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GAF PMMA Flashing

Roofing System Overview

Instructions

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A. System Overview and Products

1. GAF PMMA Products

- a. The GAF PMMA Flashing System is a liquid-applied flashing system designed for use in conjunction with various membrane waterproofing systems. The GAF PMMA Flashing System is a layered application consisting of one coat of primer (where required depending on substrate conditions) and waterproofing layers of PMMA-based flashing reinforced with polyester fleece.
- b. The GAF PMMA Flashing System consists of GAF PMMA Flashing and Catalyst, GAF PMMA Cleaner, GAF PMMA Primer, GAF PMMA Paste, and GAF PMMA Fleece.

2. Weather Restrictions

- a. Do not apply any GAF PMMA products if there is a threat of precipitation, condensation is present on the substrate, or the ambient temperature is within 5°F of the dew point. Ambient and substrate temperatures affect the application of GAF PMMA products. Ambient and substrate temperature guidelines and restrictions vary by product and are noted in the product sections of this guide.

3. The GAF PMMA Flashing System used with Built-Up and SBS Modified Asphaltic Roofing Systems

- a. The GAF PMMA Flashing Resin System can be applied directly over standard GAF Built-Up and SBS Modified Asphaltic roof systems that are applied by torch or hot asphalt. Alternatively, the GAF PMMA Flashing System can be installed between plies of GAF Built-Up and SBS Modified Asphaltic roof systems applied by heat-weld, hot mopped, or cold adhesive. Refer to the ["application instructions"](#) for step-by-step installation procedures.

4. The PMMA Flashing System used with GAF Everguard® PVC and PVC KEE Roof Membrane Systems

- a. The PMMA Flashing System can be applied directly over standard GAF Everguard® PVC and PVC KEE roof systems. Refer to the ["application instructions"](#) for step-by-step installation procedures.

B. Personal Protection

1. Safety and Protection

- a. Refer to the Safety Data Sheet (SDS) for each GAF PMMA product for specific Personal Protective Equipment (PPE) information.

C. Storage and Disposal

1. Storage

- a. Store GAF PMMA products indoors in closed containers in a well-ventilated, cool, dry area away from direct sunlight, heat, open fire, any ignition source, oxidizing agents, strong acids, and strong alkalis. Flashing resin products may auto-polymerize at temperatures greater than 140°F (60°C). Flashing resin product shelf life is 12 months from date of manufacture in unopened containers. The shelf life of flashing products will be reduced if the products are stored at temperatures above 77°F (25°C). GAF PMMA Catalyst is heat sensitive. Proper storage is important to help ensure handling safety and product quality. To maintain product quality, the storage temperature of GAF PMMA Catalyst should not exceed 77°F (25°C). The reactivity/effectiveness of GAF PMMA Catalyst will decrease progressively when stored under high temperature conditions. Exposure to a temperature of 122°F (50°C) or higher can result in self-accelerating decomposition of GAF PMMA Catalyst. Self-accelerating decomposition is signaled by the presence of bright white smoke, and can create temperatures in excess of 500°F (260°C), depending on the environmental conditions and quantity of catalyst present. Such temperatures can be hazardous in the presence of flammable materials. Therefore, GAF PMMA Catalyst should never be subjected to conditions that can result in self-accelerating decomposition.
- b. Materials stored on the job site during application should be kept on a pallet in a shaded, well-ventilated area. In unshaded areas, materials should be covered with a white, reflective tarp in a manner that allows air circulation beneath the tarp.

2. Disposal

- a. Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations. Uncured flashing, such as that present in pails or on lids, should be catalyzed to allow for disposal. GAF PMMA Catalyst can be added to, and mixed with, GAF PMMA products to facilitate disposal.

D. Installation Materials, Tools, and Equipment

Installation Steps	Required Equipment and Material
Substrate Preparation	<ol style="list-style-type: none"> 1. Blower, vacuum, and broom 2. Hand grinder with carbide disk, diamond cup, or other appropriate abrasive wheel. Do not use a wire wheel. 3. Shot blaster with dust collector/air pulse compressor 4. Sandpaper 5. GAF PMMA Cleaner 6. GAF PMMA Primer 7. GAF PMMA Paste
Mixing	<ol style="list-style-type: none"> 1. Plastic tarps or sheeting 2. Variable speed drill with 1/2 in. chuck 3. Mixing agitator or stir sticks 4. Jiffy Mixer 5. 1-tablespoon measure (Included with GAF PMMA Catalyst powder) 6. Plastic mixing buckets (2 or 3 liter with volume graduation marks in kg/liters) 7. Battery operated scale
Application	<ol style="list-style-type: none"> 1. Tape (masking, painter's, or gaffers tape) 2. Margin trowel 3. Application brushes - 2 in. - 3 in. wide 4. Application rollers - 4in. - 6 in. wide 5. Heavy duty scissors 6. Disposable butyl rubber or nitrile gloves
Miscellaneous	<ol style="list-style-type: none"> 1. Clean cotton rags 2. Infrared thermometer 3. Tape measure 4. Chalk line

E. Product Information

Product Listing						
Product	Packaging Size(s)	Pot Life at 68°F (20°C) [Mixed]	Temperature Limitations			
			Ambient Temperature		Substrate Temperature	
			Minimum	Maximum	Minimum	Maximum
GAF PMMA Cleaner	1 gallon (3.9 L) can	N/A	N/A			
GAF PMMA Catalyst	10 0.1 kg. (3.2 oz) bags/box	15 minutes	N/A			
GAF PMMA Primer	10 kg. (22 lb.) pail	15 minutes	32°F (0°C)	95°F (35°C)	32°F (0°C)	122°F (50°C)
GAF PMMA Paste	10 kg. (22 lb.) pail	15 minutes	32°F (0°C)	122°F (50°C)	32°F (0°C)	122°F (50°C)
GAF PMMA Fleece	1 ft. x 82 ft. (305 mm x 25 m), 1 ft. x 164 ft. (305 mm x 50 m), 2.15 ft. x 164 ft. (655 mm x 50 m), 3.4 ft. x 164 ft. (1.04 m x 50 m)	N/A	N/A			
GAF PMMA Flashing Resin – Summer Grade	10 kg. (22 lb.) pail	15 minutes	59°F (15°C)	104°F (40°C)	59°F (15°C)	122°F (50°C)
GAF PMMA Flashing Resin – Winter Grade	10 kg. (22 lb.) pail	15 minutes	23°F (–5°C)	68°F (20°C)	23°F (–5°C)	77°F (25°C)

GAF PMMA Set/Cure Times (At 68°F (20°C))				
Product Name	Rain Proof	First Coat	Second Coat	Foot Traffic
GAF PMMA Primer	25 minutes	45 Minutes	N/A	N/A
GAF PMMA Paste	30 Minutes	1 Hour	45 Minutes	1 Hour
GAF PMMA Flashing Resin (Summer and Winter Grade)	30 Minutes	45 Minutes	N/A	Approx. 2 Hours

Note:

- Minimum set/cure times noted above are approximate, and may vary. The information provided is based on laboratory conditions, and is intended for use as a guideline only. Actual set/cure times should be established in the field, based on actual field conditions.

F. Surface Preparation

1. General Surface Preparation

- All substrates must be free from gross irregularities, loose material, unsound material, foreign material (such as dirt, ice, snow, water, grease, oil, release agents, paint coverings), or any other condition that would be detrimental to the adhesion of the catalyzed primer and/or flashing to the substrate. Some surfaces may require shotblasting, scarification followed by shotblasting, or grinding to achieve a suitable substrate. Substrate preparation guidelines appear in the chart below but it is important to note that requirements can vary for a particular situation. In applications where adhesion to a substrate not listed in the chart is required, please contact the GAF Design Services at 1-877-423-7663 for information on testing such substrates for adhesion by performing a field adhesion test.

Surface Preparation	
Compatible Roofing Membrane	Preparatory Guidelines
GAF Granulated Membranes <ul style="list-style-type: none"> Built-Up Cap Sheet SBS Modified Bitumen Asphaltic membranes 	All loose granules, dust, and organic debris must be completely removed from the surface of the roof membrane by brooming, and/or power vacuuming, low-pressure wash, or other suitable method prior to application of the GAF PMMA Flashing System. If a low-pressure wash is used, allow the substrate to dry completely prior to application of GAF PMMA Products.
GAF Smooth-surfaced SBS modified bitumen	Surface must be clean, dry and free from gross irregularities, loose material, unsound material, or any foreign material (such as dirt, ice, snow, water, grease, bitumen/coal tar, oil, release agents, paint coverings), or any other condition that would be detrimental to the adhesion of the catalyzed primer and/or flashing to the surface.
GAF Everguard® PVC and PVC KEE	
Securock® Cement Board, DEXcell® Cement Board	Acceptable sheathings include approved cementitious boards as substrates for direct application of GAF PMMA flashing materials. Common paper-faced gypsum wall board is not acceptable as a substrate panel. Joints between panels must be overlaid with 2 in. wide strips of gaffers tape. The gaffer tape should then be primed using GAF PMMA Primer prior to application of the GAF PMMA Flashing System.

Penetration Preparation	
Type of Penetration	Preparatory Guidelines
PVC Pipe	Wipe down thoroughly with GAF PMMA Cleaner and abrade with sand paper prior to application of resins. Allow GAF PMMA Cleaner a minimum of 20 minutes drying time after application before continuing. The next application process should be completed within 60 minutes of cleaning with GAF PMMA Cleaner.
Cast Iron Pipe	<p>Substrate must be clean and dry and free from gross irregularities, loose material, unsound material, or any foreign material (such as dirt, ice, snow, water, grease, bitumen/coal tar, oil, release agents, paint coverings), or any other condition that would be detrimental to the adhesion of the catalyzed primer and/or resin to the substrate. Remove rust or other oxidation layers.</p> <p>Abrade surface to bright finish prior to cleaning with GAF PMMA Cleaner. Do not use a wire-wheel for substrate preparation. Extend the preparation area a minimum of 1/4 in. (7 mm) beyond the termination of the GAF PMMA materials.</p>
Metal	<p>Wipe down thoroughly with GAF PMMA Cleaner prior to application of resins. Allow GAF PMMA Cleaner a minimum of 20 minutes drying time after application before continuing. The next application process should be completed within 60 minutes of cleaning with GAF PMMA Cleaner.</p> <p>Do not use GAF PMMA products with galvalume coated metal.</p> <p>In case of stainless steel, copper or aluminum, qualify/prepare substrate and prime with Rust-Oleum® High Performance V2100 System Enamel Spray Primer (Rust-Oleum® Part#V2182838 Flat Gray) in accordance with Rust-Oleum® specifications.</p> <p>Note: Rust-Oleum is a registered trademark of Rust-Oleum® Corporation.</p>

Wall and Curbs Preparation	
Surface	Preparatory Guidelines
Concrete	<p>Substrate must be clean and dry and free from gross irregularities, loose material, unsound material, or any foreign material (such as dirt, ice, snow, water, grease, bitumen/coal tar, oil, release agents, paint coverings), or any other condition that would be detrimental to the adhesion of the catalyzed primer and/or resin to the substrate. Concrete and Masonry substrates should be primed with GAF PMMA Primer prior to any flashing application.</p> <p>Do not use GAF PMMA products with concrete that has an internal relative humidity in excess of 75%.</p>
Concrete Masonry Unit (CMU)	

G. Measuring and Mixing GAF PMMA Flashing Resin

1. **General Guidelines**
 - a. GAF PMMA products are fast setting and should only be catalyzed as needed. Depending on the flashing type and ambient/substrate temperature, the amount of catalyst needed will vary.
2. **Mixing All GAF PMMA Product**
 - a. Thoroughly mix the entire container of uncatalyzed GAF PMMA resin product for 2 minutes using a slow-speed mechanical agitator or a mixing stick before each use, if pouring off into a second container when batch mixing. This will redistribute liquids and solids that may have separated during storage. Catalyze only the amount of flashing that can be used within the approximate anticipated pot life. Add premeasured GAF PMMA Catalyst powder to the flashing component and stir for 2 minutes using a slow-speed mechanical agitator or a mixing stick before applying to the substrate.
 - b. When mixing the GAF PMMA Catalyst powder with high viscous materials, such as the GAF PMMA Paste, it is important to make sure the two components are thoroughly mixed.
 - c. The amount of GAF PMMA Catalyst powder that should be used is based on the weight (or associated volume) of the uncatalyzed GAF PMMA product. GAF PMMA products may have different volumes for the same measure of weight. See the table below for ratios.
3. **GAF PMMA Catalyst Mixing Ratios & Measurements**
 - a. The amount of GAF PMMA Catalyst powder added to GAF PMMA products is based on the weight (or associated volume) of the flashing used, and varies with the type of flashing and the ambient temperature. The amount of GAF PMMA Catalyst powder added to GAF PMMA products should never be less than indicated in the mixing ratio tables.

Flashing Resin Field Measure Chart		
Product	Density	Liquid Measure
GAF PMMA Primer	1.0 kg/liter	1.0 liter/kg
GAF PMMA Paste	1.4 kg/liter	0.72 liter/kg
GAF PMMA Flashing Resin	1.4 kg/liter	0.72 liter/kg

GAF PMMA Catalyst Mixing Chart – GAF PMMA Primer

Primer Quantity	2% Catalyst 77°F to 95°F (25°C to 35°C)			4% Catalyst 41°F to 77°F (5°C to 25°C)			6% Catalyst 32°F to 41°F (0°C to 5°C)		
	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags
1 kg (1 liter)	20	2	n/a	40	4	n/a	60	6	n/a
10 kg (10 liters)	200	n/a	2	400	n/a	4	600	n/a	6

Substrate temperature range for application of GAF PMMA Primer is 32°F to 95°F (0°C to 35°C).

GAF PMMA Catalyst Mixing Chart – GAF PMMA Paste

Paste Quantity	Ambient Temperature 77°F to 95°F (25°C to 35°C)			Ambient Temperature 41°F to 77°F (5°C to 25°C)			Ambient Temperature 32°F to 41°F (0°C to 5°C)		
	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags
1 kg (0.72 liter)	20	2	n/a	40	4	n/a	60	6	n/a

Substrate temperature range for application of GAF PMMA Paste is 32°F to 122°F (0°C to 50°C).

GAF PMMA Catalyst Mixing Chart – GAF PMMA Flashing Resin – Summer Grade

Flashing Quantity	Summer Grade – 2% Catalyst 68°F to 104°F (20°C to 40°C)			Summer Grade – 4% Catalyst 59°F to 68°F (15°C to 20°C)		
	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags
1 kg (0.72 liter)	20	2	n/a	40	4	n/a
10 kg (7.2 liters)	200	n/a	2	400	n/a	4

Substrate temperature range for application of Summer Grade Flashing resin is 59°F to 122°F (15°C to 50°C).

GAF PMMA Catalyst Mixing Chart – GAF PMMA Flashing Resin – Winter Grade

Flashing Quantity	Winter Grade – 2% Catalyst 59°F to 68°F (15°C to 20°C)			Winter Grade – 4% Catalyst 41°F to 59°F (5°C to 15°C)			Winter Grade – 6% Catalyst 23°F to 41°F (–5°C to 5°C)		
	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags	g	Tbsp.	0.1-kg Bags
1 kg (0.72 liter)	20	2	n/a	40	4	n/a	60	6	n/a
10 kg (7.2 liters)	200	n/a	2	400	n/a	4	600	n/a	6

Substrate temperature range for application of Winter Grade Flashing resin is 23°F to 77°F (–5°C to 25°C).

H. GAF PMMA Primer

1. General Application Guidelines

- a. GAF PMMA Primer is required for concrete or approved cement boards. For specific priming requirements, refer to the [“substrate preparation chart.”](#)
- b. Refer to the [“Product Listing”](#) Table for ambient and substrate temperature limitations when applying GAF PMMA Primer.
- c. The primer itself should be within storage temperature guidelines at the time of catalyzation to ensure that the product maintains a workable pot life. Discontinue primer application when the ambient and/or substrate temperature exceeds 95°F (35°C). In warm temperatures, the substrate should be shaded for a sufficient period of time, as necessary, to maintain substrate temperatures below maximum values.
- d. GAF PMMA Primer is applied with a roller and can be covered with GAF PMMA Flashing after the primer is cured (generally a minimum of 45 minutes following application). GAF PMMA Primer is required for all concrete and CMU vertical and horizontal surfaces. When priming concrete substrates, GAF PMMA Primer should always be applied when ambient and substrate temperatures are falling rather than rising to minimize the potential for the formation of pinholes in the applied primer. Cured GAF PMMA Primer can be exposed for up to 6 months and if work is interrupted for more than 12 hours, or the surface of the primer becomes dirty or contaminated from exposure to the elements, thoroughly clean the in-place and cured primer with GAF PMMA Cleaner. GAF PMMA Cleaner should be allowed a minimum of 20 minutes drying time after application before continuing. Following the GAF PMMA Cleaner drying time, the next application process should be completed within 60 minutes.

I. GAF PMMA Paste

1. GAF PMMA Paste is used for remediation of depressions in substrate surfaces or other irregularities prior to application of the GAF PMMA Flashing System.
2. GAF PMMA Paste Application Guidelines
 - a. The paste itself should be within storage temperature guidelines at the time of catalyzation to ensure that the product maintains a workable pot life. Discontinue product application when the ambient temperature exceeds 95°F (35°C) and/or the substrate temperature exceeds 122°F (50°C). Provide adequate shade over the substrate area both prior to and during application as necessary to maintain surface temperatures below maximum values.
 - b. GAF PMMA Paste, as with all GAF PMMA products, may require the application of a GAF PMMA Primer product before application. See the [“substrate preparation guidelines.”](#)
 - c. When GAF PMMA Paste is to be applied over a GAF PMMA product, thoroughly clean the surface of the in-place coating product with GAF PMMA Cleaner. This step is required even if the GAF PMMA product has been recently applied. GAF PMMA Cleaner should be allowed a minimum of 20 minutes of drying time after application before continuing. Following the GAF PMMA Cleaner drying time, the GAF PMMA Paste application process should be completed within 1 hour.
 - d. GAF PMMA Paste is applied with a trowel and can be covered with the GAF PMMA Flashing System after the GAF PMMA Paste is set.
3. GAF PMMA Paste Coverage Rates
 - a. GAF PMMA Paste Thickness and Coverage Rates:
 1. Typical Coverage: 0.13 kg/sf per 1 mm of thickness (1.4 kg/m² per 1 mm layer of thickness)
 - b. Minimum Thickness: product can be feather-edged
 - c. Maximum Thickness (per lift): 3/16 in. (5 mm)

J. GAF PMMA Fleece

1. GAF PMMA Fleece is the reinforcement layer used in GAF PMMA Flashing Systems. Use only GAF PMMA Fleece with GAF PMMA Flashing. Do not use other types of roofing fabric.

K. GAF PMMA Flashing Resin

1. General Application Guidelines

- a. GAF PMMA Flashing resin, when catalyzed, is combined with fleece fabric to form the GAF PMMA Flashing System, a monolithic, reinforced flashing membrane used for flashing details. GAF PMMA Flashing is available in two formulations: Summer Grade and Winter Grade.
- b. Care should be taken to ensure that the correct formulation of GAF PMMA Flashing resin (Summer Grade or Winter Grade) is chosen for the application based upon the ambient temperature during application. Refer to the [“Product Listing”](#) Table when applying GAF PMMA Flashing resin (Summer Grade or Winter Grade).
- c. The flashing itself should be within storage temperature guidelines at the time of catalyzation to ensure that the product maintains a workable pot life. Discontinue flashing application when ambient or

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substrate temperature exceeds the values above. In warm temperatures, the substrate should be shaded for a sufficient period of time both prior to and during application, as necessary, to maintain substrate temperatures below maximum values.

- d. If work is interrupted for more than 12 hours, or the surface of the catalyzed GAF PMMA Flashing resin becomes dirty or contaminated from exposure to the elements, thoroughly clean the transition area with GAF PMMA Cleaner. GAF PMMA Cleaner should be allowed a minimum of 20 minutes evaporation time after application before continuing work. Following the drying time, the next application process should be completed within 1 hour.

L. Coverage and Consumption Rates

Layer	Minimum Consumption			
	sf/unit*	kg/sf	kg/sq	kg/m ²
GAF PMMA Primer (concrete/CMU)	270 sf (10-kg pail)	0.037	3.7	0.4
GAF PMMA Primer (Securock® Gypsum-Fiber Roof Board/DEXcell® Cement Board)	135 sf (10-kg pail)	0.074	7.4	0.8
GAF PMMA Flashing Resin Base Layer (smooth surfaces)	32 sf (10-kg pail) [Full 3-course]	0.19	18.6	2
Reinforcing Fleece - GAF PMMA Fleece		N/A		
GAF PMMA Flashing Resin Top Layer		0.12	12.1	1.3
GAF PMMA Flashing Resin Base Layer (granule surfaces)	25 sf (10-kg pail) [Full 3-course]	0.28	27.9	3
Reinforcing Fleece - GAF PMMA Fleece		N/A		
GAF PMMA Flashing Resin Top Layer		0.12	12.1	1.3

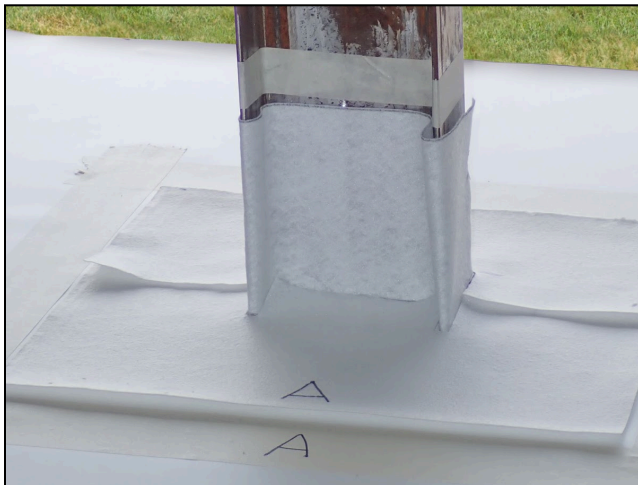
* Does not include waste, overage due to uneven/rough substrates, product needed to treat joints/cracks/overlaps and material required to saturate roller covers.

M. GAF PMMA Flashing System Application

Application – Over Everguard® PVC and PVC KEE



1. Ensure that the finish ply of the roof system fits tightly around the penetration. Remove all foreign materials from the penetration, such as dirt, rust, asphalt, coatings, paint, or other substances, by grinding. Refer to the [substrate preparation chart](#) in section F for more information.
2. Fill voids where membranes terminate at penetrations with GAF PMMA Paste. Apply GAF PMMA Paste over protruding bolts/fasteners to create a smooth surface for the reinforced GAF PMMA flashing membrane. Allow the GAF PMMA Paste a minimum of 60 minutes curing time before continuing.



3. Cut the GAF PMMA Fleece for the penetration configuration, extending 6 in. up the penetration and 6 in. out onto the horizontal. The pieces of fleece must overlap by at least 2 in. (50 mm). Place each piece dry in its designated area to ensure proper fit and laps. Install masking/painter's tape a maximum 1/4 in. beyond the edge of the GAF PMMA Fleece, both on the top of the penetration and the horizontal surface.
4. Mix the GAF PMMA Flashing with the GAF PMMA Catalyst as detailed in the mixing instructions. Apply a base coat of GAF PMMA Flashing to the vertical penetration surfaces, extending onto the roof membrane a minimum of 2 in.

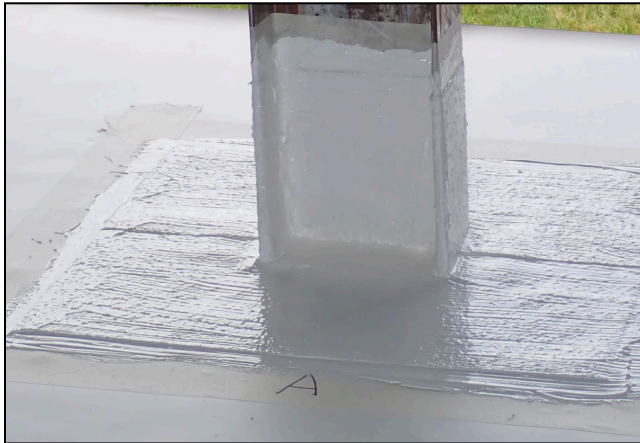
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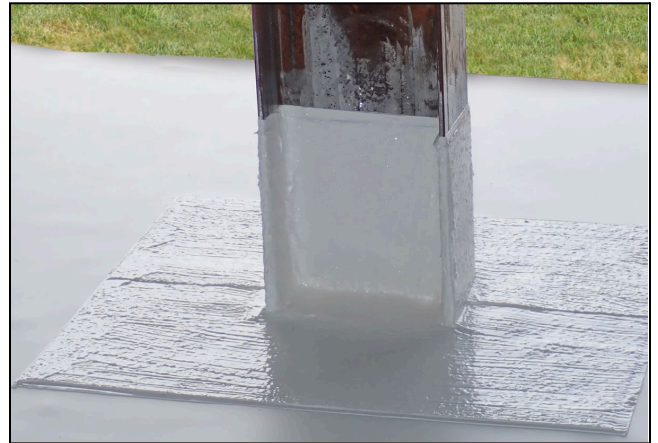
5. Apply the pre-cut GAF PMMA Fleece to the vertical penetration surfaces by embedding the fleece in the GAF PMMA flashing, extending the fleece a minimum of 2 in. onto the roof membrane.



6. Apply a base coat of GAF PMMA Flashing to the horizontal surface extending to the masking tape. Apply the pre-cut GAF PMMA Fleece to the horizontal surface by embedding the fleece in the GAF PMMA flashing. Saturate all fleece surfaces to be lapped with GAF PMMA Flashing. Pieces of fleece must overlap by at least 2 in. (50 mm).



7. Top coat the embedded GAF PMMA Fleece with an additional layer of GAF PMMA Flashing resin.

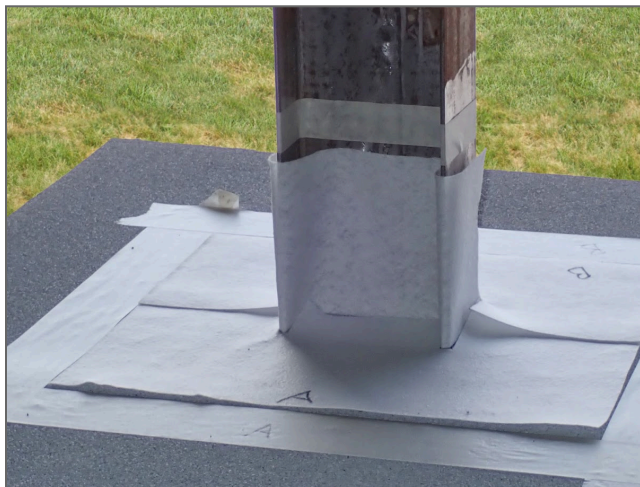


8. Remove the masking/painter's tape before the flashing sets completely.

Application – Over any Ruberoid® Granule SBS (hot-mopped or heat-welded) or any GAFGLAS® Cap Sheet (hot-mopped)



1. Ensure that the granulated cap sheet fits tightly around the penetration. Remove all foreign materials from the penetration, such as dirt, rust, asphalt, coatings, paint, or other substances, by grinding. Refer to the [substrate preparation chart](#) in section F for more information. Clean penetration only; do not use cleaner on the asphaltic membrane. Do not glaze coat the top surface ply with hot asphalt, prior to the application of the GAF PMMA system.
2. Fill voids where membranes terminate at penetrations with GAF PMMA Paste. Apply GAF PMMA Paste over protruding bolts/fasteners to create a smooth surface for the reinforced GAF PMMA flashing membrane. Allow the GAF PMMA Paste a minimum of 60 minutes curing time before continuing.

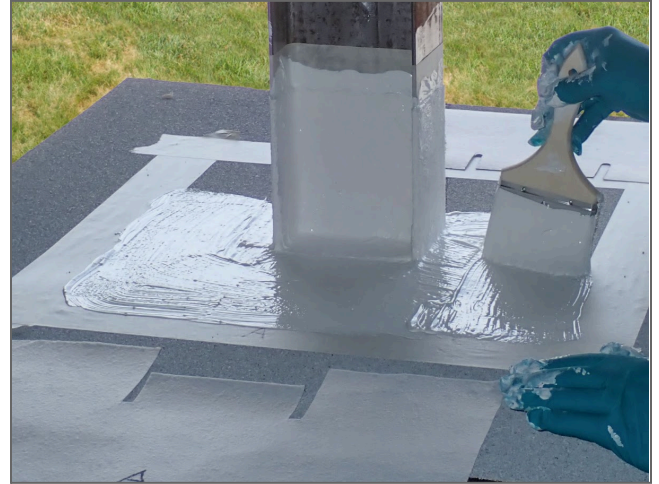


3. Cut the GAF PMMA Fleece for the penetration configuration, extending 6 in. up the penetration and 6 in. out onto the horizontal. The pieces of fleece must overlap by at least 2 in. (50 mm). Place each piece dry in its designated area to ensure proper fit and laps. Install masking/painter's tape a maximum 1/4 in. beyond the edge of the GAF PMMA Fleece, both on the top of the penetration and the horizontal surface.
4. Mix the GAF PMMA Flashing with the GAF PMMA Catalyst as detailed in the mixing instructions. Apply a base coat of GAF PMMA Flashing to the vertical penetration surfaces, extending onto the roof membrane a minimum of 2 in.

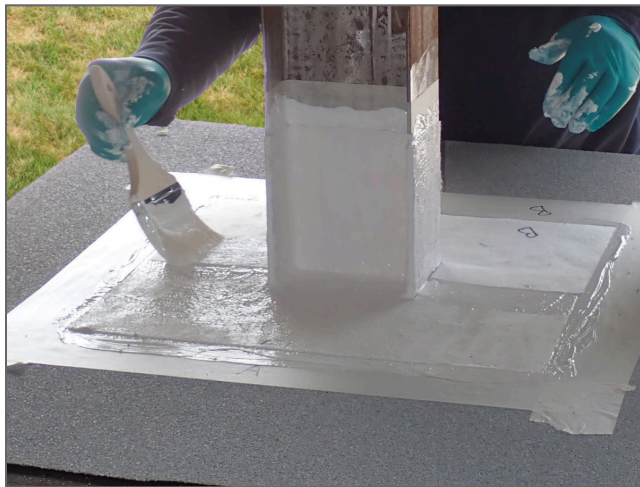
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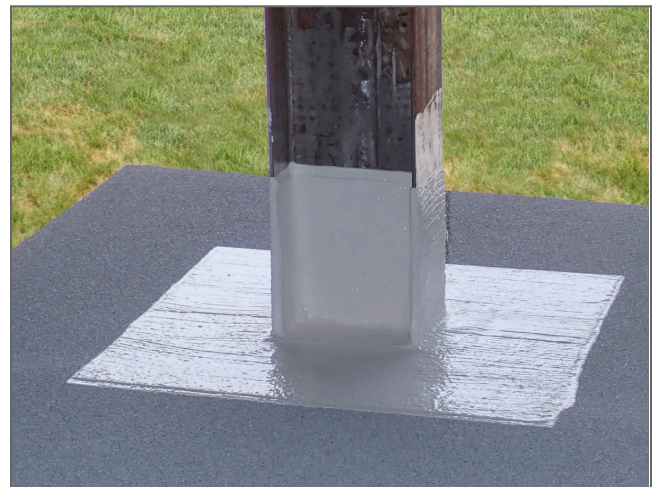
5. Apply the pre-cut GAF PMMA Fleece to the vertical penetration surfaces by embedding the fleece in the GAF PMMA flashing, extending the fleece a minimum of 2 in. onto the roof membrane.



6. Apply a base coat of GAF PMMA Flashing to the horizontal surface extending to the masking tape. Apply the pre-cut GAF PMMA Fleece to the horizontal surface by embedding the fleece in the GAF PMMA flashing. Saturate all fleece surfaces to be lapped with GAF PMMA Flashing. Pieces of fleece must overlap by at least 2 in. (50 mm).



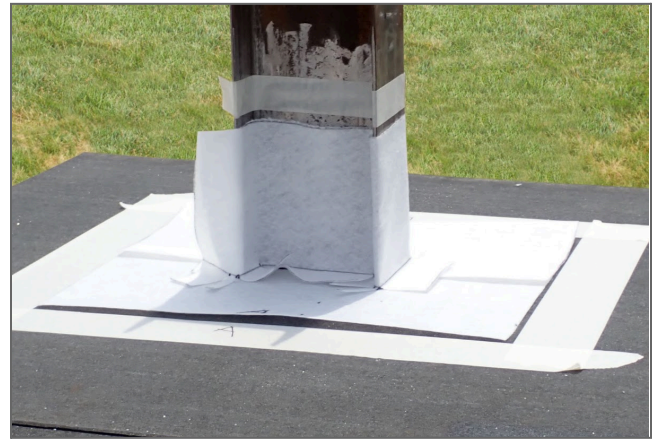
7. Top coat the embedded GAF PMMA Fleece with an additional layer of GAF PMMA Flashing. The GAF PMMA Fleece must be sufficiently coated with the GAF PMMA Flashing to prevent the GAF PMMA Fleece from telegraphing through.



8. Remove the masking/painter's tape before the GAF PMMA flashing sets completely.

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Interply Application – Between any Ruberoid® Smooth SBS and any Ruberoid® Granule SBS (hot-mopped or heat-welded) or between any GAFGLAS®, Ply Sheet and Cap Sheet (hot-mopped)



1. Ensure that the smooth surfaced modified sheet fits tightly around the penetration. Remove all foreign materials from the penetration, such as dirt, rust, asphalt, coatings, paint, or other substances, by grinding. Refer to the [substrate preparation chart](#) in section F for more information. Clean penetration only; do not use cleaner on the asphaltic membrane. Fill voids where membranes terminate at penetrations with GAF PMMA Paste. Apply GAF PMMA Paste over protruding bolts/fasteners to create a smooth surface for the reinforced GAF PMMA flashing membrane. Allow the GAF PMMA Paste a minimum of 60 minutes curing time before continuing. Do not glaze coat the top surface ply with hot asphalt, prior to the application of the GAF PMMA system.

2. Cut the GAF PMMA Fleece for the penetration configuration, extending 6 in. up the penetration and 6 in. out onto the horizontal. The pieces of fleece must overlap by at least 2 in. (50 mm). Place each piece dry in its designated area to ensure proper fit and laps. Install masking/painter's tape 1/4 in. beyond the edge of the GAF PMMA Fleece, both on the top of the penetration and the horizontal surface.



3. Mix the GAF PMMA Catalyst and GAF PMMA Flashing as detailed in the mixing instructions. Apply a base coat of GAF PMMA Flashing to the vertical penetration surfaces extending onto the smooth ply a minimum of 2 in.

4. Apply the pre-cut GAF PMMA Fleece to the vertical penetration surfaces by embedding the fleece in the flashing, extending the fleece a minimum of 2 in. onto the roof membrane. Ensure that no air is trapped beneath the fleece.

Installation Instructions



5. Apply a base coat of GAF PMMA Flashing to the horizontal surface extending to the masking tape. Apply the pre-cut GAF PMMA Fleece to the horizontal surface by embedding the fleece in the GAF PMMA flashing. Saturate all fleece surfaces to be lapped with GAF PMMA Flashing. Pieces of fleece must overlap by at least 2 in. (50 mm).



6. Top coat the embedded GAF PMMA Fleece with an additional layer of GAF PMMA Flashing. The GAF PMMA Fleece must be sufficiently coated with the GAF PMMA Flashing to prevent the GAF PMMA Fleece from telegraphing through. Remove the masking/painter's tape before the flashing sets completely.



7. After the flashing is set, a target of base ply material is applied over the finished GAF PMMA Flashing membrane if the underlying sheet was applied in solvent-based adhesive. Extend the target a minimum of 4 in. beyond the GAF PMMA Flashing membrane in all directions. Apply the granulated surface membrane, ensuring that it fits tightly around the penetration.



8. Apply a bead of GAF M-BOND™ Adhesive Sealant around the base of the penetration to fill any gaps between the SBS roof membrane system and the penetration.

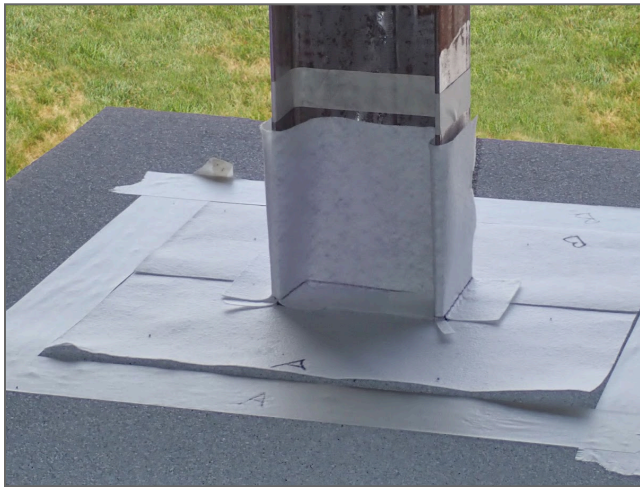
Application – Over any Ruberoid® Granule SBS (cold-adhesive applied)



1. Ensure that the granulated cap sheet fits tightly around the penetration. Remove all foreign materials from the penetration, such as dirt, rust, asphalt, coatings, paint, or other substances, by grinding. Refer to the [substrate preparation chart](#) in section F for more information. Clean penetration only; do not use cleaner on the asphaltic membrane.



2. Fill voids where membranes terminate at penetrations with GAF PMMA Paste. Apply GAF PMMA Paste over protruding bolts/fasteners to create a smooth surface for the reinforced GAF PMMA flashing membrane. Allow the GAF PMMA Paste a minimum of 60 minutes curing time before continuing.



3. Cut the GAF PMMA Fleece for the penetration configuration, extending 6 in. up the penetration and 6 in. out onto the horizontal. The pieces of fleece must overlap by at least 2 in. (50 mm). Place each piece dry in its designated area to ensure proper fit and laps. Install masking/painter's tape 1/4 in. beyond the edge of the GAF PMMA Fleece, both on the top of the penetration and the horizontal surface.

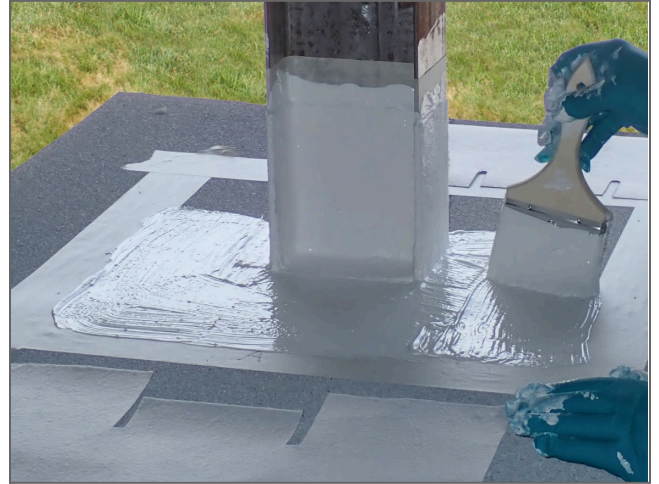


4. Mix the GAF PMMA Flashing with the GAF PMMA Catalyst as detailed in the mixing instructions. Apply a base coat of GAF PMMA Flashing to the vertical penetration surfaces, extending onto the roof membrane a minimum of 2 in.

Installation Instructions



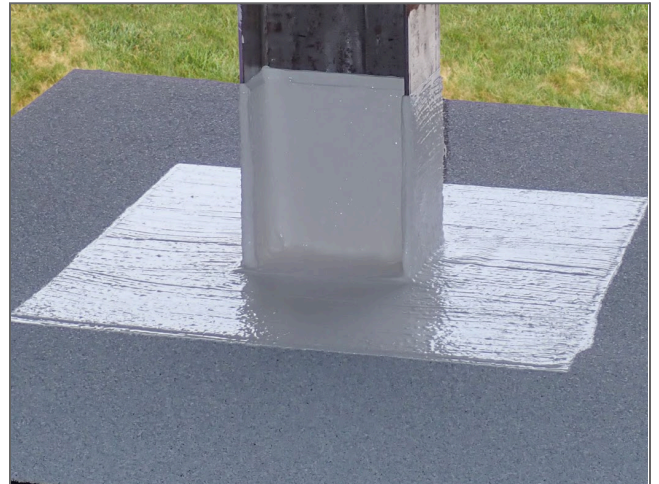
5. Apply the pre-cut GAF PMMA Fleece to the vertical penetration surfaces by embedding the fleece in the GAF PMMA flashing, extending the fleece a minimum of 2 in. onto the roof membrane.



6. Apply a base coat of GAF PMMA Flashing to the horizontal surface extending to the masking tape. Apply the pre-cut GAF PMMA Fleece to the horizontal surface by embedding the fleece in the GAF PMMA flashing. Saturate all fleece surfaces to be lapped with GAF PMMA Flashing. Pieces of fleece must overlap by at least 2 in. (50 mm).



7. Top coat the embedded GAF PMMA Fleece with an additional layer of GAF PMMA Flashing. The GAF PMMA Fleece must be sufficiently coated with the GAF PMMA Flashing to prevent the GAF PMMA Fleece from telegraphing through.

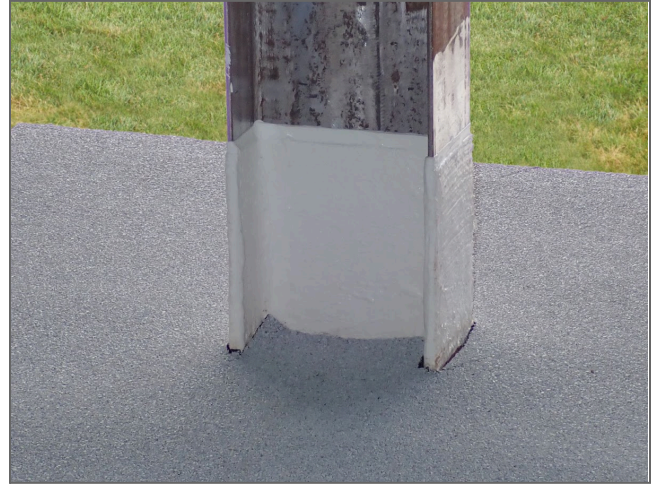


8. Remove the masking/painter's tape before the GAF PMMA flashing sets completely.

Installation Instructions



9. After the flashing is set, a target of smooth ply material is applied over the finished GAF PMMA Flashing membrane. Extend the target a minimum of 4 in. beyond the GAF PMMA Flashing membrane in all directions.



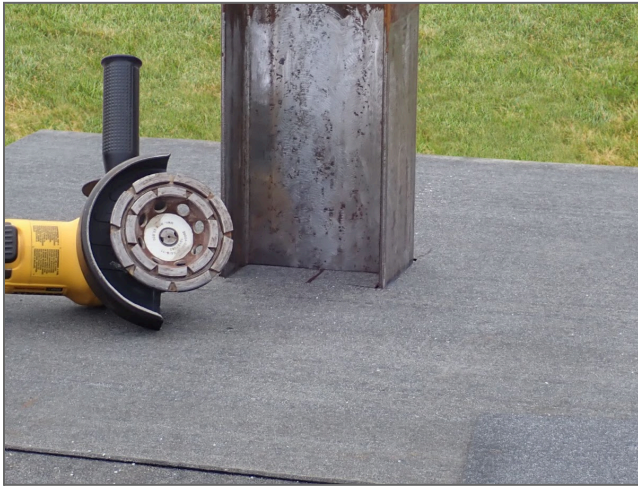
10. Apply a target of granulated surface membrane, ensuring that it fits tightly around the penetration. Extend the target a minimum of 4 in. beyond the smooth membrane in all directions.



11. Apply a bead of GAF M-BOND™ Adhesive Sealant around the base of the penetration to fill any gaps between the SBS roof membrane system and the penetration.

Installation Instructions

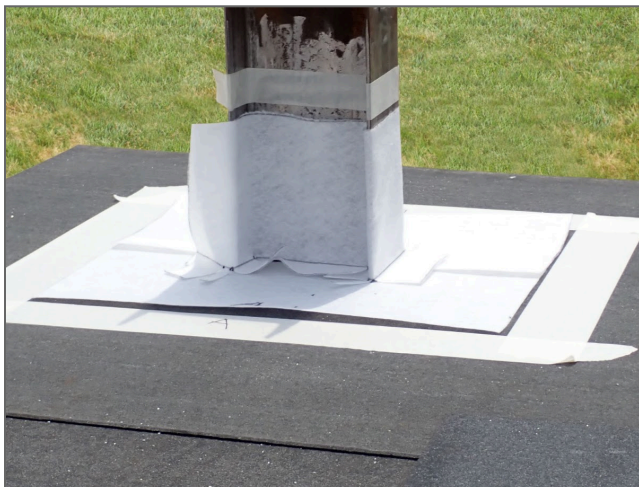
Interply Application - Between any Ruberoid® Smooth SBS and any Ruberoid® Granule SBS (cold-adhesive applied)



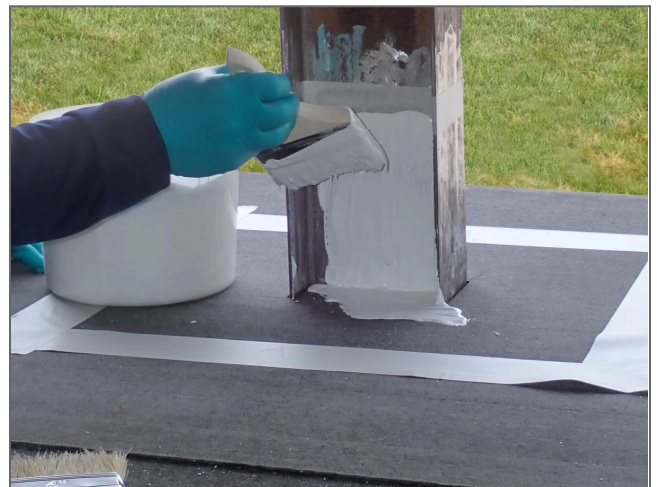
1. Ensure that the smooth modified SBS sheet fits tightly around the penetration. Remove all foreign materials from the penetration, such as dirt, rust, asphalt, coatings, paint, or other substances, by grinding. Refer to the [substrate preparation chart](#) in section F for more information. Clean penetration only; do not use cleaner on the asphaltic membrane.



2. Fill voids where membranes terminate at penetrations with GAF PMMA Paste. Apply GAF PMMA Paste over protruding bolts/fasteners to create a smooth surface for the reinforced GAF PMMA flashing membrane. Allow the GAF PMMA Paste a minimum of 60 minutes curing time before continuing.



3. Cut the GAF PMMA Fleece for the penetration configuration, extending 6 in. up the penetration and 6 in. out onto the horizontal. The pieces of fleece must overlap by at least 2 in. (50 mm). Place each piece dry in its designated area to ensure proper fit and laps. Install masking/painter's tape 1/4 in. beyond the edge of the GAF PMMA Fleece, both on the top of the penetration and the horizontal surface.

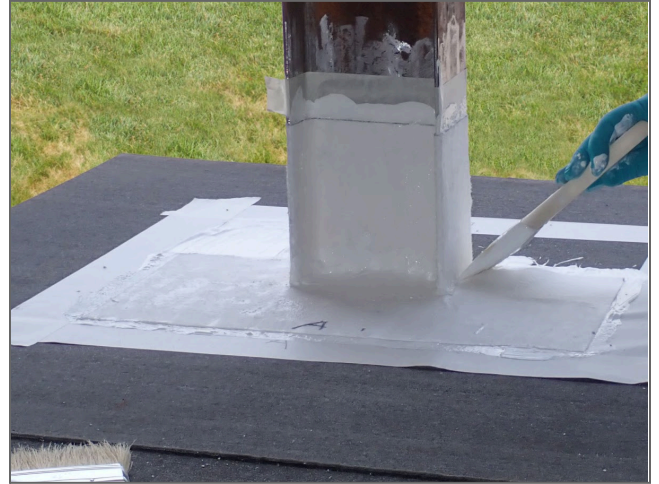


4. Mix the GAF PMMA Flashing with the GAF PMMA Catalyst as detailed in the mixing instructions. Apply a base coat of GAF PMMA Flashing to the vertical penetration surfaces, extending onto the roof membrane a minimum of 2 in.

Installation Instructions



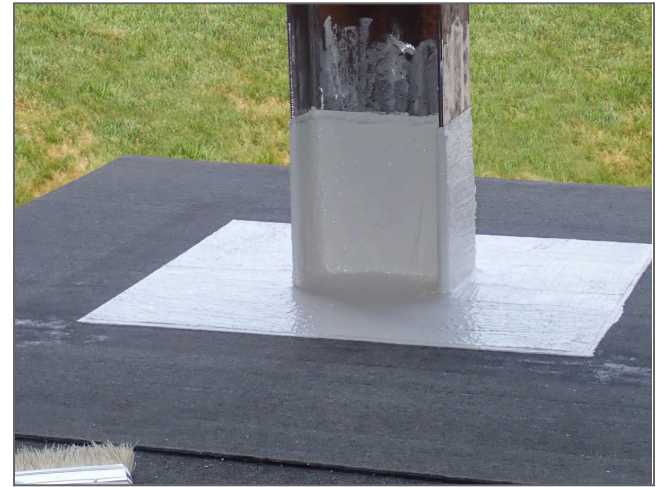
5. Apply the pre-cut GAF PMMA Fleece to the vertical penetration surfaces by embedding the fleece in the GAF PMMA flashing, extending the fleece a minimum of 2 in. onto the roof membrane.



6. Apply a base coat of GAF PMMA Flashing to the horizontal surface extending to the masking tape. Apply the pre-cut GAF PMMA Fleece to the horizontal surface by embedding the fleece in the GAF PMMA flashing. Saturate all fleece surfaces to be lapped with GAF PMMA Flashing. Pieces of fleece must overlap by at least 2 in. (50 mm).



7. Top coat the embedded GAF PMMA Fleece with an additional layer of GAF PMMA Flashing. The GAF PMMA Fleece must be sufficiently coated with the GAF PMMA Flashing to prevent the GAF PMMA Fleece from telegraphing through.



8. Remove the masking/painter's tape before the GAF PMMA flashing sets completely.

Installation Instructions



9. After the flashing is set, a target of base ply material is applied over the finished GAF PMMA Flashing membrane. Extend the target a minimum of 4 in. beyond the GAF PMMA Flashing membrane in all directions.

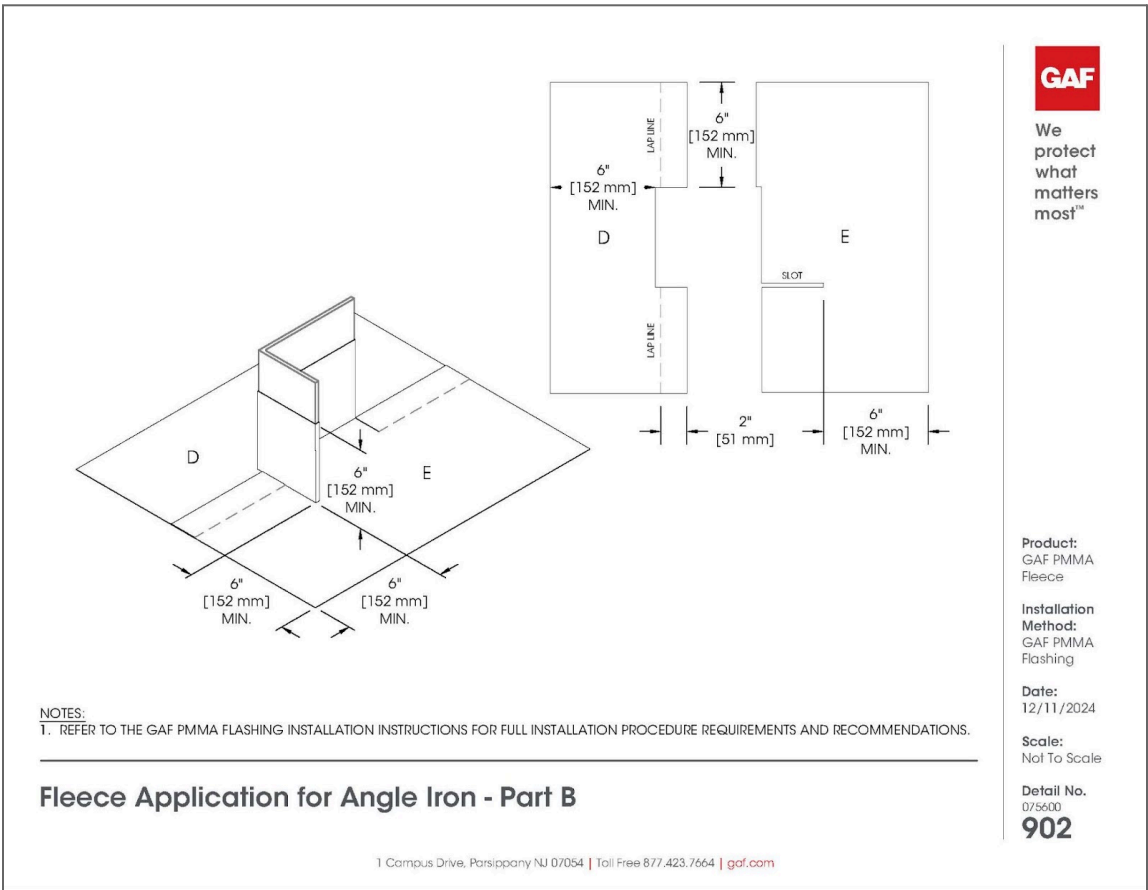
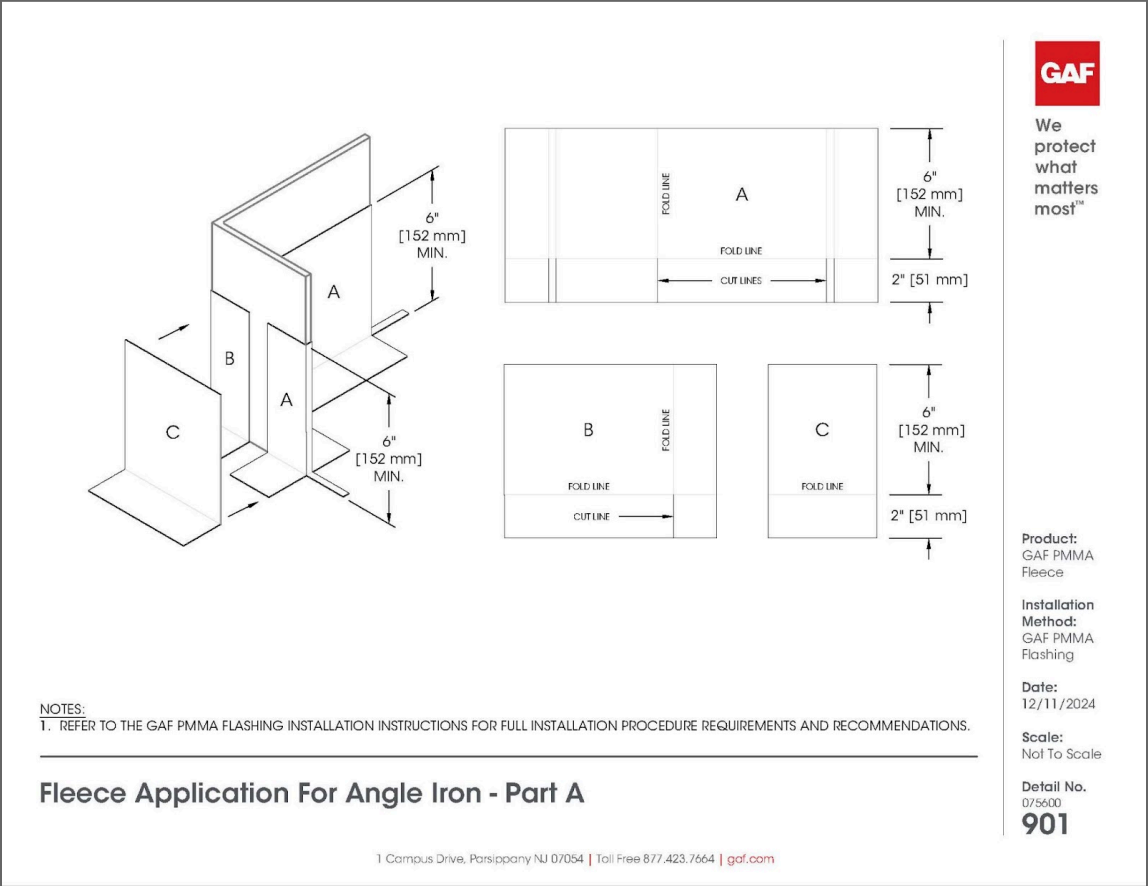


10. Apply the granulated surface membrane, ensuring that it fits tightly around the penetration.



11. Apply a bead of GAF M-BOND™ Adhesive Sealant around the base of the penetration to fill any gaps between the SBS roof membrane system and the penetration.

N. Appendix A – GAF PMMA Flashing System Fleece Cutting Diagrams





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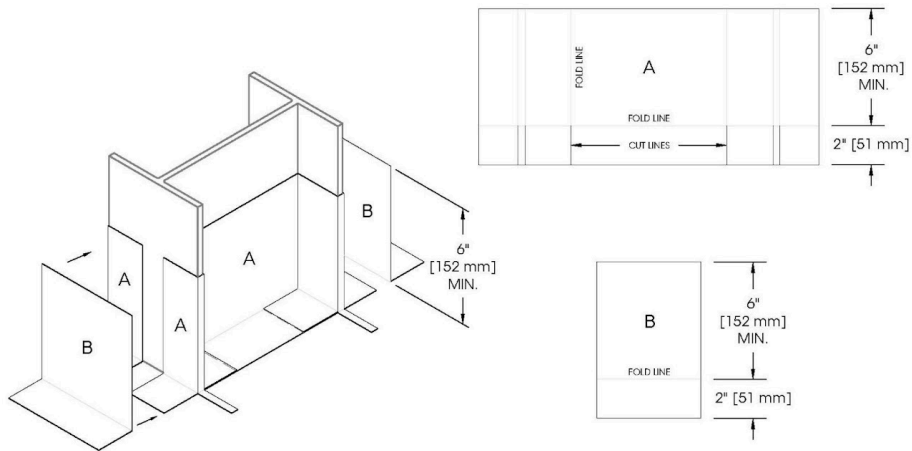
Product:
GAF PMMA Fleece

Installation Method:
GAF PMMA Flashing

Date:
12/11/2024

Scale:
Not To Scale

Detail No.
075600
903



NOTES:

1. REFER TO THE GAF PMMA FLASHING INSTALLATION INSTRUCTIONS FOR FULL INSTALLATION PROCEDURE REQUIREMENTS AND RECOMMENDATIONS.

Fleece Application for I-Beam - Part A

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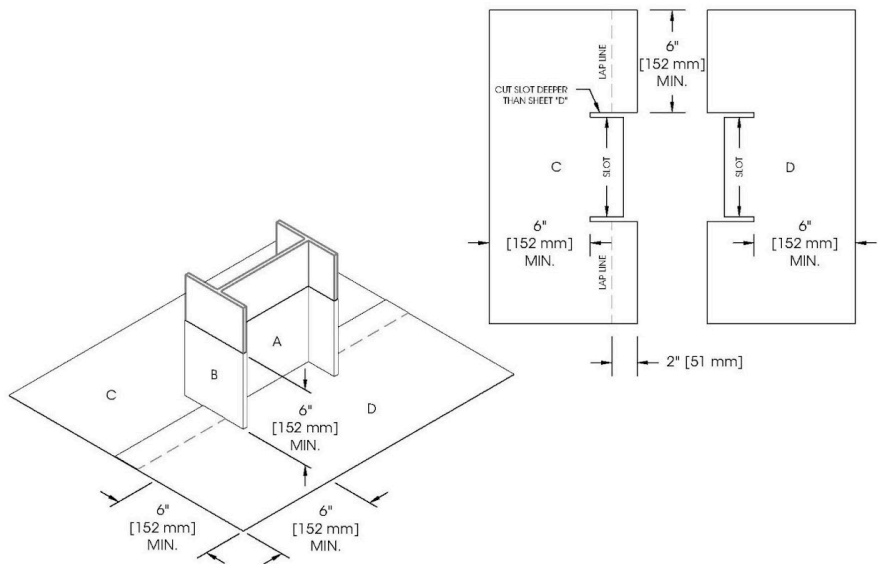
Product:
GAF PMMA Fleece

Installation Method:
GAF PMMA Flashing

Date:
12/11/2024

Scale:
Not To Scale

Detail No.
075600
904



NOTES:

1. REFER TO THE GAF PMMA FLASHING INSTALLATION INSTRUCTIONS FOR FULL INSTALLATION PROCEDURE REQUIREMENTS AND RECOMMENDATIONS.

Fleece Application for I-Beam - Part B

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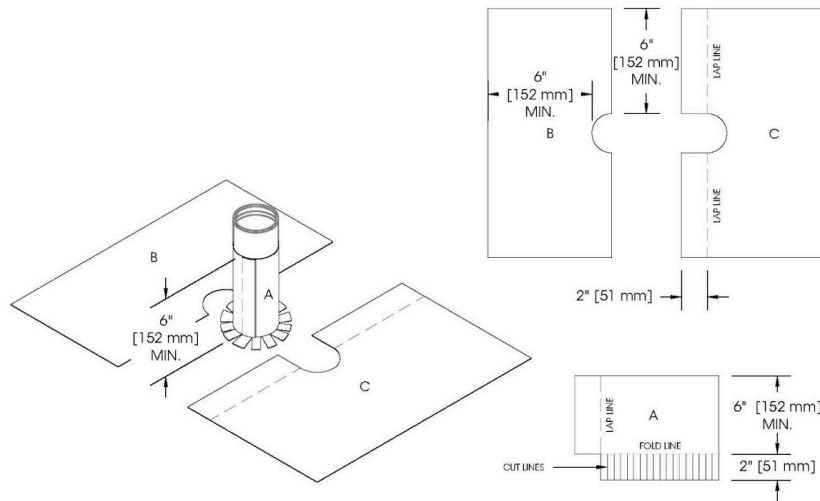
Product:
GAF PMMA Fleece

Installation Method:
GAF PMMA Flashing

Date:
12/11/2024

Scale:
Not To Scale

Detail No.
075600
905



NOTES:

1. REFER TO THE GAF PMMA FLASHING INSTALLATION INSTRUCTIONS FOR FULL INSTALLATION PROCEDURE REQUIREMENTS AND RECOMMENDATIONS.

Fleece Application for Round Pipe Penetration

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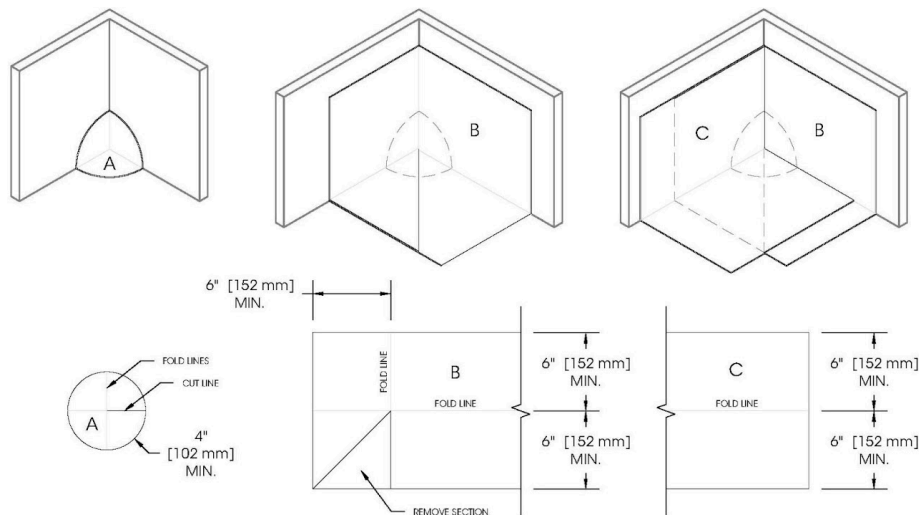
Product:
GAF PMMA Fleece

Installation Method:
GAF PMMA Flashing

Date:
12/11/2024

Scale:
Not To Scale

Detail No.
075600
906



NOTES:

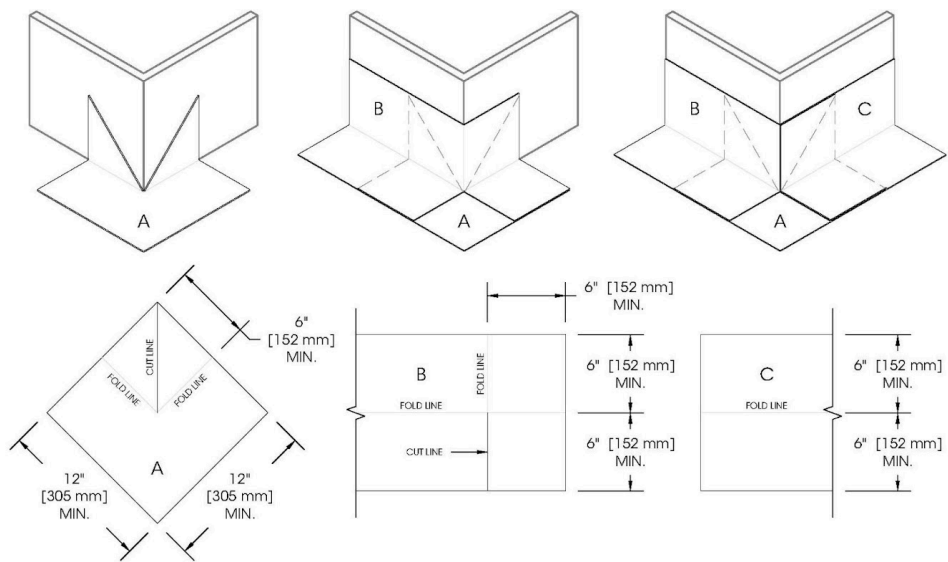
1. REFER TO THE GAF PMMA FLASHING INSTALLATION INSTRUCTIONS FOR FULL INSTALLATION PROCEDURE REQUIREMENTS AND RECOMMENDATIONS.

Fleece Application for Inside Corner

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NOTES:
1. REFER TO THE GAF PMMA FLASHING INSTALLATION INSTRUCTIONS FOR FULL INSTALLATION PROCEDURE REQUIREMENTS AND RECOMMENDATIONS.

Fleece Application for Outside Corner

Product:
GAF PMMA
Fleece

Installation
Method:
GAF PMMA
Flashing

Date:
12/11/2024

Scale:
Not To Scale

Detail No.
075600
907

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The GAF logo consists of the letters "GAF" in a bold, white, sans-serif font, centered within a solid red square.

We
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what
matters
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