

CITY OF CARO
ADVERTISEMENT FOR BIDS
ROOF REPLACEMENT AT DPW FACILITY

The City of Caro, Michigan hereby invites individuals/firms interested in replacement of the roof at the DPW Facility located at 741 S. Hooper Street.

The City of Caro will receive sealed bids at the City Clerk's Office, 317 S. State Street, Caro, MI 48723 for City of Caro until **Monday, October 30, 2023, at 11:00 A.M.** **Bids shall be submitted in a sealed envelope and plainly marked "ROOF REPLACEMENT AT DPW FACILITY – CITY OF CARO."** A complete bid specification may be obtained from:

City of Caro
ATTN: City Clerk
317 S. State Street
Caro, MI 48723
Phone 989-673-7671

Bids will be publicly opened and read aloud at 11:00 A.M. on Monday, October 30, 2023, in the Council Chambers of the Caro Municipal Building, 317 S. State Street, Caro, Michigan.

City of Caro
Invitation to Bid
ROOF REPLACEMENT AT DPW FACILITY
SPECIFICATIONS AND FORMS

I. INTRODUCTION

1.1 Purpose

The City of Caro is accepting bids from qualified individuals/contractors capable of replacing the roof at the DPW Facility located at 741 S. Hooper Street.

1.2 Background

The City of Caro takes great pride in maintaining city owned equipment to ensure peak performance of city equipment. With that in mind, we are looking for an individual or company to install a membrane roof system at the DPW Facility at 741 S. Hooper Street. The City expects that the selected individual and/or firm will hold itself to the highest possible standards when completing the work as described in this document and any contract resulting from it, for the City. The City seeks to complete this project as effectively and efficiently as possible. The City will evaluate each bid in regards to quality of service offered and costs of said services, the experience of the bidders, and other intangibles. With these aspects in mind, we will hold the successful bidder to the highest necessary standards to complete these tasks.

1.3 Objective

The primary objective of the work described in this bid is to contract for the roof replacement with the specifications listed herein. The City reserves the right to add, modify or delete any areas deemed necessary at its option. The contractor shall provide all labor, supervision, materials, equipment, transportation, and other services necessary to perform the work as required and specified herein.

1.4 Minimum Qualifications

Bids will be accepted from individuals/contractor who meet the following minimum qualifications. Individuals or contractors that do not meet these minimum qualifications shall be deemed non-responsive and will not receive further consideration.

1. Must be licensed to do business in the State of Michigan.
2. Must possess all necessary certifications and qualifications to perform the work described in this bid.
3. Must provide applicable certificates of insurance coverage for the following:
 - a. *Workers Compensation - The contractor shall obtain and maintain Workers Compensation Insurance in accordance with all applicable Statutes of the State of Michigan. (If applicable provide completed Sole Proprietor form.)*
 - b. *General Liability Insurance - The contractor shall obtain and maintain General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and/or aggregate combined single limit, Personal Injury, Bodily Injury and Property Damage.*

- c. *Motor Vehicle Liability - The contractor shall obtain and maintain, during the life of this contract, Motor Vehicle Liability Insurance including applicable No-fault coverage, with limits of liability not less than \$1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.*
- d. *Additional Insured – The Contractor’s insurance certificate shall include the City of Caro, its employees, officers, elected officials, designees and assigns, as additional named insured.*

1.5 Funding

Any contract awarded as a result of this procurement is contingent upon the availability of funding, as determined by the City of Caro.

1.6 Period of Performance

The period of performance of any contract resulting from this bid is the Fiscal Year 2023/2024.

II. GENERAL INFORMATION FOR CONTRACTORS

2.1 Program Administrator

The Program Administrator is the primary point of contact for this procurement. All communication between prospective bidders and the City of Caro upon receipt of this bid shall be with the Program Administrator, as follows:

Scott R. Czasak
City Manager
317 South State Street
Caro, MI 48723
Telephone: (989) 673-7671
E-mail: sczasak@carocity.net

Prospective bidders are to rely only on written statements issued by the Program Administrator. Any other communication will be considered unofficial and non-binding on the City. Communication directed to parties other than the Program Administrator may result in disqualification of the prospective bidder.

Upon or after awarding the contract, the City Manager may designate another City staff member as a contact for the assignment and timing of work, and/or quality control.

2.2 Submission of Bids

Responding individuals/contractors are required to submit three (3) copies of their bid, one (1) of which must have original signatures. The bid, whether mailed or hand delivered, must arrive at the City Hall no later than **11:00 A.M., local time, on Monday, October 30, 2023.**

The bid shall be sent or delivered to the City Clerk. The envelope should be clearly marked **“Roof Replacement at DPW Facility – CITY OF CARO.”** and addressed to the attention of the Caro City Clerk as follows:

City of Caro
ATTN: City Clerk
317 S. State Street
Caro, MI 48723

Bidders who mail bids should allow normal mail delivery time to ensure timely receipt of their bids by the Caro City Clerk. Respondents assume the risk for the method of delivery chosen. The City assumes no responsibility for delays caused by any delivery service. Bids may not be transmitted using electronic media such as facsimile or email transmission.

Late bids will not be accepted and will be automatically disqualified from further consideration. All bids and any accompanying documentation becomes the property of the City and will not be returned.

2.3 Proprietary Information and Public Disclosure

Materials submitted in response to this competitive bid shall become the property of the City. All bids received shall remain confidential until the deadline for submission of bids has expired, as defined by Michigan statute (MCL 15.243(i), the Freedom of Information Act).

2.4 Revisions/Addenda to the Bid

In the event it becomes necessary to revise any part of this bid, addenda will be put in writing and provided to all prospective bidders known to the City of Caro. For this purpose, the published questions and answers and any other pertinent information will be considered an addendum to the bid and will be provided to all known prospective bidders.

The City of Caro reserves the right to cancel or to reissue the bid in whole or in part, prior to execution of a contract.

2.5 Acceptance Period

Bids must provide 30 days for acceptance by the City of Caro from the due date for receipt of bids.

2.6 Responsiveness

All bids will be reviewed by the City Manager to determine compliance with administrative and operational requirements and instructions specified in this bid. Failure to comply with any part of the bid may result in rejection of the bid as nonresponsive. The City of Caro also reserves the right, at its sole discretion, to waive irregularities.

2.7 Most Favorable Terms

The City of Caro reserves the right to make an award without further discussion of the bid submitted. Therefore, the bid should be submitted initially on the most favorable terms that the respondent could propose. There will be no "best and final offer" procedure. The City of Caro reserves the right to contact a respondent for clarification of its bid.

This bid specification shall be incorporated and is an integral component of a contract resulting from this bid. It is understood that the bid will become a part of the official procurement file on this matter without obligation to the City of Caro.

2.8 Costs of Bid

The City of Caro will not be liable for any costs incurred by the bidder(s) in preparation of a bid submitted in response to this invitation, in the conduct of a presentation, or any other activities related to responding to this bid.

2.9 No Obligation Contract

The issuance of this bid does not obligate the City of Caro to award a contract for services as specified herein.

2.10 Decision on Bids

The City of Caro reserves the right, at its sole discretion, to accept, reject or modify any and/or all bids, to waive irregularities or informalities, and/or not to issue a contract as a result of this bid.

2.11 Failure to Comply

The Respondent is specifically notified that failure to comply with any part of the bid may result in rejection of the bid as non-responsive.

2.12 Commitment of Funds

The City of Caro or their delegates are the only individuals who may legally commit the City of Caro to the expenditures of funds for a contract resulting from this bid. No costs chargeable to the proposed contract may be incurred before receipt of a fully executed contract.

2.13 Signatures

The City of Caro Roof Replacement at DPW Facility and the Certifications and Assurances form must be signed and dated by a person authorized to legally bind the Respondent to a contractual relationship, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship.

The successful bidder shall sign the work agreement and provide proofs of insurance prior to the commencement of work.

III. STATEMENT OF WORK

3.1 Overview

The primary objective of the work resulting from this bid is to replace the roof at the DPW Facility located at 741 S. Hooper Street as specified in the Scope of Work and included documents.

At its option, the City reserves the right to add or delete any areas of work deemed necessary. Should this occur, the City and Contractor shall meet and discuss the addition and/or subtraction of fees for the new or deleted area(s) of work.

3.2 Independent Contractor Status

The contractor shall furnish all tools, equipment, machinery, material, labor and supervision for all work described in this bid specification. By signing the contract and bid proposal/price worksheet(s), the bidder verifies that he has examined the work site(s), understands the site conditions, scope of work and specifications, and is submitting a bid with full knowledge and understanding of the job and its requirements.

3.3 Subcontracting

Subcontracting may be permitted after a review of the proposed subcontractor and the scope of work to be subcontracted has been made to and approved in writing by the City of Caro. The contractor shall submit the necessary subcontractor approval request forms, insurance certificates and such other affidavits as may be required by the contract prior to the review by the City of Caro. Approval of any subcontractor shall not relieve the prime contractor of any responsibilities, duties, and or liabilities as defined in other sections of this contract. The prime contractor is required to provide a competent individual to review and monitor all work performed under the contract and/or subcontract for each mow. Such an individual shall have full authority to act for the prime contractor.

3.4 Description of Work, Standards and Locations

Work to be done under this bid specification consists of the following:

Roof Areas 1, 2, 3, & 5

- Tear off existing roof systems down to the roof deck.
- Inspect existing roof deck and replace any rotted or damaged decking. Deck replacement will be based on a predetermined square foot replacement cost.
- Inspect and replace any rotted or damaged wood nailers. Wood nailer replacement will be based on a predetermined lineal foot cost.
- Add additional wood nailers as needed to match height of new insulation and on parapet walls for installation of new metal fascia.
- Install (2) layers of 1.5" ISO insulation to the entire roof area.
- Install a 50 mil, mechanically attached Duro Last Roofing system to the entire roof area. Roof membrane is to be DL prefab or DLX. Roof membrane is to be mechanically attached per manufacturers specifications.
- Install two way breather vents per manufacturers specifications.
- Flash and seal all roof penetrations per manufacturers specifications.
- Encapsulate the parapet wall between roof area 1 & 3.
- Encapsulate all exterior parapet walls on roof areas.
- Install new 2 piece metal compression fascia to roof perimeter. 24 gauge – Standard color
- Install new DX6 gutter to roofs areas 1, 2, 3 and 5. 24 gauge – standard color
- Install new 3 x 4 down spouts.
- Install a single row of 5' wide walk pads on roof area 2. Walk pads should be placed at ice fall line from area 1.
- Complete clean up and removal of all job related debris.
- Provide a 20 year manufacturers warranty covering 100% material and labor.

Roof Area 4:

- Replace loose fasteners on parapet termination bar.
- Recaulk termination bar on parapets.
- Include installing up to 20 – 6" round roof patches to misc areas in roof membrane.

IV. BID CONTENT

Bids must be submitted on eight and one-half by eleven (8½ x 11) inch paper and separated into three major sections.

These major sections shall include:

1. Signed Certifications and Assurances (Exhibit A of this bid).
2. Signed City of Caro Roof Replacement at DPW Facility form (Exhibit B of this bid).
3. Complete itemized bid including final proposed price.

Bids must provide information in the same order as presented in this document with the same headings. This will not only be helpful to the evaluators of the bid but should assist the Respondent in preparing a thorough bid.

4.1 City of Caro Roof Replacement at DPW Facility Bid

The attached City of Caro Roof Replacement at DPW Facility form (Exhibit B to this bid), and all bid amendments must be signed and dated by a person authorized to legally bind the Respondent to a contractual relationship, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship. Along with introductory remarks, the City of Caro Roof Replacement at DPW Facility form is to include by attachment, the following information about the Respondent and any proposed subcontractors:

- Name, address, principal place of business, telephone number, and fax number/email address of legal entity or individual with whom a contract would be written.
- Name, address, and telephone number of each principal officer (President, Vice President, Treasurer).
- Legal status of the Respondent (sole proprietorship, partnership, corporation, etc.,) and the year the entity was organized to do business as the entity now substantially exists.
- Federal Employer Tax Identification number or Social Security number (if awarded the contract).

4.2 References

List names, addresses, telephone numbers, and fax numbers/e-mail addresses of five (5) references for which similar work has been accomplished and briefly describe the type of service provided. By the submission and signing of the bid, the bidder grants permission to the City to contact the references. Do not include current City of Caro staff or elected officials as references.

4.3 Related Information

If the Respondent has had a contract terminated for default in the last five years, describe such incident. Termination for default is defined as notice to stop performance due to the Respondent's non-performance or poor performance and the issue of performance was either (a) not litigated due to inaction on the part of the Proposer, or (b) litigated and such litigation determined that the Proposer was in default.

Submit full details of the terms for default including the other party's name, address, and phone number. Present the Respondent's position on the matter. The City will evaluate the facts and may, at its sole discretion, reject the bid on the grounds of the past experience. If the Respondent has experienced no such termination for default in the past five years, so indicate in writing in the submittal.

4.4 Cost Bid

The evaluation process is designed to award this bid not necessarily to the lowest cost bid, but to the Respondent whose bid best meets the requirements as described within these documents. Respondents are encouraged to submit bids that are consistent with ongoing efforts to conserve City resources. The Respondent is to complete, sign and submit a City of Caro Roof Replacement at DPW Facility form (Exhibit B) to bid this work.

4.5 Equipment List

The bid shall include a detailed list of the equipment the contractor will have available for use on the City's properties. The list shall include:

- The name and type of equipment
- Age of equipment
- Condition of equipment

V. EVALUATION AND CONTRACT AWARD

5.1 Evaluation Procedure

Responsive bids will be evaluated in accordance with the requirements stated in this bid specification and any addenda issued. All bids received by the stated deadline will be reviewed by the City Manager and staff to ensure that the Contractors meet the minimum requirements to perform the work requested and that bids contain all of the required information requested in the bid. Only responsive bids that meet the requirements will be considered for award. Any Contractor that does not meet the stated qualifications or any bid that does not contain all of the required information will be rejected as non-responsive.

5.2 Award Procedure

Bid Opening:	October 30, 2023
Tabulation and Evaluation of Bids:	October 30-November 1, 2023
Recommendation to City Council:	November 1, 2023
Council consideration of bids/ anticipated vote:	November 6, 2023
Anticipated Contract Signing and provision of insurance certificates:	November 7, 2023
Authorization of Work:	November 7, 2023

The successful bidder shall sign the work agreement(s) as attached and provide proofs of insurance prior to the commencement of work.

5.3 Payment Procedure

Invoices shall be submitted monthly for work performed.

EXHIBIT A
CERTIFICATIONS AND ASSURANCES

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR BID
FAILURE TO SUBMIT THIS COMPLETED FORM MAY RESULT IN DISQUALIFICATION

Firm Name: _____

I/we make the following statement of assurances as a required element of the bid to which it is attached, understanding that the truthfulness of the facts affirmed here and the continuing compliance with these requirements are conditions precedent to the award or continuation of the related contract(s):

1. The prices and/or data have been determined independently, without consultation, communication, or agreement with other proposers for the purpose of restricting competition. However, I/we may freely join with other persons or organizations for the purpose of presenting a single bid or bid.
2. The attached bid or bid is a firm offer for a period of 30 days following receipt, and it may be accepted by the City of Caro without further negotiation (except where obviously required by lack of certainty in key terms) at any time within the 30-day period.
3. In preparing this bid or bid, I/we have not been assisted by any current or former employee of City of Caro whose duties relate (or did relate) to this bid, bid, or prospective contract, and who was assisting in other than his or her official, public capacity. Neither does such a person nor any member of his or her immediate family have any financial interest in the outcome of bid bid. (Any exceptions to these assurances are described in full detail on a separate page and attached to this document.)
4. I/we understand that City of Caro will not reimburse me/us for any costs incurred in the preparation of this bid or bid. All bids or bids become the property of City of Caro, and I/we claim no proprietary right to the ideas, writings, items, or samples, unless so stated in this bid.
5. Unless otherwise required by law, the prices and/or cost data which have been submitted have not been knowingly disclosed by the proposer and will not knowingly be disclosed by him/her prior to opening, in the case of a bid directly or indirectly to any other proposer or to any competitor.
6. No attempt has been made or will be made by the proposer to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
7. I/we agree that submission of the attached bid constitutes acceptance of the solicitation contents and the attached sample contract and general terms and conditions. If there are any exceptions to these terms, I/we have described those exceptions in detail on a page attached to this document.
8. I/we acknowledge communication of any kind regarding my/our bid directed to parties other than the Program Administrator may result in my/our disqualification.
9. I/we warrant that no conflict of interest knowingly exists for any member of the Program team that contributed to this bid or prospective contract.

Signature

Date

Title

Name of Company

EXHIBIT B, page 1

City of Caro Roof Replacement at DPW Facility Form

Use this Form for your bid; total of 4 pages.

COMPANY INFORMATION

FIRM NAME: _____

ADDRESS: _____

ESTABLISHED: _____, _____ STATE: _____

TYPE OF ORGANIZATION: (Circle One)

- a. Individual
- b. Partnership
- c. Corporation
- d. Joint Venture
- e. Other _____

If applicable, former Firm Name(s) and locations

YEARS IN WORK RELATED FIELD:

How many years has your company been doing work in general contracting, commercial roofing, or related field?

_____ Years

Explain the type of work in a related field, if any: _____

USE OF SUBCONTRACTORS:

To provide any of the services listed in these specifications, would any services be handled by subcontractors?

_____ No

_____ Yes, explain below and fill out attached Subcontractor Information on page 3

REFERENCES: LIST FIVE (5) CLIENTS WHO HAVE HAD WORK PERFORMED BY YOUR COMPANY MEETING ALL SPECIFICATIONS.

COMPANY

ADDRESS

CONTACT PERSON

PHONE

1) _____

2) _____

3) _____

4) _____

5) _____

EXHIBIT B, page 2

PERSONNEL OF THE FIRM ASSIGNED TO THE CITY OF CARO ACCOUNT

Please provide any certifications, degrees, and/or list any additional training classes taken to increase expertise in this field for the people listed in this section.

NAME	TITLE	SPECIALTY/DEGREE/CERTIFICATION	YRS. EXPERIENCE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PROGRAM MANAGER

Name and Title of Program Manager assigned to this account:

Credentials: _____

Cell Phone Number: _____

Pager Number: _____

Office Phone Number: _____

PROOF OF QUALITY

Please provide proof of the quality of work your company provides. This can include special contracts awarded based on expertise, awards won by your company in the fencing field, or any other item that is relevant.

ITEM TITLE	DESCRIPTION
_____	_____
_____	_____
_____	_____

ADDED VALUE

Please provide any "Added Value" information about your company that separates you from your competition. This can include special equipment that would be available to your employees for use at City of Caro locations, specially trained personnel, etc. Please be as specific in describing these items as possible.

ITEM TITLE	DESCRIPTION
_____	_____
_____	_____
_____	_____

EXHIBIT B, page 3

SUBCONTRACTOR(S) INFORMATION:

Subcontracting may be permitted after a review of the proposed subcontractor and the scope of work to be sublet has been made by the City of Caro. The contractor shall submit the necessary subcontractor approval request forms, insurance certificates and such other affidavits as may be required by the contract prior to the review by the City. Approval of any subcontractor shall not relieve the prime contractor of any responsibilities, duties, and or liabilities as defined in other sections of this contract. The prime contractor is required to provide a competent individual to review and monitor all work performed under the contract on a daily basis. Such an individual shall have full authority to act for the contractor.

Proposed subcontractors *statement of qualifications* must be completed and submitted with bid.

<u>Proposed Subcontractor</u>	<u>Address</u>	<u>Phone No.</u>	<u>Federal I.D./ Social Security</u>	<u>Amount of Subcontract</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Signature of Authorized Person: _____

Printed Name: _____

Title: _____ Date: _____

Listing of Equipment Utilized (attach additional sheet as necessary):

EXHIBIT B, page 4

Please attach any additional pages in response to requirements as outlined in this bid, or additional information for consideration by the City.

Signature of Authorized Person: _____

Printed Name: _____

Title: _____

Date: _____

CITY OF CARO ROOF REPLACEMENT AT DPW FACILITY WORK AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 202_, between the City of Caro, Michigan, a Michigan municipal corporation, of 317 South State Street, Caro, Michigan 48723, hereafter referred to as "City" and _____ of _____, hereinafter referred to as "Contractor," for the considerations stated herein, agree as follows:

1. The Contractor agrees to perform specified services in accordance with the Invitation to Bid, Specifications and Exhibits attached hereto and incorporated herein by reference.
2. The City shall pay to the Contractor, and the Contractor shall accept as full payment for the performance of this work, subject to any additions or deductions provided for, the contracted price of _____ (dollars) and _____ (cents); (\$ _____). Such payment shall be made within thirty (30) days of completion and acceptance of work performed.
3. It is understood that the Invitation to Bid, Specifications, Work, Bid Proposal and all Addenda prepared for this project are all essential documents of this contract and are incorporated as a part of this agreement by reference.
4. This agreement shall be binding upon the personal representatives, successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this document the day and year first above written.

CITY OF CARO, a Michigan Municipal Corporation

CONTRACTOR

By: _____
(City Signature)

By: _____
(Signature of authorized officer)

Its: _____

Its: _____

(Name - printed or typed)

(Contractor's name - printed or typed)

(Company Name)

(date)

(date)

CITY OF CARO

APPENDIX B, page 1 of 2

Minimum Insurance Requirements for Contractors

Summary Statement and Purpose

The provision of adequate insurance by persons and businesses working for the City of Caro or on street rights-of-way is essential to protect the public from the costs of injury or damage and to protect the City from unnecessary liability resulting from the acts of persons and businesses working for the City of Caro. Minimum insurance requirements are needed to provide this protection.

Persons or businesses which provide professional services to the City of Caro under the terms of a written contract or to provide labor and/or material to accomplish work for the City of Caro or for others on or over street right-of-way and/or other City of Caro property shall carry insurance and bonds to protect the public and the City of Caro from exposure to unnecessary financial risks.

Prior to signing of contracts, issuance of purchase orders or permits, or other authorization to begin work, certificates of insurance evidencing the purchase of insurance in amounts not less than required by this City policy or the bid specifications, whichever is greater, shall be filed with the City Clerk for the City of Caro.

Such certificates shall:

- a. Show that the insurance is currently in force and termination date of each policy.
- b. State the limits of liability of the policies covered by the certificate.
- c. Be issued to the City of Caro as the certificate holder.
- d. Provide that the City of Caro will receive not less than ten (10) days written notice of the cancellation of any listed policy.
- e. Be issued in the name of an insurance company authorized to conduct business in the State of Michigan.

Insurance shall meet or exceed the following requirements. Exceptions to recognize more or less hazardous operations and financial risks may be considered, and with approval of the City of Caro, may be made in specifications or contract requirements prior to awarding contracts or issuing purchase orders.

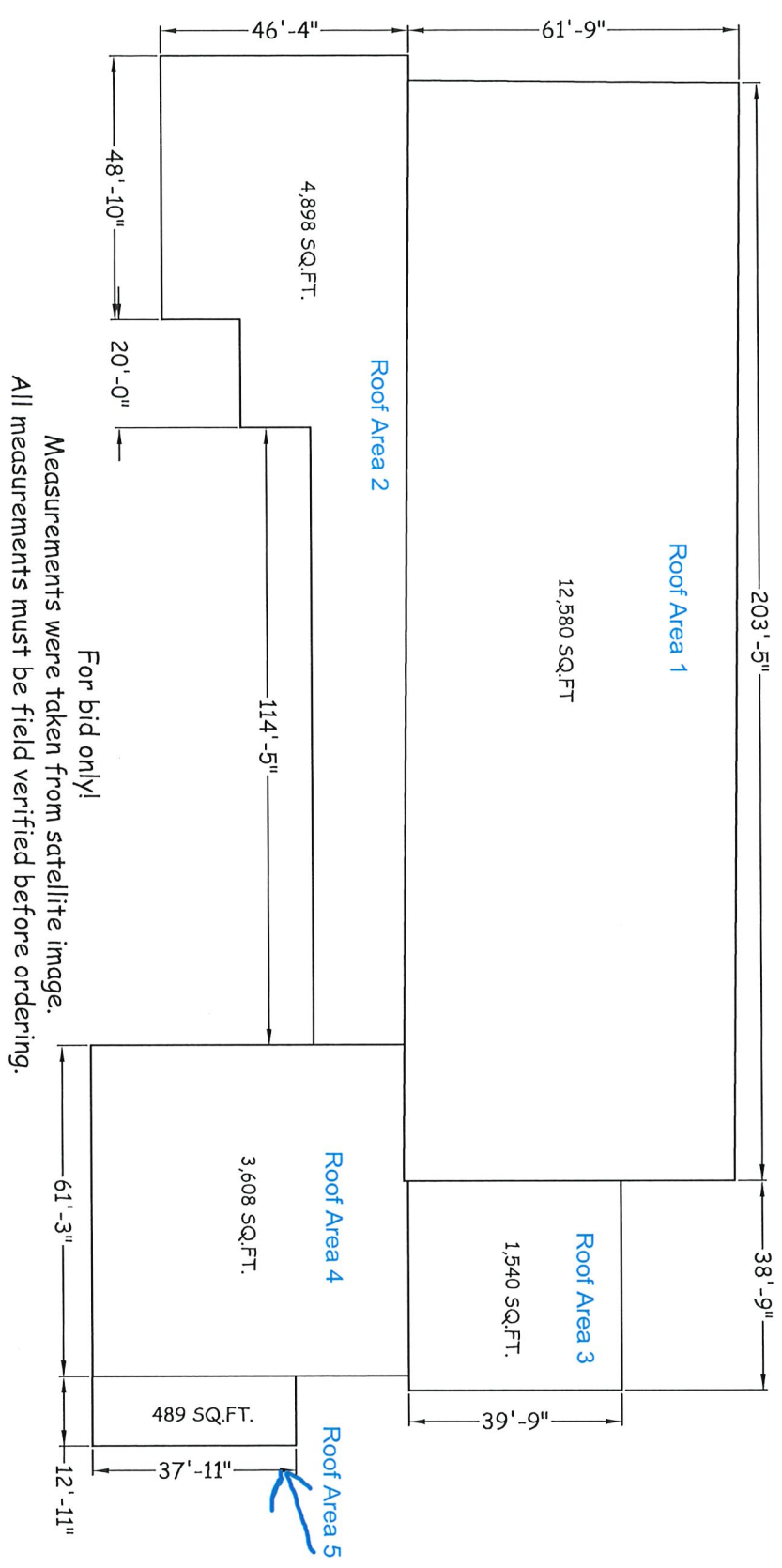
CITY OF CARO

APPENDIX B, page 2 of 2

MINIMUM INSURANCE REQUIREMENTS

The limits of liability for the insurance required by the City of Caro shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

	<u>WORKERS COMPENSATION</u>	<u>MINIMUM AMOUNT</u>
1.	a. Part One: Compensation	Statutory
	b. Part Two: Employees Liability:	
	Accident	\$1,000,000
	Disease	\$1,000,000
	Aggregate Disease	\$1,000,000
2.	<u>GENERAL LIABILITY</u>	
	a. Combined Single Limit Each Occurrence Limit	\$1,000,000
	b. Combined Single Limit Aggregate Limit	\$1,000,000
3.	<u>COMPREHENSIVE AUTOMOBILE LIABILITY</u>	
	a. Combined Single Limit:	\$1,000,000
	b. No Fault:	Statutory
4.	<u>OWNERS AND CONTRACTORS PROTECTIVE LIABILITY</u>	
	a. Combined Single Limit	\$1,000,000
5.	<u>UMBRELLA or EXCESS LIABILITY</u>	\$1,000,000
6.	The Owners and Contractors Protective Liability Insurance shall include the following persons or entities as additional named insured:	
	a. The CITY OF CARO, its employees, elected officials, officers, designees and assigns.	



For bid only!
 Measurements were taken from satellite image.
 All measurements must be field verified before ordering.

Legend Factory Field Curb Stack Walkpad	Drawn By: JNanney Date: 09/21/2023 Scale: N.T.S.	Caro DPW Caro, MI Trevor Wagester			 THE WORLD'S BEST ROOF® 525 E Morley Drive Saginaw, MI 48601 Fax: 989-758-6359 Phone: 800-248-0280 engineering@duro-last.com										
	Duro-Last Roofing, Inc. is the supplier of the materials only. The proposed layout is based upon the information provided by the contractor and/or independent sales rep. Verification of local building codes, dimensions and quantities are the sole responsibility of the architect, installing contractor, independent sales rep, or owners representative prior to ordering.	<table border="1"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>By</th> </tr> </thead> <tbody> <tr> <td>00/00/00</td> <td>-</td> <td>-</td> </tr> <tr> <td>00/00/00</td> <td>-</td> <td>-</td> </tr> <tr> <td>00/00/00</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Date	Revision		By	00/00/00	-	-	00/00/00	-	-	00/00/00	-	-
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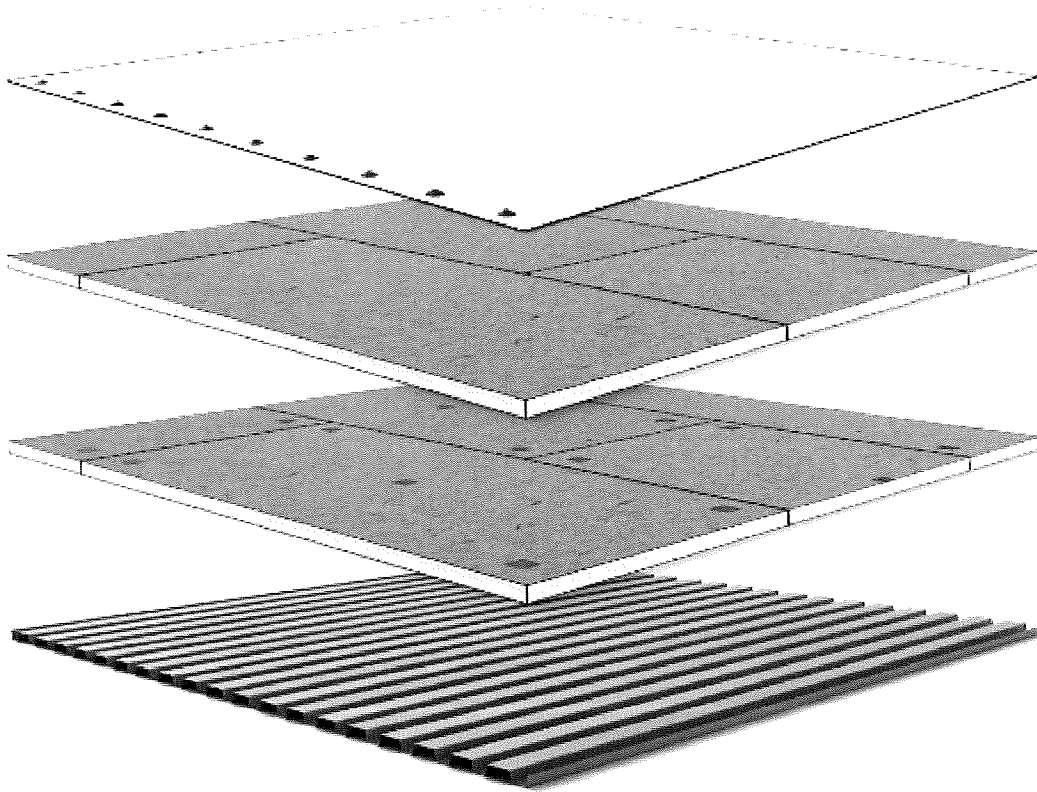
3-part Specification

Caro DPW

DPW BUILDING

741 Hooper St
Caro, MI 48723

Prepared for: Tom Reese | Caro DPW
Prepared by: Trevor Wagester | Duro-Last Roofing



PART 1 GENERAL

1.1 SUMMARY

- A. Membrane Type: Duro-Last 50-mil Membrane (Custom Fab: Regular Rolls)
 - 1. Roll Width: 60" (Installed widths may vary)
 - 2. Membrane Color: White
 - 3. Attachment Type: Mechanically Fastened
 - 4. Fasteners: Duro-Last® HD Screw (#14)
 - 5. Plates: Duro-Last® Poly-Plate
- B. Insulation Layer 1 Type: Duro-Guard® ISO II (Glass Reinforced Facer)
 - 1. Board Application: Flat Stock
 - 2. Board Style: Layer Thickness
 - 3. Board Size: 4' x 8'
 - 4. Thickness: 1.5"
 - 5. Attachment Type: Loose-Laid
 - 6. Loose-Laid: Loose-Laid
- C. Insulation Layer 2 Type: Duro-Guard® ISO II (Glass Reinforced Facer)
 - 1. Board Application: Flat Stock
 - 2. Board Style: Layer Thickness
 - 3. Board Size: 4' x 8'
 - 4. Thickness: 1.5"
 - 5. Attachment Type: Mechanically Fastened
 - 6. Fasteners: Duro-Last® HD Screw (#14)
 - 7. Plates: Duro-Last® 3-Inch Metal Plate
- D. Deck Type: Steel Deck (20 ga)
- E. Prefabricated flashings, corners, parapets, stacks, vents, and related details.
- F. Fasteners, adhesives, and other accessories required for a complete roofing installation.
- G. Traffic Protection.

1.2 REFERENCES

- A. ASTM INTERNATIONAL (ASTM)
 - 1. (2019) Standard Test Methods for Coated Fabrics (D751)
 - 2. (2021) Standard Specification for Poly(Vinyl Chloride) Sheet Roofing (D4434/D4434M)
 - 3. (2022) Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board (C1289)
 - 4. (2020) Standard Test Methods for Fire Tests of Roof Coverings (E108)

5. (2020) Standard Test Methods for Fire Tests of Building Construction and Materials (E119)

B. UL SOLUTIONS (UL)

1. (2021) UL Roofing Systems (TGFU.R10128)

C. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

1. (2007) Minimum Design Loads for Buildings And Other Structures (ASCE Standard - ASCE/SEI 7-05)

2. (2014) Minimum Design Loads for Buildings and Other Structures (ASCE Standard - ASCE/SEI 7-10)

3. (2017) Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE Standard - ASCE/SEI 7-16)

D. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)

1. (2019) NRCA Roofing Manual - Membrane Systems

1.3 SYSTEM DESCRIPTION

A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.

C. Physical Properties (must meet or exceed):

1. Roof product must meet the requirements of Type III PVC sheet roofing as defined by ASTM D4434.

2. Thickness: 50 mil, nominal, in accordance with ASTM D751.

3. Thickness over Scrim: ≥ 28 mil in accordance with ASTM D7635.

4. Breaking Strength: ≥ 438 lbf. (machine direction) and ≥ 390 lbf. (cross machine direction) in accordance with ASTM D751 Grab Method.

5. Elongation at Break: $\geq 31\%$ (machine direction) and $\geq 31\%$ (cross machine direction) in accordance with ASTM D751 Grab Method.

6. Seam Strength: ≥ 417 lbf. in accordance with ASTM D751 Grab Method.

7. Tear Strength: ≥ 132 lbf. (machine direction) and ≥ 163 lbf. (cross machine direction) in accordance with ASTM D751 Procedure B.

8. Low Temperature Bend: Pass at -40 °F in accordance with ASTM D2136.

9. Heat Aging: Pass after being conditioned for 56 days in oven maintained at 176 °F in accordance with ASTM D3045.

10. Accelerated Aging: Pass after 10,000 hours of total test time in accordance with ASTM G155.

11. Dimensional Stability: Change of -0.30% (machine direction) and -0.45% (cross machine direction) in accordance with ASTM 1204.

12. Water Absorption: $< 1.7\%$ at 158 °F for 168 hours in accordance with ASTM D570.

13. Static Puncture Resistance: ≥ 56 lbf. in accordance with ASTM D5602.

14. Dynamic Puncture Resistance: ≥ 14.7 ft-lbf. in accordance with ASTM D5635.

D. Cool Roof Rating Council (CRRC) (Membrane must be listed on the CRRC website):

1. Solar Reflectance (Initial): $\geq 86\%$

2. Solar Reflectance (3-Year Aged): $\geq 74\%$

3. Thermal Emittance (Initial): $\geq 89\%$

4. Thermal Emittance (3-Year Aged): $\geq 89\%$

5. Solar Reflectance Index (SRI) (Initial): $\geq 108\%$

6. Solar Reflectance Index (SRI) (3-Year Aged): $\geq 91\%$

E. Insulation:

1. General Requirements

a. Install using a minimum of two layers.

b. Configuration as indicated on the drawings.

2. Duro-Guard® ISO II (Glass Reinforced Facer)

a. Layer Thickness: 1.5"

3. Duro-Guard® ISO II (Glass Reinforced Facer)

a. Layer Thickness: 1.5"

1.4 SUBMITTALS

A. Product data sheets to be used, with the following information included:

1. Preparation instructions and recommendations

2. Storage and handling requirements and recommendations

3. Installation methods

4. Maintenance requirements

B. Sustainability Documentation:

1. NSF/ANSI Standard 347 Certificate

2. Type III product-specific Environmental Product Declaration

C. Shop Drawings: Indicate insulation pattern, overall membrane layout, field seam locations, joint or termination detail conditions, and location of fasteners.

D. Provide verification samples for each product specified (two samples representing each product, color and finish):

1. 4-inch by 6-inch sample of roofing membrane, of color specified.

2. 4-inch by 6-inch sample of walkway pad.

3. Termination bar, fascia bar with cover, drip edge, and gravel stop if to be used.

4. Each fastener type to be used for installing membrane, insulation/recover board, termination bar and edge details.

E. Installer Certification: Certification from the roofing system manufacturer that Installer is approved, authorized, or licensed by manufacturer to install roofing system.

F. Manufacturer's warranties.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with manufacturer's installation instructions.

B. Manufacturer Qualifications: A manufacturer specializing in the production of PVC membranes systems and utilizing a Quality Control Manual during the production of the membrane roofing system that has been approved by and is inspected by Underwriters Laboratories.

C. Installer Qualifications: Company specializing in installation of roofing systems similar to those specified in this project and approved by the roofing system manufacturer.

D. Source Limitations: Obtain components for membrane roofing system from roofing membrane manufacturer.

E. There shall be no deviations from the roof membrane manufacturer's specifications or the approved shop drawings without the prior written approval of the manufacturer.

1.6 REGULATORY REQUIREMENTS

A. Conform to applicable code for roof assembly fire hazard, wind uplift, and cool roof requirements.

B. Fire Hazard Requirements: Provide membrane roofing materials with the following fire-test-response characteristics. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.

1. Class A

2. Fire-test-response standard: Comply with ASTM E108 for application and roof slopes indicated.

3. Fire-Resistance Ratings: Comply with ASTM E119 for fire-resistance-rated roof assemblies of which roofing system is a part.

4. Conform to applicable code for roof assembly fire hazard requirements.

C. Wind Uplift Requirements: Roofing System Design: Provide a roofing system designed to resist uplift pressures calculated according to the current edition of ASCE/SEI 7, Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

1.7 PRE-INSTALLATION MEETING

A. Convene meeting not less than one week before starting work of this section.

B. Review methods and procedures related to roof deck construction and roofing system including, but not limited to, the following:

1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing installer, roofing system manufacturer's representative, deck installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.

2. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment, and facilities needed to make progress and avoid delays.
3. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
4. Review structural loading limitations of roof deck during and after roofing.
5. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
6. Review governing regulations and requirements for insurance and certificates if applicable.
7. Review temporary protection requirements for roofing system during and after installation.
8. Review roof observation and repair procedures after roofing installation.
9. Review existing roof manufacturer's recycling program and return roofing system to the manufacturer for recycling.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Store roof materials and place equipment in a manner to avoid permanent deflection of deck.
- E. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.9 WARRANTY

- A. Contractor's Warranty: The contractor shall warrant the roof application with respect to workmanship and proper application for two (2) years from the effective date of the warranty issued by the manufacturer.
- B. Manufacturer's Warranty: Must be no-dollar limit type and provide for completion of repairs, replacement of membrane or total replacement of the roofing system at the then-current material and labor prices throughout the life of the warranty. In addition the warranty must meet the following criteria:
 1. Warranty Period: 20 years from date issued by the manufacturer.
 2. Must provide adequate or sufficient drainage.
 3. Issued direct from and serviced by the roof membrane manufacturer.
 4. Transferable for the full term of the warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Duro-Last Roofing, Inc., which is located at: 525 Morley Drive, Saginaw, MI 48601.
Telephone: 800-248-0280.
- B. All roofing system components to be provided or approved by Duro-Last Roofing, Inc.
- C. Substitutions: Not permitted.

2.2 ROOFING SYSTEM COMPONENTS

A. Roofing Membrane:

1. Properties:

- a. Type: Duro-Last 50-mil Membrane (Custom Fab: Regular Rolls)
- b. Roll Width: 60" (Installed widths may vary)
- c. Membrane Color: White
- d. Attachment Type: Mechanically Fastened
- e. Fasteners: Duro-Last® HD Screw (#14)
- f. Plates: Duro-Last® Poly-Plate

2. Features:

- a. ASTM D4434, Type III
- b. Fabric-reinforced, PVC, NSF/ANSI 347 Gold or Platinum Certification, and a product-specific third-party verified Environmental Product Declaration.
- c. Minimum recycle content 7% post-industrial and 0% post-consumer.
- d. Recycled at end of life into resilient flooring or concrete expansion joints.

B. Insulation:

1. General Requirements

- a. Provide preformed roof insulation boards that comply with requirements and referenced standards, as selected from manufacturer's standard sizes.
- b. Provide preformed saddles, crickets, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.
- c. Provide roof insulation accessories approved by the roof membrane manufacturer and as recommended by insulation manufacturer for the intended use.

2. Component:

a. Properties:

- 1. Type: Duro-Guard® ISO II (Glass Reinforced Facer)
- 2. Board Application: Flat Stock
- 3. Size: 4' x 8'
- 4. Method: Layer Thickness: 1.5"

5. Attachment Type: Loose-Laid

b. Features:

1. Closed-cell polyisocyanurate foam core insulation board.
2. Complying with ASTM C1289, Type II, felt or glass-fiber mat facer on both major surfaces.

3. Component:

a. Properties:

1. Type: Duro-Guard® ISO II (Glass Reinforced Facer)
2. Board Application: Flat Stock
3. Size: 4' x 8'
4. Method: Layer Thickness: 1.5"
5. Attachment Type: Mechanically Fastened
6. Fasteners: Duro-Last® HD Screw (#14)
7. Plates: Duro-Last® 3-Inch Metal Plate

b. Features:

1. Closed-cell polyisocyanurate foam core insulation board.
2. Complying with ASTM C1289, Type II, felt or glass-fiber mat facer on both major surfaces.
3. Provide Duro-Last factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening insulation and/or insulation cover boards in conformance to specified design requirements.

C. Deck Type:

1. Properties:

- a. Type: Steel Deck (20 ga)

D. Accessory Materials: Provide accessory materials supplied by or approved for use by Duro-Last Roofing, Inc.:

1. Sheet Flashing: Manufacturer's standard reinforced PVC sheet flashing.
2. Prefab Flashings: Manufactured using standard reinforced PVC membrane.
 - a. Duro-Last® Inside and Outside Corners
 - b. Duro-Last® Stack Flashing
 - c. Duro-Last® Curb Flashing
3. Fasteners: Factory-coated steel fasteners meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane and insulation to substrate. Supplied by Duro-Last Roofing, Inc.
 - a. Duro-Last® HD Screw (#14)
4. Plates: Metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane and insulation to substrate. Supplied by Duro-Last Roofing, Inc.

- a. Duro-Last® Poly-Plate
- b. Duro-Last® 3-Inch Metal Plate

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that the surfaces and site conditions are ready to receive work.
- B. Verify that the deck is supported and secured.
- C. Verify that the deck is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters.
- D. Verify that the deck surfaces are dry and free of standing water, ice or snow.
- E. Verify that all roof openings or penetrations through the roof are solidly set.
- F. If substrate preparation is the responsibility of another contractor, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Surfaces shall be clean, smooth, free of fins, sharp edges, loose and foreign material, oil, grease, and bitumen.
- D. Tearing off Existing Single-Ply System:
 - 1. Remove existing single-ply membrane and return to the manufacturer for recycling.

3.3 INSTALLATION

A. Insulation:

1. General Requirements

- a. Install insulation in accordance with the roof manufacturer's requirements.
- b. Insulation shall be adequately supported to sustain normal foot traffic without damage.
- c. Where field trimmed, insulation shall be fitted tightly around roof protrusions with no gaps greater than ¼ inch.
- d. Tapered insulation boards shall be installed in accordance with the insulation manufacturer's shop drawings.
- e. No more insulation shall be applied than can be covered with the roof membrane by the end of the day or the onset of inclement weather.
- f. If more than one layer of insulation is used, all joints between subsequent layers shall be offset by at least 6 inches.

2. Duro-Guard® ISO II (Glass Reinforced Facer)

- a. Loosely lay insulation boards in parallel courses with end joints staggered 50% and adjacent boards butted together with no gaps greater than ¼ inch.

3. Duro-Guard® ISO II (Glass Reinforced Facer)

- a. Use only fasteners, stress plates and fastening patterns accepted for use by the roof manufacturer. Fastening patterns must meet applicable design requirements.
- b. Install fasteners in accordance with the roof manufacturer's requirements. Fasteners that are improperly installed must be replaced or corrected.
- c. Install all layers in parallel courses with end joints staggered 50% and adjacent boards butted together with no gaps greater than ¼ inch.

B. Roofing Membrane:

1. General Requirements

- a. Install membrane in accordance with the roof manufacturer's requirements.
- b. Cut membrane to fit neatly around all penetrations and roof projections.

2. Duro-Last 50-mil Membrane (Custom Fab: Regular Rolls)

- a. Use only fasteners, stress plates and fastening patterns accepted for use by the roof manufacturer. Fastening patterns must meet applicable design requirements.
- b. Install fasteners in accordance with the roof manufacturer's requirements. Fasteners that are improperly installed must be replaced or corrected.
- c. Mechanically fasten membrane to the structural deck utilizing fasteners and fastening patterns in accordance with the roof manufacturer's requirements.

C. Weld overlapping sheets together using hot air. Minimum weld width is 1-1/2 inches.

D. Check field welded seams for continuity and integrity and repair all imperfections by the end of each work day.

E. Flashings: Complete all flashings and terminations as indicated on the drawings and in accordance with the membrane manufacturer's requirements.

1. Provide securement at all membrane terminations at the perimeter of each roof level, roof section, curb flashing, skylight, expansion joint, interior wall, penthouse, and other similar condition.
 - a. Do not apply flashing over existing thru-wall flashings or weep holes.
 - b. Secure flashing on a vertical surface before the seam between the flashing and the main roof sheet is completed.
 - c. Extend flashing membrane a minimum of 6 inches (152 mm) onto the main roof sheet beyond the mechanical securement.
 - d. Use care to ensure that the flashing does not bridge locations where there is a change in direction (e.g. where the parapet meets the roof deck).

2. Penetrations:

- a. Flash all pipes, supports, soil stacks, cold vents, and other penetrations passing through the roofing membrane as indicated on the Drawings and in accordance with the membrane manufacturer's requirements.
- b. Utilize custom prefabricated flashings supplied by the membrane manufacturer.
- c. Existing Flashings: Remove when necessary to allow new flashing to terminate directly to the penetration.

3. Pipe Clusters and Unusual Shapes:

- a. Clusters of pipes or other penetrations which cannot be sealed with prefabricated membrane flashings shall be sealed by surrounding them with a prefabricated vinyl-coated metal pitch pan and sealant supplied by the membrane manufacturer.
- b. Vinyl-coated metal pitch pans shall be installed, flashed and filled with sealant in accordance with the membrane manufacturer's requirements.
- c. Pitch pans shall not be used where prefabricated or field fabricated flashings are possible.

F. Roof Drains: Coordinate installation of roof drains and vents.

1. Drain Assemblies with Clamping Rings:

- a. Remove existing roofing system materials from drain bowl and clamping ring.
- b. The membrane must extend beyond the inside of the clamping ring.
- c. Use a manufacturer supplied or approved sealant (1/2 tube minimum) between the membrane and drain bowl assembly.
- d. After the membrane is properly installed onto the bowl and the clamping ring set in place, all bolts securing the ring must be installed to provide constant, even compression on the sealant. If bolts are broken or missing, replacements must be installed.

2. Drain Boots:

- a. Remove existing flashing and asphalt at existing drains in preparation for sealant and membrane.
- b. Use a manufacturer supplied or approved sealant (1/2 tube minimum) to the outside of the drain boot and insert it into the drain.
- c. Fasten membrane around the perimeter of the drain with the same fastening pattern as the field membrane, no less than 1 fastener per drain.
- d. Install a pair of composite drain rings (CDRs) to compress the boot to the pipe. Ensure the CDR openings face in opposite directions.
- e. Secure the manufacturer's drain guard over the opening by heat welding the attachment tabs to the roof membrane.

G. Edge Details:

1. Provide edge details as indicated on the Drawings. Install in accordance with the membrane manufacturer's requirements.
2. Join individual sections in accordance with the membrane manufacturer's requirements.

3. Coordinate installation of metal flashing and counter flashing.
4. Manufactured Roof Specialties: Coordinate installation of copings, counter flashing systems, gutters, downspouts, and roof expansion assemblies.

H. Walkways:

1. Install walkways in accordance with the membrane manufacturer's requirements.
2. Provide walkways where indicated on the Drawings.
3. Install walkway pads at roof hatches, access doors, rooftop ladders and all other traffic concentration points regardless of traffic frequency. Provided in areas receiving regular traffic to service rooftop units or where a passageway over the surface is required.
4. Do not install walkways over flashings or field seams until manufacturer's warranty inspection has been completed.

I. Water Cut-Offs:

1. Provide water cut-offs on a daily basis at the completion of work and at the onset of inclement weather.
2. Provide water cut-offs to ensure that water does not flow beneath the completed sections of the new roofing system.
3. Remove water cut-offs prior to the resumption of work.
4. The integrity of the water cut-off is the sole responsibility of the roofing contractor.
5. Any membrane contaminated by the cut-off material shall be cleaned or removed.

3.4 FIELD QUALITY CONTROL

- A. The membrane manufacturer's representative shall provide a comprehensive final inspection after completion of the roof system. All application errors shall be addressed and final punch list completed.

3.5 PROTECTION

- A. Protect installed roofing products from construction operations until completion of project.
- B. Where traffic is anticipated over completed roofing membrane, protect from damage using durable materials that are compatible with membrane.
- C. Repair or replace damaged products after work is completed.

END OF SECTION

TERMS OF SERVICE

The Specification Generator is a program (the "Program") that creates a document that can, and in most cases should, be modified by the specifier to meet the requirements of an individual project. Duro-Last is not responsible for the accuracy of any document created in full or in part by this Program.

Duro-Last is providing this Program to specifiers without charge to aid in their development of roofing project specifications. The user of any specification created with this Program is solely responsible for its content and accuracy with respect to complying with Duro-Last Roofing specifications, project requirements and all applicable regulatory codes. This Program should not be construed to replace any system design provided by a professional architect or engineer, who remains ultimately responsible for the design integrity and safety of all building components including the applicability of all relevant building codes and regulations.

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