**Material Requirements**

<table>
<thead>
<tr>
<th>Material</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAMKO AWAPLAN VERSA-SMOOTH</td>
<td>1 ply</td>
</tr>
<tr>
<td>TAMKO TAM-GLASS PREMIUM® or TAM-PLY IV®</td>
<td>Fiberglass Ply Sheet</td>
</tr>
<tr>
<td>Interply Asphalt (Per 100 sq. ft.)</td>
<td>Approx. 69 lbs.</td>
</tr>
<tr>
<td>Flood Coat Asphalt (Per 100 sq. ft.)</td>
<td>Approx. 60 lbs.</td>
</tr>
<tr>
<td>Gravel (Per 100 sq. ft.)</td>
<td>Approx. 400 lbs.</td>
</tr>
</tbody>
</table>

**Slope:** Positive drainage up to 3 in. per linear ft. For slopes above 3/4 in. per linear ft., fastening of the AWAPLAN VERSA-SMOOTH 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. fiberglass, 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 VERSA-SMOOTH:** Starting at the low point of the roof, install 1 ply of TAMKO AWAPLAN VERSA-SMOOTH, side lapped 4 in., and end lapped 6 in. Apply at a right angle to the slope of the roof. The AWAPLAN VERSA-SMOOTH 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.

Alternately, the AWAPLAN VERSA-SMOOTH may be installed by sufficiently heating the back side with a torch at the juncture of the insulation and the AWAPLAN VERSA-SMOOTH roll to form a bead of melted asphalt as the AWAPLAN VERSA-SMOOTH is rolled out. Use care when applying heat as damage can occur to the product by overheating.

**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 lbs. (+15%) of specification asphalt per 100 sq. ft. over the entire surface. While hot, embed approximately 400 lbs. of clean roofing gravel or 300 lbs. of slag per 100 sq. ft. of completed roof area.

**Flashing:** The flashing material must be a TAMKO polyester reinforced modified asphalt 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 “torch applied” or “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 “torch applied” or “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 AWAPLAN VERSA-SMOOTh**  1 ply
**TAMKO TAM-CAP** Fiberglass Mineral Surfaced Cap Sheet  1 ply
Asphalt (Per 100 sq. ft.)  Approx. 46 lbs.

Slope: Positive drainage up to 3 in. per linear ft. For slopes above 3/4 in. per linear ft., fastening of the AWAPLAN VERSA-SMOOTH 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. Polysiocyanurate 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 VERSA-SMOOTH**: Starting at the low point of the roof, install 1 ply of TAMKO AWAPLAN VERSA-SMOOTH, beginning with a 1/2 m width, then 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 VERSA-SMOOTH 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.

Alternately, the AWAPLAN VERSA-SMOOTH may be installed by sufficiently heating the back side with a torch at the juncture of the insulation and the AWAPLAN VERSA-SMOOTH roll to form a bead of melted asphalt as the AWAPLAN VERSA-SMOOTH is rolled out. Use care when applying heat as damage can occur to the product by over-heating.

**TAM-CAP Mineral Surfaced Cap Sheet**: Starting at the low point of the roof, apply 1 ply of TAMKO TAM-CAP, side lapping each sheet 2 in. and end lapping 6 in. over the preceding sheets. Fully mop each sheet with specification asphalt at the rate of 23 lbs. (+15%) of specification asphalt per 100 sq. ft. On slopes of 1 in. per foot or greater, nail adjacent to top edge on 12 in. centers.

**NOTE**: Before application of TAM-CAP, cut into 12 ft. to 18 ft. lengths, allow to flatten and relax. Stagger the end laps.

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

**U.L. Requirements**: Contact TAMKO for information on U.L. systems requirements.

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Take precautions to prevent breathing and contact with skin.

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**Material Requirements**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAMKO AWAPLAN VERSA-SMOOTH</td>
<td>2 plies</td>
</tr>
<tr>
<td>Asphalt (Per 100 sq. ft.)</td>
<td>Approx. 46 lbs.</td>
</tr>
</tbody>
</table>

**Surfacing (Options Below)**

<table>
<thead>
<tr>
<th>Surface Coat</th>
<th>Approx.</th>
<th>Gravel (Per 100 sq. ft.)</th>
<th>Approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Flood Coat</td>
<td>60 lbs.</td>
<td>400 lbs.</td>
<td></td>
</tr>
<tr>
<td>(2) Surface Coat</td>
<td>60 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Fibered Aluminum Coating</td>
<td>1-1/2-2 gals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Emulsion Coating</td>
<td>3 gals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Asphalt Glaze Coating</td>
<td>20 to 25 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) TAM-GUARD or White Elastomeric Coating</td>
<td>2 gals.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Slope:**
- Positive drainage up to 3 in. per linear ft. For slopes above 3/4 in. per linear ft., fastening of the AWAPLAN VERSA-SMOOTH 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. Polysisocyanurate 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 VERSA-SMOOTH 2-Ply Installation:**
- Over the insulation, install 2 plies of AWAPLAN VERSA-SMOOTH in specification asphalt. Starting at the low point of the roof, apply the first ply of AWAPLAN VERSA-SMOOTH 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 VERSA-SMOOTH 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 VERSA-SMOOTH 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: Coat the entire roof surface with (a) Fibered Aluminum Roof Coating at a rate of 1-1/2 to 2 gal. per 100 sq. ft. or (b) Emulsion Roof Coating at a rate of not less than 3 gals. per 100 sq. ft., or (c) a surface grade hot asphalt using a min. of 20 lbs. and a max. of 25 lbs. per 100 sq. ft., or (d) TAM-STAR or TAM-GUARD White Elastomeric 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.

**U.L. Requirements:**
- Contact TAMKO for information on U.L. systems requirements.

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