



**B.U.R., Modified, & Steep Slope  
Roofing Systems**

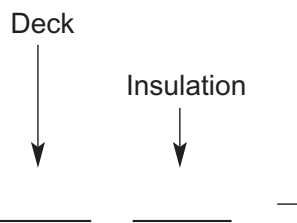
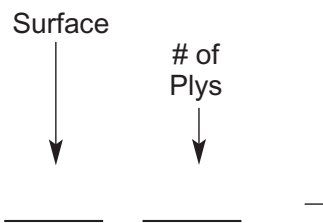
## **5. Low Slope Roofing System Specifications**

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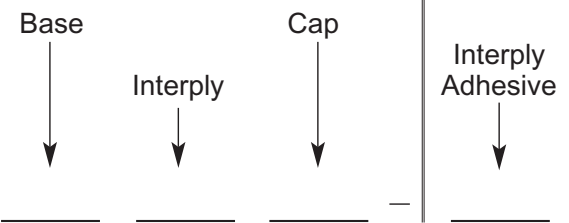
## UNITED STATES AND CANADA



## QUICK REFERENCE



## SYSTEM REFERENCE



### Surface:

M = Mineral  
F = Foil Surface  
G = Gravel or Slag  
S = Smooth (Emulsion)  
A = Aluminum Coating  
C = Blown Ceramic Granules

### Type of Deck:

W = Combustible/Nailable (Wood, Plywood)  
C = Structural Concrete  
L = Lightweight Concrete  
M = Metal  
S = Structural Wood Fiber (Tectum)  
G = Poured Gypsum  
P = Precast slabs; Concrete, Gypsum

### Insulation:

U = Uninsulated  
I = Insulated

### Base/Interply Felts:

A = 515 Fiberglass Base Sheet  
B = 501 Premium 1™ Fiberglass SBS Base Sheet  
C = 602 Arctic Shield™ Fiberglass SBS Base Sheet  
D = 603 Superbase™ Fiberglass SBS Base Sheet  
E = 605 Panoply® SBS Base Sheet  
F = 1000 ESHAvent® Base Sheet  
H = 500 Premium™ Type IV Ply Sheet  
I = 506 Super 6™ Type VI Ply Sheet  
K = 160 APP Torchable Polyester Smooth Cap Sheet  
L = 159 APP Torchable Base Sheet  
N = Inverted 502 Premium 1™ Mineral Surface  
X = None  
P = UDL

### Cap Sheet:

A = 502 Premium 1™ Mineral Surface  
B = 601 High Performance Premium Polyglass® SBS  
C = 625 Paragon® SBS Mineral Surface  
D = 650 Panoply® SBS Mineral Surface  
G = 1020 ESHAum® SBS Foil Surface  
H = 350 Mineral Surfaced SBS Modified Roll Roofing  
I = 160 APP Torchable Polyester Smooth Cap Sheet  
J = 161 APP Torchable Polyester Mineral FR Cap Sheet  
K = 162 APP Torchable Polyester Mineral Cap Sheet  
X = None

### Interply Adhesive:

H = Hot Asphalt  
S = SEBS Hot Asphalt  
C = Standard Cold  
M = Modified Cold  
T = Torched Only

## **TWO PLY SYSTEMS**

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System Configuration	Max. Wrnty.
<b>M2-BXB</b> (501, 601 cap)	<b>5 year</b>
<b>M2-CXB</b> (602, 601 cap)	<b>5-10 year</b>
<b>M2-DXB</b> (603, 601 cap)	<b>5-10 year</b>
<b>M2-EXB</b> (605, 601 cap)	<b>5-10 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#501</b>	30.6 lbs.
One (1) ply of <b>#602</b>	47.5 lbs.
One (1) ply of <b>#603</b>	75.0 lbs.
One (1) ply of <b>#605</b>	50.0 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#601</b>	100.0 lbs.
<i>Adhesive for roofing plies:</i>	
ASTM D 312 Type III, or IV	
25.0 lbs. per ply/per sq.	
<i>*Adhesive for roofing plies and surfacing:</i>	
Choose either <b>#705</b> or <b>#727</b>	
1.5-2.0 gals. per ply	
<i>Insulation:</i>	
Specified	
<i>Weight per square (-insulation):</i>	
<b>180.6 lbs. to 225 lbs.</b>	

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

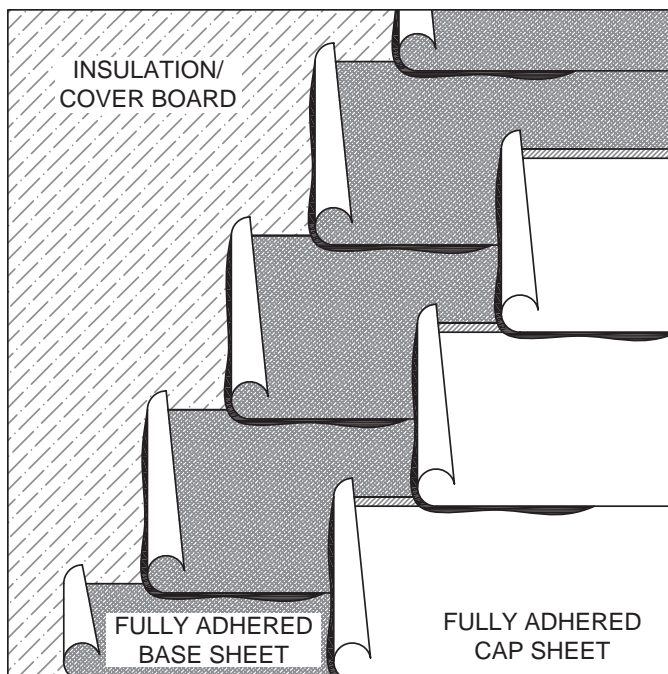
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Side laps are to be 4" with end laps of 6". Broom base sheet to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps. Side laps are to be 4" with end laps of 6". Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

*\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.*

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions



Two-ply, hot mopped\*, roofing system with modified SBS fiberglass base sheet and cap sheet installed over an approved roof deck.

(curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1/2" in 12"** using hot asphalt over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other fire ratings using attachments other than hot asphalt contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



### System Configuration

### Max. Wrrnty.

<b>M2-BXC</b> (501, 625 cap)	<b>5-10 year</b>
<b>M2-CXC</b> (602, 625 cap)	<b>5-10 year</b>
<b>M2-DXC</b> (603, 625 cap)	<b>5-10 year</b>
<b>M2-EXC</b> (605, 625 cap)	<b>5-10 year</b>

### Materials per 100 sq/ft of roof area:

*Base Sheet Options (choose one of the following):*

One (1) ply of <b>#501</b>	30.6 lbs.
One (1) ply of <b>#602</b>	47.5 lbs.
One (1) ply of <b>#603</b>	75.0 lbs.
One (1) ply of <b>#605</b>	50.0 lbs.

### Cap Sheet:

One (1) ply of <b>#625</b>	102.0 lbs.
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*Adhesive for roofing plies:* ASTM D 312 Type III, or IV  
25.0 lbs. per ply/per sq.

*\*Adhesive for roofing plies and surfacing:*

Choose either **#705** or **#727** 1.5-2.0 gals. per ply

*Insulation:* Specified

*Weight per square (-insulation):* **182.6 lbs. to 227 lbs.**

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

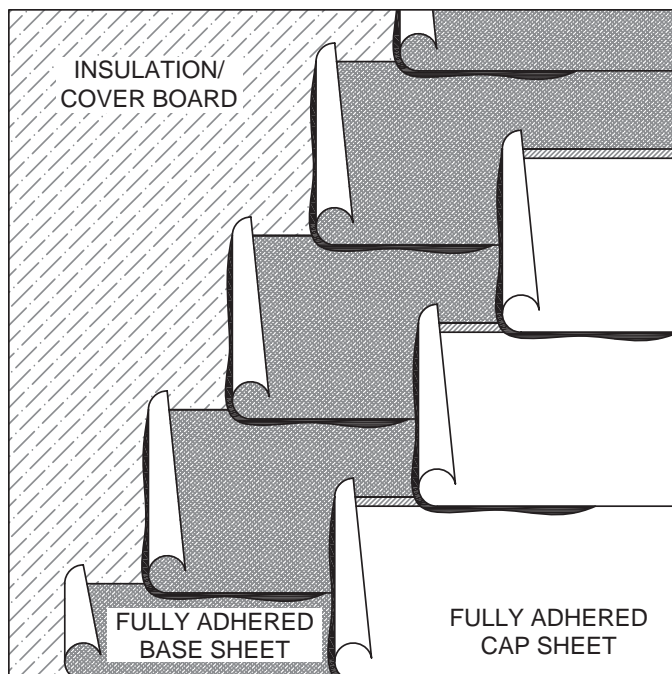
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Side laps are to be 4" with end laps of 6". Broom base sheet to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps. Side laps are to be 4" with end laps of 6". Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

*\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.*

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the



Two-ply, hot mopped\*, roofing system with modified SBS fiberglass base sheet and cap sheet installed over an approved roof deck.

vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1" in 12" using hot asphalt over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other fire ratings using attachments other than hot asphalt contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M2-BXD</b> (501, 650 cap)	<b>5-10 year</b>
<b>M2-CXD</b> (602, 650 cap)	<b>5-10 year</b>
<b>M2-DXD</b> (603, 650 cap)	<b>5-10 year</b>
<b>M2-EXD</b> (605, 650 cap)	<b>5-10 year</b>

### Materials per 100 sq/ft of roof area:

#### Base Sheet Options (choose one of the following):

One (1) ply of <b>#501</b>	30.6 lbs.
One (1) ply of <b>#602</b>	47.5 lbs.
One (1) ply of <b>#603</b>	75.0 lbs.
One (1) ply of <b>#605</b>	50.0 lbs.

#### Cap Sheet:

One (1) ply of <b>#650</b>	102.0 lbs.
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Adhesive for Roofing Plies:	ASTM D 312 Type III or IV
	25.0 lbs. per ply/per sq.

#### \*Adhesive for roofing plies and surfacing:

Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply
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Insulation:	Specified
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Weight per square (-insulation):	<b>182.6 lbs. to 227.0 lbs.</b>
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**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

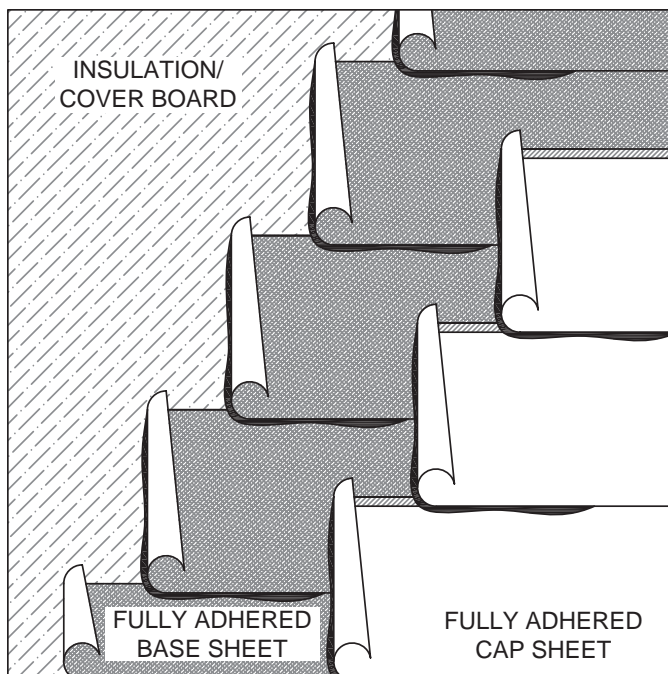
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Side laps are to be 4" with end laps of 6". Broom base sheet to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps. Side laps are to be 4" with end laps of 6". Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

*\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.*

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the



Two-ply (2), hot mopped\* roofing system with modified SBS fiberglass base sheet and cap sheet installed over an approved roof deck.

commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1" in 12"** using hot asphalt over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other fire ratings using attachments other than hot asphalt contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M2-AXJ</b> (515, 161 cap)	<b>5-12 year</b>
<b>M2-BXJ</b> (501, 161 cap)	<b>5-12 year</b>
<b>M2-FXJ</b> (1000, 161 cap)	<b>5-12 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
One (1) ply of <b>#1000</b>	50.0 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#161</b>	105.0 lbs.
<i>Insulation:</i>	
	NONE
<i>Weight per square:</i>	<b>132.6 lbs. to 155 lbs.</b>

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

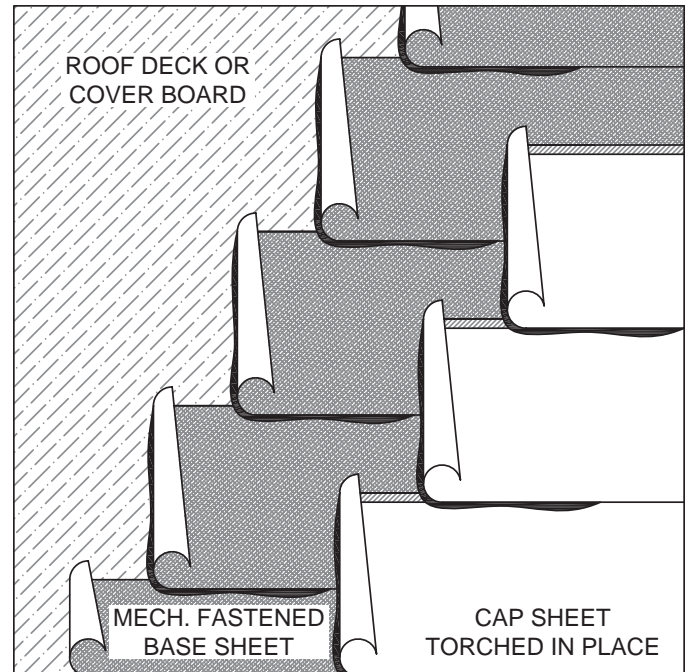
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 3" in 12". Slopes that are greater than 3" in 12" are to be installed in a strapped fashion. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Torch Applied* - install base sheet according to instructions in section 4-5 of this manual. Cap sheet will be installed so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps. Unroll roll completely and set into position. Re-roll the membrane a min. of 6' and no more than 16' making sure the sheet remains aligned correctly. Side laps are to be 3" wide with end laps of 6". Use a propane torch and apply the flame split 75% on the roll, 25% on the base sheet to the exposed outer surface of the membranes underside in a steady motion untill the membrane reaches the application temperature (350-400°F) and roll membrane into position achieving a min. 1/4" compound flow-out at all side and end laps. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) on top of the heated, softened APP membrane and secure (sheet metal only). Strip off with a target sheet of the same APP membrane torched over the flashing and extending a minimum of 6" from the outside edge of the flange.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified APP cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'B'** rating up to **2" in 12"** using a propane torch over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products.*



Two-ply, torch applied roofing system with conventional or modified fiberglass base sheet and a polyester torchdown cap sheet installed over an approved roof deck.

System Configuration	Max. Wrnty.
<b>S2-AXI</b> (515, 160, coating)	<b>5-12 year</b>
<b>S2-BXI</b> (501, 160, coating)	<b>5-12 year</b>
<b>S2-FXI</b> (1000, 160, coating)	<b>5-12 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
One (1) ply of <b>#1000</b>	50.0 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#160</b>	90.0 lbs.
<i>Coating:</i>	
Acrylic/Elastomeric roof coating	2.0-3.0 gallons
Emulsion roof coating	3.0-5.0 gallons
Aluminum roof coating	1.5-2.0 gallons
<i>Insulation:</i>	
	Specified
<i>Weight per square:</i>	<b>130.6 lbs. to 186.6 lbs.</b>

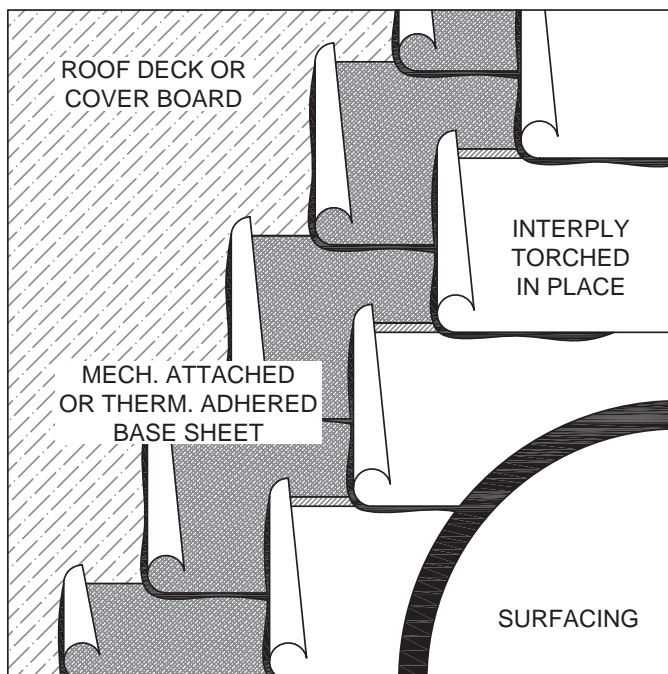
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 3" in 12". Slopes that are greater than 3" in 12" are to be installed in a strapped fashion. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Torch Applied** - install base sheet according to instructions in section 4-5 of this manual. Cap sheet will be installed so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps. Unroll roll completely and set into position. Re-roll the membrane a min. of 6' and no more than 16' making sure the sheet remains aligned correctly. Side laps are to be 3" wide with end laps of 6". Use a propane torch and apply the flame split 75% on the roll, 25% on the base sheet to the exposed outer surface of the membranes underside in a steady motion until the membrane reaches the application temperature (350-400°F) and roll membrane into position achieving a min. 1/4" compound flow-out at all side and end laps. Stagger all end laps a minimum of 12". Allow the roof to weather (30 to 90 days, based on the coating manufacturers requirements), clean and coat as specified.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) on top of the heated, softened APP membrane and secure (sheet metal only). Strip off with a target sheet of the same APP membrane torched over the flashing and extending a minimum of 6" from the outside edge of the flange. Allow the roof to weather (30 to 90 days, based on the coating manufacturers requirements), clean and coat as specified.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified APP cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Two-ply, torch applied roofing system with conventional or modified fiberglass base sheet, a polyester torchdown cap sheet and coating installed over an approved deck.

**Fire Ratings:** The specification carries a **Class 'B'** rating up to **2" in 12"** using a propane torch over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products.*

System Configuration	Max. Wrnty.
<b>M3-XHA</b> (2-500, 502 cap)	<b>5-10 year</b>
<b>M3-XIA</b> (2-506, 502 cap)	<b>5-12 year</b>

### Materials per 100 sq.ft. of roof area:

*Ply Sheet Options (choose one of the following):*

Two (2) plies of <b>#500</b>	7.2 lbs. per ply/14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs. per ply/18.4 lbs.

### Cap Sheet:

One (1) ply of <b>#502</b>	72.0 lbs.
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Adhesive for roofing plies:	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
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Insulation:	Specified
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Weight per square (-insulation):	<b>161.4 lbs. to 165.4 lbs.</b>
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**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

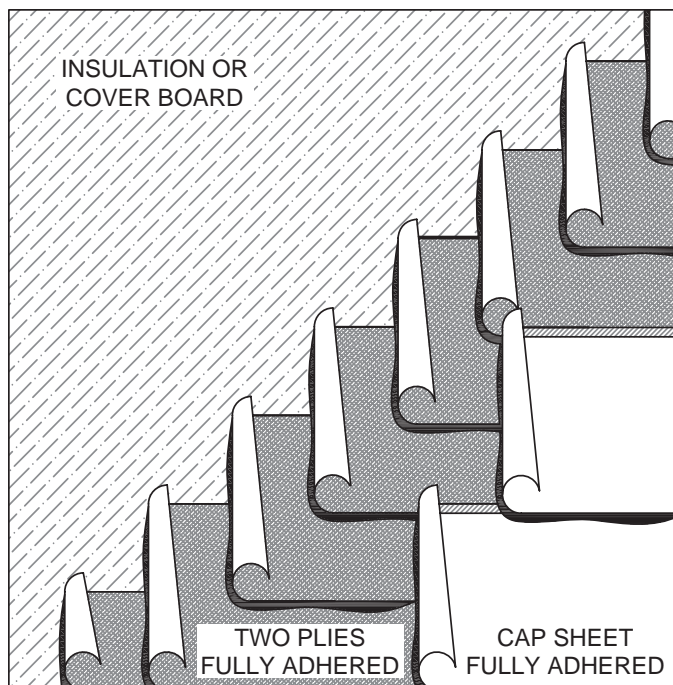
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*



Three-ply, hot mopped, built-up roofing system with conventional fiber-glass ply sheets and cap sheet installed over an approved roof deck.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M3-XHH</b> (2-500, 350 cap)	<b>5-10 year</b>
<b>M3-XIH</b> (2-506, 350 cap)	<b>5-15 year</b>
<b>Materials per 100 sq./ft. of roof area:</b>	
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs. per ply/14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs. per ply/18.4 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#350</b>	78.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>167.4 lbs. to 171.4 lbs.</b>

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

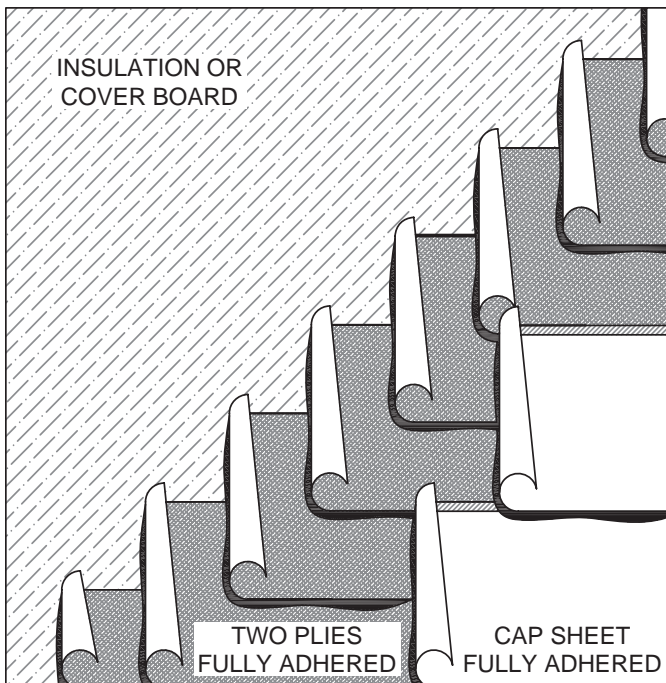
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the*



Three-ply, hot mopped, built-up roofing system with conventional fiberglass ply sheets and a SBS modified cap sheet installed over an approved roof deck.

*current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M3-AHA</b> (515, 500, 502 cap)	<b>5-10 year</b>
<b>M3-AIA</b> (515, 506, 502 cap)	<b>5-10 year</b>
<b>M3-BHA</b> (501, 500, 502 cap)	<b>5-10 year</b>
<b>M3-BIA</b> (501, 506, 502 cap)	<b>5-10 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#500</b>	7.2 lbs.
One (1) ply of <b>#506</b>	9.2 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#502</b>	72.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>181.8 lb.s to 186.8 lbs.</b>

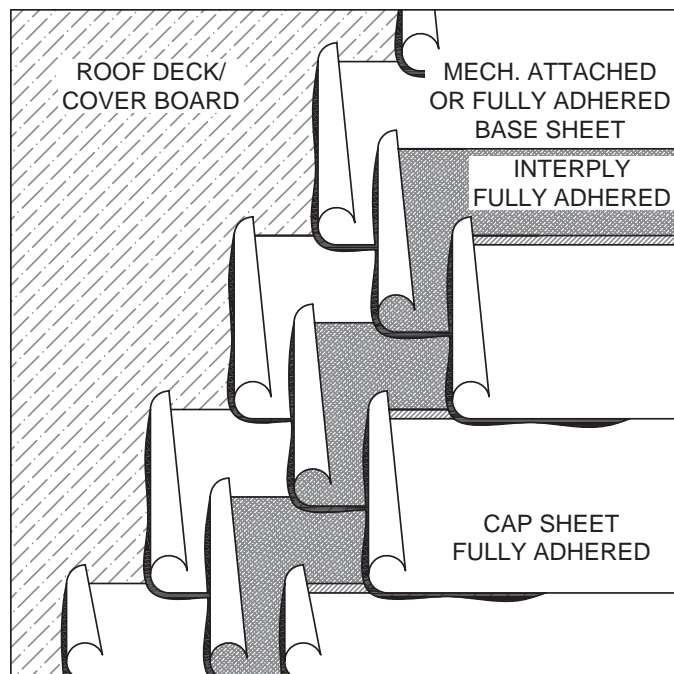
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified cap sheet base flashing extending



Three ply, hot mopped, built-up roofing system with conventional fiber-glass base, ply, and cap sheet installed over an approved roof deck.

6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** *When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below) attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M3-AHH</b> (515, 500, 350 cap)	<b>5-10 year</b>
<b>M3-AIH</b> (515, 506, 350 cap)	<b>5-10 year</b>
<b>M3-BHH</b> (501, 500, 350 cap)	<b>5-10 year</b>
<b>M3-BIH</b> (501, 506, 350 cap)	<b>5-10 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#500</b>	7.2 lbs.
One (1) ply of <b>#506</b>	9.2 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#350</b>	78.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>187.8 lbs. to 192.8 lbs.</b>

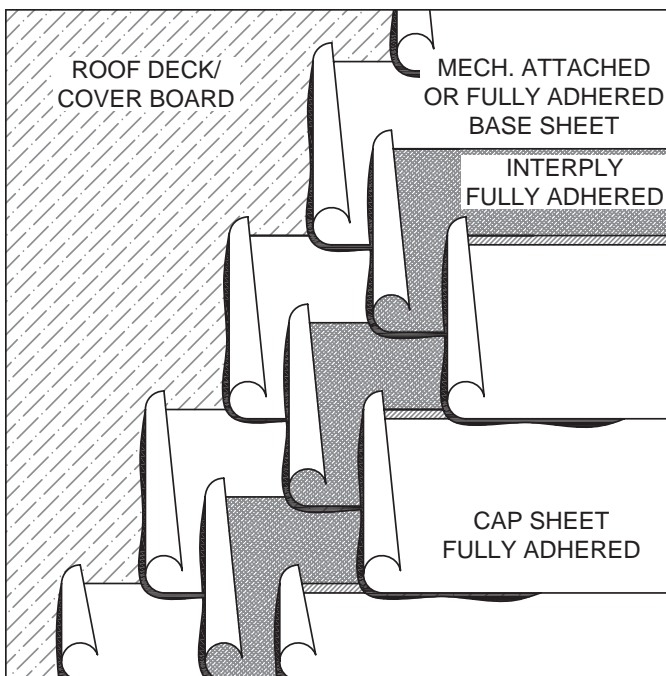
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified cap sheet base flashing extending



Three ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** *When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions below**) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions below**), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M3-AHB</b> (515, 500, 601 cap)	<b>5-10 year</b>
<b>M3-AIB</b> (515, 506, 601 cap)	<b>5-10 year</b>
<b>M3-BHB</b> (501, 500, 601 cap)	<b>5-10 year</b>
<b>M3-BIB</b> (501, 506, 601 cap)	<b>5-10 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#500</b>	7.2 lbs.
One (1) ply of <b>#506</b>	9.2 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#601</b>	100.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>209.8 lbs. to 214.8 lbs.</b>

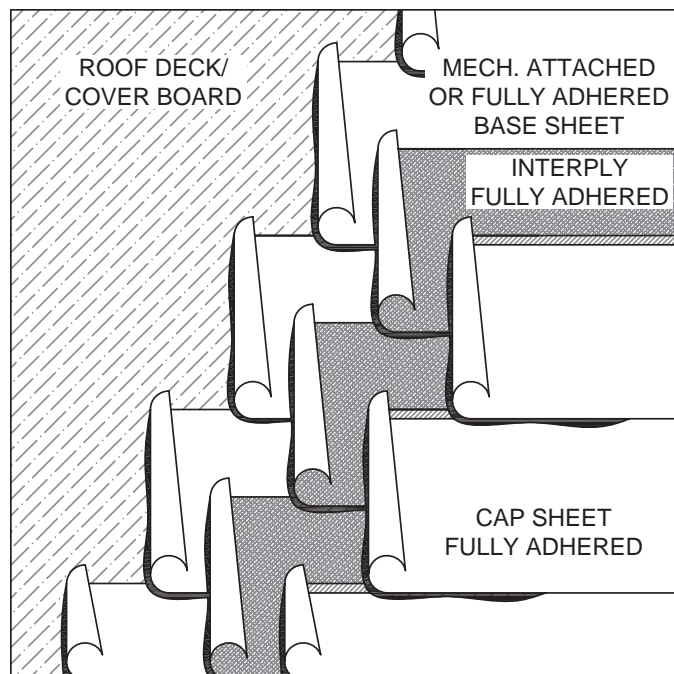
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs,



Three ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

walls, roof top equipment, etc). After the installation of the cap sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1/2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** *When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M3-AHC</b> (515, 500, 625 cap)	<b>5-10 year</b>
<b>M3-AIC</b> (515, 506, 625 cap)	<b>5-10 year</b>
<b>M3-BHC</b> (501, 500, 625 cap)	<b>5-10 year</b>
<b>M3-BIC</b> (501, 506, 625 cap)	<b>5-10 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#500</b>	7.2 lbs.
One (1) ply of <b>#506</b>	9.2 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#625</b>	102.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>211.8 lbs. to 216.8 lbs.</b>

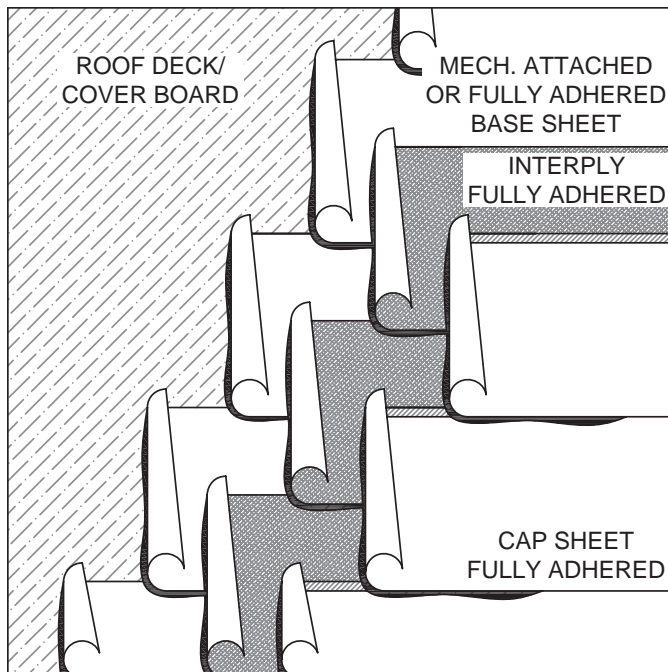
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and



Three-ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note: When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.**

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M3-AHD</b> (515, 500, 650 cap)	<b>5-10 year</b>
<b>M3-AID</b> (515, 506, 650 cap)	<b>5-10 year</b>
<b>M3-BHD</b> (501, 500, 650 cap)	<b>5-10 year</b>
<b>M3-BID</b> (501, 506, 650 cap)	<b>5-10 year</b>

### Materials per 100 sq.ft. of roof area:

*Base Sheet Options (choose one of the following):*

One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.

*Ply Sheet Options (choose one of the following):*

One (1) ply of <b>#500</b>	7.2 lbs.
One (1) ply of <b>#506</b>	9.2 lbs.

*Cap Sheet:*

One (1) ply of <b>#650</b>	102.0 lbs.
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*Adhesive for roofing plies:* ASTM D 312 Type III, or IV  
25.0 lbs. per ply/per sq.

*Insulation:* Specified

*Weight per square (-insulation):* **211.8 lbs. to 216.8 lbs.**

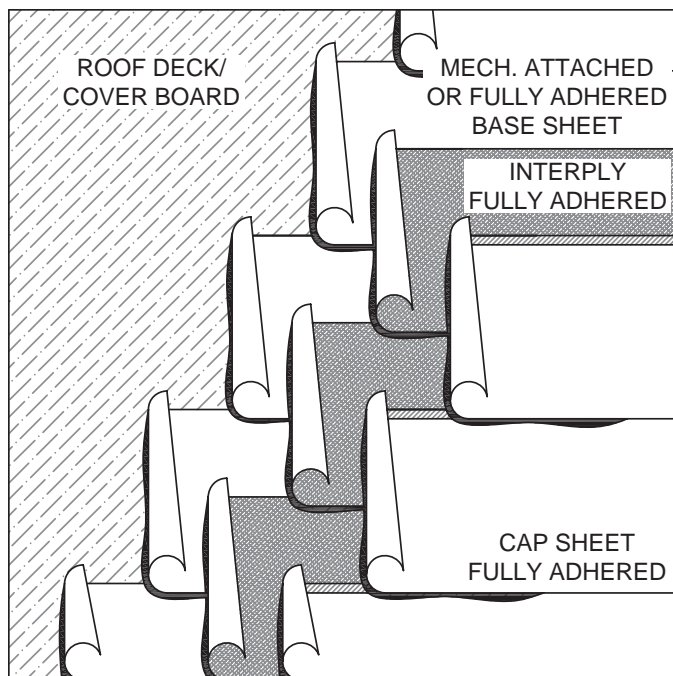
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap



Three-ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** *When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M3-BBC</b> (501, 501, 625 cap)	<b>5-10 year</b>
<b>M3-DBC</b> (603, 501, 625 cap)	<b>5-15 year</b>
<b>M3-BDC</b> (501, 603, 625 cap)	<b>5-20 year</b>
<b>M3-EEC</b> (605, 605, 625 cap) cold applied only	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base/Ply Sheet Options (see configurations above):</i>	
<b>#501</b>	30.6 lbs. per ply
<b>#603</b>	75.0 lbs. per ply
<b>#605</b> (cold applied only)	50.0 lbs. per ply
<i>Cap Sheet:</i>	
One (1) ply of <b>#625</b>	102.0 lbs.
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>*Adhesive for roofing plies and surfacing:</i>	
Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>238.2 lbs. to 327.0 lbs.</b>

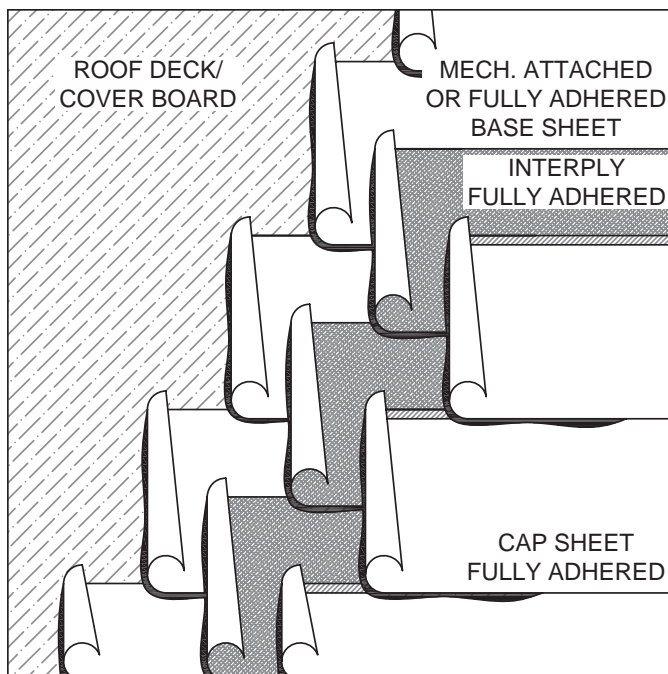
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

*\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.*

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.



Three-ply, hot mopped\*, built-up roofing system with SBS fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M3-BBH</b> (501, 501, 350 cap)	<b>5-10 year</b>
<b>M3-DBH</b> (603, 501, 350 cap)	<b>5-10 year</b>
<b>M3-BDH</b> (501, 603, 350 cap)	<b>5-10 year</b>
<b>M3-EBH</b> (605, 501, 350 cap)	<b>5-10 year</b>

### Materials per 100 sq.ft. of roof area:

Base/Ply Sheet Options (see configurations above):

<b>#501</b>	30.6 lbs. per ply
<b>#603</b>	75.0 lbs. per ply
<b>#605</b> (cold adhesive only)	50.0 lbs. per ply

### Cap Sheet:

One (1) ply of <b>#350</b>	78.0 lbs.
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Adhesive for roofing plies:	ASTM D 312 Type III, or IV
	25.0 lbs. per ply/per sq.

\*Adhesive for roofing plies and surfacing:

Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply
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Insulation:	Specified
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Weight per square (-insulation):	<b>214.2 lbs. to 258.6 lbs.</b>
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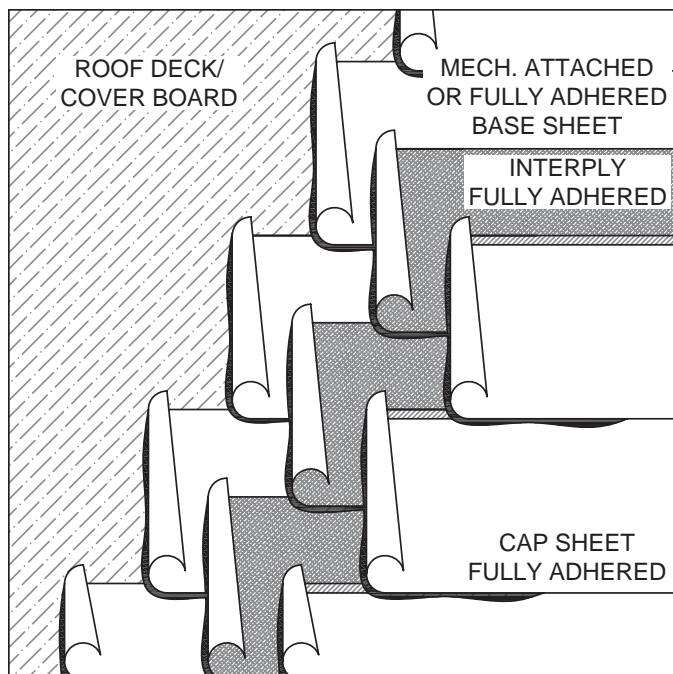
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.



Three-ply, hot mopped\*, built-up roofing system with SBS fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M3-BBB</b> (501, 501, 601 cap)	<b>5-10 year</b>
<b>M3-BDB</b> (501, 603, 601 cap)	<b>5-10 year</b>
<b>M3-DBB</b> (603, 501, 601 cap)	<b>5-10 year</b>
<b>M3-EBB</b> (605, 501, 601 cap)	<b>5-10 year</b>

### Materials per 100 sq.ft. of roof area:

Base/Ply Sheet Options (choose one of the following):

<b>#501</b>	30.6 lbs. per ply
<b>#603</b>	75.0 lbs. per ply
<b>#605</b> (cold applied only)	50.0 lbs. per ply

### Cap Sheet:

One (1) ply of <b>#601</b>	100.0 lbs.
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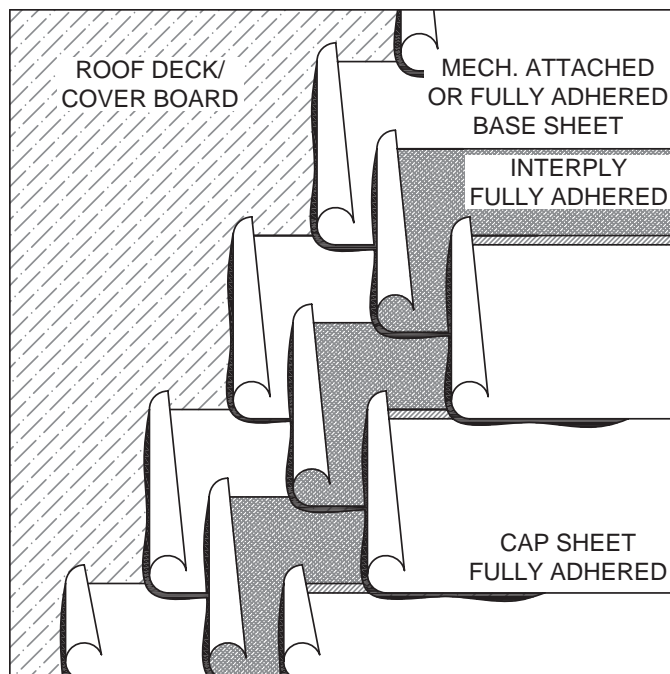
Adhesive for roofing plies:	ASTM D 312 Type III, or IV
	25.0 lbs. per ply/per sq.

### \*Adhesive for roofing plies and surfacing:

Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply
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Insulation:	Specified
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Weight per square (-insulation):	<b>236.6 lbs. to 280.6 lbs.</b>
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Three-ply, hot mopped\*, built-up roofing system with SBS fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the cap sheet. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the cap sheet, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1/2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrrnty.
<b>G3-XHX</b> (3-500, gravel)	<b>5-10 year</b>
<b>G3-XIX</b> (3-506, gravel)	<b>5-15 year</b>
Materials per 100 sq/ft of roof area:	
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs. per ply/21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs. per ply/27.6 lbs.
<i>Surfacing:</i>	
ASTM D 1863 commercial grade, washed, opaque gravel	
	400.0 lbs.
<i>Adhesive for roofing plies:</i>	
ASTM D 312 Type III, or IV	
	25.0 lbs. per ply/per sq.
	60.0 lbs. flood coat for surfacing
<i>Insulation:</i>	
	Specified
<i>Weight per square (-insulation):</i>	<b>556.6 lbs. to 562.6 lbs.</b>

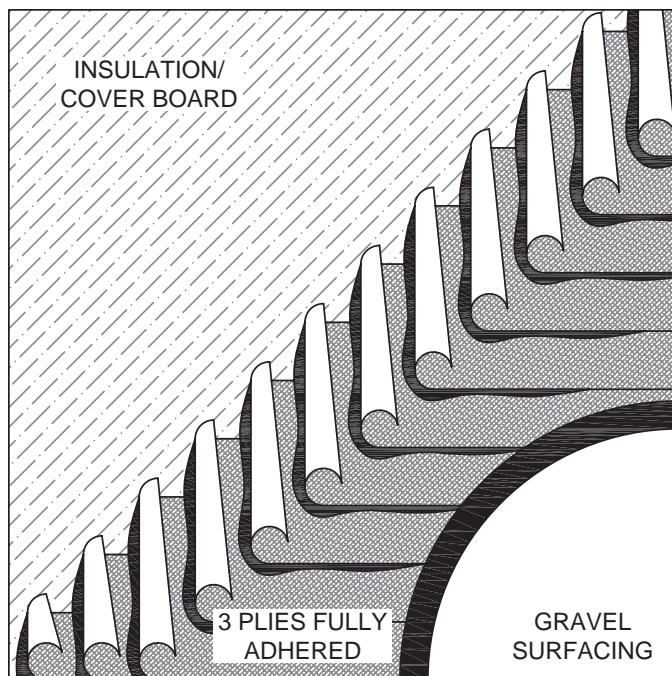
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - inter-plies are to be fully adhered to the cover board. Turn up all cant strips and down all roof edges. Install all inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all inter-plies to ensure contact between the asphalt and the bottom of the membranes. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Three-ply, hot mopped, built-up roofing system with conventional plies and gravel surfacing over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 3" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>G3-XBX (3-501, gravel)</b>	<b>5-15 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Ply Sheets:</i>	
Three (3) plies of <b>#501</b>	30.6 lbs. per ply/91.8 lbs.
<i>Surfacing:</i>	
ASTM D 1863 commercial grade, washed, opaque gravel	400.0 lbs.
<i>Adhesive for roofing plies and surfacing:</i>	
Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply 4.0 gals. flood coat surfacing
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>555.4 lbs.</b>

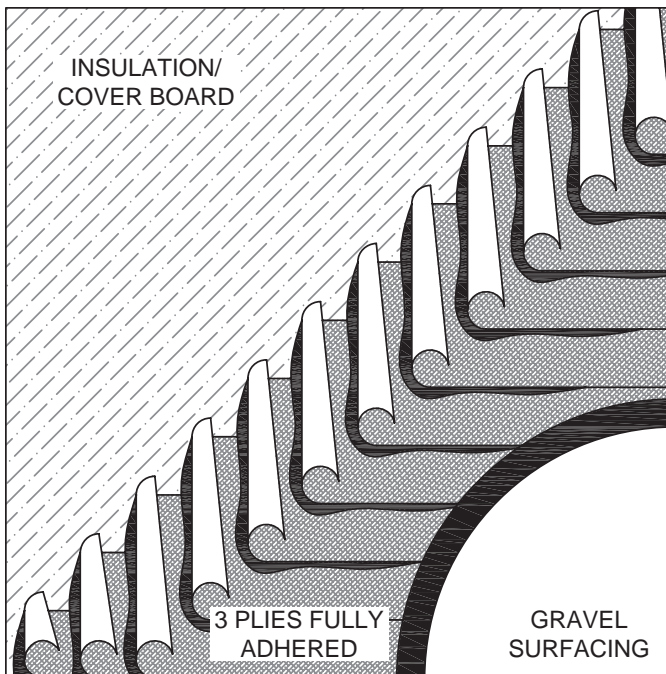
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Cold Process* - inter-plies are to be fully adhered to the cover board. Turn up all cant strips and down all roof edges. Install all inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all inter-plies to ensure contact between the asphalt and the bottom of the membranes. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Three-ply, cold process, built-up roofing system with SBS plies and gravel surfacing over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1/4" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board, attached as required by the insulation manufacturer. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M4-XHA</b> (3-500, 502 cap)	<b>5-15 year</b>
<b>M4-XIA</b> (3-506, 502 cap)	<b>5-20 year</b>
<b>Materials per 100 sq./ft. of roof area:</b>	
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs. per ply/21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs. per ply/27.6 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#502</b>	72.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>193.6 lbs. to 199.6 lbs.</b>

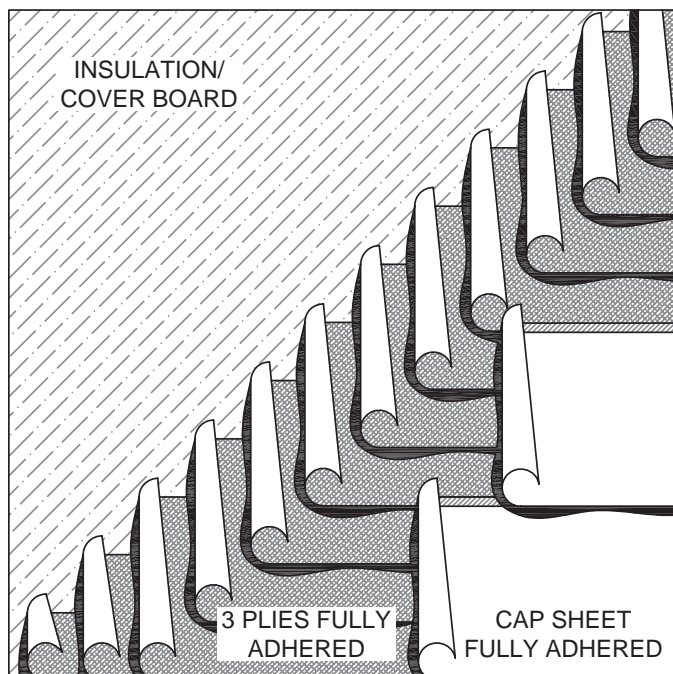
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with Two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.



Four-ply, hot mopped, built-up roofing system with conventional fiber-glass ply and cap sheet installed over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), Styrofoam (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M4-AHA</b> (515, 2-500, 502 cap)	<b>5-15 year</b>
<b>M4-AIA</b> (515, 2-506, 502 cap)	<b>5-20 year</b>
<b>M4-BHA</b> (501, 2-500, 502 cap)	<b>5-12 year</b>
<b>M4-BIA</b> (501, 2-506, 502 cap)	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs. per ply/14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs. per ply/18.4 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#502</b>	72.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>214.0 lbs. to 221.0 lbs.</b>

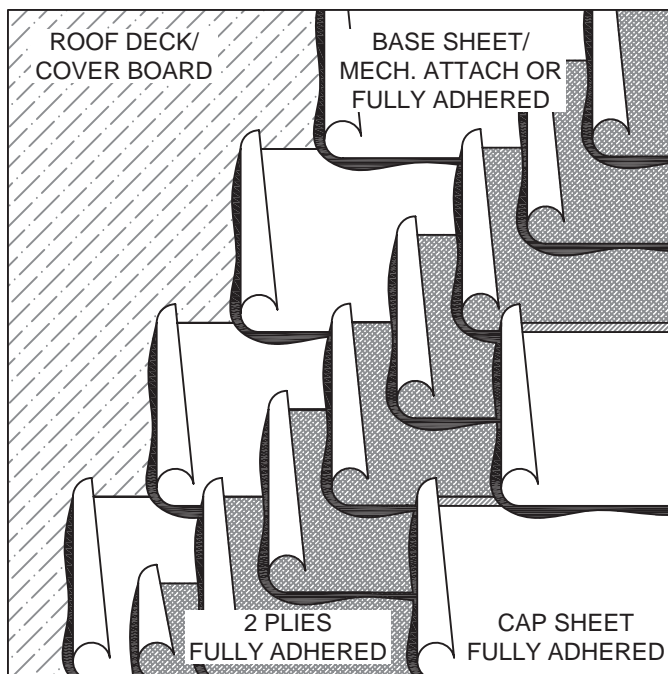
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with Two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.



Four ply, hot mopped, built-up roofing system with conventional fiber-glass base, ply, and cap sheet installed over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), Styrofoam (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M4-XHH</b> (3-500 Type IV, 350 cap)	<b>5-15 year</b>
<b>M4-XIH</b> (3-506 Type VI, 350 cap)	<b>5-20 year</b>
<b>Materials per 100 sq./ft. of roof area:</b>	
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs. per ply/21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs. per ply/27.6 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#350</b>	78.0 lbs.
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	
	<i>Specified</i>
<i>Weight per square (-insulation):</i>	<b>199.6 lbs. to 205.6 lbs.</b>

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

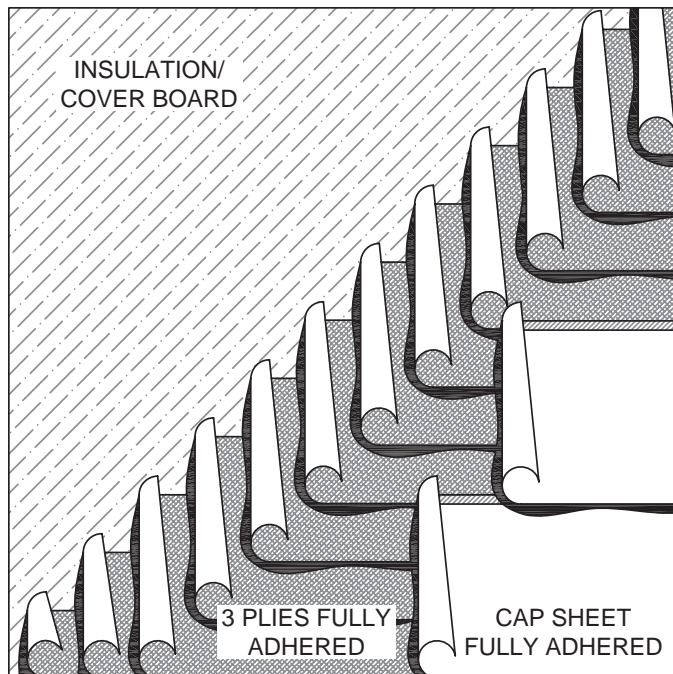
**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install all inter-plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (11') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with Two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the*



Four-ply, hot mopped, built-up roofing system with conventional fiberglass ply sheets and an high Performance SBS fiberglass cap sheet installed over an approved roof deck.

current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M4-AHH</b> (515, 2-500, 350 cap)	<b>5-15 year</b>
<b>M4-AIH</b> (515, 2-506, 350 cap)	<b>5-20 year</b>
<b>M4-BHH</b> (501, 2-500, 350 cap)	<b>5-15 year</b>
<b>M4-BIH</b> (501, 2-506, 350 cap)	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs./14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs./18.4 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#350</b>	78.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>220.0 lbs. to 227.0 lbs.</b>

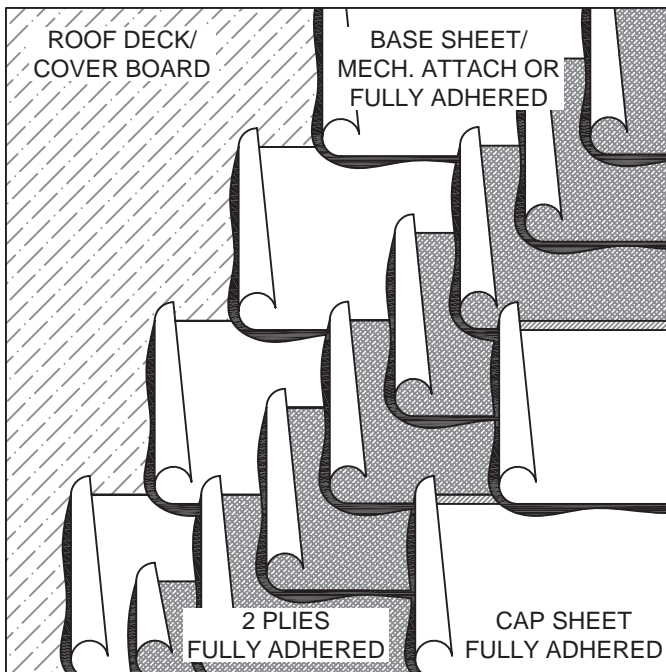
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of



Four ply, hot mopped, built-up roofing system with conventional fiber-glass base, ply, and High Performance SBS cap sheet installed over an approved roof deck.

the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions below**) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions below**), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M4-AHB</b> (515, 2-500, 601 cap)	<b>5-10 year</b>
<b>M4-AIB</b> (515, 2-506, 601 cap)	<b>5-20 year</b>
<b>M4-BHB</b> (501, 2-500, 601 cap)	<b>5-10 year</b>
<b>M4-BIB</b> (501, 2-506, 601 cap)	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs./21.6 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs./27.6 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#601</b>	100.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>249.2 lbs. to 258.2 lbs.</b>

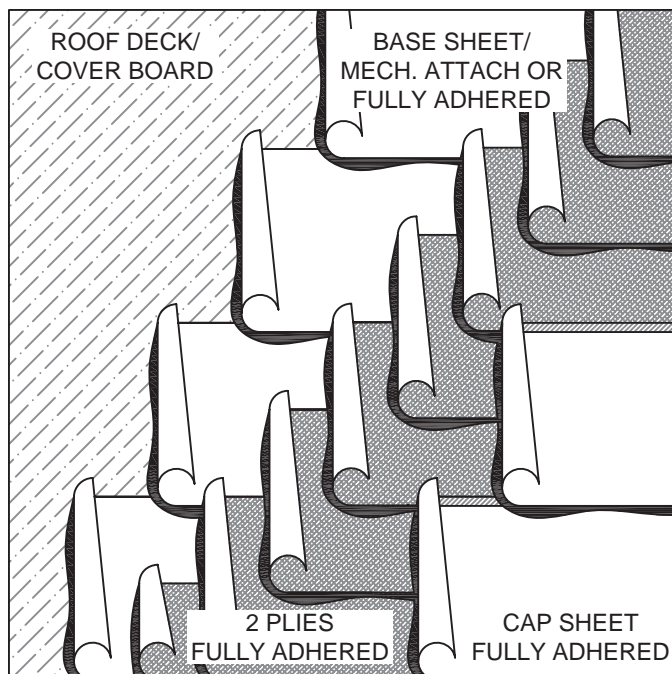
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs,



Four ply, hot mopped, built-up roofing system with a fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **2" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>M4-AHC</b> (515, 2-500 type IV, 625 cap)	<b>5-15 year</b>
<b>M4-AIC</b> (515, 2-506 type VI, 625 cap)	<b>5-20 year</b>
<b>M4-BHC</b> (501, 2-500 type IV, 625 cap)	<b>5-15 year</b>
<b>M4-BIC</b> (501, 2-506 type VI, 625 cap)	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs./14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs./18.4 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#625</b>	102.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>251.2 lbs. to 265.2 lbs.</b>

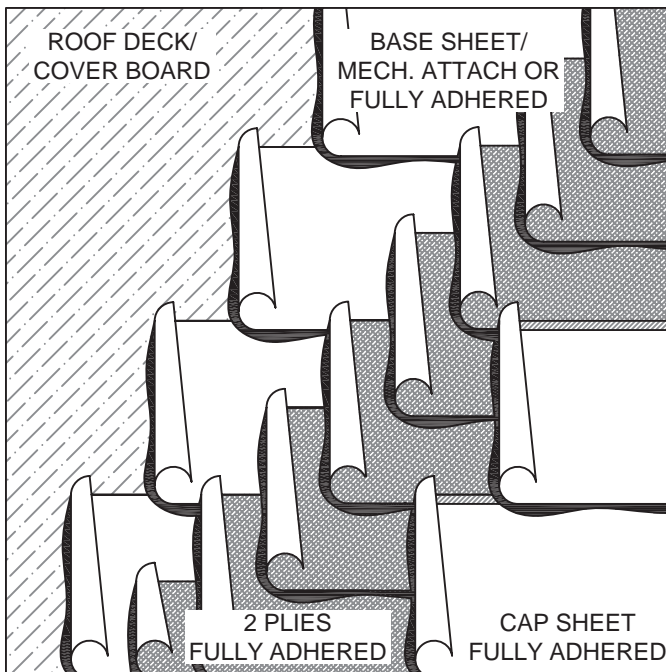
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions



Four ply, hot mopped, built-up roofing system with a fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

(curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to **1" in 12"** over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M4-AHD</b> (515, 2-500, 650 cap)	<b>5-15 year</b>
<b>M4-AID</b> (515, 2-506, 650 cap)	<b>5-20 year</b>
<b>M4-BHD</b> (501, 2-500, 650 cap)	<b>5-15 year</b>
<b>M4-BID</b> (501, 2-506, 650 cap)	<b>5-20 year</b>
<b>Materials per 100 sq.ft. of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies of <b>#500</b>	7.2 lbs./14.4 lbs.
Two (2) plies of <b>#506</b>	9.2 lbs./18.4 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#650</b>	102.0 lbs.
<i>Adhesive for roofing plies:</i>	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	Specified
<i>Weight per square (-insulation):</i>	<b>258.2 lbs. to 265.2 lbs.</b>

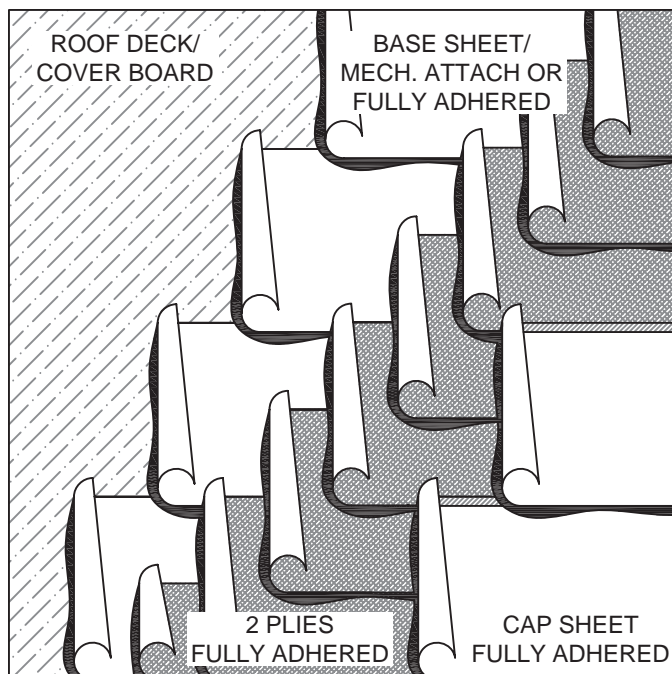
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of



Four ply, hot mopped, built-up roofing system with a fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

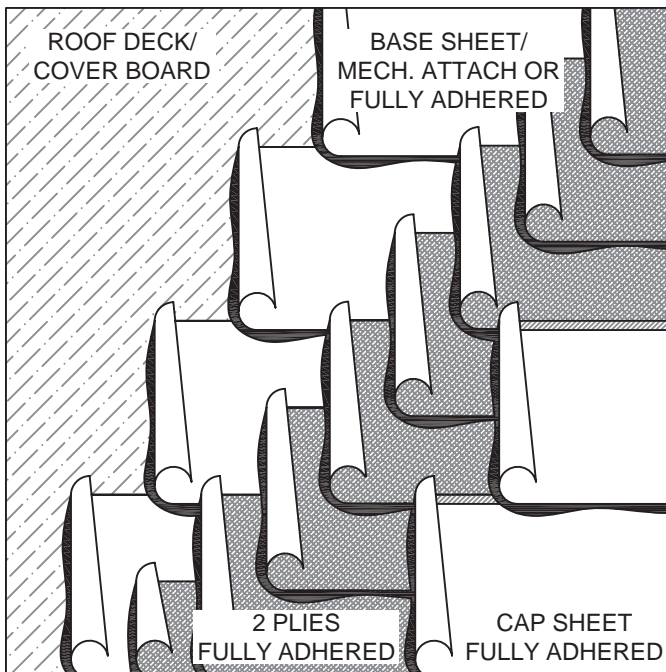
**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions below**) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions below**), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M4-BBB</b> (501, 2-501, 601 cap)	<b>5-20 year</b>
<b>M4-BCB</b> (501, 2-602, 601 cap)	<b>5-20 year</b>
<b>M4-BDB</b> (501, 2-603, 601 cap)	<b>5-20 year</b>
<b>Materials per 100 sq./ft. of roof area:</b>	
<i>Base Sheet:</i>	
One (1) ply <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Two (2) plies <b>#501</b>	30.6 lbs./61.2 lbs.
Two (2) plies <b>#602</b>	47.5 lbs./95.0 lbs.
Two (2) plies <b>#603</b>	75.0 lbs./150.0 lbs.
<i>Cap Sheet:</i>	
One (1) ply <b>#601</b>	100.0 lbs.
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>*Adhesive for roofing plies and surfacing:</i>	
Choose either <b>#705</b> or <b>#727</b>	1.5-2.0 gals. per ply
<i>Insulation:</i>	
	Specified
<i>Weight per square (-insulation):</i>	
	<b>291.8 lbs. to 380.6 lbs.</b>



Four ply, hot mopped\*, built-up roofing system with an SBS base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

*\*Cold Process - refer to low slope application instructions located in sections 4.7.4, 4.7.6 & 4.7.9 of this manual.*

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two (2) of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install cap sheet after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** *When installing this system over an insulated roof deck, the base sheet attachment will change from a mechanical to fully adhered.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>G4-XHX</b> (4-500, gravel)	<b>5-12 year</b>
<b>G4-XIX</b> (4-506, gravel)	<b>5-20 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Ply Sheet Options (choose one of the following):</i>	
Four (4) plies of <b>#500</b>	7.2 lbs. per ply/28.8 lbs.
Four (4) plies of <b>#506</b>	9.2 lbs. per ply/36.8 lbs.
<i>Surfacing:</i>	
ASTM D 1863 commercial grade, washed, opaque gravel	
	400.0 lbs.
<i>Adhesive for roofing plies:</i>	
ASTM D 312 Type III, or IV	
	25.0 lbs. per ply/per sq.
	60.0 lbs. flood coat for surfacing
<i>Insulation:</i>	
	Specified
<i>Weight per square (-insulation):</i>	<b>588.8 lbs. to 596.8 lbs.</b>

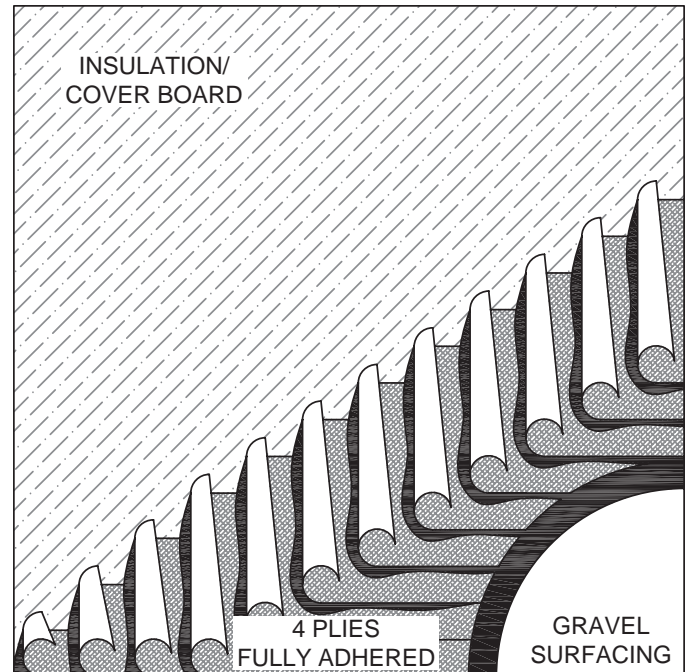
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - Inter-plies are to be fully adhered to the cover board. Turn up all cant strips and down all roof edges. Install all inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all inter-plies to ensure contact between the asphalt and the bottom of the membranes. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Four-ply, hot mopped, built-up roofing system with conventional plies, and a gravel surfacing over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 3" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>E4-AHX</b> (515, 3-500, emulsion)	<b>5-10 year</b>
<b>E4-BHX</b> (515, 3-506, emulsion)	<b>5-15 year</b>
<b>E4-AIX</b> (501, 3-506, emulsion)	<b>5-20 year</b>
<b>E4-BIX</b> (501, 3-506, emulsion)	<b>5-20 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs. per ply/21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs. per ply/27.6 lbs.
<i>Surfacing:</i>	
Emulsion roof coating:	3.0-5.0 gallons
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	
	Specified
<i>Weight per square (-insulation):</i>	
	<b>175.0 lbs. to 202.6 lbs.</b>

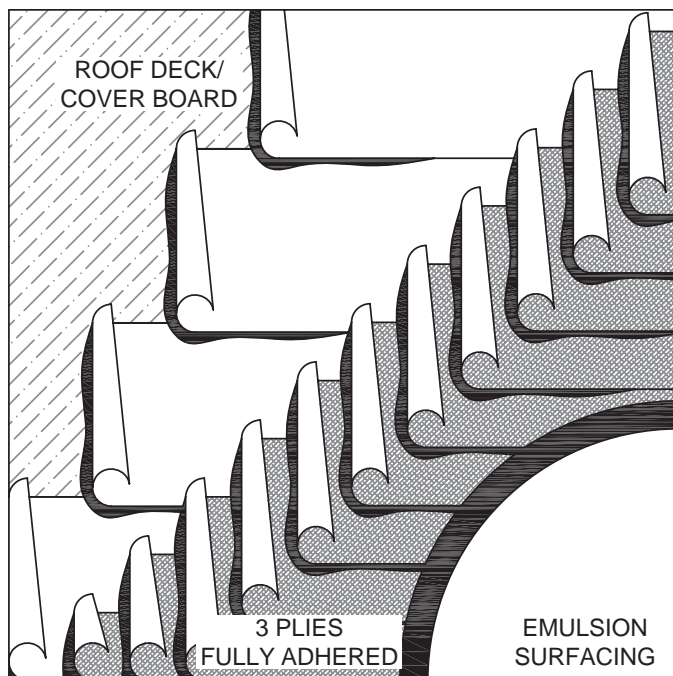
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all base/inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all inter-plies to ensure contact between the asphalt and the bottom of the membranes. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Allow the roof to weather (30 to 90 days, based on the coating manufacturers requirements), clean and coat as specified.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Four-ply, hot mopped, built-up roofing system with conventional plies, and a emulsion surfacing sheet over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1/2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below), attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M5-AHA</b> (515, 3-500, 502 cap)	<b>5-10 year</b>
<b>M5-AIA</b> (515, 3-506, 502 cap)	<b>5-20 year</b>
<b>M5-BHA</b> (501, 3-500, 502 cap)	<b>5-10 year</b>
<b>M5-BIA</b> (501, 3-506, 502 cap)	<b>5-20 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs./21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs./27.6 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#502</b>	72.0 lbs.
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	
	Specified
Weight per square (-insulation):	<b>246.2 lbs. to 255.2 lbs.</b>

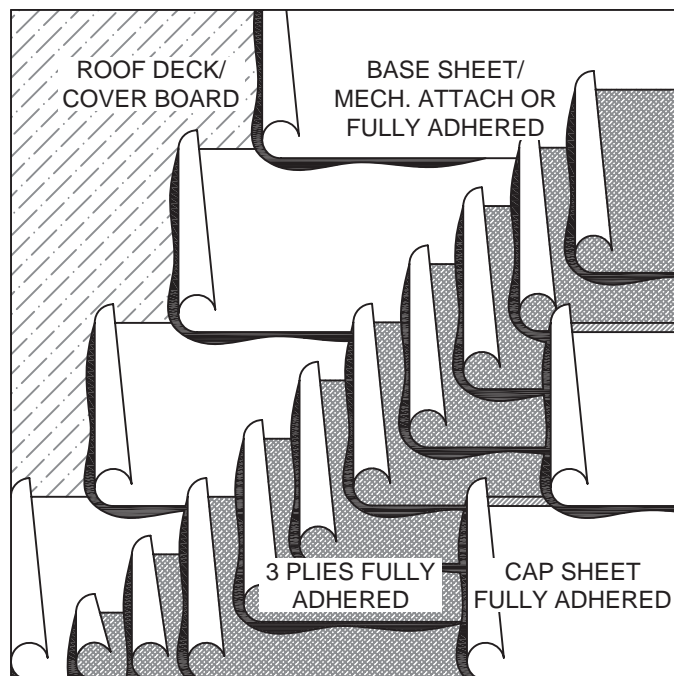
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified cap sheet base flashing extending 6" beyond



Five ply, hot mopped, built-up roofing system with conventional fiber-glass base, ply, and cap sheet installed over an approved roof deck.

the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note: when installing this system over an insulated roof deck, the base sheet attachment will change from mechanical to fully adhered.**

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.

System Configuration	Max. Wrnty.
<b>M5-AHH</b> (515, 3-500, 350 cap)	<b>5-15 year</b>
<b>M5-AIH</b> (515, 3-506, 350 cap)	<b>5-20 year</b>
<b>M5-BHH</b> (501, 3-500, 350 cap)	<b>5-15 year</b>
<b>M5-BIH</b> (501, 3-506, 350 cap)	<b>5-20 year</b>
<b>Materials per 100 sq/ft of roof area:</b>	
<i>Base Sheet Options (choose one of the following):</i>	
One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.
<i>Ply Sheet Options (choose one of the following):</i>	
Three (3) plies of <b>#500</b>	7.2 lbs./21.6 lbs.
Three (3) plies of <b>#506</b>	9.2 lbs./27.6 lbs.
<i>Cap Sheet:</i>	
One (1) ply of <b>#350</b>	78.0 lbs.
<i>Adhesive for roofing plies:</i>	
	ASTM D 312 Type III, or IV 25.0 lbs. per ply/per sq.
<i>Insulation:</i>	
	Specified
<i>Weight per square (-insulation):</i>	
	<b>252.2 lbs to 261.2 lbs.</b>

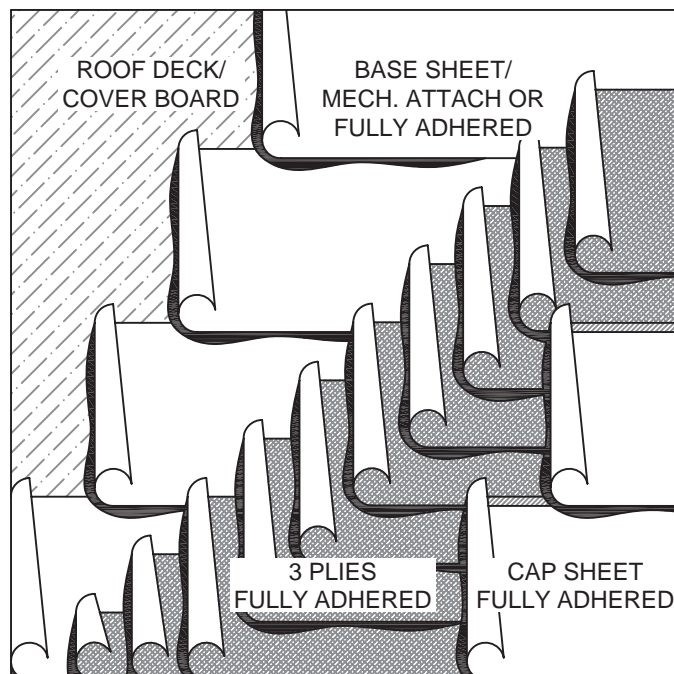
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Cap sheet will be installed so that the water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 of the total length (10.6') and allow to relax prior to installation. Position cap membrane for installation and embed into a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Broom all cap sheet to ensure contact between the asphalt and the bottom of the sheet. Stagger all end laps a minimum of 12".

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). After the installation of the field surfacing, install the specified SBS cap sheet base



Five ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and a High Performance SBS cap sheet installed over an approved roof deck.

flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note: when installing this system over an insulated roof deck, the base sheet attachment will change from mechanical to fully adhered.**

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions** below) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions** below), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
G5-AHX (515, 4-500, gravel)	5-10 year
G5-AIX (515, 4-506, gravel)	5-20 year
G5-BHX (501, 4-500, gravel)	5-10 year
G5-BIX (501, 4-506, gravel)	5-20 year

### Materials per 100 sq/ft of roof area:

Base Sheet Options (choose one of the following):

One (1) ply of #515	27.6 lbs.
One (1) ply of #501	30.6 lbs.

Ply Sheet Options (choose one of the following):

Four (4) plies of #500	7.2 lbs./28.8 lbs.
Four (4) plies of #506	9.2 lbs./36.8 lbs.

### Surfacing:

ASTM D 1863 commercial grade, washed,  
opaque gravel 400.0 lbs.

Adhesive for roofing plies: ASTM D 312 Type III, or IV  
25.0 lbs. per ply/per sq.  
60.0 lbs. Flood Coat for Surfacing

Insulation: Specified

Weight per square (-insulation): **641.4 lbs. to 652.4 lbs.**

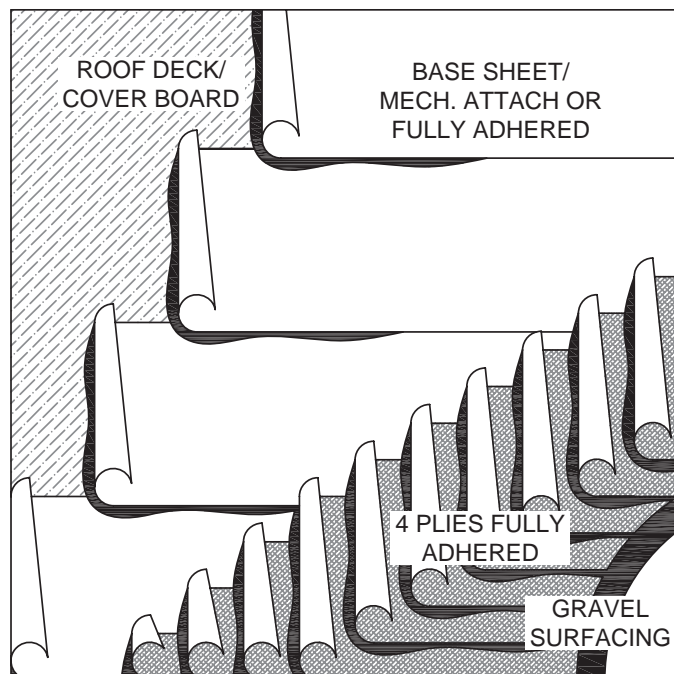
**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 Type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application:** *Hot Mopped* - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all base/inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all inter-plies to ensure contact between the asphalt and the bottom of the membranes. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.



Five ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and gravel surfacing over an approved roof deck.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1/2" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note:** when installing this system over an insulated roof deck, the base sheet attachment will change from mechanical to fully adhered.

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions below**) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions below**), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.



System Configuration	Max. Wrnty.
<b>E5-AHX</b> (515, 4-500, emulsion)	<b>5-15 year</b>
<b>E5-AIX</b> (515, 4-506, emulsion)	<b>5-20 year</b>
<b>E5-BHX</b> (501, 4-500, emulsion)	<b>5-15 year</b>
<b>E5-BIX</b> (501, 4-506, emulsion)	<b>5-20 year</b>

### Materials per 100 sq/ft of roof area:

Base Sheet Options (choose one of the following):

One (1) ply of <b>#515</b>	27.6 lbs.
One (1) ply of <b>#501</b>	30.6 lbs.

Ply Sheet Options (choose one of the following):

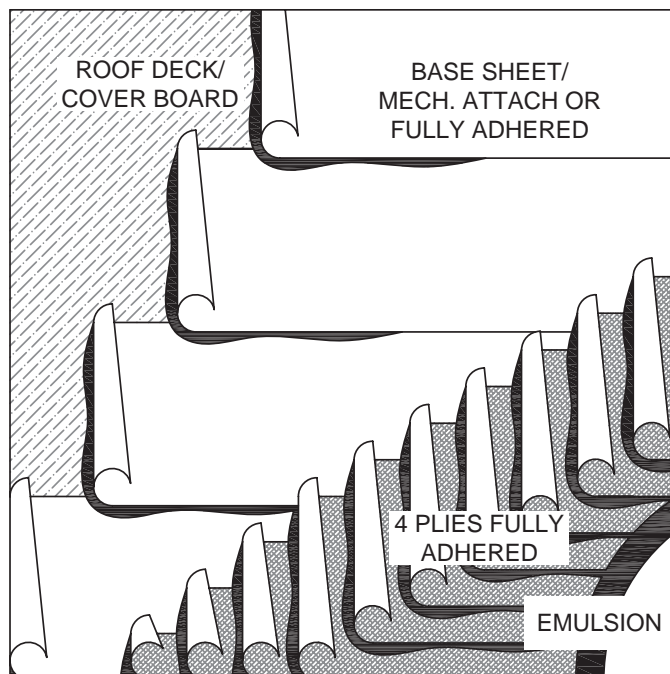
Four (4) plies of <b>#500</b>	7.2 lbs./28.8 lbs.
Four (4) plies of <b>#506</b>	9.2 lbs./36.8 lbs.

Adhesive for roofing plies: ASTM D 312 type III, or IV  
25.0 lbs. per ply/per sq.

Surfacing:  
Emulsion roof coating 3.0-5.0 gallons

Insulation: Specified

Weight per square (-insulation): **207.8 lbs. to 218.4 lbs.**



Five ply, hot mopped, built-up roofing system with conventional fiberglass base, ply, and an emulsion surfacing over an approved roof deck.

**Roof deck and general information:** Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General requirements and Commercial Installation Instructions.

**Special requirements:** This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes that are greater than 1" in 12" are to be installed in a strapped fashion using ASTM D 312 type IV asphalt, and wood nailers/insulation stops to facilitate back nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: General Requirements/Strapped Installations.

**Application: Hot Mopped** - install base sheet according to instructions in section 4-5 of this manual. Turn up all cant strips and down all roof edges. Install all inter plies so that the water is over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Broom all plies to ensure contact between the asphalt and the bottom surface of the roofing felts. Back nail all felts at the wood nailers (strapped installations only) using 1" cap head nails 1" from the leading edge, ensuring that each nail is covered by the specified number of inter-ply sheets. Allow the roof to weather (30 to 90 days, based on the coating manufacturers requirements), clean and coat as specified.

**Flashings:** Install all primed flashings (lead, metal, scuppers, etc) in a layer of plastic cement on top of the inter-ply and stripped off with two plies of reinforcement, feathering each ply 3" from the edge of the flange and corresponding ply. Install surfacing after all flashings have been stripped in.

**Base flashings:** Base flashing stripping ply(s) are to be installed over the inter-ply before the installation of the field surfacing. Stripping ply(s) are to extend 3" beyond the toe of the cant and up the vertical surface of all flat to vertical transitions (curbs, walls, roof top equipment, etc). Install the specified cap sheet base flashing extending 6" beyond the toe of the cant and up the vertical surface. Terminate the base flashing as shown in the commercial roofing details of the current Malarkey Specification Manual. Install field surfacing.

**Fire Ratings:** The specification carries a **Class 'A'** rating up to 1" in 12" over the following decks: Wood, Metal, Concrete, Lightweight Concrete, Structural Wood Fiber, and Gypsum. *The exact listing for this roofing system can be found in the current edition of the ITS Warnock Hersey Directory of Listed Products. For other ratings, contact the Malarkey Technical Services Department.*

**Note: when installing this system over an insulated roof deck, the base sheet attachment will change from mechanical to fully adhered.**

**Approved Insulations:** Polyisocyanurate, Expanded/extruded polystyrene (see **Precautions below**) attached as required by the insulation manufacturer. Cover boards: Perlite, High Density Wood Fiber, Gypsum Utility Board (see **Precautions below**), attached as required by the insulation manufacturer.

**Precautions:** EPS/XPS insulation can be used with **hot applied roofing systems only** and require the cover board joints to be taped to prevent damage due to asphalt seepage. Gypsum utility board is to receive a one ply of the specified ply sheet over its entire surface, before multiple layers of ply sheet can be installed. Contact Malarkey's Technical Department for more information regarding these precautions at 800-545-1191.