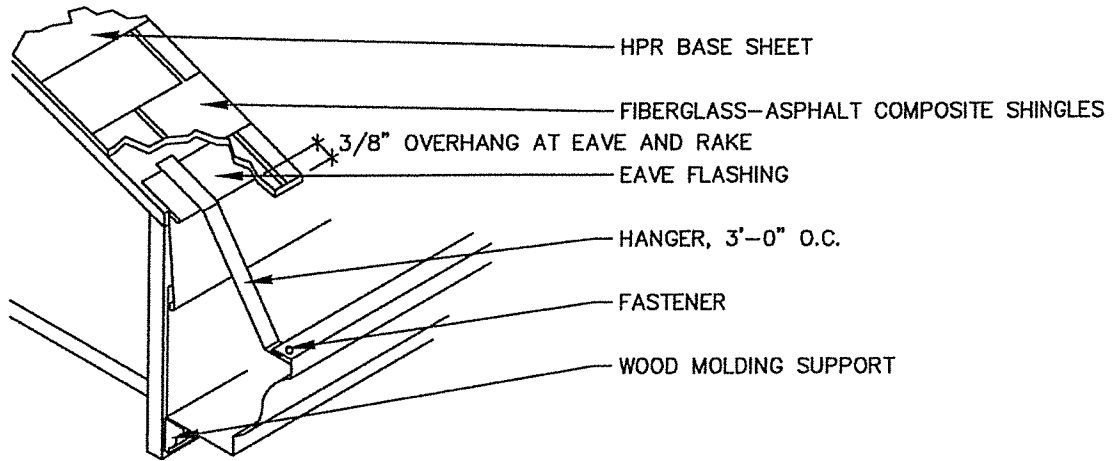


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 THE GARLAND COMPANY UK, LTD

DETAIL:

VENT/PIPE PENETRATION FLASHING DETAIL



⊙ EAVE @ GUTTER  
ARCH. REF.:



since 1895

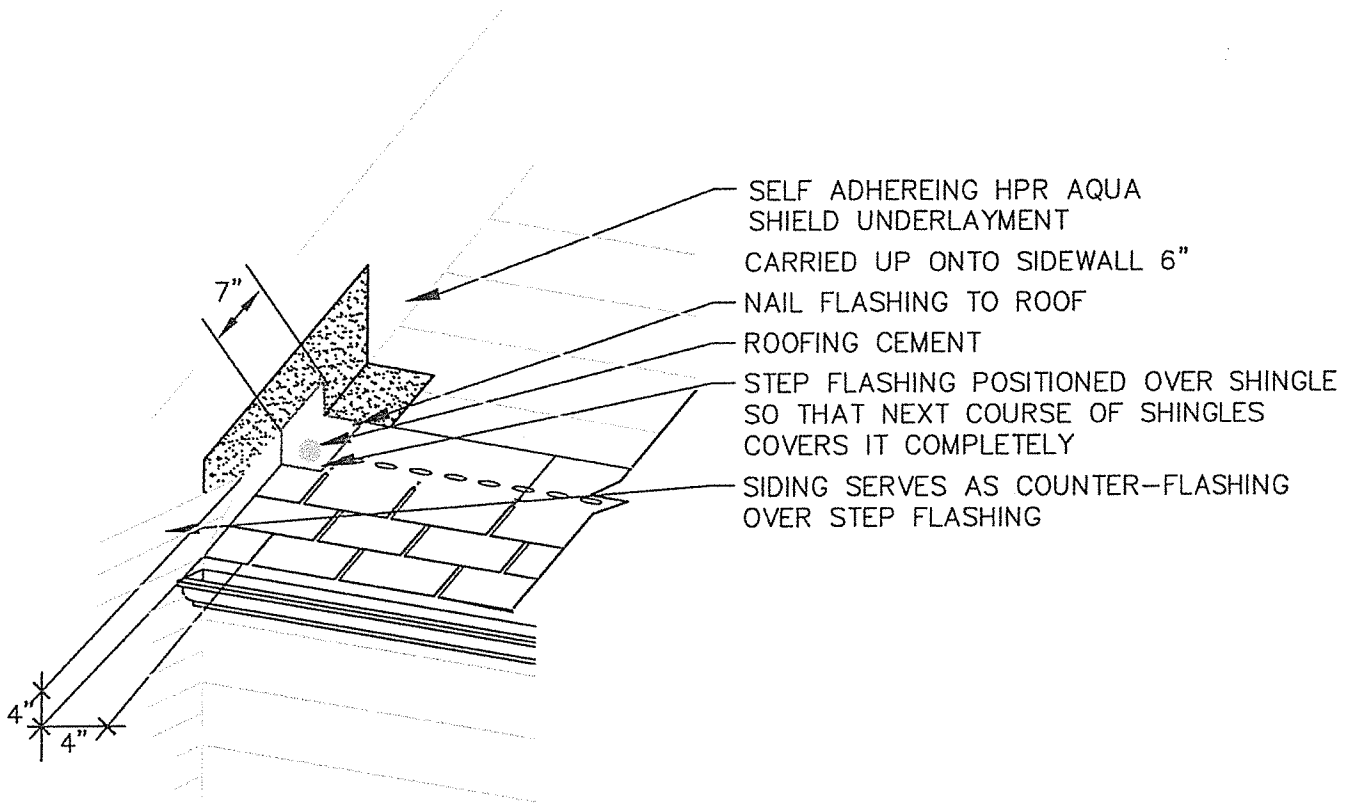
THE GARLAND COMPANY, INC.  
GARLAND CANADA, INC.  
THE GARLAND COMPANY UK, LTD

DETAIL:

EAVE @ GUTTER

SECTION:

SHINGLES



STEP FLASHING AGAINST VERTICAL SIDEWALL

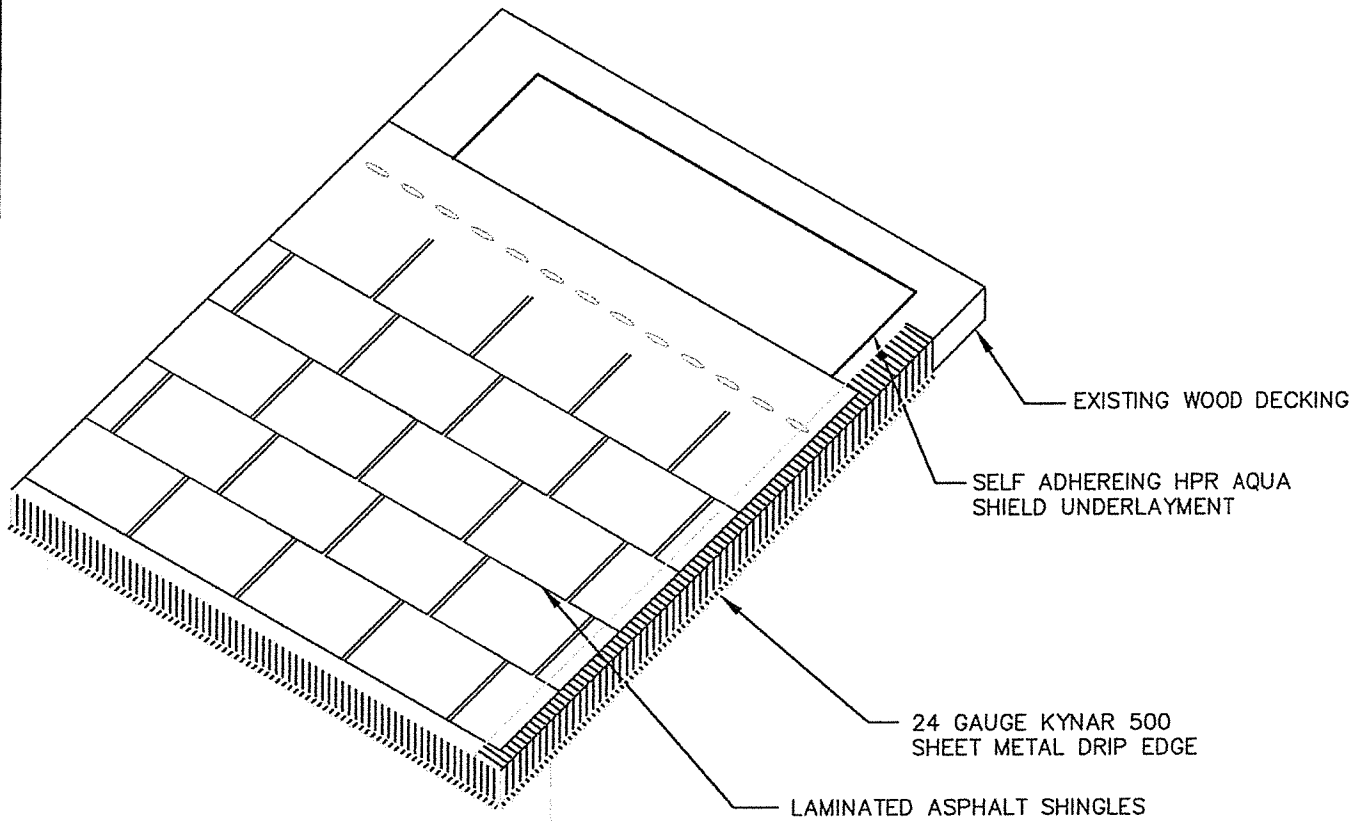


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 THE GARLAND COMPANY UK, LTD

DETAIL:  
 STEP FLASHING AGAINST VERTICAL SIDEWALL

FILENAME:

TYPICAL SHINGLE ROOF SECTION



1  
SHT 3

TYPICAL ROOF SECTION

SCALE: N.T.S.

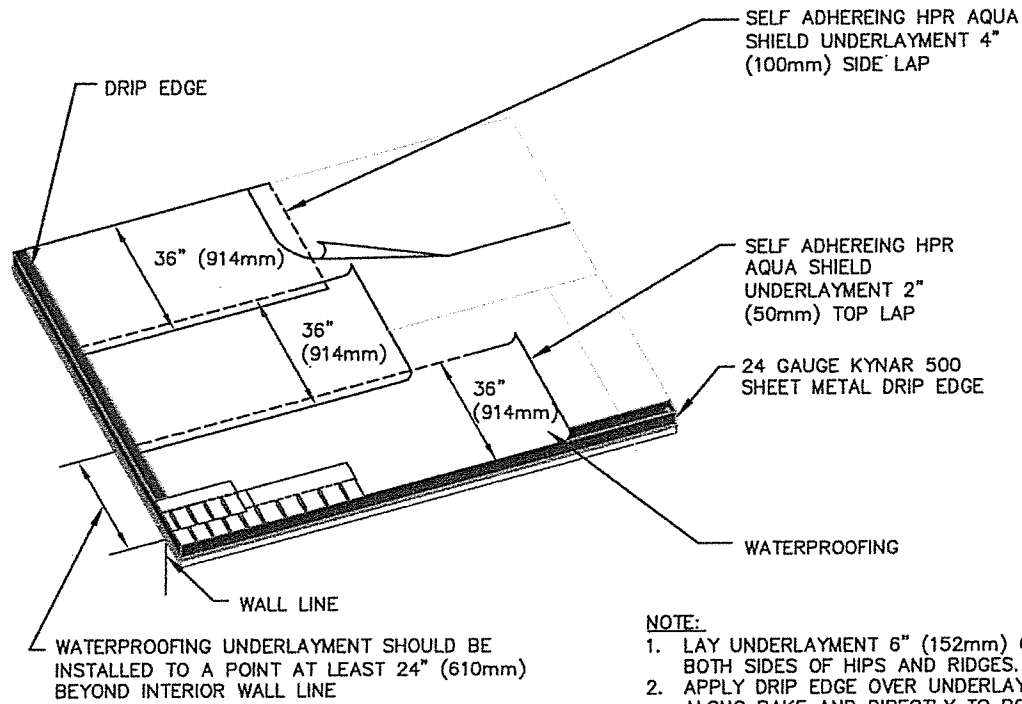


since 1895

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DETAIL:

TYPICAL SHINGLE ROOF SECTION



○ UNDERLAYMENT DETAIL  
SCALE: N.T.S.

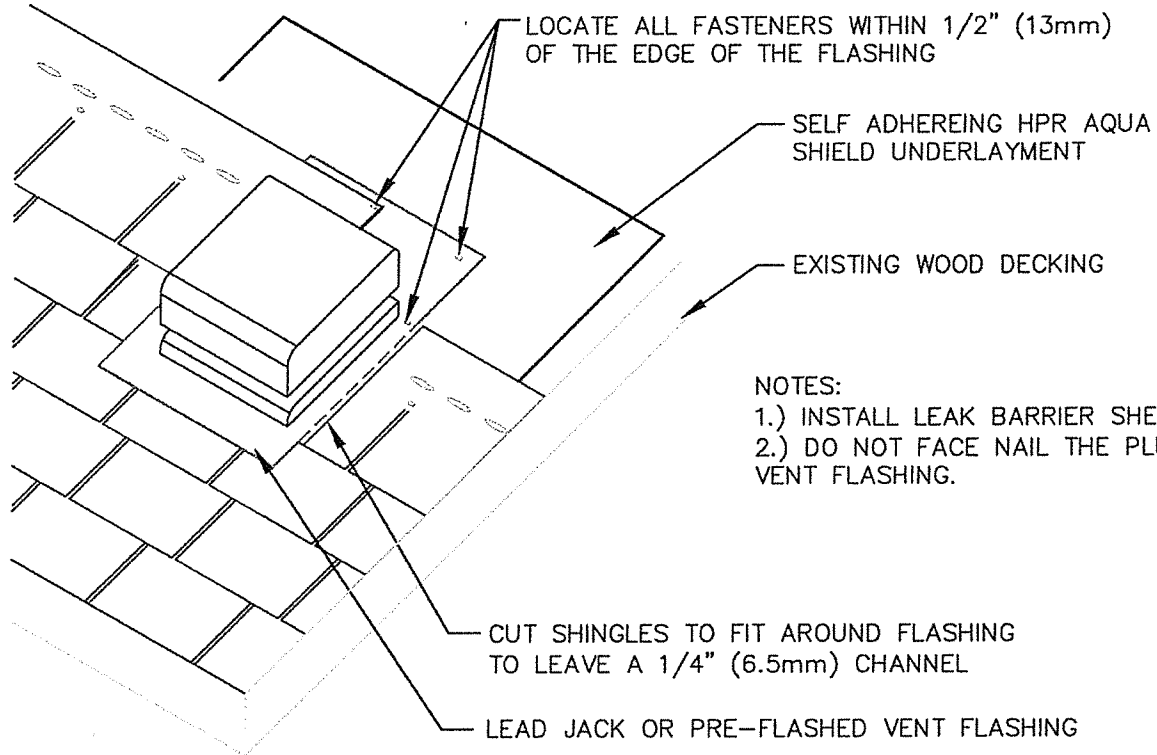


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DETAIL:

UNDERLAYMENT DETAIL



- NOTES:
- 1.) INSTALL LEAK BARRIER SHEET.
  - 2.) DO NOT FACE NAIL THE PLUMBING VENT FLASHING.

**VENT FLASHING DETAIL**

SCALE: N.T.S.



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DETAIL:

VENT FLASHING DETAIL