



Roofing & Building Maintenance

COLD WEATHER PRODUCT SELECTOR GUIDE

**Tremco Roofing and Building
Maintenance Solutions**

Designed to Offer Maximum Performance

TremLock® T-138 Shingle Recover System/T-238

BURmastic® Built-Up Roofing Systems

THERMastic® Built-Up Roofing &

Hot POWERply® Modified Bitumen Systems

PowerFAST Modified Bitumen System

Heat Welded Modified Bitumen Systems

Tremco Single Ply Systems

AlphaGuard™ PUMA Liquid Applied Roofing System

Additional Cold Weather Solutions

THERE'S MORE SNOW IN THE FORECAST, THE WIND'S SHRIEKING AND IT'S SO COLD.

**LET'S KEEP
ROOFING!**

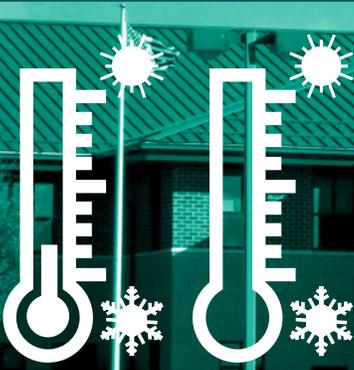


Roofing & Building Maintenance

WITH OUR UNIQUE SYSTEMS AND MAKE-IT HAPPEN ATTITUDE, TREMCO ROOFING CAN HELP CONTRACTORS STAY ON THE JOB ALL WINTER*, EVEN IF IT'S MORE THAN 20°F BELOW (-29°C) AND KEEP FACILITY MANAGERS FROM DEALING WITH MAJOR ROOFING PROBLEMS COME SPRING.

OUR RANGE OF COLD WEATHER SOLUTIONS – METAL, COLD AND HOT-APPLIED BUILT-UP AND MODIFIED BITUMEN, SINGLE PLY, LIQUID APPLIED – FOR RESTORATION, RENOVATION AND REPLACEMENT IS UNMATCHED. SUPPORTED BY OUR EXCEPTIONAL SALES FORCE AND COMMITMENT TO LONG-TERM ROOF ASSET MANAGEMENT, WE NOT ONLY FIX ROOFING ISSUES NOW, BUT KEEP THOSE ROOFS WATERTIGHT AND WORKING THROUGH DECADES OF MISERABLE WEATHER.

TremLock® T-138 Shingle Recover System and T-238 Standing Seam System



Tremco Roofing's TremLock T-138 Shingle Recovery System and T-238 Standing Seam System provide a long-term, economical solution for building owners. Their many advantages include ease of installation, individual panel replaceability, and improved

weathertightness. The innovative T-138 system installs directly over shingles without tear off or underlayment while the T-238 is an excellent option for re-roofing, retrofitting, and new construction for open span or solid decking.



TremLock T-138

- No tearoff/disposal of existing roof
- Ease of installation
- No underlayment required
- Shingle recovery clip designed to re-cover shingles and allow air flow
- Above sheathing ventilation (ASV) uses air space to help reduce heat transfer and decrease energy expense



TremLock T-238

- Two patented frameless recover systems
- 24" wide panels reduce installation labor
- Extremely high wind uplift capacity without additional edge zone or corner framing
- Continuous panels up to 300' with on-site roll forming

WHY IS THIS A GREAT WINTER SOLUTION?

TREMLOCK T-138 AND TREMLOCK T-238 PANELS CAN BE INSTALLED AT PRACTICALLY ANY TEMPERATURE, EVEN WHEN IT'S BELOW ZERO (-17.8°C).

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Take in to account that 100' panels incurring 50 degrees differential throughout the day will expand or contract by 3/8" (steel), 1/2" (copper) or 3/4" (aluminum).
- If using sealants, they will not bond for watertightness or make full contact until temperatures reach 45° F (7°C).

BURmastic® Built Up Roofing Systems



Tremco Roofing's BURmastic systems have been at the cutting edge of BUR technology since their inception; today, they are a standard within the roofing industry. BURmastic systems have many codes and approvals, making their installation possible around the US and Canada, and can be surfaced with gravel, Rock-It® white marble, or an approved coating system to provide a bright, white finish. Their multi-ply construction makes them exceptionally durable and waterproof. These systems are installed in cold process adhesive.



WHY IS THIS A GREAT WINTER SOLUTION?

BURMASTIC ROOFING SYSTEMS MAY BE INSTALLED AT TEMPERATURES AS LOW AS 20°F (-6°C). USING BURMASTIC ADHESIVE IS LOW ODOR AND REQUIRES NO KETTLES OR TORCHES, MINIMIZING ONSITE DISRUPTION.

- Top of the line performance and redundancy in a multi-ply assembly
- Easily stands up against all weather conditions
- Low maintenance solution that provides long-term sustainability
- Meets Florida Building Code requirements
- FM Global fire and wind rated; UL fire rated
- Full, long-term warranties

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation and ice.
- Roofing plies and adhesives must be smooth and pliable—store the rolls and adhesive indoors or within a heated area. BURmastic Adhesive, for example, must be kept at material temperatures above 55°F (13°C) in order to be applied; use an oil-jacketed, in-line heat exchanger to manage the temperature if you're spraying this adhesive.
- Cut roofing rolls into 16' sections and stack, allowing sheets to relax for at least 1 hour before application at ambient temperatures below 55°F (13°C)



THERMastic® Built-Up Roofing (BUR) and Hot POWERply® Modified Bitumen (MB) Systems



THERMastic built-up roofing systems and hot POWERply roofing systems are exceptionally durable and watertight. THERMastic systems are made of multiple plies adhered with high quality, enhanced THERMastic hot-melt adhesive that is far superior to regular mopping asphalt for elongation, low temperature flexibility and adhesion. Hot POWERply systems consist of two or more modified bitumen plies adhered in THERMastic adhesive.

WHY IS THIS A GREAT WINTER SOLUTION?

BOTH SYSTEMS MAY BE INSTALLED AT TEMPERATURES DOWN TO 14°F (-10°C), PROVIDED THE COLD TEMPERATURE APPLICATION CONSIDERATIONS BELOW ARE FOLLOWED.

- Built to last against harsh weather, foot traffic windblown debris, mechanical movement and thermal movement
- Gravel surfaces provide even greater weatherproofing and toughness.
- Very puncture resistant
- Both systems meet numerous code and approval requirements
- Adhesive can also be used as a flood coat

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation and ice.
- To prevent stiffness, store roofing plies and MB membranes on end in a warm location, approximately 70°F (21°C), for at least 24 hours before using.
- Unroll and cut modified bitumen rolls into 16 foot sections and stack, allowing sheets to relax for at least one hour before rerolling and applying when ambient temperatures are below 55°F (13°C).
- Adhesive must be delivered to the point of application within the EVT range or within the temperature range listed in the project specifications. Use insulated supply lines and insulated luggers; do not overheat asphalt to compensate for cold temperature.
- Apply hot adhesive no more than three feet ahead of the roofing roll. Use smaller mop heads for shorter mopping lengths.
- Finish the mop stroke by mopping the selvedge last to provide the hottest adhesive along the exposed lap edge.
- Immediately set the roll, apply pressure and broom the roll into the hot adhesive.

PowerFAST Modified Bitumen (MB) System



The PowerFAST Modified Bitumen (MB) System consists of a POWERply cap sheet membrane adhered to a high-performance POWERply anchor membrane, mechanically attached directly to the deck. This configuration enables the PowerFAST roof system to become watertight quickly as well as providing wind uplift resistance that is superior to many fully adhered MB systems.

WHY IS THIS A GREAT WINTER SOLUTION?

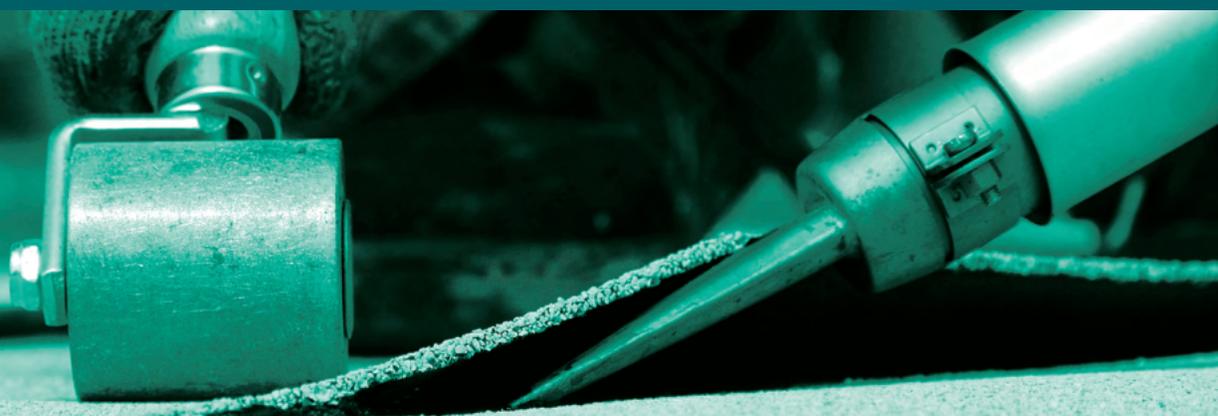
THE POWERFAST ROOFING SYSTEM MAY BE INSTALLED AT TEMPERATURES AS LOW AS 20°F (-6°C), PROVIDED THE COLD TEMPERATURE APPLICATION CONSIDERATIONS ARE FOLLOWED.

- Any POWERply cap membranes may be used, including high-reflectance options
- Very puncture resistant
- Sealing laps with hot air welder ensures rapid waterproofing integrity; adhesives can also be used, depending on application temperatures
- Securement options include barbed plates or pressure bars per local wind uplift requirements

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation and ice.
- Roofing plies and adhesives must be smooth and pliable; store them indoors or within a heated area. POWERply base membrane must be rolled out and relaxed for one hour at an ambient temperature of 55°F (13°C) or lower, to minimize wrinkling.
- The PowerFAST application relies on the installation of mechanical fasteners for the base membrane. There are no temperature restrictions on operating screw guns to install fasteners. The base membrane laps are then sealed, creating a watertight, temporary membrane. The cap sheet and optional intermediate membrane are then fully adhered to the base anchor membrane to complete the roof system.
- Tremco recommends using a hot air heat welder with a 4" wide air nozzle for fabricating field seams. Hot air heat welders may be adjusted to seam under any ambient condition, plus the hot air removes any potential condensation from the lap surfaces before welding.

Heat Welded Modified Bitumen (MB) System



Our heat welded modified bitumen system, part of the POWERply® line, consists of two or three MB sheets installed on the roof without adhesives. A propane torch or hot air welding equipment is used to weld the base membrane to a coverboard or a cap sheet to a base membrane. The remainder of the roofing system, including insulation and coverboard, can be adhered with hot asphalt, low rise foam insulation adhesive or mechanical fasteners.



Heat Welded Modified Bitumen

- Very durable, watertight and resistant to foot traffic
- Numerous POWERply membranes can be used
- Surfacing options include gravel, mineral and high reflectance solutions
- Excellent choice where climate is severe

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation and ice.
- Store membranes in a warm location, approximately 70°F (21°C) for 24 hours minimum prior to use. Rolls stored in cold areas get stiff and therefore may ridge during application.
- Unroll the entire membrane and let relax prior to re-rolling and applying the membrane.
- Extreme care must be taken during torching membranes. Do not directly torch roof membrane to wood, wood fiber or other combustible materials.

WHY IS THIS A GREAT WINTER SOLUTION?

WHEN USING MECHANICAL FASTENERS AND LOW RISE FOAM, THE HEAT WELDED MODIFIED BITUMEN SYSTEM MAY BE INSTALLED AT VIRTUALLY ANY TEMPERATURE, PROVIDED THE COLD TEMPERATURE APPLICATION CONSIDERATIONS ARE FOLLOWED.

Tremco Single Ply Roofing Systems



Tremco Roofing offers our customers multiple single ply roofing systems – TremPly KEE, TremPly TPO, TremPly Max TPO and TPA. All systems feature white, reflective surfaces to help lower energy use; are suitable for all types of commercial roofs; are lightweight yet strong; resist contaminants and pollutants; and provide excellent wind resistance. They are all thermoplastic membranes with heat-welded seams, eliminating the need for adhesives and tapes.

TremPly KEE—TremPly KEE’s performance and value are exceptional. The high KEE/Elvaloy content helps keep these systems flexible in lower temperatures and accommodates building movement. Heavy duty reinforcement makes them very resistant to tears and punctures, and combines with maximum seam strength for durability and long-term performance. Their resistance to fungus, algae and fire makes TremPly KEE systems one of the most sustainable roofing systems available.

TremPly TPO and Max TPO—You’ll get excellent performance at a great value. TremPly TPO is perfect for new construction or reroofing, with exceptional seam strength and puncture resistance, and outstanding long-term weatherproofing. TremPly TPO Max provides advanced protection against heat aging and UV degradation for premium performance.

TPA—Tremco Roofing’s TPA roof system has proven itself a top performer over the last 20+ years. Providing weatherproofing peace of mind, our TPA is highly configurable and very durable.

In addition, our exclusive TRA system is designed for inverted roofing. This tough, reinforced system combines both EPDM and SBR into a unique sheet that can be adhered in multiple adhesives, including our premium rubberized THERMastic Adhesive options which can be installed in cooler temperatures.

WHY IS THIS A GREAT WINTER SOLUTION?

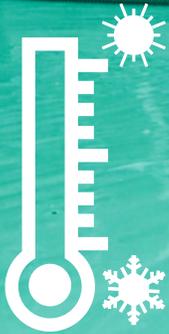
TREMPly KEE, TREMPly TPO AND TPA ARE ALL THERMOPLASTIC SINGLE PLY SYSTEMS AND CAN BE INSTALLED WITHOUT ADHESIVES OR TAPES. THERE ARE NO TEMPERATURE RESTRICTIONS PROVIDED THE COLD TEMPERATURE APPLICATION CONSIDERATIONS ARE FOLLOWED.

OUR TRA MEMBRANE REQUIRES THERMASTIC ADHESIVE WHICH CAN BE INSTALLED DOWN TO 14°F (-10°C)

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation and ice.
- The SFS Intec Isoweld induction welding system is the best choice for mechanically attaching our single ply systems, especially in frosty, snowy or cold conditions (0°F/-17.8°C or lower). The system must warm up for 20 minutes before using; be sure to keep the LCD screen warm.

AlphaGuard™ PUMA Liquid Applied Roofing Systems



The two coat AlphaGuard PUMA Liquid Applied Roofing System can restore a variety of roof types and works just as well as a new or replacement roof. AlphaGuard PUMA is the perfect choice when you must work in temperatures as low as -20°F (-28°C). It can deliver waterproofing in as little as 30 minutes, accepts foot traffic after only one to two hours, and is fully cured in two days. Tremendous benefits at any time but especially in the bitter cold.

WHY IS THIS A GREAT WINTER SOLUTION?

LOW TEMPERATURE IS ALMOST IRRELEVANT BECAUSE YOU CAN INSTALL THE ALPHAGUARD PUMA LIQUID APPLIED ROOFING SYSTEM WHEN IT'S -20°F (-28°C), PROVIDED THE COLD TEMPERATURE APPLICATION CONSIDERATIONS BELOW ARE FOLLOWED.

- Restoration dramatically reduces the amount of roofing material hauled to overstressed landfills.
- Offers superior elongation and flexibility.
- 100% solids system; VOC acceptable in the US and Canada; Class A fire-rated by UL
- Extremely bright, white top coat can help lower energy use, and satisfy customer requirements for high reflectivity and emissivity
- Excellent choice for flashing applications with the flashing grade versions
- Forms the AlphaGuard PUMA PLUS system when used with approved insulation, coverboard, and base ply

COLD TEMPERATURE APPLICATION CONSIDERATIONS

- Substrates must be clean and dry, and free of all moisture, including condensation, frost and ice.
- AlphaGuard PUMA 107 primer, flashing grade resins, base coat and top coat can all be used in extreme temperatures; do not use AlphaGuard PUMA VB Primer in colder temperatures.
- All resins may require our AlphaGuard PUMA Cold Weather Catalyst accelerator before catalyzing with our AlphaGuard PUMA Catalyst to ensure a proper chemical cure.
- It is critical that the AlphaGuard PUMA mixing process be followed. Mixing charts for standard and cold weather applications for both the US and Canada are available through your local Tremco Roofing sales representative.

Additional Cold Weather Solutions



Even if there isn't a roof restoration or replacement project, you can still do a lot of work and keep a lot of customers satisfied during winter. Here are other Tremco Roofing solutions to use in the cold.

ONESEAL ROOF MAINTENANCE PRODUCTS

For quick winter repairs, use OneSeal Clean and Prime and OneSeal Roof Sealer.

OneSeal Clean and Prime is an all-in-one cleaner and primer. Spray it directly on the problem area, wipe clean after 15 to 30 seconds, and the area is both cleaned and primed. After cleaning, spray OneSeal Roof Sealer on to the hole or tear. It dries quickly, provides a watertight, flexible seal, and eliminates cracking at low temperatures because of its flexibility.

They're great individually, but when used together their quick-dry formulations are ideal for efficient roof repairs. Both products can be used in temperatures as low as 40°F (4.4°C).

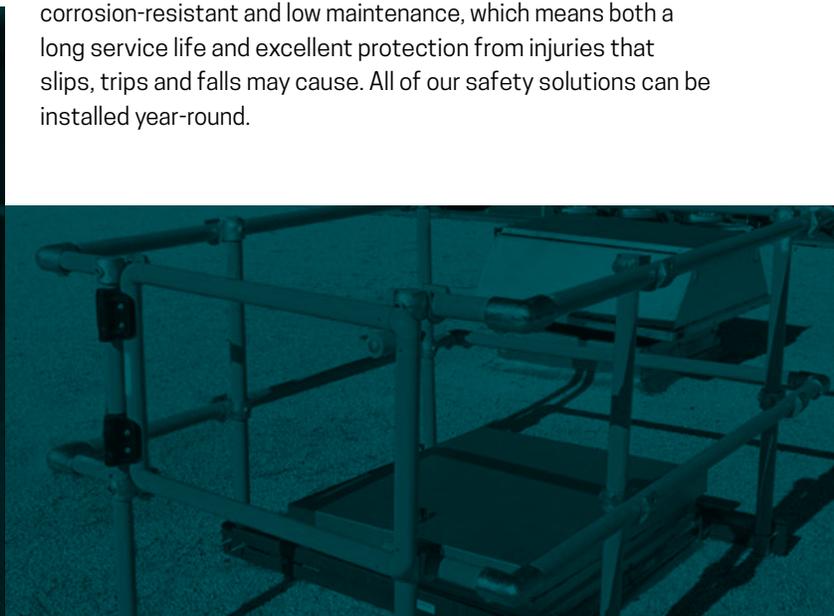
KNOVI MONITORING TECHNOLOGY SM

The enormous weight of water behind clogged roof drains can lead to catastrophic damage. Prevent this from happening with Knovi Monitoring Technology featuring SmartDrain™ rooftop sensors. Attached to the drains, SmartDrain sensors send automatic alerts to a pre-determined contact list when they detect rising water levels within the drains, so you can eliminate drain disasters before they happen! Knovi Monitoring Technology solutions can be installed at any temperature.

SAFETY

Whatever the season, safety is without question Tremco Roofing's highest priority. We always lead with safety and are committed to protecting the health and safety of everyone who steps on a roof. Our combination of strong personal safety practices, strict compliance with safety regulations and best-in-class safety solutions ensures an unmatched safety culture.

Our wide offering of safety products helps us take our customers' rooftop safety to new heights. These guardrails, hatch guards, skylight guards, crossovers, ladders and other solutions offer an unprecedented level of safety. Made primarily of fiberglass reinforced plastics (FRP), our solutions are extremely durable, corrosion-resistant and low maintenance, which means both a long service life and excellent protection from injuries that slips, trips and falls may cause. All of our safety solutions can be installed year-round.



WINTER PRODUCTS COMPARISON CHART

SYSTEM	SYSTEM TYPE	APPLICATION METHOD	MINIMUM OUTSIDE TEMPERATURE REQUIRED	SPECIAL TOOLS/EQUIPMENT REQUIRED
BURmastic	Built Up Roofing	Cold Applied Asphalt	32°F/0°C	Oil-jacketed in-line heat exchange
THERMastic	Built Up Roofing	Hot Applied Asphalt	14°F/-10°C	Insulated supply lines and insulated luggers. Indoor storage or heated area for rolled materials
Heat Welded MB	Modified Bitumen	Hot Air Weld	No Minimum	Indoor storage or heated area for rolled materials
PowerFAST	Modified Bitumen	Mechanically Attached/Hot Air Weld	32°F/0°C	Hot air heat welder with 4" wide air nozzle. Indoor storage or heated area for rolled materials
POWERply	Modified Bitumen	Hot Applied Asphalt	14°F/-10°C	Insulated supply lines and insulated luggers. Indoor storage or heated area for rolled materials
POWERply	Modified Bitumen	Cold Applied Adhesive	20°F/-6°C	Oil Jacketed in-line heat exchange
POWERply	Modified Bitumen	Two Component Adhesive	20°F/-6°C	Keep adhesive components above 45°F prior to mixing. Use plural component heated spray equipment.
AlphaGuard PUMA	Two Component Liquid Applied Roofing System	Brush, Roller, Squeegee	-20°F/-29°C	Additional rollers and brushes. May require additional cold weather catalyst
TremLock	Metal	Mechanically Attached	45°F/7°C (Sealants)	Cut-resistant gloves, safety glasses
TremPly KEE, TremPly TPO or Tremco TPA	Single Ply	Mechanically Attached or Induction Welded	14°F/-10°C	Isoweld® equipment for induction welding

Remember to always *Lead With Safety* and ensure that rooftop conditions are safe before starting projects.

DON'T GO STIR-CRAZY THIS WINTER. GET BACK ON THE ROOF AND KEEP YOUR CASH FLOW GOING WITH COLD WEATHER SOLUTIONS FROM TREMCO ROOFING AND BUILDING MAINTENANCE. TALK WITH YOUR TREMCO ROOFING SALES REPRESENTATIVE TO LEARN MORE ABOUT MAKING THE ROOFING SEASON 12 MONTHS LONG.