

***CONSTRUCTION DOCUMENTS/SPECIFICATIONS
BUILT UP REPAIR AND RECOAT
With Full Fabric***

**Building F & G
200 W Court Street
Yuma, AZ 85364**

Conducted For:



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SRC Project Number: 3870

Prepared by:

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“THE PROBLEM SOLVERS”

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**REPAIR AND RECOAT WITH FULL WEBBING
EXISTING BUILT-UP ROOF AREAS
SECTION 07750**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description.
- B. Quality Assurance.
- C. Submittals.
- D. Product Delivery, Storage, and Handling.
- E. Environmental Conditions.
- F. Field Quality Control.
- G. Warranty.

1.02 DESCRIPTION

- A. General Description of Work: Provide all labor, materials, and equipment necessary to complete the repair and recoat with full fabric of the existing built-up roof areas.

1.03 QUALITY ASSURANCE

- A. Southwest Roofing Consultants, Inc. (SRC) will provide site inspections and punch list items to assure the installation is correct and in accordance with industry standards accepted practices and qualify for a Fifteen (15) Year No Leak Warranty.
- B. Initial Roof Inspection: SRC and Contractor shall inspect roof areas prior to application of new insulation and/or coating. This inspection is to verify that all surfaces have been properly prepared.
- C. Final Inspection: Upon completion of individual units, a final inspection shall take place with SRC, Material Manufacturer Representative, and the Contractor. All punch list items will be issued in writing to the Contractor. The Contractor must correct these items within 72 hours, or as climatic conditions permit.
- D. GAF Coatings roof system shall be installed by a contractor currently certified for installation or approved equal.

1.04 SUBMITTALS

- A. Submit one copy of Manufacturer's Fifteen Year Warranty.
- B. All submittals are to be included in the Contractors bid package.
- C. After the award, a full submittal package with materials to be used will be submitted for review and approval.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver only approved materials to the job site. Deliver materials in original sealed containers with seals unbroken and labels legible and intact.
- B. Materials shall be delivered in sufficient quantities so as not to cause delays in the work.
- C. The Contractor for work under this section shall be responsible for storage and protection of all materials required. Refer to storage section of manufacturers' product data sheets for specific requirements.
- D. All waste materials and debris shall be cleaned up daily.
- E. Any damaged materials or materials not conforming to the specified requirements shall be rejected. Rejected materials shall be immediately removed from the job site and be replaced at no additional cost to the owner.

1.06 ENVIRONMENTAL CONDITIONS

- A. Polyurethane insulation shall be applied only within the environmental conditions listed on the insulation manufacturers' application instructions and technical data sheets.
- B. The protective coating must be applied in accordance with the coating manufacturers' most current application instructions and technical data sheets.

1.07 FIELD QUALITY ASSURANCE

- A. Environmental Conditions:
 - 1. The following environmental conditions, including the overall weather conditions, shall be recorded daily by the contractor for work under this section.
 - a. General weather conditions (i.e. cloudy, sunny, rainy, etc.).
 - b. Surface temperature.
 - c. Surface moisture.
 - d. Ambient temperature and relative humidity.
 - e. Wind velocity.
 - f. Sketch of roof area completed each day and lot numbers of materials used in areas completed.
 - 2. The above information shall be recorded at the time intervals as listed on the Daily Quality Control Report form. This information shall be recorded a minimum of two (2) times a day. The Contractor shall submit copies of the completed form to SRC and the Owner's Representative for record purposes.
- B. Verification of Foam Thickness and Protective Coating Film Thickness:
 - 1. Protective Coating Application: During coating application, the film thickness applied each day shall be measured by the applicator using a wet mil gauge. In addition, the Contractor shall record batch numbers of the material applied. This information shall be recorded on the Daily Quality Control Report form.

1.08 WARRANTY

- A. The Contractor shall furnish a Fifteen (15) Year Manufacturer's Warranty (GAF Emerald or equal). The Manufacturer shall provide all labor and materials to replace any delaminated roof areas from work installed during the warranty period.

PART II PRODUCTS

2.01 SECTION INCLUDES

- A. Energy Star Acrylic Roof Coating
- B. Sealant
- C. Substrate Cleaner/Primer
- D. Coatings
- E. Fabric

2.02 Energy Star Acrylic Roof Coating

- A. The acrylic roof coating shall be Energy Star listed and meet ASTM D-6083 standards, along with the physical property requirements listed herein.
- B. Typical physical properties:

Property	Method	Result
Initial Tensile Strength (psi)	ASTM D-412	550 psi
Initial Elongation (%)	ASTM D-412	500%
Tear Resistance (lbf/in)	ASTM D-624	126
Hardness	ASTM D-626	75 to 80 Shore A
Low Temperature Flexibility After Accelerated Weathering	Federal Test Method No. 141a-6221	Pass
Permeance (perms)	ASTM D-1653	2.5
Volume Solids (%)	ASTM D-2697	52

- C. Approved Manufacturers:
- 1. *GAF United Coatings systems*

2.02 Sealant

- A. Sealant shall be Butter Grade in a color to best match the topcoat color. (white)
Roof mate butter grade

2.04 Substrate Cleaner/Primer

- A. The roofs will be cleaned thoroughly. Use United's *UCC* cleaner as required.
- B. The primer shall be a product approved by the material manufacturer to make certain all warranty rights are kept intact. *United Coatings Epoxy Primer*

2.06 Coatings

- A. The color of the topcoat will be white. Base coat and intermediate coats will all be exclusive in color to make sure all mils of coating as specified are present. Contractors to only use the highest quality materials of the manufacturer. Topcoat will be **White**. *GAF Roof Mate*

2.07 Fabric

- A. The fabric that will be installed within the system will be a reinforcing fabric and will be of high quality. Such as *United Coatings Roof Mate Fabric* in 4", 6", 12", 20" and 40". To be incorporated into the system as a reinforcing fabric. Use smaller widths at repair locations for easier installation.

END OF SECTION

PART 3 – EXECUTION

3.01 SECTION INCLUDES

- A. Surface preparation.
- B. Surface Primer.
- C. Acrylic Coating/Fabric Application.
- D. Field Quality Control
- E. Safety Requirements

3.02 Surface Preparation:

- A. Preparation of existing roof:
 - 1. Remove any suspect areas where existing roofing seems unsuitable for application. Once isolated areas of roofing are removed bring it up to minimum standards for application of the new coatings system.
 - 2. Remove all dust, dirt and debris using air pressure, a hand or power broom and/or a power washer. Other contaminants such as oil and grease must be removed with the appropriate cleaning solution (UCC) and rinsed with clean water. Make sure the existing roof is sound and attached properly so as not to affect the new coating system roof application.

3. All abrasions, defects and/or indentations found will be cutout/rounded and new butter grade caulking will be utilized to seal these areas. This must be completed thoroughly throughout the roof area prior to the coatings system application.
4. Any irregularities that are found should be cut out and/or reattached to make sure the new application of coatings is proper in isolated areas.
5. Factory painted metal surfaces will not normally require an additional application of primer unless oxidized and/or otherwise not acceptable.
6. Make sure all surfaces are clean and dry prior to coating application.

B. Other Surfaces:

1. Contact consultant for recommendations of surface preparations on other surfaces to receive the acrylic coatings roof system (if needed).

3.03 Surface Primer

A. Inspection

1. Prior to application of the primer, inspect the substrates to be primed to ensure preparations have been met. Make certain roof is thoroughly cleaned.
2. Surface primer shall not be applied unless the environmental conditions of Section 1.06 are met.

B. Application

1. Apply the surface primer in strict accordance with the manufacturer's application instructions.
2. Confirm primer is cured before installing coatings.
3. Install 3/4 gallon per square of the specified primer in all areas. If less primer can be utilized and meet material manufacturers requirements that will be acceptable.

3.04 Repair and Acrylic Roof Coating/Fabric Application

A. Inspection

1. Prior to the application of the acrylic roof coating, inspect the roof surface to ensure the conditions of Section 3.03 have been met.
2. The built-up roof surface shall be free of dust, dirt, debris, and other contaminants that would impair the adhesion of the acrylic coating.
3. The built-up roof surface must be dry prior to the acrylic coating application.
4. If more than 24 hours elapse between the primer application and the start of the acrylic coating application, the coating manufacturer shall thoroughly inspect the surface for any bond breaker.
5. Make sure all environmental conditions of Section 1.06 are met prior to acrylic coating application.

B. Application

1. After surface and defects are properly repaired including resealing of ALL penetrations and repair/resealing of ductwork and properly cleaned, primer will be installed at the rates designed by the material manufacturer. Minimum ½ gallon per square if no requirement given.
2. The acrylic roof coating basecoat shall be applied in no case more than 24 hours after the installation of the primer application.
3. Apply acrylic roof coating basecoat at approximately 2 gallons per 100 square feet. Additional coating may be required depending upon the surface texture of the built up. The contractor is expected to back roll the base coat during the application process.
4. Installation of the fabric will occur while base coat remains tacky. Back roll the fabric for full adhesion into the base coat. While the coatings are still wet the Roofing Contractor will embed the fabric and make certain no fish mouths, ridges and/or other issues are present. The fabric will be fully embedded in the coating and additional coatings used at lap lines of the fabric as needed to meet proper application procedures.
5. The basecoat/webbing detail shall not be subjected to foot traffic or be disturbed until it is cured.
6. After the basecoat has been cured, inspect the coating and fabric for pinholes, cracks, thin areas, or other deviations. All deviations observed shall be caulked with Butter grade sealant and/or roller coated with additional acrylic roof coating prior to applying subsequent coats.
7. The basecoat must be cured, clean and free of all moisture prior to application of subsequent coats.
8. Apply the acrylic roof coating intermediate coat within 72 hours of the basecoat application. The intermediate coat application shall be made at right angles to the basecoat application. The intermediate coat shall be installed at 1½ gallons per 100 square feet for 12 dry mil thickness. Additional coating may be required to achieve 12 dry mils per coat depending upon the finished surface texture of the basecoat/webbing. The contractor is expected to back roll the second/intermediate coating as needed to meet warranty requirements.
9. Apply the topcoat in a uniform manner to the intermediate coat within 72 hours of the intermediate coat application. Install the topcoat at 1 ½ gallons or 12 dry mils per 100 square feet or as is required for a total protective coating system dry film thickness of a minimum of 40 mils in three applications minimum (exclusive of the fabric). Topcoat shall be a contrasting color to the intermediate coat. **Topcoat shall be white!**
10. Allow the topcoat to cure and inspect the finished coating surface for pinholes, cracks, thin areas, or other deviations. Repair any deviations observed with butter grade sealant and/or additional acrylic roof coating topcoat.

11. An inspection shall take place to confirm that the acrylic coating has been installed to meet the minimum 40 dry mil requirements exclusive of fabric installation.
12. It is the contractor's responsibility to ensure the minimum total dry film thickness specified is achieved throughout the entire roof area.

END OF SECTION

SITE OVERVIEW



SPECIFICATION PHOTOGRAPHS



1. Overview of a Building F roof.



2. There are two small, slightly lower roof areas that are included in Building F.



3. Overview of Building G roof.



4. Rotten or damaged wood sleepers will be replaced as part of the base bid.

END OF SPECIFICATIONS