

SPEC MANUAL

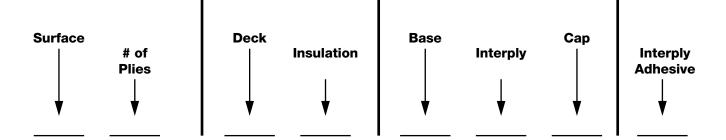
B.U.R., MODIFIED & SHINGLE ROOFING SYSTEMS

Chapter 3

Low Slope Roofing System Specifications



3.1 UNDERSTANDING MALARKEY'S ROOFING SYSTEM SPECIFICATIONS



Surface

M = Mineral

F = Foil Surface

G = Gravel or Slag

S = Smooth (Emulsion)

A = Aluminum Coating

C = Blown Ceramic Granules

R = Reflective Cap Sheet

AC = Acrylic Coating

Deck

W = Combustible/Nailable

C = Structural Concrete

L = Lightweight Concrete

M = Metal

S = Structural Wood Fiber

G = Poured Gypsum

P = Precast Slabs:

Concrete, Gypsum

Insulation

U = Uninsulated

I = Insulated

Base/Interply Felts

A = 515 Pano™ Base

B = 501 Paragon® MOD Base

C = 602 Paragon® ULTRA Base

H = 500 Pano™ Ply® 4

I = 506 Pano[™] Ply[®] 6

N = Inverted 502 Cap

R = 410 OmniSeal[™] Base

S = 420 OmniSeal™ Ply

T = 620 Paragon® ULTRA TG Base

U = 610 Paragon® ULTRA SA Base

X = None

Cap

A = 502 Pano™ Cap

B = 601 Paragon® MOD Cap

C = 625 Paragon® ULTRA Cap

E = 436 OmniSeal™ Cap FR

H = 350 Paragon® CHROMA Cap

P = 430 OmniSeal™ Cap

R = 626G Paragon® RCap™

S = 524G RCap[™] Plus

T = 630 Paragon® ULTRA TG Cap

X = None

Interply Adhesive

H = Hot Asphalt

M = Modified Cold

T = Torched Only

SA = Self-Adhering

SF = Solvent-Free

UNDERSTANDING MALARKEY'S ROOFING SYSTEM SPECIFICATIONS



3.2 **MALARKEY'S NDL LOW SLOPE WARRANTIED SYSTEMS**

Length	Initial Ply/Base Sheet Attachment	Base Sheet	Ply Sheet(s)	Cap Sheet	Number of Sheets Fully Adhered
10 year	Mechanically attached to nailable deck	Any Base Sheet	2 or more of any Ply Sheets fully adhered	Any Cap Sheet fully adhered	3 or more
10 year	Fully adhered over insulation/cover board	Not Required	2 or more of any Ply Sheets fully adhered	Any Cap Sheet fully adhered	3 or more
10 year	Mechanically attached to nailable deck	Any Base Sheet	1 or more any SBS Base Sheet fully adhered	Any SBS Cap Sheet fully adhered	2 or more
10 year	Fully adhered over insulation/ cover board	Not Required	1 or more any SBS Base Sheet fully adhered	Any SBS Cap Sheet fully adhered	2 or more
10 year	Mechanically attached to nailable deck	Any Base Sheet	3 or more plies of any Ply Sheet fully adhered	Flood Coat and Gravel	3 or more
10 year	Fully adhered over insulation/cover board	Not Required	3 or more plies of any Ply Sheet fully adhered	Flood Coat and Gravel	3 or more
10 year	Mechanically attached to nailable deck	Any Base Sheet		625, 630	
10 year	Fully adhered or screw and plated over insulation/cover board	Any Base Sheet		625, 630	
15 year	Mechanically attached to nailable deck	Any Base Sheet	2 or more of any Ply Sheet fully adhered	Any SBS Cap Sheet fully adhered	3 or more
15 year	Fully adhered over insulation/ cover board	Not Required	2 or more of any Ply Sheet fully adhered	Any SBS Cap Sheet fully adhered	3 or more
15 year	Mechanically attached to nailable deck	Any Base Sheet	3 or more of any Ply Sheet fully adhered	Any Cap Sheet fully adhered	4 or more
15 year	Fully adhered over insulation/cover board	Not Required	3 or more of any Ply Sheet fully adhered	Any Cap Sheet fully adhered	4 or more
15 year	Fully adhered over insulation/ cover board	Not Required	2 or more 506 Ply or 2 or more SBS Base Sheets fully adhered	Any Cap Sheet fully adhered	3 or more
15 year	Mechanically attached to nailable deck	Any Base Sheet	2 or more 506 Ply or 2 or more SBS Base Sheets fully adhered	Any Cap Sheet fully adhered	3 or more
15 year	Mechanically attached to nailable deck	Any SBS Base Sheet	1 or more any SBS Base Sheet fully adhered	Any ASTM D6163 Cap Sheet fully adhered	2 or more
15 year	Fully adhered over insulation/ cover board	Not Required	1 or more any SBS Base Sheet fully adhered	Any ASTM D6163 Cap Sheet fully adhered	2 or more



Length	Initial Ply/Base Sheet Attachment	Base Sheet	Ply Sheet(s)	Cap Sheet	Number of Sheets Fully Adhered
15 year	Mechanically attached to nailable deck	Any Base Sheet	1 or more of any ASTM D6163 Base Sheets fully adhered	Any 100 lb. SBS Cap Sheet fully adhered	2 or more
15 year	Fully adhered over insulation/ cover board	Not Required	1 or more of any ASTM D6163 Base Sheets fully adhered	Any 100 lb. SBS Cap Sheet fully adhered	2 or more
15 year	Mechanically attached to nailable deck	Any Base Sheet	4 plies of 500 Ply Sheet or 3 or more plies of 506 Ply Sheet fully adhered	Flood Coat and Gravel	3 or more plies
15 year	Fully adhered over insulation/ cover board	Not Required	4 plies of 500 Ply Sheet or 3 or more plies of 506 Ply Sheet	Flood Coat and Gravel	3 or more
15 year	Fully adhered over insulation and DD Prime	Not Required	610 fully adhered	630 fully adhered torch applied	2 or more
15 year	Mechanically attached to nailable deck	410	610	630	2 or more
20 year	Fully adhered over insulation/ cover board	Not Required	Any ASTM D6163 Base Sheet fully adhered	Any ASTM D6163 Cap Sheet fully adhered	2 or more
20 year	Mechanically attached to nailable deck	Any SBS Base Sheet	Any ASTM D6163 Base Sheet fully adhered	Any ASTM D6163 Cap Sheet fully adhered	2 or more
20 year	Fully adhered over insulation/ cover board	Not Required	Any ASTM D6163 Base Sheet fully adhered	Any ASTM D6163 Cap Sheet fully adhered	2 or more
20 year	Fully adhered over insulation/cover board	N/A	2 or more any SBS Base Sheet	Any Cap Sheet fully adhered	3 or more
20 year	Mechanically attached to nailable deck	Any Base Sheet	3 or more 506 Ply Sheet fully adhered	Any Cap Sheet fully adhered	4 or more
20 year	Fully adhered over insulation and cover board	Not Required	3 or more 506 Ply Sheet fully adhered	Any Cap Sheet fully adhered	4 or more
20 year	Mechanically attached to nailable deck	Any Base Sheet	2 or more 506 Ply Sheet fully adhered	625, 626G, 630	3 or more
20 year	Fully adhered over insulation/cover board	Not Required	2 or more 506 Ply Sheet fully adhered	625, 626G, 630	3 or more
20 year	Mechanically attached to nailable deck	Any Base Sheet	4 or more plies of 506 Ply Sheet	Flood Coat and Gravel	4 or more
20 year	Fully adhered over insulation/ cover board	Not Required	4 or more plies of 506 Ply Sheet	Flood Coat and Gravel	4 or more
20 year	Fully adhered over insulation/cover board	Not Required	4 or more plies of 506 Ply Sheet	Flood Coat and Gravel	4 or more



Length	Initial Ply/Base Sheet Attachment	Base Sheet	Ply Sheet(s)	Cap Sheet	Number of Sheets Fully Adhered
25 year	Mechanically attached to nailable deck	Any SBS Base Sheet	3 plies of 506 Ply Sheet fully adhered	625, 626G, 630	4 or more
25 year	Fully adhered over insulation/ cover board	Not Required	3 plies of 506 Ply Sheet fully adhered	625, 626G, 630	4 or more
25 year	Mechanically attached to nailable deck	Any SBS Base Sheet	1 or more any SBS Base Sheet fully adhered and one or more plies of any ASTM D6163 Base Sheet fully adhered	625, 626G, 630	3 or more
25 year	Fully adhered over insulation/ cover board	Any SBS Base Sheet fully adhered	1 or more plies of any ASTM D6163 Base Sheet fully adhered	625, 626G, 630	3 or more
30 year	Mechanically attached to nailable deck	Any SBS Base Sheet	4 or more 506 Ply Sheets fully adhered	625, 626G, 630	5 or more
30 year	Fully adhered over insulation/ cover board	Not Required	4 or more 506 Ply Sheets fully adhered	625, 626G, 630	5 or more
30 year	Mechanically attached to nailable deck	Any SBS Base Sheet	2 or more ASTM D6163 Base Sheets fully adhered	625, 626G, 630	3 or more
30 year	Fully adhered over insulation/ cover board	Not Required	2 or more ASTM D6163 Base Sheets fully adhered	625, 626G, 630	3 or more



Base Flashing Configurations: Base Flashings are fully adhered. Cap Sheet in Base Flashings must equal the field cap sheet.

10 YEAR:

- 1. Any two (2) Ply Sheets and any Cap Sheet, all fully adhered
- 2. Any Base Sheet and any Cap Sheet, both fully adhered

15 and 20 YEAR:

- 3. Any ASTM D6163 Base Sheet and any Cap Sheet, both fully adhered
- 4. Any Base Sheet and either a 625, 626G or 630 cap sheet, both fully adhered

25 and 30 YEAR:

5. Either a 602, 610 or 620 base sheet and either a 625, 626G or 630 cap sheet, both fully adhered NOTE: OmniSeal™ self-adhered systems are not eligible for NDL warranties.

COLD PROCESS ADHESIVE PROJECTS:

For field membranes, use Malarkey-approved, modified bitumen *Brush-Grade* adhesive and provide copies of invoices. Base Flashings require Malarkey-approved, modified bitumen *Trowel-Grade* adhesive.

When installing Base Flashings, apply the adhesive to both the wall surface and backside of the stripping/backer ply and base flashing cap sheets. Malarkey recommends the use of a ½" notched trowel as it will help prevent under or over application of the adhesive. Roll each of the base flashings to promote adhesion, being careful at lap edges to avoid displacing the adhesive with excessive pressure.

Use only SBS Base Sheets as the base or interplies.

M2-XBB (501, 601) **M2-XCB** (602, 601)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **501** 30 lbs. One (1) ply of **602** 60 lbs.

Cap Sheet:

One (1) ply of **601** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 180 lbs. to 210 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** section.

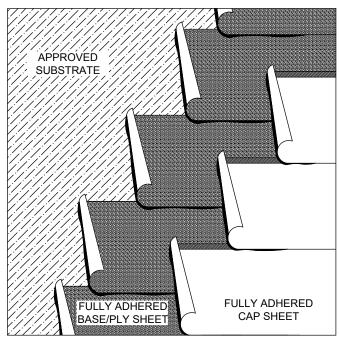
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base sheet so 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. Lap 2" on sides, 6" on the ends, and turn up all cant strips. Broom base sheet to ensure full adhesion between the sheet and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap in lengths ½ to ½ the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process – Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the base sheet and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Two-ply (2) roofing system with SBS-modified base and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field base sheet to top of cant or above. Install stripping/backer ply sheet to vertical surface of wall, a minimum of 8" above field of roof and onto field 3" beyond toe of cant. Apply field cap sheet to top of cant. Install base flashing cap sheet up the vertical surface a minimum of 8" above field of roof and onto field 6" beyond toe of cant. Mechanically fasten top of base flashing and properly counterflash as shown in low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".

Two-Ply Modified 625 Cap



System Configurations

M2-XBC (501, 625) **M2-XCC** (602, 625)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **501** 30 lbs. One (1) ply of **602** 60 lbs.

Cap Sheet:

One (1) ply of **625** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 180 lbs. to 210 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* section.

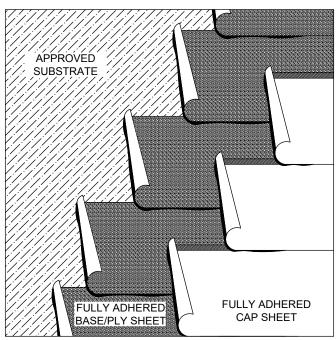
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base sheet so 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. Lap 2" on sides, 6" on the ends, and turn up all cant strips. Broom base sheet to ensure full adhesion between the sheet and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process – Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the base sheet and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Two-ply (2) roofing system with SBS-modified base and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field base sheet to top of cant or above. Install stripping/backer ply sheet to vertical surface of wall, a minimum of 8" above field of roof and onto field 3" beyond toe of cant. Apply field cap sheet to top of cant. Install base flashing cap sheet up the vertical surface a minimum of 8" above field of roof and onto field 6" beyond toe of cant. Mechanically fasten top of base flashing and properly counterflash as shown in low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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M2-XCC (602, 625) **M2-XUC** (610, 625) **M2-XTC** (620, 625)

Materials per 100 sq ft of roof area:

Base Sheet options (choose one):
One (1) ply of 602
One (1) ply of 610 (self-adhering)
One (1) ply of 620 (may be torch applied)

Nominal Weights
60 lbs.
76 lbs.

Cap Sheet:

One (1) ply of 625

Hot Asphalt/Cold Process:

Dependent on application

Insulation:

Specified

Nominal weight per square (-insulation):

201 lbs. to 226 lbs.

Roof Deck and General Information: Roof deck must be clean, dry, smooth, structurally sound, and drainage incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** section.

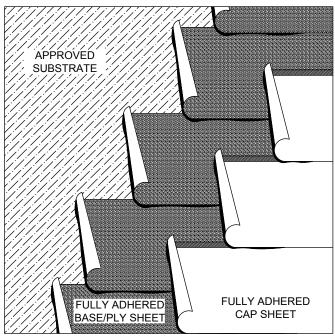
Special Requirements: Slopes greater than 1" in 12" are to be installed in a strapped fashion and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Universal Instructions - Install base and cap sheets so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut rolls into manageable lengths and allow to relax. Turn up all cant strips. Stagger end laps in successive courses a minimum of 3'.

Self-Adhering (610 only) - Position base sheet and fold it back on itself, lengthwise; remove release film on that side, and return sheet to deck. Press securely into place and repeat with other half. Side laps minimum 3" with end laps, 6". At end laps, cut opposing diagonal corners at 45° angles, the underlying end in its down-side corner and the overlapping end in its high-side corner. The width of the cuts should match the width of the selvage overlap. Use a weighted roller to ensure adhesion; work outward from the center to eliminate wrinkles and buckles.

Torch Applied (620 only) - Install base sheet according to the **Low Slope Roofing Installation Instructions** / Membrane Installation and Base Sheet Fastening Pattern sections of this manual. Unroll and set into position. Re-roll a min. of 6' and no more than 16', making sure the sheet remains aligned correctly. Side laps minimum 2" or 4" with end laps, 6". Use a propane torch and while standing in front of the roll, apply the flame split 75% on the roll, 25% on the base sheet to the exposed outer surface of the membrane's underside in a steady, L-shape motion, melting 1 mm of compound on back of the sheet to achieve a min. ¼" compound flow-out at all side and end laps.

Hot Mopped - Install base and cap sheets in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Side laps should be minimum 2" for base sheets and 4" for cap sheets; end laps, 6" for both. Ensure full adhesion with the underlying material, substrate or membrane.



Two-ply (2) roofing system with SBS-modified base and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the inclines out of valleys.

Flashings: Adhesive Application – Install all primed metal flashings in a layer of trowel grade adhesive on top of the base sheet and strip-off flanges. Install the cap sheet after all flanges have been stripped-in.

Flashings: *Torch Applied* – Install all primed metal flashings on top of the heated, softened base sheet or in a bed of mastic, and secure (sheet metal only). Strip-off flanges and torch in place over the flashing, extending a minimum of 6" beyond the outside edge of the flange.

Base Flashings: Install cant strip at roof-to-vertical transitions. Apply field base sheet to top of cant or above. Adhere stripping/backer ply to vertical surface of wall, minimum 8" above field of roof and onto field 3" beyond toe of cant. Apply field cap sheet to top of cant. Install base flashing cap sheet up the vertical surface minimum 8" above field of roof and onto field 6" beyond toe of cant. Mechanically fasten top of base flashing and counterflash as shown in the low slope roofing details of current Malarkey Specification Manual.

Fire Rating: Class A rating up to 1" in 12" and 2" in 12" depending on configuration.

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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Two-Ply Modified 630 Cap



System Configurations

M2-XUT (610, 630) **M2-XTT** (620, 630)

Materials per 100 sq ft of roof area:

Base Sheet options (choose one):

One (1) ply of **610** (self-adhered)

One (1) ply of **620** (may be torch applied)

Nominal Weights

85 lbs.

76 lbs.

Cap Sheet.

One (1) ply of **630** 107 lbs.

Hot Asphalt/Cold Process/Torch Attachment: Dependent on application

Insulation: Specified

Nominal weight per square (-insulation): 183 lbs. to 233 lbs.

Roof Deck and General Information: Roof deck must be clean, dry, smooth, structurally sound, and drainage incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** section.

Special Requirements: Slopes greater than 1" in 12" are to be installed in a strapped fashion and back-nailed. If sheets are *torch applied*, then slopes greater than 3" in 12" should be installed in a strapped fashion and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

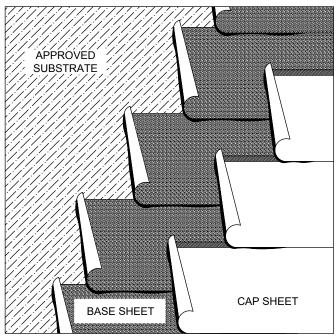
Application: *Universal Instructions* - Install base and cap sheets so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut rolls into manageable lengths and allow to relax. Turn up all cant strips. Stagger end laps in successive courses a minimum of 3'.

Self-Adhering (610 only) - Position base sheet and fold it back on itself, lengthwise; remove release film on that side, and return sheet to deck. Press securely into place and repeat with other half. Side laps minimum 3" with end laps, 6". At end laps, cut opposing diagonal corners at 45° angles, the underlying end in its down-side corner and the overlapping end in its high-side corner. The width of the cuts should match the width of the selvage overlap. Use weighted roller to ensure adhesion; work outward from the center to eliminate wrinkles and buckles.

Hot Mopped - Install base and cap sheets in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Side laps should be minimum 2" for base sheets and 4" for cap sheets; end laps, 6". Ensure full adhesion with the underlying material, substrate or membrane.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Torch Applied - Install base sheet according to the **Low Slope Roofing Installation Instructions** / Membrane
Installation and Base Sheet Fastening Pattern sections of
this manual. Unroll cap sheet, and set into position. Re-roll
a min. of 6' and no more than 16', making sure the sheet
remains aligned correctly. Side laps minimum 3" or 4" with



Two-ply (2) roofing system with SBS-modified base and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

end laps, 6". Use a propane torch and while standing in front of the roll, apply the flame split 75% on the roll, 25% on the base sheet to the exposed outer surface of the membrane's underside in a steady, L-shape motion, melting 1 mm of compound on back of the sheet to achieve a min. ¼" compound flow-out at all side and end laps.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the inclines out of valleys.

Flashings: Adhesive Application – Install all primed metal flashings in a layer of trowel grade adhesive on top of the base sheet and strip-off flanges. Install the cap sheet after all flanges have been stripped-in.

Flashings: Torch Applied – Install all primed metal flashings on top of the heated, softened base sheet or in a bed of mastic, and secure (sheet metal only). Strip-off flanges and torch in place over the flashing, extending a minimum of 6" beyond the outside edge of the flange.

Base Flashings: Install cant strip at roof-to-vertical transitions. Apply field base sheet to top of cant or above. Adhere stripping/backer ply to vertical surface of wall, minimum 8" above field of roof and onto field 3" beyond toe of cant. Apply field cap sheet to top of cant. Install base flashing cap sheet up the vertical surface minimum 8" above field of roof and onto field 6" beyond toe of cant. Mechanically fasten top of base flashing and counterflash as shown in the low slope roofing details of current Malarkey Specification Manual.

Fire Rating: Class A rating up to 1" in 12" and 2" in 12" depending on configuration.

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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Three-Ply Hybrid 524G RCap™ Plus Cap

System Configurations

R3-XHS (2-500, 524G) **R3-XIS** (2-506, 524G)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheets:

Two (2) plies of 500 7 lbs. each

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Two (2) plies of **506** 8 lbs. each

Cap Sheet:

One (1) ply of **524G RCap Plus** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 167 lbs. to 169 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** section.

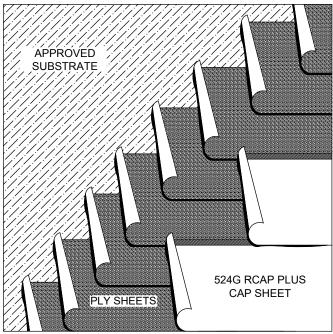
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install ply sheets so 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. Half-lap on sides, 6" on the ends, and turn up all cant strips. Broom ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap in lengths ½ the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the ply sheets and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field ply sheets to top of cant or above. Install stripping/backer ply sheet to vertical surface of wall, a minimum of 8" above field of roof and onto field 3" beyond toe of cant. Apply field cap sheet to top of cant. Install base flashing cap



Three-ply (3) roofing system with conventional ply sheets and a highly-reflective, SBS-modified cap sheet installed over an approved substrate.

sheet up the vertical surface a minimum of 8" above field of roof and onto field 6" beyond toe of cant. Mechanically fasten top of base flashing and properly counterflash as shown in low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Three-Ply Modified 524G RCap™ Plus



System Configurations

R3-BBS (2-501, 524G)

R3-BCS (501, 602, 524G)

R3-CCS (2-602, 524G) **R3-CHS** (602, 500, 524G)

Materials per 100 sq ft of roof area (nominal weights):

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

Two (2) plies of 501

30 lbs. per ply/ 60 lbs.

-OR-

One (1) ply of **501** and 30 lbs. One (1) ply of **602** 60 lbs.

-OR-

Two (2) plies of **602** 60 lbs. per ply/ 120 lbs.

-OR-

One (1) ply of **602** and 60 lbs. (1) ply of **500** 7 lbs.

Cap Sheet:

One (1) ply of **524G RCap Plus** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

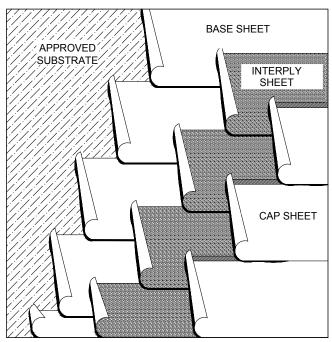
Nominal weight per square (-insulation): 213 lbs. to 273 lbs.

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** section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and the end laps back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom base and inter-plies to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.



Three-ply (3) roofing system with SBS-modified base sheets, conventional or SBS-modified inter-plies, and a highly-reflective, SBS-modified cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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M3-XHA (2-500, 502) **M3-XIA** (2-506, 502)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following):

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs. Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

Insulation:

One (1) ply of **502** 75 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Specified

Nominal weight per square (-insulation): 164 lbs. to 166 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** section.

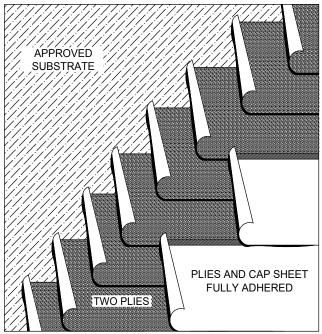
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install ply sheets so 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. Half-lap on sides, 6" on the ends, and turn up all cant strips. Broom the plies to ensure full adhesion between the sheets and substrate. Install the cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, install a layer of Malarkey ply sheet in valleys and waterways that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the ply sheets and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets to top of cant or above. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6"



Three-ply (3) roofing system with conventional ply and cap sheets installed over an approved substrate.

beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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Three-Ply Hybrid 350 Cap



System Configurations

M3-XHH (2-500, 350) **M3-XIH** (2-506, 350)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following):

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs. Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

One (1) ply of **350** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 167 lbs. to 169 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** section.

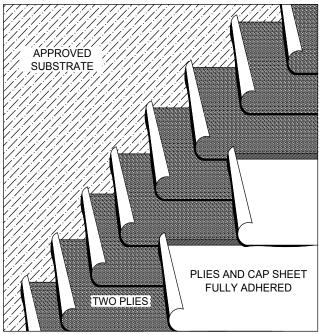
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install ply sheets so 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. Half-lap on sides, 6" on the ends, and turn up all cant strips. Broom the plies to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the ply sheets and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets to top of cant or above. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6"



Three-ply (3) roofing system with conventional ply sheets and SBS-modified cap sheet installed over an approved substrate.

beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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M3-AHA (515, 500, 502) M3-AIA (515, 506, 502) M3-BHA (501, 500, 502) M3-BIA (501, 506, 502)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

One (1) ply of **500** 7 lbs.
One (1) ply of **506** 8 lbs.

Cap Sheet:

One (1) ply of **502** 75 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 182 lbs. to 188 lbs.

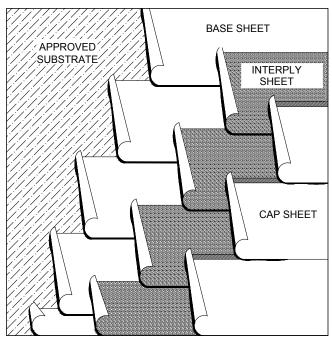
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General Requirements section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Three-ply (3) roofing system with conventional or SBS-modified base sheets, conventional plies, and conventional cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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Three-Ply Hybrid 350 Cap



System Configurations

M3-AHH (515, 500, 350) M3-AIH (515, 506, 350)

M3-BHH (501, 500, 350)

M3-BIH (501, 506, 350)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of 515 25 lbs. One (1) ply of 501 30 lbs.

Ply Sheet Options (choose one of the following):

One (1) ply of 500 7 lbs. One (1) ply of 506 8 lbs.

Cap Sheet:

One (1) ply of 350 78 lbs

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 185 lbs. to 191 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 section.

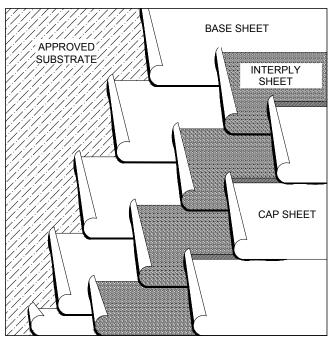
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and



Three-ply (3) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

follow with inter-ply 2" above top of cant. Install a stripping/ backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

M3-AHB (515, 500, 601)

M3-AIB (515, 506, 601) **M3-BHB** (501, 500, 601)

M3-BIB (501, 506, 601)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

One (1) ply of **500** 7 lbs.
One (1) ply of **506** 8 lbs.

Cap Sheet:

One (1) ply of **601** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 207 lbs. to 213 lbs.

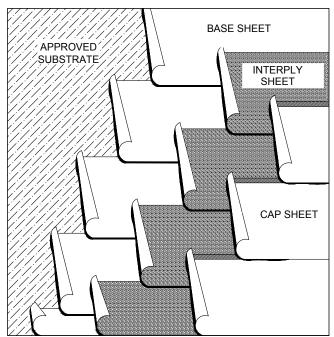
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General Requirements section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Three-ply (3) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Three-Ply Hybrid 625 Cap



System Configurations

M3-AHC (515, 500, 625) **M3-AIC** (515, 506, 625)

M3-BHC (501, 500, 625) **M3-BIC** (501, 506, 625)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

One (1) ply of **500** 7 lbs.
One (1) ply of **506** 8 lbs.

Cap Sheet:

One (1) ply of **625** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 207 lbs. to 213 lbs.

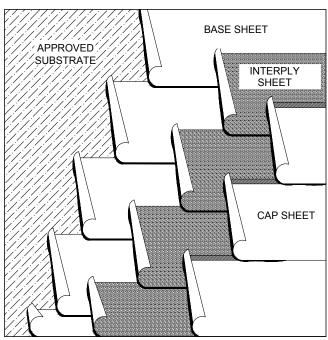
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: **General Requirements**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

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Three-ply (3) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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R3-ACR (515, 602, 626G) **R3-BCR** (501, 602, 626G)

Materials per 100 sq ft of roof area:

Base Sheet options (choose one):
One (1) ply of **515**One (1) ply of **501**Nominal Weights
25 lbs.
30 lbs.

Ply Sheet:

One (1) ply of **602** 60 lbs.

Cap Sheet:

Insulation:

One (1) ply of **626G** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III or IV 25 lbs. per ply/per sq.

Specified

Nominal weight per square (-insulation): 260 lbs. to 265 lbs.

Roof Deck and General Information: Roof deck must be clean, dry, smooth, structurally sound, and drainage incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: *General Requirements* section.

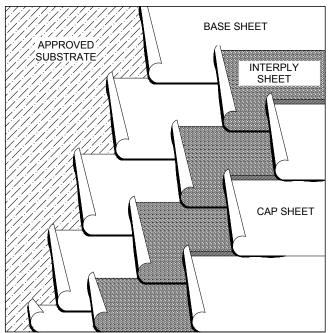
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" are to be installed in a strapped fashion using ASTM D312 Type IV asphalt and wood nailers/insulation stops to facilitate back-nailing of the roofing system. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and interply sheets so 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. Side laps should be a minimum of 2" with end laps, 6". Turn up all cant strips. Broom each layer to ensure full adhesion between the membranes and substrate. Install cap sheet so water runs over or parallel to, but never against the laps. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet and embed in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Ensure full adhesion between it and the course below. Turn up all cant strips and down roof edges. Side laps should be 4" with end laps, 6". Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the inclines out of valleys.

Flashings: Install primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the interply and strip-off flanges. Install cap sheet once all flanges have been stripped-in.

Base Flashings: Install a cant strip at roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with interply 2" above top of cant. Install stripping/backer ply sheet to vertical surface of wall and fully adhere it to the interply 3" beyond toe of cant. Apply field cap sheet over stripping/backer ply to top of cant. Install base flashing cap



Three-ply (3), hot-mopped roofing system with either a conventional or SBS-modified base sheet and SBS-modified ply and cap sheets installed over an approved substrate. Cap sheet is highly reflective. Ensure offset of membrane courses as shown so laps on laps avoided.

sheet up vertical surface and 6" beyond toe of cant. Terminate base flashing as shown in low slope roofing details of current Malarkey Specifications Manual.

Fire Ratings: This specification carries a Class A rating up to 1" in 12".

Three-Ply Modified 630 Cap



System Configurations M3-UTT (610, 620, 630) M3-TTT (620, 620, 630) Materials per 100 sq ft of roof area: Base Sheet options (choose one): **Nominal Weights** One (1) ply of 610 (self-adhered) 85 lbs. 76 lbs. One (1) ply of 620 Ply Sheet: One (1) ply of 620 76 lbs. Cap Sheet: One (1) ply of **630** 107 lbs 620, 630 attachment options Hot Asphalt, Cold Process or Torch (dependent on application) Insulation: Specified Nominal weight per square (-insulation): 259 lbs. to 334 lbs.

Roof Deck and General Information: Roof deck must be clean, dry, smooth, structurally sound, and drainage incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** section.

Special Requirements: Slopes greater than 1" in 12" are to be installed in a strapped fashion and back-nailed. If sheets are *torch applied*, then slopes greater than 3" in 12" should be installed in a strapped fashion and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

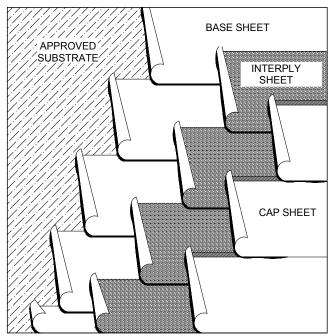
Application: *Universal Instructions* - Install all sheets so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut rolls into manageable lengths and allow to relax. Turn up all cant strips. At end laps for self-adhering and torch-applied membranes, cut opposing diagonal corners at 45° angles, the underlying end in its down-side corner and the overlapping end in its high-side corner. The width of the cuts should match the width of the selvage overlap and therefore be covered by application of succeeding courses. Width of end laps, 6". Use a hand roller to ensure adhesion. Stagger end laps in successive courses a minimum of 3'.

Application: Self-Adhering (610 only) - Position base sheet and fold it back on itself, lengthwise; remove release film on that side, and return sheet to deck. Press securely into place and repeat with other half. Side laps minimum 3" with end laps, 6". Use a weighted roller to ensure adhesion; work outward from the center to eliminate wrinkles and buckles.

Application: *Hot Mopped* - Cut membrane sheets in lengths 1/3 to 1/2 the total length of the rolls and allow to relax prior to installation. Install in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Ensure full adhesion between it and the course below. Side laps should be 4" with end laps, 6". Stagger end laps in successive courses a minimum of 3'.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Application: *Torch Applied* - Unroll rolls completely and set into position. Re-roll a min. of 6' and no more than 16', making sure the sheets remain aligned correctly. Side laps should be 4" with end laps, 6". Use a propane torch and



Three-ply (3) roofing system with SBS-modified base, ply, and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

while standing in front of the roll, apply the flame split 75% on the roll, 25% on the sheet below to the exposed outer surface of the membrane's underside in a steady, L-shape motion, melting 1 mm of compound on back of the sheet to achieve full adhesion. Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the inclines out of valleys.

Flashings: Adhesive Application - Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the base sheet and strip-off flanges. Install the ply and cap sheets after all flanges have been stripped-in.

Flashings: *Torch Applied* - Install all primed metal flashings on top of the heated, softened base sheet or in a bed of mastic, and secure (sheet metal only). Strip-off flanges and torch in place over the flashing, extending a minimum of 6" beyond the outside edge of the flange.

Base Flashings: Install a cant strip at roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install stripping/backer ply sheet to vertical surface of wall and fully adhere it to the inter-ply 3" beyond toe of cant. Apply field cap sheet over stripping/backer ply to top of cant. Install base flashing cap sheet up vertical surface and 6" beyond toe of cant. Terminate base flashing as shown in low slope roofing details of current Malarkey Specifications Manual.

Fire Ratings: This specification carries a Class A rating up to 1" in 12" depending on configuration.

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, ASTM D5849, and FM 4470, "Resistance to Foot Traffic Test."

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Insulation:

System Configurations M3-BBC (501, 501, 625) M3-CBC (602, 501, 625) M3-BCC (501, 602, 625) M3-CHC (602, 500, 625) M3-CCC (602, 602, 625) Materials per 100 sq ft of roof area (nominal weights): Base/Ply Sheet Options (see configurations above): 500 7 lbs. 501 30 lbs. 602 60 lbs. Cap Sheet: One (1) ply of 625 100 lbs. Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Specified

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** section.

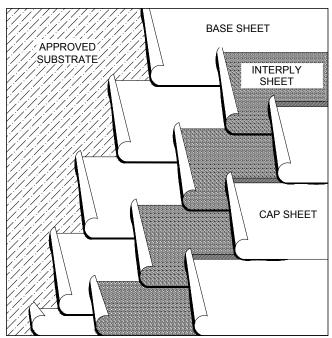
Nominal weight per square (-insulation): 235 lbs. to 295 lbs.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ to to to 1/3 to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process – Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.



Three-ply (3) roofing system with conventional or SBS-modified base and ply sheets, and SBS-modified cap sheet installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".

Three-Ply Modified 350 Cap



System Configurations

M3-BBH (501, 501, 350) M3-CBH (602, 501, 350)

M3-BCH (501, 602, 350)

Materials per 100 sq ft of roof area (nominal weights):

Base/Ply Sheet Options (see configurations above):

501 30 lbs. 602 60 lbs.

Cap Sheet:

One (1) ply of **350** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation:

Specified

Nominal weight per square (-insulation): 213 lbs. to 243 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 section.

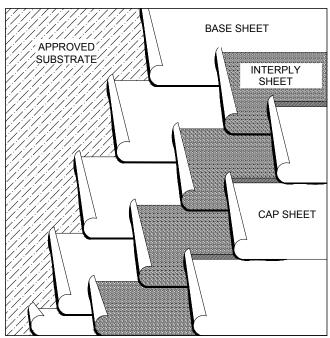
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Three-ply (3) roofing system with SBS-modified base, ply, and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/ backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".



M3-BBB (501, 501, 601) M3-BCB (501, 602, 601) M3-CBB (602, 501, 601)

Materials per 100 sq ft of roof area (nominal weights):

Base/Ply Sheet Options (see configurations above):

501 30 lbs. 602 60 lbs.

Cap Sheet:

Insulation:

100 lbs. One (1) ply of 601

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Specified

Nominal weight per square (-insulation): 235 lbs. to 265 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 section.

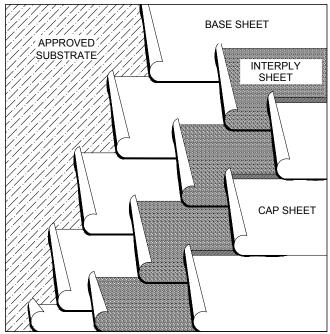
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and ply sheets so 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. Lap a minimum of 2" on sides, 6" on the ends, and turn up all cant strips. Broom the base and inter-ply to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-ply and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Three-ply (3) roofing system with SBS-modified base, ply, and cap sheets installed over an approved substrate. Ensure offset of membrane courses as shown so laps on laps avoided.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-ply 2" above top of cant. Install a stripping/ backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1/2" in 12".

Three-Ply Conventional Gravel



System Configurations

G3-XHX (3-500, gravel) **G3-XIX** (3-506, gravel)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following):

Three (3) plies of 500 7 lbs. per ply/21 lbs. Three (3) plies of 506 8 lbs. per ply/ 24 lbs.

Low Slope Roofing System Specifications

ASTM D1863 commercial grade, washed, opaque gravel

400 lbs.

ASTM D312 Type III or IV Adhesive for roofing plies:

> 25 lbs. per ply/per sq. 60 lbs. flood coat surfacing

Insulation: Specified

Nominal weight per square (-insulation): 556 lbs. to 559 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 section.

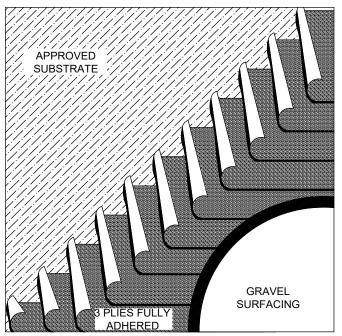
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install ply sheets so 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. Side laps are as shown above, 6" on the ends, and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom the ply sheets to ensure full adhesion between the sheets and substrate. Apply gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the ply sheets and strip-off flanges. Apply surfacing after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets from the field to top of cant or above. Install stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Apply surfacing.



Three-ply (3) roofing system with conventional ply sheets and gravel surfacing over an approved substrate.

Fire Ratings: The specification carries a Class 'A' rating up to 3" in 12".



Three-Ply Modified Cold-Applied Gravel

System Configuration

G3-XBX (3-501, gravel)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheets:

Three (3) plies of **501** 30 lbs. per ply/ 90 lbs.

Surfacing:

ASTM D1863 commercial grade, washed, opaque gravel

400 lbs.

Adhesive for roofing plies: ASTM D312 Type III or IV

25 lbs. per ply/per sq. 35 lbs. flood coat surfacing

Insulation: Specified

Nominal weight per square (-insulation): 600 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 section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

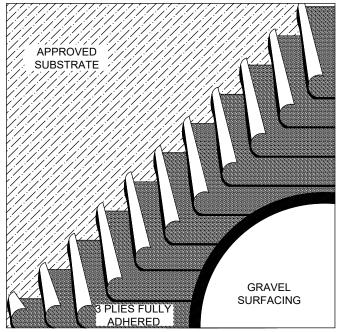
Application: *Hot Mopped* – Install ply sheets so water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of hot asphalt at the nominal rate of 25 lbs. per ply, per square. Side laps are as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom the ply sheets to ensure full adhesion between the sheets and substrate. Apply gravel surfacing in a flood coat of asphalt applied at the nominal rate of 35 lbs. per square.

*Cold Process – Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the ply sheets and strip-off flanges. Apply surfacing after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets from the field to top of cant or above. Install stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the



Three-ply (3) roofing system with SBS-modified ply sheets and gravel surfacing installed over an approved substrate.

stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Apply surfacing.

Fire Ratings: The specification carries a Class 'A' rating up to 1/4" in 12".

Four-Ply Hybrid 524G RCap™ Plus Cap



System Configurations

R4-AHS (515, 2-500 Type IV, 524G) **R4-AIS** (515, 2-506 Type IV, 524G)

R4-BHS (501, 2-500 Type IV, 524G)

R4-BIS (501, 2-506 Type IV, 524G)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet: (choose one of the following)

One (1) ply of **515** 25 lbs.

-OR-

One (1) ply of **501** 30 lbs.

Ply Sheet Options: (choose one of the following)

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs.

-OR-

Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

One (1) ply of **524G RCap Plus** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 217 lbs. to 224 lbs.

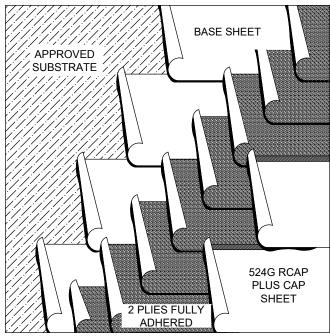
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: *General Requirements*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

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap base sheet a minimum of 2" on sides, half-lap the interplies, 6" on the ends, and turn up all cant strips. Broom the base and inter-plies to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional ply sheets, and a highly-reflective, SBS-modified cap sheet installed over an approved substrate.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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Four-Ply Modified 524G RCap[™] Plus Cap

System Configuration R4-BBS (501, 2-501, 524G)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet:

One (1) ply of **501** 30 lbs.

Ply Sheets:

Two (2) plies of **501** 30 lbs. per ply/ 60 lbs.

Cap Sheet:

One (1) ply of **524G RCap Plus** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 268 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** section.

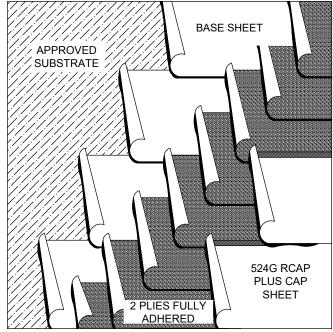
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, half-lap the inter-plies, end laps 6", and turn up all cant strips. Broom the base and inter-plies to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ the total length of the roll and allow to relax prior to installation. Position for installation and embed in a uniform mopping of asphalt at a rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field



Four-ply (4) roofing system with SBS-modified base and ply sheets, and a highly-reflective, SBS-modified cap sheet installed over an approved substrate.

3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Four-Ply Conventional 502 Cap



System Configurations

M4-XHA (3-500, 502) **M4-XIA** (3-506, 502)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following)

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs. Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Cap Sheet:

Insulation:

One (1) ply of **502** 75 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Specified

Nominal weight per square (-insulation): 196 lbs. to 199 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* section.

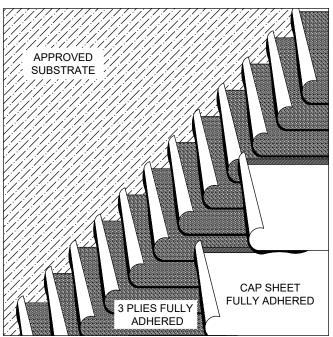
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install ply sheets so 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. Side laps are as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides and 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Apply cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets from field to top of cant. Install stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6"



Four-ply (4) roofing system with conventional plies and cap sheet installed over an approved substrate.

beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

M4-AHA (515, 2-500, 502) **M4-AIA** (515, 2-506, 502)

M4-BHA (501, 2-500, 502)

M4-BIA (501, 2-506, 502)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following)

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following)

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs. Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

One (1) ply of **502** 75 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified Nominal weight per square (-insulation): 214 lbs. to 221 lbs.

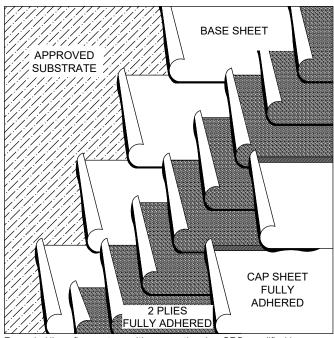
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General Requirements section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, halflap the inter-plies, end laps 6", and turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional ply sheets, and conventional cap sheet installed over an approved substrate.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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Four-Ply Hybrid 350 Cap



System Configurations

M4-XHH (3-500 Type IV, 350) M4-XIH (3-506 Type VI, 350)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following)

Three (3) plies of 500 7 lbs. per ply/21 lbs. Three (3) plies of 506 8 lbs. per ply/ 24 lbs.

Cap Sheet:

One (1) ply of 350 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Specified

Insulation: Nominal weight per square (-insulation): 199 lbs. to 202 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 section.

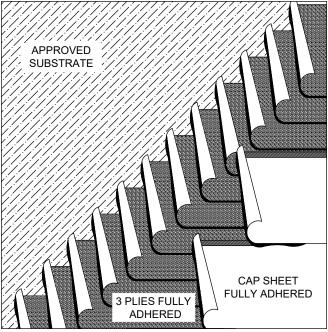
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install ply sheets so 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. Side laps are as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with a layer of Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply ply sheets from field to top of cant. Install stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten



Four-ply (4) roofing system with conventional ply sheets and SBS-modified cap sheet installed over an approved substrate.

the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

M4-AHH (515, 2-500, 350) M4-AIH (515, 2-506, 350)

M4-BHH (501, 2-500, 350)

M4-BIH (501, 2-506, 350)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following)

One (1) ply of 515 25 lbs. One (1) ply of 501 30 lbs.

Ply Sheet Options (choose one of the following):

Two (2) plies of 500 7 lbs. per ply/ 14 lbs. Two (2) plies of 506 8 lbs. per ply/ 16 lbs.

Cap Sheet:

Insulation:

One (1) ply of 350 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Specified Nominal weight per square (-insulation): 217 lbs. to 224 lbs.

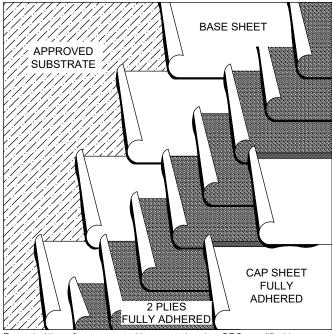
Roof Deck and General Information: Roof deck must be clean, dry, smooth, and structurally sound to receive the new roofing system. Drainage must be incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: General Requirements section.

Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, halflap the inter-plies, end laps 6", and turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/ backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Four-Ply Hybrid 524G Cap



System Configuration

R4-XHS (3-500 Type IV, 524G) **R4-XIS** (3-506 Type VI, 524G)

Materials per 100 sq ft of roof area:

Ply Sheets (choose one of the following): Nominal Weights
Three (3) plies of 500 7 lbs. per ply/ 21 lbs.
Three (3) plies of 506 8 lbs. per ply/ 24 lbs.

Cap Sheet:

One (1) ply of **524G** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 199 lbs. to 202 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** section.

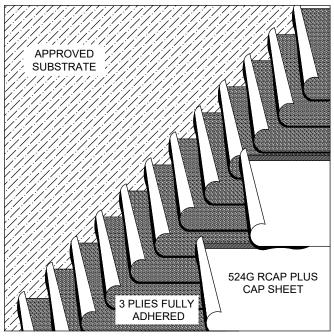
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" are to be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install inter-plies so water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of asphalt at the nominal rate of 25 lbs. per ply, per square. Side laps as shown above, end laps 6", and turn up all cant strips. Broom all plies to ensure complete contact between the asphalt and bottom of the sheets. Install cap sheet so water runs over or parallel to, but never against the laps. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax. Position cap sheet and embed in a uniform mopping of asphalt at the nominal rate of 25 lbs. per square. Ensure full contact between the asphalt and bottom of the cap sheet. Side laps should be 2" with end laps, 6". Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey ply sheet that extends at least 12" up the inclines out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install the cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field inter-plies to the top of the cant or above. Install a stripping/backer ply sheet to the vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to the top of the cant. Install base flashing cap sheet up the vertical surface a minimum of 8" above the field of the



Four-ply (4), hot-mopped roofing system with conventional ply sheets and a highly-reflective, granule-surfaced, modified cap sheet installed over an approved substrate.

roof and to the field cap sheet 6" beyond the toe of the cant. Mechanically fasten the top of the base flashing and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: This specification carries a Class A rating up to ¼" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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M4-AHB (515, 2-500, 601)

M4-AIB (515, 2-506, 601)

M4-BHB (501, 2-500, 601) **M4-BIB** (501, 2-506, 601)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following)

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs. Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

One (1) ply of **601** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified Nominal weight per square (-insulation): 239 lbs. to 246 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** section.

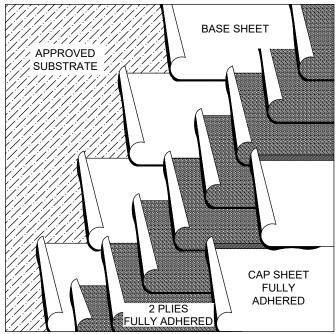
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base and ply sheets so 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. Lap base sheet a minimum of 2" on sides, half-lap the inter-plies, 6" on the ends, and turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to ½ the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate.

backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specific88ation carries a Class 'A' rating up to 2" in 12".

Four-Ply Hybrid 601 Cap



System Configurations

M4-XHB (3-500 Type IV, 601) **M4-XIB** (3-506 Type VI, 601) **M4-XBB** (3-501, 601)

Materials per 100 sq ft of roof area:

Ply Sheets (choose one of the following): Nominal Weights
Three (3) plies of 500 7 lbs. per ply/ 21 lbs.
Three (3) plies of 506 8 lbs. per ply/ 24 lbs.
Three (3) plies of 501 30 lbs. per ply/ 90 lbs.

Cap Sheet:

One (1) ply of **601** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 221 lbs. to 290 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* section.

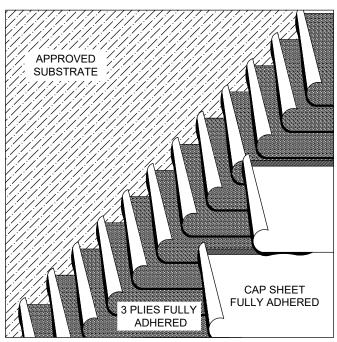
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" are to be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install ply sheets so 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. Side laps are as shown above, end laps 6", and end laps a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides and 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey ply sheet that extends at least 12" up the inclines out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install the cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field plies to the top of the cant or above. Install a stripping/backer ply sheet to the vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to the



Four-ply (4), hot-mopped roofing system with either conventional or modified ply sheets and a granule-surfaced, modified cap sheet installed over an approved substrate.

top of the cant. Install base flashing cap sheet up the vertical surface a minimum of 8" above the field of the roof and to the field cap sheet 6" beyond the toe of the cant. Mechanically fasten the top of the base flashing and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: This specification carries a Class A rating up to ¼" in 12".

M4-AHC (515, 2-500 type IV, 625) **M4-AIC** (515, 2-506 type VI, 625) **M4-BHC** (501, 2-500 type IV, 625) **M4-BIC** (501, 2-506 type VI, 625)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following)

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Two (2) plies of **500** 7 lbs. per ply/ 14 lbs. Two (2) plies of **506** 8 lbs. per ply/ 16 lbs.

Cap Sheet:

One (1) ply of **625** 100 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 239 lbs. to 246 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** section.

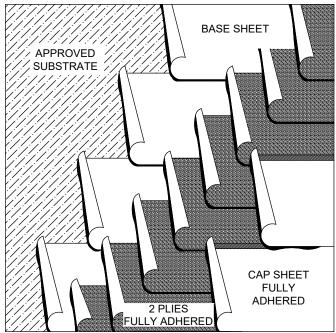
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, halflap the inter-plies, end laps 6", and turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional plies, and premium, SBS-modified cap sheet installed over an approved substrate.

backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".

Four-Ply Modified 601 Cap



System Configurations

M4-BBB (501, 2-501, 601) M4-BCB (501, 2-602, 601)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet:

One (1) ply of 501 30 lbs.

Ply Sheet Options (choose one of the following):

Two (2) plies of 501 30 lbs. per ply/ 60 lbs. Two (2) plies of 602 60 lbs. per ply/ 120 lbs.

Cap Sheet:

100 lbs. One (1) ply of 601

ASTM D312 Type III, or IV Adhesive for roofing plies: 25 lbs. per ply/per sq.

Specified

Insulation: Nominal weight per square (-insulation): 290 lbs. to 351 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 section.

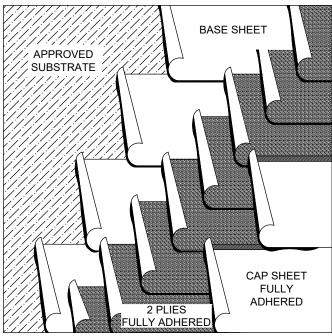
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: General Requirements / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped - Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, halflap the inter-plies, end laps 6", and turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install cap sheet so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut cap to 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 4" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

*Cold Process - Refer to Malarkey Specification Manual / Low Slope Roofing Installation Instructions located in Subsections: Base Sheet Attachment Using Hot Asphalt & Cold Adhesive, Inter-ply Hot/Cold Adhesive Attachment, and Cap Sheet Hot/Cold Adhesive Attachment.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.



Four-ply (4) roofing system with SBS-modified base, ply, and cap sheets installed over an approved substrate.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/ backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 1" in 12".



M4-UTT (610, 2-620, 630)

Materials per 100 sq ft of roof area:

Base Sheet: Nominal Weights
One (1) ply of 610 (self-adhered) 85 lbs.

Ply Sheet:

Two (2) plies of **620** 76 lbs. per ply/ 152 lbs.

Cap Sheet:

One (1) ply of **630** 107 lbs.

Adhesive for inter-plies and cap Torch Applied

Insulation: Specified

Nominal weight per square (-insulation): 344 lbs.

Roof Deck and General Information: Roof deck must be clean, dry, smooth, structurally sound, and drainage incorporated in the design to prevent ponding water. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** section.

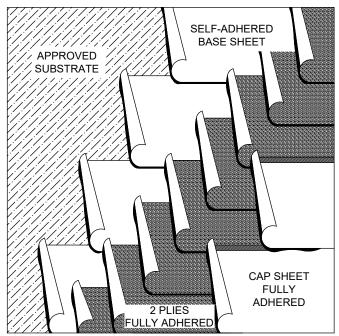
Special Requirements: Slopes greater than 1" in 12" are to be installed in a strapped fashion and back-nailed. If sheets are *torch applied*, then slopes greater than 3" in 12" should be installed in a strapped fashion and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Universal Instructions* - Install all sheets so water runs over (shingle fashion) or parallel to (strapped), but never against the laps. Cut rolls into manageable lengths and allow to relax. At end laps for self-adhering and torch-applied membranes, cut opposing diagonal corners at 45° angles, the underlying end in its down-side corner and the overlapping end in its high-side corner. The width of the cuts should match the width of the selvage overlap and therefore be covered by application of succeeding courses. Width of end laps, 6". Use a hand roller to ensure adhesion at these T-joints. Stagger end laps in successive courses a minimum of 3'.

Application: *Self-Adhering (610 only)* - Position base sheet and fold it back on itself, lengthwise; remove release film on that side, and return sheet to deck. Press securely into place and repeat with other half. Side laps minimum 3" with end laps, 6". Following application of each course, use a weighted roller over the surface to ensure adhesion; work outward from the center to eliminate wrinkles and buckles.

Application: Torch Applied - Unroll inter-ply and cap sheet rolls completely and set into position. Re-roll a min. of 6' and no more than 16', making sure the sheets remain aligned correctly. Side laps should be 4" with end laps, 6". Use a propane torch and while standing in front of the roll, apply the flame split 75% on the roll, 25% on the sheet below to the exposed outer surface of the membrane's underside in a steady, L-shape motion, melting 1 mm of compound on back of the sheet to achieve a min. ¼" compound flow-out at all side and end laps. Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to installation of the roofing system, line valleys and waterways with a layer of Malarkey 610 that extends at least 12" up the inclines out of valleys.



Four-ply (4) roofing system with SBS-modified base, inter-plies, and cap sheet installed over an approved substrate.

Flashings: *Torch Applied* - Install all primed metal flashings on top of the heated, softened 620 or in a bed of mastic, and secure (sheet metal only). Strip-off flanges. Install 630 after all flanges have been stripped-in.

Base Flashing: 610/630

Base Flashing Application: Install a cant strip at roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install stripping/backer ply sheet to vertical surface of wall a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet over stripping/backer ply to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: This specification carries a Class A up to 1" in 12" using a propane torch.

Four-Ply Conventional Gravel



System Configuration

G4-XHX (4-500, gravel) **G4-XIX** (4-506, gravel)

Materials per 100 sq ft of roof area (nominal weights):

Ply Sheet Options (choose one of the following):

Four (4) plies of **500** 7 lbs. per ply/ 28 lbs. Four (4) plies of **506** 8 lbs. per ply/ 32 lbs.

Surfacing:

ASTM D1863 commercial grade, washed, opaque gravel

400 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq. 60 lbs. flood coat for surfacing

Insulation: Specified

Nominal weight per square (-insulation): 588 lbs. to 592 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* section.

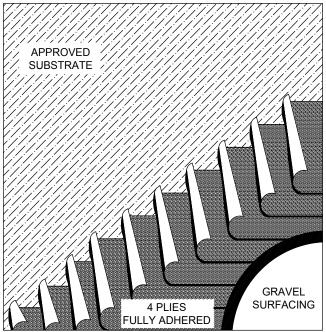
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install ply sheets so 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. Side laps are as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom ply sheets to ensure full adhesion between the sheets and substrate. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey ply sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install surfacing once all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field ply sheets to top of cant and above. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Install field surfacing.



Four-ply (4) roofing system with conventional ply sheets and gravel surfacing over an approved substrate.

Fire Ratings: The specification carries a Class 'A' rating up to 3" in 12".

G4-AHX (515, 3-500 Type IV, gravel) **G4-AIX** (515, 3-506 Type VI, gravel)

Materials per 100 sq ft of roof area:

Base Sheet: Nominal Weights
One (1) ply of 515
25 lbs.

Ply Sheets (choose one of the following):

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs. Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Surfacing:

ASTM D1863 commercial grade, washed, opaque gravel

400 lbs.

Adhesive for roofing plies: ASTM D312 Type III or IV

25 lbs. per ply/per sq.

60 lbs. flood coat for surfacing

Insulation: Specified Nominal weight per square (-insulation): 581 lbs. to 609 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** section.

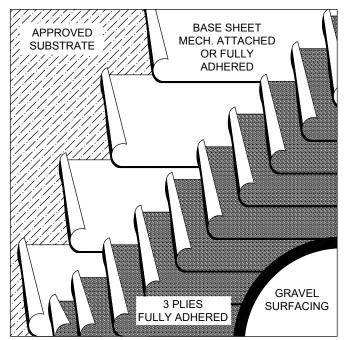
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" are to be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: *Hot Mopped* – Install base sheet and interplies so water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of asphalt at the nominal rate of 25 lbs. per ply, per square. Base sheet side laps are minimum 2", interplies as shown above, end laps 6", and turn up all cant strips. Broom the surface to ensure complete contact between the asphalt and membranes. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the inclines out of valleys and waterways.

Flashings: Install primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install surfacing once all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field base sheet to the top of the cant and follow with the inter-plies to the top of the cant or above. Install a stripping/backer ply sheet to the vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3"



Four-ply (4), hot-mopped roofing system with conventional base/ply sheets, flood coat, and gravel surfacing over an approved substrate.

beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Install field surfacing.

Fire Ratings: This specification carries a Class A rating up to 3" in 12".

Malarkey Roofing Products

Four-Ply Conventional Emulsion

System Configurations

S4-AHX (515, 3-500, emulsion)

S4-BHX (515, 3-506, emulsion)

S4-AIX (501, 3-500, emulsion) **S4-BIX** (501, 3-506, emulsion)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs. Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Surfacing:

Emulsion roof coating: 3-5 gallons

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified

Nominal weight per square (-insulation): 172 lbs. to 197 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** section.

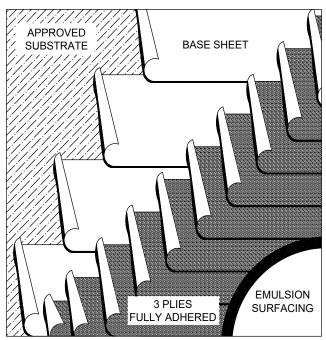
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn base sheet and interplies up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Allow the roof to weather (30 to 90 days, based on the coating manufacturer's requirements), clean and coat as specified.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install roof coating after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up



Four-ply (4) roofing system with conventional or SBS-modified base sheets, conventional plies, and emulsion surfacing over an approved substrate.

the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Install roof coating.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".



Five-Ply Hybrid 524G RCap™ Plus Cap

System Configurations

R5-AHS (515, 3-500 Type IV, 524G) **R5-AIS** (515, 3-506 Type VI, 524G) **R5-BHS** (501, 3-500 Type IV, 524G) **R5-BIS** (501, 3-506 Type VI, 524G)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs.

-OR-

One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs.

-OR-

Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Cap Sheet:

Insulation:

One (1) ply of **524G RCap Plus** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Specified

Nominal weight per square (-insulation): 249 lbs. to 257 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** section.

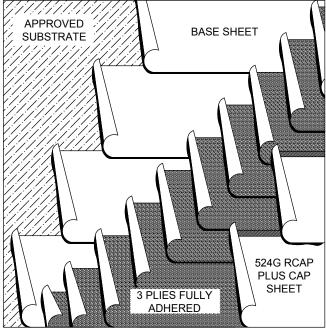
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap base sheet a minimum of 2" on sides, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and



Five-ply (5) roofing system with conventional or SBS-modified base sheets, conventional plies, and reflective-coated, SBS-modified cap sheet installed over an approved substrate.

follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Five-Ply Hybrid 502 Cap



System Configurations

M5-AHA (515, 3-500, 502) **M5-AIA** (515, 3-506, 502)

M5-BHA (501, 3-500, 502)

M5-BIA (501, 3-506, 502)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515**One (1) ply of **501**25 lbs.
30 lbs.

Ply Sheet Options (choose one of the following):

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs. Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Cap Sheet:

One (1) Ply of **502** 75 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation:

Specified

Nominal weight per square (-insulation): 246 lbs. to 254 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** section.

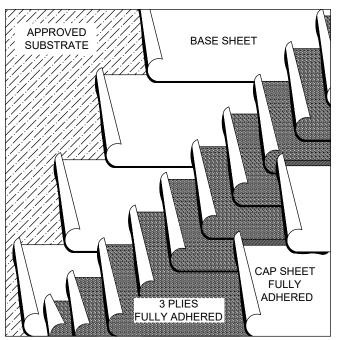
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn base sheet and interplies up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Cut cap in lengths ½ the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/



Five-ply (5) roofing system with conventional or SBS-modified base sheets, and conventional plies and cap sheet installed over an approved substrate.

backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

M5-AHH (515, 3-500, 350) **M5-AIH** (515, 3-506, 350) **M5-BHH** (501, 3-500, 350)

M5-BIH (501, 3-506, 350)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Three (3) plies of **500** 7 lbs. per ply/ 21 lbs. Three (3) plies of **506** 8 lbs. per ply/ 24 lbs.

Cap Sheet:

One (1) Ply of **350** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

Insulation: Specified Nominal weight per square (-insulation): 249 lbs. to 257 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* section.

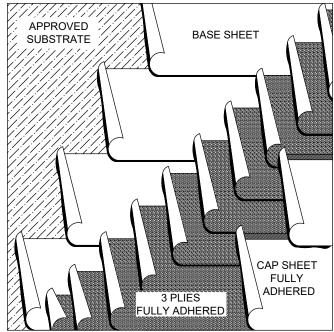
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap base sheet a minimum of 2" on sides, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax prior to installation. Position cap sheet for installation and embed in a uniform mopping of asphalt applied at the rate of 25 lbs. per square. Lap 2" on sides, 6" on the ends. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/



Five-ply (5) roofing system with conventional or SBS-modified base sheets, conventional plies, and SBS-modified cap sheet installed over an approved substrate.

backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to top of cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual.

Fire Ratings: The specification carries a Class 'A' rating up to 2" in 12".

Five-Ply Hybrid 524G Cap



System Configurations

R5-XHS-H (4-500 Type IV, 524G) **R5-XIS-H** (4-506 Type VI, 524G)

Materials per 100 sq ft of roof area:

Ply Sheets (choose one of the following): Nominal Weights
Four (4) plies of 500 7 lbs. per ply/ 28 lbs.
Four (4) plies of 506 8 lbs. per ply/ 32 lbs.

Cap Sheet:

One (1) ply of **524G** 78 lbs.

Adhesive for roofing plies: ASTM D312 Type III or IV

25 lbs. per ply/per sq.

Insulation: Specified
Nominal weight per square (-insulation): 231 lbs. to 235 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 section.

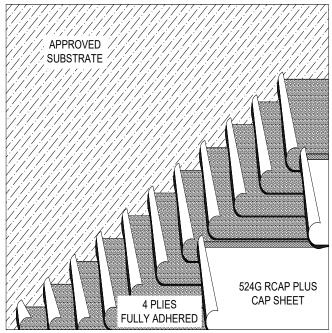
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" are to be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install inter-plies so water runs over (shingle fashion) or parallel to (strapped), but never against the laps in a uniform mopping of asphalt at the nominal rate of 25 lbs. per ply, per square. Side laps are as shown above, end laps 6", and turn up all cant strips. Broom the surface of each ply to ensure complete contact between the asphalt and bottom of the sheets. Install cap sheet so water runs over or parallel to, but never against the laps. Cut cap in lengths 1/3 to 1/2 the total length of the roll and allow to relax. Position cap sheet and embed in a uniform mopping of asphalt at the nominal rate of 25 lbs. per square. Ensure full contact between the asphalt and bottom of the cap sheet. Stagger end laps in successive courses a minimum of 3'.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey ply sheet that extends at least 12" up the inclines out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install the cap sheet after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions (curbs, walls, rooftop supports, etc.). Apply field inter-plies to the top of the cant or above. Install a stripping/backer ply sheet to the vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Apply field cap sheet to the top of the cant. Install base flashing cap sheet up the vertical surface a minimum of 8" above the field of the



Five-ply (5), hot-mopped roofing system with conventional ply sheets and a highly-reflective, granule-surfaced, modified cap sheet installed over an approved substrate.

roof and to the field cap sheet 6" beyond the toe of the cant. Mechanically fasten the top of the base flashing and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Bleed-out can be granulated with 2200R reflective granules.

Fire Ratings: This specification carries a Class A rating up to ½" in 12".

G5-AHX (515, 4-500, gravel) **G5-AIX** (515, 4-506, gravel) **G5-BHX** (501, 4-500, gravel) **G5-BIX** (501, 4-506, gravel)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Four (4) plies of **500** 7 lbs. per ply/ 28 lbs. Four (4) plies of **506** 8 lbs. per ply/ 32 lbs.

Surfacing:

ASTM D1863 commercial grade, washed, opaque gravel

400 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV

25 lbs. per ply/per sq.

60 lbs. flood coat for surfacing

Insulation: Specified

Nominal weight per square (-insulation): 638 lbs. to 647 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** section.

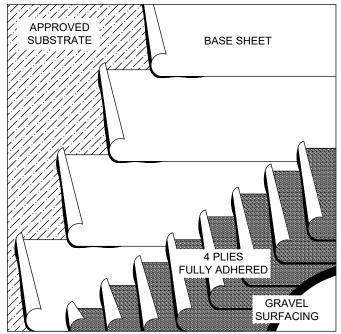
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap a minimum of 2" on sides for the base sheet, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn base sheet and interplies up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Install gravel surfacing in a flood coat of asphalt applied at the nominal rate of 60 lbs. per square.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install surfacing once all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3"



Five-ply (5) roofing system with conventional or SBS-modified base sheets, conventional plies, and gravel surfacing over an approved substrate.

beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Install surfacing.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Five-Ply Hybrid Emulsion



System Configurations

S5-AHX (515, 4-500, emulsion)

S5-AIX (515, 4-506, emulsion)

S5-BHX (501, 4-500, emulsion)

S5-BIX (501, 4-506, emulsionl)

Materials per 100 sq ft of roof area (nominal weights):

Base Sheet Options (choose one of the following):

One (1) ply of **515** 25 lbs. One (1) ply of **501** 30 lbs.

Ply Sheet Options (choose one of the following):

Four (4) plies of **500** 7 lbs. per ply/ 28 lbs. Four (4) plies of **506** 8 lbs. per ply/ 32 lbs.

Adhesive for roofing plies: ASTM D312 Type III, or IV 25 lbs. per ply/per sq.

Surfacing:

Emulsion roof coating 3-5 gallons
Insulation:
Specified

Nominal weight per square (-insulation): 204 lbs. to 230 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* section.

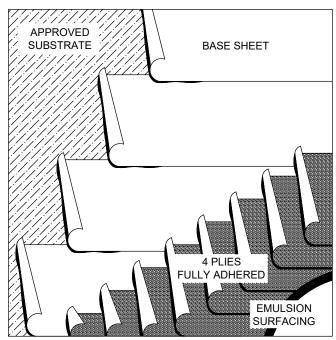
Special Requirements: This roofing system can be installed as illustrated on slopes up to 1" in 12". Slopes greater than 1" in 12" should be installed in a strapped fashion using ASTM D312 Type IV asphalt and back-nailed. For more information, please refer to the current Malarkey Specification Manual: **General Requirements** / Subsection Low Slope Membrane Installations with Slopes of 1" or Greater.

Application: Hot Mopped – Install base and ply sheets so 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. Lap base sheet a minimum of 2" on sides, inter-plies as shown above, end laps 6", and spaced a minimum of 3' apart in subsequent courses. Turn up all cant strips. Broom base/ply sheets to ensure full adhesion between the sheets and substrate. Allow roof to weather (30 to 90 days based on the coating manufacturer's requirements), clean and coat as specified.

Valleys and Waterways: Prior to application of the roofing system, line valleys and waterways with Malarkey base sheet that extends at least 12" up the incline out of valleys.

Flashings: Install all primed metal flashings (lead, metal, scuppers, etc.) in a layer of trowel grade adhesive on top of the inter-plies and strip-off flanges. Install roof coating after all flanges have been stripped-in.

Base Flashings: Install a cant strip at all roof deck-to-vertical transitions. Apply field base sheet to top of cant and follow with inter-plies 2" above top of cant. Install a stripping/backer ply sheet to vertical surface of the wall, a minimum of 8" above the field of the roof, and onto the field 3" beyond the toe of the cant. Install specified cap sheet base flashing 6" beyond the toe of the cant and up



Five-ply (5) roofing system with conventional or SBS-modified base sheets, conventional plies, and emulsion surfacing over an approved substrate.

the vertical surface to the same height as the stripping/backer ply. Mechanically fasten the top of the base flashings and properly counterflash as shown in the low slope roofing details of the current Malarkey Specification Manual. Install roof coating.

Fire Ratings: The specification carries a Class 'A' rating up to ½" in 12".

Performance Requirements: Meets the requirements of ASTM G154, ASTM D3746, and FM 4470, "Resistance to Foot Traffic Test."

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