

ADDENDUM #2 TO THE SPECIFICATIONS FOR

FACILITIES ROOF RESTORATION / REPLACEMENT BID

The addendum is an integral part of the RFB and must be signed and returned with the submittal. The purpose of this addendum is to incorporate the following changes and or clarifications to the RFB.

Attached are:

- Updated Bid Form and Signature sheet (Page 2-3)
- Pre Bid Meeting questions and answers (Page 4-5)
- 30 Yr. Composition Shingle minimum specifications and Scope of Work (Page 6-11)
- Metal Roof System minimum Silicone Coating specifications and Scope of Work (Page12-19)
- Last day for questions is Friday, June 9, 2017.

All other terms and conditions remain unchanged.

If you have any questions regarding this addendum, please contact me at lewing@rockwall.com or 972-772-6418.

Sincerely,

Lea Ann Ewing Purchasing Agent

Attachment

CITY OF ROCKWALL, TEXAS Facilities Roof Restoration / Replacement Bid Bid Response Form

Company Name:			
Service Center	ID #12 - 1600 Ai	irport Rd, Rockwall 75087	
T			
Restoration only	Roofing System and F	R-Panel Roofing System	
		\$	
Troduct description			
The Center ID #1	9 - 108 E. Washins	gton, Rockwall 75087	
30 Yr. Composition			
Replacement only		\$	
Product description			
		-	AllOs
		rt Rd, Rockwall 75087	
30 Yr. Composition	Shingles	Ф	
Replacement only		\$	1000
Product description			
Fire Station 3 ID	#150 – 191 E Oua	il Run Rd, Rockwall 75087	
30 Yr. Composition			
Replacement only		\$	
Product description			21 100
Fire Station 4 ID	#151 – 2915 S. Go	oliad St., Rockwall 75032	
30 Yr. Composition	Shingles		
Replacement only		\$	
Product description			
Municipal Court	<u>ID #187 – 2860 SH</u>	H 66, Rockwall 75087	
30 Yr. Composition	Shingles		
Replacement only		\$	
Product description			

below the number of calendar days for pro	FOB City of Rockwall, Rockwall, Texas 75087. State ject completion after vendor receives purchase orde ted. Calendar days ARO
Terms are Net 30 Days after acceptance by early payment.	y the City unless vendor offers a percent discount fo
The undersigned hereby certifies that specifications and has read them carefully specified within this document.	he understands all the terms, conditions, and and will furnish and deliver all materials and services
Authorized Signature	
Printed Name and Title	
Company Name	
Physical	
Mailing Address	
City, State, Zip	
Phone #	
E-mail	
Date	
	s. Fill in with ink and submit this completed document with a
Receipt is hereby acknowledged for the follow	ving addenda to the contract documents:
Addendum No. 1 dated	Received
Addendum No. 2 dated	Received
Addendum No. 3 dated	Received
Addendum No. 4 dated	Received
Addendum No. 5 dated	Received

CITY OF ROCKWALL, TEXAS Facilities Roof Restoration / Replacement Bid

General Statement

Contractor to provide all Labor, Materials, Equipment and Supervision to make roof repairs, restoration and replacement as outlined in the Specifications. Bid submittal should include the cost of replacement of all Composition Shingle Roof systems as well as restoration by applying a silicone based coating on the Service Center Metal Roof Systems.

Contractor to provide brief description of recommended products priced on the Bid Form. Use additional sheets of paper when necessary. Include manufacturer's processes, warranties, materials and supplies for each facility roof.

Contractor shall properly collect and dispose of any debris resulting from this facility roof project including construction materials, supplies and any landscaping that must be removed to properly perform this work.

CITY OF ROCKWALL, TEXAS

FACILITIES ROOF BID – PRE BID MEETING QUESTIONS AND ANSWERS

Q1 The full scope of work. What are the specifications? A1 Included in Addendum #2 and follows this question / answer section. Q2 Who is insurance company, what is deductible vs full budget range. TMLIRP, \$2,500 deductible and full budget for all buildings included in this bid is \$150,000. A2 Were any roofs cored? Q3 **A3** No What about the metal roof at the Center? Is it part of the bid? Q4 A4 No Q5 Replacement of the skylights at the Service Center. A5 Skylights are to be removed and not replaced.

Q6	panel. This building in question is building "C" Parks Dept.					
A6	Yes					
Q7	Are gutters and downspouts a part of this bid?					
Α7	No.					
Q8	Warranty expectations? Replacement, repair, restoration, time?					
A8	Coating – minimum 10 years product and materials, 10 years labor for restoration and 20 years for product replacement.					
	Shingles – minimum 30 years product and materials, 10 years labor					
Q9	Concerning the structure of the roof over Airport (Todd's) office. How they can bid when they do not know the status of the structure underneath other than "don't stand on it".					
A9	This area may require new decking. If so, we will know at the time the old roof is removed. For bidding purposes, do not include decking cost.					
Q10	Is Airport shop area a part of this bid?					
A10	No					
Q11	Due to the restructuring of the Courts building, all ventilation of the attic area was effectively stopped by the firewalls bisecting the attic. Does the roof bid cover installation of new roof vents to the areas that are no longer vented?					
A11	Yes					
Q12	Are awnings at Fire Station 3 and 4 a part of this bid?					
A12	No					
Q13	What are the work hours?					
A13	Monday thru Friday 7 am–7 pm, Saturday 8 am- 5 pm and no work on Sunday.					

CITY OF ROCKWALL, TEXAS

FACILITIES ROOF RESTORATION / REPLACEMENT

Scope of Work and Minimum Specifications

List of Facilities included in this bid:

Service Center

Standing Seam Metal Roof -Trapezoidal metal roof specifications - Restoration with coating

R-Panel roof system - Metal Roof - Restoration with coating

Replace all roof caps

Remove all skylights and do not replace. The City desires to remove these lights and make roof repairs for proper enclosure and apply coating.

The Center

30 Yr. Composition shingle - replacement

Airport Office

30 Yr. Composition shingle - replacement

Fire Station #3

30 Yr. Composition shingle - replacement

Fire Station #4

30 Yr. Composition shingle - replacement

Municipal Court

30 Yr. Composition shingle - replacement

30 Year Composition Shingle

Minimum Replacement Specifications

Scope of Work

The decking material should not be included in the cost of full replacement. Colors will be determined after the bid is awarded.

- Contractor to assure that the entire property is fully protected while roofing replacement is underway. This includes siding, walls, windows, doors, plants, bushes, etc. Use tarps and protection plywood.
- Remove existing roof down to the decking.
- 3. Contractor will examine the existing decking to determine if any replacement is necessary at this time. The City and the Contractor should agree to replacement before any new deck work is completed. Any soft, wet or rotted wood needs to be replaced to create a solid base for roof structure. Wood sheeting needs to be inspected by the Contractor to make sure that it is attached to the roof rafters the right way and if not, then the Contractor shall re-nail whole wood decking so that the roof is fully secured. For bid cost purposes, do not include cost of new decking in your bid submittal price.
- 4. **Drip Edge Installation** After wood decking is prepared, Contractor to install drip edge at all edges of the roof. Drip edge is a piece of metal bend at 90 degrees to prevent rain from getting underneath roofing material on all edges.
- 5. **Ice and Water Shield Installation** Contractor to install <u>roofing underlayment</u>. Ice and water shield sticks to the wood decking which prevents any water leaks. It must be installed at the bottom of the roof and at all roof penetrations (chimneys, pipe flanges, roof connections, etc.).
- 6. **Roofing Felt Installation** Contractor to install roofing felt. Roofing felt prevents shingles from sticking to the wood. Felt shall be a minimum heavy duty commercial #30 roofing felt.
- 7. **New Roofing Material Installation** Contractor to install new roofing material (shingles) 60 mil minimum. Working from the bottom up, followed by step and/or counter flashing, ridge vents, and ridge capping installation, as needed. Minimum 30 year warranty.
- 8. **Final Inspection** Bid should include a final inspection by the Contractor and a City Representative of each new roof (post-roofing inspection).

2015 IBC Code Requirements:

1507.1 Scope.

Roof coverings shall be applied in accordance with the applicable provisions of this section and the manufacturer's installation instructions.

1507.2 Asphalt shingles.

The installation of asphalt shingles shall comply with the provisions of this section.

1507.2.1 Deck requirements.

Asphalt shingles shall be fastened to solidly sheathed decks.

1507.2.2 Slope.

Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (17-percent slope) or greater. For roof slopes from two units vertical in 12 units horizontal (17-percent slope) up to four units vertical in 12 units horizontal (33-percent slope), double underlayment application is required in accordance with Section 1507.2.8.

1507.2.3 Underlayment.

Unless otherwise noted, required underlayment shall conform to ASTM D 226, Type I, ASTM D 4869, Type I, or ASTM D 6757.

1507.2.4 Self-adhering polymer modified bitumen sheet.

Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970.

1507.2.5 Asphalt shingles.

Asphalt shingles shall comply with ASTM D 225 or ASTM D 3462.

1507.2.6 Fasteners.

Fasteners for asphalt shingles shall be galvanized, stainless steel, aluminum or copper roofing nails, minimum 12-gage [0.105 inch (2.67 mm)] shank with a minimum 3/8-inch-diameter (9.5 mm) head, of a length to penetrate through the roofing materials and a minimum of 3/4 inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than 3/4 inch (19.1 mm) thick, the nails shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.

1507.2.7 Attachment.

Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 21 units vertical in 12 units horizontal (21:12), shingles shall be installed as required by the manufacturer.

1507.2.8 Underlayment application.

For roof slopes from two units vertical in 12 units horizontal (17-percent slope) and up to four units vertical in 12 units horizontal (33-percent slope), underlayment shall be two layers applied in the following manner. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm) and fasten sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater, underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

1507.2.8.1 High wind attachment.

Underlayment applied in areas subject to high winds [Vasd greater than 110 mph (49 m/s) as determined in accordance with Section 1609.3.1] shall be applied with corrosion-resistant fasteners in accordance with the manufacturer's instructions. Fasteners are to be applied along the overlap not more than 36 inches (914 mm) on center.

Underlayment installed where Vasd, in accordance with Section 1609.3.1, equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II, ASTM D 4869 Type IV, or ASTM D 6757. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6-inch (152 mm) spacing at the side laps. Underlayment shall be applied in accordance with Section 1507.2.8 except all laps shall be a minimum of 4 inches (102 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 inch (25 mm) with a thickness of at least 32-gage [0.0134 inch (0.34 mm)] sheet metal. The cap nail shank shall be a minimum of 12 gage [0.105 inch (2.67 mm)] with a length to penetrate through the roof sheathing or a minimum of 3/4 inch (19.1 mm) into the roof sheathing.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

1507.2.8.2 Ice barrier.

In areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches (610 mm) inside the exterior wall line of the building.

Exception: Detached accessory structures that contain no conditioned floor area.

1507.2.9 Flashings.

Flashing for asphalt shingles shall comply with this section. Flashing shall be applied in accordance with this section and the asphalt shingle manufacturer's printed instructions.

1507.2.9.1 Base and cap flashing.

Base and cap flashing shall be installed in accordance with the manufacturer's instructions. Base flashing shall be of either corrosion-resistant metal of minimum nominal 0.019-inch (0.483 mm) thickness or mineral-surfaced roll roofing weighing a minimum of 77 pounds per 100 square feet (3.76 kg/m2). Cap flashing shall be corrosion-resistant metal of minimum nominal 0.019-inch (0.483 mm) thickness.

1507.2.9.2 Valleys.

Valley linings shall be installed in accordance with the manufacturer's instructions before applying shingles. Valley linings of the following types shall be permitted:

- 1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table 1507.2.9.2.
- 2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing complying with ASTM D 3909 or ASTM D 6380 shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
- 3. For closed valleys (valleys covered with shingles), valley lining of one ply of smooth roll roofing complying with ASTM D 6380, and at least 36 inches (914 mm) wide or types as described in Item 1 or 2 above shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.

TABLE 1507.2.9.2

VALLEY LINING MATERIAL

MATERIAL	MININ	MINIMUM THICKNESS GAGE			WEIGHT		
Aluminum	0.024	in.		_			
Cold-rolled copper		0.0216 in.		_	ASTM B 370, 16 oz. per square ft.		
Copper —	_	16 oz					
Galvanized steel		0.0179 in.		26 (zinc-coated G90) —			
High-yield copper		0.0162 in.		_	ASTM B 370, 12 oz. per square ft.		
Lead —	-	2.5 po	unds				
Lead-coated copper		0.0216	in.	_	ASTM B 101, 16 oz. per square ft.		
Lead-coated high-yield copper 0.0162 in. ASTM B 101, 12 oz. per square ft.							
Painted terne	20 pounds			nds			
Stainless steel	_	28	_				

Zinc alloy 0.027 in. — —

For SI: 1 inch = 25.4 mm, 1 pound = 0.454 kg, 1 ounce = 28.35 g, 1 square foot = 0.0929 m2.

1507.2.9.3 Drip edge.

A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of the drip edge shall be lapped a minimum of 2 inches (51 mm). The vertical leg of drip edges shall be a minimum of 11/2 inches (38 mm) in width and shall extend a minimum of 1/4 inch (6.4 mm) below sheathing. The drip edge shall extend back on the roof a minimum of 2 inches (51 mm). Underlayment shall be installed over drip edges along eaves. Drip edges shall be installed over underlayment along rake edges. Drip edges shall be mechanically fastened a maximum of 12 inches (305 mm) on center.

<u>Metal Roof System – Minimum Silicone Coating Specifications</u> <u>Scope of Work</u>

Colors will be determined after the bid is awarded.

- 1. Contractor to assure that the entire property is fully protected while roofing replacement is underway. This includes siding, walls, windows, plants, bushes, etc. Use tarps and protection plywood.
- 2. Power wash and mechanically abraid all silicone products from existing roof surface to receive new materials.
- 3. Stitch all panel gas greater than 1/8 th inch with new fasteners.
- 4. Apply rust inhibitive primer to all surface rust areas.
- 5. Replace missing metal flashing details, ridge cap, rake etc. with new sheet metal flashing. Examine all screws and washers to make sure they are in good condition as per coating manufacturer's instructions. Washers that have deteriorated should be replaced before coating is applied. Any missing screws and washers should be replaced before coating is applied.
- 6. Replace missing deteriorated foam closures at ridge cap and panel end flashing.
- 7. 3 course all vertical and horizontal seams with Coating material.
- 8. 3 course any expansion joints, ridge caps, perimeter rake metal flashings, curb flashings penetrations with Coating material.
- 8. Cut metal roof panels flush with gutters and 3 course the panel ends into the gutter with Coating material to ensure that if the gutter over flows that no back flow can enter the building and the wall at this condition.
- 9. Apply Coating material at manufacturer's instructions (gallons per square) covering the total panel stretch out at recommended manufacturer's gallons per square.
- 10. **Final Inspection** Bid should include a final inspection by the Contractor and a City Representative of each roof (post-roofing inspection).
- 12. Minimum 20 year labor and material warranty.

Minimum Specifications for SILICONE ROOF COATING RESTORATION SYSTEM OVER METAL ROOF PANEL

Part 1. General Conditions

1.01 Description

A. Scope of Work

Provide all materials, labor and equipment required for the installation of the Coating System over the existing metal roof including all ancillary products.

B. Related Work

- 1. Perform Moisture Survey
- 2. Replace Wet Insulation
- 3. Repair All Sheet Metal Defects
- 4. Repair All Flashing Defects
- 5. Surface Preparation
- 6. Perform Adhesion Tests
- 7. Install Silicone Coating system Membrane
- 8. Walkway Systems

1.02 Performance Requirements

- A. Conform to applicable code for fire resistance ratings of roof system.
- B. Underwriters Laboratories, Inc. UL 790: Class A Fire Hazard Classification.
- C. Factory Mutual (FM) FM Standard 4470 approval
- D. All silicone products must be domestically produced. Products produced outside of the US will not be accepted.
- E. Coating manufacturer must produce its own product. Private labeled silicone coating products will not be accepted.

1.03 Submittals

- A. Product Data: Product data on silicone coating, physical and chemical properties, preparation of substrate required, product limitations, and cautionary requirements.
- B. Safety Data Sheets (SDS)
- C. Shop Drawings: Roof plan and details showing extent of roofing, intersections with adjacent surfaces, and details of expansion joints, counterflashing, and other items for a complete roofing system.

D. Manufacturer's Installation Instructions: Indicate installation requirements and procedures.

E. Certificates:

- 1. Product certificates signed by the manufacturer certifying material is in compliance with the specified performance characteristics and criteria, and physical requirements.
- F. Sample copy of PM warranty
- G. Maintenance Data: Contractor to provide the City with RCR System maintenance manuals.
- H. Final Inspection Report: Copy of roofing system manufacturer's inspection report of completed roofing installation.

1.04 Quality Assurance

A. Manufacturer:

- 1. Company specializing in the manufacturing of the system specified in this Section.
- 2. A minimum of 10,000,000 square feet of a similar system installed.

B. Installer:

- 1. Installer must be a Certified Licensed Applicator (CLA) by the Manufacturer providing the warranty, and is capable of receiving the specified warranty.
- 2. CLA to ensure all personnel are properly trained and have a full understanding of all OSHA safety requirements.
- C. Manufacturer Field Representative: Provide a qualified representative of the Manufacturer providing the warranty to monitor and periodically inspect the installation.

1.05 Delivery, Storage, and Handling

- A. Deliver and store liquid materials and other products in their original unopened containers or packaging until ready for installation.
- B. Materials shall be clearly labeled with the manufacturer's name, product identification, safety information, and lot numbers.
- C. Store materials indoors whenever possible.
- D. Protect stored products from freezing.
- E. Comply with the manufacturer's instructions for handling and safety procedures.
- F. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.06 Environmental Requirements

- A. Maintain logs of environmental conditions (temperature, humidity, and wind speed) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside of manufacturer's limits.
- B. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.
- C. Do not install silicone coating under the following conditions:
 - 1. When ambient temperature is below 35° F.
 - 2. At temperatures less than 5° F above dew point.

1.07 Warranty

A. Provide Manufacturer's 20 year labor & material warranty covering leaks due to silicone material failure.

Part 2. Products

2.01 Acceptable Products

- A. Insulation Board
 - 1. Match existing material
- B. Butyl Fleece Tape
 - 1. Progressive Materials: FT 500 Butyl Fleece Tape
- C. Cleaners and Primers
 - 1. Progressive Materials:
 - a. P100 General Purpose Primer
 - b. P130 Rust Inhibitor Primer
- D. Silicone Caulk Sealant
 - 1. Progressive Materials: SS 300 Series Silicone Sealant
- E. Flashing Grade Sealant
 - 1. Progressive Materials: FGS 400 Silicone Flashing Grade Sealant
- F. Reinforcing Fabric
 - 1. Progressive Materials: PF 200 Polyester Fabric

- a. PF 206 6"
- b. PF 212 12"

G. Walkway System

- 1. Progressive Materials: Pro-Grip Walkway System
 - a. PG 700 Pro-Grip Yellow Walkway Coating
 - b. PG 750 Pro-Grip Yellow Walkway granules

H. Skylight Sealer

1. Progressive Materials: HS 3220 Clear Silicone Skylight Coating

I. Silicone Coating

1. Progressive Materials: Pro-EcoSil HS 3200 Series

2.02 Silicone Coating Materials

A. Silicone base and top coat to be Pro-EcoSil HS 3200 Series Silicone Coating by Progressive Materials, LLC and complying with the following minimum properties:

- 1. Tensile Strength: ASTM D412, 247.
- 2. Elongation: ASTM D412, 237 percent minimum at break at 75 degrees F.
- 3. Water Vapor Permeance: ASTM D-96, 10.7 at 20 mils.
- 4. Fire resistance: ASTM E108, UL 790 Class A.
- 5. Color: Owner to select standard topcoat color.
- 6. Solids Content: 92% ±3%
- 7. VOC Content: < 50 grams/liter
- 8. Initial Solar Reflectivity: .89
- 9. Initial Thermal Emissivity: .90
- 10. SRI Value: 113

Part 3. Execution

3.01 Examination

A. Verify roof slope prior to beginning installation. There is to be no single area of standing water on the roof 24 hours after a rain, greater than 100 sq. ft. and more than $\frac{1}{2}$ " deep.

- B. Identify all seam failures, flashings failures and inadequate sheet metal details.
- C. Inspect all roof drains to ensure proper performance.
- D. Inspect all roof system fasteners for back out.

3.02 Preparation

A. Cleaning

- 1. Thoroughly power wash roof surface and all other areas to receive new coating with 2,000 psi water pressure. Be sure not to damage existing metal panel during this process.
- 2. After the surface has dried, perform an adhesion test. If the coating does not properly adhere to the surface, apply P100 General Purpose Primer at a rate of $\frac{1}{2}$ gallon per 100 square feet.
- 3. Any areas of grease contamination are to be cleaned with an industrial strength detergent.
- 4. Any existing roofing or mastic materials must be removed as the warranty will not cover failure of underlying materials.
- 5. All loose coating or paint material must be removed by wire brush, power washing or scraping.

B. Rust Contamination

- 1. Any rust areas should be cleaned with a wire brush to remove scaling.
- 2. Apply P130 Rust Inhibitor Primer at a rate of ½ gallon per square.

C. Flashing Details

1. Ensure all existing flashings provide a watertight condition. If necessary, re-flash any areas required with FT500 Butyl Fleece Tape. Apply 25 mils of HS 3200 Silicone Coating over Fleece Tape.

D. Sheet Metal

1. Ensure all sheet metal accessories are in good condition and will provide a watertight condition. If necessary, replace or repair any sheet metal required to provide a watertight condition.

E. Fasteners

- 1. Identify and replace all fasteners that are loose or backed out and replace with oversized fastener.
- 2. Prior to coating the field of the roof, spot apply HS 3200 to all fasteners. Generously apply coating to ensure complete encapsulation of fastener. Application may take 2 coats depending on fastener size.

F. Fiberglass Skylight Panels

1. Thoroughly clean skylight panels and apply 2 coats (30 mils) of HS 3220 Clear Skylight Coating.

G. Horizontal Laps:

- 1. Apply pressure to lower lap panel, if more than 1/8" gap appears at lap joint, install additional stitch fasteners.
- 2. Clean any residual roofing material from lap area.
- 3. Install 4" FT 500 Butyl Fleece Tape overlap joint. Ensure material is centered over the lap joint and use a roller to compress tape to eliminate any voids or fish mouths.
- 4. Apply 25 mils of HS 3200 over the FT 500 Butyl Fleece Tape after installation

H. Vertical Laps

1. Apply pressure to vertical lap joint, if more than 1/8" gap appears at lap joint, install additional fasteners and treat fastener as outlined above.

3.03 Silicone Coating Installation

- A. Ensure surface is completely dry.
- B. Ensure subsequent coats of primer or silicone coating is completely cured.
- C. Ensure adhesion tests have been completed and results are satisfactory with the manufacturer's requirements.
- D. Install silicone coating in two or three passes over entire roof surface at a rate of:
 - . 30 mils minimum for a 20 year warranty
- E. Care should be taken to ensure proper coverage of vertical rib surfaces.

F. NOTE

1. Any subsequent roof repairs after the coating installation should be done only with silicone products. Repairs should be completed with a three course coating and fabric if needed.

3.04 Walkway System

A. Install the Pro-Grip Walkway System at heavy traffic areas and at high impact areas as directed by the owner.

1. Walkway Areas

- a. Walkways should be a minimum of 30" wide.
- b. Mask off area to receive walkway system to ensure clean straight edges.
- c. Install PG 700 Pro-Grip Yellow Walkway Coating at a thickness of 25 mils.
- d. Immediately after the application of the PG 700, broadcast PG 750 Pro-Grip Walkway Granules into the coating at a rate of 40 lbs. per 100 square feet. The granules will settle

into the coating. Apply the granules generously, inspect the surface within a few minutes and reapply as needed to obtain a continuous film of granules.

- e. After the coating has completely cured, remove all loose granules with a small hand blower and a soft bristle broom.
- 2. High Impact Areas (around mechanical equipment, etc.)
 - a. Mask off area to receive walkway system to ensure clean straight edges. Area should be 30" wide around all identified equipment.
 - b. Install PG 700 Pro-Grip Yellow Walkway Coating at a thickness of 40 mils.
 - c. Immediately after the application of the PG 700, broadcast PG 750 Pro-Grip Walkway Granules into the coating at a rate of 60 lbs. per 100 square feet. The granules will settle into the coating. Apply the granules generously, inspect the surface within a few minutes and reapply as needed to obtain a continuous film of granules.
 - d. After the coating has completely cured, remove all loose granules with a small hand blower and a soft bristle broom.

3.05 Field Quality Control

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation upon completion and submit report to Owner/Architect. There shall be no items on the roof that could inhibit the inspection process, such as, solar panels, decking systems, etc.
 - 1. Notify Owner 48 hours in advance of date and time of inspection.
 - a. Repair or remove and replace components of roofing system where inspection results indicate that they do not comply with specified requirements.

3.06 Cleaning

- A. Remove overspray from adjacent surfaces using cleaning agents and procedures recommended by manufacturer of affected construction.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their instructions.
- C. Repair or replace defaced or disfigured finishes caused by work of this section.

3.07 Protection of Finished Work

- A. Ensure roof surface is free of traffic for minimum of 12 hours after silicone coating application or until coating is completely cured.
- B. Ensure any subsequent work does not cause damage to finished roof system. If necessary, install protection over finished roof area.