TRIPLY® APP 2 PLY SYSTEM

Information Sheet

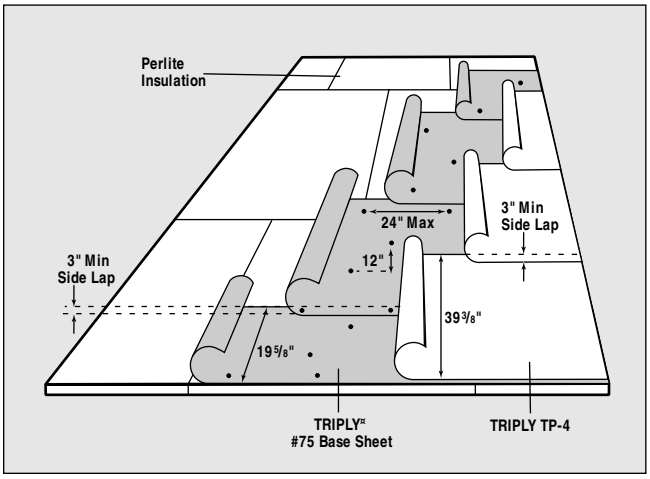
GAF MATERIALS CORPORATION

Quality You Can Trust Since 1886…
From North America's Largest Roofing Manufacturer™

TRIPLY® APP 2 PLY SYSTEM

GAF MATERIALS CORPORATION

"SMOOTH SURFACE"



Substrate— Insulated decks

Slope— Up to 3 inches per foot.

Materials
Perlite Insulation
TRIPLY Insulation Fastening System
TRIPLY #75 Base Sheet
TRIPLY TP-4 (Smooth)
TRIPLY Premium Alumnium Coating

General

Design and Application Instructions shall apply in addition to the following recommendations and specifications. For additional information call 1-800-766-3411

Application Recommendations

1. Install one ply of TRIPLY #75 Base Sheet over the perlife simultaneously attaching the base sheet and isulation to the deck using TRIPLY screws and plates. The side laps must be a minimum of 3 inches. The end laps must be a minimum of 4 inches.

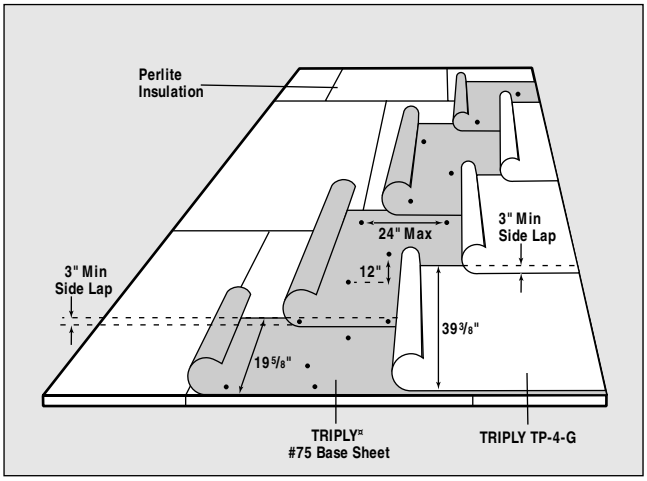
2. Starting at the low point of the roof surface, set the TRIPLY TP-4 roll in the course to be followed and unroll half the roll where practical. Position the membrane to provide a minimum of 3 inch side laps and a 6 inch end lap. Using the propane torch, apply the flame to the surface of the coiled portion of the roll until the surface reaches the proper application temperature (approximately 350˚ F). The side lap and the end lap areas of the previously applied sheet must also be heated to provide proper adhesion. The flame should be moved from side to side and up the side lap area of the previously applied sheet. Unroll the membrane while pressing onto the underlying surface. Be sure that the surface of the roll is heated sufficiently so that the texture-backed products lose their sharp definition. The generation of heavy smoke is an indications that the surface is being overheated. When this half of the roll is secure, reroll the other half of the roll and torch in place in the same manner. A minimum of 1/4 inch flow out of modified bitumen compound is required at all seams. Field seams should not be troweled.

3. For smooth surfaced installation a coating is required, between 1 and 4 weeks after the installation, apply TRIPLY Premium Alumnium Roof Coating at a rate of approximately 1 1/2-2 gallons per 100 square feet. The TRIPLY Membrane surface must be clean, dry, and free of all loose dirt and dust at the time of coating.

Torch Safety Precautions and Recommendations

See reverse side of this sheet.

"GRANULAR SURFACE"



Substrate— Insulated decks

Slope— Up to 3 inches per foot.

Materials
Perlite Insulation
TRIPLY Insulation Fastening System
TRIPLY #75 Base Sheet
TRIPLY TP-4-G (Granular Surface)

General

Design and Application Instructions shall apply in addition to the following recommendations and specifications. For additional information call 1-800-766-3411

Application Recommendations

1. Install one ply of TRIPLY #75 Base Sheet over the perlife simultaneously attaching the base sheet and isulation to the deck using TRIPLY® screws and plates. The side laps must be a minimum of 3 inches. The end laps must be a minimum of 4 inches.

2. Starting at the low point of the roof surface, set the TRIPLY TP-4-G roll in the course to be followed and unroll half the roll where practical. Position the membrane to provide a minimum of 3 inch side laps and a 6 inch end lap. Using the propane torch, apply the flame to the surface of the coiled portion of the roll until the surface reaches the proper application temperature (approximately 350˚ F). The side lap and the end lap areas of the previously applied sheet must also be heated to provide proper adhesion. The plastic film must be melted off the selvage edge of granule surfaced products. The flame should be moved from side to side and up the side lap area of the previously applied sheet. Unroll the membrane while pressing onto the underlying surface. Be sure that the surface of the roll is heated sufficently so that it develops a sheen. The generation of heavy smoke is an indication that the surface is being overheated. When this half of the roll is secure, reroll the other half of the roll and torch in place the same manner. A minimum of 1/4 inch flow out of modified bitumen compound is required at all seams. Field seams should not be troweled. At the 6 inch minimum end laps, sufficient heat must be applied to the granule surfaced TRIPLY Membranes to cause the granules to sink into the top surface coating to assure a receptive surface for bonding to the overlapping next roll of TRIPLY Membrane.

Torch Safety Precaution and Recommendations

See reverse side of this sheet.

TRIPLY® Safety Precautions

GAF MATERIALS CORPORATION

Safety Precautions/Considerations

Roofing is a hazardous activity. Workers must be properly trained to work in a manner to avoid falls, burns, back injuries, heat related afflictions, etc.

It is the sole responsibility of the roofing applicator to enforce fire safety precautions and to ensure safety at all times. All appropriate OSHA and local codes should be followed in the application of roofing. All personnel involved in roofing should be properly trained in safety and fire procedures. Proper clothing and equipment should be worn at all times on the job site.

We refer you to the National Roofing Contractors Associations Passport to Safety booklet which addresses numerous safety concerns.

National Roofing Contractors Association
O'Hare International Center
10255 West Higgins Rd. Suite 600
Rosemont, IL 60018-5607
(708) 299-9070

Torch Safety Information

Installation of torch-applied products creates the risk of fire, including smoldering fires.

Torch-applied products must be applied only by professional roofing applicators trained in proper torch application and safety procedures.

Roofing applicators must follow GAFMCs current roofing safety requirements, procedures and specifications, which are available from GAF Technical Services, toll-free 1-800-ROOF-411.

Procedures and equipment that will be used must comply with all applicable code requirements.

Knowledge of the building construction and HVAC systems must be obtained prior to installation of torch-applied products.

All potentially combustible and flammable aspects of the buildings use and design that increase the risk of fire must be identified including:

- deck and under deck composition (materials and accessories);
- insulation types;
- cants and tapered edge strips;
- parapet wall and curb composition;
- perimeter details;
- adjoining building materials;
- expansion joints;
- wires and electrical conduit pipes;
- natural gas lines;
- chemicals, grease, oil or other condensates/exhausts/spills.

A base sheet must be used between the roofing membrane and any combustible materials such as wood.

Never apply flame directly to combustible materials or allow the flame to enter into hidden or protected areas that may contain combustible materials such as:

- air intakes or exhaust openings;
- air coolers;
- lead flashings;
- drains;
- counter flashings and coping covers;
- collars;
- flashings.

The installation equipment must be designed for the specific use, and must be in proper working order.

Ventilation must always meet or exceed OSHA or NIOSH requirements.

A supervisor trained in torch safety must conduct external and internal fire watches during application and after the torches are shut down. The watches shall never be less than one hour and may need to be longer. The watches shall be of sufficient frequency and duration based on:

- weather;
- building and roof design and composition;
- penetration types and design.

Infrared scanning equipment must be used in the fire watch.

One Class ABC fire extinguisher must be kept within 10 feet of every torch operator.

The above list is not a complete set of necessary safety requirements, procedures, and specifications. Call GAF Technical Services for the most current GAFMC technical literature. In addition, the following steps must be taken by the applicator to prevent fires, since only the applicator is in a position to prevent fires. These steps include, but are not limited to:

Do not leave propane torches lighted and unattended. Do not place a lighted torch on the deck surface, insulation, membrane, or any other surface or object other than an acceptable torch stand. Extinguish the torch when not in use.

Avoid holding the flame on any one area of the membrane or substrate long enough for heavy smoke to be generated.

Train all personnel in GAF MATERIALS CORPORATION's recommended application techniques.

Train all personnel in fire prevention and extinguishing methods. Take precautions when working around combustible materials, such as gas lines for HVAC units, and in the presence of solvent-based products. Use caution to prevent burns and train personnel in first aid procedures.

Comply with all applicable fire regulations regarding the storage and use of propane.

Note: For more information on safety measures we recommend you refer to the Asphalt Roofing Manufacturers Association booklet titled Torch Applied Roofing Dos and Donts and their video, A Guide to Safety Torch-On Modified Bitumen.

Asphalt Roofing Manufacturers Association
4041 Powder Mill Road, Suite # 404
Calverton, MD. 20705-3106
(301) 231-9050

Specific Recommendations for Torch Applications

Membrane Installation

Only torches designed for installing modified bitumen roofing sheets should be used for installing TRIPLY sheets in both field and flashing constructions.

Starting at the low point of the roof surface, set the roll in the course to be followed and unroll half the roll where practical. Position the membrane to provide a minimum of 3 inch side laps and a 6 inch end lap. End laps shall not occur in a continuous line and should be offset by a minimum of 3 feet. Using the torch, apply the flame to the surface of the coiled portion of the roll until the surface reaches the proper application temperature (approximately 350˚F). The side lap and end lap areas of the previously applied sheet must also be heated to provide proper adhesion. The plastic film must be melted off the selvage edge of granule surfaced products. The flame should be moved from side to side and up the side lap area of the previously applied sheet. Unroll the membrane while pressing onto the underlying surface. BE SURE that the surface of the roll is heated sufficiently so that it develops a sheen and the texture-backed products lose their sharp definition. The generation of heavy smoke is an indication that the surface is being overheated. When this half of the roll is secure, reroll the other half of the roll and heat weld in place in the same manner. A minimum of 1/4 inch flow out of modified bitumen compound is required at all seams. More than 1" flow out of modified bitumen compound may indicate excess heating of the sheet. Field seams should not be troweled. Vertical flashing seams may be troweled when desired for appearance.

At the 6 inch minimum end laps, sufficient heat must be applied to the granule surfaced TRIPLY Membranes to cause the granules to sink into the top surface coating to assure a receptive surface for bonding to the overlapping next roll of TRIPLY Membrane.

Occasionally, a roll of TRIPLY membrane will contain a splice that was fabricated as part of the manufacturing process. These splices are marked. Cut out all splices, and treat as an end lap area.

Note: Torch applied TRIPLY Membranes must **not** be installed with asphalt **nor** should they be used in conjunction with roofing cements.

Surfacing

Coatings or gravel surfacing are required for smooth surfaced torch applied TRIPLY Membrane installations to be guaranteed for 12 years. Apply TRIPLY Premium Aluminum Roof Coating within 1 - 4 weeks.
Reapplication of surfacing should be employed as part of a periodic maintenance program. The frequency may vary depending on climatic conditions.