



BUILDING CODE COMPLIANCE OFFICE (BCCO)  
 PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA  
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**NOTICE OF ACCEPTANCE (NOA)**

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**GAF Material Corporation**  
 1361 Alps Road  
 Wayne, NJ 07470

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by the BCCO and accepted by the Building Code and Product Review Committee to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The BCCO (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BCCO reserves the right to revoke this acceptance, if it is determined by BCCO that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: GAF Ruberoid® Modified Bitumen Roof System for Recover Decks.**

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA 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 NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA #00-0331.14 and consists of pages 1 through 31.  
 The submitted documentation was reviewed by Frank Zuloaga, RRC.



NOA No: 03-0930.07  
 Expiration Date: 11/06/08  
 Approval Date: 11/20/03  
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## ROOFING SYSTEM APPROVAL

Category: Roofing  
Sub-Category: SBS/APP, Modified Bitumen  
Deck Type: Recover Deck  
Maximum Design Pressure -60 psf  
Fire Classification: See General Limitation #1

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

| <u>Product</u>   | <u>Dimensions</u>     | <u>Test Specification</u>                          | <u>Product Description</u>   |
|--|-----------------------|--|--|
| GAF Asphalt Concrete Primer (Matrix™ 307 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. & 100 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 (Matrix™ Fibered 305 Emulsion)   | 5 gallons             | ASTM 1227  | Surface coating for smooth surfaced roofs.   |
| GAF Premium Fibered Aluminum Roof Coating (Matrix™ System Pro Aluminum Roof Coating Fibered 301) | 1, 5 gallons          | ASTM D 2824  | Fibered aluminum coating.  |
| GAF Jetblak All Weather Plastic Cement (Matrix™ Standard Wet/Dry Roof Cement 204)                | 1, 5 gallons          | ASTM D 3019<br>ASTM D 3409                         | Refined asphalt blended with a mineral stabilizer and fibers. Permits adhesion to wet and dry surfaces.  |
| GAF Aluminum Emulsion  | 5 gallons             |  | Mineral colloidal bituminous emulsion with reflective aluminum flakes.   |
| GAF Aluminum Roof Paint (Matrix™ System Pro Aluminum Roof Coating Fibered 302)                   | 5 gallons             | ASTM D2824,<br>Type I                              | Non-fibered. aluminum pigmented, asphalt roof coating.   |
| GAF Built-Up Roofing Asphalt   | 100 lb. cartons, bulk | ASTM D312,<br>Types I, II, III and IV <sub>1</sub> | Interply mopping and surfacing asphalt   |
| GAFGLAS® #75   | 39.37" (1 meter) Wide | ASTM D 4601  | Asphalt impregnated and coated glass mat base sheet.   |



NOA No: 03-0930.07  
 Expiration Date: 11/06/08  
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| <u>Product</u>   | <u>Dimensions</u>        | <u>Test Specification</u> | <u>Product Description</u>  |
|--|--------------------------|---------------------------|---|
| GAFGLAS #80<br>Ultima™ Base Sheet                            | 39.37" (1 meter)<br>Wide | ASTM D4601                | Asphalt impregnated and coated, fiberglass base sheet.  |
| GAFGLAS FlexPly™<br>6  | 39.37" (1 meter)<br>Wide | ASTM D 2178               | Type VI asphalt impregnated glass felt with asphalt coating.  |
| GAFGLAS Ply 4®   | 39.37" (1 meter)<br>Wide | ASTM D 2178               | Type IV asphalt impregnated glass felt with asphalt coating.  |
| GAFGLAS® Mineral<br>Surfaced Cap Sheet                       | 39.37" (1 meter)<br>Wide | ASTM D 3909               | Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.   |
| GAFGLAS®<br>STRATAVENT®<br>Eliminator Perforated             | 39.37" (1 meter)<br>Wide | ASTM D3672<br>ASTM D 4897 | Fiberglass base sheet 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®<br>STRATAVENT®<br>Eliminator Perforated<br>Nailable | 39.37" (1 meter)<br>Wide | ASTM D3672<br>ASTM D 4897 | Fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.                           |
| RUBEROID® SBS<br>Heat-Weld™ Smooth                           | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced.   |
| RUBEROID® SBS<br>Heat-Weld™ Granule                          | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.  |
| RUBEROID® SBS<br>Heat-Weld™ 170 FR                           | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.   |
| RUBEROID® SBS<br>Heat-Weld™ PLUS                             | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.  |
| RUBEROID® SBS<br>Heat-Weld PLUS FR                           | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.   |
| RUBEROID® SBS<br>Heat-Weld™ 25                               | 1 meter (39.37")<br>wide | ASTM D-6164               | Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced.   |
| RUBEROID MOP<br>Smooth                                       | 39.37" (1 meter)<br>Wide | ASTM D5147<br>ASTM D6298  | Non-woven polyester mat coated with polymer modified asphalt. Does not have a factory applied surfacing.  |
| RUBEROID<br>ULTRACLAD® SBS                                   | 1 sq. roll<br>101 lb.    | ASTM D5147                | Woven fiberglass mat coated with polymer modified asphalt and surfaced with aluminum, copper or stainless steel foil.   |



| <u>Product</u>                                    | <u>Dimensions</u>        | <u>Test Specification</u>             | <u>Product Description</u>   |
|---|--------------------------|---------------------------------------|--|
| RUBEROID MOD<br>Asphalt, Asphalt L &<br>Asphalt P | 60 lb. kegs              |                                       | SEBS modified asphalt  |
| RUBEROID®<br>Modified Base Sheet                  | 39.37" (1 meter)<br>Wide | ASTM D4601<br>Type II, Type<br>G2 BUR | Premium glass fiber reinforced SBS-modified base sheet.  |
| Ruberoid® Mop<br>Granule                          | 39.37" (1 meter)<br>Wide | ASTM D 6222<br>ASTM D 5147            | Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.                   |
| Ruberoid® Torch<br>Smooth                         | 39.37" (1 meter)<br>Wide | ASTM D 5147                           | Heavy duty, polyester reinforced, asphalt modified bitumen membrane.   |
| Ruberoid® Torch Plus<br>(Granule)                 | 39.37" (1 meter)<br>Wide | ASTM D 6222<br>ASTM D 5147            | Heavy duty, polyester reinforced, asphalt modified bitumen membrane.   |
| Ruberoid® Torch<br>Granule                        | 39.37" (1 meter)<br>Wide | ASTM D 6222<br>ASTM D 5147            | Asphalt impregnated, coated felt, surfaced with mineral granules.  |
| Ruberoid® Torch FR                                | 39.37" (1 meter)<br>Wide | ASTM D 6222<br>ASTM D 5147            | Non-woven polyester mat coated with fire retardant polymer modified asphalt surfaced with mineral granules.        |
| Ruberoid® Mop Plus<br>(Granule)                   | 39.37" (1 meter)<br>Wide | ASTM D 6164<br>ASTM D 5147            | Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.                   |
| Ruberoid® Mop FR                                  | 39.37" (1 meter)<br>Wide | ASTM D 6164<br>ASTM D 5147            | Non-woven polyester mat coated with fire-retardant, polymer modified asphalt surfaced with mineral granules.       |
| Ruberoid® 20                                      | 39.37" (1 meter)<br>Wide | ASTM D 6163<br>ASTM D 5147            | SBS modified asphalt base sheet reinforce with a glass fiber mat.  |
| Ruberoid® 30                                      | 39.37" (1 meter)<br>Wide | ASTM D 6163<br>ASTM D 5147            | Non woven fiberglass mat coated with polymer modified asphalt and surfaced with mineral granules.                  |
| Ruberoid® 30 FR                                   | 39.37" (1 meter)<br>Wide | ASTM D 6163<br>ASTM D 5147            | Non woven fiberglass mat coated with fire retardant, polymer modified asphalt and surfaced with mineral granules.1 |
| Ruberoid® Mop 170<br>FR                           | 39.37" (1 meter)<br>Wide | ASTM D 6164<br>ASTM D 5147            | Non-woven polyester mat coated with fire retardant polymer modified asphalt surfaced with mineral granules.        |
| TopCoat® Surface<br>Seal SB (Matrix)              | 5 gallons                |                                       | Surface coating for smooth surfaced and mineral surfaced roofs.  |
| GAF WeatherCote®<br>MB+(Matrix)                   | 5 gallons                |                                       | Surface coating for smooth surfaced and mineral surfaced roofs.  |
| TopCoat MB+                                       | 5 gallons                |                                       | Surface coating for smooth surfaced and mineral surfaced roofs.  |
| Matrix™<br>WeatherCote™                           | 5 gallons                |                                       | Surface coating for smooth surfaced and mineral surfaced roofs.  |
| Matrix Low VOC                                    | 5 gallons                |                                       | Surface coating for smooth surfaced and mineral surfaced roofs.  |



| <u>Product</u>  | <u>Dimensions</u> | <u>Test Specification</u> | <u>Product Description</u>  |
|---|-------------------|---------------------------|---|
| Matrix 101 System<br>Pro SBS Adhesive<br>(Ruberoid®/MB) | 5 gallons         | ASTM D3019                | Cold Applied Modified SEBS Asphalt Adhesive   |
| Matrix 201 System<br>Pro SBS Flashing<br>(Ruberoid®/MB) | 5 gallons         | ASTM D3019                | Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.   |
| Matrix 102 Select SBS<br>Adhesive<br>(Ruberoid®/MB)     | 5 gallons         | ASTM D3019                | Cold Applied Modified SEBS Asphalt Adhesive.  |
| Matrix 202 Select SBS<br>Flashing                       | 5 gallons         | ASTM D4586                | Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.   |
| Matrix 203 Standard<br>Plastic Cement                   | 5 gallons         | ASTM D4586                | Standard Plastic Asphalt Roofing Cement   |
| Matrix 213 Gun Grade<br>Plastic Cement                  | 5 gallons         | ASTM D4586                | Standard Plastic Asphalt Roofing Cement Caulk Grade.  |
| Matrix 103 Cold<br>Adhesive                             | 5 gallons         | ASTM D3019                | Cold Applied Asphalt Adhesive.  |
| Matrix 303 Select<br>Fibered Aluminum                   | 5 gallons         | ASTM D 2824               | Fibered aluminum coating.   |
| Matrix 304 Select<br>Non-Fibered                        | 5 gallons         | ASTM D2824,<br>Type I     | Non-fibered. aluminum pigmented, asphalt roof coating.  |
| Vent Stacks (metal<br>and plastic)                      |                   | ASTM D 1929<br>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. |

### APPROVED INSULATIONS:

TABLE 2

| <b>Product Name</b>                 | <b>Product Description</b>   | <b>Manufacturer<br/>(With Current NOA)</b> |
|-------------------------------------|--|--|
| GAFTEMP Isotherm RA, RN & Composite | Polyisocyanurate foam insulation   | GAF Materials Corp.                        |
| GAFTEMP® Composite A & N            | Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation. | GAF Materials Corp.                        |
| (BMCA)GAFTEMP® Fiberboard           | Fiberboard insulation.   | GAF Materials Corp.                        |
| EnergyGuard Perlite                 | Perlite insulation board.  | GAF Materials Corp.                        |
| EnergyGuard Recover Board           | Perlite recover board  | GAF Materials Corp.                        |
| EnergyGuard High Density Fiberboard | High density wood fiberboard insulation.   | GAF Materials Corp.                        |
| PYROX                               | Polyisocyanurate foam insulation   | Apache Products Co.                        |
| White Line                          | Polyisocyanurate foam insulation   | Apache Products Co.                        |



**APPROVED INSULATIONS:**

**TABLE 2**

| <b>Product Name</b>                            | <b>Product Description</b>                             | <b>Manufacturer<br/>(With Current NOA)</b> |
|--|--|--|
| ACFoam I, & II                                 | Polyisocyanurate foam insulation                       | Atlas Energy Products                      |
| ACFoam Composite                               | Polyisocyanurate/perlite composite insulation          | Atlas Energy Products                      |
| ISO 95+, GL, GW                                | Polyisocyanurate foam insulation                       | Firestone Building Products, Inc.          |
| ISO 95+ Composite                              | Polyisocyanurate / perlite ridged insulation           | Firestone Building Products, Inc.          |
| Wood Fiber                                     | Wood fiber insulation board                            | generic                                    |
| High Density Wood Fiberboard                   | Wood fiber insulation board                            | generic                                    |
| Perlite Insulation                             | Perlite insulation board                               | generic                                    |
| Pelite/Urethane Composite                      | Perlite / urethane composite board insulation          | generic                                    |
| Type X Gypsum                                  | Fire resistant rated gypsum                            | generic                                    |
| Dens Deck                                      | Water resistant gypsum board                           | G-P Gypsum Corp.                           |
| ENRGY 2 & ENRGY 2 PLUS, PSI-25, UltraGard Gold | Polyisocyanurate foam insulation                       | Johns Manville                             |
| ENRGY 2 & ENRGY 2 PLUS, PSI-25, UltraGard Gold | Polyisocyanurate foam/fescoboard composite insulation. | Johns Manville                             |
| FiberGlass Roof Insulation                     | Glass fiber/Mineral fiber insulation                   | Johns Manville                             |
| ISORoc   | Polyisocyanurate foam / rockwool composite insulation  | Johns Manville                             |
| Structodek                                     | Wood fiber insulation board                            | Masonite.                                  |
| Fiberglas                                      | Fiber glass roof insulation                            | Owens-Corning Fiberglas Corp.              |
| Paroc Base Board, Paroc Cap Board              | Rockwool insulation.                                   | Partek, Inc.                               |
| Multi-Max, FA                                  | Polyisocyanurate roof insulation                       | RMax, Inc.                                 |
| Thermarroof Composite                          | Polyisocyanurate foam/perlite composite insulation.    | RMax, Inc.                                 |



**APPROVED FASTENERS:**

**TABLE 3**

| <b>Fastener Number</b> | <b>Product Name</b>  | <b>Product Description</b>   | <b>Dimensions</b>     | <b>Manufacturer (With Current NOA)</b> |
|------------------------|--|--|-----------------------|--|
| 1.                     | GAFTITE® (Drill-Tec®) #12, #14 Heavy Duty Roofing Fastener | Insulation fastener for steel, wood & concrete decks.              |                       | GAF Materials Corp.                    |
| 2.                     | GAFTITE® (Drill-Tec®) ASAP                                 | Pre-assembled GAFTITE Fasteners and metal and plastic plates.      |                       | GAF Materials Corp.                    |
| 3.                     | GAFTITE® (Drill-Tec®) Base Sheet Fastener and Plate        | Base sheet fastening assembly.                                     |                       | GAF Materials Corp.                    |
| 4.                     | GAFTITE® (Drill-Tec®) Lite Deck Fastener                   | Insulation fastener for CWF and Gypsum decks.                      |                       | GAF Materials Corp.                    |
| 5.                     | Galvalume Plates (Drill-Tec® Metal)                        | Round galvalume stress plates.                                     | 3" and 3 1/2"         | GAF Materials Corp.                    |
| 6.                     | Polypropylene Plates (Drill-Tec® Plastic)                  | Round polypropylene stress plates.                                 | 3" and 3 1/2"         | GAF Materials Corp.                    |
| 7.                     | Dekfast Fasteners #12, #14 & #15                           | Insulation fastener for wood, steel and concrete decks             |                       | Construction Fasteners Inc.            |
| 8.                     | Dekfast Hex Plate  | Galvalume hex stress plate.  | 2 7/8" x 3 1/4"       | Construction Fasteners Inc.            |
| 9.                     | Dekfast Lock Plate   | Polypropylene locking plate.                                       | 3" x 3 1/4"           | Construction Fasteners Inc.            |
| 10.                    | FM-30, FM-45, FM-60, FM-90 Fasteners                       | Base ply fastening systems for lightweight concrete decks          |                       | ES Products, Inc.                      |
| 11.                    | Nail-Tite Type 'A', Type 'R'                               | Galvanized steel base ply fastener for lightweight concrete decks. |                       | ES Products, Inc.                      |
| 12.                    | #12, #14 Roofgrip Fasteners                                | Insulation fastener for wood and steel.                            |                       | ITW Buildex Corp.                      |
| 13.                    | Hextra Plus  | Pre-assembled Insulation fastener and 3" metal plate               |                       | ITW Buildex Corp.                      |
| 14.                    | Metal Plate  | Galvalume stress plate.  | 3" round<br>3" square | ITW Buildex Corp.                      |
| 15.                    | Gearlok Plastic Plate                                      | Polypropylene round plate  | 3.2"                  | ITW Buildex Corp.                      |
| 16.                    | Olympic Fastener #12, #14 & #15                            | Insulation fastener  |                       | Olympic Mfg Group                      |



**APPROVED FASTENERS:**

**TABLE 3**

| <b>Fastener Number</b> | <b>Product Name</b>           | <b>Product Description</b>  | <b>Dimensions</b> | <b>Manufacturer (With Current NOA)</b> |
|------------------------|-------------------------------|---|-------------------|--|
| 17.                    | Fluted Nail (Con-Tite)        | Insulation fastener   |                   | Olympic Mfg Group                      |
| 18.                    | Olympic CR Base Ply Fasteners | Base ply fastening assembly   |                   | Olympic Mfg Group                      |
| 19.                    | Lite-Deck Fastener            | Insulation fastener for CWF and Gypsum decks.                                 |                   | Olympic Mfg Group                      |
| 20.                    | Lite-Deck Metal               | Round galvalume stress plates.  | 3"                | Olympic Mfg Group                      |
| 21.                    | NTB Magnum                    | Glass reinforced Nylon insulation fastener for gypsum & CWF decks with barbs. |                   | Olympic Mfg Group                      |
| 22.                    | NTB Plate                     | Galvalume stress plate  | 3" round          | Olympic Mfg Group                      |
| 23.                    | Olympic Fastener ASAP         | Pre-assembled Insulation fastener and plate                                   |                   | Olympic Mfg Group                      |
| 24.                    | Olympic Polypropylene         | Polypropylene plastic plate   | 3.25" round       | Olympic Mfg Group                      |
| 25.                    | Olympic G-2                   | Galvalume AZ55 steel plate  | 3.5" round        | Olympic Mfg Group                      |
| 26.                    | Olympic Standard              | Galvalume AZ50 steel plate  | 3" round          | Olympic Mfg Group                      |
| 27.                    | Rawl Fasteners #12 & #14      | Insulation fastener for use in steel, wood or concrete.                       |                   | Powers Fasteners, Inc.                 |
| 28.                    | Rawl Drive/Spike              | Insulation fastener for concrete decks  |                   | Powers Fasteners, Inc.                 |
| 29.                    | Rawl Plate                    | Galvalume AZ55 steel plate  | 3" round          | Powers Fasteners, Inc.                 |
| 30.                    | Powerlite                     | Insulation fastener for CWF and Gypsum decks.                                 |                   | Powers Fasteners, Inc.                 |
| 31.                    | Powerlite Plates              | 3" round galvalume AZ55 steel plate   | 3" round          | Powers Fasteners, Inc.                 |
| 32.                    | Powerlite Lap Plates          | 2" round galvalume AZ55 steel plate   | 2" round          | Powers Fasteners, Inc.                 |



**APPROVED FASTENERS:**

**TABLE 3**

| <b>Fastener Number</b> | <b>Product Name</b>                          | <b>Product Description</b>                             | <b>Dimensions</b> | <b>Manufacturer (With Current NOA)</b> |
|------------------------|--|--|-------------------|--|
| 33.                    | Insul-Fixx Fastener & HD Insul-Fixx Fastener | Insulation fastener for wood, steel and concrete decks |                   | SFS/Stadler                            |
| 34.                    | Insul-Fixx S Plate                           | 3" round galvalume AZ50 steel plate                    | 3" round          | SFS/Stadler                            |
| 35.                    | Insul-Fixx P Plate                           | 3" round polyethylene stress plate                     | 3" round          | SFS/Stadler                            |
| 36.                    | Tru-Fast Fasteners                           | Insulation fastener for concrete decks                 |                   | Tru-Fast                               |
| 37.                    | Tru-Fast MP-3                                | Galvalume AZ50 steel plate                             | 3.23" round       | Tru-Fast                               |
| 38.                    | Tru-Fast Plastic Plate                       | Polyethylene plastic plate.                            | 3.04" round       | Tru-Fast                               |
| 39.                    | Tru-Fast Plates                              | Polyethylene plastic plate                             | 3" round          | Tru-Fast                               |



**APPROVED ASSEMBLIES:**

- Membrane Type:** APP  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/poured gypsum/wood/steel  
**System Type A:** Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>ACFoam-I<br/>Minimum 1.2" thick</b>   | N/A                                       | N/A  |
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold, Isotherm RA, Isotherm RN<br/>Minimum 1.3" thick</b>                                     | N/A                                       | N/A  |
| <b>ENRGY 2, PSI-25, ISO-95, Composite Plus, GL, GW<br/>Minimum 1.4" thick</b>  | N/A                                       | N/A  |
| <b>ACFoam Composite, Barrier Board Plus, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP<br/>Composite A, GAFTEMP Composite N<br/>Minimum 1.5" thick</b> | N/A                                       | N/A  |
| <b>ACFoam-II<br/>Minimum 1.75" thick</b>   | N/A                                       | N/A  |
| <b>EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density<br/>Wood Fiber<br/>Minimum 1/2" thick</b>                 | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>  | N/A                                       | N/A  |

**Note:** All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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 Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.



- Anchor Sheet: One ply of GAFGLAS® #75, GAFGLAS #80 Ultima™ Base Sheet, Ruberoid 20 or GAFGLAS® Stratavent® Eliminator Nailable mechanically fastened as described below:
- Fastening: Approved fasteners at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 24" o.c.
- Base Sheet: One ply of GAFGLAS® #75 or GAFGLAS #80 Ultima Base Sheet adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4 or GAFGLAS FlexPly™ 6, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane: One or more plies of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.
- Surfacing: (Optional) Install one of the following:
1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
  2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)
- Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/poured gypsum/wood/steel  
**System Type A:** Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold, Isotherm RA, Isotherm RN<br/>Minimum 1.3" thick</b>                                     | N/A                                       | N/A  |
| <b>ENRGY 2, PSI-25, ISO-95, Composite Plus, GL, GW<br/>Minimum 1.4" thick</b>  | N/A                                       | N/A  |
| <b>ACFoam Composite, Barrier Board Plus, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP<br/>Composite A, GAFTEMP Composite N<br/>Minimum 1.5" thick</b> | N/A                                       | N/A  |
| <b>ACFoam-II<br/>Minimum 1.75" thick</b>   | N/A                                       | N/A  |
| <b>EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density<br/>Wood Fiber<br/>Minimum 1/2" thick</b>                 | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>  | N/A                                       | N/A  |

**Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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 Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.**

**Anchor Sheet:** One ply of GAFGLAS® #75, GAFGLAS #80 Ultima™ Base Sheet, Ruberoid 20 or GAFGLAS® Stratavent® Eliminator Nailable mechanically fastened as described below:

**Fastening:** Approved fasteners at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 24" o.c.

**Base Sheet:** One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 or Ruberoid® 20 adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



**Ply Sheet:** (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or a single ply of Ruberoid® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Membrane:** One ply of Ruberoid® Mop Granule, Ruberoid® Mop Plus Granule, Ruberoid®30 or Ruberoid® 30 FR Ruberoid Mop 120 FR or Ruberoid® Mop FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).

**Maximum Design Pressure:** -45 psf (See General Limitation #9.)



**Membrane Type:** APP  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/poured gypsum/wood/steel  
**System Type B:** Base layers of insulation mechanically fastened, optional top layer adhered with approved asphalt.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Base Insulation Layer</b>   | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>ACFoam-I<br/>Minimum 1.2" thick</b>   | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>GAFTEMP® Isotherm R, Isotherm RA, Isotherm RN, Pyrox, White Line, UltraGard Gold<br/>Minimum 1.3" thick</b>                                     | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>ENRGY 2, PSI-25<br/>Minimum 1.4" thick</b>  | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>Minimum 2" thick</b>  | <b>Approved Fastener for Deck type</b>    | <b>1:4 ft<sup>2</sup></b>                  |
| <b>ISO-95, Composite, Plus, GL, GW<br/>Minimum 1.4" thick</b>  | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>ACFoam Composite, Barrier Board Plus, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP<br/>Composite A, GAFTEMP Composite N<br/>Minimum 1.5" thick</b> | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>ACFoam-II<br/>Minimum 1.75" thick</b>   | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density<br/>Wood Fiber<br/>Minimum ½" thick</b>                   | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>  | <b>Approved Fastener for Deck type</b>    | <b>1:2 ft<sup>2</sup></b>                  |

**Note: Base layers of insulation shall be mechanically attached using the fastener density listed. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Protocol TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

| <b>Top Insulation Layer (Optional)</b>   | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>Any of the insulations listed for Base Layer</b>  |   |  |
| <b>EnergyGuard High Density Fiberboard, EnergyGuard Perlite Recover Board<br/>Minimum ½" thick</b> | <b>N/A</b>                                | <b>N/A</b>                                 |



**Note: Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.**

**Base Sheet:** One ply of GAFGLAS® #75, GAFGLAS® Stratavent® Eliminator Perforated GAFGLAS #80 Ultima™ Base Sheet or Ruberoid® 20 adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Ply Sheet:** (Optional; required if Stratavent Perforated or Ruberoid 20 is used as a base sheet) One or more plies of GAFGLAS® Ply 4 or GAFGLAS FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Note:** **Where Ruberoid® 20 is applied as a base sheet, it shall be covered with one ply GAFGLAS® Ply 4 or FlexPly 6® before torch application of membrane.**

**Membrane:** One or more plies of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)

**Maximum Design Pressure:**

-45 psf (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/poured gypsum/wood/steel  
**System Type B:** Base layers of insulation mechanically fastened, optional top layer adhered with approved asphalt.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| Base Insulation Layer   | Insulation Fasteners<br>(Table 3) | Fastener<br>Density/ft <sup>2</sup> |
|---|-----------------------------------|-------------------------------------|
| ACFoam-I<br>Minimum 1.2" thick  | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| GAFTEMP® Isotherm R, Isotherm RA, Isotherm RN, Pyrox, White Line, UltraGard Gold<br>Minimum 1.3" thick                  | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| ENERGY 2, PSI-25, GAFTEMP Isotherm RN<br>Minimum 1.4" thick   | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| Minimum 2" thick  | Approved Fastener for Deck type   | 1:4 ft <sup>2</sup>                 |
| ISO-95, Composite, Plus, GL, GW<br>Minimum 1.4" thick   | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| ACFoam Composite, Barrier Board Plus, ENERGY 2 Plus, GAFTEMP® Composite<br>Minimum 1.5" thick                           | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| ACFoam-II, GAFTEMP® Isotherm RA<br>Minimum 1.75" thick  | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density<br>Wood Fiber<br>Minimum ½" thick | Approved Fastener for Deck type   | 1:2 ft <sup>2</sup>                 |
| Fiberglas<br>Minimum 15/16" thick   | Approved Fastener for Deck type   | 1:2.67 ft <sup>2</sup>              |

**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 Roofing Application Standard RAS 117 for fastening details).

| Top Insulation Layer   | Insulation Fasteners<br>(Table 3) | Fastener<br>Density/ft <sup>2</sup> |
|--|-----------------------------------|-------------------------------------|
| Any of the insulations listed for Base Layer, above.   |                                   |                                     |
| ACFoam Composite<br>Minimum 1.5" thick   | N/A                               | N/A                                 |
| EnergyGuard Perlite, Perlite, High Density Wood Fiber, EnergyGuard High Density Wood Fiber<br>Minimum ½" thick | N/A                               | N/A                                 |



**Note: Apply top layer of insulation in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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 Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.**

- Base Sheet: One ply of GAFGLAS® Stratavent® (Vent Ply) Perforated, GAFGLAS® #75 GAFGLAS #80 ULTIMA™ Base Sheet or Ruberoid® 20 adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or a single ply of Ruberoid® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane: One ply of Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, Ruberoid® Mop Plus Granule, Ruberoid® 30, Ruberoid® 30 FR or Ruberoid® Mop adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing: (Optional) Install one of the following:
1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
  2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal./sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).
- Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type** APP & SBS

**Deck Type 7I:** Recover

**Deck Description:** Concrete/steel

**System Type B(2):** One or more layers of insulation is mechanically attached, perforated base sheet loose laid over the insulation.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>ACFoam-II, GAFTEMP Isotherm RA, Pyrox, GAFTEMP® Isotherm R<br/>Minimum 2" thick</b> | <b>1 (#14)</b>                            | <b>1:1.5 ft<sup>2</sup></b>                |

**Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One ply of GAFGLAS STRATAVENT® Eliminator Perforated loose laid with 2" side laps.

**Ply Sheet:** (Optional, required for torch applied RUBEROID membranes) One, two or three plies of GAFGLAS® Ply 4 or GAFGLAS® Ply 6® or GAFGLAS FlexPly™6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Membrane:** One or more plies of RUBEROID® Torch Smooth, RUBEROID Torch Granule, RUBEROID Torch Plus Granule or RUBEROID Torch FR, RUBEROID MOP (Smooth and Granular), RUBEROID MOP 170FR, RUBEROID MOP PLUS and RUBEROID MOP FR applied according to manufacturer's application instructions.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)

**Maximum Design Pressure:** -60 psf (See General Limitation #7.)



**Membrane Type:** APP  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type C:** All layers of insulation simultaneously attached.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Base Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|---|---|--|
| <b>AC Foam-I<br/>Minimum 1.2" thick</b>   | N/A                                       | N/A  |
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold<br/>Minimum 1.3" thick</b>                                | N/A                                       | N/A  |
| <b>ENRGY 2, PSI-25, ISO-95, Composite Plus, GL, GW, Isotherm RN<br/>Minimum 1.4" thick</b>                          | N/A                                       | N/A  |
| <b>AC Foam Composite, GAFTEMP Composite A, ENRGY 2 Plus, GAFTEMP Composite N<br/>Minimum 1.5" thick</b>             | N/A                                       | N/A  |
| <b>AC Foam-II, GAFTEMP Composite RA<br/>Minimum 1.75" thick</b>   | N/A                                       | N/A  |
| <b>EnergyGuard High Density Fiberboard, EnergyGuard Perlite Recover Board<br/>Minimum 1/2" thick</b>                | N/A                                       | N/A  |
| <b>EnergyGuard High Density Fiberboard, EnergyGuard Perlite Recover Board, Type X Gypsum<br/>Minimum 1/2" thick</b> | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>   | N/A                                       | N/A  |

**Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

| <b>Top Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>ACFoam-I<br/>Minimum 1.2" thick</b>                             | Approved Fastener for Deck type           | 1:2 ft <sup>2</sup>                        |
| <b>GAFTEMP® Isotherm R, UltraGard Gold<br/>Minimum 1.3" thick</b>  | Approved Fastener for Deck type           | 1:2 ft <sup>2</sup>                        |
| <b>ENRGY 2, PSI-25, GAFTEMP Isotherm RN<br/>Minimum 1.4" thick</b> | Approved Fastener for Deck type           | 1:2 ft <sup>2</sup>                        |
| <b>Minimum 2" thick</b>  | Approved Fastener for Deck type           | 1:4 ft <sup>2</sup>                        |
| <b>ISO-95, Composite, Plus, GL, GW</b>                             |   |  |



|  |                                 |                     |
|--|---------------------------------|---------------------|
| Minimum 1.4" thick   | Approved Fastener for Deck type | 1:2 ft <sup>2</sup> |
| ACFoam Composite, Barrier Board Plus, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP Composite A, GAFTEMP Composite N |                                 |                     |
| Minimum 1.5" thick   | Approved Fastener for Deck type | 1:2 ft <sup>2</sup> |
| AC Foam-II, GAFTEMP Isotherm RA  |                                 |                     |
| Minimum 1.75" thick  | Approved Fastener for Deck type | 1:2 ft <sup>2</sup> |
| EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density Wood Fiber                 |                                 |                     |
| Minimum ½" thick   | Approved Fastener for Deck type | 1:2 ft <sup>2</sup> |
| Fiberglas  |                                 |                     |
| Minimum 1 <sup>5</sup> / <sub>16</sub> " thick   | Approved Fastener for Deck type | 1:2 ft <sup>2</sup> |

**Note:** All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment. GAF requires either a ply of GAFGLAS® STRATAVENT Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® Ply 6®, GAFGLAS FlexPly™6 GAFGLAS® #75, GAFGLAS STRATAVENT Perforated (loose laid) or Ruberoid® 20 adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Note:** Where Ruberoid® 20 is applied as a base sheet, it shall be covered with one ply GAFGLAS® Ply 4 or FlexPly™ Ply 6® before torch application of membrane.

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

Membrane: One or more plies of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

Surfacing: (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)

Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type:** SBS

**Deck Type 7I:** Recover

**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel

**System Type C:** All layers of insulation simultaneously attached.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Base Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|---|---|--|
| <b>AC Foam-I<br/>Minimum 1.2" thick</b>   | N/A                                       | N/A  |
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold<br/>Minimum 1.3" thick</b>  | N/A                                       | N/A  |
| <b>ISO-95, Composite Plus, GL, GW, Isotherm RN<br/>Minimum 1.4" thick</b>   | N/A                                       | N/A  |
| <b>AC Foam Composite, GAFTEMP Composite A, Barrier Board Plus, ENRGY 2 Plus, GAFTEMP<br/>Composite N<br/>Minimum 1.5" thick</b> | N/A                                       | N/A  |
| <b>AC Foam-II, GAFTEMP Composite RA<br/>Minimum 1.75" thick</b>   | N/A                                       | N/A  |
| <b>EnergyGuard High Density Fiberboard, EnergyGuard Perlite Recover Board, Type X Gypsum<br/>Minimum 1/2" thick</b>             | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>   | N/A                                       | N/A  |

**Note:** All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

| <b>Top Insulation Layer</b>   | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|---|---|--|
| <b>EnergyGuard Wood Fiber<br/>Minimum 1" thick</b>  | Approved Fastener for Deck type           | 1:2 ft <sup>2</sup>                        |
| <b>EnergyGuard Perlite, High Density Wood Fiber, EnergyGuard High Density Wood Fiber<br/>Minimum 1/2" thick</b> | Approved Fastener for Deck type           | 1:2.67 ft <sup>2</sup>                     |



**Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment. GAF requires either a ply of GAFGLAS® STRATAVENT Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.**

- Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly 6®, GAFGLAS® #75, GAFGLAS #80 ULTIMA™ Base Sheet GAFGLAS® Stratavent® Nailable, Ruberoid® 20 adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS FlexPly™ 6 or a single ply of Ruberoid® 20 fully adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane: One ply of Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, Ruberoid® Mop Plus Granule or Ruberoid® Mop FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing: (Optional) Install one of the following:
1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
  2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).
- Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type:** APP  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type D:** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|--|---|--|
| <b>ACFoam-I<br/>Minimum 1.2" thick</b>   | N/A                                       | N/A  |
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold<br/>Minimum 1.3" thick</b>   | N/A                                       | N/A  |
| <b>ENRGY 2, PSI-25, ISO-95, Composite Plus, GL, GW<br/>Minimum 1.4" thick</b>  | N/A                                       | N/A  |
| <b>ACFoam Composite, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP Composite A,<br/>GAFTEMP Composite N<br/>Minimum 1.5" thick</b>     | N/A                                       | N/A  |
| <b>ACFoam-II, Isotherm RA<br/>Minimum 1.75" thick</b>  | N/A                                       | N/A  |
| <b>EnergyGuard Wood Fiber<br/>Minimum 1" thick</b>   | N/A                                       | N/A  |
| <b>EnergyGuard Perlite, Type X Gypsum, High Density Wood Fiber, EnergyGuard High Density<br/>Wood Fiber<br/>Minimum 1/2" thick</b> | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum 15/16" thick</b>  | N/A                                       | N/A  |

**Note:** All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. GAF requires either a ply of GAFGLAS® STRATAVENT Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

**Base Sheet:** One ply of GAFGLAS® #75, GAFGLAS® Stratavent® Eliminator Nailable mechanically fastened as described below:

**Fastening:** Fasten base sheet at a 4" side lap 18" o.c. and two rows staggered in the center of the sheet 24" o.c.



- Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4 or GAFGLAS FlexPly™6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane: One or more plies of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.
- Surfacing: (Optional) Install one of the following:
1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
  2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)
- Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 7I:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type D:** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations shall apply.**

One or more layers of any of the following insulations.

| <b>Base Insulation Layer</b>  | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
|---|---|--|
| <b>ACFoam-I<br/>Minimum 1.2" thick</b>  | N/A                                       | N/A  |
| <b>GAFTEMP® Isotherm R, Pyrox, White Line, UltraGard Gold<br/>Minimum 1.3" thick</b>  | N/A                                       | N/A  |
| <b>ENRGY 2, PSI-25, GAFTEMP Isotherm RN<br/>Minimum 1.4" thick</b>  | N/A                                       | N/A  |
| <b>ISO-95, Composite, Plus, GL, GW<br/>Minimum 1.4" thick</b>   | N/A                                       | N/A  |
| <b>ACFoam Composite, ENRGY 2 Plus, GAFTEMP® Composite, GAFTEMP® Composite A,<br/>GAFTEMP® Composite N, EnergyGuard Perlite<br/>Minimum 1.5" thick</b> | N/A                                       | N/A  |
| <b>ACFoam-II, GAFTEMP® Isotherm RA<br/>Minimum 1.75" thick</b>  | N/A                                       | N/A  |
| <b>Fiberglas<br/>Minimum <sup>15</sup>/<sub>16</sub>" thick</b>   | N/A                                       | N/A  |
| <b>Type X Gypsum<br/>Minimum ½" thick</b>   | N/A                                       | N/A  |
| <b>Top Insulation Layer</b>   | <b>Insulation Fasteners<br/>(Table 3)</b> | <b>Fastener<br/>Density/ft<sup>2</sup></b> |
| <b>EnergyGuard Perlite, High Density Wood Fiber, EnergyGuard High Density Wood Fiber<br/>Minimum ½" thick</b>   | N/A                                       | N/A  |

**Note:** All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. GAF requires either a ply of GAFGLAS® STRATAVENT Eliminator Perforated laid dry or a layer of EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.



- Base Sheet: One ply of GAFGLAS® #75, GAFGLAS® Stratavent® Eliminator Nailable or GAFGLAS #80 ULTIMA™ Base Sheet mechanically fastened as described below:
- Fastening: Fasten base sheet with approved fasteners at a 4" side lap 18" o.c. and two rows staggered in the center of the sheet 24" o.c.
- Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or a single ply of Ruberoid® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane: One ply of Ruberoid® Mop Granule, Ruberoid® Mop 170 FR, Ruberoid® Mop Plus Granule, Ruberoid® 30, Ruberoid® 30 FR or Ruberoid® Mop adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing: (Optional) Install one of the following:
1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
  2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).
- Maximum Design Pressure: -45 psf (See General Limitation #9.)



**Membrane Type:** APP  
**Deck Type 7:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type E:** Base sheet mechanically fastened.

**All General and System Limitations shall apply.**

**Base Sheet:** One ply of GAFGLAS® #75 GAFGLAS #80 ULTIMA™ Base Sheet or GAFGLAS® Stratavent® Eliminator Nailable mechanically fastened as described below:

**Fastening:** Fasten base sheet at a 4" side lap 18" o.c. and two rows staggered in the center of the sheet 24" o.c.

**Ply Sheet:** (Optional) One or more plies of GAFGLAS® PLY 4® 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.

**Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)

**Maximum Design Pressure:** -45 psf (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 7:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type E:** Base sheet adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Base Sheet:** One ply of GAFGLAS® Ply 4, GAFGLAS® Ply 6®, GAFGLAS® #75, GAFGLAS® Stratavent® Eliminator Perforated or Ruberoid® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Ply Sheet:** (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS FlexPly™ 6 or a single ply of Ruberoid® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Membrane:** One ply of Ruberoid® Mop Granule, Ruberoid® Mop 170 FR Ruberoid® Mop Plus Granule or Ruberoid® Mop adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).

**Maximum Design Pressure:** -45 psf (See General Limitation #9.)



**Membrane Type:** APP  
**Deck Type 7:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type F:** Base sheet adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Base Sheet:** One ply of GAFGLAS® #75 or GAFGLAS #80 ULTIMA™ Base Sheet adhered to a properly prepared existing roof substrate in a spot or strip or spot mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Ply Sheet:** (Optional) One or more plies of GAFGLAS® PLY 4® 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.

**Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

**Surfacing:** (Optional) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. or Matrix™ 305 Fibered Emulsion at 3 gal/sq. (for Torch Smooth applications only)

**Maximum Design Pressure:** -45 psf (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 7:** Recover  
**Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel  
**System Type F:** Base sheet adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Base Sheet:** One ply of GAFGLAS® Stratavent® Perforated loose laid.  
**Ply Sheet:** One or more plies of GAFGLAS® PLY 4® 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.  
**Membrane:** One ply of Ruberoid® Mop Granule, Ruberoid® Mop 170 FR, Ruberoid® Mop Plus Granule, Ruberoid® 30, Ruberoid® 30 FR or Ruberoid® Mop adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
**Surfacing:** (Optional) Install one of the following:  

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. Matrix™ System Pro Aluminum Roof Coating Fibered 301 or GAF Premium Fibered Aluminum Roof Coating applied at a rate of 1-2 gal/sq. Matrix™ 305 Fibered Emulsion at 3 gal./sq. (for Mop Smooth applications only).

  
**Maximum Design Pressure:** -60 psf (See General Limitation #9.)



## RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

## 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 installed 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 shall 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 Testing Application Standard TAS 105. If the fastener value, as field-tested, are 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 a 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, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 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 Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither 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.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No: 03-0930.07  
Expiration Date: 11/06/08  
Approval Date: 11/20/03  
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