

BASALT REGIONAL LIBRARY ROOF REPLACEMENT

PROJECT LOCATION:

BASALT REGIONAL LIBRARY

14 Midland Avenue
Basalt, Colorado 81621

CLIENT:

Basalt Regional Library

14 Midland Avenue
Basalt, Colorado 81621

CONTACT INFORMATION:

Amy Shipley - Executive Director

CONSULTING ENGINEER:

WISS, JANNEY, ELSTNER ASSOCIATES, INC.

3609 South Wadsworth Boulevard, Suite 400
Lakewood, Colorado 80235
303.917.4300 tel

DRAWING SHEET INDEX

| No. | SHEET TITLE |
|------|-------------------------|
| R100 | COVER SHEET & INDEX |
| R101 | PROJECT GENERAL NOTES |
| R200 | OVERALL ROOF PLAN |
| R201 | DEMOLITION PLAN |
| R202 | UPLIFT PLAN |
| R203 | ROOF PLAN |
| R300 | TYPICAL ROOF DETAILS |
| R301 | TYPICAL ROOFING DETAILS |
| R302 | REFERENCE PHOTOS |
| R400 | STANDARD ROOF DETAILS |

WJE ENGINEERS
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PROJECT:

**BASALT REGIONAL
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14 Midland Avenue
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**Basalt Regional Library
District**

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| No. | DATE | DESCRIPTION |
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WJE PROJECT No.: 2022.7310.0
ISSUE DATE: SEPTEMBER 22, 2023
PROJECT MANAGER: CLM
REVIEWED BY: MMT
DRAWN BY: KMH/BRS/CRS
SCALE: AS NOTED

COVER SHEET & INDEX

TITLE:
R100
SHEET No.:

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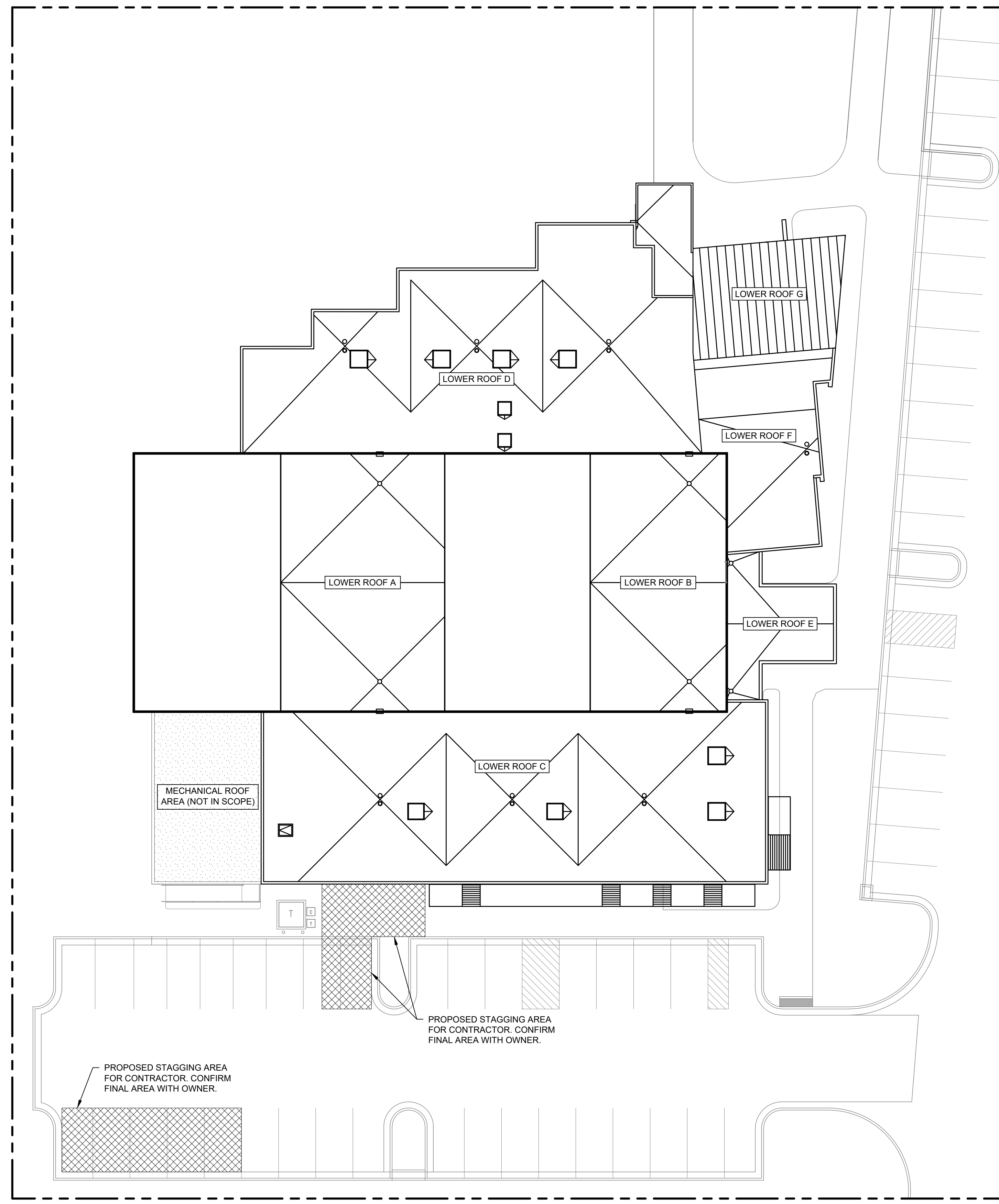
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OVERALL ROOF PLAN

TITLE:
R200
SHEET No.:



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

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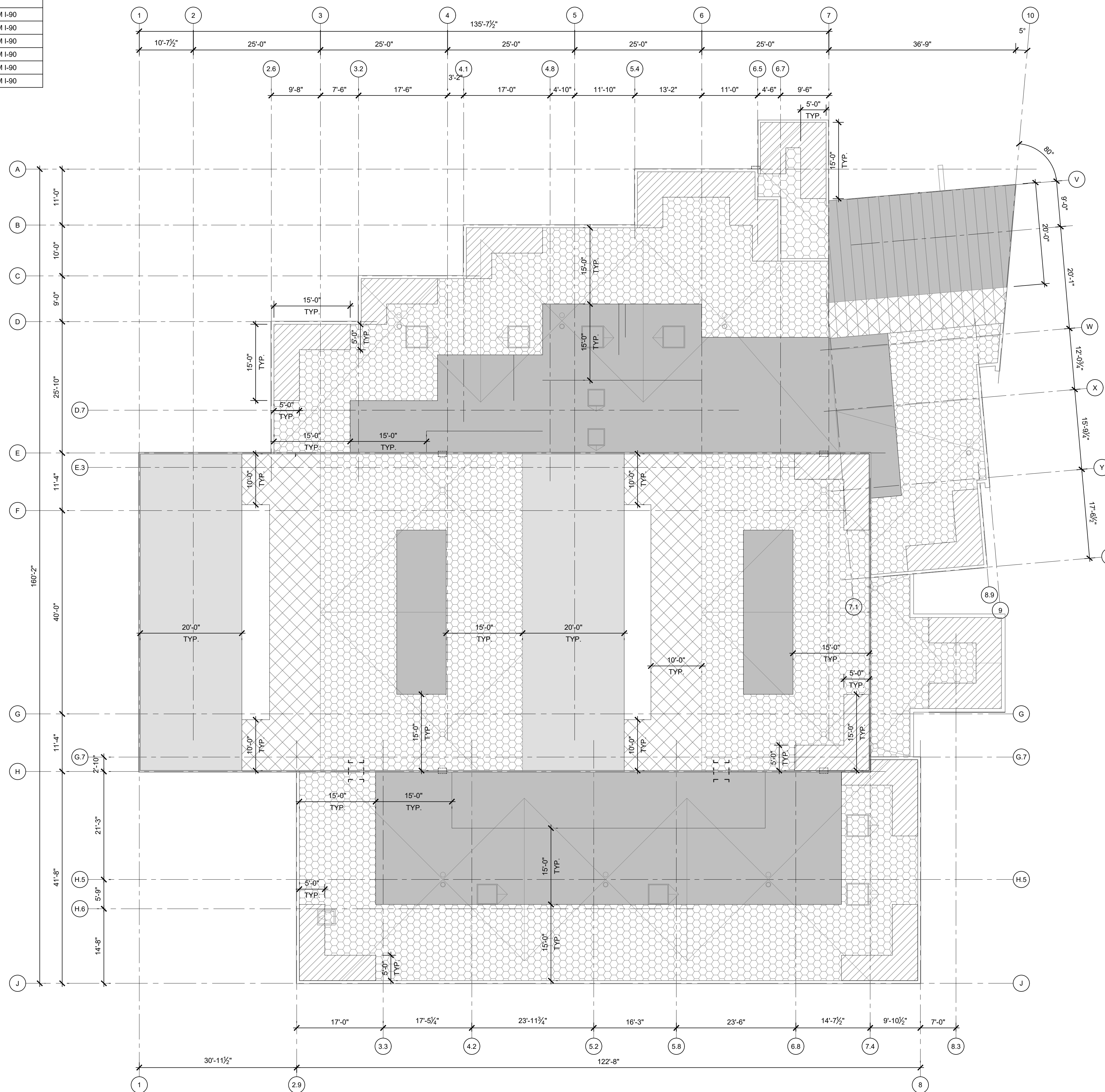
| ROOF SYSTEM WIND RESISTANT ZONES | | | | |
|----------------------------------|----------|------|------------------------------|-----------|
| ROOF AREA | TYPE | ZONE | DESIGN UPLIFT PRESSURE (PSF) | FM EQUIV. |
| FLAT | MEMBRANE | 1 | 49 | FM I-90 |
| | | 2 | 64 | FM I-90 |
| | | 3 | 87 | FM I-90 |
| MONOSLOPE | MEMBRANE | 1 | 38 | FM I-90 |
| | | 2 | 46 | FM I-90 |
| | | 3 | 79 | FM I-90 |

NOTES:

1. ROOF SYSTEM SHALL BE A TESTED ASSEMBLY THAT MEETS OR EXCEEDS THE DESIGN UPLIFT PRESSURES PROVIDED. THE DESIGN UPLIFT PRESSURES IN THE TABLE ABOVE ARE SERVICE LEVEL PRESSURES WITH A 2.0 SAFETY FACTOR FOR THE LISTED MEMBRANE ROOF TYPES.
2. MEMBRANE ROOF ASSEMBLY SHALL BE MINIMUM FM I-90.
3. GROUND ELEVATION PROVISIONS APPLY: GROUND ELEVATION 6,600 FT. ABOVE SEA LEVEL.

BUILDING AND ROOF AREA INPUT DATA

ROOF SLOPE: BETWEEN FLAT AND 4.5:12 OR LESS
 EXPOSURE CATEGORY: C
 RISK CATEGORY: II
 BASIC WIND SPEED: 115 MPH Vult



1 UPLIFT PLAN
 SCALE: 3/32" = 1'-0"
 N

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UPLIFT PLAN

TITLE:
R202
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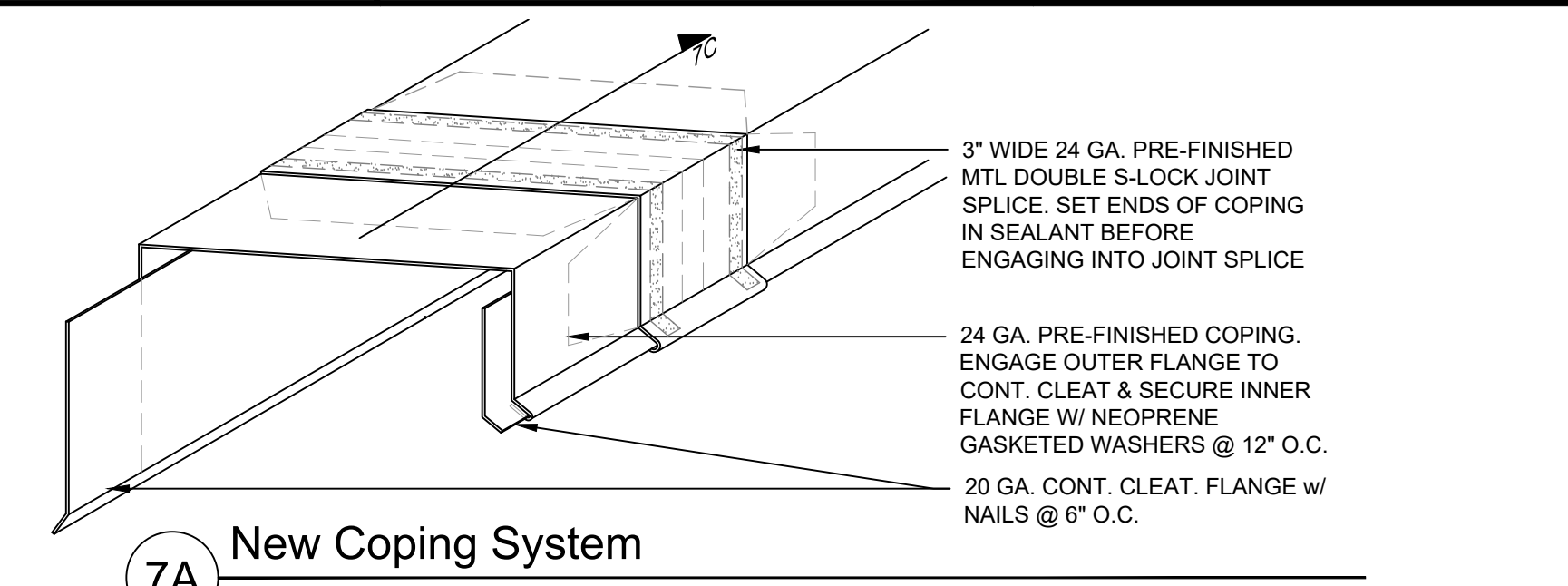
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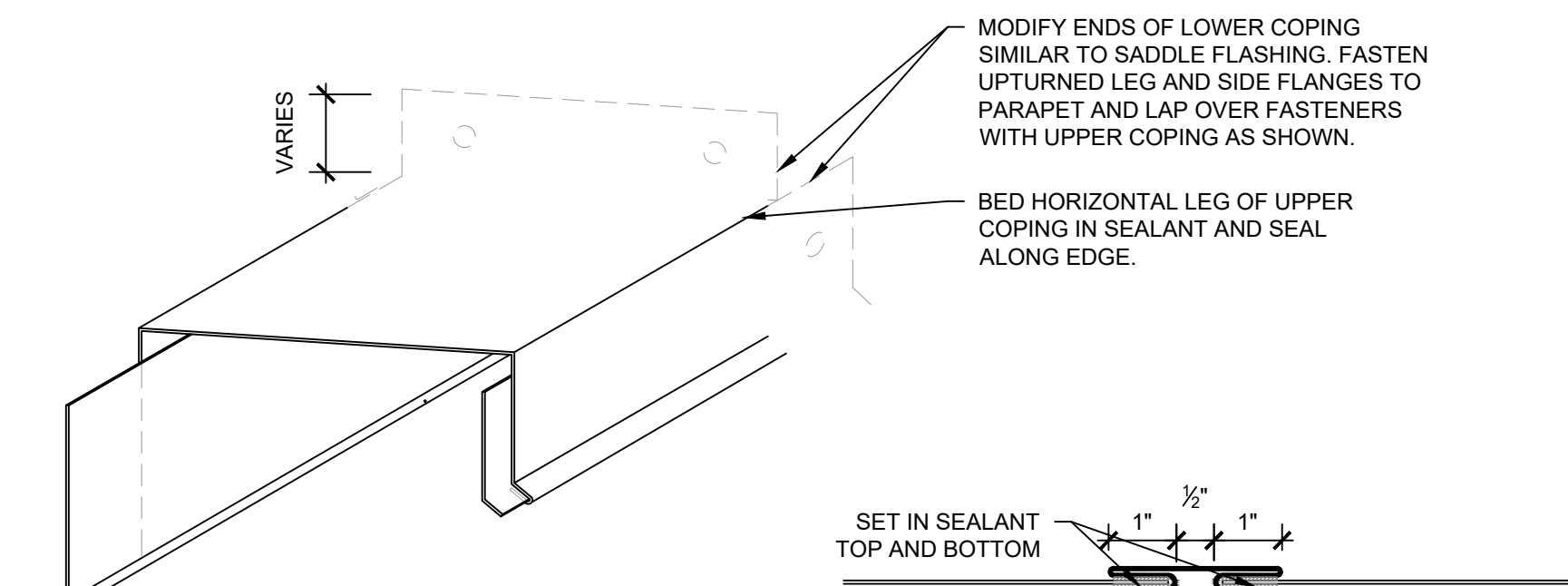
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TYPICAL ROOF DETAILS

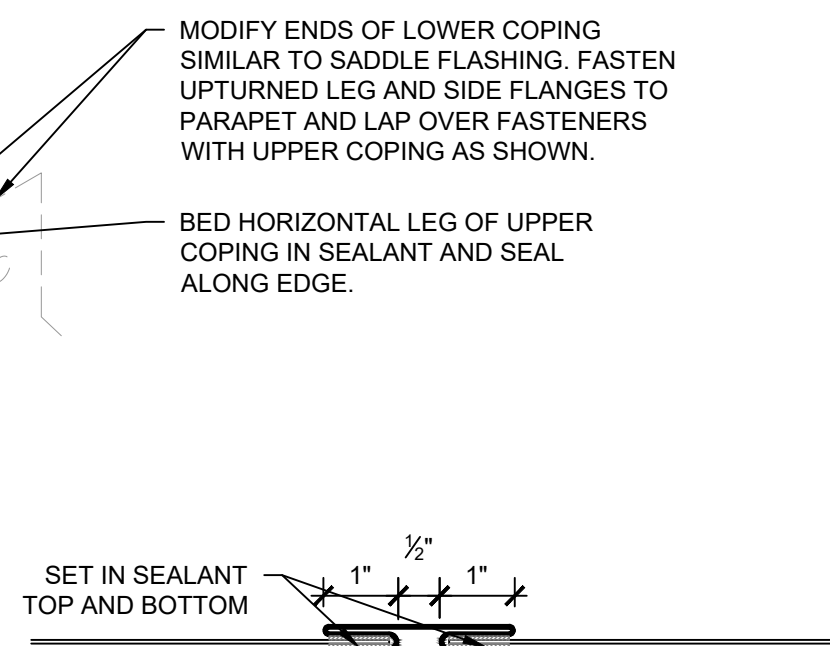
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R300
SHEET No.:



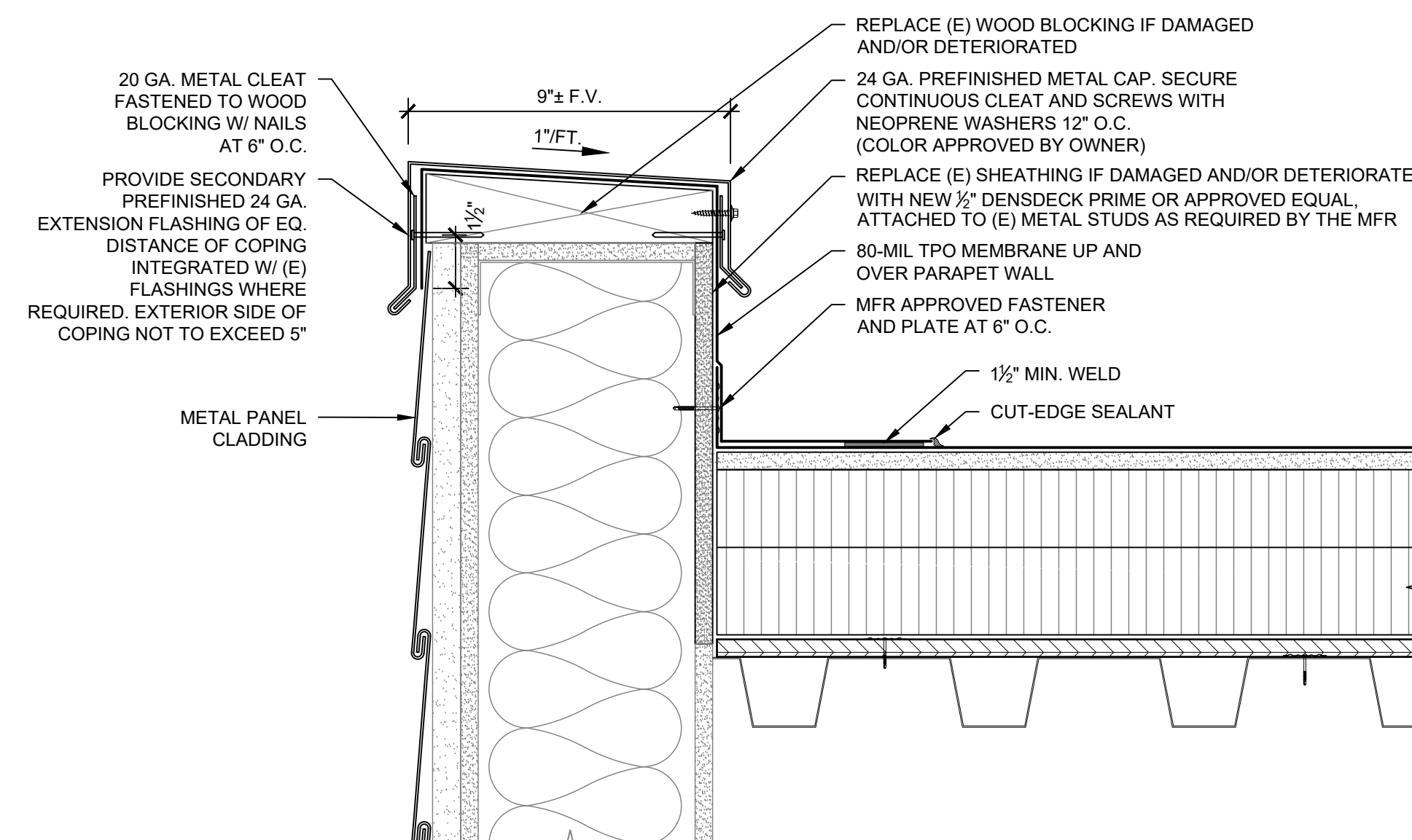
7A New Coping System
Not To Scale



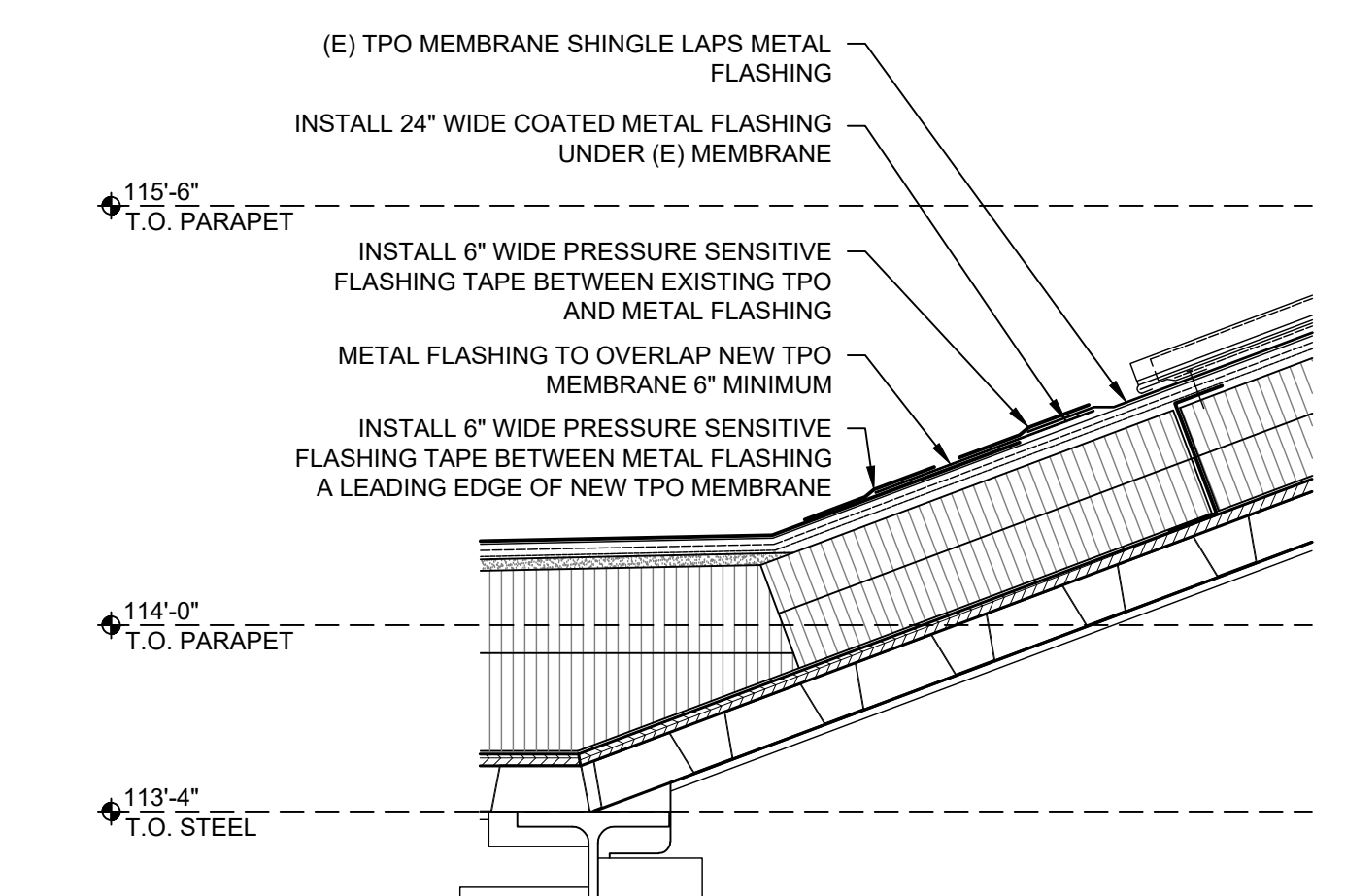
7B Step in New Coping System
Not To Scale



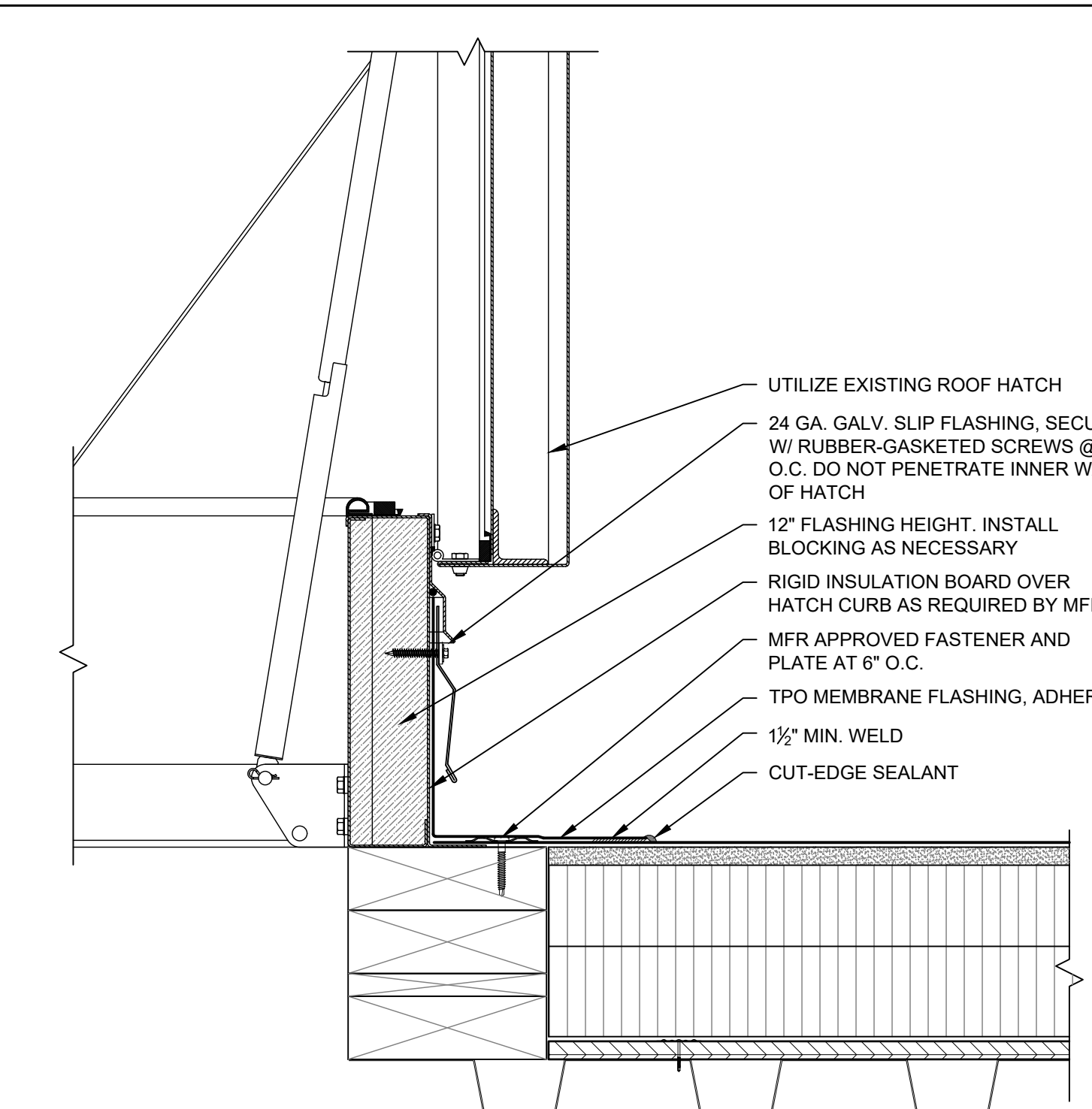
7C Double S-Lock Joint Splice
Not To Scale



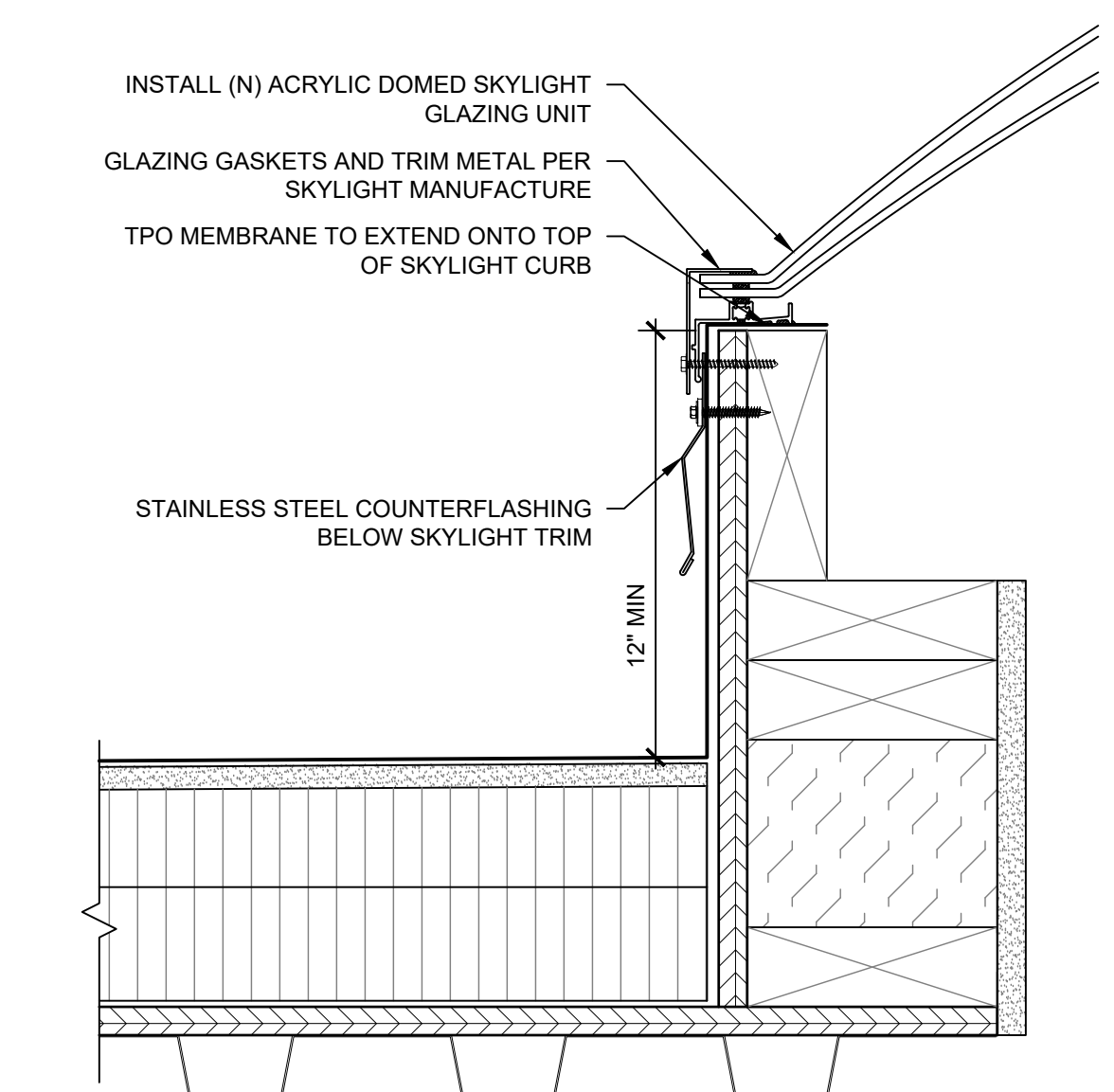
7 Parapet Wall Flashing Detail
SCALE: 3" = 1'-0"



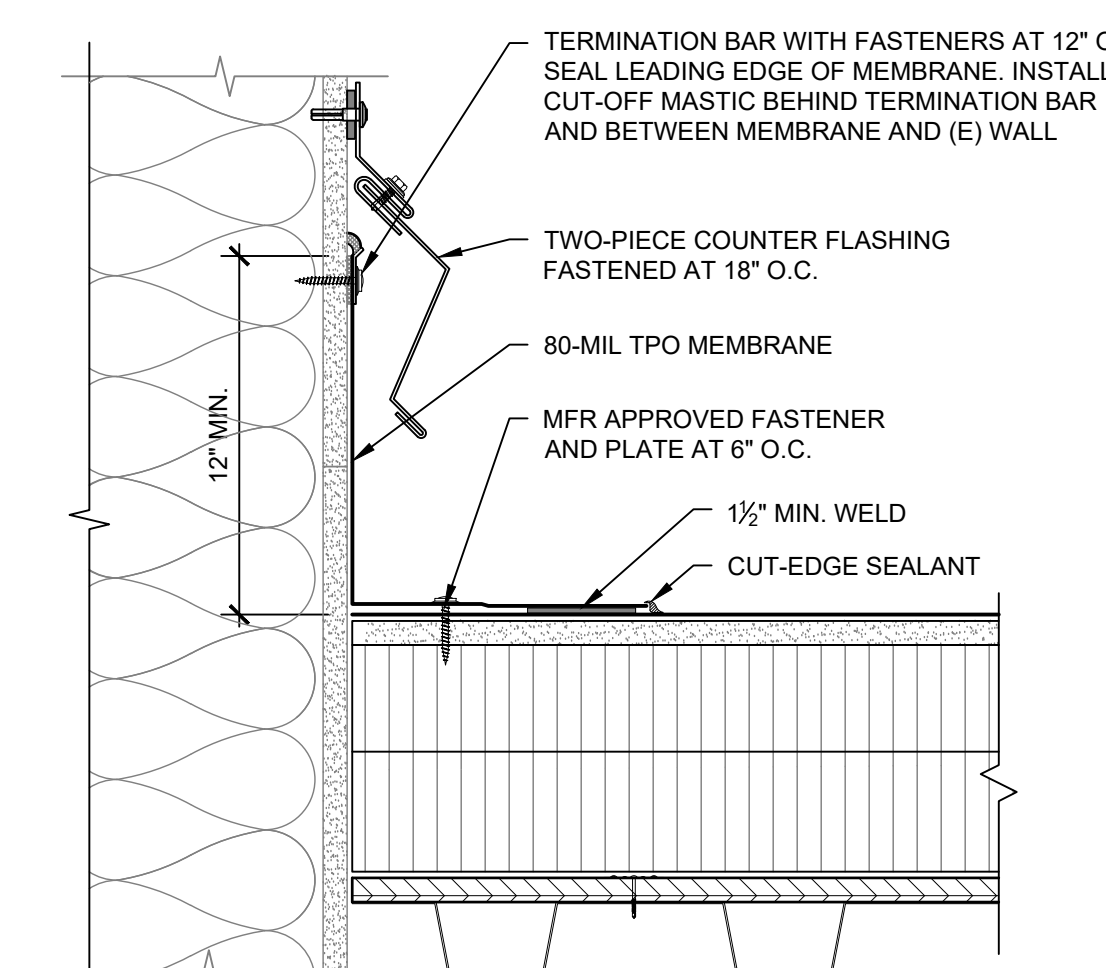
8 TPO to STDG Seam
SCALE: 1-1/2" = 1'-0"



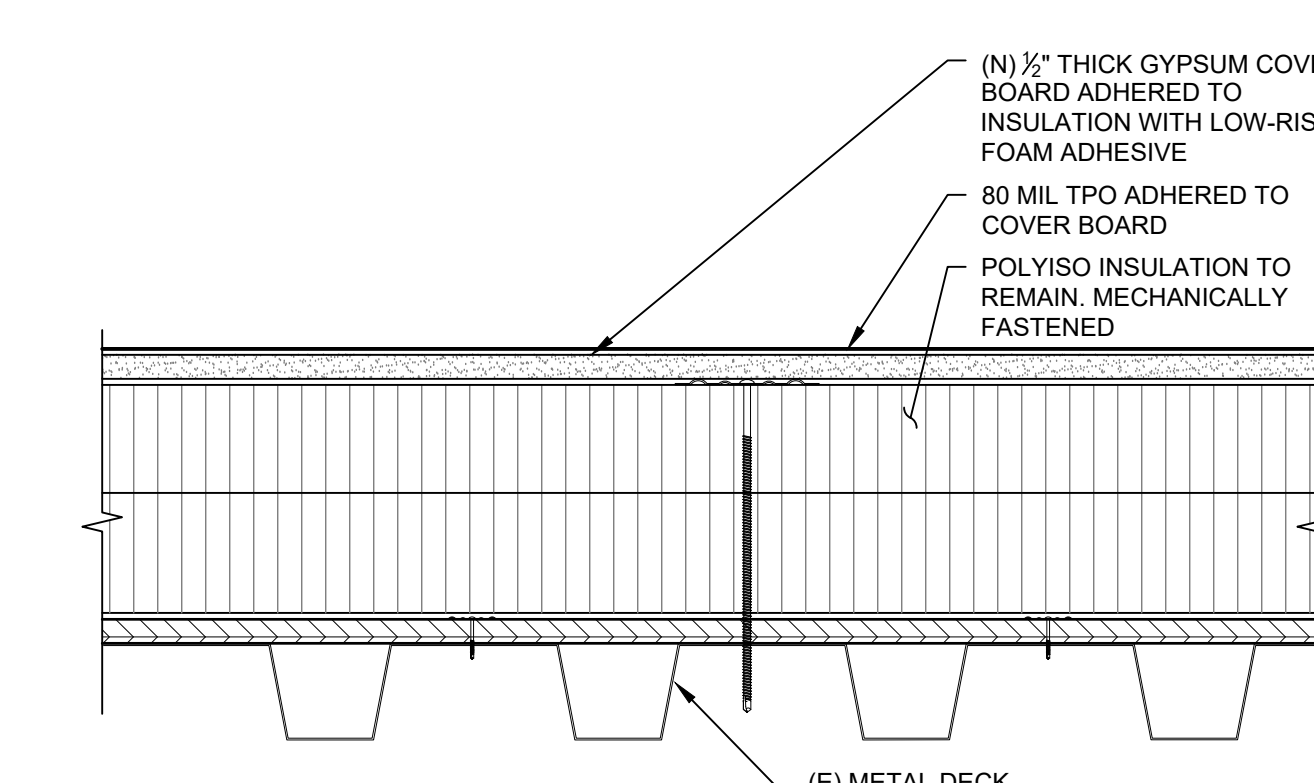
4 Flashing Termination at Roof Hatch
SCALE: 3" = 1'-0"



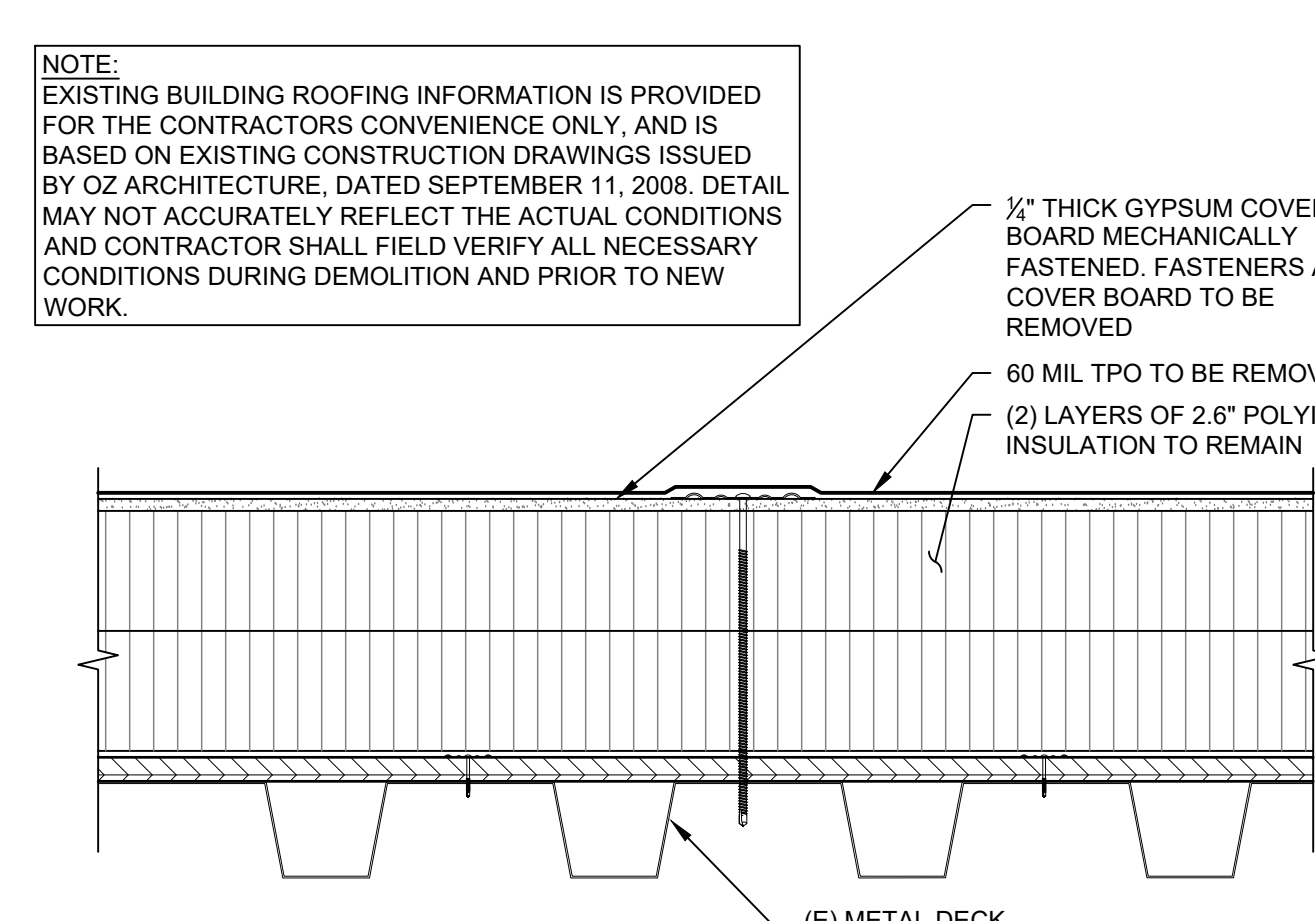
5 Skylight Curb
SCALE: 3" = 1'-0"



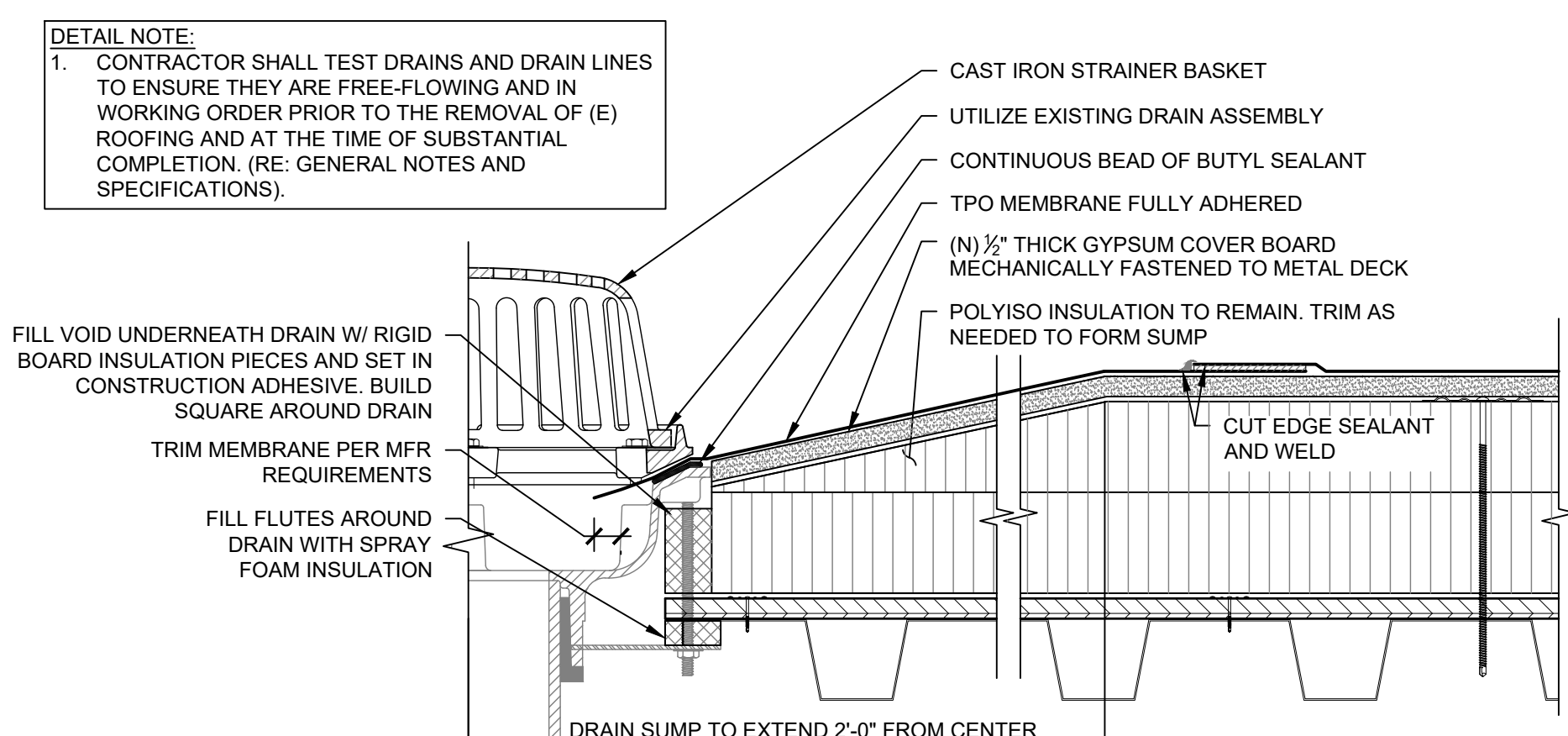
6 Roof Termination at Curtain Wall
SCALE: 3" = 1'-0"



2 New TPO Roofing System (Roof Areas A and B)
SCALE: 3" = 1'-0"



1 Existing TPO Roof Assembly
SCALE: 3" = 1'-0"



3 Flashing Termination at Existing Drain
SCALE: 3" = 1'-0"

NOTE: EXISTING BUILDING ROOFING INFORMATION IS PROVIDED FOR THE CONTRACTOR'S CONVENIENCE ONLY, AND IS BASED ON EXISTING CONSTRUCTION DRAWINGS ISSUED BY OZ ARCHITECTURE, DATED SEPTEMBER 11, 2008. DETAIL MAY NOT ACCURATELY REFLECT THE ACTUAL CONDITIONS AND CONTRACTOR SHALL FIELD VERIFY ALL NECESSARY CONDITIONS DURING DEMOLITION AND PRIOR TO NEW WORK.

DETAIL NOTE:
1. CONTRACTOR SHALL TEST DRAINS AND DRAIN LINES TO ENSURE THEY ARE FREE-FLOWING AND IN WORKING ORDER PRIOR TO THE REMOVAL OF (E) ROOFING AND AT THE TIME OF SUBSTANTIAL COMPLETION. (RE: GENERAL NOTES AND SPECIFICATIONS).

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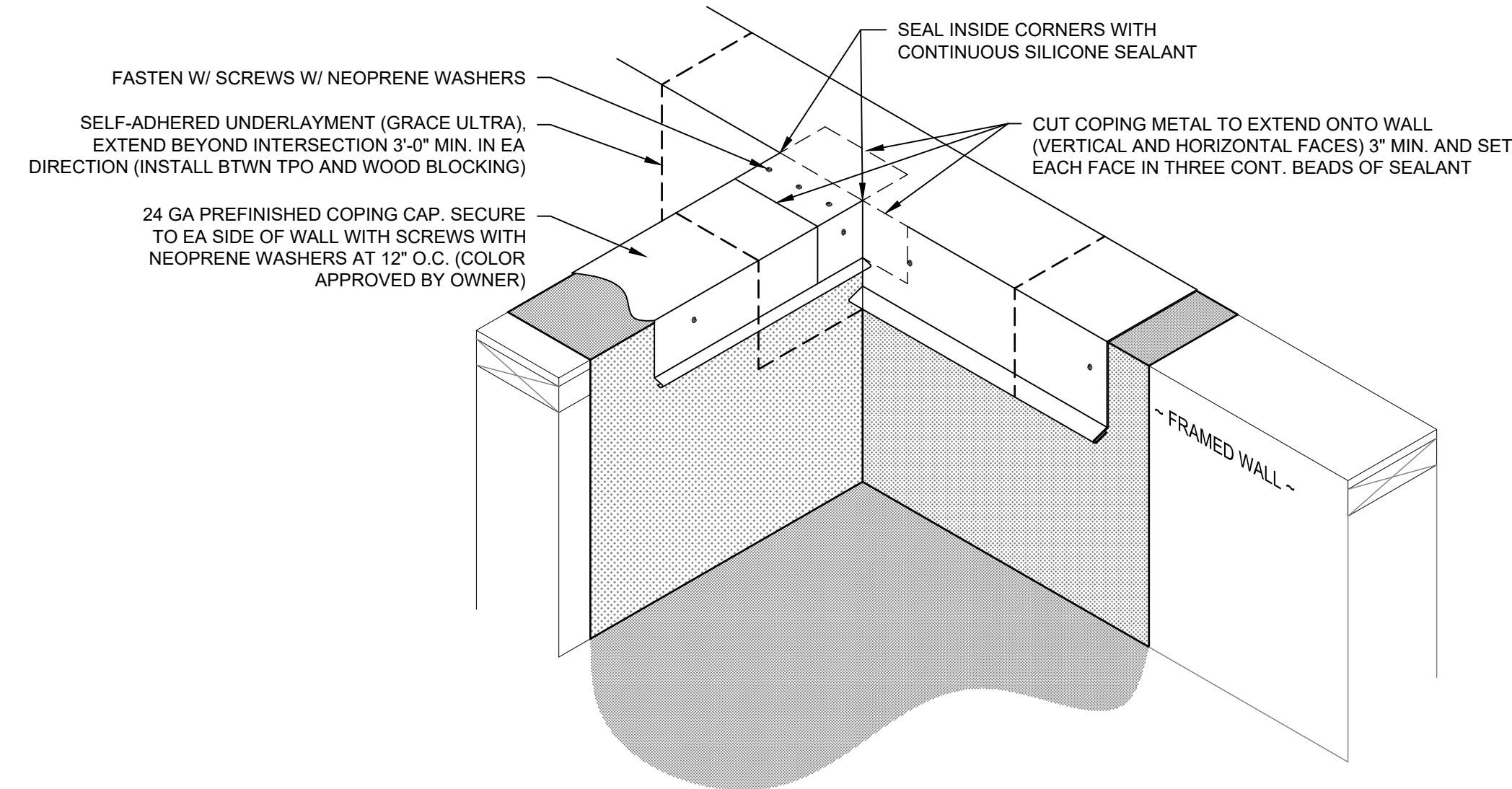
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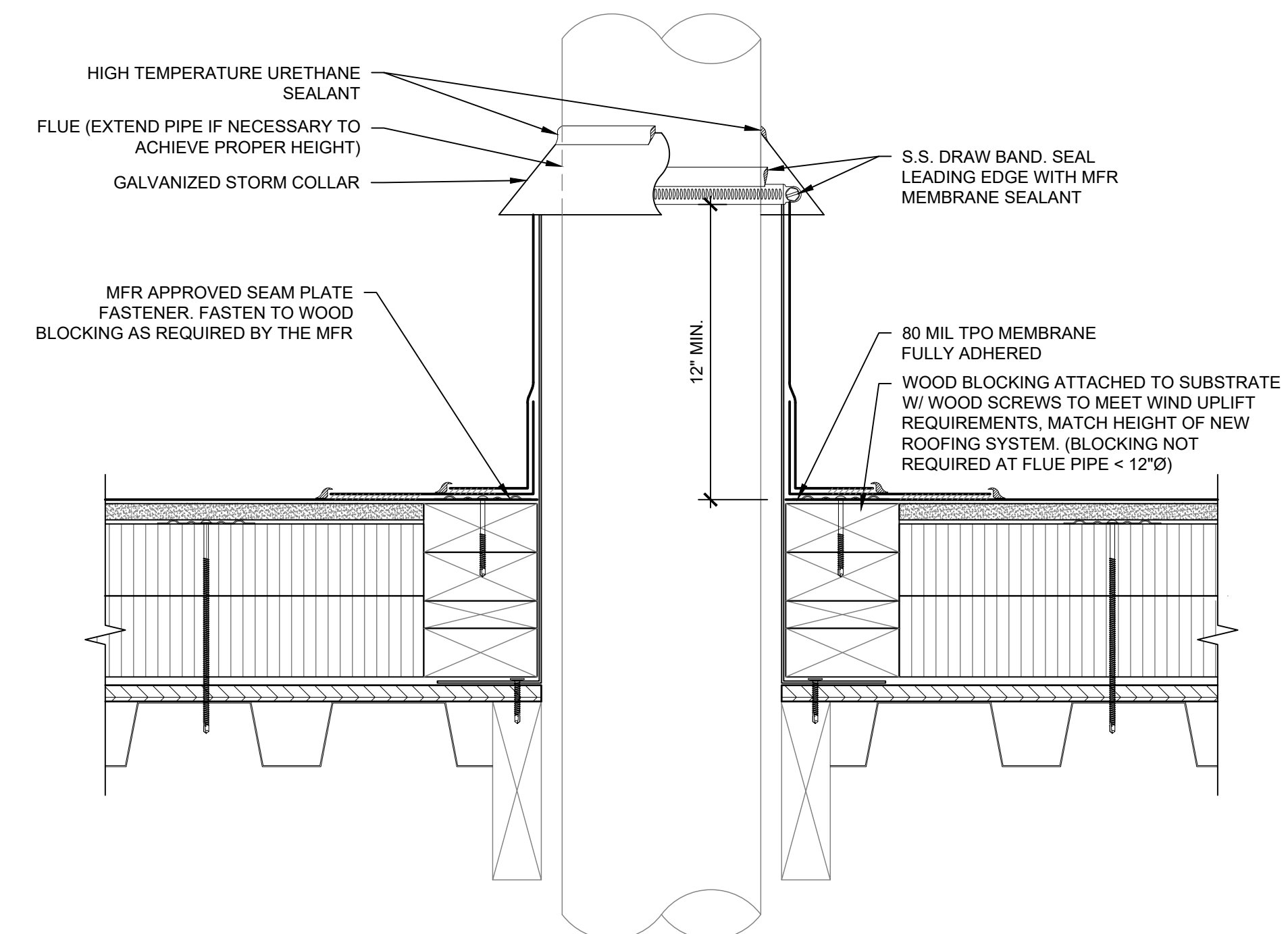
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**TYPICAL ROOFING
DETAILS**

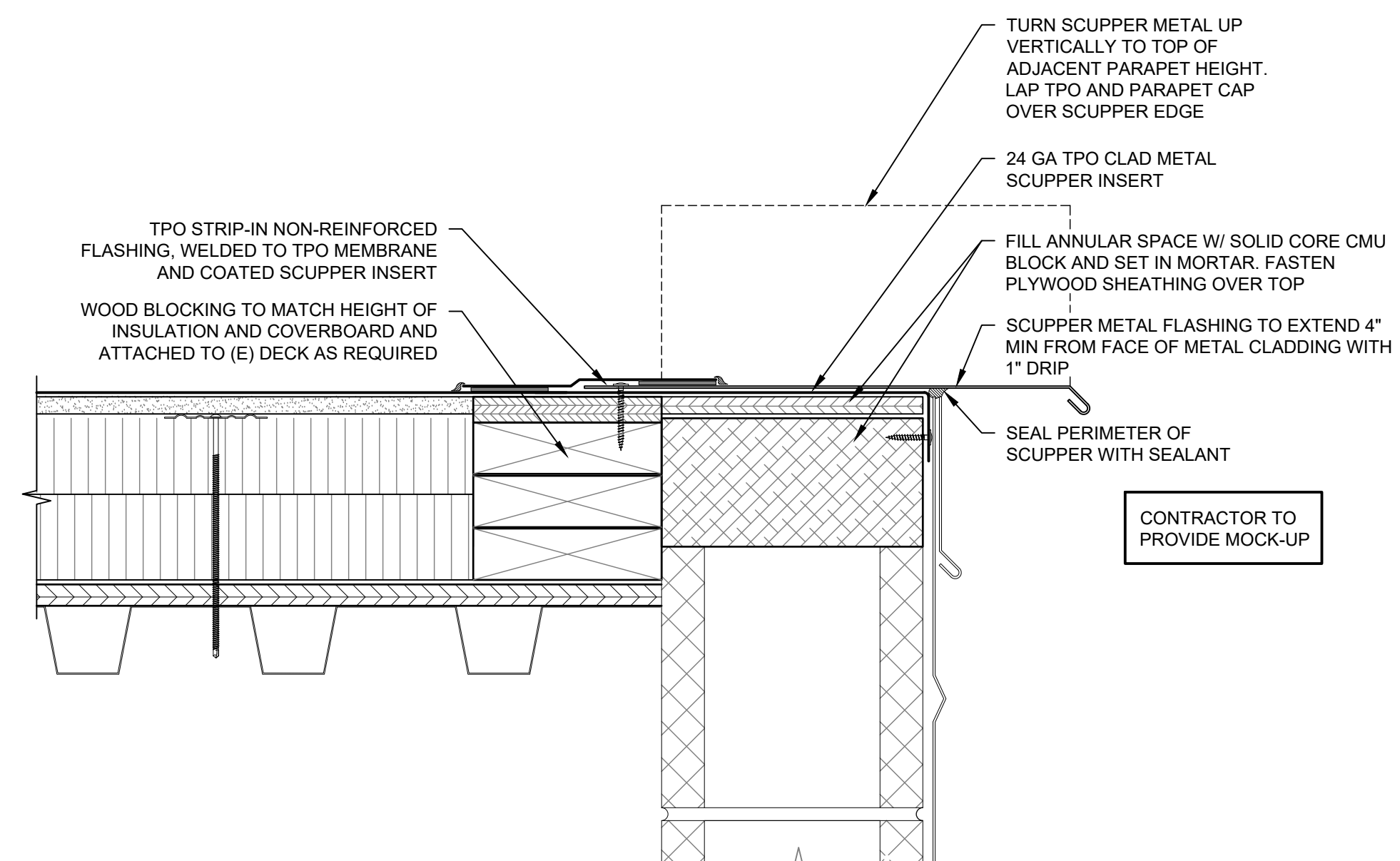
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R301
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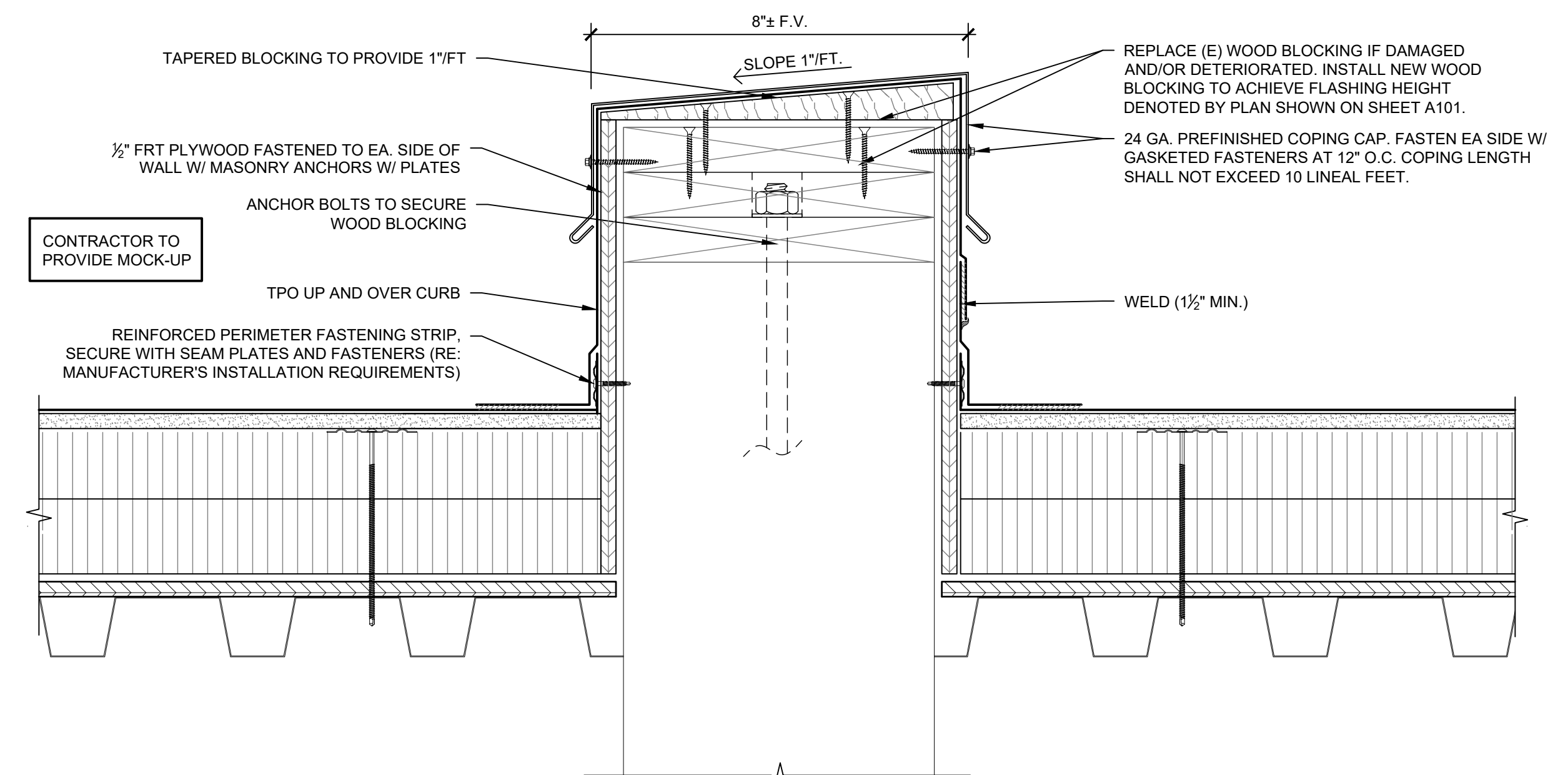
4 Detailing at Coping Intersection
SCALE: N.T.S.



3 Flashing Termination at Flue Pipe > 12" Ø
SCALE: 3" = 1'-0"



2 Scupper with Collector Head and Downspout
SCALE: 3" = 1'-0"



1 Roof Area Divider Curb
SCALE: 3" = 1'-0"

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MECHANICAL ROOF PENETRATION NOTES

1. THESE GENERAL NOTES APPLY TO ALL MECHANICAL, ELECTRICAL, OR PLUMBING (MEP) PENETRATIONS, AND ROOF MOUNTED ACCESSORIES OR EQUIPMENT.
2. ALL MECHANICAL EQUIPMENT OR ACCESSORY CURBS SHALL PROVIDE A MINIMUM CLEARANCE OF 12 INCHES ABOVE THE PLANE OF THE FINISHED ROOF FOR INSTALLATION OF THE BASE FLASHINGS AND COUNTERFLASHINGS. WOOD CURBS SHALL BE USED WHERE POSSIBLE, AND ALL HORIZONTAL BLOCKING SHALL MATCH THE HEIGHT OF THE ROOF INSULATION AT THE CURB LOCATION. ALL SUCH CURBS SHALL HAVE PROPER STRUCTURAL SUPPORT BENEATH THE DECK TO PREVENT DEFLECTION.
3. EQUIPMENT OR OTHER ROOFTOP ACCESSORIES SHALL NOT BE SET IN PLACE UNTIL ALL BITUMINOUS BASE FLASHINGS AND COUNTERFLASHINGS MADE OF COMPATIBLE METAL ARE ON SITE AND READY TO INSTALL. ALL MECHANICAL EQUIPMENT OR ACCESSORY CURBS SHALL HAVE A COUNTERFLASHING INSTALLED MADE OF A COMPATIBLE SHEET METAL MATERIAL. THE GAUGE SHALL BE EQUIVALENT TO 24 GAUGE GALVANIZED STEEL.
4. WHEREVER CONSTRUCTION DOCUMENTS CALL FOR REPLACEMENT, EXTENSION, OR RAISING OF MECHANICAL EQUIPMENT CURBS, SUCH A REQUIREMENT ALSO INCLUDES EXTENDING OR REPLACING CONDUITS, PIPING (INCLUDING GAS PIPING), INTERNAL DUCTS, LOUVERS, AND DAMPERS IN SUCH A MANNER AS TO PROVIDE A COMPLETE OPERATIONAL ASSEMBLY.
5. PITCH PANS OR PITCH POCKETS ARE NOT PERMITTED. WHEREVER A PIPE OR CONDUIT PENETRATES THE ROOF, A HOODED AND WOOD CURBED FLASHING SHALL BE USED. ALL PIPE OR CONDUIT WILL HAVE A 100 DEGREE RIGHT ANGLE BEND TO CAUSE WATER TO DRAIN AWAY FROM THE FLASHING, AND SUCH CONDUITS AND PIPES SHALL HAVE A DRIP LOOP UNLESS SUCH INTERFERES WITH THE NORMAL FUNCTION OF THE LINE.
6. ALL PIPES, CONDUITS, OR OTHER ROOF PENETRATIONS SHALL HAVE AT LEAST AN 12" HORIZONTAL CLEARANCE FROM ANY OTHER PENETRATION, WALL, OR CURB.
7. ALL PIPES OR CONDUITS OF ANY TYPE SHALL BE SUPPORTED WITH PORTABLE PIPE HANGERS OR APPROVED EQUIVALENT HAVING GALVANIZED IRON SUPPORTS AND A COMPOSITE BASE SET ON PADS MADE OF COMPATIBLE APPROVED ROOFING MATERIAL. THE PORTABLE PIPE HANGERS SHALL BE SET AT A MAXIMUM DISTANCE OF 10 FEET APART OR AS STIPULATED BY THE LOCAL CODE ENFORCING AUTHORITY APPLICABLE TO THE PROJECT. WOOD BLOCKING OR PLASTIC BLOCKS ARE NOT PERMITTED.
8. WHERE THE WEIGHT OF EQUIPMENT OR PIPING WARRANTS, PERMANENT CURBED SUPPORTS EXTENDING A MINIMUM OF 12" ABOVE THE PLANE OF THE FINISHED ROOF AND HAVING A METAL CAP WITH PERMANENT ROLLERS SHALL BE USED IN LIEU OF PORTABLE PIPE HANGERS.
9. WHERE EQUIPMENT, PIPING, CONDUITS, OR ACCESSORIES ARE SUPPORTED BY PARALLEL LINEAR WOOD CURBS INSTEAD OF FULL CURBS, SUCH SUPPORTS SHALL BE REPLACED WITH FULL CURBS TO PREVENT DAMMING OF WATER IN HEAVY RAINS, UNLESS FULL CURBS CONFLICTS WITH THE FUNCTION OF THE ITEM.
10. WALKWAY PROTECTION MATERIAL APPROVED BY THE ROOFING MATERIAL MANUFACTURER SHALL BE INSTALLED AROUND THE PERIMETER OF ALL MECHANICAL EQUIPMENT AND ROOF ACCESS POINTS.
11. ALL PRIMARY DRAINS SHALL BE SUMPED A MINIMUM OF 48" SQUARE. ROOF INSULATION SHALL NOT BE THINNER THAN 3" AT THE DRAIN. CAST IRON OR CAST ALUMINUM STRAINERS SHALL BE USED WITH ALL ROOF DRAINS. PLASTIC STRAINERS ARE NOT ACCEPTABLE. ANY MISSING OR DAMAGED STRAINER SHALL BE REPLACED WITH COMPATIBLE STRAINERS.
12. WHERE WOOD BLOCKING IS REQUIRED TO SUPPORT CURBS OR OTHER PENETRATION FLASHINGS, SUCH WOOD SHALL BE KILN-DRIED (KD) WITH ALL BLOCKING LAYERS LAPPED AND SECURED WITH HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR OTHER CORROSION-RESISTANT SCREWS, NOT NAILED.
13. ALL WOOD CURBS SHALL BE CONSTRUCTED OF A SIZE AND DIMENSIONS TO PROVIDE 1" CLEARANCE ON EVERY SIDE BETWEEN THE I.D. OF THE EQUIPMENT FLANGE AND THE O.D. OF THE CURB, TO ALLOW FOR THE BUILD-UP OF FLASHING MATERIAL AT THE CORNERS. GOUGED ROOF FLASHING CORNERS ARE NOT ACCEPTABLE.
14. EXTEND PLUMBING VENTS 11" ABOVE THE PLANE OF THE FINISHED ROOF. RELOCATE ANY VENT CLOSER THAN 12" TO ANY VENT, CURB, WALL OR OTHER PROJECTIONS. RELOCATION OF VENTS INCLUDES EXTENDING VENTS, REPAIRING DECK, CORING DECK, INTERIOR REPAIRS & FINISHES TO PROVIDE A COMPLETE CONNECTION.

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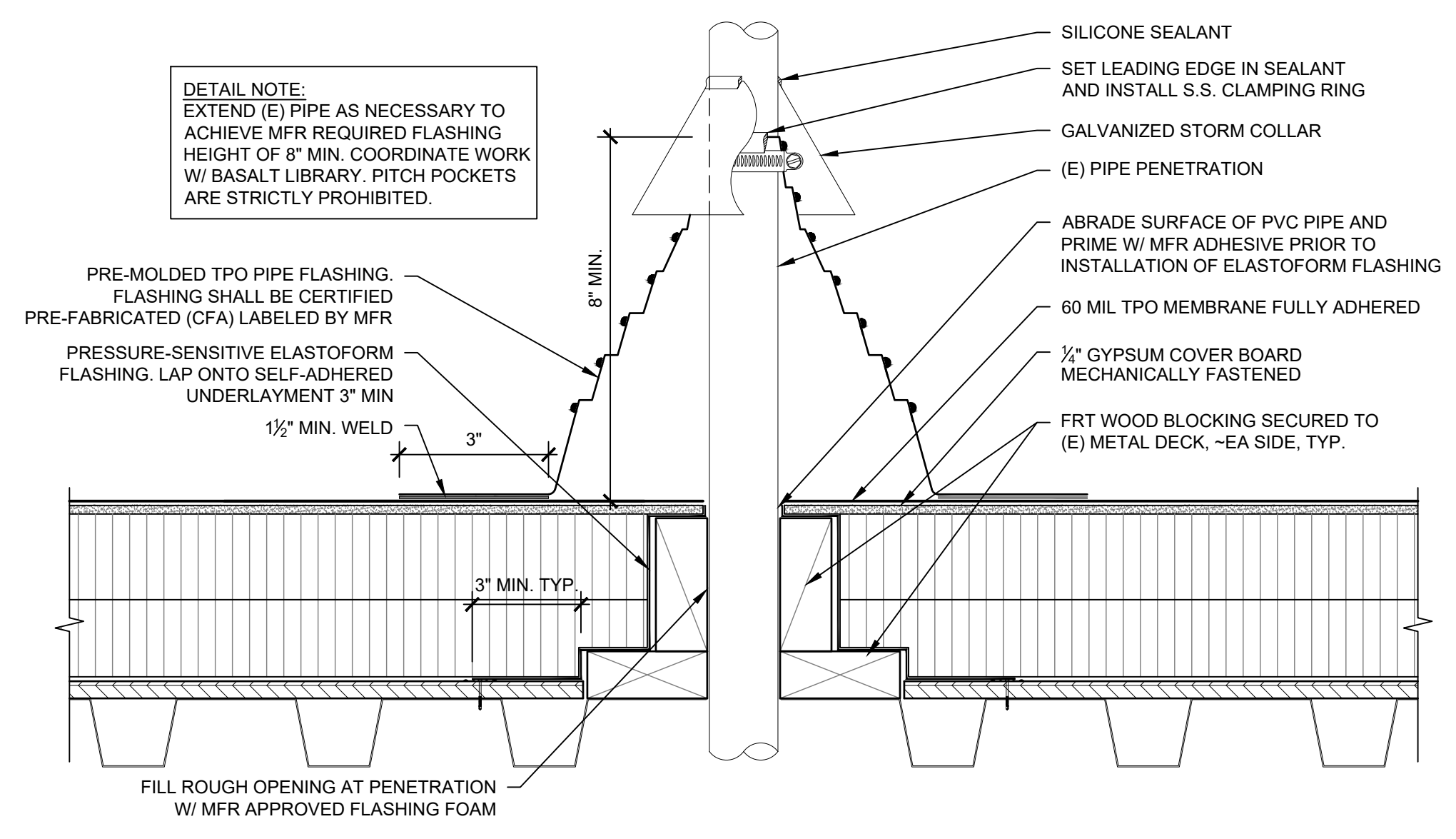
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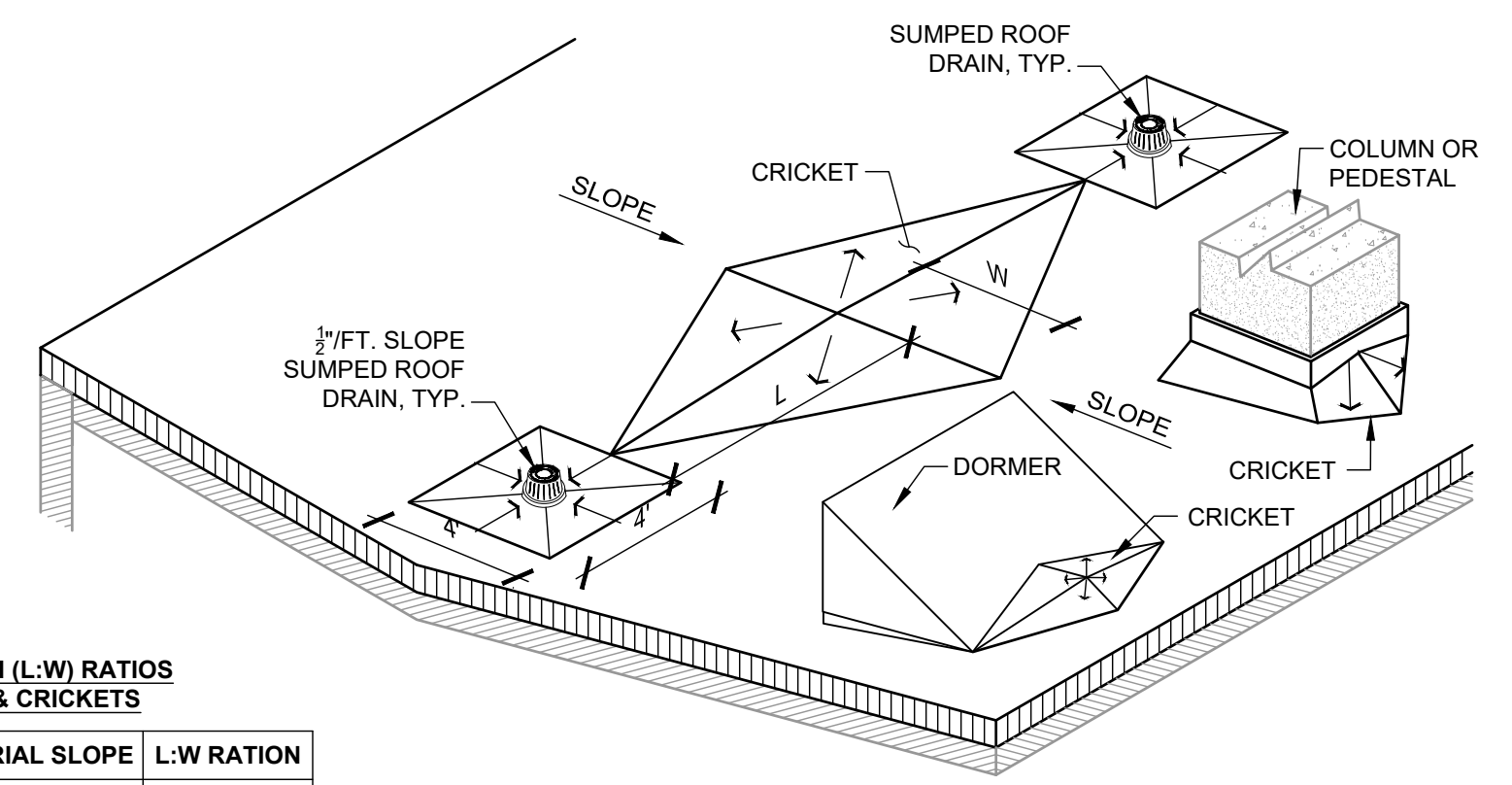
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STANDARD ROOF DETAILS

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SHEET No.:



2 FLASHING TERMINATION AT EXISTING PIPE PENETRATION
SCALE: 3/4" = 1'-0"



LENGTH TO WIDTH (L:W) RATIOS FOR SADDLES & CRICKETS

| ROOF SLOPE | S & C MATERIAL SLOPE | L:W RATION |
|------------|----------------------|------------|
| 1/8" | 1/4" | 2:1 |
| 1/4" | 1/2" | 2:1 |
| 1/2" | 1" | 2:1 |

1 STANDARD TAPERED ISO CRICKET DETAIL
N.T.S.

PLOTTER BY: Schuman, Brad (8/20/2023 - 11:38 AM)
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