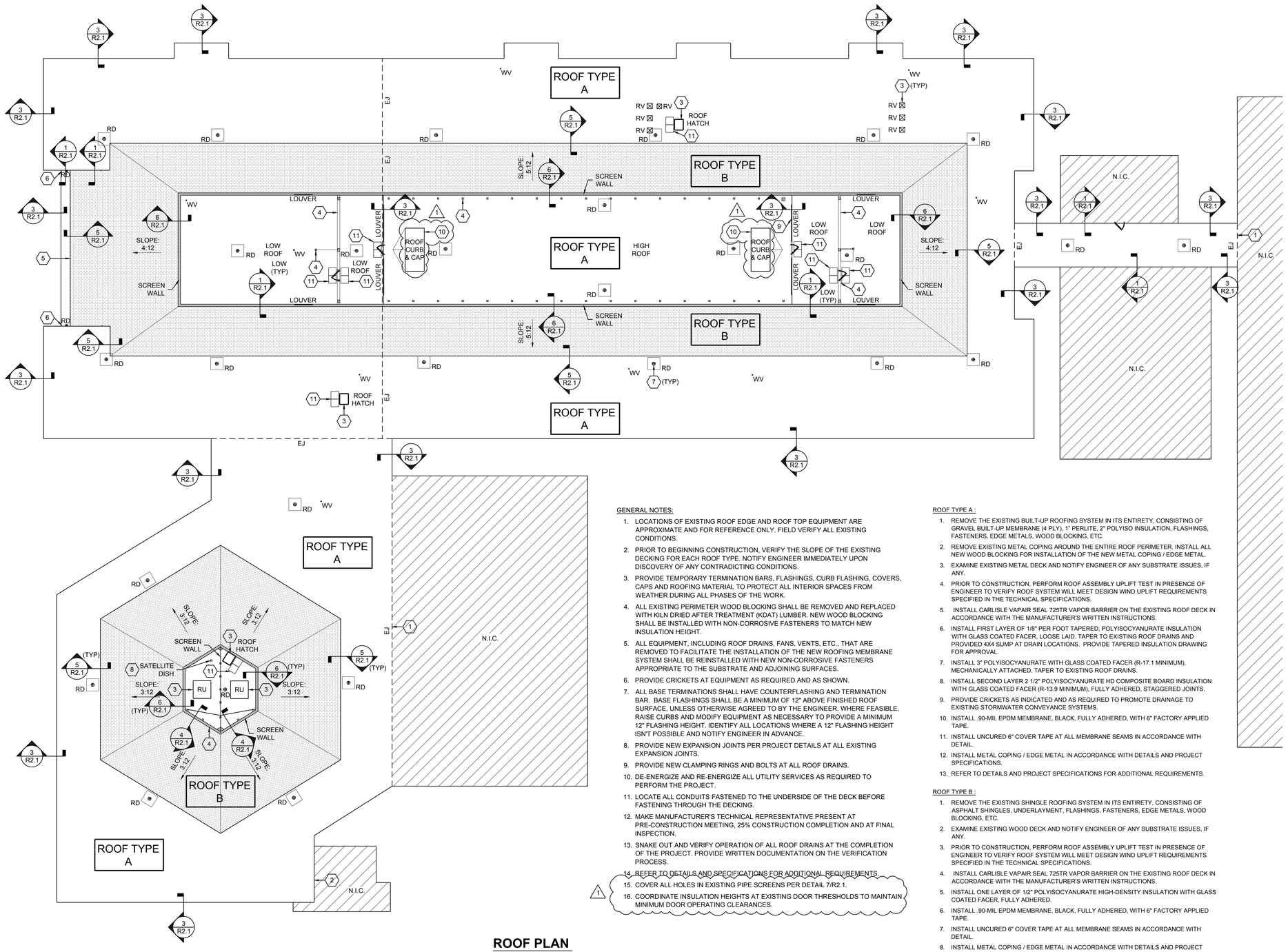

KEYED NOTES

MARK	NOTE
1	TIE TO EXISTING EPDM MEMBRANE WITH TYPICAL EXPANSION JOINT DETAIL. REFER TO DETAIL 2/R2.0
2	TIE TO EXISTING EPDM MEMBRANE. REFER TO DETAIL 8/R2.0
3	REMOVE AND REINSTALL ROOFTOP EQUIPMENT (HATCH, FAN, ETC.) INSTALL BLOCKING TO RAISE FLASHING HEIGHT TO A MINIMUM OF 12". REFER TO FLASHING DETAILS ON SHEET R2.1
4	REPLACE POURABLE SEALER POCKET AT ALL SCREEN WALL POST AND KICKER LOCATIONS. TYPICAL AT ALL SCREEN WALL LOCATIONS. REFER TO DETAIL 6/R2.0
5	REMOVE EXISTING SHINGLES ON WALL AND INSTALL NEW EPDM PER DETAILS. REMOVE AND REINSTALL HEAT TRACE WIRING TO FACILITATE INSTALLATION OF NEW MEMBRANE.
6	REPLACE OBLIQUE SCUPPER DRAIN WITH ZURN MODEL Z161 3" PIPE CONNECTION. FIELD VERIFY DRAIN SIZE. SNAKE ALL DRAINS AT THE COMPLETION OF THE PROJECT TO VERIFY PROPER OPERATION.
7	AT ALL ROOF DRAIN LOCATIONS INSTALL 4'x4' SUMP. REPLACE CLAMPING RING, FASTENERS AND DOME COVER. SNAKE ALL DRAINS AT THE COMPLETION OF THE PROJECT TO VERIFY PROPER OPERATION.
8	REMOVE AND REINSTALL SATELLITE DISH AS NECESSARY TO FACILITATE THE INSTALLATION OF THE NEW ROOF MEMBRANE. COORDINATE WITH OWNER.
9	REMOVE AND REINSTALL ROOF LADDER SECURE TO STRUCTURE.
10	REMOVE AND REPLACE EXISTING FLASHING IN ACCORDANCE WITH PROJECT DETAILS. RAISE CURB AS NECESSARY TO ACHIEVE MINIMUM 12" FLASHING HEIGHT.
11	PROVIDE WALK PAD. FIELD LOCATE.

NOTE:
FLASH ALL OTHER ROOF APPENDAGES PER THE DETAILS △1

GENERAL NOTES:

1. LOCATIONS OF EXISTING ROOF EDGE AND ROOF TOP EQUIPMENT ARE APPROXIMATE AND FOR REFERENCE ONLY. FIELD VERIFY ALL EXISTING CONDITIONS.
2. PRIOR TO BEGINNING CONSTRUCTION, VERIFY THE SLOPE OF THE EXISTING DECKING FOR EACH ROOF TYPE. NOTIFY ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY CONTRADICTING CONDITIONS.
3. PROVIDE TEMPORARY TERMINATION BARS, FLASHINGS, CURB FLASHING, COVERS, CAPS AND ROOFING MATERIAL TO PROTECT ALL INTERIOR SPACES FROM WEATHER DURING ALL PHASES OF THE WORK.
4. ALL EXISTING PERIMETER WOOD BLOCKING SHALL BE REMOVED AND REPLACED WITH KILN DRIED AFTER TREATMENT (KDAT) LUMBER. NEW WOOD BLOCKING SHALL BE INSTALLED WITH NON-CORROSIVE FASTENERS TO MATCH NEW INSULATION HEIGHT.
5. ALL EQUIPMENT, INCLUDING ROOF DRAINS, FANS, VENTS, ETC., THAT ARE REMOVED TO FACILITATE THE INSTALLATION OF THE NEW ROOFING MEMBRANE SYSTEM SHALL BE REINSTALLED WITH NEW NON-CORROSIVE FASTENERS APPROPRIATE TO THE SUBSTRATE AND ADJOINING SURFACES.
6. PROVIDE CRICKETS AT EQUIPMENT AS REQUIRED AND AS SHOWN.
7. ALL BASE TERMINATIONS SHALL HAVE COUNTERFLASHING AND TERMINATION BAR. BASE FLASHINGS SHALL BE A MINIMUM OF 12" ABOVE FINISHED ROOF SURFACE, UNLESS OTHERWISE AGREED TO BY THE ENGINEER. WHERE FEASIBLE, RAISE CURBS AND MODIFY EQUIPMENT AS NECESSARY TO PROVIDE A MINIMUM 12" FLASHING HEIGHT. IDENTIFY ALL LOCATIONS WHERE A 12" FLASHING HEIGHT ISN'T POSSIBLE AND NOTIFY ENGINEER IN ADVANCE.
8. PROVIDE NEW EXPANSION JOINTS PER PROJECT DETAILS AT ALL EXISTING EXPANSION JOINTS.
9. PROVIDE NEW CLAMPING RINGS AND BOLTS AT ALL ROOF DRAINS.
10. DE-ENERGIZE AND RE-ENERGIZE ALL UTILITY SERVICES AS REQUIRED TO PERFORM THE PROJECT.
11. LOCATE ALL CONDUITS FASTENED TO THE UNDERSIDE OF THE DECK BEFORE FASTENING THROUGH THE DECKING.
12. MAKE MANUFACTURER'S TECHNICAL REPRESENTATIVE PRESENT AT PRE-CONSTRUCTION MEETING, 25% CONSTRUCTION COMPLETION AND AT FINAL INSPECTION.
13. SNAKE OUT AND VERIFY OPERATION OF ALL ROOF DRAINS AT THE COMPLETION OF THE PROJECT. PROVIDE WRITTEN DOCUMENTATION ON THE VERIFICATION PROCESS.
14. REFER TO DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
15. COVER ALL HOLES IN EXISTING PIPE SCREENS PER DETAIL 7/R2.1.
16. COORDINATE INSULATION HEIGHTS AT EXISTING DOOR THRESHOLDS TO MAINTAIN MINIMUM DOOR OPERATING CLEARANCES.

△1

ROOF TYPE A :

1. REMOVE THE EXISTING BUILT-UP ROOFING SYSTEM IN ITS ENTIRETY, CONSISTING OF GRAVEL BUILT-UP MEMBRANE (4 PLY), 1" PERLITE, 2" POLYISO INSULATION, FLASHINGS, FASTENERS, EDGE METALS, WOOD BLOCKING, ETC.
2. REMOVE EXISTING METAL COPING AROUND THE ENTIRE ROOF PERIMETER. INSTALL ALL NEW WOOD BLOCKING FOR INSTALLATION OF THE NEW METAL COPING / EDGE METAL.
3. EXAMINE EXISTING METAL DECK AND NOTIFY ENGINEER OF ANY SUBSTRATE ISSUES, IF ANY.
4. PRIOR TO CONSTRUCTION, PERFORM ROOF ASSEMBLY UPLIFT TEST IN PRESENCE OF ENGINEER TO VERIFY ROOF SYSTEM WILL MEET DESIGN WIND UPLIFT REQUIREMENTS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
5. INSTALL CARLISLE VAPAIR SEAL 725TR VAPOR BARRIER ON THE EXISTING ROOF DECK IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
6. INSTALL FIRST LAYER OF 1/8" PER FOOT TAPERED, POLYISOCYANURATE INSULATION WITH GLASS COATED FACER, LOOSE LAID. TAPER TO EXISTING ROOF DRAINS AND PROVIDED 4X4 SUMP AT DRAIN LOCATIONS. PROVIDE TAPERED INSULATION DRAWING FOR APPROVAL.
7. INSTALL 3" POLYISOCYANURATE WITH GLASS COATED FACER (R-17.1 MINIMUM), MECHANICALLY ATTACHED. TAPER TO EXISTING ROOF DRAINS.
8. INSTALL SECOND LAYER 2 1/2" POLYISOCYANURATE HD COMPOSITE BOARD INSULATION WITH GLASS COATED FACER (R-13.9 MINIMUM), FULLY ADHERED, STAGGERED JOINTS.
9. PROVIDE CRICKETS AS INDICATED AND AS REQUIRED TO PROMOTE DRAINAGE TO EXISTING STORMWATER CONVEYANCE SYSTEMS.
10. INSTALL .90-MIL EPDM MEMBRANE, BLACK, FULLY ADHERED, WITH 6" FACTORY APPLIED TAPE.
11. INSTALL UNCURED 6" COVER TAPE AT ALL MEMBRANE SEAMS IN ACCORDANCE WITH DETAIL.
12. INSTALL METAL COPING / EDGE METAL IN ACCORDANCE WITH DETAILS AND PROJECT SPECIFICATIONS.
13. REFER TO DETAILS AND PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ROOF TYPE B :

1. REMOVE THE EXISTING SHINGLE ROOFING SYSTEM IN ITS ENTIRETY, CONSISTING OF ASPHALT SHINGLES, UNDERLAYMENT, FLASHINGS, FASTENERS, EDGE METALS, WOOD BLOCKING, ETC.
2. EXAMINE EXISTING WOOD DECK AND NOTIFY ENGINEER OF ANY SUBSTRATE ISSUES, IF ANY.
3. PRIOR TO CONSTRUCTION, PERFORM ROOF ASSEMBLY UPLIFT TEST IN PRESENCE OF ENGINEER TO VERIFY ROOF SYSTEM WILL MEET DESIGN WIND UPLIFT REQUIREMENTS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
4. INSTALL CARLISLE VAPAIR SEAL 725TR VAPOR BARRIER ON THE EXISTING ROOF DECK IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. INSTALL ONE LAYER OF 1/2" POLYISOCYANURATE HIGH-DENSITY INSULATION WITH GLASS COATED FACER, FULLY ADHERED.
6. INSTALL .90-MIL EPDM MEMBRANE, BLACK, FULLY ADHERED, WITH 6" FACTORY APPLIED TAPE.
7. INSTALL UNCURED 6" COVER TAPE AT ALL MEMBRANE SEAMS IN ACCORDANCE WITH DETAIL.
8. INSTALL METAL COPING / EDGE METAL IN ACCORDANCE WITH DETAILS AND PROJECT SPECIFICATIONS.
9. REFER TO DETAILS AND PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ABBREVIATION LIST

DS	DOWN SPOUT
RD	ROOF DRAIN
RU	ROOF UNIT
RV	ROOF VENT
WV	WASTE VENT

GENERAL DETAIL NOTES:
1. CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S WRITTEN DETAILS TO ENSURE WARRANTY COMPLIANCE.
2. MANUFACTURER'S DETAILS ARE THE MINIMUM REQUIREMENTS. CONTRACTOR SHALL COMPLY WITH ALL DETAILS AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS FOR THE ENTIRE PROJECT BEFORE PROCEEDING WITH THE WORK.

ROOF PLAN
SCALE: 1/16"=1'-0"

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REVISIONS	DATE	BY
1: ADDENDUM #1	02/01/24	RPK

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Roof Plan

SCIENCE HALL ROOF REPLACEMENT
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SHEET:
R1.0

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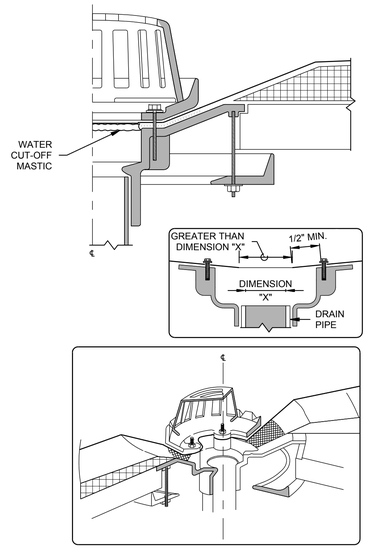
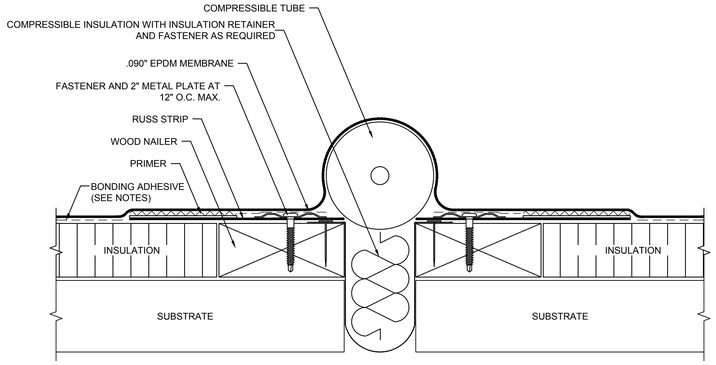
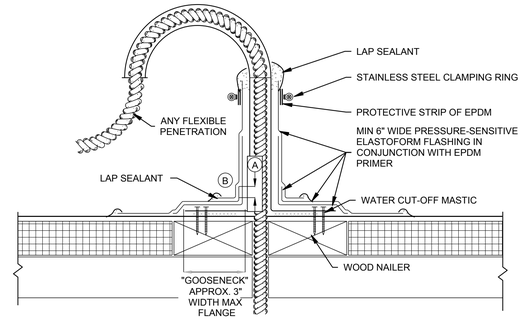


NOTES:
1. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.
2. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
3. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
4. REMOVE EXISTING LEAD, FLASHING MATERIAL & ENSURE THE DRAIN RING IS COMPLETELY CLEAN DOWN TO BARE METAL.
5. FIELD SPLICES MUST BE LOCATED AT LEAST 6" OUTSIDE THE DRAIN SUMP.
6. INSULATION TAPER SHALL NOT BE GREATER THAN 6" IN 12" HORIZONTAL.

1 R2.0 **Roof Drain Detail**
SCALE: N.T.S



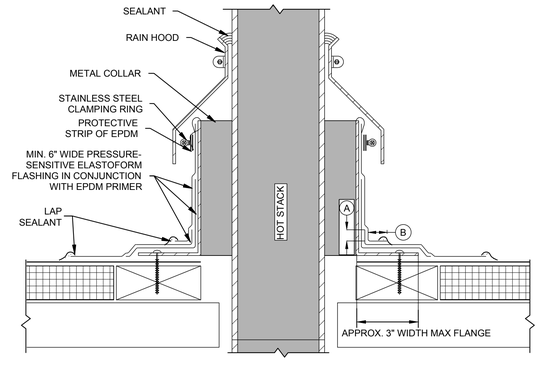
2 R2.0 **Expansion Joint Detail**
SCALE: N.T.S



NOTES:
1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
2. TEMPERATURE OF PENETRATION MUST NOT EXCEED 180°F.
3. WOOD NAILERS MUST EXTEND PAST TOTAL WIDTH OF METAL FLANGE.
4. EPDM PRIMER MUST BE APPLIED TO THE MATING SURFACES PRIOR TO APPLYING PRESSURE-SENSITIVE ELASTOFORM FLASHING.
5. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING PRESSURE-SENSITIVE ELASTOFORM FLASHING.

DIMENSIONS		
A	1/2"	MIN.
B	1"	MIN.

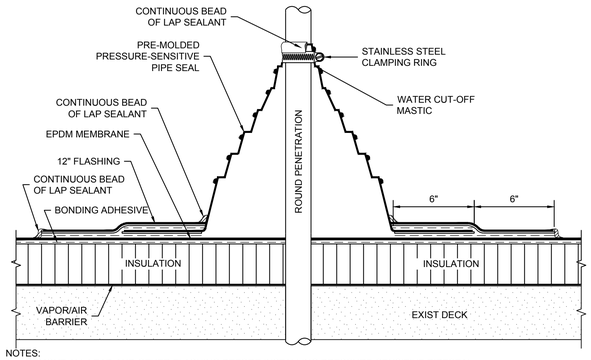
3 R2.0 **Flexible Penetration**
SCALE: N.T.S



NOTES:
1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD FABRICATED PIPE SEAL.
2. TEMPERATURE OF METAL COLLAR MUST NOT EXCEED 180°F.
3. EPDM PRIMER MUST BE APPLIED TO THE MATING SURFACES PRIOR TO APPLYING PRESSURE-SENSITIVE ELASTOFORM FLASHING.
4. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING PRESSURE-SENSITIVE ELASTOFORM FLASHING.

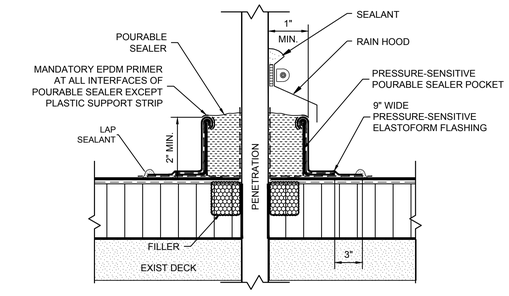
DIMENSIONS		
A	1/2"	MIN.
B	1"	MIN.

4 R2.0 **Field Fabricated Hot Stack**
SCALE: N.T.S



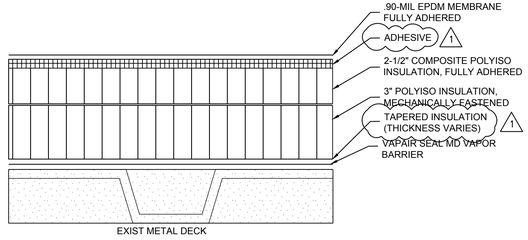
NOTES:
1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING PRESSURE-SENSITIVE PIPESEAL.
2. TEMPERATURE OF PIPE PENETRATION MUST NOT EXCEED 180°F.
3. PRE-MOLDED PIPE FLASHING MUST HAVE INTACT RIB AT THE TOP EDGE REGARDLESS OF PIPE DIAMETER.
4. EPDM PRIMER MUST BE APPLIED TO MEMBRANE SURFACE PRIOR TO APPLYING PRESSURE-SENSITIVE PIPE SEAL.
5. DECK FLANGES OF THE PRESSURE-SENSITIVE PIPE SEAL SHALL NOT BE OVERLAPPED, CUT OR APPLIED OVER ANY ANGLE CHANGE.
6. WHEN A FIELD SPLICE INTERSECTS A PIPE SEAL, APPLY LAP SEALANT ALONG THE EDGE OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" IN EACH DIRECTION FROM THE SPLICE INTERSECTION & OVERLAY WITH A 6"X6" T-JOINT COVER.
7. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED.

5 R2.0 **Roof Penetration Detail**
SCALE: N.T.S

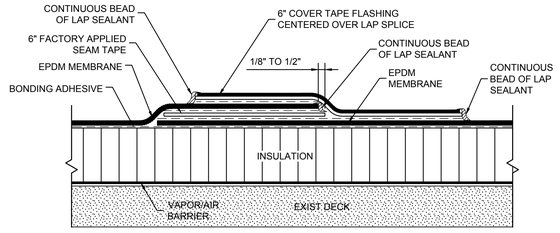


NOTES:
1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F.
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. PENETRATIONS, MEMBRANE, FLASHING AND METAL (INSIDE POCKET) MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER. DO NOT PRIME THE BLUE PLASTIC SUPPORT STRIP.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED PRESSURE-SENSITIVE ELASTOFORM FLASHING AND DECK MEMBRANE.
6. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" IN DIAMETER. REFER TO SPECIFICATIONS.

6 R2.0 **Pourable Sealer Pocket Detail**
SCALE: N.T.S



7 R2.0 **Typical Roof Type A Assembly Detail**
SCALE: N.T.S



NOTES:
1. APPLY AT ALL MEMBRANE SEAMS.
2. END LAPS OF SPLICE TAPE MUST OVERLAP A MINIMUM OF 1".
3. END LAPS OF 6" COVER TAPE FLASHING MUST OVERLAP A MINIMUM OF 3".

8 R2.0 **Membrane Splice Detail**
SCALE: N.T.S

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1: ADDENDUM #1	02/01/24	RPK

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Roof Details

SCIENCE HALL ROOF REPLACEMENT
LEHIGH CARBON COMMUNITY COLLEGE
4252 EDUCATION PARK DR
SCHNECKSVILLE, PA 18078

DATE: 01/10/2024	DSGN: REK
SCALE: AS NOTED	CHK REK
DRAWN: RPK	APPRD: REK
JOB: 1006122.003	P MGR: REK

SHEET: R2.0

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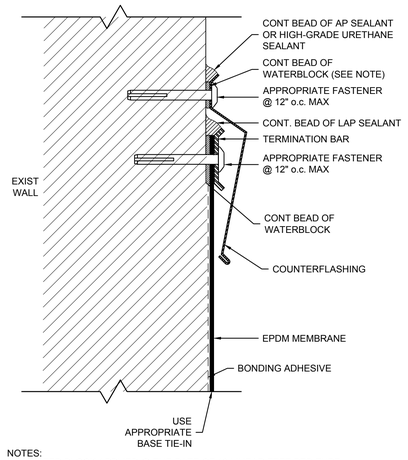
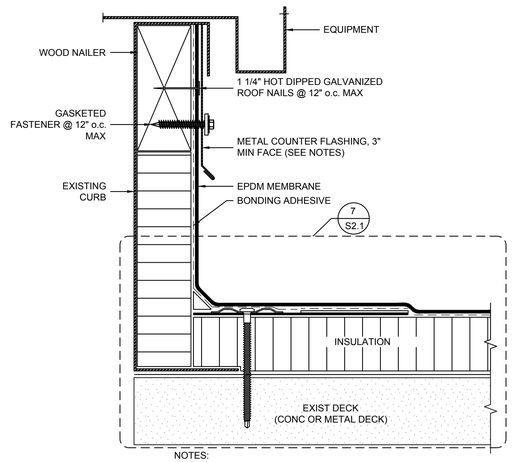


NOTES:
1. WATER BLOCK APPLIED @ THE RATE OF 10 LINEAR FEET PER TUBE.
2. METAL COUNTERFLASHING SHALL BE FORMED w/ HEMMED LOWER EDGE.
3. INSTALL TERMINATION BAR w/ 1/4" GAP BETWEEN ADJOINING SECTIONS.
4. TERMINATION BAR MUST BE CUT @ INSIDE AND OUTSIDE CORNERS. DO NOT BEND AROUND CORNERS.
5. TERMINATION BAR MUST BE FASTENED WITHIN 1" MAX OF ALL SECTION ENDS.
6. INSTALL METAL WORK IN ACCORDANCE w/ CURRENT SMACNA RECOMMENDATIONS.
7. ALL TERMINATIONS SHALL BE A MINIMUM OF 12" ABOVE THE FINISHED ROOF SURFACE.

Surface Mounted Membrane Termination Section

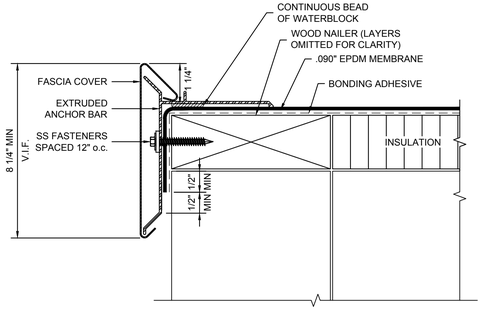
1 / R2.1 SCALE: N.T.S



NOTES:
1. MAXIMUM 6" LONG FASTENERS. (NOTE: WOOD BLOCKING MAY BE SUBSTITUTED FOR INSULATION TO REDUCE FASTENER LENGTH REQUIREMENT).
2. METAL COUNTERFLASHING SHALL BE .032" MIN ALUMINUM FORMED w/ HEMMED LOWER EDGE MOUNTED TIGHTLY TO UNDERSIDE OF MECHANICAL UNIT.
3. INSTALL METAL WORK IN ACCORDANCE w/ SMACNA RECOMMENDATIONS.

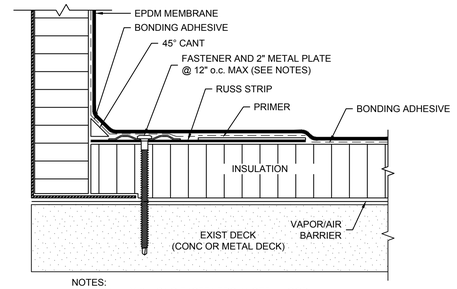
Typical Flashing at Roof Curb Detail

2 / R2.1 SCALE: N.T.S



Section

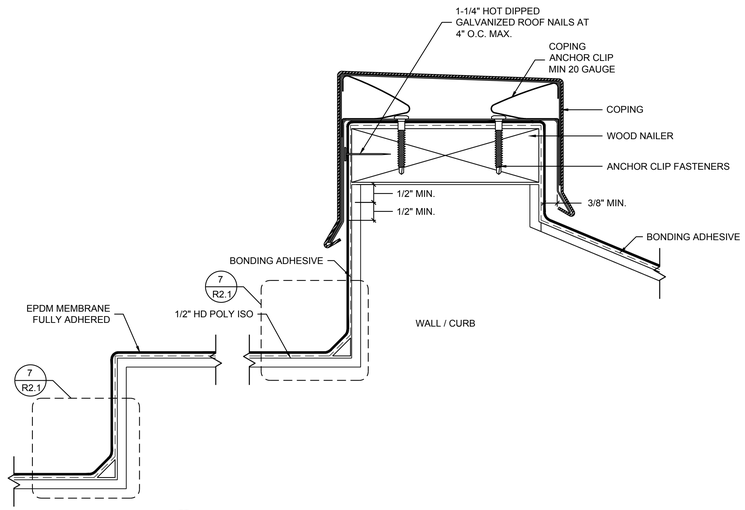
3 / R2.1 SCALE: N.T.S



NOTES:
1. MAXIMUM 6" LONG FASTENERS. (NOTE: WOOD BLOCKING MAY BE SUBSTITUTED FOR INSULATION TO REDUCE FASTENER LENGTH REQUIREMENT).
2. METAL COUNTERFLASHING SHALL BE .032" MIN ALUMINUM FORMED w/ HEMMED LOWER EDGE MOUNTED TIGHTLY TO UNDERSIDE OF MECHANICAL UNIT.
3. INSTALL METAL WORK IN ACCORDANCE w/ SMACNA RECOMMENDATIONS.

Typical Roof Detail

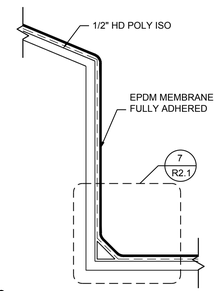
7 / R2.1 SCALE: N.T.S



Section

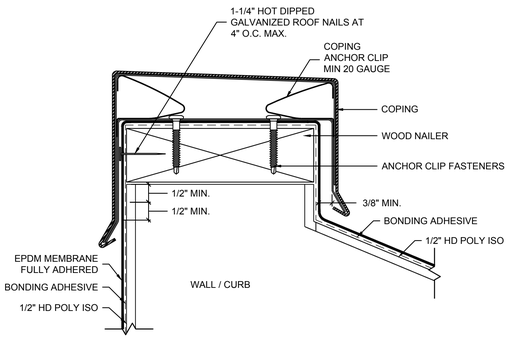
4 / R2.1 SCALE: N.T.S

NOTES:
1. BONDING ADHESIVE REQUIRED BETWEEN MEMBRANE AND INSULATION FOR FULLY ADHERED SYSTEMS.
2. APPLIES AT METAL DECK.
3. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LBS PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.
4. FASTEN COPING CLEAT AS PER SUPPLIED INSTRUCTIONS.



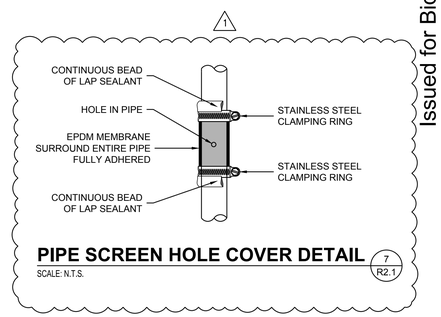
Section

5 / R2.1 SCALE: N.T.S



Section

6 / R2.1 SCALE: N.T.S



PIPE SCREEN HOLE COVER DETAIL

SCALE: N.T.S. 7 / R2.1

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Roof Sections

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SHEET: R2.1

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