

MOD BIT

POCKET GUIDE



“The name trusted in roofing since 1906”

Mule Hide Products Modified Bitumen Field Installation Guide
Fully Adhered Systems
July, 2018

Installation Guidelines

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Self-Adhered Modified Bitumen Details

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Installation Guidelines for Mule-Hide Self-Adhered Modified Bitumen (SAMB) Membranes

- A. Store membranes at room temperature whenever possible until just prior to installing the rolls. Materials shall be stored in a tidy and safe manner to avoid exceeding the allowable live load of the storage area. Do not double stack pallets of Mule-Hide self-adhering modified bitumen membrane.
- B. Rolls must be stored on ends. If stored on sides the roll can become distorted (egg shaped) and difficult to install.
- C. The minimum application temperature for Mule-Hide SAMB materials is 40°F and rising for 48 consecutive hours.
 - a. In order to perform properly, Mule-Hide SAMB materials require a minimum application temperature of 40°F and rising for 48 consecutive hours. This applies to the roofing materials and approved substrate. During installation, the membrane must be promptly rolled with a minimum 75# roller. Failure to abide by these requirements may result in poor adhesion or cracking issues.
 - b. During periods of colder weather, the Mule-Hide SAMB materials should always be stored at room temperature (60° to 80° F) until just prior to use. Materials that are not stored at room temperature (or not used within 4 hours) should be restored to room temperature prior to use.
- D. The following insulation/cover boards are acceptable for use with a self-adhering modified bitumen roofing system:
 - a. Mule-Hide Poly ISO 1 or Mule-Hide Poly ISO 2 polyisocyanurate insulation.
 - b. High Density (HD) Wood Fiberboards
 - i. Structodek® HD with Primed Red Coating wood fiberboard by Blue Ridge - may be used as an overlay over other insulations. 1/2-inch thick is the minimum requirement when used as an overlay.
 - ii. HD Wood Fiberboard – Asphalt impregnated, coated six sides.
 - c. DensDeck Prime or Securock – A minimum 1/4" thick layer of DensDeck Prime or Securock Gypsum-Fiber Roof Board may be used as an overlay over an approved insulation or as a thermal barrier over a combustible deck. Priming of DensDeck Prime with Mule-Hide #121 Asphalt Primer is not required (unless contaminants such as gypsum dust are present), but if primer is applied it will enhance adhesion.

- E. Application over new Plywood (minimum 15/32" CDX grade) or new Oriented Strand Board (OSB) as a deck or substrate. On new construction, insulation board or Nail Base is recommended, however adhering directly to new plywood or OSB deck is acceptable if the decking is secured with screws or back-out resistant fasteners. OSB must be installed with the rough side up. Decks attached with common or cement coated nails or staples shall be covered with an approved insulation. Marine grade or "Green treated" plywood are not recommended. Check with local building code requirements as adhering a Self-Adhering Modified Bitumen membrane direct to a wood deck may not meet local fire codes.
- F. When adhering directly to an existing plywood or OSB deck Mule-Hide #121 Asphalt Primer must be used.
- G. After adhering the sheet, it is required that uniform pressure be applied to the entire roll area by using a minimum 75# linoleum roller, water filled lawn roller or similar weighted roller.
 - a. Sheet should be rolled in the short dimension first and long dimension second.
 - b. Care must be taken to prevent injury when rolling membrane, especially on sloped surfaces.
- H. When completing end laps, cut the top corner of the top sheet on a 45-degree angle (start the cut approximately 3 inches in from the top edge and finishing down 3 inches from the top edge), also applying Mule-Hide #271 or #421 Mod Bit sealant to the 45-degree cuts. Align the next sheet so the end of the sheet covers the **FASTLap®**. Remove the protective release film from the **FASTLap®** and apply firm even pressure to the seam area. Thoroughly roll the end lap with a silicone roller. End laps should be staggered approximately 3 feet apart.

Refer to Mule-Hide's full specifications for additional requirements, this guide does not replace the Mule-Hide specifications.

Installation Guidelines for Mule-Hide APP (Torch) Modified Bitumen Membranes

The roofing contractor must ensure that all applicators with the application of heat welded modified bitumens are properly trained and carry a valid Certified Roofing Torch Applicator card (**CERTA**) as evidence of training. All applicators must carry, review, understand and adhere to the safety information and guidelines contained in the “Torch Applied/Dos and Don’ts” as published and supplied by the Asphalt Roofing Manufacturers Association from time to time. After installation, to minimize the risk of fire, applicators should thoroughly inspect all areas of the roof where torches have been used (preferably with thermometers), as well as all return air ducts and cross beams. Applicators should provide a minimum of a four-hour fire watch after torching to minimize the risk of fire. Applicators must keep fire extinguishers readily available on site and must follow all relevant federal, state and local laws and rules applicable to the project and the product(s) being used, particularly those relating to safety and fire prevention.

The following is a list of approved cover boards/thermal barriers that may be used in the Mule-Hide APP Torch MB Roof Systems:

1. **Dens Deck Prime by Georgia-Pacific (GP)** – APP Torch and SA Base Sheets may be applied directly to the surface. Minimum thickness of the Dens-Deck Prime is dependent on local wind conditions. Priming of DensDeck Prime with Mule-Hide #121 Asphalt Primer is not required (unless contaminants such as gypsum dust are present), but if primer is applied it will enhance adhesion. Contact the Mule-Hide Technical Service Department for details regarding acceptable thicknesses and fastening patterns.
2. **Securock Gypsum-Fiber Roof Board by United States Gypsum (USG)** Field priming of this product is not required. APP Torch Base Sheet may be heat-welded (torch applied) directly to the surface.
3. SA Base Sheet may also be applied directly an approved substrate.
4. G2 base Sheet or Mule-Hide Nail Base may also attached with appropriate fasteners directly to the substrate.

When attempting to install Mule-Hide Modified Bitumen membranes to a non-acceptable substrate/insulation, Mule-Hide requires the installation of an acceptable material as an overlay before the installation of an appropriate Mule-Hide base sheet.

Do not install modified bitumen membranes at temperatures lower than 40-45 degrees F wherever practicable. Where work is unavoidable at such temperatures the following precautions be taken:

- A. Take extra care during cold weather installation at ambient temperatures of 40-45 degrees F or below and when ambient temperatures are affected by wind or humidity to ensure adequate bonding is achieved between the surfaces to be joined. This applies to both material seam welds and adhesion of the applied product to the appropriately prepared substrate as the substrate can be affected by such temperature constraints as well.
- B. In addition, unrolling of cold materials under very low ambient conditions must be avoided to prevent the likelihood of unnecessary stress cracking. Rolls must be at least 40 degrees F at the time of application. Should the membrane roll become stiff or difficult to install, it should be replaced with a new roll from the heated storage area.
- C. When installing a Mule-Hide APP Modified System Roof System in cooler weather, it is recommended that liquids such as solvents, sealants, etc. be stored at warmer temperatures (60°F or more but not exceeding 80°F) until just prior to use in order to facilitate the installation.
- D. If using the SA Base Sheet, it must be installed in temperatures above 50°F. Temperatures must be 50° F and rising for 48 consecutive hours.

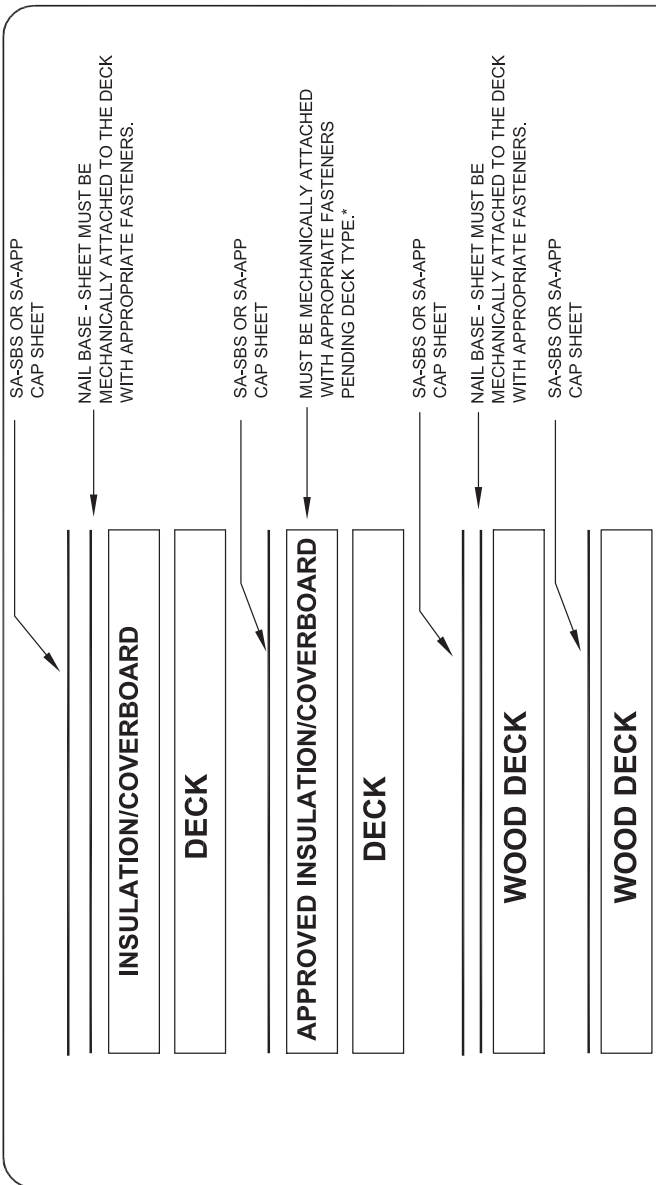
Basic installation guidelines are as follows:

- A. Start at the low point of the roof. The APP Torch Base Sheet is specifically designed to apply direct to approved substrates (cover boards, nailable base sheets, approved deck materials, and overlay materials). Note: some substrates may require priming with Mule-Hide #121 Asphalt Primer.
- B. Application direct to structural concrete, metal, metallic surfaces, smooth BUR, smooth Modified Bitumen and Dens-Deck Prime require the application of Mule-Hide #121 Asphalt Primer prior to application of the APP Torch Base Sheet. Primer must be allowed to dry thoroughly.
- C. Application directly to wood decking is not permitted and requires the installation of an approved base sheet or cover board as a substrate.
- D. When completing end laps, cut the top corner of the top sheet on

a 45-degree angle (start the cut approximately 3 inches in from the top edge and finishing down 3 inches from the top edge). Torch the top sheet down and roll thoroughly with a silicone roller. End laps should be staggered approximately 3 feet apart.

- E. Do not heat the substrate.
- F. Position successive rolls providing a minimum 6" end lap and 3" side lap. Asphalt bleed out shall be 1/4" to 3/8" on all seams.
- G. Laps shall be rolled with a 6" wide roller immediately after heat welding.
- H. APP Torch Base Sheet must be turned up to the top of the cant.

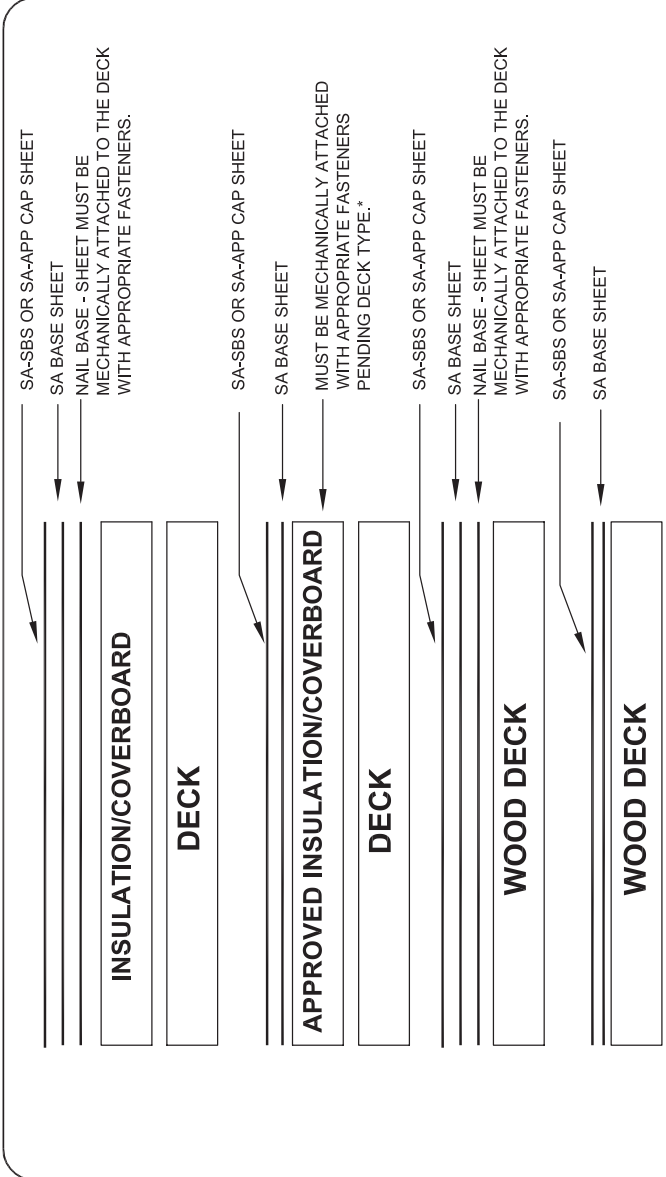
Refer to Mule-Hide's full specifications for additional requirements, this guide does not replace the Mule-Hide specifications.



NOTE: MINIMUM OF ONE PLY CAP SHEET ON VERTICAL SURFACES IS REQUIRED. REFER TO SPECIFIC DETAILS.

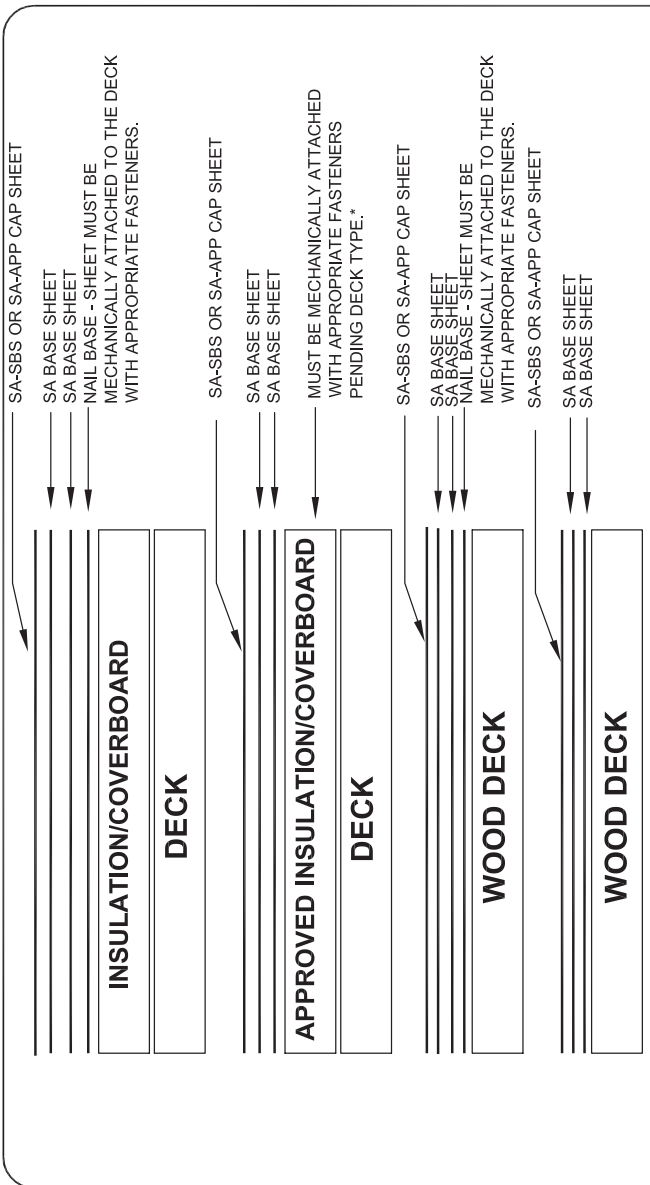
* APPROVED INSULATION MAY BE HOT MOPPED TO PRIMED STRUCTURAL CONCRETE DECK. CONTACT MULE-HIDE FOR SPECIFIC INFORMATION AND REQUIREMENTS.

| | | |
|---|--|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | 10-YEAR MEMBRANE ASSEMBLIES SELF-ADHERING MOD BIT SYSTEMS | DETAIL NO.: MH-MBA-1 |
|---|--|---------------------------------------|



NOTE: MINIMUM 2 PLYES ON VERTICAL SURFACES IS REQUIRED. REFER TO SPECIFIC DETAILS.
 * APPROVED INSULATION MAY BE HOT MOPPED TO PRIMED STRUCTURAL CONCRETE DECK. CONTACT MULE-HIDE FOR SPECIFIC INFORMATION AND REQUIREMENTS.

| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | 15-YEAR MEMBRANE ASSEMBLIES | DETAIL NO.: MH-MBA-2 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

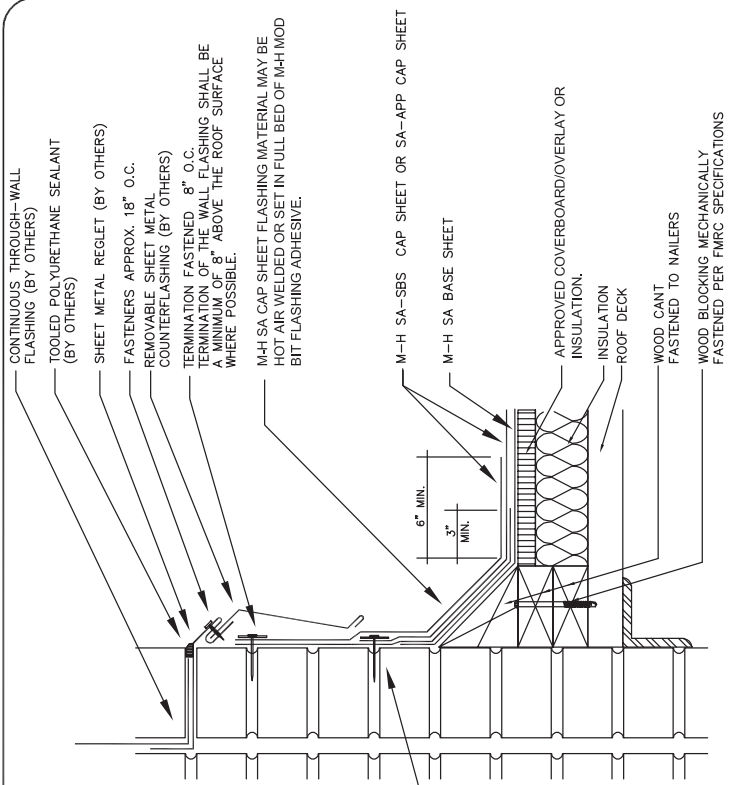


NOTE: MINIMUM OF 2 PLYES REQUIRED FOR VERTICAL SURFACES. REFER TO SPECIFIC DETAILS.
 * APPROVED INSULATION MAY BE HOT MOPPED TO PRIMED STRUCTURAL CONCRETE DECK. CONTACT MULE-HIDE FOR SPECIFIC INFORMATION AND REQUIREMENTS.

| | | |
|---|--|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | 20-YEAR MEMBRANE ASSEMBLIES SELF-ADHERING MOD BIT SYSTEMS | DETAIL NO.: MH-MBA-3 |
|---|--|---------------------------------------|

- NOTES:
1. ACCEPTABLE MASONRY, METAL & WOOD SUBSTRATES MUST BE PRIMED WITH MH # 121 ASPHALT PRIMER PRIOR TO APPLICATION OF SELF-ADHERING MEMBRANES.
 2. FLASHING PLIES INSTALLED OVER GRANULAR FIELD SHEET MUST BE SET IN A FULL BEDDING OF M-H MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED.
 3. ALL WOOD BLOCKING TO BE ATTACHED PER FMRC GUIDELINES.
 4. IF USING A NON-ACCEPTABLE COVERBOARD/OVERLAY OR INSULATION, THE M-H NAIL BASE MUST BE INSTALLED AND MECHANICALLY ATTACHED TO THE DECK PRIOR TO THE INSTALLATION OF EITHER THE SA BASE SHEET OR SA CAP SHEETS.
 5. METAL FLASHING (BY OTHERS) SHALL BE INSTALLED FOLLOWING NRCA & SMACNA GUIDELINES.

EXTENSION OF FIELD PLIES ABOVE TOP OF CANT REQUIRED. 1" ABOVE FOR SA BASE SHEET AND 2" ABOVE FOR SA CAP SHEETS. FIELD CAP SHEET TO BE MECHANICALLY ATTACHED 8" ON CENTER.

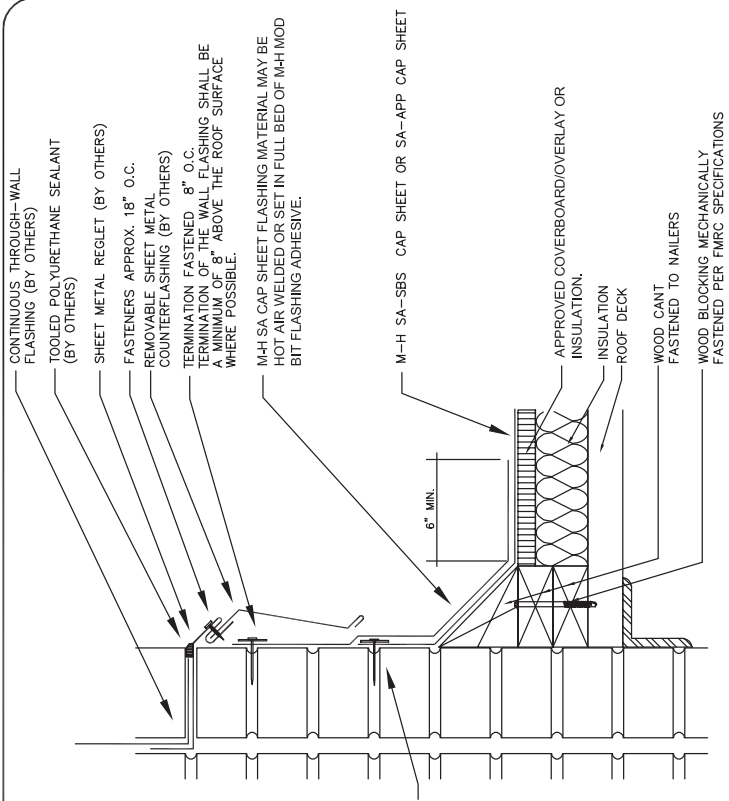


| | | |
|--|---|--|
| <p>MULE-HIDE PRODUCTS CO.,INC. 2003</p> | <p>BASE FLASHING W/CANT - OPTION 1</p> | <p>DETAIL NO.: MH-MB-C1</p> |
| | <p>SELF-ADHERING MOD BIT SYSTEMS</p> | |

NOTES:

1. ACCEPTABLE MASONRY, METAL & WOOD SUBSTRATES MUST BE PRIMED WITH MH # 121 ASPHALT PRIMER PRIOR TO APPLICATION OF SELF-ADHERING MEMBRANES.
2. FLASHING PILES INSTALLED OVER GRANULAR FIELD SHEET MUST BE SET IN A FULL BEDDING OF M-H MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED.
3. ALL WOOD BLOCKING TO BE ATTACHED PER FMRC GUIDELINES.
4. IF USING A NON-ACCEPTABLE COVERBOARD/OVERLAY OR INSULATION, THE M-H NAIL BASE MUST BE INSTALLED AND MECHANICALLY ATTACHED TO THE DECK PRIOR TO THE INSTALLATION OF EITHER THE SA BASE SHEET OR SA CAP SHEETS.
5. METAL FLASHING (BY OTHERS) SHALL BE INSTALLED FOLLOWING NRCA & SMACNA GUIDELINES.

EXTENSION OF FIELD CAP SHEET ABOVE TOP OF CANT REQUIRED, 2" ABOVE FOR SA CAP SHEETS. FIELD CAP SHEET TO BE MECHANICALLY ATTACHED 8" ON CENTER.

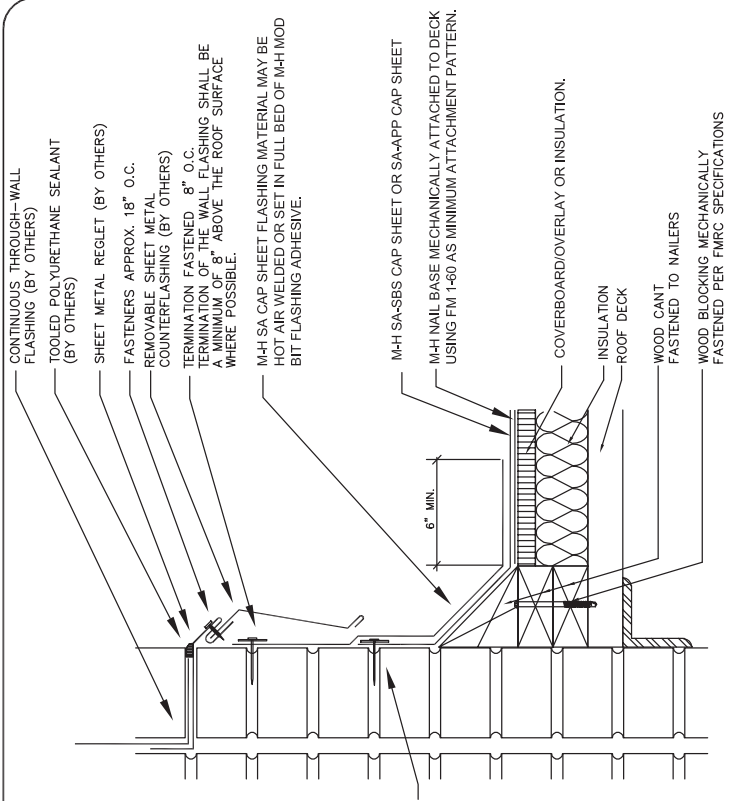


| | | |
|--|---|---|
| <p>MULE-HIDE PRODUCTS CO.,INC. 2003</p> | <p>BASE FLASHING W/CANT - OPTION 2</p> | <p>DETAIL NO.: MH-MB-C2</p> |
| | <p>SELF-ADHERING MOD BIT SYSTEMS</p> | |

NOTES:

1. ACCEPTABLE MASONRY, METAL & WOOD SUBSTRATES MUST BE PRIMED WITH MH # 121 ASPHALT PRIMER PRIOR TO APPLICATION OF SELF-ADHERING MEMBRANES.
2. FLASHING PLIES INSTALLED OVER GRANULAR FIELD SHEET MUST BE SET IN A FULL BEDDING OF M-H MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED.
3. ALL WOOD BLOCKING TO BE ATTACHED PER FMRC GUIDELINES.
4. IF USING A NON-ACCEPTABLE COVERBOARD/OVERLAY OR INSULATION, THE M-H NAIL BASE MUST BE INSTALLED AND MECHANICALLY ATTACHED TO THE DECK PRIOR TO THE INSTALLATION OF EITHER THE SA BASE SHEET OR SA CAP SHEETS.
5. METAL FLASHING (BY OTHERS) SHALL BE INSTALLED FOLLOWING NRCA & SMACNA GUIDELINES.

EXTENSION OF FIELD CAP SHEET ABOVE TOP OF CANT REQUIRED, 2" ABOVE FOR SA CAP SHEETS. FIELD CAP SHEET TO BE MECHANICALLY ATTACHED 8" ON CENTER.



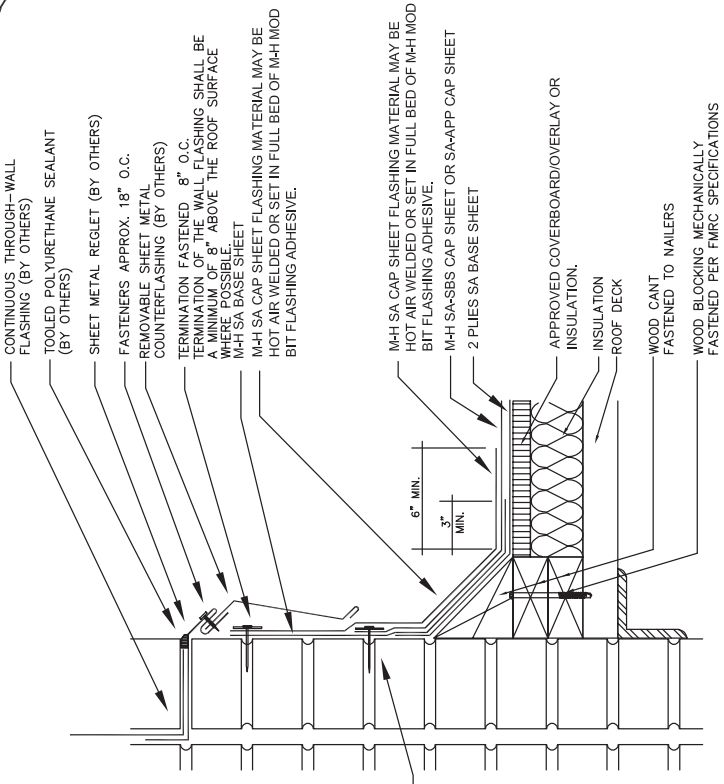
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|---|--|
| <p>BASE FLASHING W/CANT - OPTION 3</p> <p>SELF-ADHERING MOD BIT SYSTEMS</p> | <p>DETAIL NO.:</p> <p>MH-MB-C3</p> |
| | <p>MULE-HIDE</p> <p>PRODUCTS CO.,INC.</p> <p>2003</p> |

NOTES:

1. ACCEPTABLE MASONRY, METAL & WOOD SUBSTRATES MUST BE PRIMED WITH MH# 121 ASPHALT PRIMER PRIOR TO APPLICATION OF SELF-ADHERING MEMBRANES.
2. FLASHING PLIES INSTALLED OVER GRANULAR FIELD SHEET MUST BE SET IN A FULL BEDDING OF M-H MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED.
3. ALL WOOD BLOCKING TO BE ATTACHED PER FMRC GUIDELINES.
4. IF USING A NON-APPROVED COVERBOARD/OVERLAY OR INSULATION, THE M-H NAIL BASE MUST BE INSTALLED AND MECHANICALLY ATTACHED TO THE DECK PRIOR TO THE INSTALLATION OF THE SA BASE SHEETS.
5. METAL FLASHING (BY OTHERS) SHALL BE INSTALLED FOLLOWING NRCA & SWACNA GUIDELINES.

EXTENSION OF FIELD PLIES ABOVE TOP OF CANT REQUIRED. 1" ABOVE FOR SA BASE SHEET AND 2" ABOVE FOR SA CAP SHEETS. FIELD CAP SHEET TO BE MECHANICALLY ATTACHED 8" ON CENTER.

NOTE:
20-YR WARRANTIES REQUIRE 2 PLIES OF SA BASE SHEET ON THE FIELD OF THE ROOF.



CONTINUOUS THROUGH-WALL FLASHING (BY OTHERS)
TOOLED POLYURETHANE SEALANT (BY OTHERS)
SHEET METAL REGLET (BY OTHERS)
FASTENERS APPROX. 18" O.C.
REMOVABLE SHEET METAL COUNTERFLASHING (BY OTHERS)
TERMINATION FASTENED 8" O.C.
TERMINATION OF THE WALL FLASHING SHALL BE WITHIN 3" OR 8" ABOVE THE ROOF SURFACE
M-H SA BASE SHEET
M-H SA CAP SHEET
HOT AIR WELDED OR SET IN FULL BED OF M-H MOD BIT FLASHING ADHESIVE.
M-H SA CAP SHEET FLASHING MATERIAL MAY BE HOT AIR WELDED OR SET IN FULL BED OF M-H MOD BIT FLASHING ADHESIVE.
M-H SA-SBS CAP SHEET OR SA-APP CAP SHEET
2 PLIES SA BASE SHEET
APPROVED COVERBOARD/OVERLAY OR INSULATION.
INSULATION
ROOF DECK
WOOD CANT FASTENED TO NAILERS
WOOD BLOCKING MECHANICALLY FASTENED PER FMRC SPECIFICATIONS

DETAIL NO.:
MH-MB-C4

BASE FLASHING W/CANT - OPTION 4

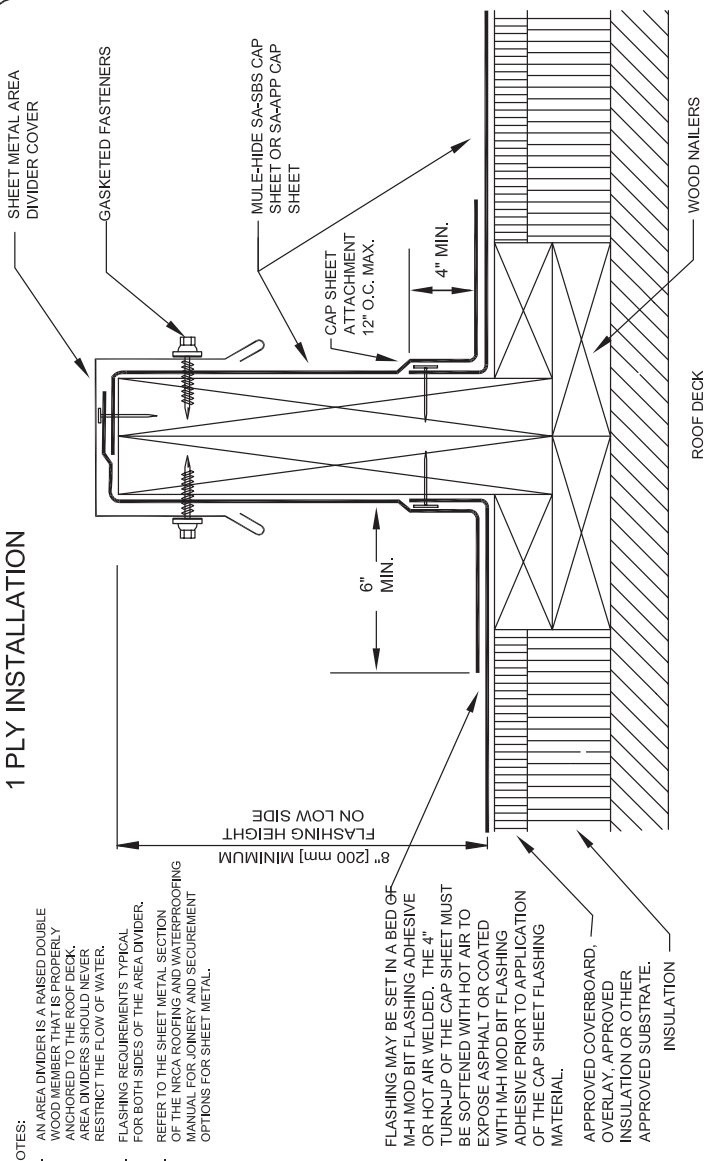
SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003

1 PLY INSTALLATION

NOTES:

1. AN AREA DIVIDER IS A RAISED DOUBLE CHANNEL WITH A 4" DEPTH. IT IS TO BE ANCHORED TO THE ROOF DECK. AREA DIVIDERS SHOULD NEVER RESTRICT THE FLOW OF WATER.
2. FLASHING REQUIREMENTS TYPICAL FOR BOTH SIDES OF THE AREA DIVIDER. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.
- 3.



FLASHING HEIGHT
ON LOW SIDE
8" (200 mm) MINIMUM
6" MIN.

FLASHING MAY BE SET IN A BED OF M-H MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED. THE 4" TURN-UP OF THE CAP SHEET MUST BE SOFTENED WITH HOT AIR TO EXPOSE ASPHALT OR COATED WITH M-H MOD BIT FLASHING ADHESIVE PRIOR TO APPLICATION OF THE CAP SHEET FLASHING MATERIAL.
APPROVED COVERBOARD, OVERLAY, APPROVED INSULATION OR OTHER APPROVED SUBSTRATE.
INSULATION
WOOD NAILERS
ROOF DECK

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2003

BASE FLASHING - AREA DIVIDER
OPTION 1

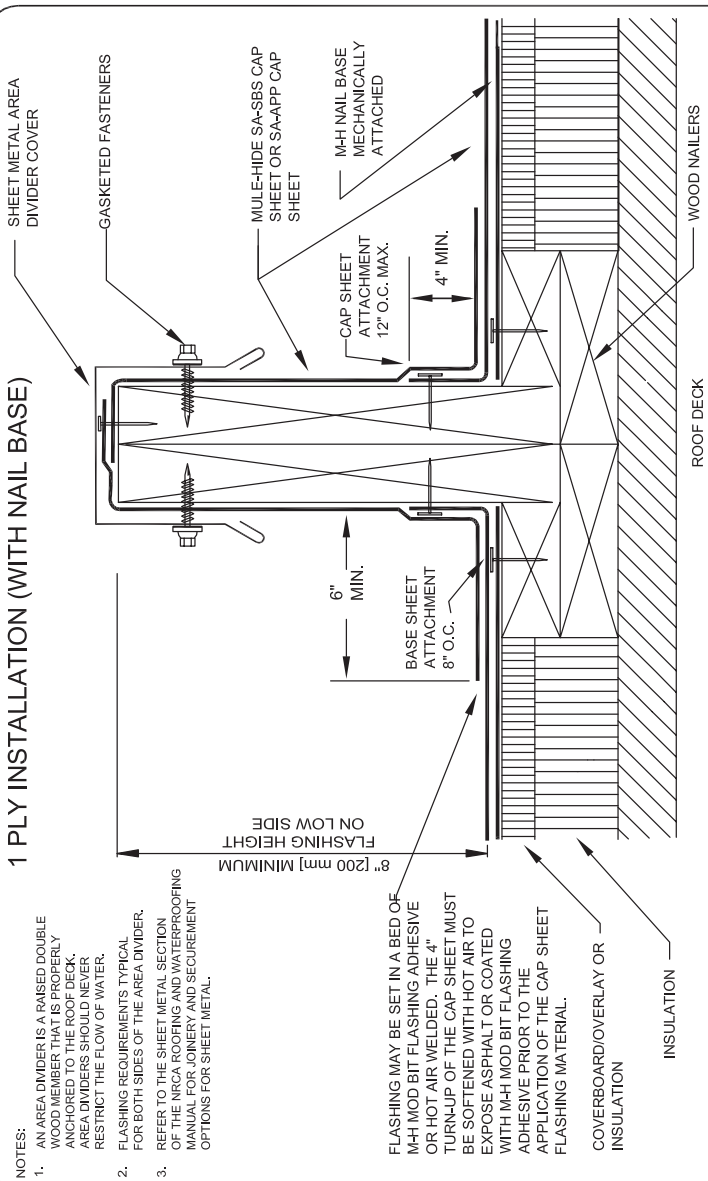
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-AD1

1 PLY INSTALLATION (WITH NAIL BASE)

NOTES:

1. AN AREA DIVIDER IS A RAISED DOUBLE CHANNEL WITH THE CAP SHEET MECHANICALLY ANCHORED TO THE ROOF DECK. AREA DIVIDERS SHOULD NEVER RESTRICT THE FLOW OF WATER.
2. FLASHING REQUIREMENTS TYPICAL FOR BOTH SIDES OF THE AREA DIVIDER. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.
- 3.



FLASHING HEIGHT
ON LOW SIDE
8" (200 mm) MINIMUM

6" MIN.
BASE SHEET
ATTACHMENT
8" O.C.

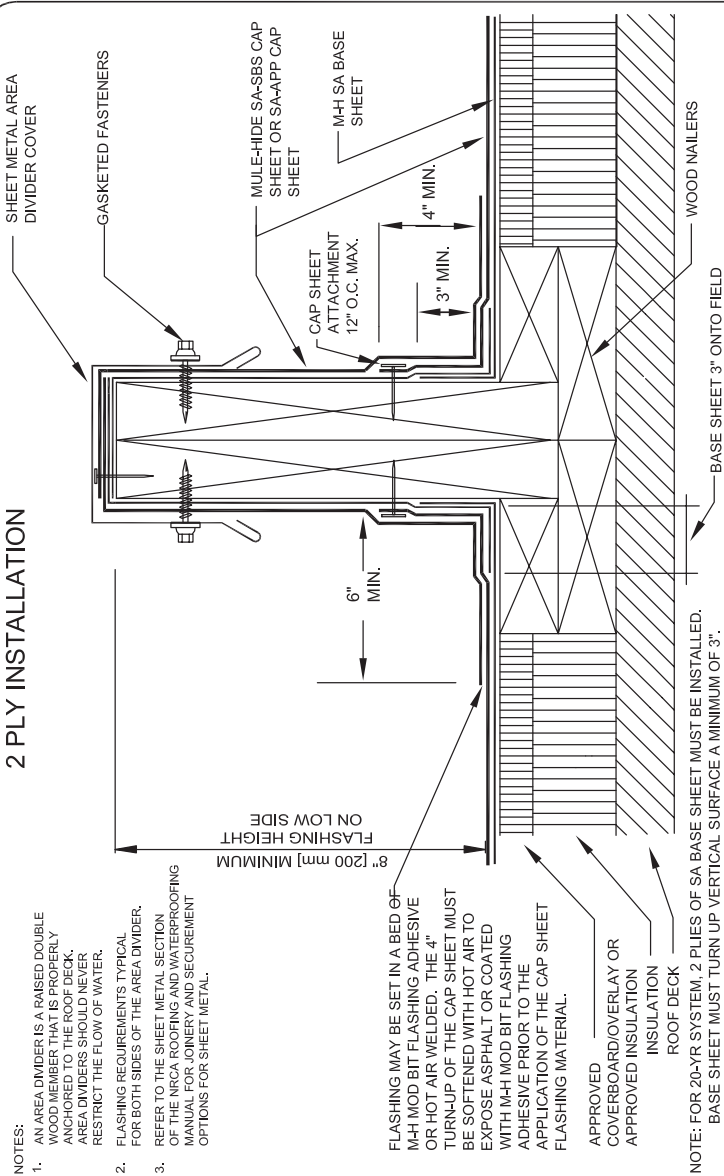
4" MIN.
CAP SHEET
ATTACHMENT
12" O.C. MAX.

| | | |
|---|---|--|
| <p>MULE-HIDE PRODUCTS CO., INC. 2003</p> | <p>BASE FLASHING - AREA DIVIDER OPTION 2</p> | <p>DETAIL NO.: MH-MB-AD2</p> |
| | <p>SELF-ADHERING MOD BIT SYSTEMS</p> | |

2 PLY INSTALLATION

NOTES:

1. AN AREA DIVIDER IS A RAISED DOUBLE CHANNEL SYSTEM FULLY ANCHORED TO THE ROOF DECK. AREA DIVIDERS SHOULD NEVER RESTRICT THE FLOW OF WATER.
2. FLASHING REQUIREMENTS TYPICAL FOR BOTH SIDES OF THE AREA DIVIDER. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.
- 3.



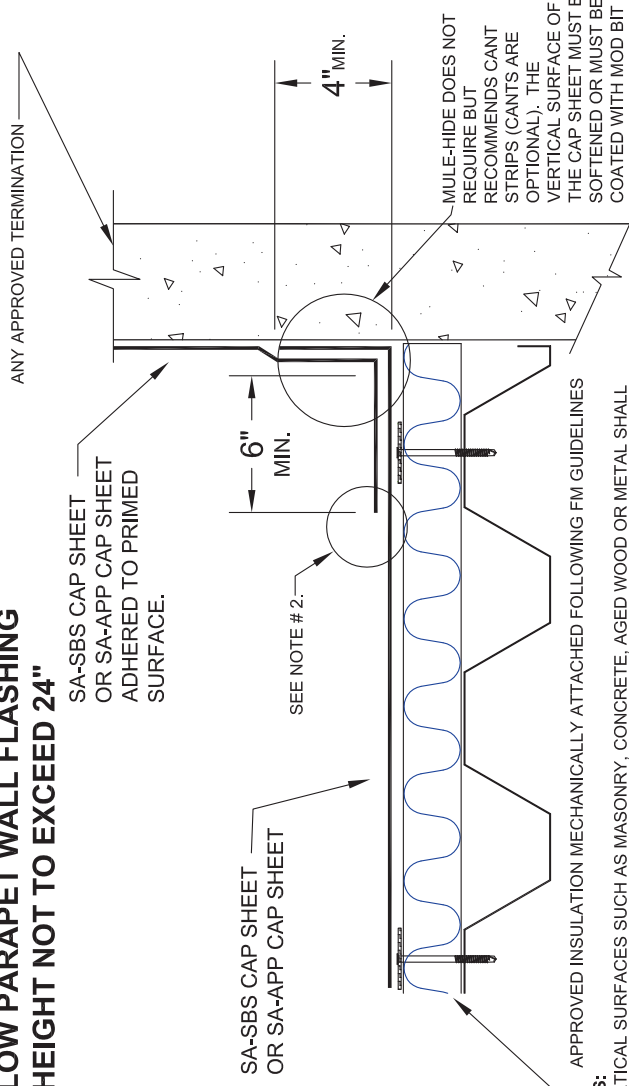
FLASHING MAY BE SET IN A BED OF MH MOD BIT FLASHING ADHESIVE OR HOT AIR WELDED. THE 4\"/>

APPROVED COVERBOARD/OVERLAY OR APPROVED INSULATION ROOF DECK

NOTE: FOR 20-YR SYSTEM, 2 PLYS OF SA BASE SHEET MUST BE INSTALLED. BASE SHEET MUST TURN UP VERTICAL SURFACE A MINIMUM OF 3\"/>

| | | |
|---|---|--|
| <p>MULE-HIDE PRODUCTS CO., INC. 2003</p> | <p>BASE FLASHING - AREA DIVIDER OPTION 3</p> | <p>DETAIL NO.: MH-MB-AD3</p> |
| | <p>SELF-ADHERING MOD BIT SYSTEMS</p> | |

**LOW PARAPET WALL FLASHING
HEIGHT NOT TO EXCEED 24"**



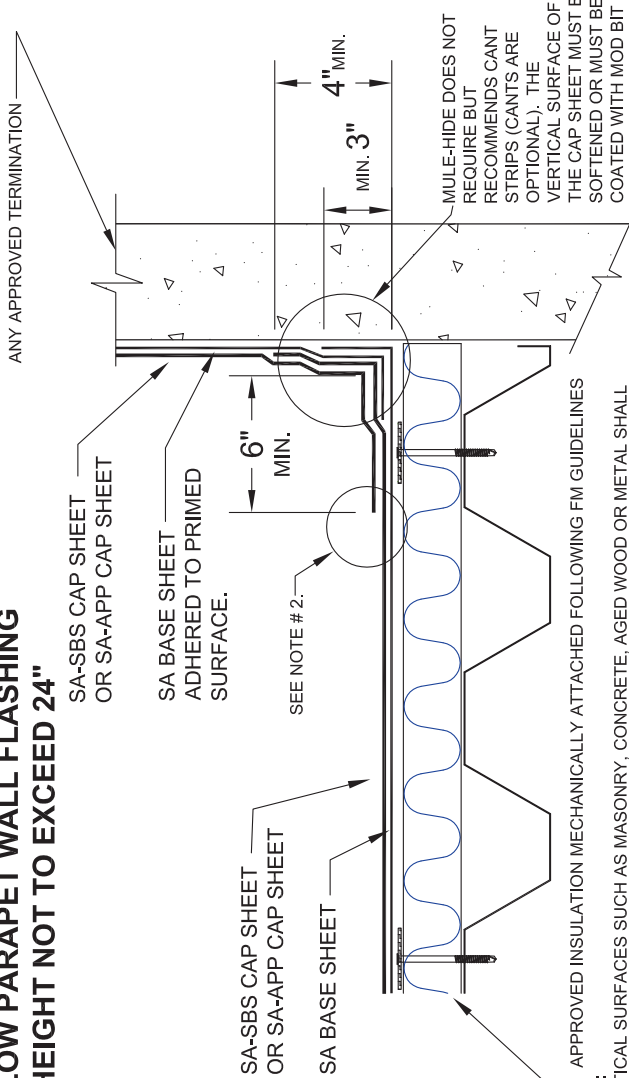
- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.

DETAIL NO.:
MH-MB-BF1

BASE FLASHING - OPTION 1
SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003

**LOW PARAPET WALL FLASHING
HEIGHT NOT TO EXCEED 24"**



- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.
- APPROVED INSULATION MECHANICALLY ATTACHED FOLLOWING FM GUIDELINES
- MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANT STRIPS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

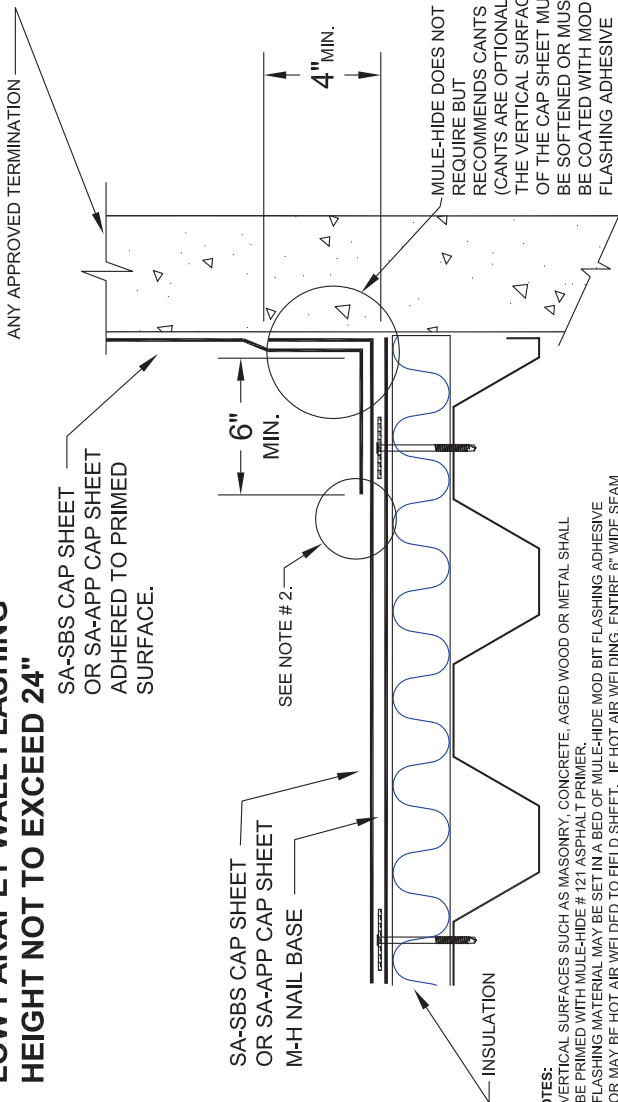
DETAIL NO.:
MH-MB-BF2

BASE FLASHING - OPTION 2

SELF-ADHERING MOD BIT SYSTEMS

**MULE-HIDE
PRODUCTS CO.,INC.
2003**

LOW PARAPET WALL FLASHING HEIGHT NOT TO EXCEED 24"

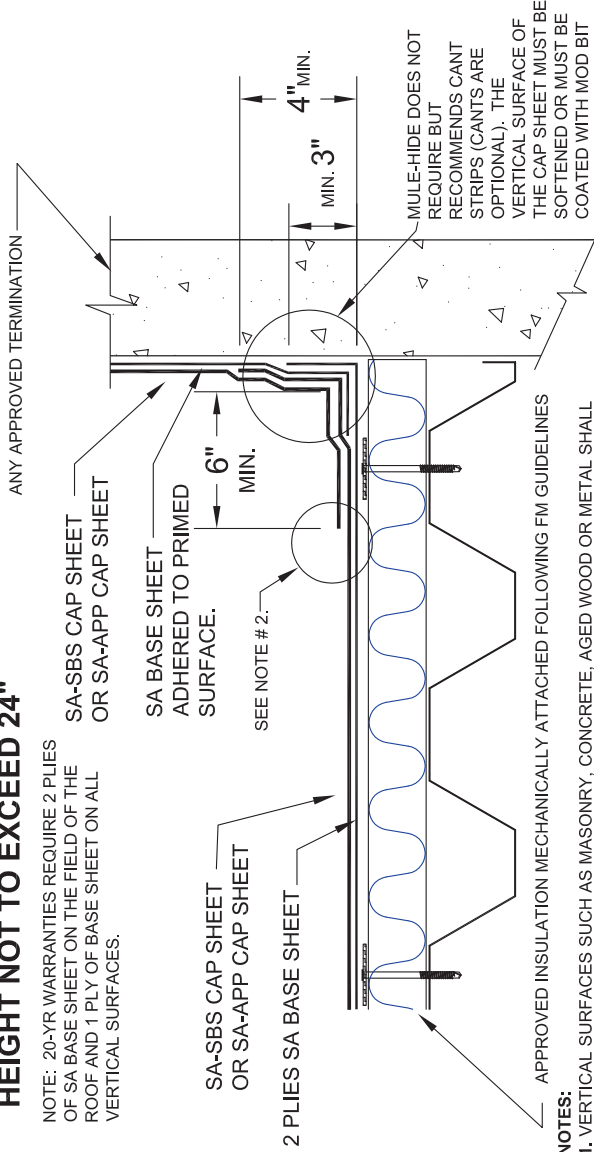


- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.
 3. INSULATION SHOULD BE ATTACHED SUFFICIENTLY TO HOLD IN PLACE PRIOR TO INSTALLING THE NAIL BASE.
 4. NAIL BASE SHALL BE MECHANICALLY ATTACHED IN COMPLIANCE WITH FM ATTACHMENT GUIDELINES. THE MINIMUM ATTACHMENT PATTERN IS FM 1-60. REFER TO DETAIL: MH-MB-NB-FM 1-60.

| | | |
|--|---|--|
| <p>MULE-HIDE PRODUCTS CO.,INC. 2014</p> | <p>BASE FLASHING - OPTION 3</p> | <p>DETAIL NO.: MH-MB-BF3</p> |
| | <p>SELF-ADHERING MOD BIT SYSTEMS</p> | |

LOW PARAPET WALL FLASHING HEIGHT NOT TO EXCEED 24"

NOTE: 20-YR WARRANTIES REQUIRE 2 PLYS OF SA BASE SHEET ON THE FIELD OF THE ROOF AND 1 PLY OF BASE SHEET ON ALL VERTICAL SURFACES.



MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANT STRIPS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

APPROVED INSULATION MECHANICALLY ATTACHED FOLLOWING FM GUIDELINES

- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.

DETAIL NO.:
MH-MB-BF4

BASE FLASHING - OPTION 4

SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2014

PARAPET WALL FLASHING HEIGHT EXCEEDING 30"

SA-SBS CAP SHEET
OR SA-APP CAP SHEET
ADHERED TO PRIMED
SURFACE.

MAXIMUM WALL HEIGHT WITHOUT INTERMITTENT FASTENING IS 33" (WHEN CANTS ARE NOT INSTALLED). FOR WALLS HIGHER THAN 30", INTERMITTENT FASTENING IS EVERY 33" TO 36" MAXIMUM DEPENDING ON TYPE OF FASTENERS USED. IF ATTACHING WITH CAP NAILS THE SEAM WIDTH SHALL BE 3". IF USING INSULATION PLATES AND FASTENERS, THE SEAM WIDTH SHALL BE 6". FASTENERS SHALL BE SPACED A MAXIMUM OF 6" ON CENTER.

M-H MOD BIT SEALANT

33"

SA-SBS CAP SHEET
OR SA-APP CAP SHEET

6"

ANY APPROVED TERMINATION

CAP SHEET MUST
TURN UP THE
VERTICAL SURFACE A
MINIMUM OF 4".

MULE-HIDE DOES NOT
REQUIRE BUT
RECOMMENDS CANTS
(CANTS ARE OPTIONAL).
THE VERTICAL SURFACE
OF THE CAP SHEET MUST
BE SOFTENED OR MUST
BE COATED WITH MOD BIT
FLASHING ADHESIVE
PRIOR TO INSTALLING
FLASHING MATERIAL.

APPROVED INSULATION MECHANICALLY ATTACHED FOLLOWING FM GUIDELINES

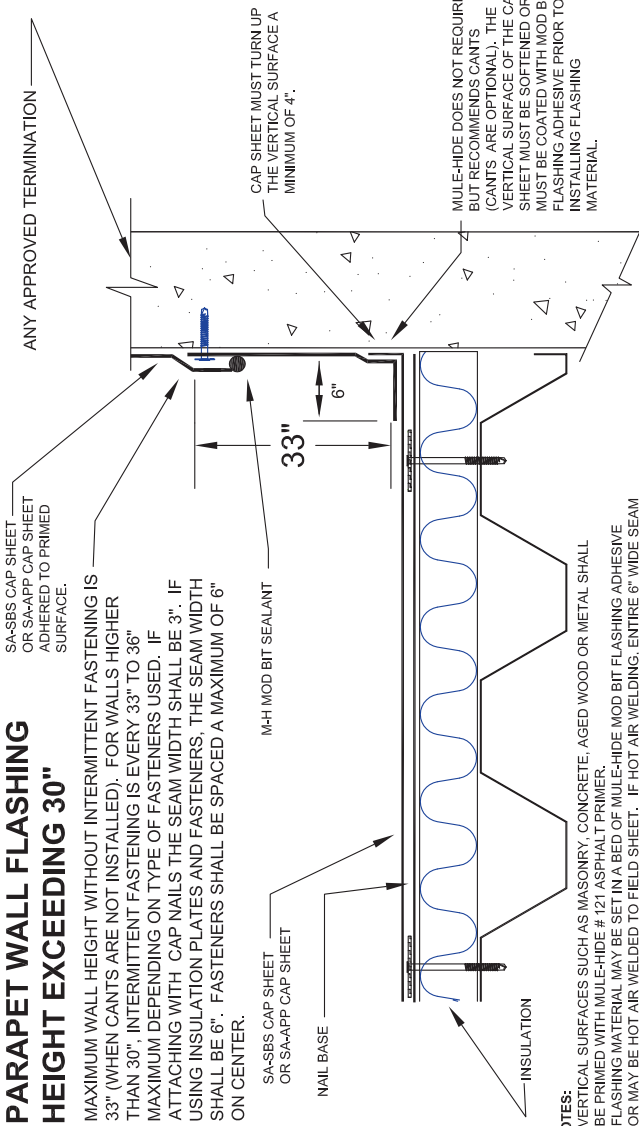
- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.

MULE-HIDE
PRODUCTS CO.,INC.
2014

BASE FLASHING - OPTION 5
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-BF5

PARAPET WALL FLASHING HEIGHT EXCEEDING 30"



SA-SBS CAP SHEET
OR SA-APP CAP SHEET
ADHERED TO PRIMED
SURFACE.

MAXIMUM WALL HEIGHT WITHOUT INTERMITTENT FASTENING IS 33" (WHEN CANTS ARE NOT INSTALLED). FOR WALLS HIGHER THAN 30", INTERMITTENT FASTENING IS EVERY 33" TO 36" MAXIMUM DEPENDING ON TYPE OF FASTENERS USED. IF ATTACHING WITH CAP NAILS THE SEAM WIDTH SHALL BE 3". IF USING INSULATION PLATES AND FASTENERS, THE SEAM WIDTH SHALL BE 6". FASTENERS SHALL BE SPACED A MAXIMUM OF 6" ON CENTER.

M-H MOD BIT SEALANT

SA-SBS CAP SHEET
OR SA-APP CAP SHEET

NAIL BASE

INSULATION

ANY APPROVED TERMINATION

CAP SHEET MUST TURN UP THE VERTICAL SURFACE A MINIMUM OF 4".

MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANTS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.
3. INSULATION SHOULD BE MECHANICALLY ATTACHED SUFFICIENTLY TO HOLD IN PLACE PRIOR TO INSTALLING THE NAIL BASE.
4. NAIL BASE SHALL BE MECHANICALLY ATTACHED IN COMPLIANCE WITH FM ATTACHMENT GUIDELINES. THE MINIMUM ATTACHMENT PATTERN IS FM 1-60. REFER TO DETAIL: MH-MB-NB-FM 1-60.

**MULE-HIDE
PRODUCTS CO.,INC.
2014**

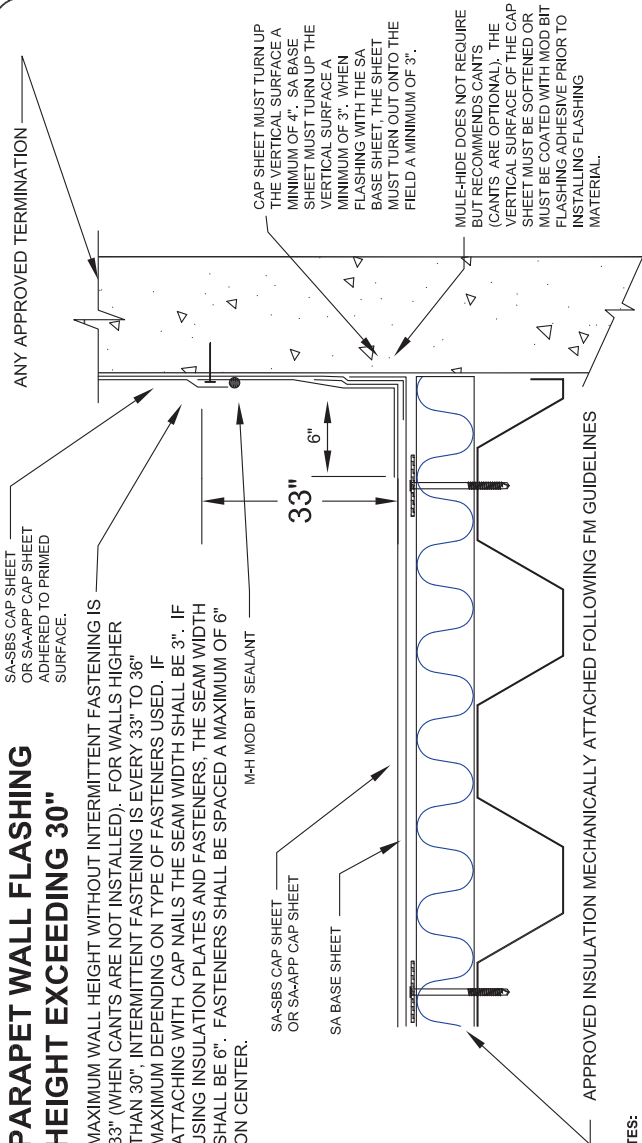
BASE FLASHING - OPTION 6

SELF-ADHERING MOD BIT SYSTEMS

**DETAIL NO.:
MH-MB-BF6**

PARAPET WALL FLASHING HEIGHT EXCEEDING 30"

MAXIMUM WALL HEIGHT WITHOUT INTERMITTENT FASTENING IS 33" (WHEN CANTS ARE NOT INSTALLED). FOR WALLS HIGHER THAN 30", INTERMITTENT FASTENING IS EVERY 33" TO 36" MAXIMUM DEPENDING ON TYPE OF FASTENERS USED. IF ATTACHING WITH CAP NAILS THE SEAM WIDTH SHALL BE 3". IF USING INSULATION PLATES AND FASTENERS, THE SEAM WIDTH SHALL BE 6". FASTENERS SHALL BE SPACED A MAXIMUM OF 6" ON CENTER.



NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.

**MULE-HIDE
PRODUCTS CO.,INC.
2003**

**BASE FLASHING - OPTION 7
SELF-ADHERING MOD BIT SYSTEMS**

**DETAIL NO.:
MH-MB-BF7**

PARAPET WALL FLASHING HEIGHT EXCEEDING 30"

SA-SBS CAP SHEET
OR SA-APP CAP SHEET
ADHERED TO PRIMED
SURFACE.

MAXIMUM WALL HEIGHT WITHOUT INTERMITTENT FASTENING IS 33" (WHEN CANTS ARE NOT INSTALLED). FOR WALLS HIGHER THAN 30", INTERMITTENT FASTENING IS EVERY 33" TO 36" MAXIMUM DEPENDING ON TYPE OF FASTENERS USED. IF ATTACHING WITH CAP NAILS THE SEAM WIDTH SHALL BE 3". IF USING INSULATION PLATES AND FASTENERS, THE SEAM WIDTH SHALL BE 6". FASTENERS SHALL BE SPACED A MAXIMUM OF 6" ON CENTER.

NOTE: 20-YR WARRANTIES REQUIRE 2 PLIES OF SA-BASE SHEET INSTALLED ON THE FIELD OF THE ROOF AND 1 PLY ON ALL VERTICAL SURFACES.

M-H MOD BIT SEALANT

SA-SBS CAP SHEET
OR SA-APP CAP SHEET

2 PLIES SA-BASE SHEET

33"

6"

ANY APPROVED TERMINATION

CAP SHEET MUST TURN UP THE VERTICAL SURFACE A MINIMUM OF 4". SA-BASE SHEET MUST TURN UP THE VERTICAL SURFACE A MINIMUM OF 3". WHEN FLASHING WITH THE SA-BASE SHEET, THE SHEET MUST TURN OUT ONTO THE FIELD A MINIMUM OF 3".

MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANTS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

APPROVED INSULATION MECHANICALLY ATTACHED FOLLOWING FM GUIDELINES

NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.

MULE-HIDE
PRODUCTS CO.,INC.
2003

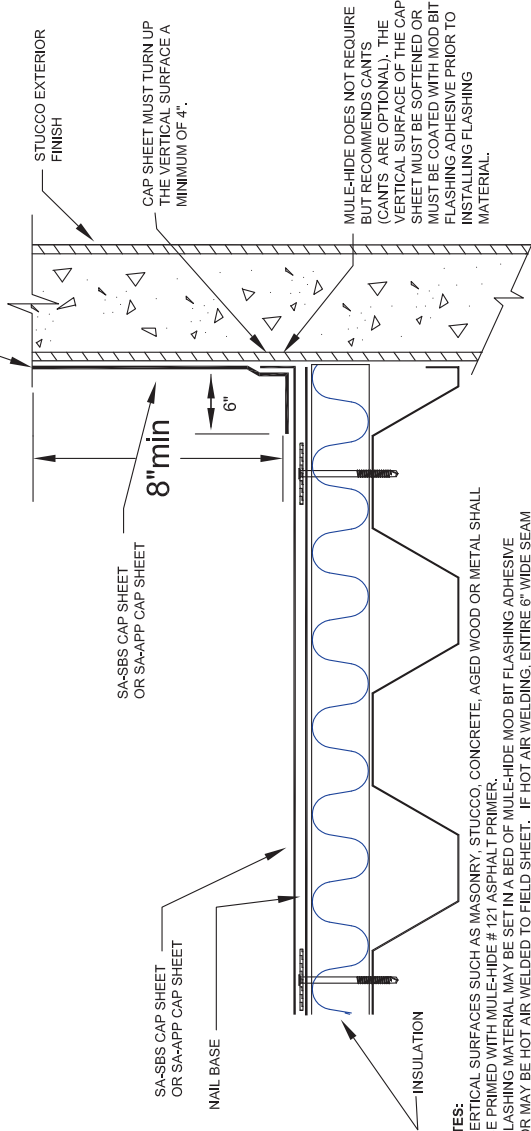
BASE FLASHING - OPTION 8

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-BF8

PARAPET WALL FLASHING SURFACE TERMINATION

ANY APPROVED TERMINATION



STUCCO EXTERIOR FINISH

CAP SHEET MUST TURN UP THE VERTICAL SURFACE A MINIMUM OF 4".

MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANTS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

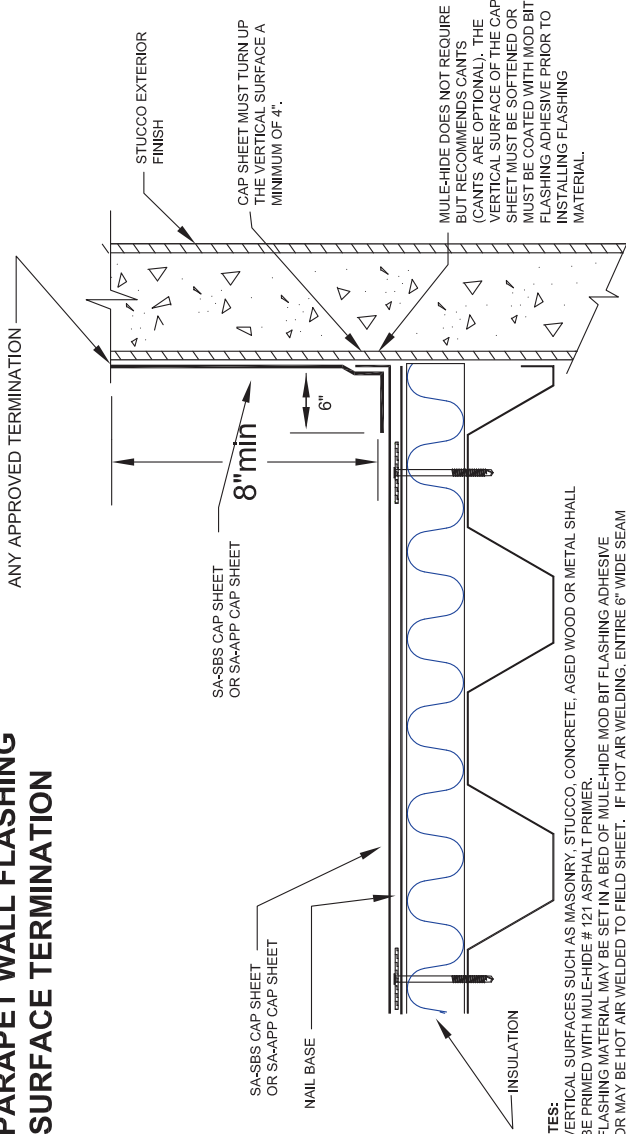
- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.
 3. INSULATION SHOULD BE MECHANICALLY ATTACHED SUFFICIENTLY TO HOLD IN PLACE PRIOR TO INSTALLING THE NAIL BASE.
 4. NAIL BASE SHALL BE MECHANICALLY ATTACHED IN COMPLIANCE WITH FM ATTACHMENT GUIDELINES. THE MINIMUM ATTACHMENT PATTERN IS FM 1-60. REFER TO DETAIL: MH-MB-NB-FM 1-60.

DETAIL NO.:
MH-MB-BF9

BASE FLASHING - OPTION 9
SELF-ADHERING MOD BIT SYSTEMS

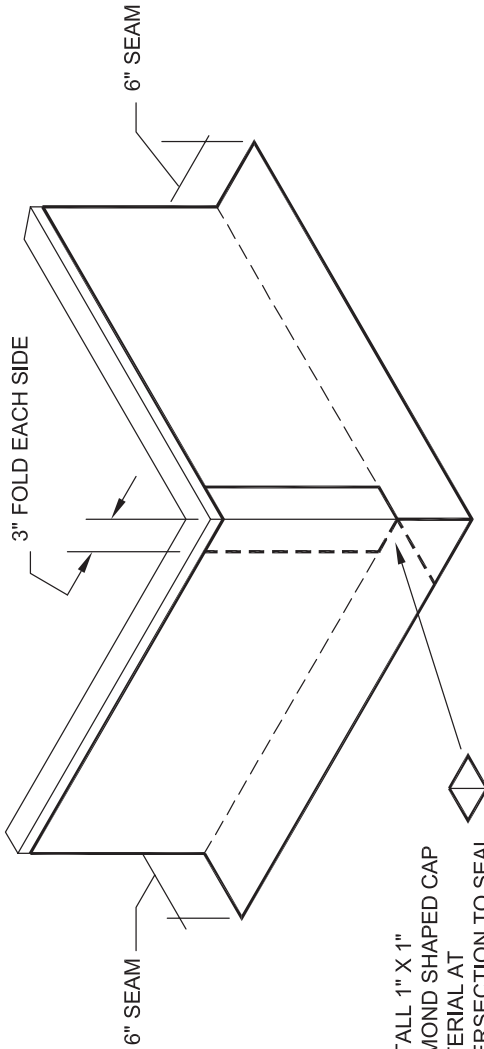
MULE-HIDE
PRODUCTS CO.,INC.
2003

PARAPET WALL FLASHING SURFACE TERMINATION



- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE #121 ASPHALT PRIMER.
 2. FLASHING MATERIAL MAY BE SET IN A BED OF MULE-HIDE MOD BIT FLASHING ADHESIVE OR MAY BE HOT AIR WELDED TO FIELD SHEET. IF HOT AIR WELDING, ENTIRE 6" WIDE SEAM MUST BE SEALED.
 3. INSULATION SHOULD BE MECHANICALLY ATTACHED SUFFICIENTLY TO HOLD IN PLACE PRIOR TO INSTALLING THE NAIL BASE.
 4. NAIL BASE SHALL BE MECHANICALLY ATTACHED IN COMPLIANCE WITH FM ATTACHMENT GUIDELINES. THE MINIMUM ATTACHMENT PATTERN IS FM 1-60. REFER TO DETAIL: MH-MB-NB-FM 1-60.

| | | |
|---|--------------------------------------|---|
| MULE-HIDE PRODUCTS CO.,INC. 2014 | BASE FLASHING - OPTION 10 | DETAIL NO.: MH-MB-BF10 |
| | SELF-ADHERING MOD BIT SYSTEMS | |



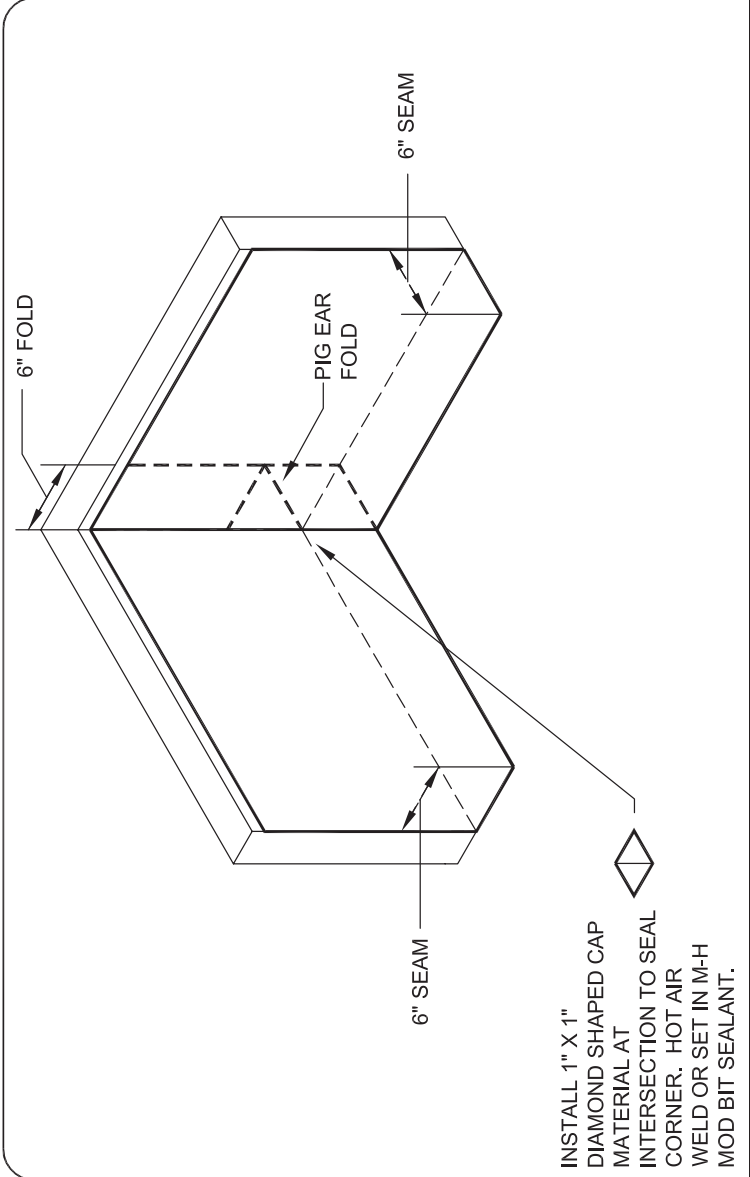
INSTALL 1" X 1"
DIAMOND SHAPED CAP
MATERIAL AT
INTERSECTION TO SEAL
CORNER. HOT AIR
WELD OR SET IN M-H
MOD BIT SEALANT.

DETAIL NO.:
MH-MB-M1

OUTSIDE CORNER

SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003



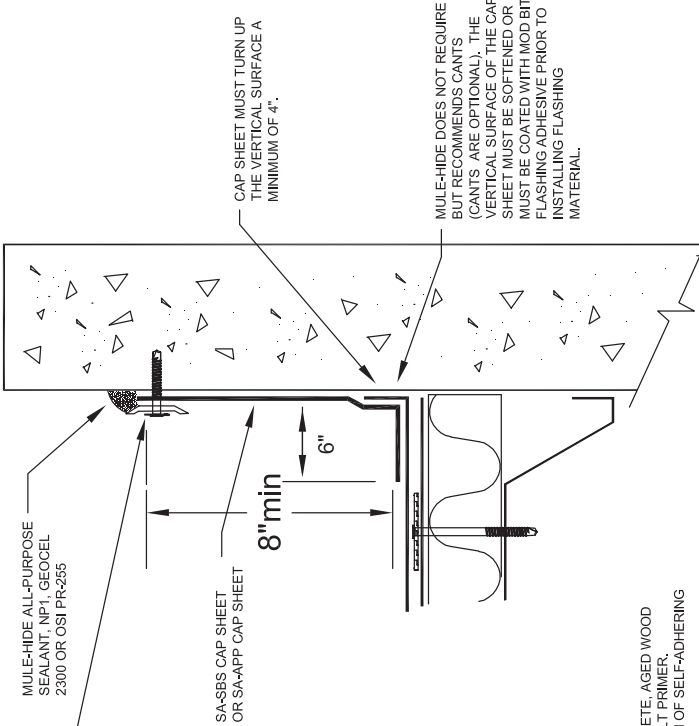
INSTALL 1" X 1"
 DIAMOND SHAPED CAP
 MATERIAL AT
 INTERSECTION TO SEAL
 CORNER. HOT AIR
 WELD OR SET IN M-H
 MOD BIT SEALANT.



| | |
|---|---|
| INSIDE CORNER SELF-ADHERING MOD BIT SYSTEMS | DETAIL NO.: MH-MB-M2 |
| | MULE-HIDE PRODUCTS CO.,INC. 2003 |

PARAPET WALL FLASHING SURFACE TERMINATION

TOP OF FLASHINGS MUST BE MECHANICALLY TERMINATED WITH TERMINATION BAR AND APPROPRIATE FASTENERS SPACED 6" ON CENTER. THE WALL (CONCRETE, WOOD, ETC.) THE TOP OF THE TERMINATION BAR MUST BE SEALED WITH AN APPROVED CAULK. IF NOT INSTALLING A TERMINATION BAR, THE FLASHING MUST BE MECHANICALLY ATTACHED 8" O.C. AND A METAL COUNTERFLASHING MUST BE INSTALLED TO COVER THE TOP OF THE MOD BIT FLASHING MATERIAL.



CAP SHEET MUST TURN UP THE VERTICAL SURFACE A MINIMUM OF 4".

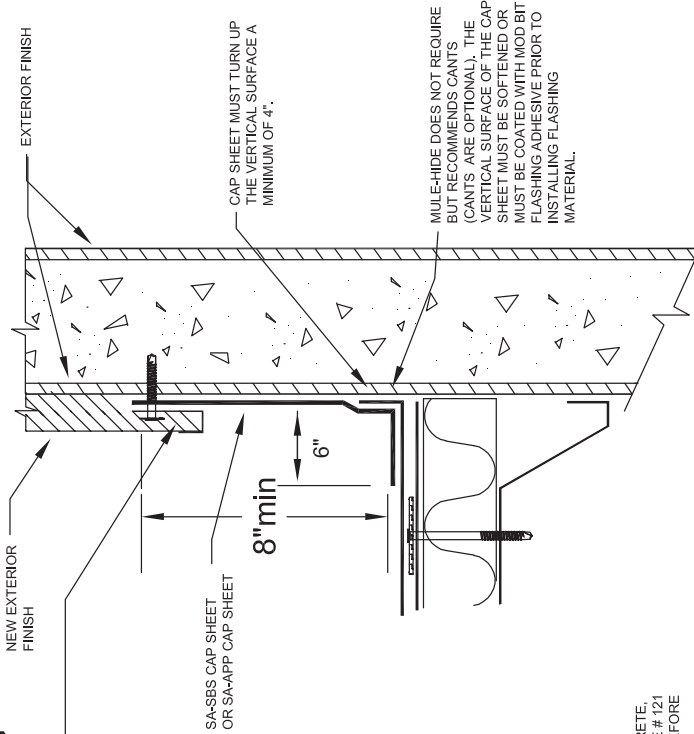
MULE-HIDE DOES NOT REQUIRE BUT RECOMMENDS CANTS (CANTS ARE OPTIONAL). THE VERTICAL SURFACE OF THE CAP SHEET MUST BE SOFTENED OR MUST BE COATED WITH MOD BIT FLASHING ADHESIVE PRIOR TO INSTALLING FLASHING MATERIAL.

- NOTES:**
1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. PRIMER MUST BE THOROUGHLY DRY BEFORE APPLICATION OF SELF-ADHERING MEMBRANES.

| | | |
|--|--------------------------------------|--|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | WALL FLASHING TERMINATION - 1 | DETAIL NO.: MH-MB-WFT01 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

PARAPET WALL FLASHING SURFACE TERMINATION

TOP OF FLASHINGS MUST BE MECHANICALLY TERMINATED. "J" STYLE METAL MATERIAL USED IN CONJUNCTION WITH AN EXTERIOR FINISH MATERIAL (NEW STUCCO OR SIDING) MAY BE INSTALLED OVER THE FLASHINGS (ACTING AS A TERMINATION BARY) WITH APPROPRIATE FASTENERS SPACED 8" ON CENTER. THE FASTENERS MUST PENETRATE AND ANCHOR INTO THE STRUCTURAL WALL (CONCRETE, WOOD, BLOCK, ETC.)



NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. PRIMER MUST BE THOROUGHLY DRY BEFORE APPLICATION OF SELF-ADHERING MEMBRANES.

MULE-HIDE
PRODUCTS CO.,INC.
 2003

WALL FLASHING TERMINATION - 2

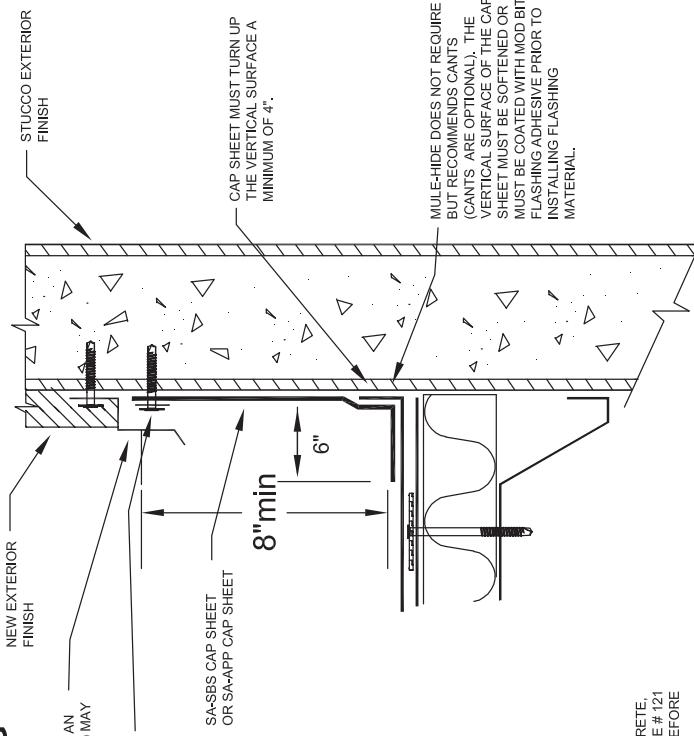
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-WFT02

PARAPET WALL FLASHING SURFACE TERMINATION

"Z" STYLE METAL MATERIAL USED IN CONJUNCTION WITH AN EXTERIOR FINISH MATERIAL (NEW STUCCO, SIDING, ETC.) MAY BE INSTALLED OVER THE FLASHINGS.

THE TOP OF THE SELF-ADHERING MOD BIT FLASHINGS MUST BE MECHANICALLY ATTACHED WITH APPROPRIATE FASTENERS SPACED A MAXIMUM OF 8" ON CENTER. THE FASTENERS MUST PENETRATE AND ANCHOR INTO THE STRUCTURAL WALL (CONCRETE, WOOD, BLOCK, ETC.).



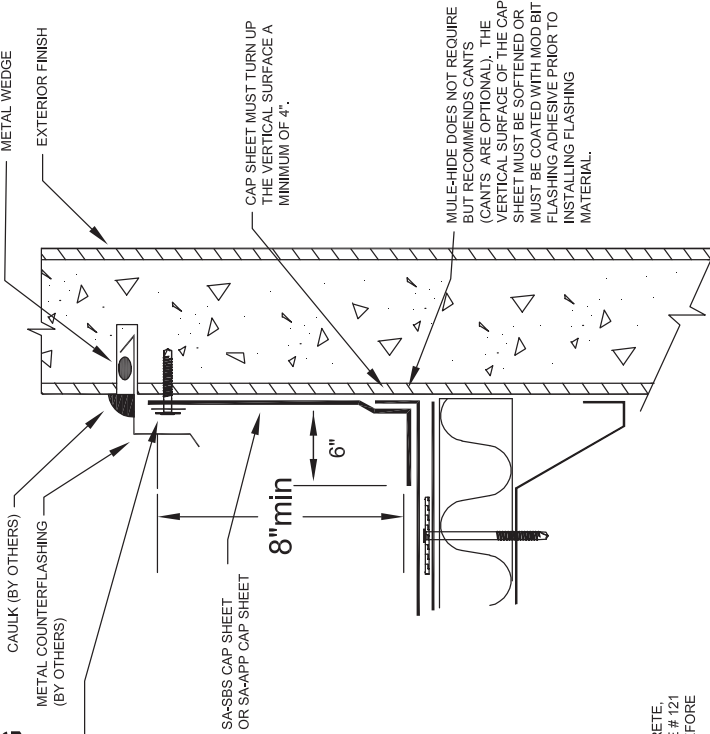
NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. PRIMER MUST BE THOROUGHLY DRY BEFORE APPLICATION OF SELF-ADHERING MEMBRANES.

| | | |
|---|--------------------------------------|--|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | WALL FLASHING TERMINATION - 3 | DETAIL NO.: MH-MB-WFT03 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

PARAPET WALL FLASHING REGLET TERMINATION

TOP OF FLASHINGS MUST BE MECHANICALLY TERMINATED. SELF-ADHERING MOD BIT FLASHINGS MUST BE FASTENED WITH APPROPRIATE FASTENERS SPACED A MAXIMUM OF 8" ON CENTER. THE FASTENERS MUST PENETRATE AND ANCHOR INTO THE STRUCTURAL WALL (CONCRETE, WOOD, BLOCK, ETC.)



NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. PRIMER MUST BE THOROUGHLY DRY BEFORE APPLICATION OF SELF-ADHERING MEMBRANES.

MULE-HIDE
PRODUCTS CO.,INC.
 2003

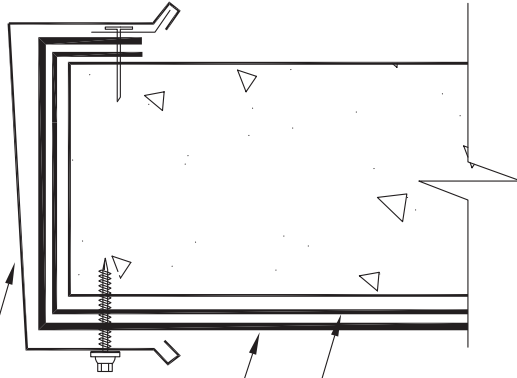
WALL FLASHING TERMINATION - 4

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-WFT04

PARAPET WALL FLASHING COPING CAP TERMINATION

OUTSIDE FACE OF FLASHINGS MUST BE MECHANICALLY TERMINATED UNDER THE COPING CAP. CONTINUOUS CLEAT FASTENED 12" O.C., MAX. MUST BE USED WHENEVER OUTSIDE FACE DIMENSION IS 4" OR MORE. FASTEN INSIDE FACE OF COPING 24" ON CENTER WITH GROMMETTED FASTENERS.



SA-SBS CAP SHEET
OR SA-APP CAP SHEET

SA-BASE SHEET
AS REQUIRED FOR
WARRANTY

NOTES:

1. VERTICAL SURFACES SUCH AS MASONRY, STUCCO, CONCRETE, AGED WOOD OR METAL SHALL BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. PRIMER MUST BE THOROUGHLY DRY BEFORE APPLICATION OF SELF-ADHERING MEMBRANES.

MULE-HIDE
PRODUCTS CO.,INC.
2003

WALL FLASHING TERMINATION - 5

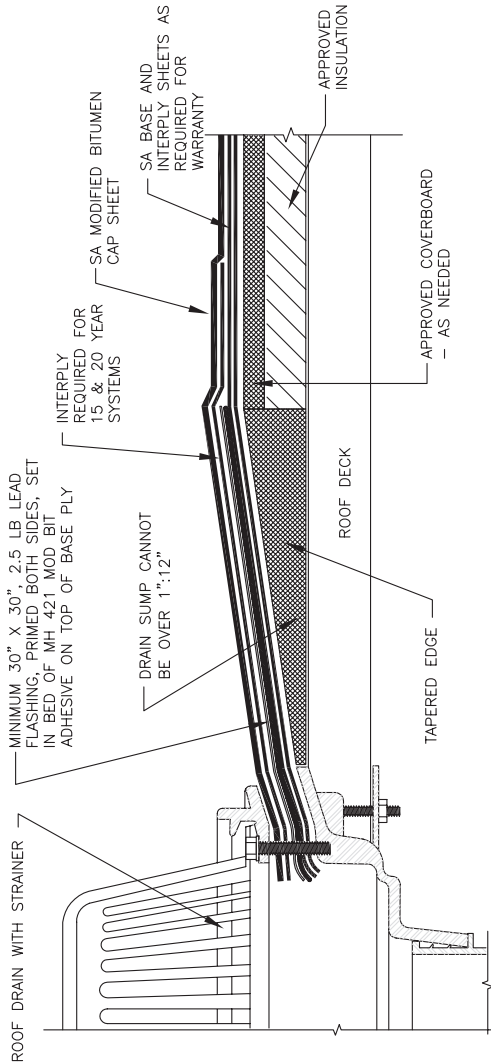
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-WFT05

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS
2. IF DRAIN SUMP IS GREATER THAN 1":12", A RETROFIT DRAIN INSERT MUST BE USED
3. A TARGET PATCH OF SA BASE IS REQUIRED IF A FIELD SEAM IS WITHIN 6" - 9" OF CLAMPING RING
4. NO SEAM CAN BE LESS THAN 6" FROM THE DRAIN CLAMPING RING



ROOF DRAIN

SYSTEMS:

SELF-ADHERING MODIFIED BITUMEN

DETAIL NO.:

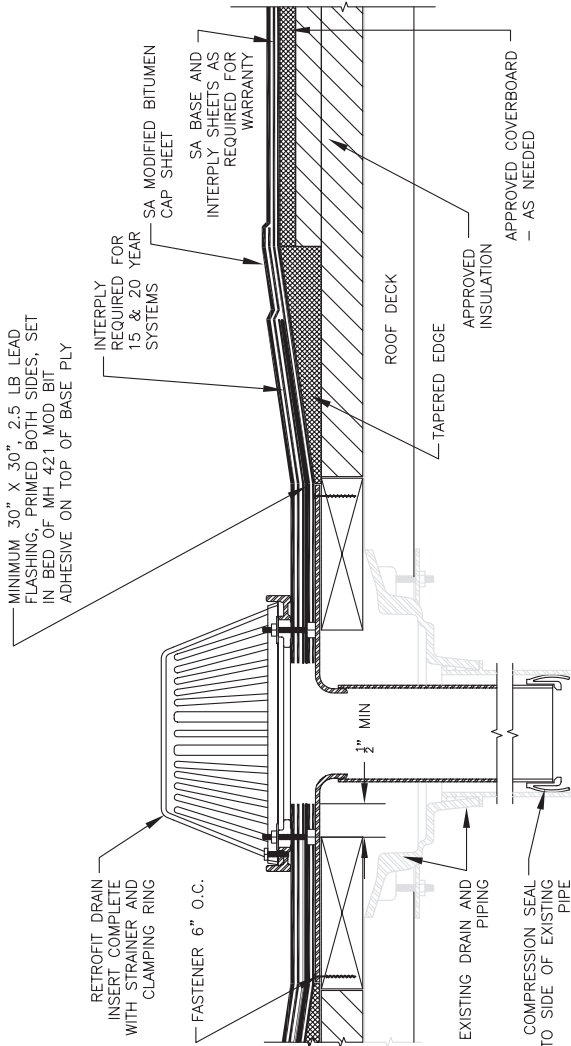
MH-MB-D1

REVISION DATE: OCTOBER 2015

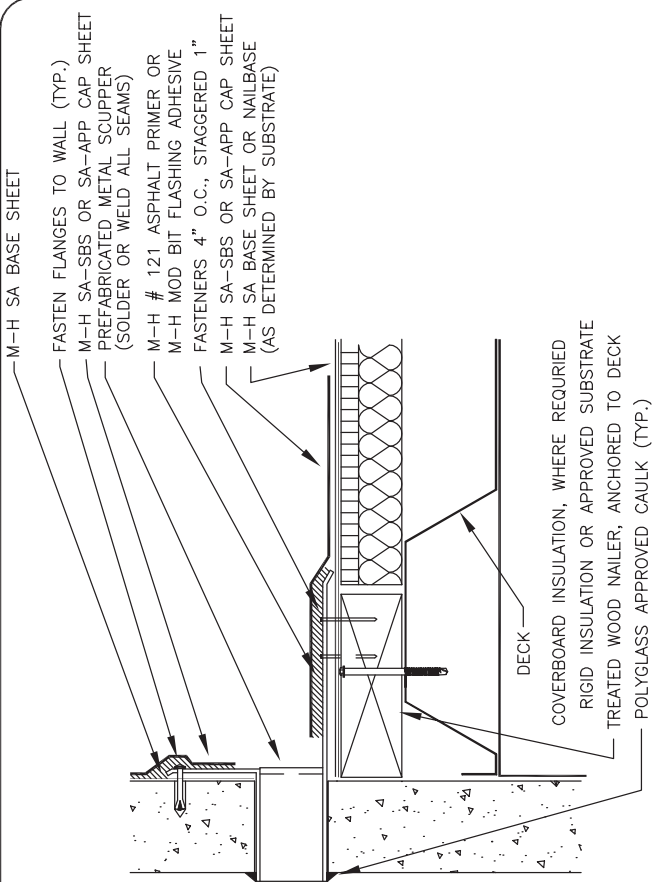
**MULE-HIDE
PRODUCTS CO., INC.**

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS
2. WOOD NAILERS MUST BE INSTALLED AROUND DRAIN
3. A TARGET PATCH OF SA, BASE MODIFIED BITUMEN IS REQUIRED IF A FIELD SEAM IS WITHIN 6" - 9" OF CLAMPING RING
4. NO SEAM CAN BE LESS THAN 6" FROM THE DRAIN CLAMPING RING



| | | |
|-------------------------------------|---|--------------------------------|
| MULE-HIDE PRODUCTS CO., INC. | RETROFIT DRAIN INSERT SYSTEMS: SELF-ADHERING MODIFIED BITUMEN | DETAIL NO.: MH-MB-D2 |
| | REVISION DATE: MARCH 2015 | |



NOTES:

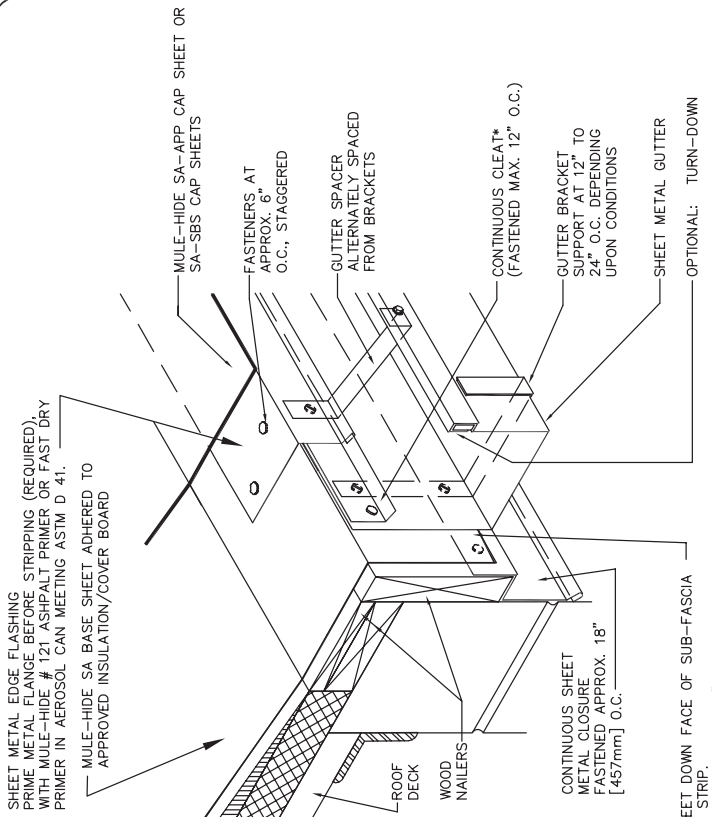
- 1. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED AT ALL MEMBRANE IN ALL LOCATIONS WHERE "FAST LAP" IS NOT PRESENT

| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | SCUPPER - OPTION 1 | DETAIL NO.: MH-MB-S1 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

NOTES:

1. ATTACH WOOD NAILER TO WALL/DECK IN ACCORDANCE WITH FIBC GUIDELINES PER SECTION 4.26, REGARDING WIND LOADS TO ROOF SYSTEMS & DECKING.
2. WOOD BLOCKING MAY BE SLOTTED FOR VENTING OF WET-BILL DECKS OR OTHER APPLICABLE CONSTRUCTIONS.
3. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL.
4. REFER SMACNA RECOMMENDATIONS & DETAILS REGARDING METAL THICKNESS & CLEAT REQUIREMENTS.
5. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED TO THE MEMBRANE IN ALL LOCATIONS WHERE "FASTLAP" IS NOT PRESENT.

* CONTINUOUS CLEAT IS RECOMMENDED TO BE AT LEAST ONE GAUGE HEAVIER THAN EDGE FLASHING METAL.



EXTEND SA BASE SHEET DOWN FACE OF SUB-FASCIA TO COVER METAL "Z" STRIP.
 *Z" STRIP MECHANICALLY ATTACHED 8" O.C. TO SUB-FASCIA

MULE-HIDE
PRODUCTS CO.,INC.
2003

GUTTER DETAIL - OPTION 1

SELF-ADHERING MOD BIT SYSTEMS

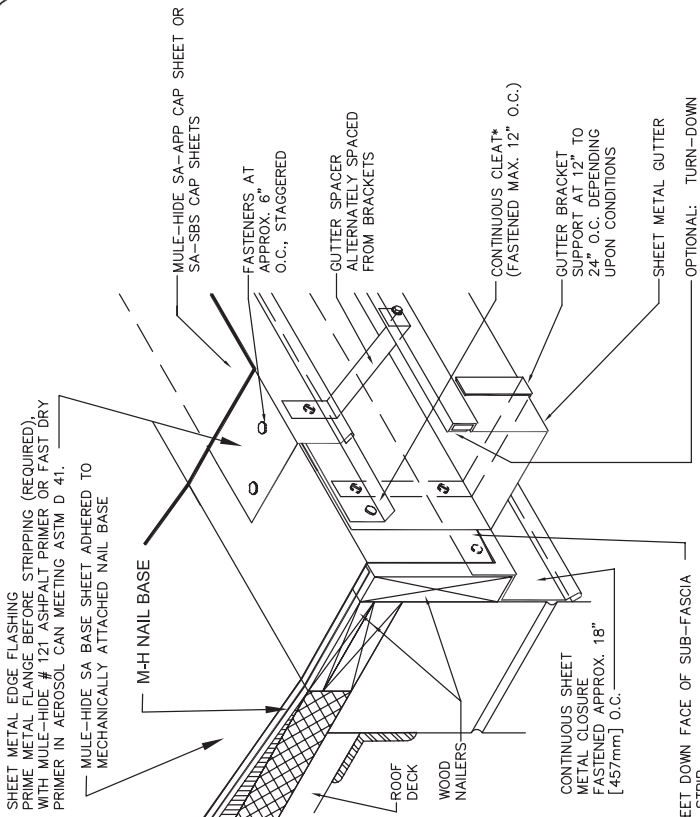
DETAIL NO.:
MH-MB-G1

NOTES:

1. ATTACH WOOD NAILER TO WALL/DECK IN ACCORDANCE WITH FIRC GUIDELINES PER SECTION 4.02. REPAIRING WIND LOADS TO ROOF SYSTEMS & DECKING.
2. WOOD BLOCKING MAY BE SLOTTED FOR VENTING OF WET-BILL DECKS OR OTHER APPLICABLE CONSTRUCTIONS.
3. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL.
4. REFER SMACNA RECOMMENDATIONS & DETAILS REGARDING METAL THICKNESS & CLEAT REQUIREMENTS.
5. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED TO THE MEMBRANE IN ALL LOCATIONS WHERE "FAST LAP" IS NOT PRESENT.
6. THE M-H NAIL BASE MUST BE INSTALLED AND MECHANICALLY ATTACHED AS THE INITIAL BASE PLY WHEN INSTALLING THE SELF-ADHERING MEMBRANES OVER NON-APPROVED INSULATIONS, COVERBOARDS OR OVERLAYS.

* CONTINUOUS CLEAT IS RECOMMENDED TO BE AT LEAST ONE GAUGE HEAVIER THAN EDGE FLASHING METAL.

EXTEND SA BASE SHEET DOWN FACE OF SUB-FASCIA TO COVER METAL "Z" STRIP.
 "Z" STRIP MECHANICALLY ATTACHED 8" O.C. TO SUB-FASCIA

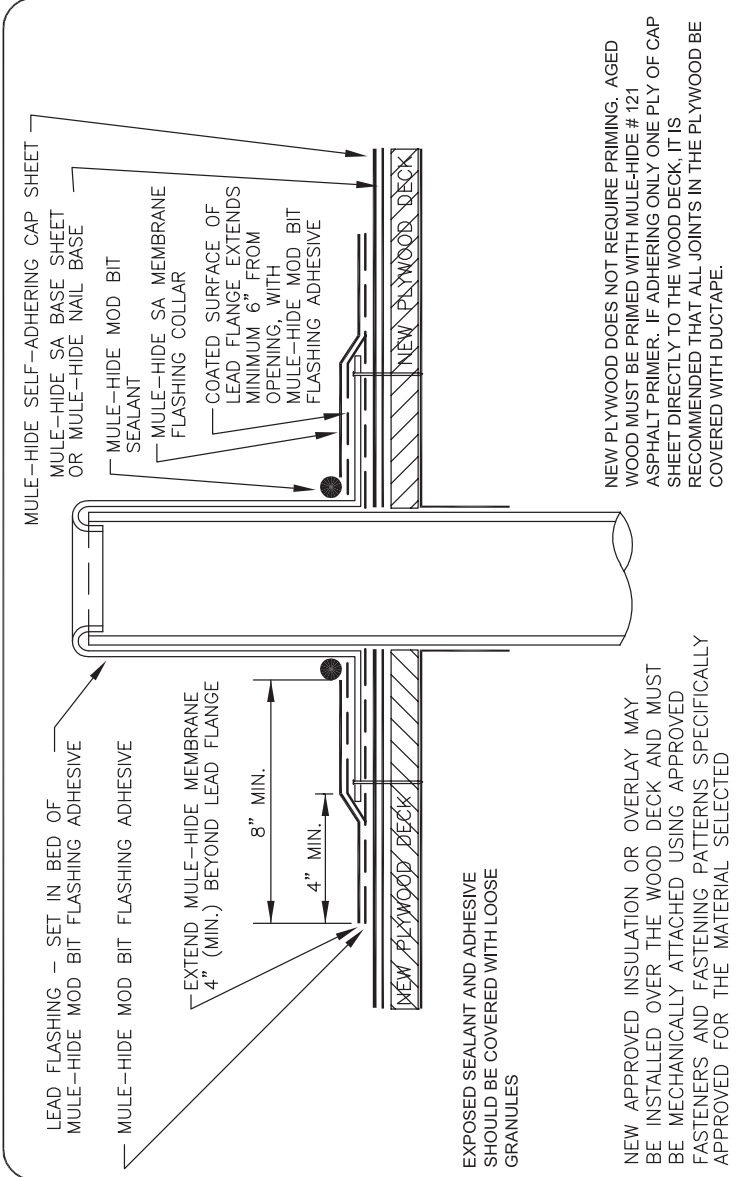


DETAIL NO.:
MH-MB-G2

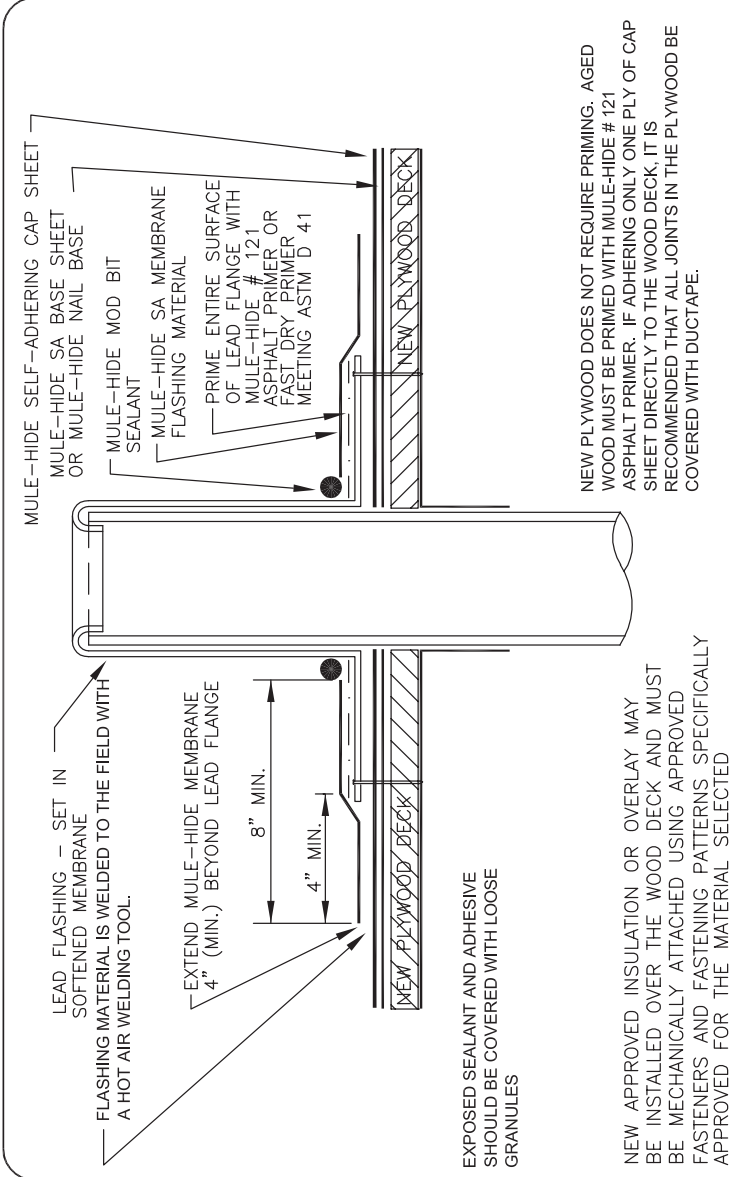
GUTTER DETAIL - OPTION 2

SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003



| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | PIPE FLASHING - OPTION 1 | DETAIL NO.: MH-MB-P1 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

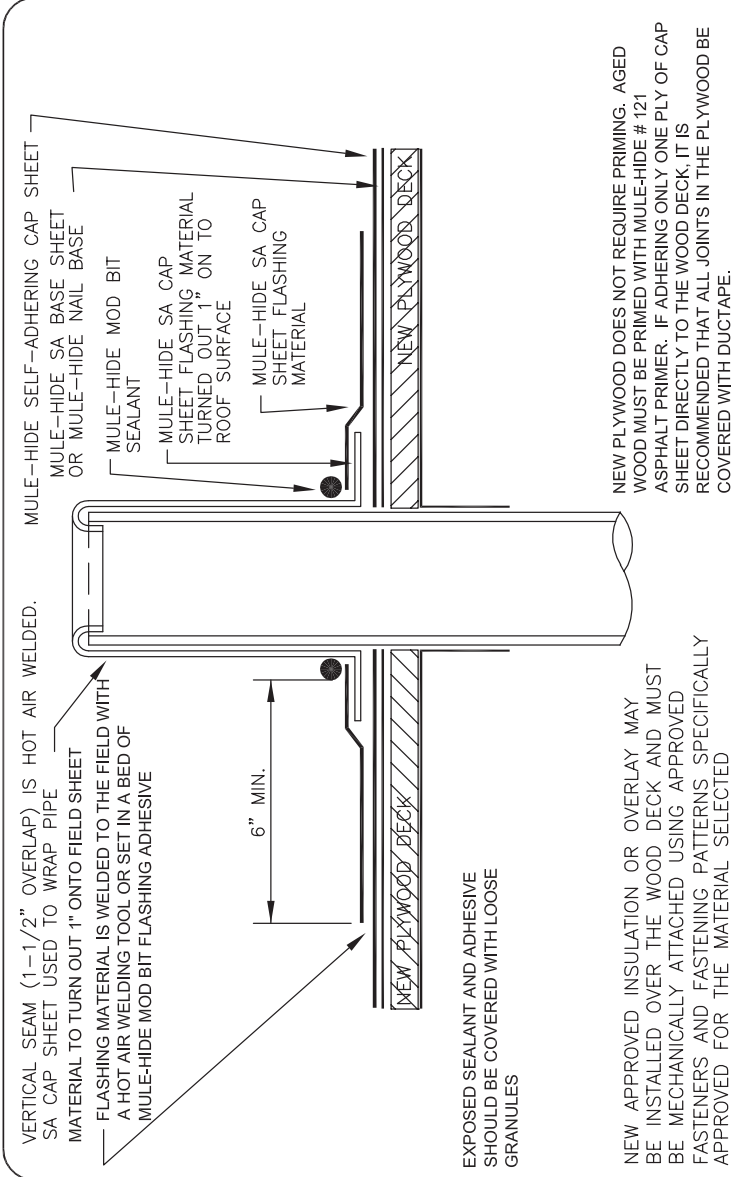


EXPOSED SEALANT AND ADHESIVE SHOULD BE COVERED WITH LOOSE GRANULES

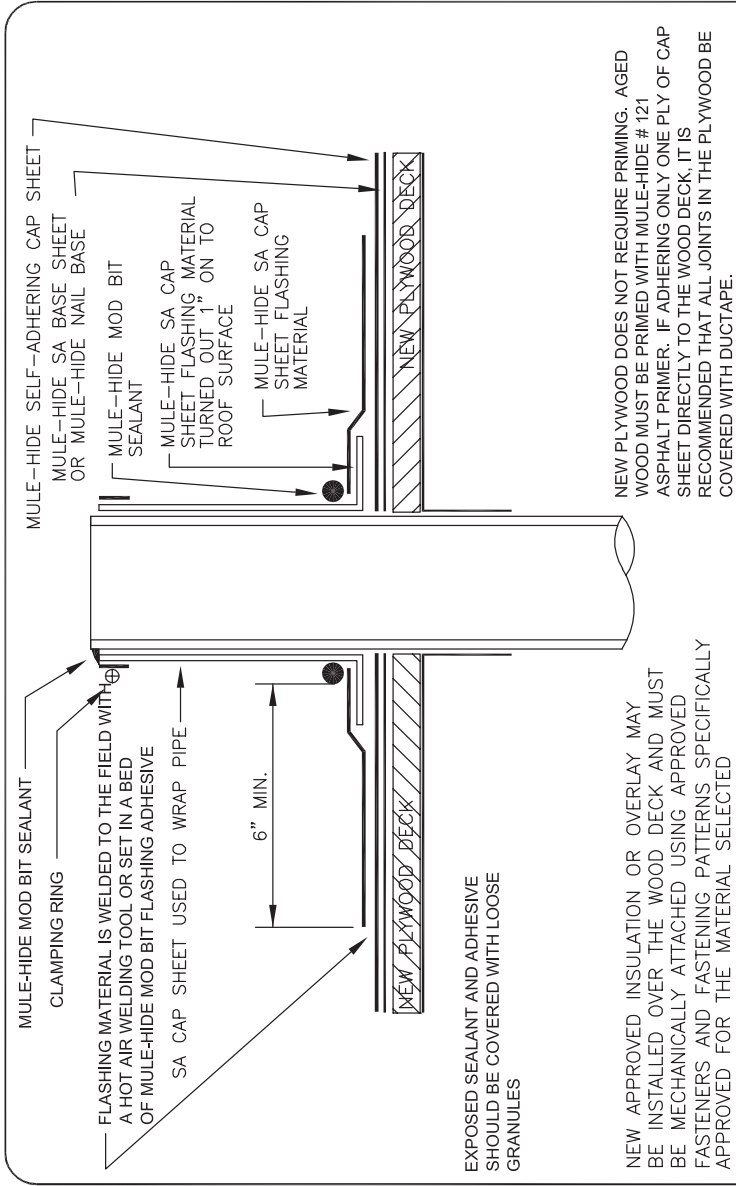
NEW APPROVED INSULATION OR OVERLAY MAY BE INSTALLED OVER THE WOOD DECK AND MUST BE MECHANICALLY ATTACHED USING APPROVED FASTENERS AND FASTENING PATTERNS SPECIFICALLY APPROVED FOR THE MATERIAL SELECTED

NEW PLYWOOD DOES NOT REQUIRE PRIMING. AGED WOOD MUST BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER. IF ADHERING ONLY ONE PLY OF CAP SHEET DIRECTLY TO THE WOOD DECK, IT IS RECOMMENDED THAT ALL JOINTS IN THE PLYWOOD BE COVERED WITH DUCTAPE.

| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | PIPE FLASHING - OPTION 2 | DETAIL NO.: MH-MB-P2 |
| | SELF-ADHERING MOD BIT SYSTEMS | |



| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | PIPE FLASHING - OPTION 3 | DETAIL NO.: MH-MB-P3 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

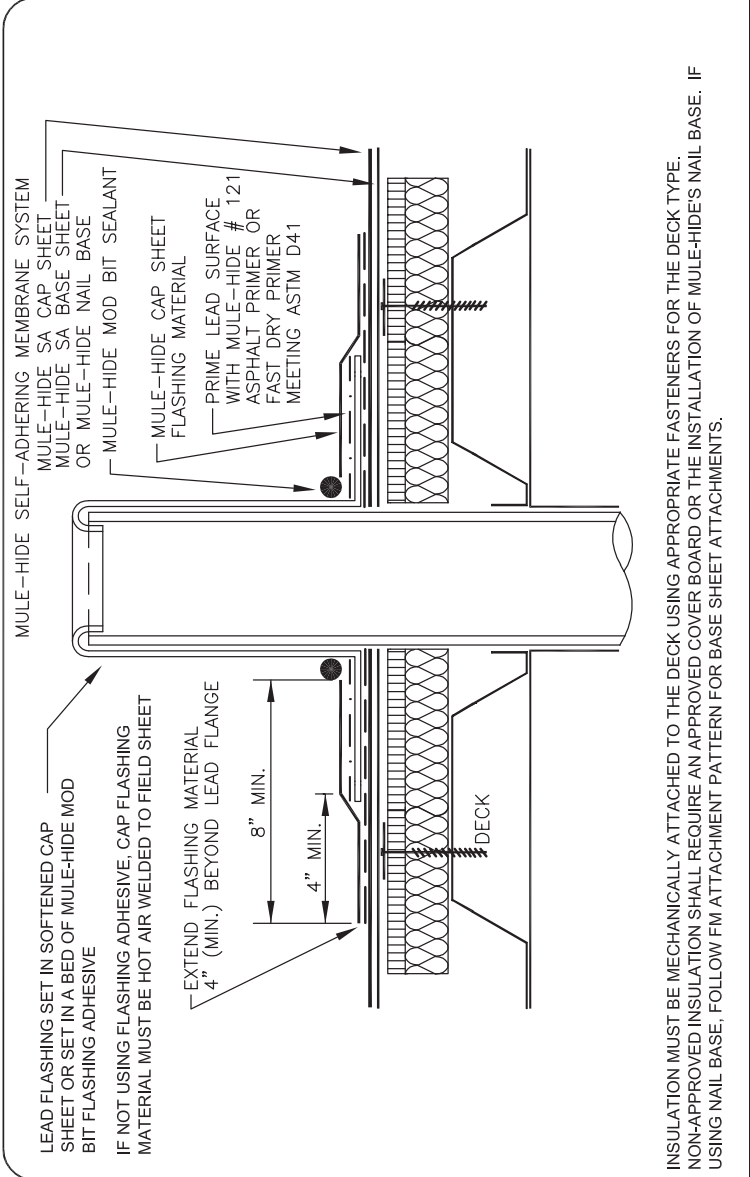


MULE-HIDE
PRODUCTS CO., INC.
 2003

PIPE FLASHING - OPTION 4

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-P4

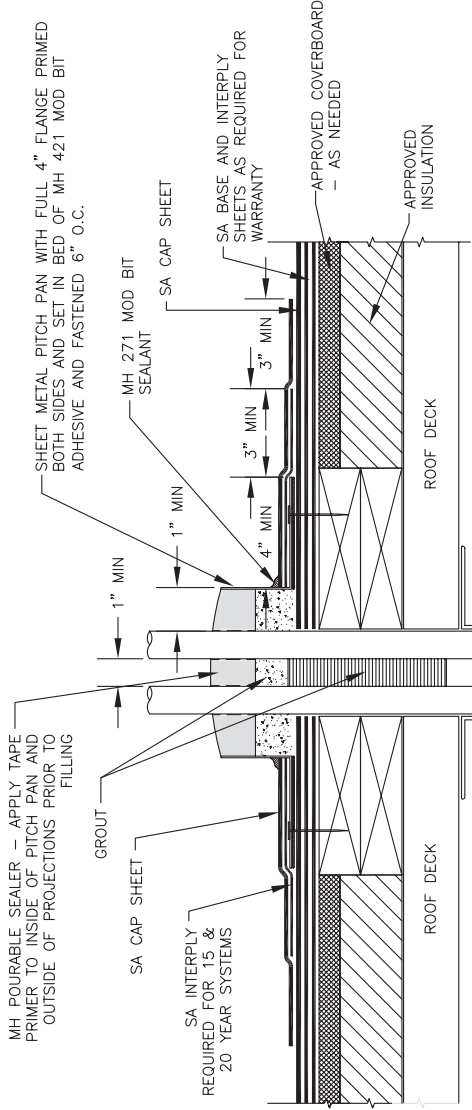


INSULATION MUST BE MECHANICALLY ATTACHED TO THE DECK USING APPROPRIATE FASTENERS FOR THE DECK TYPE. NON-APPROVED INSULATION SHALL REQUIRE AN APPROVED COVER BOARD OR THE INSTALLATION OF MULE-HIDE'S NAIL BASE. IF USING NAIL BASE, FOLLOW FM ATTACHMENT PATTERN FOR BASE SHEET ATTACHMENTS.

| | | |
|---|--------------------------------------|---------------------------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | PIPE FLASHING - OPTION 5 | DETAIL NO.: MH-MB-P5 |
| | SELF-ADHERING MOD BIT SYSTEMS | |

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MATCHING THE INSULATION THICKNESS AND EXTENDING BEYOND THE FLANGE ARE REQUIRED.
3. ALL SEAMS OVER GRANULATED SURFACES MUST BE COMPLETED WITH EITHER HOT AIR WELDING OR MH 421 MOD BIT ADHESIVE.



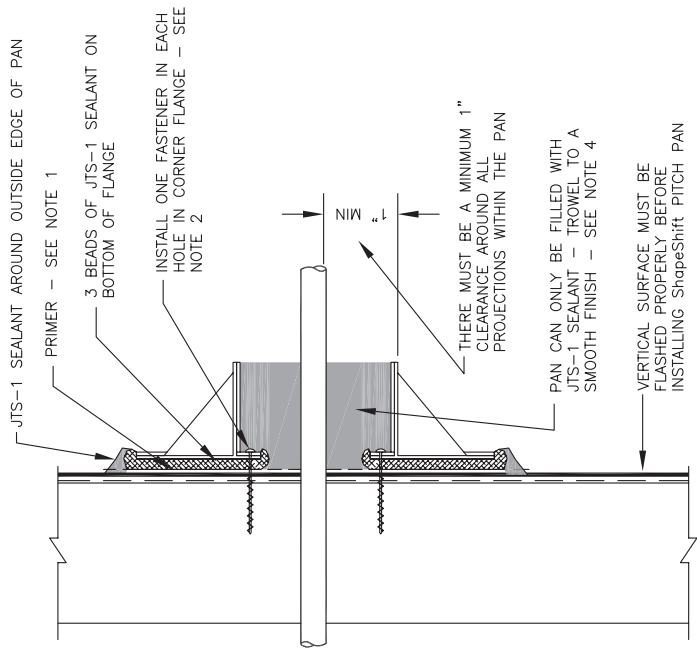
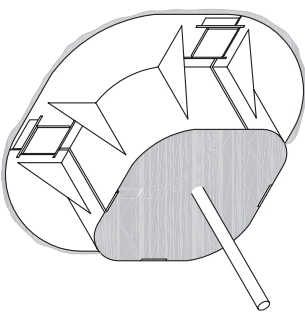
PENETRATION POCKET

DETAIL NO.:
MHMB-141

REVISION DATE: MARCH 2017

SYSTEMS:
SELF-ADHERING
MODIFIED BITUMEN

**MULE-HIDE
PRODUCTS CO., INC.**



NOTES:

1. MOD BIT MEMBRANE MUST BE PRIMED WITH 2-PART EPOXY PRIMER BEFORE SETTING FLANGE ON WALL.
2. PITCH PAN MUST BE FASTENED TO SUBSTRATE WITH 1 FASTENER IN EACH CORNER PIECE. PLACE FASTENER IN HOLE FOUND ON INSIDE FLANGE.
3. ShapeShift PITCH PANS CAN BE CONFIGURED INTO THE SHAPE NEEDED BY USING ANY COMBINATION OF CORNER AND STRAIGHT PIECES.
4. VERTICAL PITCH PANS CAN ONLY BE FILLED WITH JTS-1 SEALANT BECAUSE IT DOES NOT SHRINK OR SAG. NO OTHER SEALANTS ARE APPROVED.

PAN CAN ONLY BE FILLED WITH JTS-1 SEALANT - TROWEL TO A SMOOTH FINISH - SEE NOTE 4

VERTICAL SURFACE MUST BE FLASHED PROPERLY BEFORE INSTALLING ShapeShift PITCH PAN

ShapeShift
VERTICAL SEALANT POCKET
SYSTEMS:

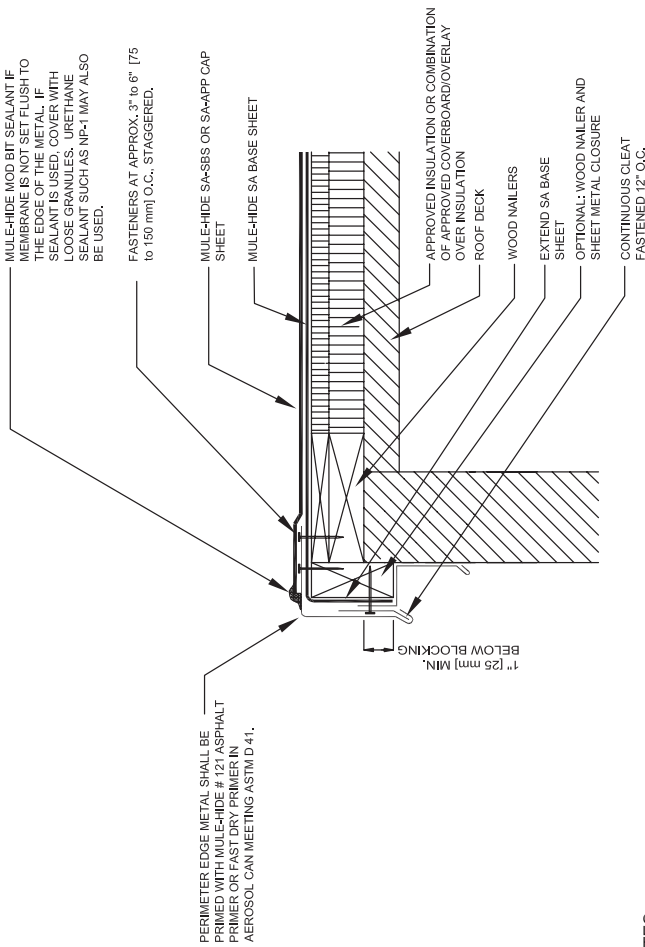
ALL MOD BIT SYSTEMS

DETAIL NO.:

MHMB-142

REVISION DATE: 05/2018

**MULE-HIDE
PRODUCTS CO., INC.**



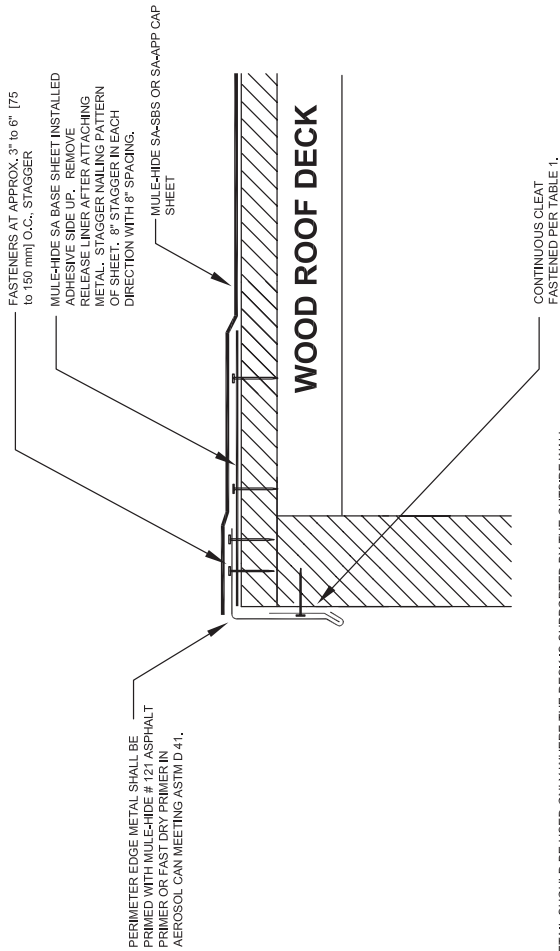
NOTES:

1. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.
- 2.

MULE-HIDE
PRODUCTS CO., INC.
2003

EDGE METAL FLASHING - OPTION 1
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-EM1



CONTINUOUS CLEAT
FASTENED PER TABLE 1.

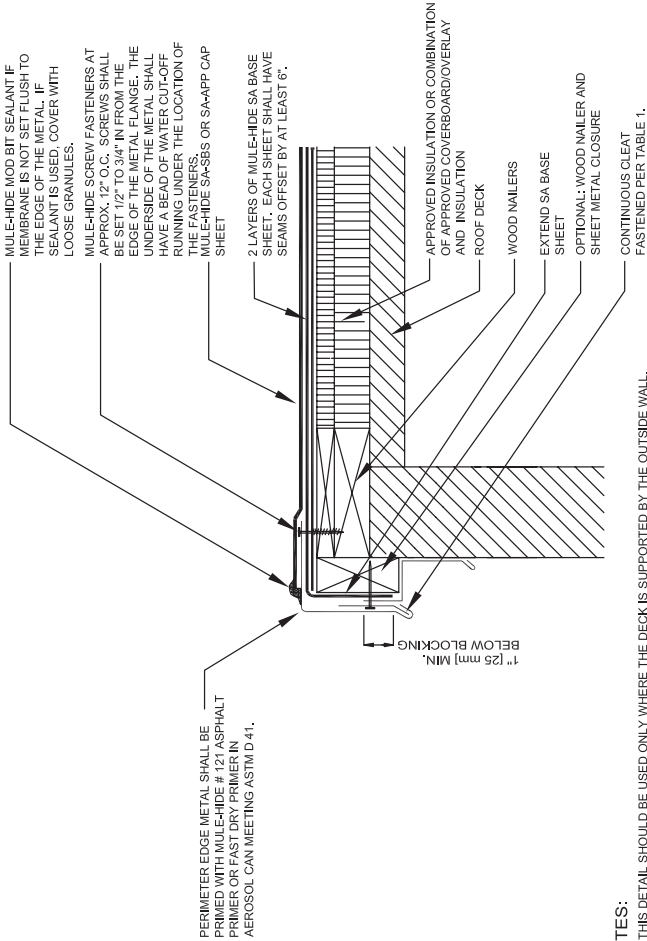
- NOTES:**
1. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SEQUENCE OPTIONS FOR SHEET METAL.
 2. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SEQUENCE OPTIONS FOR SHEET METAL.
 3. THIS DETAIL IS ONLY AVAILABLE FOR PROJECTS REQUESTING TEN-YEAR MATERIAL OR SYSTEM WARRANTIES.
 4. DECK MUST HAVE A MINIMUM SLOPE OF 1/4" PER FOOT.

DETAIL NO.:
MH-MB-EM2

EDGE METAL FLASHING - OPTION 2

SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003



NOTES:

1. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.
2. MULE-HIDE REQUIRES THE USE OF MULE-HIDE SCREWS TO ANCHOR THE EDGE METAL FOR 20-YEAR WARRANTIES.
3. MULE-HIDE REQUIRES 2 LAYERS OF SA BASE SHEET FOR 20-YEAR WARRANTIES.

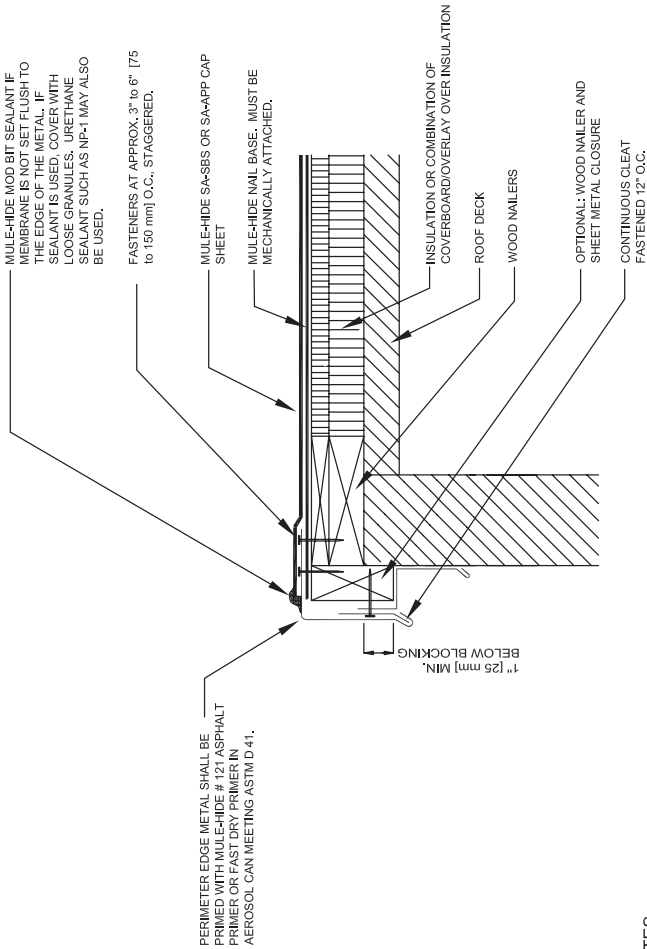
MULE-HIDE REQUIRES 2 LAYERS OF SA BASE SHEET FOR 20-YEAR WARRANTIES

MULE-HIDE
PRODUCTS CO.,INC.
2003

EDGE METAL FLASHING - OPTION 3

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-EM3



NOTES:

1. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL. REFER TO THE SHEET METAL SECTION OF THE NRCA ROOFING AND WATERPROOFING MANUAL FOR JOINERY AND SECUREMENT OPTIONS FOR SHEET METAL.

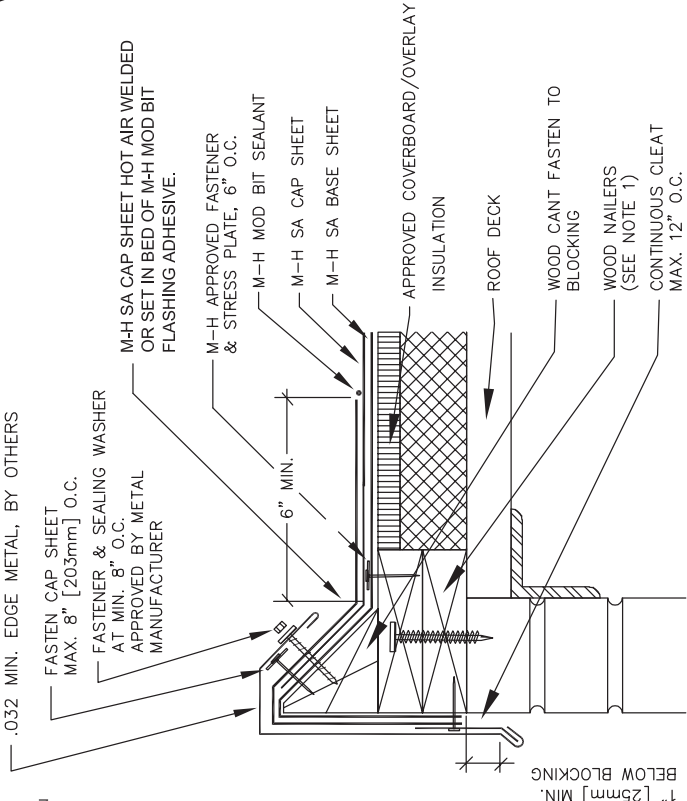
MULE-HIDE
PRODUCTS CO., INC.
2003

EDGE METAL FLASHING - OPTION 4
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-EM4

NOTES:

1. ATTACH WOOD NAILER TO WALL/DECK IN ACCORDANCE WITH FMRC GUIDELINES AS PER SECTION 1-28, REGARDING WINDLOADS TO ROOF SYSTEMS & DECK SECUREMENT.
2. REFER TO SMACNA RECOMMENDATIONS & DETAILS REGARDING METAL THICKNESS & CLEAT REQUIREMENTS.
3. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED TO MEMBRANE IN ALL LOCATIONS WHERE "FASTLAP" IS NOT PRESENT.
4. ALL ACCEPTABLE MASONRY, CONCRETE, METAL & AGED WOOD SUBSTRATES MUST BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER (ASTM D 41).
5. REFER TO MULE-HIDE APPLICATION GUIDELINES AND PRODUCT DATA SHEETS FOR SUITABLE INSULATION TO ACCEPT MULE-HIDE SELF-ADHERING MEMBRANES.
6. INSULATION MUST BE ATTACHED IN ACCORDANCE WITH MULE-HIDE MINIMUM REQUIREMENTS.
7. NON-COMPATIBLE INSULATION SHALL REQUIRE AN APPROVED COVERBOARD TO WHICH THE SA BASE SHEET MAY BE ADHERED. CERTAIN APPROVED COVERBOARDS (UNDERLAYMENTS) MAY REQUIRE PRIMING WITH MULE-HIDE # 121 ASPHALT PRIMER.
8. IF INSTALLING A 20-YR SYSTEM, 2 PILES OF SA BASE SHEET ARE REQUIRED.



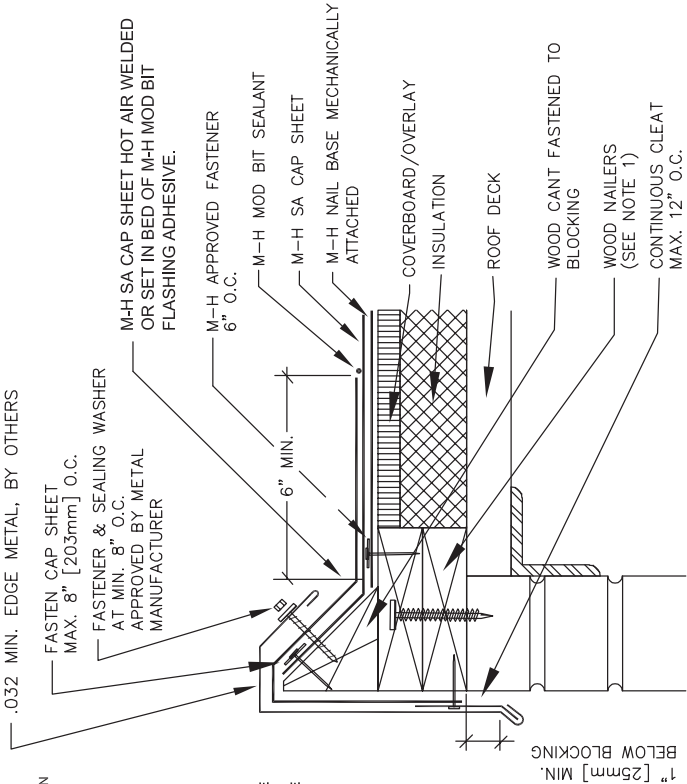
MULE-HIDE
PRODUCTS CO.,INC.
2003

GRAVEL STOP - OPTION # 1
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-GS1

NOTES:

1. ATTACH WOOD NAILER TO WALL/DECK IN ACCORDANCE WITH FMRC GUIDELINES AS PER SECTION 1-28, REGARDING WINDLOADS TO ROOF SYSTEMS & DECK SECUREMENT.
2. REFER TO SMACNA RECOMMENDATIONS & DETAILS REGARDING METAL THICKNESS & CLEAT REQUIREMENTS.
3. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED TO MEMBRANE IN ALL LOCATIONS WHERE "FASTLAP" IS NOT PRESENT.
4. ALL ACCEPTABLE MASONRY, CONCRETE, METAL & AGED WOOD SUBSTRATES MUST BE PRIMED WITH MULE-HIDE # 121 ASPHALT PRIMER (ASTM D 41).
5. INSULATION MUST BE ATTACHED IN ACCORDANCE WITH MULE-HIDE MINIMUM REQUIREMENTS.
6. IF INSTALLING A 15-YR SYSTEM, 1 PLY OF SA BASE SHEET IS REQUIRED OVER THE NAIL BASE.
7. IF INSTALLING A 20-YR SYSTEM, 2 PLYS OF SA BASE SHEET ARE REQUIRED OVER THE NAIL BASE.

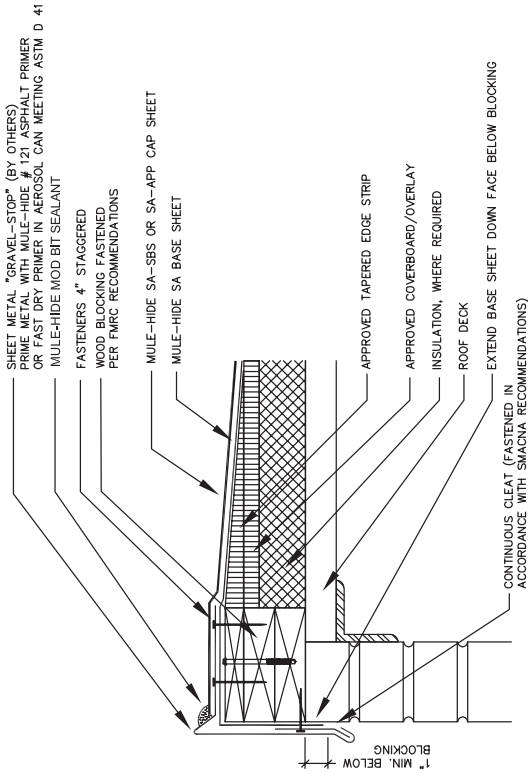


1" [25mm] MIN. BELOW BLOCKING

DETAIL NO.:
MH-MB-GS2

GRAVEL STOP - OPTION 2
SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003



NOTES:

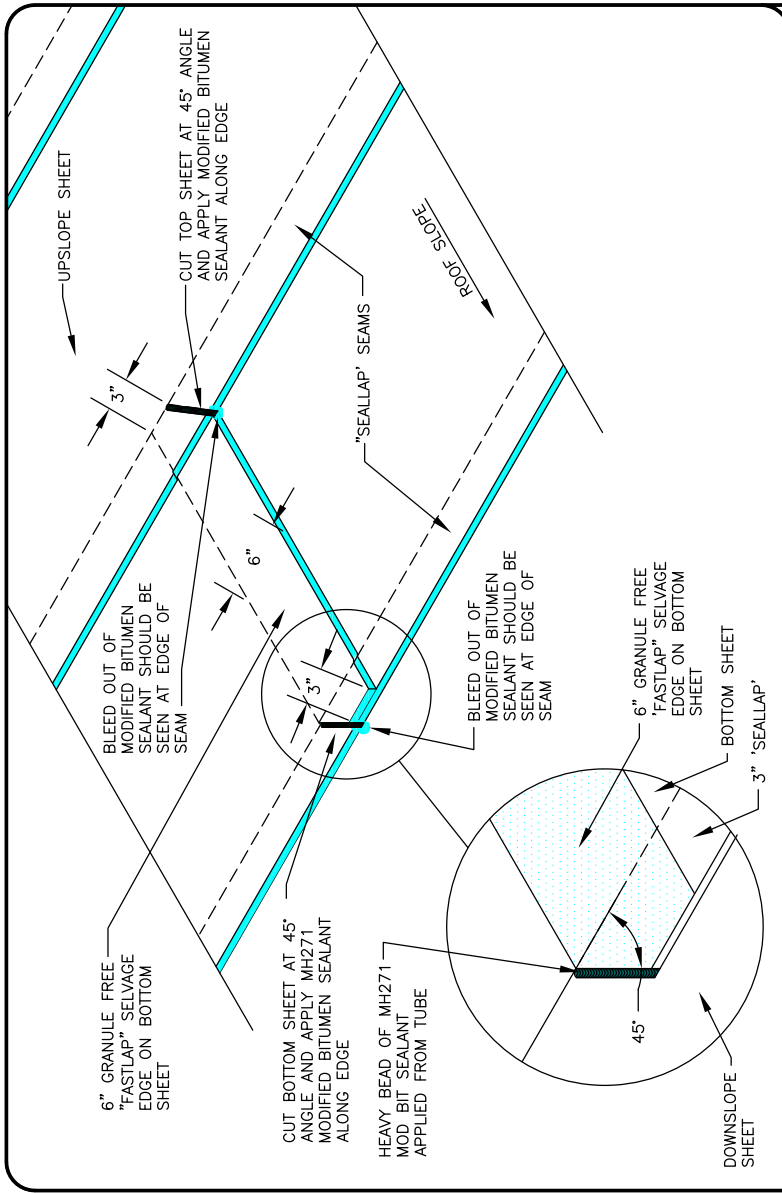
1. ATTACH WOOD NAILER TO WALL/DECK IN ACCORDANCE WITH FMRC GUIDELINES, AS PER SECTION 1-28, REGARDING WINDLOADS TO ROOF SYSTEMS & DECK SECUREMENT.
2. WOOD BLOCKING MAY BE SLOTTED FOR VENTING OF WET-FILL DECKS OR OTHER APPLICABLE CONSTRUCTIONS
3. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL
4. REFER TO SMACNA RECOMMENDATIONS & DETAILS REGARDING METAL THICKNESS & CLEAT REQUIREMENTS
5. MEMBRANE ENDLAPS MUST BE 6" MINIMUM & FULLY ADHERED AT ALL MEMBRANE IN LOCATIONS WHERE "FAST LAP" IS NOT PRESENT
6. IF INSTALLING A 20-YR SYSTEM, 2 PLYS OF SA BASE SHEET MUST BE INSTALLED.

MULE-HIDE
PRODUCTS CO.,INC.
2003

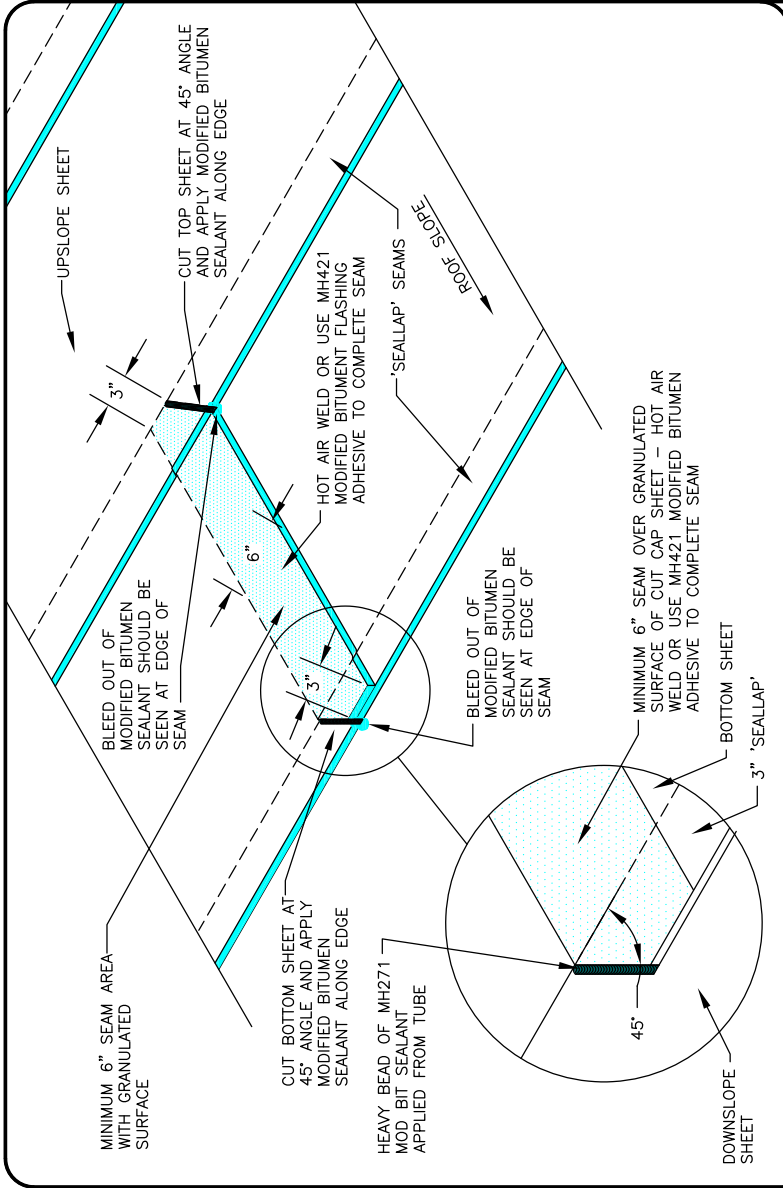
GRAVEL STOP - OPTION 3

SELF-ADHERING MOD BIT SYSTEMS

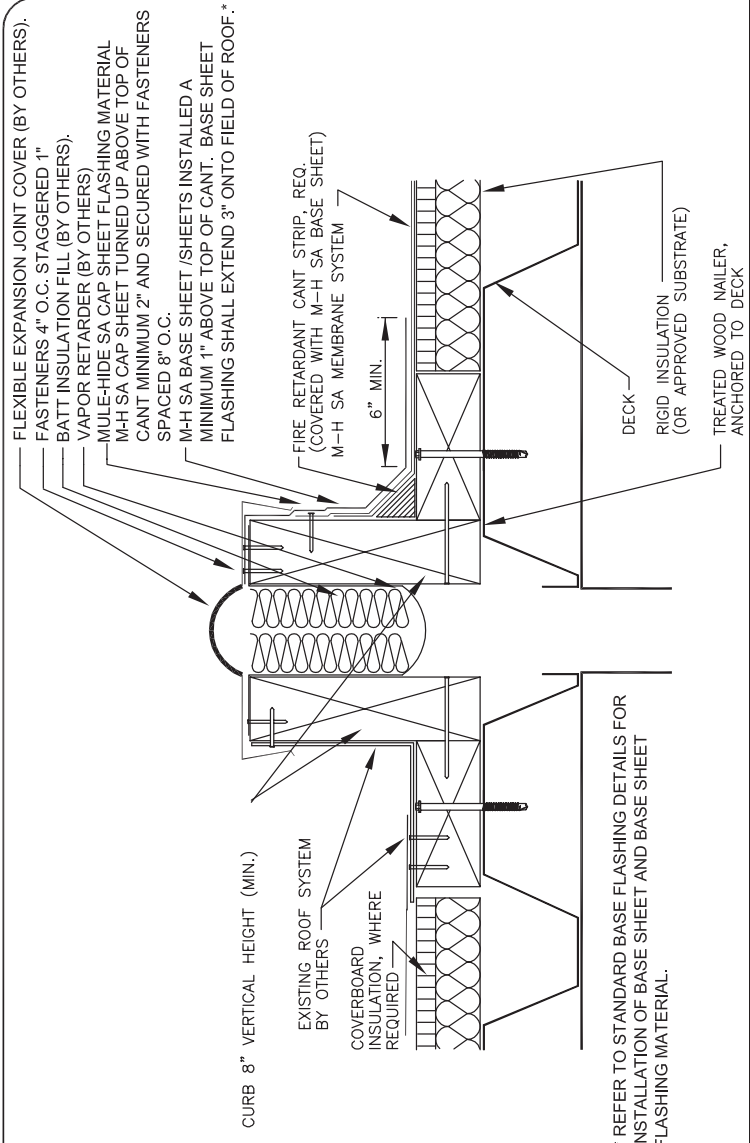
DETAIL NO.:
MH-MB-GS3



| | | |
|---|--|--------------------------------|
| MULE-HIDE PRODUCTS CO., INC. 2010 | 'FASTLAP' END LAPS - 45 DEGREE CUT SYSTEMS: | DETAIL NO.: MHMB-110 |
| | SELF-ADHERING MODIFIED BITUMEN | |



| | | |
|--|--|---------------------------------------|
| MULE-HIDE PRODUCTS CO., INC. 2010 | CUT CAP SHEET END LAPS - 45 DEGREE CUT SYSTEMS: | DETAIL NO.: MHMB-111 |
| | SELF-ADHERING MODIFIED BITUMEN | |

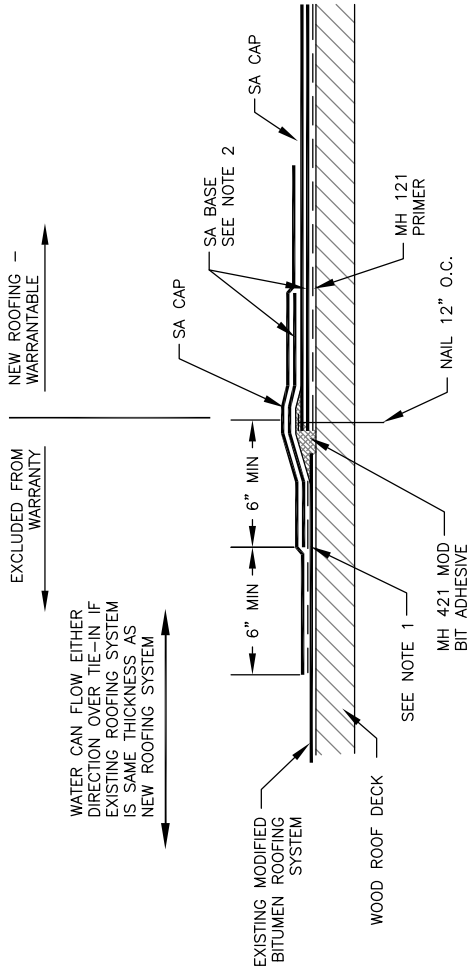


- FLEXIBLE EXPANSION JOINT COVER (BY OTHERS).
- FASTENERS 4" O.C. STAGGERED 1"
- BATT INSULATION FILL (BY OTHERS).
- VAPOR RETARDER (BY OTHERS)
- MULE-HIDE SA CAP SHEET FLASHING MATERIAL
- M-H SA CAP SHEET TURNED UP ABOVE TOP OF
- CANT MINIMUM 2" AND SECURED WITH FASTENERS
- SPACED 8" O.C.
- M-H SA BASE SHEET /SHEETS INSTALLED A
- MINIMUM 1" ABOVE TOP OF CANT. BASE SHEET
- FLASHING SHALL EXTEND 3" ONTO FIELD OF ROOF.*

- FIRE RETARDANT CANT STRIP, REQ. (COVERED WITH M-H SA BASE SHEET)
- M-H SA MEMBRANE SYSTEM
- 6" MIN.
- DECK
- RIGID INSULATION (OR APPROVED SUBSTRATE)
- TREATED WOOD NAILER, ANCHORED TO DECK

* REFER TO STANDARD BASE FLASHING DETAILS FOR INSTALLATION OF BASE SHEET AND BASE SHEET FLASHING MATERIAL.

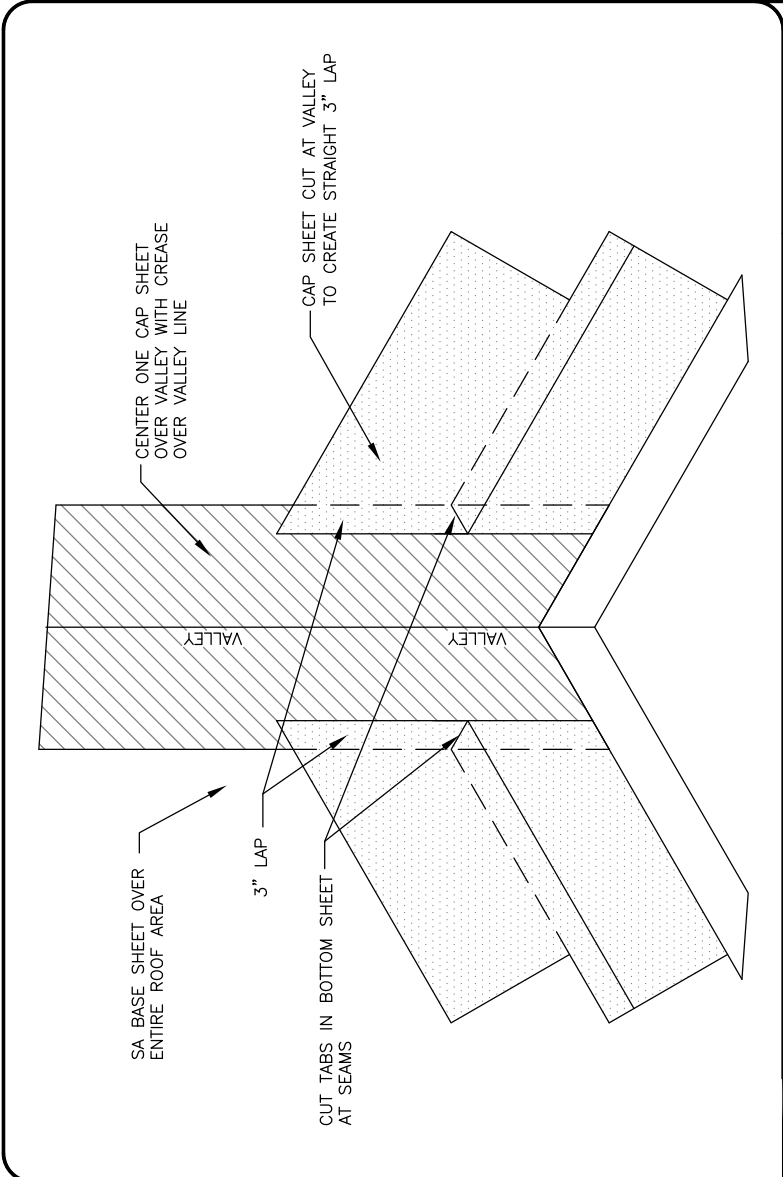
| | |
|--|--|
| <p>EXPANSION JOINT - OPTION 1</p> <p>SELF-ADHERING MOD BIT SYSTEMS</p> | <p>DETAIL NO.:</p> <p>MH-MB-EJ1</p> |
| | <p>MULE-HIDE</p> <p>PRODUCTS CO.,INC.</p> <p>2003</p> |



NOTES:

1. EXISTING MEMBRANE MUST BE PRIMED WITH MH 121 PRIMER. IF EXISTING MOD. BIT. IS GRANULAR SURFACED, MH 421 MOD BIT ADHESIVE MUST BE USED TO COMPLETE SEAM. IF EXISTING MOD BIT IS SMOOTH SURFACED, ADHERING DIRECTLY TO THE PRIMED SURFACE IS ACCEPTABLE.
2. 20-YR WARRANTIES REQUIRE 2 PLYS OF SA BASE SHEET ON THE FIELD OF THE ROOF PRIOR TO INSTALLING CAP SHEETS.

| | | |
|---|---|---------------------------------------|
| MULE-HIDE PRODUCTS CO., INC. | TIE-IN TO EXISTING SMOOTH MOD. BIT. WITH TEAR-OFF SYSTEMS: | DETAIL NO.: MHMB-162 |
| | SELF-ADHERING MODIFIED BITUMEN | REVISION DATE: 03/2017 |

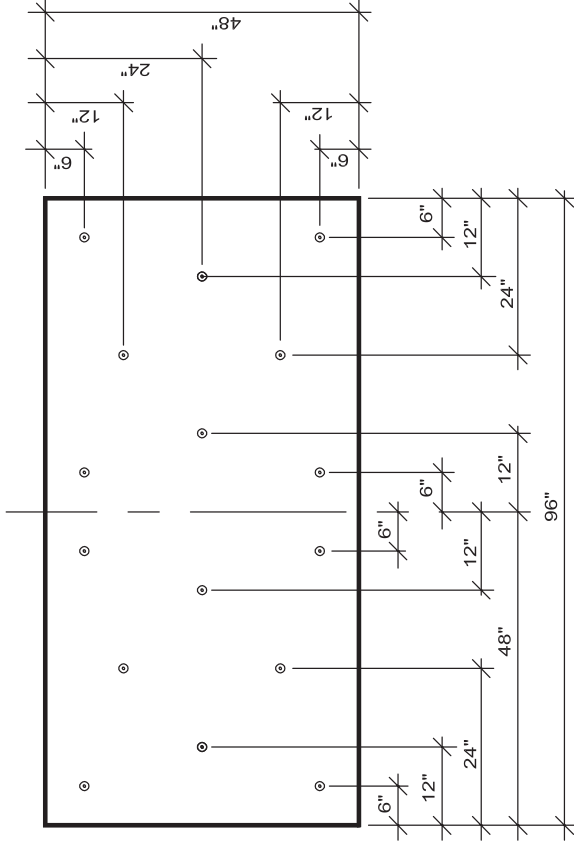


**MULE-HIDE
PRODUCTS CO., INC.
2010**

OPEN VALLEY
SYSTEMS:
SELF-ADHERING MODIFIED BITUMEN

DETAIL NO.:
MHMB-180

THE ATTACHMENT PATTERN SHOWN IS THE STANDARD PATTERN FOR FIELD ATTACHMENT REQUIRED BY MULE-HIDE. THE ATTACHMENT IN THE PERIMETER AREA IS INCREASED 50% AND 75% IN THE CORNERS.



4' X 8' INSULATION ATTACHMENT (1 PER 2 SF.)
STANDARD ATTACHMENT

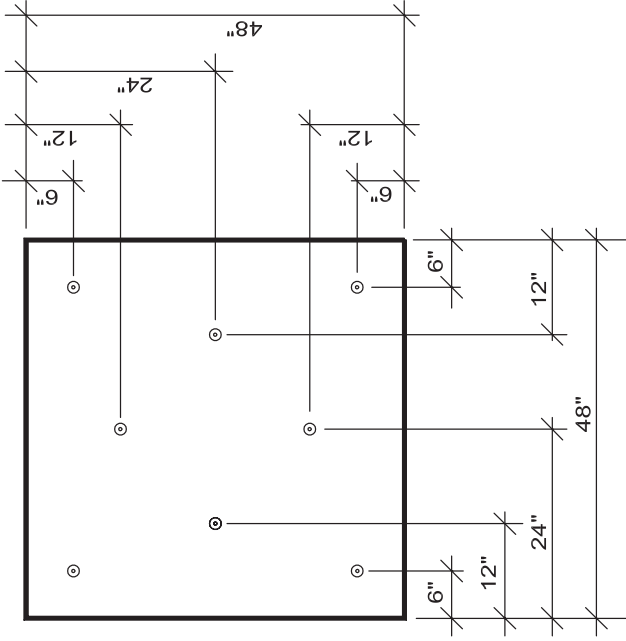
MULE-HIDE
PRODUCTS CO.,INC.
2003

INSULATION ATTACHMENT - OPTION 1

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-INS-1

THE ATTACHMENT PATTERN SHOWN IS THE STANDARD PATTERN FOR FIELD ATTACHMENT REQUIRED BY MULE-HIDE. THE ATTACHMENT IN THE PERIMETER AREA IS INCREASED 50% AND 75% IN THE CORNERS.

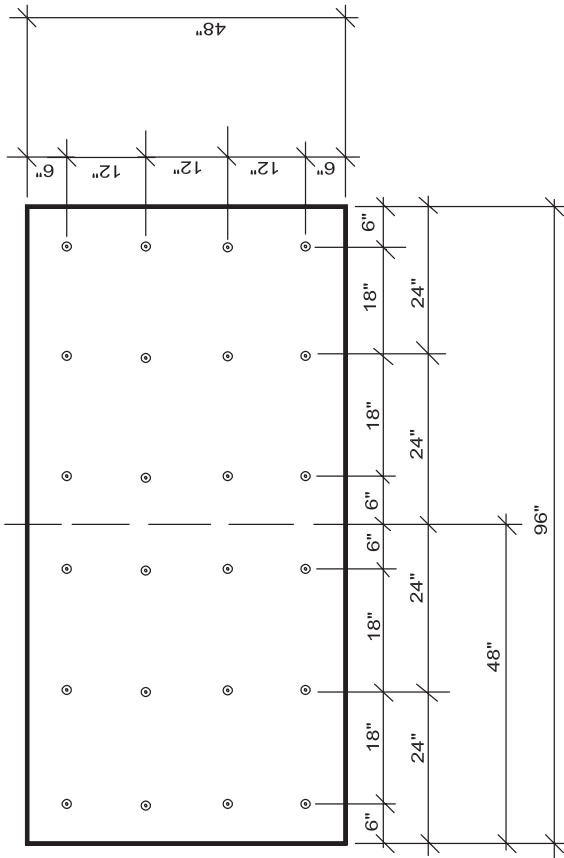


4' X 4' INSULATION ATTACHMENT (1 PER 2 SF.)
STANDARD ATTACHMENT

MULE-HIDE
PRODUCTS CO., INC.
2003

INSULATION ATTACHMENT - OPTION 2
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-INS-2



4' X 8' INSULATION ATTACHMENT (1 PER 1.33 SF)
 STANDARD ATTACHMENT (24 PER BOARD)

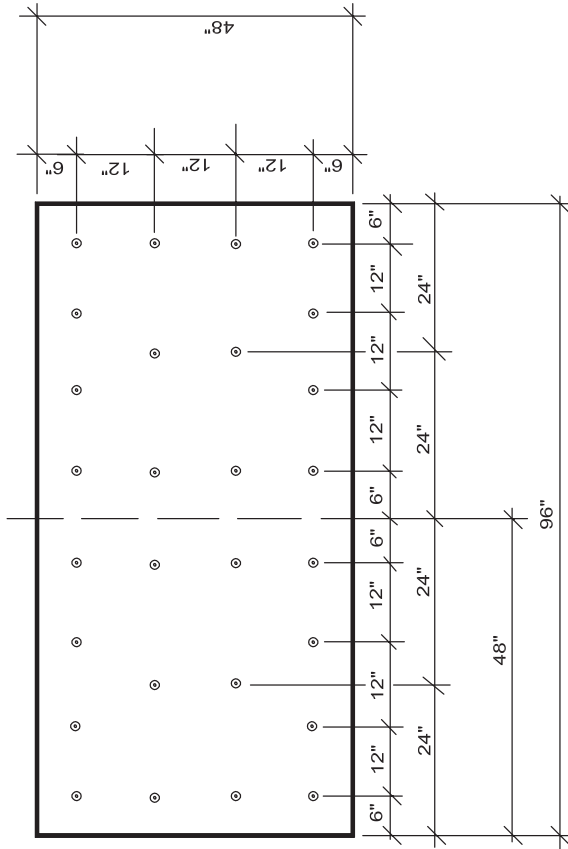
MULE-HIDE
PRODUCTS CO.,INC.
 2003

INSULATION ATTACHMENT - OPTION 3

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-INS-3

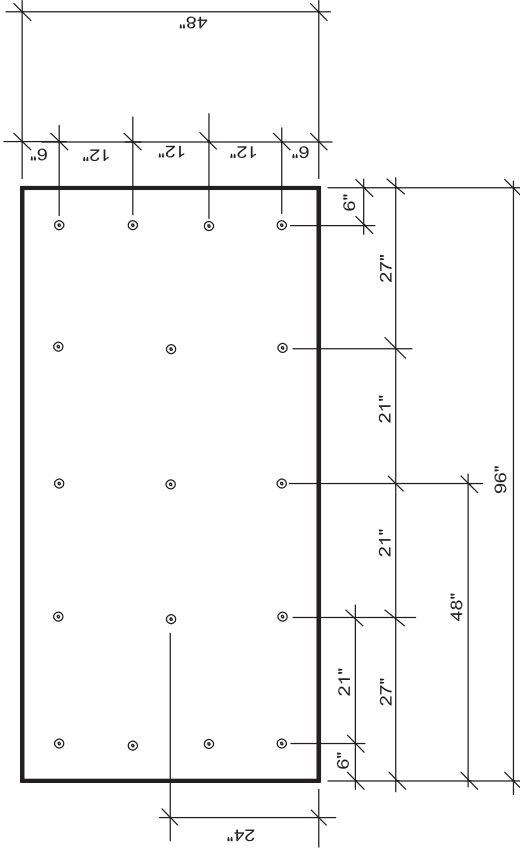


4' X 8' INSULATION ATTACHMENT (1 PER 1,14 SF)
 STANDARD ATTACHMENT (28 PER BOARD)

MULE-HIDE
PRODUCTS CO.,INC.
 2003

INSULATION ATTACHMENT - OPTION 4
SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
MH-MB-INS-4



4' X 8' ORIENTED STRAND BOARD ATTACHMENT (1 PER 1.88 SF)
STANDARD ATTACHMENT (MINIMUM 7/16" THICK)

MULE-HIDE
PRODUCTS CO.,INC.
2003

INSULATION ATTACHMENT - OPTION 5

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-INS-5

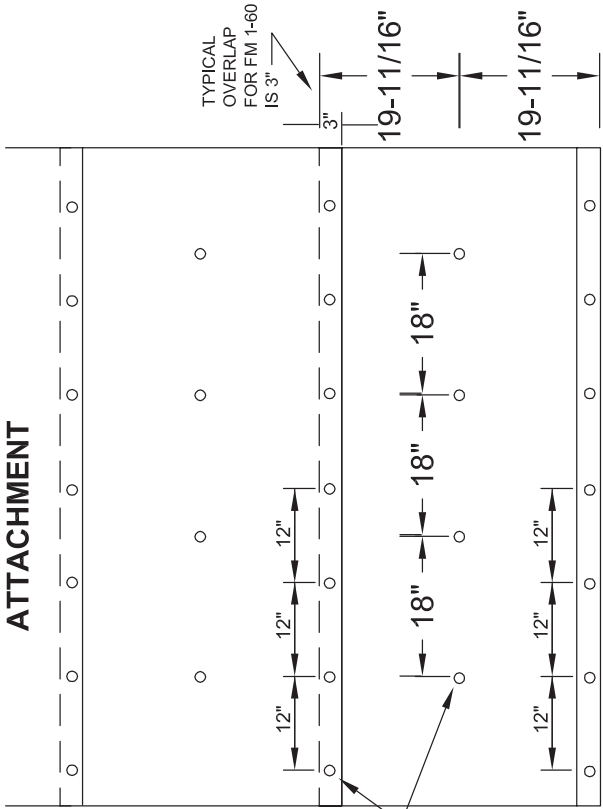
TYPICAL FM 1-60 ATTACHMENT

FIELD FASTENING PATTERN FOR NAIL BASE

NOTE: TYPICALLY, CORNERS REQUIRE 100% INCREASE OF FASTENERS AND PERIMETERS REQUIRE 50% INCREASE.

FASTENER PLACEMENT:
 12" O.C. @ SEAMS
 18" O.C. @ CENTER OF ROLLS

FACTORY MUTUAL APPROVED FASTENERS AND PLATES



39-3/8" WIDE NAIL BASE ROLLS

DETAIL NO.:
MH-MB-NB
FM 1-60

NAIL BASE FASTENING PATTERN

SELF-ADHERING MOD BIT SYSTEMS

MULE-HIDE
PRODUCTS CO.,INC.
2003

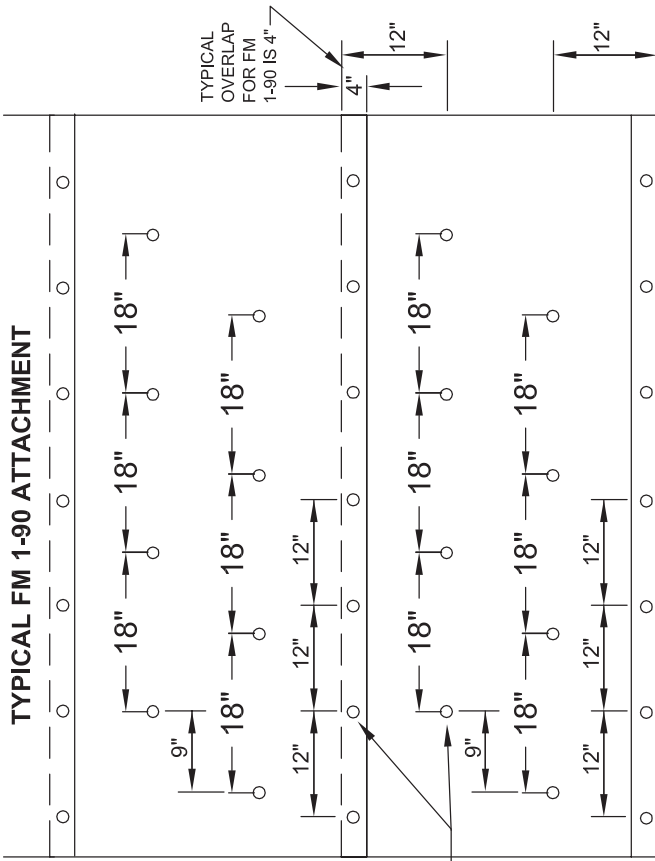
**FIELD FASTENING
PATTERN FOR NAIL
BASE SHEET**

NOTE: TYPICALLY, CORNERS
REQUIRE 100% INCREASE OF
FASTENERS AND PERIMETERS
REQUIRE 50% INCREASE.

FASTENER PLACEMENT:
12" O.C. @ SEAMS
18" O.C. @ FIELD, 2 ROWS
SPACED 12" APART AND FROM
SHEET EDGE AND STAGGERED
9"

**FACTORY MUTUAL APPROVED
FASTENERS AND PLATES**

TYPICAL FM 1-90 ATTACHMENT



39-3/8" WIDE NAIL BASE ROLLS

**MULE-HIDE
PRODUCTS CO.,INC.
2003**

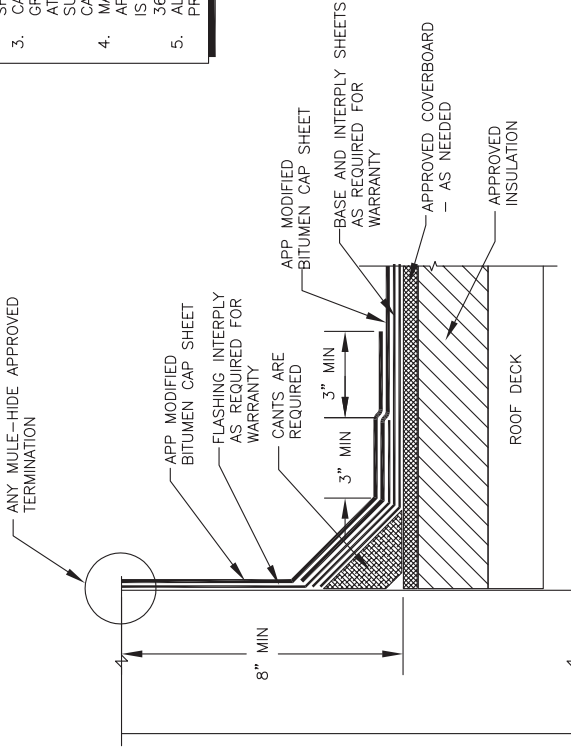
NAIL BASE FASTENING PATTERN

SELF-ADHERING MOD BIT SYSTEMS

**DETAIL NO.:
MH-MB-NB
FM 1-90**

NOTES:

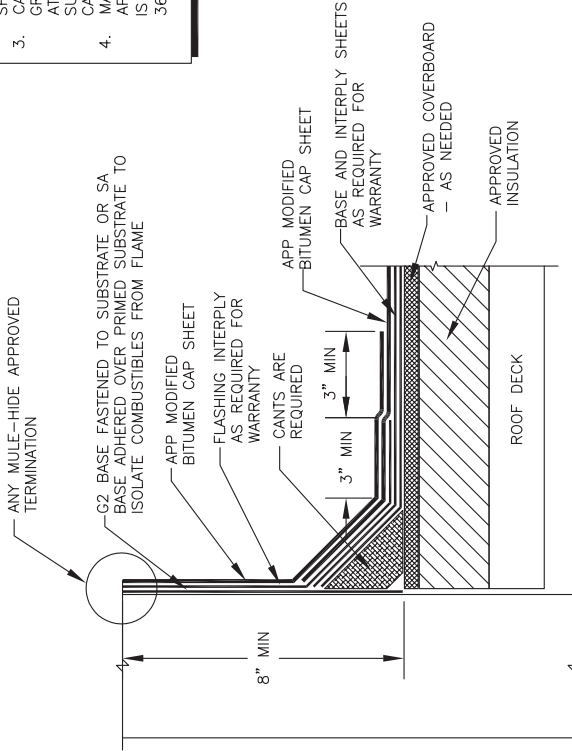
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW07T. ALL VERTICAL SURFACES MUST BE PRIMED.



| | | |
|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | BASE FLASHING NONCOMBUSTIBLE SUBSTRATE SYSTEMS: | DETAIL NO.: MHMB-UN-CW01T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

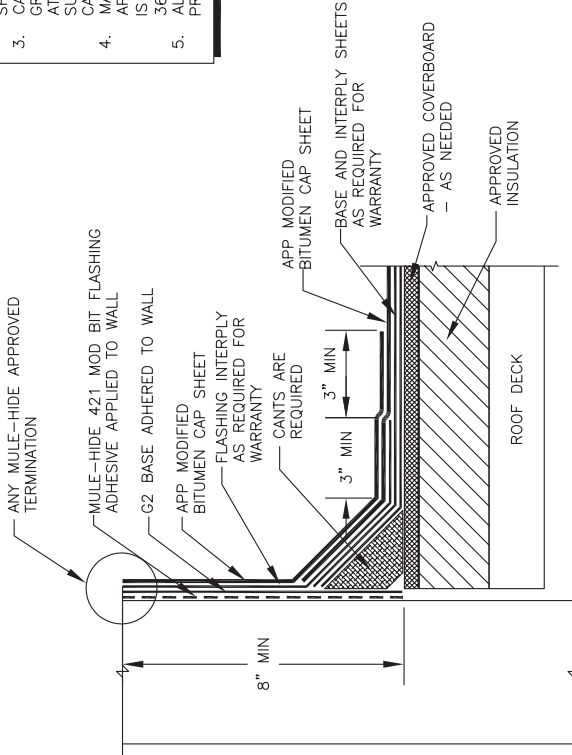
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW07T



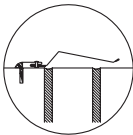
| | |
|---|--|
| MULE-HIDE PRODUCTS CO., INC. | BASE FLASHING COMBUSTIBLE SUBSTRATE SYSTEMS: APP MODIFIED BITUMEN |
| DETAIL NO.: MHMB-UN-CW11T REVISION DATE: MARCH 2015 | |

NOTES:

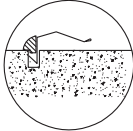
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW07T.
5. ALL VERTICAL SURFACES MUST BE PRIMED.



| | | |
|---|---|--|
| MULE-HIDE PRODUCTS CO., INC. | BASE FLASHING WITH MASTIC SYSTEMS: | DETAIL NO.: MHMB-UN-CW02T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |



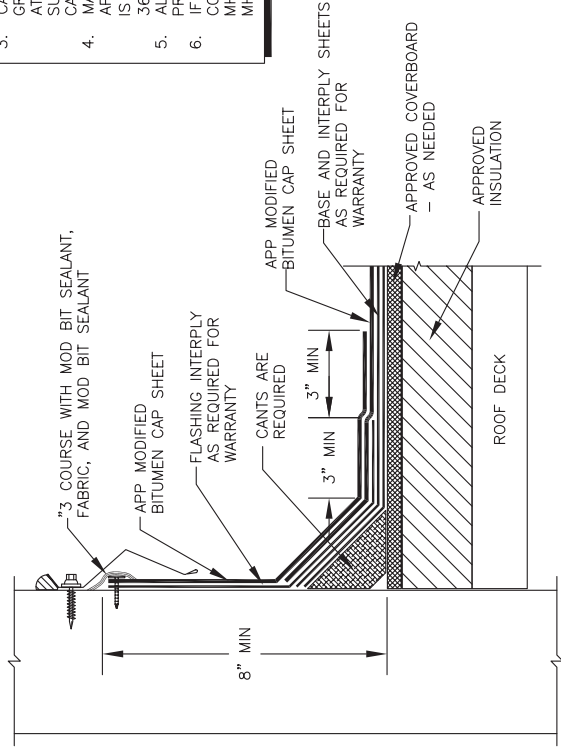
2-PIECE REGLET



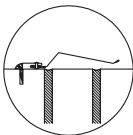
REGLET

NOTE:
SCREWS THROUGH
COUNTERFLASHING TO
ACT AS TERMINATION
ARE NOT APPROVED

- NOTES:
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
 2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
 3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
 4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW06T. ALL VERTICAL SURFACES TO BE PRIMED.
 5. IF FLASHING SUBSTRATE IS COMBUSTIBLE, REFER TO DETAIL MHMB-UN-CW11T OR MHMB-UN-CW02T.

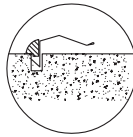


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|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | BASE FLASHING WITH METAL COUNTERFLASHING SYSTEMS: | DETAIL NO.: MHMB-UN-CW03T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |



NOTE:
SCREWS THROUGH
COUNTERFLASHING TO
ACT AS TERMINATION
ARE NOT APPROVED

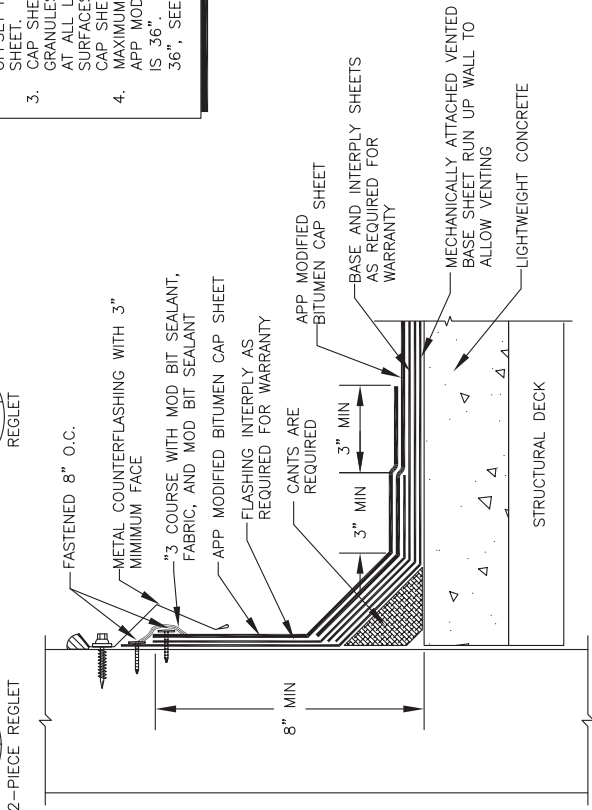
2-PIECE REGLET



REGLET

NOTES:

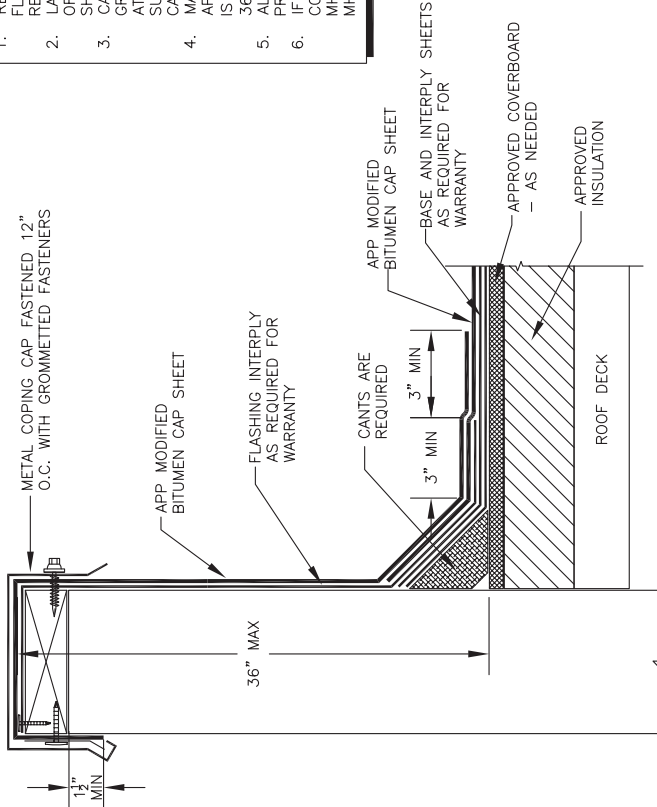
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW06T



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|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | BASE FLASHING FOR VENTED PERIMETER SYSTEMS: | DETAIL NO.: MHMB-UN-CW04T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

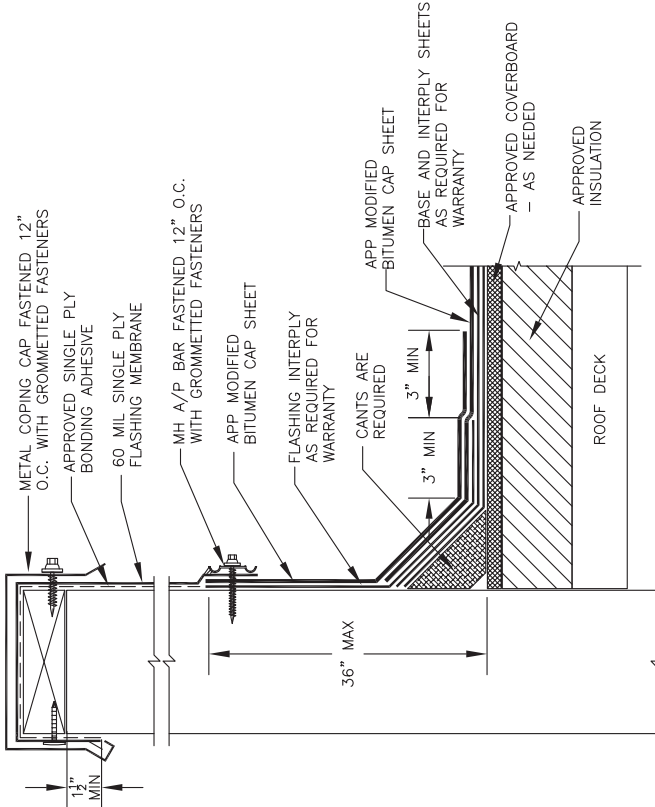
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW06T.
5. ALL VERTICAL SURFACES TO BE PRIMED.
6. IF FLASHING SUBSTRATE IS COMBUSTIBLE, REFER TO DETAIL MHMB-UN-CW11T OR MHMB-UN-CW02T.



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|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | PARAPET WALL WITH METAL COPING SYSTEMS: | DETAIL NO.: MHMB-UN-CW05T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

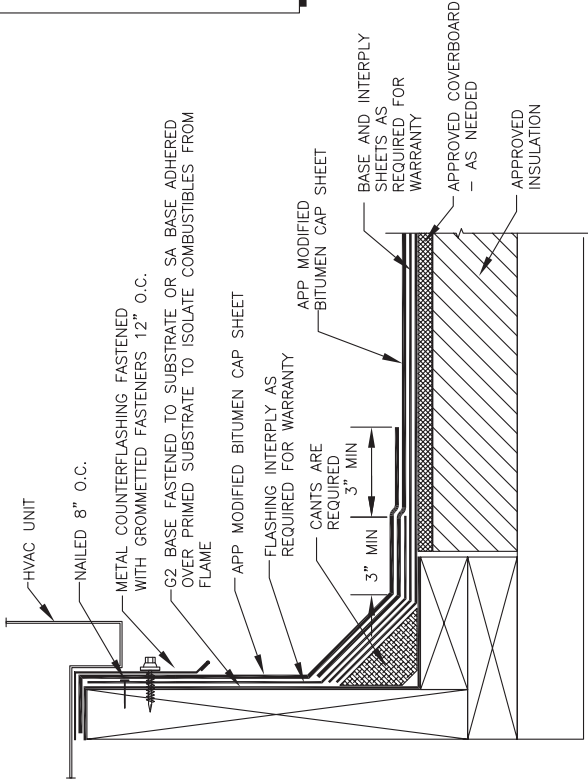
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS 36". IF WALL IS TALLER THAN 36" SEE DETAIL MHMB-UN-CW06T SINGLE PLY MEMBRANE MUST OVERLAP TOP OF MODIFIED BITUMEN FLASHING PRIOR TO INSTALLING A/P BAR.
5. ALL VERTICAL SURFACES AT APP FLASHINGS TO BE PRIMED.
6. IF FLASHING SUBSTRATE IS COMBUSTIBLE REFER TO DETAIL MHMB-UN-CW11T OR MHMB-UN-CW02T.



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| <p>MULE-HIDE PRODUCTS CO., INC.</p> | <p>HIGH WALL PARAPET FLASHING SYSTEMS:</p> <p>APP MODIFIED BITUMEN</p> |
| <p>DETAIL NO.:</p> <p>MHMB-UN-CW06T</p> <p>REVISION DATE: MARCH 2015</p> | |

NOTES:

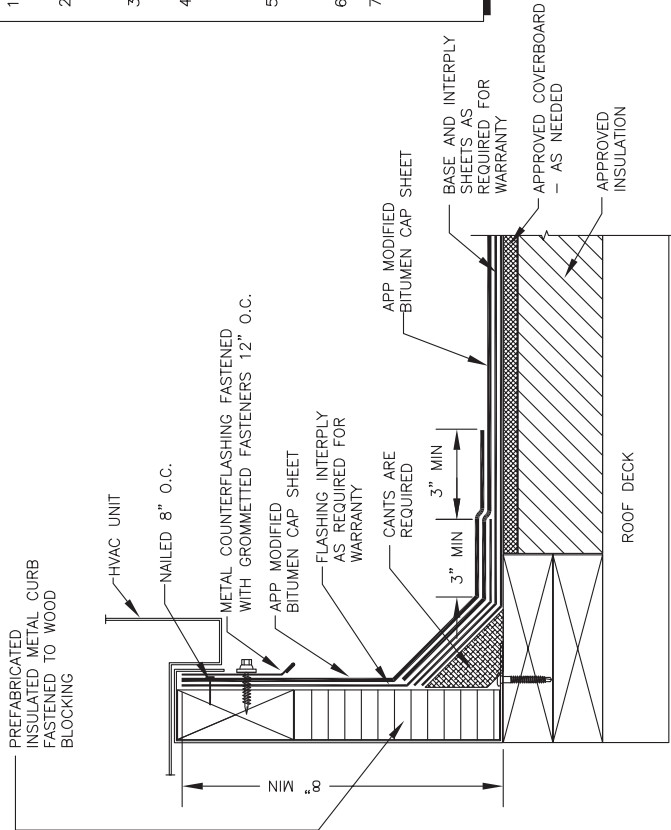
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.
3. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
4. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
5. INSTALL HVAC UNITS AFTER THE ROOF MEMBRANE AND FLASHINGS HAVE BEEN INSTALLED, IF POSSIBLE.



| | | |
|-------------------------------------|---|---|
| MULE-HIDE PRODUCTS CO., INC. | HVAC CURB WOOD SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-CW07T REVISION DATE: MARCH 2015 |
| | APP MODIFIED BITUMEN | |

NOTES:

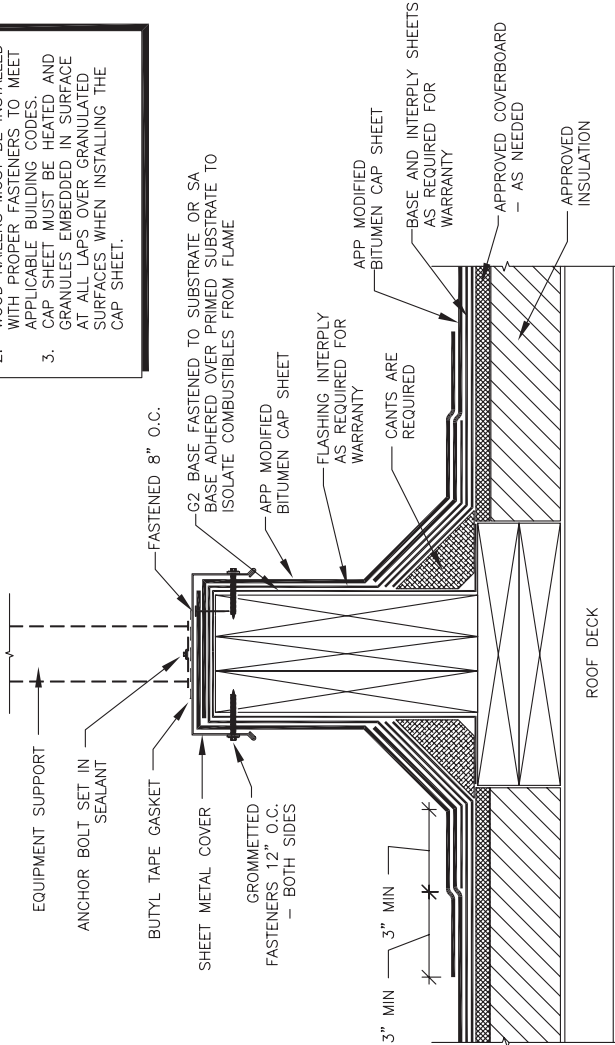
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.
3. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
4. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
5. INSTALL HVAC UNITS AFTER THE ROOF MEMBRANE AND FLASHINGS HAVE BEEN INSTALLED, IF POSSIBLE.
6. VERTICAL SURFACES MUST BE PRIMED.
7. ANY COMBUSTIBLE MATERIALS ON PREFABRICATED CURB MUST BE PROTECTED WITH A G2 BASE NAILED IN PLACE OR A SA BASE ADHERED TO A PRIMED SURFACE.



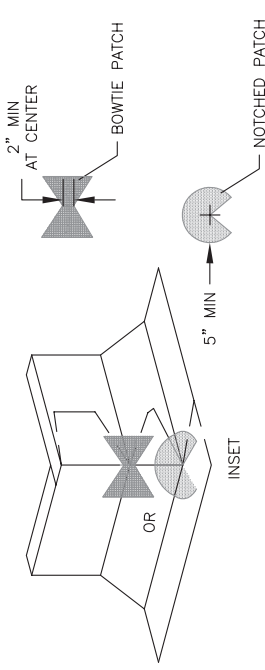
| | | |
|--|--|--|
| <p>MULE-HIDE PRODUCTS CO., INC.</p> | <p>SYSTEMS:</p> <p>APP MODIFIED BITUMEN</p> | <p>DETAIL NO.:</p> <p>MHMB-UN-CW08T</p> <p>REVISION DATE: MARCH 2015</p> |
| | <p>PREFABRICATED METAL CURB</p> | |

NOTES:

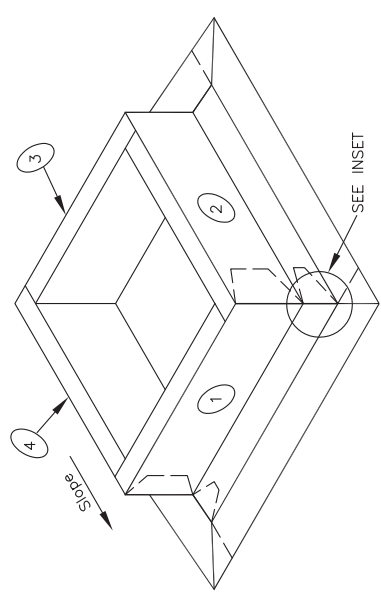
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS. OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



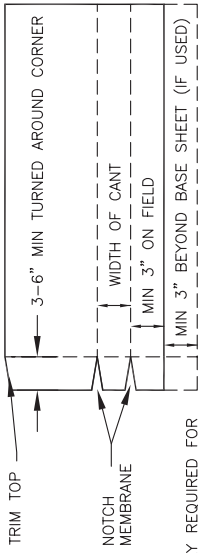
| | |
|---|---|
| <p>MULE-HIDE PRODUCTS CO., INC.</p> | <p>DETAIL NO.: MHMB-UN-CW10T</p> <p>REVISION DATE: MARCH 2015</p> |
| <p>AREA DIVIDER / EQUIPMENT SUPPORT WOOD CURB SYSTEMS:</p> <p>APP MODIFIED BITUMEN</p> | |



- NOTES:
1. REFER TO SPECIFICATIONS FOR FLASHING-MEMBRANE REQUIREMENTS.
 2. CUT MEMBRANE AND WRAP CORNERS AS SHOWN.
 3. INSTALL BOWTIE OR NOTCHED PATCHES AS SHOWN IN INSET TO MAKE CORNERS WATER TIGHT.
 4. FLASHING MAY BE CUT FLUSH WITH EDGE OF CURB (AS SHOWN) OR DOUBLE-WRAPPED AROUND CORNERS.



| | | |
|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | OUTSIDE CORNER ISOMETRIC SYSTEMS: | DETAIL NO.: MHMB-UN-CR01T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

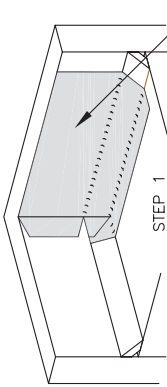


INTERPLY REQUIRED FOR
15 & 20 YEAR SYSTEMS

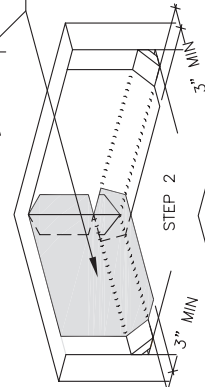
SHEET LAYOUT

NOTES:

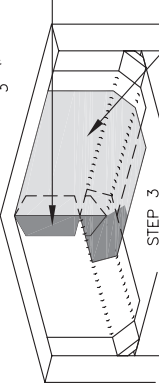
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. CUT MEMBRANE AND WRAP CORNERS AS SHOWN.



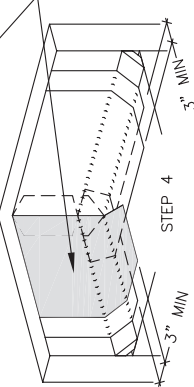
STEP 1



STEP 2



STEP 3

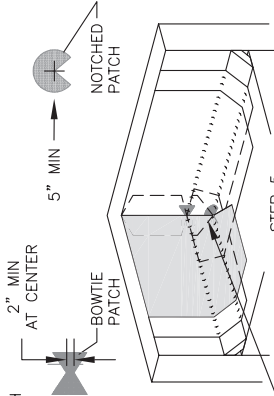


STEP 4

HEAT SURFACE OF MEMBRANE AND EMBED GRANULES INTO THE SHEET TO CREATE SMOOTH SURFACE FOR OVERLAPPING SHEET

APP MODIFIED BITUMEN GRANULE SURFACED CAP SHEET

INSTALL CORNER PATCHES AT ALL ANGLE CHANGES



STEP 5

INSIDE CORNER ISOMETRIC SYSTEMS:

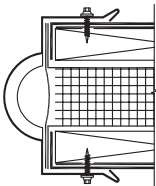
DETAIL NO.:

MHMB-UN-CR02T

REVISION DATE: MARCH 2015

MULE-HIDE PRODUCTS CO., INC.

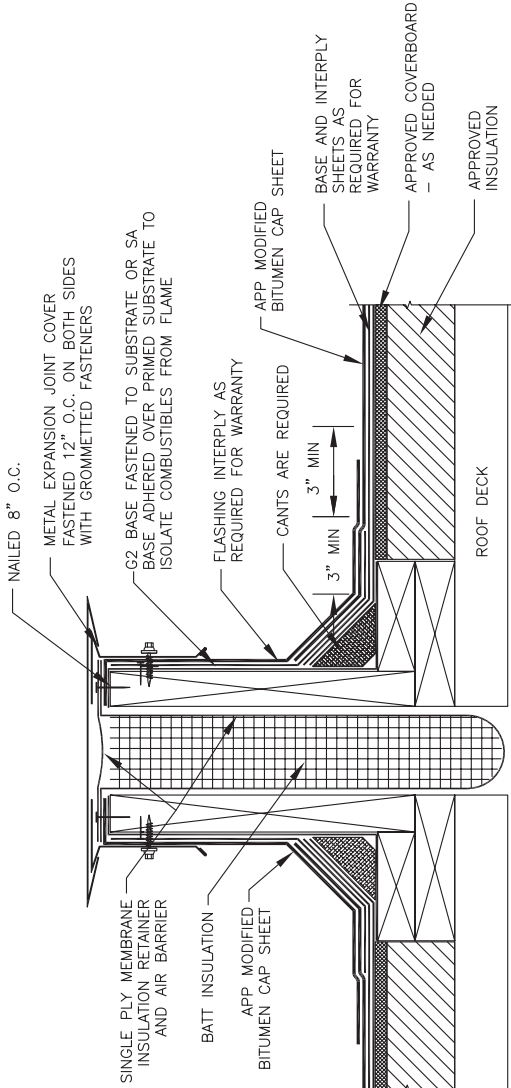
APP MODIFIED BITUMEN



PREFABRICATED EXPANSION JOINT COVER

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.
3. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
4. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.

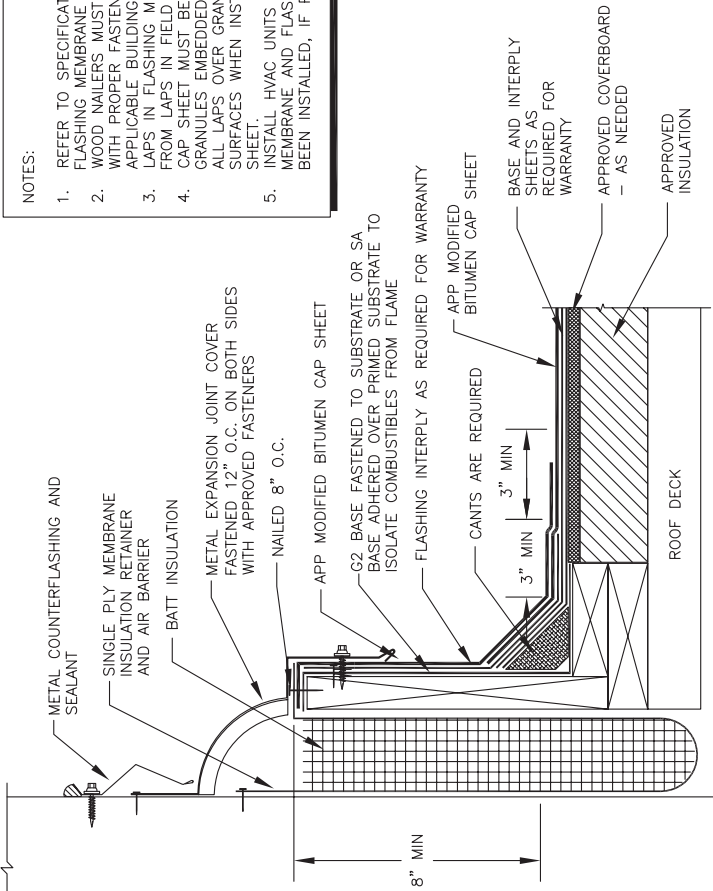


EXPANSION JOINT CURB SYSTEMS:
APP MODIFIED BITUMEN

DETAIL NO.:
MHMB-UN-XJ01T
REVISION DATE: MARCH 2015

MULE-HIDE PRODUCTS CO., INC.

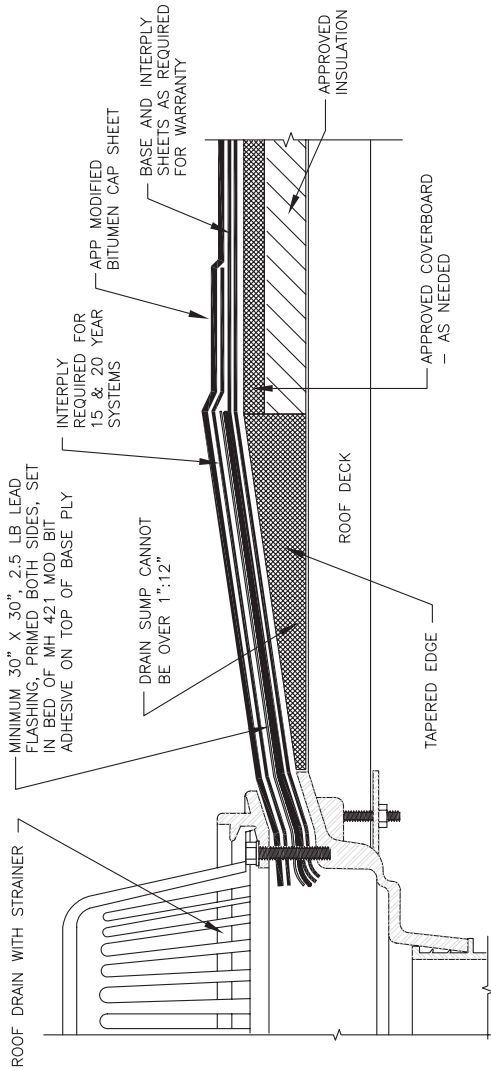
- NOTES:
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
 2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.
 3. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
 4. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
 5. INSTALL HVAC UNITS AFTER THE ROOF MEMBRANE AND FLASHINGS HAVE BEEN INSTALLED, IF POSSIBLE.



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|---|---|---|
| MULE-HIDE PRODUCTS CO., INC. | EXPANSION JOINT WALL SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-XJ02T REVISION DATE: MARCH 2015 |
| | EXPANSION JOINT WALL SYSTEMS: APP MODIFIED BITUMEN | |

NOTES:

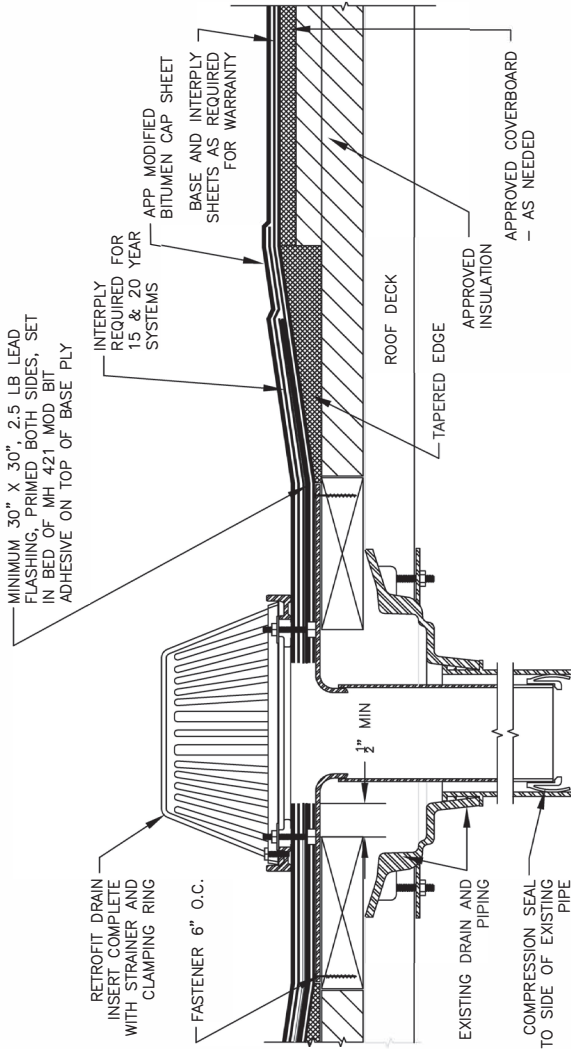
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS
2. IF DRAIN SUMP IS GREATER THAN 1":12", A RETROFIT DRAIN INSERT MUST BE USED
3. A TARGET PATCH OF SMOOTH SURFACED MODIFIED BITUMEN IS REQUIRED IF A FIELD SEAM IS WITHIN 6" - 9" OF CLAMPING RING
4. NO SEAM CAN BE LESS THAN 6" FROM THE DRAIN CLAMPING RING



| | | |
|---|--------------------------------|--|
| MULE-HIDE PRODUCTS CO., INC. | ROOF DRAIN SYSTEMS: | DETAIL NO.: MHMB-UN-DR01T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

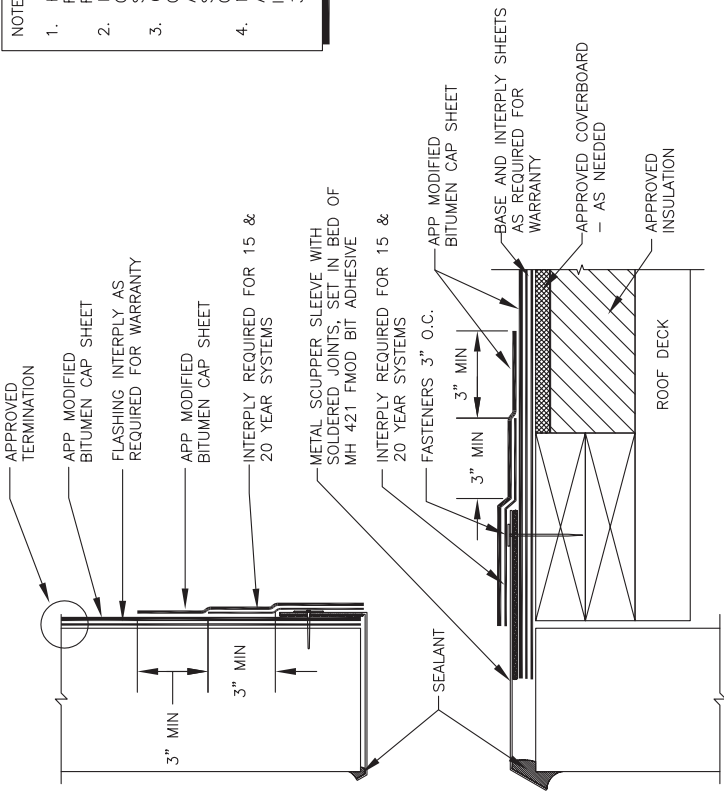
NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS
2. WOOD NAILERS MUST BE INSTALLED AROUND DRAIN
3. A TARGET PATCH OF SMOOTH SURFACED MODIFIED BITUMEN IS REQUIRED IF A FIELD SEAM IS WITHIN 6" - 9" OF CLAMPING RING
4. NO SEAM CAN BE LESS THAN 6" FROM THE DRAIN CLAMPING RING



| | | |
|---|---|--|
| MULE-HIDE PRODUCTS CO., INC. | RETROFIT DRAIN INSERT SYSTEMS: | DETAIL NO.: MHMB-JN-DR02T |
| | APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

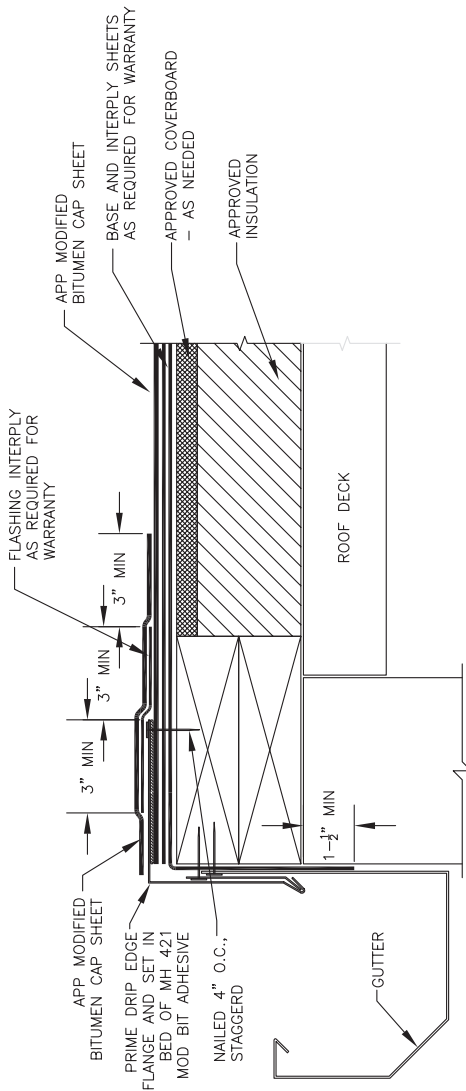
- NOTES:
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
 2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
 3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
 4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS .36". IF WALL IS TALLER THAN .36", SEE DETAIL MHMB-UN-CW06T



| | | |
|-------------------------------------|--|--|
| MULE-HIDE PRODUCTS CO., INC. | THROUGH WALL SCUPPER | DETAIL NO.: MHMB-UN-DR03T |
| | SYSTEMS: APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

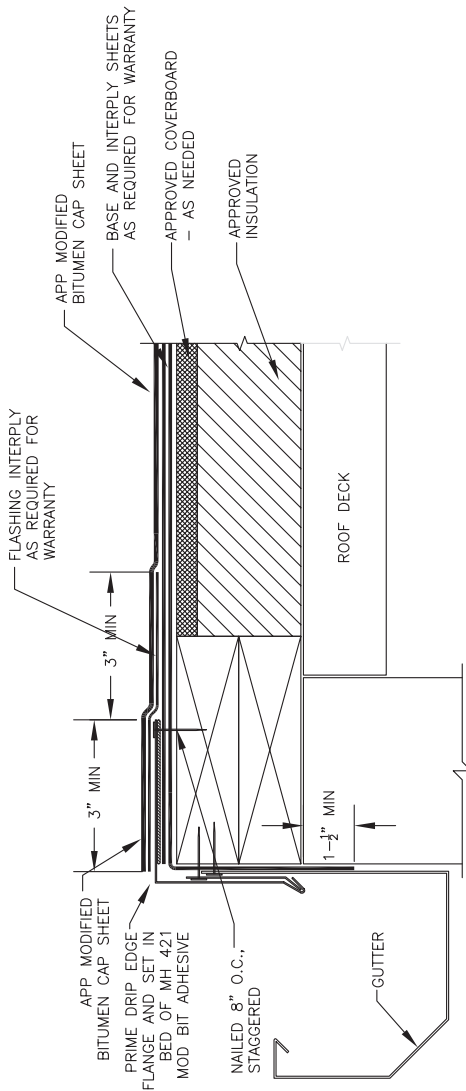
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES AND EXTEND BEYOND THE METAL FLANGE.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | | |
|---|---|---|
| MULE-HIDE PRODUCTS CO., INC. | GUTTER WITH DRIP EDGE SYSTEMS: | DETAIL NO.: MHMB-UN-DR04T REVISION DATE: MARCH 2015 |
| | APP MODIFIED BITUMEN | |

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES AND EXTEND BEYOND THE METAL FLANGE.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



GUTTER WITH DRIP EDGE
OPTION 2

SYSTEMS:

APP MODIFIED BITUMEN

DETAIL NO.:

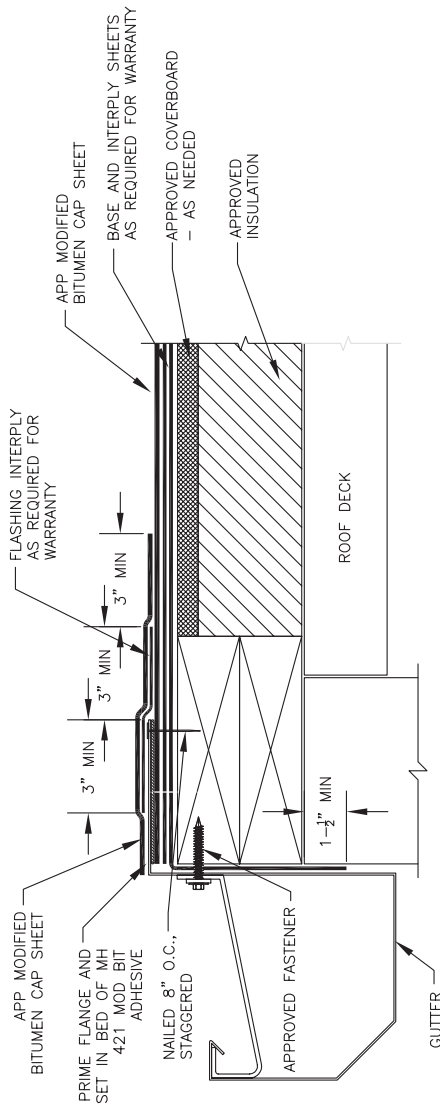
MHMB-UN-DR05T

REVISION DATE: MARCH 2015

**MULE-HIDE
PRODUCTS CO., INC.**

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES AND EXTEND BEYOND THE METAL FLANGE.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



FLANGED GUTTER
WITHOUT DRIP EDGE
SYSTEMS:

APP MODIFIED BITUMEN

DETAIL NO.:

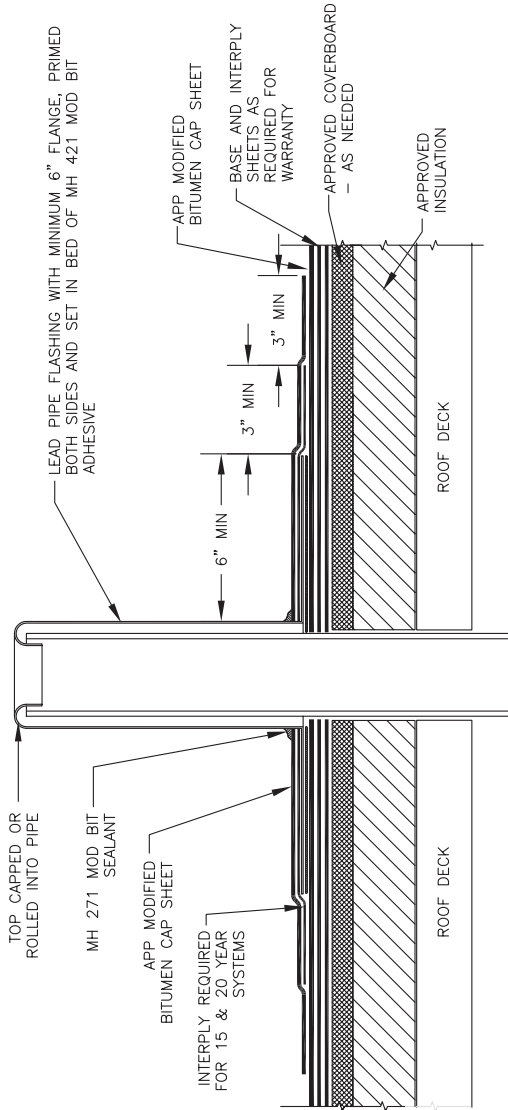
MHMB-UN-DR06T

REVISION DATE: MARCH 2015

**MULE-HIDE
PRODUCTS CO., INC.**

NOTES:

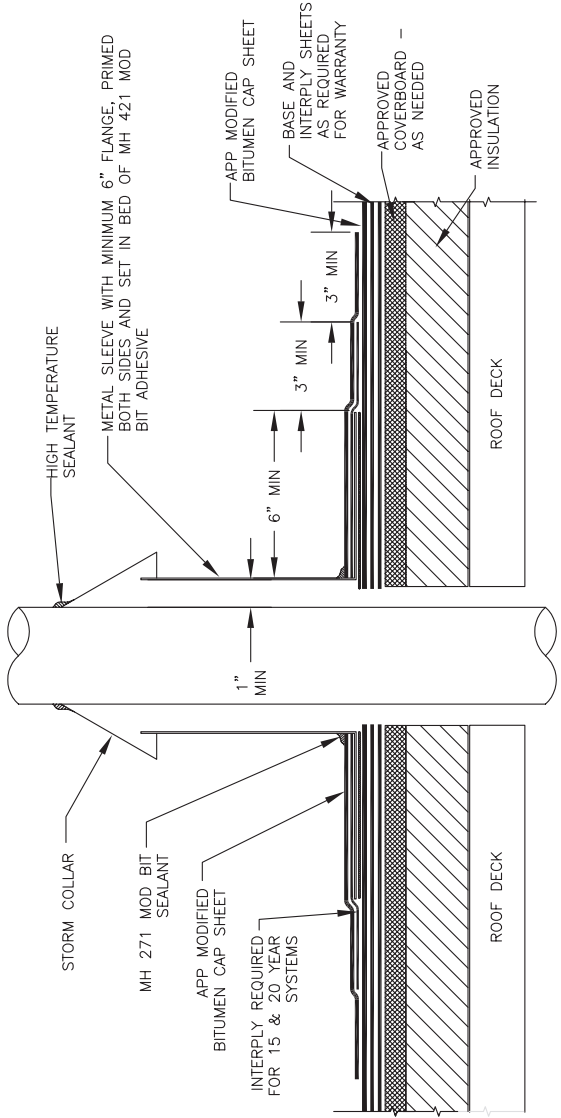
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | | |
|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | VENT PIPE | DETAIL NO.: MHMB-UN-PP01T |
| | SYSTEMS: APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

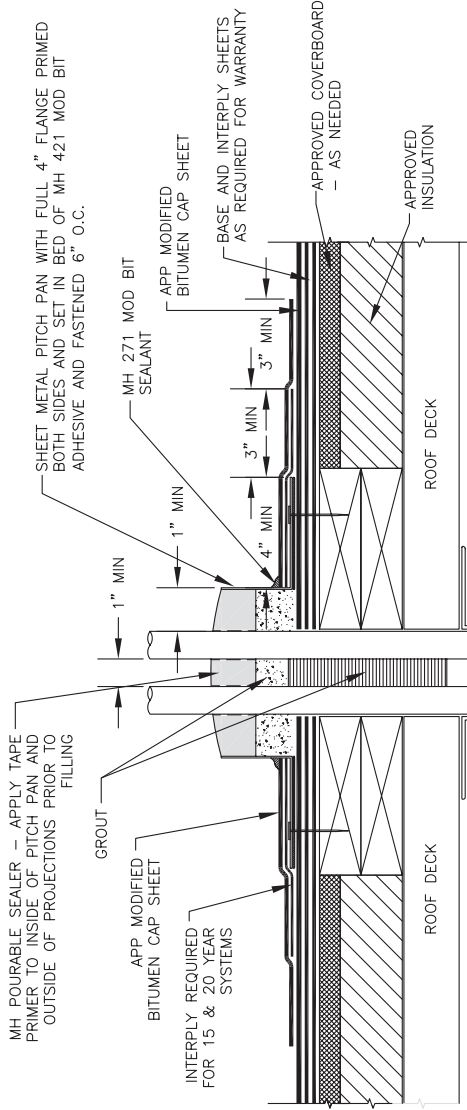
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. TEMPERATURE OF METAL SLEEVE MUST NOT EXCEED 160° F.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



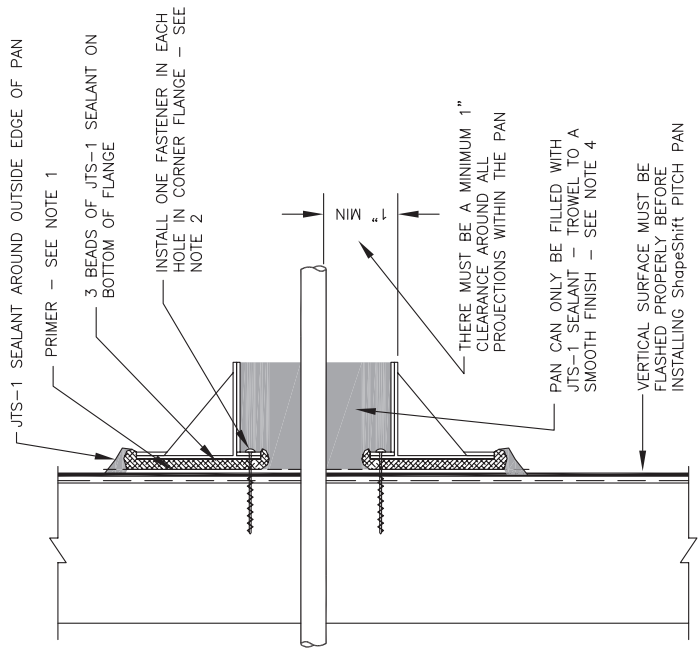
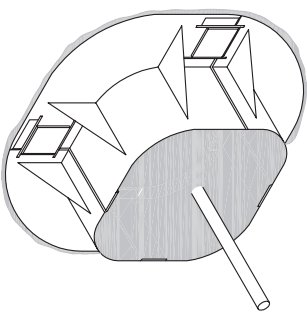
| | | |
|---|--|---|
| MULE-HIDE PRODUCTS CO., INC. | HOT STACK SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-PP02T REVISION DATE: MARCH 2015 |
|---|--|---|

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MATCHING THE INSULATION THICKNESS AND EXTENDING BEYOND THE FLANGE ARE REQUIRED.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | |
|---|----------------------------------|
| <p>MULE-HIDE PRODUCTS CO., INC.</p> | <p>PENETRATION POCKET</p> |
| <p>SYSTEMS:</p> <p>APP MODIFIED BITUMEN</p> | |
| <p>DETAIL NO.:</p> <p>MHMB-UN-PP03T</p> | |
| <p>REVISION DATE: MARCH 2015</p> | |



NOTES:

1. MOD BIT MEMBRANE MUST BE PRIMED WITH 2-PART EPOXY PRIMER BEFORE SETTING FLANGE ON WALL.
2. PITCH PAN MUST BE FASTENED TO SUBSTRATE WITH 1 FASTENER IN EACH CORNER PIECE. PLACE FASTENER IN HOLE FOUND ON INSIDE FLANGE.
3. ShapeShift PITCH PANS CAN BE CONFIGURED INTO THE SHAPE NEEDED BY USING ANY COMBINATION OF CORNER AND STRAIGHT PIECES.
4. VERTICAL PITCH PANS CAN ONLY BE FILLED WITH JTS-1 SEALANT BECAUSE IT DOES NOT SHRINK OR SAG. NO OTHER SEALANTS ARE APPROVED.

ShapeShift
VERTICAL SEALANT POCKET
SYSTEMS:
ALL MOD BIT SYSTEMS

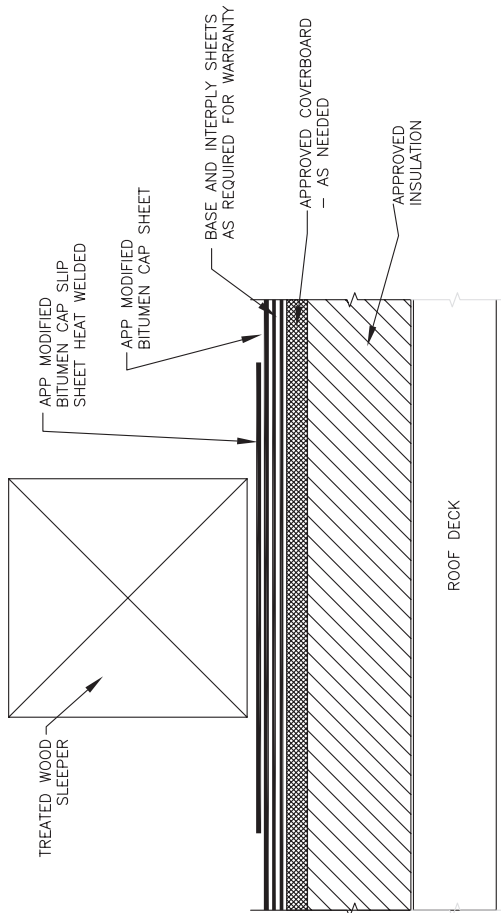
DETAIL NO.:
MHMB-142

REVISION DATE: 05/2018

**MULE-HIDE
PRODUCTS CO., INC.**

NOTES:

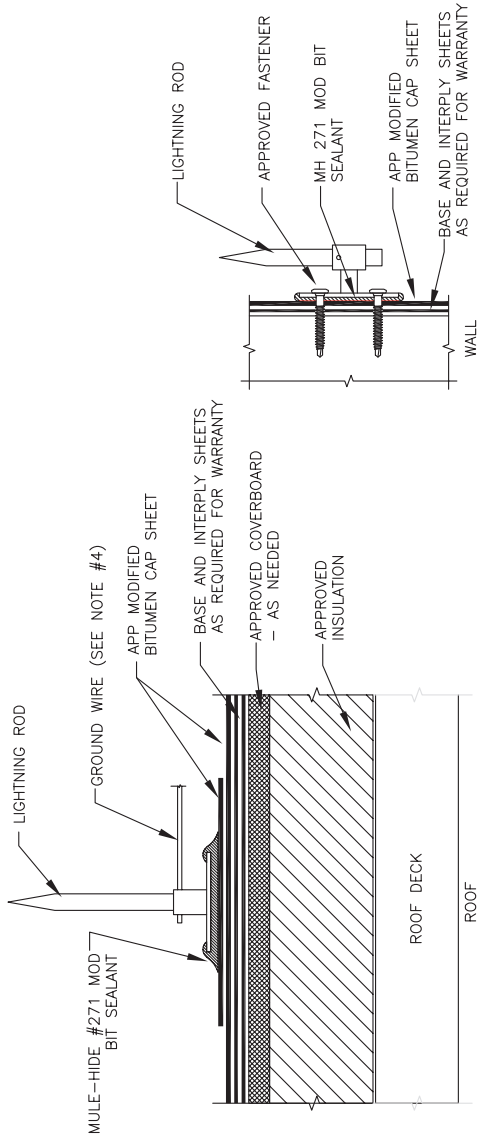
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. DO NOT INSTALL SLEEPERS OVER FASTENER PLATES OR SEAMS.
3. WOOD NAILERS MATCHING THE INSULATION THICKNESS IS REQUIRED WHEN THE WEIGHT SUPPORTED BY THE SLEEPER WILL CRUSH THE INSULATION.
4. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | | |
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| MULE-HIDE PRODUCTS CO., INC. | SLEEPER SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-PP05T REVISION DATE: MARCH 2015 |
|---|--|---|

NOTES:

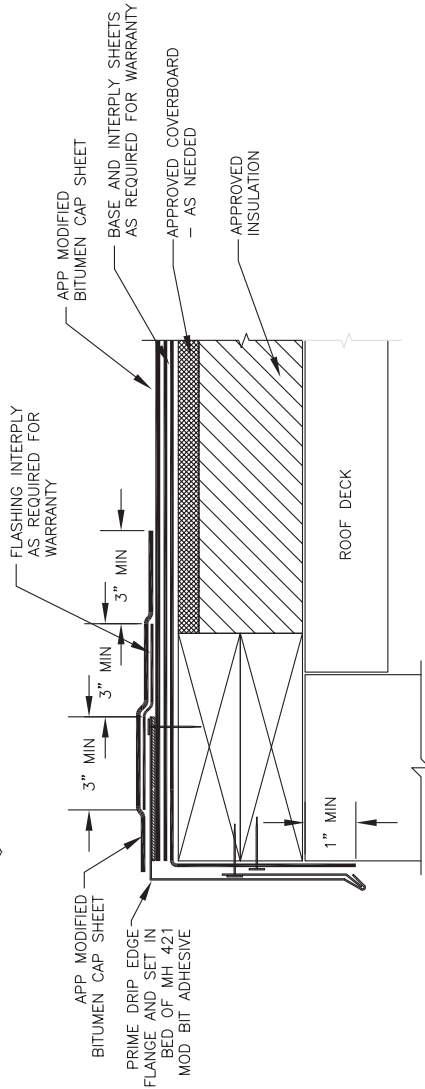
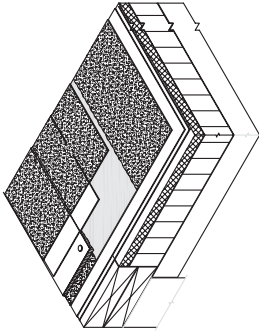
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. GROUND WIRE SUPPORTS ARE TO BE FLASHED IN A SIMILAR MANNER.
3. GROUND WIRE MUST BE ANCHORED SUFFICIENTLY TO PREVENT CONTACT WITH FIELD OR FLASHING MEMBRANE.
4. INSTALL ANOTHER LAYER OF CAP SHEET IF GROUND WIRE MUST COME IN CONTACT WITH FIELD OR FLASHING MEMBRANE.
5. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | | |
|---|--|---|
| MULE-HIDE PRODUCTS CO., INC. | LIGHTNING ROD SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-PP06T REVISION DATE: MARCH 2015 |
| | © | |

NOTES:

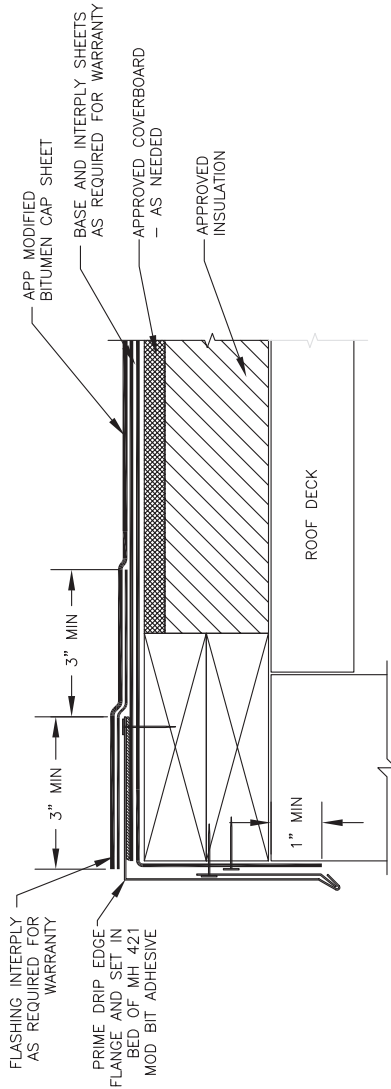
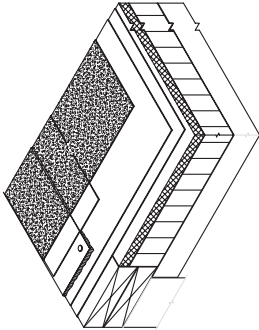
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES AND EXTEND BEYOND THE METAL FLANGE.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



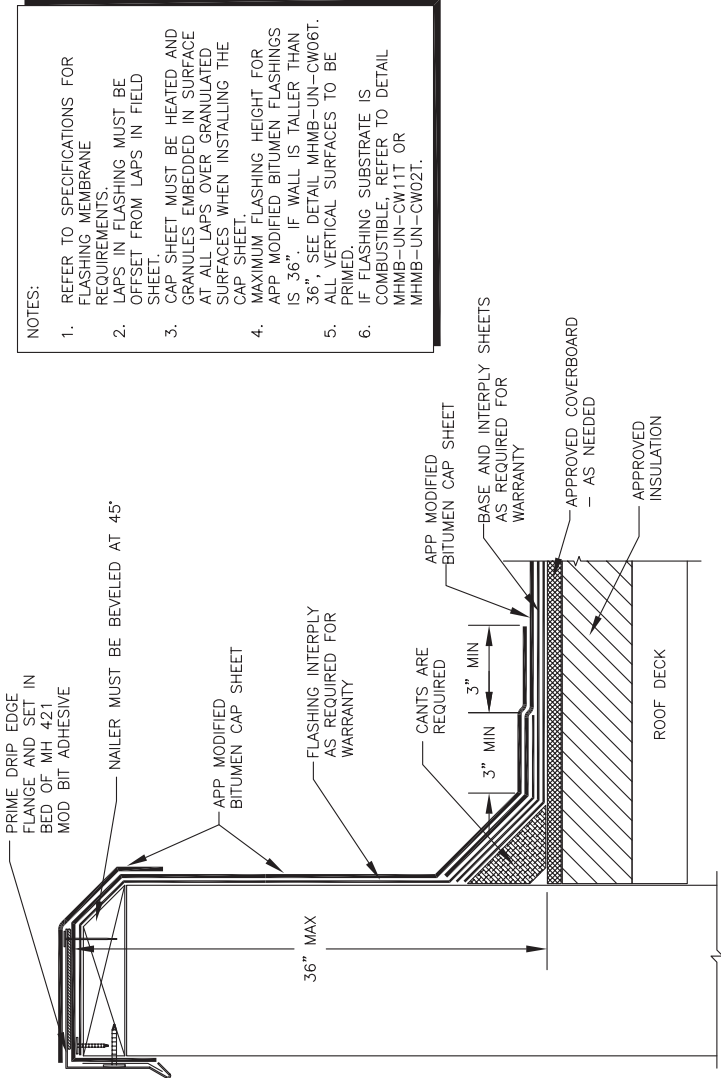
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|-------------------------------------|---|---|
| MULE-HIDE PRODUCTS CO., INC. | DRIP EDGE SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-RE01T REVISION DATE: MARCH 2015 |
| | MULE-HIDE PRODUCTS CO., INC. | |

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. WOOD NAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES AND EXTEND BEYOND THE METAL FLANGE.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



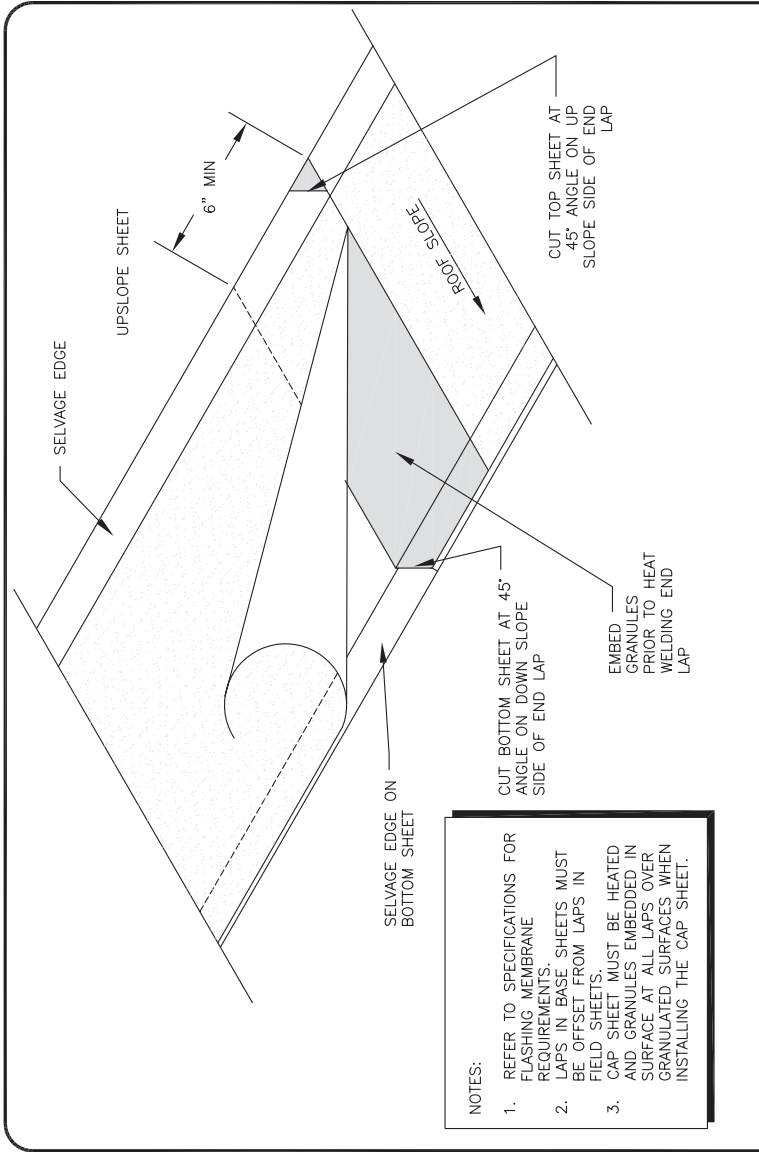
| | |
|--|--|
| <p>MULE-HIDE PRODUCTS CO., INC.</p> | <p>DRIP EDGE OPTION 2 SYSTEMS: APP MODIFIED BITUMEN</p> |
| <p>DETAIL NO.: MHMB-UN-RE02T REVISION DATE: MARCH 2015</p> | |



NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN FLASHING MUST BE OFFSET FROM LAPS IN FIELD SHEET.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.
4. MAXIMUM FLASHING HEIGHT FOR APP MODIFIED BITUMEN FLASHINGS IS .36". IF WALL IS TALLER THAN 36", SEE DETAIL MHMB-UN-CW06T.
5. ALL VERTICAL SURFACES TO BE PRIMED.
6. IF FLASHING SUBSTRATE IS COMBUSTIBLE, REFER TO DETAIL MHMB-UN-CW11T OR MHMB-UN-CW02T.

| | | |
|---|---|--|
| MULE-HIDE PRODUCTS CO., INC. | ROOF EDGE ON PARAPET SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-RE03T |
| | | REVISION DATE: MARCH 2015 |

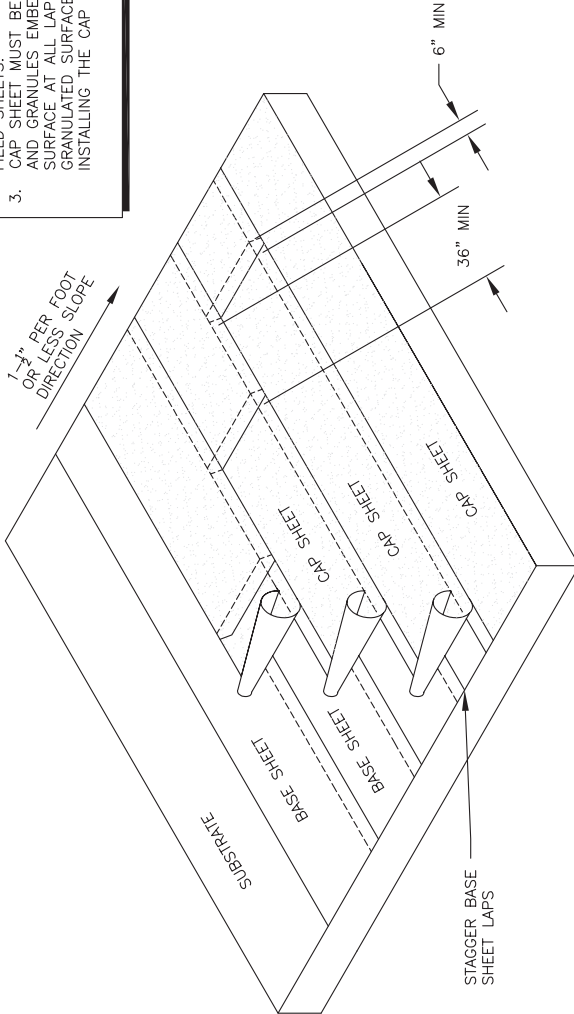


- NOTES:
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
 2. LAPS IN BASE SHEETS MUST BE OFFSET FROM LAPS IN FIELD SHEETS.
 3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.

| | | |
|---|--|--|
| MULE-HIDE PRODUCTS CO., INC. | END LAP | DETAIL NO.: MHMB-UN-SE01T |
| | SYSTEMS: APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

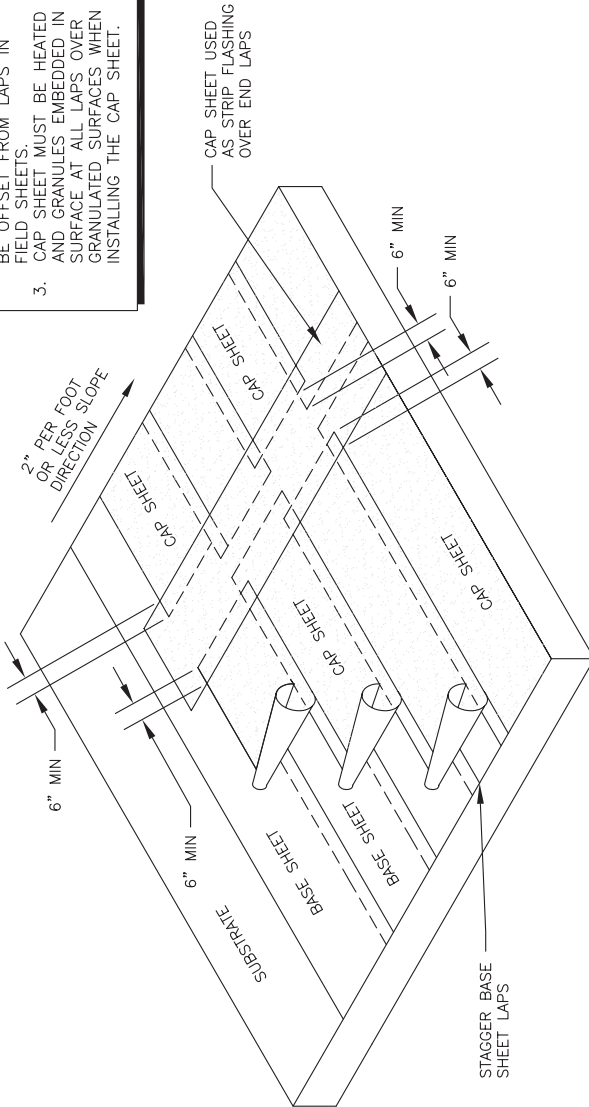
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. LAPS IN BASE SHEETS MUST BE OFFSET FROM LAPS IN FIELD SHEETS.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



| | | |
|---|----------------------------------|-------------------------------------|
| MULE-HIDE PRODUCTS CO., INC. | END LAPS OPTION 1 | DETAIL NO.: MHMB-UN-SE02T |
| | SYSTEMS: APP MODIFIED BITUMEN | REVISION DATE: MARCH 2015 |

NOTES:

1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS. SHEETS MUST BE OFFSET FROM LAPS IN FIELD SHEETS.
2. LAPS IN BASE SHEETS MUST BE OFFSET FROM LAPS IN FIELD SHEETS.
3. CAP SHEET MUST BE HEATED AND GRANULES EMBEDDED IN SURFACE AT ALL LAPS OVER GRANULATED SURFACES WHEN INSTALLING THE CAP SHEET.



END LAPS
OPTION 2

SYSTEMS:

APP MODIFIED BITUMEN

DETAIL NO.:

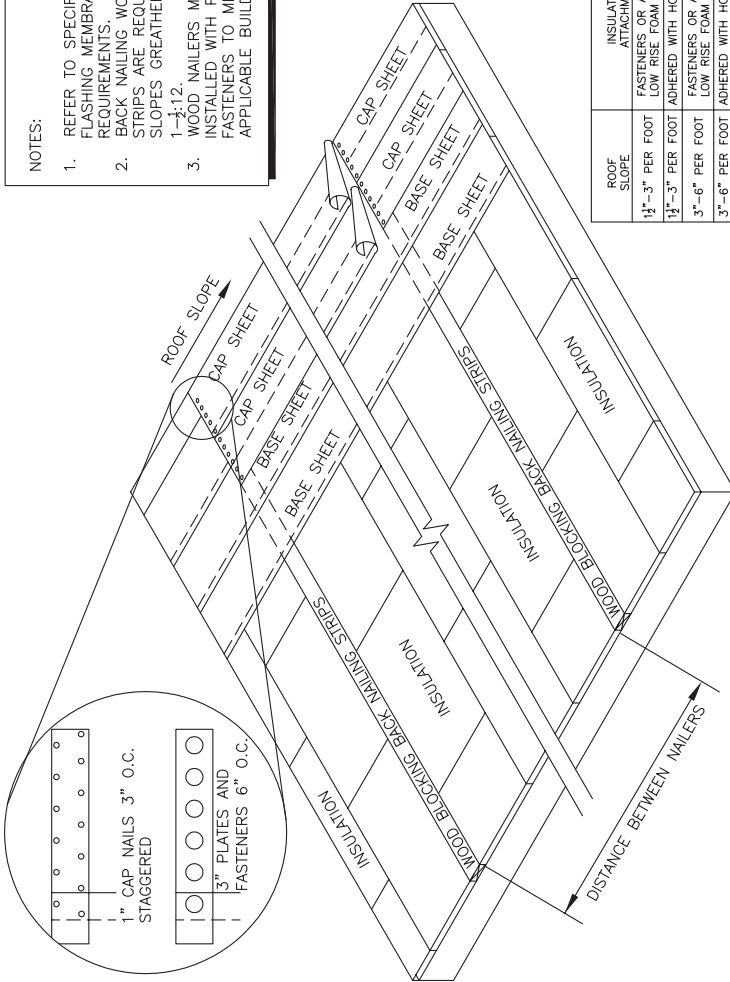
MHMB-UN-SE03T

REVISION DATE: MARCH 2015

**MULE-HIDE
PRODUCTS CO., INC.**

NOTES:

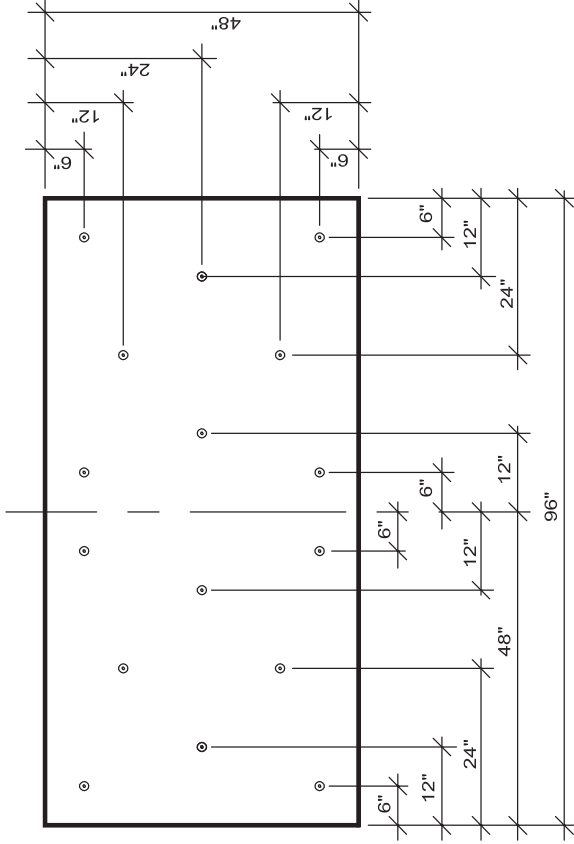
1. REFER TO SPECIFICATIONS FOR FLASHING MEMBRANE REQUIREMENTS.
2. BACK NAILING WOOD BLOCKING STRIPS ARE REQUIRED ON ALL SLOPES GREATER THAN 1- $\frac{1}{2}$:12.
3. WOOD MAILERS MUST BE INSTALLED WITH PROPER FASTENERS TO MEET APPLICABLE BUILDING CODES.



| ROOF SLOPE | INSULATION ATTACHMENT | DISTANCE BETWEEN MAILERS |
|-------------------------------|--|--------------------------|
| 1 $\frac{1}{2}$ "-3" PER FOOT | FASTENERS OR APPROVED LOW RISE FOAM ADHESIVE | 32'-0" |
| 1 $\frac{1}{2}$ "-3" PER FOOT | ADHERED WITH HOT ASPHALT | 16'-0" |
| 3"-6" PER FOOT | FASTENERS OR APPROVED LOW RISE FOAM ADHESIVE | 16'-0" |
| 3"-6" PER FOOT | ADHERED WITH HOT ASPHALT | 8'-0" |

| | | |
|-------------------------------------|--|---|
| MULE-HIDE PRODUCTS CO., INC. | BACK NAILING PARALLEL WITH SLOPE SYSTEMS: APP MODIFIED BITUMEN | DETAIL NO.: MHMB-UN-SE04T REVISION DATE: MARCH 2015 |
| | PRODUCTS CO., INC. | |

THE ATTACHMENT PATTERN SHOWN IS THE STANDARD PATTERN FOR FIELD ATTACHMENT REQUIRED BY MULE-HIDE. THE ATTACHMENT IN THE PERIMETER AREA IS INCREASED 50% AND 75% IN THE CORNERS.



4' X 8' INSULATION ATTACHMENT (1 PER 2 SF.)
STANDARD ATTACHMENT

MULE-HIDE
PRODUCTS CO.,INC.
2003

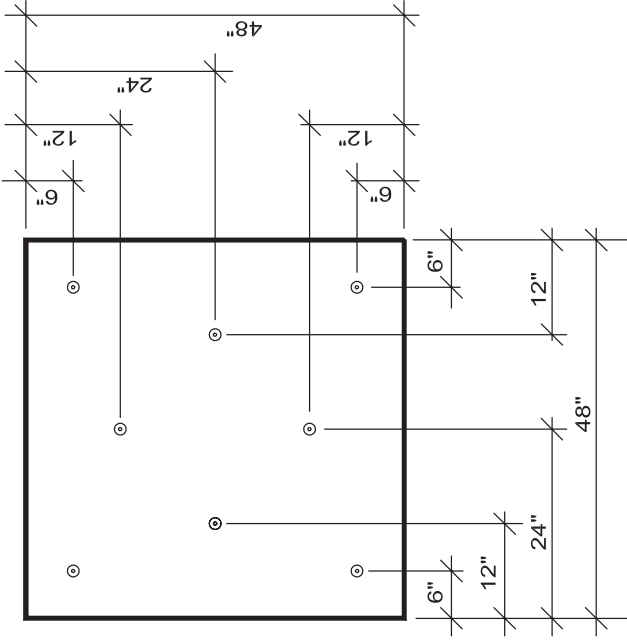
INSULATION ATTACHMENT - OPTION 1

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-INS-1

THE ATTACHMENT PATTERN SHOWN IS THE STANDARD PATTERN FOR FIELD ATTACHMENT REQUIRED BY MULE-HIDE. THE ATTACHMENT IN THE PERIMETER AREA IS INCREASED 50% AND 75% IN THE CORNERS.



4' X 4' INSULATION ATTACHMENT (1 PER 2 SF.)
STANDARD ATTACHMENT

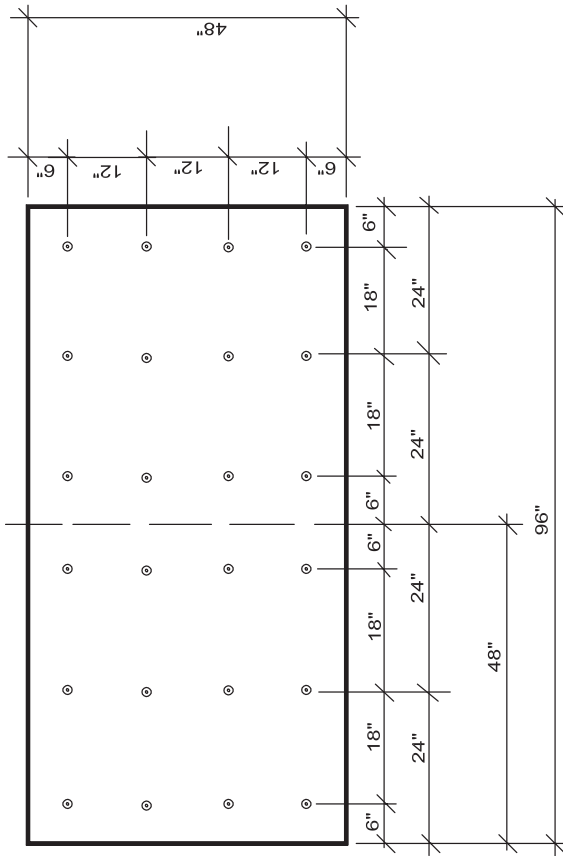
MULE-HIDE
PRODUCTS CO.,INC.
2003

INSULATION ATTACHMENT - OPTION 2

SELF-ADHERING MOD BIT SYSTEMS

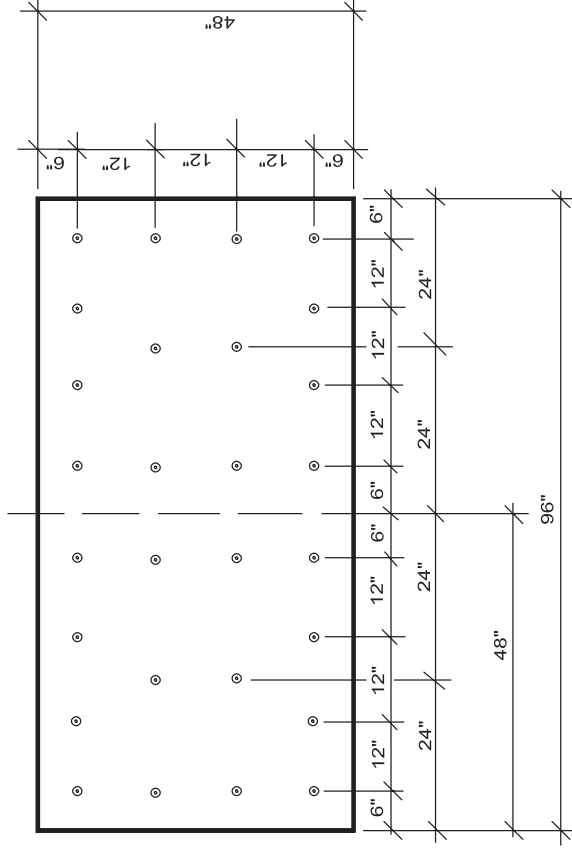
DETAIL NO.:

MH-MB-INS-2



4' X 8' INSULATION ATTACHMENT (1 PER 1.33 SF)
 STANDARD ATTACHMENT (24 PER BOARD)

| | | | |
|--|---|--|--------------------|
| MULE-HIDE PRODUCTS CO.,INC. 2003 | INSULATION ATTACHMENT - OPTION 3 | | DETAIL NO.: |
| | SELF-ADHERING MOD BIT SYSTEMS | | MH-MB-INS-3 |



4' X 8' INSULATION ATTACHMENT (1 PER 1.14 SF)
 STANDARD ATTACHMENT (28 PER BOARD)

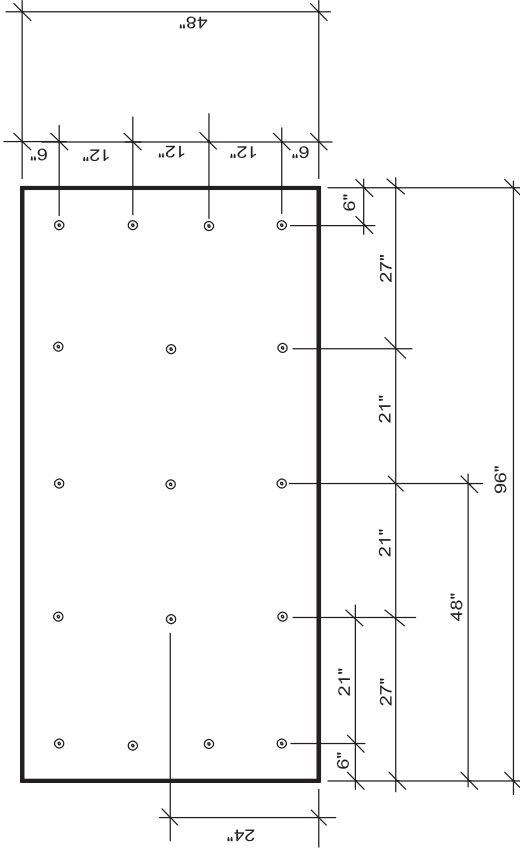
MULE-HIDE
 PRODUCTS CO.,INC.
 2003

INSULATION ATTACHMENT - OPTION 4

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-INS-4



4' X 8' ORIENTED STRAND BOARD ATTACHMENT (1 PER 1.88 SF)
 STANDARD ATTACHMENT (MINIMUM 7/16" THICK)

MULE-HIDE
 PRODUCTS CO.,INC.
 2003

INSULATION ATTACHMENT - OPTION 5

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:

MH-MB-INS-5

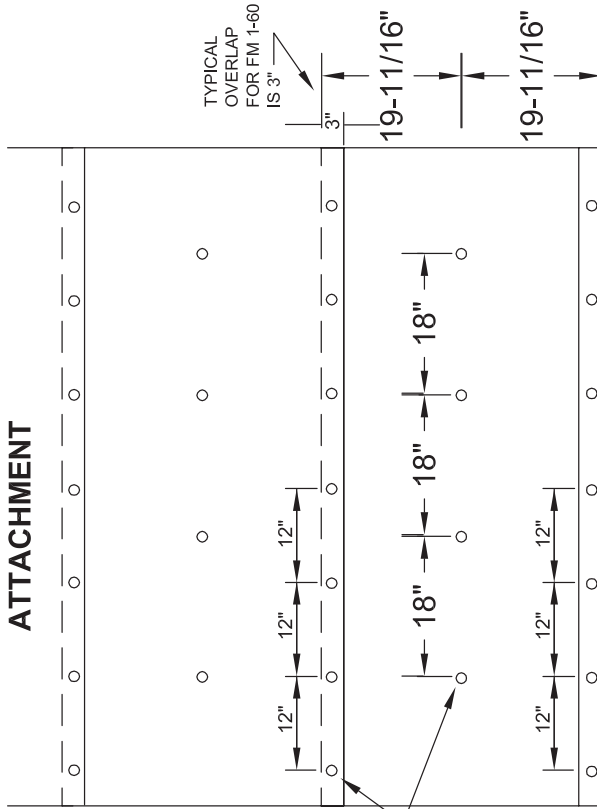
TYPICAL FM 1-60 ATTACHMENT

**FIELD FASTENING
PATTERN FOR NAIL
BASE**

NOTE: TYPICALLY, CORNERS
REQUIRE 100% INCREASE OF
FASTENERS AND PERIMETERS
REQUIRE 50% INCREASE.

FASTENER PLACEMENT:
12" O.C. @ SEAMS
18" O.C. @ CENTER OF ROLLS

**FACTORY MUTUAL APPROVED
FASTENERS AND PLATES**



**MULE-HIDE
PRODUCTS CO., INC.
2003**

NAIL BASE FASTENING PATTERN

SELF-ADHERING MOD BIT SYSTEMS

DETAIL NO.:
**MH-MB-NB
FM 1-60**

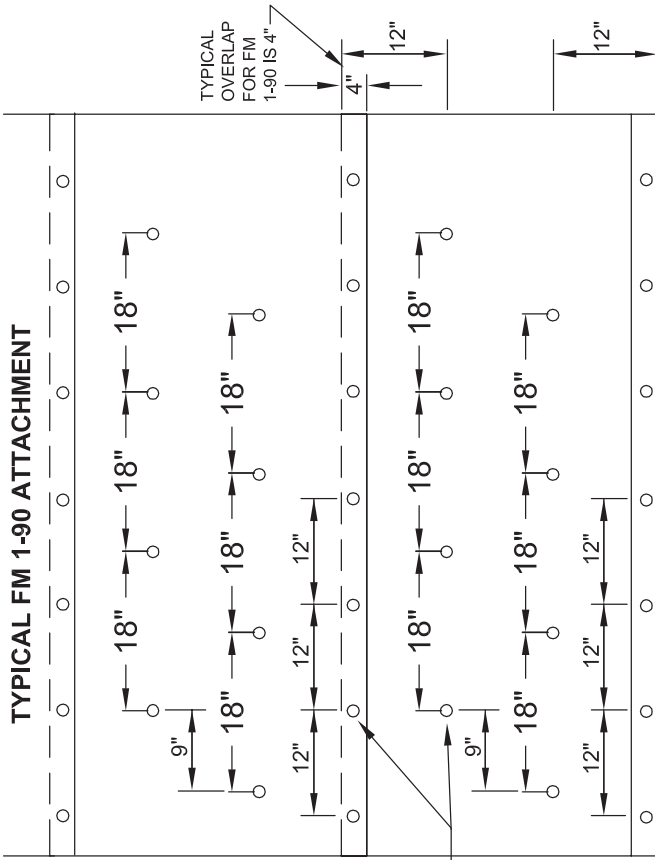
**FIELD FASTENING
PATTERN FOR NAIL
BASE SHEET**

NOTE: TYPICALLY, CORNERS
REQUIRE 100% INCREASE OF
FASTENERS AND PERIMETERS
REQUIRE 50% INCREASE.

FASTENER PLACEMENT:
12" O.C. @ SEAMS
18" O.C. @ FIELD, 2 ROWS
SPACED 12" APART AND FROM
SHEET EDGE AND STAGGERED
9"

**FACTORY MUTUAL APPROVED
FASTENERS AND PLATES**

TYPICAL FM 1-90 ATTACHMENT



39-3/8" WIDE NAIL BASE ROLLS

**MULE-HIDE
PRODUCTS CO.,INC.
2003**

**NAIL BASE FASTENING PATTERN
SELF-ADHERING MOD BIT SYSTEMS**

**DETAIL NO.:
MH-MB-NB
FM 1-90**



National Support Center • 1195 Prince Hall Drive • Beloit, WI 53511

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