



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Tri-Ply, Inc.
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: Tri-Ply Modified Bitumen Roof System for Concrete 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 #01-0129.17 and consists of pages 1 through 39.
The submitted documentation was reviewed by Jorge L. Acebo.



**NOA No: 05-0819.06
Expiration Date: 05/10/11
Approval Date: 12/22/05
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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: SBS/APP, Modified Bitumen
Deck Type: Concrete
Maximum Design Pressure -457.5 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> |
|---|---------------------------|---------------------------|---|
| TriPly Asphalt Concrete Primer | 5, 55 gallons | ASTM D 41 | Asphalt concrete primer used to promote adhesion of asphalt in built-up roofing.1 |
| TriPly #75 Base Sheet | 3 sq. roll 75 lb. roll | ASTM D 4601 | Asphalt impregnated and coated glass mat base sheet.1 |
| TriPly Ply 4 | 5 sq. roll | ASTM D 2178 | Type IV asphalt impregnated glass felt with asphalt coating.1 |
| Tri-Ply Ply 6 | 5 sq. roll 45 lb. roll | ASTM D 2178 | Type VI asphalt impregnated glass felt with asphalt coating.1 |
| TriPly Mineral Surfaced Cap Sheet | 76 lb. roll | ASTM D 3909 | Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules. |
| Tri-Ply Modified Bitumen Adhesive | 5 gallons | ASTM D 3019 Type III | Fiber reinforced, rubberized Adhesive 1 |
| TriPly SBS Modified Bitumen | 1 sq. roll 103 lbs. | ASTM D 5147 | Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.1 |
| TP 4 Smooth APP Modified Bitumen | 1 sq. roll 87 lbs. | ASTM D 5147 | Heavy duty, polyester reinforced, asphalt modified bitumen membrane, smooth surface. |
| TP 4 Granule APP Modified Bitumen | 1 sq. roll 102 lbs. | ASTM D 5147 | Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface. |
| TriPly Aluminum Roof Coating | 5 gallons | ASTM D2824, Type I | Non-fibered. aluminum pigmented, asphalt roof coating1 |
| TriPly Modified Bitumen Flashing Cement | 5 gallons | ASTM D 3019 Type III | Fiber reinforced, rubberized Adhesive |



NOA No: 05-0819.06
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APPROVED INSULATIONS:

TABLE 2

| Product Name | Product Description | Manufacturer (With Current NOA) |
|-------------------------------------|---|--|
| 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.1 | GAF Materials Corp. |
| GAFTEMP® Fiberboard | Fiberboard insulation. | GAF Materials Corp. |
| GAFTEMP® Permalite | Perlite insulation board. | GAF Materials Corp. |
| GAFTEMP Recover Board | Perlite recover board | GAF Materials Corp. |
| GAFTEMP® High Density Fiberboard | High density wood fiberboard insulation. | GAF Materials Corp. |
| PYROX | Polyisocyanurate foam insulation | Apache Products Co. |
| Nail-Line | Polyisocyanurate foam insulation | Apache Products Co. |
| White Line | Polyisocyanurate foam insulation | Apache Products Co. |
| ACFoam I, II & Composite | Polyisocyanurate foam insulation | Atlas Energy Products |
| Hy-Therm AP | Polyisocyanurate foam insulation | Celotex Corp. |
| Hy-Therm Nail-Line | Polyisocyanurate foam insulation | Celotex Corp. |
| ISO 95+ | Polyisocyanurate foam 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 |
| E'NRG'Y-2 & E'NRG'Y-2 PLUS | Polyisocyanurate foam insulation | Johns Manville |
| FiberGlass Roof Insulation | Glass fiber/Mineral fiber insulation | Johns Manville |
| Multi-Max | Polyisocyanurate roof insulation | RMax, Inc. |



APPROVED FASTENERS:

TABLE 3

| Fastener Number | Product Name | Product Description | Dimensions | Manufacturer (With Current NOA) |
|------------------------|---|--|-------------------|--|
| 1. | GAFTITE® #12 Standard & #14 Heavy Duty Roofing Fastener | Insulation fastener for steel, wood & concrete decks. | | GAF Materials Corp. 1 |
| 2. | GAFTITE® ASAP | Pre-assembled GAFTITE Fasteners and metal and plastic plates.1 | | GAF Materials Corp. 1 |
| 3. | GAFTITE® Base Sheet Fastener and Plate | Base sheet fastening assembly. | | GAF Materials Corp. 1 |
| 4. | Galvalume Plates | Round galvalume stress plates.1 | 3" and 3 1/2" | GAF Materials Corp. 1 |
| 5. | Polypropylene Plates | Round polypropylene stress plates.1 | 3" and 3 1/2" | GAF Materials Corp. 1 |
| 6. | Anchorbond Fastener | Insulation fastener for concrete decks. | | Celotex Corp. |
| 7. | Anchorbond Steel Plate | Hexagonal steel stress plates. | 3-1/4" x 2-7/8" | Celotex Corp. |
| 8. | Anchorbond Plastic Plate | Hexagonal polypropylene stress plates. | 3-1/4" x 3" | Celotex Corp. |
| 9. | Dekfast Fasteners #14 & #15 | Insulation fastener for wood, steel and concrete decks | | Construction Fasteners Inc. |
| 10. | Dekfast Hex Plate | Galvalume hex stress plate. | 2 7/8" x 3 1/4" | Construction Fasteners Inc. |
| 11. | Dekfast Lock Plate | Polypropylene locking plate. | 3" x 3 1/4" | Construction Fasteners Inc. |
| 12. | Hextra | Insulation fastener steel or wood decks | | ITW Buildex |
| 13. | #15 Roofgrip | Insulation fastener steel, wood or concrete decks | | ITW Buildex |
| 14. | Gearlok Plastic Plate | Polypropylene plastic plate | 3.2" round | ITW Buildex |
| 15. | Metal Plate | Galvalume plate for use with Roofgrip1 | 3" square | ITW Buildex |
| 16. | Olympic Fastener #12 & #14 | Insulation fastener | | Olympic Manufacturing Group, Inc. |



APPROVED FASTENERS:

TABLE 3

| Fastener Number | Product Name | Product Description | Dimensions | Manufacturer (With Current NOA) |
|------------------------|-------------------------|--|-------------------|--|
| 17. | Olympic Fastener ASAP | Pre-assembled Insulation fastener and plate | | Olympic Manufacturing Group, Inc. |
| 18. | Fluted Nail | Spiral fluted fastener for concrete decks. | | Olympic Manufacturing Group, Inc. |
| 19. | Olympic Polypropylene | Polypropylene plastic plate | 3.25" round | Olympic Manufacturing Group, Inc. |
| 20. | Olympic Standard | 3" round galvalume AZ50 steel plate | 3" round | Olympic Manufacturing Group, Inc. |
| 21. | Johns Manville CD-10 | Wafer head nail with split shank for concrete decks | | Johns Manville |
| 22. | Standard Metal Plate | 3" square galvalume AZ50 steel plate | 3" square | Johns Manville |
| 23. | Johns Manville | 3" round polyethylene stress plate | 3.25" round | Johns Manville |
| 24. | Rawl Drive | Insulation fastener for concrete decks | | Powers Fasteners, Inc. |
| 25. | Rawl Plate | 3" round galvalume AZ55 steel plate | 3" round | Powers Fasteners, Inc. |
| 26. | Insul-Fixx Fastener #14 | Insulation fastener for concrete, steel and wood decks | | SFS/Stadler |
| 27. | Insul-Fixx S Plate | 3" round galvalume AZ50 steel plate | 3" round | SFS/Stadler |
| 28. | Insul-Fixx P Plate | 3" round polyethylene stress plate | 3" round | SFS/Stadler |
| 29. | Tru-Fast | Insulation fastener for steel, wood, concrete. | | Tru-Fast |
| 30. | Tru-Fast Plastic Plate | 3.04" round polyethylene plastic plate | 3.04" round | Tru-Fast |
| 31. | Tru-Fast MP-3 | 3.23" round galvalume AZ50 steel plate | 3.23" round | Tru-Fast |



EVIDENCE SUBMITTED:

| <u>Test Agency/Identifier</u> | <u>Name</u> | <u>Report</u> | <u>Date</u> |
|-------------------------------------|--|---|--|
| Factory Mutual Research Corporation | Current Insulation Attachment Requirements | FMRC 1996 | 01.01.96 |
| Factory Mutual Research Corporation | Wind Uplift FMRC 4470 - PA 114 | J.I. 1V8A4.AM J.I. 3X3A2.AM J.I. 0Y9Q5.AM J.I. 1B9A8.AM J.I. 3D4Q2.AM | 06.28.93 08.02.94 07.29.94 09.04.97 04.30.97 |
| Trinity Engineering | Wind Uplift PA 114 | 4483.04 97-1 | 06.06.97 |
| Underwriters Laboratories, Inc. | Fire Resistance Classification UL 790 - PA 114 | R1306, 87NK11819 | 01.01.93 |
| Dynatech Engineering Corporation | Wind Uplift PA 114 | #3600.02.95-1 #4482.02.95-1 | 02.02.95 |



APPROVED ASSEMBLIES:

- Membrane Type:** APP
- Deck Type 3:** Concrete Decks, Insulated, New Construction
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type A:** All insulation layers are adhered, to a mechanically attached or adhered anchor/base-sheet. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft ² |
|---|-----------------------------------|-------------------------------------|
| Apache Pyrox, White Line , Nail Line, Hy-Therm AP, E'NRG'Y 2, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, E'NRG'Y 2 Plus, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N, ISO 95+, Wood Fiber, GAFTEMP® Fiberboard (Min. 1" thick) | N/A | N/A |
| High Density Wood Fiber, GAFTEMP® High Density Fiberboard (Min. 1/2" thick) | N/A | N/A |
| Perlite, GAFTEMP® Permalite (Min. 3/4" thick) | N/A | N/A |
| Fiberglass (Min. 15/16" thick) | 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 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.

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

| | | |
|----------------------|---|---|
| Anchor Sheet: | (Optional) Install one ply of TriPly Ply 4, Ply 6 or #75 Base Sheet | Applied directly to primed deck adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Base Sheet: | One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. see General Limitation #4. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 TP 4 Smooth, TP 4 Granule APP Modified Bitumen 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat[®] Emulsion Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only)

Maximum Design Pressure: -90 psf (See General Limitation #9)



Membrane Type: SBS

Deck Type 3: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type A: All insulation layers are adhered, to a mechanically attached or adhered anchor/base-sheet. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---------------------------------------|--|
| Apache Pyrox, White Line , Nail Line, Hy-Therm AP, E'NRG'Y 2, GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, E'NRG'Y 2 Plus, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N, ISO 95+, Wood Fiber, GAFTEMP® Fiberboard (Min. 1" thick) | N/A | N/A |
| High Density Wood Fiber, GAFTEMP® High Density Fiberboard (Min. 1/2" thick) | N/A | N/A |
| Perlite, GAFTEMP® Permalite (Min. 3/4" thick) | N/A | N/A |
| Fiberglass (Min. 15/16" thick) | 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 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.

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

| | | |
|----------------------|---|---|
| Anchor Sheet: | (Optional) Install one ply of TriPly Ply 4, Ply 6 or #75 Base Sheet | Applied directly to primed deck adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Base Sheet: | One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. see General Limitation #4. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 or more plies ply of TriPly SBS Modified Bitumen 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. TriPly 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.

Maximum Design Pressure: -90 psf (See General Limitation #9)



Membrane Type: APP

Deck Type 3: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type B: Base layer of insulation is mechanically attached to roof deck. Any subsequent layers are then adhered to base layer of insulation. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation for Base Layer (Table 2) (When applicable: Steel plate only =S, plastic plate only =P) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|--|--|
| E'NRG'Y 2, GAFTEMP® Isotherm RN (Min. 1.4" thick) | 9 or 21 1, 2, 16, 17, 18 or 24 | 1:3 1:4 |
| E'NRG'Y 2 Plus, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1.5" thick) | 1, 2, 9, 16, 17, 18, 21, 24, 26 or 29 | 1:4 |
| ISO 95 + (Min. 1.4" thick) | 21, 26 or 29S | 1:3 |
| Perlite, GAFTEMP® PERMALITE (Min. ¾" thick) | 1 (3.5" Plates), 9S, 16S, 21 or 29 | 1:2 |
| Fiberglass (Min. 1⁵/₁₆" thick) | 1, 9, 16, 18, 21, 26 or 29 | 1:2.67 |
| High Density Wood Fiber, GAFTEMP High Density Fiberboard (Min. ¾" thick) | 1S, 2, 9S, 16S, 17, 18, 21 or 29S | 1:4 |
| Wood Fiber, GAFTEMP Fiberboard (Min. 1" thick) | 1, 2, 6, 9, 13, 16, 17, 26 or 29S | 1:3 |

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).

| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---|--|
| Any of the insulations listed for Base Layer, above. | N/A | N/A |
| GAFTEMP® Recover Board (Min. ½" thick) | N/A | N/A |

Note: Apply top layer of insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/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.



| | | |
|--------------------------|---|---|
| Base Sheet: | Install one ply of TriPly #75, Ply 4, or Ply 6 base sheet | Applied 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: | (Optional) One or more plies TriPly Ply 4 or Ply 6 sheet | Fully adhered in type III or IV of an approved asphalt at an application rate of 20-40 lbs./sq. |
| Membrane: | One or more plies of TP 4 Smooth or TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -45 psf (See General Limitation #9) | |



Membrane Type: SBS

Deck Type 3: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type B: Base layer of insulation is mechanically attached to roof deck. Any subsequent layers are then adhered to base layer of insulation. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation for Base Layer (Table 2) (When applicable: Steel plate only =S, plastic plate only =P) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---|--|
| Apache Pyrox, White Line (Min. 1.3" thick) | 1, 2, 9, 16, 17, 18, 21, 26 or 29 | 1:2.67 |
| Apache/Hy-Therm Nail-Line (Min. 1.5" thick) | 1, 9, 16, 18, 26S or 29 | 1:4 |
| E'NRG'Y 2, GAFTEMP® Isotherm RN (Min. 1.4" thick) | 1, 2, 9S, 16, 17, 18, 21 or 24 | 1:3 |
| E'NRG'Y 2 Plus, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1.5" thick) | 1, 2, 9, 16, 17, 18, 21, 24, 26 or 29 | 1:4 |
| ISO 95 + (Min. 1.4" thick) | 21, 26 or 29S | 1:3 |
| Perlite, GAFTEMP® PERMALITE (Min. ¾" thick) | 1 (3.5" Plates), 9S, 16S, 21 or 29 | 1:2 |
| Fiberglass (Min. 1 ⁵ / ₁₆ " thick) | 1, 9, 16, 18, 21, 26 or 29 | 1:2.67 |
| High Density Wood Fiber, GAFTEMP High Density Fiberboard (Min. ¾" thick) | 1S, 2, 9S, 16S, 17, 18, 21 or 29S | 1:4 |
| Wood Fiber, GAFTEMP Fiberboard (Min. 1" thick) | 1, 2, 6, 9, 13, 16, 17, 26 or 29S | 1:3 |

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).

| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---|--|
| Any of the insulations listed for Base Layer, above. | N/A | N/A |
| GAFTEMP® Recover Board (Min. ½" thick) | N/A | N/A |



Note: Apply top layer of insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/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.

| | | |
|--------------------------|---|---|
| Base Sheet: | Install one ply of TriPly #75, Ply 4, or Ply 6 base sheet | Applied 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: | (Optional) One or more plies TriPly Ply 4 or Ply 6 sheet | Fully adhered in type III or IV of an approved asphalt at an application rate of 20-40 lbs./sq. |
| Membrane: | One or more plies of TriPly SBS Modified Bitumen | 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. TriPly 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. |
| Maximum Design Pressure: | -45 psf (See General Limitation #9) | |



Membrane Type: APP
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type C: All layers of insulation are mechanically attached to roof deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---------------------------------------|--|
| GAFTEMP Isotherm RA, GAFTEMP Isotherm RN (Min. 1.3" thick) | N/A | N/A |
| E'NRG'Y 2 , ISO 95+ (Min. 1.4" thick) | N/A | N/A |
| Apache Pyrox, White Line , Hy-Therm AP (Min. 1.3" thick) | N/A | N/A |
| Apache/Hy-Therm Nail-Line, E'NRG'Y 2 Plus (Min. 1.5" thick) | N/A | N/A |
| Perlite, GAFTEMP® Permalite (Min. ½" thick) | N/A | N/A |
| Fiberglass (Min. 1 ⁵ / ₁₆ " thick) | N/A | N/A |
| High Density Wood Fiber, GAFTEMP® High Density Fiberboard (Min. ¾" thick) | N/A | N/A |
| Wood Fiber, GAFTEMP® Fiberboard (Min. 1" thick) | 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.

| Insulation for Top Layer (Table 2) (When applicable: Steel plate only =S, plastic plate only =P) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---------------------------------------|--|
| Apache Pyrox, White Line (Min. 1.3" thick) | 1, 2, 9, 16, 17, 18, 21, 26 or 29 | 1:2.67 |
| Apache/Hy-Therm Nail-Line (Min. 1.5" thick) | 1, 9, 16, 18, 26S or 29 | 1:2.67 |
| E'NRG'Y 2, GAFTEMP® Isotherm RN (Min. 1.4" thick) | 9S or 21 1, 2, 16, 17, 18 or 24 | 1:3 1:4 |
| E'NRG'Y 2 Plus, GAFTEMP Composite N (Min. 1.5" thick) | 1, 2, 9, 16, 17, 18, 21, 24, 26 or 29 | 1:4 |



| | | |
|---|--|---------------|
| ISO 95 + (Min. 1.4" thick) | 21, 26 or 29S | 1:3 |
| Perlite, GAFTEMP® PERMALITE (Min. ¾" thick) | 1S, 2, 9S, 16S, 21 or 29 | 1:2 |
| Fiberglass (Min. 15/16" thick) | 1, 2, 9, 16, 17, 18, 21, 26 or 29 | 1:2.67 |
| High Density Wood Fiber, GAFTEMP High Density Fiberboard (Min. ¾" thick) | 1S, 2, 9S, 16S, 17, 18, 21 or 29S | 1:4 |
| Wood Fiber, GAFTEMP Fiberboard (Min. 1.3" thick) | 1, 2, 6, 13, 16, 17, 21 or 29S | 1:3 |

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.

| | | |
|---------------------------------|---|---|
| Base Sheet: | Install one ply of TriPly Ply 4, Ply 6 or #75 Base Sheet | Applied 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: | (Optional) One or more plies TriPly Ply 4 or Ply 6 sheet. | Adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Membrane: | One ply of TP 4 Smooth, TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -45 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type C: All layers of insulation are mechanically attached to roof deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---------------------------------------|--|
| GAFTEMP Isotherm RA, GAFTEMP Isotherm RN (Min. 1.3" thick) | N/A | N/A |
| E'NRG'Y 2, ISO 95+ (Min. 1.4" thick) | N/A | N/A |
| Apache Pyrox, White Line, Hy-Therm AP (Min. 1.3" thick) | N/A | N/A |
| Apache/Hy-Therm Nail-Line, E'NRG'Y 2 Plus (Min. 1.5" thick) | N/A | N/A |
| Perlite, GAFTEMP® Permalite (Min. 1/2" thick) | N/A | N/A |
| Fiberglass (Min. 1 ⁵ / ₁₆ " thick) | N/A | N/A |
| High Density Wood Fiber, GAFTEMP® High Density Fiberboard (Min. 3/4" thick) | N/A | N/A |
| Wood Fiber, GAFTEMP® Fiberboard (Min. 1" thick) | 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.

| Insulation for Top Layer (Table 2) (When applicable: Steel plate only =S, plastic plate only =P) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---------------------------------------|--|
| Apache Pyrox, White Line (Min. 1.3" thick) | 1, 2, 9, 16, 17, 18, 21, 26 or 29 | 1:2.67 |
| Apache/Hy-Therm Nail-Line (Min. 1.5" thick) | 1, 9, 16, 18, 26S or 29 | 1:2.67 |
| E'NRG'Y 2, GAFTEMP® Isotherm RN (Min. 1.4" thick) | 9S or 21 1, 2, 16, 17, 18 or 24 | 1:3 1:4 |
| E'NRG'Y 2 Plus, GAFTEMP Composite N (Min. 1.5" thick) | 1, 2, 9, 16, 17, 18, 21, 24, 26 or 29 | 1:4 |



| | | |
|---|--|---------------|
| Perlite, GAFTEMP® PERMALITE (Min. ¾" thick) | 1S, 2, 9S, 16S, 21 or 29 | 1:2 |
| Fiberglass (Min. 15/16" thick) | 1, 2, 9, 16, 17, 18, 21, 26 or 29 | 1:2.67 |
| High Density Wood Fiber, GAFTEMP High Density Fiberboard (Min. ¾" thick) | 1S, 2, 9S, 16S, 17, 18, 21 or 29S | 1:4 |
| Wood Fiber, GAFTEMP Fiberboard (Min. 1.3" thick) | 1, 2, 6, 13, 16, 17, 21 or 29S | 1:3 |

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.

| | | |
|---------------------------------|---|---|
| Base Sheet: | Install one ply of TriPly Ply 4, Ply 6 or #75 Base Sheet | Applied 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: | (Optional) One or more plies TriPly Ply 4 or Ply 6 sheet. | Adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Membrane: | One or more plies ply of TriPly SBS Modified Bitumen | Adhered in 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. TriPly Mineral Surfaced Cap Sheet | Adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Maximum Design Pressure: | -45 psf (See General Limitation #9) | |



Membrane Type: APP
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F: Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 TP 4 Smooth, TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -90 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F: Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 or more plies ply of TriPly SBS Modified Bitumen | Adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./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. TriPly 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. |
| Maximum Design Pressure: | -90 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(2): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 sheets | Adhered with TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./sq. |
| Membrane: | One or more plies ply of TriPly SBS Modified Bitumen | Adhered in TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./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. TriPly 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. |
| Maximum Design Pressure: | -90 psf (See General Limitation #9) | |



Membrane Type: APP
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(3): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | (Optional) One or more plies TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 TP 4 Smooth, TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -236 psf (See General Limitation #9) | |



Membrane Type: APP
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(4): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | One ply TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 TP 4 Smooth, TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -457.5 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(4): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|--------------------------|---|--|
| Base Sheet: | One ply TriPly Ply 4, Ply 6 or #75 Base Sheet | Adhered directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 or more plies ply of TriPly SBS Modified Bitumen | 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. TriPly 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. |
| Maximum Design Pressure: | -457.5 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(5): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

Base Sheet: One ply TriPly Ply 4, Ply 6 or #75 Base Sheet Adhered directly to the primed deck. Adhered with TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./sq.

Membrane: One or more plies ply of TriPly SBS Modified Bitumen Adhered with TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./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. TriPly 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.

Maximum Design Pressure: -230 psf (See General Limitation #9)



Membrane Type: APP
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(5): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

| | | |
|-----------------------------|---|---|
| Base Sheet: | GAFGLAS® STRATAVENT® Perforated | lose laid dry |
| Ply Sheet: | One or more plies of TriPly Ply 4 or Ply 6 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 TP 4 Smooth, TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| Maximum Design Pressure: | -90 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Non-Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(5): Membrane and /or base sheet is adhered to roof deck.

All General and System Limitations shall apply.

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

Base Sheet: None

Ply Sheet: (Optional), One or more plies of TriPly Ply 4 or Ply 6 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 or more plies ply of TriPly SBS Modified Bitumen Adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in TriPly Modified Bitumen Adhesive at an application rate of 1-2 gal./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. TriPly 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.

Maximum Design Pressure: -90 psf (See General Limitation #9)



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Membrane Type: APP & SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A: Optional insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| (Optional) Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---|--|
| ACFoam Composite, GAFTEMP® Composite, GAFTEMP Composite A, GAFTEMP Composite N or E'NRG'Y-2 (Min. 1.75" thick) | N/A | N/A |

Optional insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|--|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply 4 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 or more plies of TP 4 Smooth, TP 4 Granule APP Modified Bitumen or TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -270 psf (See General Limitation #9) | |



Membrane Type: APP & SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(2): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---------------------------------------|--|
| High Density Wood Fiber, GAFTEMP® High Density Fiberboard (Min. ½” thick) | N/A | N/A |
| GAFTEMP® PERMALITE® (Min. 1” thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|--|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TP 4 Smooth, TP 4 Granule APP Modified Bitumen or TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -140 psf (See General Limitation #9) | |



Membrane Type: APP & SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(3): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---|--|
| GAFTEMP® Isotherm RN (Min. 2" thick) | N/A | N/A |
| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| GAFTEMP® PERMALITE® (Min. 1/2" thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|--|---|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TP 4 Smooth, TP 4 Granule APP Modified Bitumen or TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -322.5 psf (See General Limitation #9) | |



Membrane Type: APP & SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(4): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---|--|
| GAFTEMP® Composite N (Min. 1.5" thick) | N/A | N/A |
| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| GAFTEMP® Composite (Min. 1.5" thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|--|---|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TP 4 Smooth, TP 4 Granule APP Modified Bitumen or TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -270 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(5): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|---|---|--|
| GAFTEMP® Permalite (Min. 3/4" thick) | N/A | N/A |

Insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|---|---|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat® Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -137 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(6): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| | | |
|---|---|--|
| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| E'NRG'Y 2 Plus, AC Foam I, II, Apache Pyrox, AP, White Line, Hy-Therm AP, Multi-Max or , GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1¼" thick) | N/A | N/A |

| | | |
|---|---|--|
| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| GAFTEMP® Permalite (Min. ½" thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|--------------------|---|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TriPly SBS Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating | Applied at a rate of 1.5 gal./sq. |
| | GAF WeatherCoat® Emulsion | Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |

Maximum Design Pressure: -126 psf (See General Limitation #9)



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Membrane Type: APP
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(7): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---|--|
| GAFTEMP Permalite (Min. ¾" thick) | N/A | N/A |

Insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|---------------------------------|---|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TP 4 Smooth or TP 4 Granule APP Modified Bitumen | 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. GAF Premium Fibered Aluminum Roof Coating or GAF WeatherCoat [®] Emulsion | Applied at a rate of 1.5 gal./sq. Applied at a rate of 3 gal./sq. (Torch Smooth applications only) |
| | 3. TriPly 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. |
| Maximum Design Pressure: | -128 psf (See General Limitation #9) | |



Membrane Type: SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(8): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
|--|---|--|
| E'NRG'Y 2 Plus, AC Foam I, II, Apache Pyrox, AP, White Line, Hy-Therm AP, Multi-Max or , GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1¼" thick) | N/A | N/A |
| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| GAFTEMP® Fiberboard or Wood Fiber (Min. ½" thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|--------------------|---|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TriPly SBS Modified Bitumen | 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. |
| | 2A. GAF Premium Fibered Aluminum Roof Coating or | Applied at a rate of 1.5 gal./sq. |



- 2B. GAF WeatherCoat® Emulsion Applied at a rate of 3 gal./sq. (Torch Smooth applications only)
3. TriPly 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.
- 162 psf (See General Limitation #9)

Maximum Design
Pressure:



Membrane Type: APP & SBS
Deck Type 3: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(9): All insulation layers are adhered to deck. Membrane is subsequently fully or partially adhered to insulation.

All General and System Limitations shall apply.

| | | |
|---|---|--|
| Insulation for Base Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| E'NRG'Y 2 Plus, AC Foam I, II, Apache Pyrox, AP, White Line, Hy-Therm AP, Multi-Max or , GAFTEMP Isotherm RA, GAFTEMP Isotherm RN, GAFTEMP Composite, GAFTEMP Composite A, GAFTEMP Composite N (Min. 1¼" thick) | N/A | N/A |

| | | |
|--|---|--|
| Insulation for Top Layer (Table 2) | Insulation Fasteners (Table 3) | Fastener Density/ft² |
| GAFTEMP® PERMALITE Fiberboard or Perlite (Min. ¾" thick) | N/A | N/A |

All insulation shall be adhered to the deck 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 PA 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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

| | | |
|--------------------|--|--|
| Base Sheet: | Install one ply of TriPly Ply4, Ply 6 or #75 Base Sheet | Adhered directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. |
| Ply Sheet: | (Optional) One or more plies of TriPly Ply4 or Ply 6 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 or more plies of TP 4 Smooth, TP 4 Granule APP Modified Bitumen or TriPly SBS Modified Bitumen | 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. |
| | 2A. GAF Premium Fibered Aluminum Roof Coating or | Applied at a rate of 1.5 gal./sq. |



- 2B. GAF WeatherCoat® Emulsion Applied at a rate of 3 gal./sq. (Torch Smooth applications only)
3. TriPly 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.
- 157 psf (See General Limitation #9)

Maximum Design Pressure:



CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.

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 to 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



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