



**Madison Water Utility
Vehicle Storage Building
Improvements
Addendum 1**



Project name: Vehicle Storage Building Improvements
At 115 S. Paterson St

Client: Madison Water Utility

Project location: Madison, Wisconsin

Mead & Hunt, Inc. Contact: Stacey Z. Keller

Mead & Hunt Project Number: 3235300-131021.02

Mead & Hunt, Inc. phone: 608-443-0590

City of Madison Contract Number: 7823

City of Madison Project Number: 10442

City of Madison Munis Number: 10442-86-140:53310

Date: 11/11/16

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

FOR DISTRIBUTION TO THE PLAN-HOLDERS FOR INFORMATIONAL PURPOSES:

1. Agenda and Sign-in Sheet from the November 2, 2016 Pre Bid On Site Walk Thru, attached to this addendum.

CHANGES TO THE SPECIFICATIONS MANUAL:

1. Section 060150 – Preparation for Re-Roofing:
 - A. Replace specification section in its entirety with the revised section attached to this addendum.
2. Section 084523 Fiberglass-Sandwich-Panel Assemblies:
 - A. Modify paragraph 1.5.1 changing the deflection from “L/240” to “L/60”.
 - B. Modify paragraph 2.3.C changing “....12000...” to “....1200 degrees...”.
 - C. Modify paragraph 2.5.A changing “....Skylight at...” to “....Skylights to...”.

CHANGES TO THE DRAWINGS:

Sheet A-102, Vehicle Storage Roof Plan and Details.

On the vehicle storage roof plan provide skylights in manufacturer’s standard sections such as 4 or 5 foot sections where applicable. Where manufacturer’s standards sections are used provide end sections that are equal in size and provide panel sizes close to manufacturer’s standard size.

Sheet S-002, General Notes.

Design Specifications – Roof Snow Load – Thermal Factor Ct - Replace “1.0” with 1.2

Sheet S-401, Vehicle Storage Enlarged Plans.

Keynote 04 – Insert the following as the second sentence: Design superimposed dead load of 50 psf.

Sheet F-101, Fire Protection.

The existing Skylights between column lines 2-2a and 3-3a will be redesigned and replaced with new. Adjust existing fire protect system and replace sprinkler heads as required to accommodate the new skylight design. Comply with NFPA, state and local codes for complete and proper system design. Refer to architectural drawings for skylight configuration.

GENERAL COMMENTARY AND INTERPRETATIONS:

Questions (In black) Responses (In red)

1. From reviewing the specs, it looks like the owner's consultant (SCS) is responsible for directing any environmental excavation (see page 5 of SCS document, Roles and Responsibilities).
Excavating contractor may be asked to separate Class 1 versus Class II by visual evidence of non-native fill or native clay, respectively. This may or may not be conducted under additional supervision by SCS.
2. Can we assume our compactions testing of new fill or any work on site will not require any specific environmental training or certification? Contractor is responsible for their own safety program. Third party compaction testing agency should be made aware of contaminates identified in the Materials Management Plan prepared by SCS.
3. What type of connections are to be made for the steel framed window system on the Material Storage building? Connection detail is depicts on 6/A501.

PRODUCT SUBSTITUTION REQUESTS:

1. Approved, 10 inch and 12 inch Trench Drains from ABT, Inc., 259 Murdock Road, Troutman, NC.

Respectfully submitted,

MEAD & HUNT, Inc.

Stacey Z. Keller, AIA, NCARB



**City of Madison Water Utility
Vehicle Storage Building Improvements
115 S. Paterson Street, Madison WI**

Pre-Bid Walk-Thru Agenda

Contract No: 7823 Project No: 10442

Munis No: 10442-86-140:53310

November 2, 2016



Please sign attendance roster

Note: Questions are welcome at any time during the conference

1. Introduction(s):

Al Larson	Madison Water Utility Senior Engineer
Dan Rodefeld	Madison Water Utility Operations Manager
Rich Lundeen	M&H Project Manager
Stacey Keller	M&H Project Architect

2. Project description:

Work includes associated site and utility work to include 25,000 SF of new concrete pavement of the existing gravel storage lot, landscaping, rainwater harvesting system to serve Vehicle Storage Building and security fence with vehicle and man gates. New construction of a 5,350 SF material storage building. Excavation, transportation and disposal of contaminated soil will be required to accommodate site work and material storage building. The existing Vehicle Storage Building contains some selective demolition and new construction components for a 1,700 SF Gear Room, 600 SF separated storage bays, standby generator, trench drain replacements, skylight framing system replacement with louvered penthouse construction. Work includes phasing to allow for continuous Owner occupancy in business and access to Vehicle Storage Building to the extent possible.

3. Requirements of contractor pre-qualification: available on www.cityofmadison.com/business/pw/forms.cfm

4. Proposal documents, specifications, and drawings can be found on BidExpress.com

5. All questions shall be submitted in writing to Stacey Keller at Mead and Hunt (stacey.keller@meadhunt.com) Responses to all questions will be provided to all registered plan holders. Addenda will be issued as needed.

6. Prevailing wage rates required and are attached to the specifications

7. Small Business Enterprise requirements: Contract goal of eleven (11.0) percent participation. November 11 Pre-Bid Meeting Scheduled.

8. Bid date and location: all bids are due no later than 1:00 pm on November 18, 2016, online at www.bidexpress.com or by hand 1600 Emil Street, Madison, WI 53713.

9. General discussion on plans and specs with questions, including latest items to be added, posting of addenda on www.bidexpress.com. No addenda have been issued to date.

10. Post bid schedule: Anticipated start date: February 1, 2017.

11. Phasing

12. Questions, Comments and Observations

13. Tour of site

Mead & Hunt

11/2/2016

Madison Water Utility – Vehicle Storage Building Improvements
115 South Paterson Street

Contractor Sign-In



Name	Company	Phone #	Email
Paul Lundgren	MEAD & HUNT		Paul.Lundgren@MEADHUNT.COM
Jane Derrath	KVA Electric	608-475-9765	Jane@kva-electric.com
GREG HINTZ	USAPP	920-428-1236	greg.hintz@USAPP.US
DAVID SUTTON	IKM	608 222 9196	dsutton@IKMmechanical.com
BRAD HAAR	Automatic fire systems	815-654-7449	BRAD@AutomaticfireSYSTEMS.COM
Edward Malosevich	Sure-Fire	920-495-4983	edwardm@surefireinc.com
Nic Sanderfoot	Miron Construction	715-598-5711	estimating@miron-construction.com
Jerry Gilbertson	monarch Excavating	608-635-4454	monarchserviceLLC@gmail
JEREMY VASKE	SULLIVAN DES. BLDG	608 257 2299	JEREMY@SULLIVANDESIGNBLDG.COM
Paul Koszarek	PSI (testing)	262-442-4279	paul.koszarek@psiusa.com
Matt Hamilton	HJ Pertzborn	256-3900	mhamilton@hjptzborn.com
JOE TRAINER	Daniel	271-4800	jtrainer@danielco.com
Brian Summers	J.F. AHERN Co.	513-3715	bsummers@stahern.com
Geoff Hoglund	J.F. Ahern Co.	209-3694	GHoglund@JFAhern.com

SECTION 070150 - PREPARATION FOR RE-ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Partial Roof tear-off.
 - 2. Roof re-cover preparation.
 - 3. Base flashing membrane sheet.
 - 4. Application of roof flashings consisting of multiple coats of fluid-applied, fabric-reinforced, polyurethane membrane.
 - 5. Installer to maintain warranty of the existing roof system.

1.3 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.4 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Ballasted BUR System: The existing roof system is a ballasted built-up roof system manufactured by Tremco Roofing Products.
- C. Partial Roof Tear-Off: Removal of existing system as required for replacing the existing skylights with new.
- D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- E. Existing to Remain: Existing items of construction that are not indicated to be removed.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Provide roof plan showing orientation and types of roof deck and orientation of membrane roofing and fastening spacings and patterns for mechanically fastened components.

1. Base flashings and terminations.
 - a. Indicate details meet requirements of NRCA and FMG required by this Section.
- C. Installer Qualifications: See "Quality Assurance" Article.
- D. Roofing Inspector Qualifications: See "Quality Assurance" Article
- E. Temporary Roofing: Include Product Data and description of temporary roofing system. If temporary roof will remain in place, submit surface preparation requirements needed to receive permanent roof, and submit a letter from roofing membrane manufacturer stating acceptance of the temporary membrane and that its inclusion will not adversely affect the roofing system's resistance to fire and wind.
- F. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.

1.6 INFORMATIONAL SUBMITTALS

- A. Inspection Reports: Daily reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: To include in maintenance manuals.
- B. Warranties: Executed copies of approved warranty forms.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: Tremco approved installer with experience in partial tear-off or existing ballasted BUR systems, repair and attachment to roof curbs such that the new work is incorporated in the existing warranty.
- B. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be one of the following:
 1. An authorized full-time technical employee of the manufacturer.
- C. Reroofing Conference: Conduct conference at Project site.
 1. Meet with Owner; Architect; Owner's insurer if applicable; testing and inspecting agency representative (if required by existing roofing material manufacturer); roofing system manufacturer's representative; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with

or affects reroofing including installers of roof accessories and roof-mounted equipment.

2. Review methods and procedures related to roofing system tear-off and replacement including, but not limited to, the following:
 - a. Reroofing preparation, including membrane roofing system manufacturer's written instructions.
 - b. Temporary protection requirements for existing roofing system that is to remain during and after installation.
 - c. Existing roof drains and roof drainage during each stage of reroofing, and roof drain plugging and plug removal requirements.
 - d. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - e. Existing deck removal procedures if required and Owner notifications.
 - f. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
 - g. Structural loading limitations of deck during reroofing.
 - h. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.
 - i. HVAC shutdown and sealing of air intakes.
 - j. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.
 - k. Governing regulations and requirements for insurance and certificates if applicable.
 - l. Existing conditions that may require notification of Owner before proceeding.

1.9 PROJECT CONDITIONS

- A. Protect building, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roofing operations.
- B. Existing Roof Protection: Protect existing membrane roofing system that is indicated not to be reroofed.
 1. Loosely lay 1-inch- (25-mm-) minimum thick, molded expanded polystyrene (MEPS) insulation over the roofing membrane in areas indicated. Loosely lay 15/32-inch (12-mm) plywood or OSB panels over MEPS. Extend MEPS past edges of plywood or OSB panels a minimum of 1 inch (25 mm).
 2. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
 3. Maintain temporary protection and leave in place until replacement roofing has been completed. Remove temporary protection on completion of reroofing.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- D. Weather Limitations: Proceed with roofing work only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.

1. Store all materials prior to application at temperatures between 60 and 90 deg. F.
 2. Apply coatings within range of ambient and substrate temperatures recommended by manufacturer. Do not apply materials when air temperature is below 50 or above 110 deg. F.
 3. Do not apply roofing in snow, rain, fog, or mist.
- E. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.
- F. Owner will occupy portions of building immediately below roofing area. Conduct roofing so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.

1.10 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, approval or listing agency markings, and directions for storing and mixing with other components.
- B. Handle and store roofing materials, and place equipment in a manner to avoid significant or permanent damage to deck or structural supporting members.
- C. Protect materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting.

1.11 WARRANTY

- A. Special Warranty: Written warranty in which Manufacturer agrees to repair roof installations that fail in materials or workmanship within specified warranty period.
1. Failures include, but are not limited to, the following:
 - a. Membrane failures including rupturing, cracking, or puncturing.
 - b. Deterioration of membranes, coatings, metals, metal finishes, and other associated materials beyond normal weathering.
 2. Limit of Warranty Coverage: Not to exceed original purchase price of manufacturer's materials, except that manufacturer may elect to apply the limit amount toward the following:
 - a. Purchase of replacement application within the first 5 years following completion of roofing work.
 - b. Qualified Installer Requirement: Installer must meet requirements of Quality Assurance Article.
 - c. Installation Inspection Requirement: By Roofing Inspector in accordance with requirements of Part 3 Field Quality Control Article.
 - d. Warranty Period: Maintain Existing Tremco Roofing Warranty.

- B. Installer's Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering the Work of this Section and related Sections indicated above, including all components of built-up roofing such as built-up roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
1. Warranty Period: Five years from date of Substantial Completion.
- C. Extended Roof System Warranty: Warranties specified in this Section include the following components and systems specified in other sections supplied by or approved by the roofing system Manufacturer, and installed by the roofing system Installer:
1. Sheet metal flashing and trim, including roof penetration flashings.
 2. Manufactured copings, roof edge, counterflashings, and reglets.
 3. Roof curbs, hatches, and penetration flashings.
 4. Roof and parapet expansion joint assemblies.
 5. Metal roof, wall, and soffit panels and trim.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: The scope of Work for roofing includes removal of roofing membrane, flashing, and accessories at the perimeter of the skylights and installation of new materials to provide a weathertight roof system. The Work shall maintain the warranty for the roof system installed in 2013. To maintain the existing warranty the manufacturer shall be sole-sourced to same manufacturer of the products provided for the 2013 roofing installation.
- B. Sole-sourced Manufacturer: Tremco, Inc., Beachwood, OH
1. Tremco representative contact information:
 - a. Ryan Crombie
 - b. M: (815) 378-9695
 - c. E: rcrombie@tremcoinc.com

2.2 PERFORMANCE REQUIREMENTS

- A. General: Provide 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.
1. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

- C. Flashings: Comply with requirements of Division 07 Sections “Sheet Metal Flashing and Trim” and “Manufactured Roof Specialties.” Provide base flashings, perimeter flashings, detail flashings and component materials that comply with requirements and recommendations of the following:
1. FMG 1-49 Loss Prevention Data Sheet for Perimeter Flashings.
 2. FMG 1-29 Loss Prevention Data Sheet for Above Deck Roof Components.
 3. NRCA Roofing Manual (Sixth Edition) for construction details and recommendations.
 4. SMACNA Architectural Sheet Metal Manual (Seventh Edition) for construction details.
- D. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.

2.3 MATERIALS

- A. General: Roofing materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.
- B. Temporary Roofing Materials: Selection of materials and design of temporary roofing is responsibility of Contractor.
- C. General: Provide adhesive and sealant materials recommended by roofing manufacturer for intended use and compatible with built-up roofing.
1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.

2.4 BASE FLASHING SHEET MATERIALS

- A. Base Sheet: ASTM D 4601, Type II, nonperforated, asphalt-impregnated and coated glass-fiber sheet dusted with fine mineral surfacing on both sides.
1. Tremco Product: BURmastic Glass Ply.
- B. Elastomeric Roofing Mastic, Solvent-Free: One-part, low-odor elastomeric roof mastic specially formulated for compatibility and use with specified roofing membranes and flashings.
1. Tremco Product: POLYroof SF.

2.5 FLUID-APPLIED ROOFING MEMBRANE

- A. Polyurethane Elastomeric Fluid-Applied System: Two-coat reinforced fluid-applied roofing membrane formulated for application over prepared existing roofing substrate.

- B. Polyurethane Roof Coating Base Coat: ASTM D7311, One-part, moisture triggered, polyurethane roof base coating formulated for direct application and for use with fiber reinforcement.
 - 1. Tremco Product: AlphaGuard MT Base Coat.
- C. Polyurethane Roof Coating Top Coat: ASTM D7311, One-part, moisture triggered, polyurethane roof top coating formulated for direct application over compatible reinforced base coat.
 - 1. Tremco Product: AlphaGuard MT Top Coat.
- D. Polyester Reinforcing Fabric: 100 percent stitch-bonded mildew-resistant polyester fabric intended for reinforcement of compatible fluid-applied membranes and flashings.
 - 1. Tremco Product: Permafab.

2.6 AUXILIARY ROOFING MEMBRANE MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with existing roofing system and fluid-applied roofing system.
- B. Structural Concrete/Masonry Primer: Two-component, 100 percent solids, epoxy penetrating primer for concrete deck surfaces.
 - 1. Tremco Product: AlphaGuard C-Prime.
- C. Metal Surface Primer: Single-component, water based primer to promote adhesion of base coat to metal surfaces.
 - 1. Tremco Product: AlphaGuard M-Prime.
- D. Asphaltic Surfaces Primer: Single-component, multi-substrate primer to promote adhesion of base coat to surfaces recommended by manufacturer.
 - 1. Tremco Product: AlphaGuard Re-Prime (Geogard Primer), AlphaGuard WB Primer.
- E. Joint Sealant: Single component, high solids, moisture curing polyurethane sealant recommended by coating manufacturer.
- F. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required by roofing manufacturer for application.
- G. Mastic Sealant: Polyisobutylene, plain or modified bitumen, nonhardening, nonmigrating, nonskinning, and nondrying.
- H. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
 - 1. Verify that roof openings and penetrations are in place and curbs are set and braced.
- B. Proceed with installation once unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing manufacturer's written instructions. Remove sharp projections.
 - 1. Comply with warranty requirements of existing roof membrane manufacturer.
 - 2. Mask surfaces to be protected. Seal joints subject to infiltration by coating materials.
 - 3. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
 - 4. Maintain temporary protection and leave in place until new roofing has been completed.
- B. Shut down air intake equipment in the vicinity of the Work in coordination with the Owner. Cover air intake louvers before proceeding with re-coating work that could affect indoor air quality or activate smoke detectors in the ductwork.
 - 1. Verify that rooftop utilities and service piping affected by the Work have been shut off before commencing Work.
- C. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
 - 1. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

3.3 FLUID-APPLIED MEMBRANE ROOFING INSTALLATION, GENERAL

- A. Install roofing membrane according to roofing manufacturer's written instructions.
 - 1. Commence installation of roofing in presence of manufacturer's technical personnel.
- B. Coordinate installation of roofing so insulation and other components of roofing not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

1. Provide tie-offs at end of each day's work to cover exposed roofing sheets and insulation with a course of coated felt set in roofing cement with joints and edges sealed.
 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing.
 3. Remove and discard temporary seals before beginning work on adjoining roofing.
- C. Substrate-Joint Penetrations: Prevent fluid-applied materials and adhesives from penetrating substrate joints, entering building, or damaging built-up roofing components or adjacent building construction.

3.4 BASE FLASHING SHEET INSTALLATION

- A. Install base flashing sheet starting at low point of roofing. Align base sheet without stretching. Shingle side laps of base a minimum of 4 inches.
1. Embed base sheet in cold-applied flashing adhesive applied at rate required by roofing manufacturer, to form a uniform membrane without ply sheets touching.
- B. Extend base flashing over walls a minimum of 8 inches above roofing and 3 inches (150 mm) onto existing flashing.
- C. Mechanically fasten top of base flashing securely at terminations and perimeter of roofing.
1. Seal top termination of base flashing with specified sealant.
- D. Install stripping according to roofing manufacturer's written instructions where metal flanges and edgings are set on roofing.
1. Flashing Sheet Stripping: Install flashing sheet stripping in specified cold adhesive and extend onto roofing membrane.

3.5 FLUID-APPLIED FLASHING APPLICATION

- A. Fluid-Applied Flashing and Detail Base Coat Application: Complete base coat and fabric reinforcement at parapets, curbs and penetrations. Apply base coat in accordance with manufacturer's written instructions.
1. Extend coating minimum of 8 inches up vertical surfaces and 4 inches onto existing flashing surfaces.
 2. Back roll to achieve minimum wet mil coating thickness of 48 mils unless otherwise recommended by manufacturer; verify thickness of base coat as work progresses.
 3. Embed fabric reinforcement into wet base coat. Lap adjacent flashing pieces of fabric minimum 3 inches along edges and 6 inches at end laps.
 4. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
 5. Allow base coat to cure prior to application of top coat.
 6. Following curing of base coat and prior to application of top coat, sand raised or exposed edges of fabric reinforcement.

- B. Fluid-Applied Flashing and Detail Top Coat Application: Apply top coat uniformly in a complete installation to flashings.
1. Prime base coat prior to application of top coat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
 2. Apply top coat to flashings extending coating up vertical surfaces and out onto existing surfaces 4 inches. Install top coat over flashing base coat and spread coating evenly.
 3. Back roll to achieve wet mil thickness of 32 mils unless otherwise recommended by manufacturer.
 4. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

3.6 FLUID-APPLIED MEMBRANE APPLICATION

- A. Base Coat: Apply base coat to field of membrane in accordance with manufacturer's written instructions.
1. Apply base coat on prepared and primed surfaces and spread coating evenly.
 2. Back roll to achieve minimum wet mil coating thickness of 48 mils unless otherwise recommended by manufacturer; verify thickness of base coat as work progresses.
 3. Embed fabric reinforcement into wet base coat. Lap adjacent pieces of fabric minimum 3 inches along edges and 6 inches at end laps.
 4. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
 5. Allow base coat to cure prior to application of top coat.
 6. Following curing of base coat and prior to application of top coat, sand raised or exposed edges of fabric reinforcement.
- B. Top Coat: Apply top coat to field of membrane and flashings uniformly in a complete, continuous installation.
1. Prime base coat prior to application of top coat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
 2. Apply top coat extending coating up vertical surfaces and out onto horizontal surfaces. Install top coat over field base coat and spread coating evenly.
 3. Back roll to achieve wet mil thickness of 32 mils unless otherwise recommended by manufacturer.
 4. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

3.7 FIELD QUALITY CONTROL

- A. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation, and submit report to the Architect. Notify Architect or Owner 48 hours in advance of dates and times of inspections. Inspect work as follows:
1. Upon completion of re-coating but prior to re-installation of other roofing components.

- B. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.
- C. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.

3.8 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period.
- B. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 070150