

Section 07560

Liquid-Applied Roofing

HydroStop® PremiumCoat® System over Non-Metal Substrate

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. This specification is intended to outline the requirements for application of the HydroStop® PremiumCoat® System, in conjunction with the appropriate product technical data sheets, over approved roof substrates in acceptable condition. Specific addenda address each surface at the end of this guide specification.

1.2 RELATED SECTIONS

- A. Section 06100: Rough Carpentry: Roof blocking installation and requirements.
- B. Section 07620: Sheet Metal Flashing and Trim: Metal flashing and counter flashing installation and requirements.
- C. Section 15430: Plumbing Specialties: Roof drains, scuppers, gutters and downspout installation and requirements.

1.3 REFERENCES

- A. Factory Mutual (FM Global) Approval Guide.
 - 1. Factory Mutual Standard 4470 Approval Standard for Class 1 Roof Covers.
- B. Underwriters Laboratories (UL) Roofing Systems and Materials Guide (TGFU R1306).
- C. ASTM International (ASTM) Annual Book of ASTM Standards.
 - 1. ASTM D 1079 Standard Terminology Relating to Roofing, Waterproofing, and Bituminous Materials.
 - 2. ASTM D 1653 Standard Test Methods for Water Vapor Transmission of Organic Coating Films
 - 3. ASTM D 4263 Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
 - 4. ASTM D 4798 / D4798M 1- Standard Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method).
 - 5. ASTM D 6083 Standard Specification for Liquid Applied Acrylic Coating Used in Roofing
 - 6. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials.
 - 7. ASTM E 108 Standard Test Methods for Fire Tests of Roof Coverings.
 - 8. ASTM G 26 Practice for Operating Light-Exposure Apparatus (Xenon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials.
 - 9. ASTM G 53 Practice for Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.
- D. Sheet Metal and Air Conditioning Contractors National Association, 1nc. (SMACNA) Architectural Sheet Metal Manual.
- E. National Roofing Contractors Association (NRCA).
- F. American Society of Civil Engineers (ASCE).
 - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures.

1.4 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.5 SYSTEM DESCRIPTIONS

- A. The HydroStop® PremiumCoat® System roofing work includes roofing, flashing and reinforcing of joints and junctions, and roof accessories integrally related to roof installation.
- B. Final determination of the fitness of the system, or its components, for any given roof may not be made by any representative of GAF/HydroStop® other than a member of GAF's Field Services Department.
- C. Provide an installed roofing membrane and base flashing system that does not permit the passage of water, and will withstand the design pressures calculated in accordance with the current revision of ASCE 7.
- D. GAF shall provide all primary roofing materials that are physically and chemically compatible when installed in accordance with manufacturers current application requirements.

1.6 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data:
 - 1. Provide product data sheets for each type of product indicated in this section.
- C. Shop Drawings:
 - 2. Provide manufacturers standard details and approved shop drawings for the system specified.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: GAF shall provide a roofing system that meets or exceeds the criteria listed in this section.
- B. Installer Minimum Qualifications:
 - 1. Installer shall be classified as a Premium Contractor as defined and certified by GAF.
 - 2. Installer shall be classified as a Master Select Contractor as defined and certified by GAF.
 - 3. Installer shall be classified as a Master Contractor as defined and certified by GAF.
- C. Source Limitations: Components listed shall be provided by a single manufacturer or approved by the primary roofing manufacturer.

1.8 PRE-INSTALLATION CONFERENCE

- A. Prior to scheduled commencement of the roofing installation and associated work, conduct a meeting at the project site with the installer, architect, owner, GAF representative and any other persons directly involved with the performance of the work. The installer shall record conference discussions to include decisions, agreements, and open issues and furnish copies of recorded discussions to each attending party. The primary purpose of the meeting is to review foreseeable methods and procedures related to roofing work.
 - 1. Tour representative areas of roofing substrates to inspect and discuss conditions of substrate, penetrations and other preparatory work to be performed.
 - 2. Review HydroStop® PremiumCoat® System requirements (HydroStop® PremiumCoat® System specifications, detail drawings and the Contract Documents).
 - 3. Review required submittals, both completed and in progress.
 - 4. Review and finalize the construction schedule related to roofing work, and verify availability of materials, installer's personnel, equipment and facilities needed to consistently make progress and avoid delays.
 - 5. Review required inspection(s), testing, and certifying, and material usage accounting procedures. Review forecasted weather conditions.

6. Establish procedures for coping with unfavorable conditions, including the possibility of temporary roofing work.

1.9 REGULATORY REQUIREMENTS

- A. Work shall be performed in a safe, professional manner, conforming to federal, state and local codes.
- B. UL Listing: Provide HydroStop® PremiumCoat® Roofing System and component materials which have been evaluated by Underwriters Laboratories for flame-spread, and are listed in the "Underwriters Laboratory Roofing Materials and Systems Directory" for Class A construction over existing metal or other non-combustible roofing (Flame-spread shall pass ASTM E-108 and/or UL 790). Provide roof covering materials bearing UL approval marking on the container. This indicates that the material has been subjected to UL's examination, test procedures and follow-up inspection service.

1.10 DELIVERY, STORAGE, & HANDLING

- A. Store and handle HydroStop® PremiumCoat® materials in a manner that will ensure there is no possibility of contamination.
- B. Store in a dry, well ventilated, weather tight location at temperatures between 50°F (10°C) and 90°F (32°C) until the products are ready to be applied (keep from freezing). Do not stack material pallets more than two (2) high.
- C. Do not subject existing roof to unnecessary loading of stockpiled materials.
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.11 PROJECT CONDITIONS

A. Weather:

- 1. Proceed with roofing only when existing and forecasted weather conditions permit.
- 2. Ambient temperatures shall be above 50°F (10°C) and rising when applying water based coatings.
- B. Proceed with roofing work only when existing and forecasted weather conditions will permit work to be performed in accordance with HydroStop® PremiumCoat® recommendations and guarantee requirements as follows:
 - 1. Do not begin work if precipitation is expected within twenty-four hours of application, or if temperatures are expected to fall below 42°F (6°C) during the duration of the job.
 - a. FlexSeal™ Sealant may be used in temperatures lower than 42°F (6°C).
 - 2. Upper temperature restriction (both air and substrate) for application of HydroStop® PremiumCoat® products is 110°F (43°C). If substrate temperatures exceed 110°F (43°C), HydroStop® PremiumCoat® products shall be applied during cooler periods of the day. If this is not practical, the substrate shall be cooled with water, and then HydroStop® PremiumCoat® products applied just after the water has flashed-off.
 - 3. No moisture may be present when applying HydroStop® PremiumCoat® products. Taking into consideration the UV curing properties of HydroStop® PremiumCoat® allow for sufficient daylight hours necessary for curing of materials.

1.12 WARRANTY

A. Liquid Applied Diamond Pledge™ NDL Roof Guarantee: Manufacturers standard form, without money limitation, in which GAF agrees to repair leaks through the United Coatings™ products on

the roof caused by manufacturing defects, natural deterioration of, or workmanship in applying, the United Coatings™ roofing system.

- 1. Warranty Duration:
 - a. Ten (10) Years Labor and Material
 - b. Fifteen (15) Years Labor and Material
 - c. Twenty (20) Years Labor and Material
- B. Liquid Applied Emerald Pledge™ Limited Warranty: Manufacturers standard form, in which United Coatings™ agrees to repair leaks through the United Coatings™ products on the roof caused by manufacturing defects or natural deterioration of the United Coatings™ roofing system.
 - 1. Warranty Duration:
 - a. Ten (10) Years Labor and Material
 - b. Fifteen (15) Years Labor and Material
 - c. Twenty (20) Years Labor and Material
- C. Limited Product Warranty: Manufacturers standard form, in which GAF agrees to replace or reimburse the owner the portion of the products that leaks in the event of a manufacturing defect.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: GAF, Commercial Roofing Products Division, which is located at: 1 Campus Drive; Parsippany, NJ 07054; Toll Free Tel: 800-ROOF-411; Tel: 973-628-3000; Fax: 973-628-3451; Email: technical questions@gaf.com; Web: www.gaf.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 COATINGS

- A. HydroStop® PremiumCoat® Finish Coat: An acrylic, permanently flexible, highly UV-resistant, chemical-resistant elastomeric compound fully reinforced with a tough stitch-bonded polyester fabric designed for roofing and flashing applications of all types.
 - 1. Application Rate: 0.75 1.50 gal per 100 ft² (3.05 6.11 L/10 m²) per coat.
 - 2. Application Method: Roof brush or 1" (25.4 mm) nap roller.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C).
 - 4. Dry time: (touch dry) 1 4 hours at 77°F (25°C), 40% relative humidity (full cure): 7 days.
- B. HydroStop® PremiumCoat® Foundation Coat: An acrylic, permanently flexible, highly UV-resistant, chemical-resistant elastomeric compound fully reinforced with a tough stitch-bonded polyester fabric designed for roofing and flashing applications of all types.
 - 1. Application Rate: 1.00 1.50 gal per 100 ft² $(4.08 6.11 \text{ L/}10 \text{ m}^2)$ per coat.
 - 2. Application Method: Roof brush.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C).
 - 4. Dry time: (touch dry) 1-4 hours at 77°F (25°C), 40% relative humidity (full cure): 7 days.

2.3 FLASHINGS, FABRIC, AND BULKING AGENTS

A. HydroStop® PremiumCoat® Butter Grade Flashing: A high volume solids for low shrinkage providing increased tensile strength and elongation on problem roof areas. It is ideally suited for

sealing mechanical fasteners and horizontal seams on metal roofs, as well as around flashings, drains and protrusions.

- 1. Application Rate: Application Rate: 2.0 gal per 200 linear feet with a 6 inch width (7.6 L per 61 linear meters with a 152 mm width); 2 coats typically required.
- 2. Application Method: Putty knife, spatula and stiff bristle brush.
- 3. Application Temperature (ambient): minimum 50°F (10°C).
- 4. Dry Time: 1-4 hours depending on application thickness
- 5. Clean-up: Water before curing.
- B. HydroStop® Hydrofiber Bulking Agent: This product is comprised of glass fibers that, when mixed with one of the above listed products, will create a thick, workable compound used to fill voids, level surfaces, and create cants. Also used for flashing details, metal roof seams, inside and outside flashing details, round stacks, pipe legs, pitch pockets, conduit pipes, expansion joints, etc.
 - 1. Application Rate: 0.50 gal per 100 ft² (2.03 L/10 m²).
 - 2. Application Method: Brush.
 - 3. Application Temperature (air, surface): 40°F (5°C) 110°F (43°C).
 - 4. Dry Time: Minimum 24 hours.
 - 5. Clean up: Water.
- C. HydroStop® PremiumCoat® Fabric: tough, non-woven, stitch-bonded, heat-set polyester designed for roofing and flashing applications of all types. Available in 300ft rolls and varying widths.
 - 1. Length: 300ft (91.5 m); Width: 4" (102 mm), 6" (152 mm), 8" (203 mm), 12" (305 mm), 16" (406 mm), 20" (508 mm), 24" (610 mm).
 - 2. Length: 336ft. (102 m), Width: 40" (1016 mm).
- D. United Coatings™ UniTape Seam Tape: A polymer-backed woven polyester reinforcing fabric designed for application to a wide range of substrates where additional strength is required over seams, splits, transitions, protrusions, etc.
 - 1. Temperature Limits for Service -30°F 180°F (-35°C 82°C).
 - 2. Bond Time: Initial bond is immediate; full bond requires approximately 24 hours.

2.4 PRIMERS AND SEALANTS

- A. HydroStop® Barrierguard® Waterproofing: Designed for waterproofing several types of surfaces such as masonry, foundation walls, concrete panels, exterior basement walls, retaining walls, and moisture-retaining structures such as cisterns and concrete shrubbery boxes.
 - 1. Application Rate: 0.50 0.83 gal per $100 \text{ ft}^2 (2.04 3.38 \text{ L}/10 \text{ m}^2)$.
 - 2. Application Method: Brush, roller or trowel.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C).
 - 4. Dry Time: 3 days at 75 °F (24 °C), 50% relative humidity.
- B. Adhere-it® II: Is specifically developed for dramatically increasing the bond to new or weathered black EPDM surfaces. It is a low viscosity, pinkish liquid that chemically alters the black EPDM surface to which it is applied, creating a "lock and key" effect with the subsequent topcoat.
 - 1. Application Rate: 0.20 gal per 100 ft² (0.81 L/10 m²).
 - 2. Application Method: pump-up sprayer.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C)
 - 4. Dry Time: 20 minutes. Should be power-washed after a minimum of 20 minutes and maximum of 2 hours.

- C. Epoxy Primer: A clear, single-component epoxy primer/sealer incorporating state of the art water-based technology to produce an extremely versatile product that penetrates and seals porous substrates. It is effective at increasing the bond of acrylic, polyurethane, butyl and epoxy topcoats to a variety of surfaces. It will also help to "solidify" chalky surfaces. It is safe to use, has very little odor, and is easy to clean up.
 - 1. Application Rate: 0.25 1.0 gal per 100 ft² (1.01- 4.07 L/10 m²) depending on substrate, surface and porosity.
 - 2. Application Method: Brush, roller or sprayer.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C).
 - 4. Dry Time: 75°F (24°C): 30 minutes
- D. Clean Act Primer is specifically developed for dramatically increasing the bond to new or weathered black EPDM surfaces. It is a low viscosity, pinkish liquid that chemically alters the black EPDM surface to which it is applied, creating a "lock and key" effect with the subsequent topcoat.
 - 1. Application Rate: 0.20 gal per 100 ft² (.81 L/ 10 m²)
 - 2. Application Method: pump-up sprayer.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C)
 - 4. Dry Time: 20 minutes. Should be power-washed after a minimum of 20 minutes and maximum of 2 hours.
- E. UniBase Primer: A low viscosity, highly penetrating, advanced acrylic polymer adhesive and primer designed to act as a bonding primer to enhance the adhesion over built-up, granulated cap sheets, modified bitumen roofing, concrete or previously coated surfaces, also acting as an excellent asphalt bleed blocker.
 - 1. Application Rate: 0.50 1.0 gal per 100 ft² (2.03 4.08 L/10 m²) per gallon on properly prepared surfaces.
 - 2. Application Method: Brush, roller or sprayer.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C)
 - 4. Dry Time: 1 2 hours at 70°F (21°C), 50% relative humidity.
- F. FlexSeal™ Sealant: White, solvent-based synthetic elastomeric compound designed to line and waterproof interior and exterior gutters typically found in metal buildings. FlexSeal™ Sealant is capable of withstanding ponding water. This product is easiest to apply at temperatures over 42°F.
 - 1. Application Rate: 2.0 gal per 200 linear feet with a 6 inch width (7.6 L per 61 linear meters with a 152 mm width); 2 coats typically required.
 - 2. Application Method: Roller or airless sprayer.
 - 3. Application Temperature (air, surface): 20°F (-6.6°C) 120°F (49°C).
 - 4. Dry Time: 75°F (24°C), 50% relative humidity: Approximately 24 hours.
- G. TPO Red Primer: A VOC-compliant solvent-based thermoplastic liquid designed to be applied over new or aged TPO where adhesion of water-based coatings is desired.
 - 1. Application Rate: 0.25 0.50 gal per 100 ft² (2.03 L/10 m²) per gallon on properly prepared surfaces.
 - 2. Application Method: Brush, roller or sprayer.
 - 3. Application Temperature (air, surface): 50°F (10°C) 110°F (43°C).
 - 4. Dry Time: 75°F (21.1°C), 50% relative humidity: Approximately 15 minutes.

2.5 EQUIPMENT

A. Airless Sprayer and Accessories: As recommended by GAF's Technical Services.

PART 3 - EXECUTION

3.1 SUBSTRATE CONDITIONS

- A. Refer to individual addenda at the end of this guide specification for preparation and application requirements for specific substrates.
 - 1. Addendum 1 Resurfacing PVC & Hypalon Substrates
 - 2. Addendum 2 Resurfacing Asphaltic Substrates
 - 3. Addendum 3 Resurfacing TPO Substrate
 - 4. Addendum 4 Resurfacing EPDM Substrate
 - 5. Addendum 5 Resurfacing Structural Concrete and Structural Transite Panel Substrates
 - 6. Addendum 6 Resurfacing Polyisocyanurate (ISO) Substrate
 - 7. Addendum 7 Resurfacing Gypsum (DensDeck & SecuRock) Substrate
 - 8. Addendum 8 Resurfacing For a Warranty Extension/Renewal

3.2 INSPECTION INFORMATION

- A. Inspect Preliminary Work / Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.
- B. Inform Project Architect and GAF's Field Services Department when all preliminary work and flashing details will be complete and the Installer is ready to proceed with application of United Coatings™ Roofing Membrane. Allow a minimum of two (2) weeks for the interim inspection to be made by the GAF's Field Services Department.
- C. Any final roofing installation prior to this interim inspection is subject to rejection by the Project Architect and/or the GAF's Field Services Department. Please be advised that Technical On-Site Support for instructing Certified Contractors in the proper application of the United Coatings™ Roofing System is available. The first day of instruction is at no-charge to the Certified Contractor. Any additional days or return trips for instruction will be at a cost of \$600.00 per day, plus all incurred travel expenses. The two (2) required inspections (interim and final) for the Liquid Applied Roofing System Guarantees are free of charge. Additional inspections will be billed at a rate of \$600.00 per day plus all incurred travel costs.

3.3 OTHER ITEMS

- A. Installer shall take photographs of representative roof areas, including detail work, before work commences, after the surface has been properly prepared, after all flashing and detail work has been performed, and after the spray application of the HydroStop® PremiumCoat® membrane.
- B. Installer shall provide the following support for on-site inspections by a representative from GAF's Field Services Department (list is not comprehensive):
 - 1. Representative from the installer's company who has authority to make binding decisions
 - 2. Required means to access all areas of the treated roof.
 - 3. Previous photographs of the roof, including test patch results, as applicable
 - 4. HydroStop® PremiumCoat® products and application equipment required to repair roof areas where destructive tests are to be performed by GAF's Field Services Department.
- C. Special care shall be taken to avoid shading when spraying dark HydroStop® PremiumCoat® Roofing Membrane colors. When applying HydroStop® PremiumCoat® Foundation Coat, Installer shall always spray wet material onto wet material to ensure that spray lines do not appear. HydroStop® strongly recommends the installation of any dark-colored finish coat by spraying two lighter coats (instead of one heavy coat) using a smaller tip size. Installer should also use the roof ribs or standing seams to terminate each spray pass.

- D. Installer shall take special care when moving spray hoses and other equipment on the roof so that flashing work and encapsulated fastener heads are not damaged. Also, all spray equipment shall remain on the ground for the duration of the job.
- E. If there will be an extended period of time (6 months or greater) between application of base and finish coats, the base coat shall be thoroughly cleaned before applying the finish coat.
- F. It is strongly recommended that walkways designed for metal roofing systems be installed in all high traffic areas. Contact the GAF's Technical Services Department for recommendations.

3.4 REPAIRS

- A. In the event that the HydroStop® PremiumCoat® membrane is damaged or punctured, repairs are to be performed using HydroStop® PremiumCoat® Finish Coat or HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric (where necessary) as follows:
 - 1. Damaged areas are to be cut, cleaned and dried.
 - 2. Apply HydroStop® PremiumCoat® Butter Grade Flashing or HydroStop® PremiumCoat® Finish Coat with HydroStop® Hydrofiber Bulking Agent, and feather out onto the existing HydroStop® PremiumCoat® membrane.
 - 3. If a new penetration area has been cut, embed HydroStop® PremiumCoat® Fabric into the HydroStop® PremiumCoat® Butter Grade Flashing or HydroStop® PremiumCoat® Finish Coat with HydroStop® Hydrofiber Bulking Agent according to standard HydroStop® PremiumCoat® specifications.
 - 4. Once the HydroStop® PremiumCoat® Butter Grade Flashing has cured, HydroStop® PremiumCoat® Finish Coat may be applied for aesthetic uniformity.

END OF SECTION

ADDENDUM 1 – Resurfacing PVC & Hypalon Substrates

3.5 PREPARATION OF SUBSTRATE

- A. Moisture Survey: A moisture survey shall be performed on the roof system to determine the suitability of the existing roof for application of the HydroStop® PremiumCoat® System. Any wet or deteriorated areas shall be removed and replaced.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- C. Treatment of damaged/deteriorated membrane: Any areas where the membrane has torn, cracked and/or buckled must be repaired using similar or compatible products manufactured by GAF. Any wet insulation must be replaced as part of the roofing repair. Allow 24 hours drying time before application of other HydroStop® PremiumCoat® products.
- D. Treatment of ponding water areas: Installer shall make every effort to mechanically eliminate all ponding water areas on the roof prior to application of HydroStop® PremiumCoat® products. Ponding water is defined as water that does not properly drain and remains on the roof for more than 48 hours after precipitations stops. Ponding water areas that cannot be eliminated shall be treated with FlexSeal™ Sealant prior to application of other HydroStop® PremiumCoat® products.
- E. Deteriorated Seams: Repair all delaminated or open seams using method acceptable to the manufacturer.

- F. Pitch Pans: Pitch Pans shall be capped with sheet metal so they may be sealed with HydroStop® PremiumCoat® products.
- G. Condensate Lines: Condensate lines shall be installed from HVAC units to gutters as part of the overall drainage system. The type of piping used for condensate lines may vary depending on local building codes.
- H. Membrane Cleaning: Roof substrate must be carefully pressure washed with water. Use an approximate working pressure of 2,000 psi (depending on condition of roof) to remove all dirt, dust, chalking, loose materials, etc. Take care not to damage the roof surface or force water into the roof system. Use hot water and mild detergent to remove grease and/or oils from the roof substrate. If mildew or algae are present, use bleach to treat these areas, then pressure wash surface.

3.6 FLASHING APPLICATION

- A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.
- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF's Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION RATES

A. Resurfacing PVC & Hypalon® Substrates 10 year System:

- 1. Conduct moisture survey and remove/replace all wet areas.
- 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
- 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
- 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 5. Treat all penetrations, drains, curbs, and scuppers.
- 6. Treat all seams.
- 7. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 8. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® System dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.
- B. Resurfacing PVC & Hypalon® Substrates 15 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Treat all penetrations, drains, curbs, and scuppers.
 - 6. Treat all seams.
 - 7. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 8. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.

- 10. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.
- C. Resurfacing PVC & Hypalon® Substrates 20 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Treat all penetrations, drains, curbs, and scuppers.
 - 6. Treat all seams.
 - 7. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 8. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 2 – Resurfacing Asphaltic Substrates

3.5 PREPERATION OF SUBSTRATE

- A. Moisture Survey: A moisture survey shall be performed on the roof system to determine the suitability of the existing roof for application of the HydroStop® PremiumCoat® System. Any wet or deteriorated areas shall be removed and replaced.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- C. Treatment of damaged/deteriorated membrane: Any areas where the membrane has torn, cracked and/or buckled must be repaired using similar or compatible products manufactured by GAF. Any wet insulation must be replaced as part of the roofing repair. Allow 24 hours drying time before application of other HydroStop® PremiumCoat® products.

- D. Treatment of ponding water areas: Installer shall make every effort to mechanically eliminate all ponding water areas on the roof prior to application of HydroStop® PremiumCoat® products. Ponding water is defined as water that does not properly drain and remains on the roof for more than 48 hours after precipitations stops. Ponding water areas that cannot be eliminated shall be treated with FlexSeal™ Sealant prior to application of other HydroStop® PremiumCoat® products.
- E. Deteriorated Seams: Repair all delaminated or open seams using method acceptable to the manufacturer.
- F. Pitch Pans: Pitch Pans shall be capped with sheet metal so they may be sealed with HydroStop® PremiumCoat® products.
- G. Condensate Lines: Condensate lines shall be installed from HVAC units to gutters as part of the overall drainage system. The type of piping used for condensate lines may vary depending on local building codes.
- H. Membrane Cleaning: If it is a new asphaltic substrate (less than 5 years) the surface may be cleaned using pressured air and dry broom. NOTE: If there is excessive dirt accumulation on new asphaltic membranes that cannot be removed by the dry cleaning method, it must be powerwashed and cleaned with UCC (United Cleaning Concentrate). For aged substrates (5 or more years) the roof substrate must be carefully pressure washed with water. Use an approximate working pressure of 2,000 psi (depending on condition of roof) to remove all dirt, dust, chalking, loose materials, etc. Take care not to damage the roof surface or force water into the roof system. Use hot water and mild detergent to remove grease and/or oils from the roof substrate. If mildew or algae are present, use bleach to treat these areas, then pressure wash surface.
- I. Application of primer: Smooth BUR and APP substrates must be primed using Unibase primer at the rate of 0.5 1.0 gal per 100 ft². Granular-surfaced SBS and APP as well as non-modified mineral-surfaced cap BUR do not require priming.

3.6 FLASHING APPLICATION

- A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.
- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric

- using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF's Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing Asphaltic Substrates 10 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. If it is a new asphaltic substrate (less than 5 years), the surface may be cleaned using pressured air and dry brooms. NOTE: If there is excessive dirt accumulation on new asphaltic membranes that cannot be removed by the dry cleaning method, it must be power-washed and cleaned with UCC (United Cleaning Concentrate). For aged substrates (5 or more years) the roof substrate must be power washed to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Smooth BUR and APP substrates must be primed using Unibase primer at the rate of 0.5-1.0 gal per 100 ft². Granular-surfaced SBS and APP as well as non-modified mineral-surfaced cap BUR do not require priming.
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.

- 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.
- B. Resurfacing Asphaltic Substrates 15 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. If it is a new asphaltic substrate (less than 5 years), the surface may be cleaned using pressured air and dry brooms. NOTE: If there is excessive dirt accumulation on new asphaltic membranes that cannot be removed by the dry cleaning method, it must be power-washed and cleaned with UCC (United Cleaning Concentrate). For aged substrates (5 or more years) the roof substrate must be power washed to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Smooth BUR and APP substrates must be primed using Unibase primer at the rate of 0.5-1.0 gal per 100 ft². Granular-surfaced SBS and APP as well as non-modified mineral-surfaced cap BUR do not require priming.
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.
- C. Resurfacing Asphaltic Substrates 20 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. If it is a new asphaltic substrate (less than 5 years), the surface may be cleaned using pressured air and dry brooms. NOTE: If there is excessive dirt accumulation on new asphaltic membranes that cannot be removed by the dry cleaning method, it must be power-washed and cleaned with UCC (United Cleaning Concentrate). For aged substrates (5 or more years) the roof substrate must be power washed to ensure it is free of dirt, debris, oil and other

- contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
- 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 5. Smooth BUR and APP substrates must be primed using Unibase primer at the rate of 0.5-1.0 gal per 100 ft². Granular-surfaced SBS and APP as well as non-modified mineral-surfaced cap BUR do not require priming.
- 6. Treat all penetrations, drains, curbs, and scuppers.
- 7. Treat all seams.
- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 12. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 3 – Resurfacing TPO Substrates

3.5 PREPERATION OF SUBSTRATE

- A. Moisture Survey: A moisture survey shall be performed on the roof system to determine the suitability of the existing roof for application of the HydroStop® PremiumCoat® System. Any wet or deteriorated areas shall be removed and replaced.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- C. Treatment of damaged/deteriorated membrane: Any areas where the membrane has torn, cracked and/or buckled must be repaired using similar or compatible products manufactured by GAF. Any wet insulation must be replaced as part of the roofing repair. Allow 24 hours drying time before application of other HydroStop® PremiumCoat® products.
- D. Treatment of ponding water areas: Installer shall make every effort to mechanically eliminate all ponding water areas on the roof prior to application of HydroStop® PremiumCoat® products. Ponding water is defined as water that does not properly drain and remains on the roof for more than 48 hours after precipitations stops. Ponding water areas that cannot be eliminated shall be treated with FlexSeal™ Sealant prior to application of other HydroStop® PremiumCoat® products.

- E. Deteriorated Seams: Repair all delaminated or open seams using method acceptable to the manufacturer.
- F. Pitch Pans: Pitch Pans shall be capped with sheet metal so they may be sealed with HydroStop® PremiumCoat® products.
- G. Condensate Lines: Condensate lines shall be installed from HVAC units to gutters as part of the overall drainage system. The type of piping used for condensate lines may vary depending on local building codes.
- H. Membrane Cleaning: Roof substrate must be carefully pressure washed with water. Use an approximate working pressure of 2,000 psi (depending on condition of roof) to remove all dirt, dust, chalking, loose materials, etc. Take care not to damage the roof surface or force water into the roof system. Use hot water and mild detergent to remove grease and/or oils from the roof substrate. If mildew or algae are present, use bleach to treat these areas, then pressure wash surface.
- I. Application of primer: Spray TPO Red Primer at the rate of 0.25 0.50 gal per 100 ft² over the entire surface to be covered.

3.6 FLASHING APPLICATION

- A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.
- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant

- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF's Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing TPO Substrates 10 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using TPO Red Primer at the rate of 0.25-0.50 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.
- B. Resurfacing TPO Substrates 15 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using TPO Red Primer at the rate of 0.25 0.50 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.

- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.
- C. Resurfacing TPO Substrates 20 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using TPO Red Primer at the rate of 0.25-0.50 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 12. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 4 – Resurfacing EPDM Substrates

3.5 PREPERATION OF SUBSTRATE

- A. Moisture Survey: A moisture survey shall be performed on the roof system to determine the suitability of the existing roof for application of the HydroStop® PremiumCoat® System. Any wet or deteriorated areas shall be removed and replaced.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- C. Treatment of damaged/deteriorated membrane: Any areas where the membrane has torn, cracked and/or buckled must be repaired using similar or compatible products manufactured by GAF. Any wet insulation must be replaced as part of the roofing repair. Allow 24 hours drying time before application of other HydroStop® PremiumCoat® products.
- D. Treatment of ponding water areas: Installer shall make every effort to mechanically eliminate all ponding water areas on the roof prior to application of HydroStop® PremiumCoat® products. Ponding water is defined as water that does not properly drain and remains on the roof for more than 48 hours after precipitations stops. Ponding water areas that cannot be eliminated shall be treated with FlexSeal™ Sealant prior to application of other HydroStop® PremiumCoat® products.
- E. Deteriorated Seams: Repair all delaminated or open seams using method acceptable to the manufacturer.
- F. Pitch Pans: Pitch Pans shall be capped with sheet metal so they may be sealed with HydroStop® PremiumCoat® products.
- G. Condensate Lines: Condensate lines shall be installed from HVAC units to gutters as part of the overall drainage system. The type of piping used for condensate lines may vary depending on local building codes.
- H. Membrane Cleaning: Roof substrate must be carefully pressure washed with water. Use an approximate working pressure of 2,000 psi (depending on condition of roof) to remove all dirt, dust, chalking, loose materials, etc. Take care not to damage the roof surface or force water into the roof system. Use hot water and mild detergent to remove grease and/or oils from the roof substrate. If mildew or algae are present, use bleach to treat these areas, then pressure wash surface.
- I. Application of primer: Spray Adhere-It II Primer or Clean Act Rinseable Primer at the rate of 0.20 gal per 100 ft² over the entire surface to be coated.

3.6 FLASHING APPLICATION

- A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.
- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat®

- Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF'S Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION RATES

- A. Resurfacing EPDM Substrates 10 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using Adhere-It II Primer or Clean Act Rinseable Primer at the rate of 0.20 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film

thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.

B. Resurfacing EPDM 15 year System:

- 1. Conduct moisture survey and remove/replace all wet areas.
- 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
- 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
- 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 5. Prime using Adhere-It II Primer or Clean Act Rinseable Primer at the rate of 0.20 gal per 100 ft².
- 6. Treat all penetrations, drains, curbs, and scuppers.
- 7. Treat all seams.
- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.

C. Resurfacing EPDM Substrates 20 year System:

- 1. Conduct moisture survey and remove/replace all wet areas.
- 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
- 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
- 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 5. Prime using Adhere-It II Primer or Clean Act Rinseable Primer at the rate of 0.20 gal per 100 ft².
- 6. Treat all penetrations, drains, curbs, and scuppers.
- 7. Treat all seams.
- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft2. Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.

- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 12. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 5 - Resurfacing Structural Concrete and Corrugated Structural Transite Panels Substrates3.5 PREPERATION OF SUBSTRATE

- A. Moisture Survey: A moisture survey shall be performed on the roof system to determine the suitability of the existing roof for application of the HydroStop® PremiumCoat® System. Any wet or deteriorated areas shall be removed and replaced.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- C. Treatment of ponding water areas: Installer shall make every effort to mechanically eliminate all ponding water areas on the roof prior to application of HydroStop® PremiumCoat® products. Ponding water is defined as water that does not properly drain and remains on the roof for more than 48 hours after precipitations stops. Ponding water areas that cannot be eliminated shall be treated with FlexSeal™ Sealant prior to application of other HydroStop® PremiumCoat® products.
- D. Deteriorated Seams: Repair all delaminated or open seams using method acceptable to the manufacturer.
- E. Pitch Pans: Pitch Pans shall be capped with sheet metal so they may be sealed with HydroStop® PremiumCoat® products.
- F. Condensate Lines: Condensate lines shall be installed from HVAC units to gutters as part of the overall drainage system. The type of piping used for condensate lines may vary depending on local building codes.
- G. Membrane Cleaning: Roof substrate must be carefully pressure washed with water. Use an approximate working pressure of 2,000 psi (depending on condition of roof) to remove all dirt, dust, chalking, loose materials, etc. Take care not to damage the roof surface or force water into the roof system. Use hot water and mild detergent to remove grease and/or oils from the roof substrate. If mildew or algae are present, use bleach to treat these areas, then pressure wash surface.
- H. Application of primer: Spray Epoxy Primer at the rate of 0.30 0.40 gal per 100 ft².

3.6 FLASHING APPLICATION

A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop®

PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.

- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF'S Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing Structural Concrete & Structural Corrugated Transite Panel Substrates 10 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using Epoxy Primer at the rate of 0.3-0.4 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.

- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.
- B. Resurfacing Structural Concrete & Structural Corrugated Transite Panel Substrates 15 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.
 - 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
 - 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 5. Prime using Epoxy Primer at the rate of 0.3-0.4 gal per 100 ft².
 - 6. Treat all penetrations, drains, curbs, and scuppers.
 - 7. Treat all seams.
 - 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 11. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.
- C. Resurfacing Structural Concrete & Structural Corrugated Transite Panel Substrates 20 year System:
 - 1. Conduct moisture survey and remove/replace all wet areas.
 - 2. Repair membrane including seams, penetrations, flashings, curbs, and terminations with like materials.

- 3. Power wash roof to ensure it is free of dirt, debris, oil and other contaminants that could negatively affect adhesion. United Cleaning Concentrate is recommended to clean the roof. Allow the roof to completely dry.
- 4. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 5. Prime using Epoxy Primer at the rate of 0.3-0.4 gal per 100 ft².
- 6. Treat all penetrations, drains, curbs, and scuppers.
- 7. Treat all seams.
- 8. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 9. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 10. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 11. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 12. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 6 – Resurfacing ISO Substrates

3.5 PREPERATION OF SUBSTRATE

- A. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- B. For a recover over an existing roof: one layer of ISO is required. Refer to local building code for further insulation requirements.
- C. For new construction or tear-off: one later of ISO and minimum ½" (6.35 mm) gypsum coverboard OR two layers of fully adhered staggered ISO. If the top layer is mechanically attached, plates must be encapsulated with HydroStop® PremiumCoat® Butter Grade Flashing.

3.6 FLASHING APPLICATION

A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.

- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF'S Technical Service Department for information
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing ISO Substrates 10 year System:
 - 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
 - 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 3. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
 - 4. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 6. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film

thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.

B. Resurfacing ISO 15 year System:

- 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
- 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 3. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 4. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.

C. Resurfacing ISO Substrates 20 year System:

- 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
- 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 3. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 4. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 7. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 7 – Resurfacing Gypsum (DensDeck & SecuRock) Substrates 3.5 PREPARATION OF SUBSTRATE

- A. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).
- B. If Gypsum board is mechanically attached, plates must be encapsulated with HydroStop® PremiumCoat® Butter Grade Flashing.

3.6 FLASHING APPLICATION

- A. Preliminary work consists of substrate preparation and all flashing details. After completion of substrate preparation, all flashing details, penetrations and curbs shall be flashed with either 6 inches (152 mm) or 12 inches (305 mm) HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing in accordance with HydroStop® PremiumCoat® Detail Drawings. HydroStop® PremiumCoat® Butter Grade Flashing shall be feathered at the edges (see current HydroStop® PremiumCoat® Detail Drawings) so that water may flow over the various flashing details.
- B. Parapet Walls: All parapet wall details within the roof system shall be secured and sealed with a 12 inches (305 mm) minimum width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. All voids and open areas shall be filled with polyurethane foam prior to application of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing.
- C. Curb Flashings: All curb flashings, including cricket details, shall be flashed with at least a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric and HydroStop® PremiumCoat® Butter Grade Flashing. Encapsulate all fasteners using HydroStop® PremiumCoat® Butter Grade Flashing. Do not bridge fasteners. HydroStop® PremiumCoat® Fabric shall be cut around all fasteners so fabric lies flat.
- D. Penetrations: HydroStop® PremiumCoat® Butter Grade Flashing shall be applied around the base of the penetration extending at least 6 inches (152 mm) onto the vertical and 6 inches (152 mm) onto the base. Embed a 12 inches (305 mm) width of HydroStop® PremiumCoat® Fabric using additional HydroStop® PremiumCoat® Butter Grade Flashing as necessary. Cut the HydroStop® PremiumCoat® fabric to accommodate the shape of the penetration. Both the top and bottom of neoprene pipe boots shall be flashed using HydroStop® PremiumCoat® Butter Grade and HydroStop® PremiumCoat® Fabric as describes above.
- E. Skylights: Curb skylights shall be treated in the same fashion as curb flashings. After flashing work has been completed and the coating has cured, treat deteriorated fiberglass skylight panels with United Coatings™ Acrysheen Sealer.
- F. Gutters: Trowel or brush apply FlexSeal™ Sealant to the interior or exterior gutter incorporating 12 inches (305 mm) HydroStop® PremiumCoat® fabric at all gutter seams. Gutter shall be completely clean and dry before applying FlexSeal™ Sealant
- G. Ponding Water Areas: The severity of the ponding water condition will determine the requirements for additional preparation. Contact the GAF'S Technical Service Department for information.
- H. Inspect Preliminary Work/Flashing Details for problem areas (e.g., gaps, cracks, fishmouths, air pockets, etc.) to ensure that work is complete and satisfactory.

3.7 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing Gypsum Substrates 10 year System:
 - 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.

- 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 3. Treat all seams.
- 4. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 7. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 40 mils in the field of the roof. All unsatisfactory areas must be repaired.

B. Resurfacing Gypsum 15 year System:

- 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
- 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 3. Treat all seams.
- 4. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 7. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 44 mils in the field of the roof. All unsatisfactory areas must be repaired.

C. Resurfacing Gypsum Substrates 20 year System:

- 1. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
- 2. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
- 3. Treat all seams.
- 4. Apply HydroStop® PremiumCoat® Foundation Coat at a rate of 1.5 gal per 100 ft² embed fabric and apply HydroStop® PremiumCoat® Foundation Coat at the rate of 1.0 gal per 100

- ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory conditions.
- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 7. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 8. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 52 mils in the field of the roof. All unsatisfactory areas must be repaired.

ADDENDUM 8 – Resurfacing For a Warranty Extension/Renewal

3.5 PREPARATION OF SUBSTRATE

- A. The existing HydroStop® PremiumCoat® Roofing System will be inspected to determine eligibility for recoat.
- B. Preparation of the roof substrate is the responsibility of the installer who shall address and correct all of the conditions listed in this section. Do not proceed with the installation of the HydroStop® PremiumCoat® System until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer (GAF).

3.6 FIELD OF ROOF APPLICATION AND RATES

- A. Resurfacing For a Warranty Extension/Renewal 10 year System:
 - 1. Roof must be inspected before work begins.
 - 2. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
 - 3. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 4. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 0.75 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
 - 5. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 13 mils in the field of the roof. All unsatisfactory areas must be repaired.
- B. Resurfacing For a Warranty Extension/Renewal 15 year System:
 - 1. Roof must be inspected before work begins.
 - 2. Ensure roof is free of dirt, debris, oil and other contaminants that can negatively affect adhesion.
 - 3. Before applying the HydroStop® PremiumCoat® System, an adhesion test is required to ensure an adhesion minimum of 2.0 PLI. Test patches to be applied with the rates listed below.
 - 4. Treat all seams.

- 5. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 6. Apply HydroStop® PremiumCoat® Finish Coat at the rate of 1.0 gal per 100 ft². Allow at least 24 hours drying time, and then inspect for defects, flaws or areas of insufficient coverage. Correct any unsatisfactory condition.
- 7. After a minimum of 24 hours has elapsed, inspect the final roof surface for flaws, areas of insufficient coverage, insufficient thickness, etc. The HydroStop® PremiumCoat® dry film thickness is approximately 17 mils in the field of the roof. All unsatisfactory areas must be repaired.

END OF SECTION