

#### Material Requirements

TAMKO AWAPLAN VERSAFLEX	2 plies
Asphalt (Per 100 sq. ft.)	Approx. 46 lbs.
<b>Surfacing (Options Below)</b>	
(1) Flood Coat Asphalt (Per 100 sq. ft.)	Approx. 60 lbs.
Gravel (Per 100 sq. ft.)	Approx. 400 lbs.
(2) Surface Coat: Fibered Aluminum Coating (Per 100 sq. ft.)	Approx. 1-1/2-2 gals.
(3) Surface Coat: TAM-STAR or TAM-GUARD White, Elastomeric Roof Coating (Per 100 sq. ft.)	Approx. 2 gals.

**Slope:** Positive drainage up to 3 in. per linear ft. For slopes above 3/4 in. per linear ft., fastening of the AWAPLAN VERSAFLEX membrane is required.

**Deck:** The deck should conform to TAMKO general requirements.

**Insulation:** The insulation should be installed according to the manufacturer's specification in the thickness required. The insulation should conform to TAMKO requirements. Polyisocyanurate and expanded polystyrene must have an overlay of a minimum 1/2 in. fiberboard, perlite, or fiberglass roof insulation.

**Asphalt:** The asphalt should be certified by the manufacturer to meet ASTM D-312, Type III for slopes up to 1/4 in. and Type IV for slopes up to 3 in.

**AWAPLAN VERSAFLEX 2-Ply Installation:** Over the insulation, install 2 plies of AWAPLAN VERSAFLEX in specification asphalt. Starting at the low point of the roof, apply the first ply of AWAPLAN VERSAFLEX beginning with a 1/2 m. width, then

a full 1 m. width, side lapped 4 in. and end lapped 6 in. Start the second ply of AWAPLAN VERSAFLEX beginning with a full 1 m. width, side lapped 4 in. and end lapped 6 in. Apply at a right angle to the slope of the roof. The AWAPLAN VERSAFLEX should be solidly adhered to the insulation or previous ply (pressed into the hot asphalt) with approximately 23 lbs. (±15%) of specification asphalt per 100 sq. ft. The asphalt should be above 400° F at the point of application and mopped no more than 4 ft. in front of the roll.

**Surfacing:** Select one of the following surfacings:

(1) **Flood Coat and Gravel:** Apply a flood coat of 60 lb. (±15%) of specification asphalt per 100 sq. ft. over the entire surface. While hot, embed approximately 400 lb. of clean roofing gravel or 300 lb. of slag per 100 sq. ft. of completed roof area, or

(2) **Surface Coat: Aluminum Roof Coating:** Coat the entire roof surface with Fibered Aluminum Roof Coating at a rate of 1-1/2 to 2 gal. per 100 sq. ft.

(3) **Surface Coat: White Elastomeric Roof Coating:** Coat the entire roof surface with TAM-STAR or TAM-GUARD White Elastomeric Roof Coating at a rate of 2 gals. per 100 sq. ft.

**Maintenance of the surface coating is required.**

**Flashing:** The flashing material must be a TAMKO polyester reinforced modified asphalt flashing material.

**NOTE: AWAPLAN VERSAFLEX IS NOT AN ACCEPTABLE FLASHING MATERIAL.**

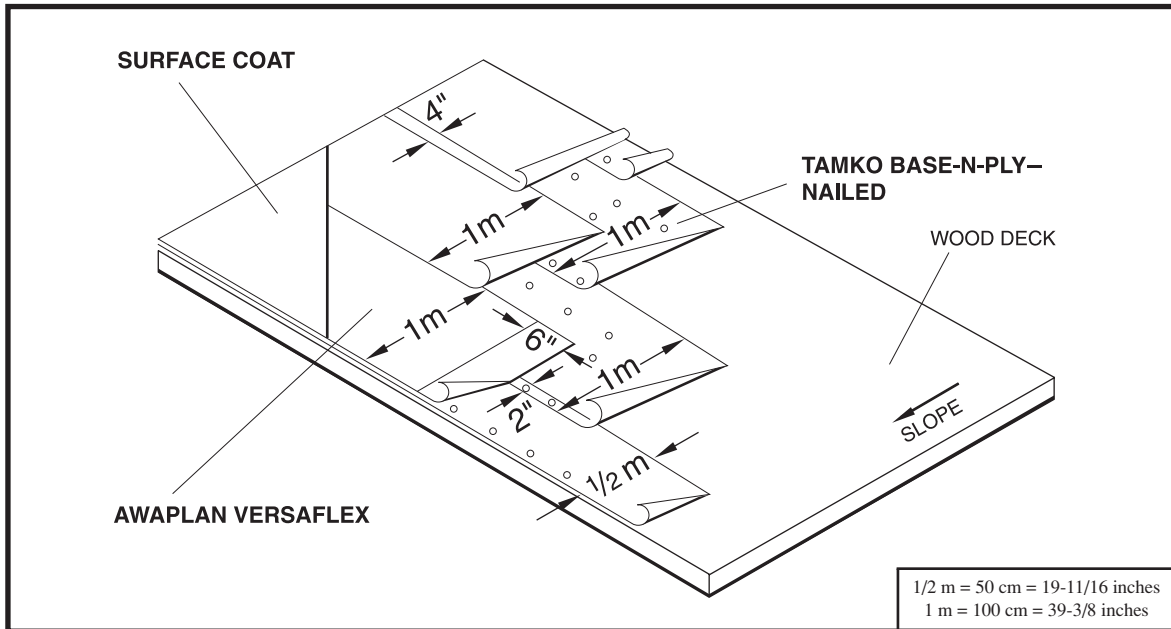
**U.L. Requirements:**

Contact TAMKO for information on U.L. systems requirements.

**Caution:** A product(s) in this specification contains crystalline silica. Crystalline silica has been classified as a "known" human carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program. A product(s) in this specification also contains oxidized asphalt. Occupational exposures to oxidized asphalt and

its emissions during roofing have been classified by IARC as a “probable human carcinogen”. Oxidized asphalt also contains Polycyclic Aromatic Hydrocarbons some of which have been classified by IARC as known or probable human carcinogens. The physical nature of the product(s) in this specification may help limit any inhalation or dermal hazard during application and/or removal. However, physical forces such as sawing, grinding or drilling during demolition work and heating or burning may increase the inhalation or dermal exposure hazard of the product(s) in this specification. Take precautions to prevent breathing and contact with skin.

Application of product(s) in this specification using “hot mopped” applications may expose workers and others in the work area to oxidized asphalt and its emissions. The International Agency for Research on Cancer has classified occupational exposures to oxidized asphalt and its emissions during roofing as a “probable human carcinogen.” During installation and removal of the product(s) in this specification, including “hot mopped” application, workers must take precautions to assure adequate ventilation and use effective personal protective equipment to prevent exposures to dusts, fumes, vapors and mists. It is the responsibility of the contractor and workers to protect themselves and others in the work area from exposure to oxidized asphalt and its emissions when applying the product(s) in this specification.



#### Material Requirements

TAMKO BASE-N-PLY®	1 ply
TAMKO AWAPLAN VERSAFLEX	1 ply
Asphalt (Per 100 sq. ft.)	Approx. 23 lbs.
Surface Coat: (Per 100 sq. ft.)	
(1) Fibered Aluminum Coating	Approx. 1-1/2 - 2 gals.
(2) Surface Coat: TAM-STAR or TAM-GUARD White Elastomeric Roof Coating	Approx. 2 gals.
(Per 100 sq. ft.)	
Clinch-type nails for base sheet	Approx. 100 nails
(Per 100 sq. ft.)	

**Slope:** Positive drainage up to 3 in. per linear ft. For slopes above 3/4 in. per linear ft., fastening of the AWAPLAN VERSAFLEX membrane is required.

**Deck:** The deck should conform to TAMKO general requirements.

**Asphalt:** The asphalt should be certified by the manufacturer to meet ASTM D-312, Type III for slopes up to 1/4 in. and Type IV for slopes up to 3 in.

**Base Sheet:** Starting at the low point of the roof, install 1 ply of TAMKO BASE-N-PLY beginning with a 1/2 m width, then a full 1 m width, side lapped 2 in. and end lapped 4 in. Apply at a right angle to the slope of the roof. Nail the sheets along the lap at intervals of no more than 8 in. Stagger-nail on 16 in. centers along 2 lines located 12 in. from each edge of the base sheet. For specific fastening patterns for wind uplift listings, contact the Technical Services Department.

**AWAPLAN VERSAFLEX:** Starting at the low point of the roof, install 1 layer of TAMKO AWAPLAN VERSAFLEX membrane, side lapped 4 in. and end lapped 6 in. The AWAPLAN VERSAFLEX membrane should be solidly adhered to the base ply (pressed into the hot asphalt) with approximately 23 lbs. (±15%) of specification asphalt per 100 sq. ft. The asphalt should be above 400° F at the point of application and mopped no more than 4 ft. in front of the roll.

**Surfacing:** Select one of the following surfacings:

(1) **Surface Coat: Aluminum Roof Coating:** Coat the entire roof surface with Fibered Aluminum Roof Coating at a rate of 1-1/2 to 2 gal. per 100 sq. ft.

(2) **Surface Coat: White Elastomeric Roof Coating:** Coat the entire roof surface with TAM-STAR or TAM-GUARD White Elastomeric Roof Coating at a rate of 2 gals. per 100 sq. ft.

**Maintenance of the surface coating is required.**

**Flashing:** The flashing material must be a TAMKO polyester reinforced modified asphalt flashing material.

**NOTE: AWAPLAN VERSAFLEX IS NOT AN ACCEPTABLE FLASHING MATERIAL.**

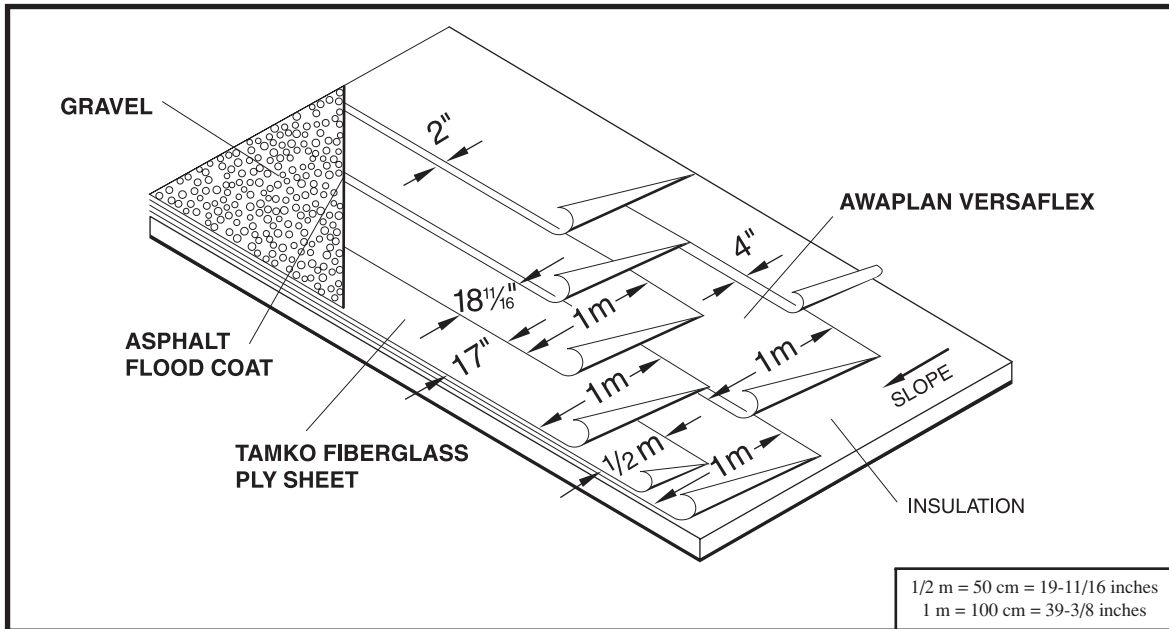
**U.L. Requirements:**

Contact TAMKO for information on U.L. systems requirements.

**Caution:** A product(s) in this specification contains crystalline silica and formaldehyde. Crystalline silica and formaldehyde have been classified as “known” human carcinogens by the International Agency for Research on Cancer (IARC) and the National Toxicology Program. A product(s) in this specification also contains oxidized asphalt. Occupational exposures to oxidized asphalt and its emissions during roofing have been classified by IARC as a “probable human carcinogen”. Oxidized asphalt also contains Polycyclic

Aromatic Hydrocarbons some of which have been classified by IARC as known or probable human carcinogens. The physical nature of the product(s) in this specification may help limit any inhalation or dermal hazard during application and/or removal. However, physical forces such as sawing, grinding or drilling during demolition work and heating or burning may increase the inhalation or dermal exposure hazard of the product(s) in this specification. Take precautions to prevent breathing and contact with skin.

Application of product(s) in this specification using “hot mopped” applications may expose workers and others in the work area to oxidized asphalt and its emissions. The International Agency for Research on Cancer has classified occupational exposures to oxidized asphalt and its emissions during roofing as a “probable human carcinogen.” During installation and removal of the product(s) in this specification, including “hot mopped” application, workers must take precautions to assure adequate ventilation and use effective personal protective equipment to prevent exposures to dusts, fumes, vapors and mists. It is the responsibility of the contractor and workers to protect themselves and others in the work area from exposure to oxidized asphalt and its emissions when applying the product(s) in this specification.



1/2 m = 50 cm = 19-11/16 inches  
1 m = 100 cm = 39-3/8 inches

#### Material Requirements

<b>TAMKO AWAPLAN VERSAFLEX</b>	<b>1 ply</b>
<b>TAMKO TAM-GLASS PREMIUM® or TAM-PLY IV® Fiberglass Ply Sheet</b>	<b>2 plies</b>
<b>Interply Asphalt (Per 100 sq. ft.)</b>	<b>Approx. 69 lbs.</b>
<b>Flood Coat Asphalt (Per 100 sq. ft.)</b>	<b>Approx. 60 lbs.</b>
<b>Gravel (Per 100 sq. ft.)</b>	<b>Approx. 400 lbs.</b>

**Slope:** Positive drainage up to 3 in. per linear ft. **For slopes above 3/4 in. per linear ft.,** fastening of the AWAPLAN VERSAFLEX and the roofing felts is required.

**Deck:** The deck should conform to TAMKO general requirements.

**Insulation:** The insulation should be installed according to the manufacturer's specification in the thickness required. The insulation should conform to TAMKO requirements. Polyisocyanurate and expanded polystyrene must have an overlay of a minimum 1/2 in. fiberboard, perlite, or fiberglass roof insulation.

**Asphalt:** The asphalt should be certified by the manufacturer to meet ASTM D-312, **Type III for slopes up to 1/4 in.** and **Type IV for slopes up to 3 in.**

**AWAPLAN VERSAFLEX:** Starting at the low point of the roof, install 1 ply of TAMKO AWAPLAN VERSAFLEX side lapped 4 in. and end lapped 6 in. Apply at a right angle to the slope of the roof. The AWAPLAN VERSAFLEX should be solidly adhered to the insulation (pressed into the hot asphalt) with approximately 23 lbs. (±15%) of specification asphalt per 100 sq. ft. The asphalt should be above 400° F at the point of application and mopped no more than 4 ft. in front of the roll.

**Fiberglass Ply Sheet 2 Ply Installation:** Over the base ply, install 2 plies of TAM-GLASS PREMIUM or TAM-PLY IV in specification asphalt. Starting from the low point of the roof, apply a 1/2 m width, then a full 1 m width. Follow with full 1 m widths, shingle fashion, lapping each ply 20-11/16 in. in such a manner so that at least 2 plies cover the base ply at any one point. Approximately 23 lbs. (±15%) of specification asphalt per 100 sq. ft. should be used to embed each ply.

**Surfacing:** Apply a flood coat of 60 lb. (±15%) of specification asphalt per 100 sq. ft. over the entire surface. While hot, embed approximately 400 lb. of clean roofing gravel or 300 lb. of slag per 100 sq. ft. of completed roof area.

**Flashing:** The flashing material **must** be a TAMKO polyester reinforced modified asphalt flashing material.

**NOTE: AWAPLAN VERSAFLEX IS NOT AN ACCEPTABLE FLASHING MATERIAL.**

#### U.L. Requirements:

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# SPECIFICATION SUBMITTAL

## 1343 AWAPLAN VERSAFLEX

### INSULATED DECKS

or dermal exposure hazard of the product(s) in this specification. Take precautions to prevent breathing and contact with skin.

Application of product(s) in this specification using "hot mopped" applications may expose workers and others in the work area to oxidized asphalt and its emissions. The International Agency for Research on Cancer has classified occupational exposures to oxidized asphalt and its emissions during roofing as a "probable human carcinogen." During installation and removal of the product(s) in this specification, including "hot mopped" application, workers must take precautions to assure adequate ventilation and use effective personal protective equipment to prevent exposures to dusts, fumes, vapors and mists. It is the responsibility of the contractor and workers to protect themselves and others in the work area from exposure to oxidized asphalt and its emissions when applying the product(s) in this specification.

For complete information on TAMKO's recommendations and requirements, consult TAMKO's web site at [www.tamko.com](http://www.tamko.com)  
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