Project Manual

Mc Call Foundation Inc. 833 Main Street Torrington, CT Roof Replacement Project

For

McCall Foundation Inc. 58 High Street Torrington, CT

December 4, 2024

Boe Studio Architects

19 Tioga Street, Torrington, CT

email: mboestudio@gmail.com

phone: 860-307-6816

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00020 INVITATION TO BID

Roof Replacement Project 833 Main Street Torrington, CT

The Mc Call Foundation Inc, 58 High Street, Torrington, CT will receive sealed bids in duplicate for a single firm fixed price contract for the removal of the existing EDPM Roof system at 883 Main Street, Torrington, CT and replacement with New EDPM Roof system and all associated components. The existing office at this site is to remain operational during the course of construction.

Bids will be received at the administrative offices of McCall Foundation Inc located a 58 High Street, Torrington, Ct. up until 4.00 p.m. December 27, 2024, upon which time all bids will be opened and read aloud. An abstract of the bids will be made available to all bidders.

A pre bid walk through shall be held December 16, 2024 at 9:00 A.M. at 883 Main Street, Torrington, CT. All contractors are required to attend to review the existing building and current site conditions in order for their bid to be considered in awarding the contract.

A Performance and Payment Bond per A.I.A. document A312, 2010 edition is required for this project.

McCall Foundation Inc., reserves the right to reject any or all bids, to waive technicalities, and to award the contract as will best serve the public interest. It is anticipated that the contract will be awarded within 10 days after the bid opening.

McCall is and equal opportunity Employer.

The contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5.

END OF SECTION

00 11 16 INVITATION TO BID

00 21 13 INSTRUCTION TO BIDDERS December 4, 2024

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INSTRUCTION TO BIDDERS:

1.Please refer to Project Documents

The Contractor shall have adequate equipment, and materials for this project to insure completion of project by sixty (business) days from the time the contractor is awarded.

All Bidders shall observe the following instruction and specifications:

2. General Provisions and Milestone Dates

Site Walk: 883 North Main Street, Torrington, CT December 16, 2024

at 9:00 am.

Date of Final Questions: December 20, 2024 4:00 pm

3. Receipt Deadline and Opening:

Bid Return Envelope: Bidders shall submit bids in an envelope clearly marked, with the bid title and opening date to prevent a sealed bid from being opened prior to the opening date. Any bid not so marked and opened by The Mc Call Foundation shall be rejected.

The following forms must be submitted in the return envelope:

- A. Bid Schedule
- B. Hold Harmless Agreement and Supplemental Agreement
- C. Completed Projects and References
- D. Non Collusion Form
- E. Non Discrimination Form.
- F. Unit Price for 2x6 Pressure Treated Rim Boards at perimeter of roof,

Mail or deliver this entire completed bid package in a sealed envelope. It is to be received no later 4:00 pm, December 27, 2024

TO: Albert Stokes

Director of Contracts and Utilization

The McCall Foundation, INC.

58 High Street

Torrington, CT 06790

To Be noted on the outside of Envelope:

DO NOT OPEN UNTIL 4:15 pm, December 27, 2024

00 21 13 INVITATION TO BID December 4, 2024

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Project Name:

McCall Foundation Inc. Re-Roofing of 883 North Main Street, Torrington, CT

Address: 883 North Main Street, Torrington, CT 06790

4. Proposal Questions

Any questions pertaining to the scope of the work or content or procedure for submitting proposals should be directed to Michael Boe, Architect by email (mboestudio@gmail.com), to be received no later than, 4:00 pm, December 20, 2024. Any questions received after that date will not be answered. Contact information is as follows:

Michael Boe, Architect 19 Tioga Street, Torrington, CT 05790 (860) 307-6816 mboestudio@gmail.com

5. Basis of Award

It is intended this Contract shall be awarded to the Bidder that best meets the needs of The McCall Foundation Inc. with respect to qualifications as referred on the "Qualification of Bidder" page, contractor's submitted start date, and cost. Qualification shall include the ability of the Contractor to complete all work within the stated time frame.

6. Notice of Award

The McCall Foundation shall give notice of Acceptance of a bid to the successful bidder by mail or email to the Bidder's address stated in the bid. Individuals are invited to attend the bid opening, with official bid results pending notification of the successful bidder.

7. Award of Contract

The McCall Foundation Inc. reserves the right to reject any and all bids for any reason the Town deems advisable, and to award contract or contracts to any Contractors bidding on the work, regardless of the amount of bid. Contract may be awarded by item to multiple bidders based on price and ability of individual bidders to complete the work in the time frame required.

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8. Performance: Labor and Material Bond

A 100% Performance bond or certified check is required for the bid.

9. Scope of Work Change

McCall Foundation Inc, reserves the right to change the scope of the project after the bid is awarded, without penalty to the Owner. All changes in scope will be issued in writing by Architect.

10. Substitution of Named Brands:

Brand name and product for this project has been spelled out. If contractor wishes to qualify different Manufacturer, they must provide full documentation to the owner at time of project walk thru. Owner will review data submitted and approve or disapprove by an issued addendum.

11. Prices

Bid shall not include any taxes, Local, State or Federal as McCall Foundation is a not for profit organization.

12. Assignment of Contract

Contractor shall not sublet, sell, transfer, assign, or dispose of contract or any portion thereon or of right, title, or interest therein of obligations there under, without written consent of , The McCall Foundation Inc.

13. Basis of Payment

Payment for this work shall be made in two (2) payments.

14. Payments for Extra Work

Written notice of claims for extra work shall be given by the Contractor within ten (10) days after receipt of written instructions from the Architect and approved by the McCall Foundation, to proceed with extra work and also before any work is commenced, except in an emergency endangering life or property. No claim shall be valid unless so made. In all cases, Contractor's itemized sheet showing all labor and material must be submitted to the Architect and to the Owner. Order for extra work shall specify any extension of contract time and one of the following payment methods.

Boe STUDIO Architects 19 Tioga Street Torrington, CT

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- A. Unit Prices or combination of unit prices
- B. A change order lump sum based Contractor's estimate accepted by owner and approved by Architect.
- C. Actual Cost plus 10% for overhead and profit.

15. Payment Requests, Retainage and Guarantee Period

Contractor must submit a payment request for payment once each month for work done and materials delivered and on site. Each request for payment must be computed for work completed, less (10%) to be retained until completion of project and Final Inspection by City of Torrington Building Official has been completed and project closed out by City.

16. Insurance

Contractor will file with The McCall Foundation, the follow evidence of insurance. Certificate must be on file with The McCall Foundation before acceptance of Bid for work to commence.

Workers Compensation

Coverage A: Statutory

Coverage B: Employers Liability:

Bodily injury by accident \$100,000 per person Sodily injury by disease \$100,000 per person Sodily injury \$500,000 aggregate

Comprehensive Commercial Liability

Bodily injury; General Limit \$2,000,000 aggregate
Products/ Completed Operations \$1,000,000 aggregate
Personal and Advertising Injury \$1,000,000 aggregate

Each Occurrence\$1,000,000 aggregateFire Damage Limit\$100,000 aggregateMedical Expenses\$10,000 per person

Premises/Independent Contractors
Contractual/Completed Operations/Products
Contractual/Liability with Broad Form
XCU (explosion/collapse/underground utilities)
Comprehensive Broad Form Liability endorsement or Equivalent

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Broad Form Property Damage Liability

Automobile Liability

Bodily Injury\$1,000,000 per personAggregate\$1,000,000 per personProperty Damage\$1,000,000 per person

Coverage:

All owned/non owned/hired/ borrowed Contractual liability to be included

Contractor must name The McCall Foundation Inc. 58 High Street, Torrington Connecticut on all certificates.

All policies will provide thirty (30) days' notice of cancellation as well as ten(10) days' notice of material change in the policies. Written documentation shall be sent to the Albert Stokes, The McCall Foundation, 58 High Street, Torrington, CT.

17. Environmental Health and Safety Compliance

The contractor must comply with all local, state and federal environmental health and safety regulations. The contractor to submit a Health and Safety Plan to Ray Donahue prior to commencing the project.

18. Hold Harmless Agreement

The Contractor agrees to hold harmless The McCall Foundation Inc. and it's respective officers, agents, and employees from any loss, costs, damages, expenses, judgments, and liability whatsoever kind of nature however so the same may be caused resulting directly or indirectly by an act of omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of sickness and death, personal injury, or damage to property directly or indirectly, including the loss of use resulting there from as permitted by law. The Contractor will be required to sign the enclosed Hold Harmless Agreement prepared the McCall Foundation Inc.

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19. Supplemental Agreement

The contractor is an independent contractor and neither the Contractor nor its employees nor the Contractor's Subcontractors(s) under any circumstances, will be considered servants or agents of the McCall Foundation Inc. and at no time legally responsible for any negligence or other wrong doing by the Contractor, it servants or agents or the Subcontractors(s). The McCall Foundation Inc. will not withhold from contract payments to the Contractor any Federal or State unemployment taxes, Federal or State Income taxes, Social Security tax, or any other amount for benefits to the Contractor. The lump sum or unit charges for service provided does not represent gross wages and further the McCall Foundation will not provide the Contractor any insurance coverage or other benefits, including Worker's Compensation. The contractor shall sign the enclosed Supplemental Agreement prepared by the McCall Foundation Inc.

20. Nondiscrimination Agreement

- (1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to ensure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;
- (2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities;
- (3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers'

representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

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- (4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f, and 46a-86; and
- (5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56. The authorized signatory of the contract shall demonstrate their understanding of this obligation by (A) initialing the nondiscrimination affirmation provision in the body of the contract, (B) providing an affirmative response in the required online bid or response to a proposal question which asks if the contractor understands its obligations, or (C) signing the contract.

00 21 24 BID PROPOSAL December 4, 2024

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Bid SCHEDULE

TO: McCall Foundation Inc. 58 High Street, Torrington, CT

The Undersigned, having examined the proposed Contract Documents titled: Mc Call Foundation Inc.
 833 Main Street Torrington, CT

Roof Replacement Project

and having visited the site as part of the mandatory site visit and examined the conditions affecting the Work, hereby proposes and agrees to furnish all labor and materials, equipment, and to perform operations necessary to complete the Work as required by said Contract Documents, for the stipulated sum of

Sum Bid	Dolla	ars
(\$)	
proposal form, the cos All unit prices and not subject day bids are o A) Provide uni	red in which no specific payment is listed in the st of such work shall be included in the unit prices be lump sum, ect. listed in the Bid Proposal are firm at to change for Ninety (90) Calendar days from the pened. Provide list of Unit Prices with Bid Form. It price for installed pressure treated 2X6 wood rim meter of building installed. Base cost on linear ment	
(\$ Unit Price	Dollars	
(\$)	
• •	ndar days from the date of a Notice of Acceptance	

- 3. Within ten (10) calendar days from the date of a Notice of Acceptance for this proposal, the undersigned agrees to execute the Contract and to furnish to the McCall Foundation Inc, 58 High Street, Torrington, CT a satisfactory "Faithful Performance Bond" and "Labor and Material Bond" in the amount of 100 percent of the contract price.
- 4. The Bidder Acknowledges receipt of Addenda listed bellow and further acknowledges that the provision of each Addendum have been include in the preparation of this Bid.

00 21 24 BID PACKAGE December 4, 2024

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5. Acknowledge Receipt of Addendum: Addendum No.	Date Received
COMPANY NAME (BIDDER) Address of Bidder:	
Phone No: Area Code ()	omply with and be bound by the
Printed Name:	
Title of Company:Address:	
Signature of Bidder:	(Date)
Typed or hand lettered Name of Bidder:	
Typed or hand lettered Title of individual Signing	as Bidder
Names, Titles and Addresses of Members of Firm	1:
State of Connecticut Contractors License Number:	
Name associated with State of Connecticut	
Contractor icense:	

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Hold Harmless Agreement

The Contractor named below agrees that it will indemnify and hold harmless the McCall Foundation Inc. and its respective officers, agents and employees from any loss, cost, damages, expenses, judgments and liability whatsoever kind of nature however the same may be caused resulting directly or indirectly by any neglect act or omission of the contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable resulting in bodily injury including sickness and death, personal injury of damage to property directly or indirectly, including the loss of use resulting there from a permitted by law, unless to the extent caused by Mc Call Foundation Inc.

Supplemental Agreement

The Contractor named below is an independent contractor and neither the Contractor not its employees nor the Contractor's subcontractors under any circumstances, will be considered servants or agents of the McCall Foundation Inc. and the McCall Foundation Inc. will be at no time legally responsible for any negligence or other wrong doing by the Contractor, its servants or agents or the Contractor's subcontractors. The Mc Call Foundation Inc. will not withhold from the contract payments the Contractor for any federal or state unemployment taxes, federal or state income taxes, Social Security tax, or any other amounts for benefits to the Contractor. The lump sum or unit charges for services provide does not represent gross wages and further the McCall Foundation will not provide the Contractor any insurance coverage or other benefits, including Worker's Compensation.

State of Cor	nnecticut)	ss:	
County of Signed:	, ,		
			Print Name:
			Title:
			Company:
			Address:
Subscribed	and sworn to before	me on	
this	day of		, 2024

Notary Public:				
	00 21 24 BID PACKAGE			
883 North Mair	00 21 24 BID PACKAGE December 4, 2024 Foundation Inc. Street Torrington, CT lacement Project Page 11 of 13			
NON-CONLLUSION A State of	AFFIDAVIT OF PRIME BIDDER			
County of)			
(Individual's Name) deposes and says :	being first duly sworn,			
1. They are				
State of Connecticut)) ss: County of)	Signed:			
	Print Name:			
	Title:			
	Company:			
	Address:			
Subscribed and sworn to before me of this day of				

Notary Public:		00 21 24 BID PACKAGE
Boe Studio Architects 19 Tioga Street Torrington, CT 06790		00 21 24 BID PACKAGE December 4, 2024
<u>883 Nor</u>	Mc Call Foundation Inc. th Main Street Torringt of Replacement Proje Page 12 of 13	
	SCRIMNATION CERTIFIC Representation by Entity	ATION
Written representation that com warranties with the Connecticut as amended.		
Instructions: For use by and entity (corporation entering into any contract type variety Torrington, CT.		
Representation of an Entity:		
I,, _ (Authorized Signatory)	.01	f (Name of Entity)
(Authorized Signatory)	(Title)	(Name of Entity)
An entity duly formed and existing	ng under the laws of	(Name State Commonwealth)
Represent that I am authorized t	o executer and deliver thi	s representation on behalf of
	and that	has
a (Name of Entity)	(Name of En	tity)
Policy in place that complies with Connecticut General Statutes ss		
(Authorized Signatory)		(Date)
(Print Name)	_	

(Printed Name)

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NONDISCRIMNATION CERTIFICATION

Representation by Individual

Written representation that complies with the Nondiscrimination agreements and warranties with the Connecticut General Statutes ss/ss 4a-60 (a)(1) and 4a-60a (a) (1) as amended. Instructions: For use by an individual who is not and entity (corporation, limited liability company, or partnership) when entering into any contract type with the McCall Foundation Inc, 58 High Street, Torrington, CT, regardless of contract value. Submit to Mc Call Foundation 58 High Street, Torrington, CT. 06790 Representation of an Individual: Represent that I will comply with the nondiscrimination agreements and warranties of Connecticut General Statutes ss/ss 4a-60 (a)(1) and ss/ss 4a-60 (a)(1) as amended. (Signatory) (Date)

00 72 00 GENERAL CONDITIONS December 4, 2024

Mc Call Foundation Inc.

883 North Main Street Torrington, CT

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- A. Contractor to remove existing roofing and insulation back to existing wood roof deck, removal of all existing aluminum drip edge and metal fascia wood nailers as required along roof edge perimeter, removal of roof flashing at chimney, and plumbing vent roof boot flashing, rainwater gutters and downspouts.
- B. Contractor to provide and install, Carlisle Syntec System, 20 year system warranty, UL and FM Approved, Sure-Seal 60 Mill EDPM Cool Gray membrane, fully adhered over polyisocyanurate foam insulation R-30 continuous, with HD cover board over polyisocyanurate foam insulation, mechanically attached. System is to be installed as per manufacturer's recommended details. All accessory items such as flashing for sanitary vent lines All fastening items, Secur Edge Drip Cap, Secur Edge 2000 Coping, Secur Edge 2000 Fascia, and all aluminum gutters and downspouts to be included in this project. Contractor to provide Perimeter pressure treated wood nailers height to match top of insulated roof deck.
- C. Owner to consider other EDPM Roof manufacturers. If contractor wishes to substitute for approval by owner provide at project meeting Carlisle Syntec System product data and warranty data. Product to perform to 110 120 mph wind loads. Product to provide 20 year system warranty. Owner will review and notify contractor if product meets owner requirements.
- D. Contractor is responsible to obtain and pay for all building permits necessary for this project.
- E. Contractor is responsible to coordinate inspections with City of Torrington as per required inspections. Obtain required inspections from City of Torrington Building Department prior to start of construction. Notify Architect of when inspections are to be carried out by City of Torrington Department.
- G. Payment schedules will be made as follows: 1/2 at contract signing, 1/2 after receipt of certificate of occupancy by City of Torrington Building Department, and receipt of all close out documents.
- H. If power shut down required contact and schedule power shut off with Ray Donahue, McCall Foundation Facility Manager.

00 72 00 GENERALCONDITIONS December 4, 2024

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- I. Contactor must: Remove all debris daily and take from site or place in Contractor supplied dumpster.
- J. Leave all public areas clean an unobstructed at building entries, as other McCall Foundation staff will be working in the building while this project is under construction.
- K. Ensure all materials are on-site prior to work beginning to ensure the job runs smoothly and without delays. This includes consistent supervision of all sub-contractors as well.
- L. Vehicular Parking can be in the parking lot.
- M. The Contractor and sub contractors must fill out all grant paperwork completely and submit by the bid closing date so that the project runs smoothly, and in a timely manner.
- N. NOTE: Progress payments can only be processed if all paper work is submitted properly.
- O. All work to be inspected and approved by Owner and City of Torrington Building Department before final payment is issued.
- P. Contractor to do a final site cleaning and inspection. All left over materials to be removed from site. Owner to inspect state of site, if it does not meet the owners standards contractor shall make corrections as per direction of owner.
- Q. No open burning allowed on site.
- R. Contractor to Submit Warranty prior to final payment.
- S. Contractor to submit Flashing, Fascia, Rainwater Gutter and rainwater downspouts color samples for owner's approval.

00 25 00 DEMOLITION December 4, 2024

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00 25 00 GENERAL DEMOLITION

1.0 General

1.1 Scope:

A. Contractor to remove top aluminum fascia flashing, rain water gutter, rainwater downspouts, roofing membrane, cover board, roofing insulation back to surface of existing metal deck along with all fasteners. Remove nailers as required after opening up roof.

2.20 Materials:

- A. EDPM Roofing membrane
- B. Rain Water Gutters
- C. Rain Water Downspouts
- D. Aluminum fascia drip edge (top dark bronze coloring) teal green fascia to remain
- E. Roofing insulation and all mechanical anchors.
- F. Flashing at chimney
- G. Roof boots at sanitary sewer vent pipes.

3.0 Workmanship:

- A. Protect existing building from damage.
- B. Provide dumpster for Construction Debris and remove from site when full. Do not over fill. Do not use owners dumpster or recycling dumpster.
- C. Pick up debris in and around work area, everyday and place In dumpster.
- D. When demolition work is occurring, take safety precautions to keep area of work clearly identified as a work area by using caution tape if in

the area of the general public or McCall Foundation Inc. staff.

4.0 Execution:

a. Carry out demolition in a timely manner.

07 53 23 Ethylene Propylene Diene Monomer (EDPM) ROOFING
December 4, 2024

Mc Call Foundation Inc.

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PART I - GENERAL

1.1 GENERAL PROVISIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions of Division 1 Specifications Sections, apply to this section.
- B. Carefully review and examine all other Contract Documents for requirements therein affecting the work of this section. Furthermore, coordinate and sequence the work of this Section with all other trades affected.

1.2 SUMMMARY

A. Furnish and install the following:

- 1. Ethylene propylene diene monomer (EDPM) single ply membrane roofing system.
- 2. Regular rigid roof insulation board.
- 3. Overpayment board (cover board)
- 4. Flashing at all penetration through the roofing system and all materials that abut the roofing system.
- 5. Roof edge metal fascia.
- 6. Roof membrane and roof membrane flashing and backsides of sloped roofs as indicated on drawings.
- B. Provide manufacturer's pre-construction and final inspection as specified herein. These inspections shall be included in contract. Additional inspections and or remedial work incurred as a result of the inspection shall be provided without cost to owner.
- C. All roofing materials and associative details shall be by a single manufactures and acceptable to requirements under the full system warranty.

1.3 RELATED WORK

- A. Existing Metal Decking
- B. Rough Carpentry
- C. Sheet Metal Flashing and Trim for roof edges and sheet metal sheet metal flashing

of various shapes, prefabricated or custom formed.

- D. Roof accessories: Fascia trim and roof edging
- E. Plumbing: for piping and other roof penetrations.

Boe Studio Architects 19 Tioga Street Torrington, CT 06790

07 53 23 Ethylene Propylene Diene Monomer (EDPM) ROOFING
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1.4 REFERENCES

- A. Comply with the applicable requirements of the following standards and those other referenced in this Section under the provision 2022 State of Connecticut Building Code .
 - 1. FM Global Property Loss Prevention Data Sheets.
 - a. 1-28 Wind Loads to Roof systems and Roof Deck Securement
 - b. 1-29: Roof Deck Securement and Above -Deck Components
 - c. 1-4: Perimeter Flashing
 - 2. UL Fire resistance Directory: Fire Hazard Classification "Class A"
 - 3. All applicable federal, state and municipal codes, laws and regulations for fire resistance roof rating.
- B. The following reference materials are hereby made part of this Section by reference there to:
 - 1. NRCA Roofing and Waterproofing Manuel, latest printing.
- C. 2022 State of Connecticut Building Code.

1.5 SUBMITTALS

- A. Submit the following:
 - 1. Literature: Manufacturer's product data sheets, specifications, performance data, physical properties and installation instructions for each item furnished hereunder.
 - 2. Manufacturer's specimen warranties: Provide sample choices of manufacturer's actual warranties for all materials to be furnished under this section, clearly defining all terms, conditions, and time period for the coverage thereof.
 - 3. Review statement: Written statement, signed by the roofing applicator, stating the Contract Drawings have been reviewed by an agent on the roofing system manufacturer, accompanied by a pre-installation written statement from the manufacturer that the selected roof system is proper, compatible, and adequate for the application shown.
 - 4. Project roofing manufacturer and applicator's qualifications, credentials, and project experience list of similar installations.
 - 5. Shop drawings:

- a. Setting plans for roof insulation, thickness and direction of slopes.
- b. Fully dimensioned 1/4" scale plans of roof. Plans shall show changes in level, key location of details, all roof penetrations, roof slopes and direction of slope. Indicate on plans any areas of proposed staging and material storage on roof.

Boe Studio Architects 19 Tioga Street Torrington, CT 06790

07 53 23 Ethylene Propylene Diene Monomer (EDPM) ROOFING
December 4, 2024

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c. Large scale design details, minimum 1 1/2" per foot scale, showing perimeter flashing conditions and penetrations. Details shall show dimensions of actual measurements taken at the project site and reflect actual conditions; manufacturer's standard preprinted shall not be acceptable as substitute for shop drawings.

6. Verification samples:

- a. Provide a 12"x12" sample of roofing membrane 60 Mil and membrane flashing.
- b. Provide a 12"x12" sample of insulation board.
- c. Provide a 12"x12" sample of overlay board.
- B. Submit the following to Architect:
 - 1. Manufacturer's field quality control reports of field inspections, including revised as built drawings and manufacturer's final punch list.
 - 2. Manufacturer's warranties: Include coverage of materials and installation.

1.6 QUALIFICATIONS

- A. Roofing manufacturer, with a minimum of 10 years documented experience demonstrating successful work of the type specified herein.
- B. Roofing applicator, with a minimum of 5 years documented experience demonstrating previous successful work of the type specified herein and approved by manufacturer.
- C. Roofing applicator's foreman with a minimum 5 years documented experience of the type of work herein, and trained by product manufacturer.

1.7 QUALITY ASSURANCE

A. The manufacturer's authorized representative shall provide periodic inspections during roofing installation, and final inspection at the completion of the project to insure, that the project has been completed in accordance with the manufacturer's requirements. Upon approval and acceptance of the project, the manufacturer's warranty

certification shall be written, executed and furnished to the owner.

- 1. Roofing manufacturer's authorized representative to visit the site as per their as required to provide Customer Warranty. They shall review installation procedures, and conduct periodic and additional inspection resulting to non-compliant roof insulations. Each visit is required a written report submitted to the Architect. The Roofing manufacturer's authorized representative is required as a minimum to inspect the following:
 - a. Field Conditions immediately prior to roofing installation.
 - b. Installation of insulation, and testing of fasteners.
 - c. Inspection of overlay board.
 - d. Periodic review of typical seams and flashing installation.
 - e. Final inspection of Roof installation, for issue of warranty.

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- B. Submit Manufacturer's field quality control reports or field inspections, including, revised "as built drawings and manufacturer's final punch list
- C. All roofing materials and accessories shall meet or exceed the minimum quality standards specified in this Section and shall be provided and approved by the roofing system manufacturer. Any materials not manufacturer or provided by manufacturer shall have written approval from the Manufacturer stating the materials are acceptable and are compatible with the other materials and systems required.
- D. UL listing: provide labeled materials which have been tested and listed by UL in "Building Materials Directory" for application, indicated, with "Class A" rated materials/system for existing roof slope. Contractor to field verify roof slope.
- E. Performance Requirements.
 - Wind Uplift Rating: Membrane roofing system to meet requirements of FM 1-28 for 1-75 rating based on roof elevations and building location for this product.
 - Above-deck roof components shall be engineered, fabricated and installed in accordance with the requirements of FM 1-29 for performance requirements specified above.
 - 3. Provide roof-covering materials that bear FM approval markings on the packaging.
 - 4. Indicate that materials have been subjected to FM's examination and follow up inspection services.
 - 5. Wind Uplift Design: Membrane roofing system shall be designed to meet ASCE-7 rooftop wind uplift pressures.

- a. For each elevation-Contractor to submit ASCE-7 Calculations with submittal prior to start of work.
- F. Fire performance characteristics: Provide insulation materials which are identical to those whose fire performance characteristics, as listed for each material or assembly of which insulation is a part, have been determined by testing, per methods indicated below, by UL or other testing and inspecting agency acceptable to authorities having jurisdiction.

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- G. The roof system manufacturer's technical specifications shall be considered a part of this specification and should be used as a reference for specific application procedures and recommendations. Where a conflict does exist between the manufacturer's written specifications and those procedures specified in this Section, the more the stringent requirements meeting the Manufacturer's minimum requirements for the provided warranty shall apply.
 - 1. Contactor shall provide, at no additional cost to this contract, all necessary labor and materials to confirm with manufacturer's required installation procedures which are necessary to provide a total roofing system in full compliance with manufacturer's warranty requirements, including additional materials, installation procedures, manufacturer's inspections, sample testing and other requirements.

1.8 REGULATORY REQUIREMENTS

- A. Roofing system, including insulation and substrate, shall meet Underwriters Laboratories Inc. Fire Hazard Classification "Class A" roof.
- B. Refer to applicable building codes for roofing system installation requirements and limitations. When a conflict exist, he more restrictive shall apply.

1.9 PRE-INSTALLATION CONFERENCE

- A. At least two weeks prior to commencing the work, conduct a pre-installation conference at the Project site. Coordinate time of meetings to occur prior to installation of work.
 - 1. Required Attendees: Owner's Representative, Architect, Contractor, Applicator's Project Superintendant, roofing manufacturer technical

representative

- a. Demolition
- b. Rough Carpentry
- c. Insulation
- d. Cover Board
- e. EDPM Roof Membrane
- f. Flashing / Trim / Gutters / Downspouts

2. Agenda:

- a. Scheduling of roofing operations
- b. Review of staging and materials storage locations.
- c. Coordination of work by other trades.
- d. Protection of building when removing existing roof.
- e. Protection of completed roofing work.

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- f. Establish weather protection and working temperature conditions to which Owner's Representative, Architects and contractor must agree.
- g. Emergency weather protection and working temperature conditions to which Owner's Representative, Architect and Contractor must agree.
- h. Emergency weather protection procedure.
- i. Discuss process for manufacture's inspection and acceptance of completed roofing and flashing.
- j. Manufacturer's deck inspection to be performed.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened containers or packages with labels and package seals intact and legible.
- B. Store all materials in accordance with manufacturer's recommendations. Store rolled goods on clean, raised platforms. Store other materials in dry areas, protected from water and direct sunlight.
- C. Do not expose stored curable roofing materials or accessories, including uncured flashing, adhesives, sealant and pourable sealer, to a constant temperature in excess of 80 degrees Fahrenheit.
- D. Provide continuous protection of stored materials against deterioration for duration of project.
- E. Store insulation on dunnage and completely cover with water-resistant breathable material. Provide weights to prevent wind damage to insulation.

- F. Distribute any materials stored on roof levels for immediate use to prevent concentrated loads that would impose excessive strain on deck or structural members. Protect roof stored materials to prevent displacement by the wind and protect for exposure to inclement weather and sun.
- G. Damaged material: Remove any damaged or contaminated materials from job site immediately, including materials in broken packages, or show other evidence of damage unless Architect specifically authorizes correction thereof and usage on project.

1.11 ENVIROMENTAL REQUIREMENTS

A. Apply roofing in dry weather; do not install roofing in inclement weather or when participation is predicted with greater than 20 percent possibility.

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- B. Do not apply roofing membrane to damp or frozen deck surfaces.
- C. Apply roofing when the ambient temperature is above 40 degrees Fahrenheit.

1.12 SEQUENCING AND SCHEDULING

- A. Coordinate the work of this section with the respective trades responsible for installing interfacing work, and ensure that the work performed hereunder is acceptable and to such trades for the installation of their work.
- B. Notify Owner's Representative and manufacturer' representative 48 hours in advance for deck acceptance. Plan the lay-up roofing membrane with respect to deck slope. Avoid situations where excessive drainage could pass into completed roofing.
- C. The Roofing applicator shall maintain communication with roofing manufacturer's representative to inform of progress and to schedule periodic sample testing.

1.13 WARRANTY

A. Deliver to the Owner upon completion of the work of this Section, an unconditional warranty, on the work of this Section agreeing to promptly repair the roofing as necessary to maintain its weather-tight integrity.

- 1. Warranty shall cover product, quality, performance, and workmanship for a period of 20 years.
- 2. Warranty shall cover total roofing system including membrane, insulation, adhesives, sealant, fasteners, membrane flashing and other materials furnished and installed under this section.

3. Warranty shall provide coverage for uplift created by specified wind speed (maximum wind speed gusts): 72 miles per hour.

1.14 EQUIPMENT

A. General: Provide new equipment. If acceptable to the Architect, the Contractor may use undamaged equipment, previously used equipment in serviceable condition. Provide equipment suitable for intended use.

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- 1. Contractor shall furnish tools, apparatus and appliances, hoists and/or lifts and power for same, scaffolding, runways ladders, temporary supports and bracing and similar work or material necessary to insure convenience and safety in the execution of work in this section. All such items shall meet the approval of the Owner but responsibility of the design, strength and safety shall remain with the Contractor. All items shall comply with the Federal OSHA regulations and acceptable codes, statutes, rules, regulations, including compliance with the requirements of the current edition of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors (AGC) and the standards of the State Labor Department.
- B. Staging, exterior, required for execution of the work of this section, shall be furnished, erected, relocated if necessary and the removal by the Contractor. Staging shall be maintained in a safe condition without charge to and for use of all trades as needed.

PART 2 -PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with the requirements specified herein, manufacturers offering product which may be incorporated in the work include the following and approved equal:

- 1. Carlisle Syntex Systems, Carlisle PA (Sure-Seal/Sure Kleen non dusted, Non-reinforced EDPM Membrane, fully adhered) 60 Mil, Color Black
- 2. Carlisle Syntex Systems, (Sure-Seal EDPM, SAT) 60 MIL, Color Black
- 2 Elevate, Holcim Building Envelope Division, Nashville, TN (Rubbergard EDPM SA System Adhered Membrane),60 Mil. Black
- 3. John Manville, Denver, CO (JM EDPM NR FIT SYSTEM),60 Mil. Color Black
- B. To establish the design basis, quality standards and performance requirements, the following product description is based on, PA (Sure-Seal/Sure Kleen non dusted, Non-reinforced EDPM Membrane, fully adhered) 60 Mil, Color Black as manufactured by Carlisle Syntex Systems. Carlisle PA. or Carlisle Syntex System, (Sure Seal SAT) 60 Mil, Color Black, Equivalent system as produce by other manufacturers will be acceptable subject to Architect's Approval. Product used must be installed within Manufacturer's acceptable temperature range.

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2.2 ROOFING MATERIALS

- A. EPDM membrane: Ethylene propylene diene monomers formed into uniform, flexible sheets complying with ASTM D 4637 and ANSI/RAM IPR-1.
 - 1. Nominal thickness: 60 mils.
 - 2. Class B
 - 3. Exposed face color: black
- B. Overlayment (cover) board: shall be 5/8" thick fiberglass-mat faced gypsum roof board

"Dens-Deck Prime" as manufactured by Georgia- Pacific Building Products, 55 Park

min. features and acceptable by roofing manufacturer.

- 1. Thickness: 5/8"
- 2. Width: 4 feet
- 3. Length: 8 feet
- 4. Weight: 2.5 psf
- 5. Surfacing: Fiberglass mat with low perm coating
- 6. Flexural Strength: Parallel (ASTM C 473): 100 lb, minimum.
- 7. Flute Span (ASTM E661): 8 "
- 8. Permeance (ASTM E96): Not more than 2 perms.
- 9. R-value (ASTM C518): Not less than 0.67.
- 10. Water Absorption (ASTM C11770: Less than 10 percent of weight.
- 11. Compressive Strength (Applicable Sections of ASTM C472): 500-900 pounds per square inch.

12. Surface Water Absorption (ASTM C473): Not more than 1 gram.

2.3 INSULATION MATERIALS

- A. General: Insulation shall be approved of roof manufacturer.
- B. Acceptable manufacturers: Subject to acceptance of roofing manufacturer and the following specification requirements.
 - 1. Carlisle Syntec, PA
 - 2. Apache Products Co, Anderson, SC
 - 3. Atlas Roofing Corporation, Atlanta, GA
 - 4. Celotex Corporation, Tampa, FL
 - 5. NRG Barriers Inc., Portland ME
- C. Polyisocyanurate foam insulation manufactured with HCFC 14 pound blowing agent and bonded to glass fiber facers at top and bottom surfaces during the manufacturing process. Insulation shall conform to property requirements of FS HH-I-19722.
 - 1. Unless otherwise indicated the minimum total thickness shall be 5 1/2 inches with a minimum "R" value of 30. Installed in a minimum of two layers with staggered joints.

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- 2. Density: 2.0 pounds per cubic foot (ASTM D-1622).
- 3. Compressed strength: 20 psi per cubic foot (ASTM D1621).
- 4. Moisture vapor barrier transmission: Less than 1 perm (ASTM E-96).
- 5. Water absorption: Less than 1 percent per volume (ASTM C209).
- 6. Roof is a single sloped roof tapered insulation is not required except at cricket adjacent to chimney.
- 7. Fasteners to secure insulation to existing metal decking and meeting the specified wind uplift requirements.

D. ROOF EDGE PROTECTION

- Available manufacturers: same source as EDPM roofing membrane.
 Metal edge system to be included in the single source total system warranty.
- 2. Basis of Design: Secure Edge 2000: Decorative metal fascia with continuous extruded aluminum bar. The system shall be watertight with no exposed fasteners. Metal fascia height to be field verified.
- 3. Cover Material: Kaynar coated Aluminum, .040 thickness color as selected by owner.
- 4. Extruded bar: Shall be continuous 6063-T alloy aluminum.

5. Fasteners: #12 X 1 5/8" corrosion resistant fasteners provided with drivers. No exposed fasteners permitted.

6. Other proposed flashings must be approved by roofing manufacturer required by manufacturer warranty.

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2.5. ACCESSORIES

- A. Pressure- sensitive RUSS: 45 Mil thick 6" wide strip reinforced EDPM membrane with factory applied 3" wide Secure Tape.
- B. Bonding adhesive shall be as recommended by manufacturer. Adhesive shall be compatible with all materials to which the elastomeric membrane to be bonded.
- C. Splicing cement and inseam sealant shall be recommended by manufacturer.

 Adhesive shall be compatible with all materials to which the elastomeric membrane is to be bonded.
 - 1. Seam tape/ tape splice systems as provided by Carlisle and Elevate roofing are acceptable alternative to adhesive splicing.

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- 2. In-seam sealant: Provide at all adhesive splice type seams, use sealant recommended by manufacturer.
 - D. Lap sealant for sealing the exposed edge of the splices shall be trowel or gun consistency as recommended by the membrane manufacturer.
 - E. Water cutoff mastic shall be recommended by membrane manufacturer.
 - F. Night sealer shall be recommended by membrane manufacturer.
 - G. Pourable sealer for preparation of decking shall be as recommended by membrane manufacturer.
 - H. Prefabricated elastomeric accessories (pipe seals, inside and outside corners, etc.) shall be fabricated by membrane manufacturer and recommended by the membrane manufacturer.
 - I. Expansion joints: Manufacturer' standard bellows type expansion joint, sized for conditions indicated on Drawings
 - 1. Expansion joint flashing: Uncured EDPM flashing 0.060 inch thick.
 - 2. Expansion joint supports: foamed EDPM expansion joint as recommended by roofing manufacturer. Provide in profile (s) detailed on the drawings.

- 3. Expandable filler: Ceramar flexible filler manufactured by W.R. Meadows, or approved equal.
- J. Nailing Strips and Fasteners: Nailing strips shall be extruded rubber and fasteners shall be non-corrodible stainless steel.
- K. Termination Bars: Minimum 1/8 inch thick extruded aluminum, of channel profile with 1/4 inch legs and minimum overall width of 2 inches. Termination bar shall be factory punched to accept fasteners 6 inches on center. Install with stainless steel screw fasteners.
- M. Masonry fasteners: Round head stainless steel screw and neoprene washer with lead expansion anchor, equal to Rawlplug by the Rawlplug Company, Inc., New Rochelle NY. Other manufacturers offering similar products which may considered equal, include the following:
 - 1. Dur-O-Wall Inc., Arlington Heights, IL.
 - 2. Hilti Corporation, Tulsa OK.
- N. Screws: Stainless steel fastener with fluorocarbon coating. Minimum thread diameter of 0.22 inches and minimum shank diameter of 0.172 inches.
- O. Miscellaneous materials: Best grade or quality approved by the roofing manufacturer for the specific application.
- P. Flashing/cap flashing: All accessory items such as flashing for sanitary vent lines All fastening items, (Carlisle) Secur Edge Drip Cap, Secur Edge 2000 Coping, Secur Edge 2000 Fascia,
 - 1. All Drip Flashing and fascia flashing to be installed in accordance with Carlisle's standards to be in compliance with Warranty requirements.

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- Q. Aluminum gutters and downspouts to be included in this project.
 - 1. Gutter 0.32 Aluminum 6" commercial A-style box gutter with Kaynar 500 Finish.
 - 2. Left and Right End Caps. Kaynar 500 Finish
 - 3. Expansion Joint 0.32 Commercial Box Profile, two internal end caps one slip cover plate.
 - 4. Downspout 0.32 Aluminum Downspout Plain Square 3x4. Kaynar 500 Finish.
 - 5. Hidden stainless steel 6" cross bar hanger (no-clip style bracket).
- R. Contractor to provide Perimeter pressure treated wood nailers height to match top of insulated roof deck. (see unit pricing for nailers). Install in accordance with roofing manufacturer's requirements to meet Warranty requirements.

2.6 VAPOR BARRIER

A. Self-adhering sheet Vapor Barrier: ASTM 1970, minimum 31 Mil thick film laminated to layer of rubberized asphalt adhesive; maximum presence rating of 0.1 perm; cold-applied, with slip resistant surface and release paper backing. Provide primer when recommended by vapor barrier manufacturer.

PART 3 - EXECUTION

3.1 COMMISSIONING OF COMPONENTS AND SYSTEMS

A. Engage a manufacturer authorized to representative who is familiar with this project, to participate and assist as necessary, observing installation deficiencies of the components and systems included in this Division when requested by the Commissioning Authority.

3.2 EXAMINATION

- A. Open area of existing roof perimeter to reveal existing perimeter nailers on bearing wall and at non-bearing wall to determine required reconfiguration for install for new EDPM Roofing system.
- A. Inspect all surfaces and verify that they are in proper condition to receive the work of this Section.
- B. Verify edge nailers, curbs and penetrations are in place prior to roofing, so that the system can be installed as continuously as possible.
- C. Verify roof deck, and related surfaces are clean, smooth, flat, free of depressions, waves, or projections, properly sloped to drains, and suitable for installation of roof system.
- D. Verify roof deck surfaces are dry and free of snow and ice.

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- E. Any condition requiring correction shall be corrected prior to the installation of the roofing system, notify Architect of any unacceptable conditions, and provide solution for condition and associated cost.
- F. Do not proceed until defects are corrected.
- G. Beginning of installation means acceptance of substrate and site conditions.

3.3 PREPARATION

A. During the operation of work of this Section, protect the work of other trades against undue soilage and damage by the exercise of reasonable care and precautions. Repair or replace any work so damaged and soiled.

- B. Carefully broom clean substrate prior to roofing application or use Leaf blower as necessary.
- C. Where surface joints at roof and wall substrates exceed 1/4 inch width, fill flush with surface with pourable sealer before proceeding with the installation.

3.4 EMERGENCY MATERIALS AND PROCEDURES

- A. Maintain continuous temporary protection prior to and during installation of roofing system.
 - 1. Provide temporary protection prior to and during installation of roofing system. Do not leave unfinished roof areas uncovered over-night or during inclement weather.
 - 2. Turn sheeting up and over all parapets, and curbing. Retain sheeting in position weights and temporary fasteners.
 - 3. Provide for surface drainage from sheeting to drainage facilities.
 - 4. Do not permit traffic over unprotected or repaired deck surface.
- B. Maintain on site equipment and materials necessary to apply emergency temporary coverage in the event of sudden storms or inclement weather.
- C. Do not install more insulation than can be covered by roofing system in the same workday. Do not apply more roofing than can be properly fastened and sealed in the same work day. Ensure water does not flow beneath completed sections of the roof system, provide temporary closures.
- D. Roofing contractor is fully responsible for all damage due to water penetration occurring during the work under this contract.

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3.5 INSTALLATION-GENERAL

- A. The entire work of this section shall be performed in accordance with the best standards or practice relating to trades involved.
- B. Follow local and state and federal regulations, safety standards and code. When a conflict exists, the more restrictive document shall govern.
- C. Follow insurance underwriter's requirements acceptable for use with specific products or systems.
- D. The roofing system Manufacturer's Technical Specifications shall be considered a part of this specification and should be used as a reference for specific application procedures and recommendations. Where a conflict exist between the manufacturer's written specifications and

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those procedures specified in this Section, the more stringent requirements

meeting the Manufacturer's minimum for the provided warranty shall apply.

E. Review all special conditions, such as connections to sheet metal gravel stops, flashing, etc with the Roofing Manufacturer, submit the Roofing Manufacturer's recommendations and details for the Architect's approval.

F. Special Cautions:

- 1. Do not use oil-based or plastic cement.
- 2. Do not subject elastomeric materials to contract with petroleum, grease, oil, solvents, vegetable or mineral oil, nor animal fat. prevent contact with hot pipes, and ducts.
- 3. Cements and bonding adhesives contain petroleum distillates are extremely volatile and flammable. Avoid breathing vapors and do not use near fire or flame.
- 4. Ensure that splicing and bonding agents are dry during installation.

3.6 INSULATION INSTALLATION

- A. Place the constant thickness insulation of first layer and subsequent layer and tapered insulation to the required slope pattern in accordance with manufacturer's instruction. Stagger joints between each layer a minimum of half a panel.
- B. The anchorage shall not be less than those required by FM "Loss Prevention Data Sheet 1-28." With perimeter enhancements as required for each building elevation by FM Loss Prevention Data Sheet 1-29. Secure roof installation to metal decking substrate with mechanical anchors or type and spacing indicated by membrane manufacturer; but in no case provide less than one anchor per 4 square feet of surface area.

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C. Membrane Underlayment (Recovery) Board: Install per roofing manufacturer's instructions with mechanical fasteners to the roof deck in recommended pattern and frequency. Install with 1/8" gap between boards.

3.7 MEMBRANE ADHERED INSTALLATION

- A. Apply low VOC bonding adhesive at a rate of 60 square feet per gallon in manner recommended by manufacturer.
- B. Roll out membrane and allow it to relax. Inspect sheet for defects as it is being rolled out. Align sheet to that it overlaps the previous sheet by the lap width recommended by the manufacturer, but not less than three inches.
- C. Fold membrane back on itself and coat the bottom side of the sheet and the top side of the deck with adhesive. Avoid getting adhesive in the lap joint area.
- D. After adhesive has been allowed to set in accordance with the manufacturers requirements, roll the membrane into the adhesive, free from air pockets, wrinkles, or tears. Firmly press sheet into place without stretching.
- E. Bond sheet to substrate except those areas directly over or within 3 inches of control or expansion joint.
- F. Position membrane sheet to allow for required splice overlap. Mark the bottom sheets with an indelible marker approximately 1/4" to 1/2" from the top edge. The pre-marked line on the membrane edge an also be used as guide for positioning the splice tape.
 - G. When the membrane is contaminated with dirt, fold the top sheet back and clean the dry splice area (minimum 6" wide) of both membrane sheets by scrubbing with clean natural fiberglass rags saturated with Sure-Seal ` Weathered Membrane Cleaner. When using Sure-Seal (black) PRE-KLEENED membrane, cleaning the splice area is not required unless contaminated with field dirt or other residue.
 - H. Apply Low VOC EDPM Primer to splice area and permit to flash off.
 - I. When adhering Factory Applied Tape (FAT), pull the poly backing from FAT beneath the top sheet and allow the top sheet to fall freely onto the exposed primed surface. Press top sheet on to the bottom sheet using firm even hand pressure across the splice towards the splice edge.
 - J. For end laps, apply 6" SecurTape to the primed membrane surface in accordance with the manufacturer's specification. Remove the poly backing and roll the top sheet onto the mating surface.

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K. Tape splices must be a minimum of 5 1/2" wide using 6" wide SecurTAPE extending 1/8" minimum and 1/2" maximum beyond the splice edge. Field splices at roof drains must be located outside the drain sump.

- M. Immediately roll the splice using positive pressure when using 2" wide steel roller. Roll across the splice edge enhancements are the required. Refer to Carlisle's Stand-Up Seam Roller can be used to roll parallel to the splice edge.
- N. At all field splice intersections, apply Lap Sealant along the edge of the membrane splice to cover the exposed SecurTAPE 2" in each the splice to the intersection. Install Carlisle's Pressuredirection from Sensitive "T" Joint Covers or a 6" wide section (with rounded corners) of Sensitive Flashing over the field splice intersection.
 - O. Sure-Seal Pressure-Sensitive RUSS ™ (Reinforced Universal Securement Strip): a 6" or 9" wide, nominal 45-mil thick cleaned, cured black reinforced EDPM membrane with Factory -Applied Tape (FAT) laminated one edge. The 6" or 9" wide Pressure-Sensitive RUSS is used horizontally or vertically the base of walls, curbs, ect., in conjunction with 2" diameter securement bars below the EDPM deck membrane for additional membrane securement.
 - P. Secure -Black Pressure Sensitive RUSS (Reinforced Universal Securement Strip): a 6" wide, nominal 45-mil thick clean, cured black EDPM membrane with 3" wide Factory-Applied Tape Laminated along one edge. Used on Sure-Black Adhered Roofing Systems.
 - Q. Provide additional membrane securement at the perimeter of roof, at expansion joints, curbs and at any angle change which exceeds 2 inches in one horizontal foot.
 - 1.Install continuous reinforcement strips 3" to 6" from inside and outside corners where additional membrane securement is required and where recommended by roofing manufacturer. Secure reinforcement with 2-inch diameter aluminum or stainless steel seam fastening space fastening plates not greater than 12 inches on center.
 - 2. Install reinforcement strips either horizontally to into deck or vertically into curbs as recommended by manufacturer.
 - R. Extend membrane up a minimum of 8 inches onto vertical surfaces.
 - S. Install termination bars with screw fasteners and EDPM or neoprene washers, located 6 inches on center. Install roofing manufacturer's recommended sealant along top and bottom edges of termination bar.
 - T. Seal Membrane around roof penetrations.

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Sure-Seal Pressure-

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strips plates;

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- U. Provide daily night seal at loose edges to prevent water flow beneath finished roofing.
- 1. Mix sealer components as instructed by manufacturer. Apply at rate of 1 gallon/100 linear foot, 12 inch. back from sheet edges on exposed substrate.

a. Embed membrane in sealer and apply continuous pressure with 2 1/2 inch tubing filled with sand. Pull sheet free before continuing permanent installation.

3.8 INSTALLATION-ELASTOMERIC FLASHING

- A. Elastomeric Flashing. Provide elastomeric sheet flashing at elastomeric sheet roofing work, as indicated (also referred to on drawings as, "Membrane Flashing").
 - 1. Use longest practical lengths and widths of elastomeric sheet flashing material to eliminate or minimize joints. Complete splices between flashing and main-roof sheet before bonding flashing to vertical surfaces. Splices shall be sealed 3 inches beyond fasteners that membrane to horizontal nailer in same manner as splices within roofing membrane. Flashing shall be bonded 100 percent to sub-surfaces, except at coves where movement is anticipated.
 - 2. Install flexible tube at coves where movement is anticipated.
 - 3. Apply bonding adhesive to flashing and surface to which it is being bonded. When bonding adhesive has dried to the point where it does not string to stick to a dry finger touch, roll flashing into adhesive. Do not bridge flashing at changes of direction.
 - 3. Nail top of flashing 12 inches on center under sheet metal coping, counter flashing, and other steel sheet metal work.
 - 4. Expansion joints: Treat expansion joints as indicated in expansion joint manufacturer's standard details and published instructions for specific conditions.
 - 5. Coordinate work of this Section with sheet metal coping, fascias, gravel stops, and flashing work of Section 07 62 00 "Sheet Metal Flashing and Trim" and Section 07 00- "Roof Accessories".

3.9 INSTALLATION-FASCIA TRIM/ROOF EDGE

A. Coordinate with roofing installer prior to installation. Verify site conditions and manufacturer's roof edging details. Comply with roof edging manufacturer's installation instructions and recommendations.

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- B. Fasten extruded spring clip in conditions manner to vertical face of wood nailers using lag screws provided. Locate fasteners 3/4 inch below roof edge and 12 inches on center using a minimum 1 1/2 inch galvanized roofing nail. Allow 1/4" inch gap between sections of spring clip.
- C. Lay roofing membrane under the extruded spring clip allowing it to extend down the face to the drip edge. Locate and hang joint covers at all joints between corners and straight edges.
- D. Hook each fascia section over the top of the extruded spring clip and membrane. Press down the fascia until the drip edge in engage. Allowed 1/8 to 1/4 inch gap for expansion (as recommended by manufacturer)

3.10 FIELD QUALITY CONTROL

- A. Contractor shall correct all deficiencies in roof as determined by roof sample analysis and as prescribed by roof system manufacturer. Should additional samples be required, the cost will be borne by the Contractor.
- B. Prior to installation of roofing membrane, obtain an independent testing agency approved by the Architect and test six fasteners for each separate substrate area pull out resistance. Report findings to Architect and roofing manufacturer. Perform and repeat failed testing without additional cost to the Contract.

3.11 CLEANING

- A. Remove elastomeric adhesive marking from finished surfaces.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surface for cleaning advice and conform to their instructions.

3.12 PROTECTION

A. Provide special protection or avoid traffic on completed work. Restore to original condition, or replace, work and roofing materials damaged.

End of Section

07 53 23 Ethylene Propylene Diene Monomer (EDPM) ROOFING