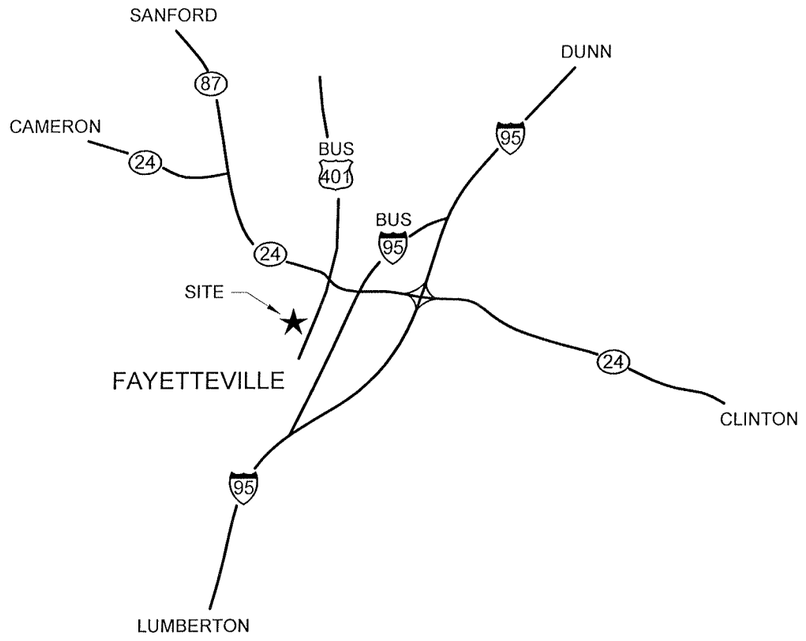
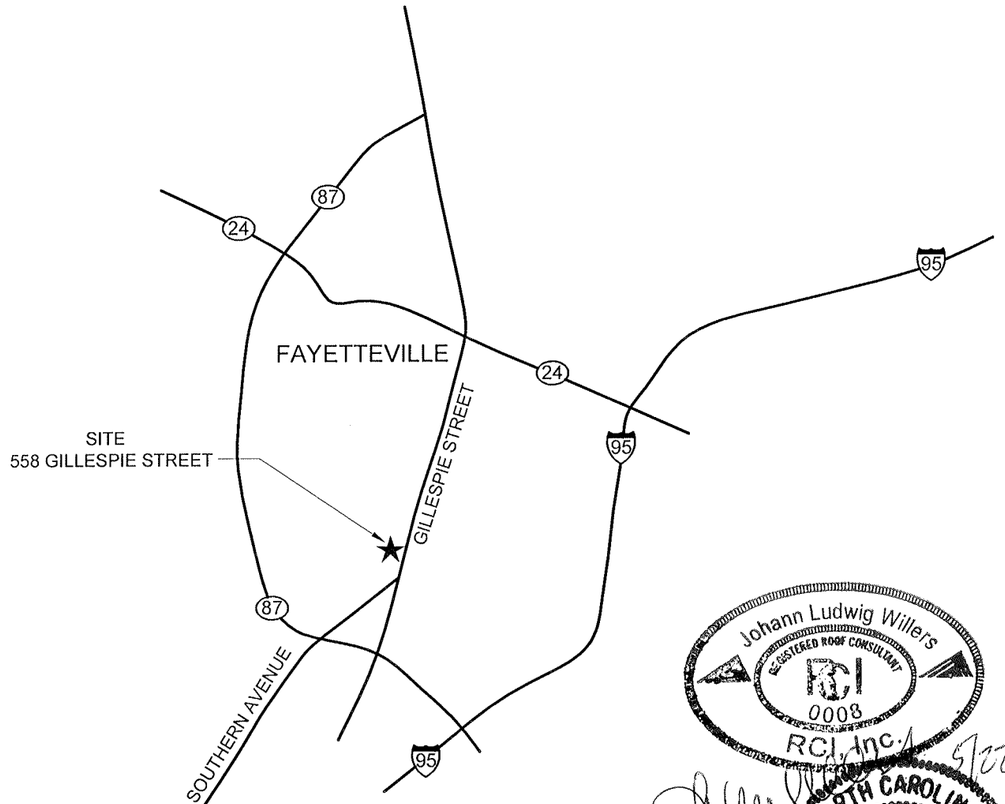
ROOF REPLACEMENT AT THE
NCDOT DIVISION & TRAFFIC SERVICES OFFICE
558 GILLESPIE STREET
FAYETTEVILLE, NORTH CAROLINA
GL: 52199012, COST CENTER:150538
SCO ID: 14-11317-01A



VICINITY MAP



LOCATION MAP

"NEITHER ROOFTOP SYSTEMS ENGINEERS, P.C., NOR ITS EMPLOYEES, NOR SUBCONSULTANTS ARE RESPONSIBLE FOR THE ACTS OR OMISSION OF ANY CONTRACTOR, SUBCONTRACTOR, OR MATERIAL SUPPLIER; FOR SAFETY PRECAUTIONS, PROGRAMS OR ENFORCEMENT; OR FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES EMPLOYED BY THE CONTRACTOR."

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11102
ENGINEER
JOHANN LUDWIG WILLERS

DRAWN BY:	ACS
CHECKED BY:	JW
DATE	5/22/15
JOB NO.	14-069
SCALE:	NONE
SHEET	1 OF 18

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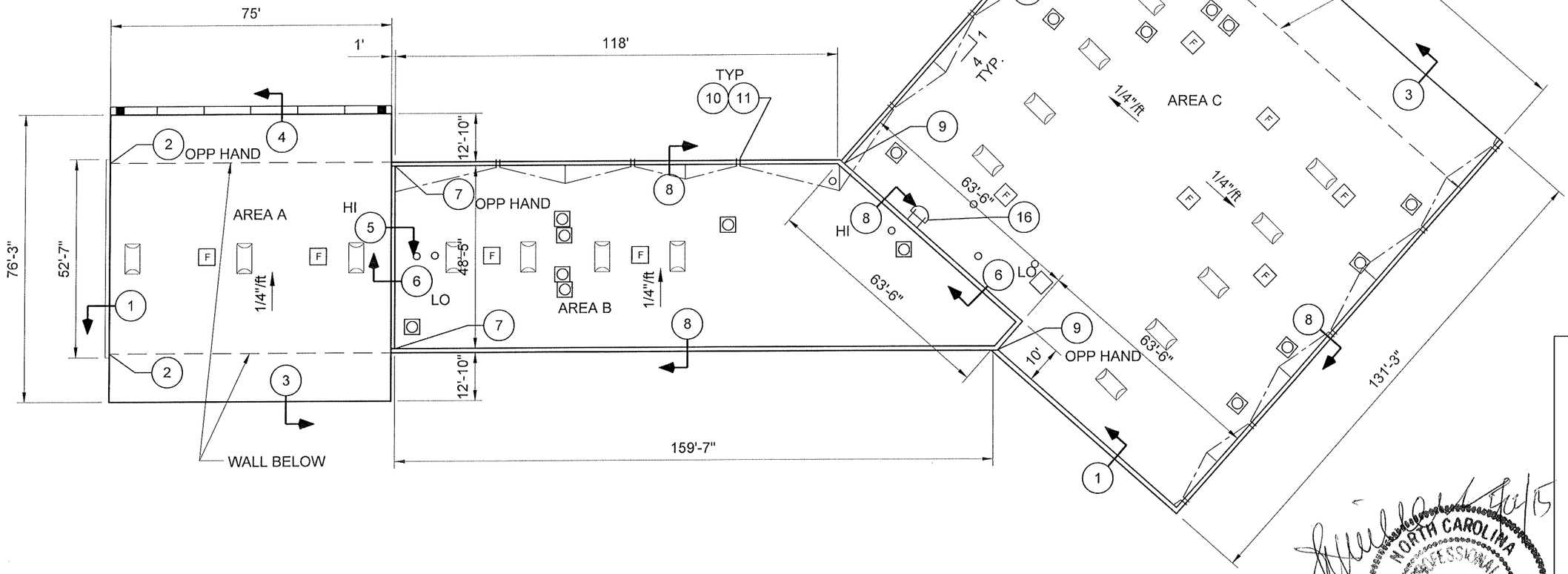
Roof Plan

ROOF REPLACEMENT AT THE
NCDOT DIVISION & TRAFFIC SERVICES OFFICE
558 GILLESPIE STREET
FAYETTEVILLE, NORTH CAROLINA
GL: 52199012,COST CENTER: 150538
SCO ID: 14-11317-01A

5/22/2015 - 3:27:00 pm - K:\Projects\Fayetteville\Drawings\Arch\Roof Plan.dwg

LEGEND

- PIPE PENETRATION
- VENT ON CURB (SEE DETAIL 17)
- SLOPE OF TAPERED INSULATION
- GUTTER/DOWNSPOUT
- HIP/RIDGE/VALLEY
- V — VENTILATOR
- F — CURBED FAN
- SKYLIGHT
- THROUGH-WALL SCUPPER



ROOF PLAN

0 30' 60' 90'

NOTES:
1. VERIFY ALL DIMENSIONS

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10/5/15

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SCALE:	1"=30'-0"
SHEET	2
OF	18

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Roof Plan

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558 GILLESPIE STREET
FAYETTEVILLE, NORTH CAROLINA
GL: 52199012,COST CENTER: 150538
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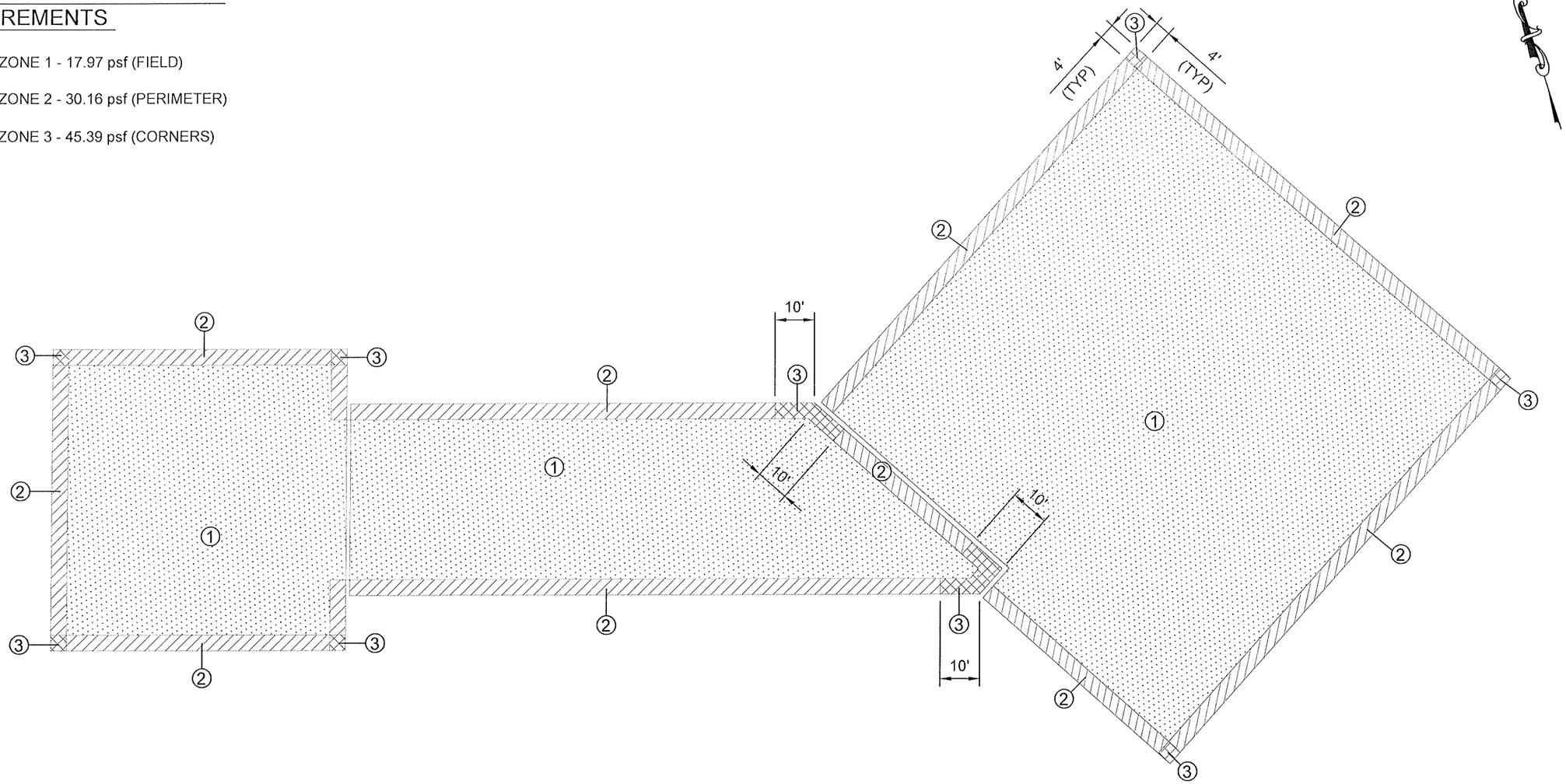
ASCE 7-05

WIND UPLIFT RESISTANCE REQUIREMENTS

① ZONE 1 - 17.97 psf (FIELD)

② ZONE 2 - 30.16 psf (PERIMETER)

③ ZONE 3 - 45.39 psf (CORNERS)



WIND UPLIFT PLAN

0 30′ 60′ 90′

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SCALE:	1"=30'-0"
SHEET	3 OF 18

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Wind Uplift Plan

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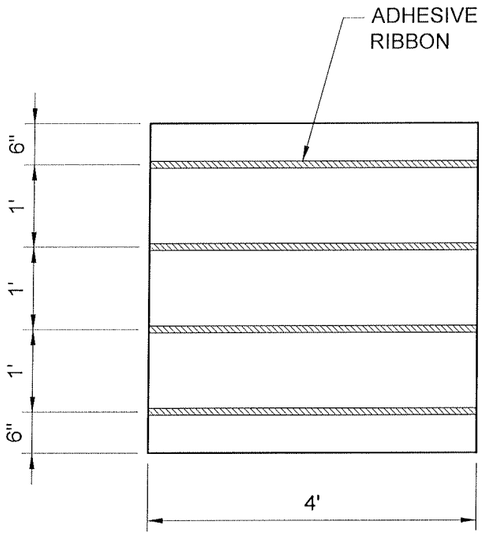
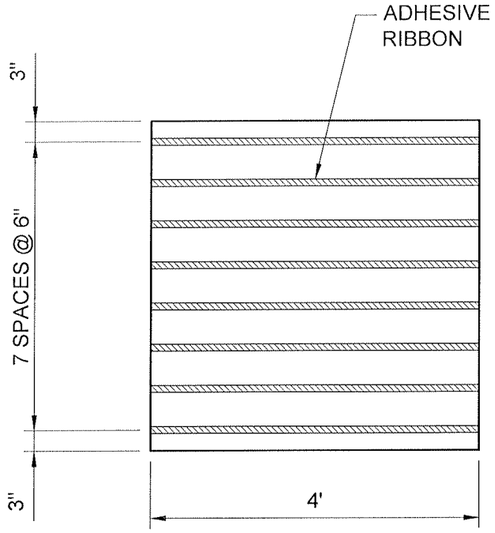
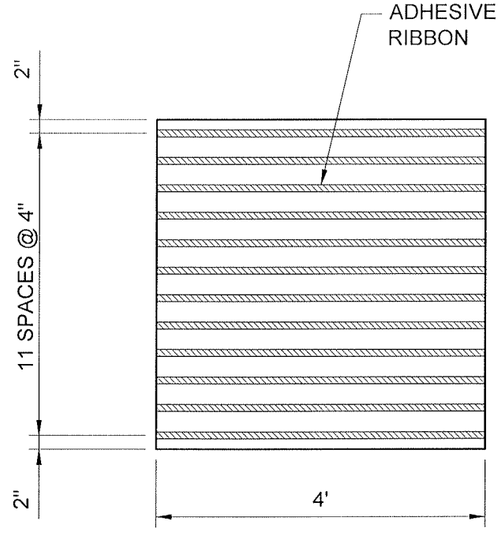


FIELD



PERIMETER



CORNER

NOTE: SEE SHEET 3 FOR UPLIFT ZONES
(ADHESIVE PATTERNS SHOWN ARE MINUMUM, INCREASE AS REQUIRED BY MEMBRANE MANURACTURER)

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DATE 5/22/15	SHEET 4 OF 18		

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Minimum Adhesive Application Pattern

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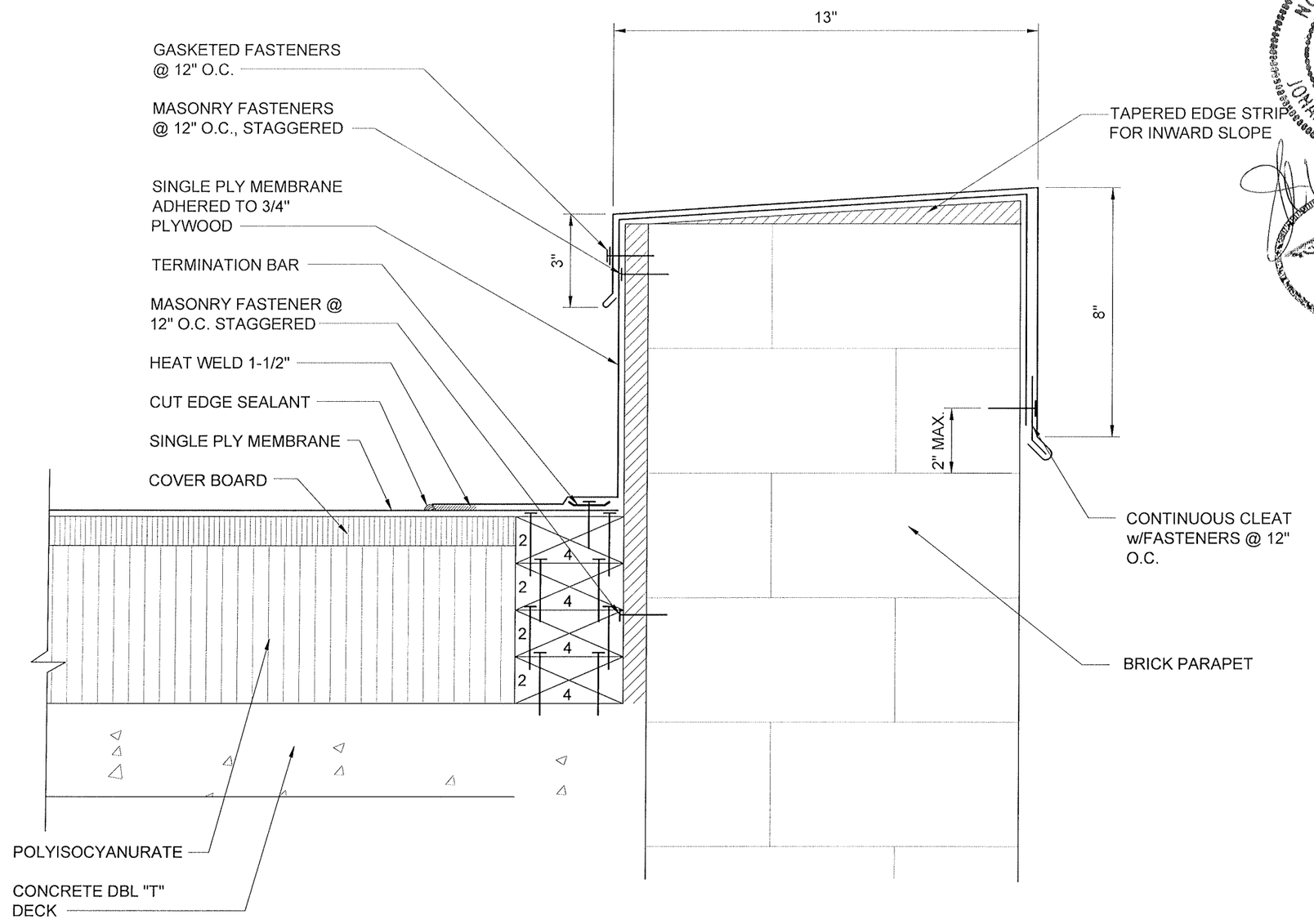

1 BRICK PARAPET DETAIL

SCALE: 3"=1'-0"

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5/22/15

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SCALE:	3"=1'-0"
SHEET	5
OF	18

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1 Parapet Detail

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FAYETTEVILLE, NORTH CAROLINA
GL: 52199012,COST CENTER: 150538
SCO ID: 14-11317-01A

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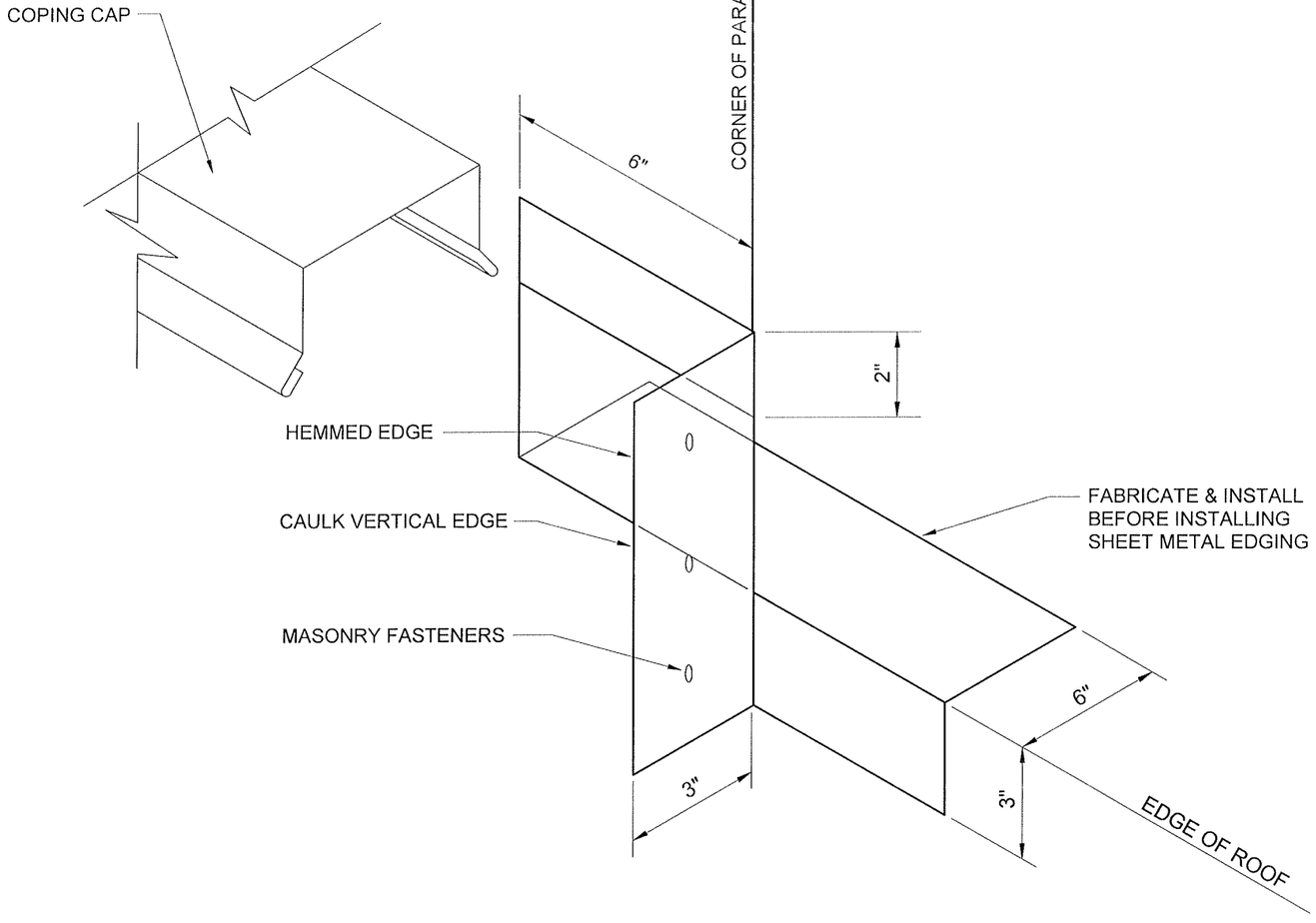

NOTES:

1. ALL SEAMS TO BE POP RIVETED AND SEALED.

2 ISOMETRIC AT INSIDE CORNER

SCALE: 3"=1'-0"

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5/22/15

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DATE	5/22/15
JOB NO.	14-069
SCALE:	3"=1-0"
SHEET	6 OF 18

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2 Isometric at Inside Corner

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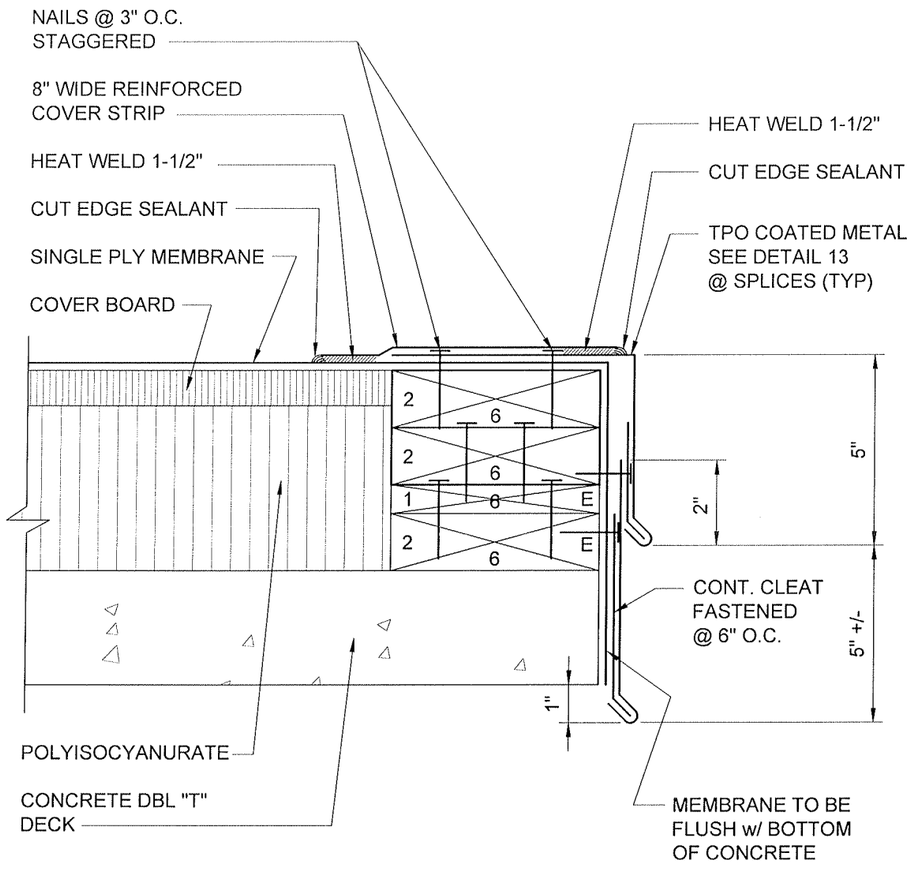
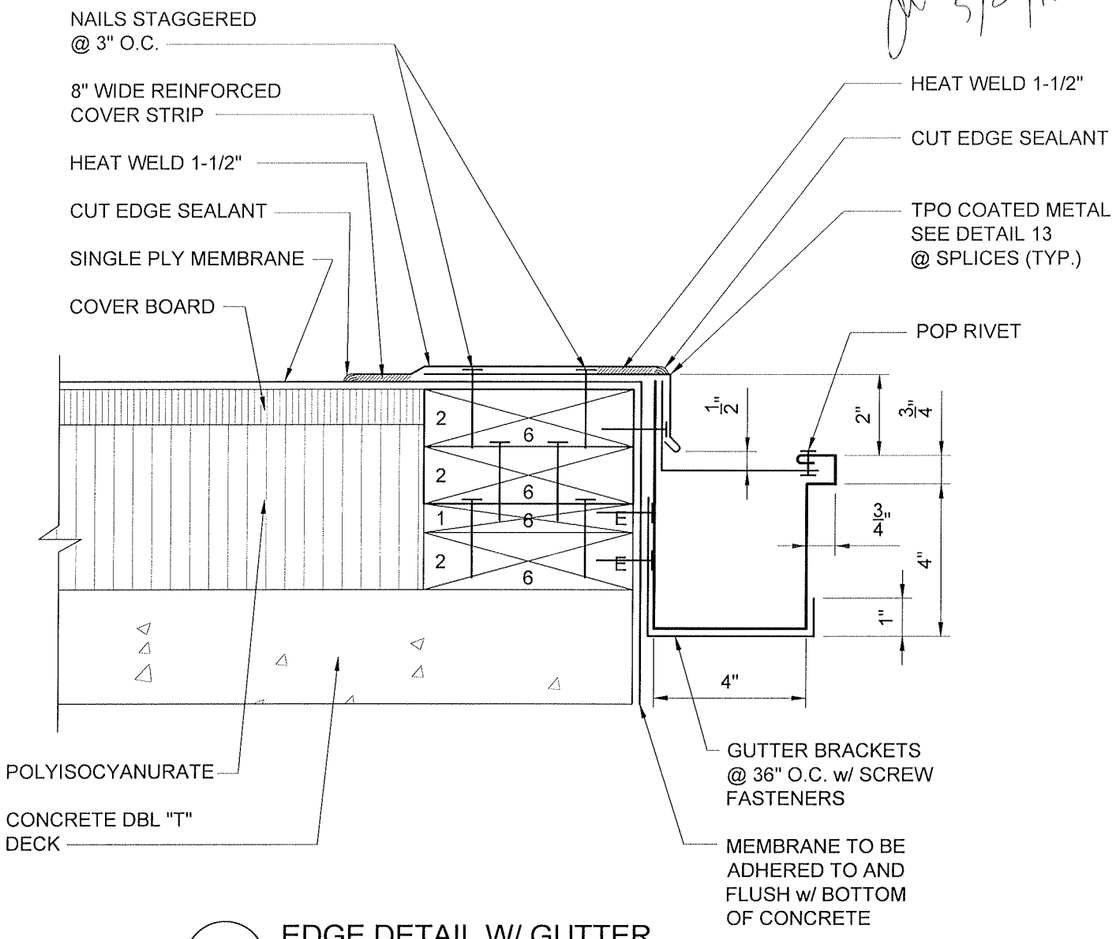


3 EDGE DETAIL

SCALE: 3"=1'-0"



4 EDGE DETAIL W/ GUTTER

SCALE: 3"=1'-0"

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DATE 5/22/15	SHEET 7 OF 18		

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3 Edge Detail 4 Edge Detail w/Gutter

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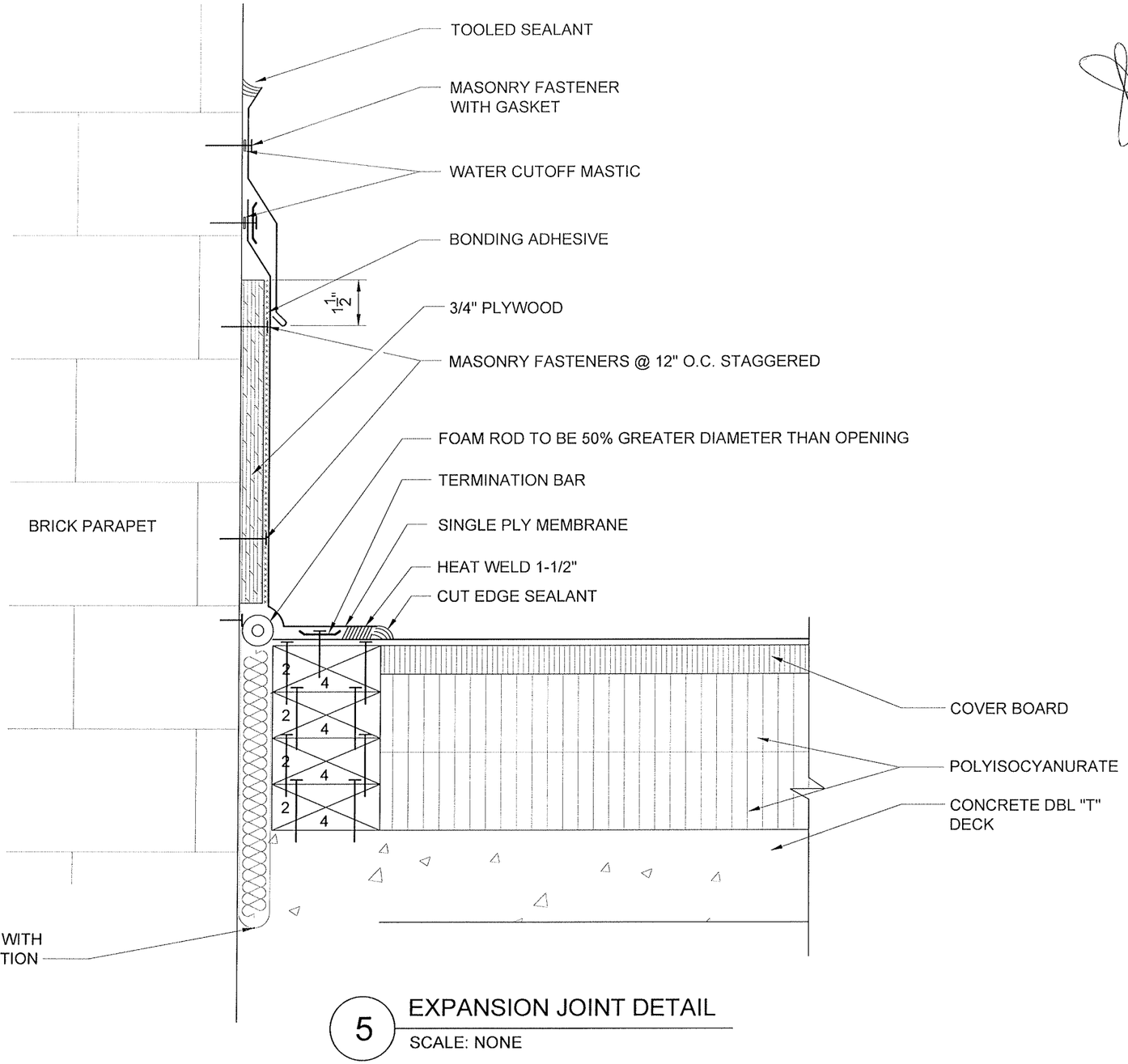

5 EXPANSION JOINT DETAIL

SCALE: NONE

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SCALE:	3"=1'-0"
SHEET	8 OF 18

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5 Flashing at Wall Detail

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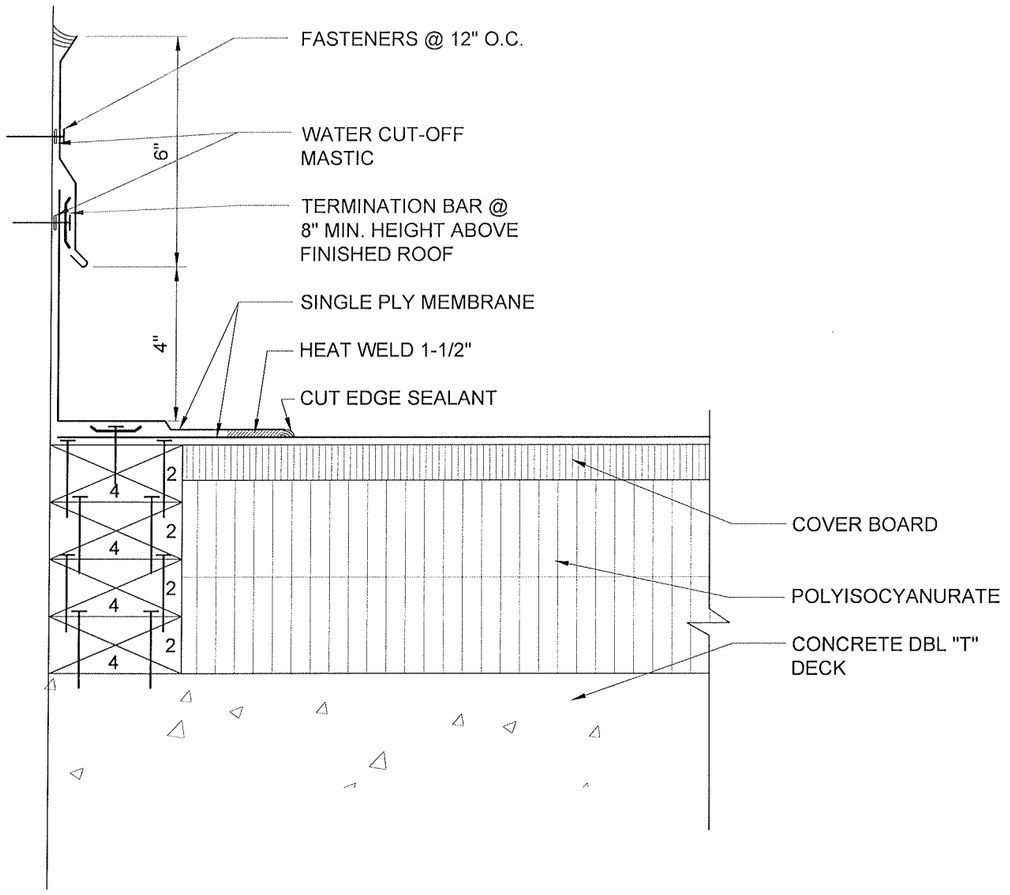

6 ROOF TO BRICK WALL DETAIL

SCALE: NONE

NORTH CAROLINA PROFESSIONAL SEAL 11102 ENGINEER JOHANN LUDWIG WILLERS

5/22/15

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			SCALE: 3"=1'-0"
			SHEET 9 OF 18

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6 Flashing Deail

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FAYETTEVILLE, NORTH CAROLINA
GL: 52199012,COST CENTER: 150538
SCO ID: 14-11317-01A

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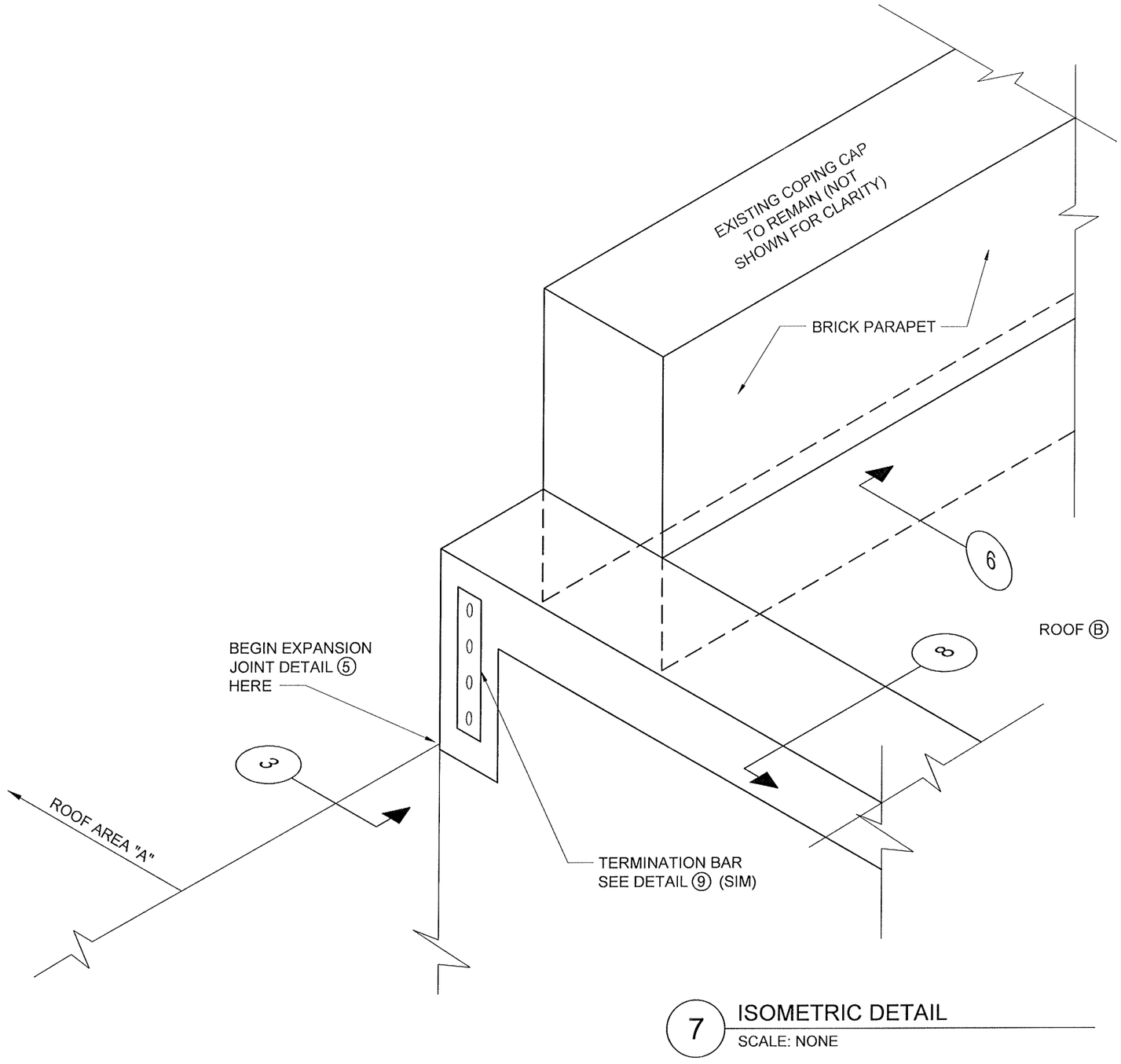

NOTES:
1. EXTEND COPING CAP DETAIL ⑫ TO END OF PRE-CAST CONCRETE PARAPET.
2. WRAP INTERFACE OF PRE-CAST CONCRETE PARAPET AND BRICK PARAPET WITH MEMBRANE DOWN TO ROOF.

7 ISOMETRIC DETAIL
SCALE: NONE

NORTH CAROLINA PROFESSIONAL SEAL 11102 ENGINEER JOHANN LUDWIG WILLERS

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5.22.15

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DATE 5/22/15	SHEET 10 OF 18

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7 Isometric Detail

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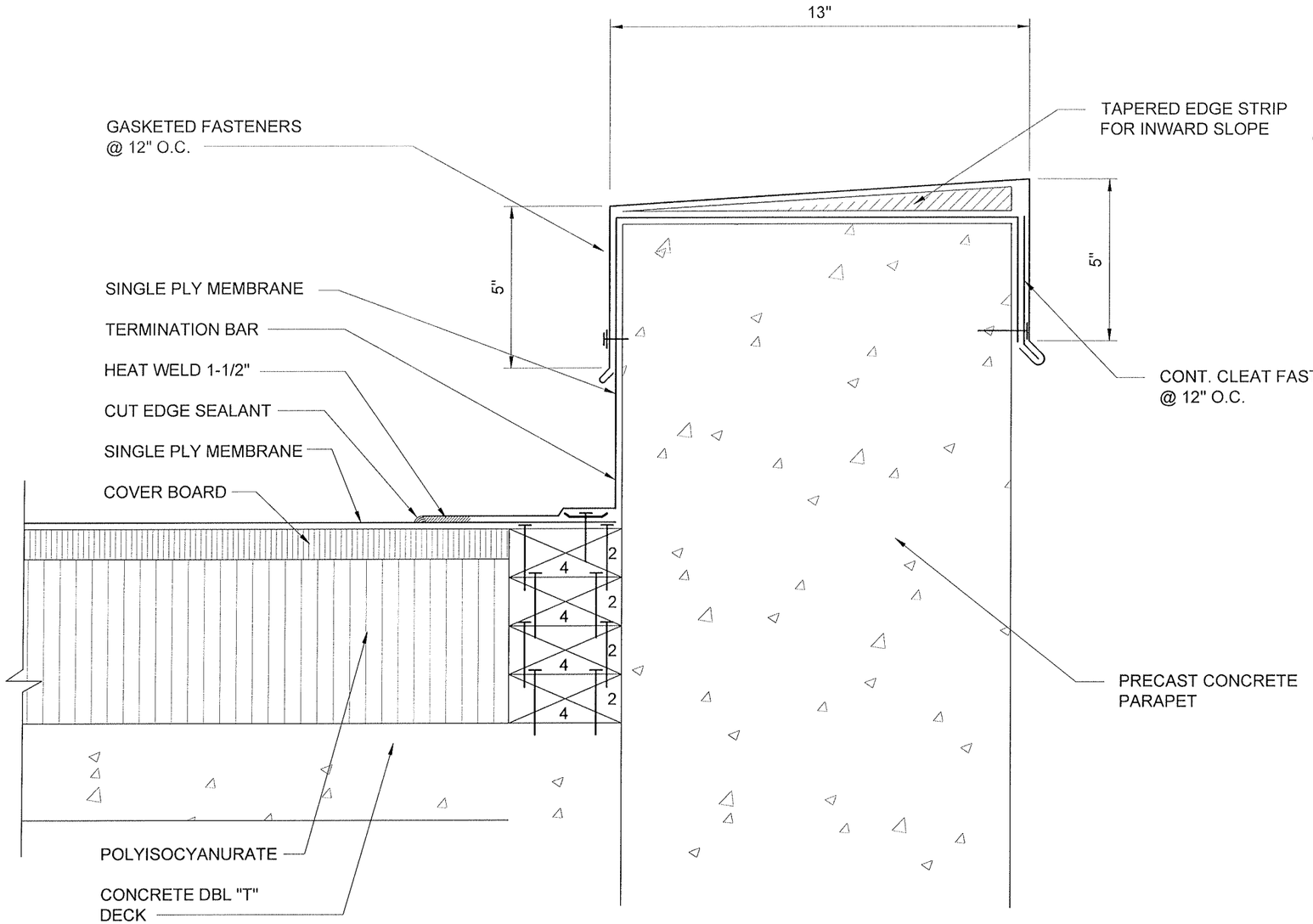

8 PARAPET DETAIL

SCALE: 3"=1'-0"

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JOB NO.	14-069
SCALE:	3"=1'-0"
SHEET	11 OF 18

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8 Parapet Detail

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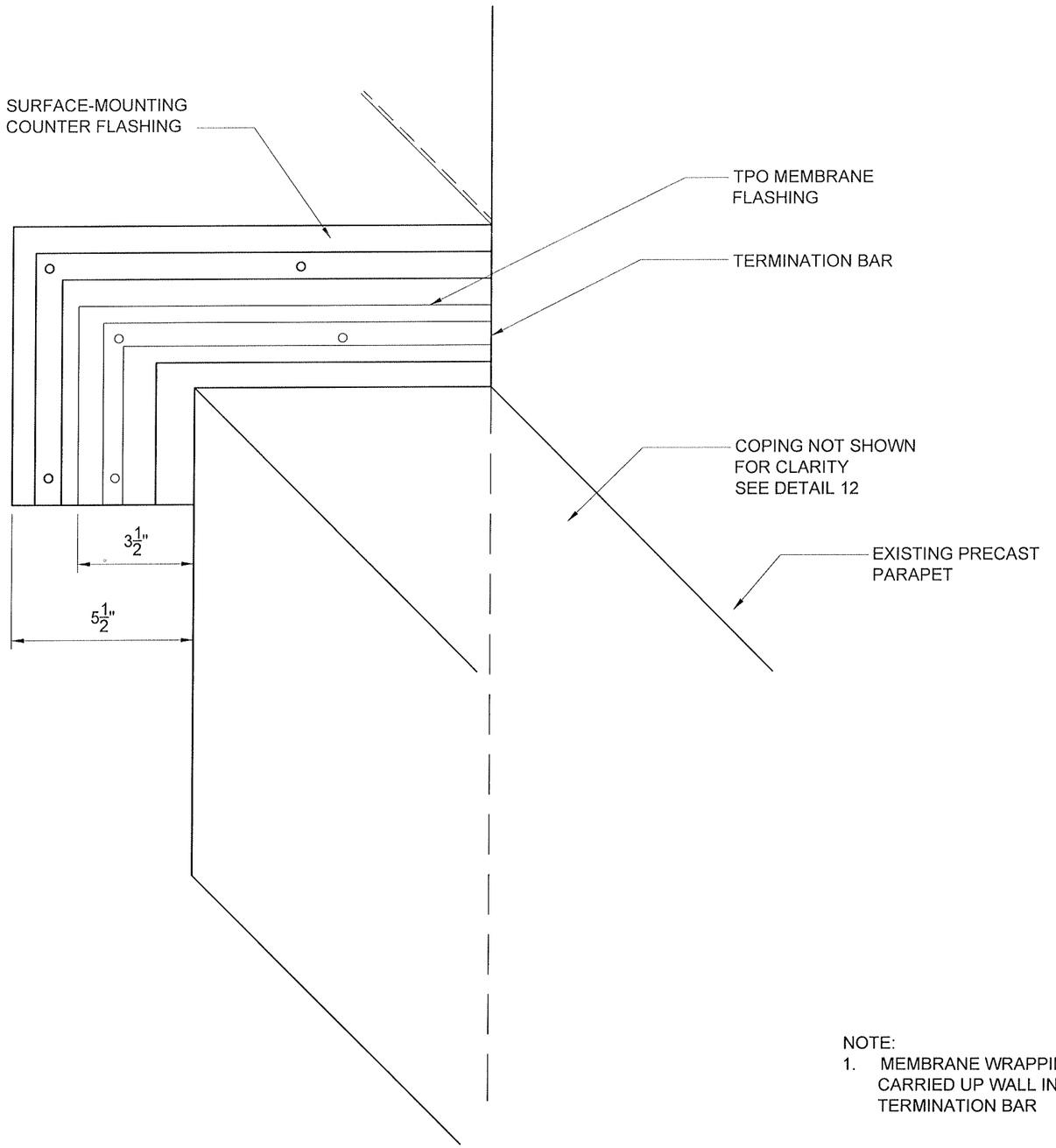

NOTE:
1. MEMBRANE WRAPPING PARAPET TO BE CARRIED UP WALL INTERFACE TO TERMINATION BAR

9 COPING TERMINATION DETAIL
SCALE: 3"=1'-0"

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9 Coping Termination Detail

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SCO ID: 14-11317-01A

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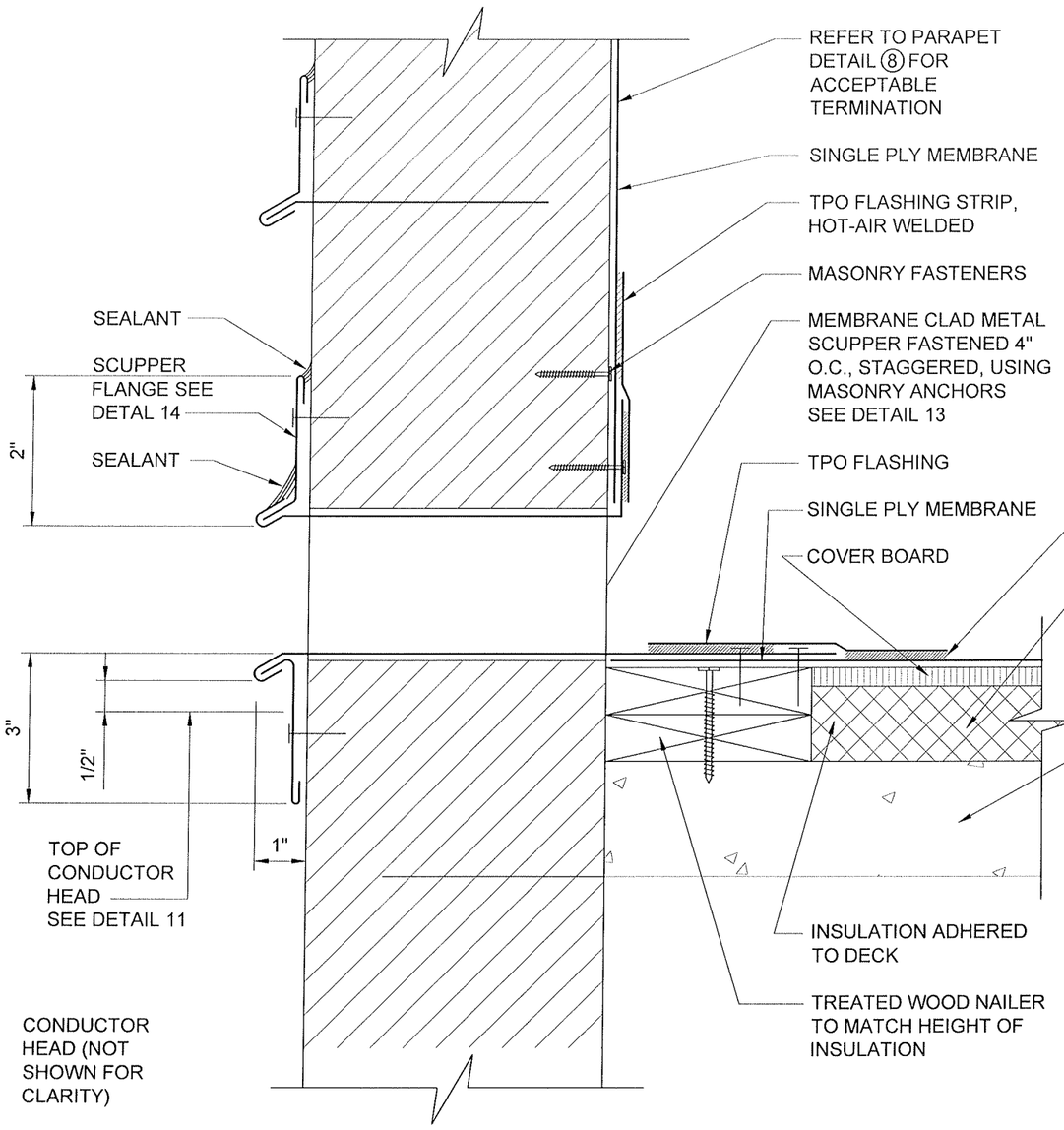
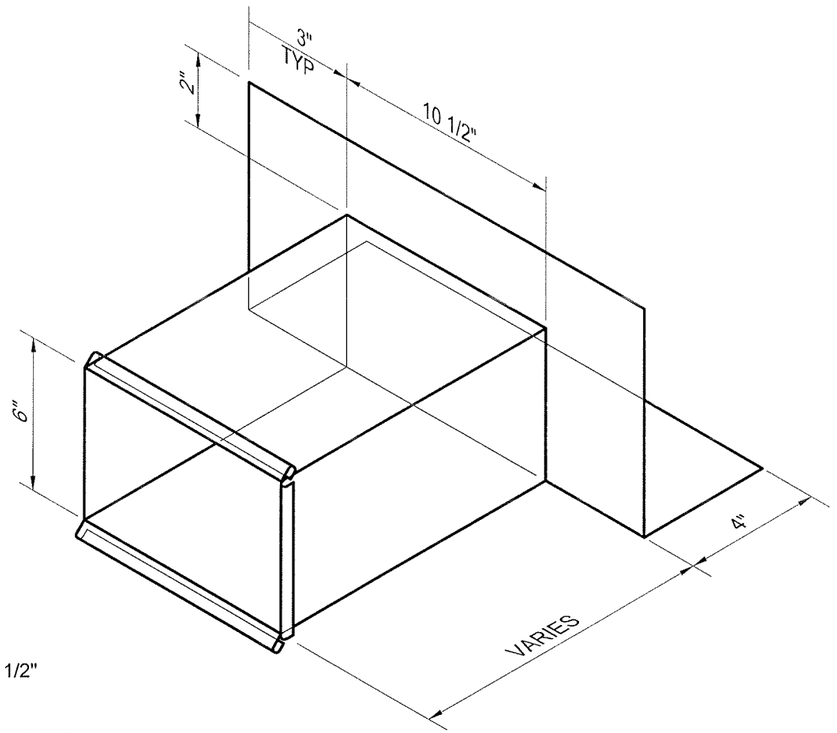
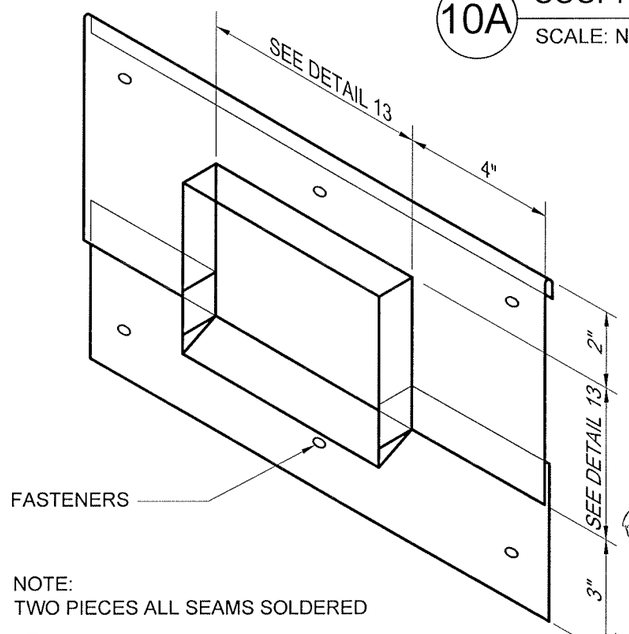


NOTES:
1. SEE ALSO DETAILS 10A & 10B

10 THRU-WALL SCUPPER
SCALE: 3"=1'-0"



10A SCUPPER ISOMETRIC
SCALE: NONE



NOTE:
TWO PIECES ALL SEAMS SOLDERED

10B SCUPPER FLANGE
SCALE: NONE

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10 10A 10B Scupper Details

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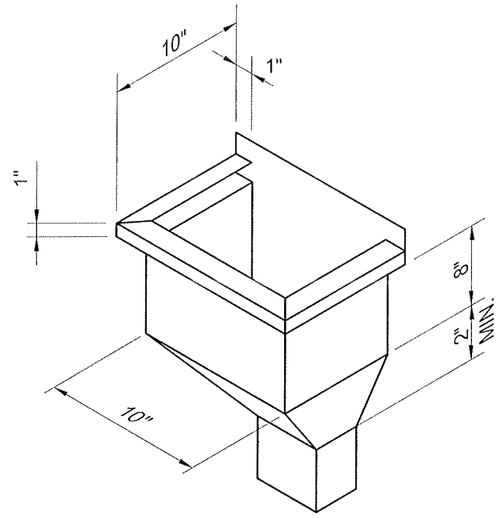
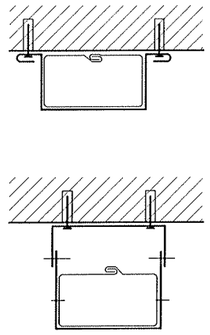


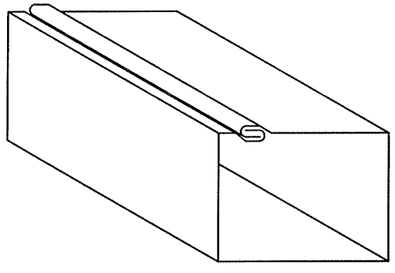
SMACNA FIGURE 1-25F
TYPICAL CONDUCTOR HEAD

11 SCALE: NONE



DOWNSPOUT SECUREMENT

11B SCALE: NONE



SMACNA FIGURE 1-32B
TYPICAL DOWNSPOUT

11A SCALE: NONE

Johann Ludwig Willers 5/22/15
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RCI
0008
RCI, Inc.
NORTH CAROLINA
PROFESSIONAL
SEAL
11102
ENGINEER
JOHANN LUDWIG WILLERS

DRAWN BY: ACS	JOB NO. 14-069		
CHECKED BY: JW	SCALE: NONE		
DATE 5/22/15	SHEET 14 OF 18		

11 11A 11B Downspout Details

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NC License No. C-0807
919-872-7866; 919-872-4486 fax
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ROOF REPLACEMENT AT THE
NCDOT DIVISION & TRAFFIC SERVICES OFFICE
558 GILLESPIE STREET
FAYETTEVILLE, NORTH CAROLINA
GL: 52199012,COST CENTER: 150538
SCO ID: 14-11317-01A

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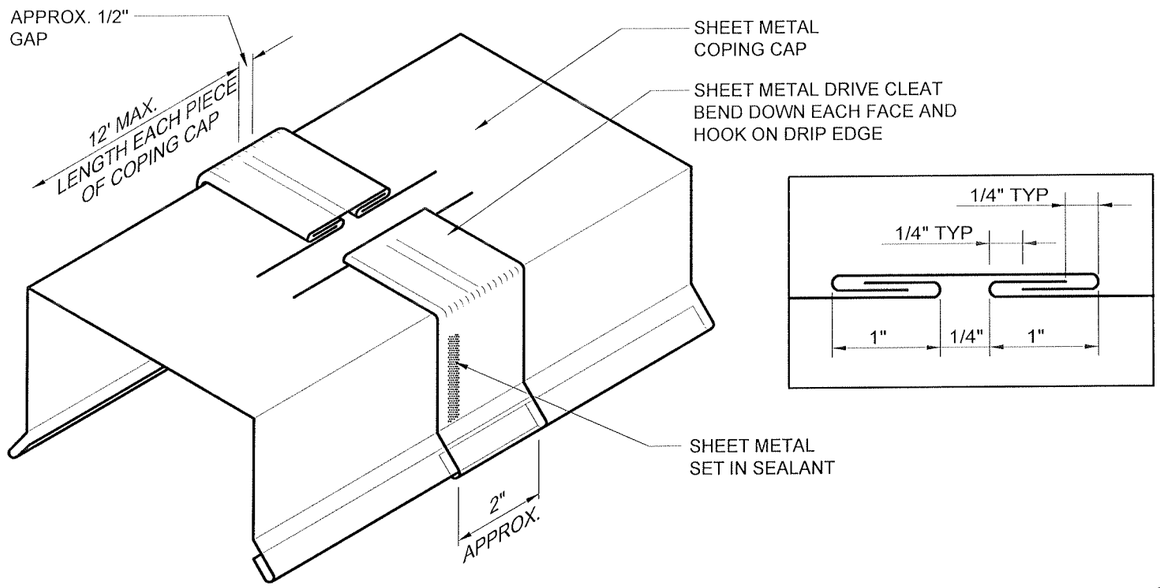
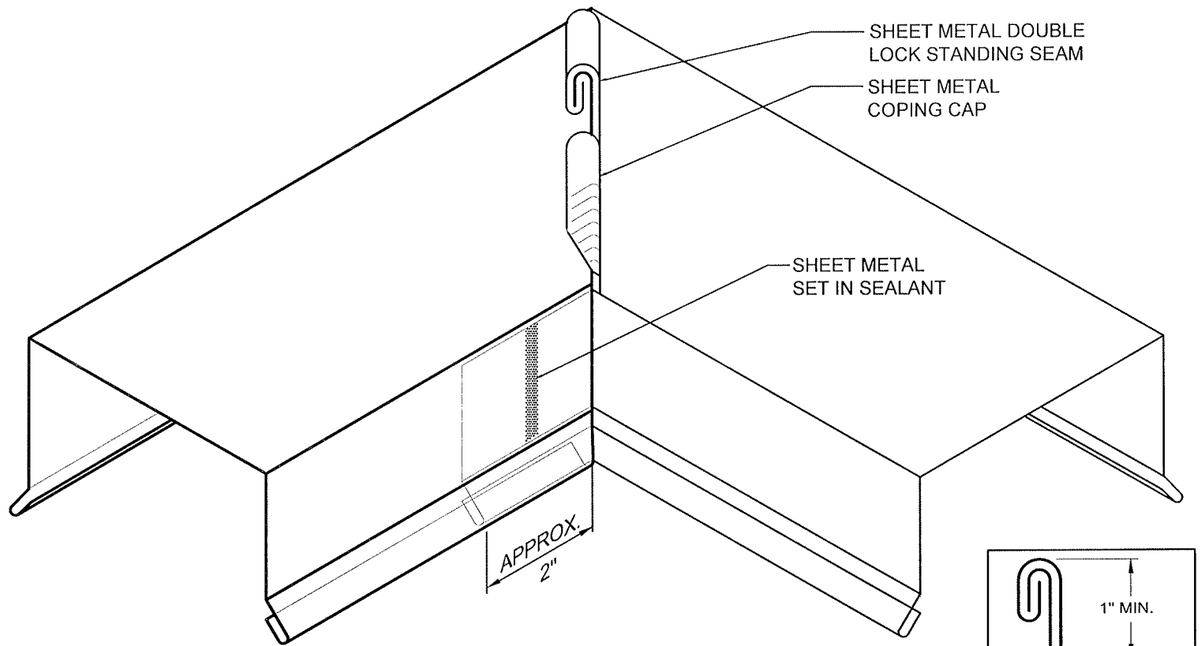


12 COPING CAP JOINTS

SCALE: NONE



12A COPING CAP MITERS W/ DOUBLE LOCK STANDING SEAM

SCALE:NONE

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12 Coping Cap Joints | 12A Coping Cap Miters

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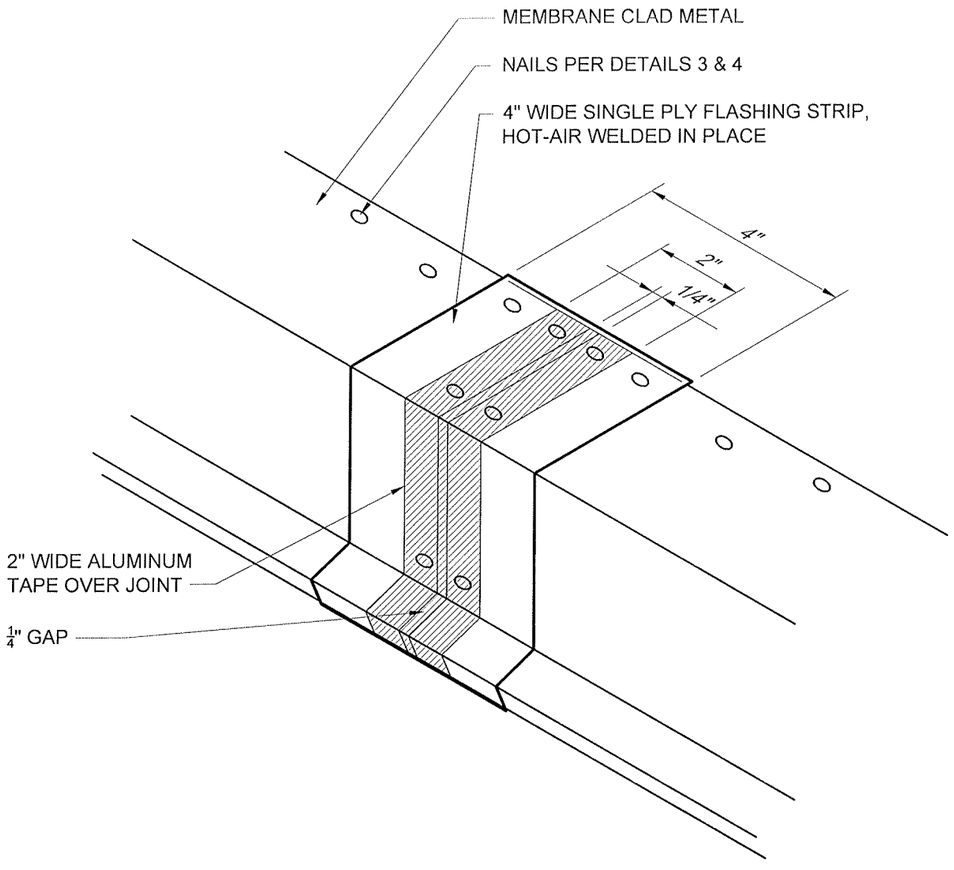
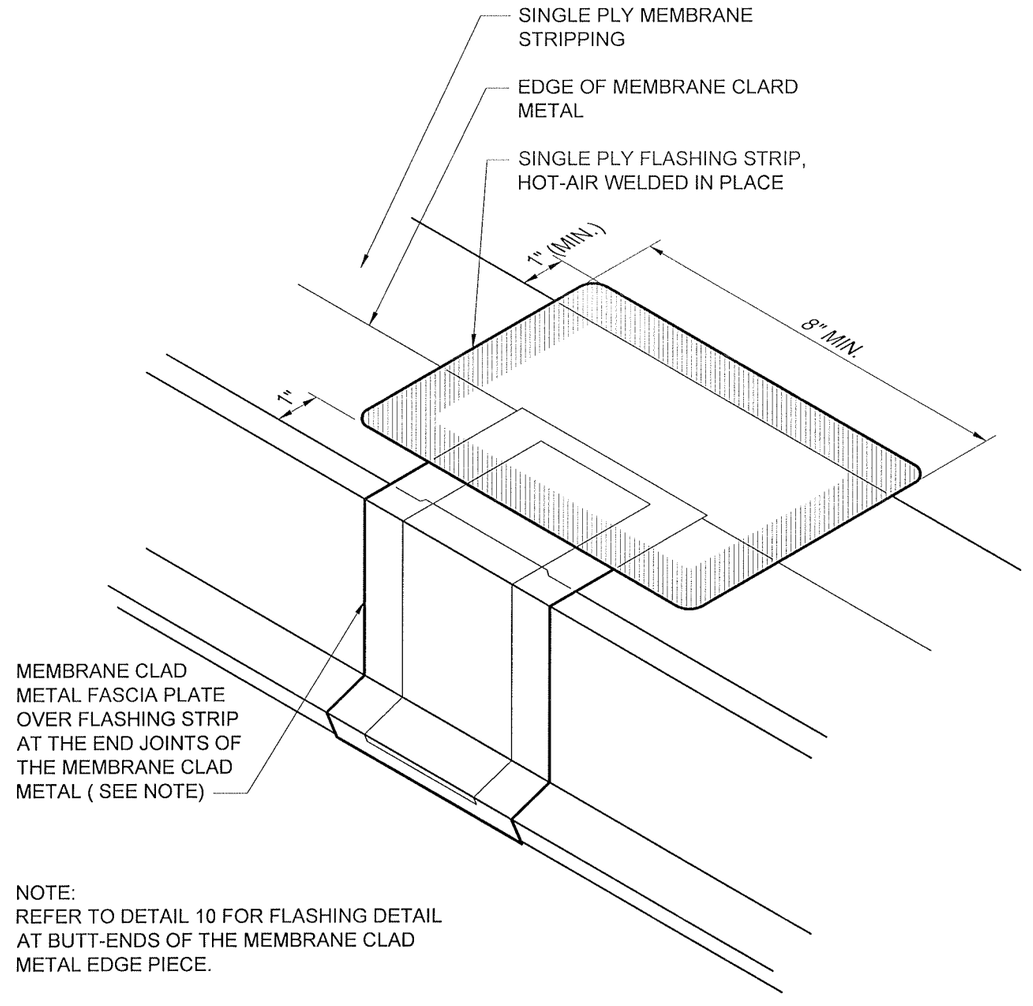


13 FLASHING CLAD METAL JOINTS

SCALE: NONE

SEE ALSO DETAIL 13A



NOTE:
REFER TO DETAIL 10 FOR FLASHING DETAIL AT BUTT-ENDS OF THE MEMBRANE CLAD METAL EDGE PIECE.

13A MEMBRANE CLAD FASCIA PLATE AT METAL JOINTS

SCALE: NONE

SEE ALSO DETAIL 13

5/22/15

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JOB NO.	SCALE:	SHEET	OF
14–069	NONE	16	18

13 13A Metal Joint Details

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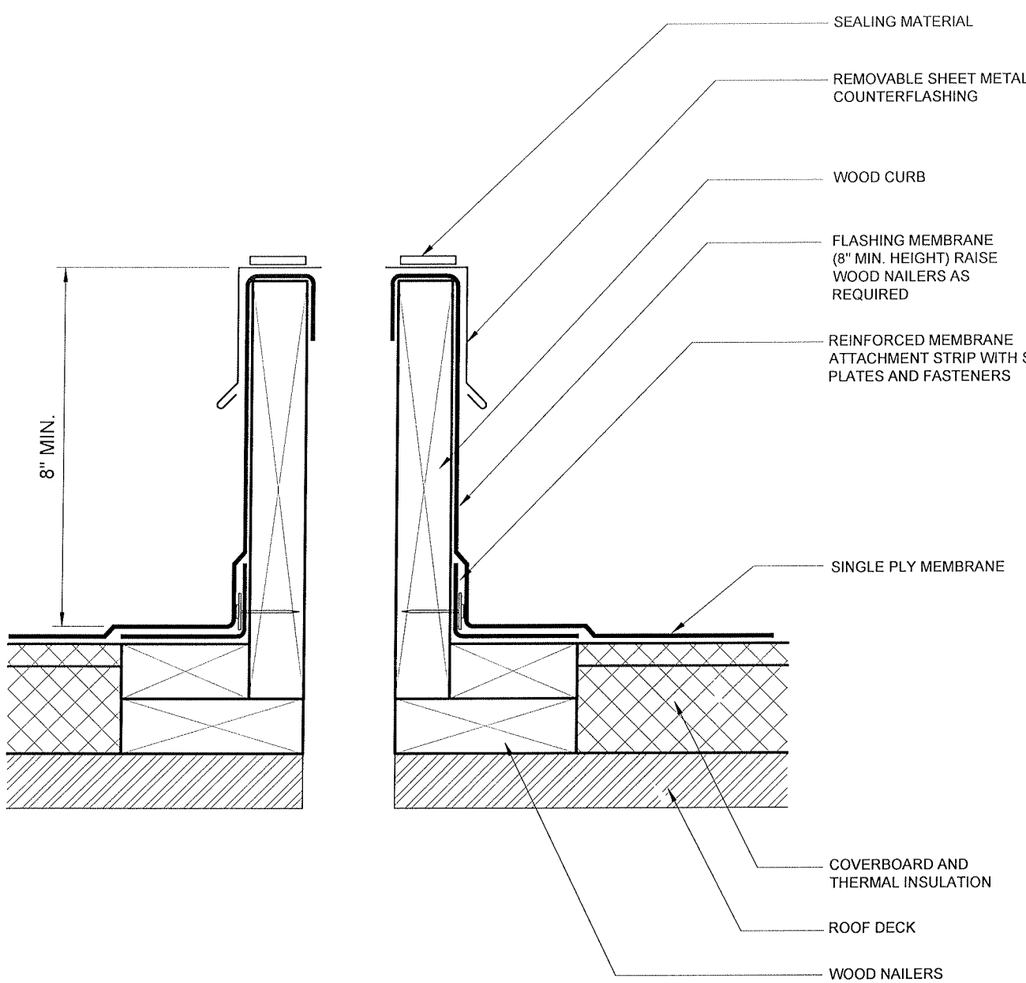
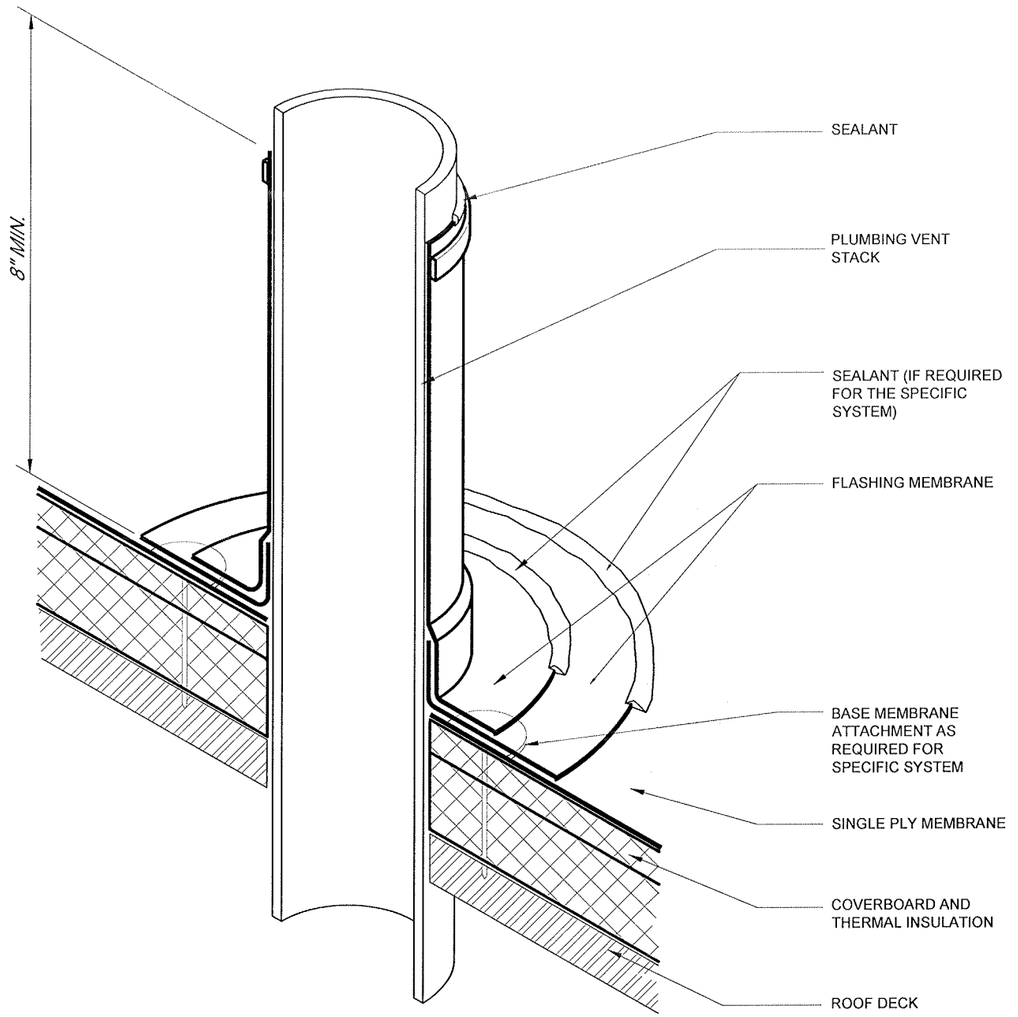


NOTES:

1. THE MECHANICAL UNITS SHOULD NOT BE SET UNTIL THE ROOF MEMBRANE AND FLASHING HAVE BEEN INSTALLED.

14 CURB DETAIL

SCALE: NONE



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

15 VENT STACK FLASHING

SCALE: NONE

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14 Curb Detail 15 Vent Stack Flashing

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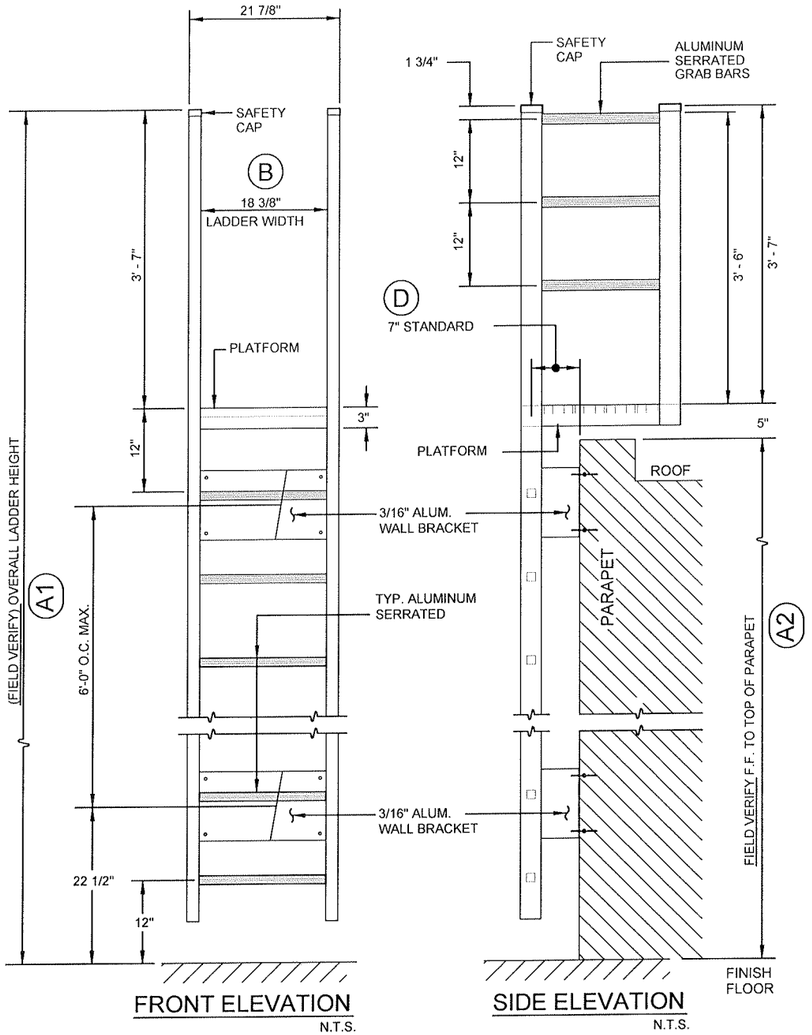

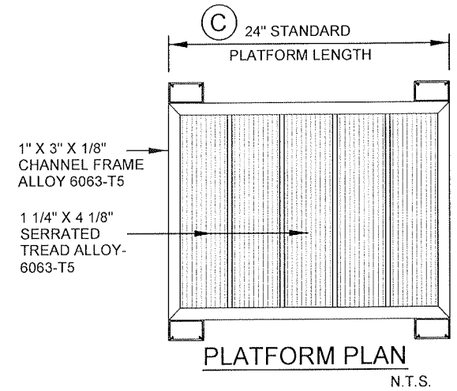

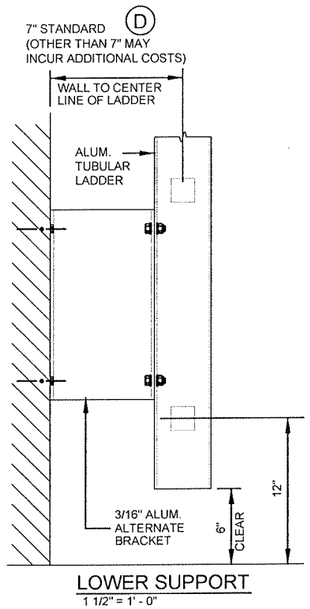

16 ROOF LADDER

SCALE:AS NOTED

JOB NO.	14-069
SCALE:	AS NOTED
SHEET	18 OF 18
DRAWN BY:	ACS
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DATE	5/22/15

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16 Roof Ladder

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SCO ID: 14-11317-01A

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