

# **EVEREST BITUMINOUS ROOF REFURBISH SYSTEM**

## **Silkoxy H3 Silicone**

### **Installation Guide Specification**

#### **PART 1 GENERAL**

##### **1.01. SUMMARY**

- A. Provide labor, materials, equipment and supervision necessary to install spray-applied elastomeric Silicone coating system as outlined in this specification to restore in an aged granulated or smooth Bituminous Roof.
- B. The manufacturer's application instruction for each product utilized is to be considered part of these specifications and should be followed at all times.

##### **1.02. QUALITY ASSURANCE**

- A. Supplier Qualifications: The Everest Silkoxy Smooth Bituminous Restoration System, utilizing Silkoxy high solids silicone, as supplied by Everest Systems Co.
- B. Applicator Qualifications: The applicator shall be approved by Everest Systems Co. North America to apply the system. Manufacturer's written verification of applicator approval is required.
- C. Field Quality Control: Before commencing with installation of the Silkoxy Silicone Restoration System, an Adhesion Pull Test must be installed and pass the minimum pull value of 2.0 pli, and 85% cohesive failure. During the installation of the Silkoxy Silicone Restoration System, an authorized Everest Systems field inspector shall visit the jobsite as needed to review the installation with the Roofing Contractor. Upon completion of the Everest Silkoxy Smooth BITUMINOUS Restoration System installation, an inspection by Everest Systems Co. or ESC's designated third party inspection firm may be required. Consult with ESC for details and warranty requirements.

##### **1.03. SUBMITTALS**

- A. Product Data: Submit Everest Systems Co. product data sheets and installation instructions.
- B. Submit material safety data sheets.
- C. Submit a sample copy of the Everest Systems Warranty.
- D. Submit a copy of Roofing Contractor's Approved Applicator Certificate from Everest Systems.

##### **1.04. PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Containers and Packaging: Deliver materials in original sealed containers, clearly marked with manufacturer's logo, full product name, and lot number(s).

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- B. Storage and Handling: Store materials between 40°F and 100°F with careful handling to prevent damage to products. If conditions exceed these ranges, special consideration in storage must be taken. Do not store at high temperatures or in direct sunlight.
- C. Protection: Protect all materials from freezing and other damage during transit, handling, storage, and installation.

**1.05. PROJECT CONDITIONS**

- A. Consult the coatings manufacturer for recommendations on the proper system to use on project substrate and at expected substrate and ambient temperatures. Do not apply coatings when wind velocity is above 15 mph.
- B. Do not apply materials unless surface to receive 100% Silicone coating is clean and dry.
- C. The entire system shall be fully adhered to the surface on which it is applied. Voids left under the system caused by bridging is not acceptable
- D. Install all material in strict accordance with all published safety, weather, or applicable regulations of the manufacturer and/or federal agencies, which have jurisdiction.

**1.06. DETAIL WORK**

- A. Refer to Everest Detail Drawings for preparation and finishing of drains, vents, ducts, flashing, parapet walls, etc. The contractor should outline this work before work commences and shall be performed observing good trade practices.

**PART 2 PRODUCTS****2.01. SILKOXY SILICONE COATING SYSTEM**

- A. The coating shall be a high solids high elongation silicone coating based on alkoxy curing chemistry, supplied by Everest Systems Co. Company.
- B. Physical Properties of Cured Coating System:

PROPERTY	ASTM METHOD	RESULTS	SILKOXY H3
Tensile Strength, psi (Max @ 73°F)	D6694/ D-2370	Minimum 200	203
% Elongation @ Break (73°F)	D6694/ D-2370	Minimum 100	468%
Volume Solids %	D6694/ D-2697	> 57	90.0
Weight Solids %	D6694/ D-1644	Report Value	90.0

**2.02. ACCESSORIES AND MISCELLANEOUS MATERIALS**

- A. Flashing and waterproof coverings for expansion joints shall be compatible with the Silkoxy H3 Silicone coatings.
- B. Everest Systems Silkoxy Silicone Flashing Grade Sealant shall be used to seal fatigued flashings, such as curbs, through roof penetrations, drains, base flashings and other areas of concern.
- C. Repairs can be made to the roof surface utilizing Everstitch 272 roofing fabric and Silkoxy Silicone/Flashing Grade.
- D. Miscellaneous materials such as adhesives, elastomeric caulking compounds, vents and drains shall be a composite part of the roof system and shall be compatible with the coating materials.

**PART 3 EXECUTION****3.01. MANUFACTURER'S INSTRUCTIONS**

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins and product guide specification instructions.

**3.02. EXAMINATION**

- A. Inspect surfaces, which will receive the coating system to make sure they are clean, smooth, sound, properly prepared, and free of moisture, dirt, debris, or other contamination.
- B. Verify that all roof penetrations, mechanical equipment, cants, edge metal, and other on-roof items are in place and secure.
- C. Verify that all critical areas around the immediate vicinity of the spray area are suitably protected.
- D. Verify that all roof drains are clean and in working order.
- E. Verify that all air conditioning and air intake vents are suitably protected or closed.

**3.03. SURFACE PREPARATION****A. GENERAL.**

- a. Existing roofing materials shall be securely fastened to meet wind uplift requirements.
- b. All roofing surfaces shall be free of loose material, grease, soft asphalt, and other materials that could interfere with adhesion.

**B. GRANULATED BITUMINOUS**

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- a. All surfaces must be power-washed until all degraded and loose asphalt has been removed
- b. Loose granules must be swept or vacuumed to remove.
- c. Apply Everprime Bleed Block or Everprime Bleed Block SS if desired to the asphaltic surface at a rate of 1 gallon per 100 square feet. This should be done to prevent surface staining of the finish coat.
- d. Any blisters shall be cut and repaired with Silkoxy silicone and fabric per Detail Drawings. Any loose seams shall be repaired with Silkoxy silicone per Detail Drawings.
- e. All seams should receive coating as follows.
  - i. Apply Silkoxy silicone at a rate of 3 gallons per square in a 6-inch wide strip over all seams.
  - ii. This material should be allowed to cure for at least 4 hours before continuing
- f. All penetrations and edges should be sealed with Silkoxy Flashing Grade material.

**3.04. APPLICATION**

## A. Elastomeric Silicone Coating System:

- a. The coating system shall be sprayed, or roller applied without causing runs or puddles.
- b. The coating system shall be evenly applied to achieve **36 dry mils** for 20 yrs. This thickness requirement is in addition to any bleed block that is applied.
- c. This is a minimum recommendation for material usage are for ideal conditions. The amount of material per 100 square feet may need to increase due to uneven application, roof profile, wind conditions while spraying, or other variables.
- d. No coating shall be applied if weather will not allow it to skin over prior to exposure to precipitation.

**3.05. FIELD QUALITY REQUIREMENTS**

- A. Inspection by the coating manufacturer's representative shall be made to verify the proper installation of the system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the contractor's expense.

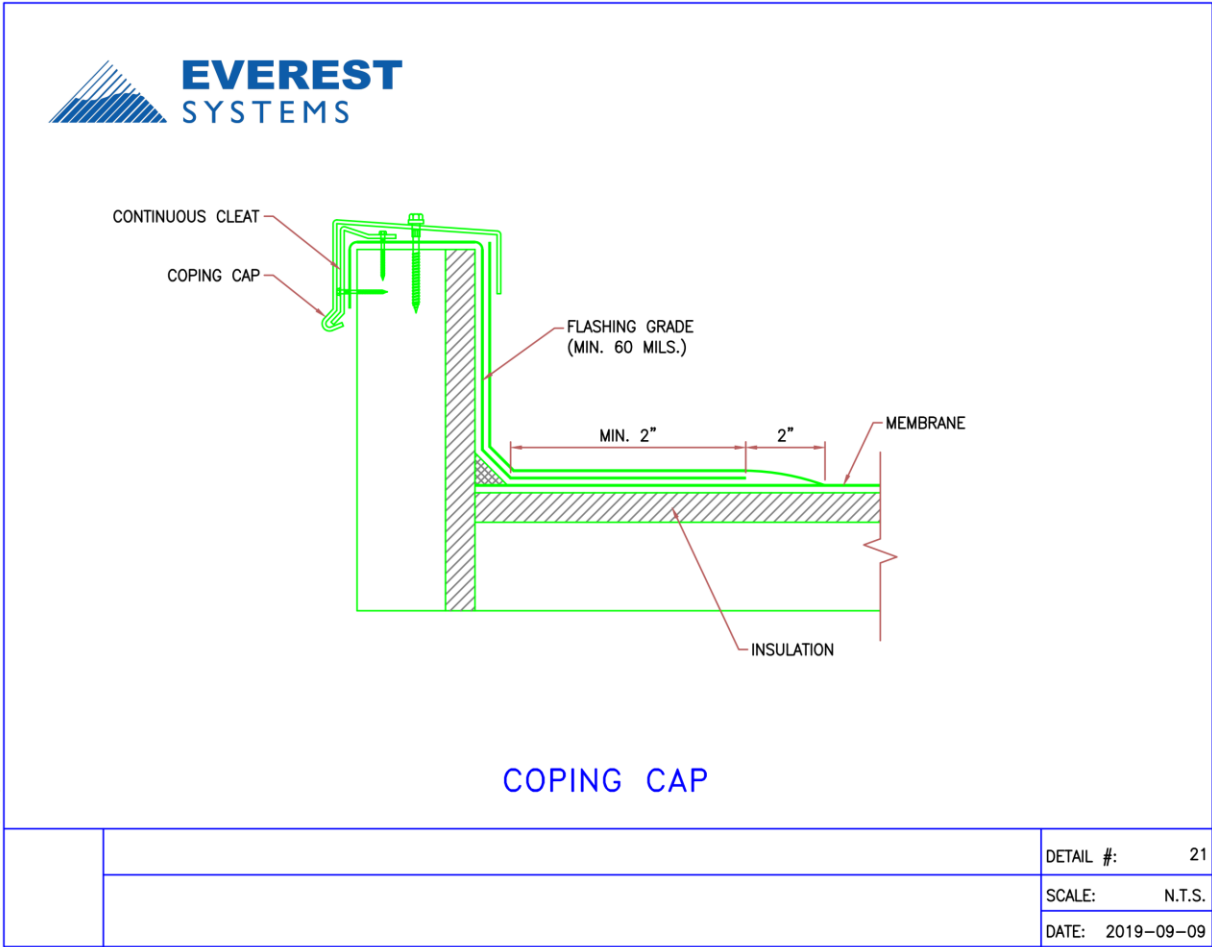
**3.06. CLEANING**

- A. Cleaning, repairing or replacing. All debris from completion of work shall be completely removed from the project site. The site shall be left in a broom-clean condition.
- B. Surfaces not intended to receive spray polyurethane foam insulation and/or elastomeric coating materials shall be protected during the application of the system. Should this protection not be effective, or not be provided, the respective surfaces shall be restored to their proper conditions.

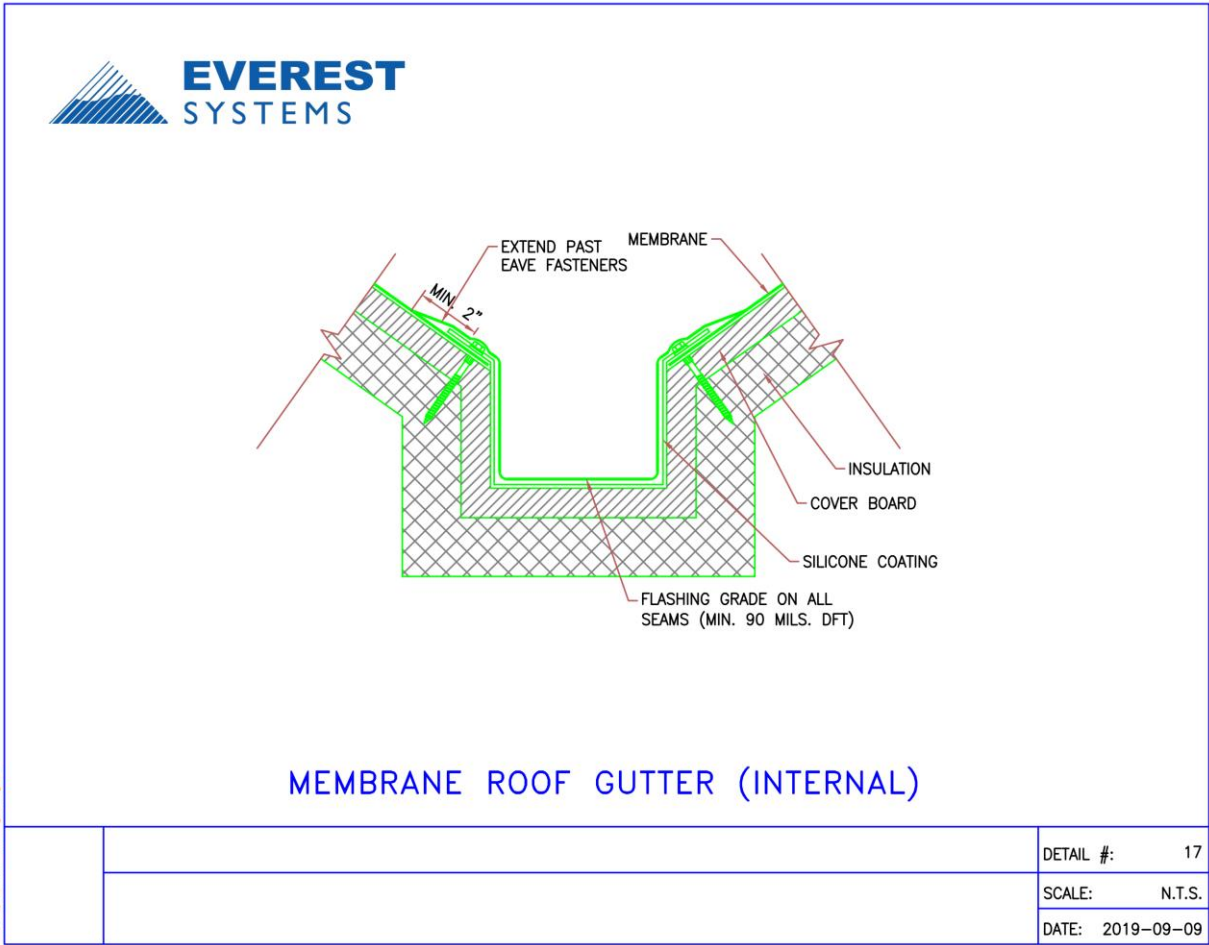
**3.07. MATERIAL**

- B. The following materials are available from Everest Systems Co. Company:
  - a. Silkoxy H3 – High Solids Silicone, high performance elastomeric roof coating
  - b. Everest Silkoxy Flashing Grade
  - c. Everstitch 272 series – Polyester Fabric
  - d. Everprime Bleed Block- Acrylic Bleed Inhibition Coating
  - e. Everprime Bleed Block SS- Premium Acrylic Bleed Inhibition Coating

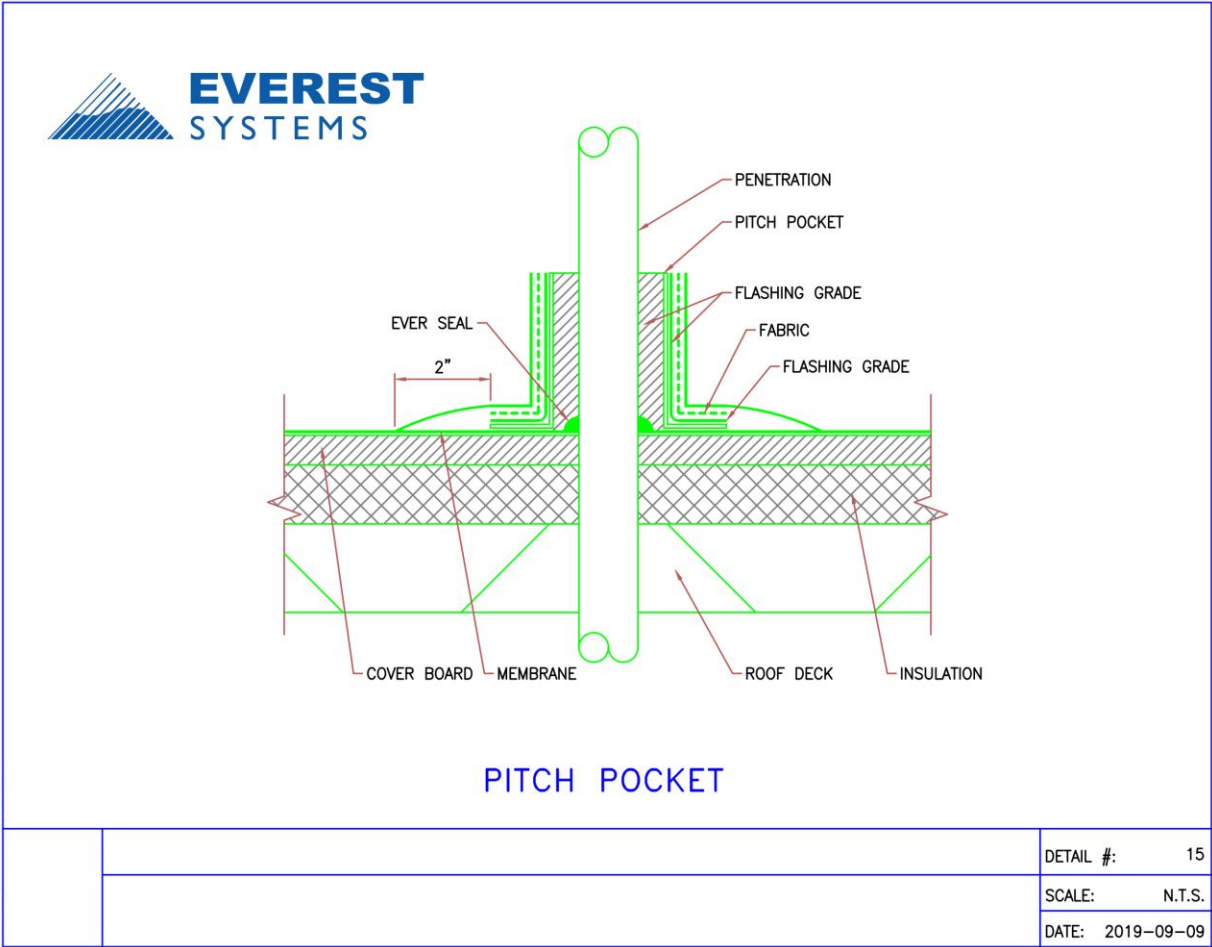
3.08. Detail Drawings



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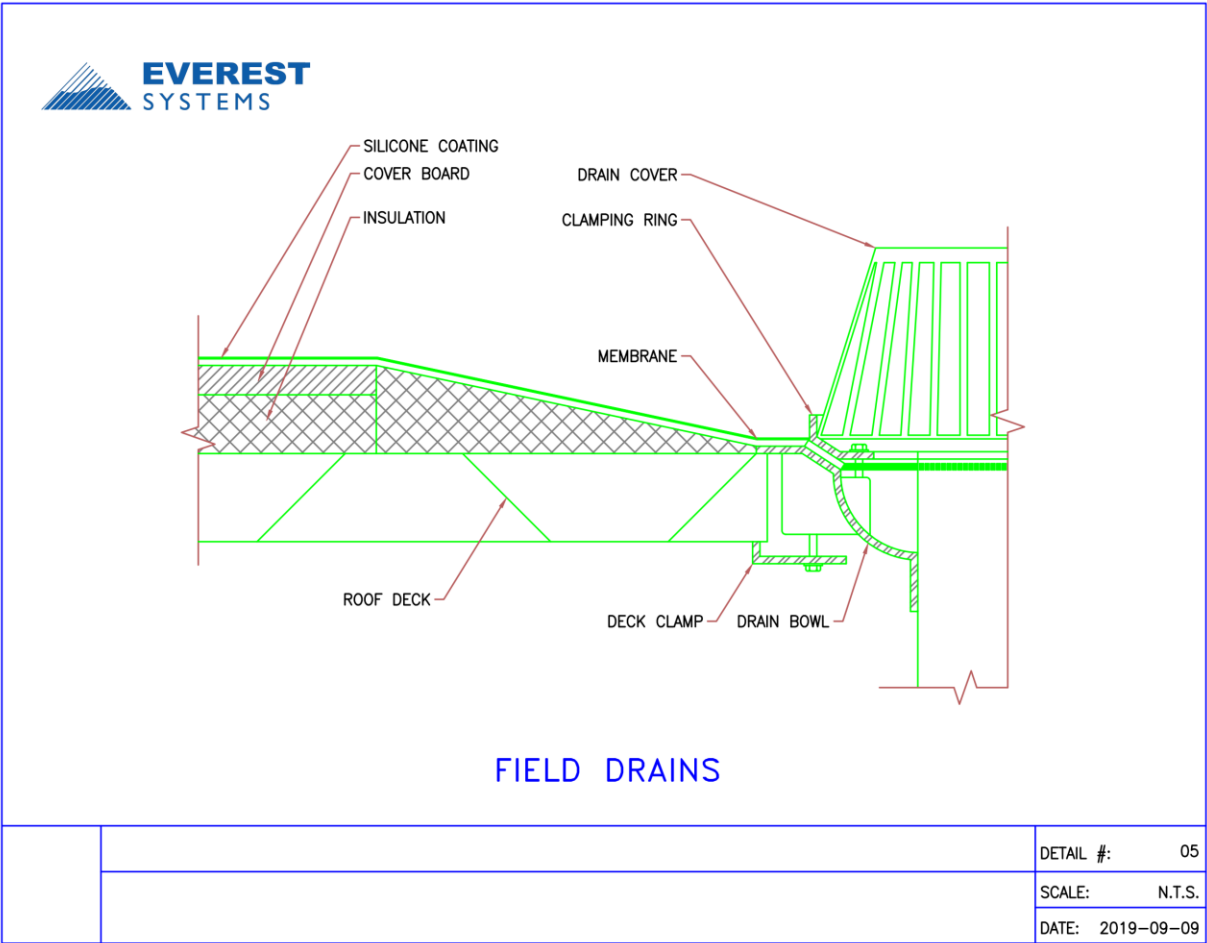


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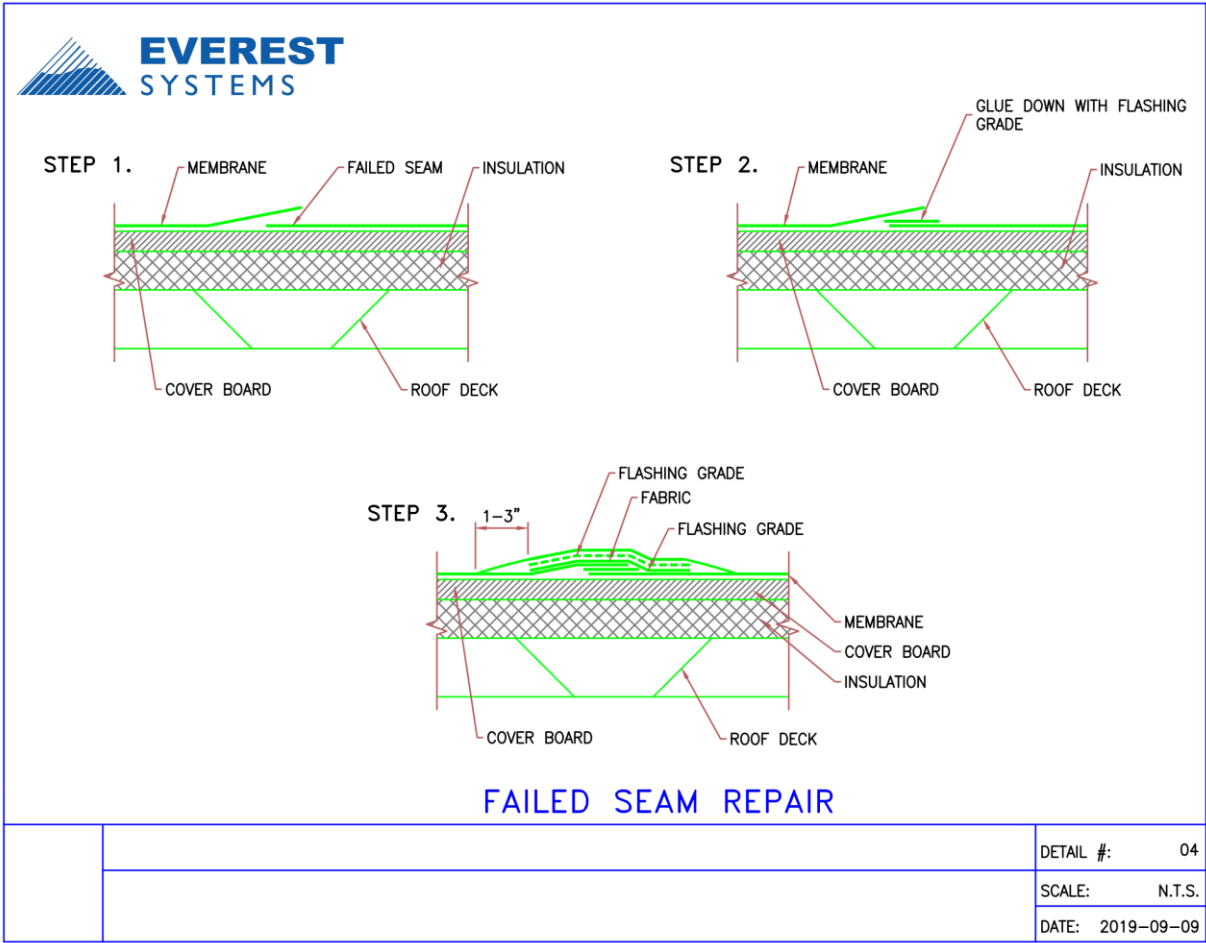




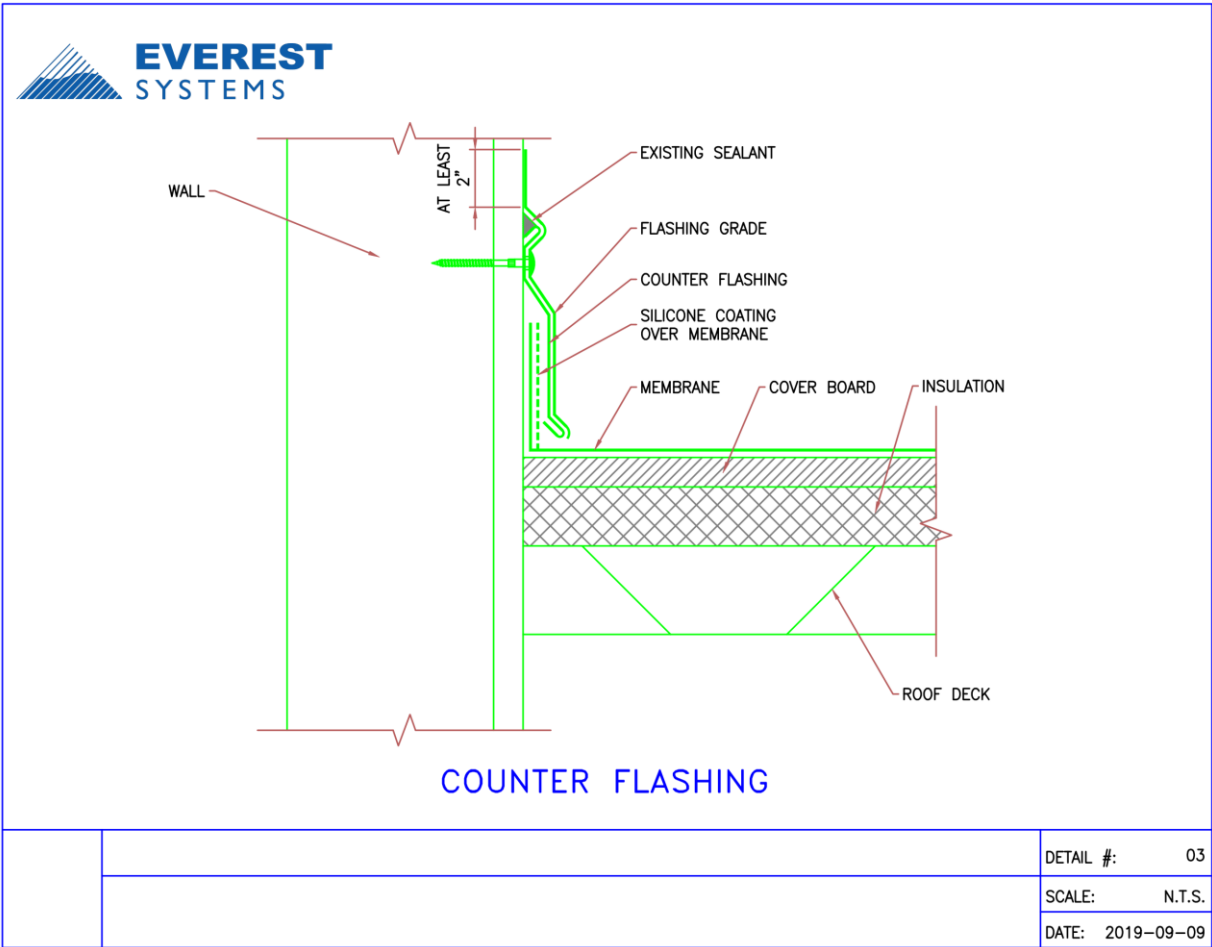
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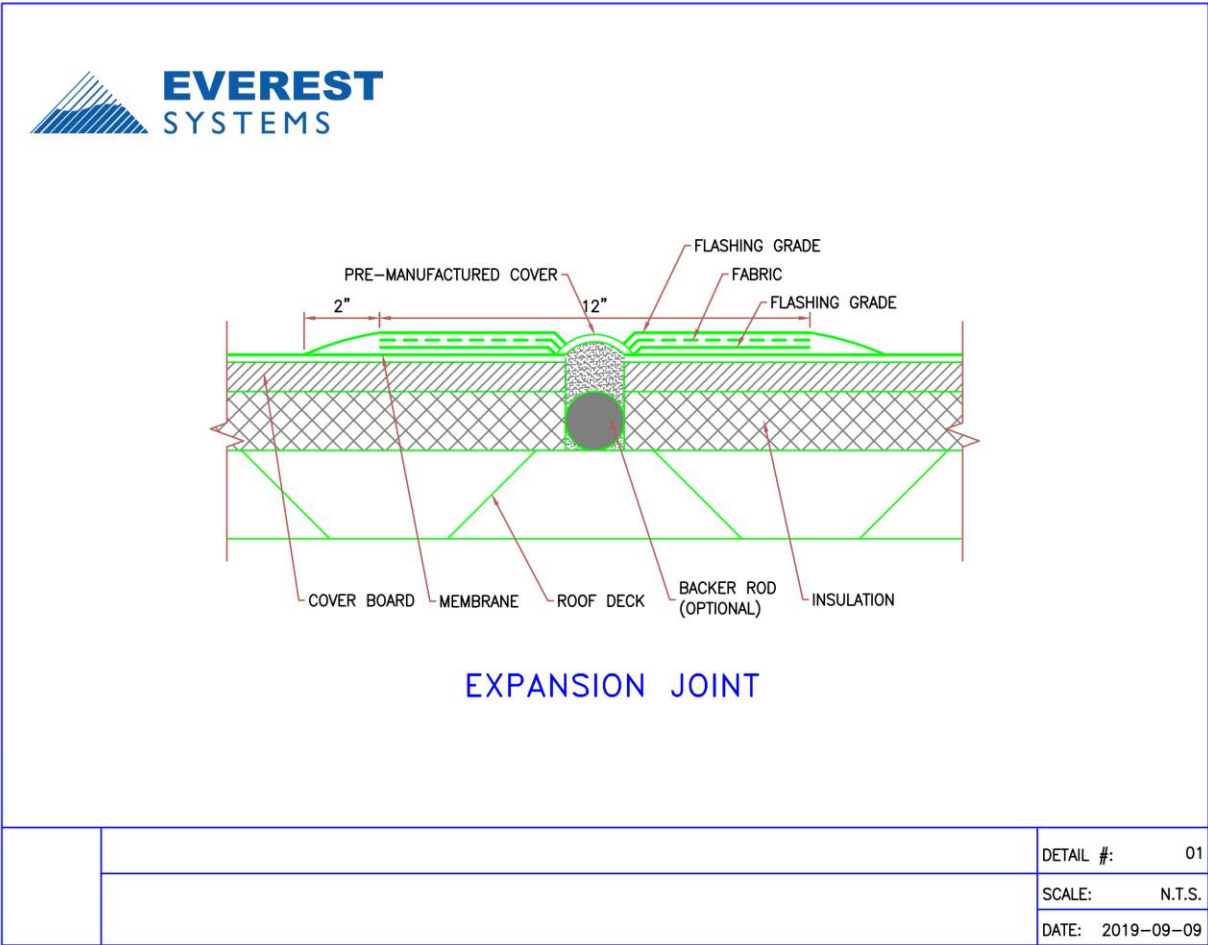
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