NOTICE OF ACCEPTANCE (NOA)

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 South Florida Building Code, 1994 Edition for Miami-Dade County or Florida Building Code.

DESCRIPTION: GAF Conventional Built-Up Roof System for Wood Deck.

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 consists of pages 1 through 23.
The submitted documentation was reviewed by Frank Zuloaga, RRC
**ROOFING SYSTEM APPROVAL**

**Category:** Roofing

**Sub-Category:** BUR

**Deck Type:** Wood

**Maximum Design Pressure:** -75 psf

**Fire Classification:** See General Limitation #1

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Test Specification</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAF Asphalt Concrete Primer (Matrix™ 307 Primer)</td>
<td>5, 55 gallons</td>
<td>ASTM D 41</td>
<td>Asphalt concrete primer used to promote adhesion of asphalt in built-up roofing.</td>
</tr>
<tr>
<td>GAF Mineral Shield® Granules</td>
<td>60 lb. bags</td>
<td>ASTM D 1863</td>
<td>Granules for surfacing of exposed asphalt, cold process cement or emulsion. GAF Mineral Shield® Granules shall be used for flashing applications only.</td>
</tr>
<tr>
<td>GAF WeatherCoat® Emulsion (Matrix™ Fibered 305 Emulsion)</td>
<td>5 gallons</td>
<td>ASTM 1227</td>
<td>Surface coating for smooth surfaced roofs.</td>
</tr>
<tr>
<td>GAF Premium Fibered Aluminum Roof Coating (Matrix™ System Pro Aluminum Roof Coating Fibered 301)</td>
<td>1, 5 gallons</td>
<td>ASTM D 2824</td>
<td>Fibered aluminum coating.</td>
</tr>
<tr>
<td>GAF Jetblak All Weather Plastic Cement (Matrix™ Standard Wet/Dry Roof Cement 204)</td>
<td>1, 5 gallons</td>
<td>ASTM 3019, ASTM 3409</td>
<td>Refined asphalt blended with a mineral stabilizer and fibers. Permits adhesion to wet and dry surfaces.</td>
</tr>
<tr>
<td>RUBEROID® Modified Bitumen Flashing Cement</td>
<td>5 gallons</td>
<td>ASTM D 4586</td>
<td>Fiber reinforced, polymer modified Flashing cement</td>
</tr>
<tr>
<td>Jetblack Premium Flashing Cement</td>
<td>5 gallons</td>
<td>ASTM D 4586</td>
<td>Asphalt flashing Cement</td>
</tr>
<tr>
<td>GAFGLAS® #75</td>
<td>39.37” (1 meter)</td>
<td>ASTM D 4601</td>
<td>Asphalt impregnated and coated glass mat base sheet.</td>
</tr>
<tr>
<td>GAFGLAS #80 Ultima Base Sheet</td>
<td>39.37” (1 meter)</td>
<td>ASTM D4601</td>
<td>Asphalt impregnated and coated, fiberglass base sheet</td>
</tr>
<tr>
<td>GAFGLAS Flex Ply™ 6</td>
<td>39.37” (1 meter)</td>
<td>ASTM D 2178</td>
<td>Type VI asphalt impregnated glass felt with asphalt coating.</td>
</tr>
<tr>
<td>GAFGLAS Ply 4®</td>
<td>39.37” (1 meter)</td>
<td>ASTM D 2178</td>
<td>Type IV asphalt impregnated glass felt with asphalt coating.</td>
</tr>
<tr>
<td>Product</td>
<td>Dimensions</td>
<td>Test Specification</td>
<td>Product Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------</td>
<td>------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>GAFGLAS® Mineral Surfaced Cap Sheet</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 3909</td>
<td>Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.</td>
</tr>
<tr>
<td>GAFGLAS® STRATAVENT® Eliminator Perforated</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 4897 D 3672</td>
<td>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.</td>
</tr>
<tr>
<td>GAFGLAS® Flashing</td>
<td>Various</td>
<td></td>
<td>Asphalt coated glass fiber mat flashing sheet available in three sizes.</td>
</tr>
<tr>
<td>GAFGLAS® STRATAVENT Eliminator Perforated Nailable</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 489 D 3672</td>
<td>Fiberglass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.</td>
</tr>
<tr>
<td>RUBEROID Modified Base Sheet</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D4601, Type II, UL Type G2 BUR</td>
<td>Premium glass fiber reinforced SBS-modified base sheet</td>
</tr>
<tr>
<td>Ruberoid® 20</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6163 D 5147</td>
<td>SBS modified asphalt base sheet and interply sheet reinforce with a glass fiber mat.</td>
</tr>
<tr>
<td>Ruberoid® Mop Granule</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6222 D 5147</td>
<td>Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td>RUBEROID MOP Smooth</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6298 D 5147</td>
<td>Non-woven polyester mat coated with polymer modified asphalt and smooth surfaced.</td>
</tr>
<tr>
<td>RUBEROID® MOP PLUS</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6163 D 5147</td>
<td>Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td>RUBEROID® MOP 170FR</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6164 D 5147</td>
<td>Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td>RUBEROID® MOP FR</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6164 D 5147</td>
<td>Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td>RUBEROID® TORCH Smooth</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 5147</td>
<td>Heavy duty, polyester reinforced, asphalt modified bitumen membrane, smooth surface.</td>
</tr>
<tr>
<td>RUBEROID® TORCH Granule</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 5147</td>
<td>Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface.</td>
</tr>
<tr>
<td>RUBEROID® TORCH PLUS</td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6222 D 5147</td>
<td>Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface.</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td><strong>Dimensions</strong></td>
<td><strong>Test Specification</strong></td>
<td><strong>Product Description</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>RUBEROID® TORCH FR</strong></td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6222, ASTM D 5147</td>
<td>Heavy duty, polyester reinforced, coated with fire retardant asphalt modified bitumen membrane, granule surface.</td>
</tr>
<tr>
<td><strong>RUBEROID® 30</strong></td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6163, ASTM D 5147</td>
<td>Non woven fiberglass mat coated with polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td><strong>RUBEROID® 30 FR</strong></td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 6163, ASTM D 5147</td>
<td>Non woven fiberglass mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.</td>
</tr>
<tr>
<td><strong>RUBEROID ULTRA CLAD® SBS</strong></td>
<td>1sq. roll 101 lbs.</td>
<td>ASTM D 5147</td>
<td>Woven fiberglass mat coated with Polymer modified asphalt and surfaced with aluminum, copper or stainless steel foil.</td>
</tr>
<tr>
<td><strong>RUBEROID ULTRA CLAD® SBS</strong></td>
<td>109. Roll 101 lbs.</td>
<td>ASTM D 5147</td>
<td>Woven fiberglass mat coated with Polymer modified asphalt surfaced with aluminum, copper or stainless steel foil.</td>
</tr>
<tr>
<td><strong>Vent Stacks (metal and plastic)</strong></td>
<td></td>
<td>PA 100(A) ASTM D 1929, ASTM D 635</td>
<td>One way valve vent used to relieve built-up pressure within the roof system. GAF Vent Stacks are available in metal or plastic.</td>
</tr>
<tr>
<td><strong>GAF Aluminum Emulsion</strong></td>
<td>5 gallons</td>
<td>None</td>
<td>Mineral colloidal bituminous emulsion with reflective aluminum flakes</td>
</tr>
<tr>
<td><strong>GAF Aluminum Roof Paint (Matrix® System Pro Aluminum Roof Coating Fibered 302)</strong></td>
<td>5 gallons</td>
<td>ASTM D2824, Type I</td>
<td>Non-fibered. aluminum pigmented, asphalt roof coating</td>
</tr>
<tr>
<td><strong>GAF Built-Up Roofing Asphalt</strong></td>
<td>100 lb. cartons, bulk</td>
<td>ASTM D312, Types I, II, III and IV</td>
<td>Interply mopping and surfacing asphalt</td>
</tr>
<tr>
<td><strong>RUBEROID MOD Asphalt, Asphalt L &amp; Asphalt P</strong></td>
<td>60 lb. kegs</td>
<td>SEBS modified asphalt</td>
<td></td>
</tr>
<tr>
<td><strong>Tile-Mate Base Sheet</strong></td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D4601</td>
<td>Asphalt impregnated and coated, fiberglass base sheet</td>
</tr>
<tr>
<td><strong>Tile-Mate Cap Sheet</strong></td>
<td>39.37” (1 meter) wide</td>
<td>ASTM D 3909</td>
<td>Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.</td>
</tr>
<tr>
<td><strong>Shingle-Mate™ Underlayment</strong></td>
<td>4 sq. roll 30 lbs.</td>
<td></td>
<td>Fiberglass reinforced shingle underlayment</td>
</tr>
</tbody>
</table>
**TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:**

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Test Specification</th>
<th>Product Description</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrox</td>
<td>various</td>
<td>PA 110</td>
<td>Polyisocyanurate foam insulation</td>
<td>Apache Products Co. (With current NOA)</td>
</tr>
<tr>
<td>Asphalt</td>
<td></td>
<td>ASTM D 312</td>
<td>Type III or IV Hot asphalt bitumen adhesive</td>
<td>Generic (With current NOA)</td>
</tr>
<tr>
<td>Asphalt Primer</td>
<td></td>
<td>ASTM D 41</td>
<td>Asphalt Primer</td>
<td>Generic (With current NOA)</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>4 mil min.</td>
<td></td>
<td>Vapor barrier / Air barrier</td>
<td>Generic (With current NOA)</td>
</tr>
<tr>
<td>Red Rosin</td>
<td>various</td>
<td></td>
<td>Rosin paper for barrier layer on wood decks</td>
<td>Generic (With current NOA)</td>
</tr>
<tr>
<td>MB aluminum roof coating</td>
<td></td>
<td>PA 121</td>
<td>Aluminum roof coating</td>
<td>Grundy Industries (With current NOA)</td>
</tr>
<tr>
<td>Super Prep II</td>
<td></td>
<td>PA 121</td>
<td>Roof coating</td>
<td>Thermo-Materials, Inc. (With current NOA)</td>
</tr>
</tbody>
</table>

**APPROVED INSULATIONS:**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Description</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAFTEMP Isotherm RA, RN &amp; Composite</td>
<td>Polyisocyanurate foam insulation</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP Tapered Isotherm RA, RN &amp; Composite</td>
<td>Tapered polyisocyanurate foam</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP® Composite A &amp; N</td>
<td>Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP Tapered Composite A &amp; N</td>
<td>Tapered Polyisocyanurate/wood fiberboard composite</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>(BMCA)GAFTEMP® Fiberboard</td>
<td>Fiberboard insulation.</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP® Permalite</td>
<td>Perlite insulation board.</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP PERMALITE® Tapered Roof Insulation</td>
<td>Tapered perlite board</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP GAFCANT™</td>
<td>Cut perlite board</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP Recover Board</td>
<td>Perlite recover board</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP GAFEDGE™ Tapered Edge Strip</td>
<td>Tapered perlite board</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>GAFTEMP® High Density Fiberboard</td>
<td>High density wood fiberboard insulation.</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>PYROX</td>
<td>Polyisocyanurate foam insulation</td>
<td>Apache Products Co.</td>
</tr>
</tbody>
</table>

NOA No: 01-1203.09  
Expiration Date: 11/04/03  
Approval Date: 02/28/02  
Page 5 of 23
**APPROVED INSULATIONS:**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Description</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nail-Line</td>
<td>Polyisocyanurate foam insulation</td>
<td>Apache Products Co.</td>
</tr>
<tr>
<td>White Line</td>
<td>Polyisocyanurate foam insulation</td>
<td>Apache Products Co.</td>
</tr>
<tr>
<td>ACFoam I, II &amp; Composite</td>
<td>Polyisocyanurate foam insulation</td>
<td>Atlas Energy Products</td>
</tr>
<tr>
<td>ISO 95+</td>
<td>Polyisocyanurate foam insulation</td>
<td>Firestone Building Products, Inc.</td>
</tr>
<tr>
<td>ISO 95+ Composite</td>
<td>Polyisocyanurate/perlite ridged insulation</td>
<td>Firestone Building Products, Inc.</td>
</tr>
<tr>
<td>Wood Fiber</td>
<td>Wood fiber insulation board</td>
<td>generic</td>
</tr>
<tr>
<td>High Density Wood Fiberboard</td>
<td>Wood fiber insulation board</td>
<td>generic</td>
</tr>
<tr>
<td>Perlite Insulation</td>
<td>Perlite insulation board</td>
<td>generic</td>
</tr>
<tr>
<td>Dens Deck</td>
<td>Water resistant gypsum board</td>
<td>G-P Gypsum Corp.</td>
</tr>
<tr>
<td>FiberGlass Roof Insulation</td>
<td>Glass fiber/Mineral fiber insulation</td>
<td>Johns Manville</td>
</tr>
<tr>
<td>Structodek</td>
<td>Wood fiber insulation board</td>
<td>Masonite.</td>
</tr>
<tr>
<td>Multi-Max &amp; FA</td>
<td>Polyisocyanurate roof insulation</td>
<td>RMax, Inc.</td>
</tr>
<tr>
<td>Paroc Base Board</td>
<td>Rockwool insulation</td>
<td>Partek, Inc.</td>
</tr>
<tr>
<td>Paroc Cap Board</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**APPROVED FASTENERS:**

<table>
<thead>
<tr>
<th>Fastener Number</th>
<th>Product Name</th>
<th>Product Description</th>
<th>Dimensions</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>GAFTITE® (Drill-Tec®) #12 Standard &amp; #14 Heavy Duty Roofing Fastener</td>
<td>Insulation fastener for steel, wood &amp; concrete decks.</td>
<td></td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>2.</td>
<td>GAFTITE® (Drill-Tec®) ASAP</td>
<td>Pre-assembled GAFTITE Fasteners and metal and plastic plates.</td>
<td></td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>3.</td>
<td>GAFTITE® (Drill-Tec®) Base Sheet Fastener and Plate</td>
<td>Base sheet fastening assembly.</td>
<td>3&quot; and 3 ½&quot;</td>
<td>GAF Materials Corp.</td>
</tr>
<tr>
<td>5.</td>
<td>Polypropylene Plates (Drill-Tec® Plastic)</td>
<td>Round polypropylene stress plates.</td>
<td>3&quot; and 3 ½&quot;</td>
<td>GAF Materials Corp.</td>
</tr>
</tbody>
</table>
# APPROVED FASTENERS:

<table>
<thead>
<tr>
<th>Fastener Number</th>
<th>Product Name</th>
<th>Product Description</th>
<th>Dimensions</th>
<th>Manufacturer (With Current NOA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Dekfast Fasteners #12, #14 &amp; #15</td>
<td>Insulation fastener for wood, steel and concrete decks</td>
<td></td>
<td>Construction Fasteners Inc.</td>
</tr>
<tr>
<td>7.</td>
<td>Dekfast Hex Plate</td>
<td>Galvalume hex stress plate.</td>
<td>2 7/8” x 3 1/4”</td>
<td>Construction Fasteners Inc.</td>
</tr>
<tr>
<td>8.</td>
<td>Dekfast Lock Plate</td>
<td>Polypropylene locking plate.</td>
<td>3” x 3 1/4”</td>
<td>Construction Fasteners Inc.</td>
</tr>
<tr>
<td>9.</td>
<td>#12 Roofgrip Fasteners</td>
<td>Insulation fastener for wood and steel.</td>
<td></td>
<td>ITW Buildex Corp.</td>
</tr>
<tr>
<td>10.</td>
<td>Metal Plate</td>
<td>Galvalume stress plate.</td>
<td>3” round 3” square</td>
<td>ITW Buildex Corp.</td>
</tr>
<tr>
<td>11.</td>
<td>Gearlok Plastic Plate</td>
<td>Polypropylene round plate</td>
<td>3.2”</td>
<td>ITW Buildex Corp.</td>
</tr>
<tr>
<td>12.</td>
<td>Glasfast Fastener</td>
<td>Insulation fastener assembly with recessed plastic plate</td>
<td></td>
<td>Johns Manville</td>
</tr>
<tr>
<td>13.</td>
<td>Olympic Fastener #12 &amp; #14</td>
<td>Insulation fastener</td>
<td></td>
<td>Olympic Manufacturing Group, Inc.</td>
</tr>
<tr>
<td>14.</td>
<td>Olympic Fastener ASAP</td>
<td>Pre-assembled Insulation fastener and plate</td>
<td></td>
<td>Olympic Manufacturing Group, Inc.</td>
</tr>
<tr>
<td>15.</td>
<td>Olympic Polypropylene</td>
<td>Polypropylene plastic plate</td>
<td>3.25” round</td>
<td>Olympic Manufacturing Group, Inc.</td>
</tr>
<tr>
<td>16.</td>
<td>Olympic G-2</td>
<td>3.5” round galvalume AZ55 steel plate</td>
<td>3.5” round</td>
<td>Olympic Manufacturing Group, Inc.</td>
</tr>
<tr>
<td>17.</td>
<td>Olympic Standard</td>
<td>3” round galvalume AZ50 steel plate</td>
<td>3” round</td>
<td>Olympic Manufacturing Group, Inc.</td>
</tr>
<tr>
<td>18.</td>
<td>Insul-Fixx Fastener</td>
<td>Insulation fastener for steel and wood decks</td>
<td></td>
<td>SFS/Stadler</td>
</tr>
<tr>
<td>19.</td>
<td>Insul-Fixx S Plate</td>
<td>3” round galvalume AZ50 steel plate</td>
<td>3” round</td>
<td>SFS/Stadler</td>
</tr>
<tr>
<td>20.</td>
<td>Insul-Fixx P Plate</td>
<td>3” round polyethylene stress plate</td>
<td>3” round</td>
<td>SFS/Stadler</td>
</tr>
</tbody>
</table>
**APPROVED FASTENERS:**

<table>
<thead>
<tr>
<th>Fastener Number</th>
<th>Product Name</th>
<th>Product Description</th>
<th>Dimensions</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td>Tru-Fast Plates</td>
<td>3&quot; round galvalume AZ55 steel plate</td>
<td>3&quot; round</td>
<td>The Tru-Fast Corp.</td>
</tr>
<tr>
<td>23.</td>
<td>Tru-Fast Plates</td>
<td>Polyethylene plastic plate</td>
<td>3&quot; round</td>
<td>The Tru-Fast Corp.</td>
</tr>
</tbody>
</table>

**EVIDENCE SUBMITTED:**

<table>
<thead>
<tr>
<th>Test Agency</th>
<th>Test Identifier</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Mutual Research Corporation</td>
<td>FMRC 1996</td>
<td>Current Insulation</td>
<td>01.01.96</td>
</tr>
<tr>
<td>Factory Mutual Research Corporation</td>
<td>J.I. 2B8A4.AM</td>
<td>Wind Uplift</td>
<td>07.02.97</td>
</tr>
<tr>
<td></td>
<td>J.I. 3B9Q1.AM</td>
<td>FMRC 44704</td>
<td>01.08.98</td>
</tr>
<tr>
<td></td>
<td>J.I. 0D0A8.AM</td>
<td></td>
<td>07.09.99</td>
</tr>
<tr>
<td>Factory Mutual Research Corporation</td>
<td>J.I. 0D1A8.AM</td>
<td>Wind Uplift</td>
<td>07.29.94</td>
</tr>
<tr>
<td></td>
<td>J.I. 0Y9Q5.AM</td>
<td>FMRC 4470 - PA 114</td>
<td>04.01.98</td>
</tr>
<tr>
<td>Factory Mutual Research Corporation</td>
<td>J.I. 3X3A2.AM</td>
<td>Wind Uplift</td>
<td>08.02.94</td>
</tr>
<tr>
<td>Factory Mutual Research Corporation</td>
<td>J.I. 0Y9Q5.AM</td>
<td>Wind Uplift</td>
<td>07.29.94</td>
</tr>
<tr>
<td>Dynatech Engineering Corporation</td>
<td>#3600.02.95-1</td>
<td>FMRC 4470 - PA 114</td>
<td>02.02.95</td>
</tr>
<tr>
<td>Dynatech Engineering Corporation</td>
<td>#4482.02.95-1</td>
<td>Wind Uplift</td>
<td>02.02.95</td>
</tr>
<tr>
<td>PRI Asphalt Technologies, Inc.</td>
<td>GAF-012-02-02</td>
<td>Physical Properties</td>
<td>11.06.01</td>
</tr>
</tbody>
</table>
**APPROVED ASSEMBLIES**

**Deck Type 1I:** Wood, Insulated, New Construction or Reroof

**Deck Description:** $19_{32}''$ or greater plywood or wood plank

**System Type A(1):** 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.

<table>
<thead>
<tr>
<th>Insulation Layer (Table 2)</th>
<th>Insulation Fasteners (Table 3)</th>
<th>Fastener Density/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>(When applicable: Steel plate only =S, plastic plate only =P)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N, ISORoc,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAFTEMP® Tapered (Min. 1” thick)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Density Wood Fiber, GAFTEMP® High Density Wood Fiber, GAFTEMP RecoverBoard, Wood Fiber,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAFTEMP® Fiberboard (Min. ½” thick)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perlite, GAFTEMP® Permalite®, Permalite Tapered ,Paroc (Min. ¾” thick) (¼” for Tapered)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiberglas (Min. 15/16” thick)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permalite Tapered Roof Insulation, Tapered Isotherm R, Tapered Isotherm RA, Tapered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsothermRN, GAFTEMP Composite Tapered, GAFTEMP Composite A Tapered, GAFTEMP Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Tapered (Min. ¼” thick)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 ft². 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® perforated laid dry or a layer of GAFTEMP® PERMALITE or wood fiber overlay board on all isocyanurate applications.

**Anchor sheet:** GAFGLAS® Ply 4®, Ply 6®, GAFGLAS Flex Ply™ 6, #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Modified Base Sheet, RUBEROID Mop Smooth or RUBEROID® 20 base sheet applied to the deck with approved annular ring shank nails and tin caps at a fastener spacing of 9” o.c. at the lap staggered in two rows 12” in the field. Base sheet shall serve as anchor sheet for attachment of insulation.
Base Sheet: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 Ultima™ Ultra Base Sheet, GAFGLAS STRATAVENT® Eliminator Perforated, RUBEROID Modified Base Sheet, RUBEROID Mop Smooth or RUBEROID® 20 directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq; (see General Limitation #4).

Ply Sheet: One or more plies GAFGLAS PLY 4®, GAFGLAS® PLY 6® Ply, GAFGLAS Flex Ply 6 sheet, #80 Ultima 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.

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 Special Roofing Bitumen with an application rate of 20 lbs./sq with an application rate of 1.5 gal./sq.; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure -45 psf (See General Limitation #7)
Deck Type 1: Wood, Non-insulated New Construction or Reroof

Deck Description: $19/32''$ or greater plywood or wood plank decks

System Type A(2): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base Sheet: GAFGLAS® #75, GAFGLAS #80 Ultima Base Sheet, GAFGLAS® PLY 4®,
GAFGLAS® PLY 6®, GAFGLAS FlexPly, GAFGLAS® STRATAVENT®
Eliminator Perforated Nailable, RUBEROID Modified Base Sheet, RUBEROID
Mop Smooth or RUBEROID® 20 applied to the deck with approved annular ring
shank nails and minimum 1 $5/8''$ tin caps at a fastener spacing of 9" o.c. at the lap,
12" o.c. in two rows staggered along the center line of the sheet in the field.

Ply Sheet: Two or more plies of GAFGLAS® PLY 4®, GAFGLAS FlexPly 6, GAFGLAS®
PLY 6® ply sheet, #80 Ultima, 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.

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.

3. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote
   LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -45 psf. (See General Limitation #7)
Deck Type 1: Wood, Non-Insulated, New Construction, Reroof

Deck Description: $\frac{19}{32}$” or greater plywood or wood plank

System Type A(3): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Mop Smooth or RUBEROID® 20 base sheet is applied to the deck with 2” side laps with (Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates 12” on center, in 3 rows. One row is in the 2” side lap. The other rows are equally spaced approximately 12” OC in the field of the sheet.

Ply Sheet: One or more plies GAFGLAS PLY 4® GAFGLAS FlexPly™6, or GAFGLAS® PLY 6® Ply, GAFGLAS FlexPly 6 sheet, #80 Ultima, 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.

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 Special Roofing Bitumen with an application rate of 20 lbs./sq with an application rate of 1.5 gal./sq.; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -45 psf (See General Limitation #7)
Deck Type II: Wood, Non-Insulated, New Construction, or Reroof

Deck Description: \(\frac{19}{32}\)" or greater plywood or wood plank

System Type A(4): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBERROID Mop Smooth or RUBEROID® 20 base sheet applied to the deck with 2” side laps with G( Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates, 12” on center, in 4 rows. One row is in the 2” side lap. The other rows are equally spaced approximately 9” OC in the field of the sheet.

Ply Sheet: One or more plies GAFGLAS PLY 4®, or GAFGLAS® PLY 6® Ply, GAFGLAS FlexPly™ 6 sheet, #80 Ultima 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.

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 Special Roofing Bitumen with an application rate of 20 lbs./sq with an application rate of 1.5 gal./sq.; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: –60psf. (See General Limitation #7)
Deck Type II: Wood, Non-Insulated, New Construction, or Reroof

Deck Description: 19/32" or greater plywood or wood plank

System Type A(5): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Mop Smooth or RUBEROID® 20 base sheet is applied to the deck with 2” side laps with (Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates 8” on center, in 4 rows. One row is in the 2” side lap. The other rows are equally spaced approximately 9” OC in the field of the sheet.

Ply Sheet: One or more plies GAFGLAS PLY 4, GAFGLAS® PLY 6®, GAFGLAS FlexPly™ 6 sheet, RUBEROID 20 or RUBEROID Mop Smooth 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 Special Roofing Bitumen with an application rate of 20 lbs./sq with an application rate of 1.5 gal./sq.; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -75 psf (See General Limitation #7)
**Deck Type II:** Wood, Insulated, New Construction, or Reroof

**Deck Description:** \( \frac{19}{32} \) or greater plywood or wood plank

**System Type B:** Optional base sheet laid dry; base layer 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.

<table>
<thead>
<tr>
<th>Insulation for Base Layer (Table 2)</th>
<th>Insulation Fasteners (Table 3)</th>
<th>Fastener Density/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACFoam-I, GAFTEMP® Isotherm R (Min. 1.3” thick)</td>
<td>1, 2, 6, 9, 13, 14 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>E’NRG’Y 2, GAFTEMP Isotherm RN (Min. 1.4” thick)</td>
<td>1, 2, 6S, 9, 13, 14 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>E’NRG’Y 2 Plus, GAFTEMP Composite N (Min. 1.5 thick)</td>
<td>6S, 9, 18 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>Perlite, GAFTEMP® PERMALITE® (Min. ¾” thick)</td>
<td>1S(3.5”), 6S, 9, 13, 14 &amp; 21S</td>
<td>1:2 ft²</td>
</tr>
<tr>
<td>Fiberglas (Min. 15/16” thick)</td>
<td>1, 2, 6, 9, 12, 13, 14 &amp; 21S</td>
<td>1:2.67 ft²</td>
</tr>
<tr>
<td>Wood Fiber, GAFTEMP® Fiberboard, GAFTEMP High Density Fiberboard (Min. 1” thick)</td>
<td>1, 2, 6, 13, 14 &amp; 21S</td>
<td>1:4 ft²</td>
</tr>
</tbody>
</table>

*Note: Base layer shall be mechanically attached with fasteners and density described. 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). 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.*

<table>
<thead>
<tr>
<th>Insulation for Top Layer (Table 2)</th>
<th>Insulation Fasteners (Table 3)</th>
<th>Fastener Density/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any of the insulations listed for Base Layer, above.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>High Density Wood Fiber, GAFTEMP® High Density Wood Fiberboard, PERMALITE® Recover Board (Min. ½” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Paroc (Min. ¾” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*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 ft². 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: (Optional) Install one ply of GAFGLAS® #75, GAFGLAS #80 ULTIMA™ Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS Flex Ply 6, GAFGLAS® STRATAVENT® Eliminator Perforated(laid dry), RUBEROID Modified Base Sheet, RUBEROID Mop Smooth or RUBEROID® 20 directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq; (see General Limitation #4).

Ply Sheet: Two or more plies of GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly™ 6 ply sheet, #80 Ultima 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. (See specification number for appropriate number of plies).

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. (See GAF application instructions for approved method of installation).

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.

3. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -45 psf (See General Limitation #7)
Deck Type II: Wood, Insulated, New Construction or Reroof

Deck Description: $19/32''$ or greater plywood or wood plank

System Type C: One or more layers of insulation simultaneously attached; Base layer optional.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

<table>
<thead>
<tr>
<th>Insulation for Base Layer (Table 2)</th>
<th>Insulation Fasteners (Table 3)</th>
<th>Fastener Density/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>(When applicable: Steel plate only =S, plastic plate only =P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACFoam-I, GAFTEMP® Isotherm R, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN (Min. 1.3” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>E'NRG'Y 2 (Min. 1.4” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ISORoc, E'NRG'Y 2 Plus, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1.5” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Perlite, GAFTEMP® PermalitePERMALITE® (Min. 3/4” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fiberglas (Min. 17/16” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Wood Fiber, GAFTEMP® Fiberboard, GAFTEMP High Density Fiberboard (Min. 1” thick)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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. 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.

<table>
<thead>
<tr>
<th>Insulation for Top Layer (Table 2)</th>
<th>Insulation Fasteners (Table 3)</th>
<th>Fastener Density/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>(When applicable: Steel plate only =S, plastic plate only =P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACFoam-I, GAFTEMP® Isotherm R (Min. 1.3” thick)</td>
<td>1, 2, 6, 9, 13, 14 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>E'NRG'Y 2, GAFTEMP Isotherm RN (Min. 1.4” thick)</td>
<td>1, 2, 6S, 9, 13, 14 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>E'NRG'Y 2 Plus, GAFTEMP Composite N (Min. 1.5 thick)</td>
<td>6S, 9, 18 &amp; 21S</td>
<td>1:3 ft²</td>
</tr>
<tr>
<td>Perlite, GAFTEMP® PERMALITE® (Min. 3/4” thick)</td>
<td>1S(3.5”), 6S, 9, 13, 14 &amp; 21S</td>
<td>1:2 ft²</td>
</tr>
<tr>
<td>Fiberglas (Min. 17/16” thick)</td>
<td>1, 2, 6, 9, 12, 13, 14 &amp; 21S</td>
<td>1:2.67 ft²</td>
</tr>
</tbody>
</table>
Wood Fiber, GAFTEMP® Fiberboard, GAFTEMP High Density Fiberboard (Min. 1” thick)

Note: 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. GAF requires either a ply of GAFGLAS STRATAVENT® Eliminator 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™ Base Sheet, GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly™ 6, GAFGLAS® STRATAVENT® Eliminator Perforated (laid dry), RUBEROID Modified Base Sheet, RUBEROID Mop Smooth or RUBEROID® 20 directly over the top layer of insulation. 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 the use of an overlay board is approved; see General Limitation #4.

Ply Sheet: Two or more plies of GAFGLAS® PLY 4®, GAFGLAS® PLY 6®, GAFGLAS FlexPly 6 ply sheet, #80 Ultima 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.

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.
3. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -45 psf (See General Limitation #7)
Deck Type II: Wood, Insulated, New Construction or Reroof

Deck Description: \(\frac{19}{32}\)" or greater plywood or wood plank

System Type D(1): Insulation and Base sheet simultaneously

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Approved Type(s): ACFoam-I, E'NRGY 2, GAFTEMP® Isotherm R, E'NRGY 2 Plus, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N loosely laid with firmly butted joints. Minimum thickness, 1.3”. GAFTEMP High Density Fiberboard, GAFTEMP Fiberboard, minimum thickness 1”

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Mop Smooth or RUBEROID® 20 base sheet applied over the loose laid insulation with 2” side laps. (Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates are installed through the base sheet and insulation in 3 rows 12” on center. One row is in the 2” side lap. The other rows are equally spaced approximately 12” OC in the field of the sheet.

Ply Sheet: One or more plies GAFGLAS PLY 4®, GAFGLAS® PLY 6® Ply, GAFGLAS FlexPly 6 sheet, #80 Ultima 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.

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 Special Roofing Bitumen with an application rate of 20 lb./sq; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -45 psf (See General Limitation #7)
Deck Type II: Wood, Insulated, New Construction or Reroof

Deck Description: 19\(\frac{3}{32}\)" or greater plywood or wood plank

System Type D(2): Insulation and Base sheet mechanically fastened.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Approved Type(s): ACFoam-I, E'NRGY 2, GAFTEMP® Isotherm R, E'NRGY 2 Plus, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N loosely laid with firmly butted joints. Minimum thickness, 1.3” GAFTEMP High Density Fiberboard, GAFTEMP Fiberboard, minimum thickness 1”.

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Mop Smooth or RUBEROID® 20 base sheet applied to the deck with 2” side laps with (Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates in 4 rows 12” on center. One row is in the 2” side lap. The other rows are equally spaced approximately 9” oc in the field of the sheet.

Ply Sheet: One, two, or three plies GAFGLAS PLY 4®, GAFGLAS® PLY 6® Ply, GAFGLAS FlexPly™ 6 sheet, #80 Ultima 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.

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 Special Roofing Bitumen with an application rate of 20 lb./sq; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -60 psf (See General Limitation #7)
Deck Type II: Wood, Insulated, New, Recover or Reroof

Deck Description: \( 19/32 \) " or greater plywood or wood plank

System Type D(3): Base sheet and insulation simultaneously mechanically fastened.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Approved Type(s): ACFoam-I, E'NR'GY 2, GAFTEMP® Isotherm R, E'NR'GY 2 Plus, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N loosely laid with firmly butted joints. Minimum thickness, 1.3” GAFTEMP High Density Fiberboard, GAFTEMP Fiberboard, minimum thickness 1"

Base sheet: GAFGLAS® #75 Base Sheet, GAFGLAS #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Perforated Nailable, RUBEROID Mop Smooth or RUBEROID® 20 base sheet applied over the loose laid insulation with 2” side laps. (Drill-Tec) GAFTITE #12 or #14 Screws and 3” Plates are installed through the base sheet and insulation in 4 rows 8” on center. One row is in the 2” side lap. The other rows are equally spaced approximately 9” OC in the field of the sheet.

Ply Sheet: One or more plies GAFGLAS PLY 4®, GAFGLAS® PLY 6® Ply GAFGLAS FlexPly™ 6 sheet, #80 Ultima 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

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 Special Roofing Bitumen with an application rate of 20 lb./sq; or 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. Top Coat Surface Seal, Top Coat MB Plus, GAF WeatherCote or WeatherCote LOW-VOC applied at rate of 1-1.5 gal/sq.

Maximum Design Pressure: -75 psf (See General Limitation #7)
Membrane Type: BUR

Deck Type 1: Wood, Non-insulated

Deck Description: 19/32” or greater plywood or wood plank

System Type E: Tile Underlayment, Base Sheet mechanically attached.

Anchor sheet: ASTM D 226 Types II, ASTM D 2626, UltimaTM 80 Base Sheet, Tile-Mate Base Sheet, RUBEROID Mop Smooth or RUBEROID® 20, applied with a minimum 4” side lap and a minimum 6” end lap. Base sheet may be applied at a right angle (90°) to the slope of the deck with approved annular ring shank nails and tin caps at a fastener spacing of 6” o.c. at the 4” side lap, and two 12” o.c. staggered rows along the center of the sheet.

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

Cap Sheet: Tile-Mate Cap Sheet or ASTM D 249 Mineral Surface capsheet applied with a minimum side lap of 2” and a minimum end lap of 6”. Cap sheet may be applied at a right angle (90°) to the slope of the deck* solidly adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Cap sheet shall be back nailed in accordance with RAS 118, 119, 120.

* Membranes may also be installed parallel to the slope of the roof (i.e. strapping). If membrane is strapped, then anchor sheet and ply sheet must also be strapped.

Maximum Design Pressure: In accordance with Tile Assembly Manufactures Notice of Acceptance.

Maximum Fire Classification: Must comply with Tile Assembly Fire Classification

Maximum Slope: In accordance with applicable Building Code
WOOD DECK SYSTEM LIMITATIONS:
1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

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 side lap 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.)*

END OF THIS ACCEPTANCE