MIAMI-DADE

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
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CONTRACTOR ENFORCEMENT SECTION
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PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

G.A.F. Materials Corporation
1361 Alps Road
Wayne NJ 07470

Your application for Product Approval of:
GAF Conventional Built-Up Roof Systems for Concrete Deck.
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime from a jobsite or manufacturer's plant for quality control testing.
If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Acceptance No.: 00-0403.02
Expires: 11/06/2003

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS

BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

Approved: 06/29/2000

ROOFING SYSTEM APPROVAL

Category:	Roofing	Approval Date: **June 29, 2000**
Sub-Category:	BUR	
		Expiration Date: **November 06, 2003**
Deck Type:	Concrete	
Maximum Design Pressure	-457.5 psf	
Fire Classification:	See General Limitation #1	

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specification	Product Description
GAF Asphalt Concrete Primer	5, 55 gallons	ASTM D 41	Asphalt concrete primer used to promote adhesion of asphalt in built-up roofing.
GAF Mineral Shield® Granules	60 lb. bags	ASTM D 1863	Granules for surfacing of exposed asphalt, cold process cement or emulsion. GAF Mineral Shield® Granules shall be used for flashing applications only.
GAF WeatherCoat® Emulsion	5 gallons	ASTM 1227	Surface coating for smooth surfaced roofs.
GAF Premium Fibered Aluminum Roof Coating	1, 5 gallons	ASTM D 2824	Fibered aluminum coating.
GAF Jetblak All Weather Plastic Cement	1, 5 gallons	ASTM D 3019 ASTM D 3409	Refined asphalt blended with a mineral stabilizer and fibers. Permits adhesion to wet and dry surfaces.
RUBEROID® Modified Bitumen Flashing Cement	5 gallons	ASTM D 4586	Fiber reinforced, polymer modified Flashing cement
Jetblack Premium Flashing Cement	5 gallons	ASTM D 4586	Asphalt flashing Cement
GAFGLAS® #75	3 sq. roll 75 lb. roll	ASTM D 4601	Asphalt impregnated and coated glass mat base sheet.
GAFGLAS #80 Ultima Base Sheet	2 Sq. Roll 70 lbs./roll	ASTM D4601	Asphalt impregnated and coated, fiberglass base sheet
GAFGLAS Ply 6®	5 sq. roll 45 lb. roll	ASTM D 2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS Flex Ply™ 6	5 sq. roll 45 lb. roll	ASTM D 2178	Type VI asphalt impregnated glass felt with asphalt coating.

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Roofing Product Control Examiner

Product	Dimensions	Test Specification	Product Description
GAFGLAS Ply 4®	5 sq. roll	ASTM D 2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® Mineral Surfaced Cap Sheet	76 lb. roll	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGLAS® STRATAVENT® Perforated	60 lb. roll	ASTM D 4897 D 3672	Fiber glass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating with factory perforations.
GAFGLAS® Flashing	various		Asphalt coated glass fiber mat flashing sheet available in three sizes.
GAFGLAS® STRATAVENT Nailable	69 lb. roll	ASTM D 489 D 3672	Fiber glass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
RUBEROID Modified Base Sheet	3 sq. roll 67 lbs.	ASTM D4601, Type II, UL Type G2 BUR	Premium glass fiber reinforced SBS-modified base sheet
GAFTEMP® Isotherm R	various	PA 110	Polyisocyanurate foam insulation.
Tapered GAFTEMP® Isotherm R	various	PA 110	Tapered Polyisocyanurate foam insulation
GAFTEMP Isotherm RA	various	PA 110	Polyisocyanurate foam insulation
Tapered GAFTEMP Isotherm RA	various	PA 110	Tapered Polyisocyanurate foam insulation
GAFTEMP Isotherm RN	various	PA 110	Polyisocyanurate foam insulation
Tapered GAFTEMP Isotherm RN	various	PA 110	Tapered Polyisocyanurate foam insulation
GAFTEMP® Composite	various	PA 110	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.
Tapered GAFTEMP® Composite	various	PA 110	Tapered Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.

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Product	Dimensions	Test Specification	Product Description
GAFTEMP® Composite A	various	PA 110	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.
Tapered GAFTEMP® Composite A	various	PA 110	Tapered Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.
GAFTEMP® Composite N	various	PA 110	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.
Tapered GAFTEMP® Composite N	various	PA 110	Tapered Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.
GAFTEMP® Fiberboard	various	PA 110	Fiberboard insulation.
GAFTEMP® Permalite®	various	PA 110	Perlite insulation board.
GAFTEMP Recover Board	1/2" thick	PA 110	Perlite recover board
GAFTEMP® High Density Fiberboard	various	PA 110	High density wood fiberboard insulation.
GAFTITE® #12 Standard Roofing Fastener		PA 114	Insulation fastener for steel and plywood decks.
GAFTITE® #14 Heavy Duty Roofing Fastener		PA 114	Insulation fastener for steel, wood and concrete decks.
GAFTITE ASAP		PA 114	Pre-assembled GAFTITE Fasteners and metal and plastic plates.
GAFTITE® Base Sheet Fastener and Plate		PA 114	Base sheet fastening assembly.
Galvalume Plates	3" and 3 ½"	PA 114	Round galvalume stress plates.
NTB Fasteners		PA 114	Fastener for use in gypsum, tectum and lightweight insulating concrete decks.
Polypropylene Plates	3" and 3 ½"	PA 114	Round polypropylene stress plates.

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Roofing Product Control Examiner

Product	Dimensions	Test Specification	Product Description
Ruberoid® 20	1.5 sq. roll 95 lbs.	ASTM D 5147	SBS modified asphalt base sheet and interply sheet reinforce with a glass fiber mat.
Ruberoid® Mop Granule	1 sq. roll 103 lbs.	ASTM D 5147	Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID MOP Smooth	1 sq. roll 87 lbs.	ASTM D 5147	Non-woven polyester mat coated with polymer modified asphalt and smooth surfaced.
RUBEROID® MOP PLUS	1 sq. roll 102 lbs.	ASTM D 5147	Non-woven polyster mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP 170FR	1 sq. roll 103 lbs.	ASTM D 5147	Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP FR	1 sq. roll 105 lbs.	ASTM D 5147	Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® TORCH Smooth	1 sq. roll 87 lbs.	ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, smooth surface.
RUBEROID® TORCH Granule	1 sq. roll 102 lbs.	ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface.
RUBEROID® TORCH PLUS	¾ sq. roll 93 lbs.	ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface
RUBEROID® TORCH FR	¾ sq. roll 90 lbs.	ASTM D 5147	Heavy duty, polyester reinforced, coated with fire retardant asphalt modified bitumen membrane, granule surface.
RUBEROID® 30	1 sq. roll 92 lbs.	ASTM D 5147	Non woven fiberglass mat coated with polymer modified asphalt and surfaced with mineral granules.

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Product	Dimensions	Test Specification	Product Description
RUBEROID® 30 FR	1 sq. roll 92 lbs.	ASTM D 5147	Non woven fiberglass mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID ULTRACLAD® SBS	1sq. roll 101 lbs.	ASTM D 5147	Woven fiberglass mat coated with Polymer modified asphalt and surfaced with aluminum, copper or stainless steel foil.
Vent Stacks (metal and plastic)		PA 100(A) ASTM D 1929 ASTM D 635	One way valve vent used to relieve built-up pressure within the roof system. GAF Vent Stacks are available in metal or plastic.
GAF Aluminum Emulsion	5 gallons	None	Mineral colloidal bituminous emulsion with reflective aluminum flakes
RUBEROID® ULTRACLAD® SBS	109. Roll 101 lbs.	ASTM D 5147	Woven fiberglass mat coated with Polymer modified asphalt surfaced with aluminum, copper or stainless steel foil.
GAF Aluminum Roof Paint	5 gallons	ASTM D2824, Type I	Non-fibered. aluminum pigmented, asphalt roof coating
GAF Built-Up Roofing Asphalt	100 lb. cartons, bulk	ASTM D312, Types I, II, III and IV	Interply mopping and surfacing asphalt
RUBEROID MOD Asphalt	60 lb. kegs		SEBS modified asphalt
RUBEROID MOD Asphalt L	60 lb. kegs		SEBS modified asphalt
RUBEROID MOD Asphalt P	60 lb. kegs		SEBS modified asphalt
GAFTEMP Composite A	Various	PA 110	Polyisocyanurate/wood fiberboard composite
GAFTEMP Tapered Composite A	Various	PA 110	Tapered Polyisocyanurate/wood fiberboard composite
GAFTEMP Composite N	Various	PA 110	Polyisocyanurate/wood fiberboard composite
GAFTEMP Tapered Composite N	Various	PA 110	Tapered Polyisocyanurate/wood fiberboard composite

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Product	Dimensions	Test Specification	Product Description
GAFTEMP Tapered Isotherm R	Various	PA 110	Tapered polyisocyanurate foam
GAFTEMP Tapered Isotherm RA	Various	PA 110	Tapered polyisocyanurate foam
GAFTEMP Tapered Isotherm RN	Various		Tapered polyisocyanurate foam
GAFTEMP GAFCANT™	Various		Cut perlite board
GAFTEMP GAFEDGE™ Tapered Edge Strip	Various		Tapered perlite board
GAFTEMP PERMALITE® Tapered Roof Insulation	Various	PA 110	Tapered perlite board
GAFTEMP Recover Board	1/2" thick, Various sizes	PA 110	Perlite board
Shingle-Mate™ Underlayment	4 sq. roll 30 lbs.		Fiberglass reinforced shingle underlayment
GAFTITE® ASAP	500 per box	PA 114	Pre-assembled fastener and metal and plastic plates

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TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product	Dimensions	Test Specification	Product Description	Manufacturer
Pyrox	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co. (with current PCA)
ACFoam I	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products (with current PCA)
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products (with current PCA)
Hy-Therm Nail-line	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current PCA)
Hy-Therm SP	various	PA 110	Polyisocyanurate foam insulation.	Celotex Corp. (with current PCA)
Hy-Therm AP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current PCA)
Hy-Therm Stable R	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current PCA)
Hy-Therm White Line	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current PCA)
Anchorbond Fastener		PA 114	Insulation fastening assembly	Celotex Corp. (with current PCA)
Dekfast Fasteners #14		PA 114	Insulation fastener for steel and concrete decks	Construction Fasteners Inc. (with current PCA)
Dekfast Hex Plate	2 7/8" x 3 1/4"	PA 114	Galvalume hex stress plate.	Construction Fasteners Inc. (with current PCA)
Dekfast Lock Plate	3" x 3 1/4"	PA 114	Polypropylene locking plate.	Construction Fasteners Inc. (with current PCA)
Dekfast Fasteners #14		PA 114	Insulation fasteners for concrete decks	Construction Fasteners Inc. (with current PCA)

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Product	Dimensions	Test Specification	Product Description	Manufacturer
Dekfast Fasteners #12		PA 114	Insulation fastener for steel and wood decks.	Construction Fasteners Inc. (with current PCA)
ISO 95+ Composite		PA 110	Polyisocyanurate / perlite ridged insulation	Firestone (with current PCA)
Asphalt		ASTM D 312	Type III or IV Hot asphlat bitumin adhesive	generic
Asphalt Primer		ASTM D 41	Asphalt Primer	generic
EPS	various	PA 110	Extruded polystyrene insulation	generic
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	generic
Pelite/Urethane Composite	various	PA 110	Perlite / urethane composite board insulation	generic
Perlite Insulation	various	PA 110	Perlite insulation board	generic
Polyethylene	4 mil min.		Vapor barrier / Air barrier	generic
Red Rosin	various		Rosin paper for barrier layer on wood decks	generic
Roofing Nails	Minimum # 12	PA 114	Corrosion resistant annular ring shank nails	generic
Tin Caps	Min. 32 ga. x $1^5/_8$"		Corrosion resistant circular discs.	generic
MB aluminum roof coating		PA 121	Aluminum roof coating	Grundy Industries (with current PCA)
Dens-Deck	various	PA 110	Gypsum insulation board.	Georgia Pacific (with current PCA)
#12 Roofgrip		PA 114	Insulation fastener for steel or wood decks	ITW Buildex (with current PCA)
#14 Roofgrip		PA 114	Insulation fastener steel, wood or concrete decks	ITW Buildex (with current PCA)
Gripdek Fastener		PA 114	Insulation fastener	ITW Buildex (with current PCA)

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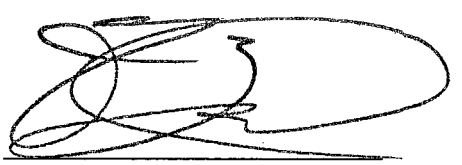
Product	Dimensions	Test Specification	Product Description	Manufacturer
Hexcel Fastener		PA 114	Insulation fastener	ITW Buildex (with current PCA)
Hextra		PA 114	Insulation fastener and metal or plastic plate	ITW Buildex (with current PCA)
Standard Plastic Plate	3" round	PA 114	Polyolefin plastic plate	ITW Buildex (with current PCA)
ISO 95+	various	PA 110	Polyisocyanurate foam insulation	Firestone (with current PCA)
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation	NRG Barriers, Inc. (with current PCA)
ISORoc	various	PA 110	Polyisocyanurate foam / rockwool composite insulation	NRG Barriers, Inc. (with current PCA)
Olympic Standard	3" round	PA 114	3" round galvalume AZ55 steel plate	Olympic Manufacturing Group, Inc. (with current PCA)
Olympic Fastener #14		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc. (with current PCA)
Olympic Polypropylene	3.25" round	PA 114	Polypropylene plastic plate	Olympic Manufacturing Group, Inc. (with current PCA)
Olympic Fastener #12		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc. (with current PCA)
Olympic Fastener ASAP		PA 114	Pre-assembled Insulation fastener and plate	Olympic Manufacturing Group, Inc. (with current PCA)



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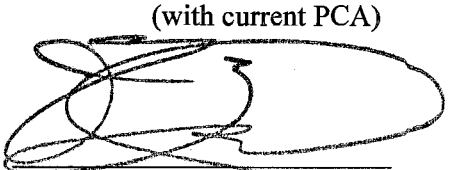
Product	Dimensions	Test Specification	Product Description	Manufacturer
Olympic CR Base Felt Fastener and Base Sheet Disc		PA 114	Insulation fastener assembly for Base Sheet fastening only	Olympic Manufacturing Group, Inc. (with current PCA)
GlasFast Fastener		PA 114	Insulation fastener assembly with recessed plastic plate	Owens-Corning Fiberglas Corp. (with current PCA)
Paroc Base Board	various	PA 110	Rockwool insulation	Partek, Inc. (with current PCA)
Paroc Cap Board	various	PA 110	Rockwool insulation	Partek, Inc. (with current PCA)
Multi-Max	various	PA 110	Polyisocyanurate foam insulation	Rmax, Inc. (with current PCA)
Multi-Max FA	various	PA 110	Polyisocyanurate foam insulation	Rmax, Inc. (with current PCA)
UltraGard	various	PA 110	Polyisocyanurate foam insulation	Schuller International Inc. (with current PCA)
Insul-Fixx Fastener		PA 114	Insulation fastener for steel and wood decks	SFS/Stadler (with current PCA)
Insul-Fixx P	3" round	PA 114	3" round polyethylene stress plate	SFS/Stadler (with current PCA)
Rawl Fasteners #12		PA 114	Insulation fastener for steel and wood decks	The Rawlplug Company Inc. (with current PCA)
Rawl Fasteners #14		PA 114	Insulation fastener for use in steel, wood or concrete	The Rawlplug Company Inc. (with current PCA)
Rawl 2" Plate	2" round	PA 114	2" round galvalume AZ55 membrane plate	The Rawlplug Company Inc. (with current PCA)
Rawl 3" Plate	3" round	PA 114	3" round galvalume AZ55 steel plate	The Rawlplug Company Inc. (with current PCA)



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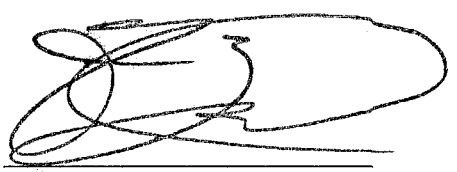
Product	Dimensions	Test Specification	Product Description	Manufacturer
Rawlite 3" Plate	3" round	PA 114	3" round galvalume AZ55 steel plate for use with Rawlite fasteners	The Rawlplug Company Inc. (with current PCA)
Super Prep II		PA 121	Roof coating	Thermo-Materials, Inc. (with current PCA)
Tru-Fast DL		PA 114	Insulation fastener for steel, or wood	Tru-Fast (with current PCA)
Tru-Fast Plastic Plate	3.04" round	PA 114	3.04" round polyethylene plastic plate	Tru-Fast (with current PCA)
Tru-Fast MP-3	3.23" round	PA 114	3.23" round galvalume AZ50 steel plate	Tru-Fast (with current PCA)
Tru-Fast HD		PA 114	Insulation fastener for use in wood, steel or concrete decks	Tru-Fast (with current PCA)
Tru-Fast Ultra		PA 114	Stainless Steel fastener for use in steel, wood and concrete decks	Tru-Fast (with current PCA)
Tru-Fast DP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast (with current PCA)
Tru-Fast TP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast (with current PCA)
Structodeck	various	PA 110	High density wood fiber	Wood Fiber Industries (with current PCA)



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EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corporation	FMRC 1996	Current Insulation Attachment Requirements	01.01.96
Factory Mutual Research Corporation	J.I. 1V8A4.AM	Wind Uplift FMRC 4470 - PA 114	06.28.93
Factory Mutual Research Corporation	J.I. 2B8A4.AM J.I. 3B9Q1.AM J.I. 0D0A8.AM	Wind Uplift FMRC 44704	07.02.97 01.08.98 07.09.99
Factory Mutual Research Corporation	J.I. 0D1A8.AM J.I. 0Y9Q5.AM	Wind Uplift FMRC 4470 - PA 114	07.29.94 04.01.98
Factory Mutual Research Corporation	J.I. 3X3A2.AM	Wind Uplift FMRC 4470 - PA 114	08.02.94
Factory Mutual Research Corporation	J.I. 0Y9Q5.AM	Wind Uplift FMRC 4470 - PA 114	07.29.94
Underwriters Laboratories, Inc.	R1306, 87NK11819	Fire Resistance Classification UL 790 - PA 114	01.01.93
Dynatech Engineering Corporation	#3600.02.95-1	Wind Uplift PA 114	02.02.95
Dynatech Engineering Corporation	#4482.02.95-1	Wind Uplift PA 114	02.02.95

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Systems

Deck Type 3I: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type B: Optional base sheet adhered with approved asphalt; base insulation layer mechanically fastened, optional top layer adhered with approved asphalt.

All General Limitations shall apply.

Insulation Base Layer	Fastener Type	Fastening Detail No. (see PA 117)	Fasteners Per Board	Fastener Density
Approved Type(s): **E'NRG'Y 2, GAFTEMP® Isotherm RN**				
Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	DekFast #14 S	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	DekFast #15 S	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	Olympic S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Con-Tite S/P	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	GAFTITE® S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Rawl Drive S	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Olympic /G2 Plate	[2]	3	1:4 ft²
Approved Type(s): **ISORoc**				
Minimum: 1.5" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	DekFast #14 S	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	DekFast #15 S	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	Olympic S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4' 1:2.67 ft²	GAFTITE® S/P/ASAP		[3]	6
Minimum: 1.5" x 4' x 4'	Rawl Drive S	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	Olympic /G2 Plate	[3]	6	1:2.67 ft²
Approved Type(s): **GAFTEMP® Isotherm R**				
Minimum: 1.3" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	DekFast #14 S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	DekFast #15 S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Olympic S/ASAP	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Con-Tite S	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	GAFTITE® S/ASAP	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Tru-Fast S	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Olympic /G2 Plate	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	HD Insulfixx S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	GAFTITE® S/P/ASAP	[2]	3	1:4 ft²

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Approved Type(s): **E'NRG'Y 2 Plus**, GAFTEMP Composite A, GAFTEMP Composite N

Minimum: 1.5" x 3' x 4'	Glasfast Striker S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4'	DekFast #14 S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4'	DekFast #15 S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	HD Insulfixx S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Olympic S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Olympic/G2 Plate	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Con-Tite S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	GAFTITE® S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Rawl Drive S	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Tru-Fast S/P	[2]	3	1:4 ft²

Approved Type(s): **ISO 95 +**

Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	HD Insulfixx S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	Tru-Fast S	[2]	4	1:3 ft²

Approved Type(s): **UltraGard Gold**

Minimum: 1.3" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	DekFast #14 S	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	DekFast #15 S	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft²

Approved Type(s): **Perlite, GAFTEMP®** PERMALITE®

Minimum: ¾" x 2' x 4'	Glasfast Striker S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	DekFast #14 S	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	DekFast #15 S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	Olympic /G2 Plate	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	Tru-Fast S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	GAFTITE® 3½"	[1]	4	1:2 ft²

Approved Type(s): **Fiberglas**

Minimum: $^{15}/_{16}$" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	DekFast #14 S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	DekFast #15 S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	HD Insulfixx S	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Glasfast/Striker	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Olympic S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	GAFTITE® S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Olympic/G2 Plate	[3]	6	1:2.67 ft²

Approved Type(s): **High Density Wood Fiber, GAFTEMP® High Density Fiberboard**

Minimum: ¾" x 4' x 4'	Glasfast Striker S/P	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	DekFast #14 S	[3]	4	1:4 ft²

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Minimum: ¾" x 4' x 4'	DekFast #15 S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic S/ASAP	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Con-Tite S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	GAFTITE® S/ASAP	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic /G2 Plate	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Tru-Fast S	[3]	4	1:4 ft²

Approved Type(s): **Wood Fiber, GAFTEMP® Fiberboard**

Minimum: 1" x 3' x 4'	DekFast S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Anchorbond S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Roofgrip S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Insulfixx S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	HD Insulfixx S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Tru-Fast S	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Olympic S/P/ASAP	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Olympic/G2 Plate	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	GAFTITE® S/P/ASAP	[1]	4	1:3 ft²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Miami-Dade County Roofing Application Standard RAS 117 for fastening details). GAF requires either a ply of GAFGLAS STRATAVENT® perforated laid dry or a layer of GAFTEMP® PERMALITE or wood fiber overlay board on all isocyanurate applications.

Insulation Top Layer	Fastener Type	Fastening Detail No. (see PA 117)	Fasteners Per Board	Fastener Density

Approved Type(s): **Any of the insulations listed for Base Layer, above.**

Approved Type(s): **Paroc**				
Minimum: ¾" x 4' x 4'	N/A	N/A	N/A	N/A

Apply top layer of insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as Base Layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly™ GAFGLAS® STRATAVENT® Perforated, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.. If base sheet is applied directly to polyisocyanurate insulation only a spot or strip mopped application as detailed in this approval is approved; (See General Limitation #4.)

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Ply Sheet: Two or three plies of GAFGLAS® Ply 4® or GAFGLAS® Ply 6® or GAFGLAS FlexPly 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -45 psf

Maximum Fire Classification: See General Limitation #2.

Maximum Slope: See General Limitation #3.

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Deck Type 3I: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type C: Optional base sheet adhered with approved asphalt; One or more layers of insulation simultaneously attached; Base layers optional.

All General Limitations shall apply.

Insulation Base Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Approved Type(s): **GAFTEMP® Isotherm R**, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN				
Minimum: 1.3" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **E'NRG'Y 2, ISO 95 +**				
Minimum: 1.4" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **ISORoc**				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Apache/Hy-Therm Pyrox, White Line, UltraGard Gold**				
Minimum: 1.3" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Apache/Hy-Therm Nail-Line, E'NRG'Y 2 Plus**				
Minimum: 1.5" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Perlite, GAFTEMP®** PERMALITE®, **GAFTEMP Recover Board**				
Minimum: ½" x 2' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fiberglas**				
Minimum: $^{15}/_{16}$" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **High Density Wood Fiber, GAFTEMP® High Density Fiberboard**				
Minimum: ¾" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Wood Fiber, GAFTEMP® Fiberboard**				
Minimum: 1" x 2' x 4'	N/A	N/A	N/A	N/A

Note: All layers shall be simultaneously attached; see top layer below for fasteners and density.

Insulation Top Layer	Fastener Type	Fastening Detail No. (see PA 117)	Fasteners Per Board	Fastener Density
Approved Type(s): **Apache/Hy-Therm Pyrox, White Line**				
Minimum: 1.3" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	DekFast #14 S/P	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	DekFast #15 S/P	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	HD Insulfixx S/P	[3]	6	1:2.67 ft²

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Minimum: 1.3" x 4' x 4'	Olympic S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	Olympic /G2 Plate	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	GAFTITE® S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: 1.3" x 4' x 4'	Tru-Fast S	[3]	6	1:2.67 ft²

Approved Type(s): **Apache/Hy-Therm Nail-Line**

Minimum: 1.5" x 4' x 4'	DekFast #14 S/P	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	DekFast #15 S/P	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	HD Insulfixx S	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	OlympicS/P/ASAP	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	GAFTITE® S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: 1.5" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft²

Approved Type(s): **E'NRG'Y 2**, GAFTEMP Isotherm RN

Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	DekFast #14 S	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	DekFast #15 S	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	Olympic S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Con-Tite S/P	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	GAFTITE® S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Rawl Drive S	[2]	3	1:4 ft²
Minimum: 1.4" x 3' x 4'	Olympic /G2 Plate	[2]	3	1:4 ft²

Approved Type(s): **GAFTEMP® Isotherm R**

Minimum: 1.3" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	DekFast #14 S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	DekFast #15 S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Olympic S/ASAP	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Con-Tite S	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	GAFTITE® S/ASAP	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	Tru-Fast S	[2]	4	1:3 ft²
Minimum: 1.3"x 3' x 4'	Olympic /G2 Plate	[2]	4	1:3 ft²
Minimum: 1.3"x 3' x 4'	HD Insulfixx S/P	[2]	4	1:3 ft²
Minimum: 1.3" x 3' x 4'	GAFTITE® S/ASAP	[2]	3	1:4 ft²

Approved Type(s): **E'NRG'Y 2 Plus, GAFTEMP Composite N**

Minimum: 1.5" x 3' x 4'	Glasfast Striker S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4'	DekFast #14 S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4'	DekFast #15 S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	HD Insulfixx S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Olympic S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Olympic/G2 Plate	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Con-Tite S/P	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	GAFTITE® S/P/ASAP	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Rawl Drive S	[2]	3	1:4 ft²
Minimum: 1.5" x 3' x 4	Tru-Fast S/P	[2]	3	1:4 ft²

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Approved Type(s): **ISO 95 +**

Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	HD Insulfixx S/P	[2]	4	1:3 ft²
Minimum: 1.4" x 3' x 4'	Tru-Fast S	[2]	4	1:3 ft²

Approved Type(s): **Perlite, GAFTEMP®** PERMALITE®

Minimum: ¾" x 2' x 4'	Glasfast Striker S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	DekFast #14 S	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	DekFast #15 S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	Olympic S/ASAP	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	Tru-Fast S/P	[1]	4	1:2 ft²
Minimum: ¾" x 2' x 4'	GAFTITE® S/ASAP	[1]	4	1:2 ft²

Approved Type(s): **Fiberglas**

Minimum: $^{15}/_{16}$" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	DekFast #14 S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	DekFast #15 S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	HD Insulfixx S	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Glasfast/Striker	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Olympic S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	GAFTITE® S/P/ASAP	[3]	6	1:2.67 ft²
Minimum: $^{15}/_{16}$" x 4' x 4'	Olympic/G2 Plate	[3]	6	1:2.67 ft²

Approved Type(s): **High Density Wood Fiber, GAFTEMP® High Density Fiber**

Minimum: ¾" x 4' x 4'	Glasfast Striker S/P	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	DekFast #14 S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	DekFast #15 S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic S/ASAP	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Con-Tite S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	GAFTITE® S/ASAP	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic /G2 Plate	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Tru-Fast S	[3]	4	1:4 ft²

Approved Type(s): **Wood Fiber, GAFTEMP® Fiber**board

Minimum: 1" x 3' x 4'	DekFast S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Anchorbond S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Roofgrip S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Insulfixx S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	HD Insulfixx S/P	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Tru-Fast S	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Olympic S/P/ASAP	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	Olympic/G2 Plate	[1]	4	1:3 ft²
Minimum: 1" x 3' x 4'	GAFTITE® S/P/ASAP	[1]	4	1:3 ft²

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Note: For System Type C, all layers of insulation shall be mechanically attached using the fastener density listed above. Refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Miami-Dade County Roofing Application Standard RAS PA 117 for fastener details). GAF requires either a ply of GAFGLAS STRATAVENT® perforated laid dry or a layer of GAFTEMP® PERMALITE or wood fiber overlay board on all isocyanurate applications.

Base Sheet: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly™ GAFGLAS® STRATAVENT® Perforated, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.. If base sheet is applied directly to polyisocyanurate insulation only a spot or strip mopped application as detailed in this approval is approved; (See General Limitation #4.)

Ply Sheet: Two or three plies of GAFGLAS® Ply 4® or GAFGLAS® Ply 6® or GAFGLAS FlexPly 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -45 psf

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Deck Type 3I: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(1): Anchor sheet adhered with approved asphalt; all layers of insulation adhered with approved asphalt.

All General Limitations shall apply.

Insulation Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One or more layers of any of the insulations listed below:				
Approved Type(s): **Apache/Hy-Therm Pyrox, AP, White Line, Hy -Therm, Nail-Line, ISORoc, UltraGuard Gold**				
Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **E'NRG'Y 2, GAFTEMP® Isotherm R**, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN				
Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **E'NRG'Y 2** Plus, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N				
Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Iso 95 +**				
Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **High Density Wood Fiber, GAFTEMP® High Density Fiberboard**				
Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Paroc**				
Minimum: ¾" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Perlite, GAFTEMP®** PERMALITE®, **GAFTEMP Recover Board**				
Minimum: ½" x 2' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fiberglas**				
Minimum: $^{15}/_{16}$" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Wood Fiber, GAFTEMP® Fiberboard**				
Minimum: 1" x 2' x 4'	N/A	N/A	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS STRATAVENT® perforated laid dry or a layer of GAFTEMP® PERMALITE or wood fiber overlay board on all isocyanurate applications.

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Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet.

Anchor Sheet: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ä Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®,GAFGLAS FlexPly™ 6 GAFGLAS® STRATAVENT® Perforated, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to primed deck adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Base Sheet: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 Ulltima Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly ™ 6 GAFGLAS® STRATAVENT® Perforated, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.. If base sheet is applied directly to polyisocyanurate insulation, only a spot or strip mopped application as detailed in this approval is approved; see General Limitation #4.

Ply Sheet: Two or three plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® or GAFGLAS Flex Ply 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -90 psf

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Deck Type 3: Concrete Decks, Non-insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(2): Base sheet adhered with approved asphalt.

All General Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ulltima Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly ™ 6, GAFGLAS® STRATAVENT® Perforated laid dry, RUBEROID™ Modified Base Sheet or RUBEROID® 20 directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: (Optional, required when used with RUBEROID 20) One, two or three plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® or GAFGLAS FlexPly 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -90 psf

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Deck Type 3: Concrete Decks, Non-insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(4): Base sheet adhered with approved asphalt.

All General Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ulltima Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly ™ 6, RUBEROID™ Modified Base Sheet or RUBEROID® 20 directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® or GAFGLAS FlexPly 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -457.5 psf

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Deck Type 3: Concrete Decks, Non-insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(5): Base sheet GAFGLAS® STRATAVENT® Perforated, lose laid dry.

All General Limitations shall apply.

Base Sheet: GAFGLAS® STRATAVENT® Perforated, lose laid dry.

Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® or GAFGLAS FlexPly 6 ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..

2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.

Maximum Design Pressure: -90 psf

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Concrete Deck System Limitations:

1. The following assembly is approved to a maximum design pressure of **-270 psf.** No substitutions shall be made:

a.	Deck Type:	Concrete, primed
b.	Insulations:	(Optional) Min. 1.75" ACFoam Composite, GAFTEMP® Composite, GAFTEMP Composite A, GAFTEMP Composite N or E'NRG'Y-2 Composite laid with the polyisocyanurate side down and bonded in a full mopping of an approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
c.	Base Sheet:	Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
d.	Ply Sheet:	One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
e.	Cap Sheet:	(Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
f.	Surfacing: (Required if no Cap Sheet)	
	1.	GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
	2.	Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

2. The following assembly is approved to a maximum design pressure of **-140 psf.** No substitutions shall be made:

a.	Deck Type:	Concrete, primed
b.	Insulations:	Min. ½" GAFTEMP® High Density Fiberboard or other Approved high density wood fiberboard or min. 1" GAFTEMP® PERMALITE® adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
c.	Base Sheet:	Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
d.	Ply Sheet:	One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
e.	Cap Sheet:	(Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

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f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

3. The following assembly is approved to a maximum design pressure of **-322.5 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed
b. Insulations: *Base Layer:* Min. 2" GAFTEMP® Isotherm R, or IsothermRN.
   Top Layer: Min. ½" GAFTEMP® PERMALITE® adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

4. The following assembly is approved to a maximum design pressure of **-270 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed
b. Insulations: *Base Layer:* Min. 1.5" GAFTEMP® Composite NP
   Top Layer: Min. 1.5 GAFTEMP® Composite adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

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e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

5. The following assembly is approved to a maximum design pressure of **-137 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed

b. Insulations: Min. ¾" GAFTEMP® Permalite adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq..

c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

6. The following assembly is approved to a maximum design pressure of **-126 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed

b. Insulations: *Base Layer:* Min. 1¼" E'NRG'Y 2 Plus, AC Foam I, II, Apache/Hy-Therm Pyrox, AP, White Line, UltraGard Gold, Multi-Max or GAFTEMP® Isotherm R, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N adhered to the concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq..
Top Layer: Min. ½" GAFTEMP® Permalite adhered to the base insulation layer or primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq.

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c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

7. The following assembly is approved to a maximum design pressure of **-140 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed

b. Insulations: *Base Layer:* Min. ½" High Density Wood Fiberboard adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq.

c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

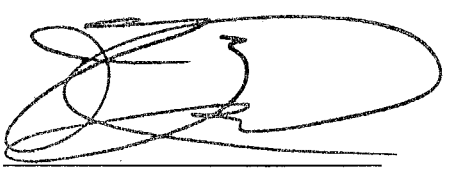
d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

8. The following assembly is approved to a maximum design pressure of **-128 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed



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b. Insulations: *Base Layer:* Min. 3/4" Gaftemp® Permalite adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq.

c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

9. The following assembly is approved to a maximum design pressure of **-162 psf**. No substitutions shall be made:

a. Deck Type: Concrete, primed

b. Insulations: *Base Layer:* Min. 1¼" E'NRG'Y 2 Plus, AC Foam I, II, Apache/Hy-Therm Pyrox, AP, White Line, UltraGard Gold, Multi-Max or GAFTEMP® Isotherm R, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N adhered to the concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq..
Top Layer: Min. ½" GAFTEMP® Fiberboard or other approved wood fiberboard adhered to the base insulation layer or primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq.

c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)

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1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

10. The following assembly is approved to a maximum design pressure of **-157 psf.** No substitutions shall be made:

a. Deck Type: Concrete, primed

b. Insulations: *Base Layer:* Min. 1¼" E'NRG'Y 2 Plus, AC Foam I, II, Apache/Hy-Therm Pyrox, AP, White Line, UltraGard Gold, Multi-Max or GAFTEMP® Isotherm R, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N adhered to the concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq..

Top Layer: Min. ¾" GAFTEMP® PERMALITE®or other approved perlite insulation board adhered to the base insulation layer or primed concrete deck in a full mopping of approved asphalt applied within the EVT range at a rate of 20-40 lbs./sq..

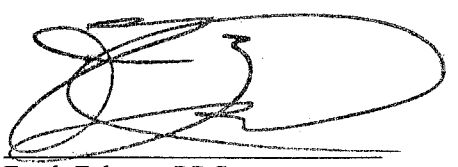
c. Base Sheet: Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima ™ GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, RUBEROID Modified Base Sheet or RUBEROID® 20 directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

d. Ply Sheet: One or more plies of GAFGLAS® PLY 4® or GAFGLAS® PLY 6® ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

e. Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

f. Surfacing: (Required if no Cap Sheet)
   1. GAF WEATHER COAT® Emulsion with an application rate of 3 gal./sq.; or GAF Premium Fibered Aluminum Roof Coating with an application rate of 1.5 gal./sq..
   2. Asphalt flood coat at an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively

***Note:** The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, corners). No rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners, and corners).



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GENERAL LIMITATIONS:

1 Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.

2 Insulation may be applied in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer.

3 All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.

4 An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet may be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**

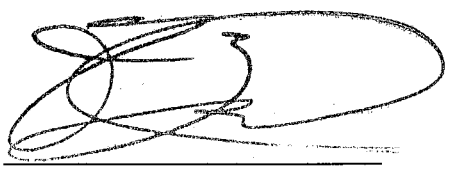
5 Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with TAS 105. If the fastener value, as field-tested, is below 275 lbf., insulation attachment shall not be acceptable.

6 Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within the specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer or Architect may be submitted. Said revised fastener spacing utilize the withdrawal resistance value taken from Miami-Dade Protocol TAS 105 and calculations in compliance with Miami-Dade Roofing Application Standard RAS 117.

7 Perimeter and corner areas shall comply with the enhanced uplift pressure of these areas, as calculated in compliance with Chapter 23 of the South Florida Building Code. Fastener densities shall be increase for both insulation and base sheet as needed calculated in compliance with Miami-Dade Roofing Application Standard TAS 117. **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**

8 All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Miami-Dade County Roofing Application Standard TAS 111 and the wind load requirements of Chapter 23 of the South Florida Building Code.

9 The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, corners). No rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners, and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**



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NOTICE OF ACCEPTANCE STANDARD CONDITIONS

1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.

2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.

3 Renewals of Acceptance will not be considered if:
- a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
- b) The product is no longer the same product (identical) as the one originally approved;
- c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
- d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.

4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.

5 Any of the following shall also be grounds for removal of this Acceptance:
- a) Unsatisfactory performance of this product or process;
- b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.

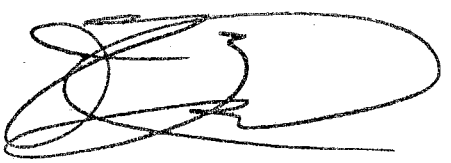
6 The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.

7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.

8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.

9 This Acceptance contains pages 1 through 34.

END OF THIS ACCEPTANCE



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