

Designing Tremco High Performance Modified Bitumen Roofing Systems

Modified Bitumen roof systems are composed of five basic components that can be assembled in a number of combinations.

Insulation - Provides "R" value and stable substrate for roof system.

Modified Base Sheets/Plies – Either a modified or unmodified base or ply sheet used under a modified bitumen top ply.

Modified Bitumen Membranes – A factory fabricated sheet consisting of of a co-polymer modified bitumen typically reinforced with polyester, fiberglass or a composite carrier.

Adhesive - Actual waterproofing material and bonding agent that is either hot or cold applied.

Surfacing – Provide UV protection and a weathering surface that can be either factory or field applied.

Flashings – Provides waterproofing around roof perimeter, equipment and projections.

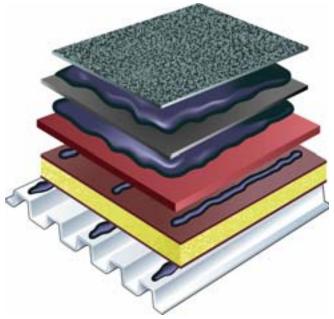
Features:

Benefits:

- · Polymer modified asphalt
- Resists thermal shock and splitting
- · Fire resistant
- Superior fire resistance · Factory-applied · Meets building codes and insurance requirements surfacing
- · Proven adhesive
- Multiple system options
- Ensured performance and durability

• Saves job site labor and application errors

- · Ability to customize system to specific needs
- · High strength composite · Exceptional strength and reinforcement toughness



Systems Overview

POWERply SBS Modified Bitumen Roof Systems These systems utilize a top ply of a modified bitumen membrane with one laver or multiple lavers of either a coated or uncoated ply sheet. These systems can be adhered with either a cold applied or a hot applied adhesive. System configurations range from a 1+1 to a host of other combinations.

POWERply APP Modified Bitumen Roof Systems These systems utilize a top ply of a modified bitumen membrane with one layer of an APP base sheet. These systems are either torch applied throughout or adhered with a cold applied adhesive (lap areas torched). System configuration is typically 1+1.

POWERply Self-adhered Modified Bitumen Roof **Systems**

These systems utilize a top ply of a self-adhered modified bitumen membrane with one layer of a self-adhered ply sheet. No adhesives are necessary with this roof system. System configuration is always 1+1.



Modified Bitumen Roofing Systems

Modified Bitumen Products:

Products

MINERAL SURFACED MBS SBS POWERply Standard POWERply Standard FR POWERply HE FR POWERply Premium FR POWERply Premium FR POWERply Supreme HT FR POWERply Extreme FR	ASTM Standard ASTM 6163 ASTM 6163 ASTM 6164 ASTM 6162 ASTM 6162 ASTM 6162		ADHESIVES Cold Applied POWERply Standard Cold Adhesive POWERply Standard Cold Adhesive LV POWERply Rubberized Cold Adhesive BURmastic Adhesive BURmastic LV Adhesive BURmastic SF Adhesive
APP POWERply APP Deluxe POWERply APP FR SMOOTH SURFACED MBS SBS	ASTM 6223 ASTM 6222		Hot Applied Premium IV Asphalt POWERply Hot Melt Adhesive Therm 50 Adhesive Thermastic Adhesive
POWERply Standard Smooth POWERply Premium Smooth POWERply Supreme Smooth POWERply Extreme Smooth	ASTM 6163 ASTM 6162 ASTM 6162 ASTM 6162		FLASHINGS Elastomeric Flashings Hypalon Elastomeric Sheeting TRA Elastomeric Sheeting
APP POWERply APP Smooth POWERply APP Deluxe Smooth	ASTM 6222 ASTM 6223		Modified Bitumen Flashings See Mineral/Smooth Surfaced MBs for MB Flashing Options
MODIFIED BASE SHEETS SBS BURmastic 300 Ply Sheet Modified Composite Ply Modified Premium Composite Ply Modified Supreme Composite Ply POWERply HE Base Sheet POWERply HE Base Sheet POWERply HD Base Sheet APP POWERply APP Base Sheet (torch down; cold applied – torch set	1 or multiple layers 1 1 or multiple layers 1	layer only layer only layer only layer only layer only	Bituminous Flashings TremFlash Flashing Membrane SURFACING BURmastic/Gravel Tremlastic/Polarcote FR Tremlastic/One Coat Aluminum One Coat Aluminum FR Tremlastic/Double Duty Aluminum BURmastic FR/Granules High Build Reflective Coating Blacklastic/Gravel Thermastic/Gravel
Self Stick POWERply SA Base Sheet (self-ad	SA Base Sheet (self-adhered)		Therm 50/Gravel Premium IV Asphalt/Gravel
NON-MODIFIED COATED PLIES Composite Ply Premium Composite Ply Supreme Composite Ply BURmastic Glass Ply BURmastic Glass Ply 28	Cold AppliedHo1 or multiple layers11 or multiple layers1	layer only layer only layer only	POWERply Hot Melt Adhesive/Gravel POWERply Standard Cold Adhesive/Gravel Factory Applied Mineral Surfacing
UNCOATED PLIES (Hot Applied O Thermglass Type IV Thermglass Premium Type VI POWERply Type IV POWERply Type VI PowERply Type VI	nly)		

SEE PRODUCT PAGES for a detailed description of each product listed above.

System performance and cost can be adjusted easily to fit your project requirements.

Polytherm Roofing Ply



System Details Modified Bitumen Roofing Systems

1 +1 Configuration CONFIGURATION: **POWERply MB Membrane** See Product List Mineral/Smooth/Self-stick **POWERply Base Sheet** See Product List Modified/Non-Modified/Coated/Uncoated Adhesives Cold Applied – See Product List Adhesives/Cold Applied Hot Applied - See Product List Adhesives/Hot Applied N/A for Self-Stick Surfacing Factory Surfacing Other Surfacing - See Product List/Surfacing Base Roof Grave Granul Smooth Slope 914 36 1 100 mm/4-

2 + 1 Configuration

CONFIGURATION:

POWERply MB Membrane See Product List Mineral/Smooth

POWERply Base Sheet

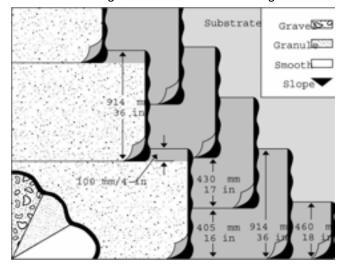
See Product List Modified/Non-Modified/Coated/Uncoated Adhesives

Cold Applied – See Product List Adhesives/Cold Applied Hot Applied – See Product List Adhesives/Hot Applied N/A for Self-stick

Surfacing

Factory Surfacing

Other Surfacing - See Product List/Surfacing



SUBSTRATE OPTIONS: Nailed Base Sheet Nailed Base Sheet with Slip Sheet 2 course insulation or 1 course insulation

Slope: Positive drainage up to 25% (3:12)

	Quantity	
Material Requirements	/m²	/100 ft ²
Base Sheets		
See Product List - Base Sheets/Uncoated Plie	s 1 ply	1 ply
Modified Membranes		
See Product List - Mineral/Smooth/Self Stick		
Interply Adhesive		
See Product List - Adhesives		
Surfacing		
See Product List - Surfacing		
Gravel		400 lbs/sq
Cold Applied Flood Coat w/Gravel		5 gal/sq
Hot Applied Flood Coat w/Gravel		60 lbs/sq
Granule		60 lbs/sq
See Product List - Mineral Surfaced MBs		0.5
BURmastic FR & Granules		3.5 gal
Reflective		4 col
Surfacing Emulsion		4 gal
Reflective Coating		as specified for coating

*Note: All coverage rates represent the required average application rate. Tolerances are ±20% for any point on

(Zones 1, 2 and 3)

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SUBSTRATE OPTIONS: Nailed Base Sheet Nailed Base Sheet with Slip Sheet 2 course insulation or 1 course insulation

Slope: Positive drainage up to 25% (3:12)

	Quantity	
Material Requirements	/m²	/100 ft ²
Base Sheets		
See Product List - Base Sheets/Uncoated Plie Interply Adhesive	es	1 or multiple
See Product List - Adhesives		
Cold Applied		2 gal/sq/ply
Hot Applied		25 lbs/sq/ply
Modified Membranes		
See Product List - Mineral Surfaced/Smooth Surfacing	MBs	1 ply
See Product List - Surfacing		
Gravel		400 lbs/sq
Cold Applied Flood Coat w/Gravel		5 gal/sq
Hot Applied Flood Coat w/Gravel		60 lbs/sq
Granule		60 lbs/sq
See Product List - Mineral Surfaced MBs		
BURmastic FR & Granules Reflective		3.5 gal
Surfacing Emulsion		4 gal
Reflective Coating		as specified for coating