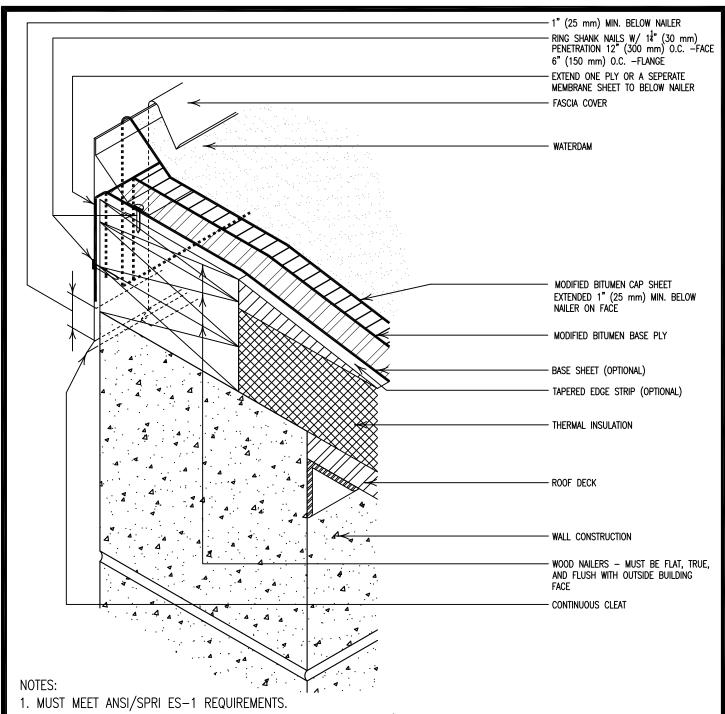


- 1. MUST MEET ANSI/SPRI ES-1 REQUIREMENTS.
- 2. ATTACH NAILER TO WALL WITH SUITABLE FASTENERS. SEE ANSI/SPRI ES-1 SECTION 3.9 AND COMMENTARY.
- 3. WHERE STRUCTURAL ELEMENTS OF THE BUILDING DO NOT ALLOW USE OF WOOD NAILER CONSULT MANUFACTURER FOR ATTACHMENT RECOMMENDATIONS.
- 4. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL.
- 5. RAIL COVER MUST ALLOW FOR EXPANSION AND CONTRACTION.



MODIFIED BITUMEN ROOFING RAIL FASCIA SYSTEM

2010 NOT DRAWN TO SCALE

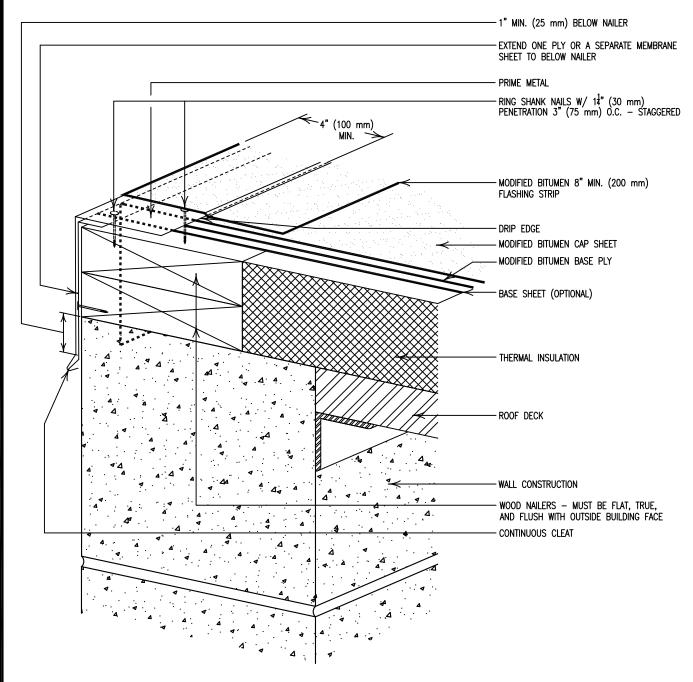


- 2. ATTACH NAILER TO WALL WITH SUITABLE FASTENERS. SEE ANSI/SPRI ES-1 SECTION 3.9 AND COMMENTARY.
- 3. WHERE STRUCTURAL ELEMENTS OF THE BUILDING DO NOT ALLOW USE OF WOOD NAILER CONSULT MANUFACTURER FOR ATTACHMENT RECOMMENDATIONS.
- 4. THIS DETAIL SHOULD BE USED ONLY WHERE THE DECK IS SUPPORTED BY THE OUTSIDE WALL.
- 5. RAIL COVER MUST ALLOW FOR EXPANSION AND CONTRACTION.



MODIFIED BITUMEN ROOFING WATERDAM SYSTEM FASCIA

2010 NOT DRAWN TO SCALE

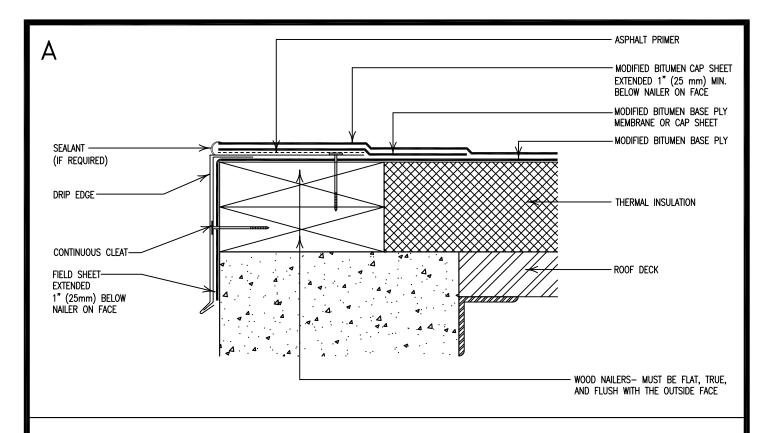


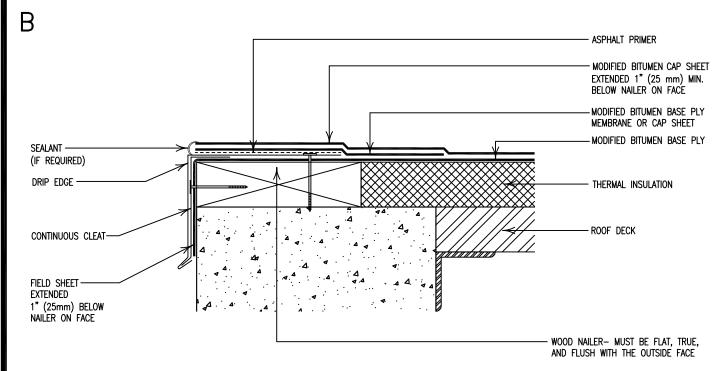
- 1. MUST MEET ANSI/SPRI ES-1 REQUIREMENTS.
- 2. ATTACH NAILER TO WALL WITH SUITABLE FASTENERS. SEE ANSI/SPRI ES-1 SECTION 3.9 AND COMMENTARY.
- 3. WHERE STRUCTURAL ELEMENTS OF THE BUILDING DO NOT ALLOW USE OF WOOD NAILER CONSULT MANUFACTURER FOR ATTACHMENT RECOMMENDATIONS.
- 4. DRIP EDGE AND CLEAT MUST ALLOW FOR EXPANSION AND CONTRACTION.



MODIFIED BITUMEN ROOFING
CLEATED DRIP EDGE

2010 NOT DRAWN TO SCALE

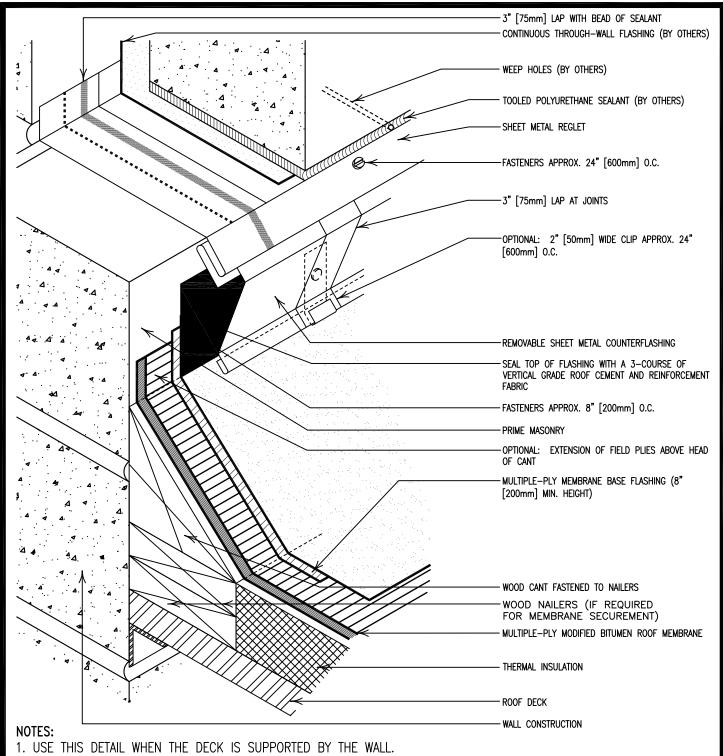






MODIFIED BITUMEN ROOFING
CLEATED DRIP EDGE
FLASHING OPTIONS

2010 NOT DRAWN TO SCALE



- 2. DO NOT SOLDER JOINTS IN THE SHEET METAL COUNTERFLASHING.
- 3. OPTION: IF WOOD NAILERS ARE NOT USED, A FILLER CANT STRIP SET IN BITUMEN OR ADHESIVE MAY BE USED.

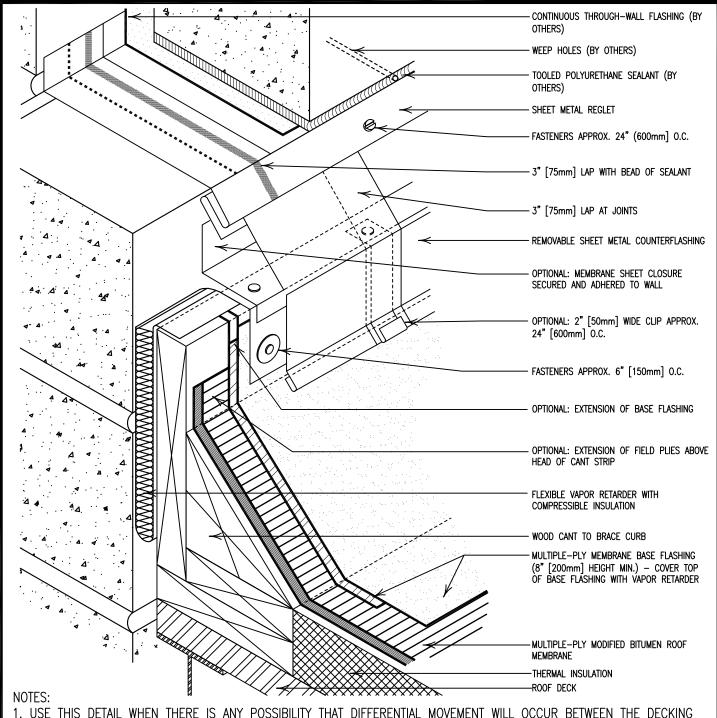


MODIFIED BITUMEN ROOFING

BASE FLASHINGS FOR

WALL SUPPORTED DECK

2010 NOT DRAWN TO SCALE

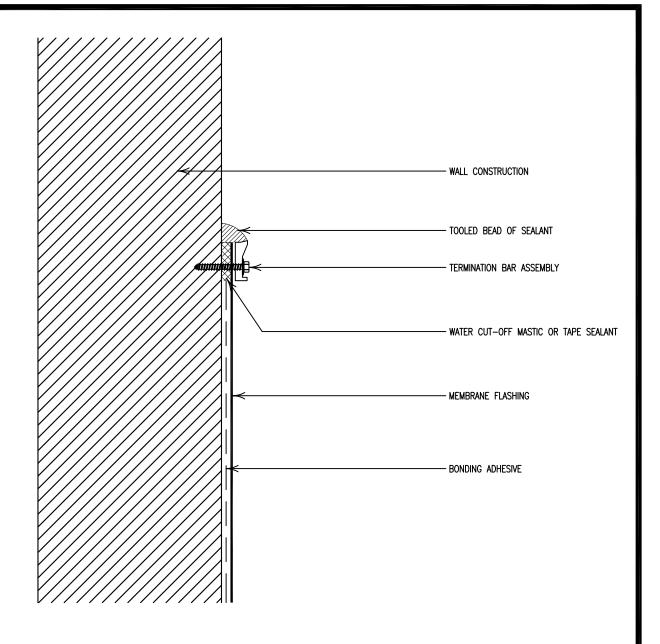


- 1. USE THIS DETAIL WHEN THERE IS ANY POSSIBILITY THAT DIFFERENTIAL MOVEMENT WILL OCCUR BETWEEN THE DECKING AND A VERTICAL SURFACE. DO NOT FASTEN THE WOOD MEMBERS TO THE WALL.
- 2. DO NOT SOLDER THE JOINTS IN THE SHEET METAL.
- 3. THIS DETAIL MAY NOT BE APPLICABLE FOR DECKS WITH LIGHTWEIGHT FILL.
- 4. ATTACH NAILERS TO DECK WITH SUITABLE FASTENERS. REFER TO ANSI/SPRI ES-1 FOR ADDITIONAL SECUREMENT INFO.



MODIFIED BITUMEN ROOFING
BASE FLASHINGS FOR
NON-WALL-SUPPORTED DECK

2010 NOT DRAWN TO SCALE

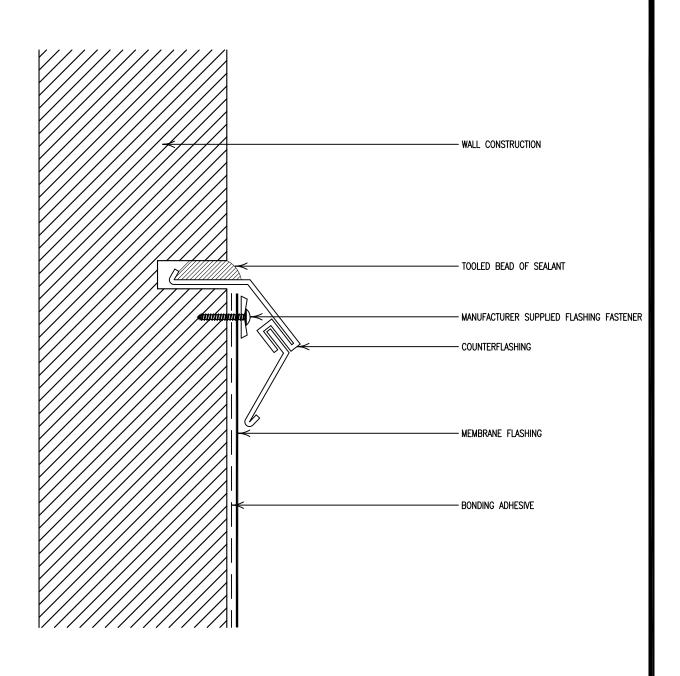


- 1. INSTALL ONLY OVER A SMOOTH, HARD SURFACE DESIGNED FOR OUTDOOR EXPOSURE.
- 2. APPLY MASTIC OR TAPE SEALANT BETWEEN THE MEMBRANE AND THE WALL SURFACE AS SHOWN.
- 3. FASTEN THE TERMINATION BAR THROUGH THE MASTIC AND INTO THE WALL USING APPROPRIATE FASTENERS. FASTEN SUFFICIENTLY TO PROVIDE CONSTANT COMPRESSION OF THE MASTIC OR TAPE SEALANT.
- 4. THE TERMINATION BAR MUST BE A MINIMUM OF 1/8" (3.25MM) THICK BY 1" (25MM) WIDE AND SUFFICIENTLY RIGID TO PROVIDE CONSTANT COMPRESSION.
- 5. ALLOW 1/4" (6.5MM) MINIMUM TO 1/2" (13MM) MAXIMUM SPACING BETWEEN CONSECUTIVE LENGTHS OF TERMINATION BAR.



# MODIFIED BITUMEN ROOFING TERMINATION BAR SYSTEM

2010 NOT DRAWN TO SCALE

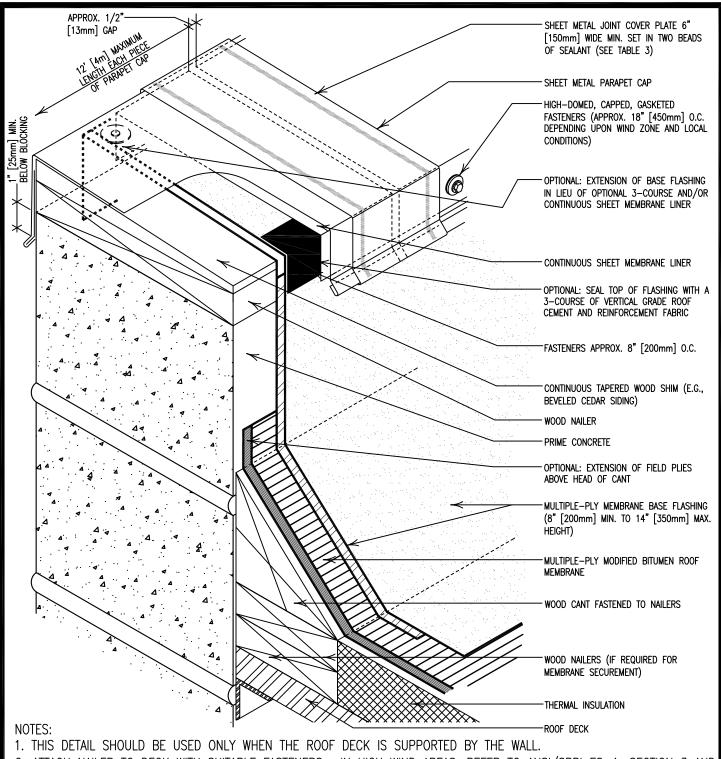


- 1. WALL FLASHING TO BE FASTENED A MAXIMUM OF 12" (300MM) ON CENTER UNDER THE COUNTERFLASHING.
  2. APPLY A SEALANT ALONG THE TOP OF THE COUNTERFLASHING TO PROTECT THE REGLET—TYPE OPENING FROM THE WEATHER.



MODIFIED BITUMEN ROOFING COUNTERFLASHING SYSTEM

2010 NOT DRAWN TO SCALE



2. ATTACH NAILER TO DECK WITH SUITABLE FASTENERS. IN HIGH WIND AREAS, REFER TO ANSI/SPRI ES-1, SECTION 3 AND COMMENTARY.

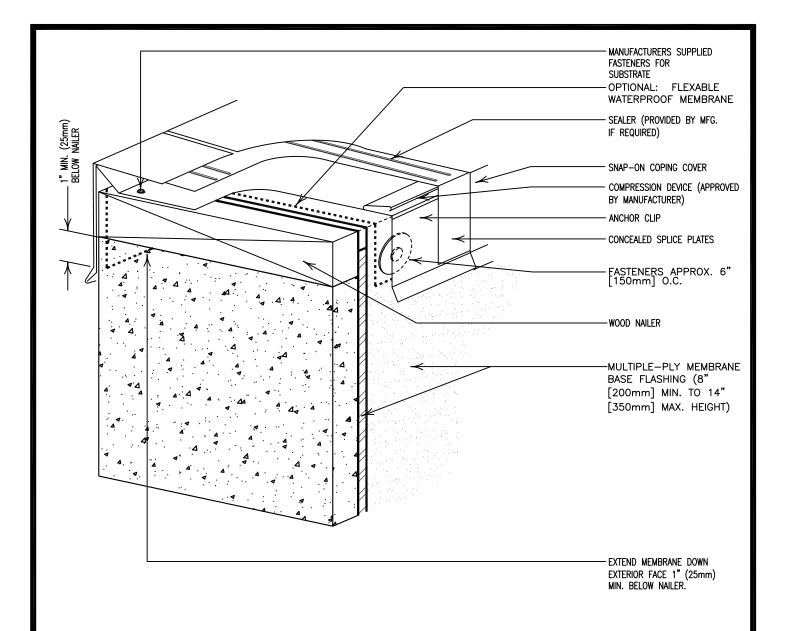


MODIFIED BITUMEN ROOFING

METAL PARAPET CAP (COPING)

BASE FLASHING

2010 NOT DRAWN TO SCALE

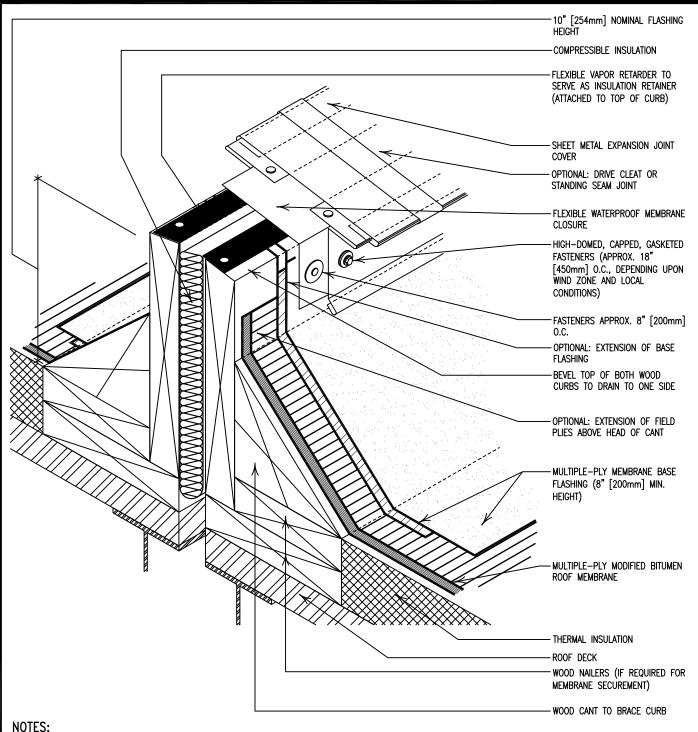


- 1. MUST MEET ANSI/SPRI ES-1 REQUIREMENTS.
- 2. ATTACH NAILER TO WALL WITH SUITABLE FASTENERS. SEE ANSI/SPRI ES-1 SECTION 3.9 AND COMMENTARY.
- 3. WHERE STRUCTURAL ELEMENTS OF THE BUILDING DO NOT ALLOW USE OF WOOD NAILERS CONSULT MANUFACTURER FOR ATTACHMENT DETAILS.
- 4. TOP OF COPING SHOULD SHED WATER TOWARD ROOF.
- 5. ALL JOINTS SHOULD PREVENT OR CONTROL WATER INFILTRATION BELOW COPING.
- 6. COPING SYSTEMS MUST ALLOW FOR EXPANSION AND CONTRACTION.
- 7. MISCELLANEOUS ITEMS SHOULD NOT BE ATTACHED TO COPING.
- 8. SOME DESIGNS MAY REQUIRE SEALANT STRIPS ON SPLICE PLATE. CONSULT MANUFACTURER.



MODIFIED BITUMEN ROOFING
METAL PARAPET CAP COPING

2010 NOT DRAWN TO SCALE

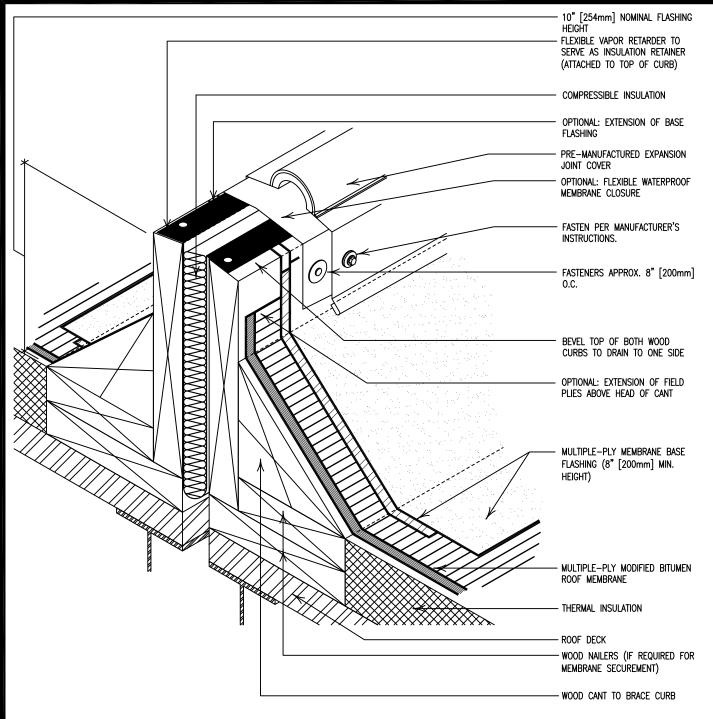


- 1. THIS DETAIL ALLOWS FOR BUILDING MOVEMENT IN BOTH DIRECTIONS.
- 2. FLASHING REQUIREMENTS TYPICAL FOR BOTH SIDES OF EXPANSION JOINT.
- 3. ATTACH NAILER TO DECK WITH SUITABLE FASTENERS.



MODIFIED BITUMEN ROOFING METAL EXPANSION JOINT COVER

2010 NOT DRAWN TO SCALE

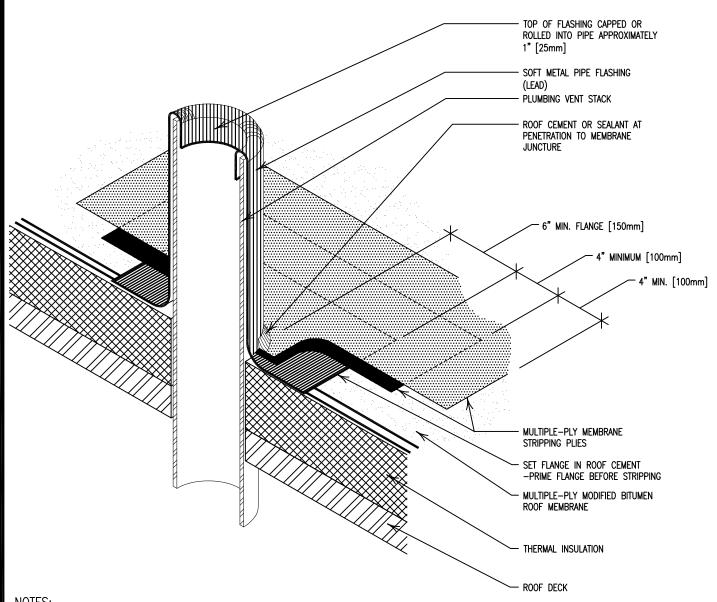


- 1. THIS DETAIL ALLOWS FOR BUILDING MOVEMENT IN BOTH DIRECTIONS.
- 2. FLASHING REQUIREMENTS TYPICAL FOR BOTH SIDES OF EXPANSION JOINT.
- 3. ATTACH NAILER TO DECK WITH SUITABLE FASTENERS.



MODIFIED BITUMEN ROOFING
MEMBRANE BELLOWS
EXPANSION JOINT COVER

2010 NOT DRAWN TO SCALE

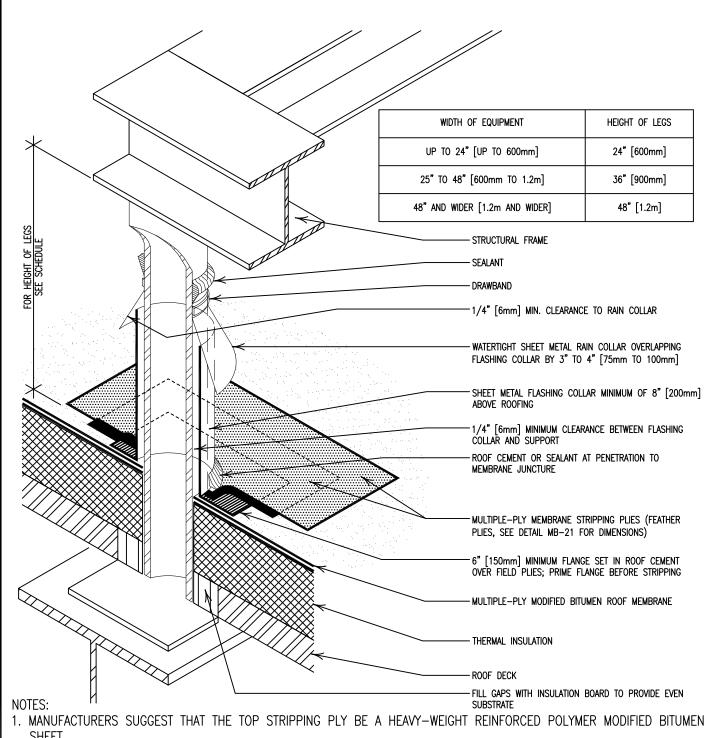


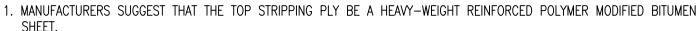
- 1. SOFT METAL FLASHING: -SHEET LEAD: MINIMUM OF 2 1/2 LBS. PER SQUARE FOOT OR -SHEET COPPER: MINIMUM OF 14 07
- 2. IF USING COPPER FLASHING OVER AN IRON OR STEEL PIPE, INSERT A SEPARATOR SHEET SUCH AS ASPHALT SATURATED ROOFING FELT, TO SEPARATE THE COPPER FLASHING FROM DIRECT CONTACT WITH PIPE TO REDUCE GALVANIC ACTION.
- 3. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12" OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.
- 4. MANUFACTURERS SUGGEST THAT THE TOP STRIPPING PLY BE A HEAVY-WEIGHT REINFORCED POLYMER MODIFIED BITUMEN SHEET.
- 5. CONTACT THE MEMBRANE MANUFACTURER WHEN INSTALLING TORCH—APPLIED SYSTEMS FOR ALTERNATIVES TO PLASTIC CEMENT.



# MODIFIED BITUMEN ROOFING PLUMBING VENT PIPE

2010 NOT DRAWN TO SCALE



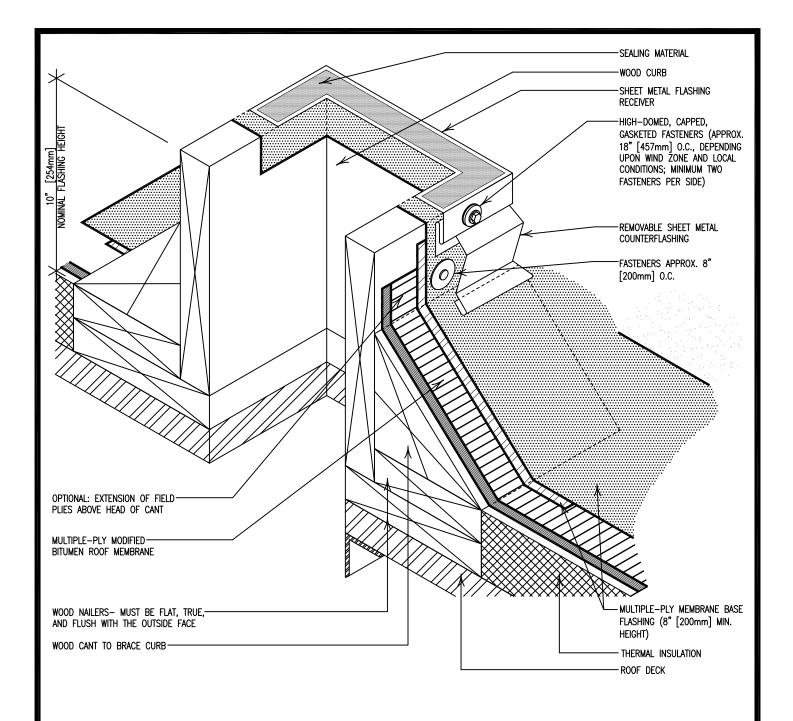


2. CONTACT THE MEMBRANE MANUFACTURER WHEN INSTALLING TORCH-APPLIED SYSTEMS FOR ALTERNATIVES TO PLASTIC CEMENT.



MODIFIED BITUMEN ROOFING EQUIPMENT SUPPORT STAND & TYPICAL RAIN COLLAR

2010 NOT DRAWN TO SCALE

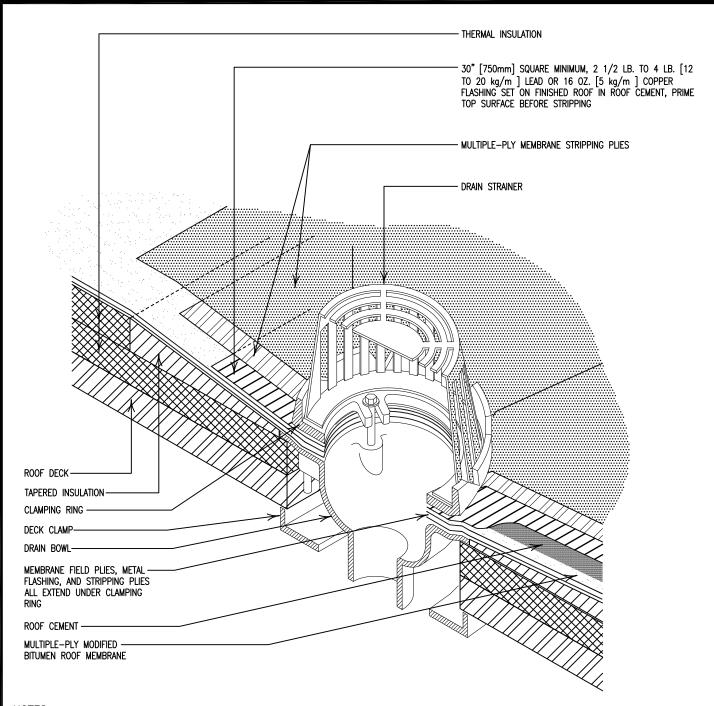


- 1. ATTACH NAILERS TO DECK WITH SUITABLE FASTENERS. SEE ANSI/SPRI ES-1.
- 2. WHEN POSSIBLE THE MECHANICAL UNITS SHOULD NOT BE INSTALLED UNTIL THE ROOF MEMBRANE AND FLASHING HAS BEEN INSTALLED.



MODIFIED BITUMEN ROOFING RAISED CURB DETAIL

2010 NOT DRAWN TO SCALE



- 1. THE USE OF A METAL SUMP IS NOT RECOMMENDED. HOWEVER, DRAIN RECEIVER BEARING PLATES ARE APPLICABLE WITH SOME PROJECTS.
- 2. DO NOT APPLY COAL TAR OF DEAD LEVEL ASPHALT INTO DRAIN SUMP.
- 3. CONTACT THE MEMBRANE SUPPLIER WHEN INSTALLING TORCH-APPLIED SYSTEMS FOR ALTERNATIVES TO PLASTIC CEMENT.



MODIFIED BITUMEN ROOFING ROOF DRAIN

2010 NOT DRAWN TO SCALE