



Reroof (without tearoff):

1. Only polyester-reinforced modified systems are acceptable to receive a TAMKO Roofing System Limited Warranty.
2. A layer of 1/2 in. minimum roof insulation is required when reroofing.
3. TAMKO will not approve the application of insulation and roofing membrane materials over badly deteriorated or moisture-laden existing roofing systems.

Reroof (with complete tear-off): Because of the potential for damage to the structural integrity of the deck system during membrane tear-off, TAMKO will not be responsible for damage to the deck.

4.9 ASPHALT/PERLITE/VERMICULITE FILL DECKS

TAMKO **will not** issue any roofing system limited warranties on systems installed over these types of decks.

5.0 VAPOR RETARDERS

The need for a vapor retarder should be determined based on consideration of occupancy, indoor /outdoor temperatures, and relative humidity utilizing accepted engineering practices. Extensive research on the effectiveness and use of vapor retarders has been published by the Cold Regions Research and Engineering Laboratory (CRREL). The decision to employ a vapor retarder system is the responsibility of the design engineer, architect, or building owner. The vapor retarder is not a part of the roofing specification. TAMKO is not responsible for damage to the roofing system when the vapor retarder is used primarily as a secondary membrane in the system design.

6.0 ROOF INSULATION

The following information represents the minimum requirements that must be met for an insulation to be used in a system that is to have a TAMKO Roofing System Limited Warranty.

The insulation manufacturer must inform TAMKO in writing that their insulation meets both the general and specific requirements as outlined in this section.

6.1 GENERAL INSULATION REQUIREMENTS

The insulation must be manufactured for use as a roof insulation.

The insulation manufacturer must accept responsibility for manufacturing defects that occur in the insulation.

The insulation must be approved by Factory Mutual.

The insulation must be approved by Underwriters Laboratories.

The insulation must meet all the specific requirements listed for the generic insulation type.

All insulated 15- and 20-year limited warranty specifications require a minimum of 2 layers of insulation, and the top layer must be adhered in hot asphalt or insulation adhesive.

Any roof insulation manufactured as a 4' x 8' board must be mechanically fastened according to the requirements of Factory Mutual.



6.1 GENERAL INSULATION REQUIREMENTS (CONTINUED)

Mopping of 4' x 8' insulation boards is not acceptable.

For a list of acceptable roof insulations see Section 32.0 or contact TAMKO's Technical Services Department.

6.2 SPECIFIC INSULATION REQUIREMENTS

Wood Fiberboard:

1. Must meet ASTM Specification C 208; FS LLL-I-535
2. Must meet ANSI Standard AHA A194.1
3. Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations.

Perlite:

1. Must meet ASTM Specification C 728; FS HH-I-529
2. Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations.

Fiberglass:

1. Must meet ASTM Specification C 726; FS HH-I-526

Expanded Polystyrene:

1. Must meet ASTM C 578
2. Must be a minimum 1.1 pound density.
3. Must be processed from modified EPS resin. Proof that the modified material is in compliance with applicable model codes must be maintained by a third-party certification and labeling program.
4. Must be aged a minimum of 7 days. Additional aging for thicker blocks is required. Boards with thickness exceeding 6 in. should be aged a minimum of 14 days.
5. Must have a minimum of 1/2 in. fiberboard, perlite, or fiberglass roof insulation over the expanded polystyrene, **and the joints of the overlay insulation must be taped in both directions.**
6. Individual board thickness should not exceed 6 in. when used with any built-up roofing specification.
7. TAMKO does not recommend solid mopping of boards greater than 6 in. thick over structural concrete decks.
8. Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations.

Extruded Polystyrene:

1. Must meet ASTM Specification C578, Type IV.
2. Must be mechanically fastened.
3. Must have a minimum of 1/2 in. fiberboard, perlite, or fiberglass roof insulation over the extruded polystyrene and the joints of the overlay insulation must be taped in both directions and must be mechanically fastened.
4. Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations.
5. Must meet the physical and performance characteristics of Dow Chemical Co.

Polyisocyanurate:

1. Must meet ASTM C 1289; FS HH-I-1972.
2. Must meet the physical properties of the **RIC/TIMA Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.**
3. Must have an overlay of a minimum of fiberboard, perlite, or fiberglass roof insulation.
4. Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations.



6.2 SPECIFIC INSULATION REQUIREMENTS (CONTINUED)

Cellular Foam Glass:

1. Must meet ASTM Specification C 552; FS HH-I-551E
2. Must meet the physical and performance characteristics of Pittsburgh Corning Foamglass.

Thermal Barrier:

1. Must meet ASTM Specification C-1117

6.3 ROOF INSULATION INSTALLATION

The installation of all roof insulation should be in accordance with the insulation manufacturer's recommendations and guidelines.

Any specific installation that varies from the insulation manufacturer's recommendations must be approved in writing by a member of the TAMKO Technical Services Department.

All cellular plastic foam roof insulations must be overlaid with a layer of fiberboard, perlite, or fiberglass roof insulation.

Note: Installation recommendations for cover board may vary; consult the specific manufacturer for their CURRENT installation recommendations. TAMKO does not recommend the use of 1 in. diameter cap fasteners for attachment of the insulation.

TAMKO will not issue Roofing System Limited Warranties on specifications that do not comply with the preceding requirements.

7.0 STORAGE OF ROOFING MATERIALS

All roofing materials must be properly stored in a dry location prior to application. When materials are stored, they must be on platforms off the ground or roof deck, and covered with opaque waterproof tarps that have been properly tied down. All rolls must be stored on end to prevent their becoming deformed or damaged. Wet or damp roofing materials should never be used in the construction of a TAMKO roof assembly.

AWAPLAN PREMIUM, AWAPLAN PREMIUM FR, AWAPLAN HEAT WELDING, AWAPLAN 170 FR, AWAPLAN 170, AWAPLAN VERSA-SMOOTH, AWAPLAN VERSAFLEX, AWAFLEX FR, AWAFLEX, OR VERSA-CAP FR: During cold and damp environmental conditions, the rolls should be placed in a heated area. Rolls should be stored in a standing position with the labels right side up. To prevent their becoming deformed or damaged, all rolls must be stored on end and not double stacked. If rolls become deformed, the material may be laid out on the roof to allow the sun to relax the material. Any areas where accidental damage occurs to the roll should be cut out before the material is installed.

8.0 APPLICATION OF ROOFING MATERIALS

The roofing contractor must maintain qualified supervision on the job at all times. The following material application information was written to provide TAMKO's recommendations and procedures during normal conditions. For specific cold-weather application recommendations see Section 15.0. For specific re-cover requirements in addition to the application recommendations listed below. See Section 23.0.

CAUTION: APPROPRIATE FALL PROTECTION METHODS SHOULD BE USED WHENEVER WORKING ON ROOFS.