

# 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.

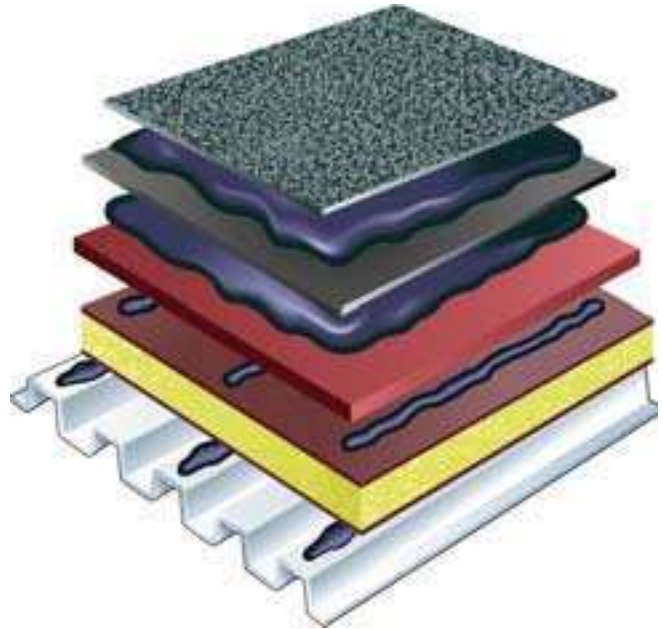
**Modified Base Sheets/Plies** – Either a modified or unmodified base or ply sheet used under a modified bitumen top ply.

**Modified Bitumen Membranes** – A factory fabricated sheet consisting of 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:

- Polymer modified asphalt
- Fire resistant
- Factory-applied surfacing
- Proven adhesive
- Multiple system options
- High strength composite reinforcement

## Benefits:

- Resists thermal shock and splitting
- Superior fire resistance
- Meets building codes and insurance requirements
- Saves job site labor and application errors
- Ensured performance and durability
- Ability to customize system to specific needs
- Exceptional strength and toughness

## Systems Overview

### POWERply SBS Modified Bitumen Roof Systems

These systems utilize a top ply of a modified bitumen membrane with one layer or multiple layers 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:

MINERAL SURFACED MBS SBS	ASTM Standard
POWERply Standard	ASTM 6163
POWERply Standard FR	ASTM 6163
POWERply HE FR	ASTM 6164
POWERply Premium FR	ASTM 6162
POWERply Supreme HT FR	ASTM 6162
POWERply Extreme FR	ASTM 6162

APP	
POWERply APP Deluxe	ASTM 6223
POWERply APP FR	ASTM 6222

SMOOTH SURFACED MBS SBS	
POWERply Standard Smooth	ASTM 6163
POWERply Premium Smooth	ASTM 6162
POWERply Supreme Smooth	ASTM 6162
POWERply Extreme Smooth	ASTM 6162

APP	
POWERply APP Smooth	ASTM 6222
POWERply APP Deluxe Smooth	ASTM 6223

### MODIFIED BASE SHEETS

SBS	Cold Applied	Hot Applied
BURmastic 300 Ply Sheet	1 or multiple layers	1 layer only
Modified Composite Ply	1 or multiple layers	1 layer only
Modified Premium Composite Ply	1 or multiple layers	1 layer only
Modified Supreme Composite Ply	1 or multiple layers	1 layer only
POWERply HE Base Sheet	1 or multiple layers	1 layer only
POWERply HT Base Sheet	1 or multiple layers	1 layer only
POWERply HD Base Sheet	1 or multiple layers	1 layer only

APP  
POWERply APP Base Sheet  
(torch down; cold applied – torch seams)

Self Stick  
POWERply SA Base Sheet (self-adhered)

NON-MODIFIED COATED PLIES	Cold Applied	Hot Applied
Composite Ply	1 or multiple layers	1 layer only
Premium Composite Ply	1 or multiple layers	1 layer only
Supreme Composite Ply	1 or multiple layers	1 layer only
BURmastic Glass Ply	1 or multiple layers	1 layer only
BURmastic Glass Ply 28	1 or multiple layers	1 layer only

### UNCOATED PLIES (Hot Applied Only)

Thermglass Type IV  
Thermglass Premium Type VI  
POWERply Type IV  
POWERply Type VI  
Polytherm Roofing Ply

ADHESIVES  
Cold Applied  
POWERply Standard Cold Adhesive  
POWERply Standard Cold Adhesive LV  
POWERply Rubberized Cold Adhesive  
BURmastic Adhesive  
BURmastic LV Adhesive  
BURmastic SF Adhesive

Hot Applied  
Premium IV Asphalt  
POWERply Hot Melt Adhesive  
Therm 50 Adhesive  
Thermastic Adhesive

FLASHINGS  
Elastomeric Flashings  
Hypalon Elastomeric Sheetting  
TRA Elastomeric Sheetting

Modified Bitumen Flashings  
See Mineral/Smooth Surfaced  
MBs for MB Flashing Options

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  
Therm 50/Gravel  
Premium IV Asphalt/Gravel  
POWERply Hot Melt Adhesive/Gravel  
POWERply Standard Cold Adhesive/Gravel  
Factory Applied Mineral Surfacing

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

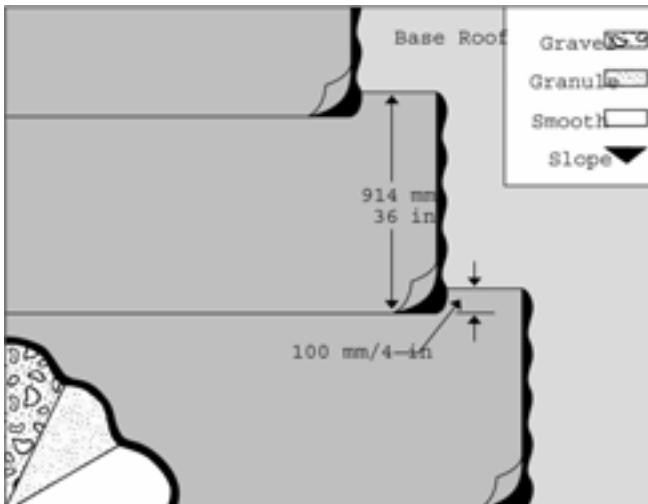
System performance and cost can be adjusted easily to fit your project requirements.

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## 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



(Zones 1, 2 and 3)

### 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)

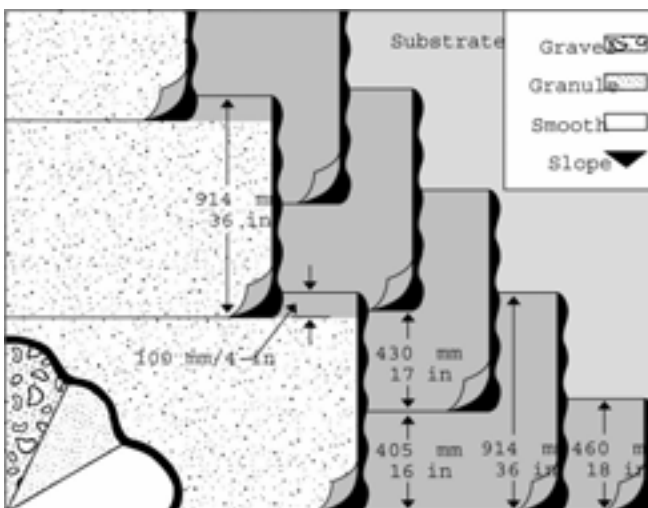
Material Requirements	Quantity	
	/m <sup>2</sup>	/100 ft <sup>2</sup>
Base Sheets		
See Product List - Base Sheets/Uncoated Plies 1 ply		1 ply
Modified Membranes		
See Product List - Mineral/Smooth/Self Stick		
Interply Adhesive		
See Product List - Adhesives		
Surfacing		
See Product List - Surfacing		
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		
BURmastic FR & Granules		3.5 gal
Reflective		
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

## 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



(Zones 1, 2 and 3)

### 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)

Material Requirements	Quantity	
	/m <sup>2</sup>	/100 ft <sup>2</sup>
Base Sheets		
See Product List - Base Sheets/Uncoated Plies		1 or multiple
Interply Adhesive		
See Product List - Adhesives		
Cold Applied		2 gal/sq/ply
Hot Applied		25 lbs/sq/ply
Modified Membranes		
See Product List - Mineral Surfaced/Smooth MBs		1 ply
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		
BURmastic FR & Granules		3.5 gal
Reflective		
Surfacing Emulsion		4 gal
Reflective Coating		as specified for coating