



GAF

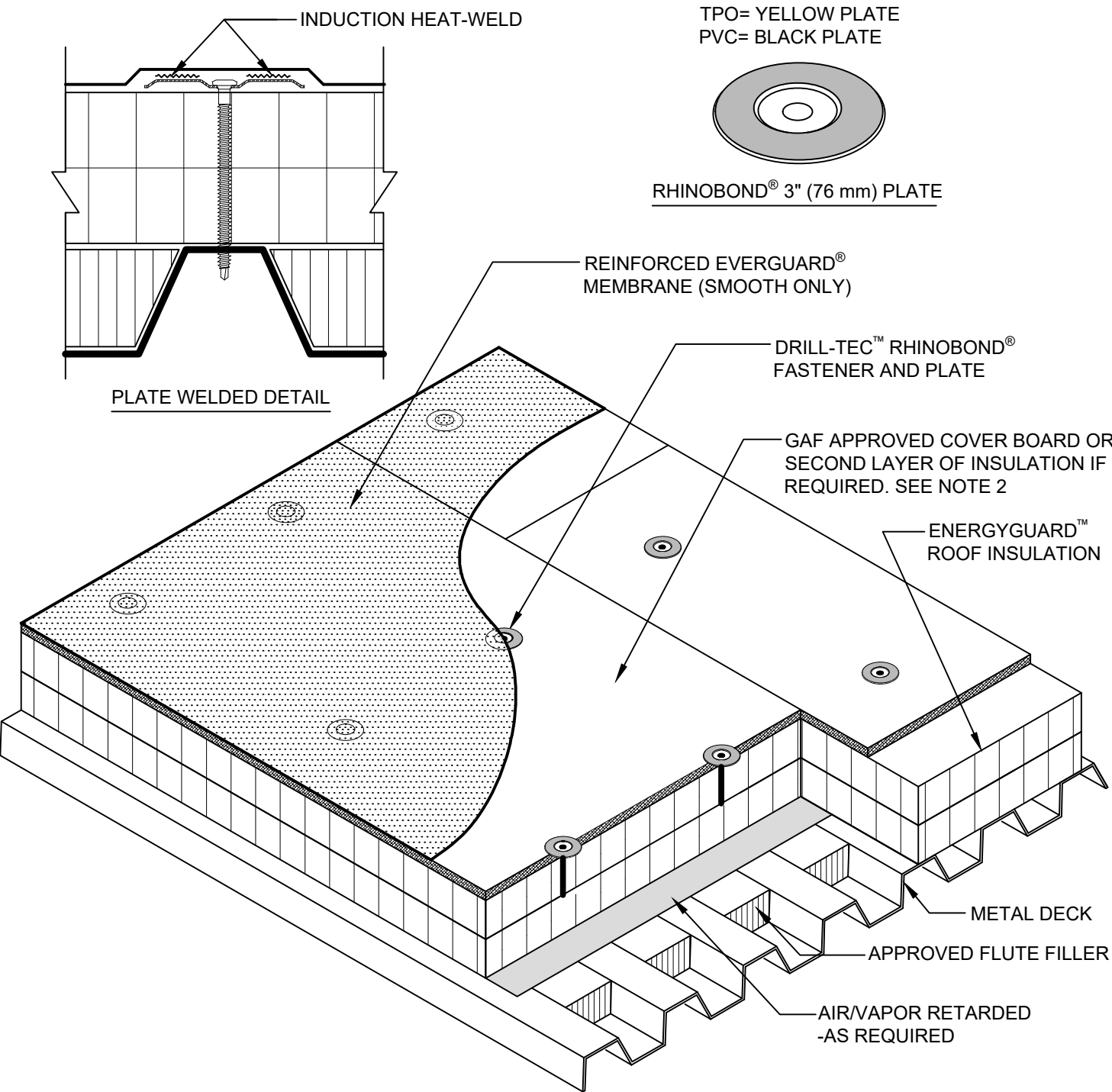
Version 2.0

We
protect
what
matters
most™

EverGuard® TPO/PVC
**ARCHITECTURAL
ROOFING DETAILS**
Manual



MANUAL



NOTE:

1. REFER TO THE DRILL-TEC™ RHINO BOND® ATTACHMENT TABLES FOR DETAILED INSTALLATION REQUIREMENTS REGARDING DECK TYPE, PLATE & FASTENER TYPE, AND MIN. EMBEDMENT.
2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.
3. INSULATION BOARDS INSTALLED OVER STEEL DECKING MUST HAVE BOARDS PLACED PERPENDICULAR TO DECK FLUTES WITH EDGES OVER FLUTE SURFACE FOR BEARING SUPPORT.



DRILL-TEC™ RHINO BOND® ASSEMBLY

DRAWING #
100E

THIS DETAIL APPLIES TO:
RHINO BOND® SYSTEMS

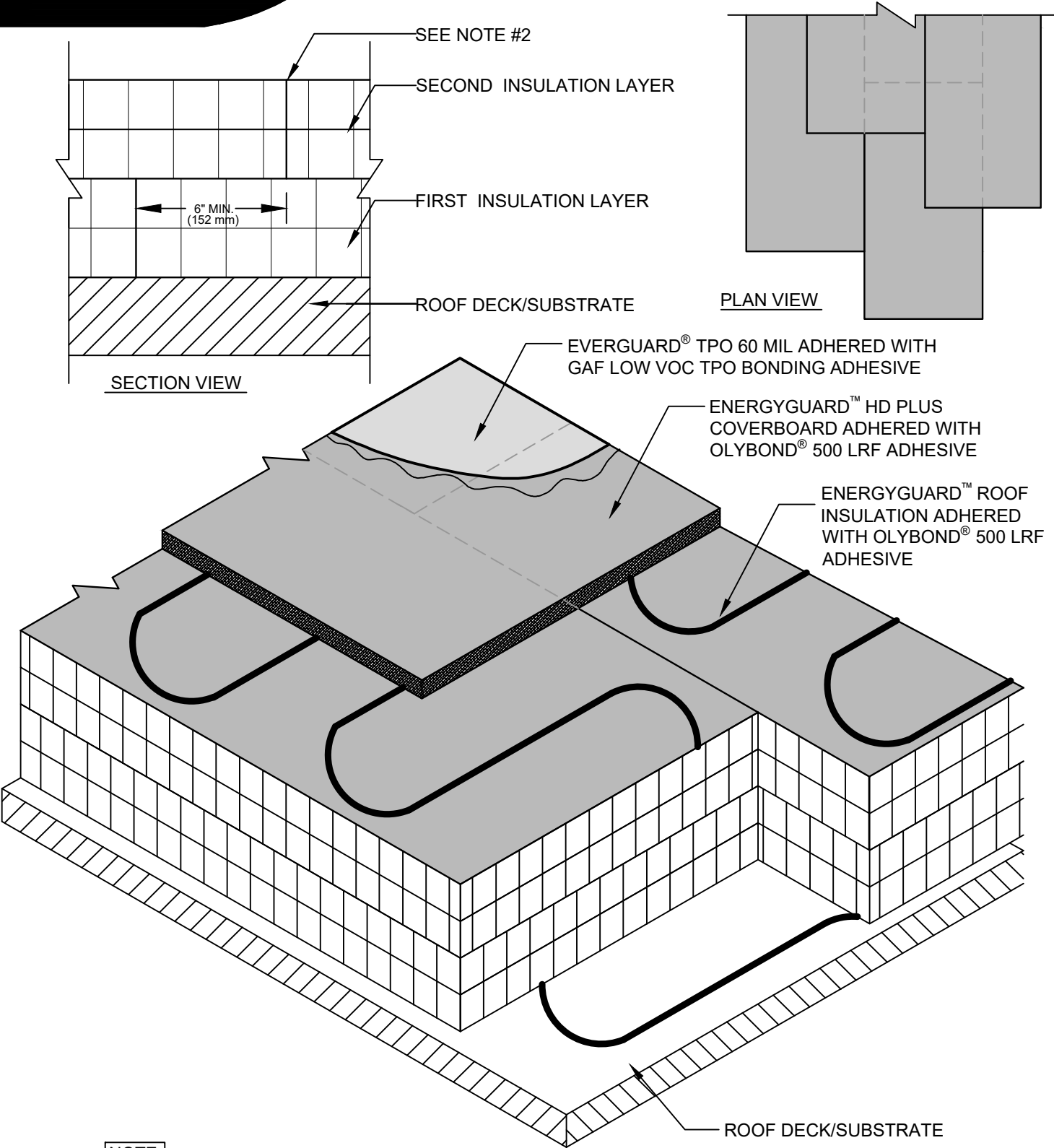
ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

~~~~~ HEAT-WELDED

SINGLE-PLY: TPO & PVC



NOTE:

- 1. REFER TO THE EVERGUARD® DESIGN & APPLICATION GUIDELINES FOR DETAILED INSTALLATION REQUIREMENTS.
- 2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.



ADHERED SYSTEM LAYOUT DETAIL


DRAWING #  
**1001**

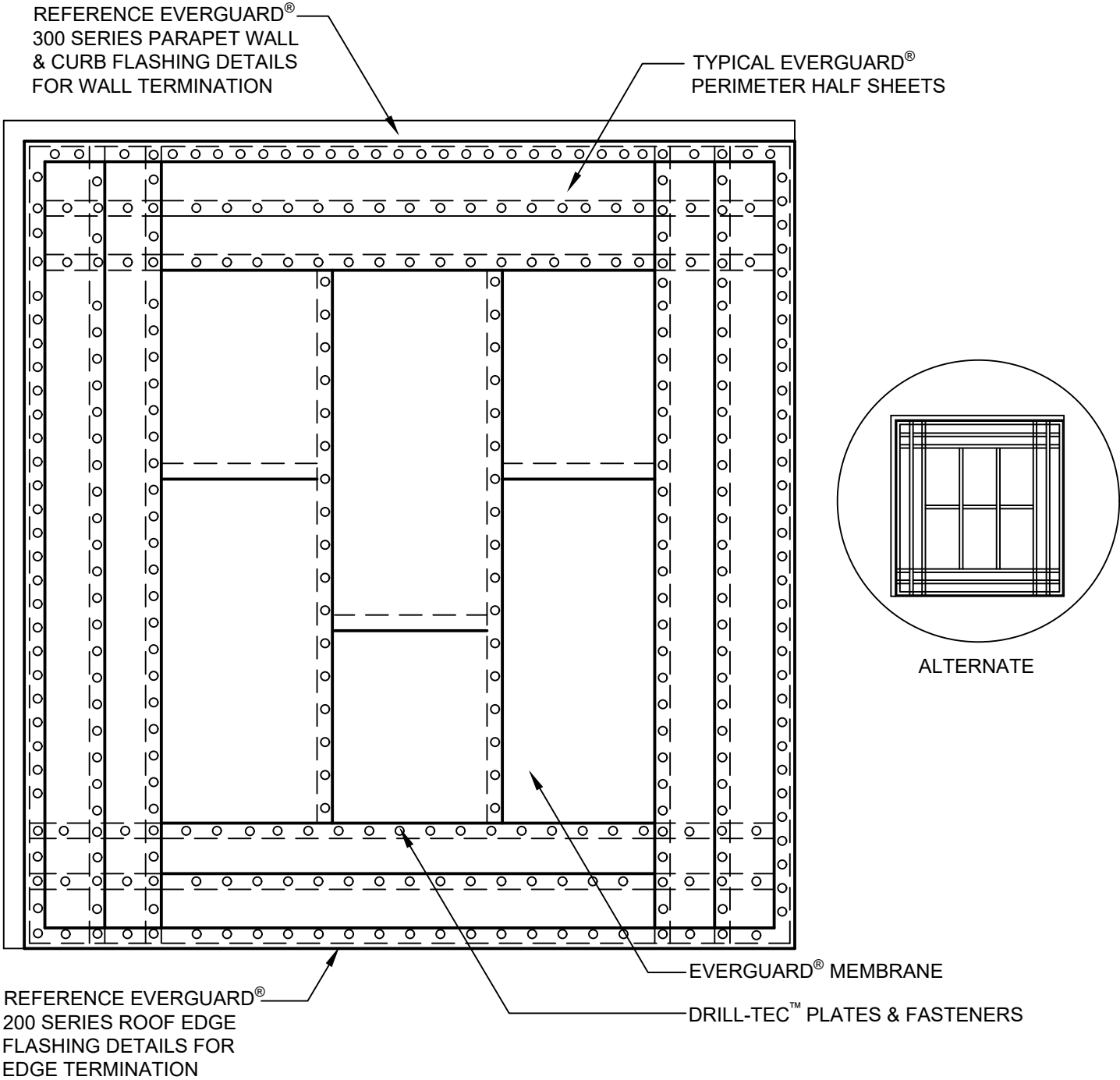
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS

ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

LEGEND

 LOW VOC TPO BONDING ADHESIVE



NOTE:

1. SEE EVERGUARD® MECHANICALLY ATTACHED SPEC MANUAL TO DETERMINE FASTENER SPACING FOR VARIOUS DECK TYPES AND WIND UPLIFT REQUIREMENTS, AND FOR REQUIRED NUMBER OF PERIMETER HALF SHEETS.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED.



ROOF MEMBRANE LAYOUT DETAIL

DRAWING #  
101A

THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

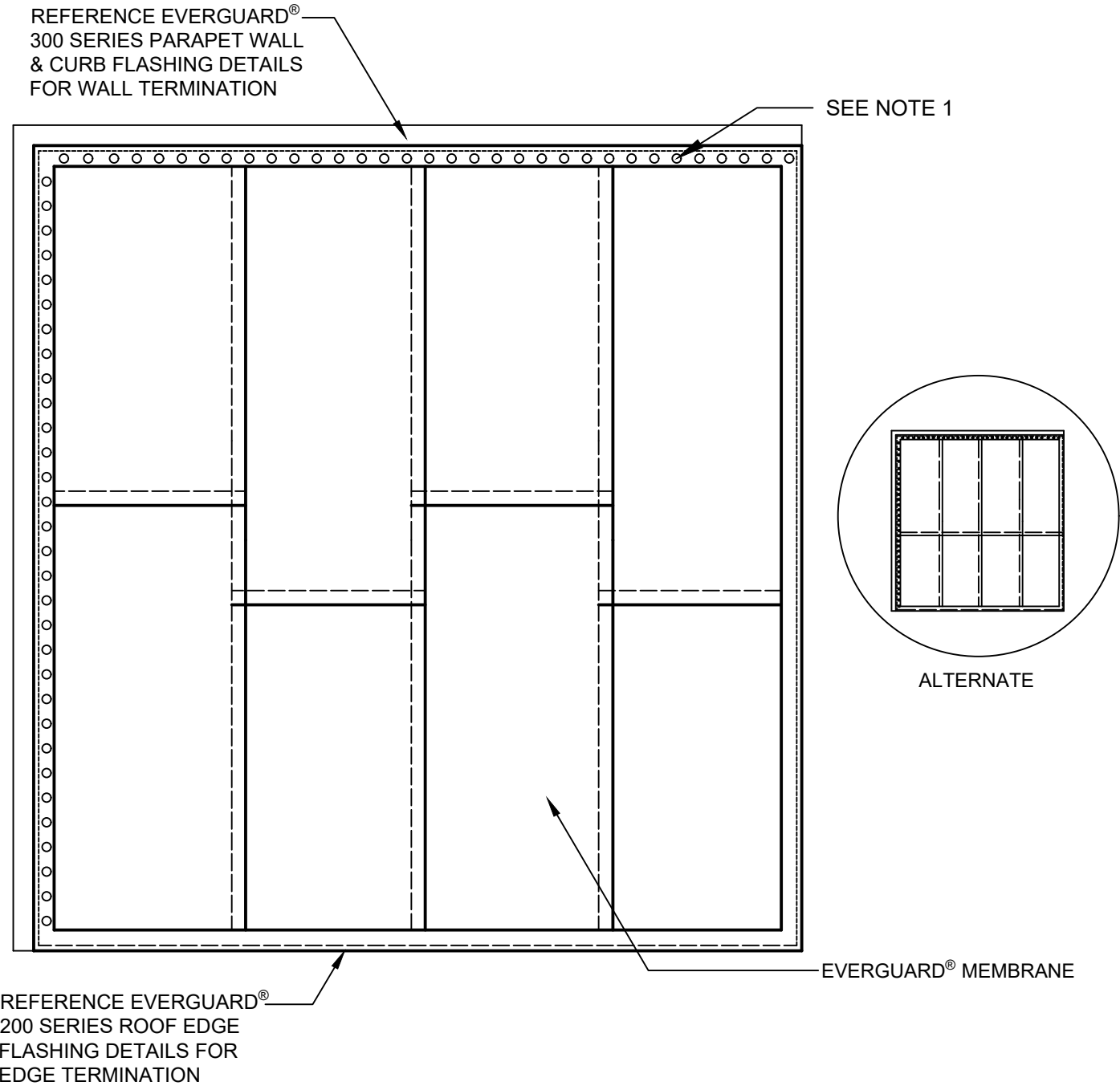
ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED SEAMS
- DRILL-TEC™ PLATES & FASTENERS





NOTE:

- 1. SEE EVERGUARD® MECHANICALLY ATTACHED SPEC MANUAL TO DETERMINE FASTENER SPACING FOR VARIOUS DECK TYPES AND WIND UPLIFT REQUIREMENTS, AND FOR REQUIRED NUMBER OF PERIMETER HALF SHEETS.
- 2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.



ROOF MEMBRANE LAYOUT DETAIL

DRAWING #  
101B

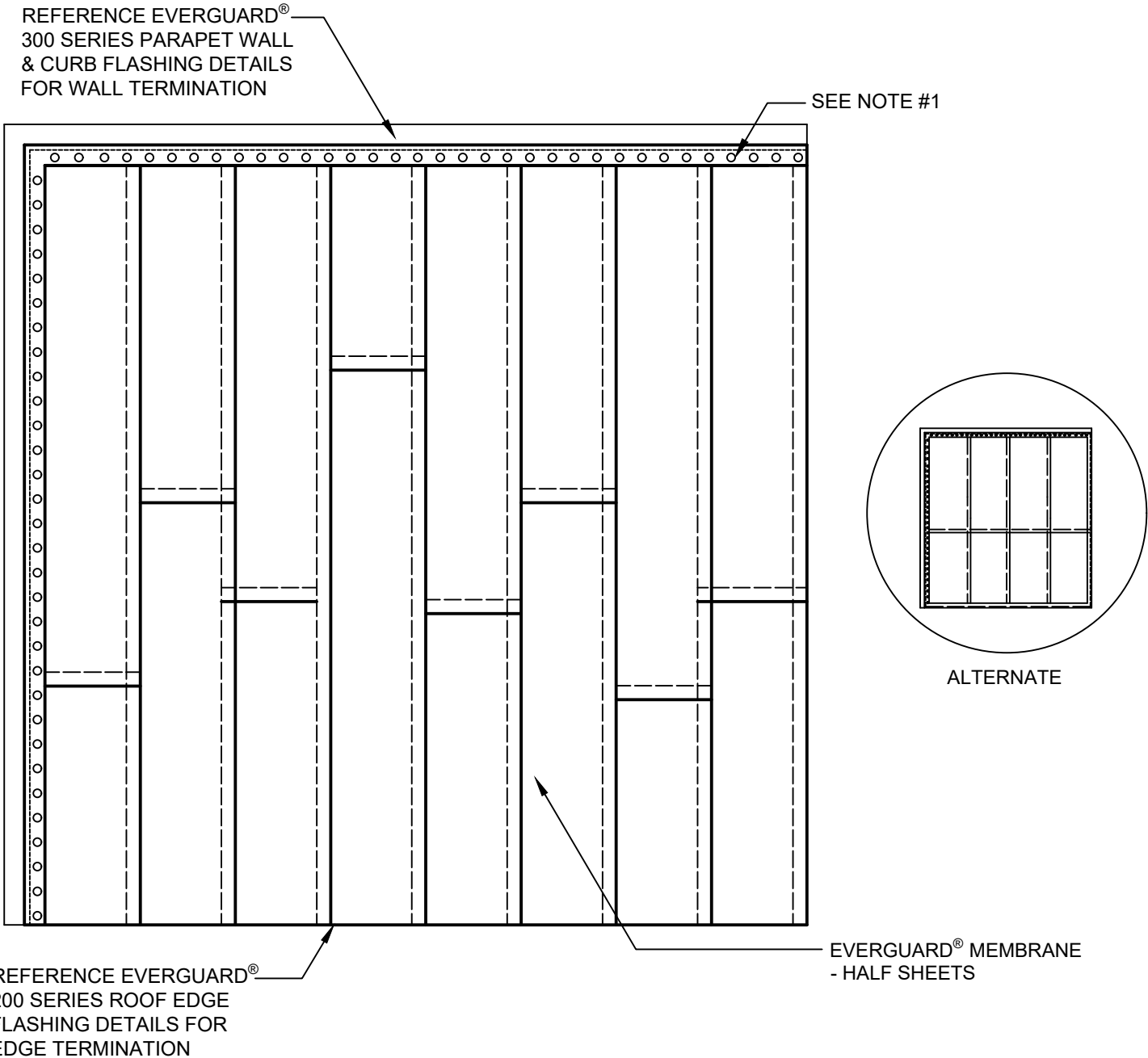
THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED SEAMS
- FASTENERS



NOTE:

- 1. SEE APPROPRIATE EVERGUARD® SPEC MANUAL TO DETERMINE PERIMETER AND CORNER ENHANCEMENTS FOR VARIOUS DECK TYPES AND WIND UPLIFT REQUIREMENTS.
- 2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.



ROOF MEMBRANE LAYOUT DETAIL  
- HALF SHEETS

DRAWING #  
101C

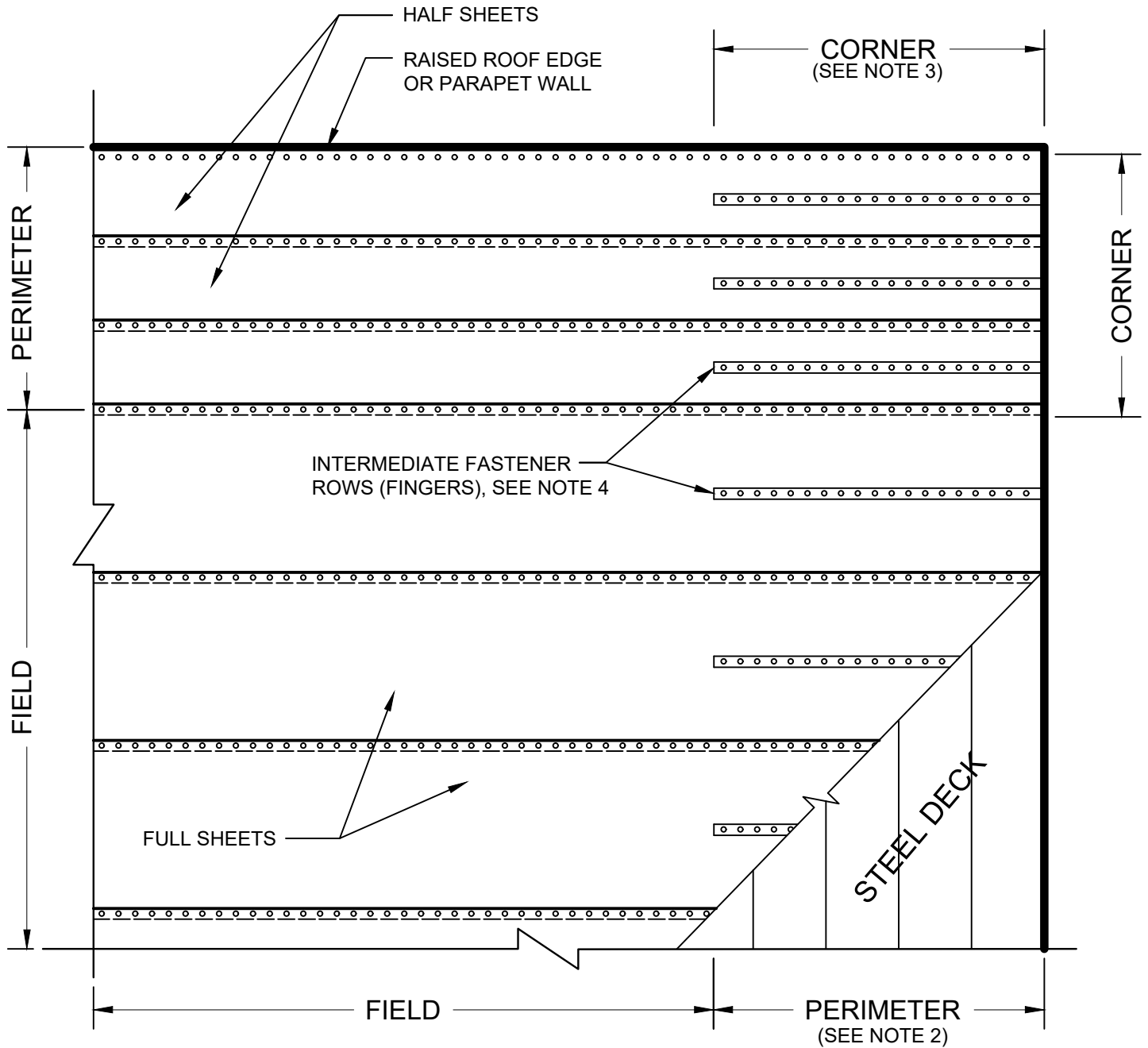
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
BALLASTED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED SEAMS
- FASTENERS



**NOTE:**

1. SEE EVERGUARD® SYSTEM GUIDELINES IN SPEC MANUAL TO DETERMINE PERIMETER, AND CORNER ZONES.
2. IN PERIMETER ZONES, DISTANCE BETWEEN ROWS IS  $\leq 60\%$  OF FIELD SPACING OR ONE ROW OF INTERMEDIATE FASTENERS (FINGERS).
3. IN CORNER ZONES, DISTANCE BETWEEN ROWS IS  $\leq 40\%$  OF FIELD SPACING OR TWO ROWS OF INTERMEDIATE FASTENERS (FINGERS).
4. INTERMEDIATE ROWS OF FASTENERS (FINGERS) MAY BE INSTALLED THROUGH THE SHEET WITH A COVER STRIP OR AN ADDITIONAL MEMBRANE PLY OVER FASTENERS, IN ACCORDANCE WITH GAF'S REQUIREMENTS.

**GAF**

**MECHANICALLY ATTACHED ASSEMBLY WITH  
INTERMEDIATE FASTENER ROWS**

DRAWING #  
**101D**

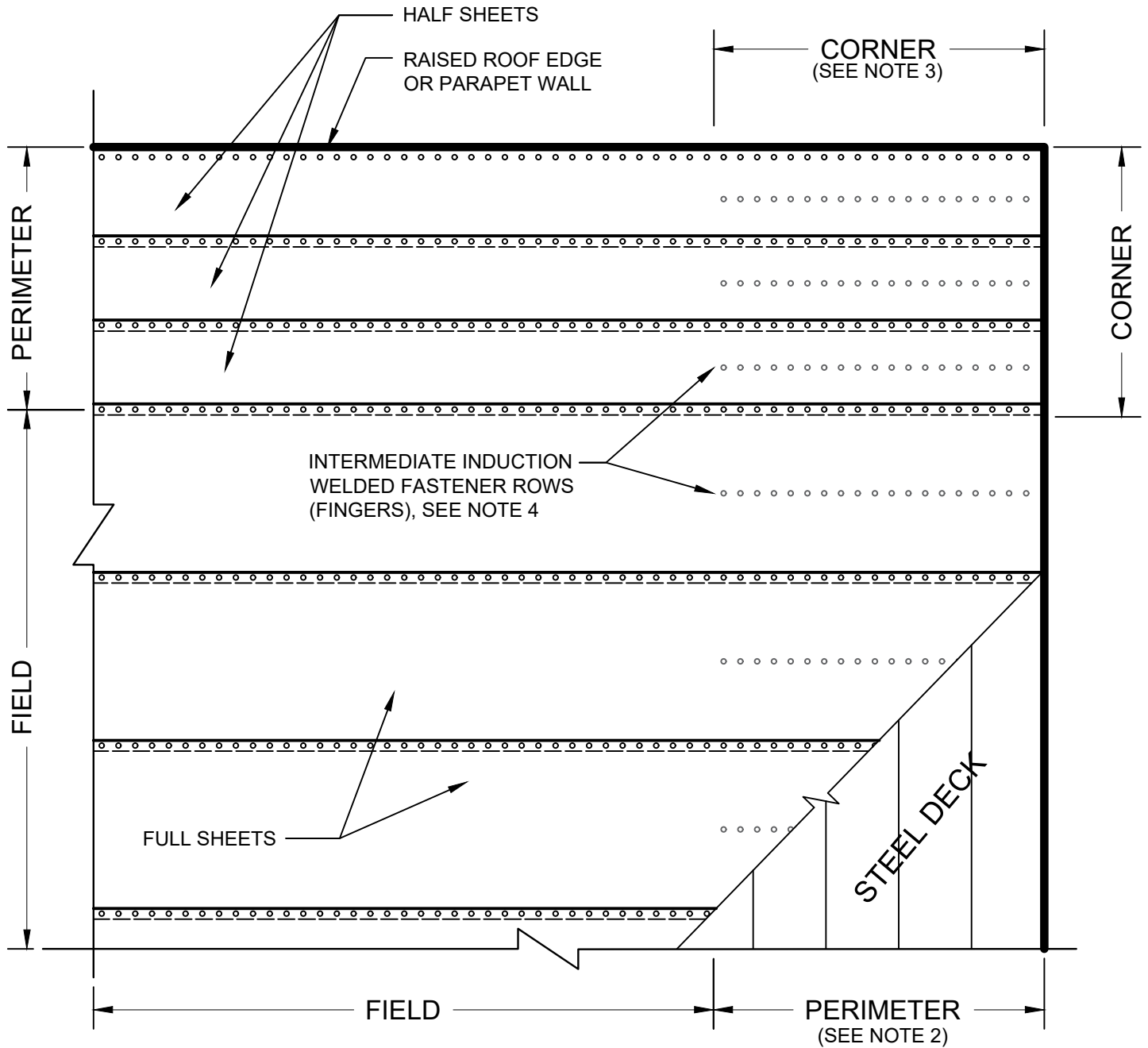
THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

**LEGEND**

- HEAT-WELDED SEAMS
- FASTENERS



**NOTE:**

1. SEE EVERGUARD® SYSTEM GUIDELINES IN SPEC MANUAL TO DETERMINE PERIMETER, AND CORNER ZONES.
2. IN PERIMETER ZONES, DISTANCE BETWEEN ROWS IS  $\leq 60\%$  OF FIELD SPACING OR ONE ROW OF INTERMEDIATE FASTENERS (FINGERS).
3. IN CORNER ZONES, DISTANCE BETWEEN ROWS IS  $\leq 40\%$  OF FIELD SPACING OR TWO ROWS OF INTERMEDIATE FASTENERS (FINGERS).
4. INTERMEDIATE ROWS OF FASTENERS (FINGERS) MAY BE INSTALLED THROUGH THE SHEET, IN ACCORDANCE WITH GAF'S REQUIREMENTS.
5. THIS DETAIL IS BASED ON THE ROOF ZONE LAYOUT PRESCRIBED IN THE 2005 AND 2010 EDITIONS OF ASCE 7.

**GAF**

**MECHANICALLY ATTACHED ASSEMBLY WITH  
INTERMEDIATE INDUCTION WELDED FASTENER ROWS**

DRAWING #  
**101E**

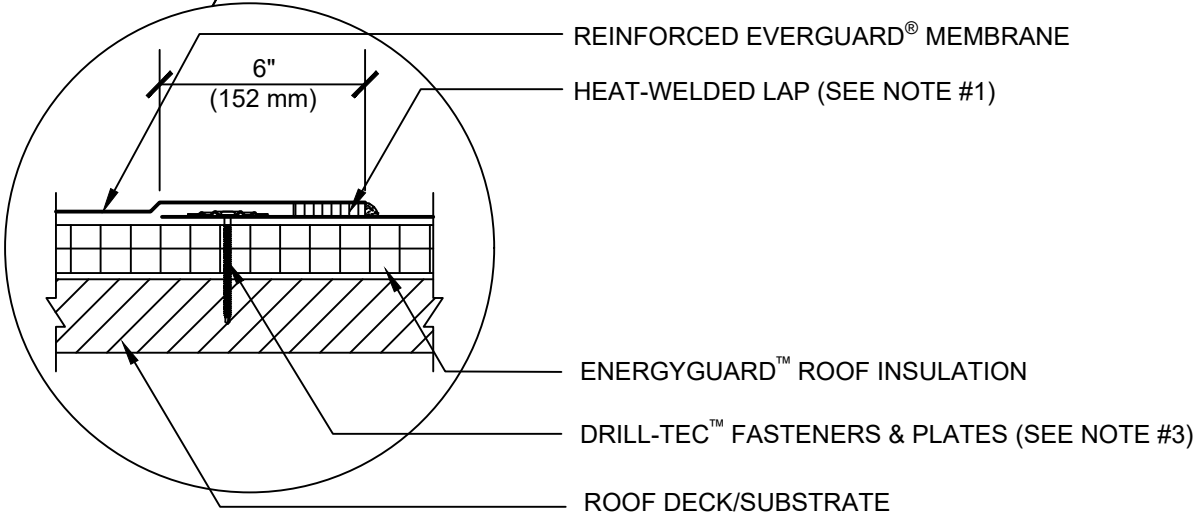
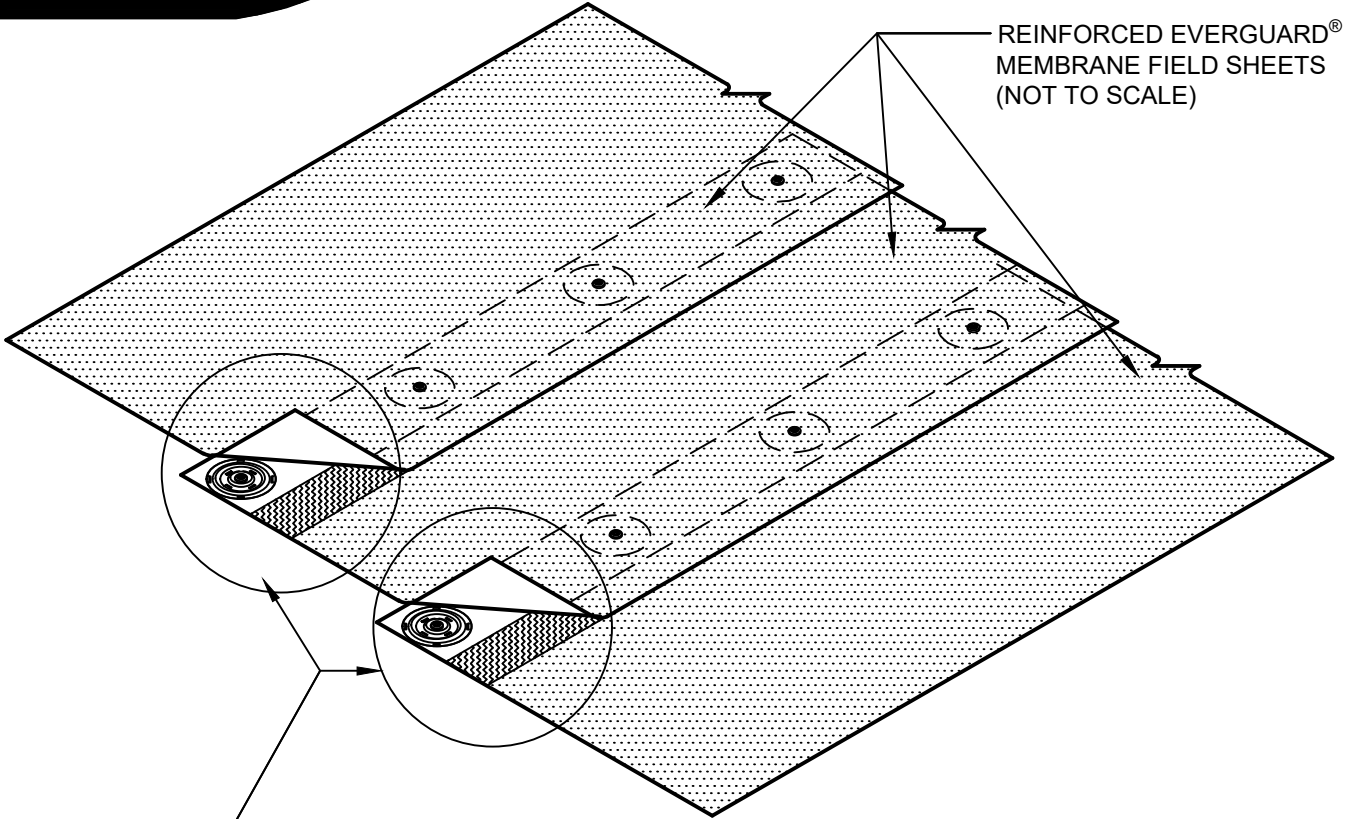
THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**7/8/21**

SCALE  
N.T.S.

**LEGEND**

- HEAT-WELDED SEAMS
- FASTENERS



NOTE:

- 1. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.
- 2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 3. SEE EVERGUARD® MECHANICALLY ATTACHED SPEC MANUAL TO DETERMINE FASTENER SPACING FOR VARIOUS DECK TYPES AND WIND UPLIFT REQUIREMENTS.



SIDE LAP

DRAWING #  
**102A**

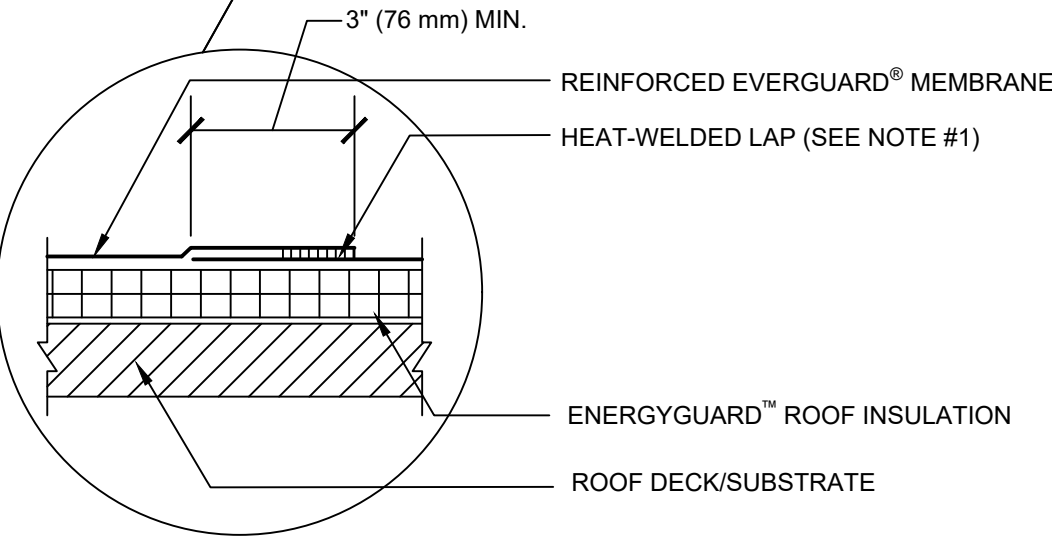
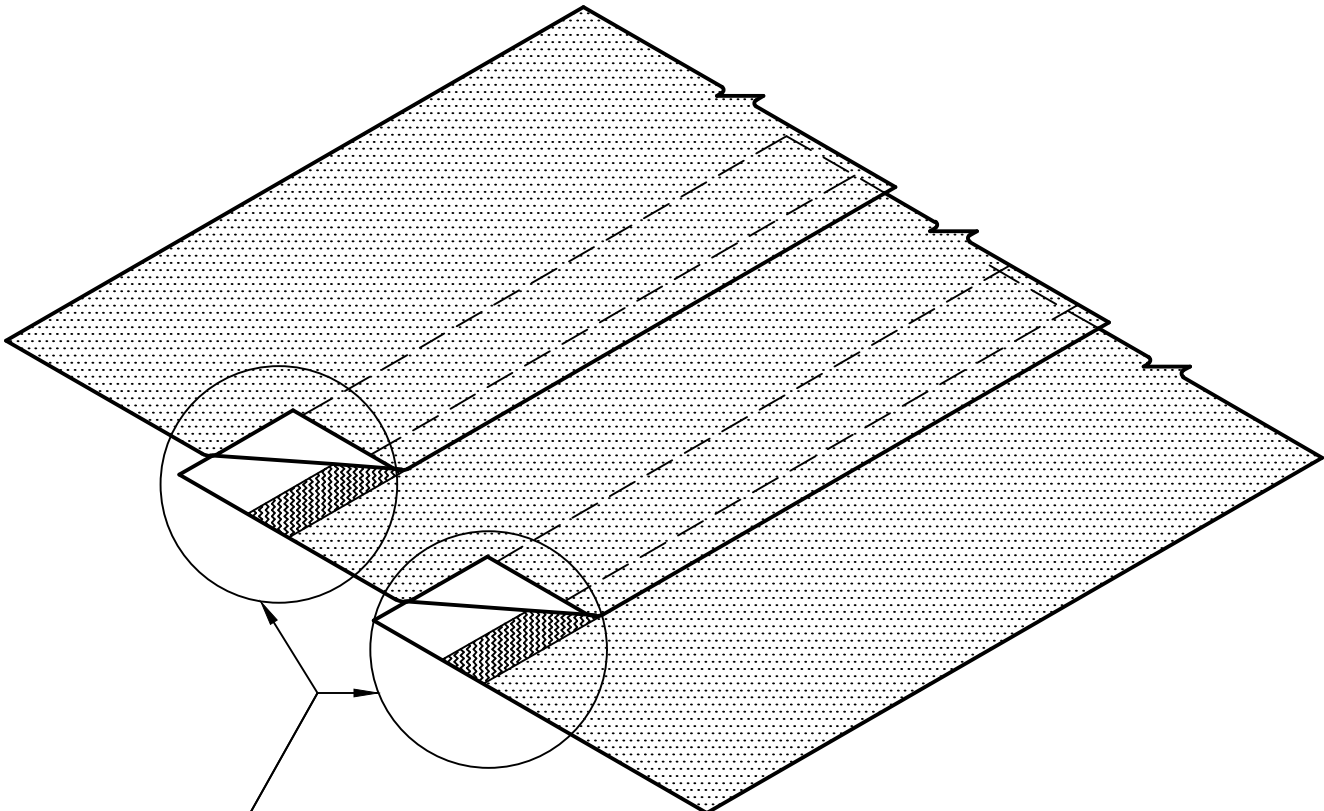
THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**12/14/20**

SCALE  
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.



SIDE LAP

DRAWING #  
102B

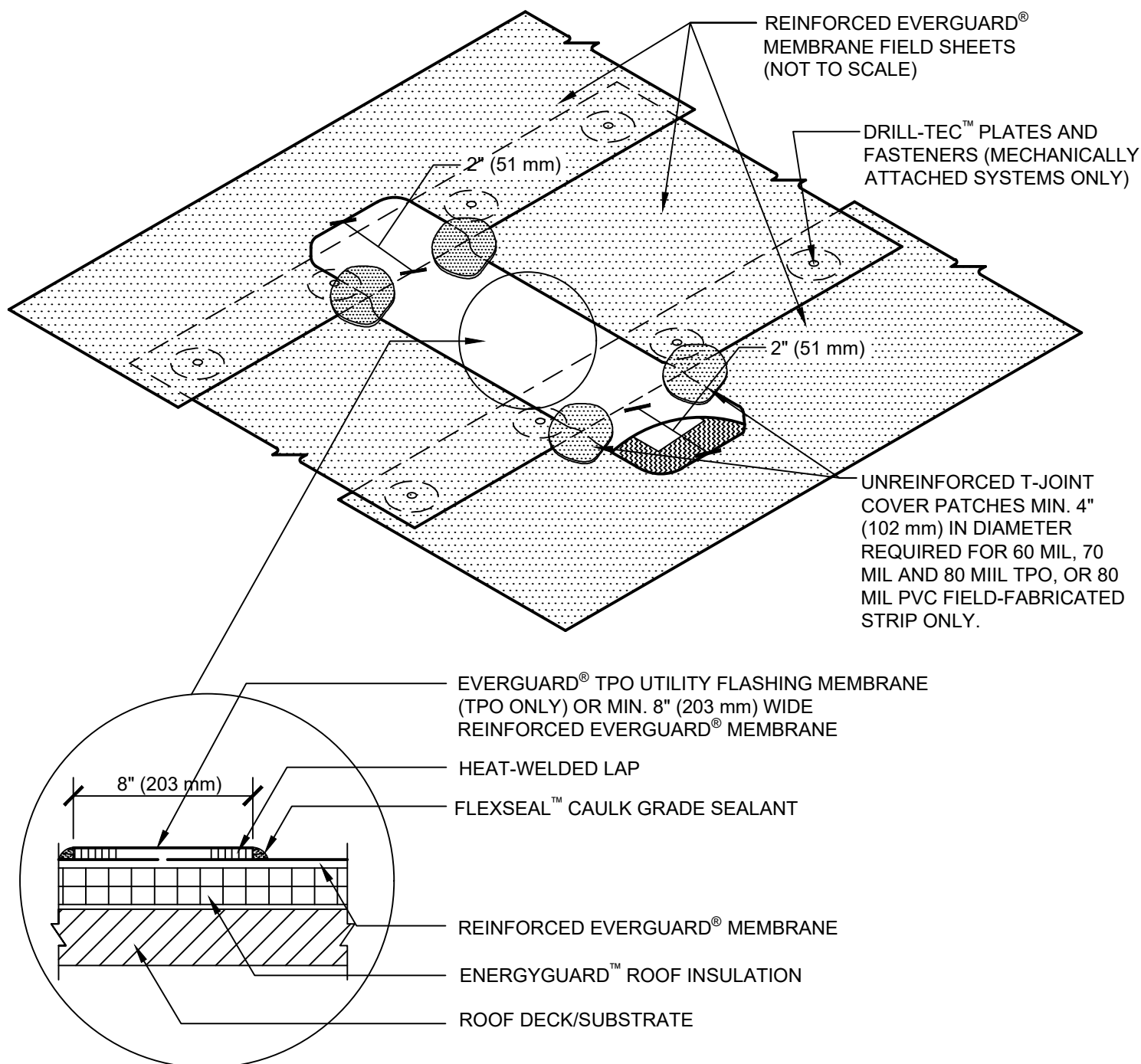
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
BALLASTED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE  
6/07/21

SCALE  
N.T.S.

LEGEND

HEAT-WELDED



## NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. **THIS DETAIL REQUIRED FOR ALL FLEECE-BACK MEMBRANES AND OPTIONAL FOR ALL LISTED SYSTEMS BELOW.**

# GAF

## END LAP WITH COVER STRIP

DRAWING #  
**103A**

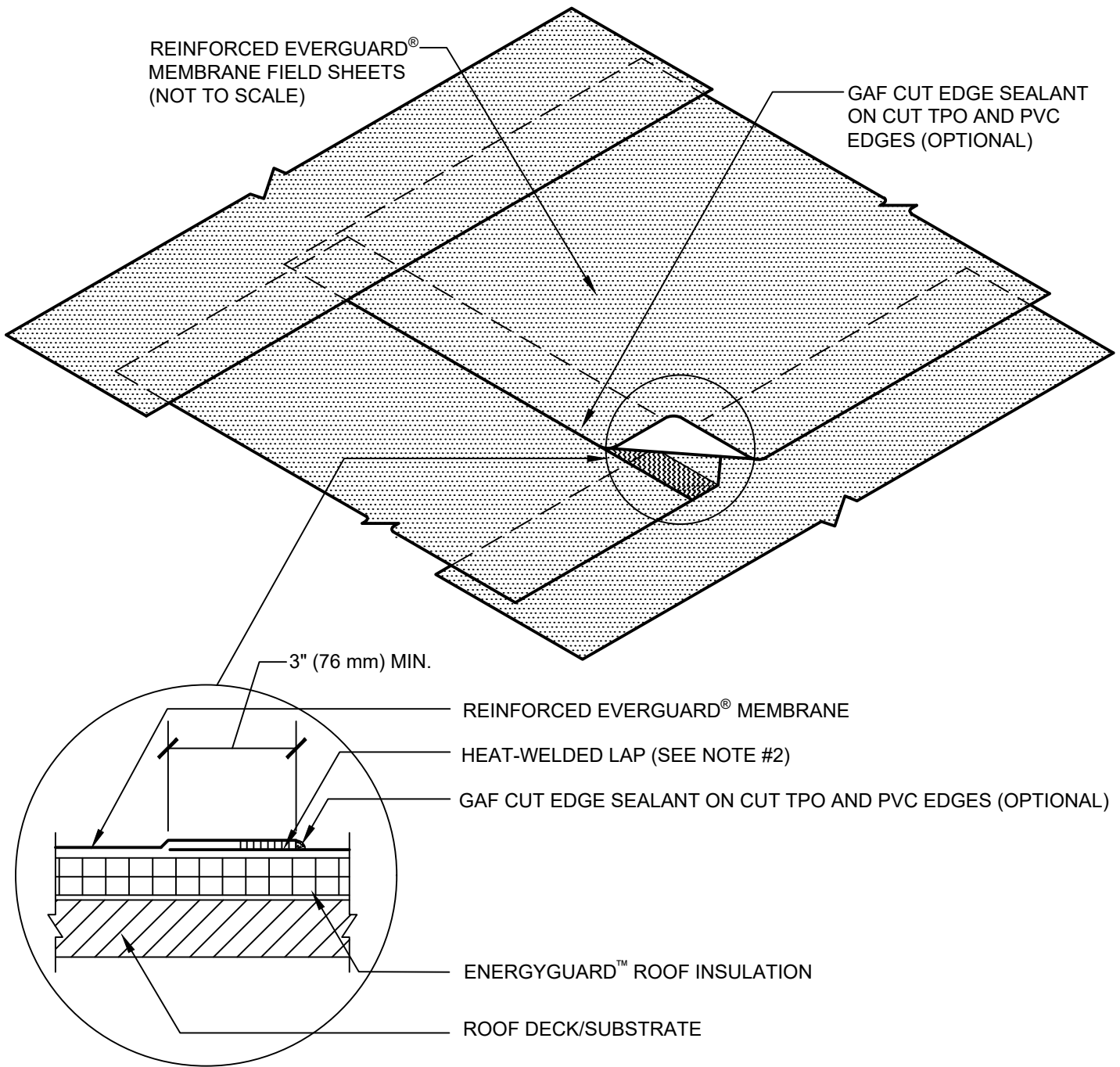
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

## LEGEND

 HEAT-WELDED



NOTES:

1. T-JOINT PATCH REQUIRED FOR 60, 70 & 80 MIL TPO AND 80 MIL PVC, REFER TO EVERGUARD® DETAIL 105.
2. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH AUTOMATIC MACHINE WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.

END LAP

DETAIL

ROOF AREA

ISSUE DATE

SCALE

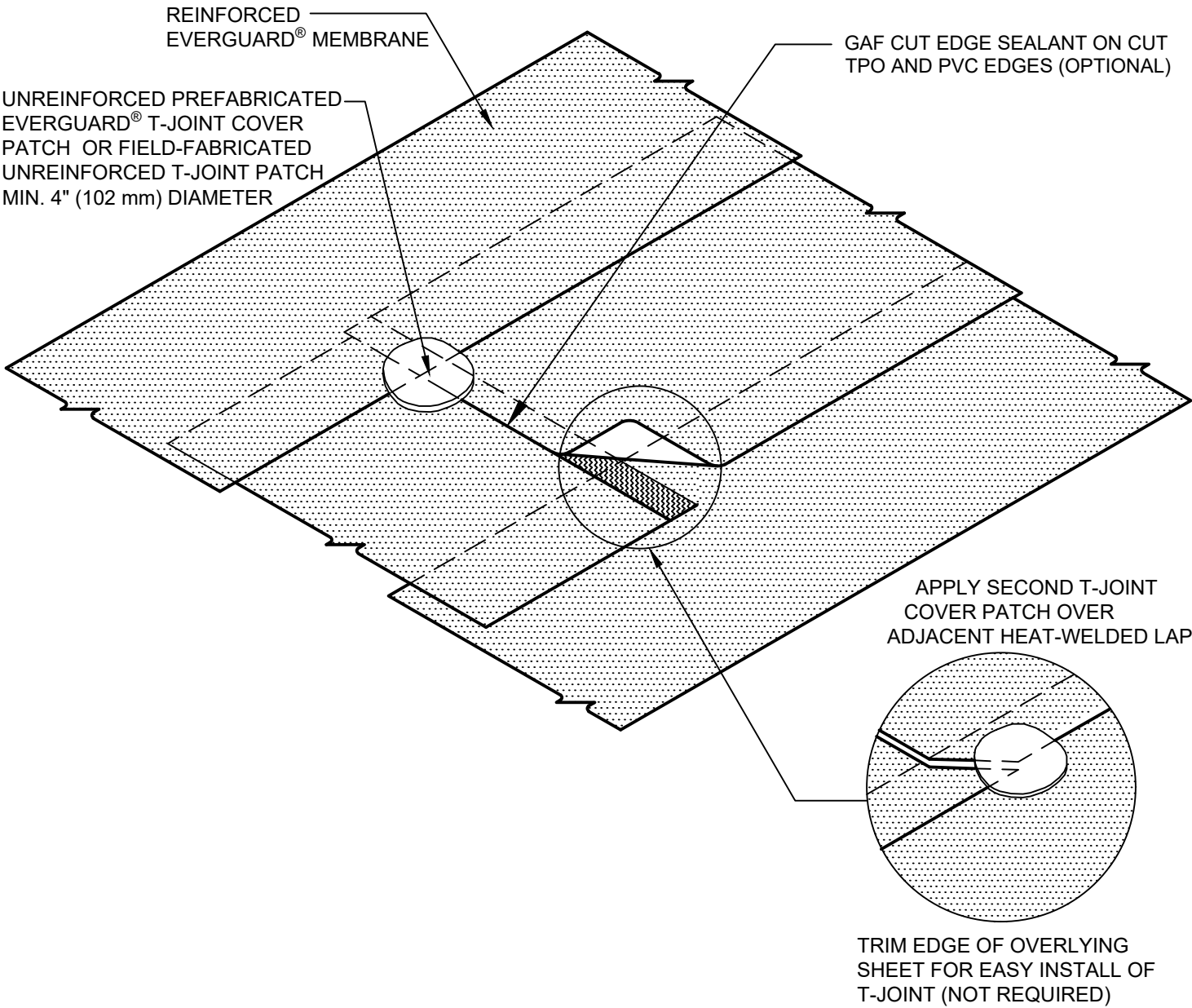
FIELD OF ROOF

2/23/2023

N.T.S.

104A





NOTES:

1. T-JOINT IS TO BE USED FOR 60-80 MIL TPO AND 80 MIL PVC ONLY.

T-JOINT COVER PATCH

DETAIL

ROOF AREA

ISSUE DATE

SCALE

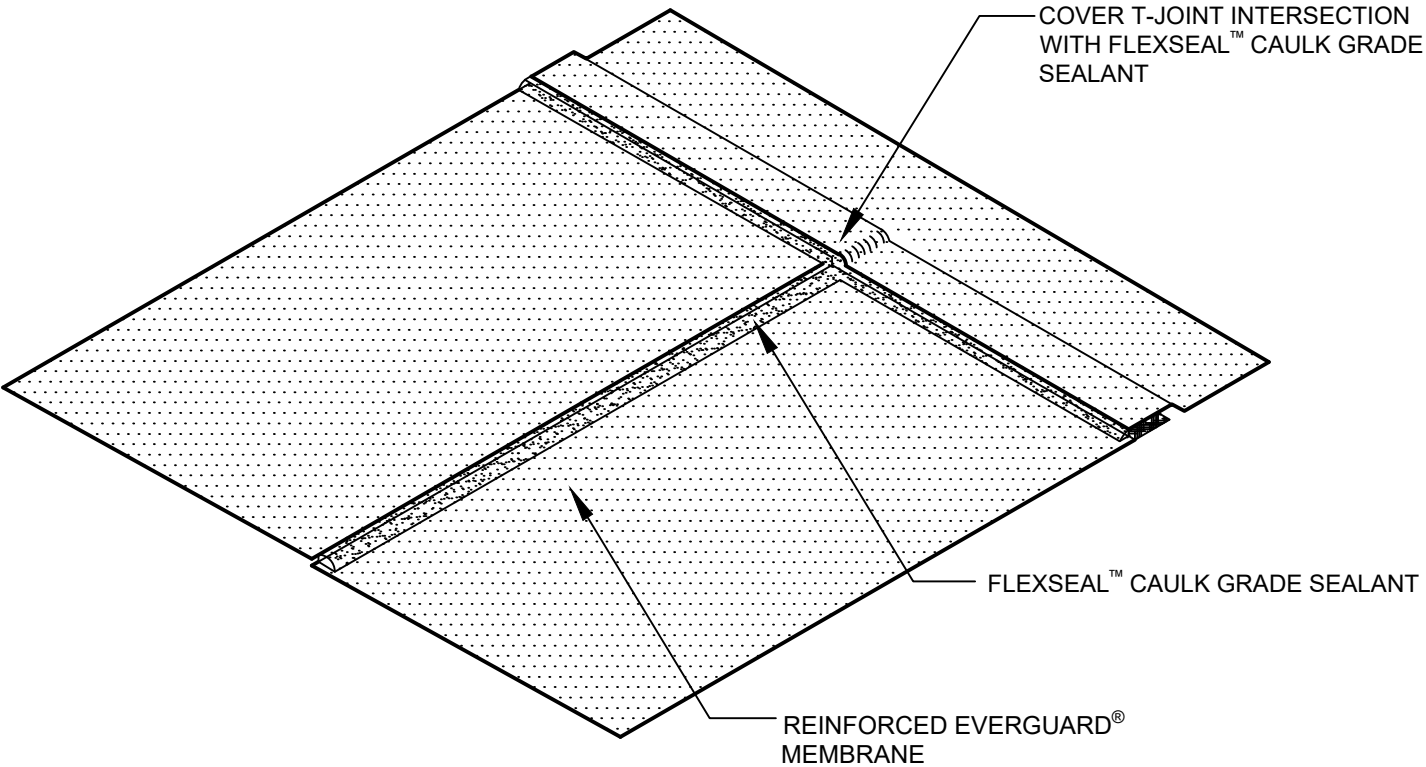
FIELD OF ROOF

2/23/2023

N.T.S.

105A

SINGLE-PLY: TPO  
-Freedom™ TPO  
-45 mil TPO



NOTE:

1. FOR SELF-ADHERED HEAT-WELDED SYSTEMS, UP TO 20YR MAXIMUM GUARANTEE ONLY.



T-JOINT COVER PATCH

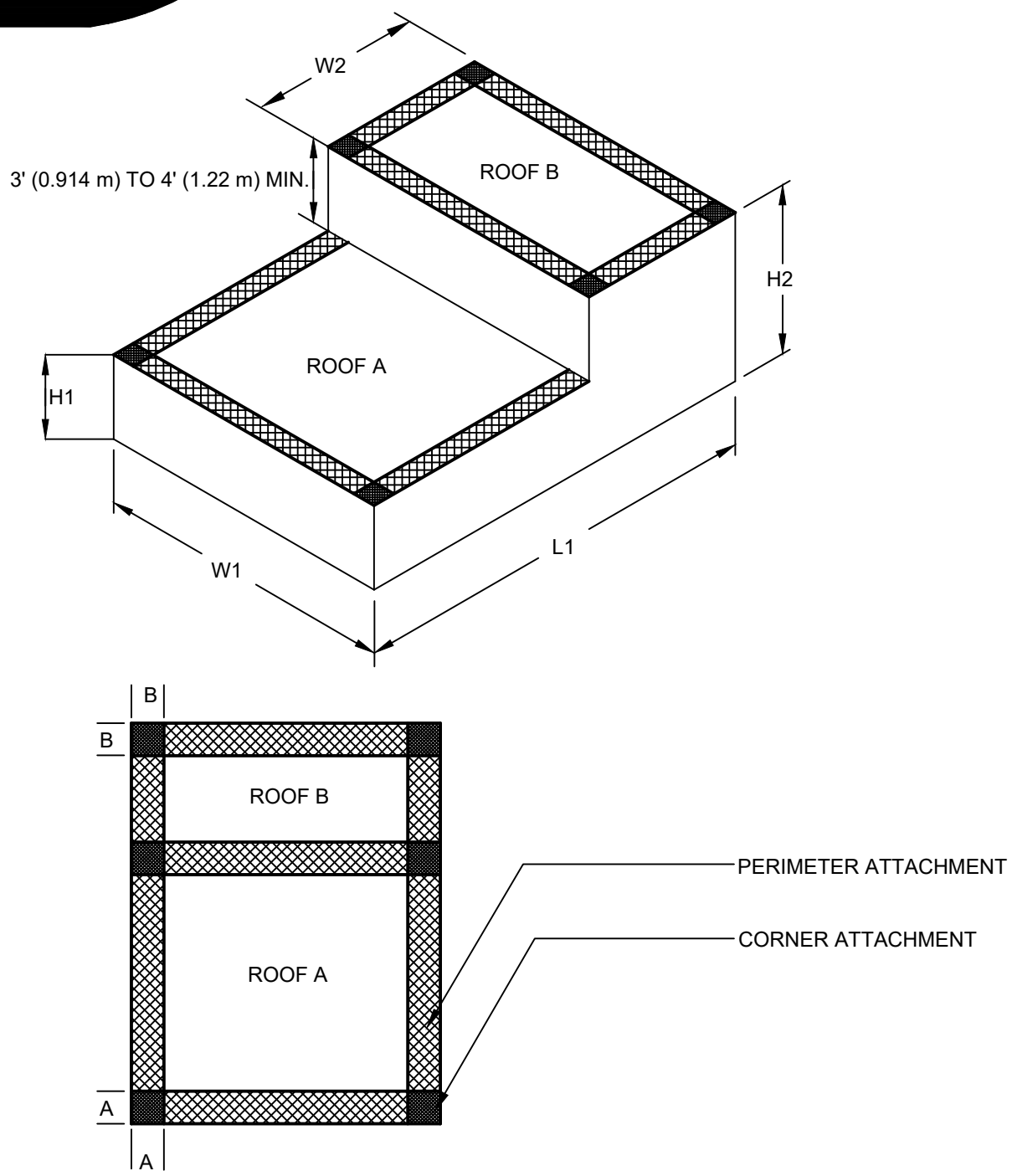
DRAWING #  
105B

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
BALLASTED SYSTEMS  
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND



**NOTE:**

- 1. WIDTH OF PERIMETER TREATMENT (A OR B) SHALL BE 10% OF THE BUILDING'S NARROWEST WIDTH (W) OR 40% OF THE BUILDING EAVE HEIGHT (H), WHICHEVER IS LESS, WITH 4' (1.22 m) BEING THE MIN. FOR STANDARD GAF GUARANTEE REQUIREMENTS. SEE HALF-SHEET REQUIREMENTS IN MECHANICALLY ATTACHED SECTION.
- 2. FOR ADHERED, SELF-ADHERED, AND RHINO BOND® SYSTEMS, SEE INSULATION TABLE FOR ENHANCEMENTS.



**ROOF AREA ZONE LAYOUT**

DRAWING #  
**106**

THIS DETAIL APPLIES TO:  
**ALL SYSTEMS**

ISSUE / REVISION DATE  
**8/11/20**

SCALE  
**N.T.S.**

**LEGEND**

- PERIMETER ATTACHMENT
- CORNER ATTACHMENT

# GAF



- ## RHINO<sup>BOND</sup>® FASTENING ZONES & LOCATIONS

DRAWING #  
**107A**

THIS DETAIL APPLIES TO:

RHINOBOND® SYSTEMS

ISSUE / REVISION DATE

8/17/20

SCALE

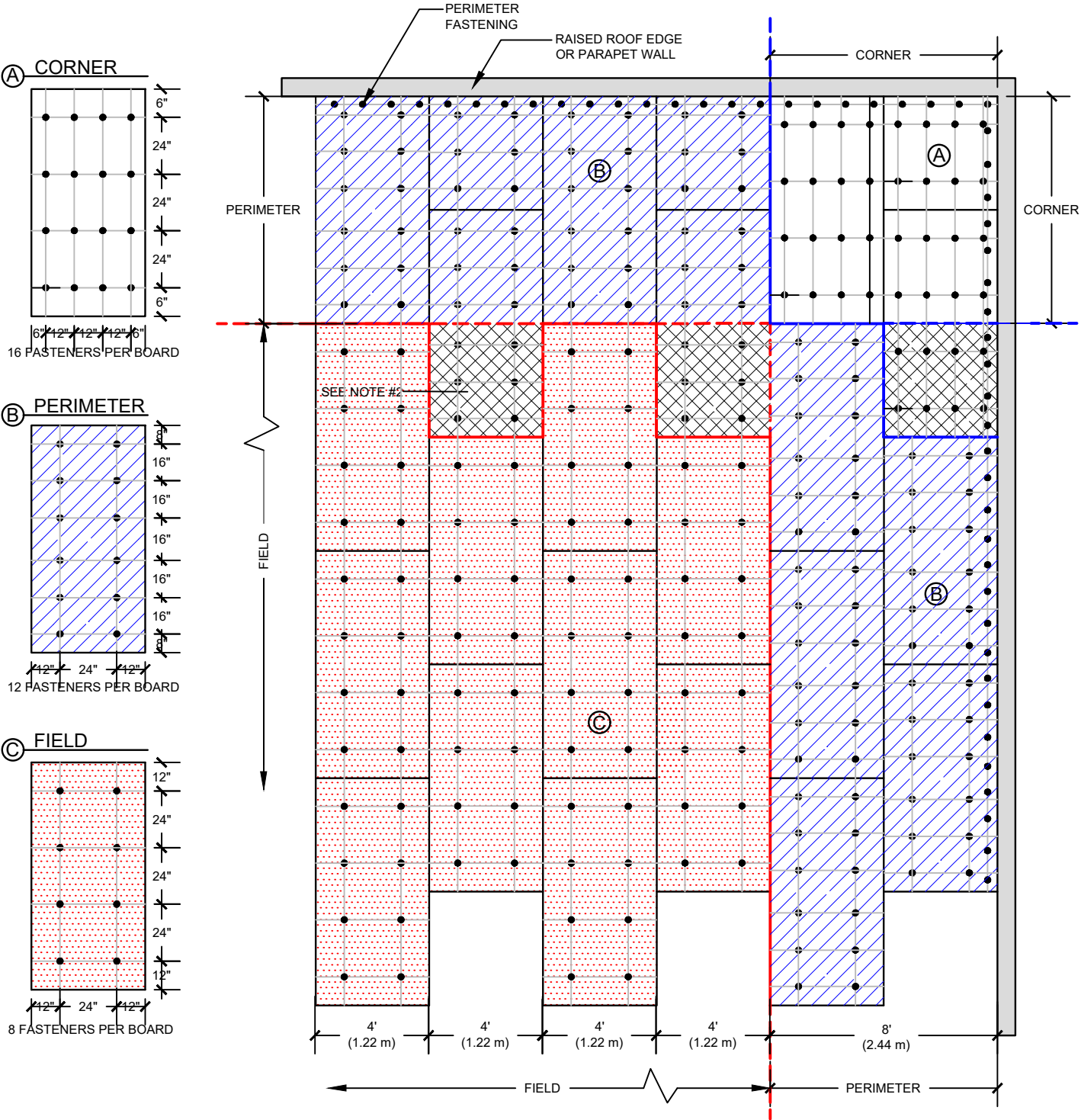
N.T.S.

FIELD ZONE

PERIMETER ZONE

CORNER ZONE

TRANSITION ZONE



NOTE:

1. SEE EVERGUARD® SYSTEM GUIDELINES IN SPEC MANUAL TO DETERMINE PERIMETER AND CORNER ENHANCMENTS FOR VARIOUS DECK TYPES AND WIND UPLIFT REQUIREMENTS.
2. IF A PORTION OF A BOARD EXTENDS INTO ANOTHER ZONE, IT MUST DEFER TO THE ZONE OF THE GREATER FASTENING PATTERN.
3. OVER APPROVED WOOD DECKS.

GAF

DRILL-TEC™ RHINOBOND® INSULATION FASTENING ZONES

DRAWING #  
107B

THIS DETAIL APPLIES TO:  
RHINOBOND® SYSTEMS

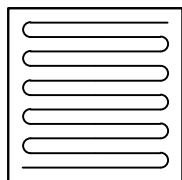
ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND

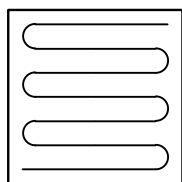
- FIELD ZONE
- PERIMETER ZONE
- CORNER ZONE
- TRANSITION ZONE

## A CORNER



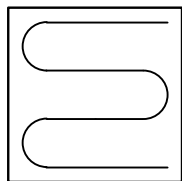
11 BEADS 4" O.C.  
4" FROM ENDS

## B PERIMETER



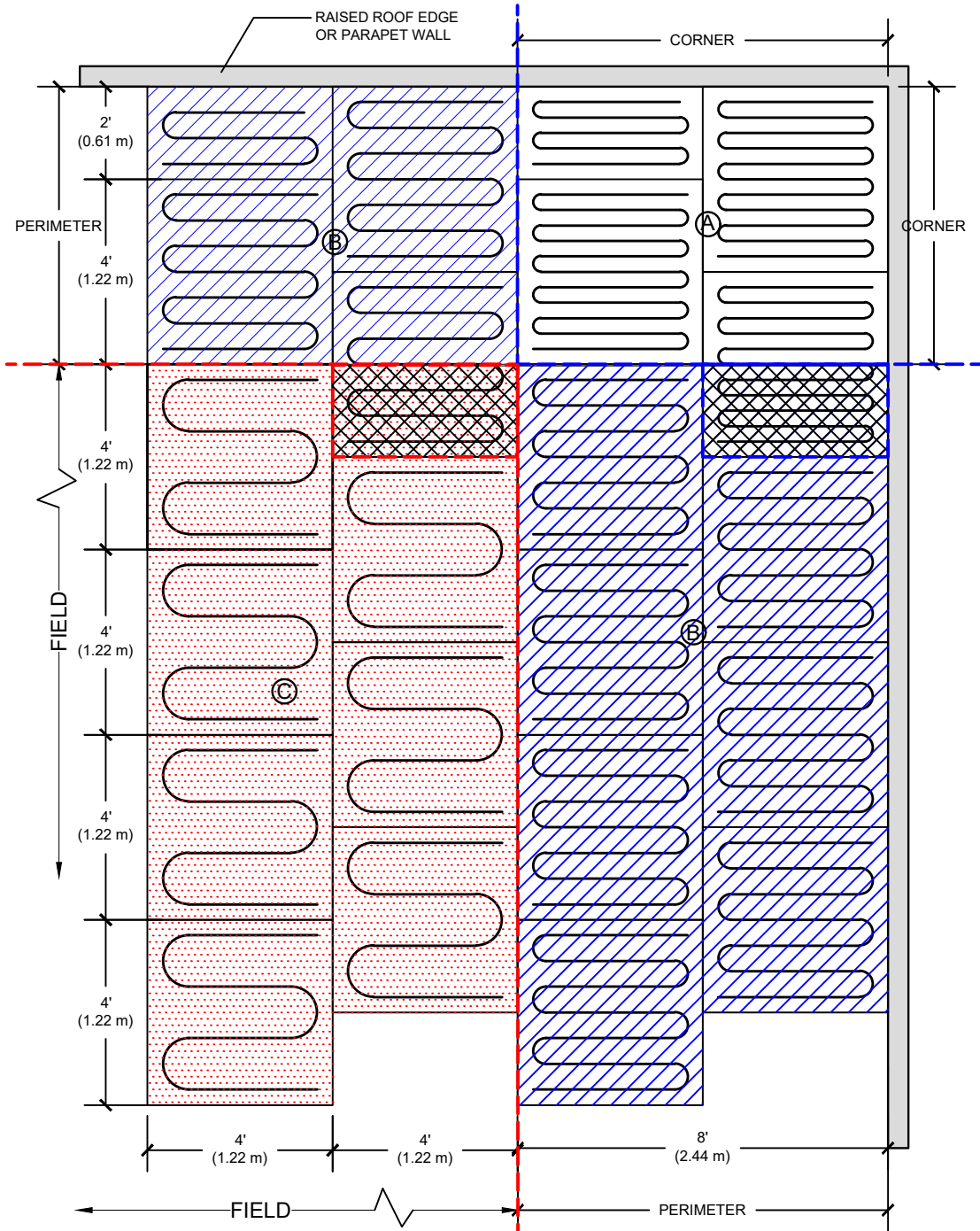
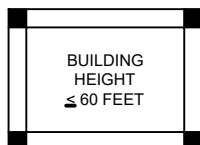
7 BEADS 6" O.C.  
6" FROM ENDS

## C FIELD



4 BEADS 12" O.C.  
6" FROM ENDS

## CORNER FASTENING

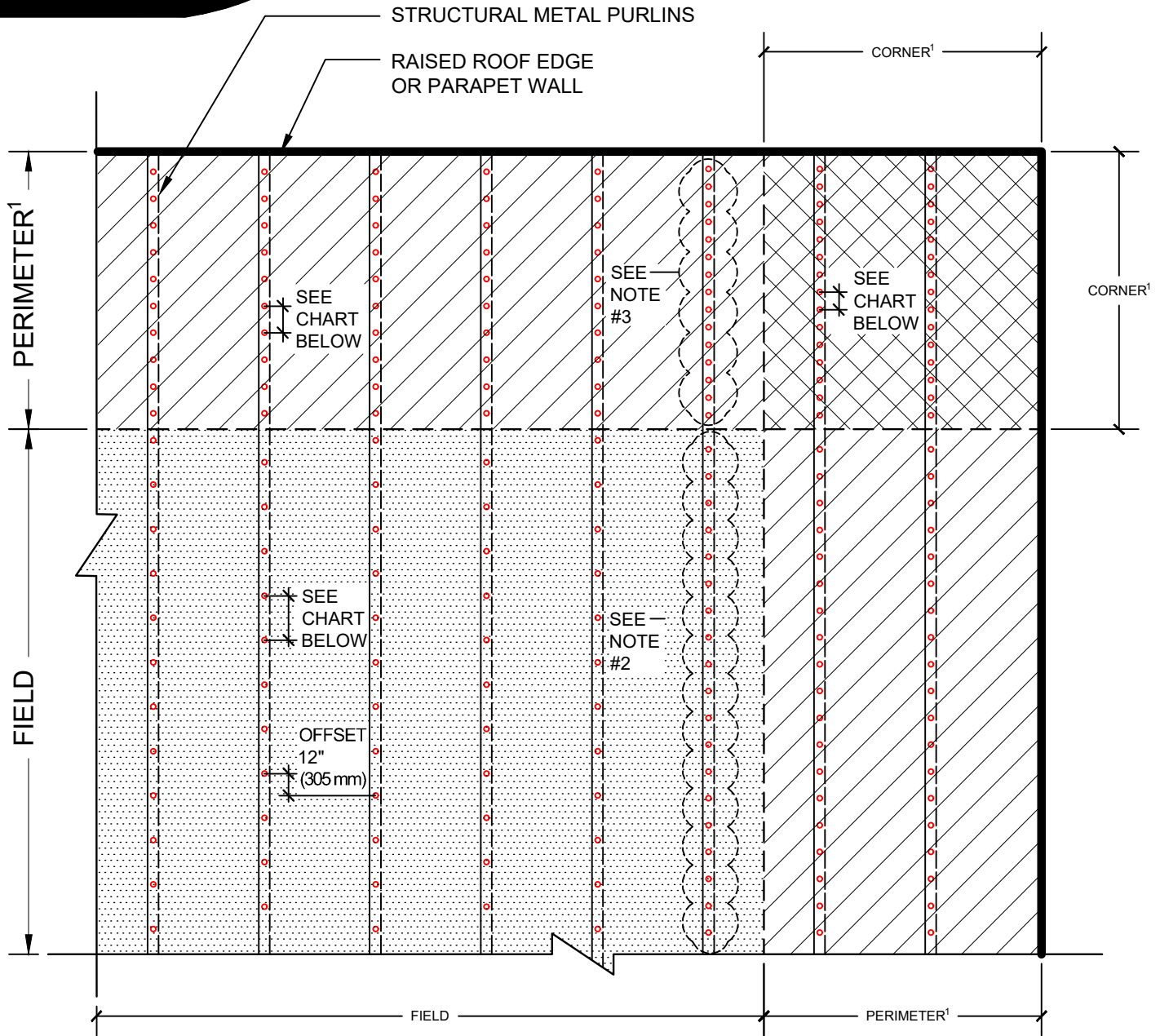


## NOTE:

1. WHEN APPLYING MULTIPLE LAYERS OF INSULATION, IT IS REQUIRED TO RUN THE BEADS PERPENDICULAR TO THE PRECEDING LAYER.
2. IF A PORTION OF A BOARD EXTENDS INTO ANOTHER ZONE, IT MUST DEFER TO THE ZONE OF THE GREATER FASTENING PATTERN.

## LEGEND

- FIELD ZONE
- PERIMETER ZONE
- CORNER ZONE
- TRANSITION ZONE



| MAXIMUM FASTENER SPACING |            |                |             |
|--------------------------|------------|----------------|-------------|
| PURLIN TYPE              | FIELD ZONE | PERIMETER ZONE | CORNER ZONE |
| MIN. 16 GA.              | 24" O.C.   | 10" O.C.       | 8" O.C.     |
| MIN. 14 GA.              | 24" O.C.   | 12" O.C.       | 9" O.C.     |
| MIN. 12 GA.              | 24" O.C.   | 12" O.C.       | 9" O.C.     |

**NOTE:**

1. SEE EVERGUARD® SPEC MANUAL TO DETERMINE PERIMETER AND CORNER ZONES.
2. DEFAULTS TO PERIMETER FASTENING RATE.
3. DEFAULTS TO CORNER FASTENING RATE.

**GAF**

## PURLIN FASTENING ZONES

### - DRILL-TEC™ RHINO-BOND® ATTACHMENT

DRAWING #  
**108A**

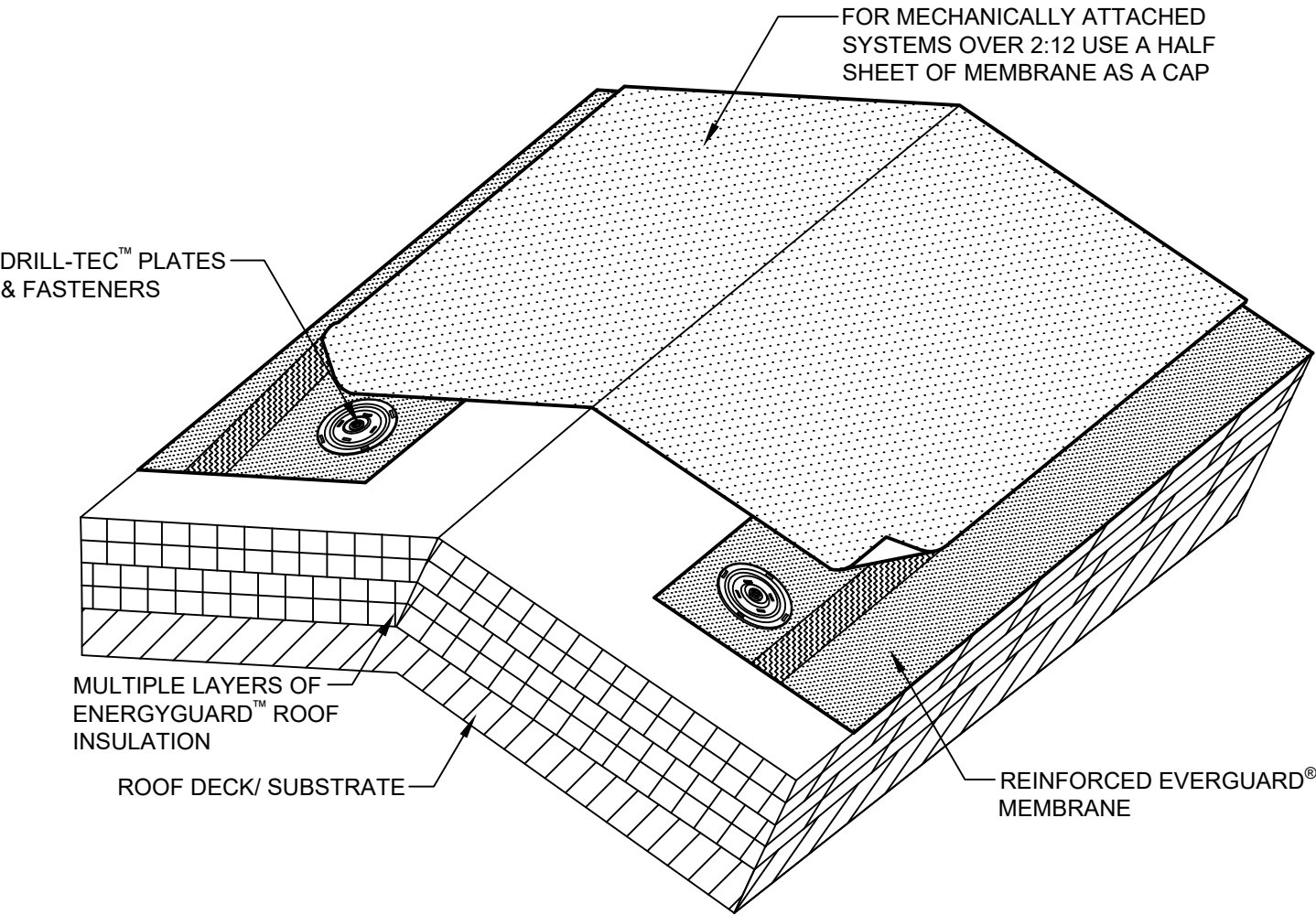
THIS DETAIL APPLIES TO:  
RHINO-BOND® SYSTEMS

ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

**LEGEND**

- FIELD ZONE
- PERIMETER ZONE
- CORNER ZONE



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED.
- 2. DO NOT RUN CAP SHEET INTO THE PERIMETER HALF SHEET REGION.



RIDGE FLASHING

DRAWING #  
110A

THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

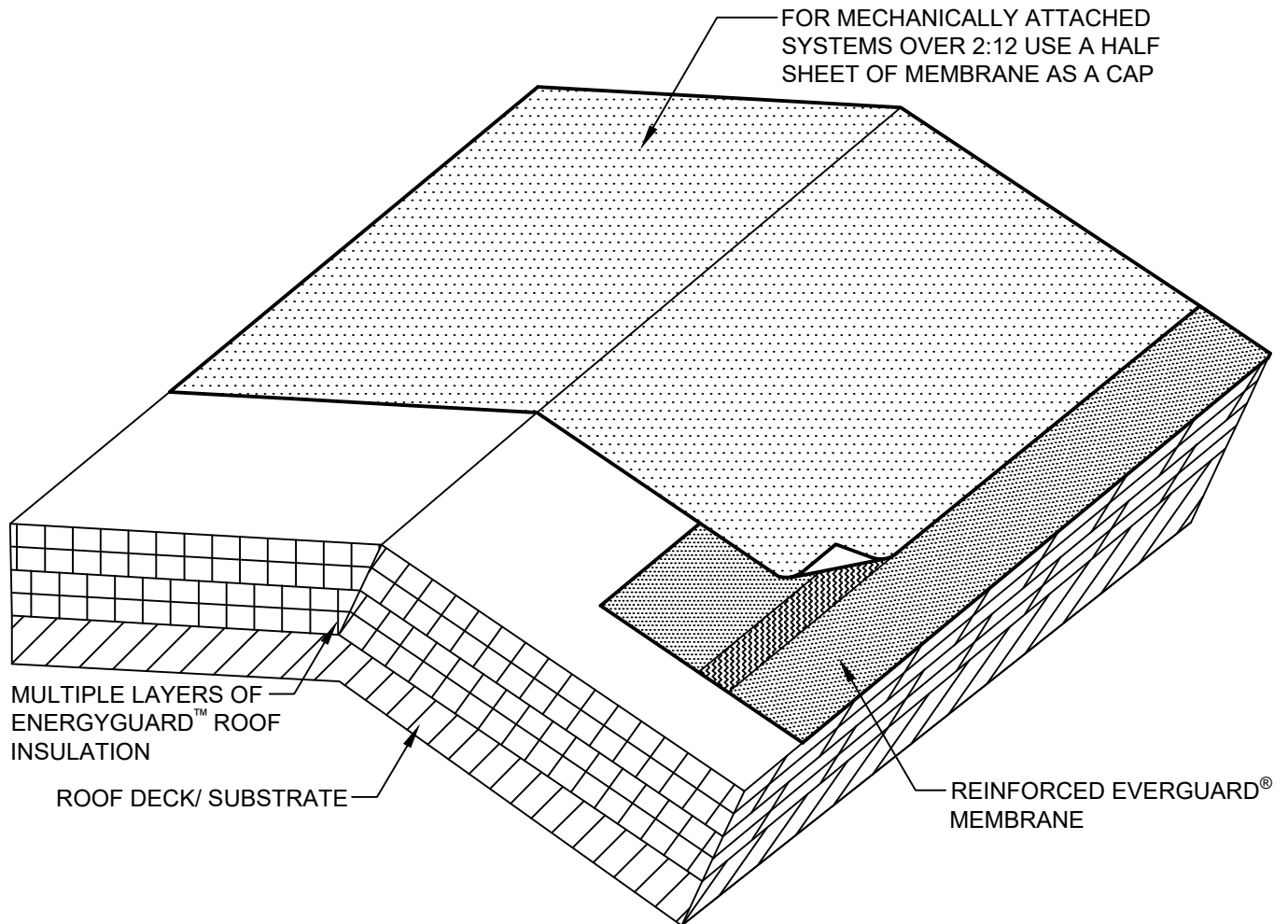
ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND

HEAT-WELDED





**GAF**

## RIDGE FLASHING

DRAWING #  
**110B**

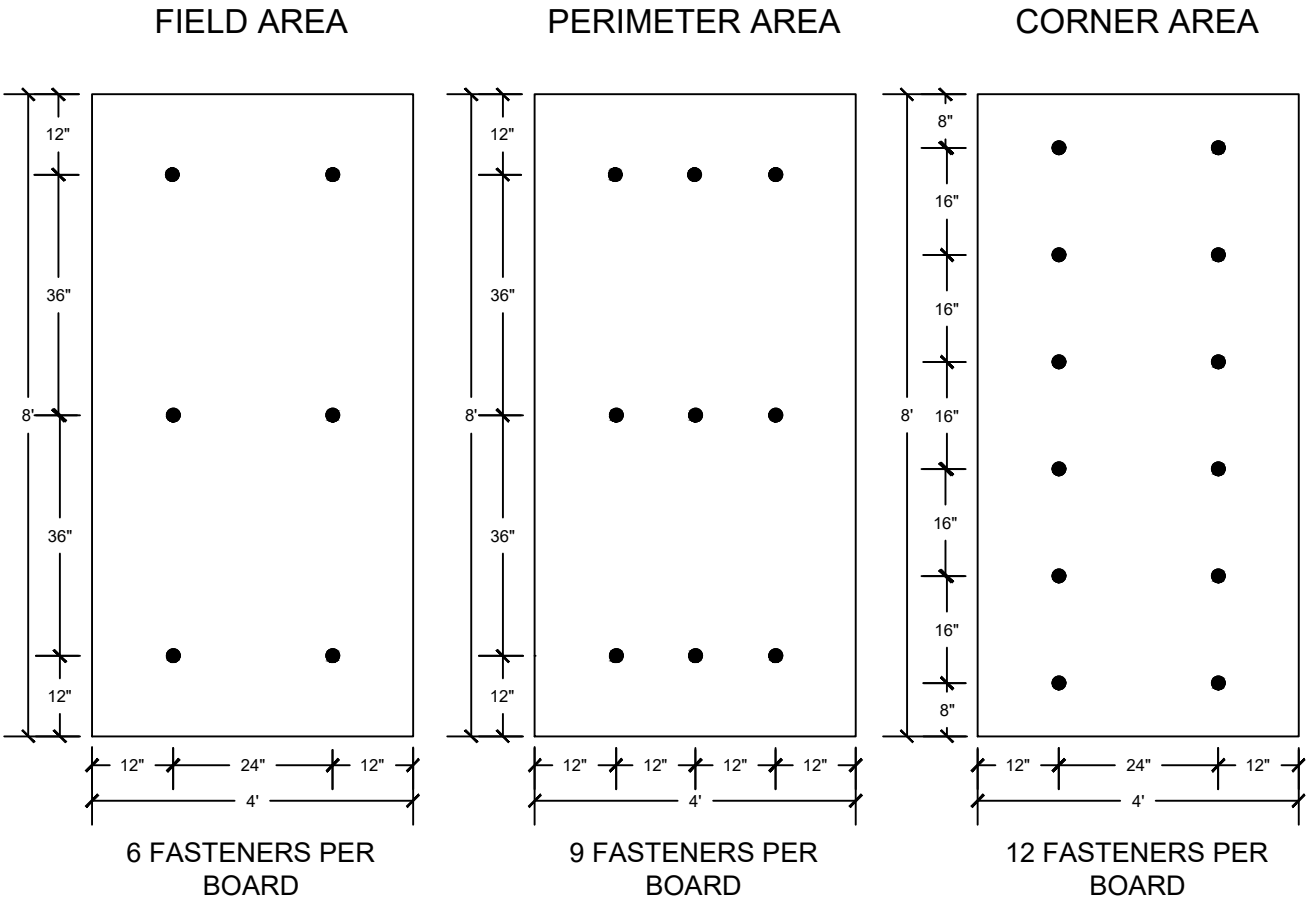
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
BALLASTED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

### LEGEND

 HEAT-WELDED



NOTE:

- 1. REFERENCE SPECIFIC SYSTEM/INSULATION TYPE AND THICKNESS REQUIREMENTS.
- 2. DRILL-TEC™ RHINO-BOND® PLATE-WELDED SYSTEM IS NOT ACCEPTABLE FOR GYPSUM, CEMENTITIOUS WOOD FIBER OR OSB.
- 3. REFER TO THE RHINO-BOND® SPEC MANUAL FOR FASTENER AND DECK REQUIREMENTS.



STANDARD FASTENING PATTERN  
- OVER APPROVED STEEL OR CONCRETE DECKS

DRAWING #  
111A

THIS DETAIL APPLIES TO:  
RHINO-BOND® SYSTEMS

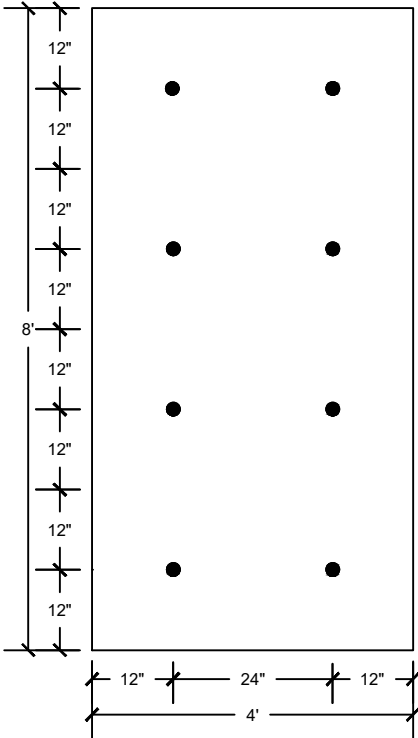
ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND

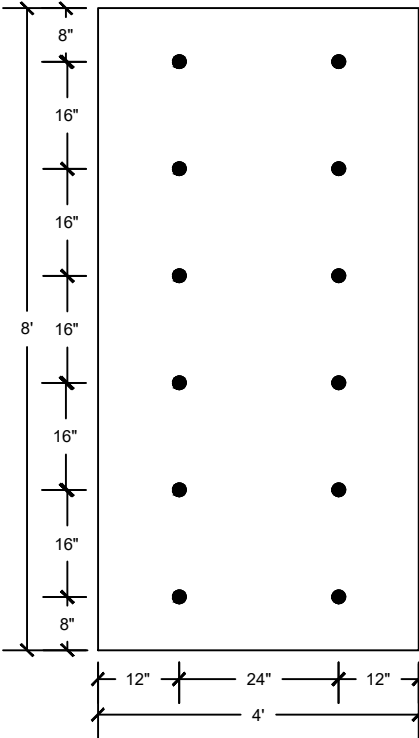
● ● ● FASTENERS

FIELD AREA



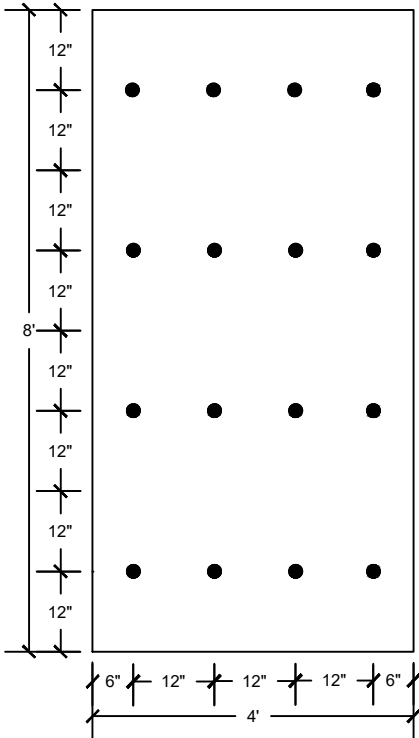
8 FASTENERS PER BOARD

PERIMETER AREA



12 FASTENERS PER BOARD

CORNER AREA



16 FASTENERS PER BOARD

NOTE:

- 1. REFERENCE SPECIFIC SYSTEM/INSULATION TYPE AND THICKNESS REQUIREMENTS.
- 2. DRILL-TEC™ RHINO-BOND® PLATE-WELDED SYSTEM IS NOT ACCEPTABLE FOR GYPSUM, CEMENTITIOUS WOOD FIBER OR OSB.
- 3. REFER TO THE RHINO-BOND® SPEC MANUAL FOR FASTENER AND DECK REQUIREMENTS.



STANDARD FASTENING PATTERN  
- OVER APPROVED WOOD DECKS

DRAWING #  
111B

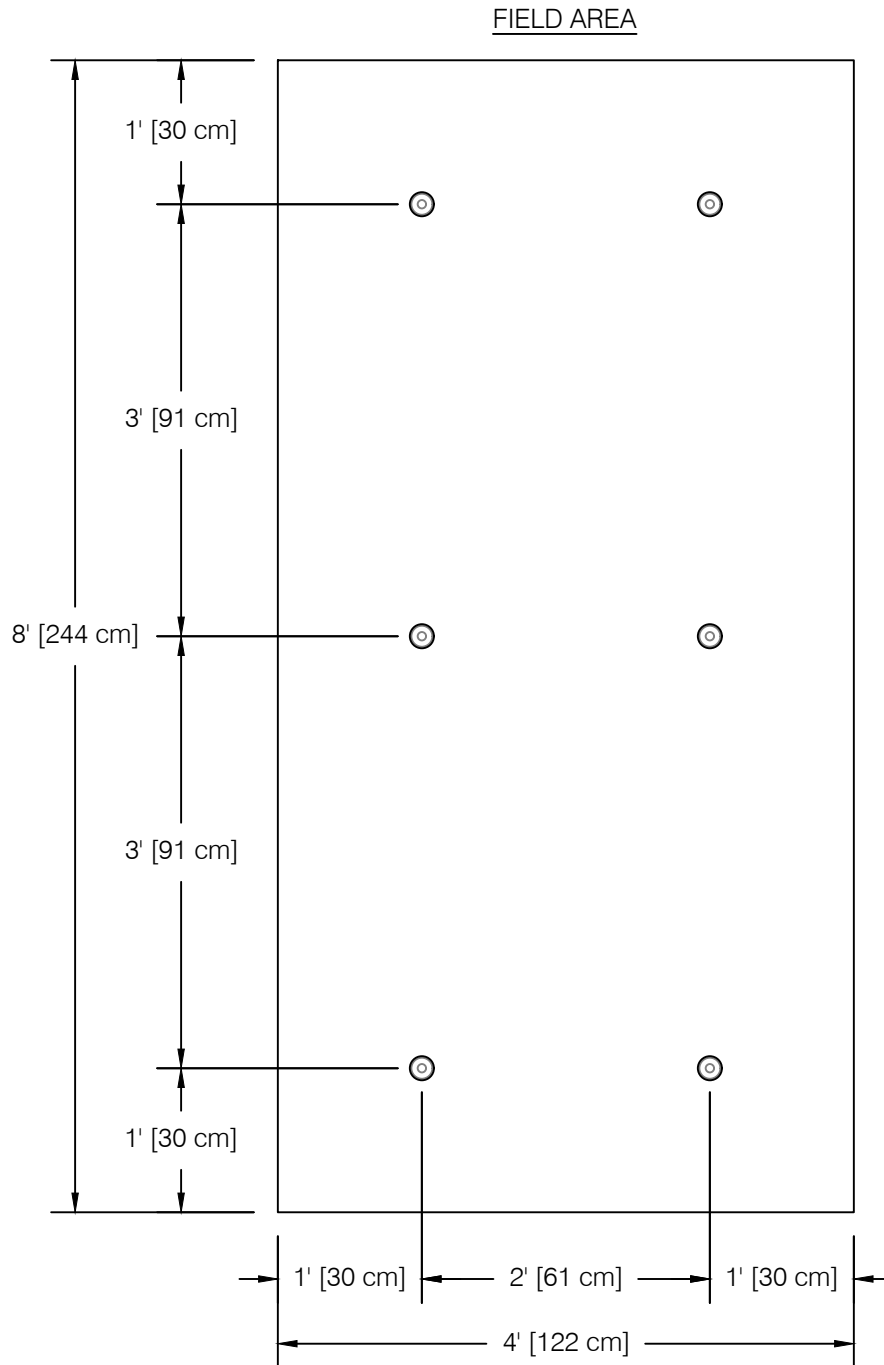
THIS DETAIL APPLIES TO:  
RHINO-BOND® SYSTEMS

ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND

● ● ● FASTENERS



NOTES:

1. CSA 123.21:20 DYNAMIC WIND UPLIFT UPDATE: EVERGUARD® TPO OR EVERGUARD EXTREME® TPO RHINO Bond® ATTACHMENT TO 22 GA. STEEL DECK WITH (6) PLATES AND FASTENERS, MINIMUM 2.6" [66 mm] THICK INSULATION BOARD, AND GAF SA VAPOR RETARDER XL.
2. DRILL-TEC™ RHINO Bond® INDUCTION WELDED SYSTEM IS NOT ACCEPTABLE FOR GYPSUM, CEMENTITIOUS WOOD FIBER, OR OSB DECKS.

STANDARD FASTENING PATTERN - OVER APPROVED STEEL DECKS

DETAIL

ROOF AREA

ISSUE DATE

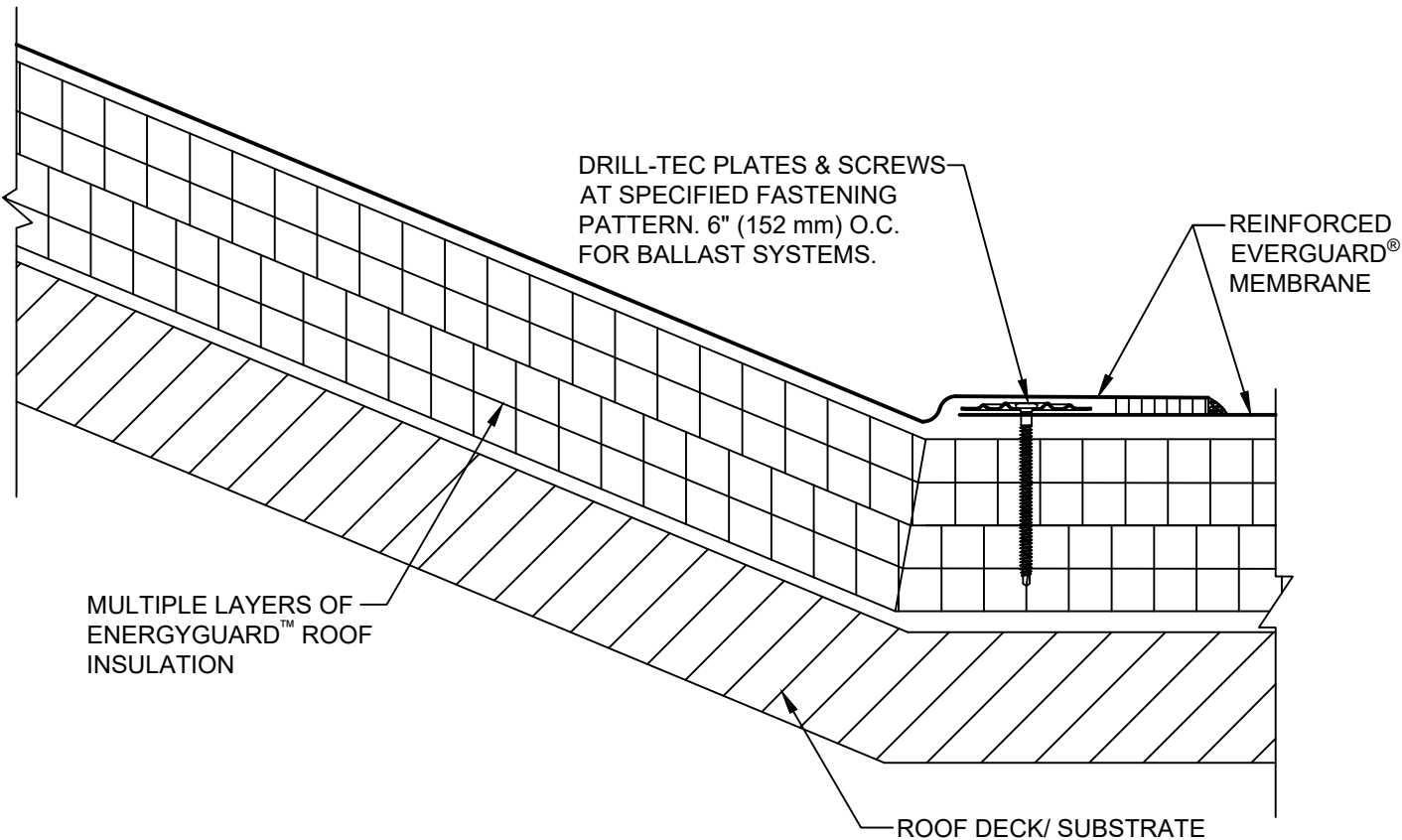
SCALE

FIELD OF ROOF

2/10/2023

3/4" = 1'

111C



NOTE:

1. ANYTHING 1:12 OR GREATER NEEDS TO BE FASTENED AT ANGLE CHANGE.



CHANGE OF DECK PLANE

DRAWING #  
112

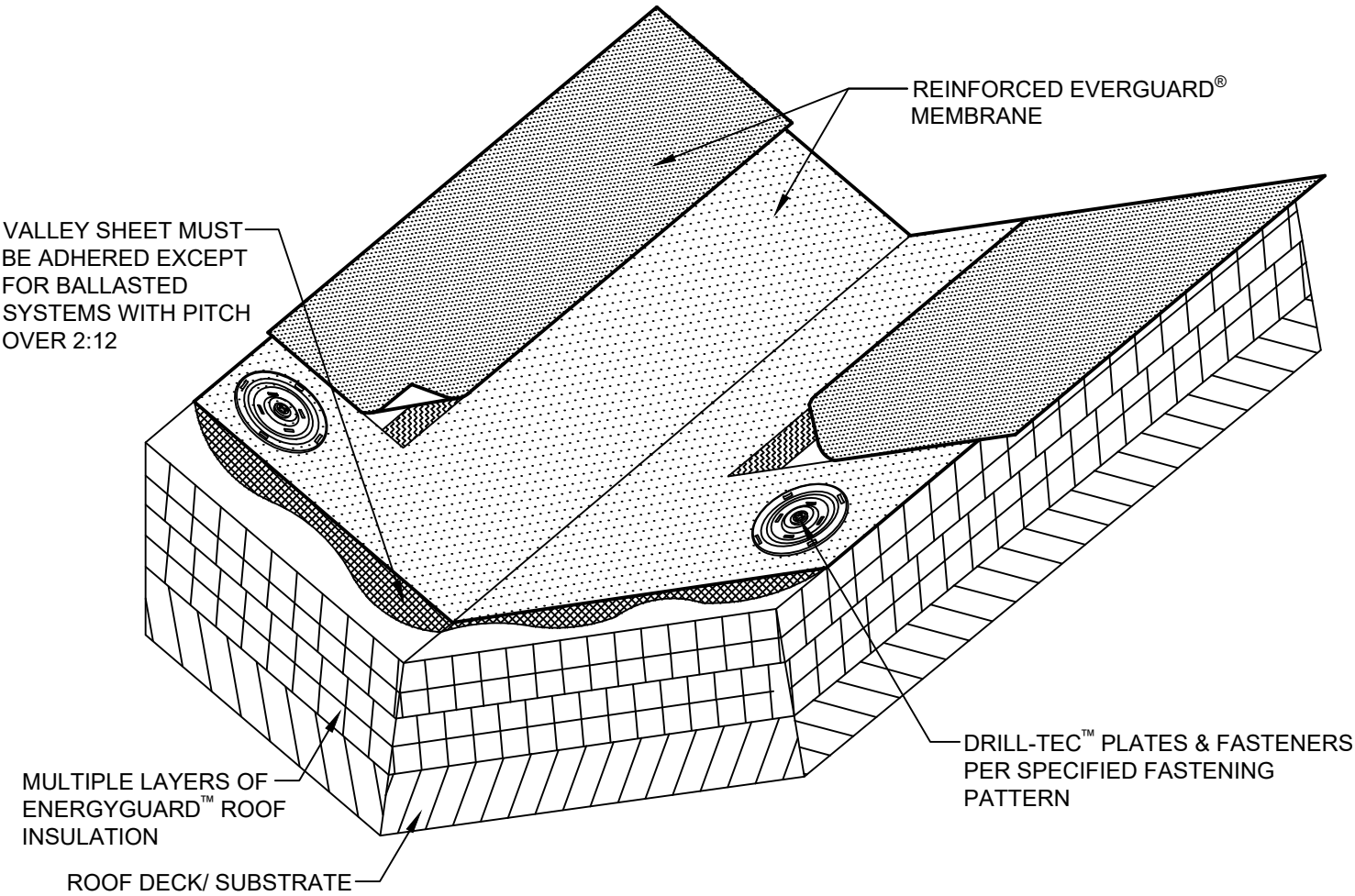
THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/11/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® CUT EDGE SEALANT IF REQUIRED



NOTE:

1. FOR MECHANICALLY ATTACHED SYSTEMS, VALLEYS MUST BE ADHERED USING APPROPRIATE BONDING ADHESIVE.



VALLEY FLASHING

DRAWING #  
113

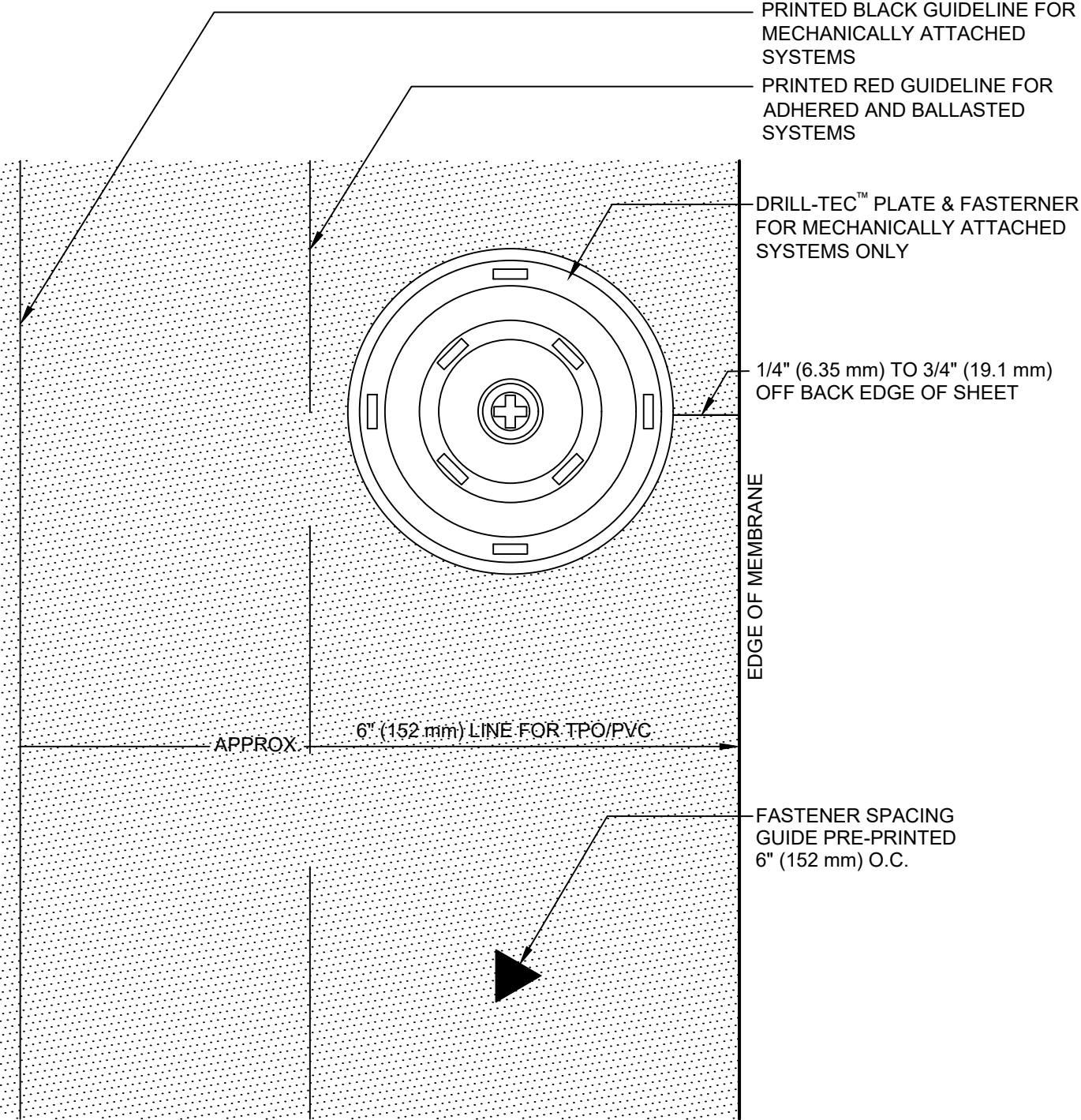
THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/11/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED SEAMS
- EVERGUARD® BONDING ADHESIVE



FASTENER PLACEMENT AT MEMBRANE EDGE

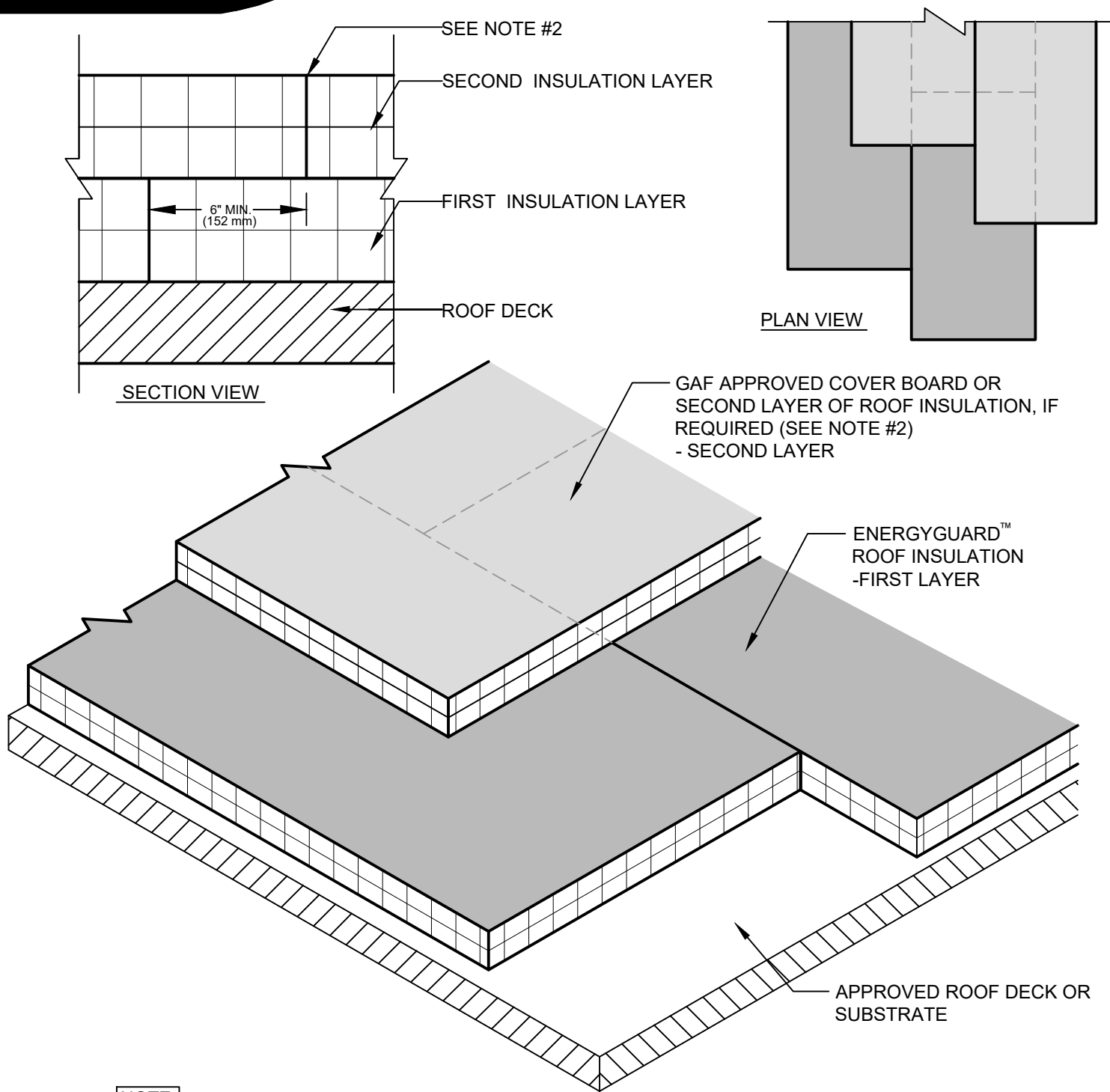
DRAWING #  
116

THIS DETAIL APPLIES TO:  
BALLASTED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND



NOTE:

- 1. REFER TO THE EVERGUARD® SPEC MANUAL FOR DETAILED INSTALLATION REQUIREMENTS.
- 2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.
- 3. INSULATION BOARDS INSTALLED OVER STEEL DECKING MUST HAVE BOARDS PLACED PERPENDICULAR TO DECK FLUTES WITH EDGES OVER FLUTE SURFACE FOR BEARING SUPPORT.



STAGGERED INSULATION BOARD LAYOUT

DRAWING #  
120

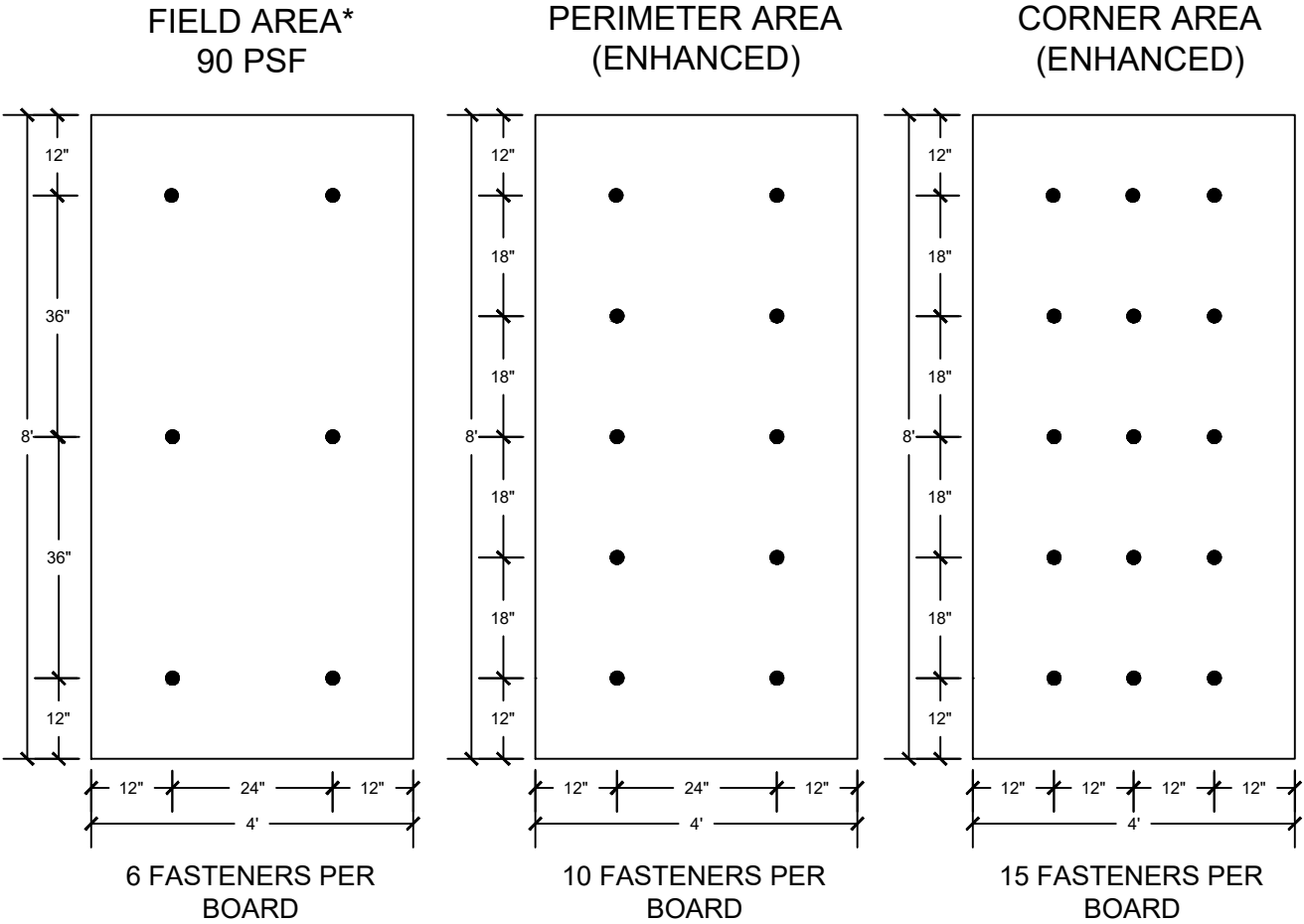
THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/11/20

SCALE  
N.T.S.

LEGEND





NOTE:

- 1. REFERENCE SPECIFIC SYSTEM/INSULATION TYPE AND THICKNESS REQUIREMENTS.
  - 2. DRILL-TEC™ RHINO BOND® ATTACHMENT SYSTEM IS NOT ACCEPTABLE FOR GYPSUM, CEMENTITIOUS WOOD FIBER OR OSB.
  - 3. REFER TO THE RHINO BOND® SPEC MANUAL FOR FASTENER AND DECK REQUIREMENTS.
  - 4. CONSULT FM APPROVALS, ROOFNAV LISTINGS, AND FM DATA SHEETS 1-28 AND 1-29 AT [HTTP://ROOFNAV.COM](http://roofnav.com), FOR DETAILED INSTALLATION REQUIREMENTS AND RECOMMENDATIONS FOR FM APPROVED INSTALLATIONS OR CONTACT TECHNICAL SALES SUPPORT AT 800-766-3411 FOR ASSISTANCE.
- \*THE FIELD OF ROOF ATTACHMENTS ABOVE EQUATE TO FM 1-90 RATINGS

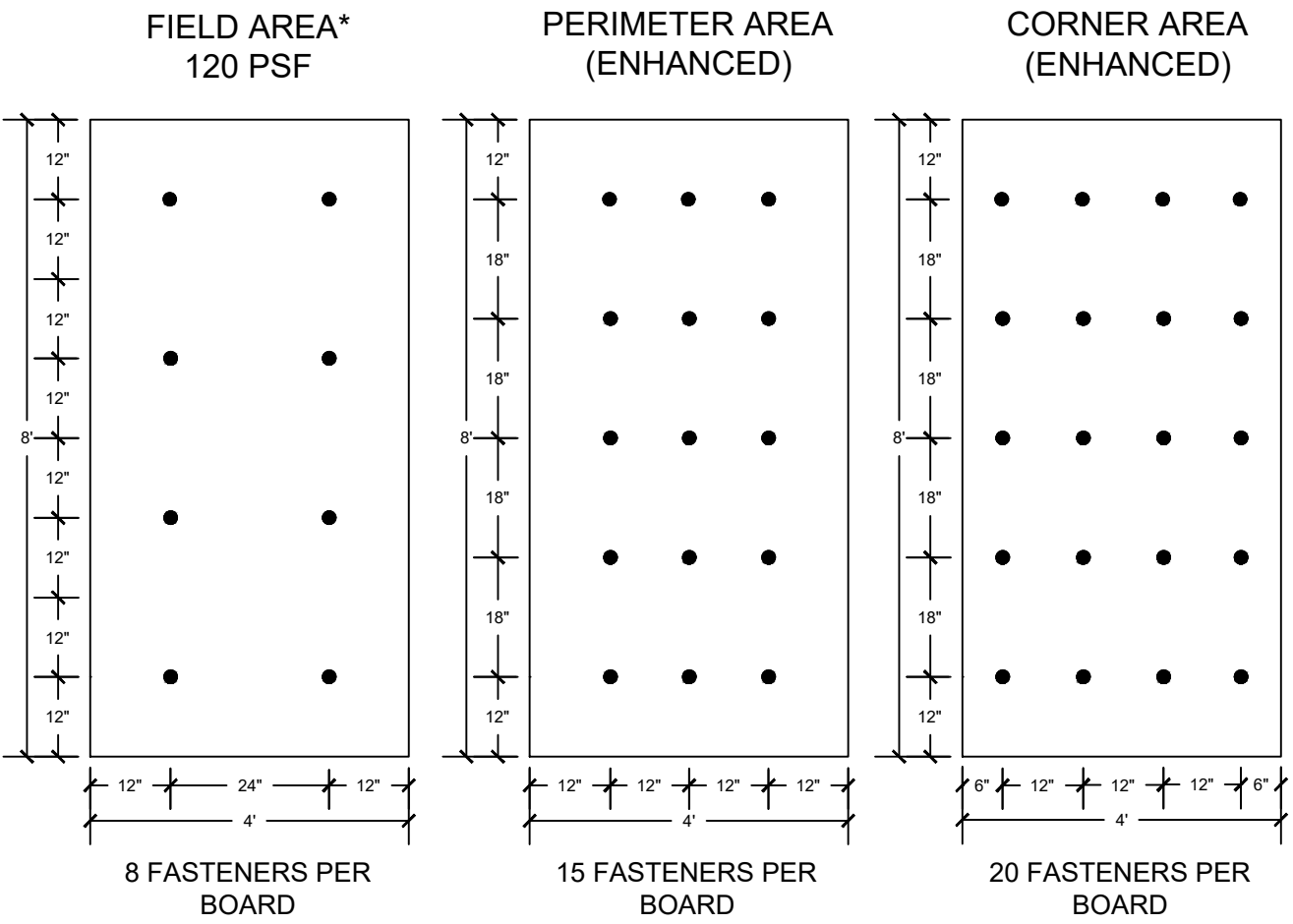


90 PSF FASTENING PATTERN  
- OVER APPROVED STEEL AND CONCRETE DECKS

|           |                         |  |                       |        |
|-----------|-------------------------|--|-----------------------|--------|
| DRAWING # | THIS DETAIL APPLIES TO: |  | ISSUE / REVISION DATE | SCALE  |
| 121       | RHINO BOND® SYSTEMS     |  | 8/17/20               | N.T.S. |

LEGEND

● ● ● FASTENERS



NOTE:

- 1. REFERENCE SPECIFIC SYSTEM/INSULATION TYPE AND THICKNESS REQUIREMENTS.
  - 2. DRILL-TEC™ RHINOBOND® ATTACHMENT SYSTEM IS NOT ACCEPTABLE FOR GYPSUM, CEMENTITIOUS WOOD FIBER OR OSB.
  - 3. REFER TO THE RHINOBOND® SPEC MANUAL FOR FASTENER AND DECK REQUIREMENTS.
  - 4. CONSULT FM APPROVALS, ROOFNAV LISTINGS, AND FM DATA SHEETS 1-28 AND 1-29 AT [HTTP://ROOFNAV.COM](http://roofnav.com), FOR DETAILED INSTALLATION REQUIREMENTS AND RECOMMENDATIONS FOR FM APPROVED INSTALLATIONS OR CONTACT TECHNICAL SALES SUPPORT AT 800-766-3411 FOR ASSISTANCE.
- \*THE FIELD OF ROOF ATTACHMENTS ABOVE EQUATE TO FM 1-120 RATINGS

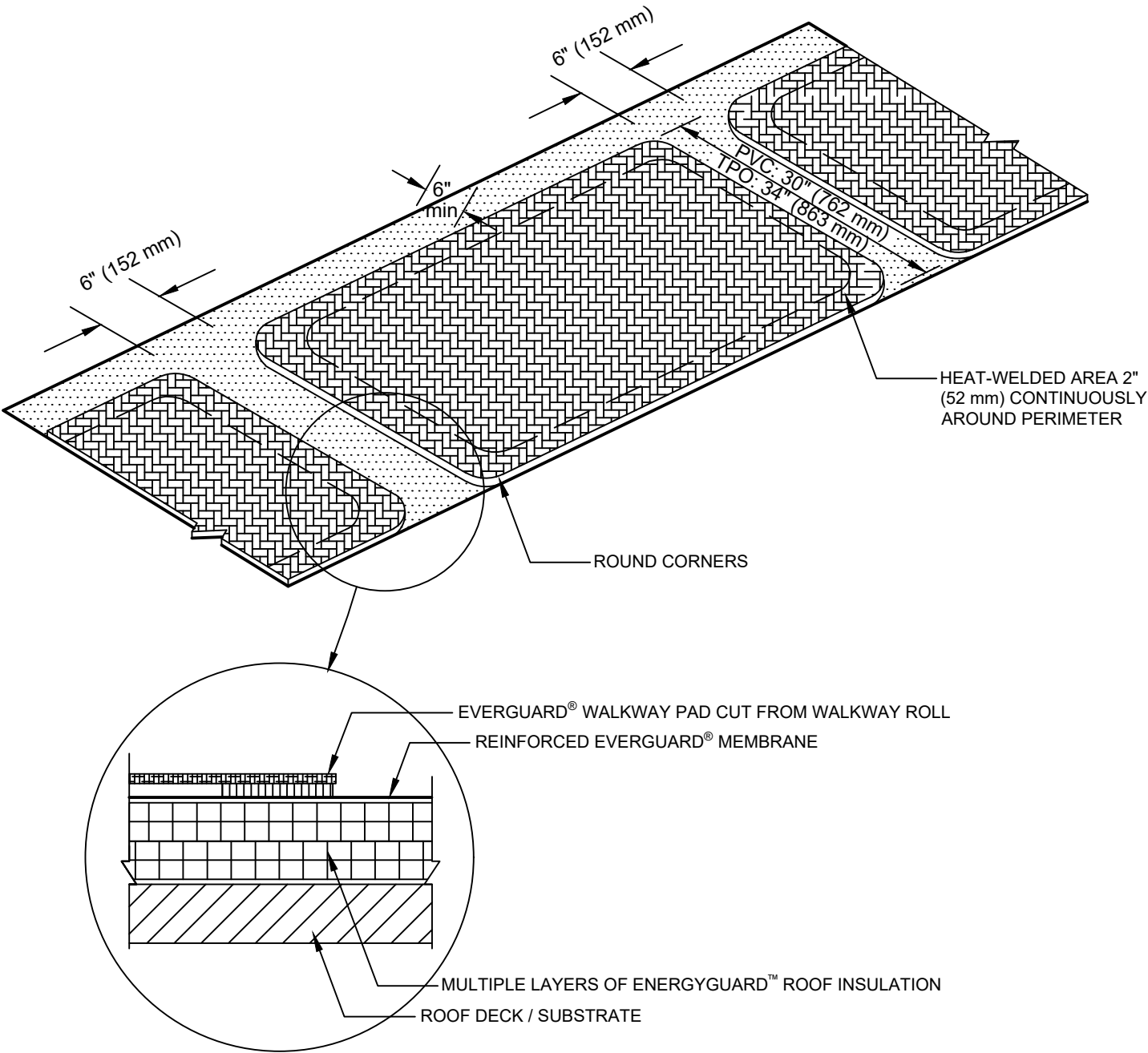


120 PSF FASTENING PATTERN  
- OVER APPROVED STEEL AND CONCRETE DECKS

|           |                         |  |                       |        |
|-----------|-------------------------|--|-----------------------|--------|
| DRAWING # | THIS DETAIL APPLIES TO: |  | ISSUE / REVISION DATE | SCALE  |
| 122       | RHINOBOND® SYSTEMS      |  | 8/17/20               | N.T.S. |

LEGEND

● ● ● FASTENERS



NOTE:

- 1. REMEMBER, DO NOT CROSS SEAMS WITH WALKWAY PADS 6" (152 mm) OFF EACH SEAM.
- 2. HEAT-WELD EDGE OF WALKWAY PADS CONTINUOUSLY.
- 3. REQUIRED AT ALL ROOF ACCESS POINTS.



HEAT-WELDED WALKWAY PADS

DRAWING #  
150

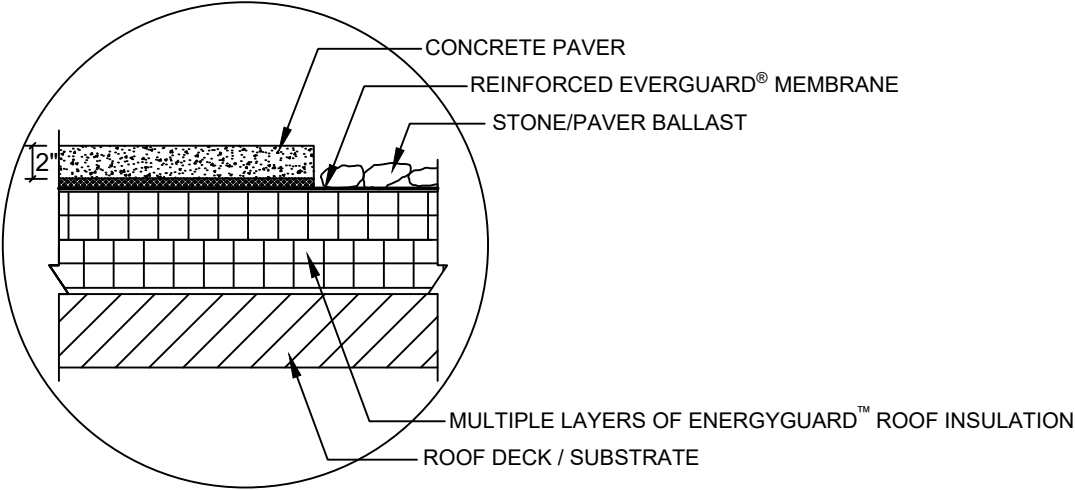
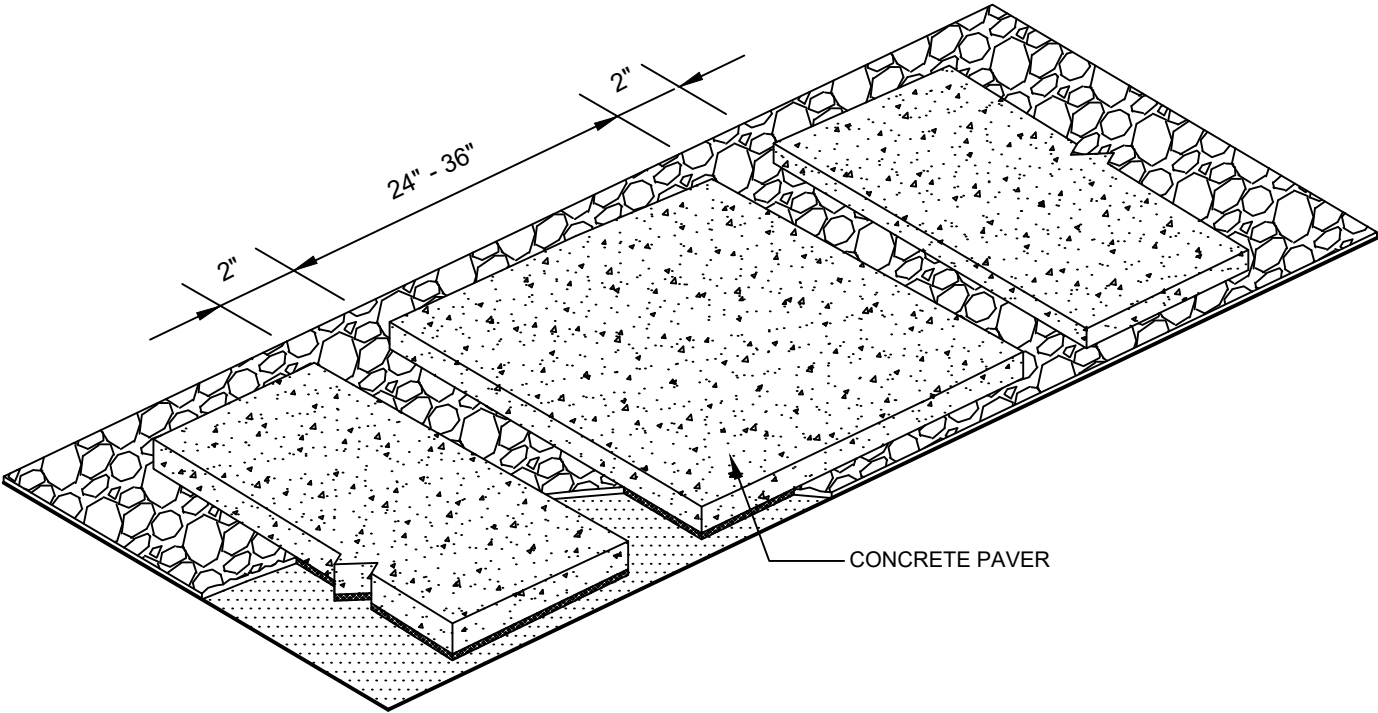
THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
11/11/20

SCALE  
N.T.S.

LEGEND

- WALKWAY PADS
- HEAT-WELDED
- REINFORCED EVERGUARD® MEMBRANE



NOTE:

- 1. REMEMBER: DO NOT CROSS SEAMS WITH CONCRETE PAVER OR EVERGUARD® POLY CUSHIONING SHEET.
- 2. GUARANTEE INSPECTION TO BE MADE BEFORE BALLAST IS BROADCAST AROUND ROOF.



PAVER WALKWAY PADS

DRAWING #  
151

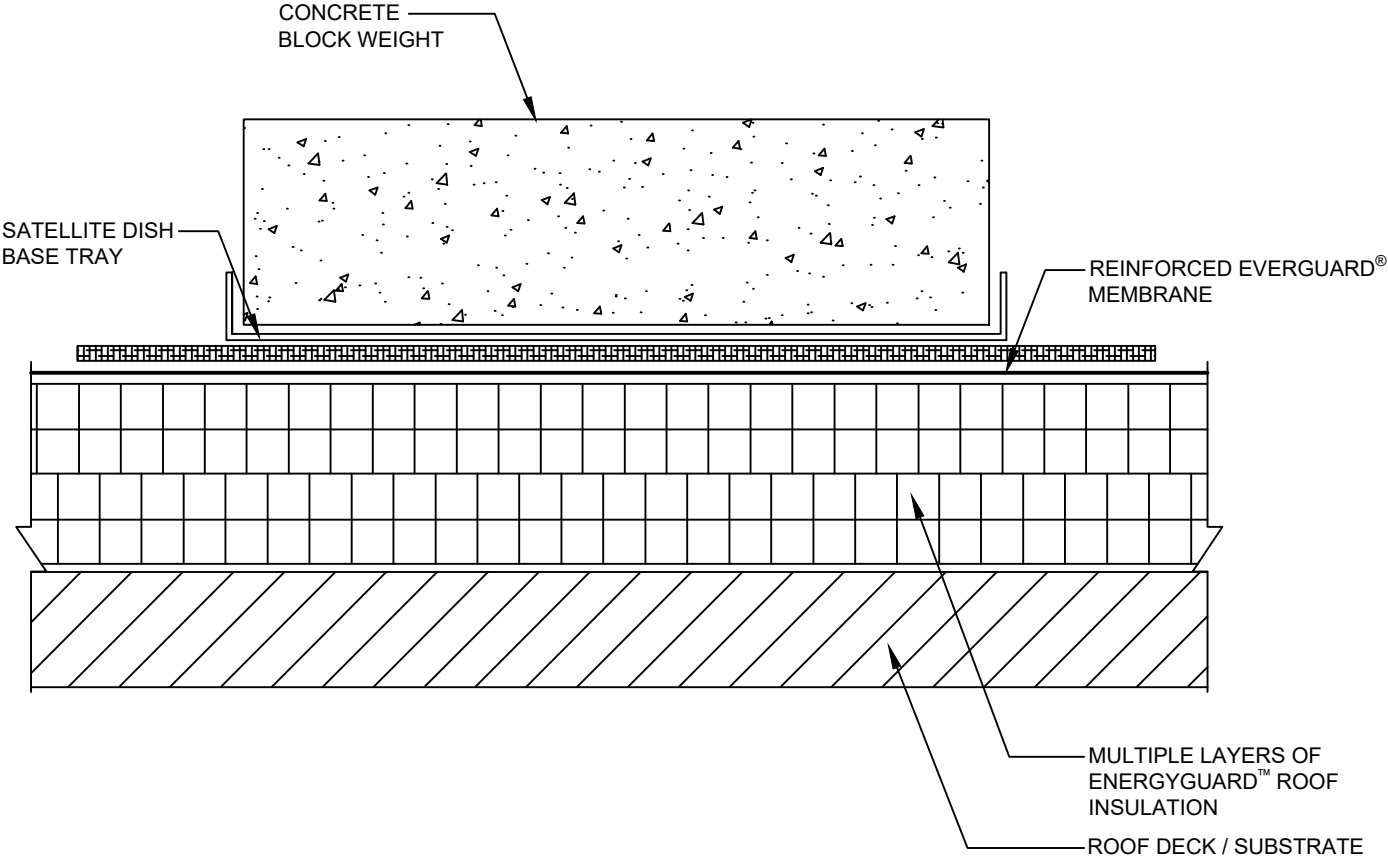
THIS DETAIL APPLIES TO:  
BALLASTED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- STONE/PAVER BALLAST
- EVERGUARD® POLY CUSHIONING LAYER (IF BALLAST ROCK IS RE-USED)
- REINFORCED EVERGUARD® MEMBRANE



SATELLITE DISH MOUNTING

DRAWING #  
155

THIS DETAIL APPLIES TO:  
ALL SYSTEMS

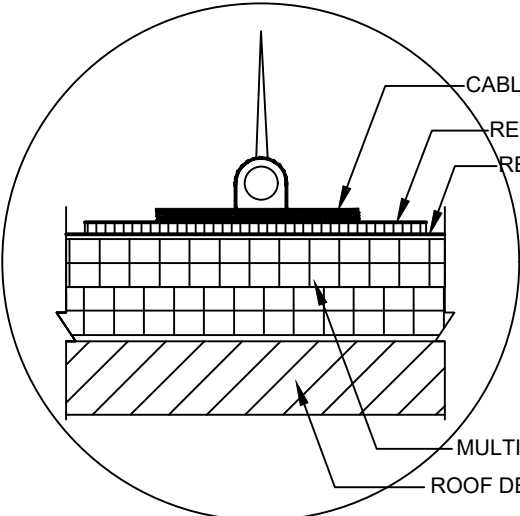
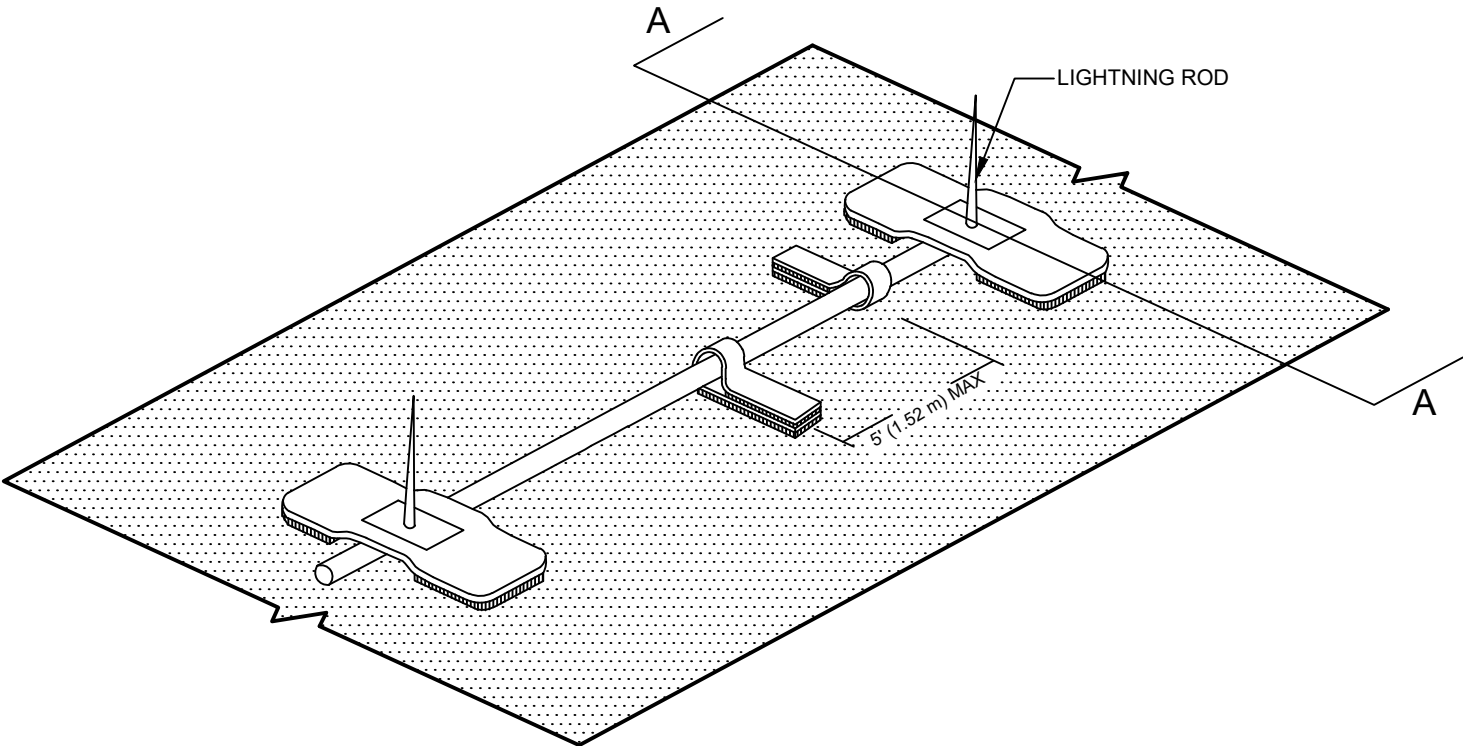
ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

 EVERGUARD® WALKWAY PAD

DETAIL IS NOT GUARANTEED



SECTION A

LIGHTNING PROTECTION TERMINAL  
- ROOF MOUNT DETAIL

DRAWING #  
160

THIS DETAIL APPLIES TO:  
ALL SYSTEMS

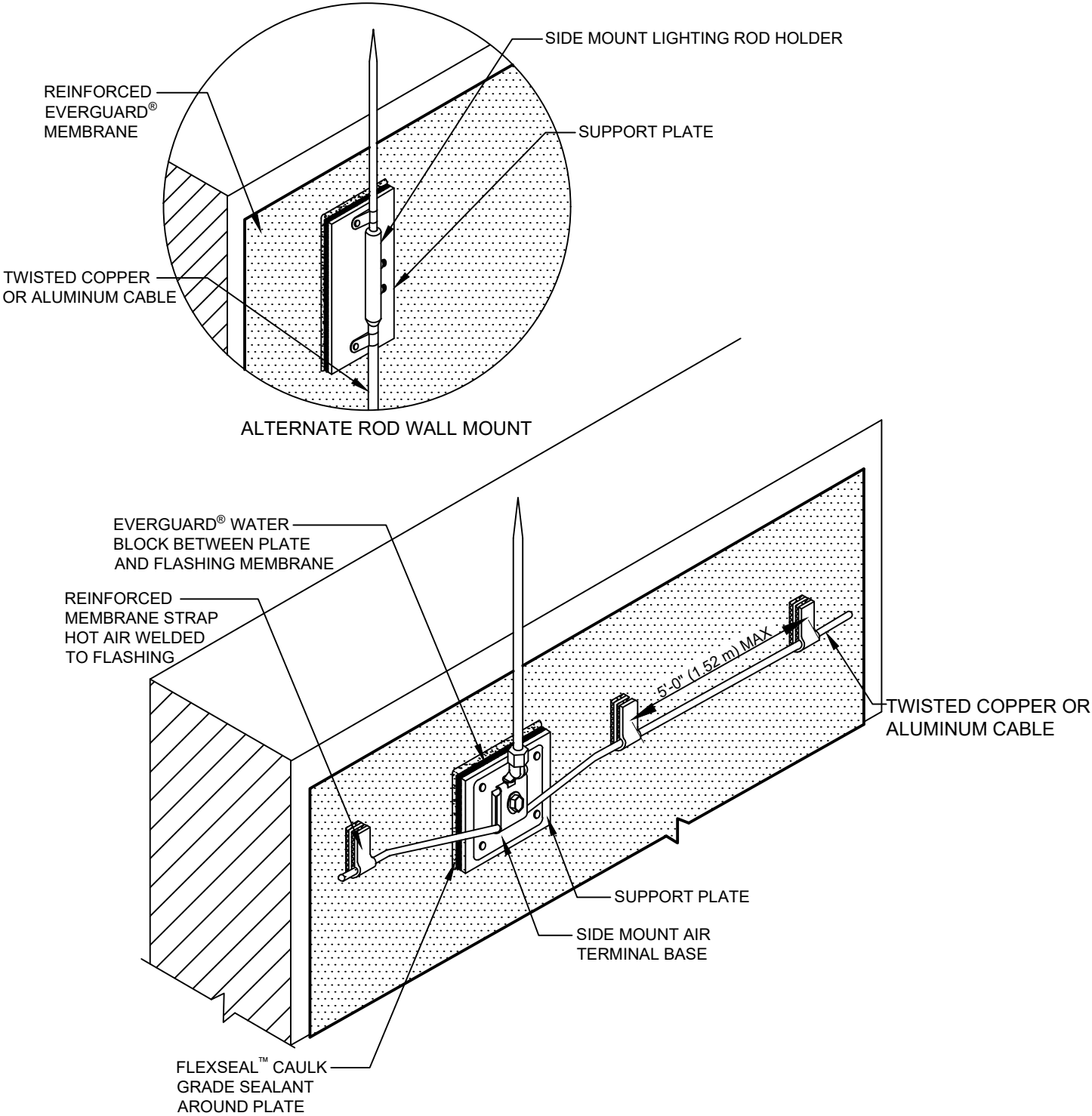
ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED
- REINFORCED EVERGUARD® MEMBRANE

DETAIL IS NOT GUARANTEED



LIGHTNING PROTECTION TERMINAL  
- WALL MOUNT DETAIL

DRAWING #  
**161**

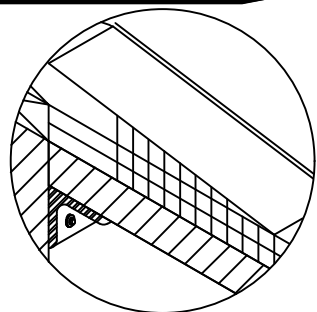
THIS DETAIL APPLIES TO:  
**ALL SYSTEMS**

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
**N.T.S.**

LEGEND

- FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® WATER BLOCK BETWEEN PLATE AND FLASHING MEMBRANE
- REINFORCED EVERGUARD® MEMBRANE



FOR ALTERNATE TAPERED ROOF  
EDGE, USE ENERGYGUARD™  
TAPERED INSULATION

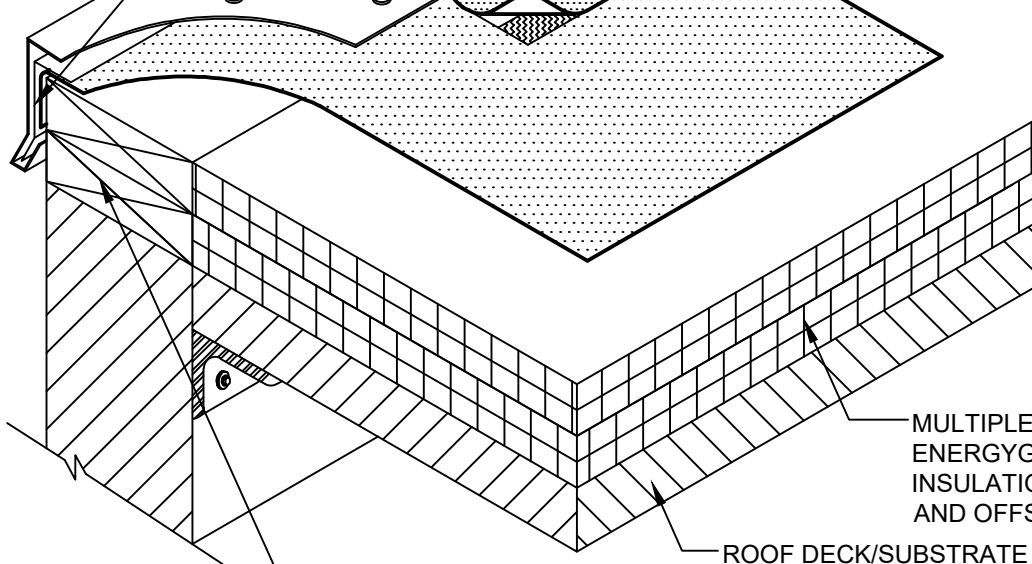
22-GAUGE CONTINUOUS  
HOOK STRIP SECURED WITH  
DRILL-TEC™ FASTENERS @  
12" (305 mm) O.C.

RING SHANK GALVANIZED NAIL @ 4" (102 mm) O.C.  
STAGGERED OR DRILL-TEC™ FASTENERS 12" (305 mm) O.C.  
2" (52 mm) MINIMUM FROM OUTSIDE EDGE OF METAL.

EVERGUARD® COATED METAL EDGE

EVERGUARD® TPO UTILITY FLASHING MEMBRANE  
(TPO ONLY) OR MIN. 8" (203 mm) WIDE  
REINFORCED EVERGUARD® MEMBRANE

REINFORCED EVERGUARD® MEMBRANE  
(PERIMETER SHEET IF REQUIRED)



MULTIPLE LAYERS OF  
ENERGYGUARD™ ROOF  
INSULATION, STAGGERED  
AND OFFSET

ROOF DECK/SUBSTRATE

WOOD NAILER, 5/4" (31.8 mm) x 4" (102 mm)  
MIN. SECURED TO DECK

## NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. 25-YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
3. FOR HEAT-WELDING LAPS, USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND (50.8 mm) WELD WITH HAND WELDER.
4. DO NOT OVERLAP ENDS OF FLASHING STRIP/COVER TAPE.

# GAF

## COATED METAL ROOF EDGE

DRAWING #  
**201B**

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
BALLASTED SYSTEMS  
RHINO-BOND® SYSTEMS  
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

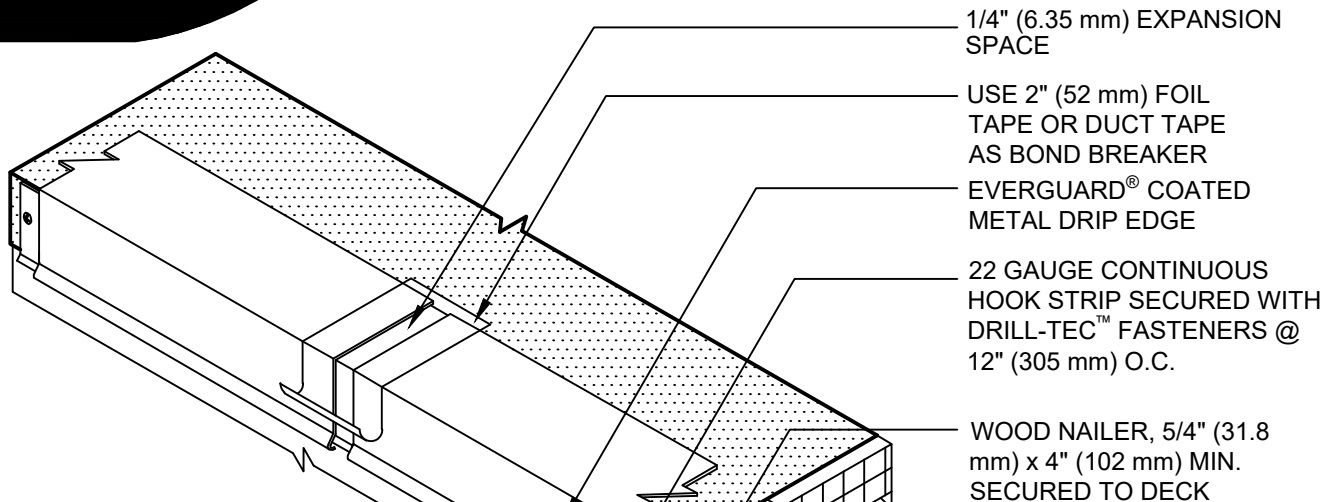
## LEGEND

HEAT-WELDED

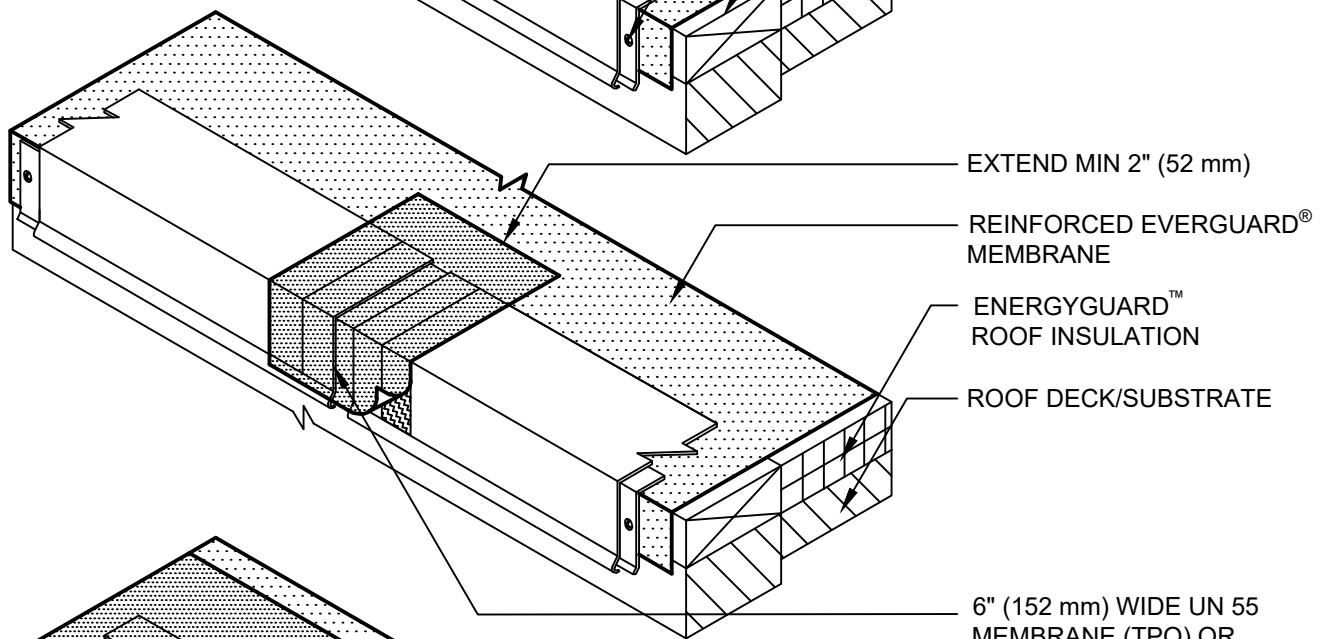


# SINGLE-PLY: TPO & PVC

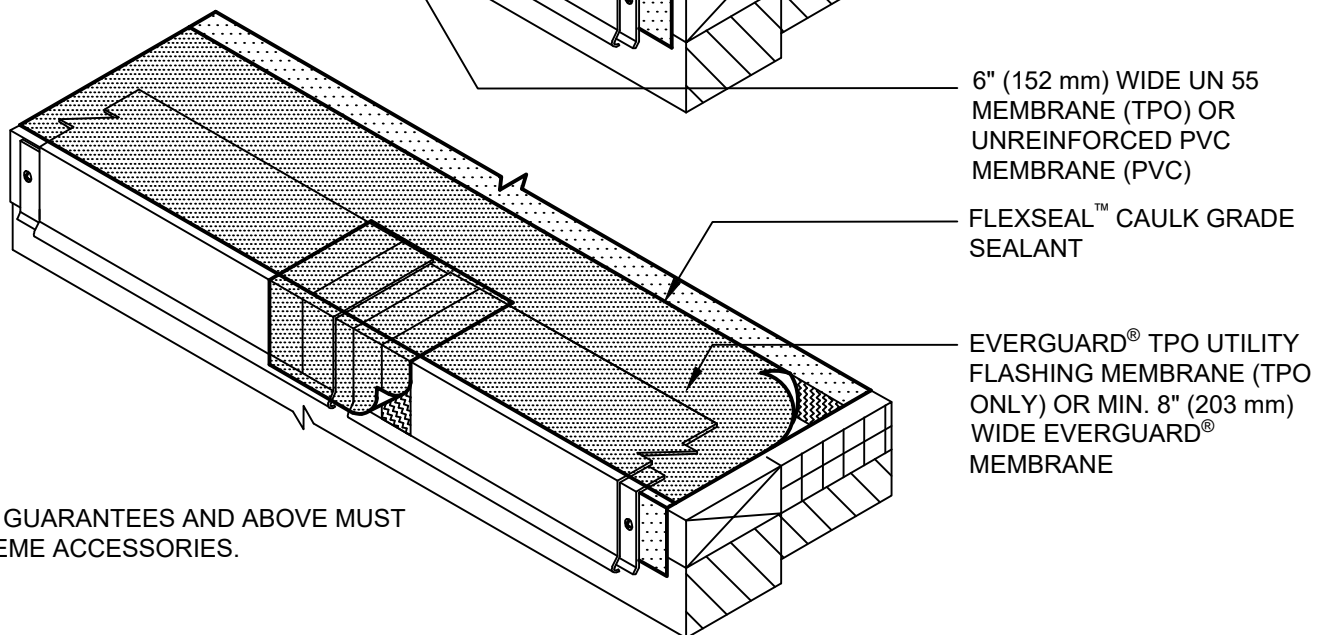
STEP 1.



STEP 2.



STEP 3.



## NOTE:

1. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

**GAF**

## COATED METAL JOINT DETAIL

DRAWING #  
**204**

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

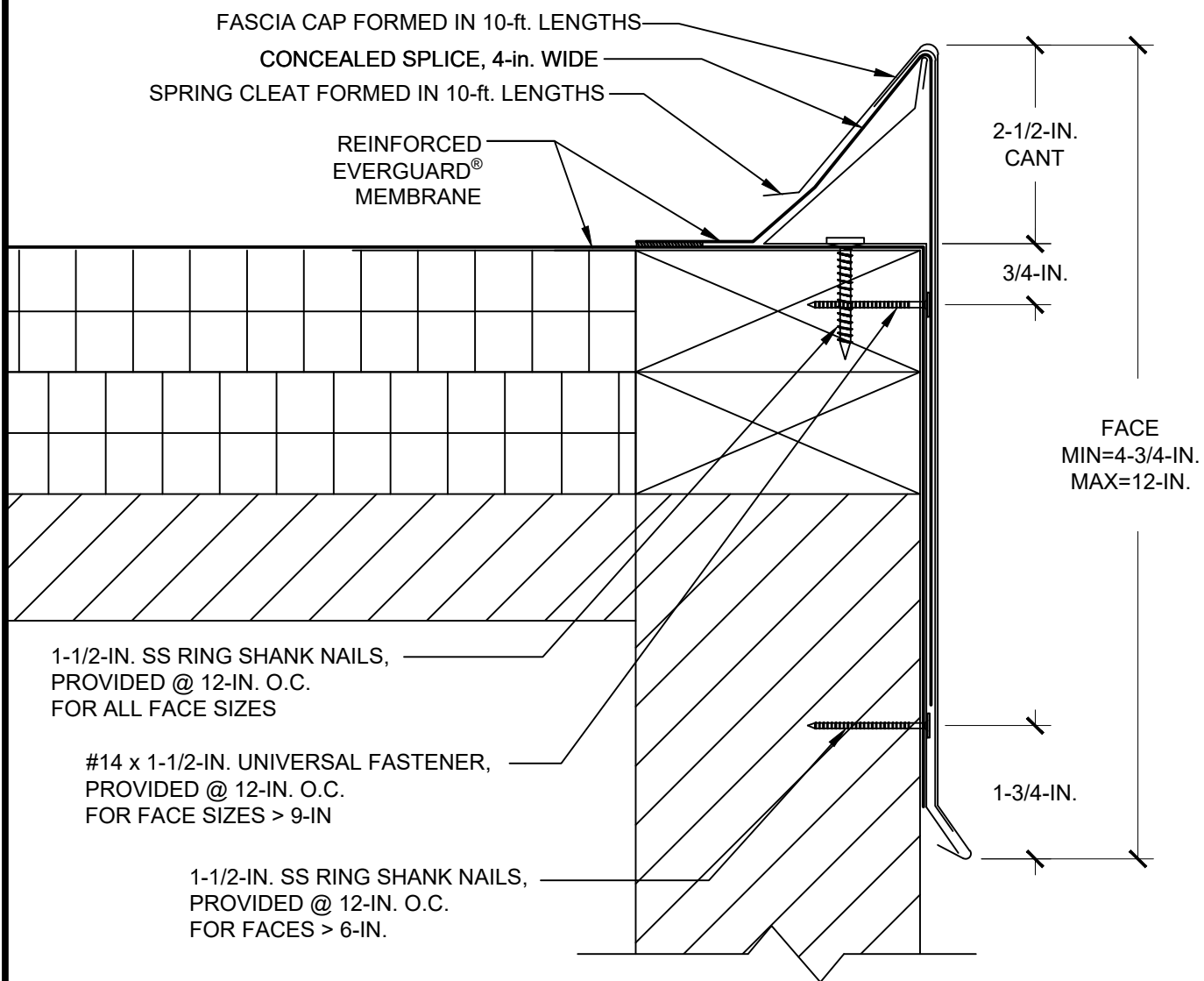
## LEGEND

 HEAT-WELDED

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 117 PSF (HORIZONTAL)

| METAL TYPE      | MAXIMUM FRONT FACE HEIGHT (in.) | CLEAT (ga.) | PERIMETER PRESSURE (psf) |          | CORNER PRESSURE (psf) |          |
|-----------------|---------------------------------|-------------|--------------------------|----------|-----------------------|----------|
|                 |                                 |             | HORIZONTAL               | VERTICAL | HORIZONTAL            | VERTICAL |
| 0.050" ALUMINUM | 6                               | 24          | 73                       | N/A      | 73                    | N/A      |
| 0.050" ALUMINUM | 9                               | 22          | 87                       | N/A      | 91                    | N/A      |
| 0.050" ALUMINUM | 12                              | 22          | 116                      | N/A      | 109                   | N/A      |
| 24 GA. STEEL    | 6                               | 24          | 87                       | N/A      | 91                    | N/A      |
| 24 GA. STEEL    | 9                               | 22          | 102                      | N/A      | 91                    | N/A      |
| 24 GA. STEEL    | 12                              | 22          | 102                      | N/A      | 91                    | N/A      |



## NOTE:

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF**

## SNAP-ON FASCIA

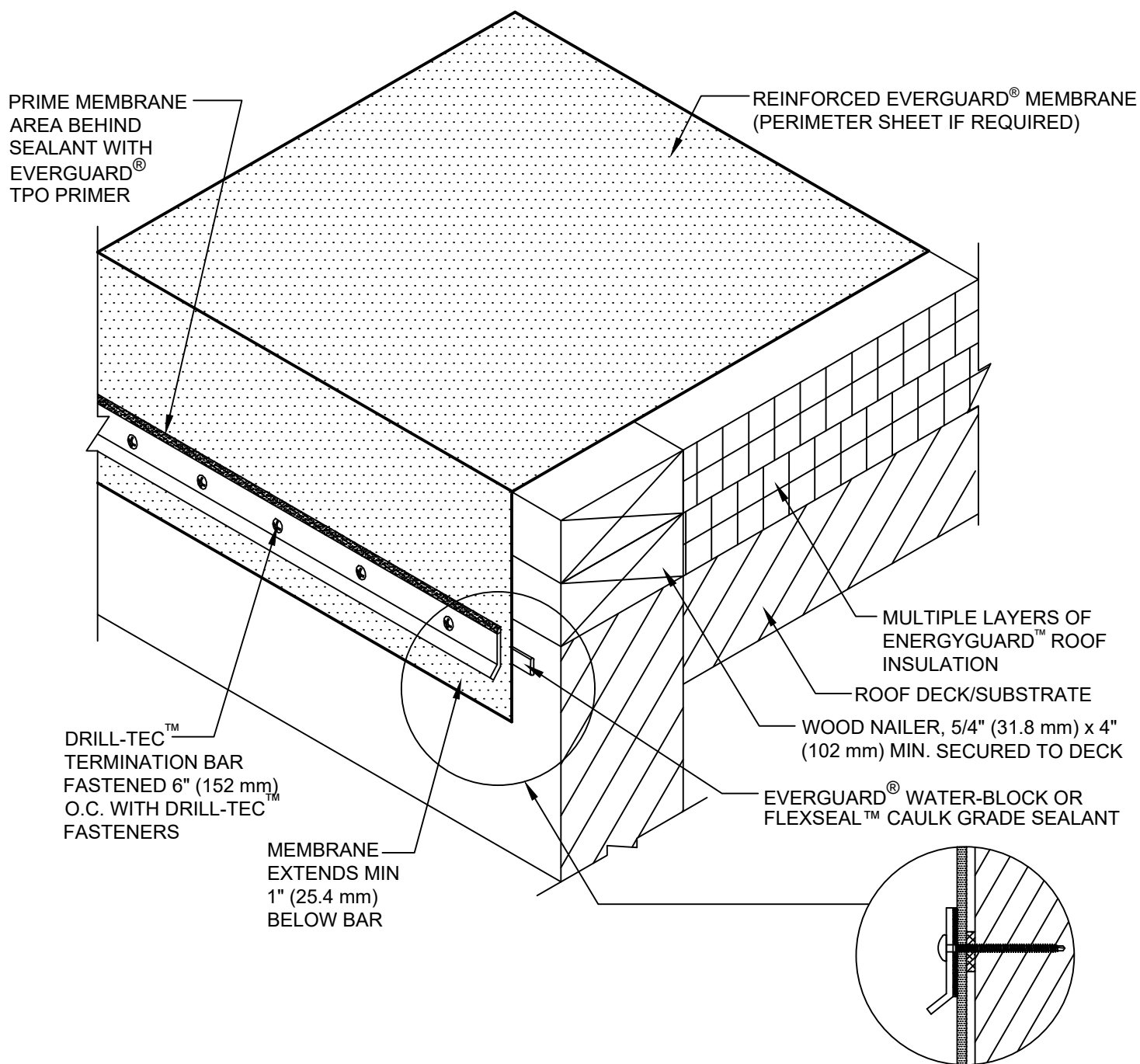
DRAWING #  
**206**

THIS DETAIL APPLIES TO:  
**ALL SYSTEMS**

ISSUE / REVISION DATE  
**8/17/20**

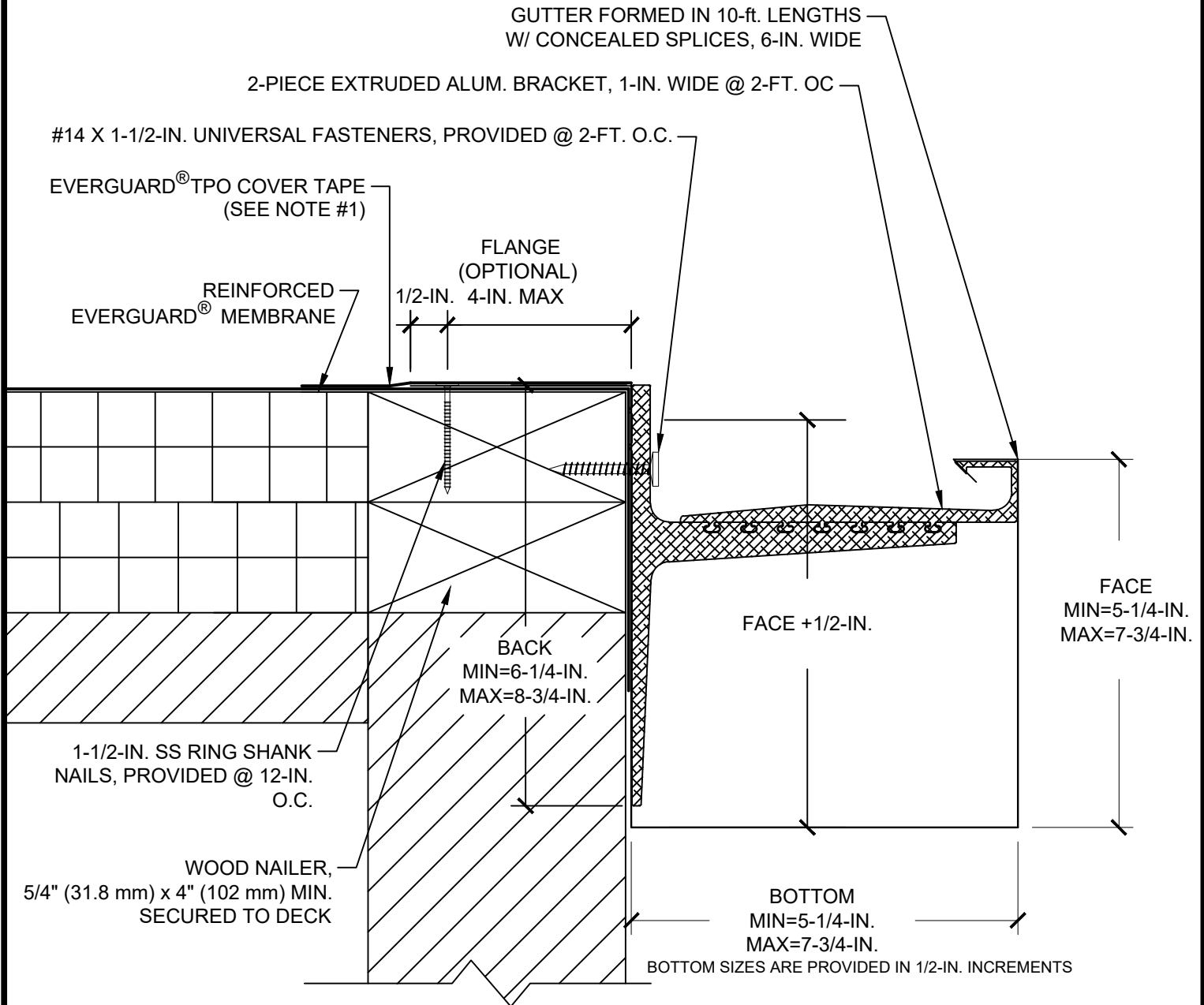
SCALE  
**N.T.S.**

## LEGEND

**GAF****MEMBRANE AT ROOF EDGE WITH TERMINATION BAR**DRAWING #  
**208**THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RIVET/BOND SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMSISSUE / REVISION DATE  
**8/24/20**SCALE  
N.T.S.**LEGEND** FLEXSEAL™ CAULK GRADE SEALANT

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 136 PSF(VERTICAL) , AND 223 PSF (HORIZONTAL)



## NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
3. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
4. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.
5. SEE DETAIL 213A OR 218 FOR COVER TAPE APPLICATIONS.

**GAF**

## WR BOX GUTTER

DRAWING #  
**210A**

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

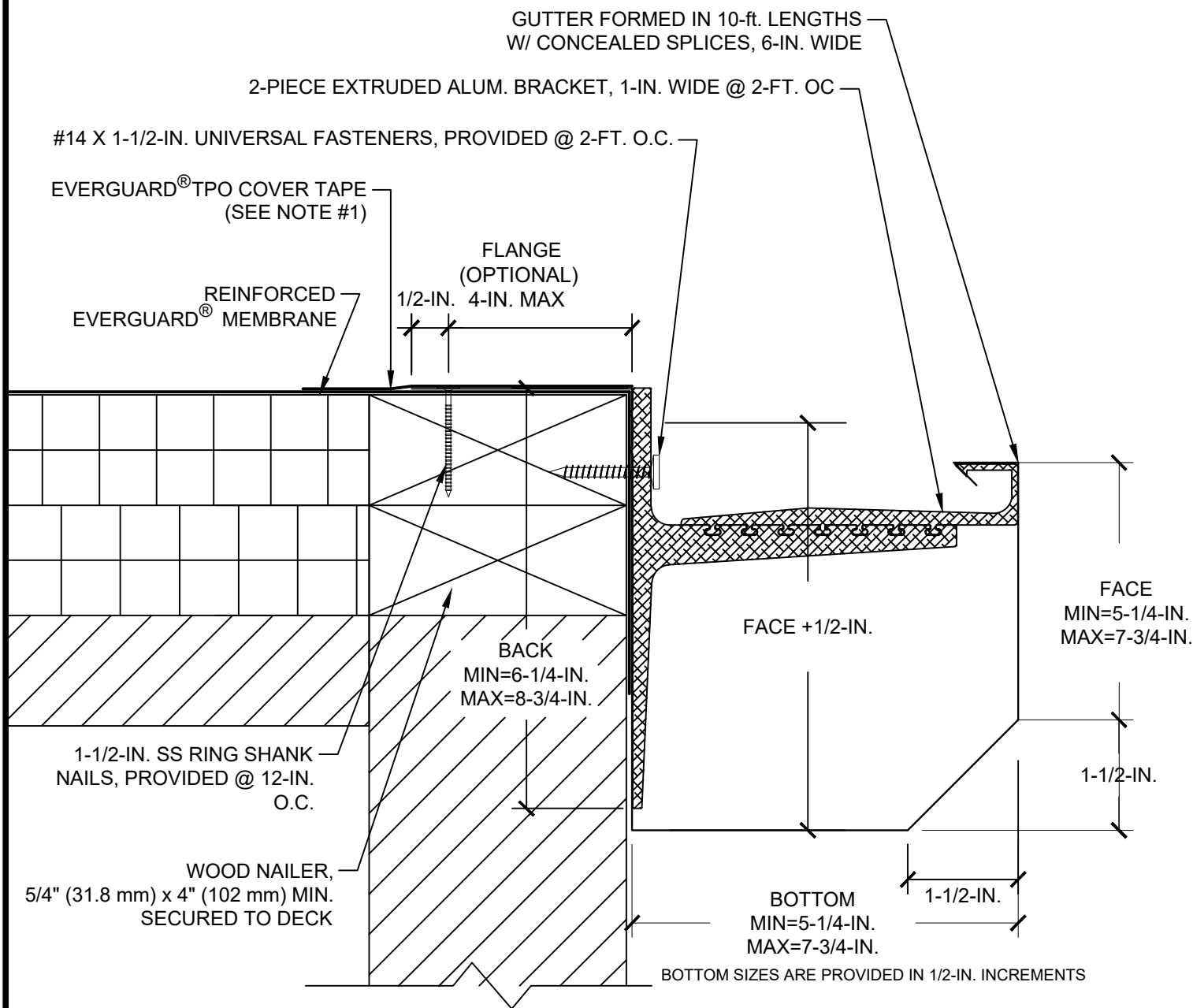
ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

## LEGEND

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 136 PSF(VERTICAL) , AND 223 PSF (HORIZONTAL)



## NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
3. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
4. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.
5. SEE DETAIL 213A OR 218 FOR COVER TAPE APPLICATIONS.

**GAF**

## WR CHAMFER GUTTER

DRAWING #  
**210B**

THIS DETAIL APPLIES TO:  
**ALL SYSTEMS**

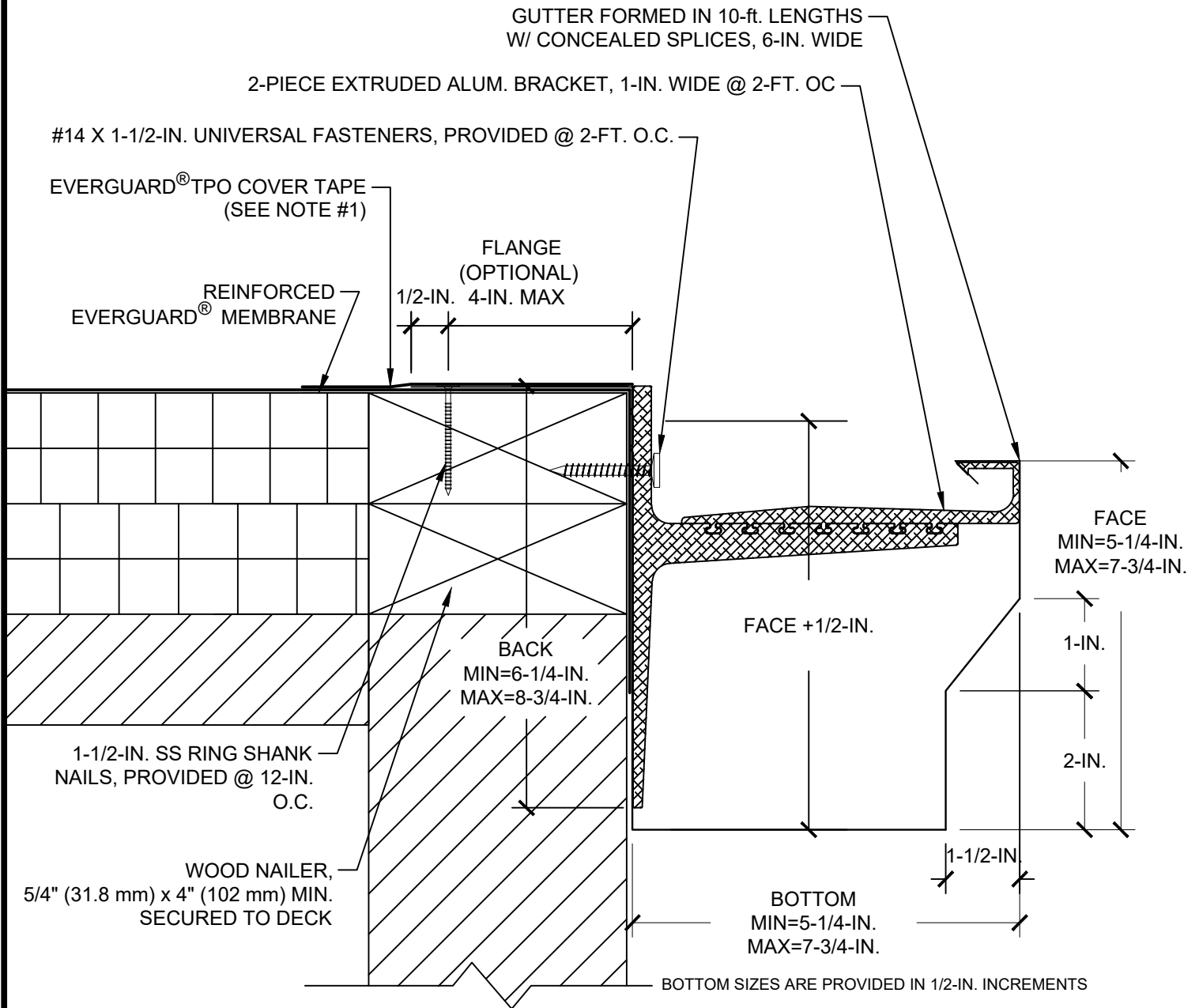
ISSUE / REVISION DATE  
**8/17/20**

SCALE  
**N.T.S.**

## LEGEND

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 136 PSF(VERTICAL) , AND 223 PSF (HORIZONTAL)



## NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
3. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
4. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.
5. SEE DETAIL 213A OR 218 FOR COVER TAPE APPLICATIONS.

**GAF**

## WR OFFSET GUTTER

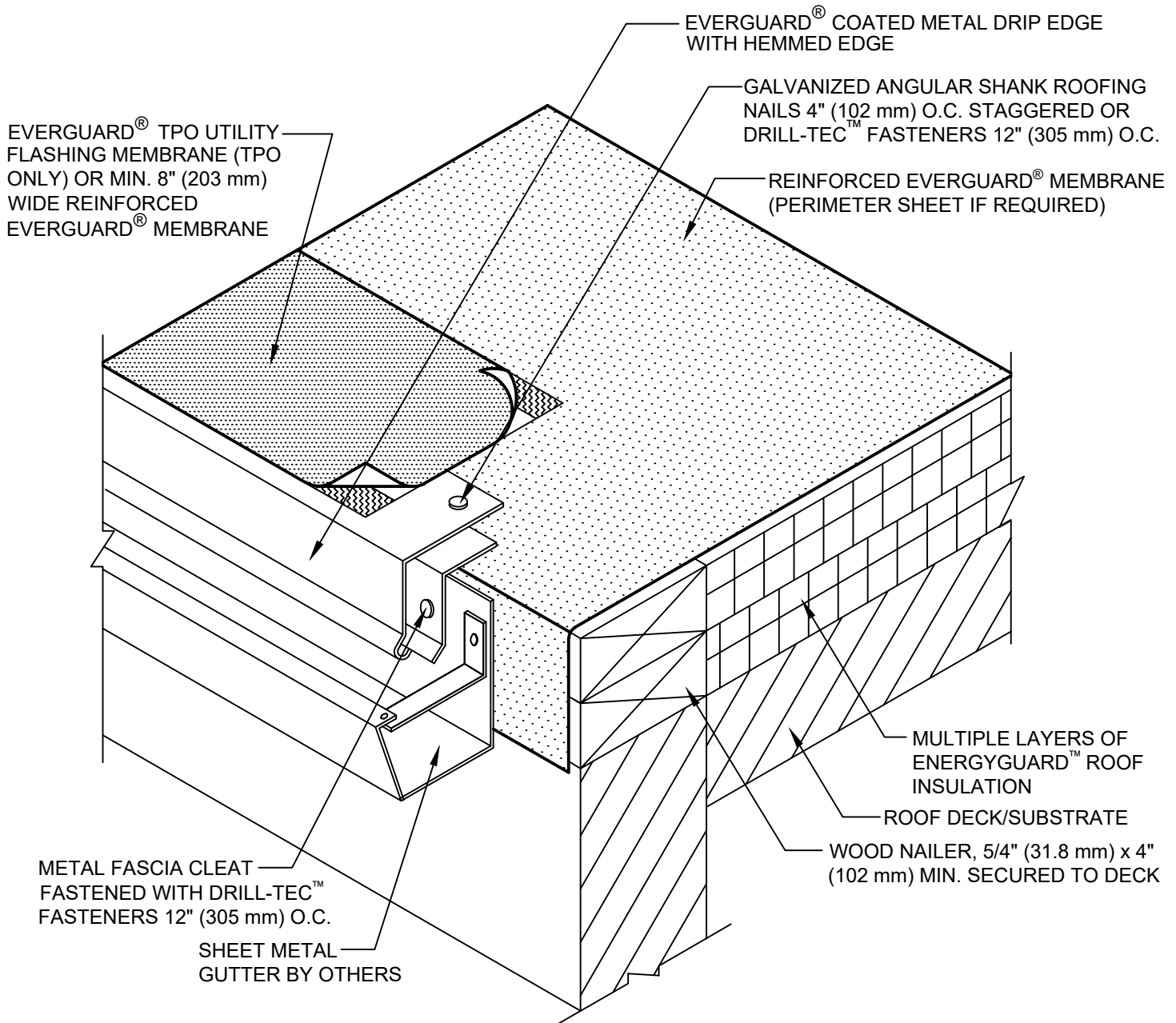
DRAWING #  
**210C**

THIS DETAIL APPLIES TO:  
**ALL SYSTEMS**

ISSUE / REVISION DATE  
**8/17/20**

SCALE  
**N.T.S.**

## LEGEND



**NOTE:**

1. REFER TO EVERGUARD® DETAIL 204 FOR COATED METAL JOINTS.
2. A CONTINUOUS METAL CLEAT IS REQUIRED.
3. 25-YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
4. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.

**GAF**

**GUTTER WITH COATED METAL EDGE DETAIL**


DRAWING #  
**211A**

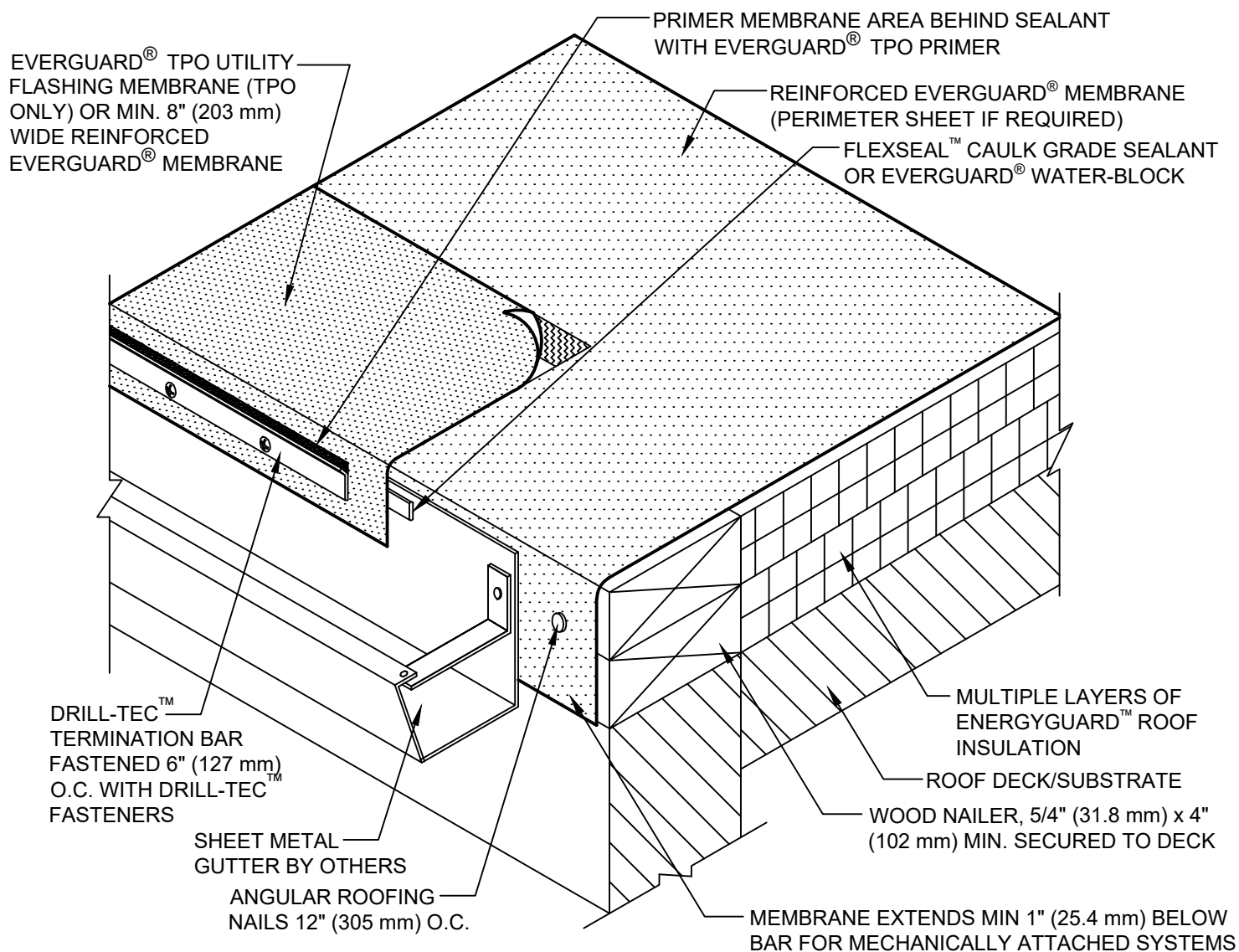
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RYNOCBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

**LEGEND**

 HEAT-WELDED LAP

**NOTE:**

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. EDGE OF MEMBRANE SHOULD NOT TERMINATE BELOW GUTTER EDGES.
3. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.

**GAF**

## GUTTER WITH TERMINATION BAR - NEW INSTALLATION

DRAWING #

**212**

THIS DETAIL APPLIES TO:

ADHERED SYSTEMS  
 RIVINBOND® SYSTEMS  
 SELF-ADHERED SYSTEMS  
 MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE

**8/24/20**

SCALE

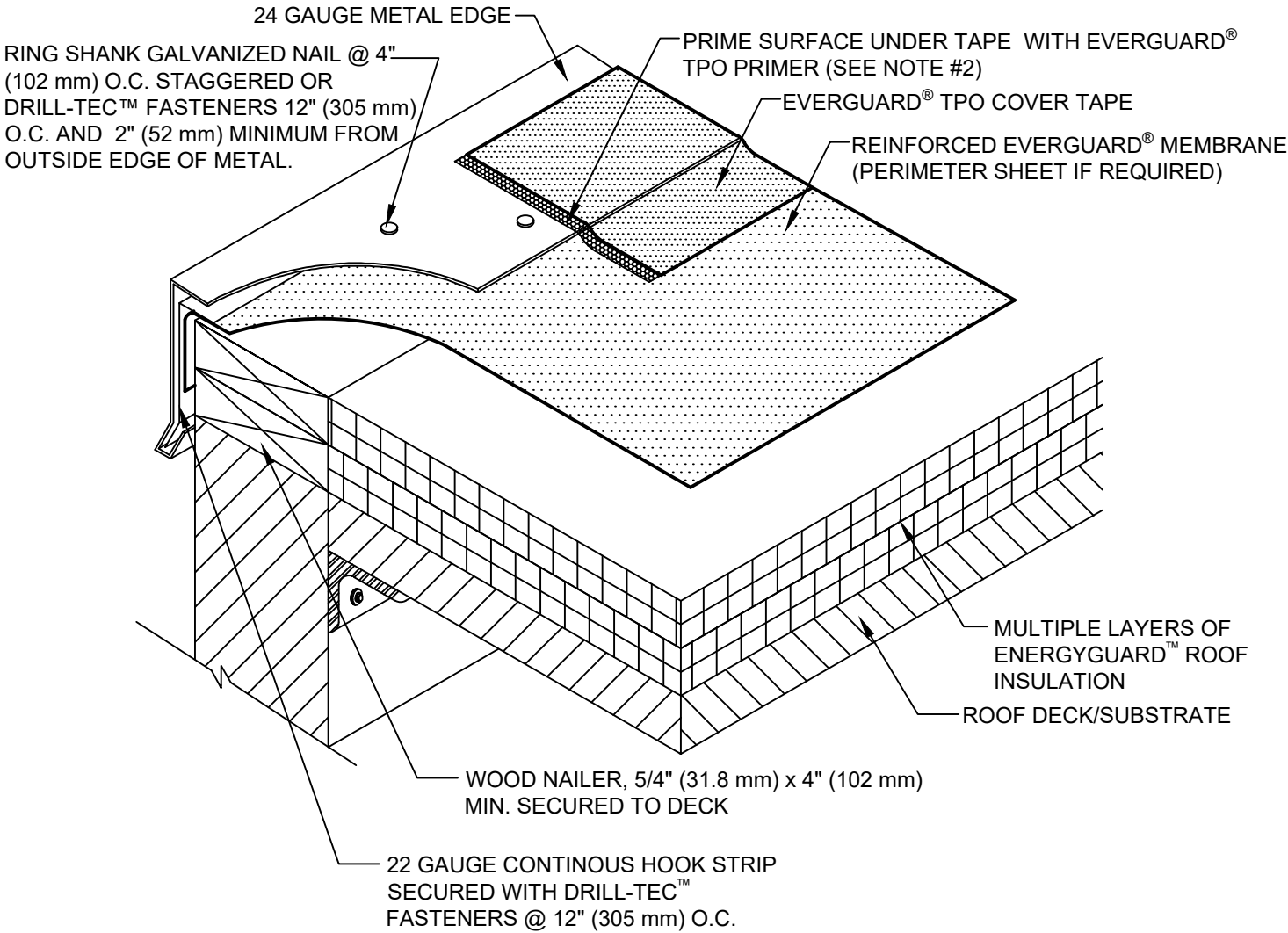
N.T.S.

**LEGEND**

HEAT-WELDED

FLEXSEAL™ CAULK-GRADE SEALANT





NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.
- 4. DO NOT OVERLAP ENDS OF FLASHING STRIP/COVER TAPE.



COVER TAPE AT ROOF EDGE DETAIL

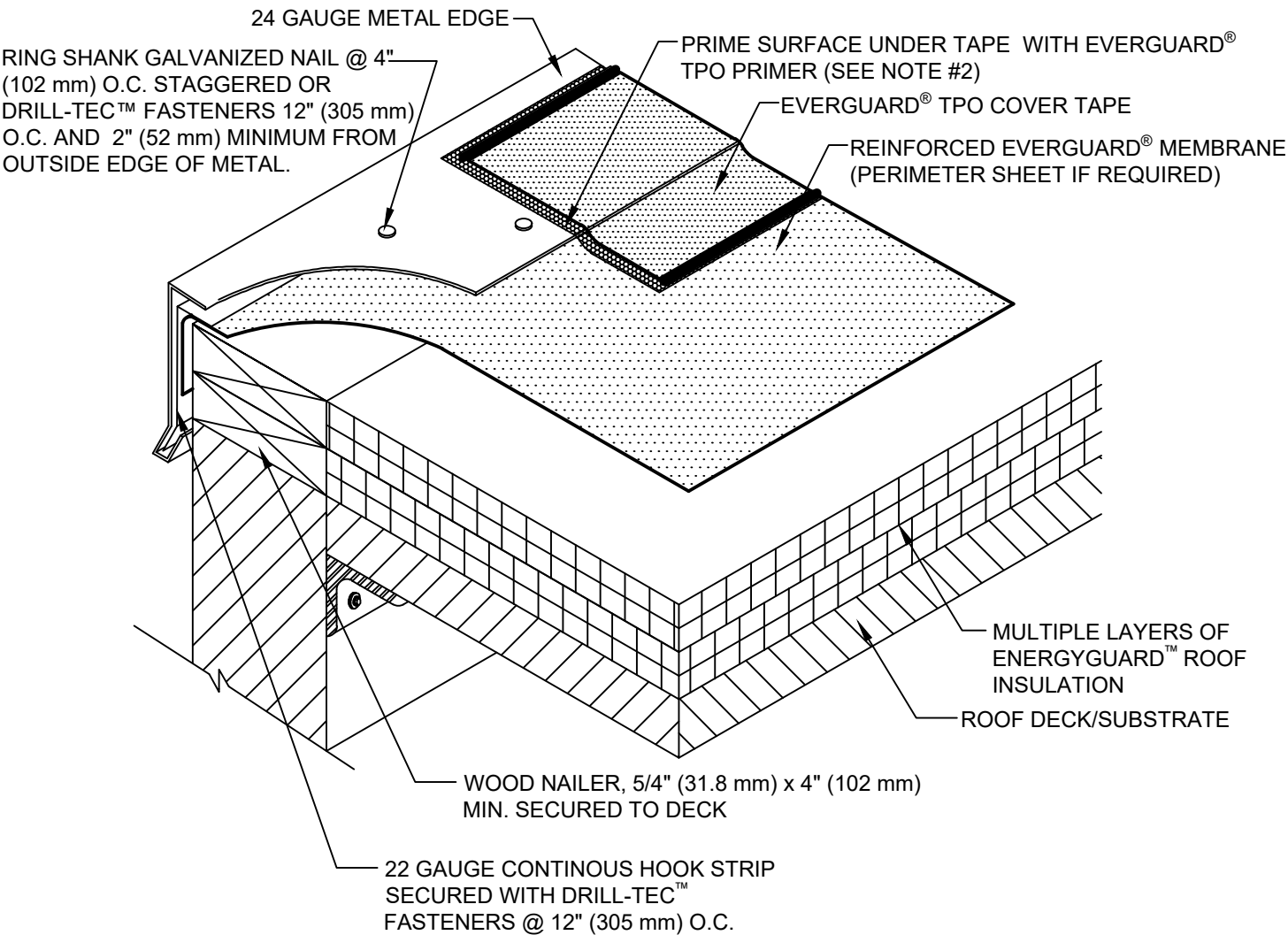
DRAWING #  
**213A**

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RIVET-BOND SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

LEGEND



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.
- 4. FLEXSEAL™ CAULK GRADE SEALANT SHOULD BE FEATHERED OUT AND APPLIED TO BOTH INSIDE AND OUTSIDE EDGES. ENSURE PRIMER EXTENDS UNDER FLEXSEAL™ CAULK GRADE SEALANT.



COVER TAPE AT ROOF EDGE DETAIL

DRAWING #  
213B

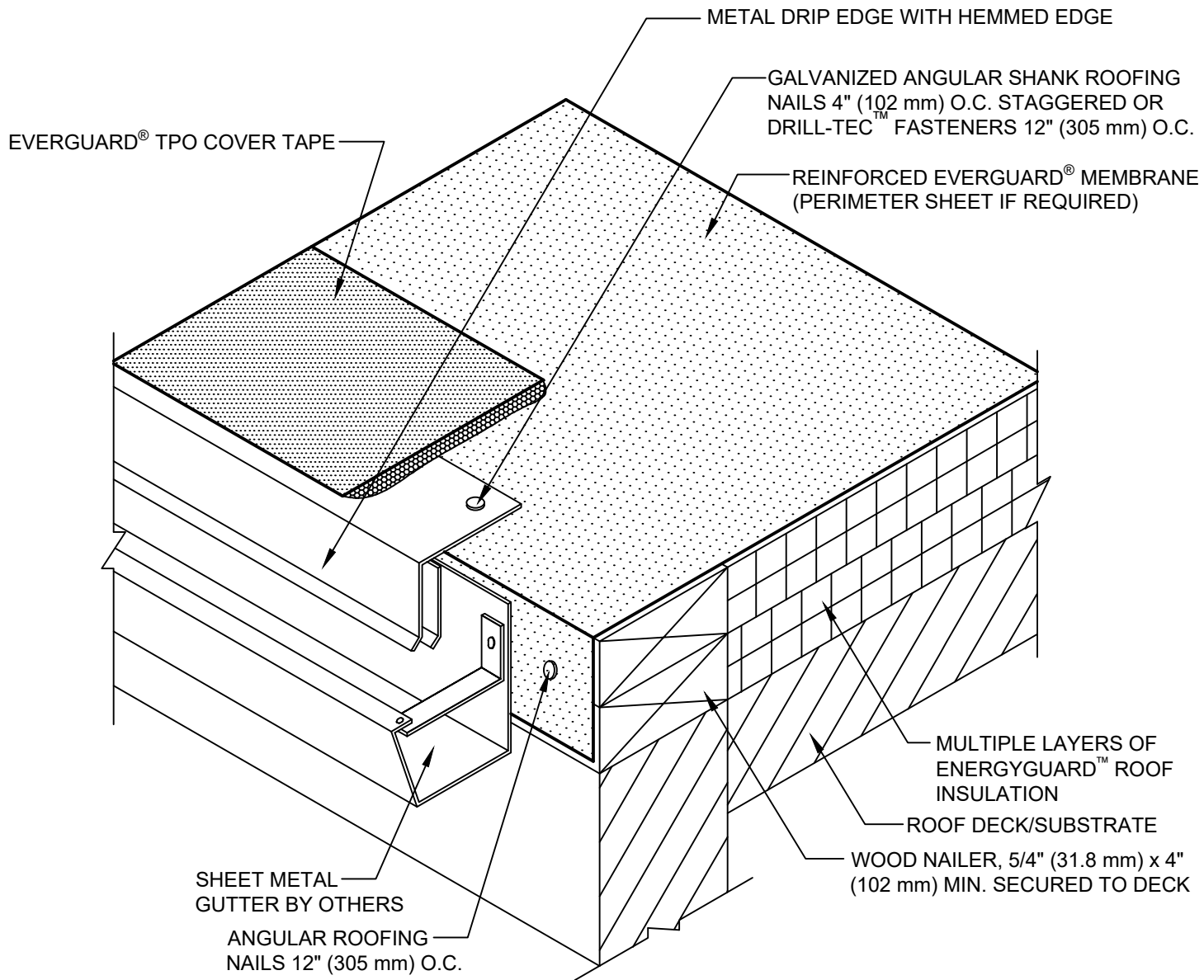
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

CONTINUOUS BEAD OF FLEXSEAL™ CAULK GRADE SEALANT (SEE NOTE 4)



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.
- 4. DO NOT OVERLAP ENDS OF FLASHING STRIP/COVER TAPE.



COVER TAPE AT GUTTER EDGE DETAIL

DRAWING #  
214A

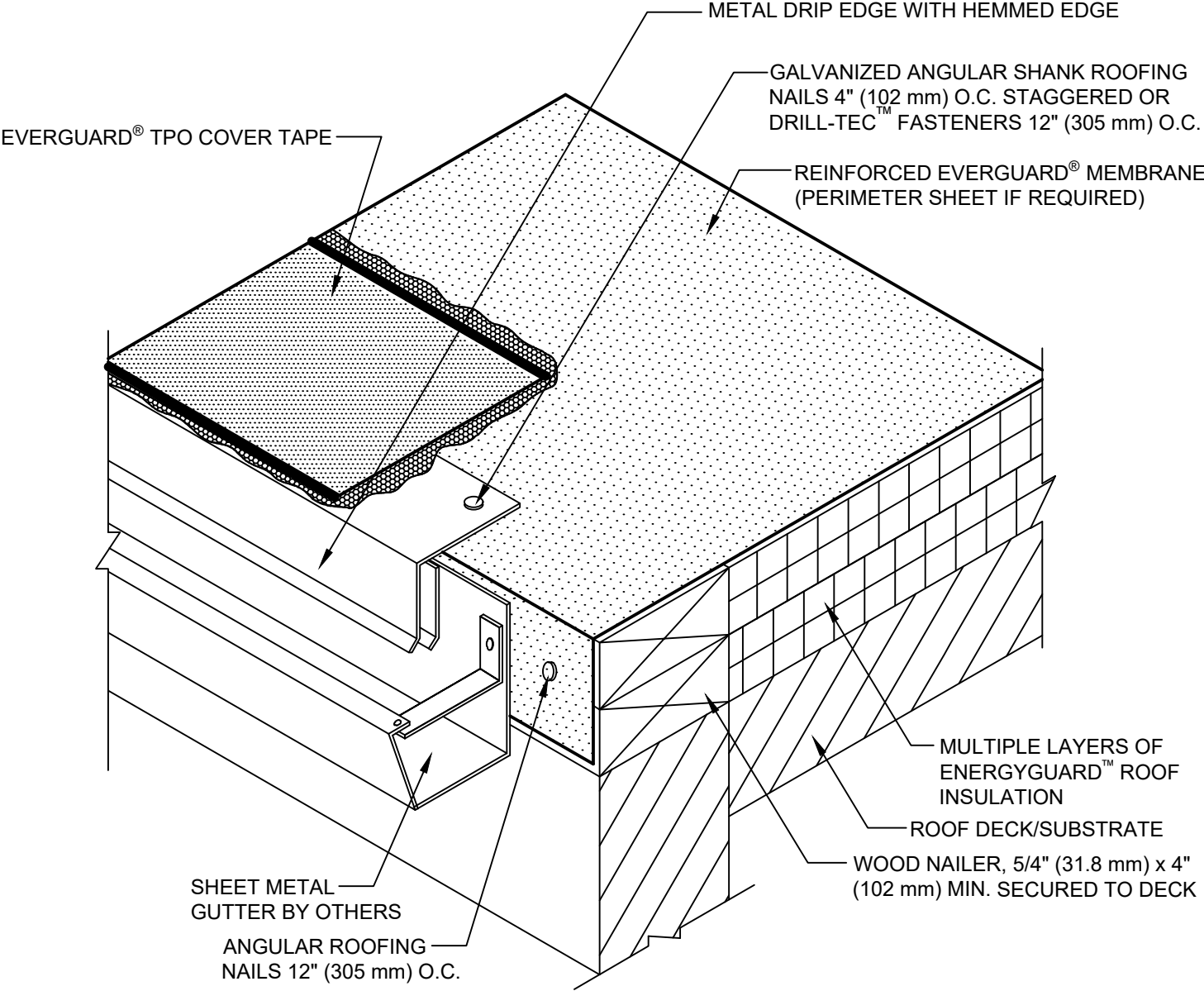
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

 EVERGUARD® TPO PRIMER (SEE NOTE #2)



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.
4. FLEXSEAL™ CAULK GRADE SEALANT SHOULD BE FEATHERED OUT AND APPLIED TO BOTH INSIDE AND OUTSIDE EDGES. ENSURE PRIMER EXTENDS UNDER FLEXSEAL™ CAULK GRADE SEALANT.
5. DO NOT OVERLAP ENDS OF FLASHING STRIP/COVER TAPE.



COVER TAPE AT GUTTER EDGE DETAIL



DRAWING #  
**214B**

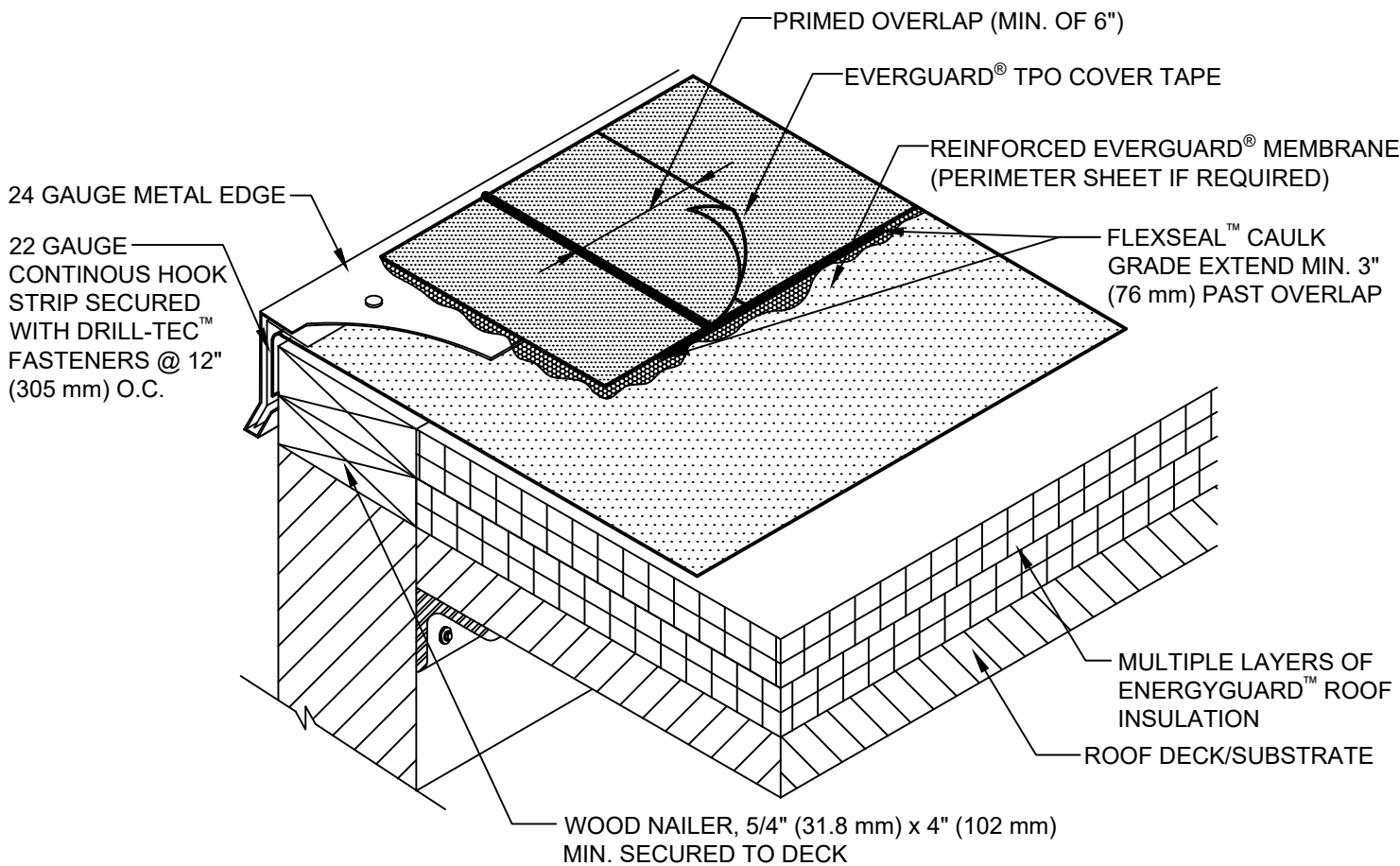
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND™ SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

LEGEND

-  CONTINUOUS BEAD OF FLEXSEAL™ CAULK GRADE SEALANT (SEE NOTE 4)
-  EVERGUARD® TPO PRIMER (SEE NOTE #2)



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.



COVER TAPE OVERLAP AT ROOF EDGE DETAIL

DRAWING #  
215A

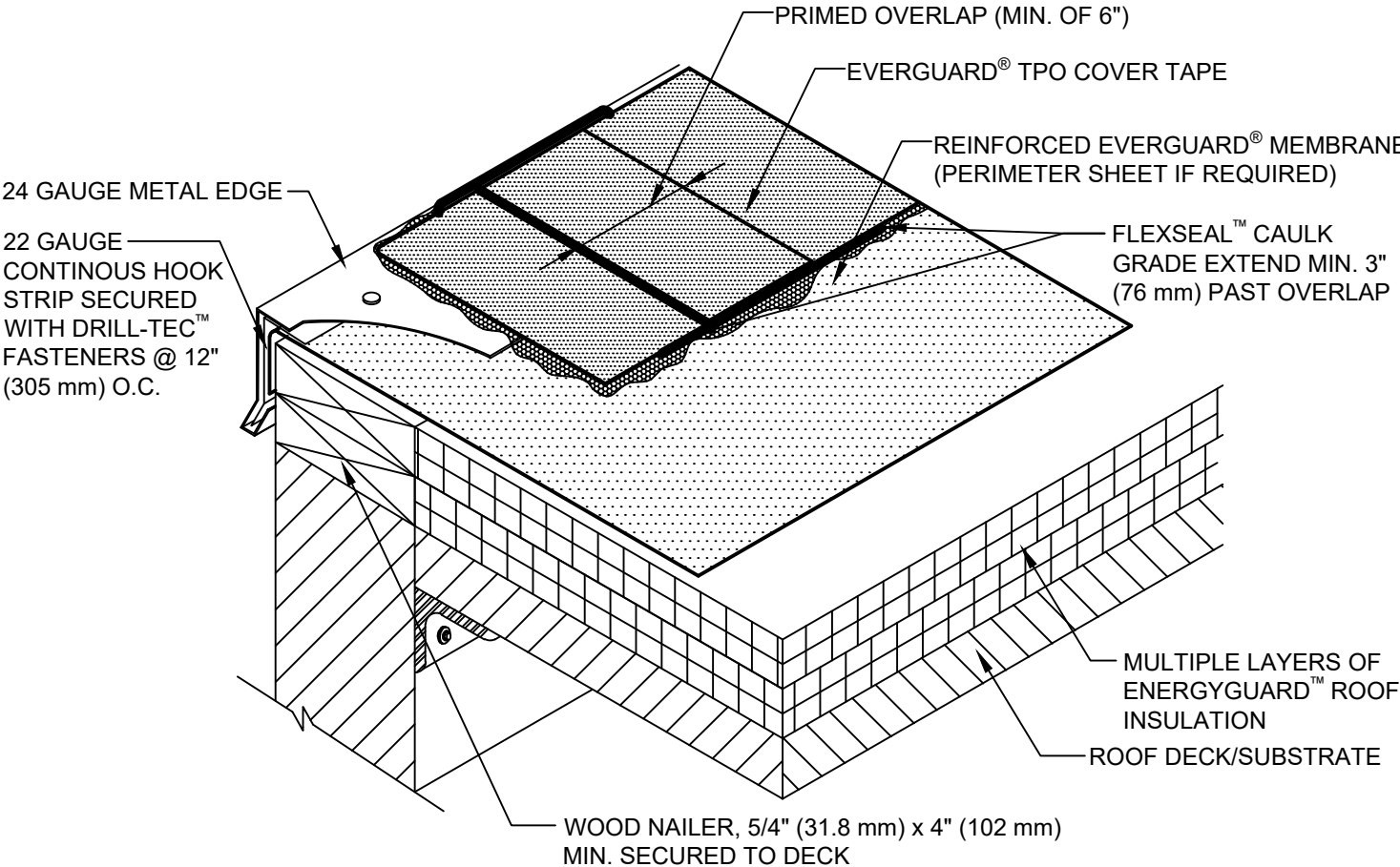
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
4/5/21

SCALE  
N.T.S.

LEGEND

- CONTINUOUS BEAD OF FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® TPO PRIMER (SEE NOTE #2)



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219.
- 4. FLEXSEAL™ CAULK GRADE SEALANT SHOULD BE FEATHERED OUT AND APPLIED TO BOTH INSIDE AND OUTSIDE EDGES. ENSURE PRIMER EXTENDS UNDER FLEXSEAL™ CAULK GRADE SEALANT.



COVER TAPE OVERLAP AT ROOF EDGE DETAIL

DRAWING #  
215B

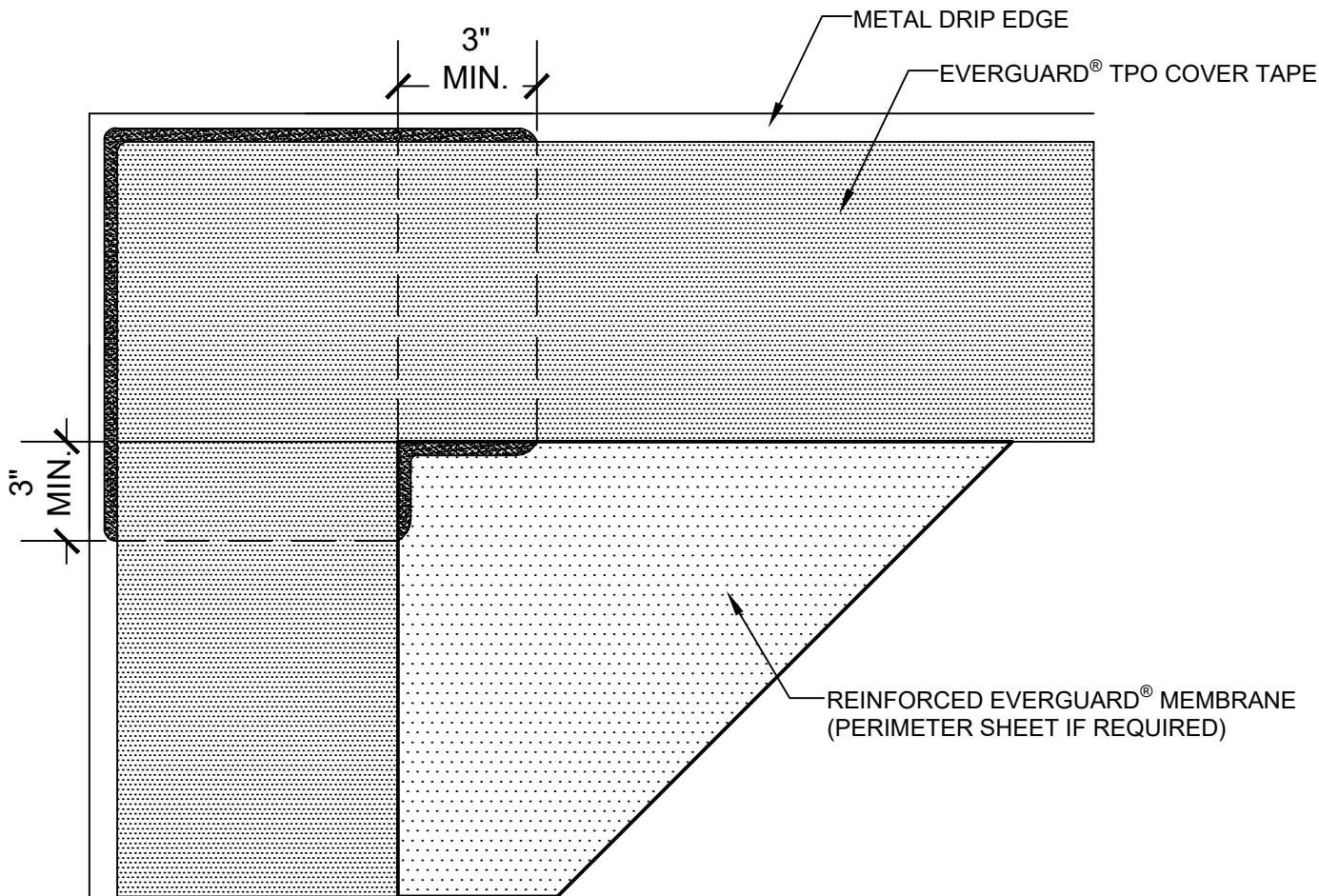
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
4/5/21

SCALE  
N.T.S.

LEGEND

- CONTINUOUS BEAD OF FLEXSEAL™ CAULK GRADE SEALANT (SEE NOTE #4)
- EVERGUARD® TPO PRIMER (SEE NOTE #2)



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219 .




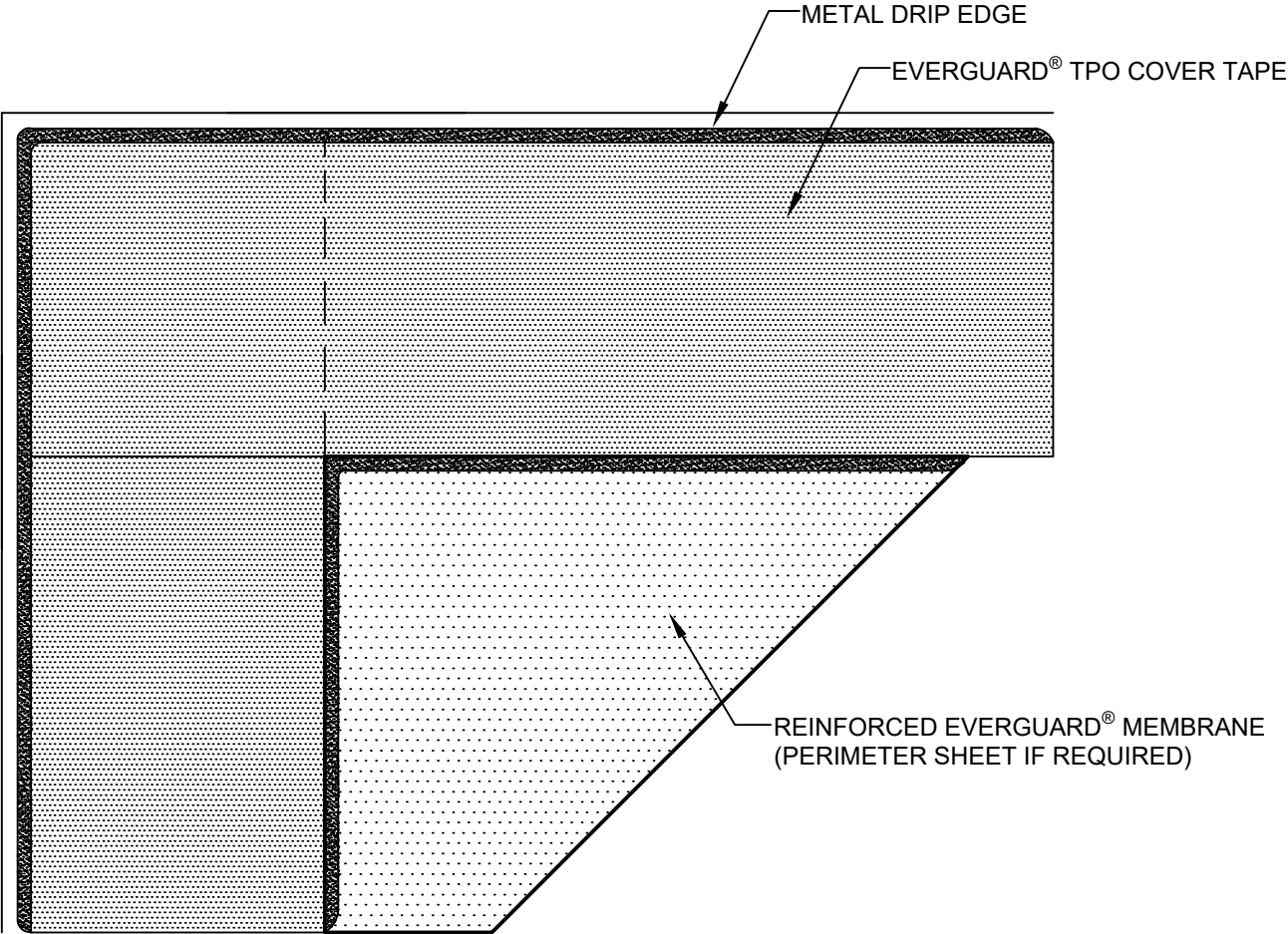
COVER TAPE AT ROOF EDGE CORNER DETAIL

DRAWING #  
216A

| THIS DETAIL APPLIES TO:                                                                        | ISSUE / REVISION DATE | SCALE  |
|------------------------------------------------------------------------------------------------|-----------------------|--------|
| ADHERED SYSTEMS<br>RHINOBOND® SYSTEMS<br>SELF-ADHERED SYSTEMS<br>MECHANICALLY ATTACHED SYSTEMS | 8/24/20               | N.T.S. |

LEGEND

 FLEXSEAL™ CAULK GRADE EXTEND MIN. 3" (76 mm) PAST OVERLAP



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
- 3. THIS DETAIL IS **NOT** TO BE USED ON SLOPES GREATER THAN 1:12. FOR SLOPES GREATER THAN 1:12, REFER TO EVERGUARD® DETAIL 218 OR 219 .
- 4. FLEXSEAL™ CAULK GRADE SEALANT SHOULD BE FEATHERED OUT AND APPLIED TO BOTH INSIDE AND OUTSIDE EDGES. ENSURE PRIMER EXTENDS UNDER FLEXSEAL™ CAULK GRADE SEALANT.




COVER TAPE AT ROOF EDGE CORNER DETAIL

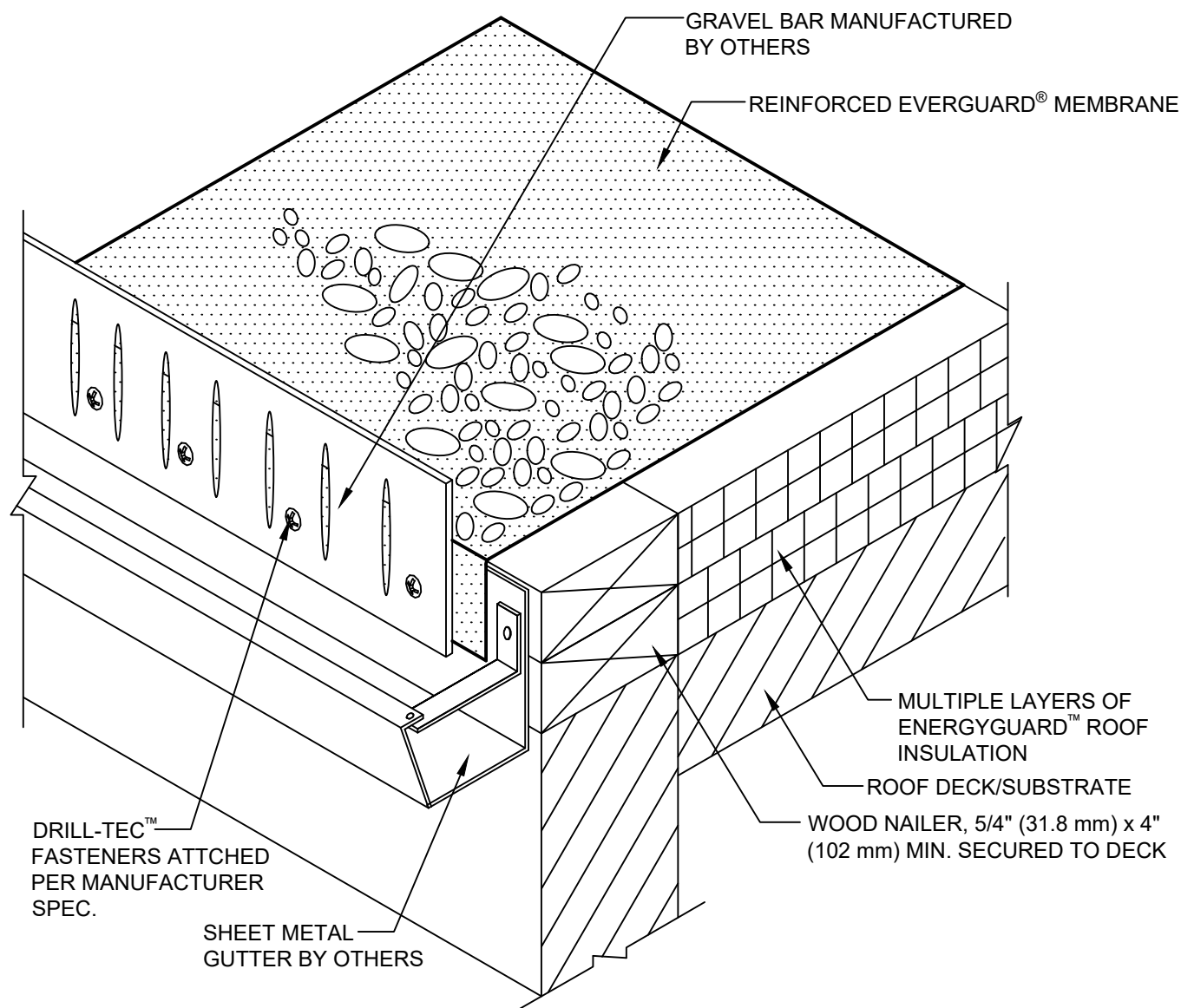
DRAWING #  
216B

| THIS DETAIL APPLIES TO:                                                                        | ISSUE / REVISION DATE | SCALE  |
|------------------------------------------------------------------------------------------------|-----------------------|--------|
| ADHERED SYSTEMS<br>RHINOBOND® SYSTEMS<br>SELF-ADHERED SYSTEMS<br>MECHANICALLY ATTACHED SYSTEMS | 8/24/20               | N.T.S. |

LEGEND

 FLEXSEAL™ CAULK GRADE EXTEND MIN. 3" (76 mm) PAST OVERLAP (SEE NOTE #4)





**NOTE:**

1. ADD BALLAST PER SPECIFICATION FOR BALLASTED SYSTEMS.
2. GUTTER IS OPTIONAL..

**GAF**

**METAL EDGE DETAIL**

DRAWING #  
**217**

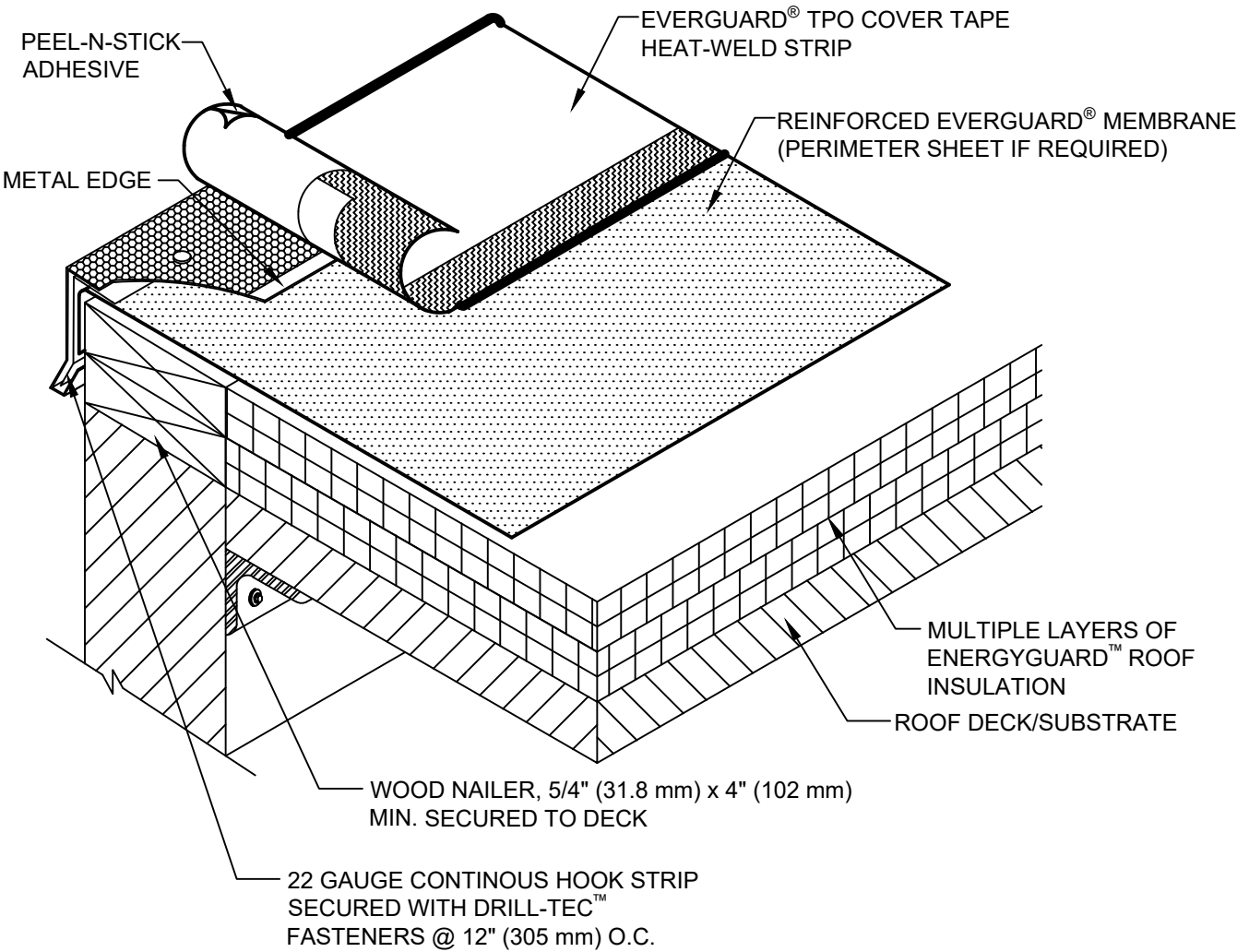
THIS DETAIL APPLIES TO:  
BALLASTED SYSTEMS

ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

**LEGEND**

 STONE/PAVER BALLAST



NOTE:

- 1. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY.
- 2. ONCE DRY, PRIME METAL **ONLY** WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE. (DO NOT SPILL PRIMER ON WELDED SEAM AREA)
- 3. PRIME THE METAL ONLY WITH EVERGUARD® TPO PRIMER. DO NOT SPILL PRIMER ON WELDED SEAM AREA.
- 4. HEAT-WELD THE MEMBRANE (NON-ADHESIVE SIDE ONLY) TO MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.



TPO COVER TAPE HEAT-WELD STRIP OVERLAP AT ROOF  
EDGE DETAIL

DRAWING #  
218

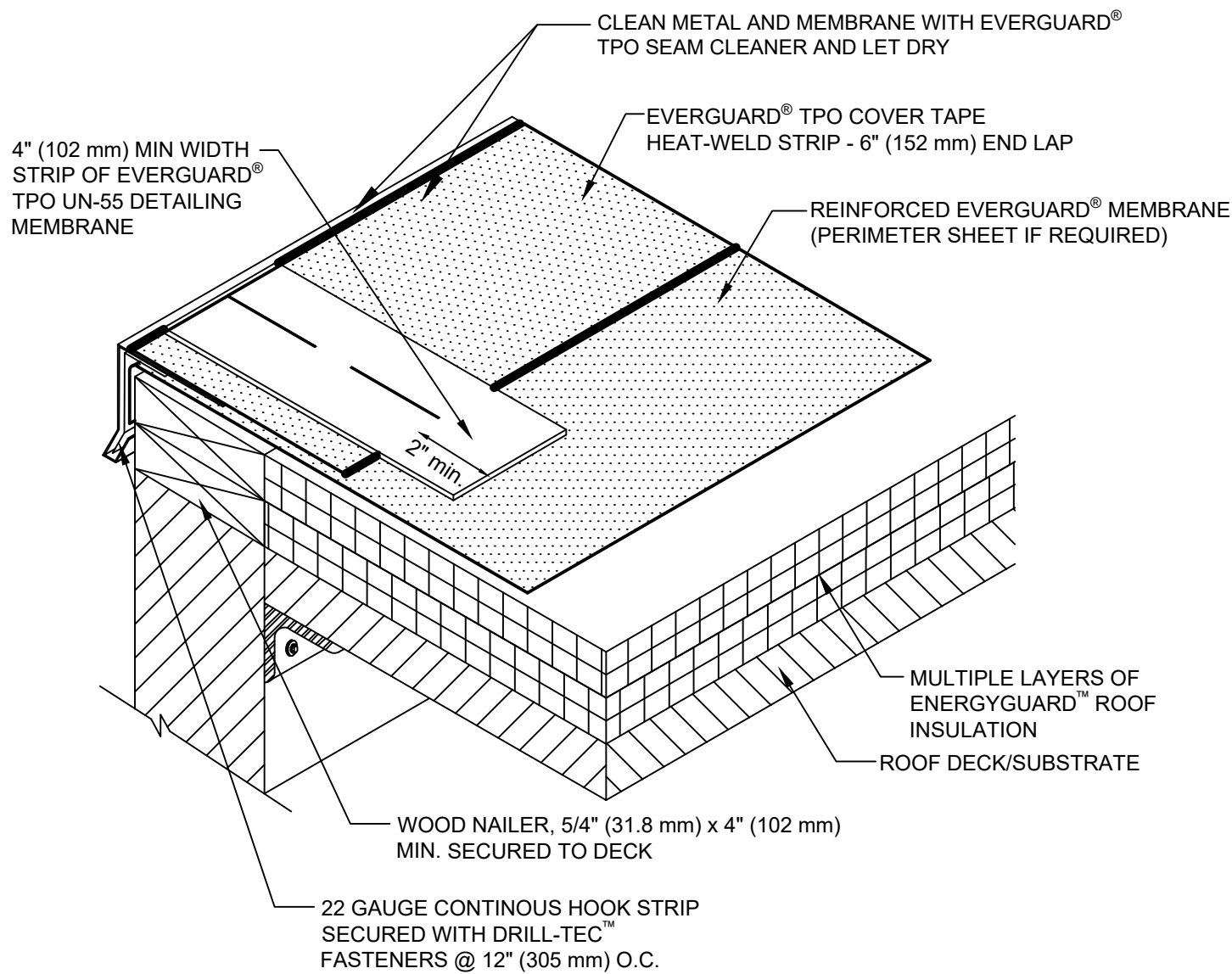
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- CONTINUOUS BEAD OF FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® TPO PRIMER (SEE NOTE #1 & #2)
- HEAT-WELDED



NOTE:

1. PRIME THE METAL ONLY WITH EVERGUARD® TPO PRIMER. DO NOT SPILL PRIMER ON WELDED SEAM AREA.
2. HEAT WELD THE END JOINT COVER STRIP OF DETAILING MEMBRANE TO THE MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.
3. REFER TO DETAIL 218 FOR EVERGUARD® COVER TAPE HEATWELD ROOF EDGE INSTALLATION.
4. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.



COVER TAPE HEATWELD STRIP END JOINT AT ROOF  
EDGE DETAIL

DRAWING #  
**219**

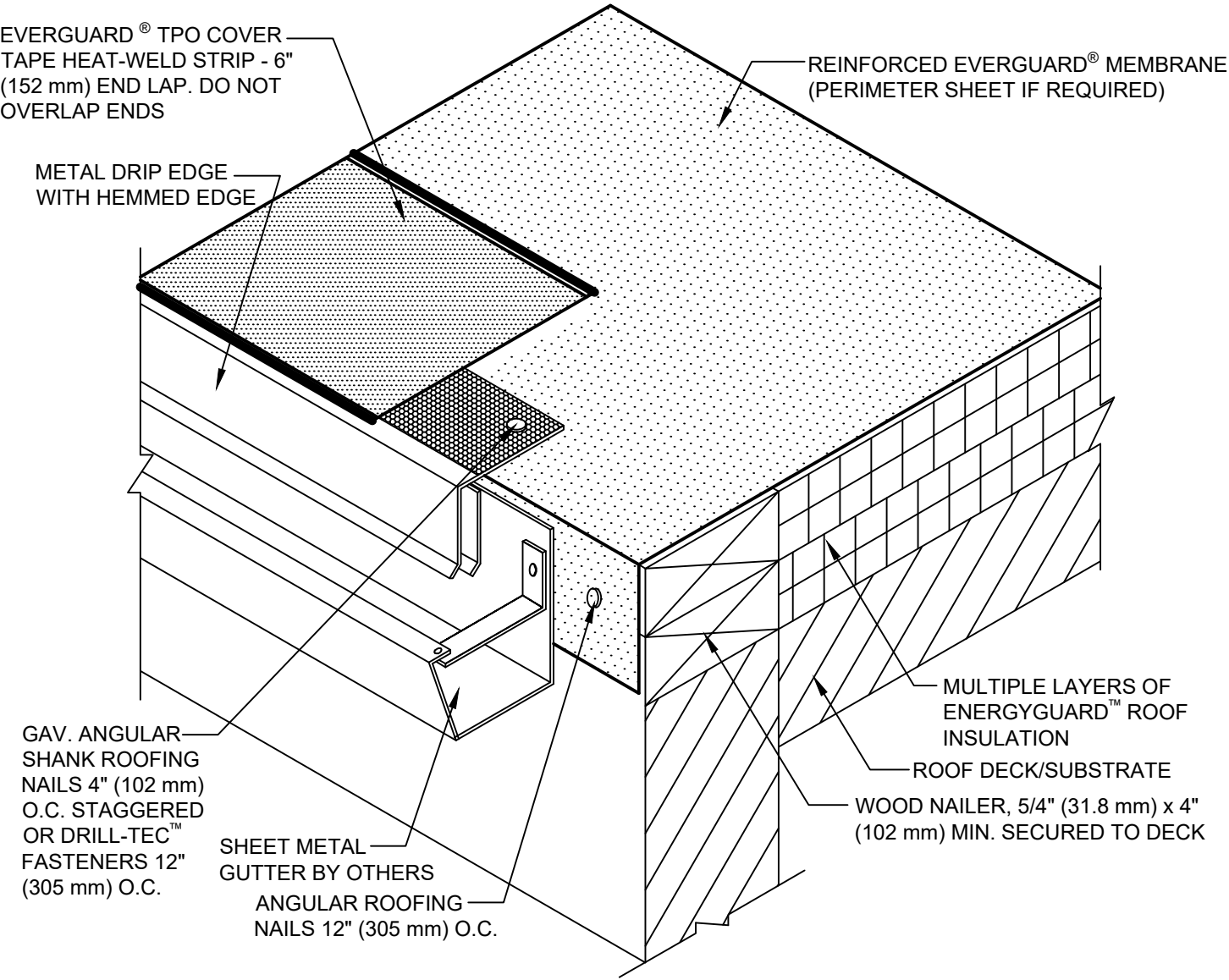
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RHINOBOND™ SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/24/20**

SCALE  
N.T.S.

LEGEND

CONTINUOUS BEAD OF FLEXSEAL™  
CAULK GRADE SEALANT



NOTE:

- 1. PRIME THE METAL ONLY WITH EVERGUARD® TPO PRIMER. DO NOT SPILL PRIMER ON WELDED SEAM AREA.
- 2. HEAT WELD THE END JOINT COVER STRIP OF DETAILING MEMBRANE TO THE MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.
- 3. HEAT WELD THE MEMBRANE (NON-ADHESIVE SIDE ONLY) TO MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.
- 4. REFER TO DETAIL 218 FOR EVERGUARD® COVER TAPE HEAT-WELD ROOF EDGE INSTALLATION.



COVER TAPE HEAT-WELD STRIP AT GUTTER EDGE DETAIL

DRAWING #  
220

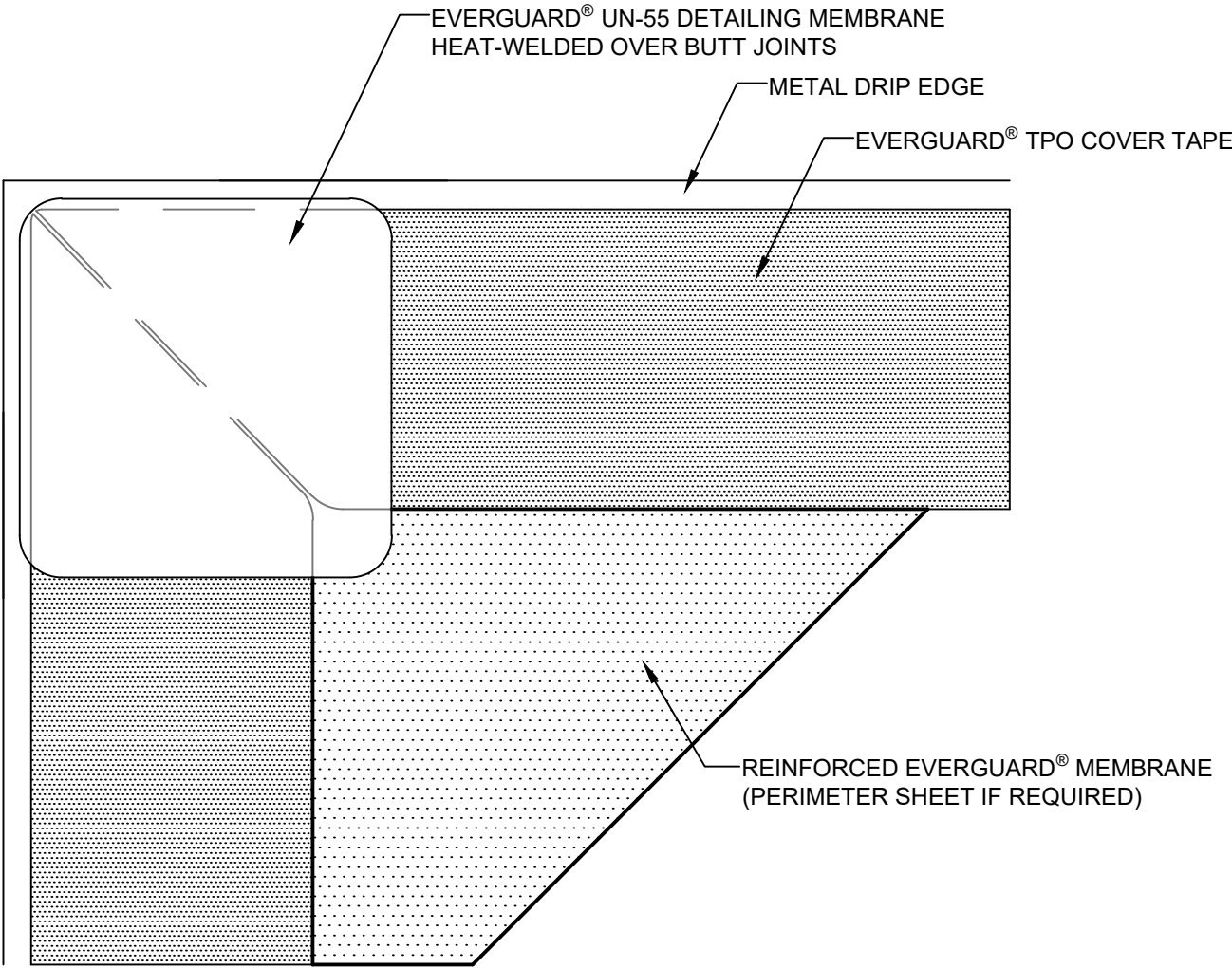
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
RYNORBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

- EVERGUARD® TPO PRIMER (SEE NOTE #1 & #2)
- FLEXSEAL™ CAULK-GRADE SEALANT



NOTE:

- 1. PRIME THE METAL ONLY WITH EVERGUARD® TPO PRIMER. DO NOT SPILL PRIMER ON WELDED SEAM AREA.
- 2. HEAT WELD THE MEMBRANE (NON-ADHESIVE SIDE ONLY) TO MEMBRANE AREA USING EITHER A ROBOTIC OR HAND WELDER TO SPEC.
- 3. REFER TO DETAIL 218 FOR EVERGUARD® COVER TAPE HEAT-WELD ROOF EDGE INSTALLATION.
- 4. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY.



COVER TAPE HEAT-WELD AT METAL DRIP EDGE  
CORNER DETAIL

DRAWING #  
221

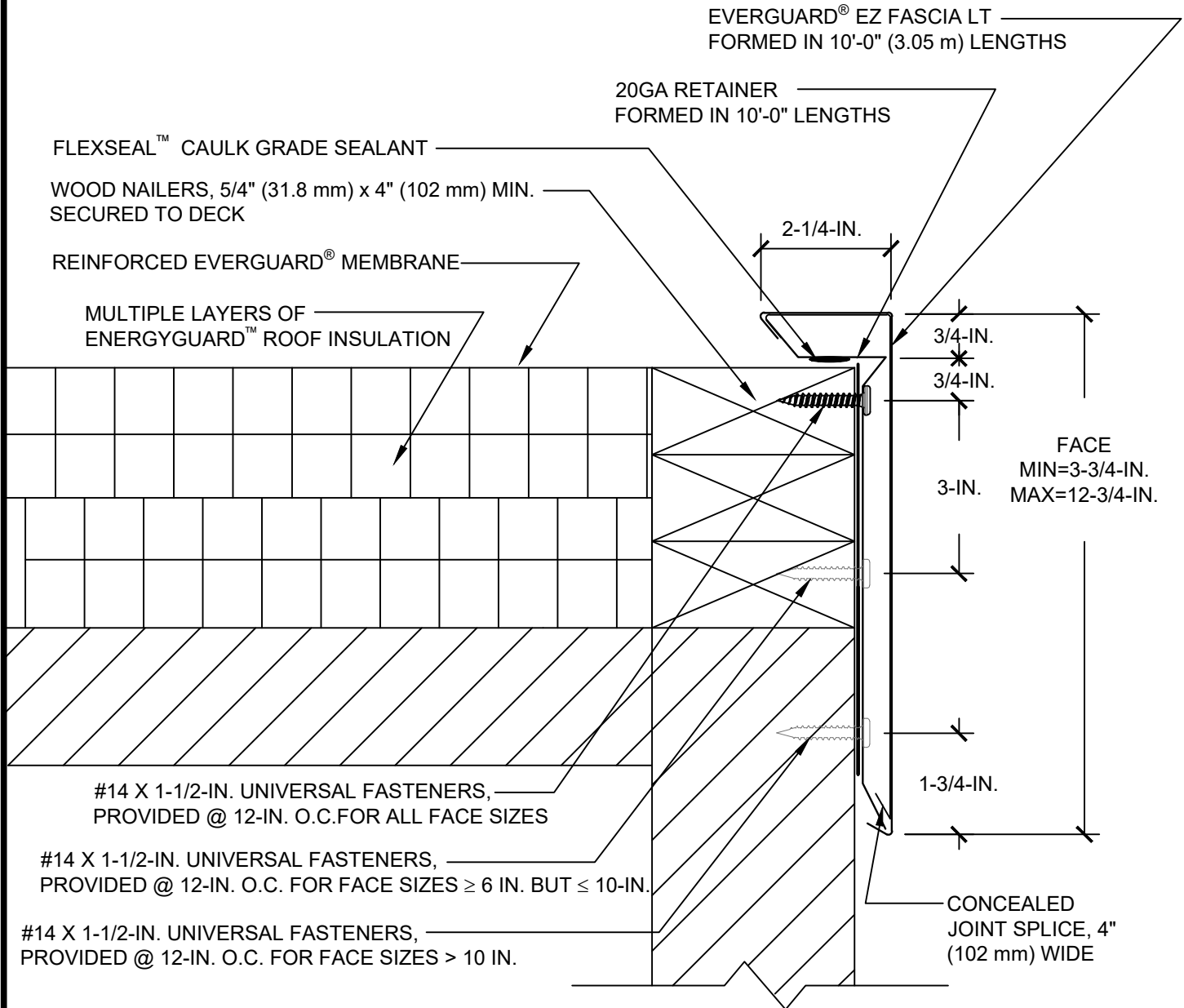
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS  
W/INCRIBOND® SYSTEMS  
SELF-ADHERED SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
8/24/20

SCALE  
N.T.S.

LEGEND

| METAL TYPE      | MAXIMUM FRONT FACE HEIGHT (in.) | PERIMETER PRESSURE (psf) |          | CORNER PRESSURE (psf) |          |
|-----------------|---------------------------------|--------------------------|----------|-----------------------|----------|
|                 |                                 | HORIZONTAL               | VERTICAL | HORIZONTAL            | VERTICAL |
| 0.040" ALUMINUM | 5.25                            | 320                      | N/A      | 325                   | N/A      |
| 0.040" ALUMINUM | 6                               | 204                      | N/A      | 200                   | N/A      |
| 0.040" ALUMINUM | 10                              | 102                      | N/A      | 109                   | N/A      |
| 24 GA. STEEL    | 5.25                            | 378                      | N/A      | 379                   | N/A      |
| 24 GA. STEEL    | 6                               | 247                      | N/A      | 236                   | N/A      |
| 24 GA. STEEL    | 10                              | 131                      | N/A      | 127                   | N/A      |
| 0.039" ZINC     | 6                               | 189                      | N/A      | 182                   | N/A      |
| 0.039" ZINC     | 10                              | 131                      | N/A      | 127                   | N/A      |



**NOTE:**

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF**

EZ FASCIA

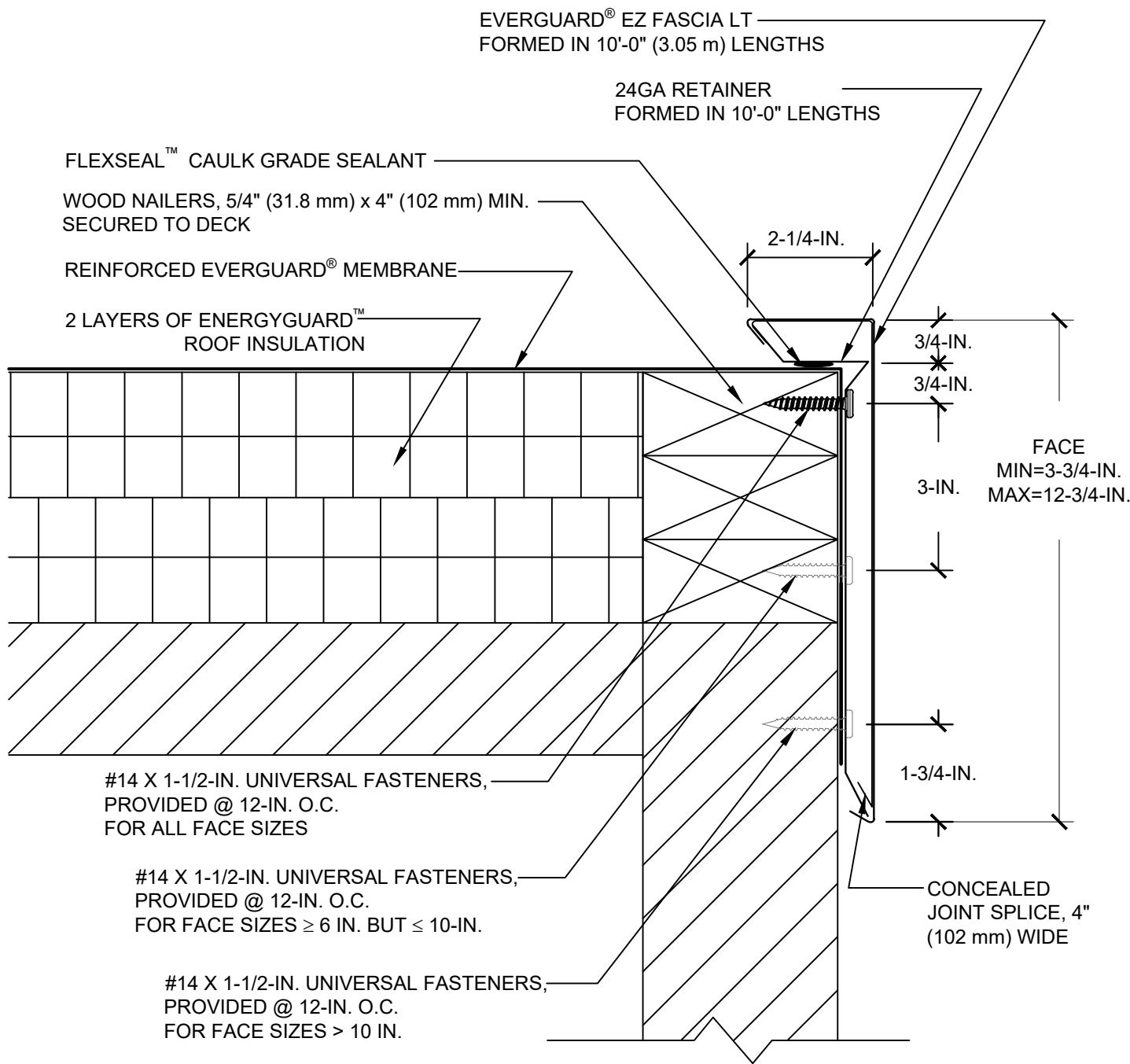
DRAWING #  
**232A**

THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

LEGEND



NOTE:

- 1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
- 2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
- 3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

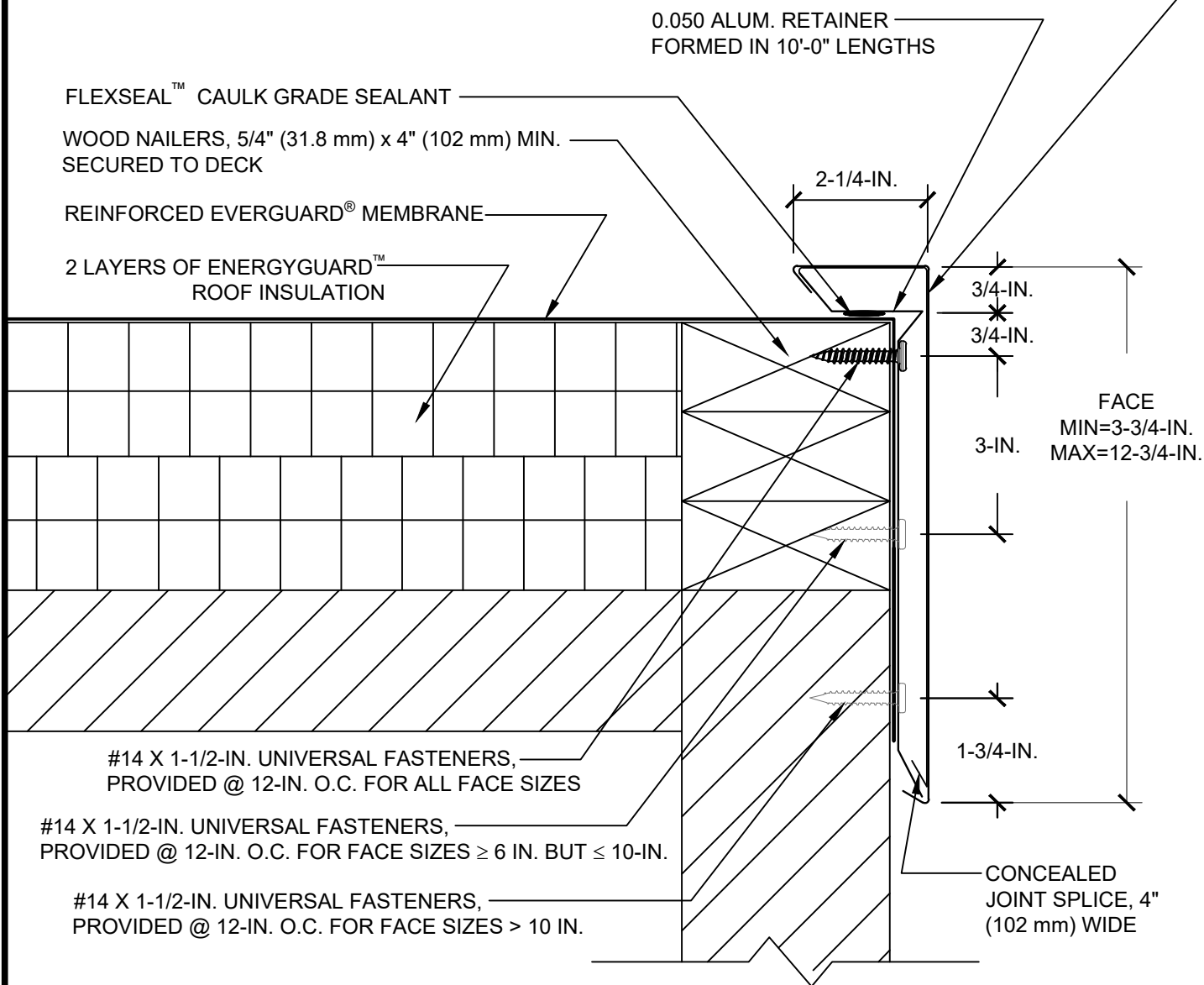
|  |              |      |                         |                       |        |  |
|--|--------------|------|-------------------------|-----------------------|--------|--|
|  | EZ FASCIA LT |      |                         |                       | LEGEND |  |
|  | DRAWING #    | 232B | THIS DETAIL APPLIES TO: | ISSUE / REVISION DATE | SCALE  |  |
|  |              |      | ALL SYSTEMS             | 8/17/20               | N.T.S. |  |

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 286 PSF (HORIZONTAL)

| METAL TYPE      | MAXIMUM FRONT FACE HEIGHT (in.) | PERIMETER PRESSURE (psf) |          | CORNER PRESSURE (psf) |          |
|-----------------|---------------------------------|--------------------------|----------|-----------------------|----------|
|                 |                                 | HORIZONTAL               | VERTICAL | HORIZONTAL            | VERTICAL |
| 0.040" ALUMINUM | 6                               | 218                      | N/A      | 218                   | N/A      |
| 0.040" ALUMINUM | 6.75                            | 204                      | N/A      | 200                   | N/A      |
| 0.040" ALUMINUM | 8.25                            | 116                      | N/A      | 109                   | N/A      |
| 24 GA. STEEL    | 5.25                            | 276                      | N/A      | 271                   | N/A      |
| 24 GA. STEEL    | 6                               | 218                      | N/A      | 218                   | N/A      |
| 24 GA. STEEL    | 8.25                            | 160                      | N/A      | 163                   | N/A      |
| 0.039" ZINC     | 6                               | 189                      | N/A      | 200                   | N/A      |

EVERGUARD® EZ FASCIA LT  
FORMED IN 10'-0" (3.05 m) LENGTHS



## NOTE:

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF**

EZ FASCIA AR

DRAWING #  
**232C**

THIS DETAIL APPLIES TO:  
ALL SYSTEMS

ISSUE / REVISION DATE  
8/17/20

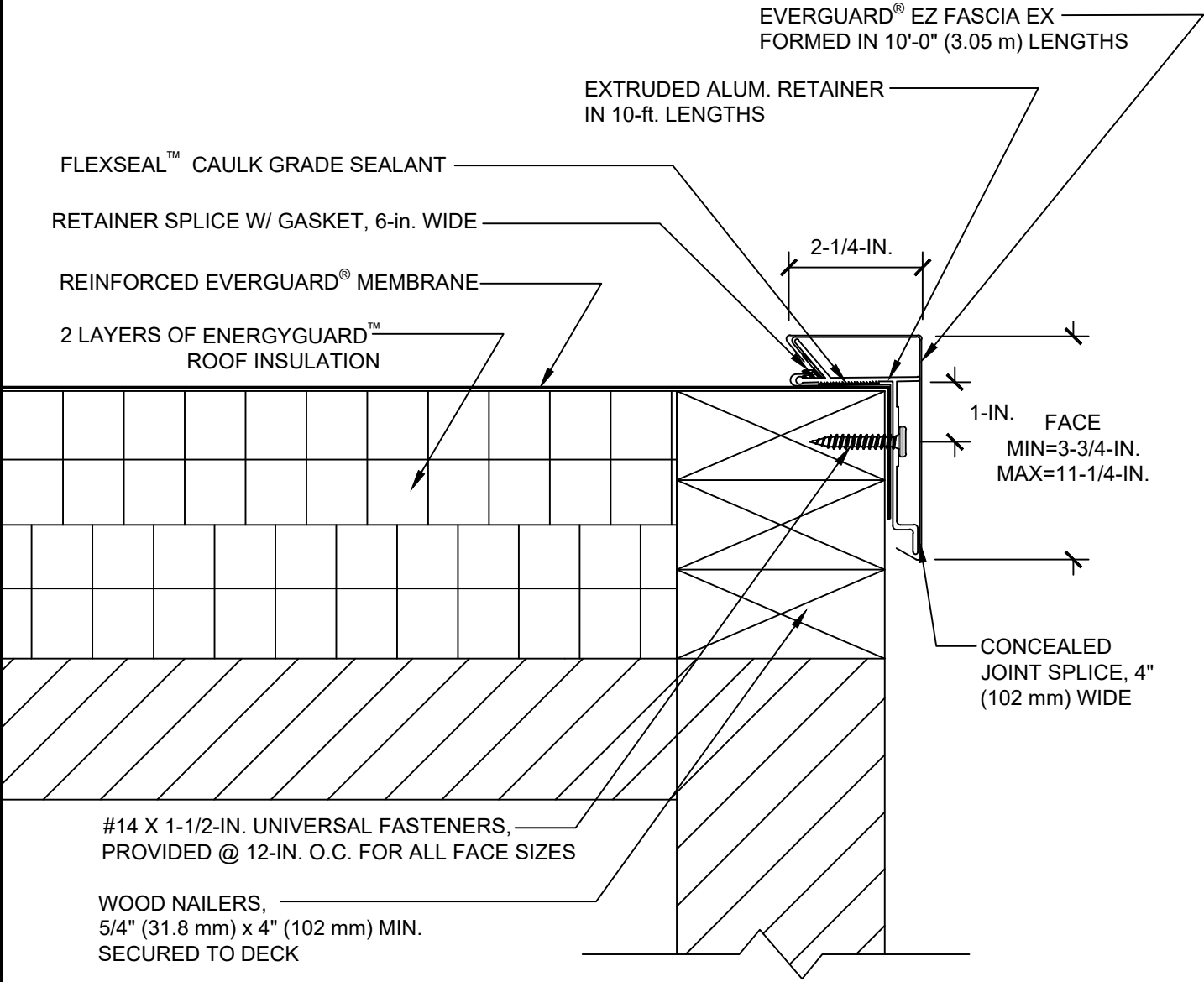
SCALE  
N.T.S.

LEGEND



ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 260 PSF (HORIZONTAL)

| METAL TYPE      | MAXIMUM FRONT FACE HEIGHT<br>(in.) | PERIMETER PRESSURE<br>(psf) |          | CORNER PRESSURE<br>(psf) |          |
|-----------------|------------------------------------|-----------------------------|----------|--------------------------|----------|
|                 |                                    | HORIZONTAL                  | VERTICAL | HORIZONTAL               | VERTICAL |
| 0.040" ALUMINUM | 6.75                               | 204                         | N/A      | 200                      | N/A      |
| 0.040" ALUMINUM | 8.25                               | 146                         | N/A      | 145                      | N/A      |
| 0.040" ALUMINUM | 11.25                              | 73                          | N/A      | 73                       | N/A      |
| 0.050" ALUMINUM | 11.25                              | 116                         | N/A      | 127                      | N/A      |
| 24 GA. STEEL    | 6.75                               | 247                         | N/A      | 253                      | N/A      |
| 24 GA. STEEL    | 8.25                               | 160                         | N/A      | 163                      | N/A      |
| 24 GA. STEEL    | 11.25                              | 87                          | N/A      | 91                       | N/A      |



NOTE:

- 1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
- 2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
- 3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

EZ FASCIA EX

DRAWING #  
**232D**

THIS DETAIL APPLIES TO:

ALL SYSTEMS

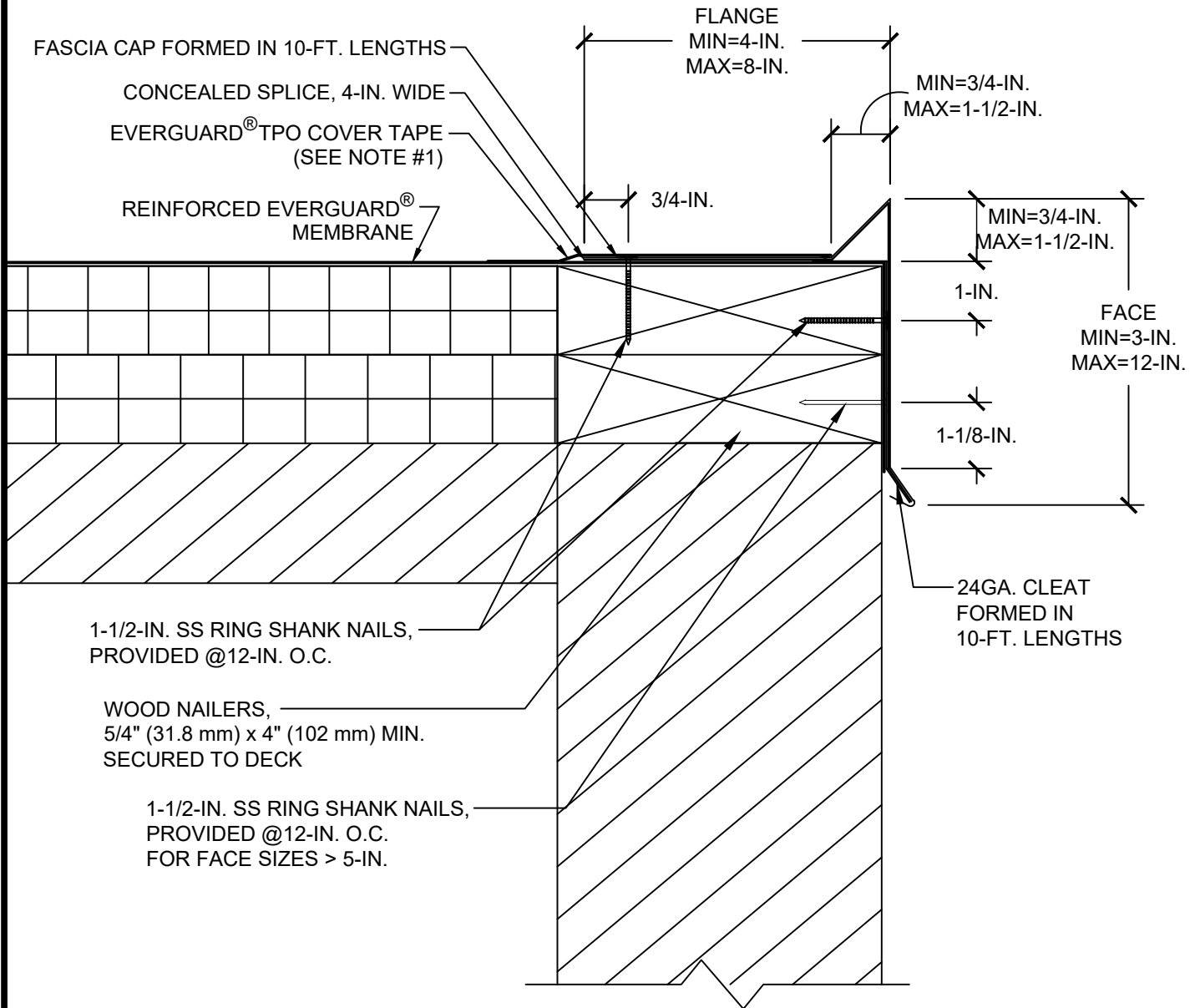
ISSUE / REVISION DATE

8/17/20

SCALE

N.T.S.

LEGEND

**NOTE:**

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF****STANDARD GRAVEL STOP FASCIA****LEGEND**

DRAWING #

**233**

THIS DETAIL APPLIES TO:

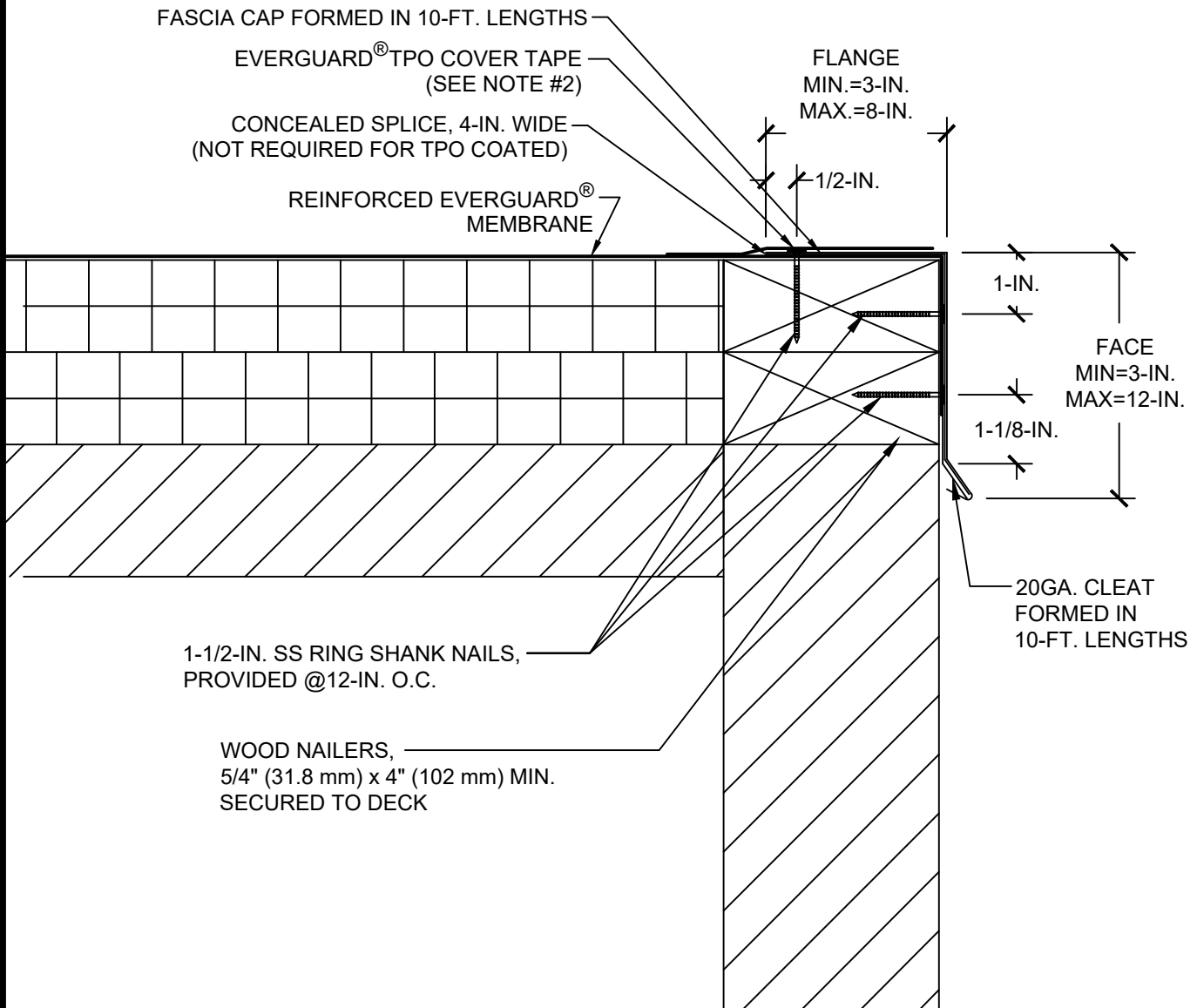
ALL SYSTEMS

ISSUE / REVISION DATE

11/19/20

SCALE

N.T.S.

**NOTE:**

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. FOR HEAT-WELDING LAPS USE 1.5" (38.1 mm) WELD WITH MACHINE AUTOMATIC WELDER AND 2" (50.8 mm) WELD WITH HAND WELDER.

**GAF****STANDARD DRIP EDGE DETAIL****LEGEND**

DRAWING #

**234**

THIS DETAIL APPLIES TO:

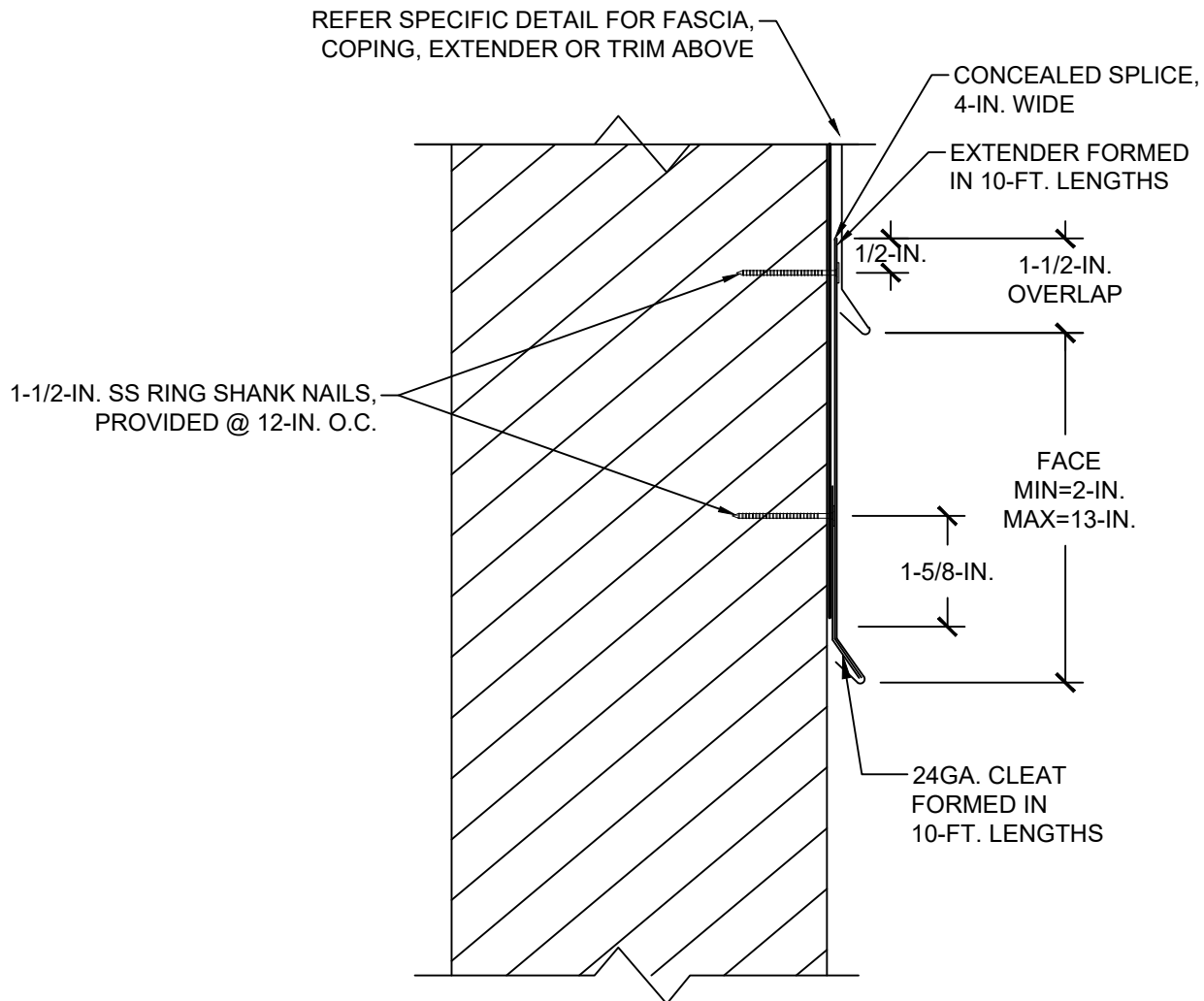
**ALL SYSTEMS**

ISSUE / REVISION DATE

**11/11/20**

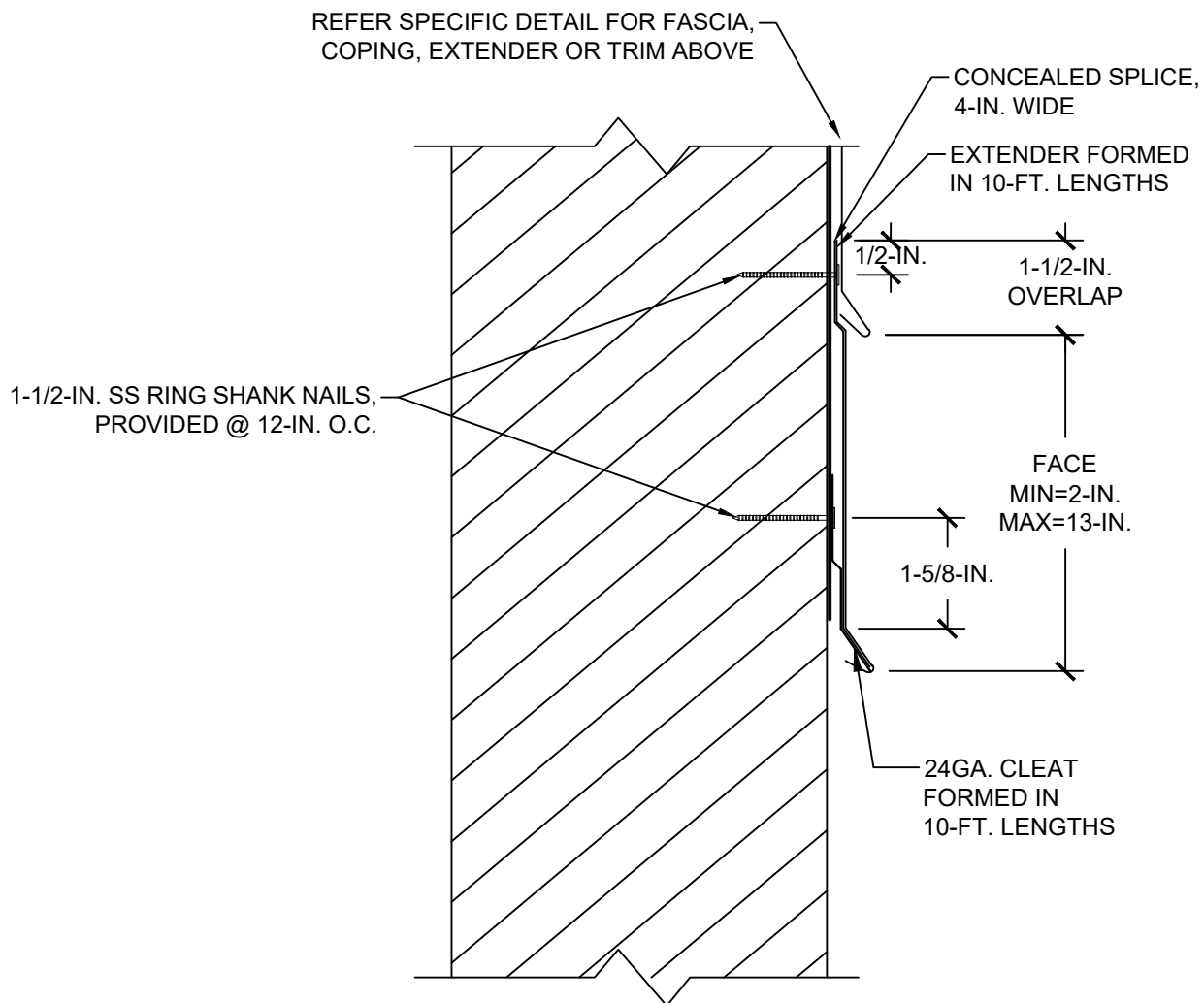
SCALE

**N.T.S.**

**NOTE:**

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF****FASCIA EXTENDER**DRAWING #  
**235A**THIS DETAIL APPLIES TO:  
ALL SYSTEMSISSUE / REVISION DATE  
8/17/20SCALE  
N.T.S.**LEGEND**

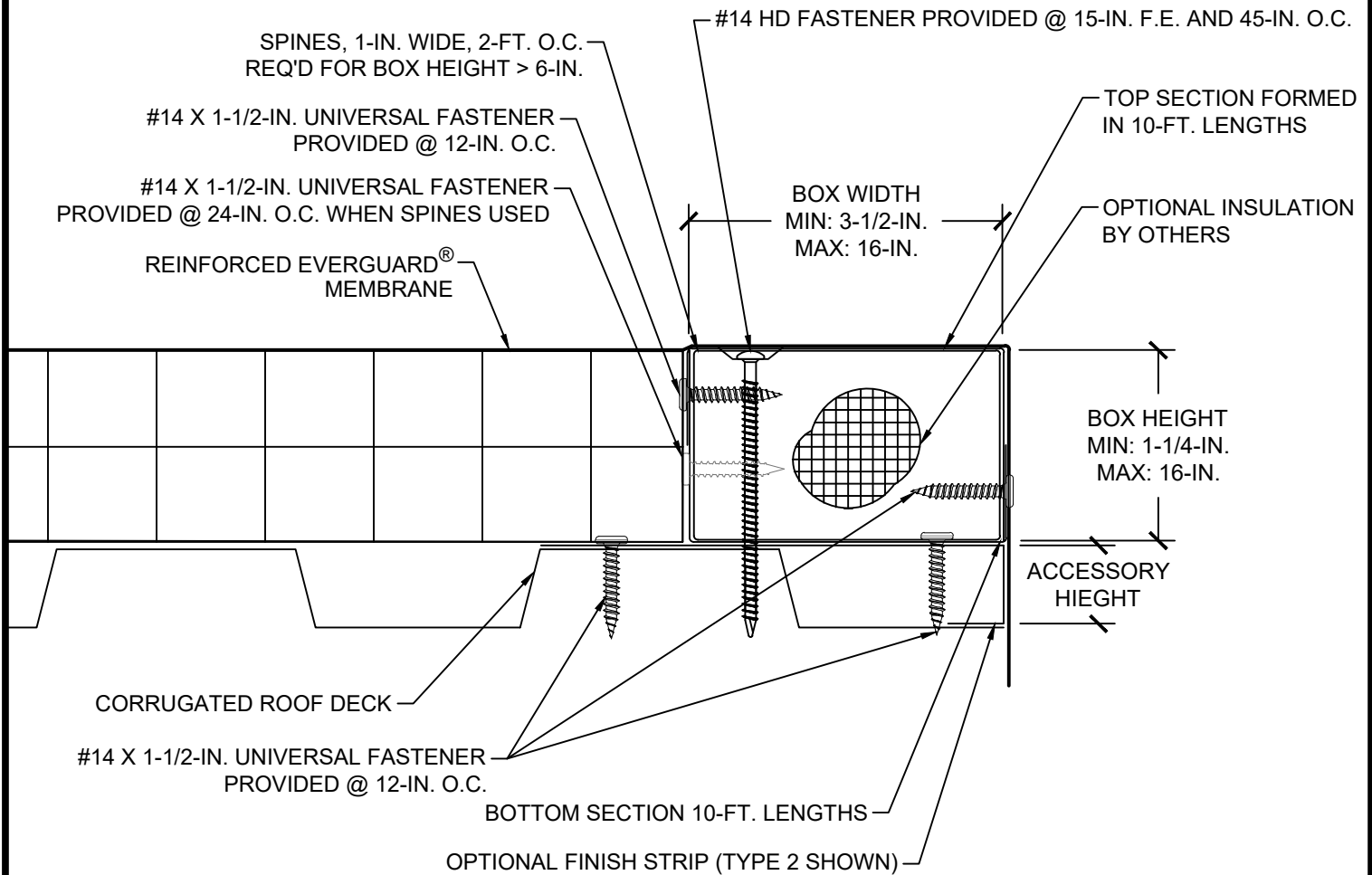
**NOTE:**

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF****FASCIA EXTENDER WITH OFFSET**DRAWING #  
**235B**THIS DETAIL APPLIES TO:  
ALL SYSTEMSISSUE / REVISION DATE  
8/17/20SCALE  
N.T.S.**LEGEND**

# SINGLE-PLY: TPO & PVC

ANSI/SPRI/FM4435/ES-1 TEST PRESSURES UP TO 911 PSF (VERTICAL) AND 526 PSF (HORIZONTAL)



## NOTE:

1. PRODUCT TO BE INSTALLED IN STRICT ACCORDANCE WITH GAF PRINTED INSTRUCTIONS.
2. PRE-DRILL WITH 3/16-IN. DRILL BIT FOR MASONRY CONDITIONS.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED TO MEET/EXCEED ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

**GAF**

## EDGE BOX RI

DRAWING #  
**236**

THIS DETAIL APPLIES TO:  
ALL SYSTEMS

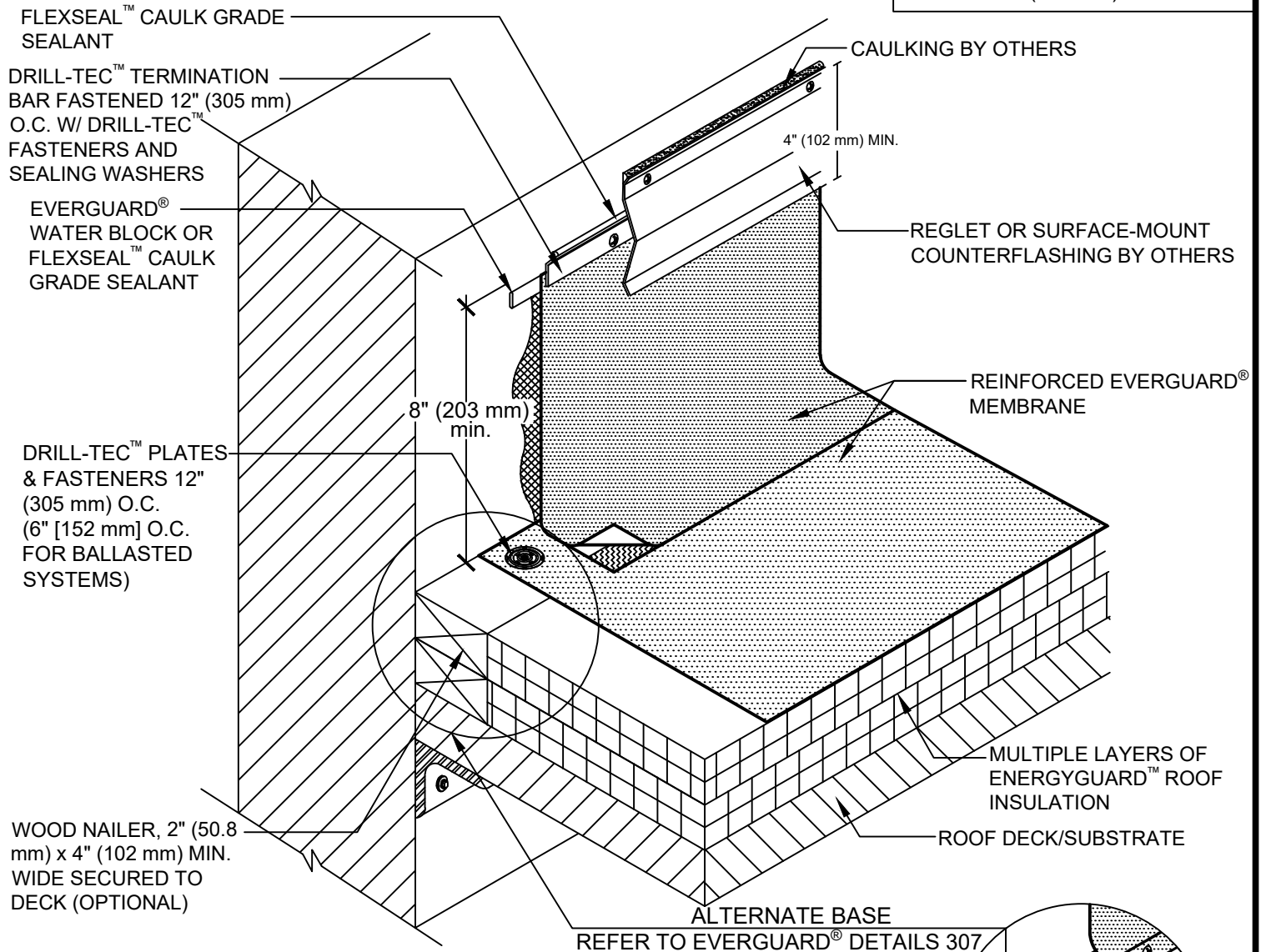
ISSUE / REVISION DATE  
8/17/20

SCALE  
N.T.S.

## LEGEND

## FLASHING KEY

- 30" - 66" (762 mm - 1.68 m) REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



### NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. EXISTING REGLET IS ACCEPTABLE IF METAL IS IN GOOD CONDITION.
3. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
4. EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.

# GAF

## WALL FLASHING WITH COUNTERFLASHING

DRAWING #

**301A**

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/17/20

SCALE

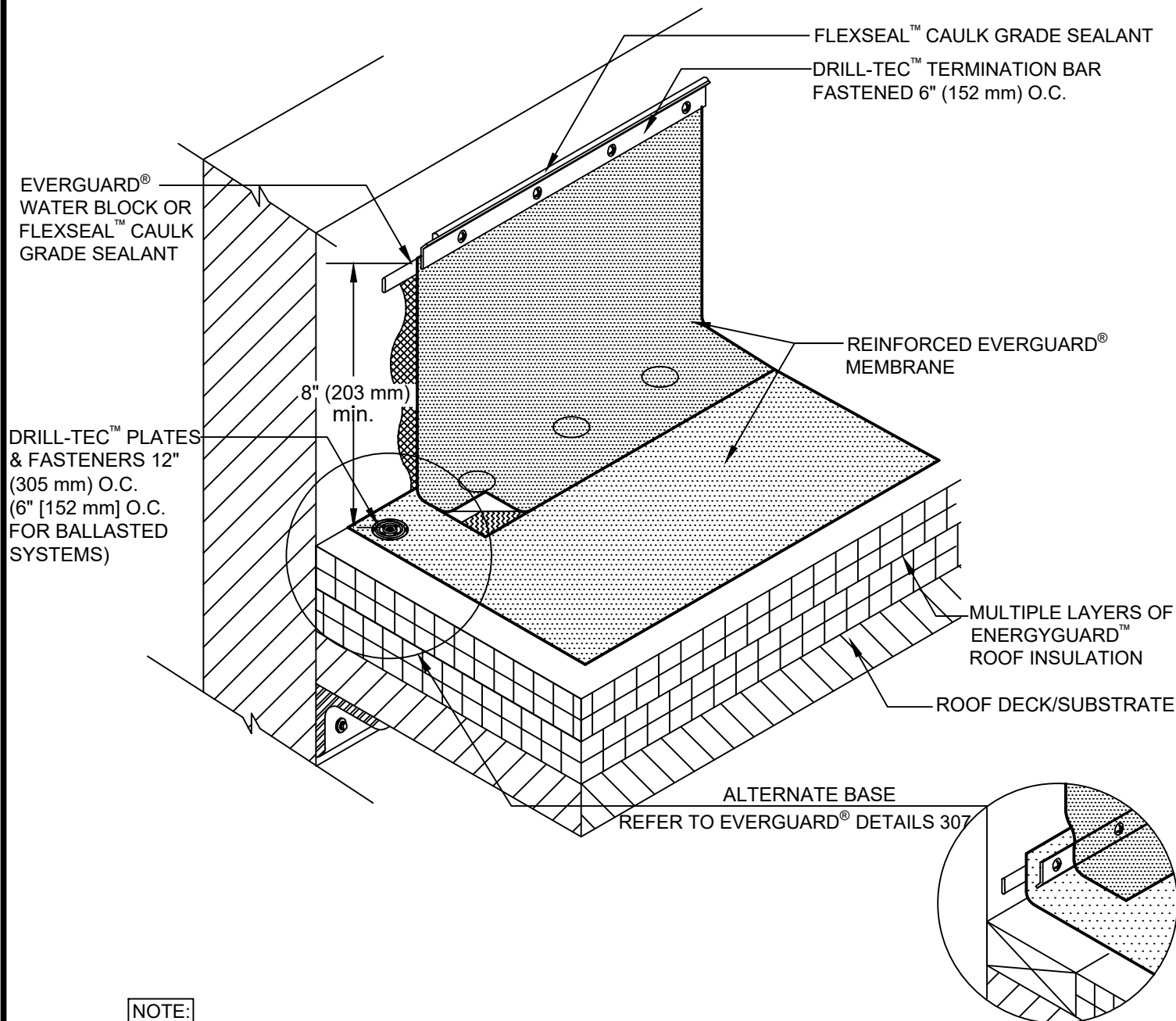
N.T.S.

### LEGEND

HEAT-WELDED

EVERGUARD® BONDING ADHESIVE

- 30" - 66" (762 mm - 1.68 m)  
REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG

**NOTE:**

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

**GAF****WALL/CURB FLASHING WITH TERMINATION BAR**

DRAWING #

**302A**

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/17/20

SCALE

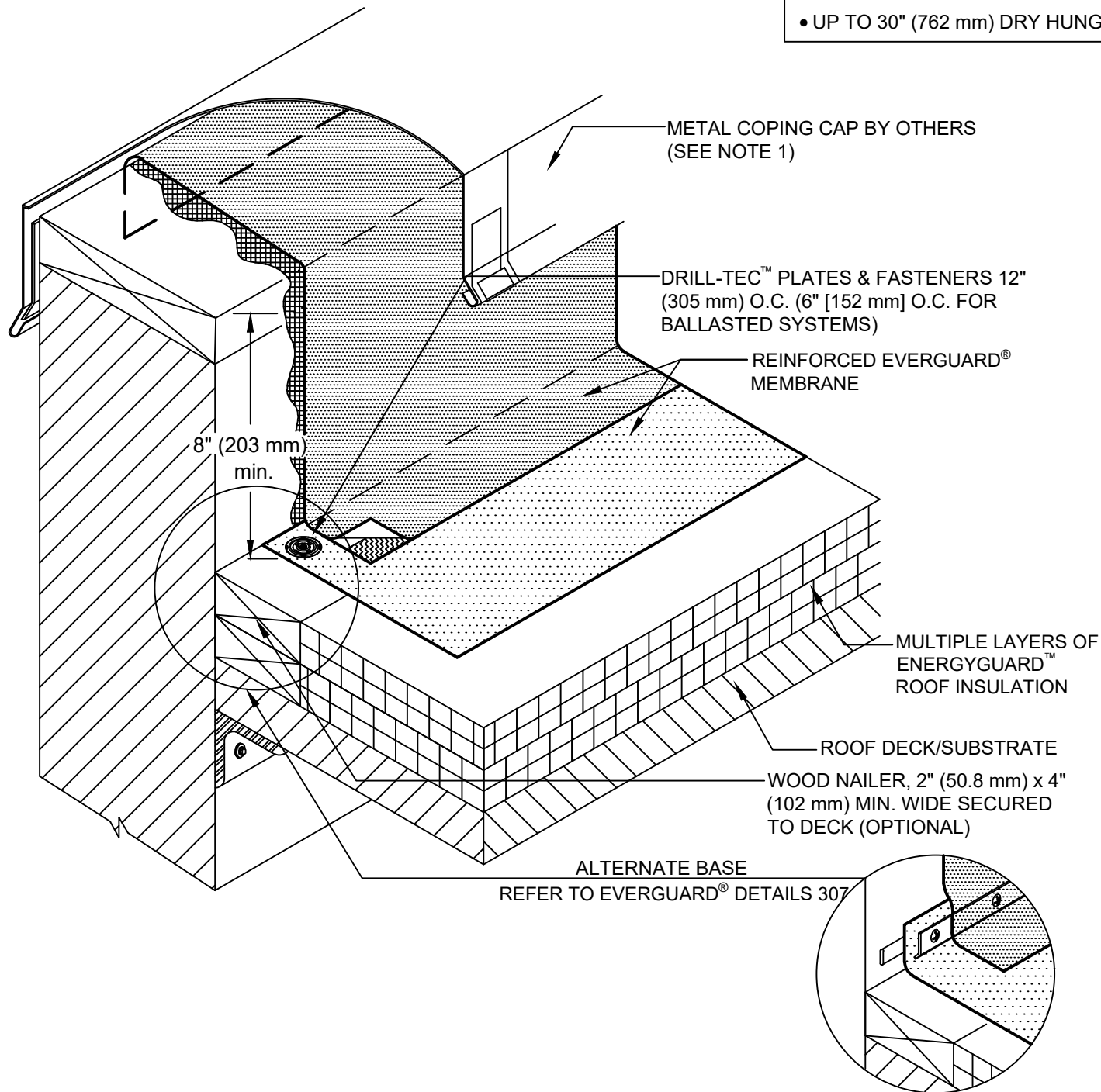
N.T.S.

**LEGEND** HEAT-WELDED EVERGUARD® BONDING ADHESIVE



## FLASHING KEY

- 30" - 66" (762 mm - 1.68 m) REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



## NOTE:

1. PERIMETER EDGE METAL SHOULD BE DESIGNED FOR WIND RESISTANCE IN ACCORDANCE WITH THE APPLICABLE EDITION OF ASCE 7 AND TESTED FOR RESISTANCE IN ACCORDANCE WITH THE TEST METHODS IN THE APPLICABLE EDITION OF ANSI/SPRI ES-1.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
3. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

## WALL FLASHING WITH COPING CAP

DRAWING #

303

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

2/2/21

SCALE

N.T.S.

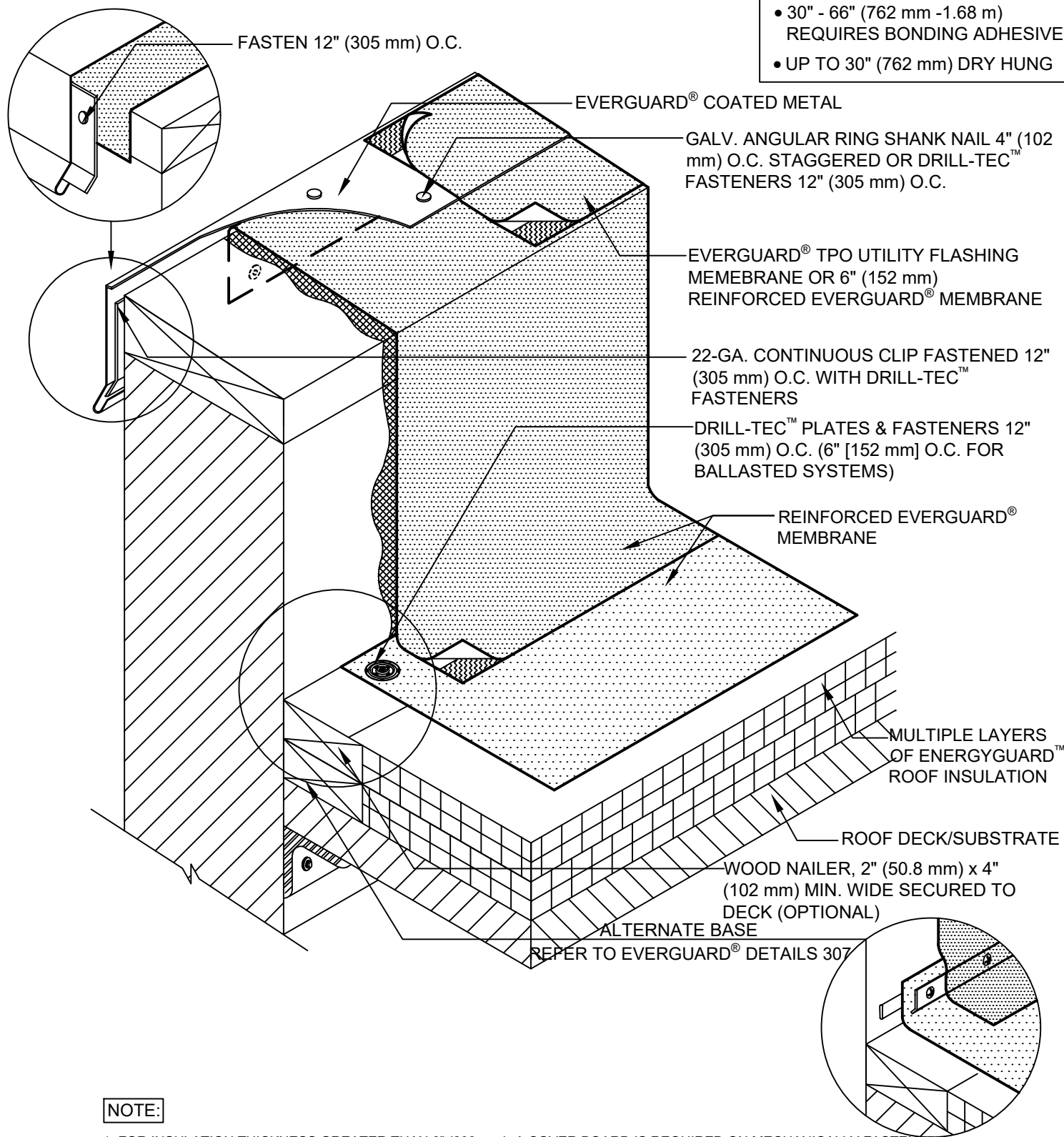
## LEGEND

HEAT-WELDED

EVERGUARD® BONDING ADHESIVE

## FLASHING KEY

- 30" - 66" (762 mm - 1.68 m) REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



### NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

**GAF**

## WALL FLASHING WITH COATED METAL EDGE

DRAWING #

**304**

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

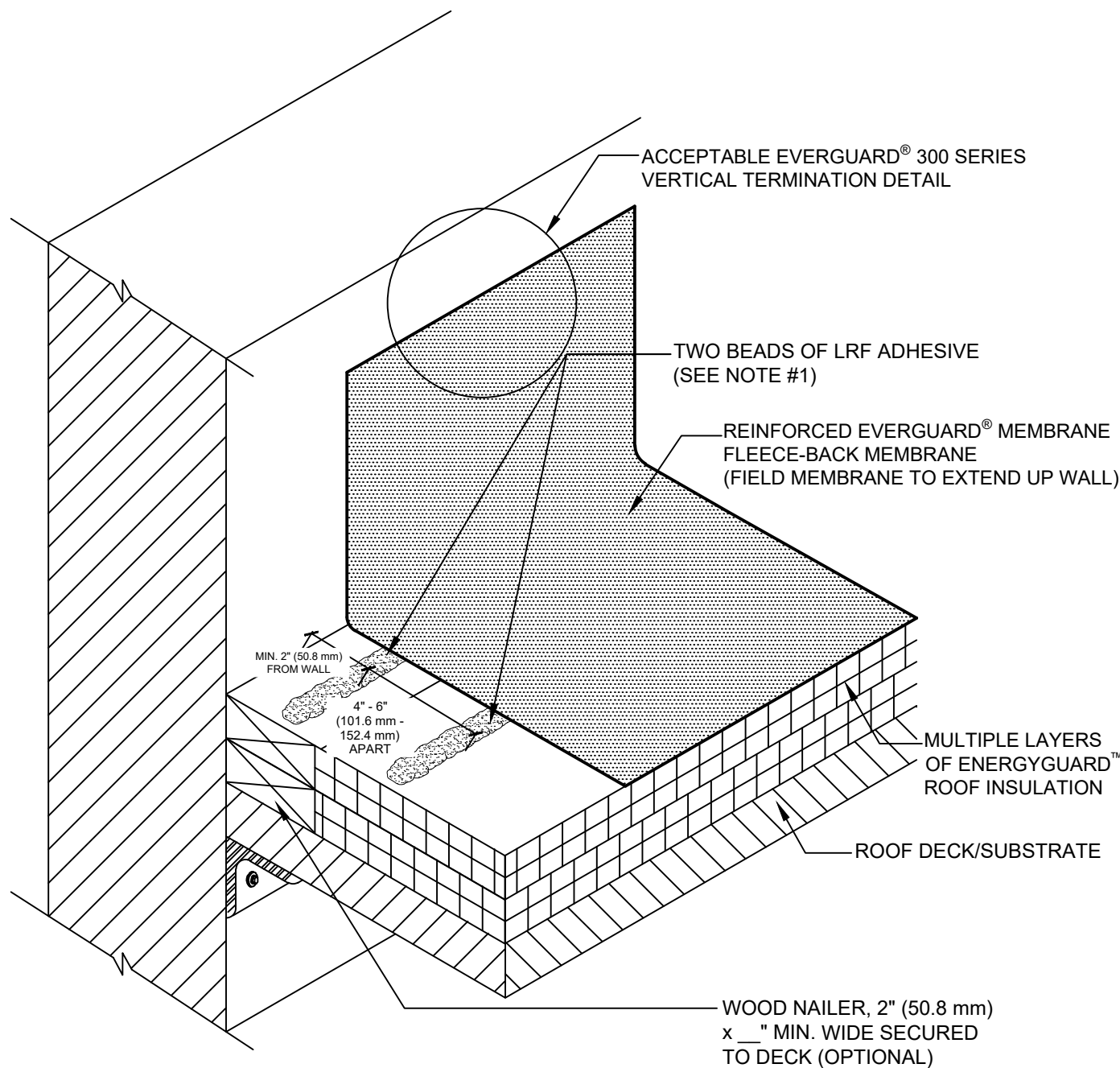
SCALE

N.T.S.

### LEGEND

HEAT-WELDED

EVERGUARD® BONDING ADHESIVE



NOTE:

1. REFER TO EVERGUARD® SPEC MANUAL FOR APPROVED LRF ADHESIVES, BEAD SIZE, AND PATTERNS.

**GAF**

LOW RISE FOAM AT BASE ATTACHMENT

DRAWING #  
**306A**

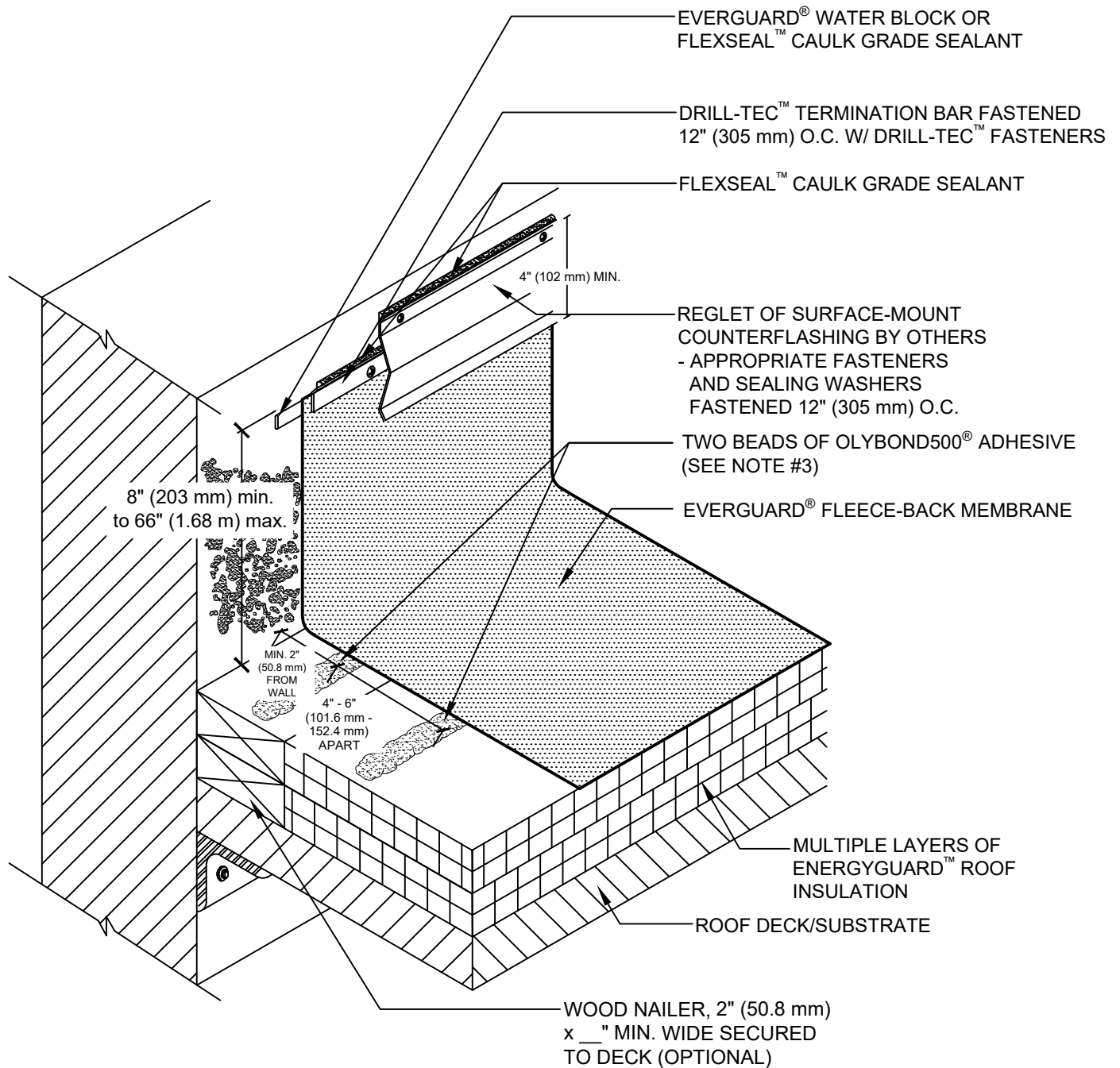
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS

ISSUE / REVISION DATE  
**5/21/21**

SCALE  
N.T.S.

LEGEND

# SINGLE-PLY: TPO & PVC Fleece-Back membranes



## NOTE:

1. EXISTING REGLET IS ACCEPTABLE IF METAL IS IN GOOD CONDITION.
2. EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.
3. REFER TO EVERGUARD® SPEC MANUAL FOR APPROVED LRF ADHESIVES, BEAD SIZE, AND PATTERNS.

**GAF**

## LOW RISE FOAM AT WALL ATTACHMENT

DRAWING #  
**306B**

THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS

ISSUE / REVISION DATE  
**5/21/21**

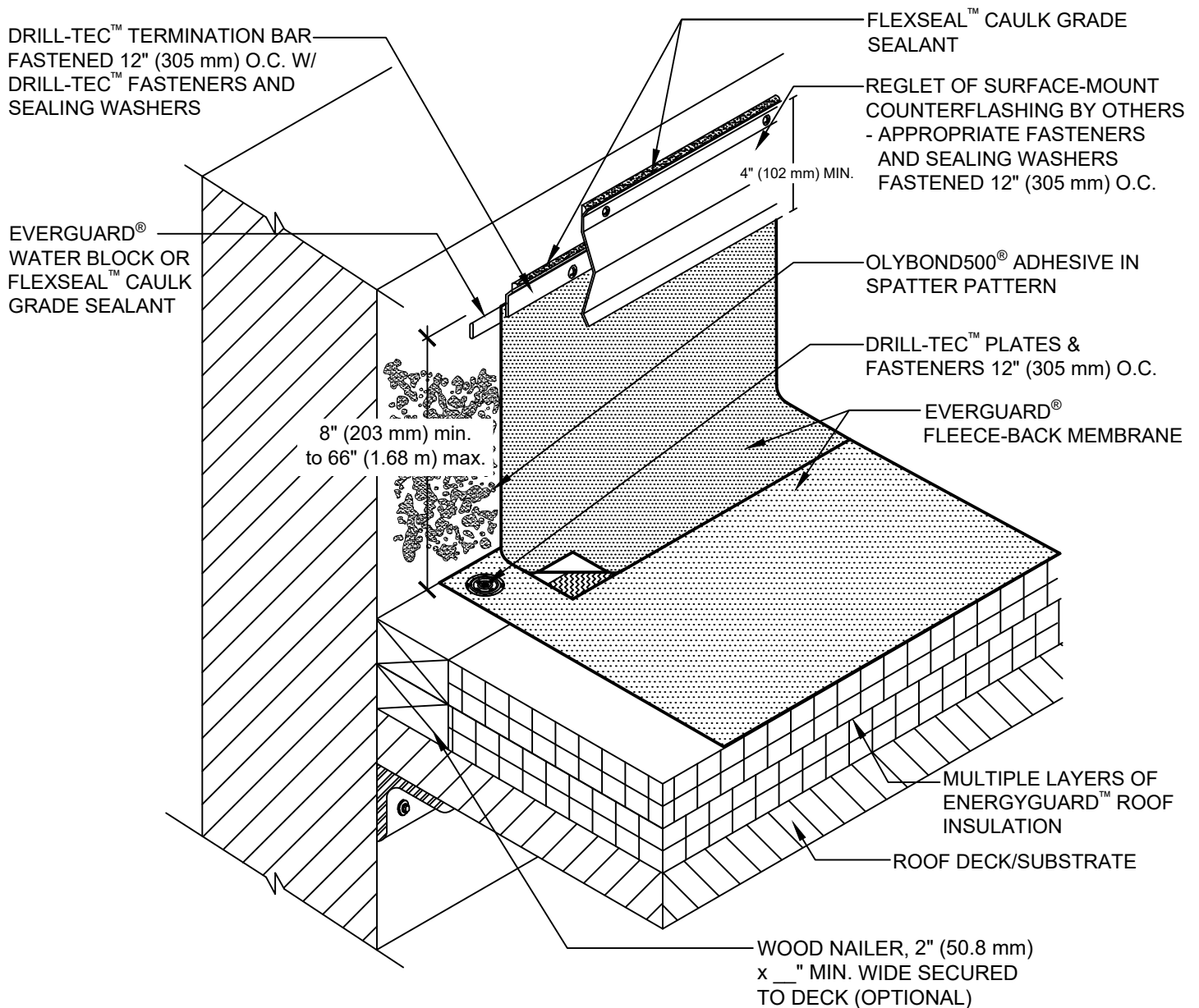
SCALE  
N.T.S.

## LEGEND



OLYBOND500® ADHESIVE IN SPATTER PATTERN

# SINGLE-PLY: TPO & PVC Fleece-Back membranes



## NOTE:

1. EXISTING REGLET IS ACCEPTABLE IF METAL IS IN GOOD CONDITION.
2. EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.

**GAF**

## ALTERNATE LOW RISE FOAM AT WALL ATTACHMENT

DRAWING #  
**306C**

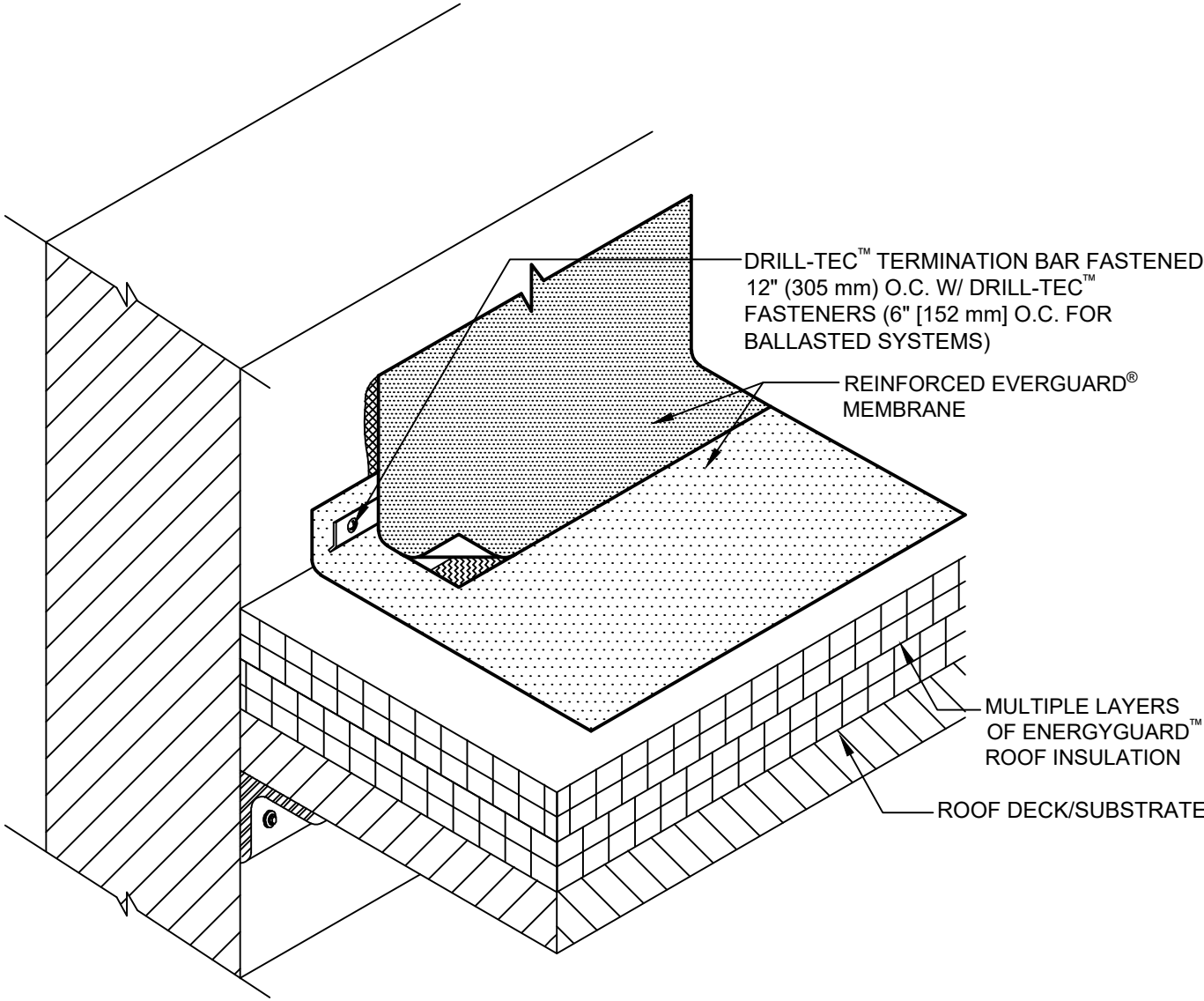
THIS DETAIL APPLIES TO:  
ADHERED SYSTEMS

ISSUE / REVISION DATE  
5/21/21

SCALE  
N.T.S.

## LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. PLATES & FASTENERS MAY BE USED IN LIEU OF TERM BAR IN NON-PRESSURIZED SITUATIONS.
- 2. THIS DETAIL NEEDS TO BE USED FOR PRESSURIZED SITUATIONS, IN ALL SYSTEMS.
- 3. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
- 4. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

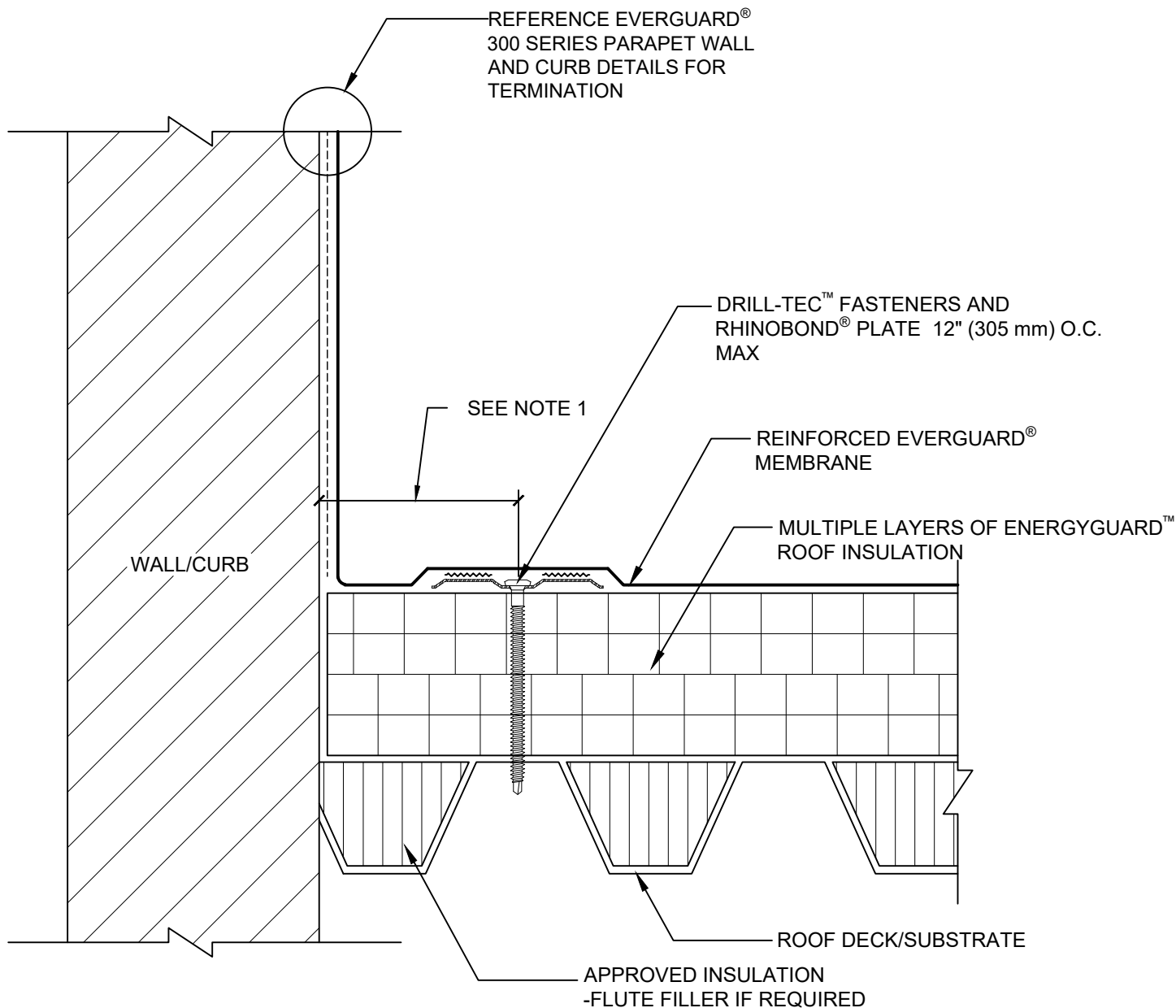


ALTERNATE WALL BASE TERMINATION

|           |                         |                       |        |
|-----------|-------------------------|-----------------------|--------|
| DRAWING # | THIS DETAIL APPLIES TO: | ISSUE / REVISION DATE | SCALE  |
| 307A      | ALL SYSTEMS             | 8/24/20               | N.T.S. |

LEGEND

- HEAT-WELDED
- EVERGUARD® BONDING ADHESIVE  
\*OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT



**NOTE:**

1. DRILL-TEC™ FASTENERS AND RHINOBOND® PLATES MUST BE INSTALLED A MAXIMUM 6" (152 mm) FROM THE ANGLE CHANGE.
2. REFER TO THE DRILL-TEC™ RHINOBOND® ATTACHMENT TABLES FOR DETAILED INSTALLATION REQUIREMENTS REGARDING DECK TYPE, PLATE & FASTENER TYPE, AND MIN. EMBEDMENT.
3. EVERGUARD® BONDING ADHESIVE OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT.

**GAF**

**BASE TIE-IN CONTINUOUS FLASHING AT ANGLE CHANGE**

DRAWING #  
**307B**

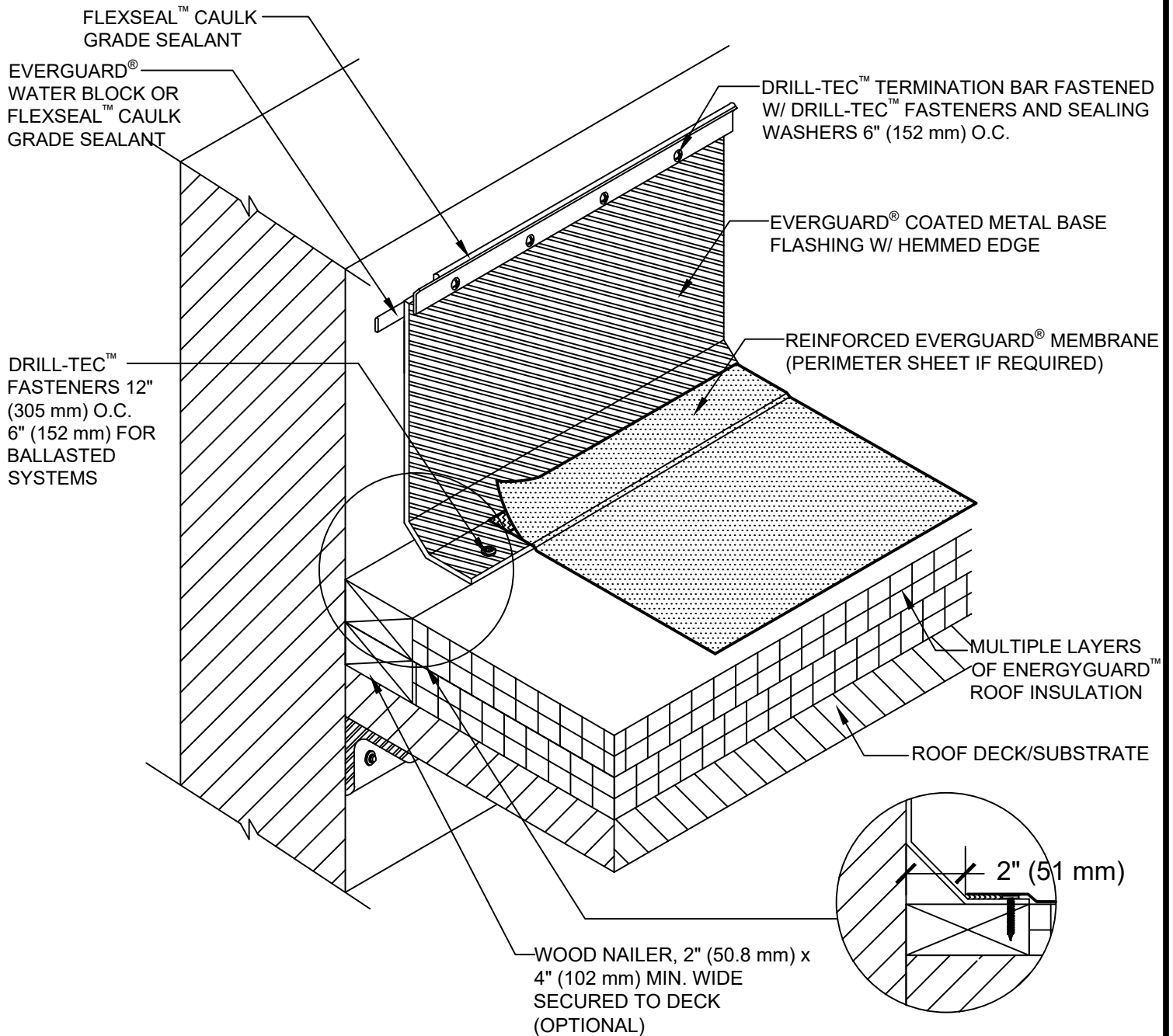
THIS DETAIL APPLIES TO:  
RHINOBOND® SYSTEMS

ISSUE / REVISION DATE  
**8/11/20**

SCALE  
N.T.S.

**LEGEND**

- EVERGUARD® BONDING ADHESIVE  
~~~~~ INDUCTION HEAT-WELD

NOTE:

1. FOR EXTENDED GUARANTEE, COUNTERFLASHING MUST BE USED. SEE EVERGUARD® DETAIL 301.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. FOR 15-YR. GUARANTEE, ADD FLEXSEAL™ CAULK GRADE SEALANT BEHIND COATED METAL. ADD TERMINATION BAR EVEN WITH TOP OF COATED METAL. SECURE BAR 12" (305 mm) O.C. AND ADD FLEXSEAL™ CAULK GRADE SEALANT IN A BEAD SO THAT BOTH COATED METAL AND TERMINATION BAR ARE COVERED.

GAF

COATED METAL WALL FLASHING

DRAWING #

308

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

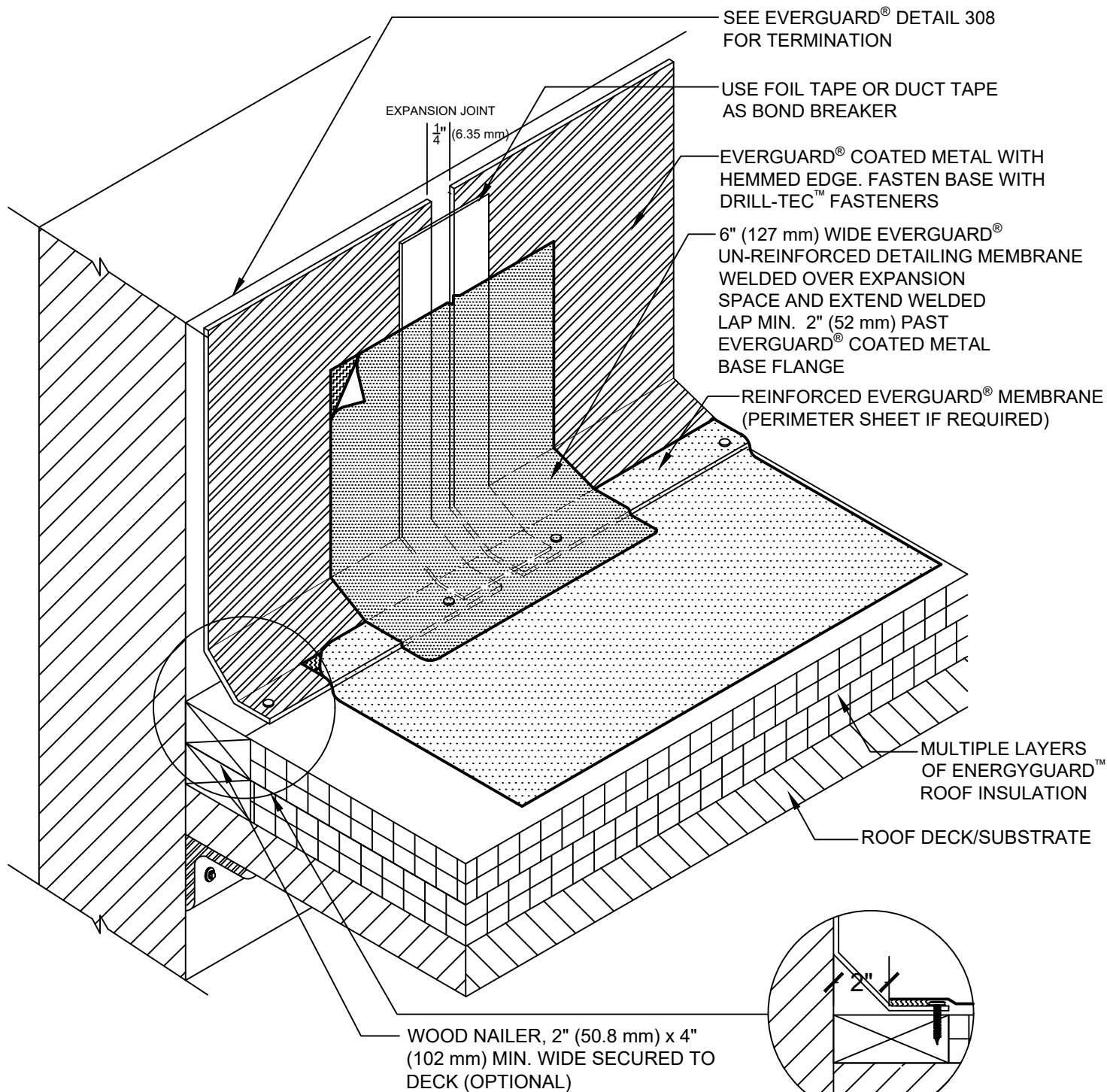
8/24/20

SCALE

N.T.S.

LEGEND

 HEAT-WELDED



GAF

COATED METAL WALL FLASHING JOINT

DRAWING #

310

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

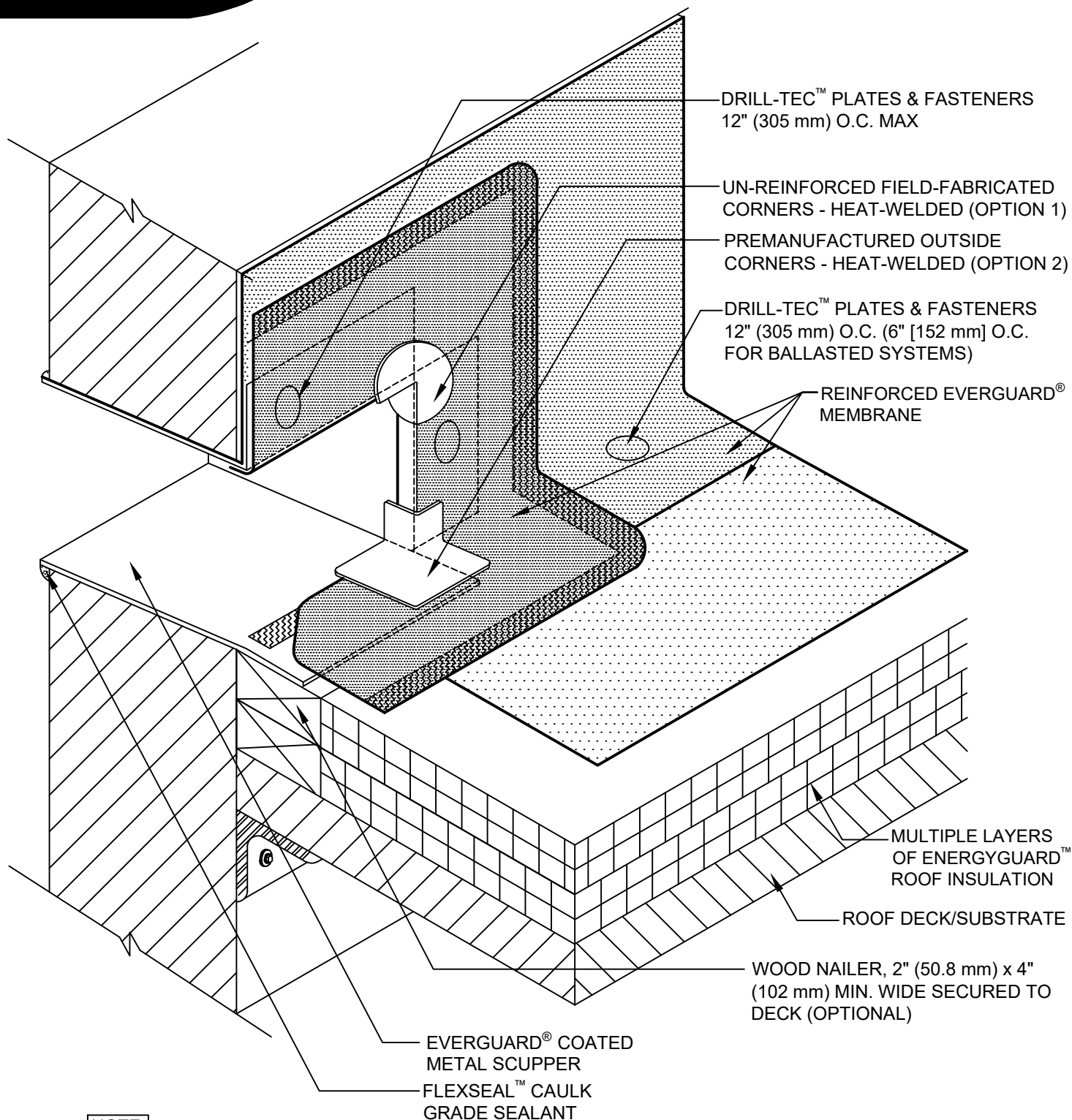
8/24/20

SCALE

N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. REMEMBER TO INSTALL EVERGUARD® UN-REINFORCED FIELD-FABRICATED OR PREMANUFACTURED OUTSIDE CORNERS TO THE SCUPPERS' FOUR ROOF-SIDE CORNERS.
3. SCUPPER MUST BE SEALED OFF ON OUTSIDE OF BUILDING.

GAF

COATED METAL WALL SCUPPER

DRAWING #

311

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

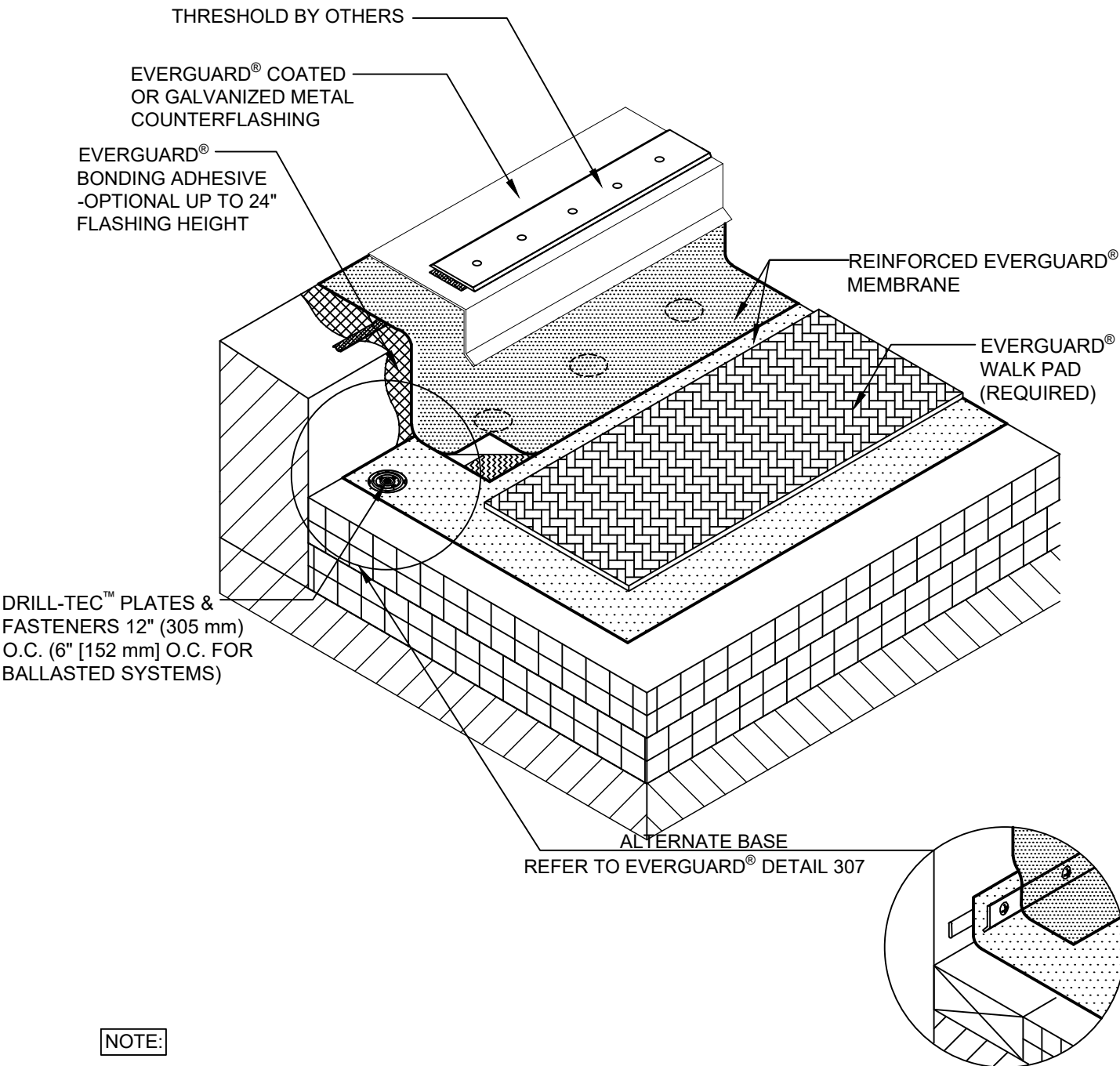
8/24/20

SCALE

N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. WALKWAY PAD OR PAVER WITH SLIP SHEET REQUIRED AT ALL ROOF ACCESS POINTS. FOR BALLASTED ATTACHED SYSTEMS PAVER IN LIEU OF PAD AND BALLAST PER SPEC.
3. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
4. FOR HEIGHTS LESS THAN 8" (203 mm) CONTACT GAF FOR MORE INFORMATION.

GAF

THRESHOLD FLASHING DETAIL

DRAWING #
312

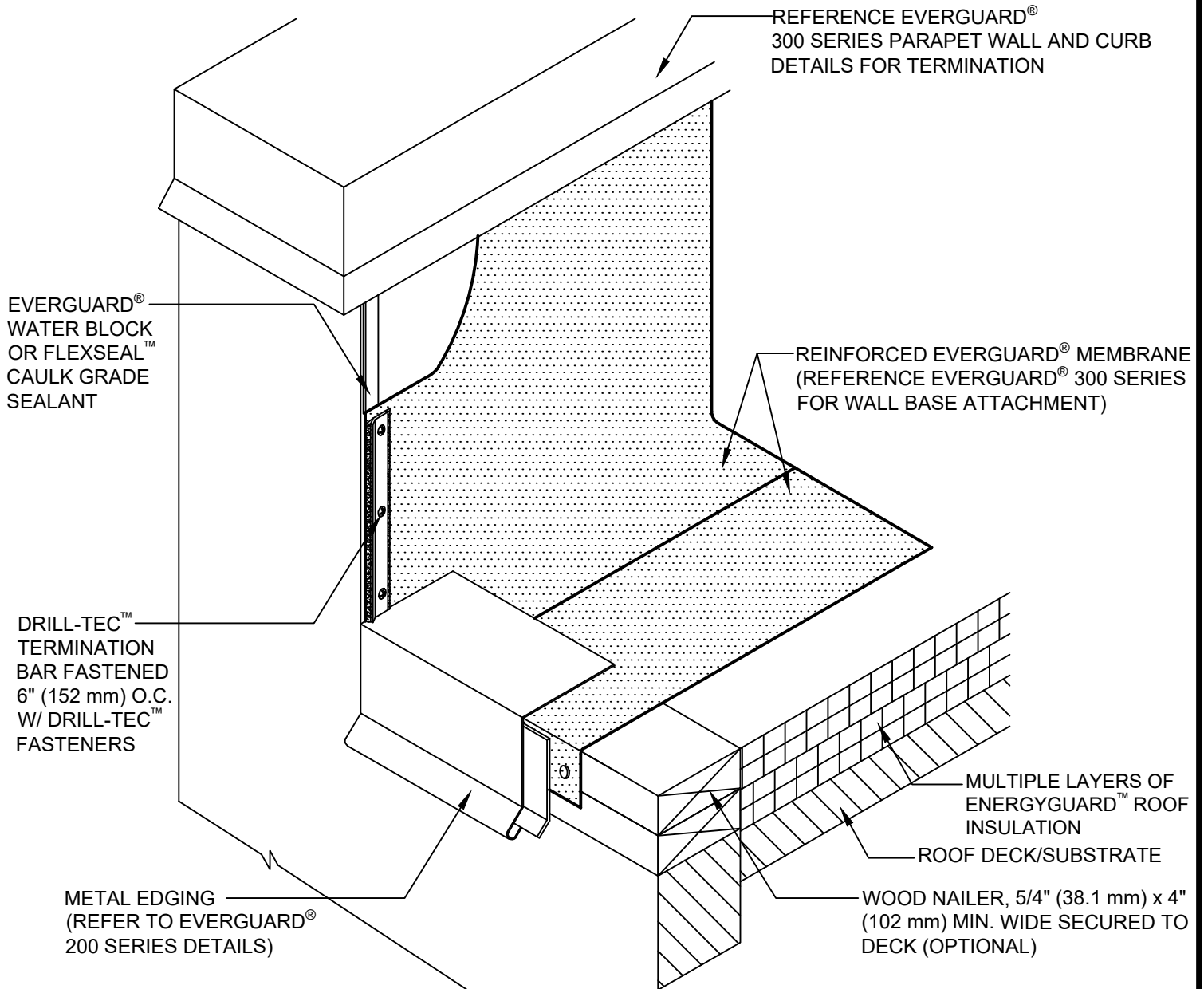
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/11/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® WATER BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. FLEXSEAL™ CAULK GRADE SEALANT IS TO BE ADDED TO ALL TERMINATION BAR EDGES, OPEN HOLES, AND DRILL-TEC™ FASTENER HEADS.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

WALL EDGE FLASHING WITH TERMINATION BAR

DRAWING #
313

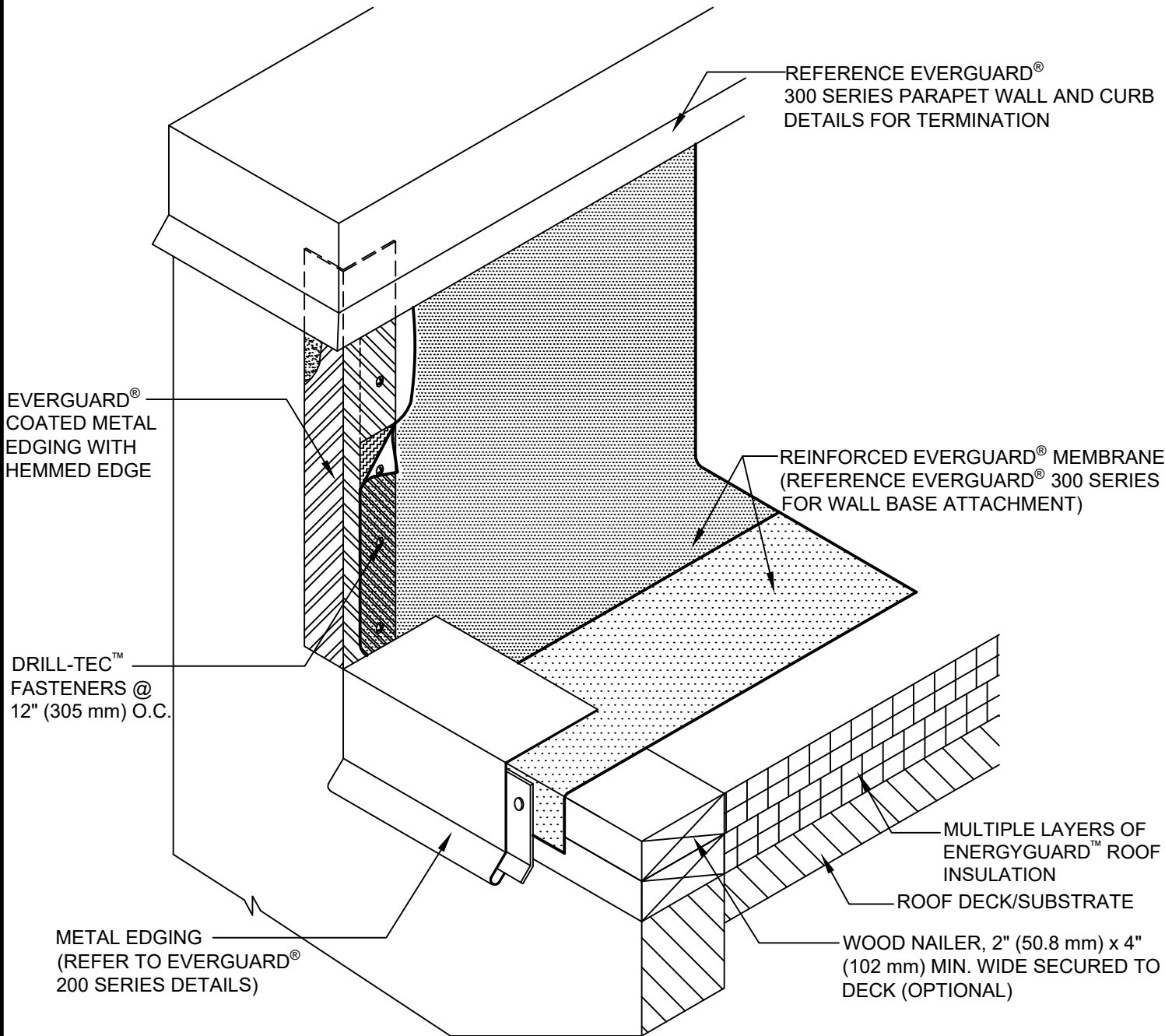
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
- 2. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.



WALL EDGE FLASHING WITH COATED METAL EDGING

DRAWING #
314

THIS DETAIL APPLIES TO:
ALL SYSTEMS

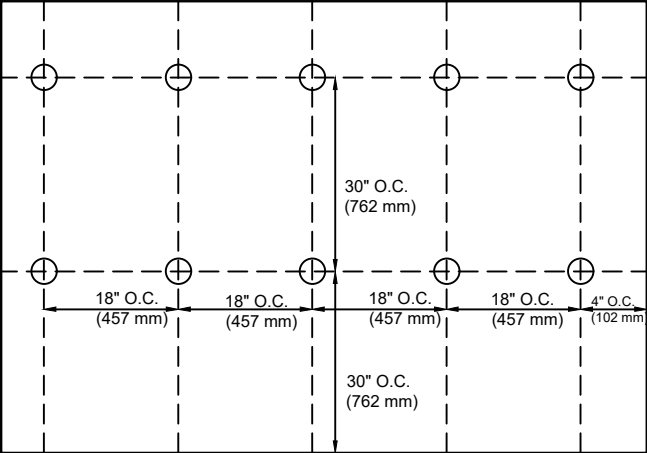
ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT

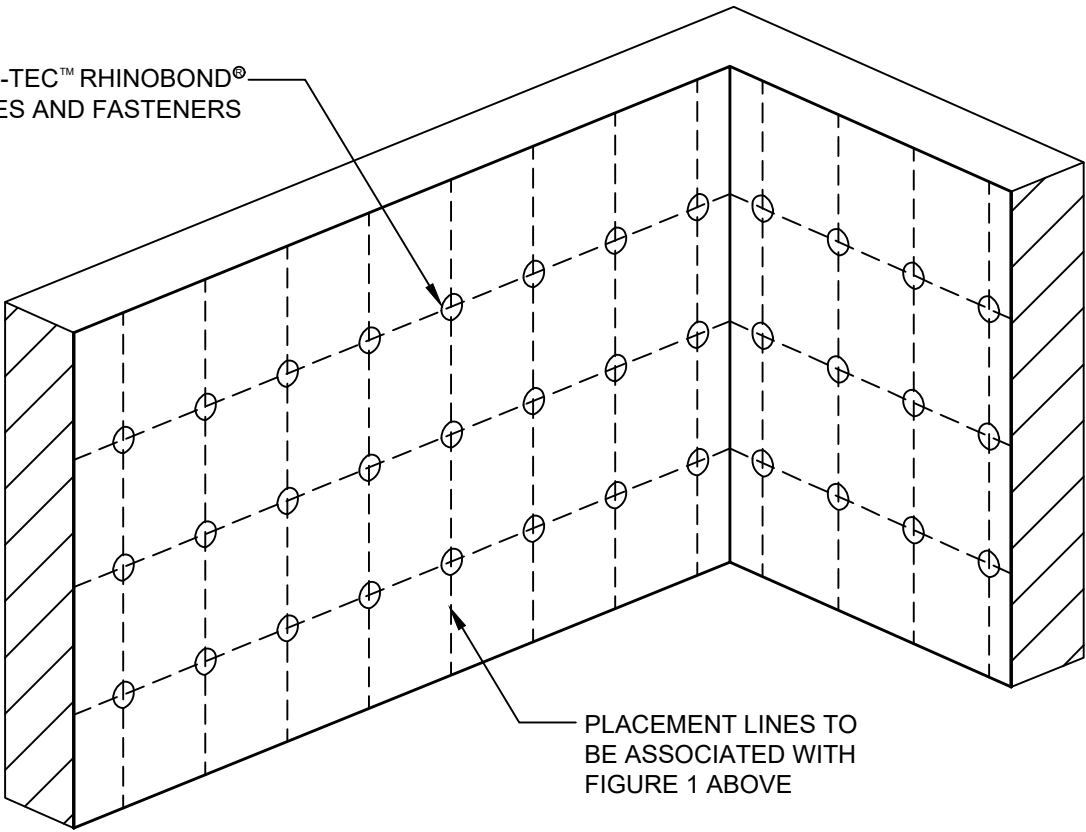
FIGURE 1



FROM CORNER OF WALL
FIRST ROW 4" (102 mm)
O.C FROM CORNER
THEN FASTENERS
18" (457 mm) O.C.

FROM BASE OF WALL
FIRST ROW OF FASTENERS 30" (762 mm) OFF WALL BASE
CONTINUE 30" (762 mm) UP WALL.

DRILL-TEC™ RHINO-BOND®
PLATES AND FASTENERS



PLACEMENT LINES TO
BE ASSOCIATED WITH
FIGURE 1 ABOVE

NOTE:

1. BASE ATTACHMENT TO FOLLOW FIELD OF ROOF APPLICATION.



RHINO-BOND WALL FLASHING FASTENING PATTERN

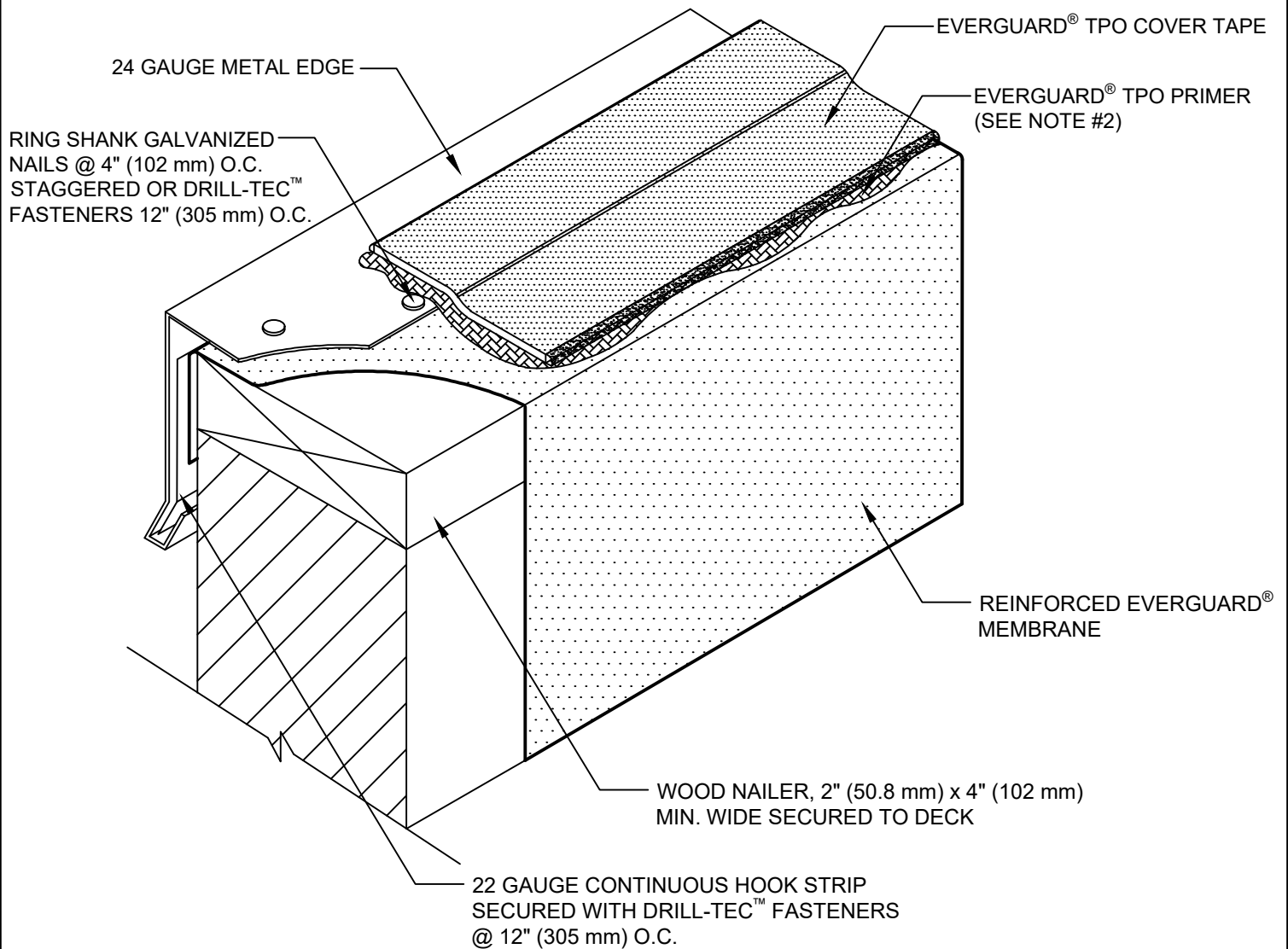
DRAWING #
315

THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
BALLASTED SYSTEMS
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE
11/23/20

SCALE
N.T.S.

LEGEND

**NOTE:**

1. METAL JOINTS ON THE ROOF SIDE CAN BE CAULKED USING EVERGUARD® TPO CUT EDGE SEALANT. DO NOT RUN TAPE UP CANTED METAL OF GRAVEL STOP.
2. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.
3. FLEXSEAL™ CAULK GRADE SEALANT SHOULD BE FEATHERED OUT AND APPLIED TO BOTH INSIDE AND OUTSIDE EDGES. ENSURE PRIMER EXTENDS UNDER FLEXSEAL CAULK GRADE SEALANT.
4. EVERGUARD® TPO COVER TAPE TO BE USED ONLY ON HORIZONTAL SURFACES, NOT TURNED VERTICALLY.

GAF**PARAPET WALL WITH METAL EDGE AND TPO COVER TAPE**

DRAWING #

316

THIS DETAIL APPLIES TO:

ALL SYSTEMS

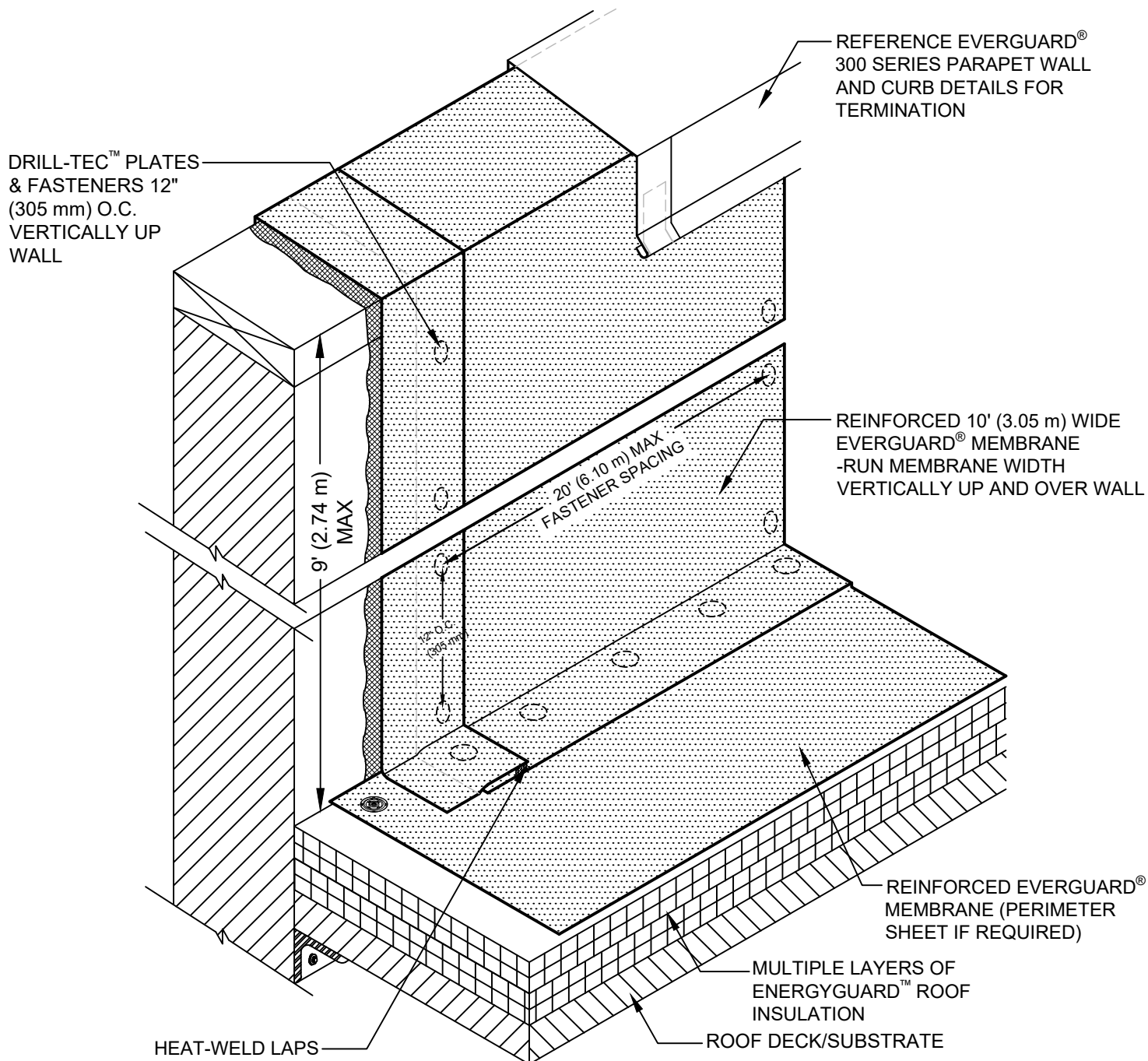
ISSUE / REVISION DATE

8/24/20

SCALE

N.T.S.

LEGEND
 FLEXSEAL™ CAULK GRADE SEALANT

**NOTE:**

1. MUST BE FASTENED VERTICALLY ON THE WALL A MINIMUM 10' (3.05 m) FROM ALL ENDS OR CORNERS OF WALL, THEN MAX 20' (6.10 m) THEREAFTER. DRILL-TEC™ FASTENERS SPACED 12" (305 mm) O.C.
2. MAX PARAPET WALL HEIGHT NOT TO EXCEED THE WIDTH OF A 10' (3.05 m) SHEET. PARAPET WALL SHOULD BE NO TALLER THAN 9' (2.74 m) TO USE A FULL 10' (3.05 m) SHEET OF MEMBRANE AS FLASHING.

GAF**HIGH WALL FLASHING WITH 10' (3.05 m) WIDE SHEETS**

DRAWING #

317A

THIS DETAIL APPLIES TO:

ALL SYSTEMS

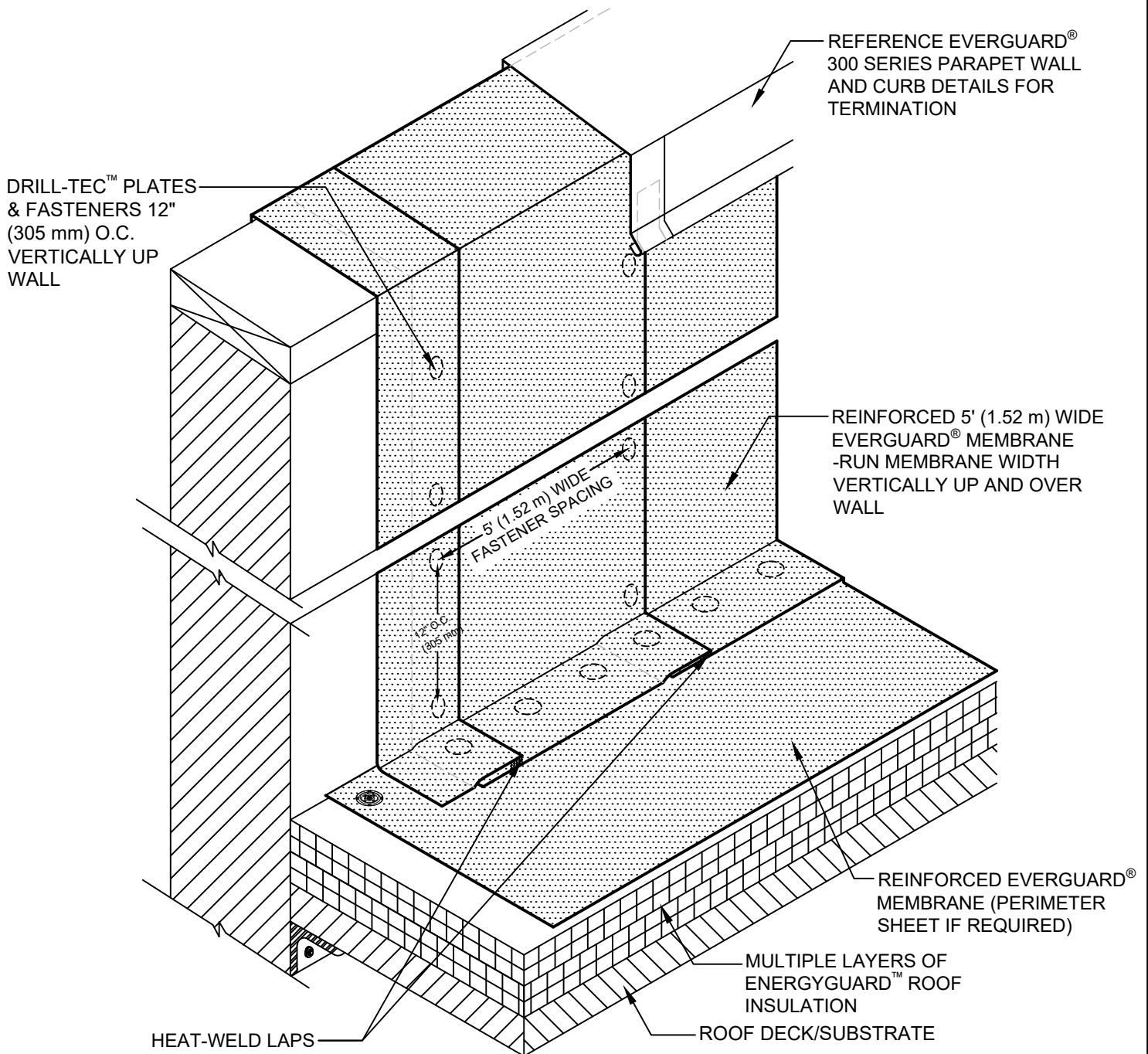
ISSUE / REVISION DATE

8/24/20

SCALE

N.T.S.

LEGENDEVERGUARD® BONDING ADHESIVE
REQUIRED

**NOTE:**

1. WALL HEIGHTS OVER 10' (3.05 M) HIGH REQUIRE THE ENTIRE WALL TO BE FULLY ADHERED. UNDER 10' (3.05 m) CAN BE DRY HUNG WITHOUT ADHESIVE.

GAF**HIGH WALL FLASHING WITH 5' (1.52 m) WIDE SHEETS**

DRAWING #

317B

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

SCALE

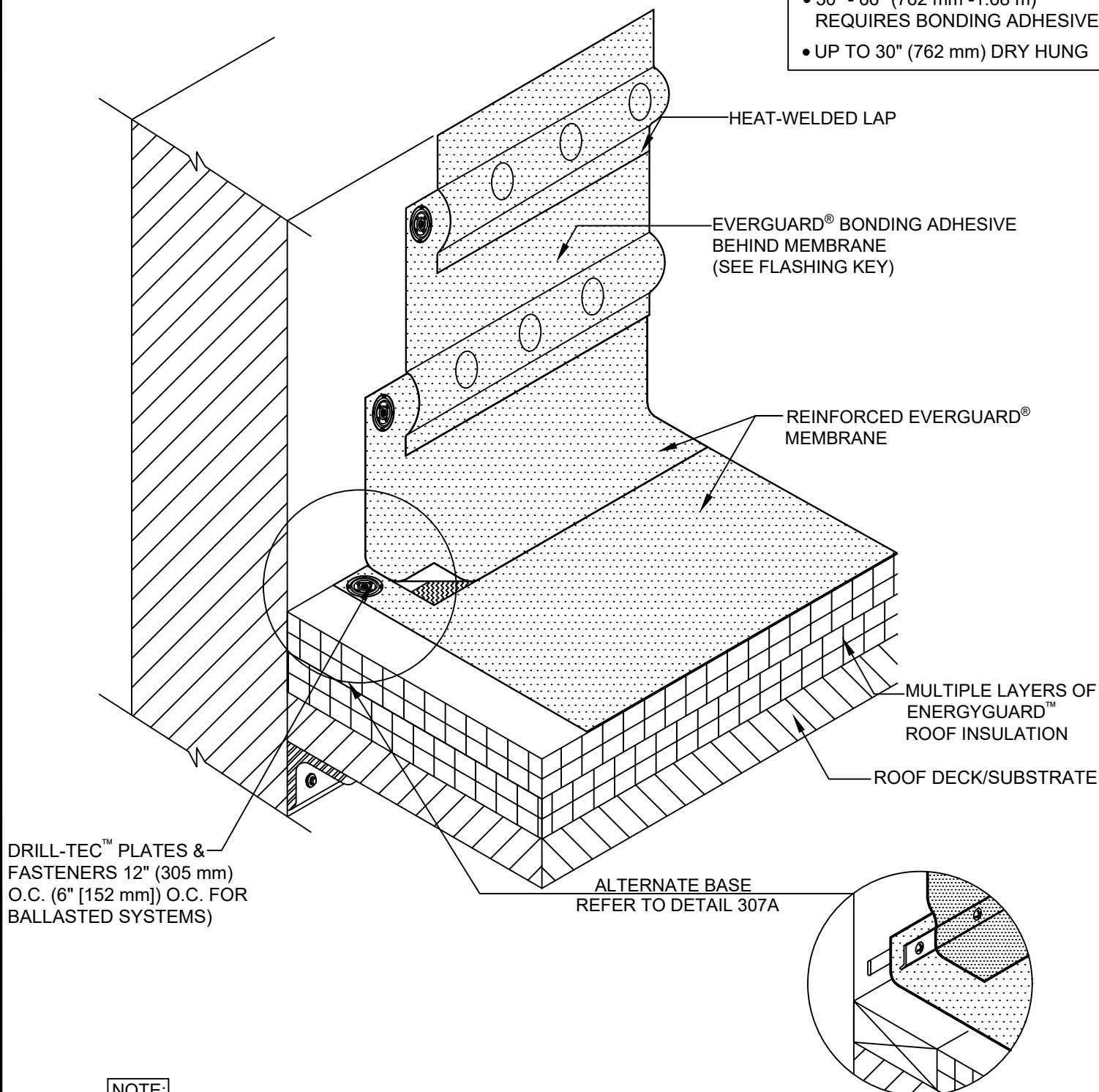
N.T.S.

LEGEND

HEAT-WELD LAPS

FLASHING KEY

- 30" - 66" (762 mm - 1.68 m)
REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

HIGH WALL FLASHING WITH PLATES AND FASTENERS

DRAWING #

317C

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

SCALE

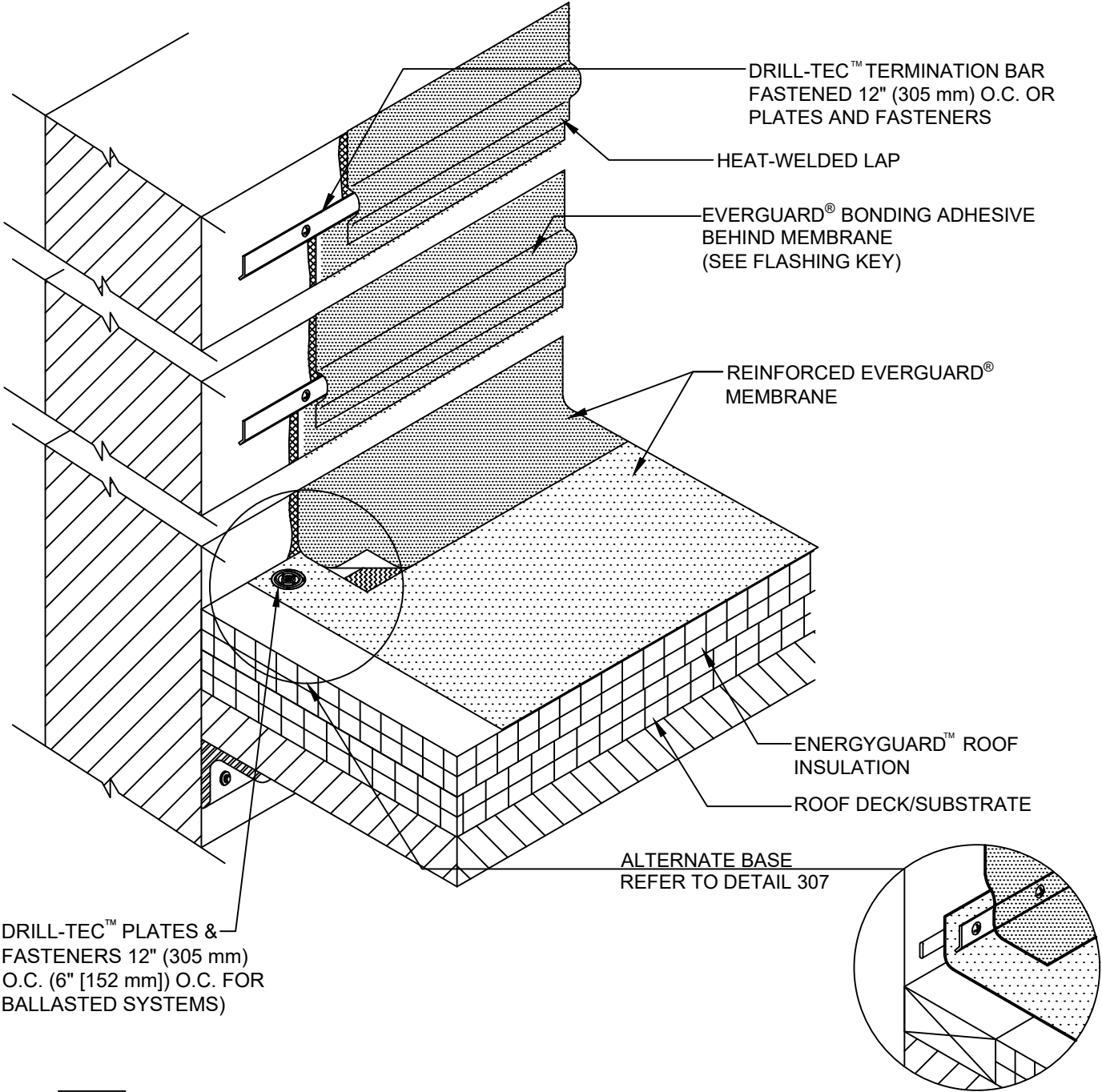
N.T.S.

LEGEND

 HEAT-WELD LAPS

FLASHING KEY

- 30" - 66" (762 mm - 1.68 m)
REQUIRES BONDING ADHESIVE
- UP TO 30" (762 mm) DRY HUNG



DRILL-TEC™ PLATES & FASTENERS 12" (305 mm) O.C. (6" [152 mm]) O.C. FOR BALLASTED SYSTEMS)

NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.



HIGH WALL FLASHING WITH TERMINATION BAR

DRAWING #
317D

THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

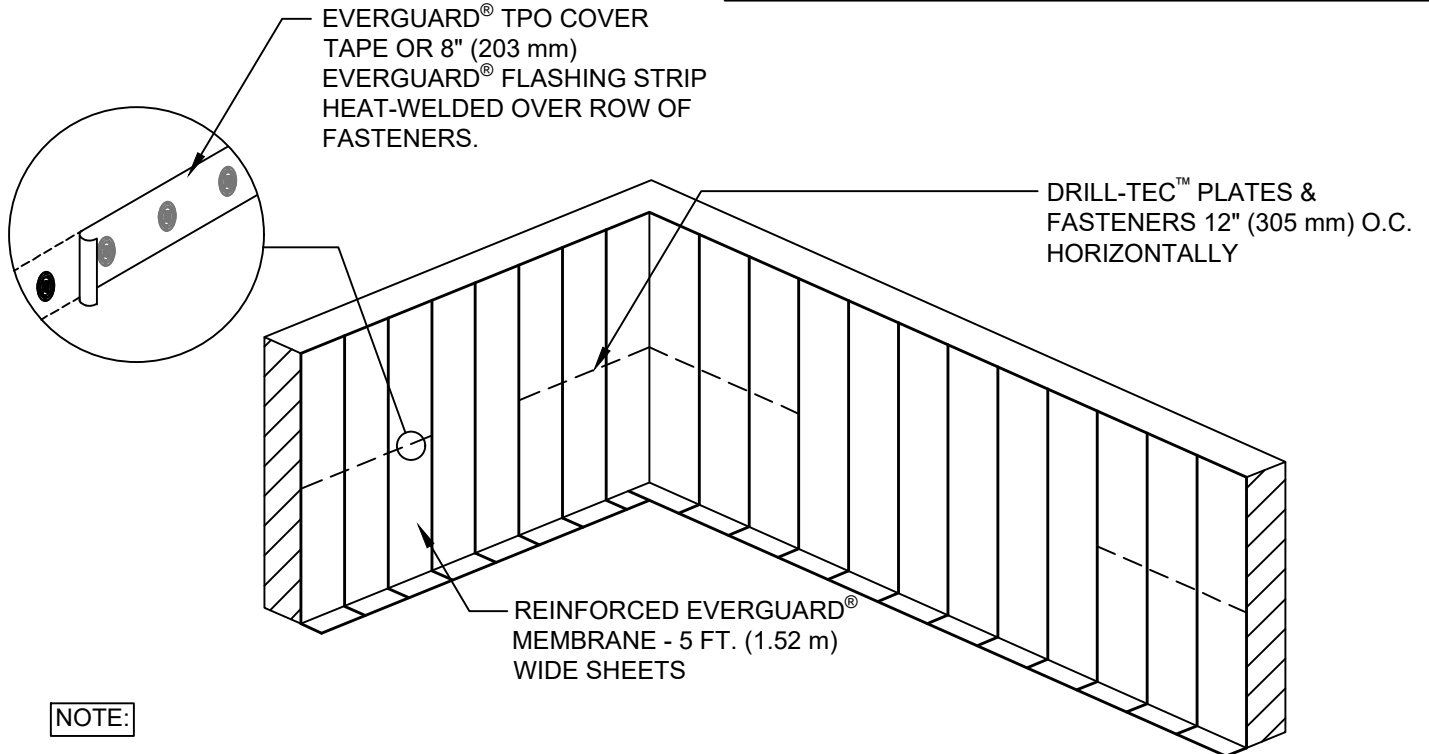
SCALE
N.T.S.

LEGEND

 HEAT-WELD LAPS

SINGLE-PLY: TPO & PVC

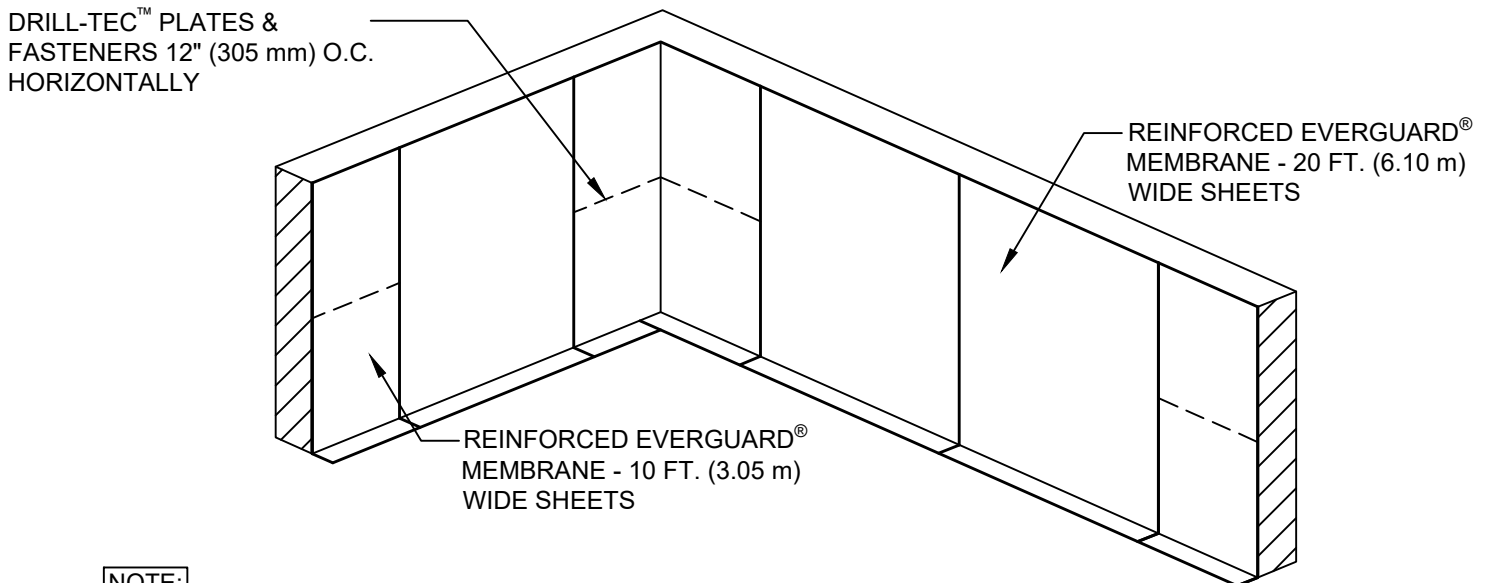
FOR 5' (1.52 m) WIDE SHEETS REFERENCE EVERGUARD® DETAIL 317B



NOTE:

1. FIRST THREE SHEETS FROM THE CORNER AND FIRST THREE SHEETS FROM THE WALL EDGE REQUIRE A ROW OF DRILL-TEC™ PLATES AND FASTENERS 12" O.C. MID WAY UP THE WALL AS SHOWN.

FOR 10' (3.05 m) WIDE SHEETS REFERENCE EVERGUARD® DETAIL 317A



NOTE:

1. FIRST SHEET FROM THE CORNER AND FIRST SHEET FROM THE WALL EDGE REQUIRE A ROW OF DRILL-TEC™ PLATES AND FASTENERS 12" O.C. MID WAY UP THE WALL AS SHOWN. CORNER AND EDGE SHEETS ARE 10' (3.05 m) ALL SHEETS IN BETWEEN ARE 20' (6.10 m) WIDE.

GAF

HIGH WALL FLASHING CORNER AND EDGE REINFORCEMENT

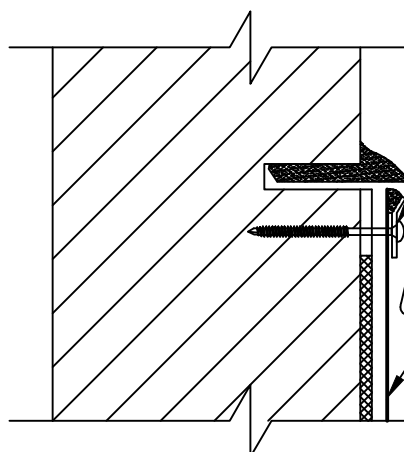
DRAWING #
317E

THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND



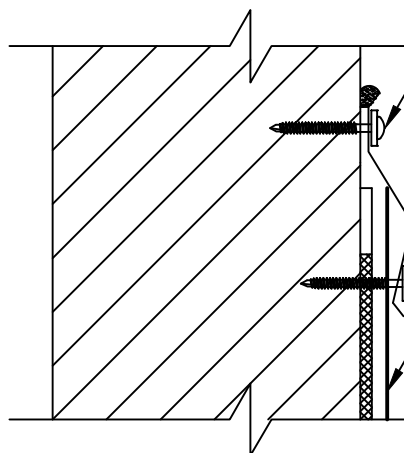
1. MECHANICAL TERMINATION

DRILL-TEC™ TERMINATION BAR FASTENED 12" (305 mm) O.C (OPTIONAL)

METAL COUNTERFLASHING (MAY BE FACE MOUNTED ALSO)

REINFORCED EVERGUARD® MEMBRANE

NOTE: EXISTING COUNTERFLASHING MUST BE IN GOOD WORKABLE CONDITION AND TIGHT TO WALL.



2. MECHANICAL TERMINATION

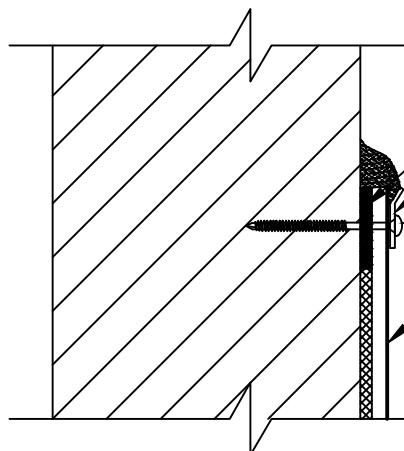
DRILL-TEC™ FASTENERS AND SEALING WASHERS 12" (305 mm) O.C.

METAL SURFACE MOUNTED COUNTERFLASHING

DRILL-TEC™ FASTENERS AND SEALING WASHERS 12" (305 mm) O.C.

REINFORCED EVERGUARD® MEMBRANE

NOTE: EXISTING COUNTERFLASHING MUST BE IN GOOD WORKABLE CONDITION AND TIGHT TO WALL.



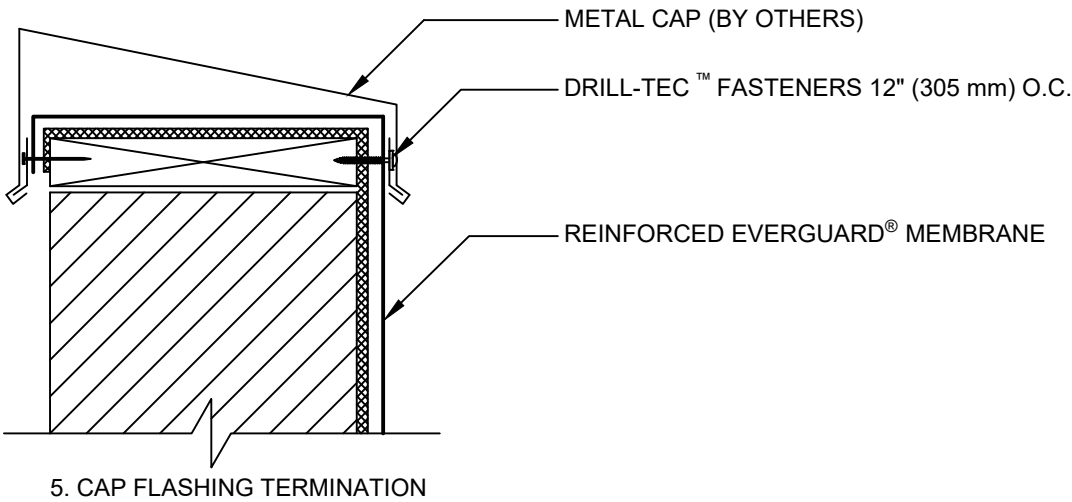
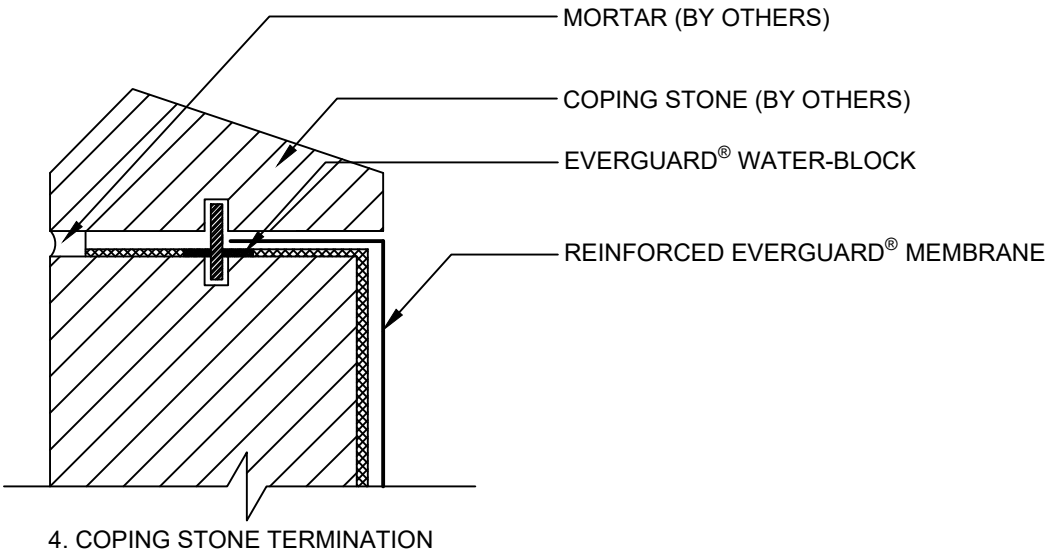
3. MECHANICAL TERMINATION (20-YR MAX GUARANTEE)

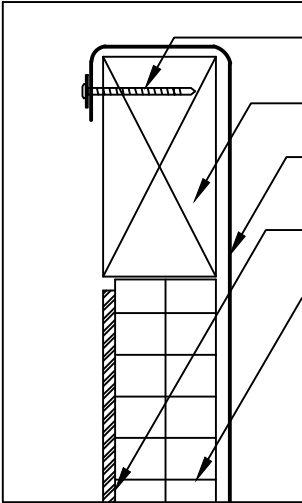
EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT

DRILL-TEC™ TERMINATION BAR

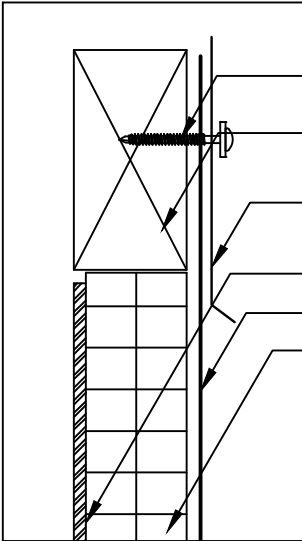
DRILL-TEC™ FASTENERS AND SEALING WASHERS 6" (152 mm) O.C.

REINFORCED EVERGUARD® MEMBRANE



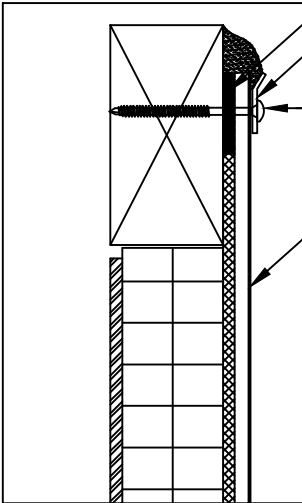


- GALVANIZED ROOF NAILS AND SEALING WASHERS FASTENED 12" (305 mm) O.C. MAX
- WOOD NAILER THICKNESS OF INSULATION
- REINFORCED EVERGUARD® MEMBRANE
- INSULATED METAL CURB
- ENERGYGUARD™ ROOF INSULATION



- DRILL-TEC™ FASTENERS AND SEALING WASHERS 12" (305 mm) O.C. MAX
- WOOD NAILER
- METAL COUNTERFLASHING OR SLIP FLASHING BY OTHERS 3" (76.2 mm) MIN. FACE.
- INSULATED METAL CURB
- REINFORCED EVERGUARD® MEMBRANE
- ENERGYGUARD™ ROOF INSULATION

NOTE: EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.



- EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT
- DRILL-TEC™ TERMINATION BAR
- DRILL-TEC™ FASTENERS AND SEALING WASHERS 6" (152 mm) O.C.
- REINFORCED EVERGUARD® MEMBRANE



SKYLIGHT NON-STANDARD CURB TERMINATION

DRAWING #
318D

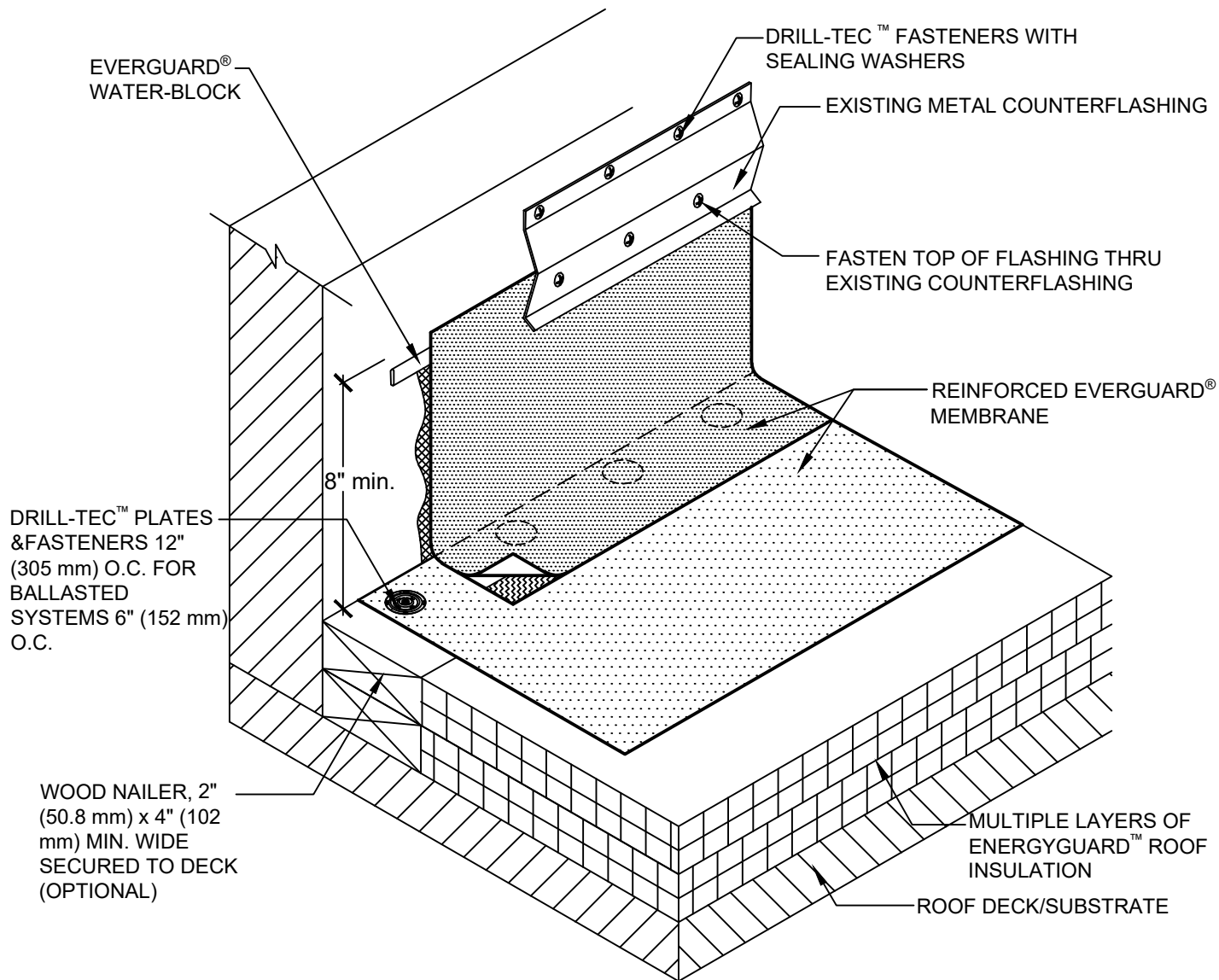
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

- EVERGUARD® BONDING ADHESIVE
- OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT
- FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. ADD BALLAST PER SPEC FOR BALLASTED SYSTEMS.
2. EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.

GAF

WALL FLASHING WITH EXISTING COUNTERFLASHING



DRAWING #
319

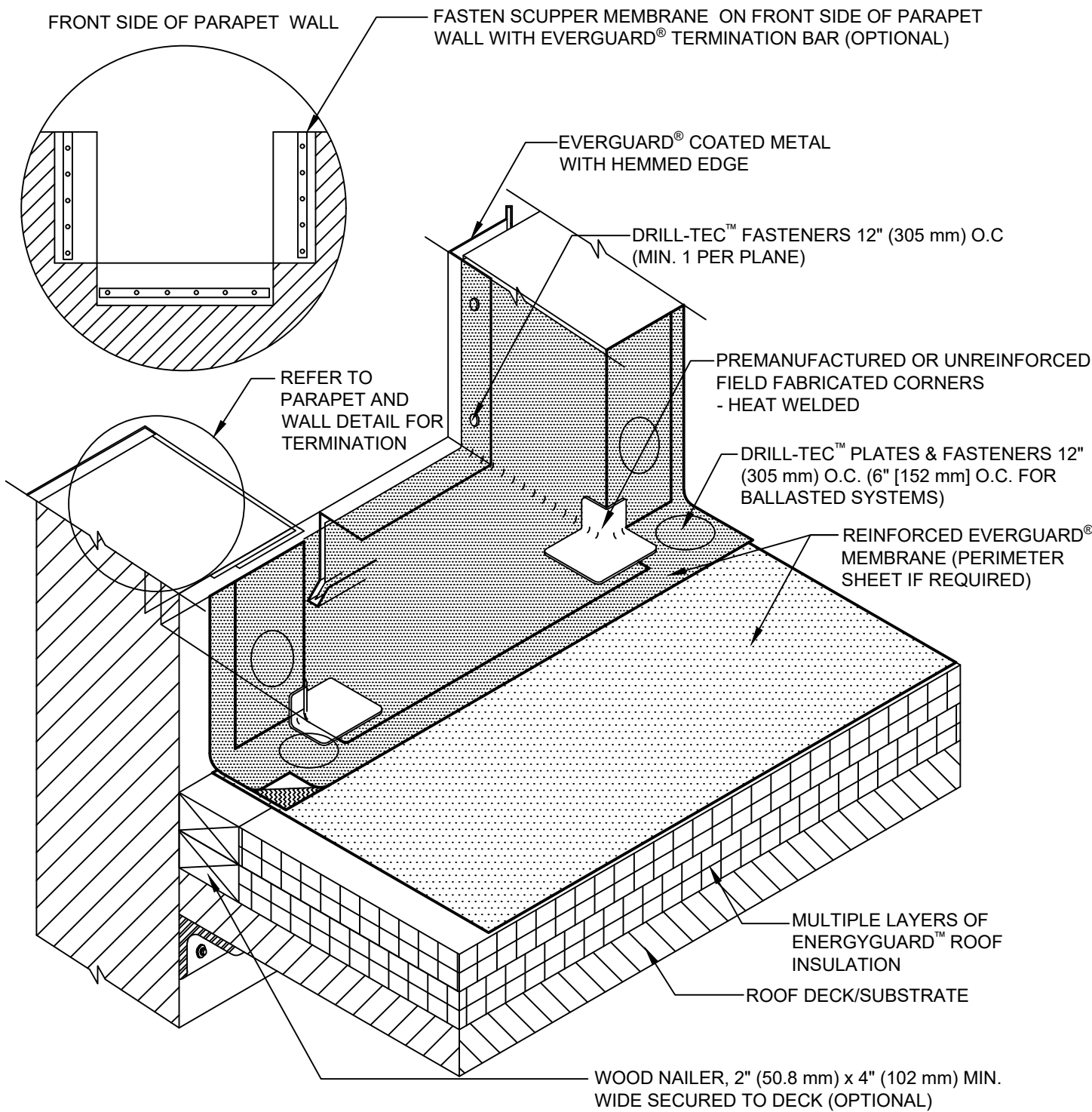
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

-  HEAT-WELDED
 EVERGUARD® BONDING ADHESIVE
-OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT



NOTE:

1. DETAIL TO BE USED IN CONJUNCTION WITH STANDARD GUIDE SPECIFICATION CONTAINING REQUIREMENTS FOR NAILERS, INSULATION ETC.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.



SCUPPER - FIELD FABRICATED
OPEN TOP

DRAWING #
322

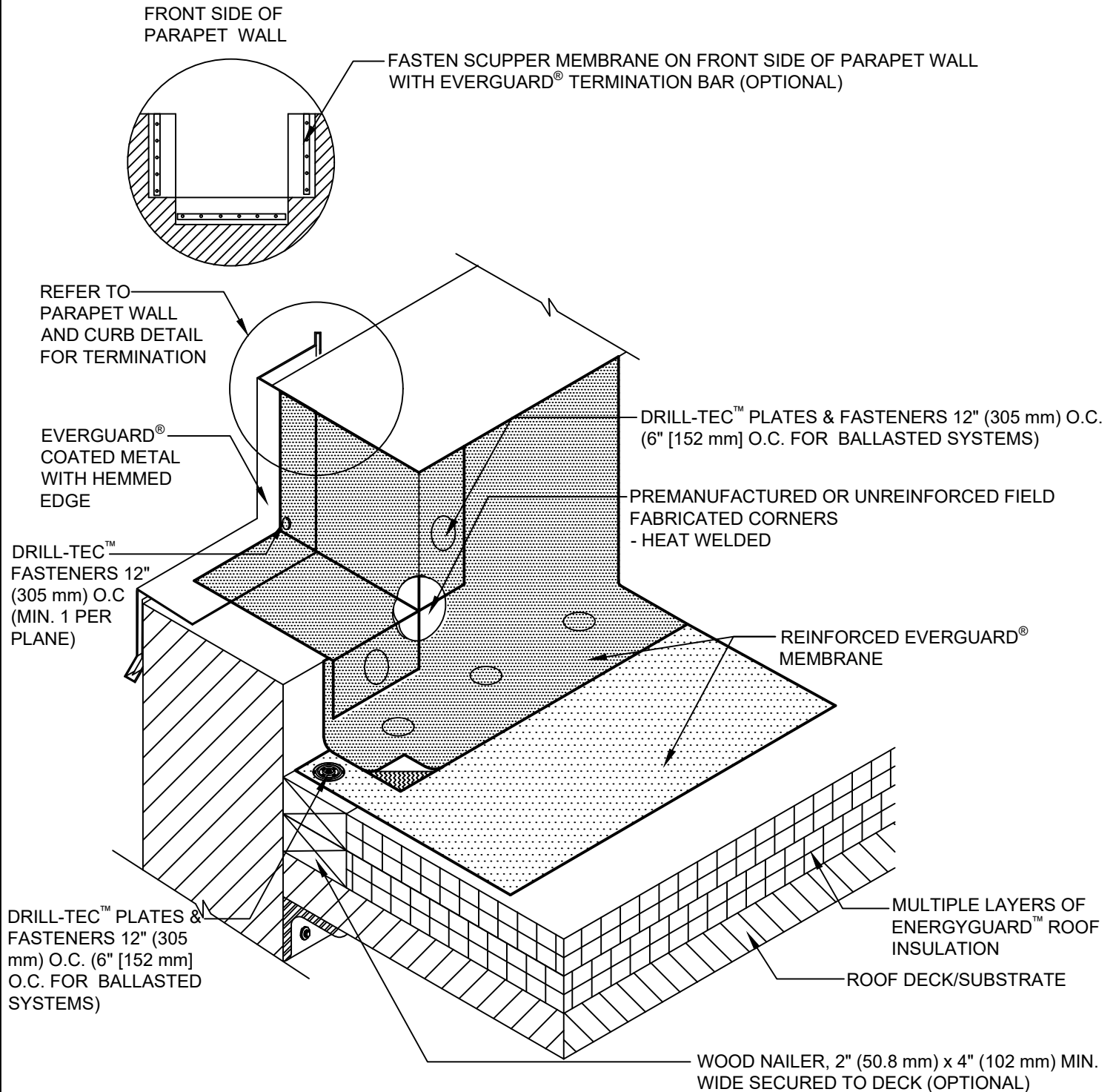
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. DETAIL TO BE USED IN CONJUNCTION WITH STANDARD GUIDE SPECIFICATION CONTAINING REQUIREMENTS FOR NAILERS, INSULATION ETC.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

SCUPPER - FIELD FABRICATED OPEN TOP - OVERFLOW

DRAWING #

323

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

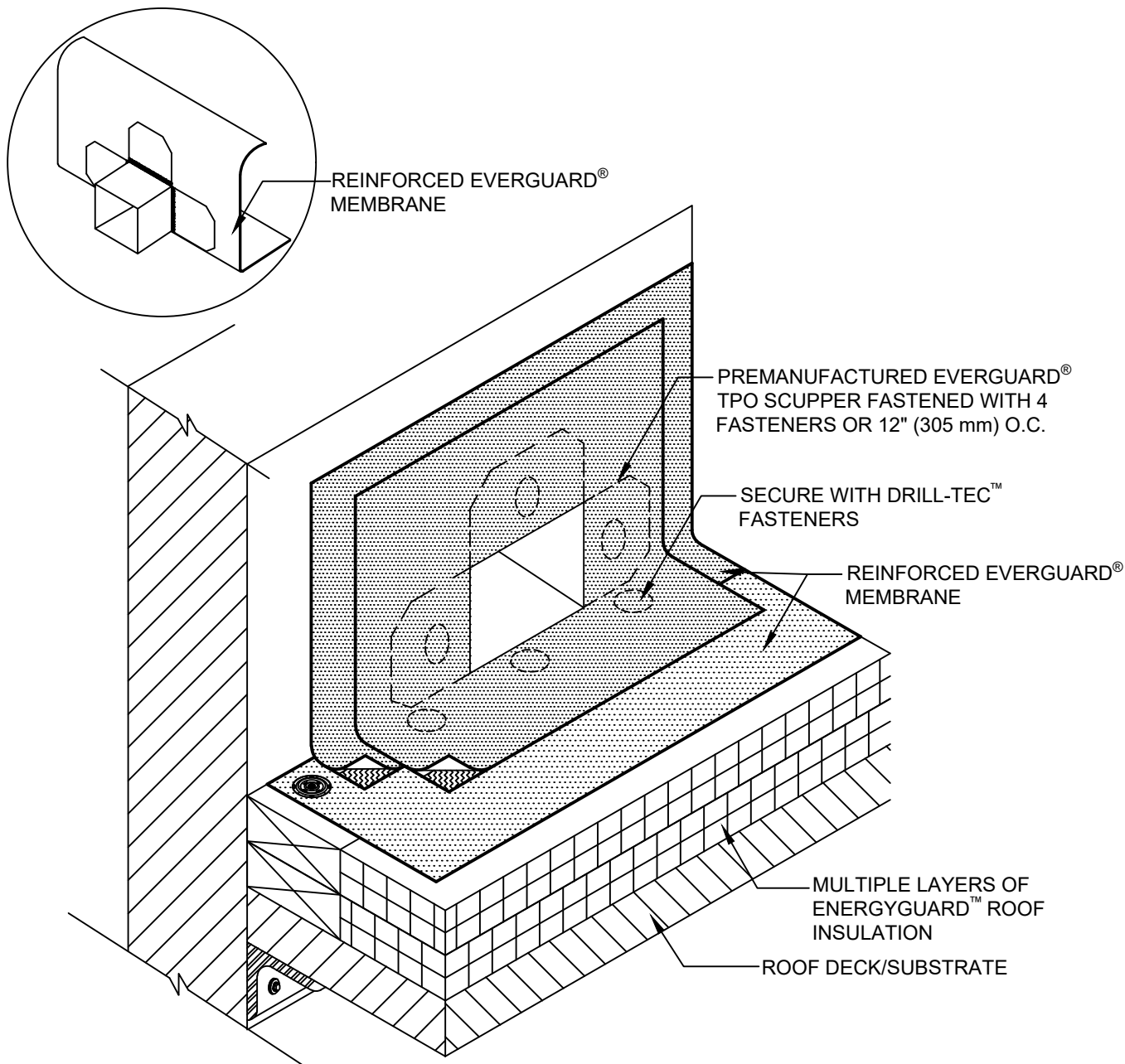
SCALE

N.T.S.

LEGEND

 HEAT-WELDED

REAR VIEW OF SCUPPER



NOTE:

1. DETAIL TO BE USED IN CONJUNCTION WITH STANDARD GUIDE SPECIFICATION CONTAINING REQUIREMENTS FOR NAILERS, INSULATION ETC.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
4. SCUPPER MUST ALSO BE SEALED ON OUTSIDE WALL.
5. FOR ALTERNATE BASE ATTACHMENT, REFER TO EVERGUARD® DETAIL 307A.

GAF

SCUPPER - PREMANUFACTURED

DRAWING #
324A

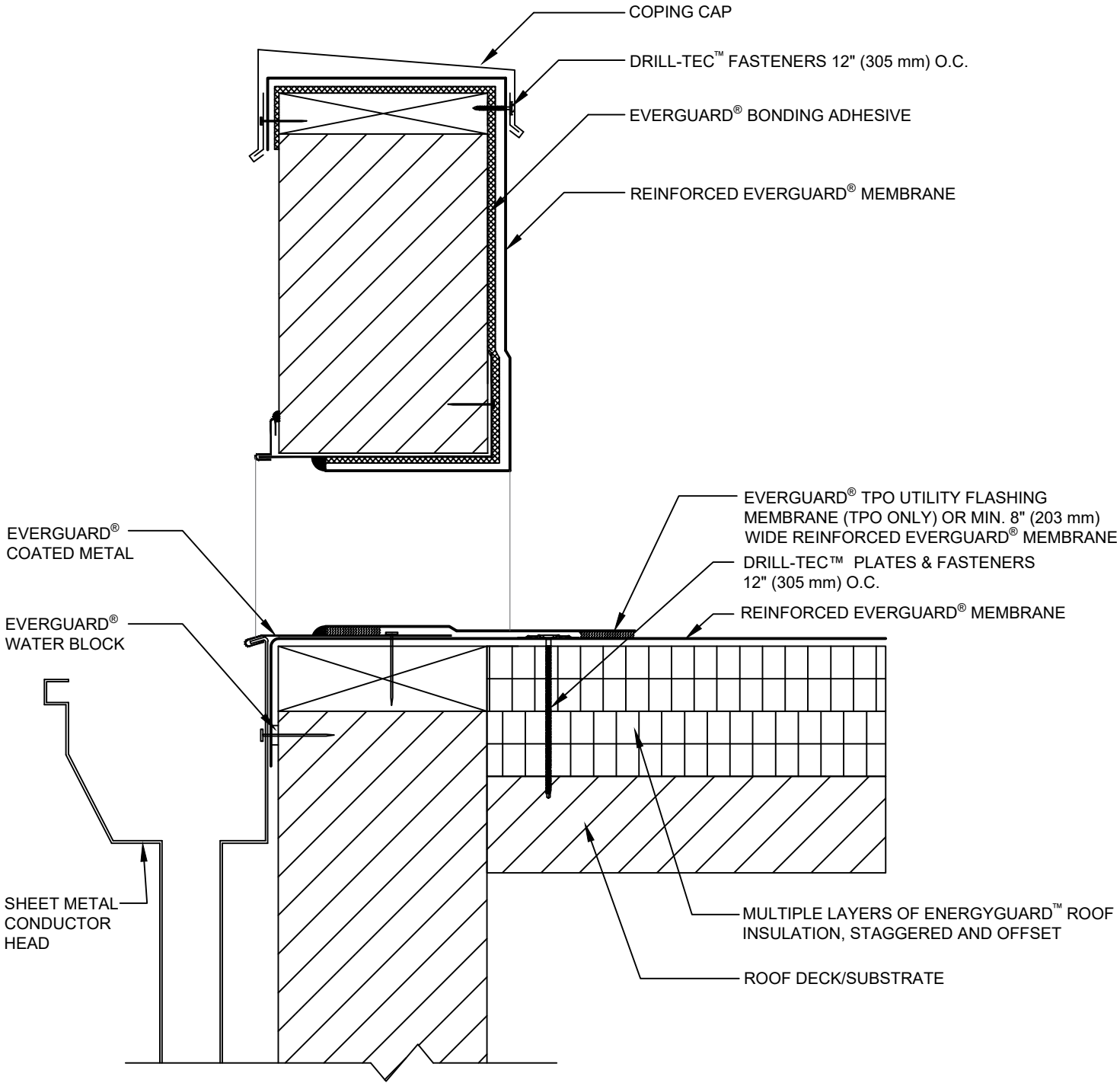
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

- 1. DETAIL TO BE USED IN CONJUNCTION WITH STANDARD GUIDE SPECIFICATION CONTAINING REQUIREMENTS FOR NAILERS, INSULATION ETC.
- 2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 3. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
- 4. SCUPPER MUST ALSO BE SEALED ON OUTSIDE WALL.



COATED METAL SCUPPER THROUGH WALL

DRAWING #
324C

THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
MECHANICALLY ATTACHED SYSTEMS
RHINO-BOND® SYSTEMS

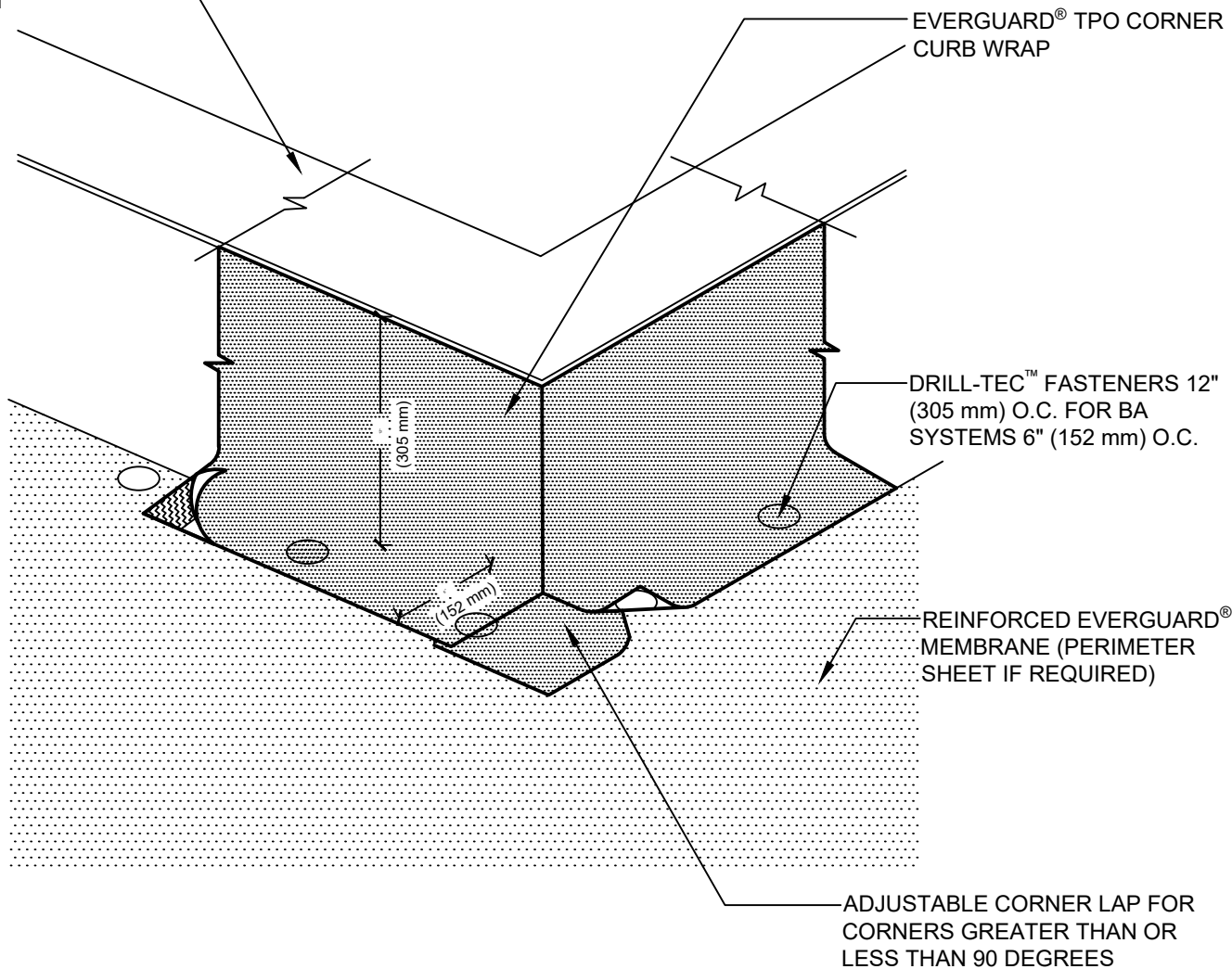
ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT

REFER TO EVERGUARD®
300 SERIES PARAPET
AND WALL DETAIL FOR
TERMINATION



NOTE:

1. FOUR CORNER CURB WRAP PIECES ARE NEEDED TO COMPLETE. VARYING SIZES MAY BE NEEDED.
2. CORNER WRAP MAY BE ADHERED OR INSTALLED DRY.
3. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

GAF

CORNER CURB WRAP

DRAWING #

325

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

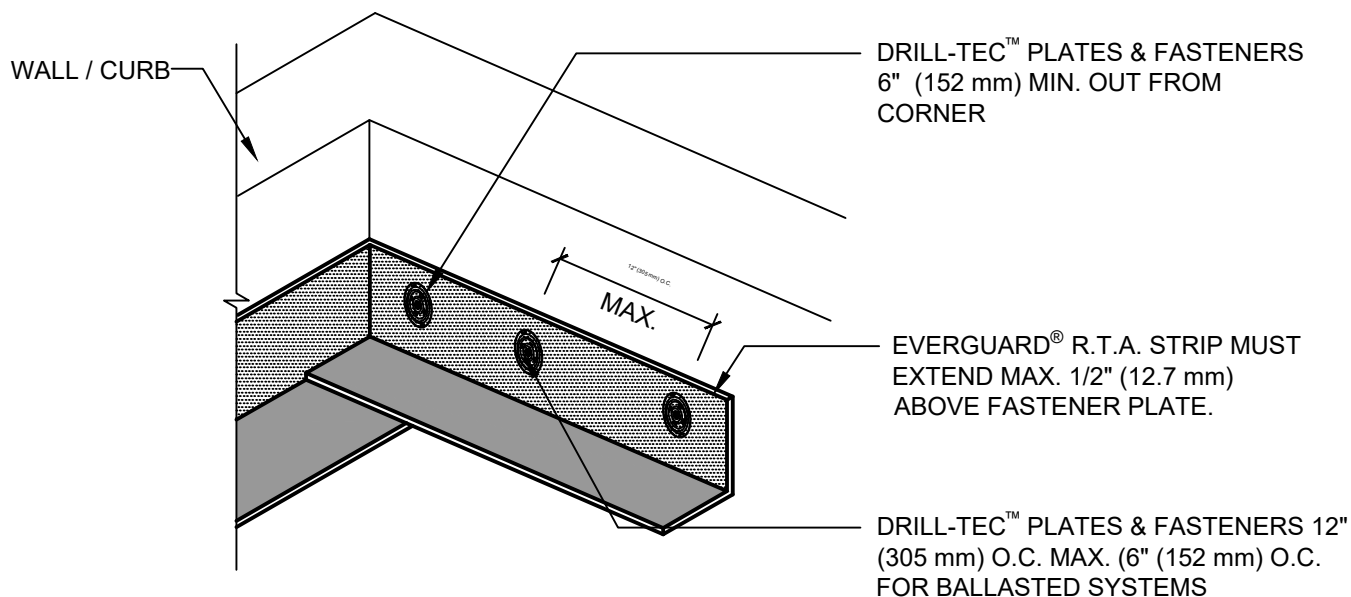
SCALE

N.T.S.

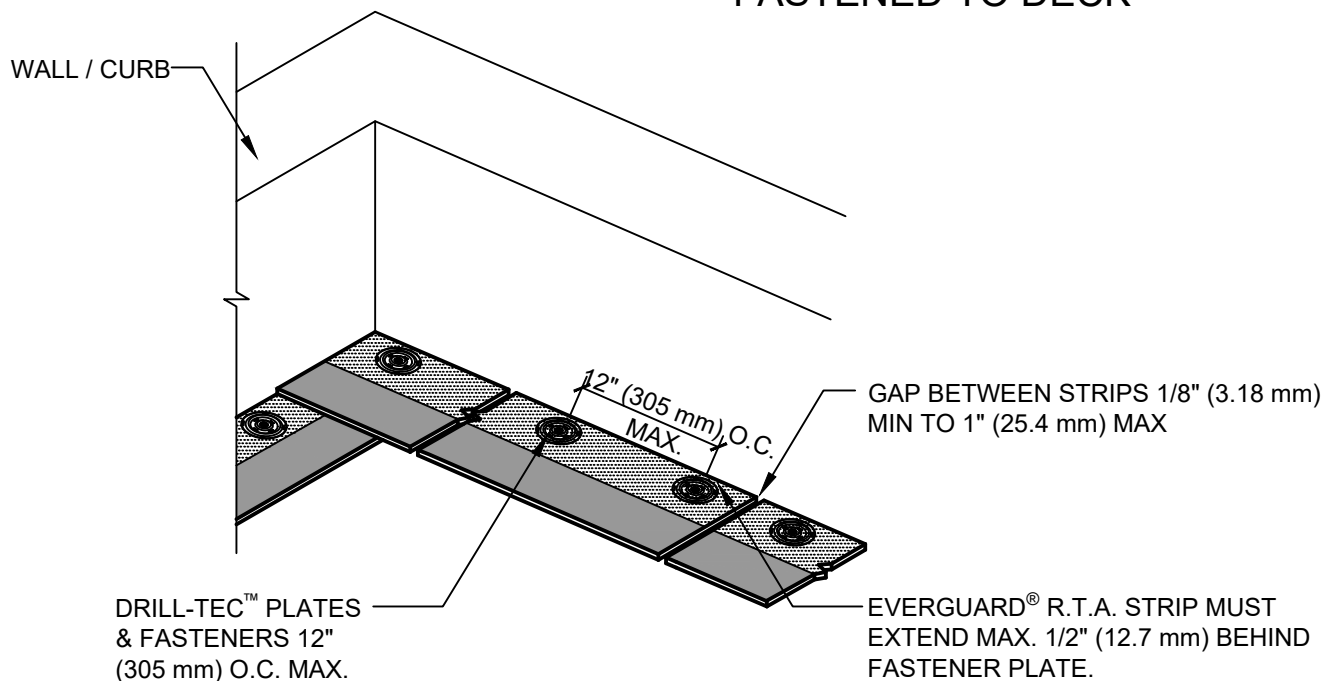
LEGEND

 HEAT-WELDED

FASTENED TO WALL / CURB



FASTENED TO DECK



NOTE:

1. THIS DETAIL IS NOT TO BE USED FOR EVERGUARD® PVC MEMBRANES OR MECHANICALLY ATTACHED SYSTEMS.
2. R.T.A. STRIP MAY BE FIELD FABRICATED OUT OF EVERGUARD® FREEDOM MEMBRANE (REMOVE FILM BEFORE INSTALLING WALL FLASHING SHEET).
3. COMMON FASTENER ANCHORING THE OVERLAP OF THE TWO STRIPS IN THE CORNER.

GAF

R.T.A. STRIP - INSIDE CORNER REINFORCEMENT

DRAWING #
326A

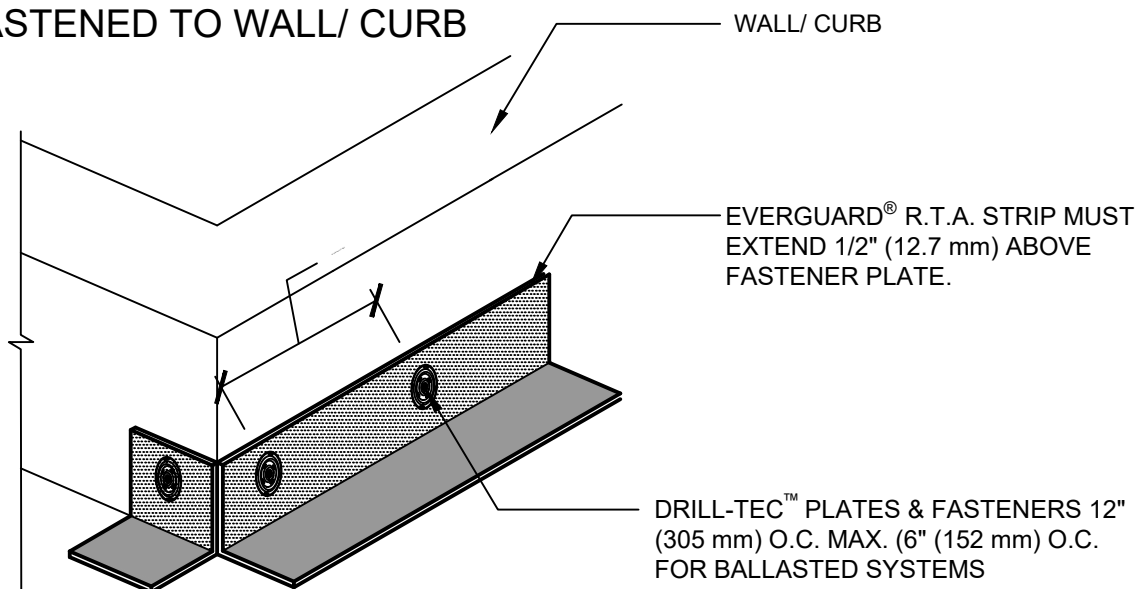
THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
BALLASTED SYSTEMS
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE
8/24/20

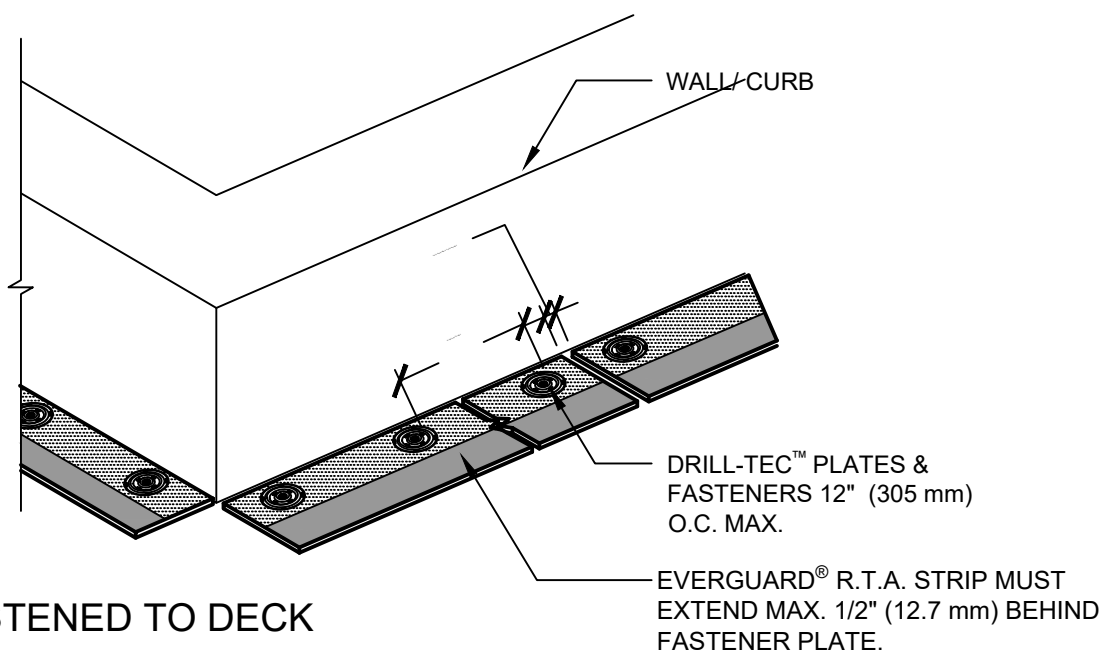
SCALE
N.T.S.

LEGEND

FASTENED TO WALL/ CURB



FASTENED TO DECK



NOTE:

1. THIS DETAIL IS NOT TO BE USED FOR EVERGUARD® PVC MEMBRANES OR MECHANICALLY ATTACHED SYSTEMS.
2. R.T.A. STRIP MAY BE FIELD FABRICATED OUT OF EVERGUARD® FREEDOM MEMBRANE (REMOVE FILM BEFORE INSTALLING WALL FLASHING SHEET).
3. COMMON FASTENER ANCHORING THE OVERLAP OF THE TWO STRIPS IN THE CORNER.

GAF

R.T.A. STRIP - OUTSIDE CORNER REINFORCEMENT

DRAWING #
326B

THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
BALLASTED SYSTEMS
SELF-ADHERED SYSTEMS

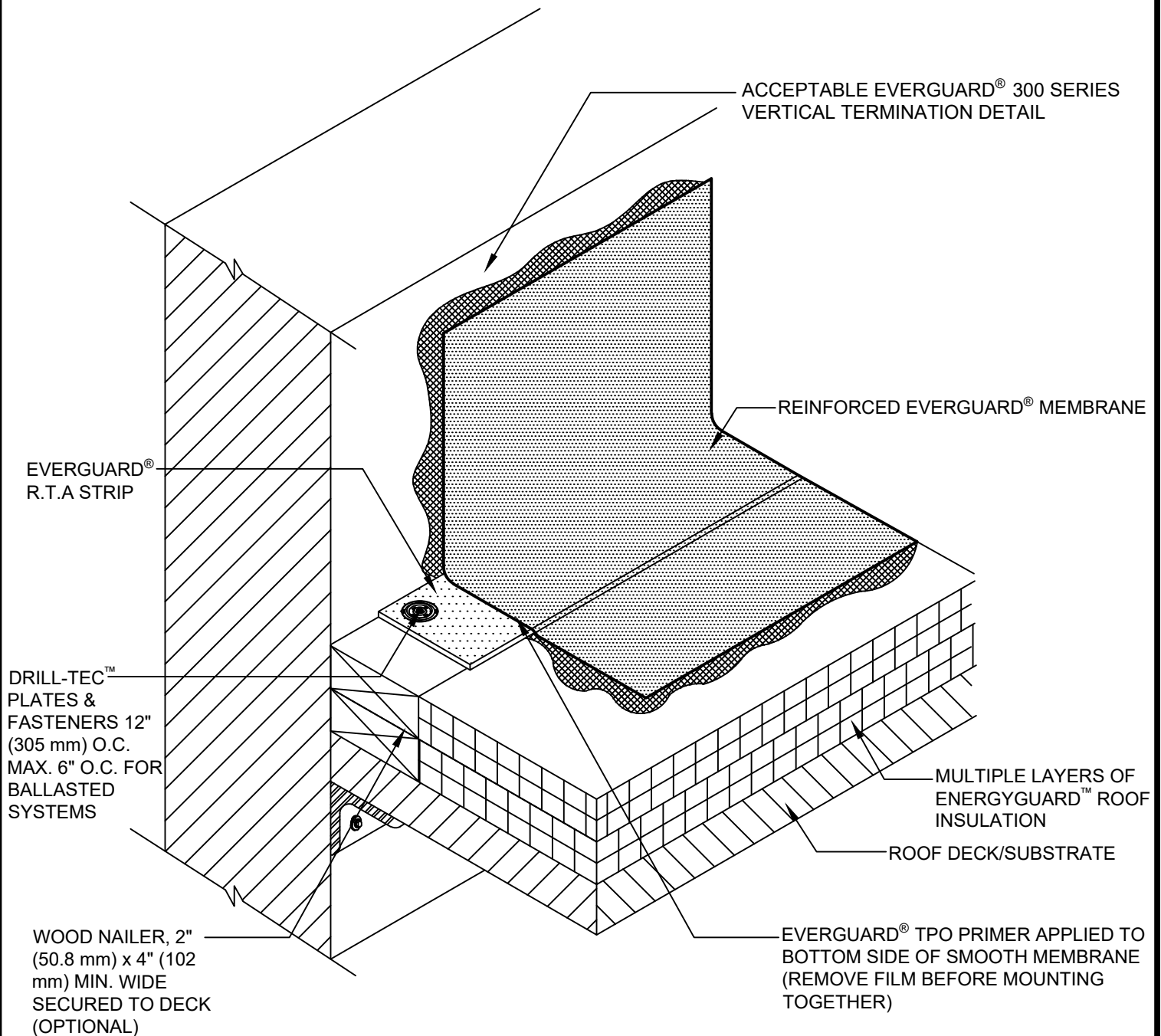
ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

SINGLE-PLY: TPO

Smooth membranes



NOTE:

1. THIS DETAIL IS NOT TO BE USED FOR EVERGUARD® PVC MEMBRANES OR MECHANICALLY ATTACHED SYSTEMS.
2. R.T.A. STRIP MAY BE FIELD FABRICATED OUT OF EVERGUARD® FREEDOM MEMBRANE (REMOVE FILM BEFORE INSTALLING WALL FLASHING SHEET).
3. COMMON FASTENER ANCHORING THE OVERLAP OF THE TWO STRIPS IN THE CORNER.

GAF

R.T.A. STRIP - BASE TIE-IN

DRAWING #
326C

THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
BALLASTED SYSTEMS
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE
8/24/20

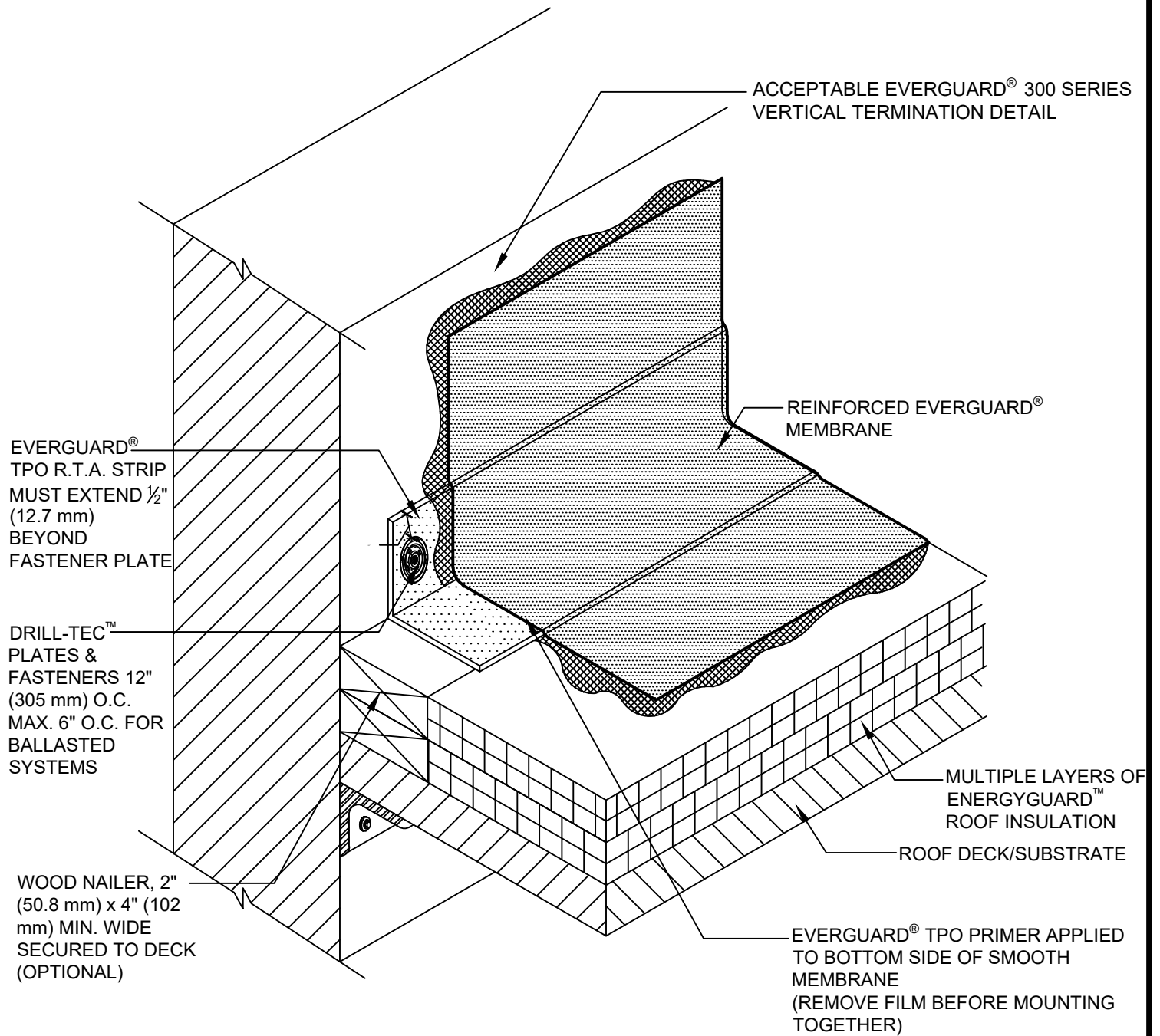
SCALE
N.T.S.

LEGEND

 EVERGUARD® BONDING ADHESIVE
-WALL ATTACHMENT OPTIONAL UP TO 30"
(762 mm) FLASHING HEIGHT

SINGLE-PLY: TPO

Smooth membranes



NOTE:

1. THIS DETAIL IS NOT TO BE USED FOR EVERGUARD® PVC MEMBRANES OR MECHANICALLY ATTACHED SYSTEMS.
2. R.T.A. STRIP MAY BE FIELD FABRICATED OUT OF EVERGUARD® FREEDOM MEMBRANE (REMOVE FILM BEFORE INSTALLING WALL FLASHING SHEET).
3. COMMON FASTENER ANCHORING THE OVERLAP OF THE TWO STRIPS IN THE CORNER.

GAF

R.T.A. STRIP - ALTERNATE BASE TIE-IN

DRAWING #
326D

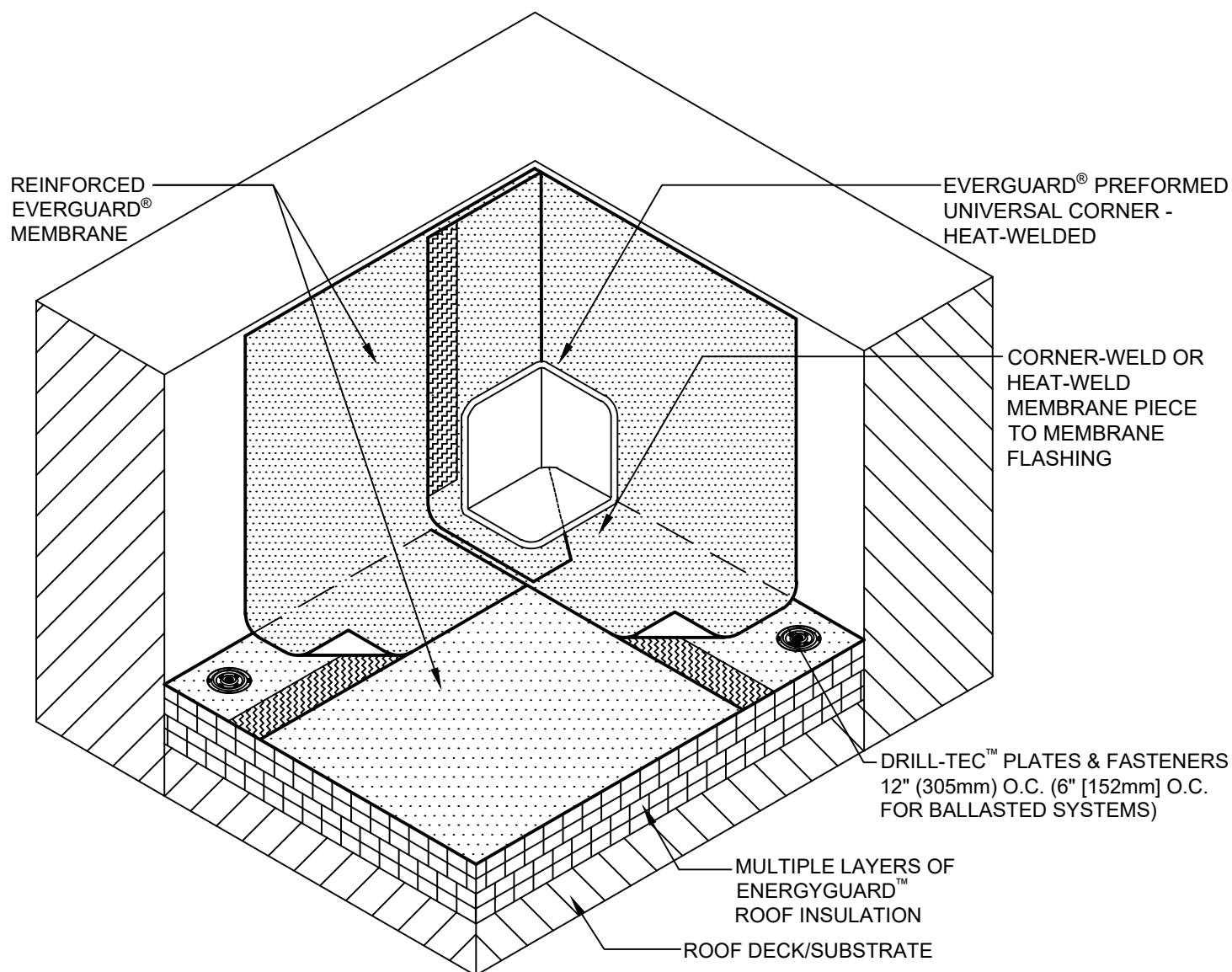
THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
BALLASTED SYSTEMS
SELF-ADHERED SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 EVERGUARD® BONDING ADHESIVE
-WALL ATTACHMENT OPTIONAL UP TO 30"
(762 mm) FLASHING HEIGHT



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES
3. FLASHINGS MAY BE ADHERED OR INSTALLED DRY. REFER TO 300 SERIES.
4. INSIDE CORNERS MAY ALSO BE FIELD-FABRICATED USING UNREINFORCED MEMBRANE.

GAF

INSIDE CORNER REINFORCEMENT - PREFORMED UNIVERSAL CORNER

DRAWING #
327A

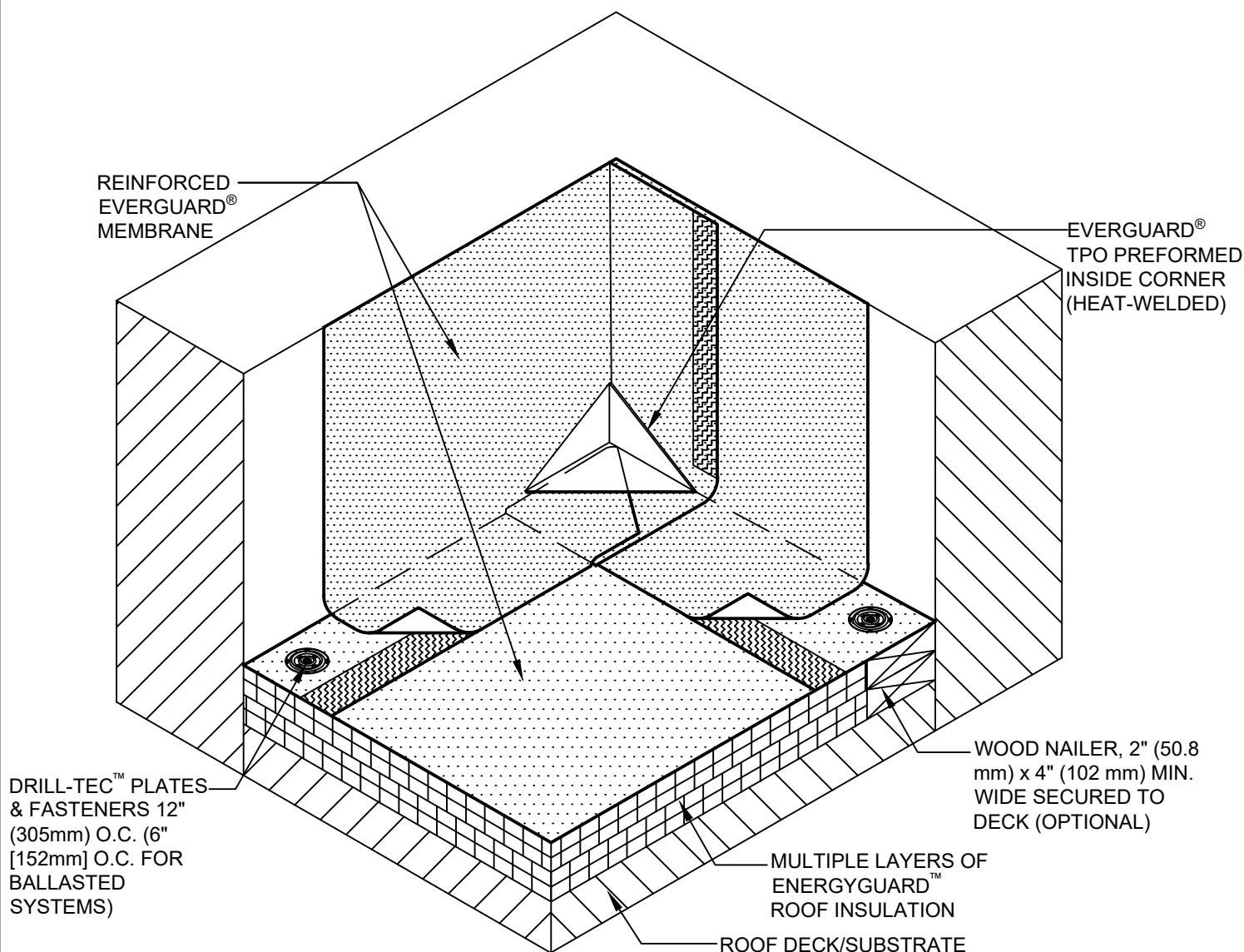
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. FLASHINGS MAY BE ADHERED OR INSTALLED DRY. SEE SPEC FOR DIMENSIONS.
3. KEEP FASTENERS BACK FROM CORNER 6" (152 mm) MAX. IN BOTH HORIZONTAL AND VERTICAL APPLICATIONS.
4. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

GAF

**INSIDE CORNER REINFORCEMENT
- PREFORMED CORNER**

DRAWING #
327B

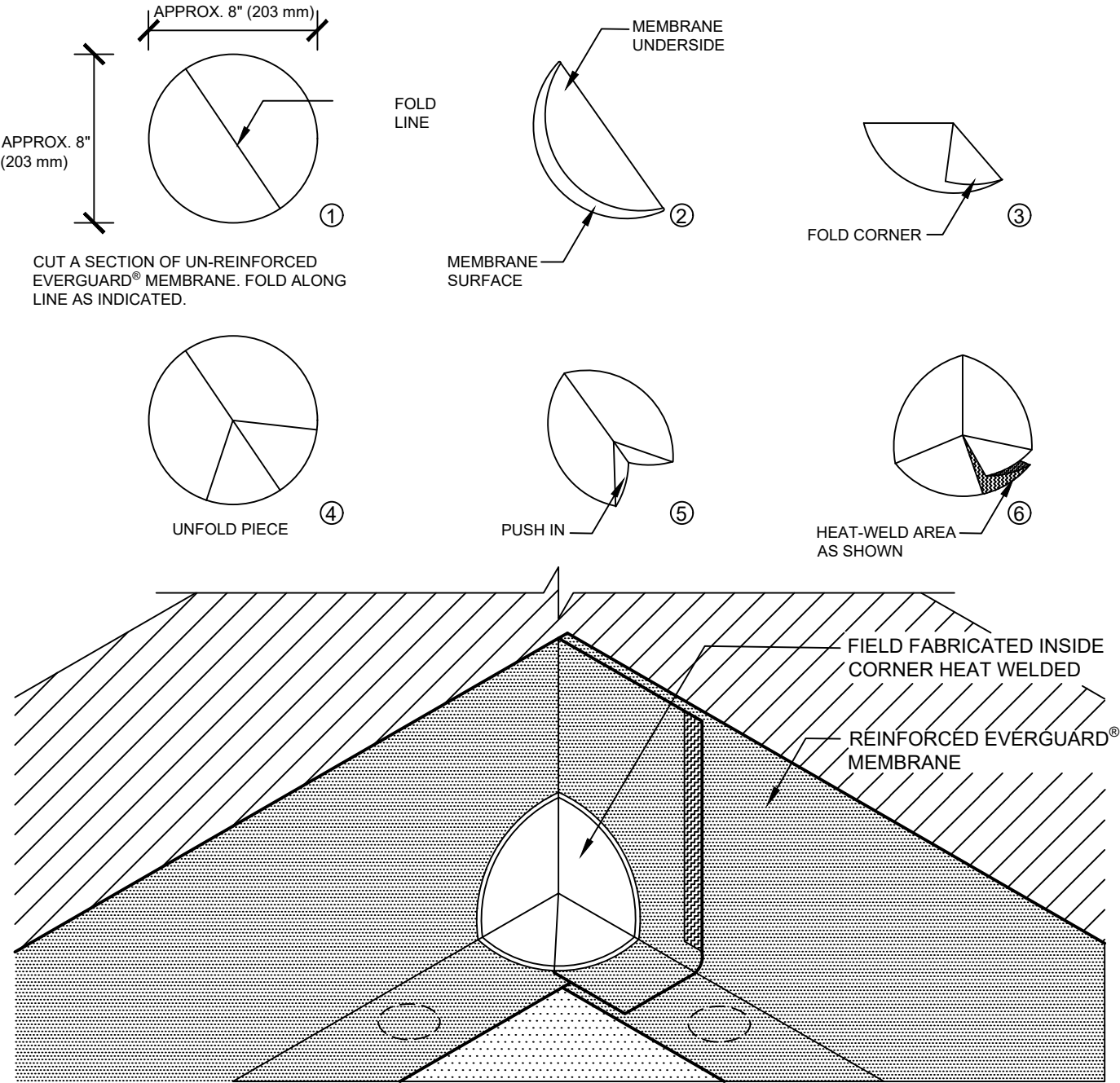
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. INSIDE CORNERS MAY BE FIELD-FABRICATED USING UN-REINFORCED MEMBRANE.
2. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

GAF

INSIDE CORNER REINFORCEMENT
- FIELD FABRICATION

DRAWING #
327D

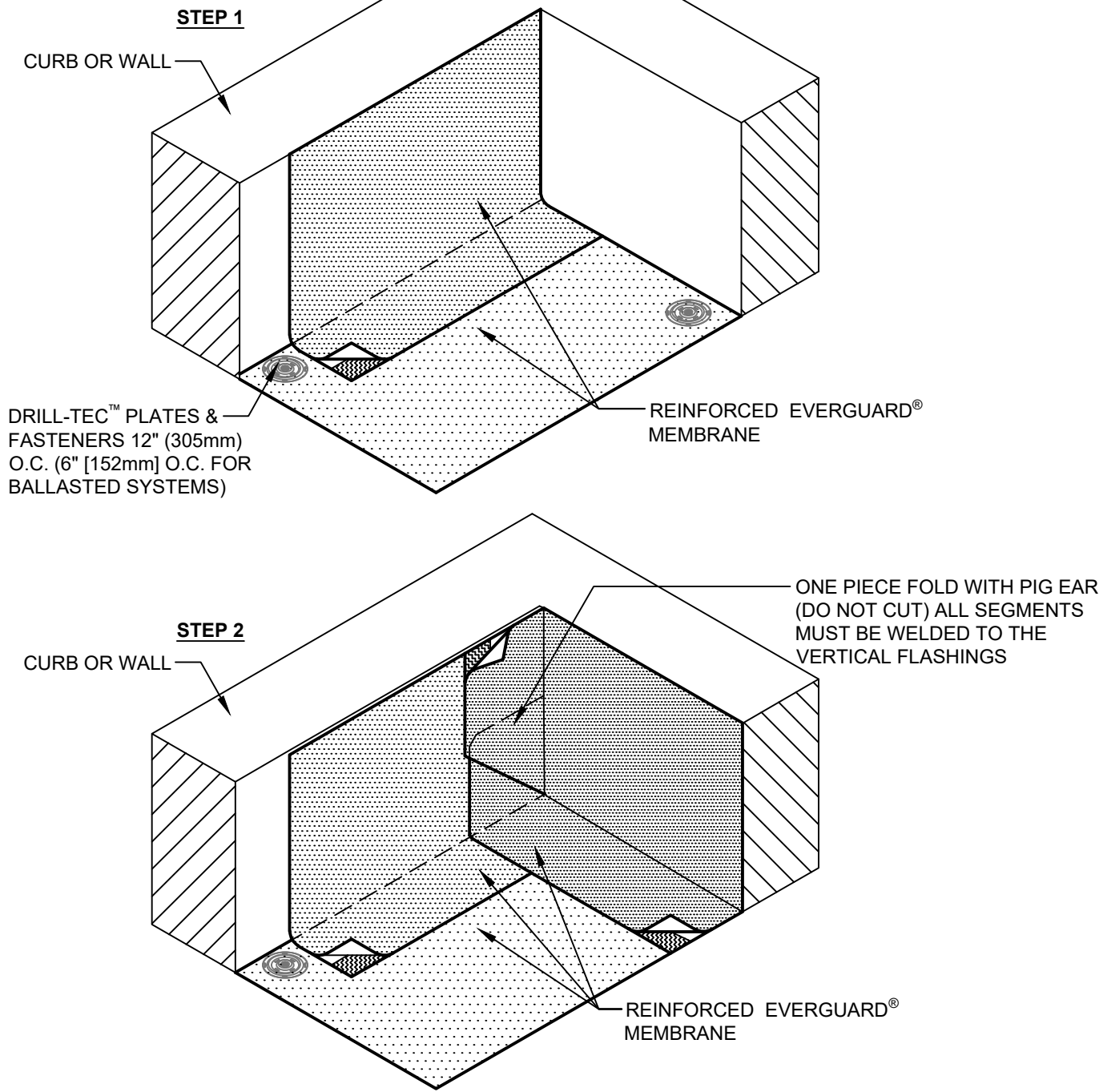
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

HEAT-WELDED



NOTE:

- 1. ALL SEGMENTS OF THE EAR MUST BE WELDED TOGETHER AND WELDED TO THE WALL
- 2. CHECK SYSTEM SPEC FOR GUIDELINES ON ADHERING FLASHINGS.
- 3. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 4. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.



INSIDE CORNER FABRICATION
- 2 STEP "PIG EAR" UP

DRAWING #
328A

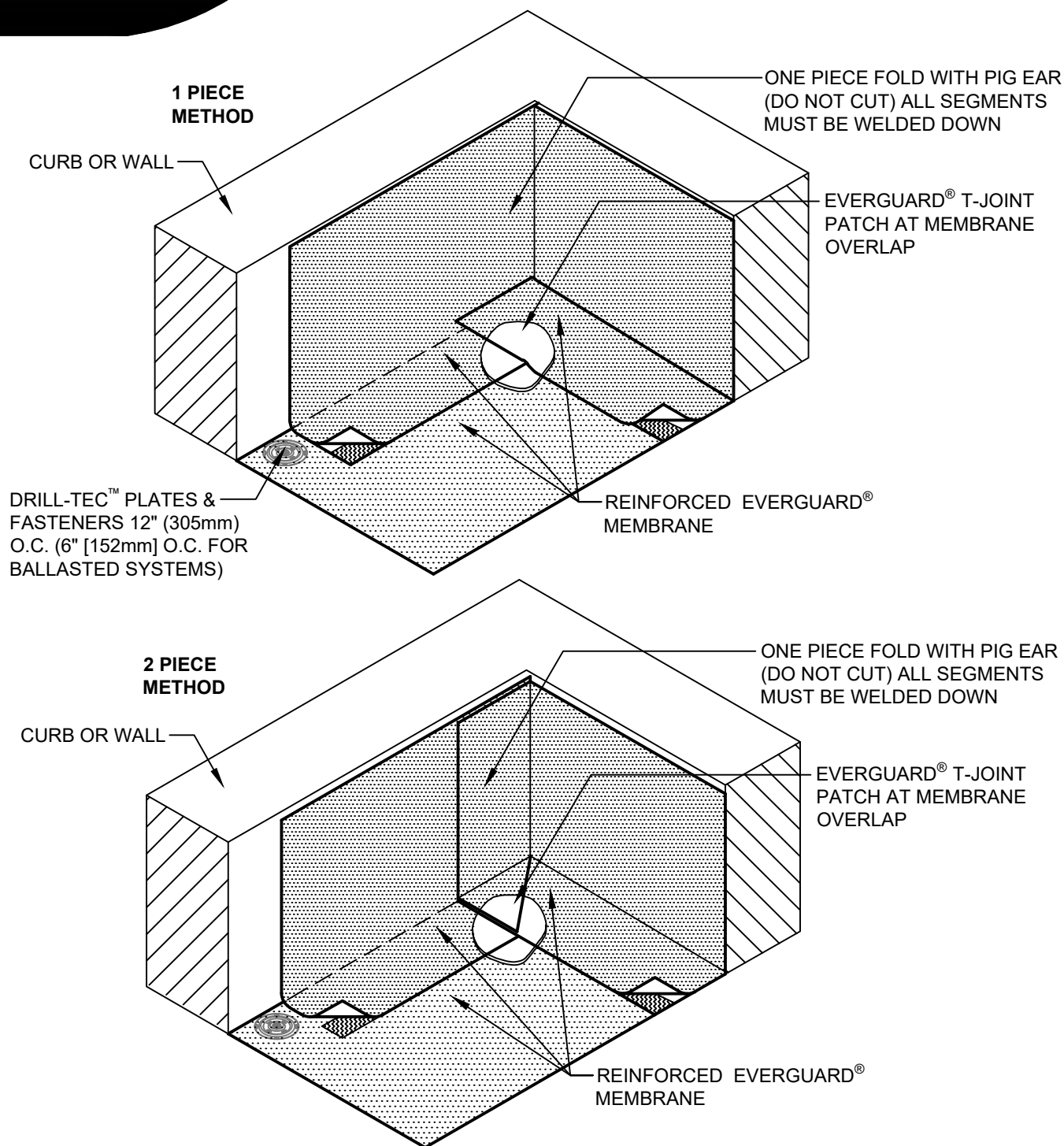
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
6/3/21

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. ALL SEGMENTS OF THE EAR MUST BE WELDED TOGETHER AND WELDED TO THE WALL
2. CHECK SYSTEM SPEC FOR GUIDELINES ON ADHERING FLASHINGS.
3. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
4. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

INSIDE CORNER FABRICATION - "PIG EAR" DOWN

DRAWING #
328B

THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED

REFER TO PARAPET
AND WALL DETAIL
FOR TERMINATION

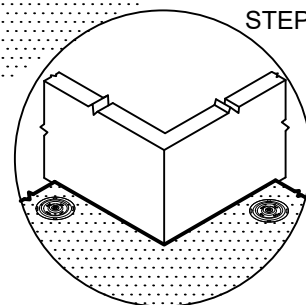
EVERGUARD®
PREFORMED
CORNER

REINFORCED
EVERGUARD® MEMBRANE

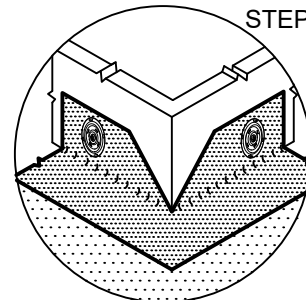
NOTE:

1. FLASHINGS MAY BE ADHERED OR INSTALLED DRY. SEE SPEC FOR DIRECTIONS.
2. KEEP FASTENERS BACK FROM CORNER 6" (152 mm) MAX. IN BOTH HORIZONTAL AND VERTICAL APPLICATIONS.

STEP 1



STEP 2



ALTERNATE
WALL/CURB ATTACHMENT

GAF

OUTSIDE CORNER REINFORCEMENT - PREFORMED CORNER DETAIL

DRAWING #
329A

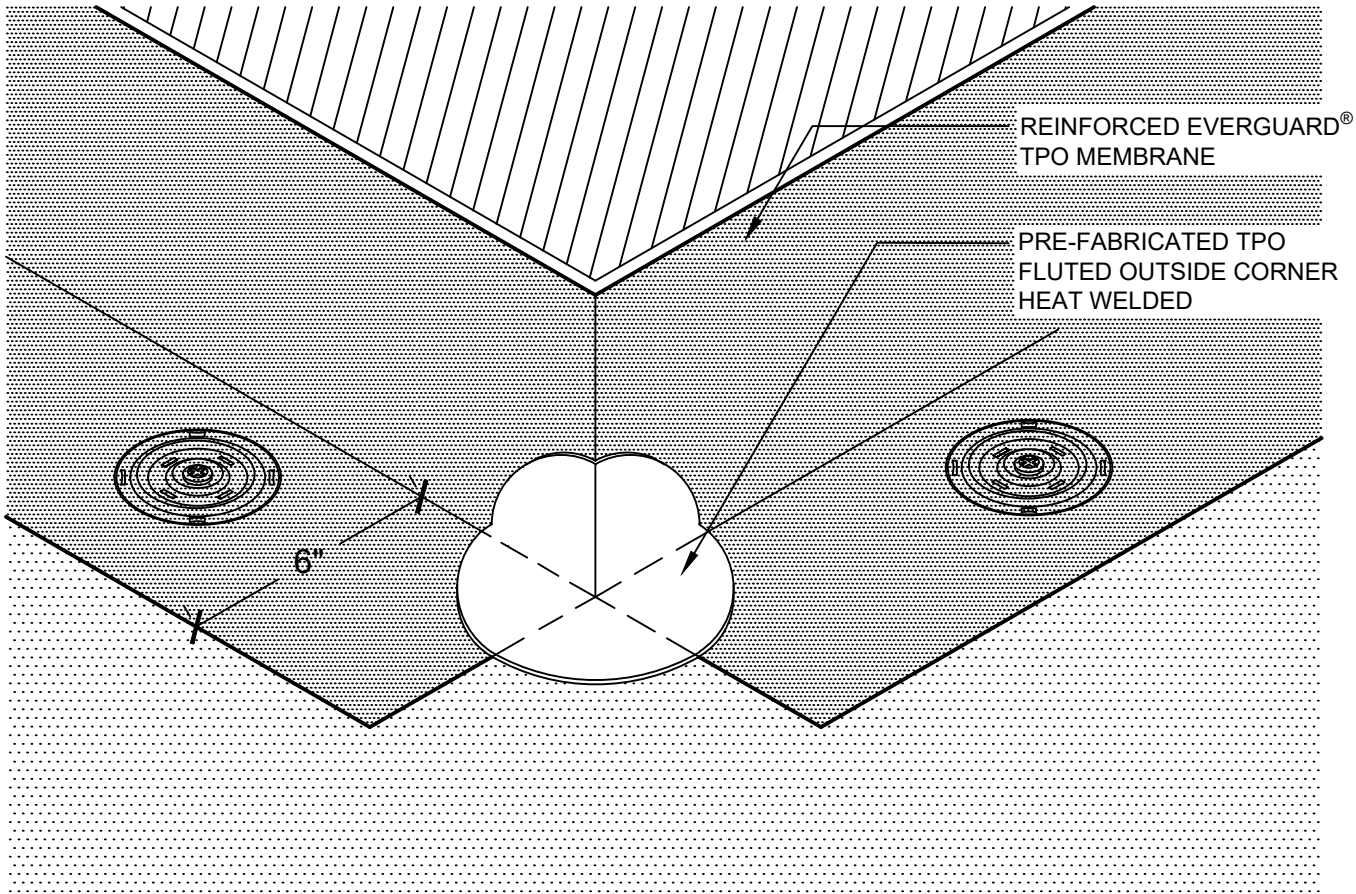
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

1. CORNER CAN BE FIELD FABRICATED WITH 4" (102mm). DIAMETER UNREINFORCED MEMBRANE HEAT-WELDED FULLY IN CORNER.



OUTSIDE CORNER REINFORCEMENT
- FLUTED CORNER

LEGEND

DRAWING #

329B

THIS DETAIL APPLIES TO:

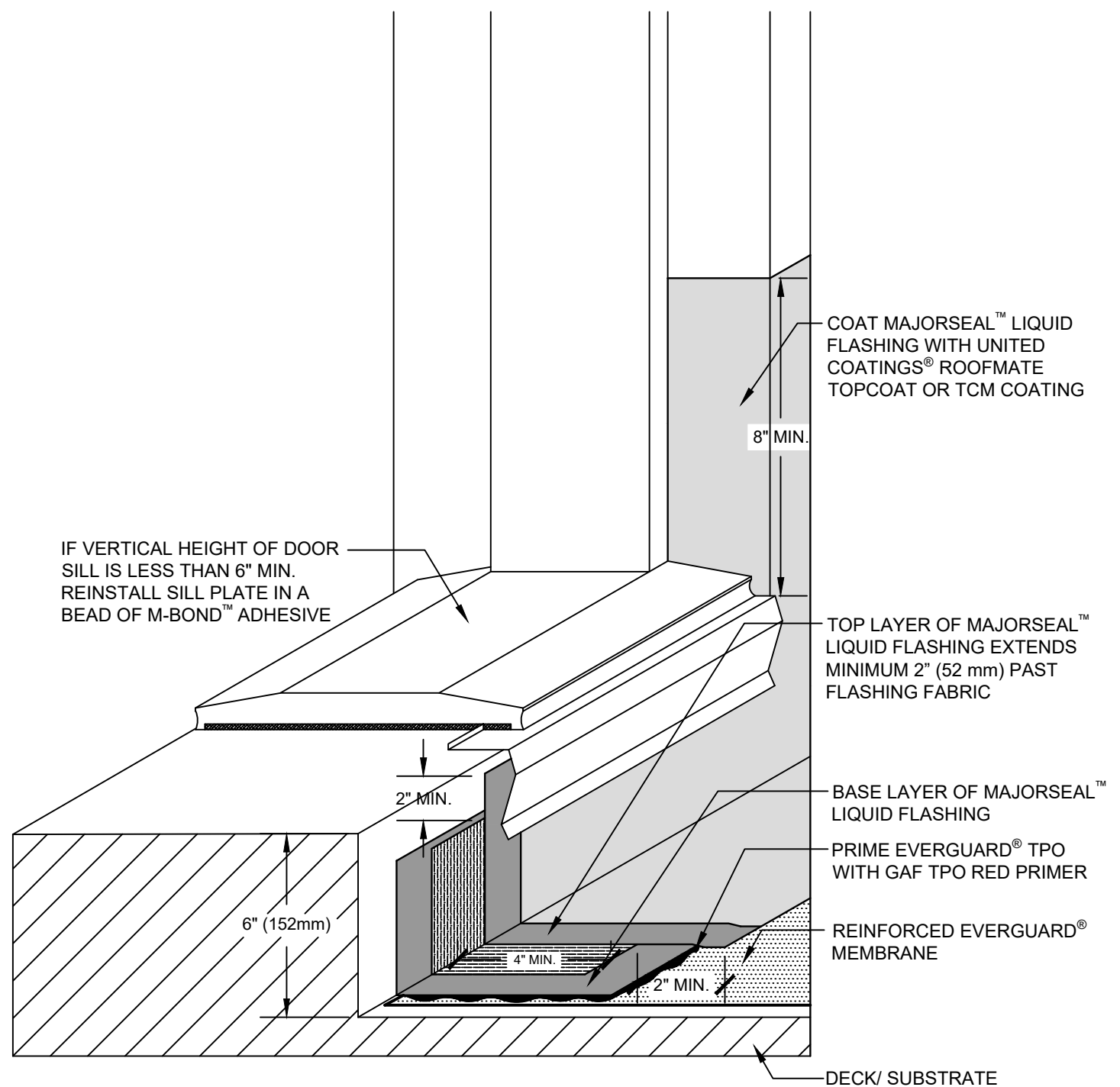
ALL SYSTEMS

ISSUE / REVISION DATE

8/24/20

SCALE

N.T.S.



NOTE:

1. EVERGUARD® TPO MEMBRANE MUST BE PRIMED WITH GAF TPO RED PRIMER IN ALL AREAS THAT MAJORSEAL™ LIQUID FLASHING OR ROOFMATE COATING WILL BE USED.
2. IF VERTICAL HEIGHT OF DOOR SILL IS LESS THAN 6" MIN. EXTEND MAJORSEAL™ LIQUID FLASHING SYSTEM UNDER DOOR SILL. SEE DETAIL 303MM FOR MORE DETAILS.

GAF

RAISED DOOR SILL FLASHING

DRAWING #
341

THIS DETAIL APPLIES TO:
ALL SYSTEMS

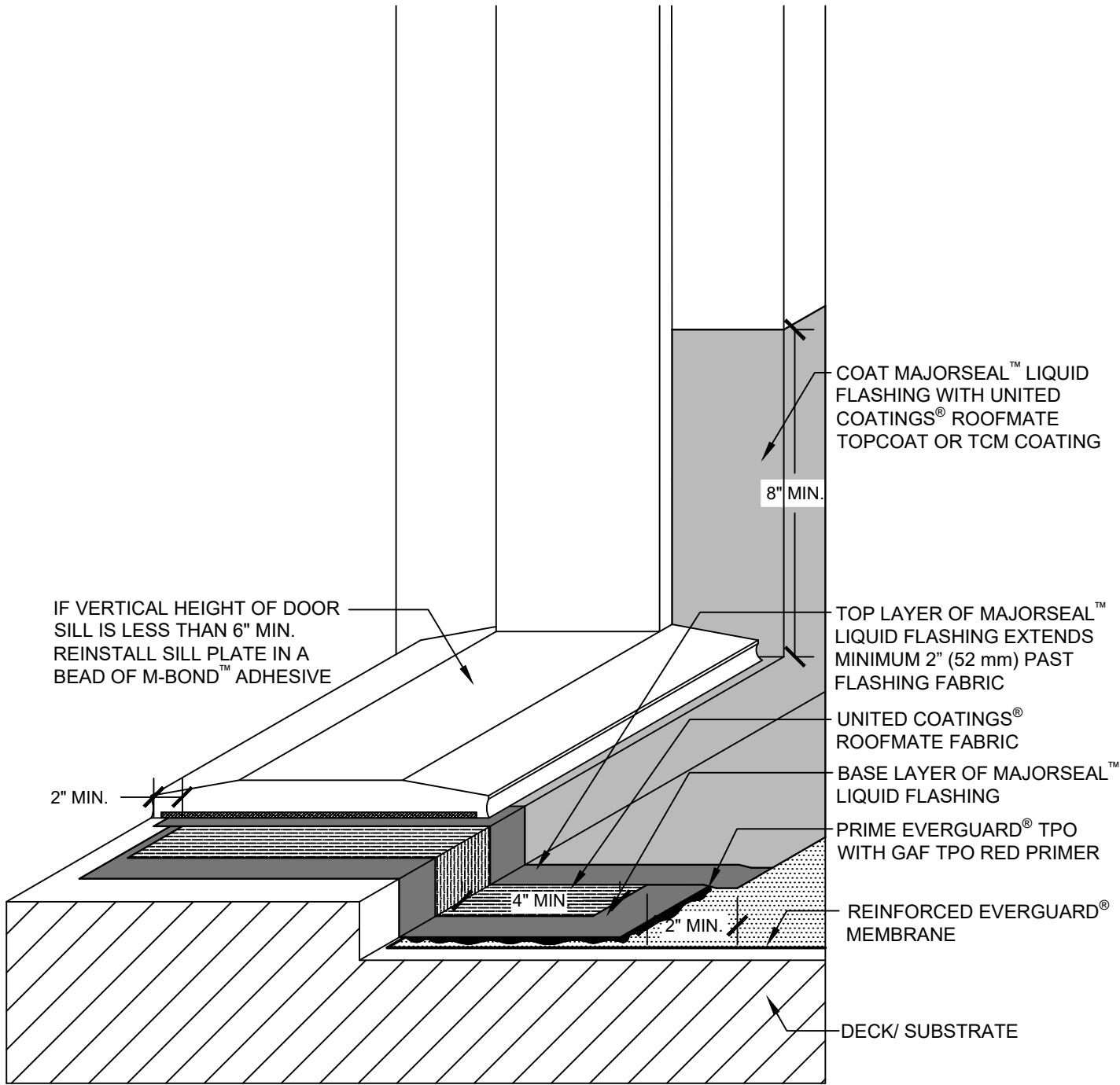
ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

UNITED COATINGS® ROOFMATE FABRIC

M-BOND™ ADHESIVE



NOTE:

1. EVERGUARD® TPO MEMBRANE MUST BE PRIMED WITH GAF TPO RED PRIMER IN ALL AREAS THAT MAJORSEAL™ LIQUID FLASHING OR ROOFMATE COATING WILL BE USED.



LOW DOOR SILL FLASHING



DRAWING #
342

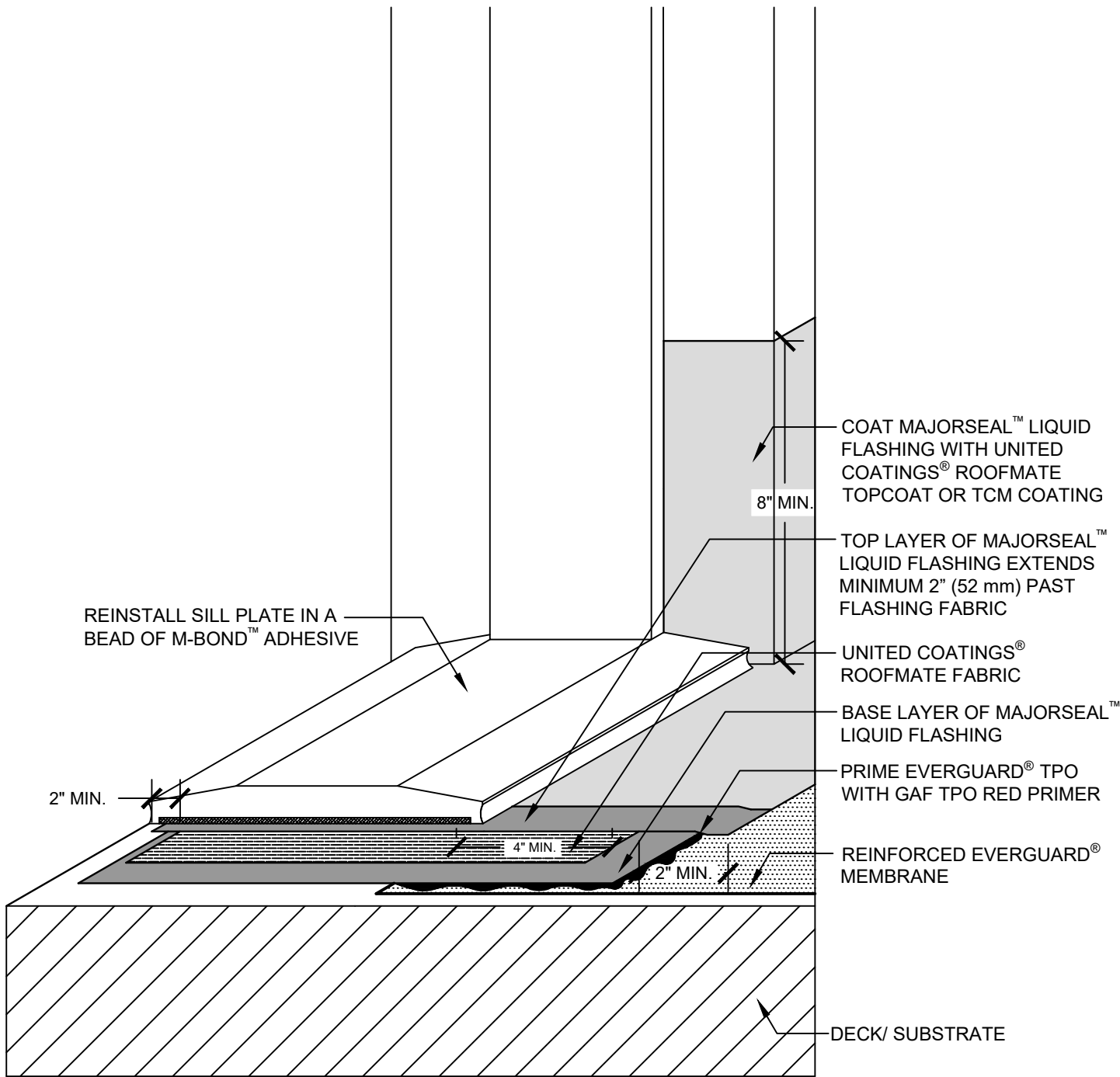
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

 UNITED COATINGS® ROOFMATE FABRIC
 M-BOND™ ADHESIVE



NOTE:

1. EVERGUARD® TPO MEMBRANE MUST BE PRIMED WITH GAF TPO RED PRIMER IN ALL AREAS THAT MAJORSEAL™ LIQUID FLASHING OR ROOFMATE COATING WILL BE USED.



FLUSH DOOR SILL FLASHING

DRAWING #
343

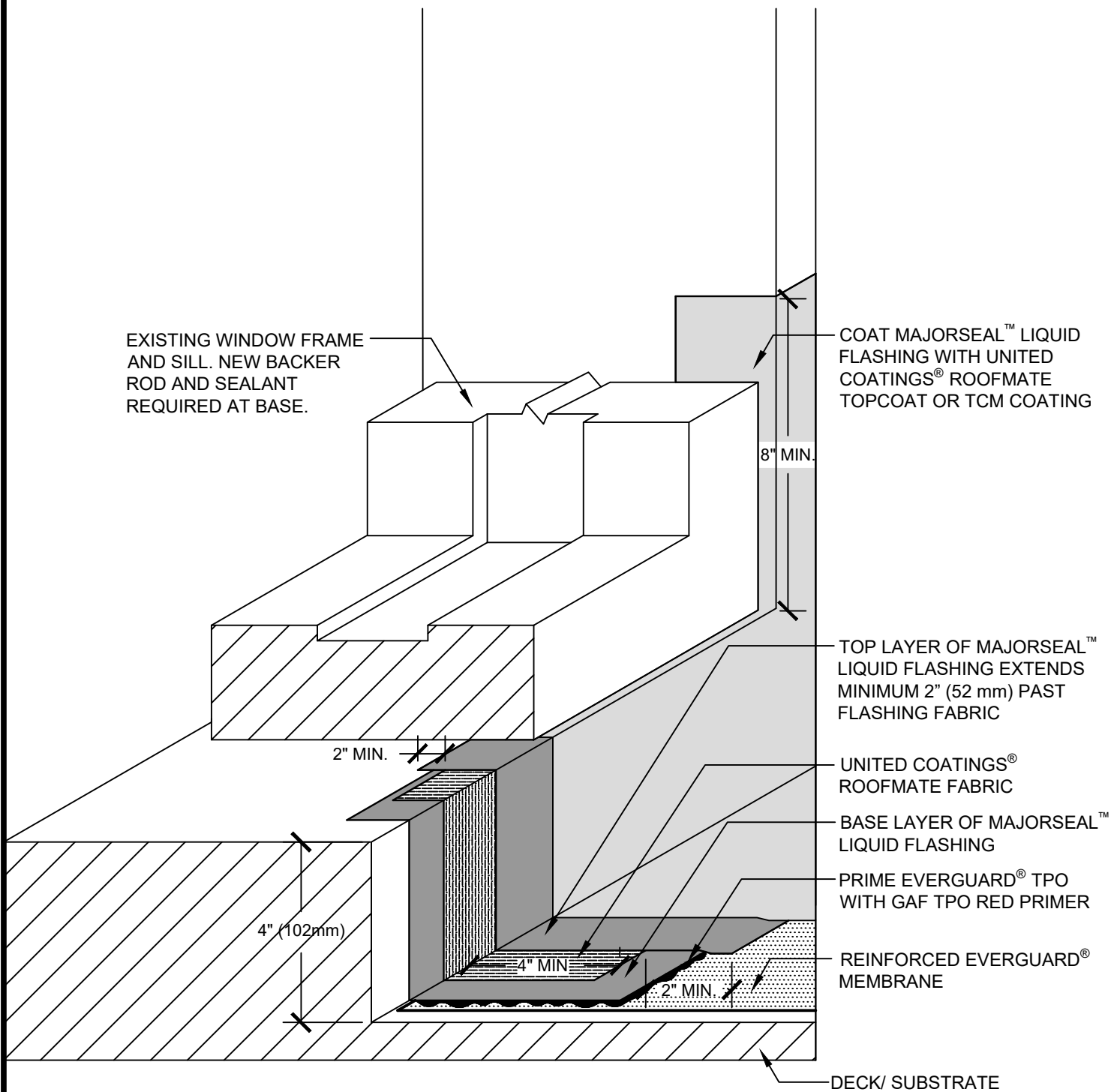
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/24/20

SCALE
N.T.S.

LEGEND

- UNITED COATINGS® ROOFMATE FABRIC
- M-BOND™ ADHESIVE

**NOTE:**

1. EVERGUARD® TPO MEMBRANE MUST BE PRIMED WITH GAF TPO RED PRIMER IN ALL AREAS THAT MAJORSEAL™ LIQUID FLASHING OR ROOFMATE COATING WILL BE USED.

GAF**WINDOW SILL FLASHING**

DRAWING #

345

THIS DETAIL APPLIES TO:

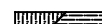
ALL SYSTEMS

ISSUE / REVISION DATE

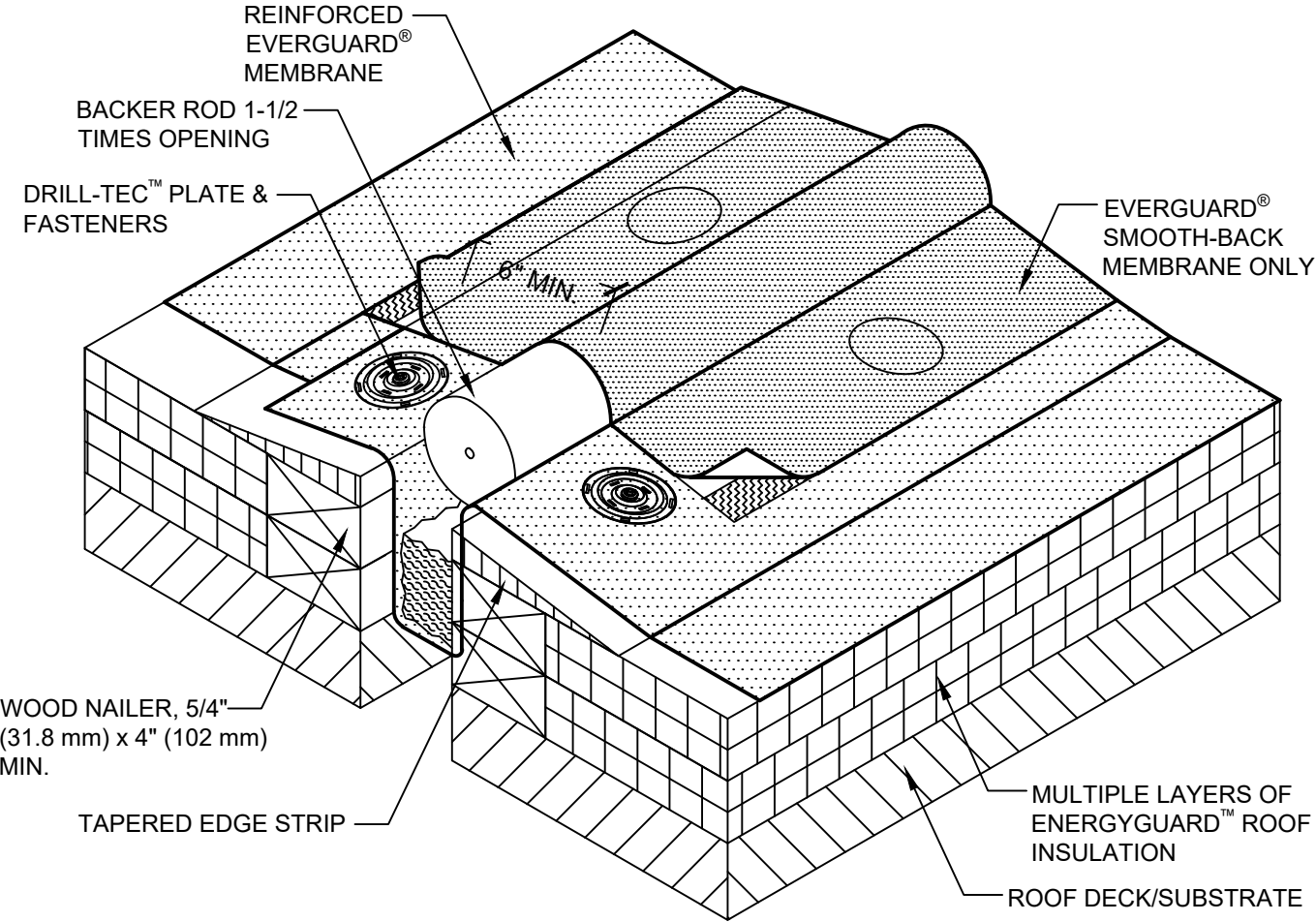
8/24/20

SCALE

N.T.S.

LEGEND

UNITED COATINGS® ROOFMATE FABRIC



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. FIELD-FABRICATED EXPANSION JOINT SHOULD NOT BE FLEECE-BACK OR SELF-ADHERING MEMBRANE. USE STANDARD EVERGUARD® MEMBRANE.



FIELD FABRICATED EXPANSION JOINT DETAIL
- FLAT TYPE

DRAWING #

401B

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

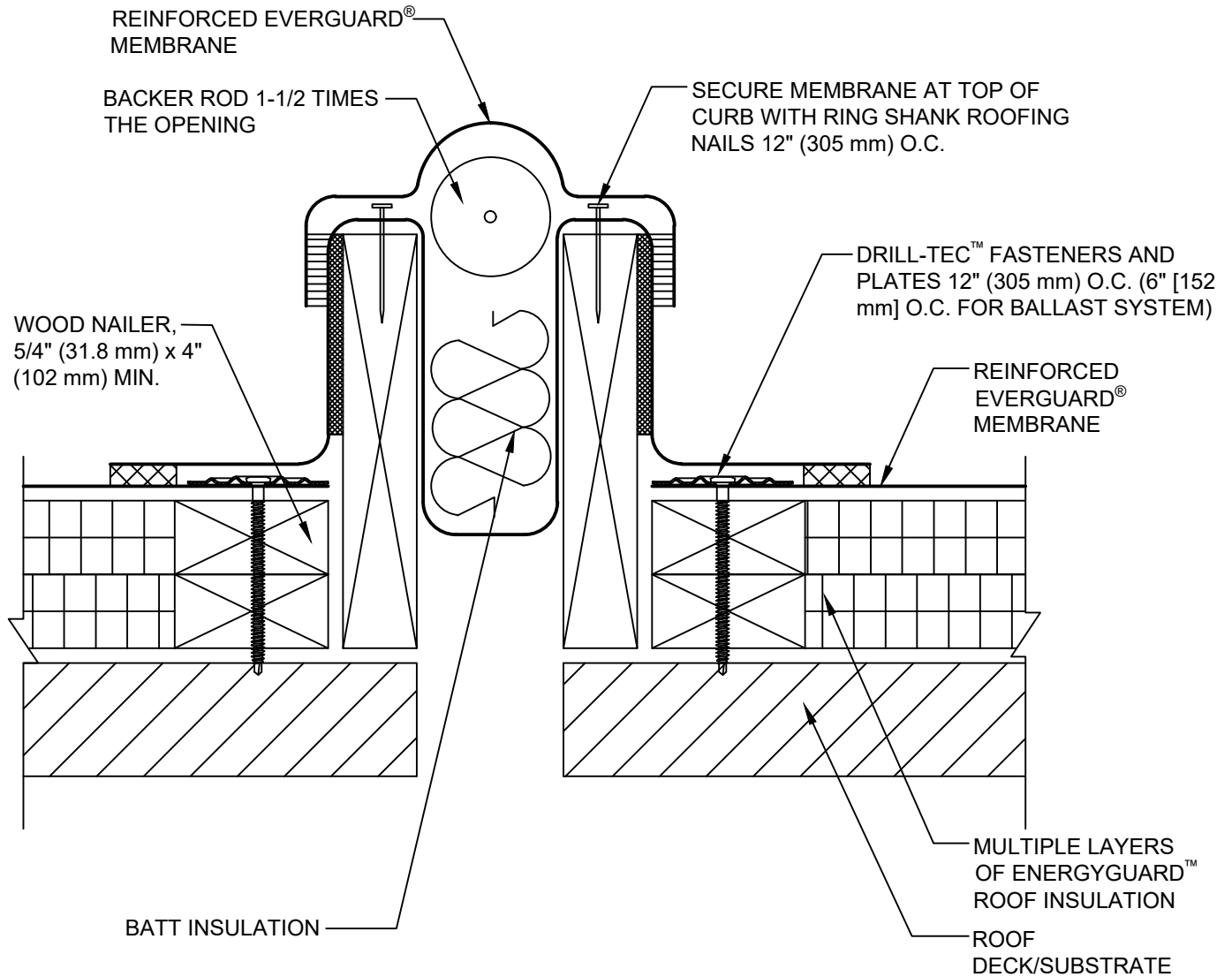
8/17/20

SCALE

N.T.S.

LEGEND

- HEAT-WELDED
- BATT INSULATION



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. FIELD FABRICATED EXPANSION JOINT SHOULD BE SMOOTH BACKED MEMBRANE ONLY.

GAF

**FIELD FABRICATED EXPANSION JOINT DETAIL
- CURB TYPE**

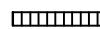

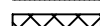
DRAWING #
402B

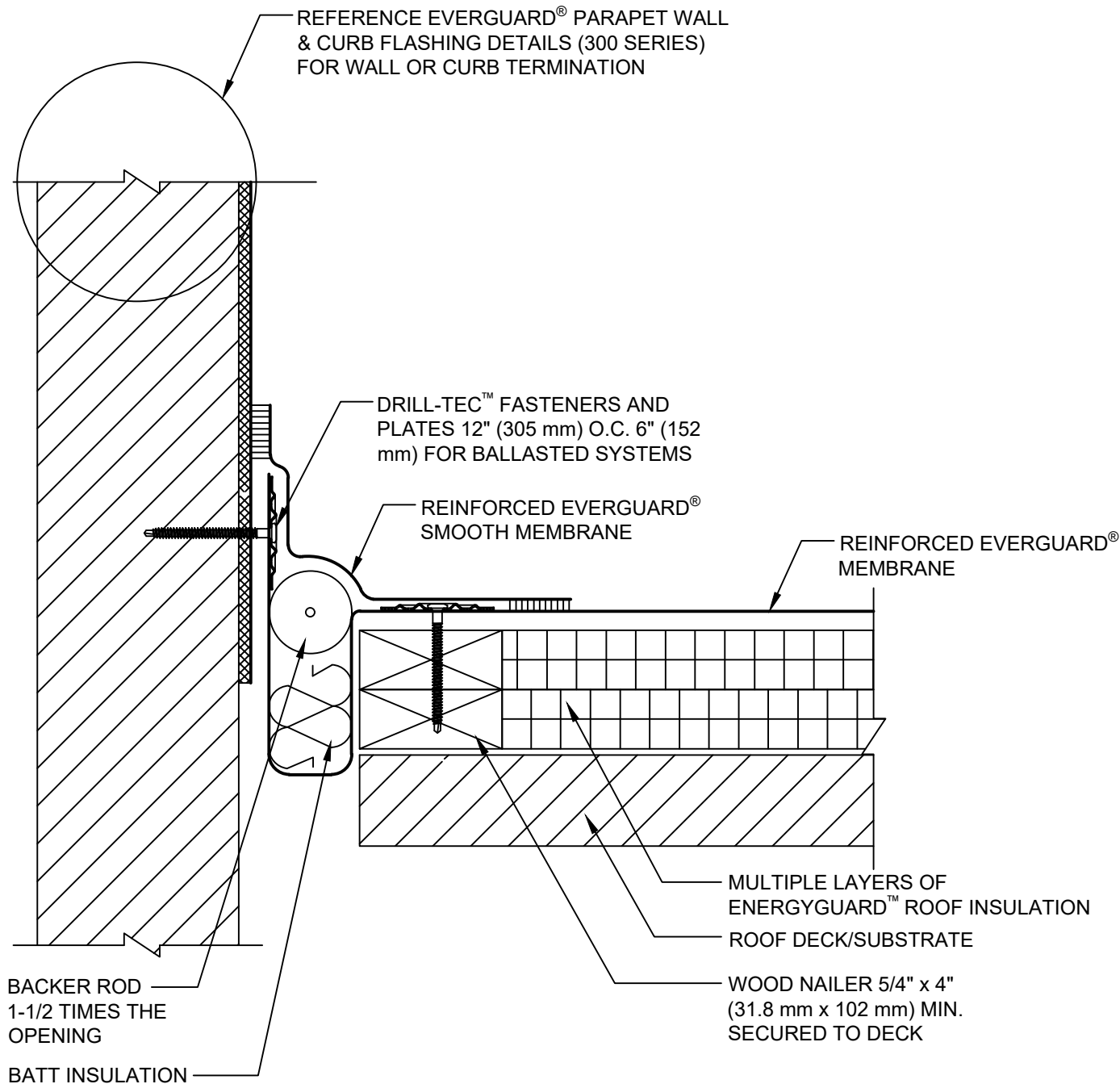
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

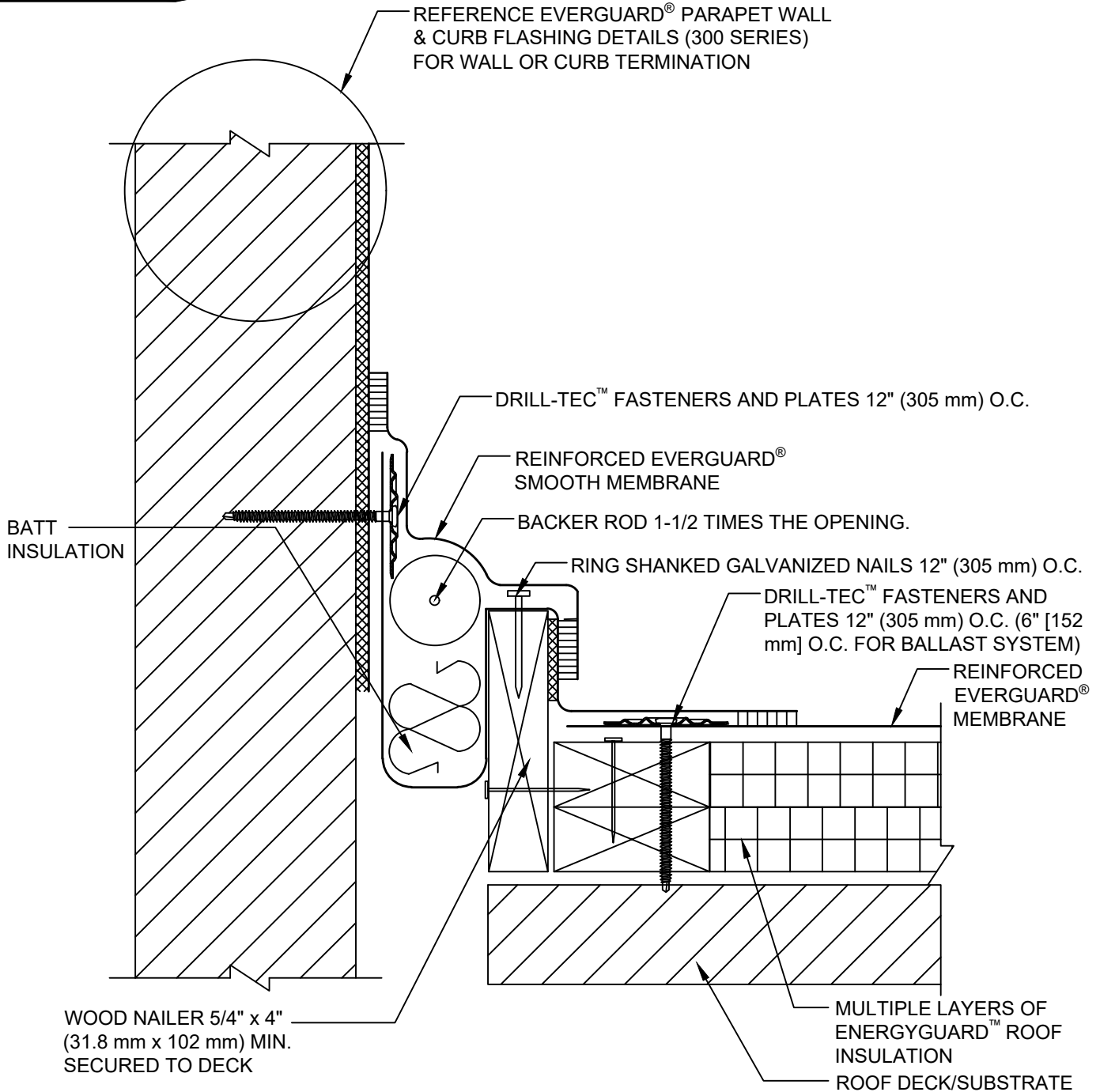
-  HEAT-WELDED
-  EVERGUARD® BONDING ADHESIVE (OPTIONAL)
-  FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. FIELD-FABRICATED EXPANSION JOINT SHOULD USE A SMOOTH BACKED MEMBRANE.

| | | | | | | |
|--|-----------|-------------------------|-----------------------|--------|---|--|
| FIELD FABRICATED WALL EXPANSION JOINT
- FLAT TYPE | | | | | LEGEND | |
| GAF | DRAWING # | THIS DETAIL APPLIES TO: | ISSUE / REVISION DATE | SCALE | HEAT-WELDED | |
| | 403B | | | | EVERGUARD® BONDING ADHESIVE
-OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT | |
| | | ALL SYSTEMS | 10/13/21 | N.T.S. | | |



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. FIELD-FABRICATED EXPANSION JOINT SHOULD USE A SMOOTH BACKED MEMBRANE.

GAF

**FIELD FABRICATED WALL EXPANSION JOINT DETAIL
- CURB TYPE**

DRAWING #
404B

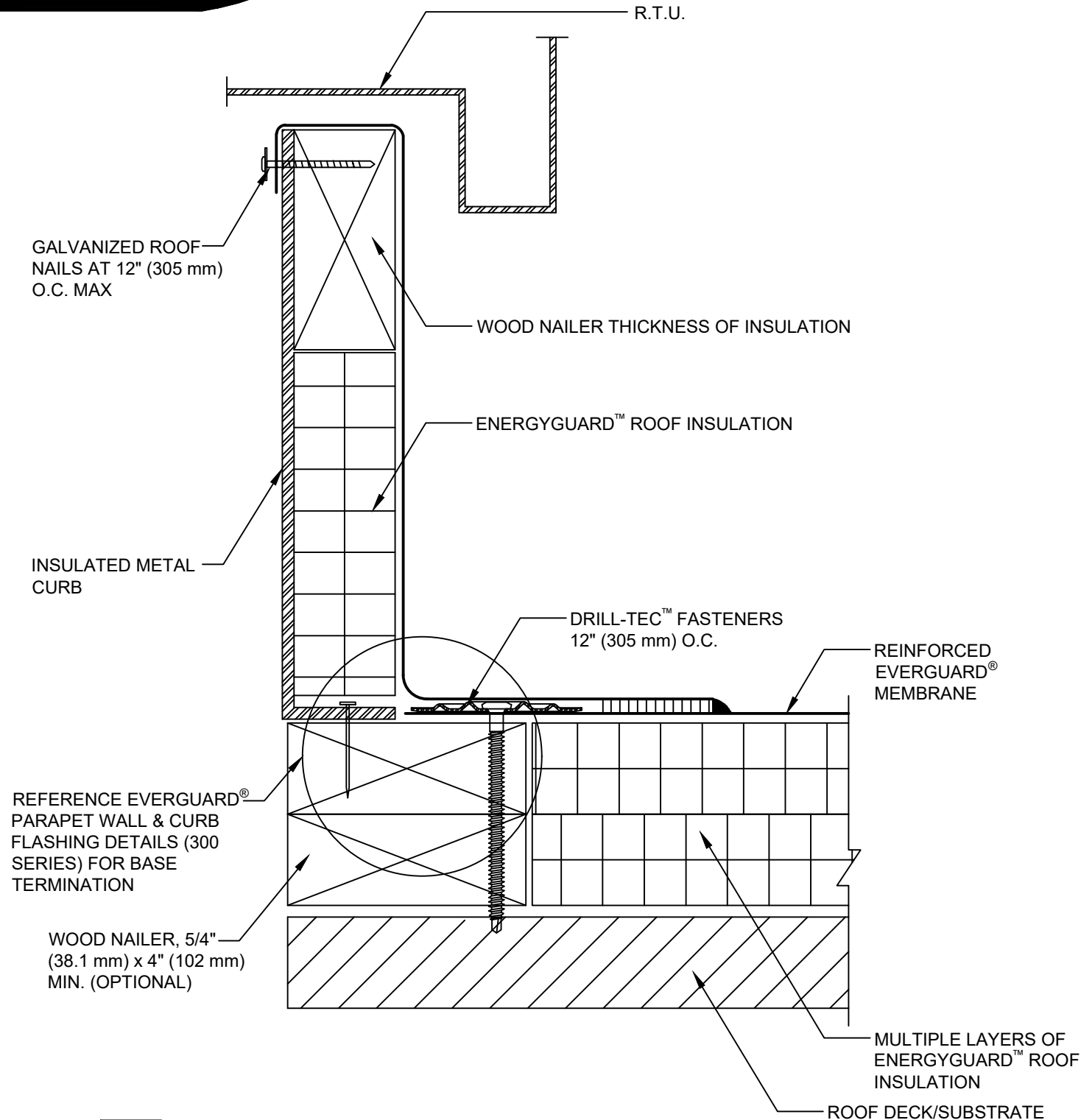
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® BONDING ADHESIVE
-OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

TERMINATION AT R.T.U. WITH WELDED LAP DETAIL

DRAWING #
503A

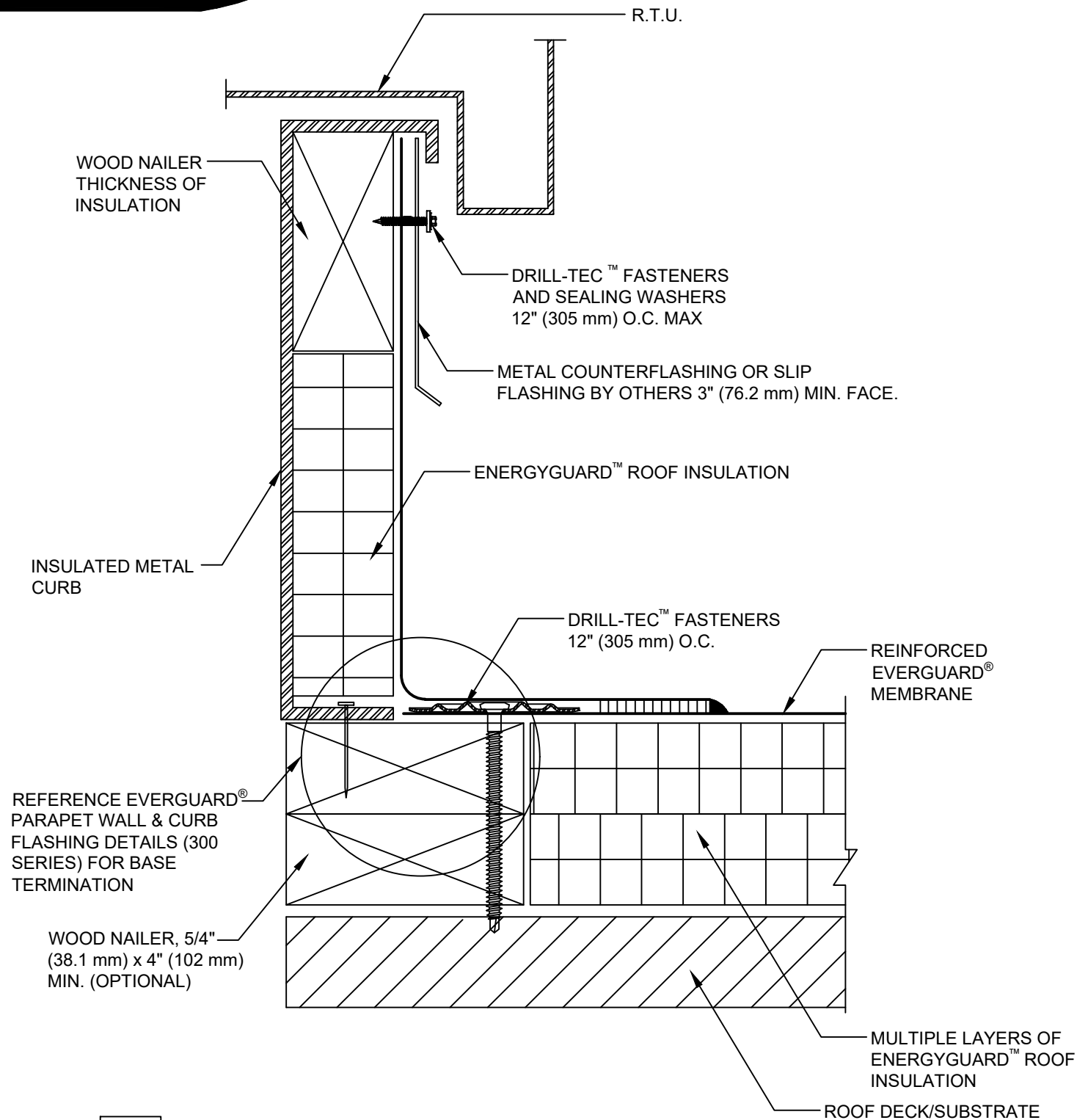
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

HEAT-WELDED
FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

TERMINATION AT R.T.U. WITH COUNTERFLASHING DETAIL

DRAWING #
503B

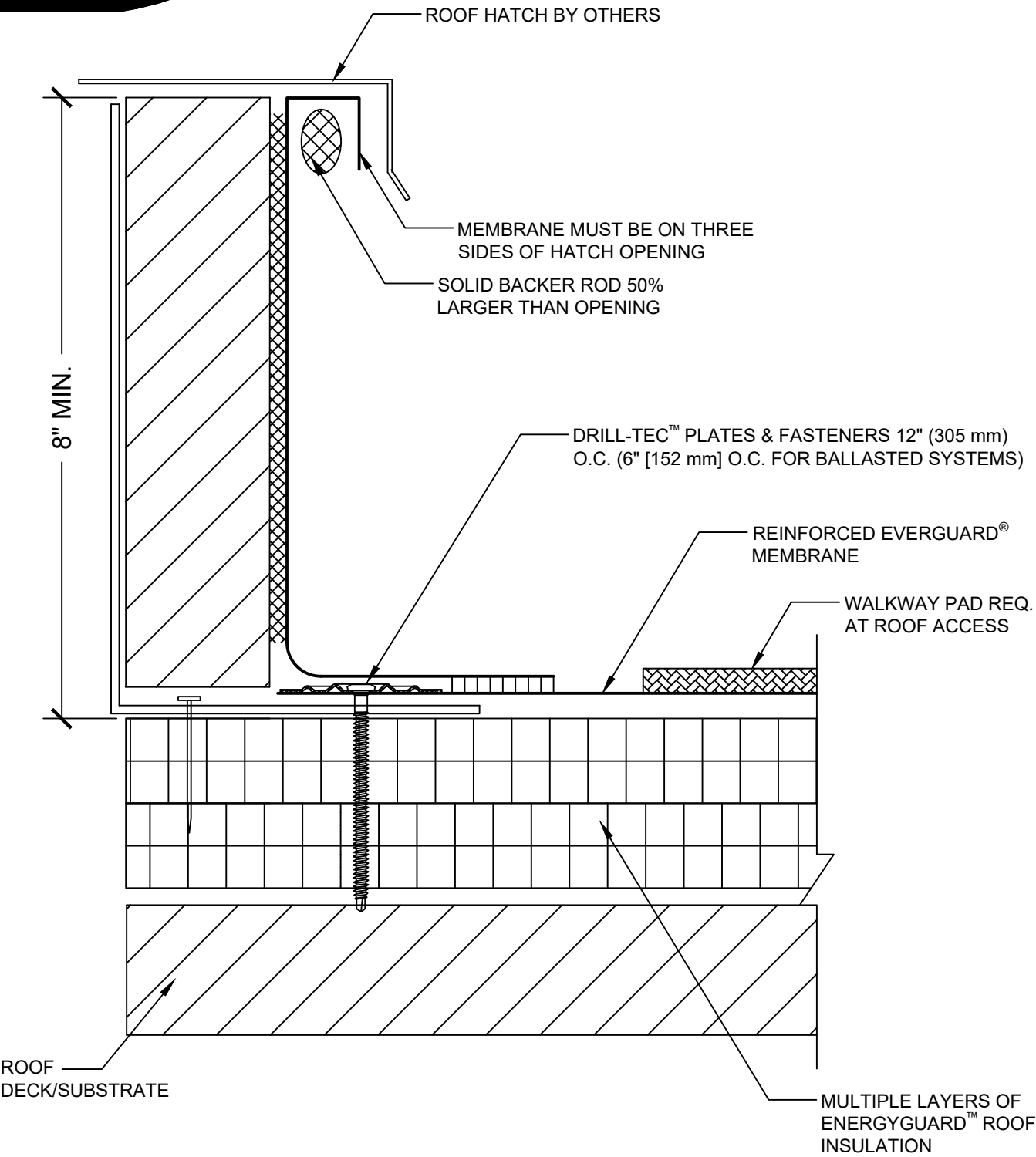
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.

GAF

ROOF HATCH DETAIL

DRAWING #
505A

THIS DETAIL APPLIES TO:
ALL SYSTEMS

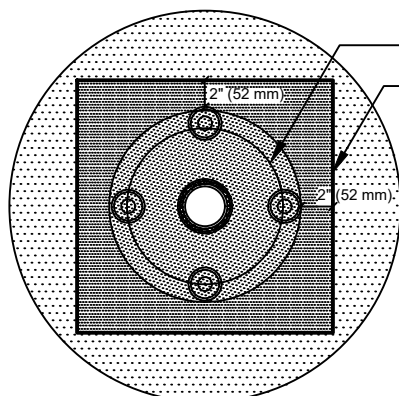
ISSUE / REVISION DATE
3/29/21

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® BONDING ADHESIVE (OPTIONAL)

ALTERNATE INSTALLATION



SEE NOTE #2

EVERGUARD® PREMOLDED VENT BOOT
TARGET MADE FROM REINFORCED
EVERGUARD® MEMBRANE

STAINLESS
STEEL CLAMP

DRILL-TEC™ PLATES
& FASTENERS
4 PER PENETRATION

ROOF
DECK/SUBSTRATE

VENT STACK

EVERGUARD® WATER BLOCK OR
FLEXSEAL™ CAULK GRADE SEALANT

EVERGUARD® PREMOLDED VENT BOOT

REINFORCED
EVERGUARD®
MEMBRANE

MULTIPLE LAYERS OF
ENERGYGUARD™
ROOF INSULATION

NOTE:

1. DO NOT CUT SIDE OF PREMOLDED BOOT. IT MUST BE PULLED OVER VENT PIPE.
2. IF THE PLATES AND FASTENERS INTRUDE INTO BOOT FLANGE AREA, THEN A TARGET MUST FIRST BE INSTALLED OVER PLATES AND FASTENERS BEFORE BOOT INSTALLATION.
3. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
4. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

GAF

PREMOLDED VENT BOOT FLASHING DETAIL

DRAWING #

506A

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

8/17/20

SCALE

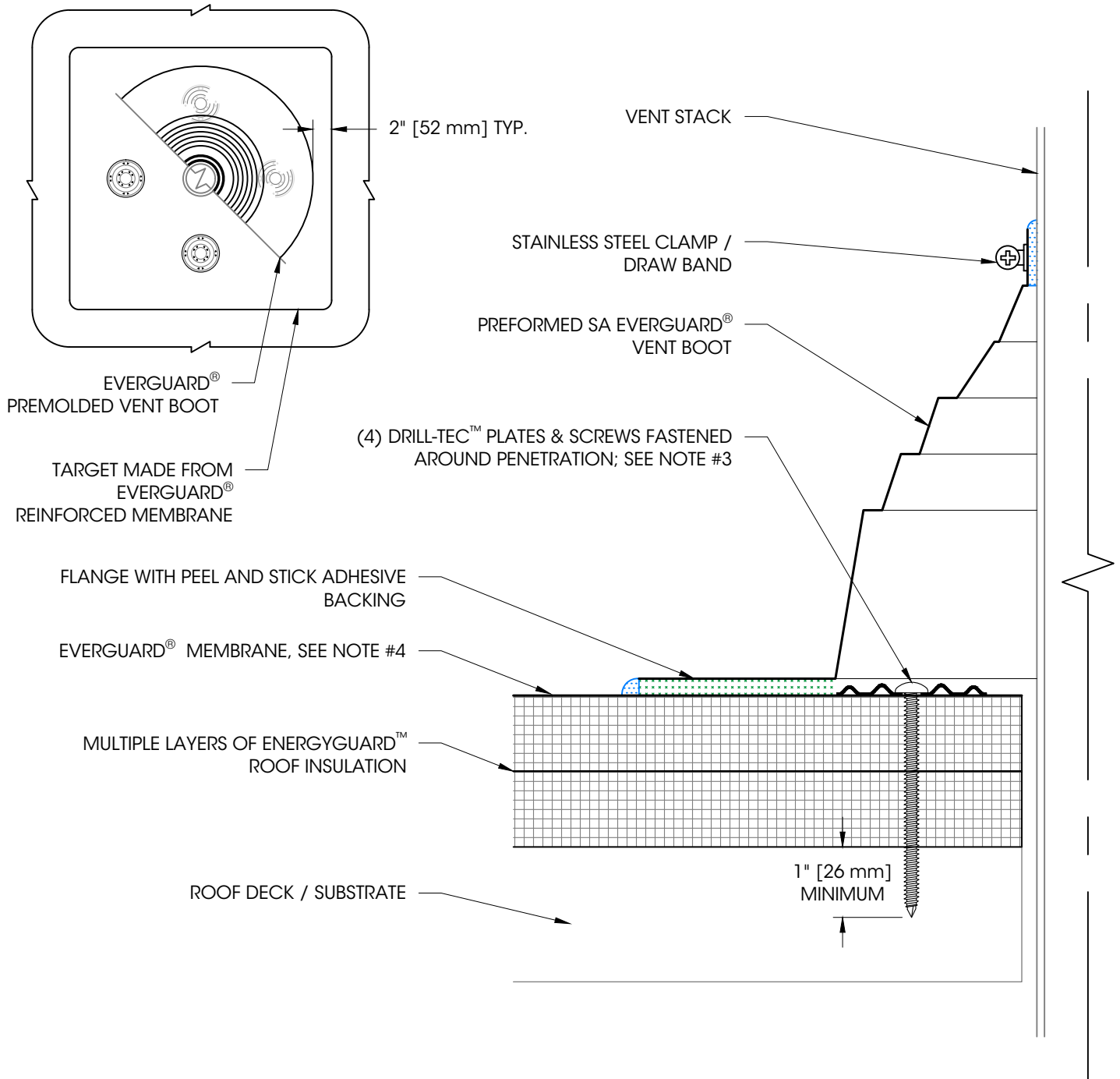
N.T.S.

LEGEND

HEAT-WELDED

FLEXSEAL™ CAULK GRADE SEALANT

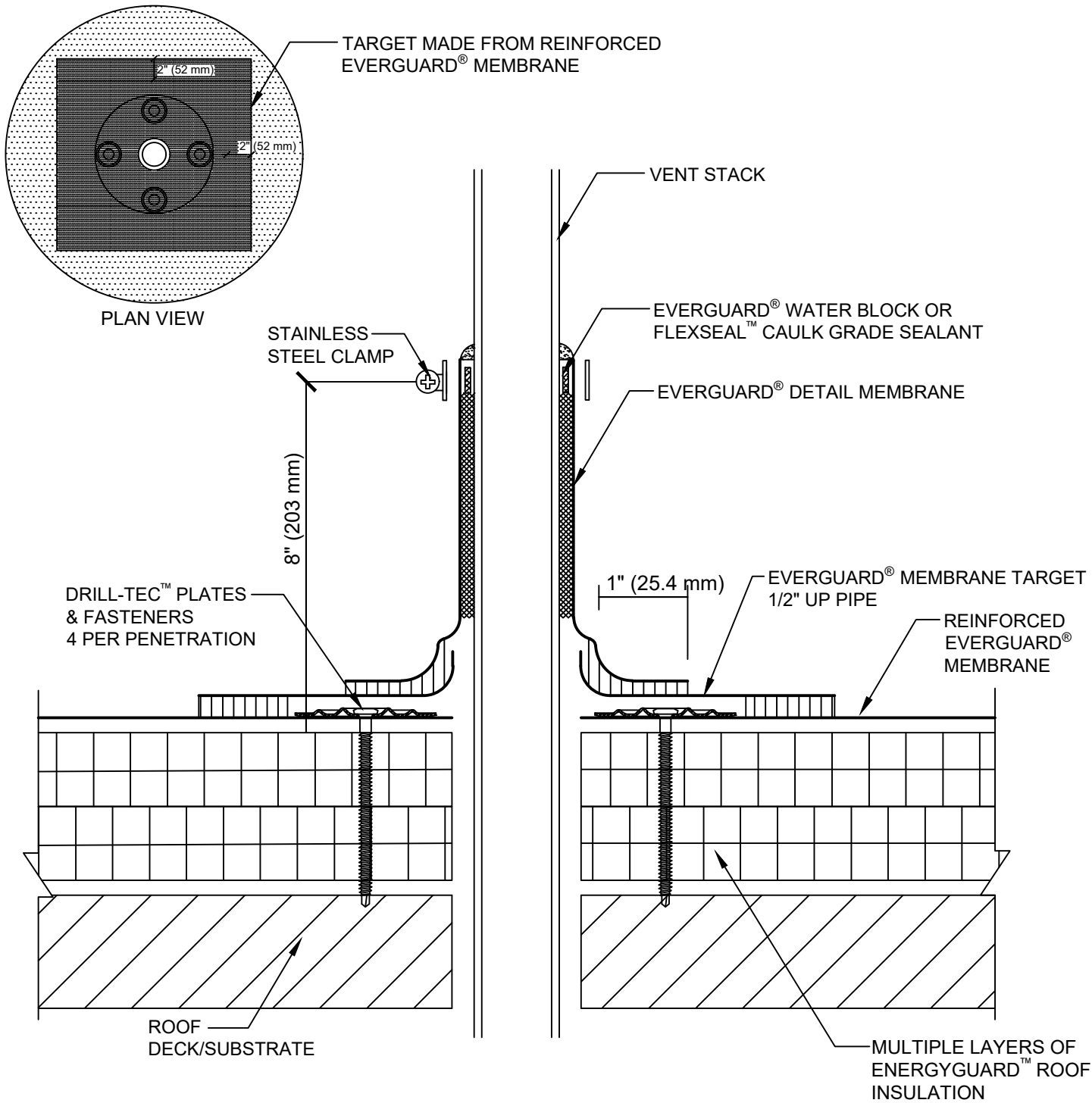
ALTERNATE INSTALLATION (SEE NOTE #3)



NOTES:

- DO NOT CUT THROUGH THE SIDE OF THE PREMOLDED BOOT; IT MUST BE INSTALLED OVER THE VENT PIPE.
- FOUR DRILL-TEC™ PLATES & SCREWS MUST BE FASTENED AROUND PENETRATION.
- IF THE PLATES AND FASTENERS INTRUDE INTO THE BOOT FLANGE AREA, THEN A TARGET MUST BE FIRST INSTALLED OVER THE PLATES AND FASTENERS PRIOR TO BOOT INSTALLATION.
- REFER TO INSTALLATION INSTRUCTIONS FOR PREPERATION AND TREATMENT OF MEMBRANE PRIOR TO INSTALLING VENT BOOT.

| LEGEND | | SA PREFORMED VENT BOOT | | | DETAIL |
|--------|----------|------------------------|------------|---------|--------|
| | ADHESIVE | ROOF AREA | ISSUE DATE | SCALE | 506B |
| | SEALANT | | | | |
| | | PENETRATIONS | 7/15/2024 | 6" = 1' | |



NOTE:

- 1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
- 2. APPLY HEAT TO UNREINFORCED DETAIL MEMBRANE AND FORM BY HAND PRIOR TO HOT AIR WELDING.



FIELD-WRAPPED PENETRATION FLASHING DETAIL

DRAWING #
507

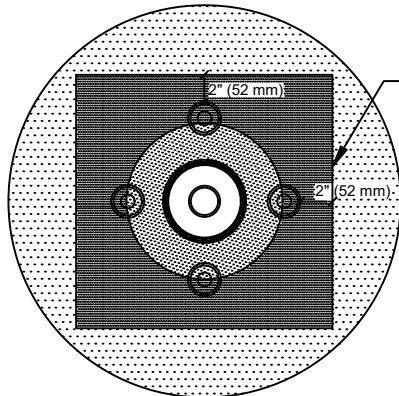
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
5/4/23

SCALE
N.T.S.

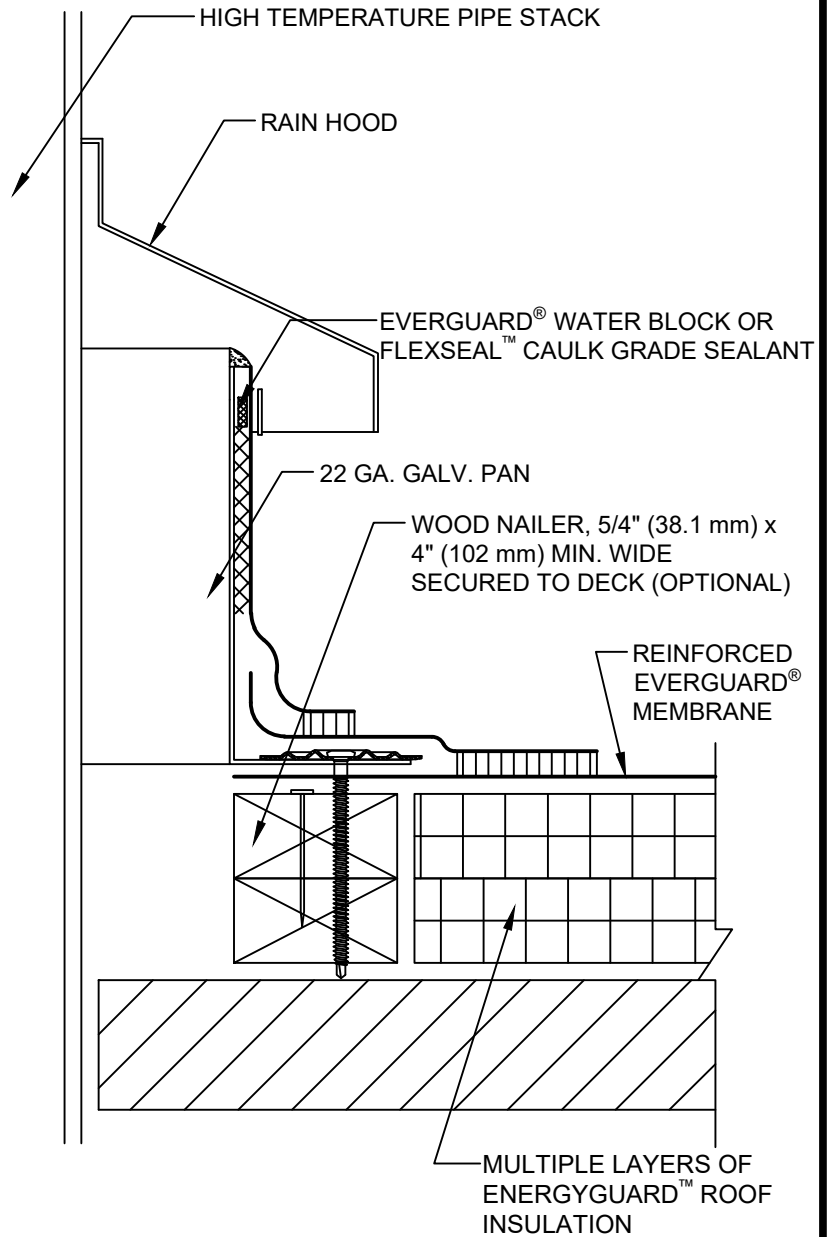
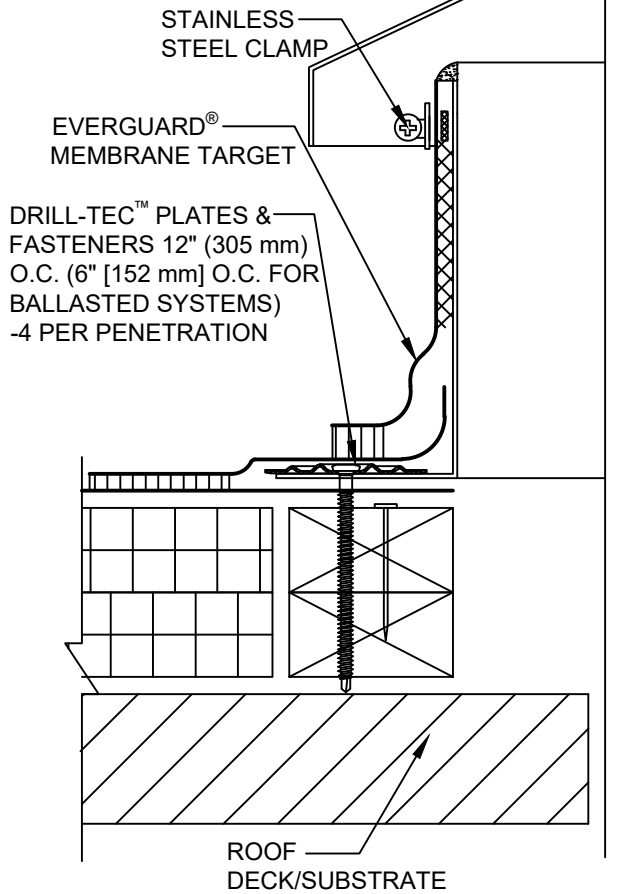
LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® BONDING ADHESIVE (OPTIONAL)



PLAN VIEW

TARGET MADE FROM REINFORCED EVERGUARD® MEMBRANE



NOTE:

1. TO BE USED WHEN TEMPERATURE OF STACK EXCEEDS 160° F.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. APPLY HEAT TO UNREINFORCED DETAIL MEMBRANE AND FORM BY HAND PRIOR TO INSTALLING.

GAF

HIGH TEMPERATURE STACK FLASHING DETAIL

DRAWING #

508

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

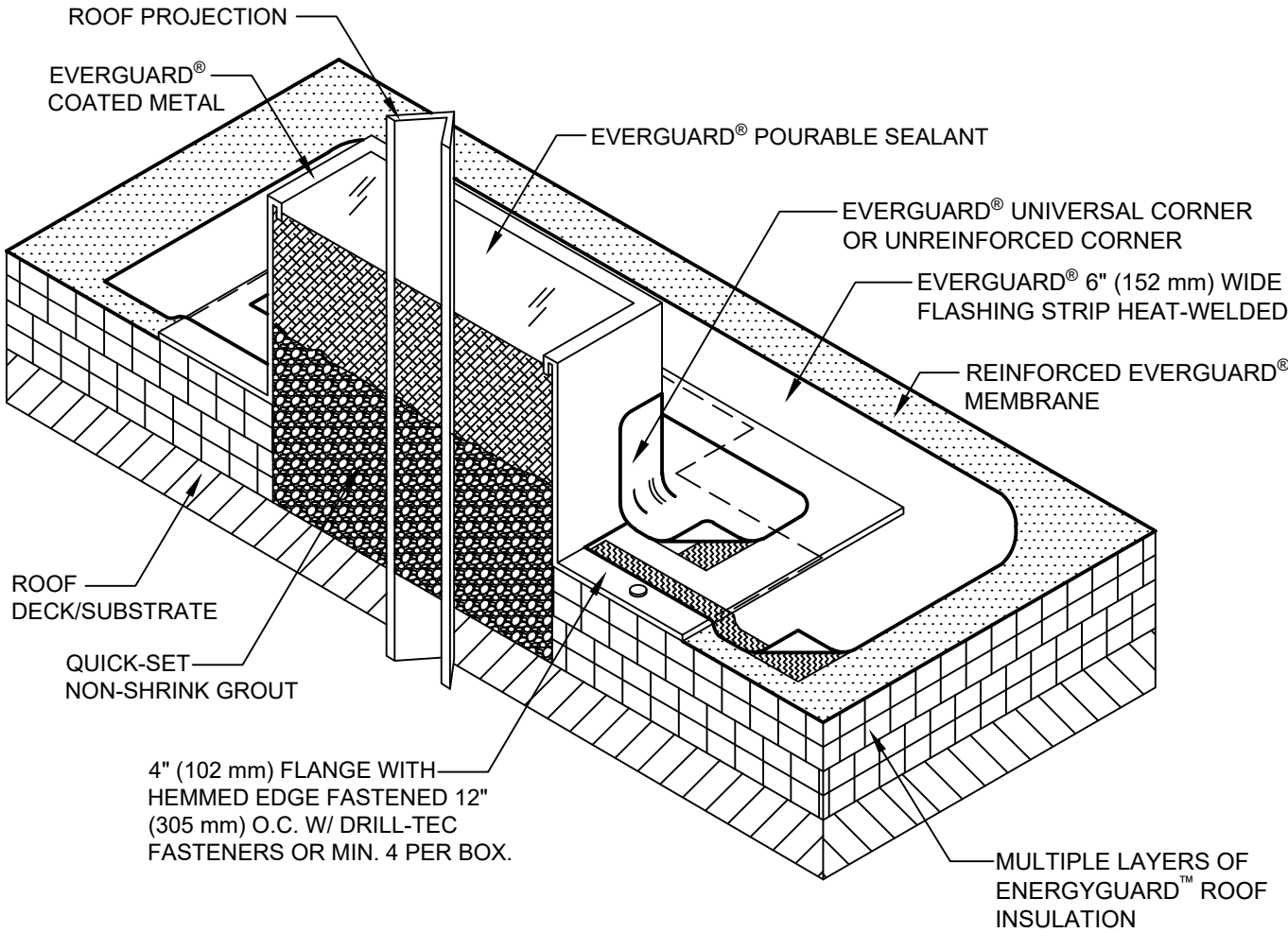
5/4/23

SCALE

N.T.S.

LEGEND

- HEAT-WELDED
- FLEXSEAL™ CAULK GRADE SEALANT
- EVERGUARD® BONDING ADHESIVE (OPTIONAL)



NOTE:

1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
2. BEND EVERGUARD® COATED METAL TO FORM A SEALANT BOX AS SHOWN. STRIP-IN VERTICAL SEAM WHERE BOX IS JOINED TOGETHER.
3. ALLOW 2" (52 mm) CLEARANCE AROUND THE PROJECTION. IF MULTIPLE PROJECTIONS, ALLOW 1" (25.4 mm) BETWEEN PROJECTION AND BOX.
4. INSIDE SURFACE OF EVERGUARD® COATED METAL SEALANT BOX (BARE METAL SIDE) MUST BE CLEAN AND DRY BEFORE SEALANT IS APPLIED.
5. EXISTING PROJECTION MUST BE CLEANED AND FREE OF ANY INSULATING MATERIALS.
6. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
7. POURABLE SEALANT IS CONSIDERED A MAINTENANCE ITEM AND IS EXCLUDED FROM GUARANTEE COVERAGE.



COATED METAL SEALANT BOX PENETRATION FLASHING

DRAWING #
509

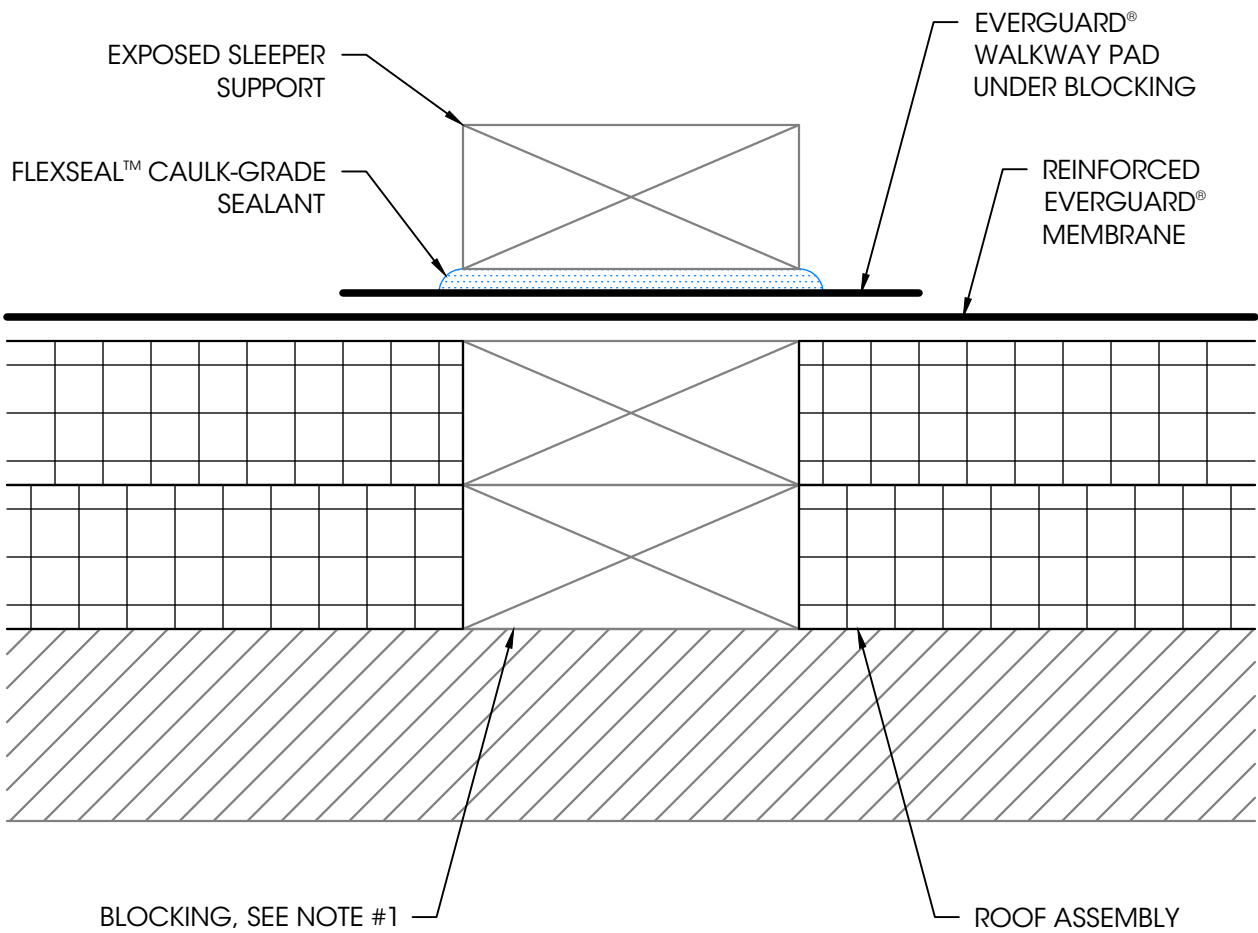
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

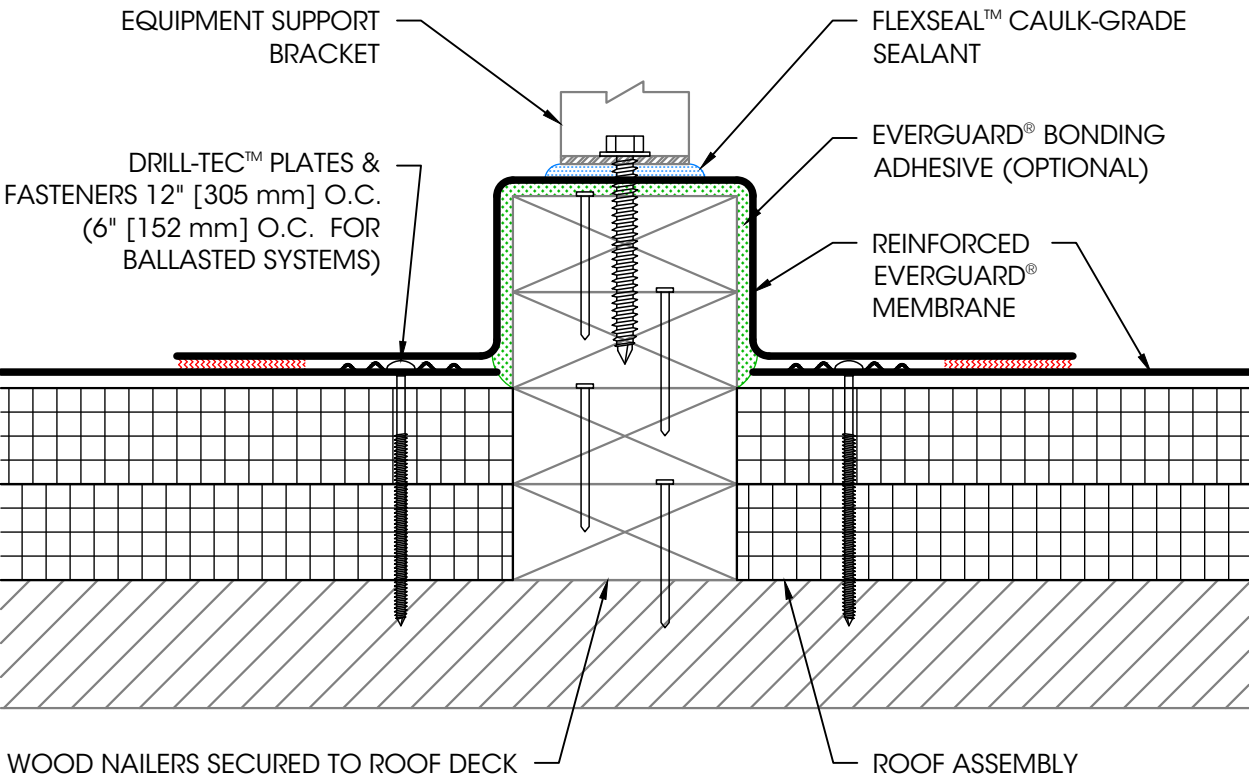
 HEAT-WELDED LAP (SEE NOTE #5)



Notes:

1. Blocking below the membrane is optional when the compressive strength of the roof boards is sufficient to carry the equipment weight.

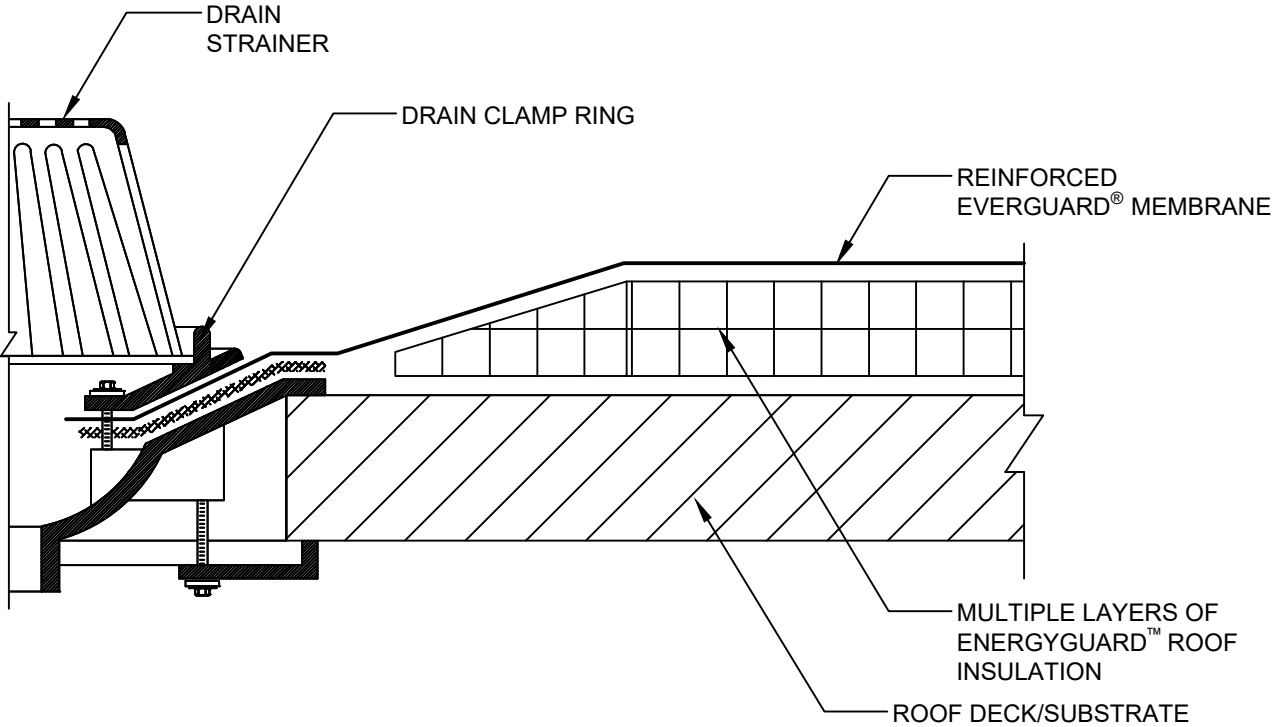
| | | | | |
|---|--------------------------------------|------------------------|-------------------|------------------------------|
| <div>LEGEND</div> <div> <div>SEALANT</div> </div> | Exposed Sleeper Support Installation | Roof Area: | | Detail No:
<div>511</div> |
| | | Issue Date:
7/23/24 | Scale:
6" = 1' | |



Notes:

1. For heat-welded laps, use a 1-1/2" [38 mm] wide weld with machine automatic welders and a 2" [51 mm] wide weld with hand welders.

| | | | | | |
|--|-----------|--|------------------------|-----------------|------------|
| Legend | | Concealed Equipment
Support Sleeper | Roof Area: | | Detail No: |
|  | Heat Weld | | Issue Date:
7/23/24 | Scale:
N.T.S | 512 |
|  | Adhesive | | | | |
|  | Sealant | | | | |
| | | | | | |



NOTE:

- 1. A FIELD WELD CANNOT PASS WITHIN 9" (227 mm) OF THE CLAMPING, OR WITHIN THE DRAIN SUMP ITSELF.
- 2. MEMBRANE MUST EXTEND MINIMUM 1" (25.4 mm) BEYOND THE BOLT HOLES. THE CLAMPING RING BOLTS MUST PENETRATE THE MEMBRANE.
- 3. TAPERED INSULATION TO CREATE A ROOF SUMP MINIMUM 36" (0.914 m) x 36" (0.914 m) IN SIZE. (IF APPLICABLE).
- 4. USE ONE FULL TUBE OF FLEXSEAL CAULK GRADE SEALANT OR EVERGUARD® WATER BLOCK PER DRAIN.
- 5. ASPHALT OR STONE PAVER MUST STOP AT DRAIN TAPER.



DRAIN -STANDARD ROOF DRAIN FLASHING DETAIL

DRAWING #
513A

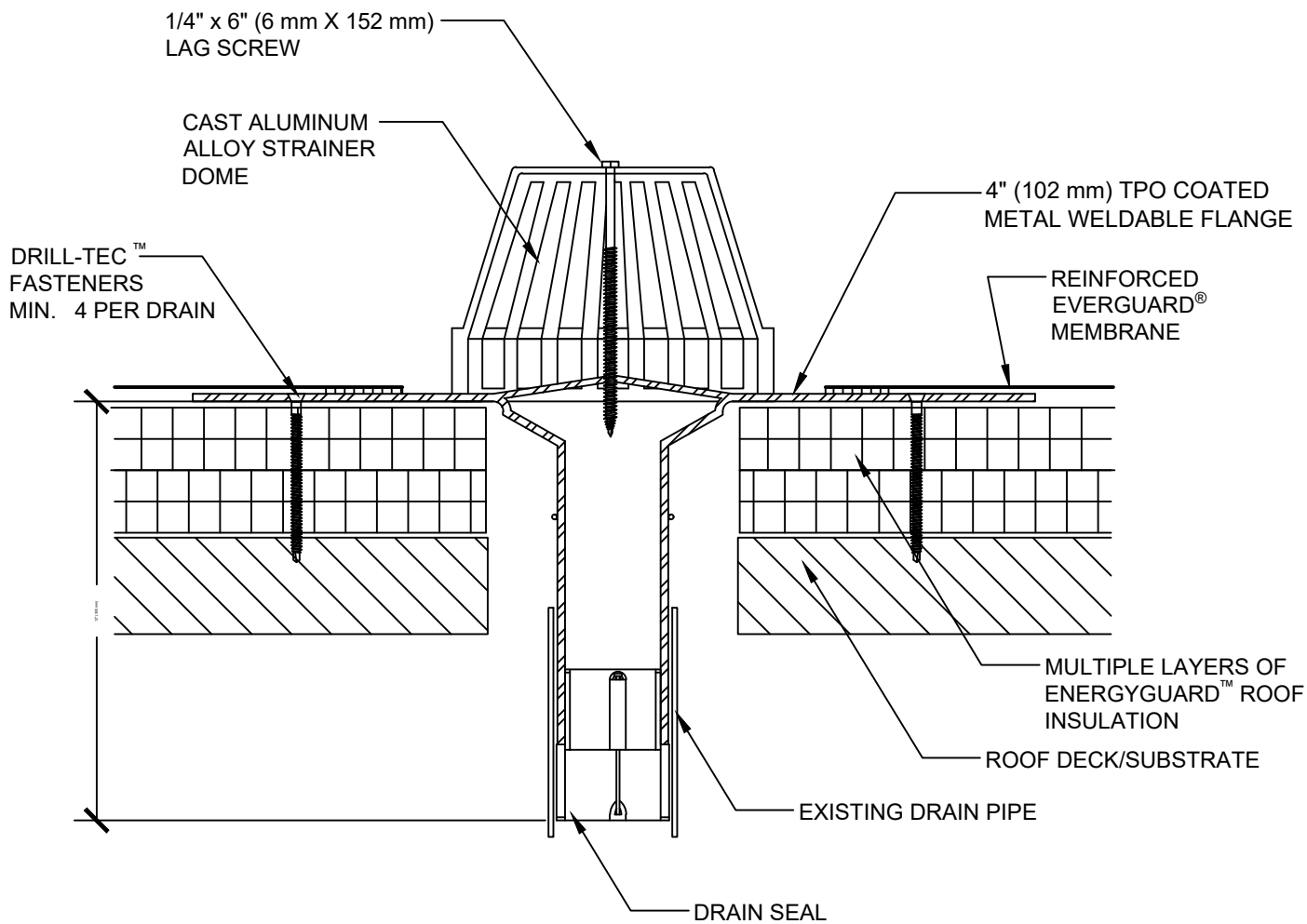
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
4/30/21

SCALE
N.T.S.

LEGEND

EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. EXISTING DRAIN PIPE SHALL BE CLEAN OF ALL DEBRIS THROUGH THE LENGTH OF THE TUBE TO ENSURE PROPER SEAL.
- 2. EVERGUARD® PRE FABRICATED DRAIN ONLY TO BE USED AS A RETROFIT DRAIN.
- 3. REFER TO PRODUCT APPLICATION INSTRUCTIONS FOR DRAIN PIPE SECUREMENT.



DRAIN - EVERGUARD® TPO COATED DRAIN DETAIL

DRAWING #
514

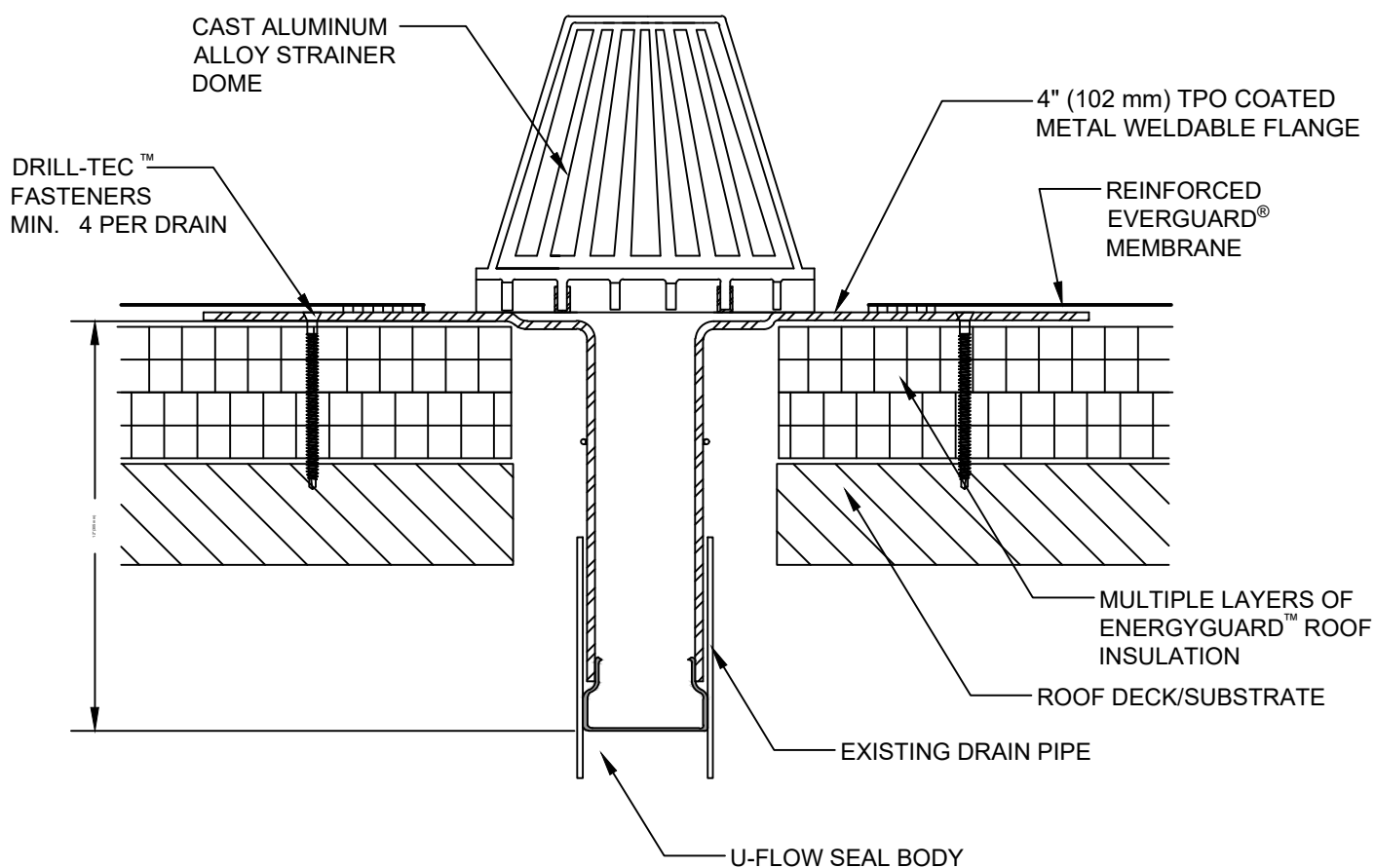
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 MIN 2" (51 mm) HEAT WELD LAP



NOTE:

1. EXISTING DRAIN PIPE SHALL BE CLEAN OF ALL DEBRIS THROUGH THE LENGTH OF THE TUBE TO ENSURE PROPER SEAL.
2. HERCULES® RETRODRAIN ONLY TO BE USED AS A RETROFIT DRAIN.
3. REFER TO PRODUCT APPLICATION INSTRUCTIONS FOR DRAIN PIPE SECUREMENT.

GAF

DRAIN - HERCULES® COATED METAL DRAIN DETAIL

DRAWING #
515

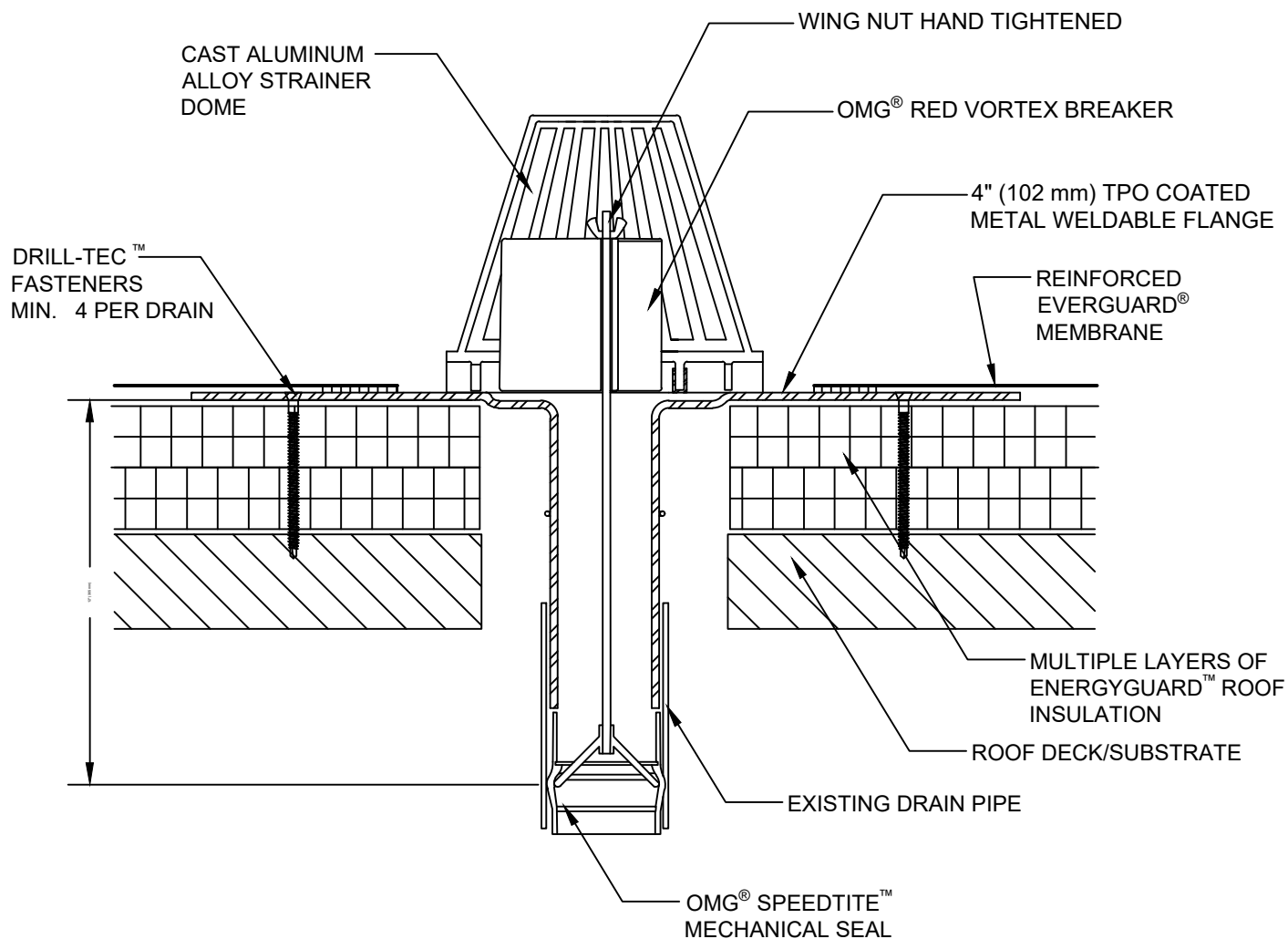
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

■■■■■■■■ MIN 2" (51 mm) HEAT WELD LAP



NOTE:

1. EXISTING DRAIN PIPE SHALL BE CLEAN OF ALL DEBRIS THE LENGTH OF THE TUBE TO ENSURE PROPER SEAL.
2. OMG® SPEEDTITE™ DRAIN ONLY BE USED AS A RETROFIT DRAIN.
3. REFER TO PRODUCT APPLICATION INSTRUCTION FOR DRAIN PIPE SECUREMENT.

GAF

DRAIN - OMG® SPEEDTITE™ COATED METAL DRAIN DETAIL

DRAWING #
516

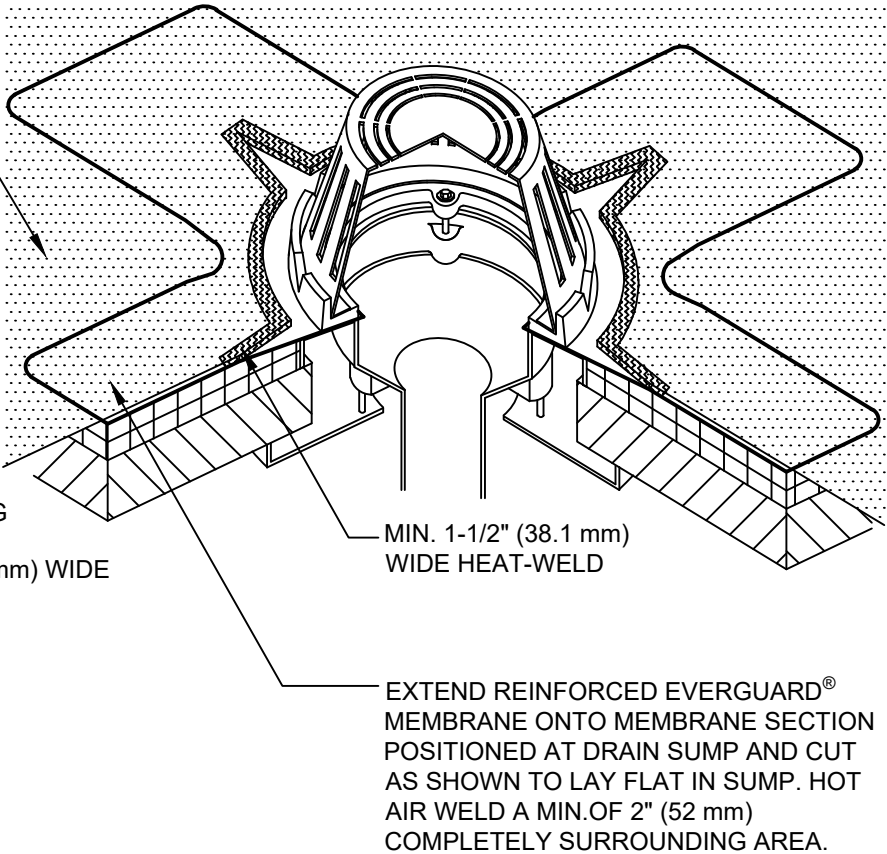
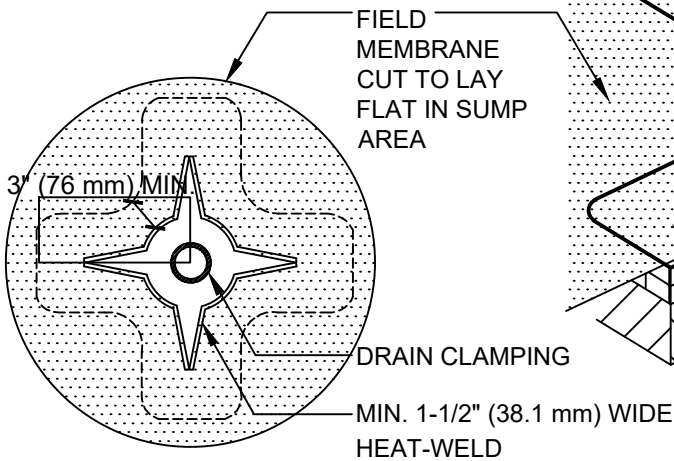
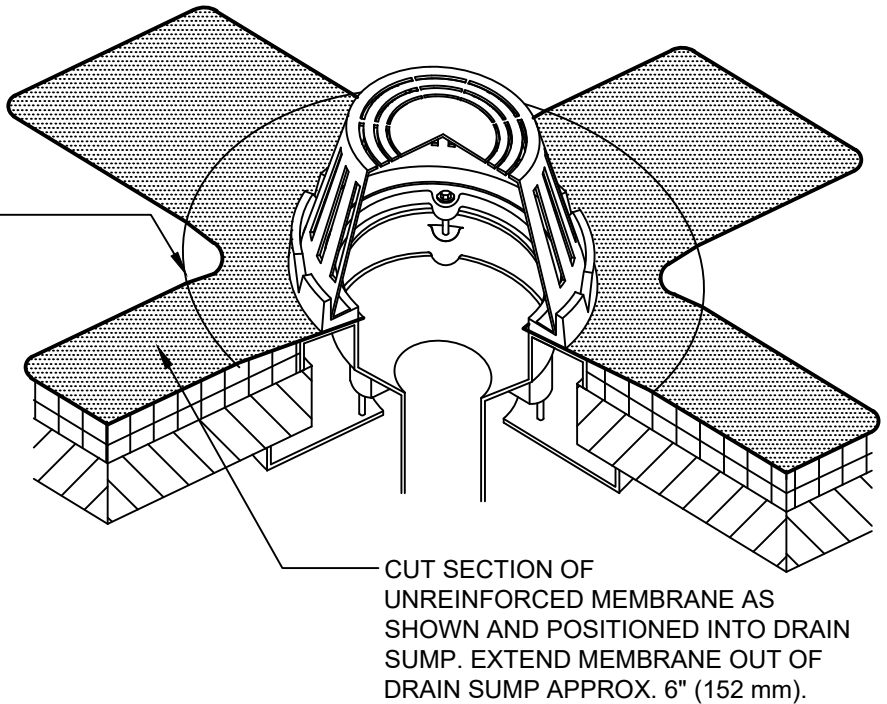
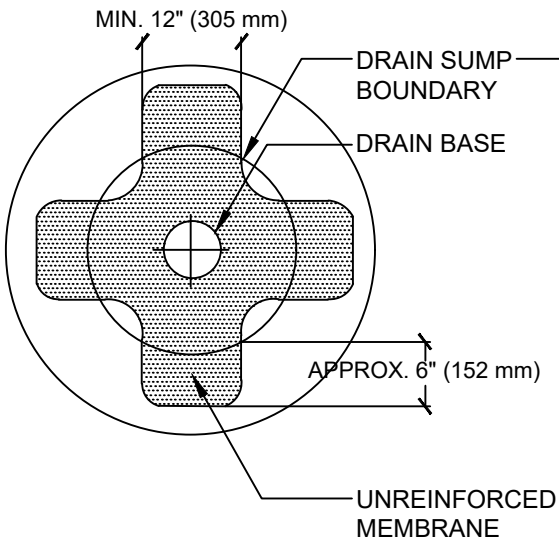
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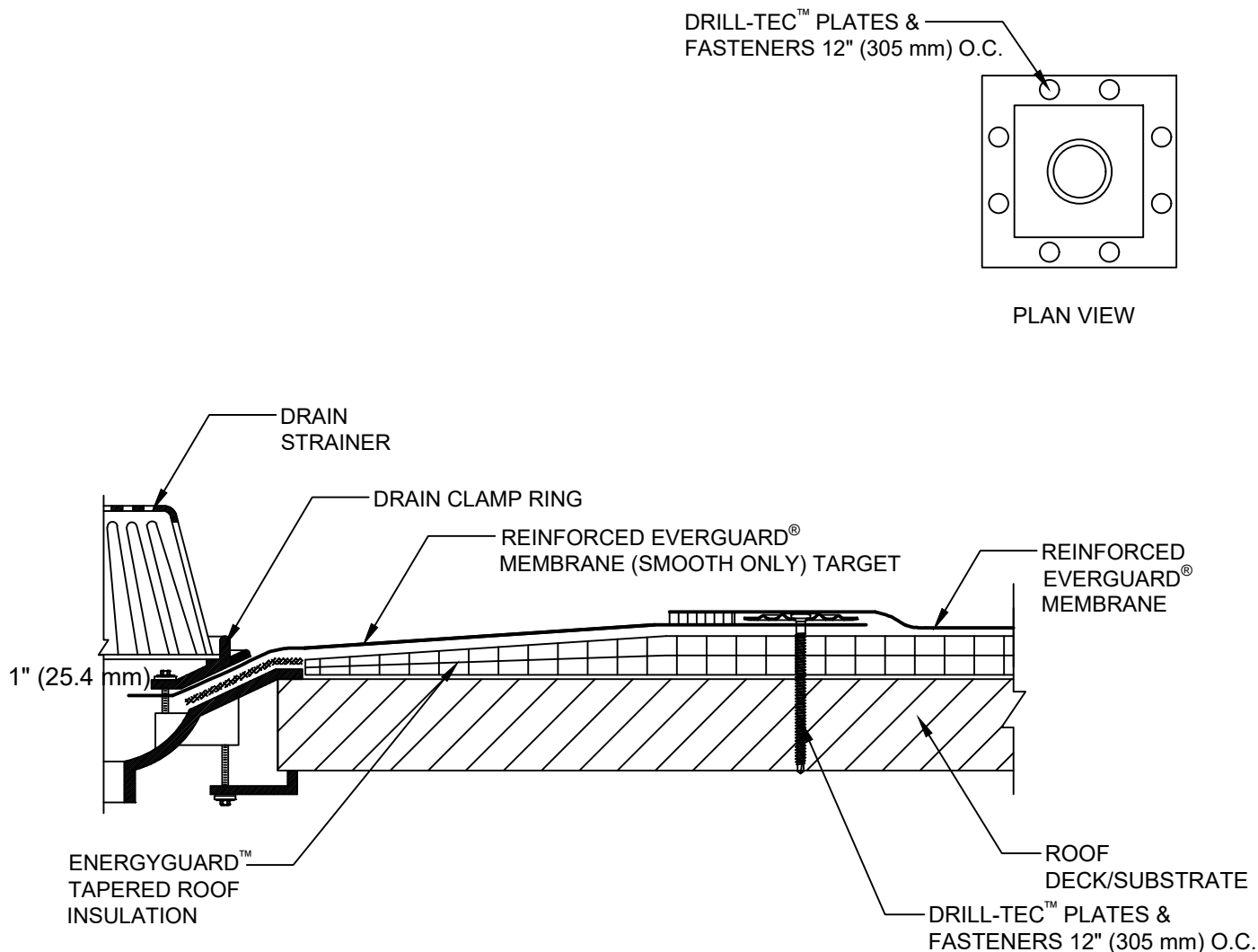
ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

MIN 2" (51 mm) HEAT WELD LAP





NOTE:

1. A FIELD WELD CANNOT PASS WITHIN 9" (229 mm) OF THE CLAMPING, OR WITHIN THE DRAIN SUMP ITSELF.
2. MEMBRANE MUST EXTEND MINIMUM 1" (25.4 mm) BEYOND THE BOLT HOLES; THE CLAMPING RING BOLTS MUST PENETRATE THE MEMBRANE.
3. TAPER INSULATION TO CREATE A ROOF SUMP MINIMUM 36" x 36" (0.914 m x 0.914 m) IN SIZE IF APPLICABLE.
4. IF ASPHALT OR ASPHALTIC PRODUCT IS PRESENT, STOP AT BEGINNING OF SUMP AND FLASH WITH SMOOTH TPO.
5. DO NOT RUN SEPARATION SHEET INTO BOWL AREA IF USED IN SYSTEM.

GAF

DRAIN- PRE TARGET

DRAWING #
519

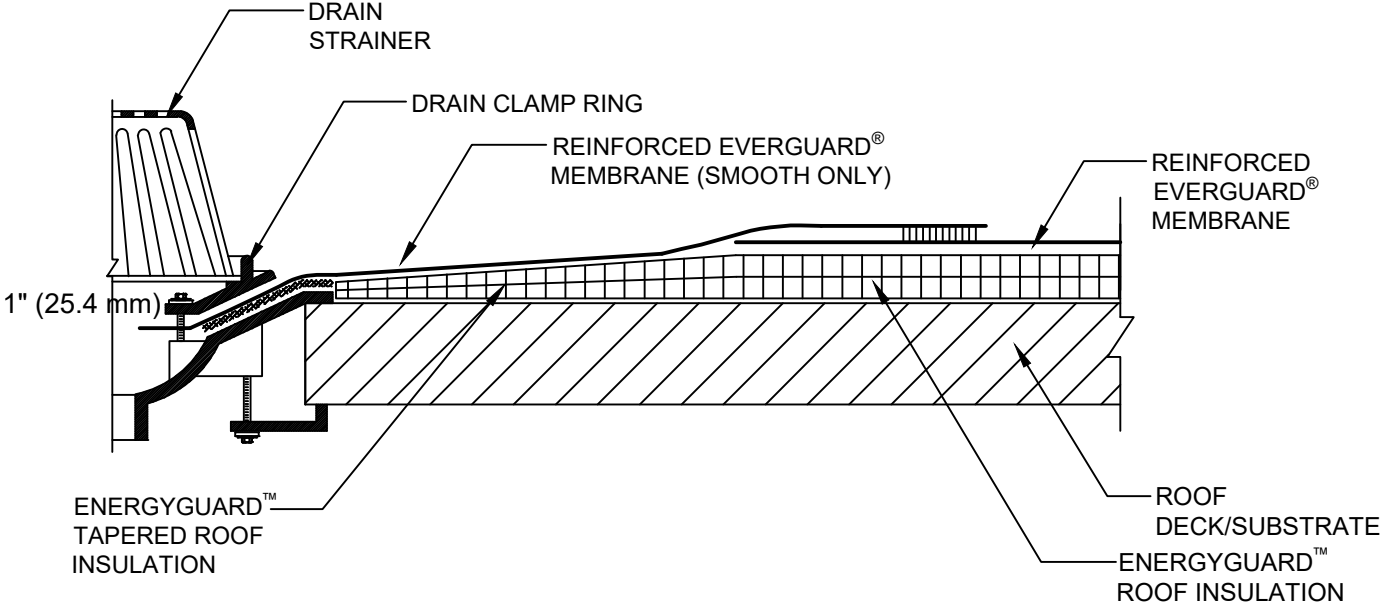
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

- HEAT-WELDED
- EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

- 1. A FIELD WELD CANNOT PASS WITHIN 9" (229 mm) OF THE CLAMPING, OR WITHIN THE DRAIN SUMP ITSELF.
- 2. MEMBRANE MUST EXTEND MINIMUM 1" (25.4 mm) BEYOND THE BOLT HOLES; THE CLAMPING RING BOLTS MUST PENETRATE THE MEMBRANE.
- 3. TAPER INSULATION TO CREATE A ROOF SUMP MINIMUM 36" x 36" (0.914 m x 0.914 m) IN SIZE IF APPLICABLE.
- 4. IF ASPHALT OR ASPHALTIC PRODUCT IS PRESENT, STOP AT BEGINNING OF SUMP AND FLASH WITH SMOOTH TPO.
- 5. DO NOT RUN SEPARATION SHEET INTO BOWL AREA IF USED IN SYSTEM.

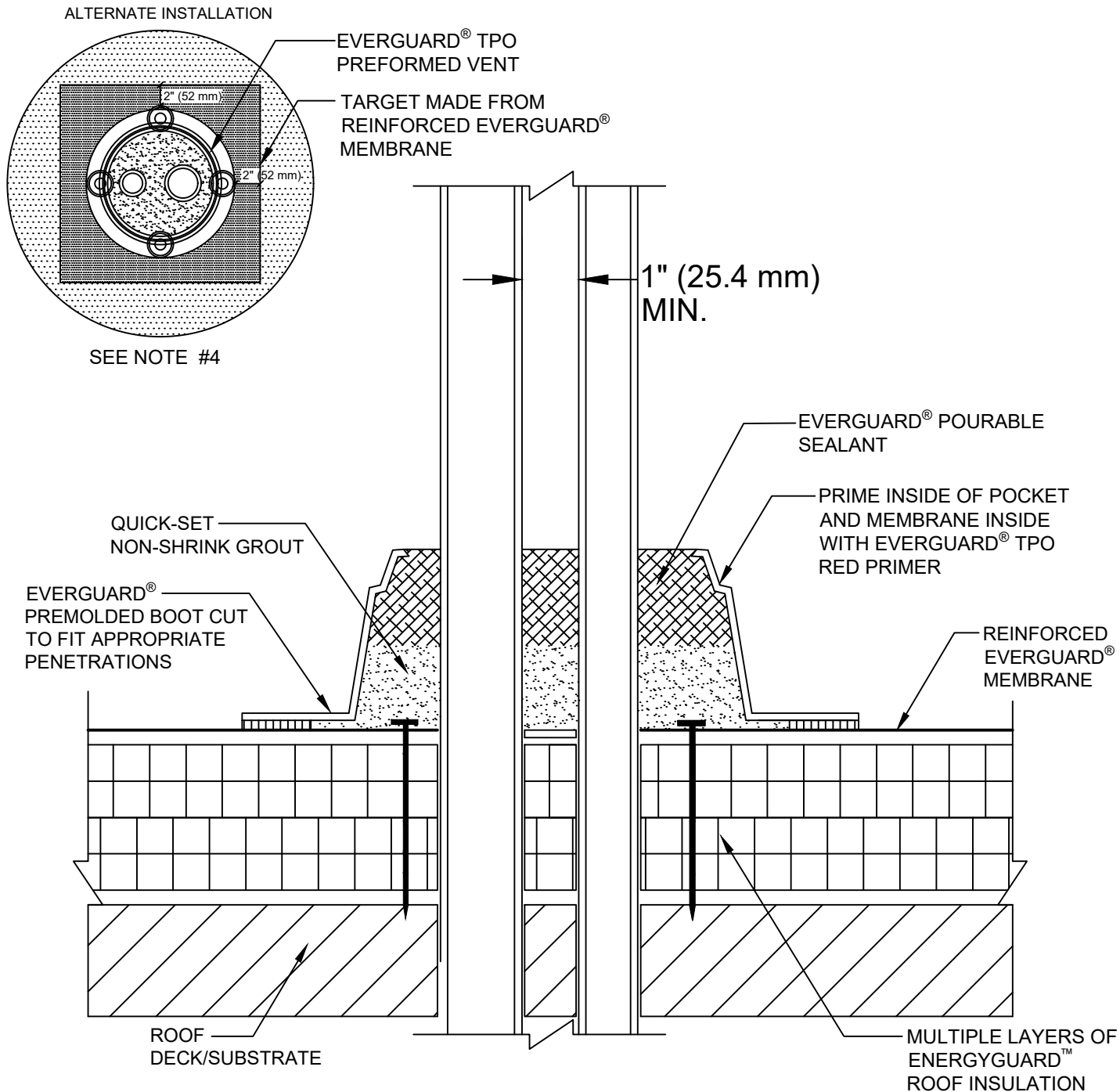


DRAIN - POST TARGET

| | | | |
|-----------|-------------------------|-----------------------|--------|
| DRAWING # | THIS DETAIL APPLIES TO: | ISSUE / REVISION DATE | SCALE |
| 520 | ALL SYSTEMS | 8/17/20 | N.T.S. |

LEGEND

- HEAT-WELDED
- EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. EXISTING PROJECTION MUST BE CLEANED AND FREE OF INSULATING MATERIALS.
2. DO NOT USE OVER EXISTING PENETRATION POCKETS.
3. DO NOT USE WHEN SERVICE LINE TEMP. EXCEEDS 140°F (60°C).
4. IF THE PLATES AND FASTENERS INTRUDE INTO BOOT FLANGE AREA, THEN A TARGET MUST FIRST BE INSTALLED OVER PLATES AND FASTENERS BEFORE BOOT INSTALLATION.
5. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.

GAF

PREFORMED PENETRATION FLASHING DETAIL

DRAWING #
522

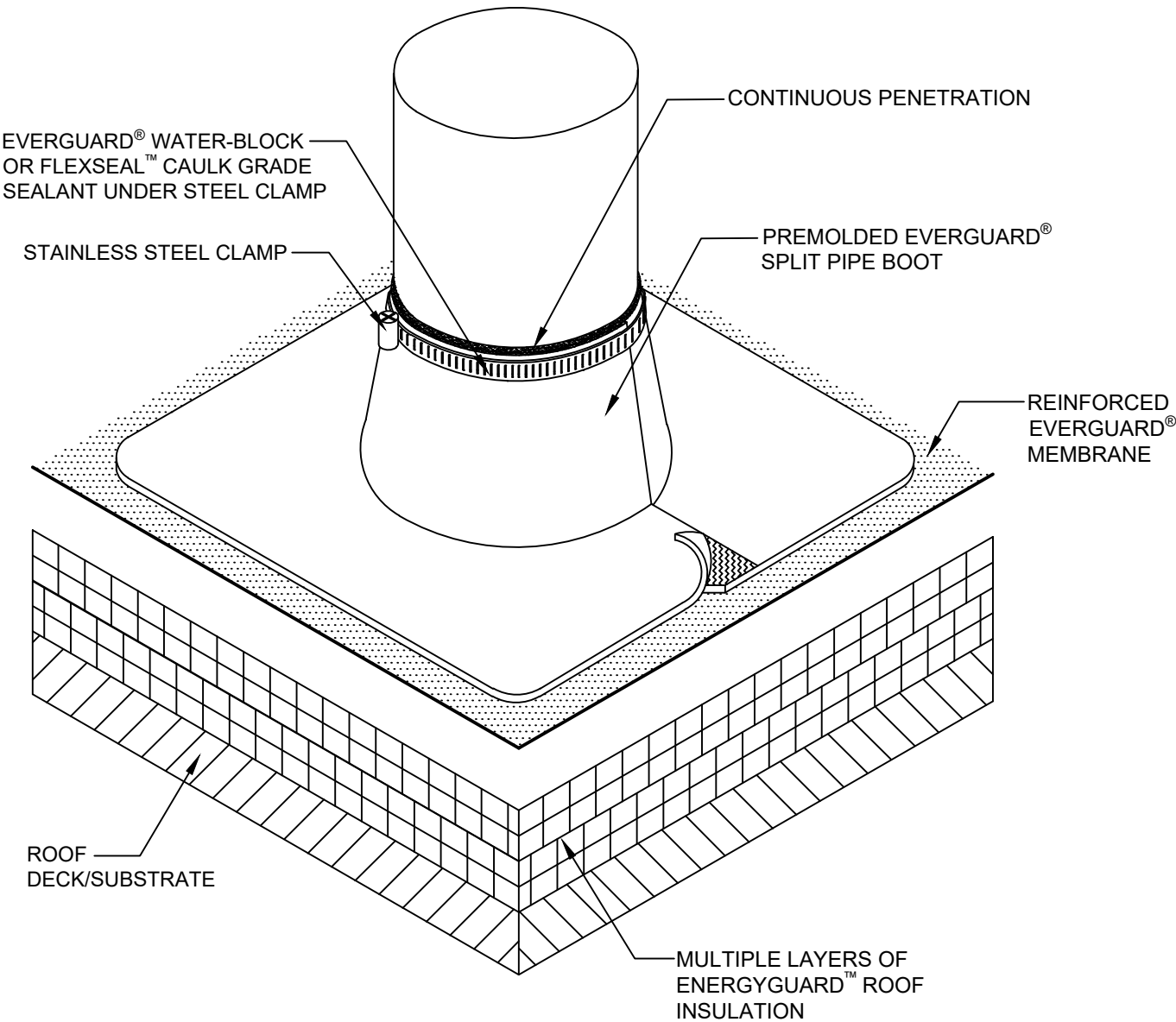
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

HEAT-WELDED LAP



NOTE:

- 1. FOUR DRILL-TEC™ PLATES & SCREWS AROUND PENETRATION.
- 2. IF PLATES AND FASTENERS ENCROACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET MUST BE ADDED FIRST TO COVER FASTENERS.
- 3. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.



SPLIT PIPE BOOT DETAIL

DRAWING #
524

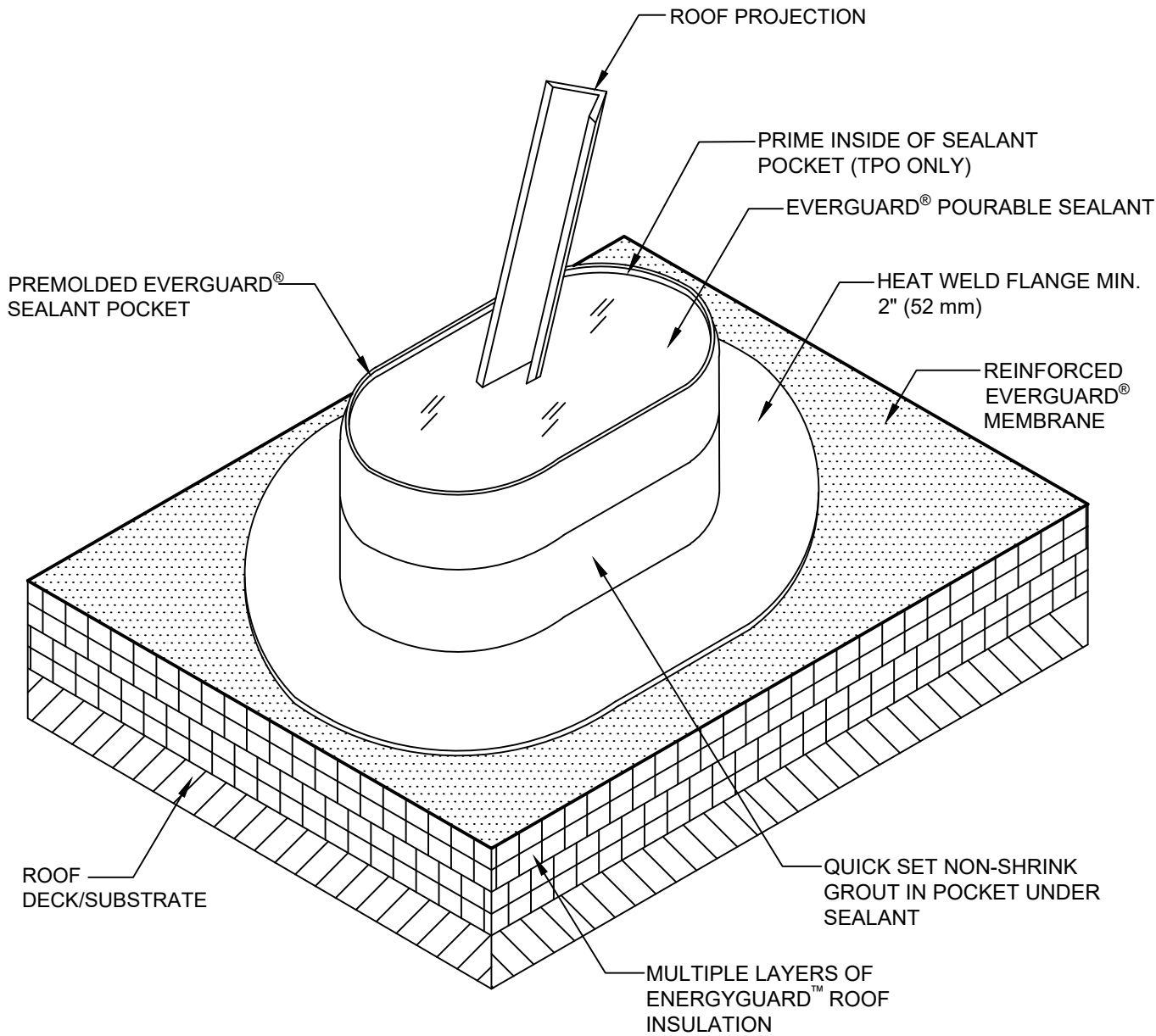
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

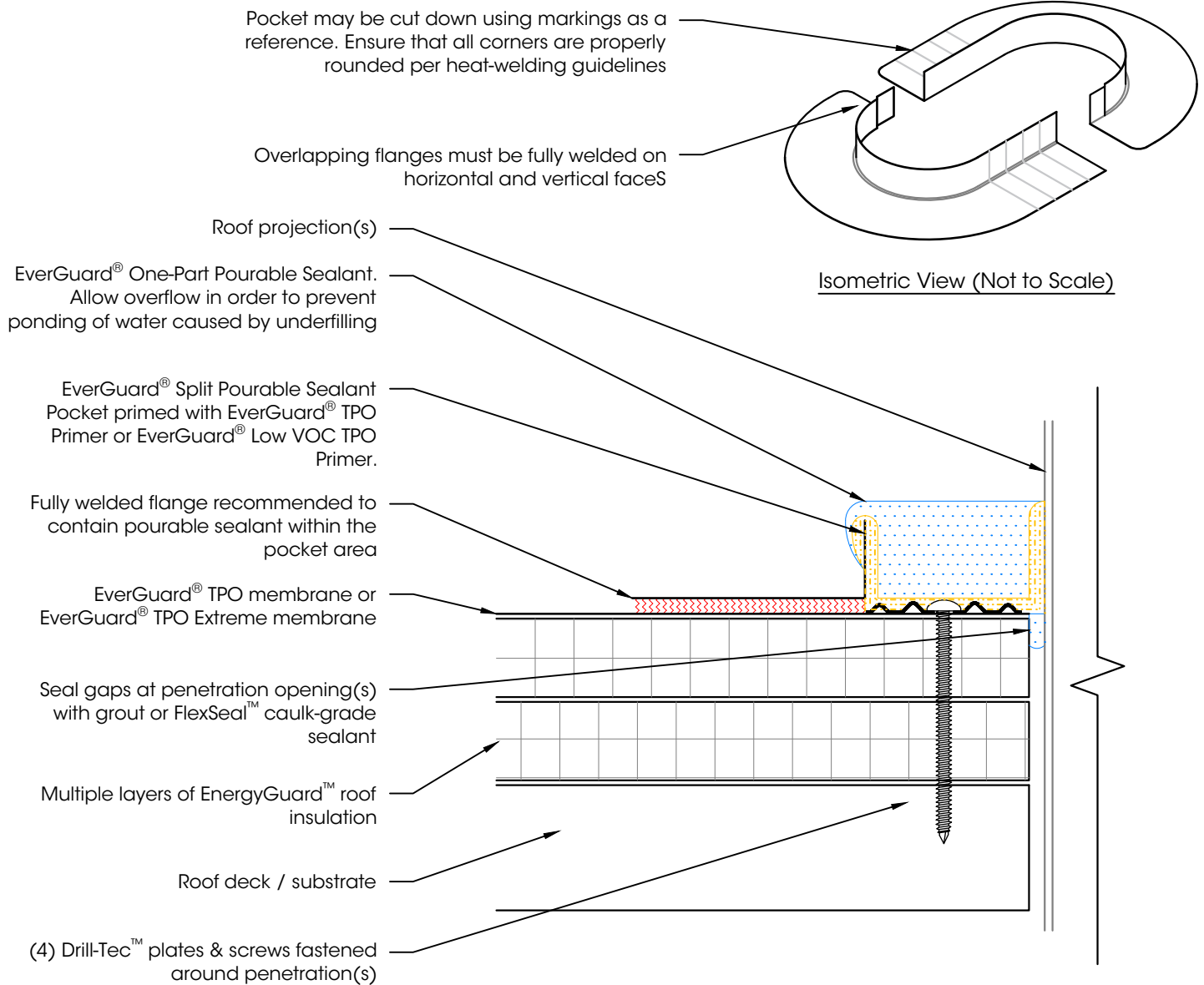
LEGEND

- HEAT WELDED LAP
- FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

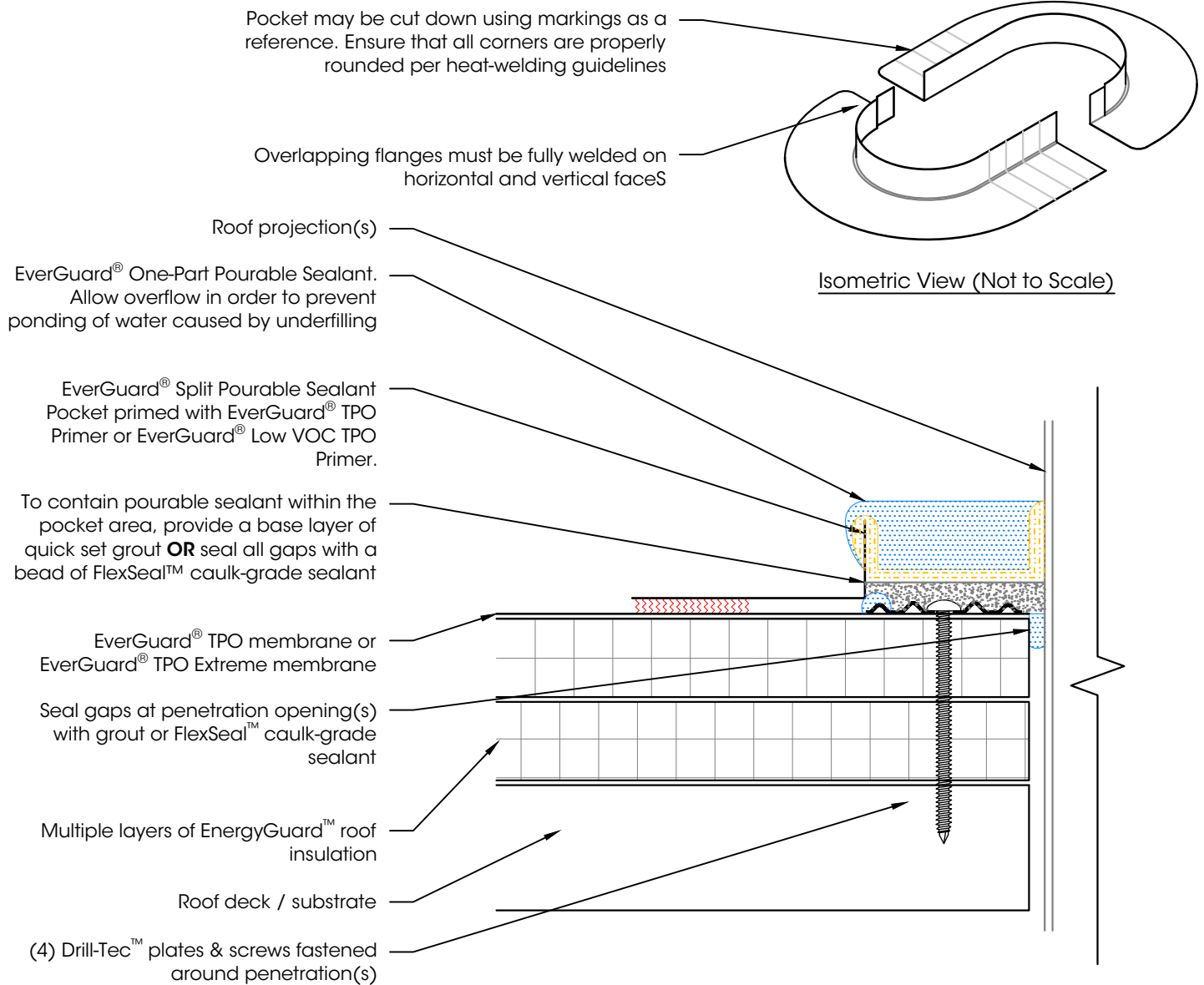
1. ALLOW 2" (52 mm) CLEARANCE AROUND THE PROJECTION. IF MULTIPLE PROJECTIONS, ALLOW 1" (25.4 mm) BETWEEN PROJECTION AND POCKET.
2. THE EXISTING PROJECTION MUST BE CLEAN OF ALL DEBRIS BEFORE INSTALLATION.
3. FOUR DRILL-TEC™ PLATES & SCREWS INSERTED AROUND PENETRATION.
4. EVERGUARD® POURABLE SEALER POCKET MUST BE PRIMED WITH EVERGUARD® TPO PRIMER (TPO ONLY).
5. IF SEALANT POCKET MUST BE CUT, STRIP IN CUT WITH UNREINFORCED TPO OR PVC STRIP MIN 4" (102 mm) WIDE AND RUN OUT ONTO DECK SHEET MINIMUM 2" (52 mm).
6. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES (TPO ONLY).
7. IF PLATES AND FASTENERS ENCROACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET MUST BE ADDED FIRST TO COVER FASTENERS.
8. POURABLE SEALANT IS CONSIDERED A MAINTENANCE ITEM AND IS EXCLUDED FROM GUARANTEE COVERAGE.



NOTES:

1. Split Pourable Sealant Pocket is available in and can be installed on EverGuard® TPO and EverGuard Extreme® TPO.
2. Allow 2" [52 mm] clearance around the projection; if multiple projections exist, allow 1" [25.4 mm] between the projection(s) & pocket.
3. The existing projection(s) must be clean of all debris & primed prior to installation.
4. Four Drill-Tec™ plates & screws must be fastened around penetration.
5. If plates and fasteners encroach into the seam area of the pocket, then a target patch must be added first to cover the fasteners.
6. Pourable sealant is considered a maintenance item and is excluded from guarantee coverage.

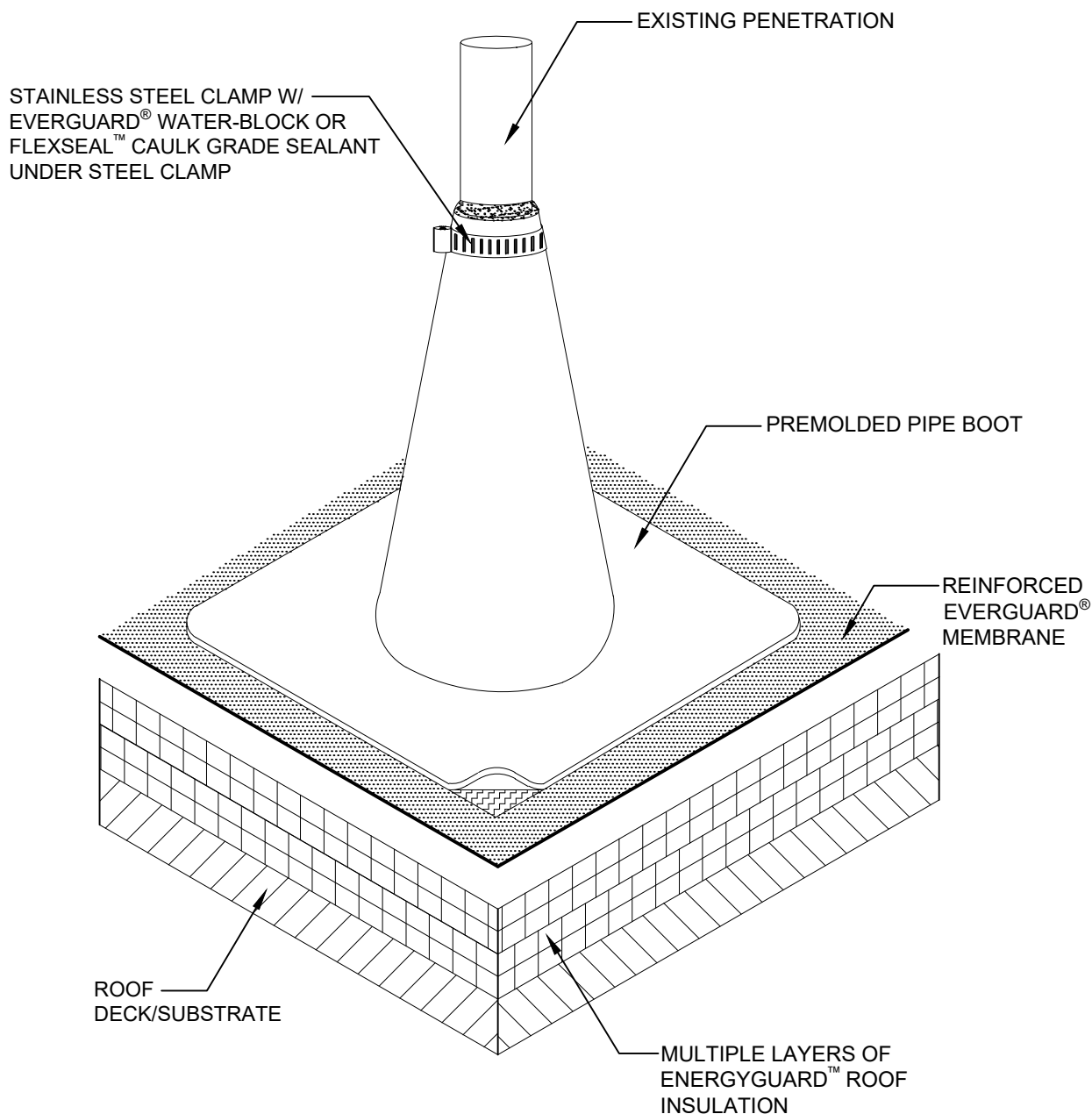
| LEGEND | | Split Pourable Sealant Pocket | | | Detail |
|--|-----------|-------------------------------|------------|---------|--------|
|  | HEAT WELD | | | | 525A |
|  | SEALANT | | | | |
|  | PRIMER | | | | |
| | | Roof Area | Issue Date | Scale | |
| | | Penetrations | 7/25/23 | 6" = 1' | |



NOTES:

1. Split Pourable Sealant Pocket is available in and can be installed on EverGuard® TPO and EverGuard Extreme® TPO.
2. Allow 2" [52 mm] clearance around the projection; if multiple projections exist, allow 1" [25.4 mm] between the projection(s) & pocket.
3. The existing projection(s) must be clean of all debris & primed prior to installation.
4. Four Drill-Tec™ plates & screws must be fastened around penetration.
5. If plates and fasteners encroach into the seam area of the pocket, then a target patch must be added first to cover the fasteners.
6. Pourable sealant is considered a maintenance item and is excluded from guarantee coverage.

| LEGEND | | Split Pourable Sealant Pocket - Alternate Method | | | Detail |
|--|-----------|--|------------|---------|--------|
|  | HEAT WELD | | | | 525B |
|  | SEALANT | | | | |
|  | PRIMER | Roof Area | | | |
| | | Penetrations | Issue Date | Scale | |
| | | | 7/25/23 | 6" = 1' | |



NOTE:

1. FOUR DRILL-TEC™ PLATES & SCREWS AROUND PENETRATION.
2. IF PLATES AND FASTENERS ENCR OACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET MUST BE ADDED FIRST TO COVER FASTENERS.
3. THIS PRODUCT IS AVAILABLE IN CUSTOM SIZES, VISIT GAF.COM FOR MORE INFORMATION.
4. THE EXISTING PROJECTION MUST BE CLEAN OF ALL DEBRIS BEFORE INSTALLATION.

GAF

NON-SPLIT CONICAL PIPE BOOT

DRAWING #
526A

THIS DETAIL APPLIES TO:
ALL SYSTEMS

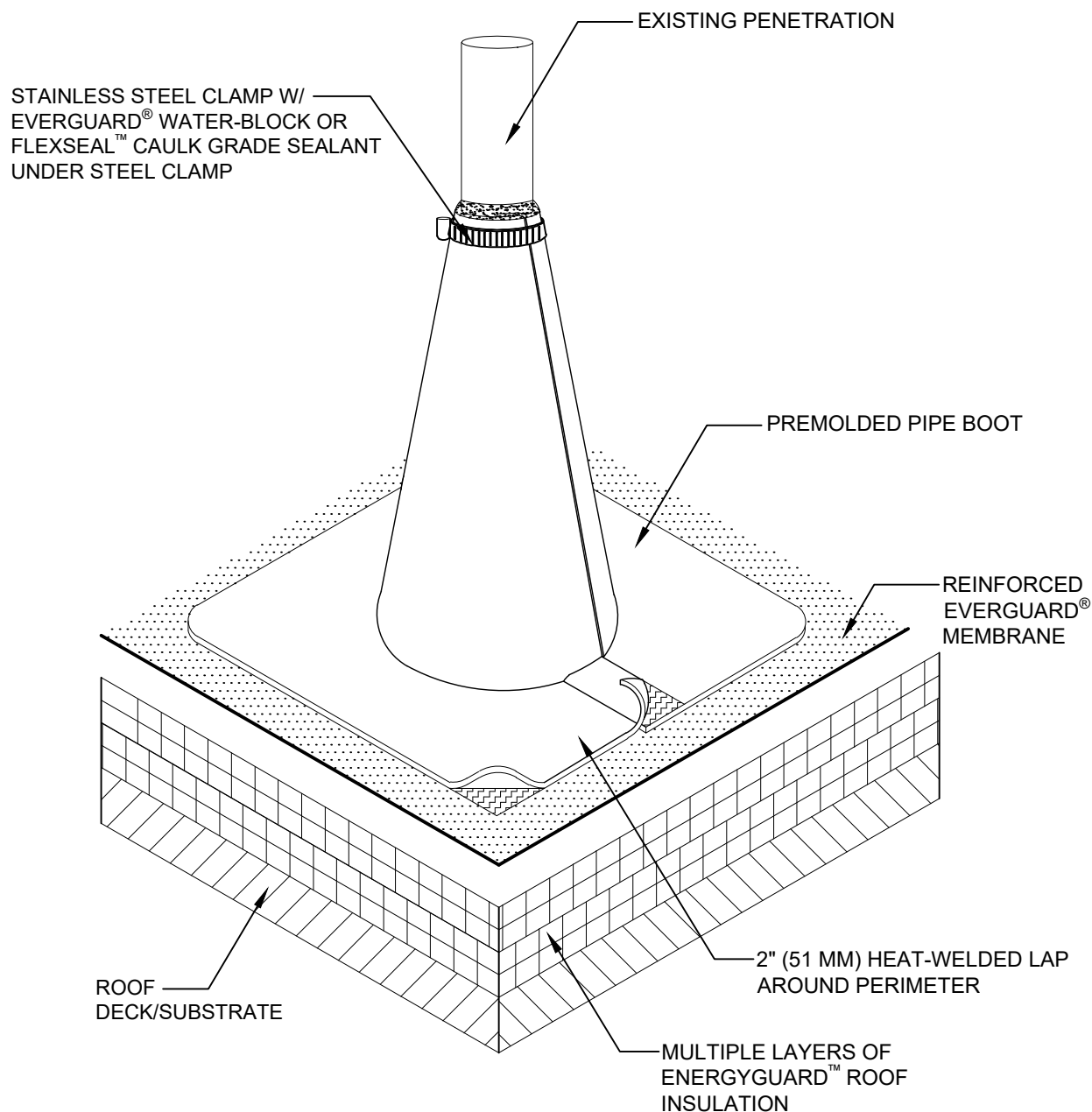
ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

2" (51 MM) HEAT-WELDED LAP
AROUND PERIMETER

FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. FOUR DRILL-TEC™ PLATES & SCREWS AROUND PENETRATION.
2. IF PLATES AND FASTENERS ENCROACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET MUST BE ADDED FIRST TO COVER FASTENERS.
3. THIS PRODUCT IS AVAILABLE IN CUSTOM SIZES, VISIT GAF.COM FOR MORE INFORMATION.
4. THE EXISTING PROJECTION MUST BE CLEAN OF ALL DEBRIS BEFORE INSTALLATION.

GAF

NON-SPLIT CONICAL PIPE BOOT


DRAWING #
526B

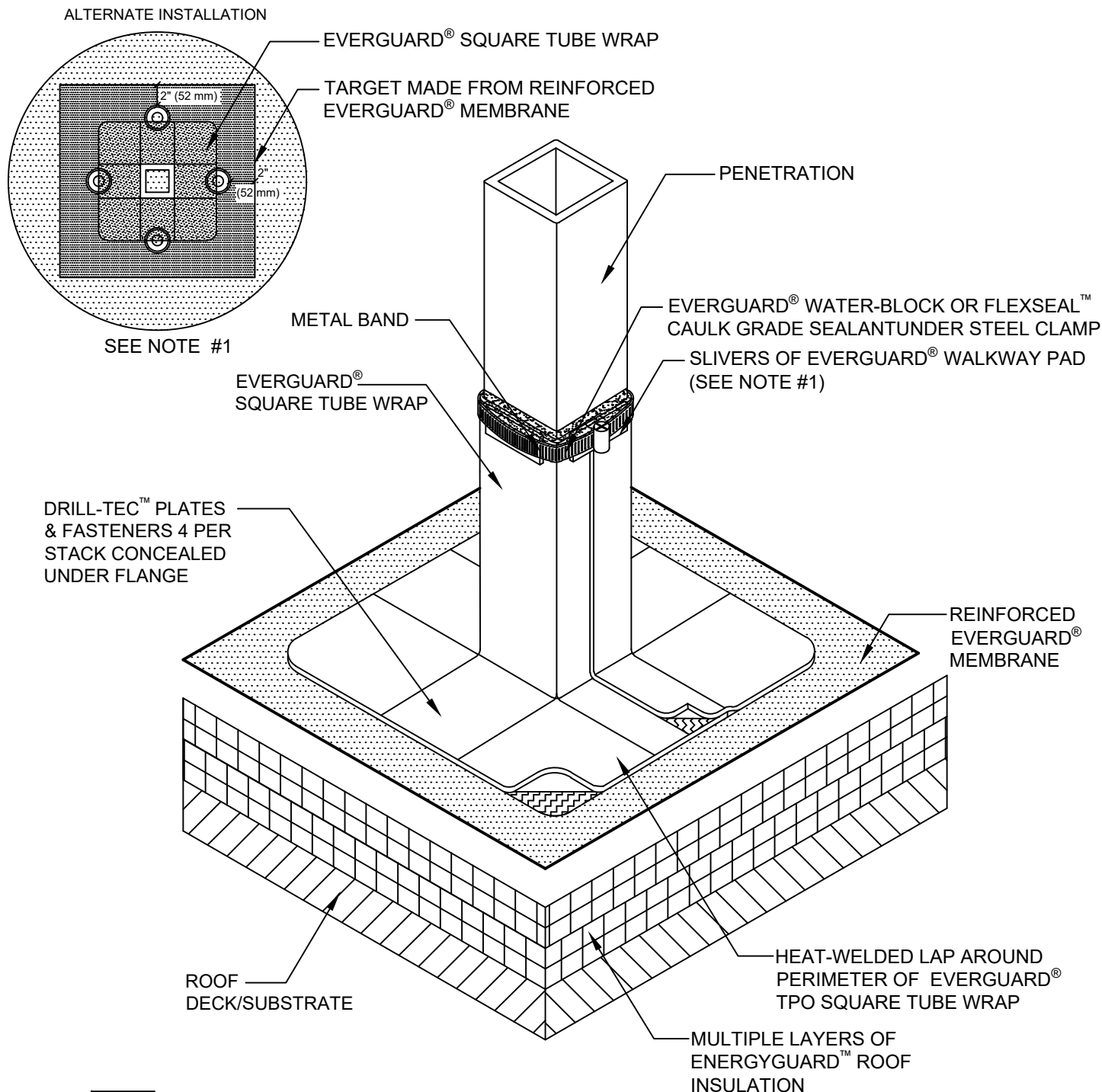
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

-  HEAT-WELDED LAP
 FLEXSEAL™ CAULK GRADE SEALANT



NOTE:

1. IF A TIGHTER FIT IS REQUIRED AT THE TOP OF THE WRAP, INSERT SLIVERS OF WALKWAY PAD BETWEEN THE BAND AND THE MEMBRANE ON ALL FOUR SIDES.
2. IF PLATES AND FASTENERS ENCROACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET MUST BE ADDED FIRST TO COVER FASTENERS.
3. 25 YEAR GUARANTEES AND ABOVE MUST USE EXTREME ACCESSORIES.
4. THE EXISTING PROJECTION MUST BE CLEAN OF ALL DEBRIS BEFORE INSTALLATION.

GAF

SQUARE TUBE WRAP DETAIL


DRAWING #
527


THIS DETAIL APPLIES TO:
ALL SYSTEMS

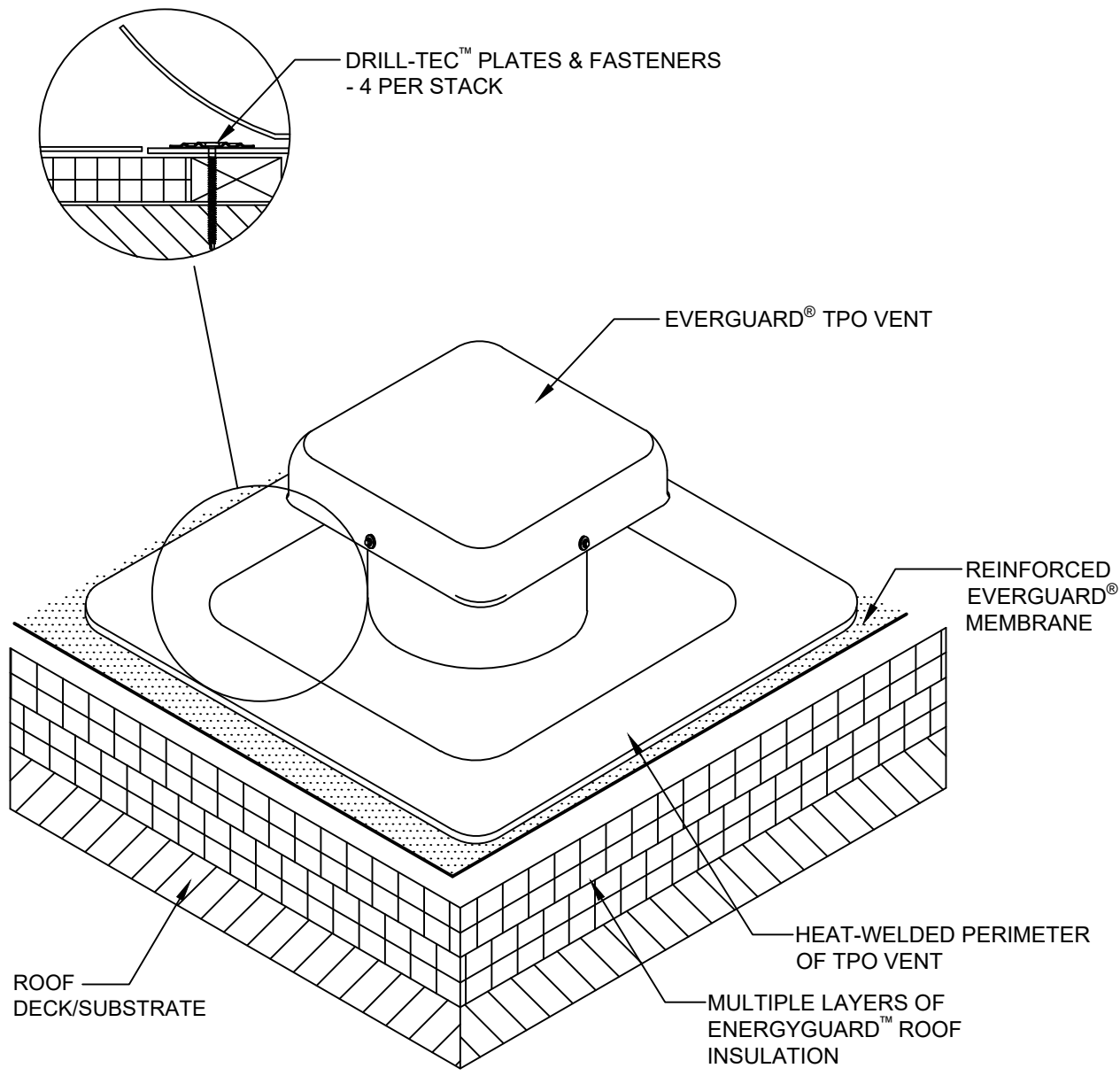
ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED LAP

 FLEXSEAL™ CAULK GRADE SEALANT



TPO VENT DETAIL

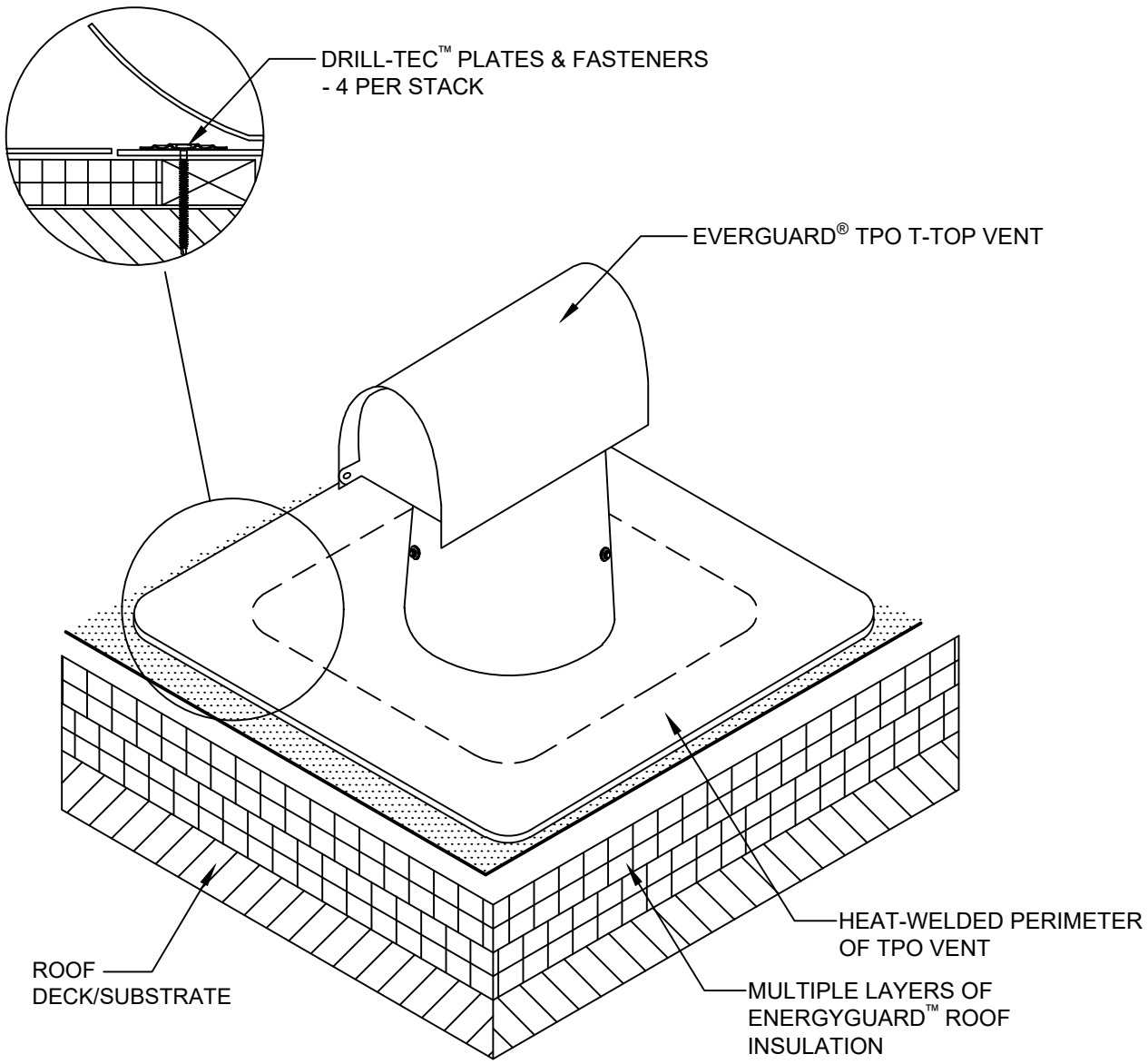
DRAWING #
528

THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND



TPO T-TOP VENT DETAIL

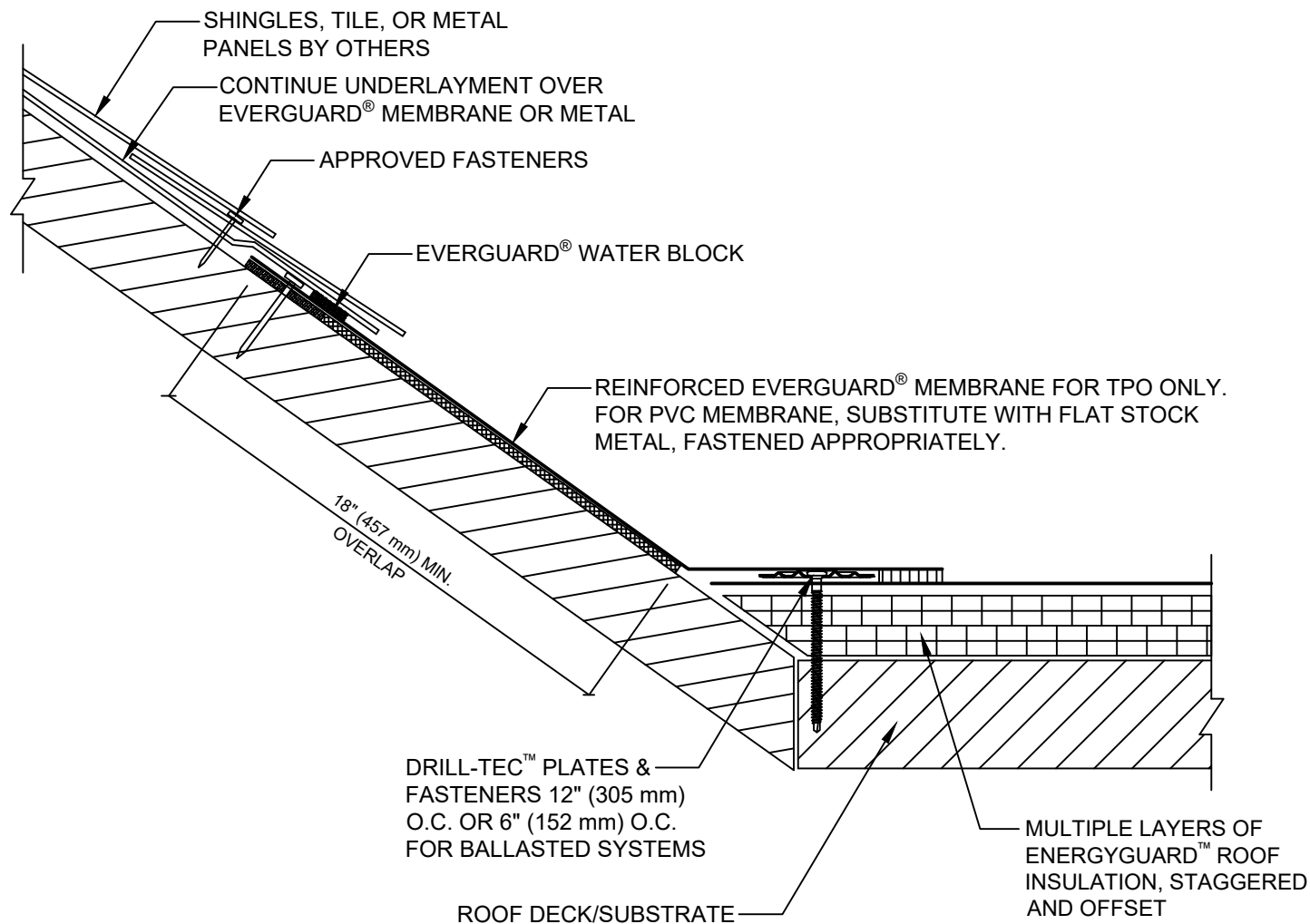
DRAWING #
530

THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND



NOTE:

1. MINIMUM SLOPE IS 2:12.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. ADD BALLAST PER SPECIFICATION FOR BALLASTED SYSTEMS.

GAF

STEEP-SLOPE TO LOW-SLOPE TRANSITION DETAIL

DRAWING #

601

THIS DETAIL APPLIES TO:

ALL SYSTEMS

ISSUE / REVISION DATE

7/15/21

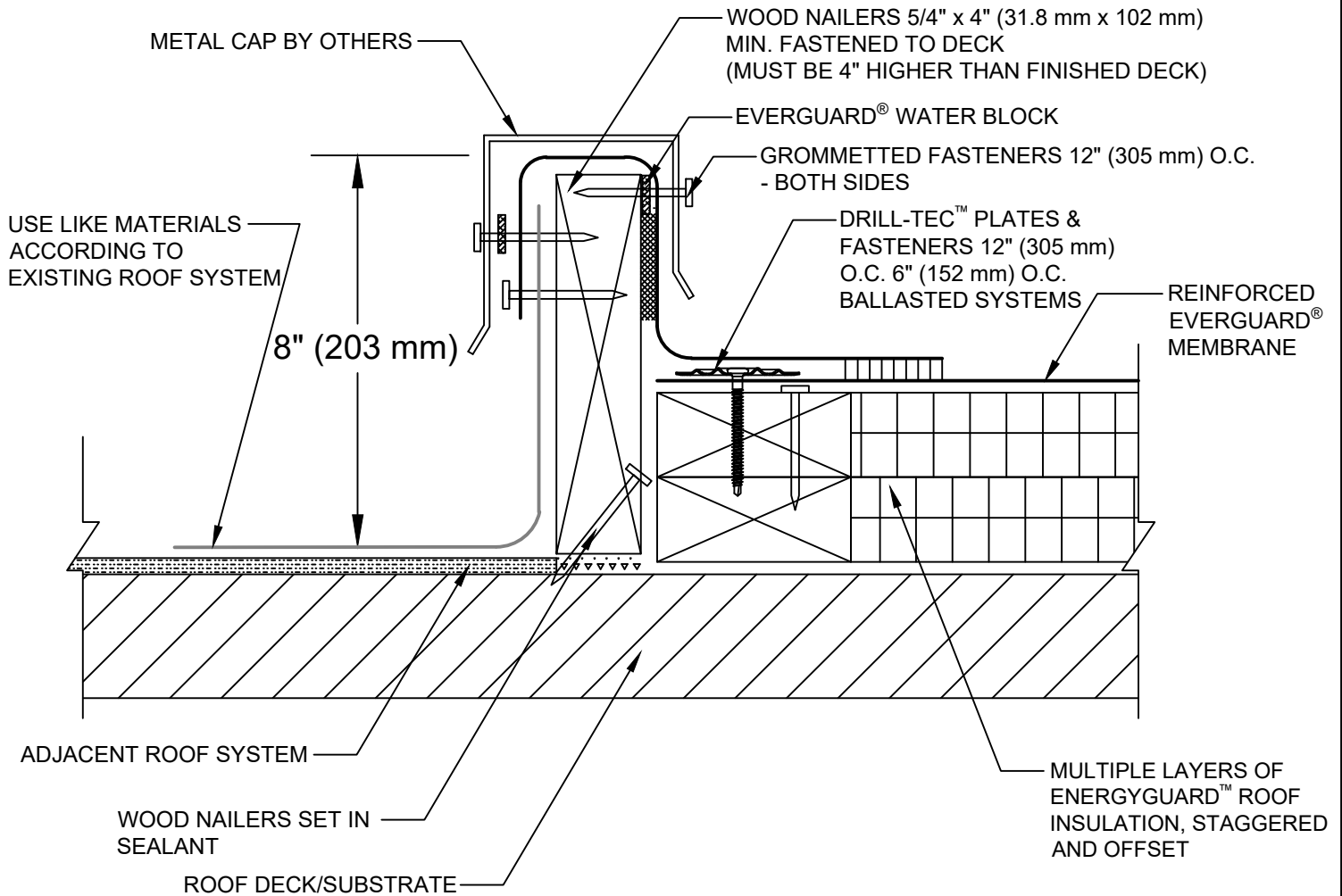
SCALE

N.T.S.

LEGEND

HEAT-WELDED

EVERGUARD® BONDING ADHESIVE
-OPTIONAL UP TO 30" (762 mm) FLASHING HEIGHT



NOTE:

1. GAF DOES NOT GUARANTEE THE WATERTIGHT INTEGRITY OF TIE-INS TO OTHER MEMBRANE ROOF SYSTEMS.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.
3. WOOD BLOCKING MUST BE SEALED TO THE DECK. IF STEEL DECK, ALL LOWER FLUTES MUST BE SEALED TO PREVENT WATER FROM GOING PAST THIS DETAIL UNDER THE ROOF.

GAF

CURB TYPE TIE-IN AT FLAT ROOF

DRAWING #

602

THIS DETAIL APPLIES TO:

ADHERED SYSTEMS
SELF-ADHERED SYSTEMS
RHINO-BOND® SYSTEMS
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE

8/17/20

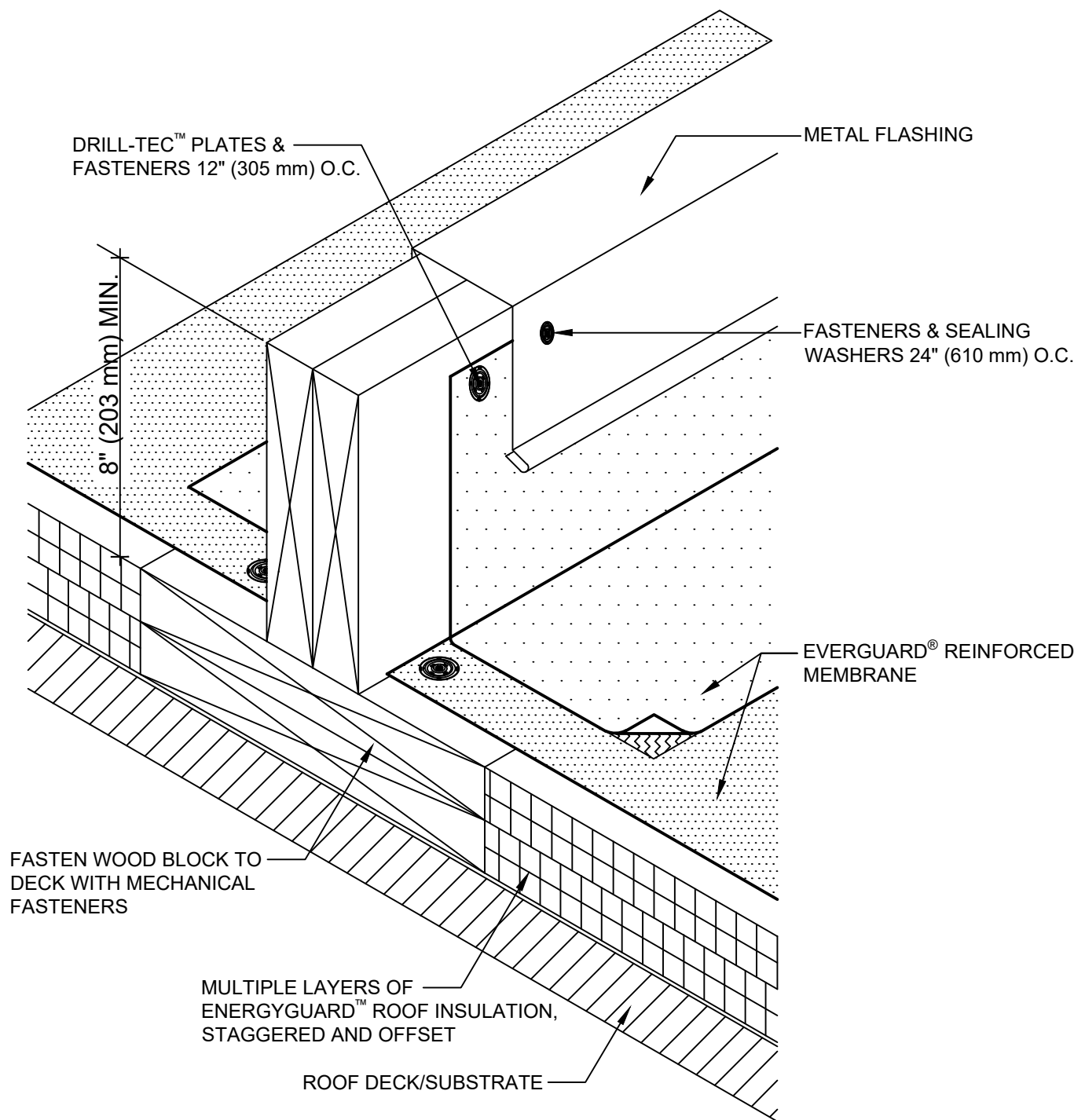
SCALE

N.T.S.

LEGEND

HEAT-WELDED

EVERGUARD® BONDING ADHESIVE (OPTIONAL)



NOTE:

1. AN AREA DIVIDER IS DESIGNED SIMPLY AS A RAISED DOUBLE WOOD MEMBER ATTACHED TO A PROPERLY FLASHED WOOD BASE PLATE THAT IS ANCHORED TO THE ROOF DECK. AREA DIVIDERS MUST NEVER RESTRICT THE FLOW OF WATER.



CURB FLASHING/AREA DIVIDER DETAIL

DRAWING #
606

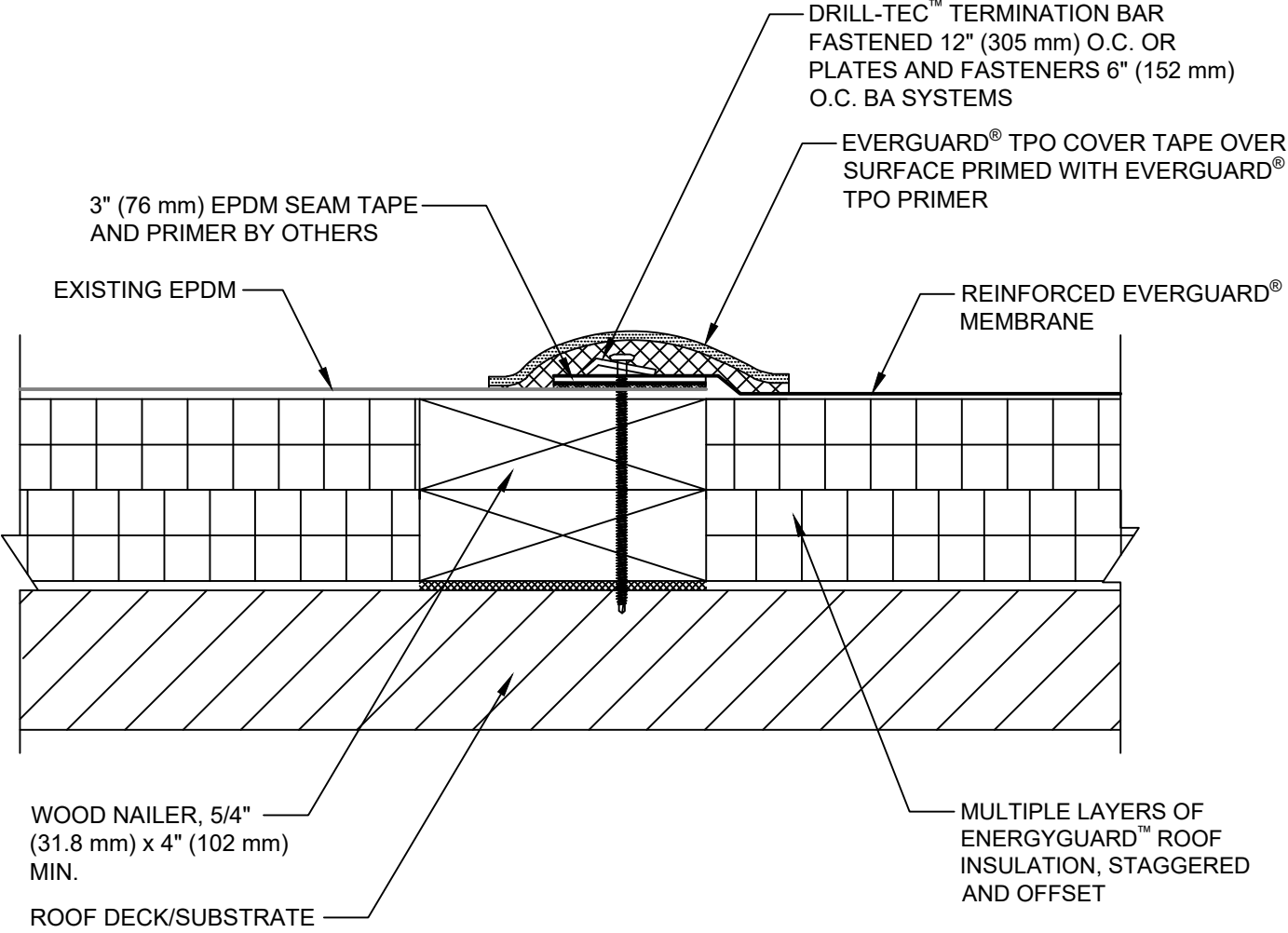
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



NOTE:

- 1. GAF DOES NOT GUARANTEE THE WATERTIGHT INTEGRITY OF TIE-INS TO OTHER MEMBRANE ROOF SYSTEMS.
- 2. FOR SELF-ADHERED HEAT-WELDED SYSTEMS, UP TO 15-YR. MAXIMUM GUARANTEE ONLY.
- 3. WOOD BLOCKING MUST BE SEALED TO THE DECK. IF STEEL DECK, ALL LOWER FLUTES MUST BE SEALED TO PREVENT WATER FROM GOING PAST THIS DETAIL UNDER THE ROOF.



TPO TO EXISTING EPDM

DRAWING #
609A

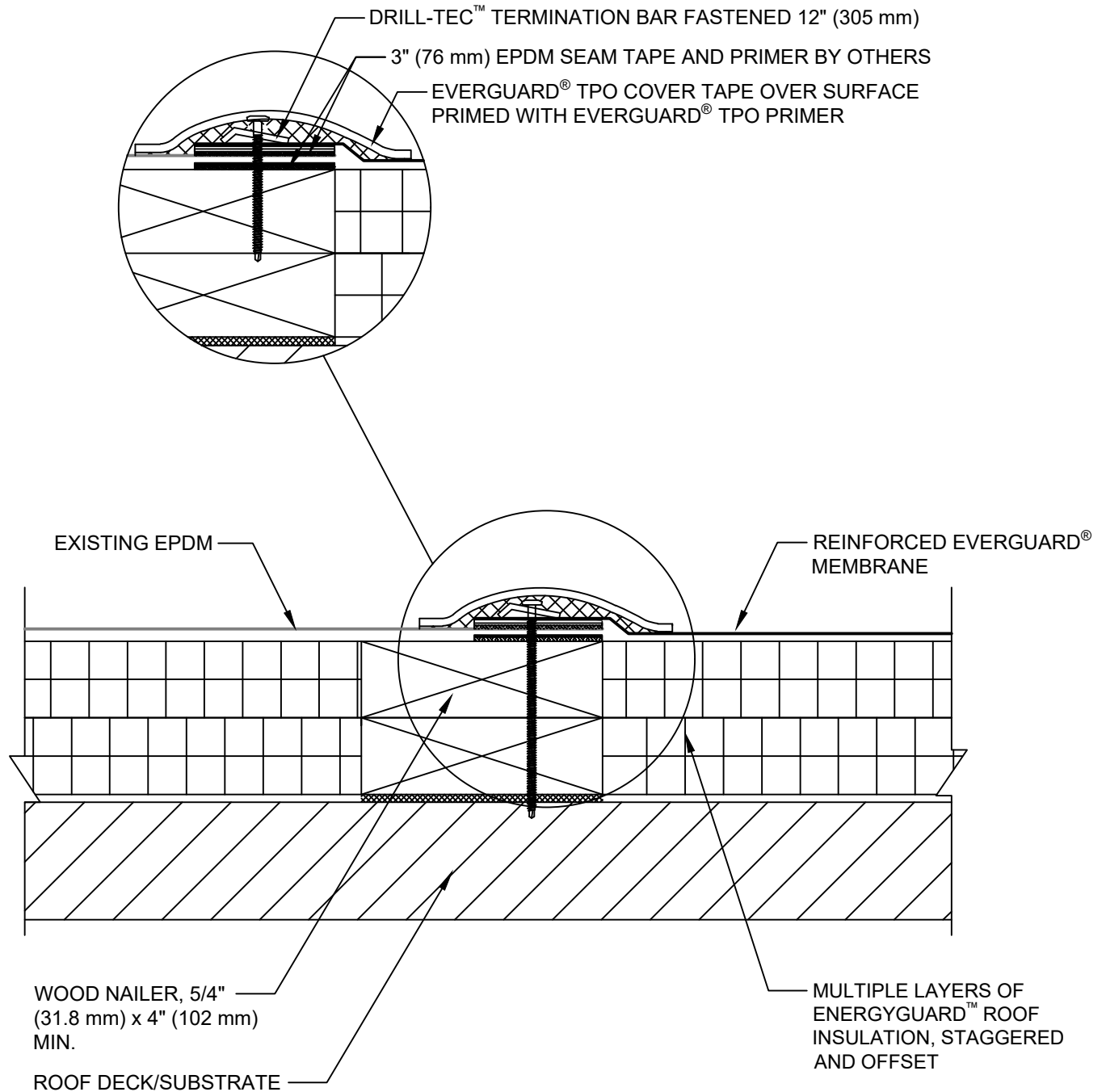
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

EVERGUARD® WATER BLOCK



NOTE:

1. GAF DOES NOT GUARANTEE THE WATERTIGHT INTEGRITY OF TIE-INS TO OTHER MEMBRANE ROOF SYSTEMS.
2. WOOD BLOCKING MUST BE SEALED TO THE DECK. IF STEEL DECK, ALL LOWER FLUTES MUST BE SEALED TO PREVENT WATER FROM GOING PAST THIS DETAIL UNDER THE ROOF.

GAF

**TPO TO EXISTING EPDM
- ALTERNATE**

DRAWING #
609B

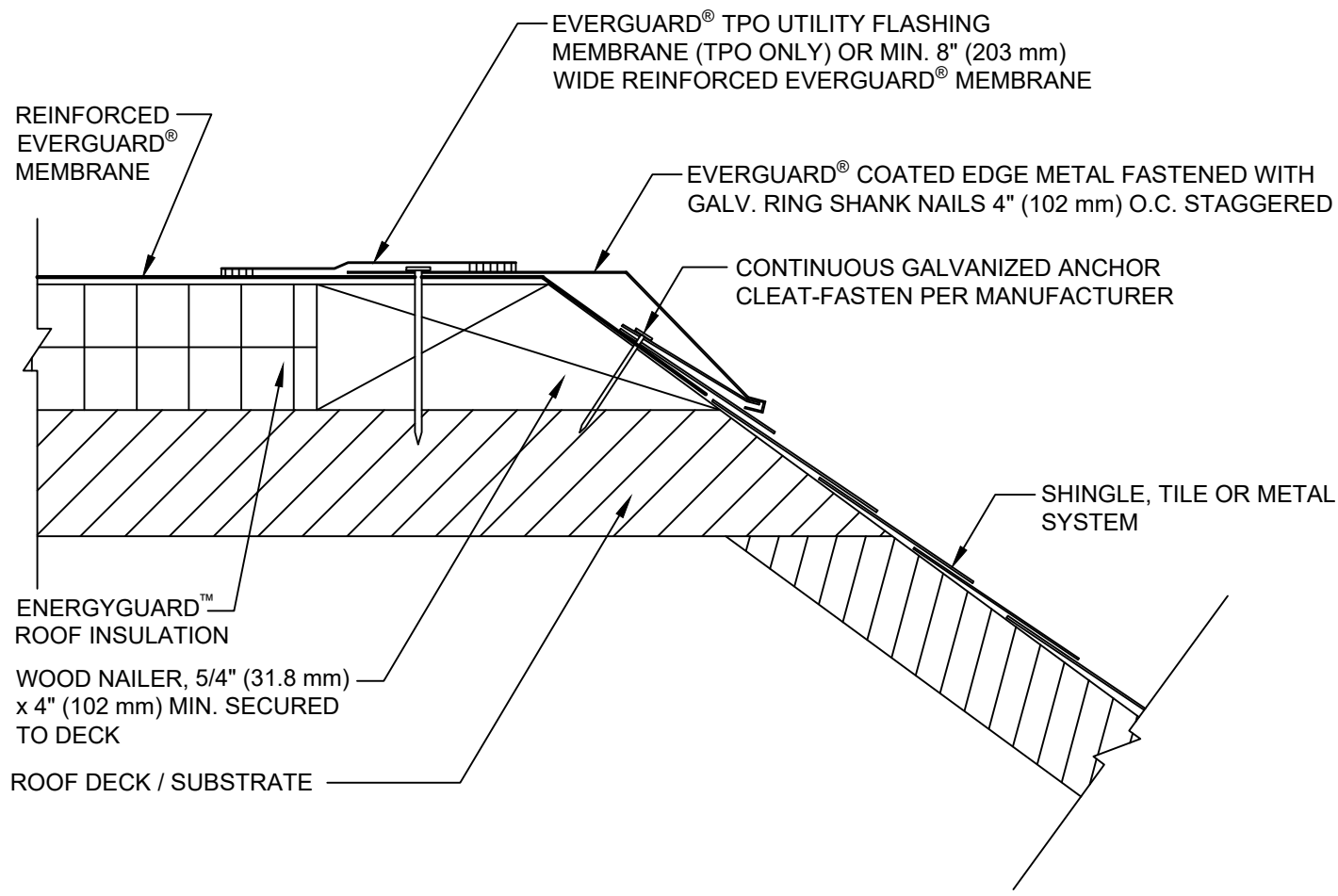
THIS DETAIL APPLIES TO:
ALL SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 EVERGUARD® WATER BLOCK



NOTE:

- 1. MINIMUM SLOPE IS 2:12 FOR SHINGLE PORTION OF ROOF.
- 2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A COVER BOARD IS REQUIRED ON MECHANICALLY ATTACHED SYSTEMS ONLY.



LOW-SLOPE TO STEEP-SLOPE TRANSITION DETAIL

DRAWING #
610

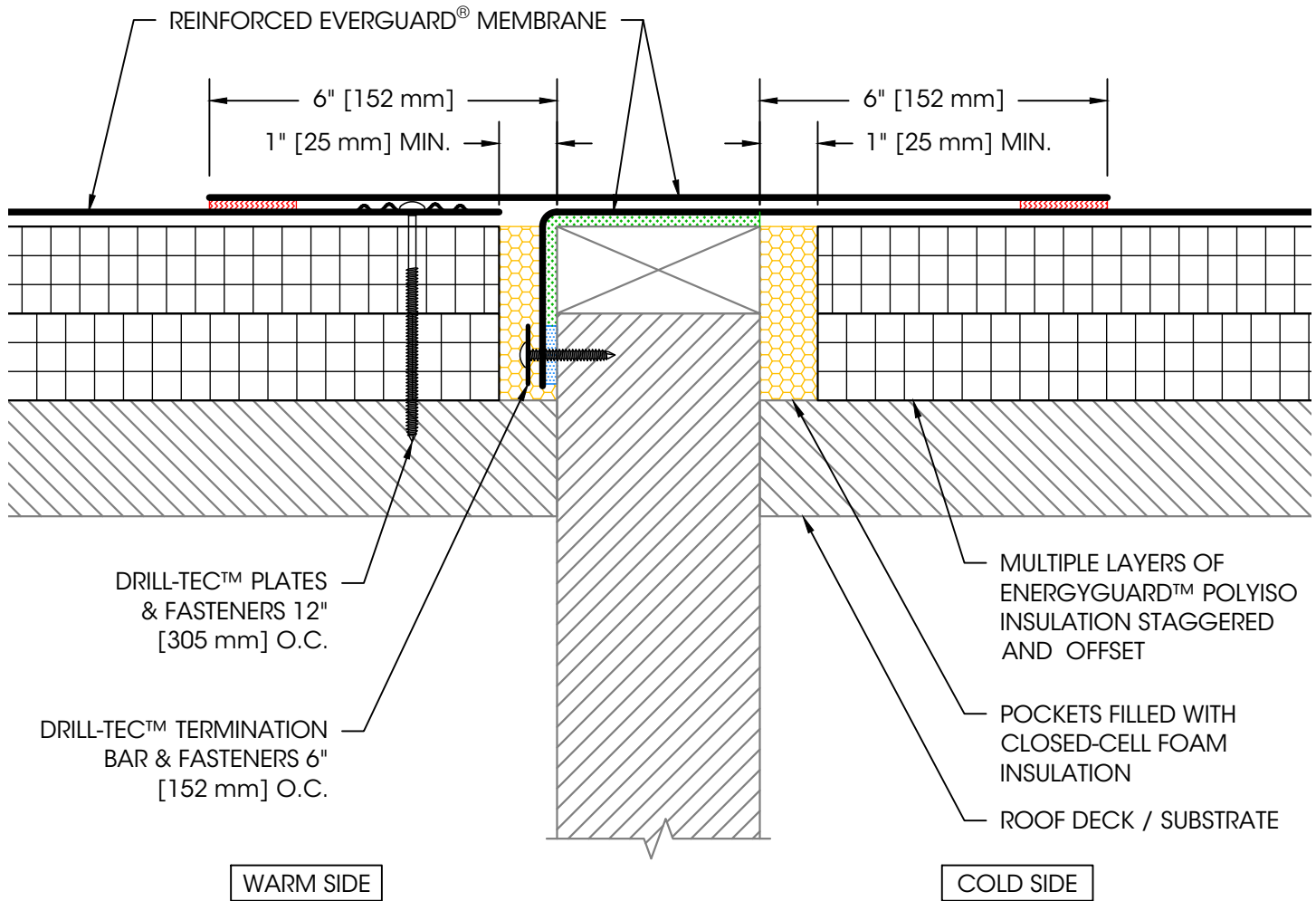
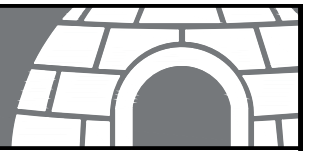
THIS DETAIL APPLIES TO:
ADHERED SYSTEMS
SELF-ADHERED SYSTEMS
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



Notes:

1. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Transition Tie-In - Wall Above Roof Deck

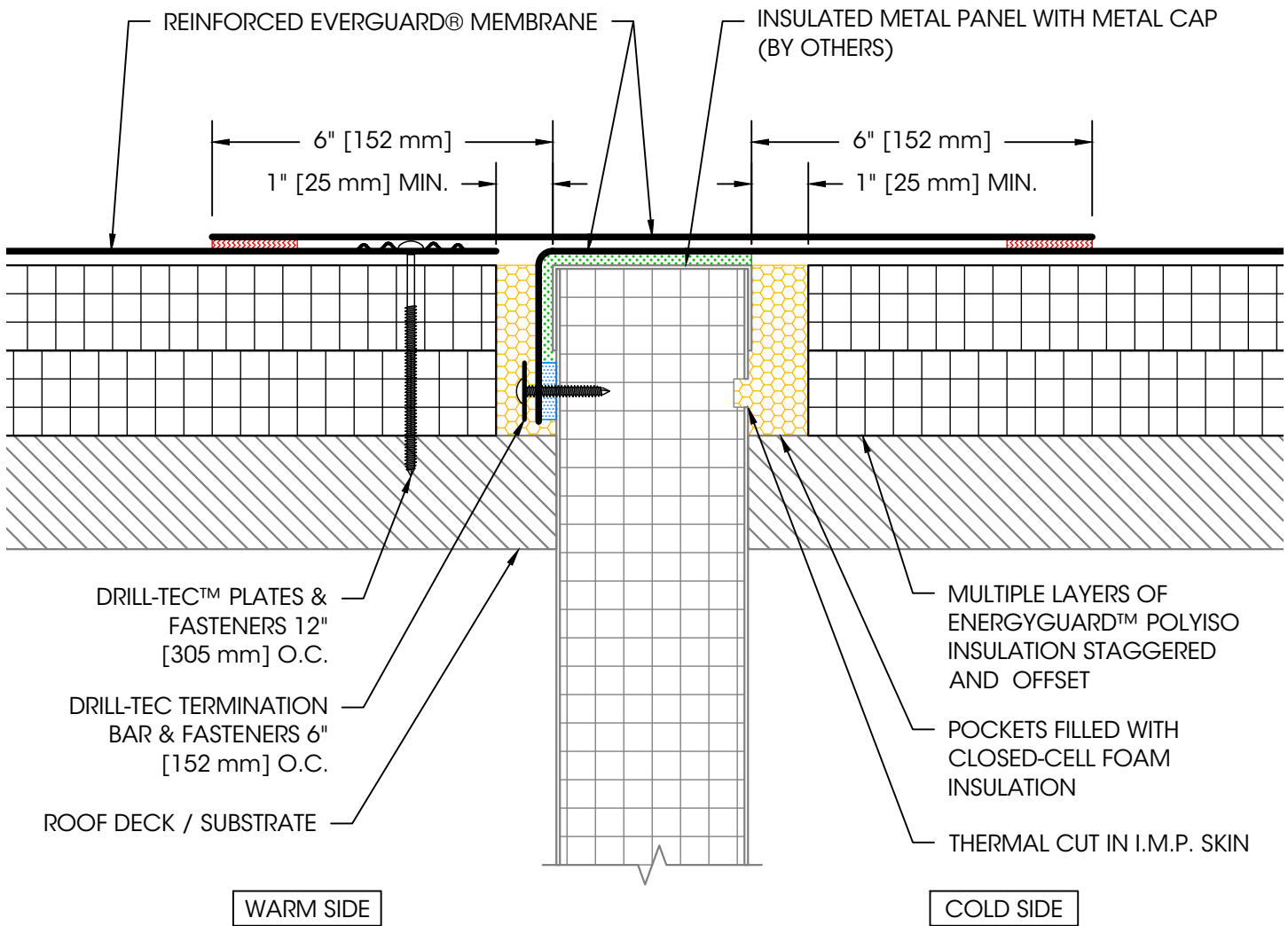
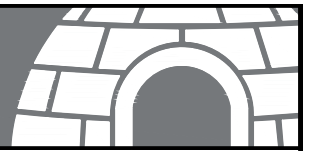
Roof Area:
Field of Roof

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

130A



Notes:

1. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Transition Tie-In at I.M.P Above Deck

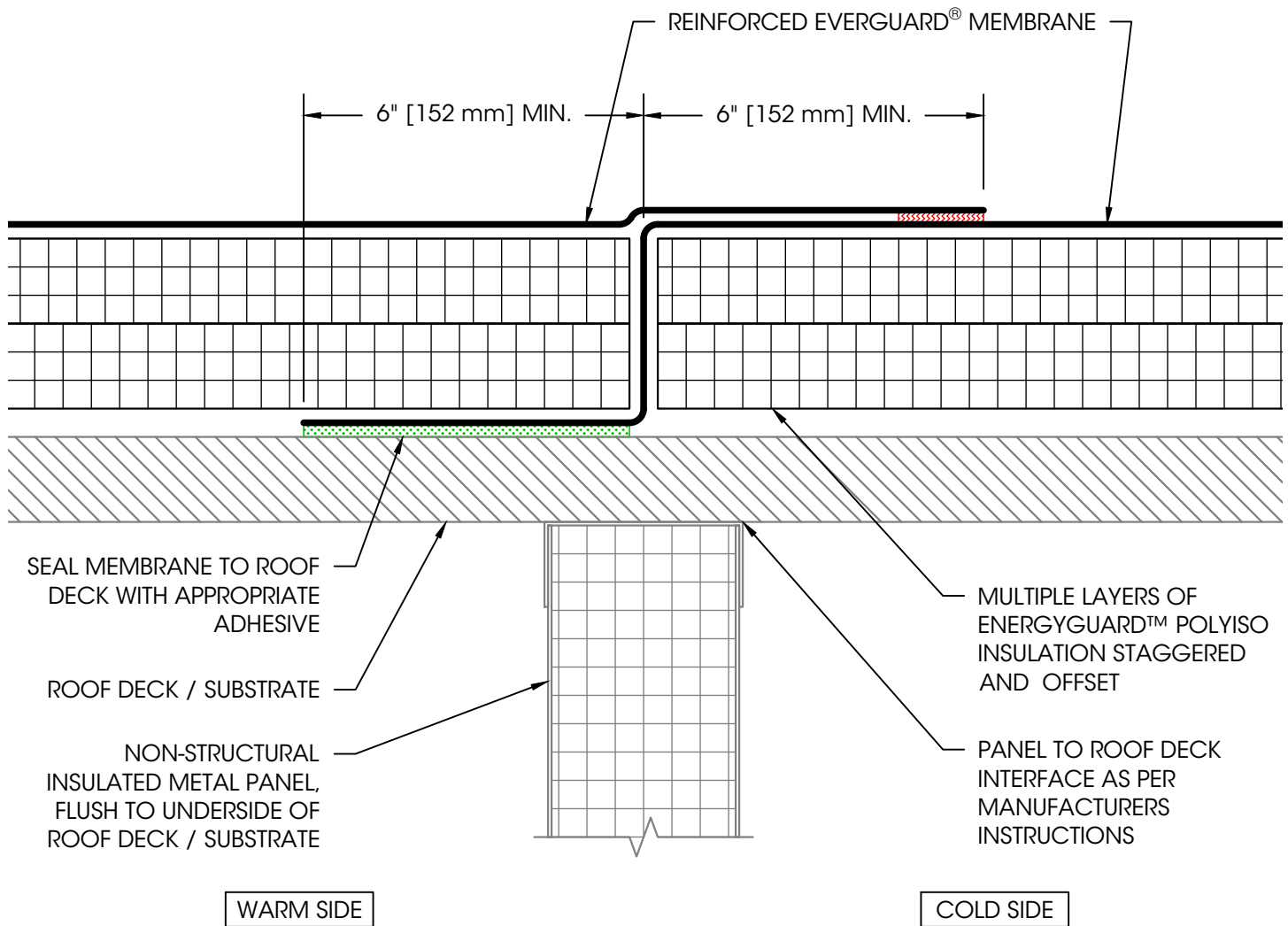
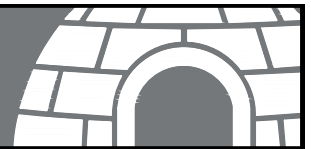
Roof Area:
Field of Roof

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

130B



Notes:

1. For steel roof decks: Fill topside of steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side, both sides of wall.
2. Air seal wall-to-underside of roof deck interface as per architectural drawings.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |

Transition Tie-In at I.M.P Below Deck

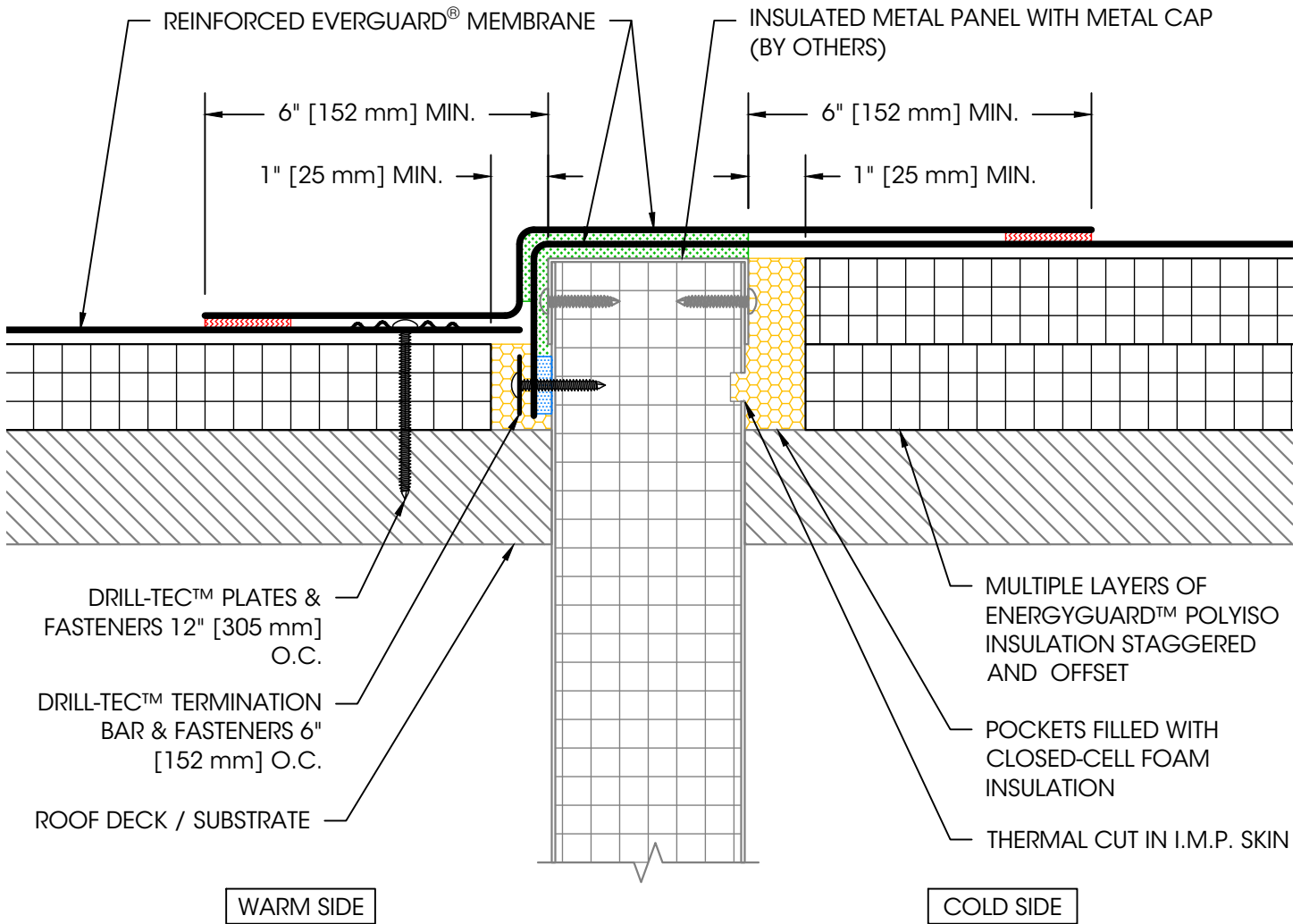
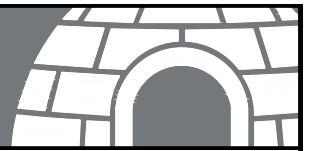
Roof Area:
Field of Roof

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

130C



Notes:

1. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Offset Transition Tie-In at I.M.P Above Deck

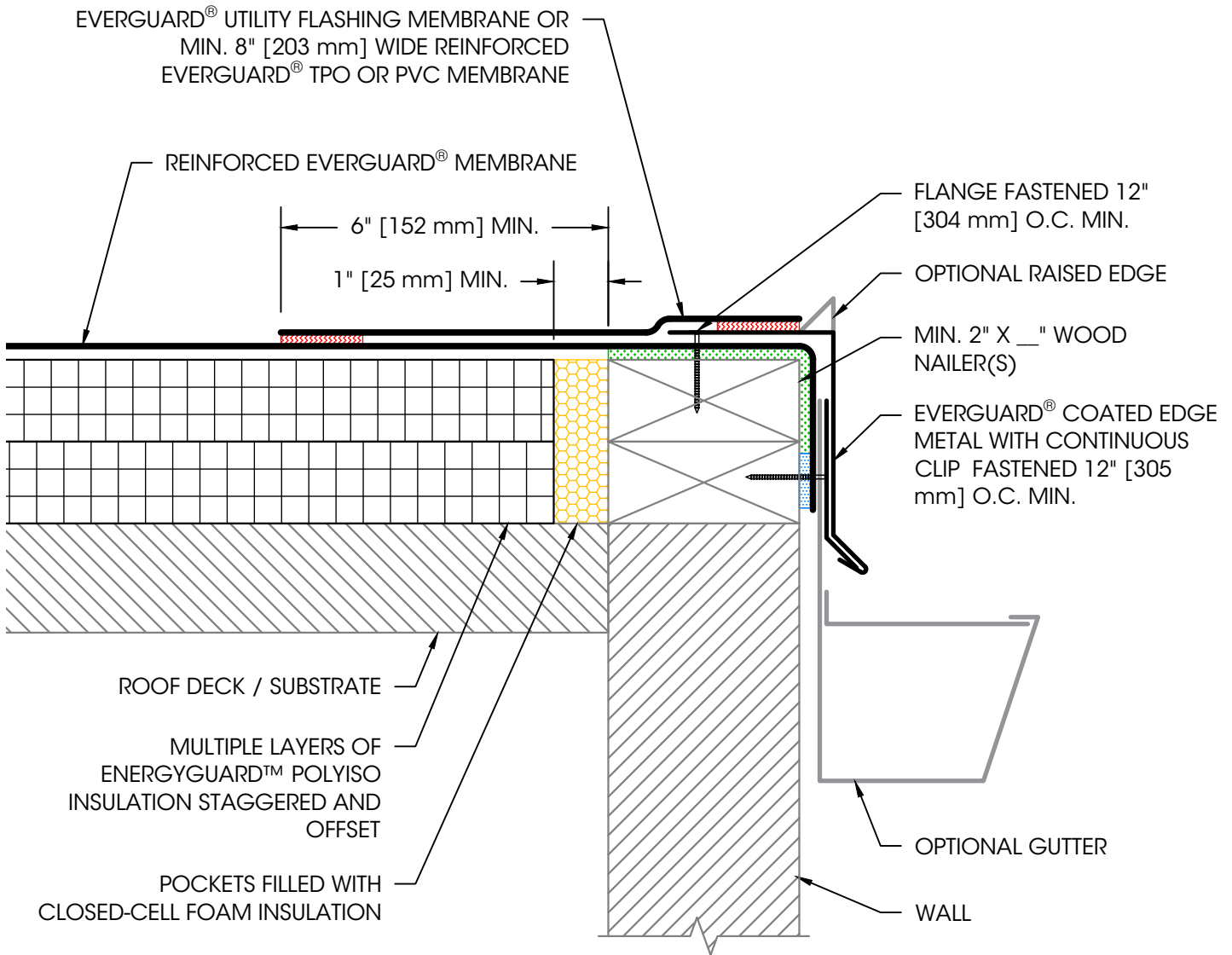
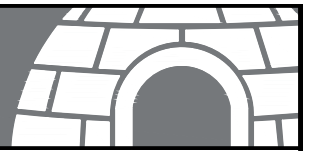
Roof Area:
Field of Roof

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

130D



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7 and tested for capacity in accordance with the test methods in the applicable edition of ANSI/SPRI ES-1.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Coated Metal Roof Edge

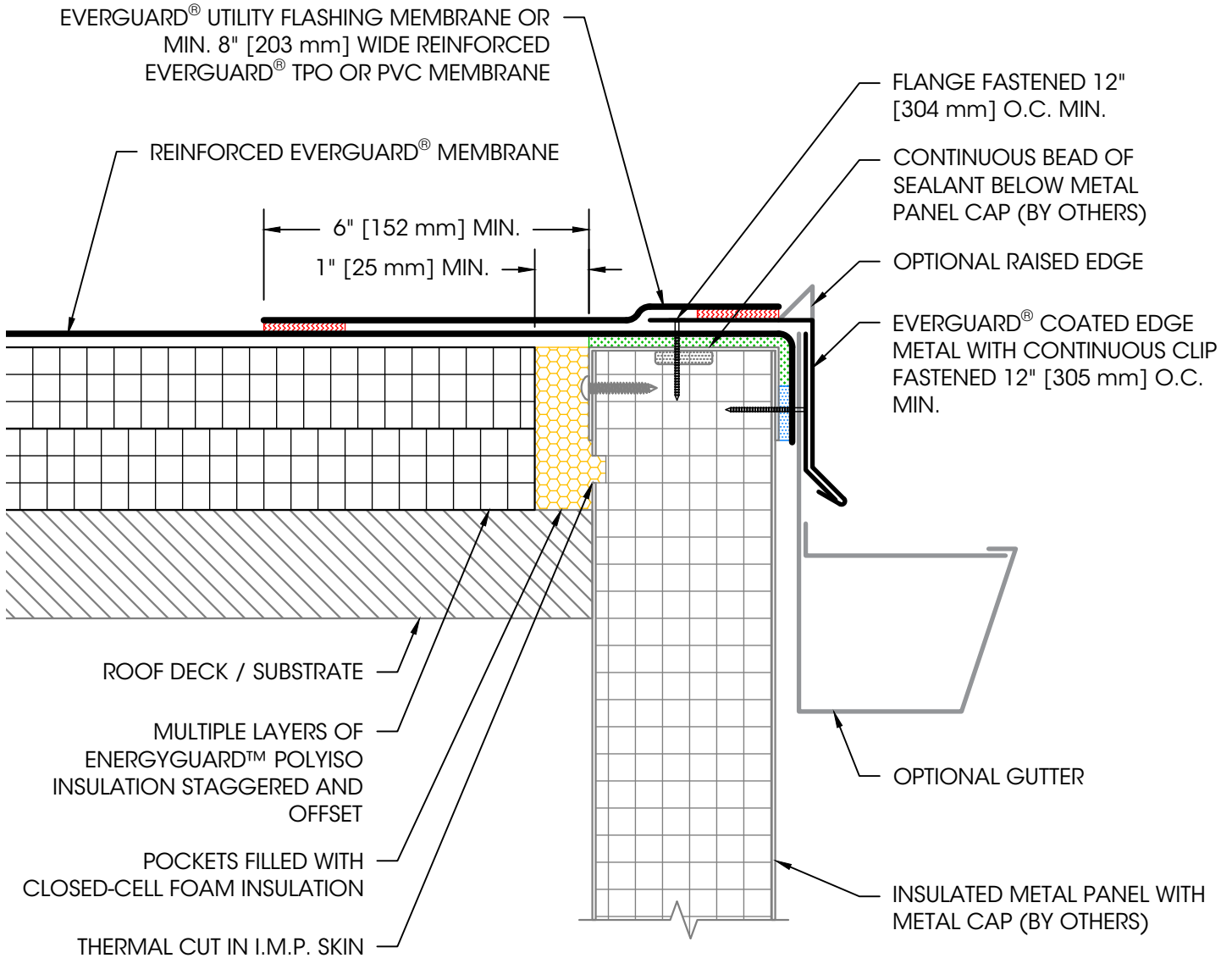
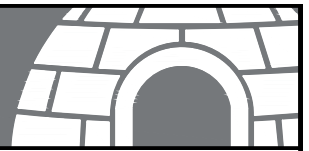
Roof Area:
Roof Edge

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

201A



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7. Additional requirements apply for guarantee coverage of attachment to insulated metal wall panels. Contact coldstorage.assistance@gaf.com for details.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Coated Metal Roof Edge at I.M.P. Wall

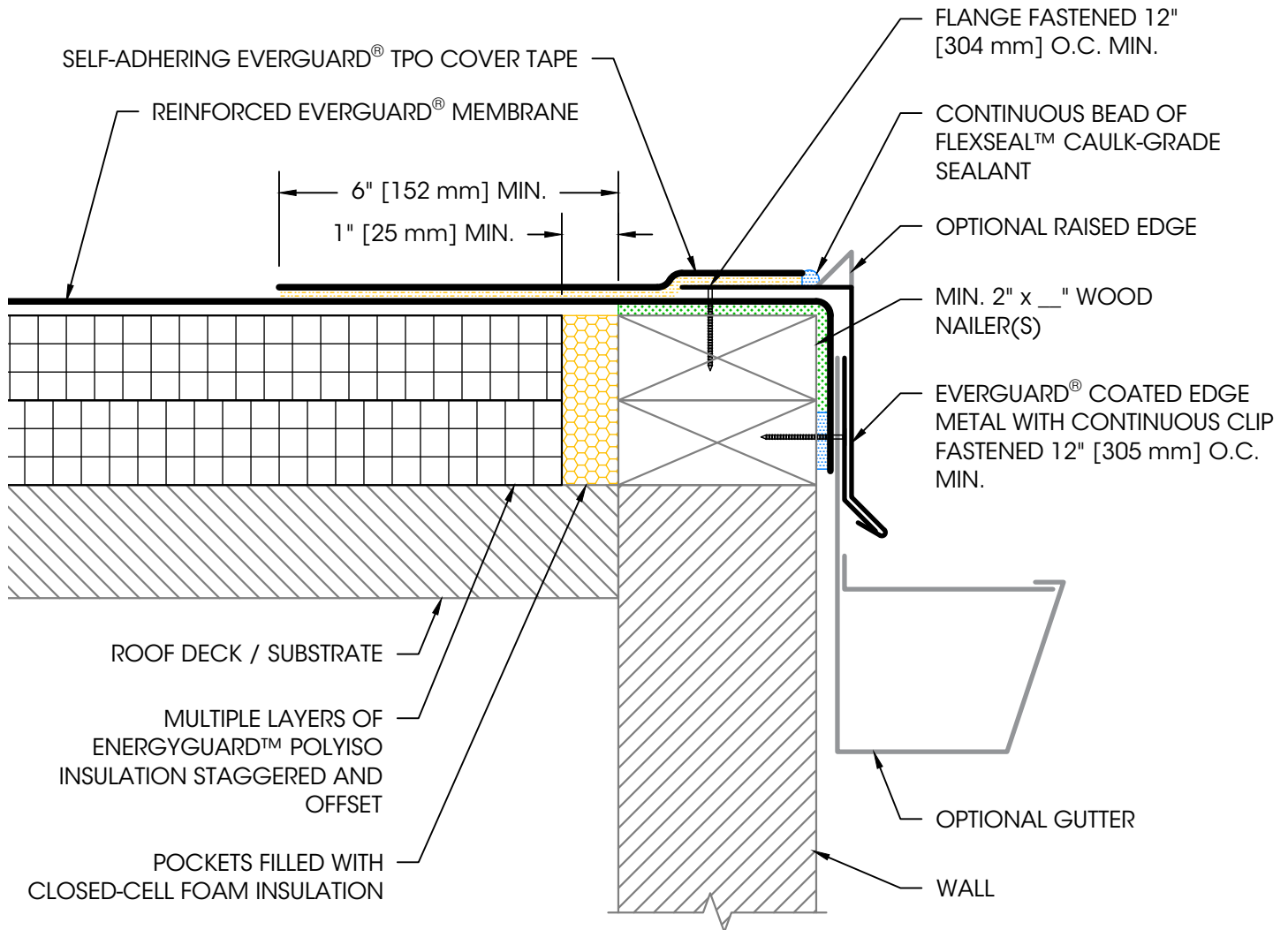
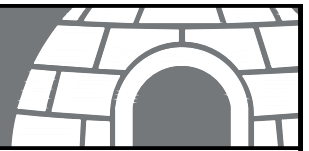
Roof Area:
Roof Edge

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

201C



Notes:

1. Clean metal and membrane with EverGuard® TPO Seam Cleaner and allow to dry. Once dry, prime metal and membrane with EverGuard® TPO Primer before installing EverGuard® TPO Cover Tape.
2. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7 and tested for capacity in accordance with the test methods in the applicable edition of ANSI/SPRI ES-1.
3. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|----------|
| | ADHESIVE |
| | SEALANT |
| | PRIMER |

Metal Roof Edge with Cover Tape

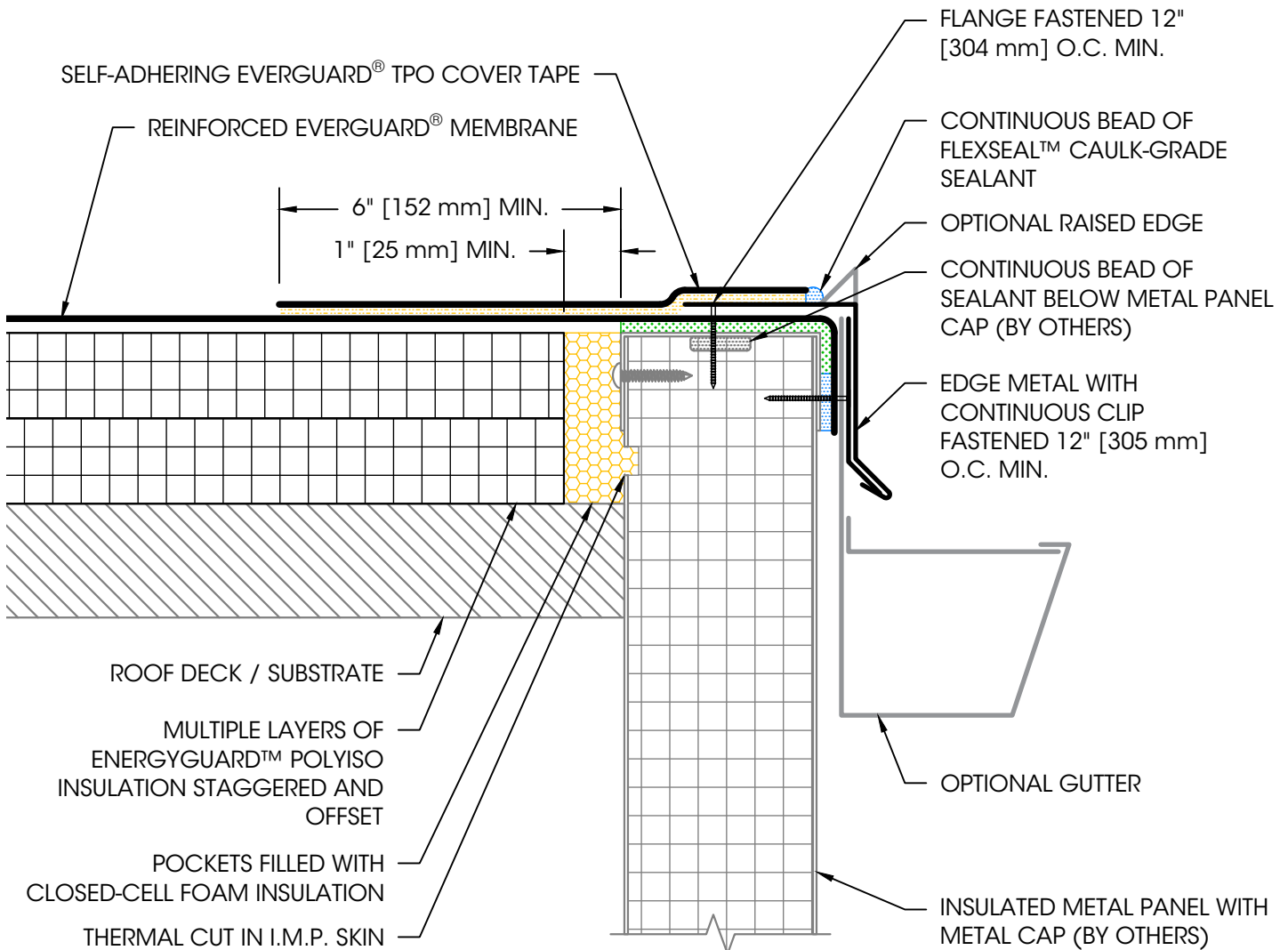
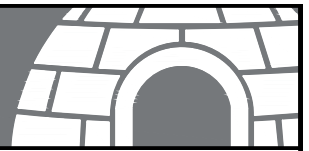
Roof Area:
Roof Edge

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

202C



Notes:

1. Clean metal and membrane with EverGuard® TPO Seam Cleaner and allow to dry. Once dry, prime metal and membrane with EverGuard® TPO Primer before installing EverGuard® TPO Cover Tape.
2. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7. Additional requirements apply for guarantee coverage of attachment to insulated metal wall panels. Contact coldstorage.assistance@gaf.com for details.
3. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall.

LEGEND

| | |
|--|----------|
| | ADHESIVE |
| | SEALANT |
| | PRIMER |

Metal Roof Edge with Cover Tape at I.M.P. Wall

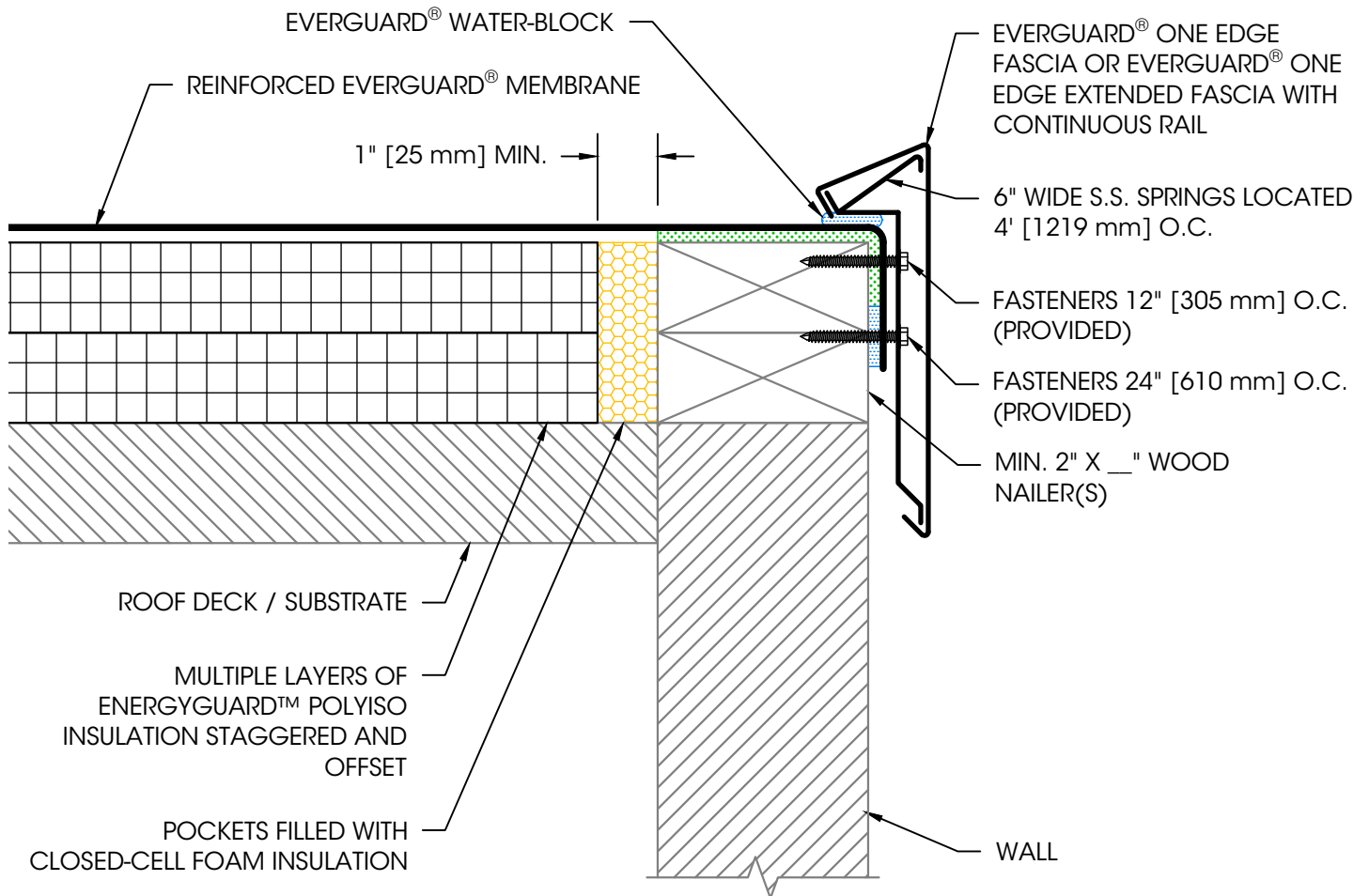
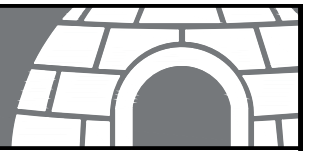
Roof Area:
Roof Edge

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

203D



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7 and tested for capacity in accordance with the test methods in the applicable edition of ANSI/SPRI ES-1.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall.

LEGEND

| | |
|--|----------|
| | ADHESIVE |
| | SEALANT |

EverGuard One Edge Fascia

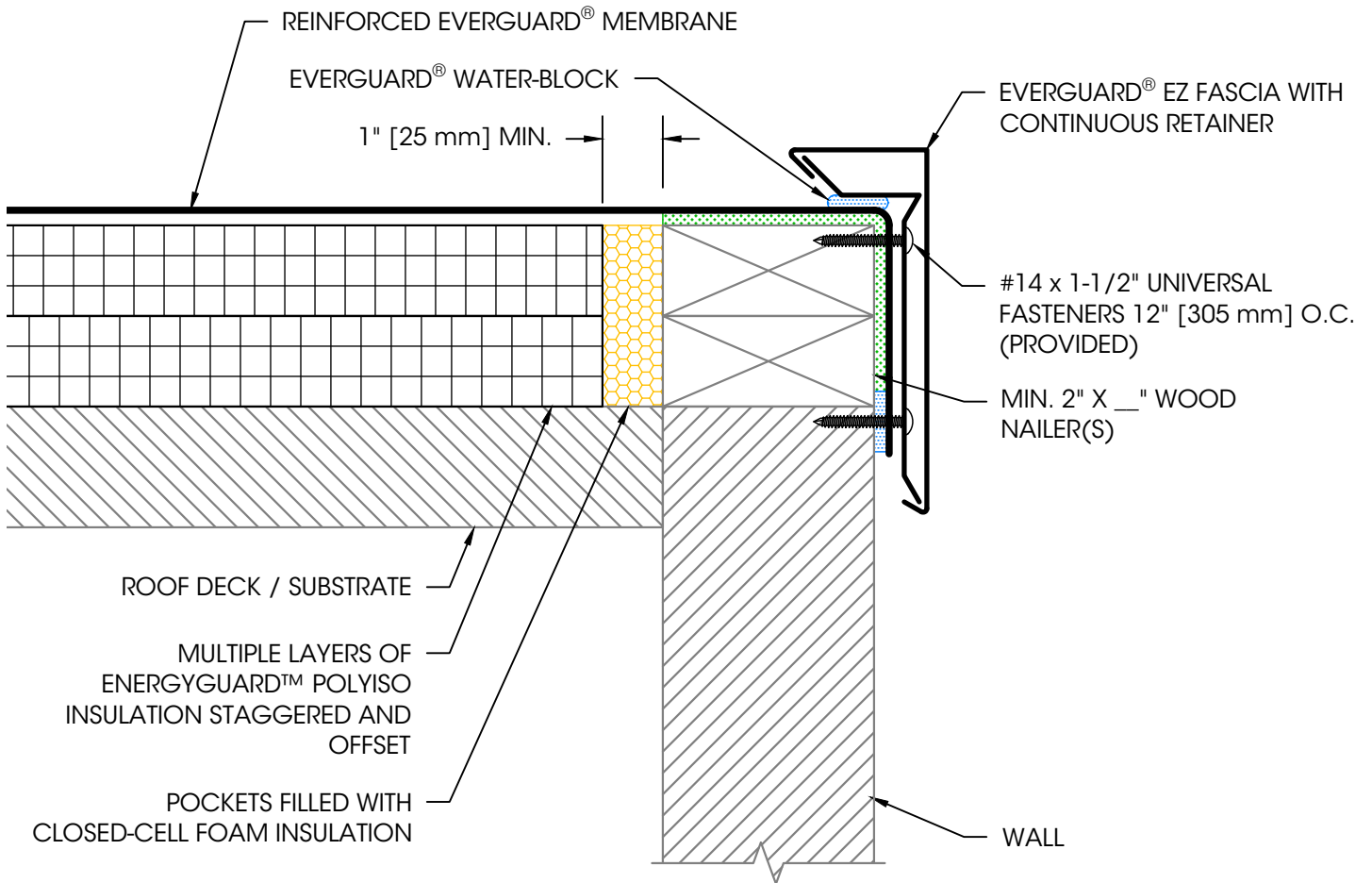
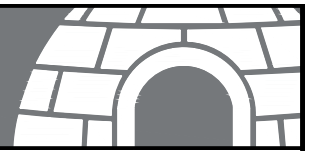
Roof Area:
Roof Edge

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

205

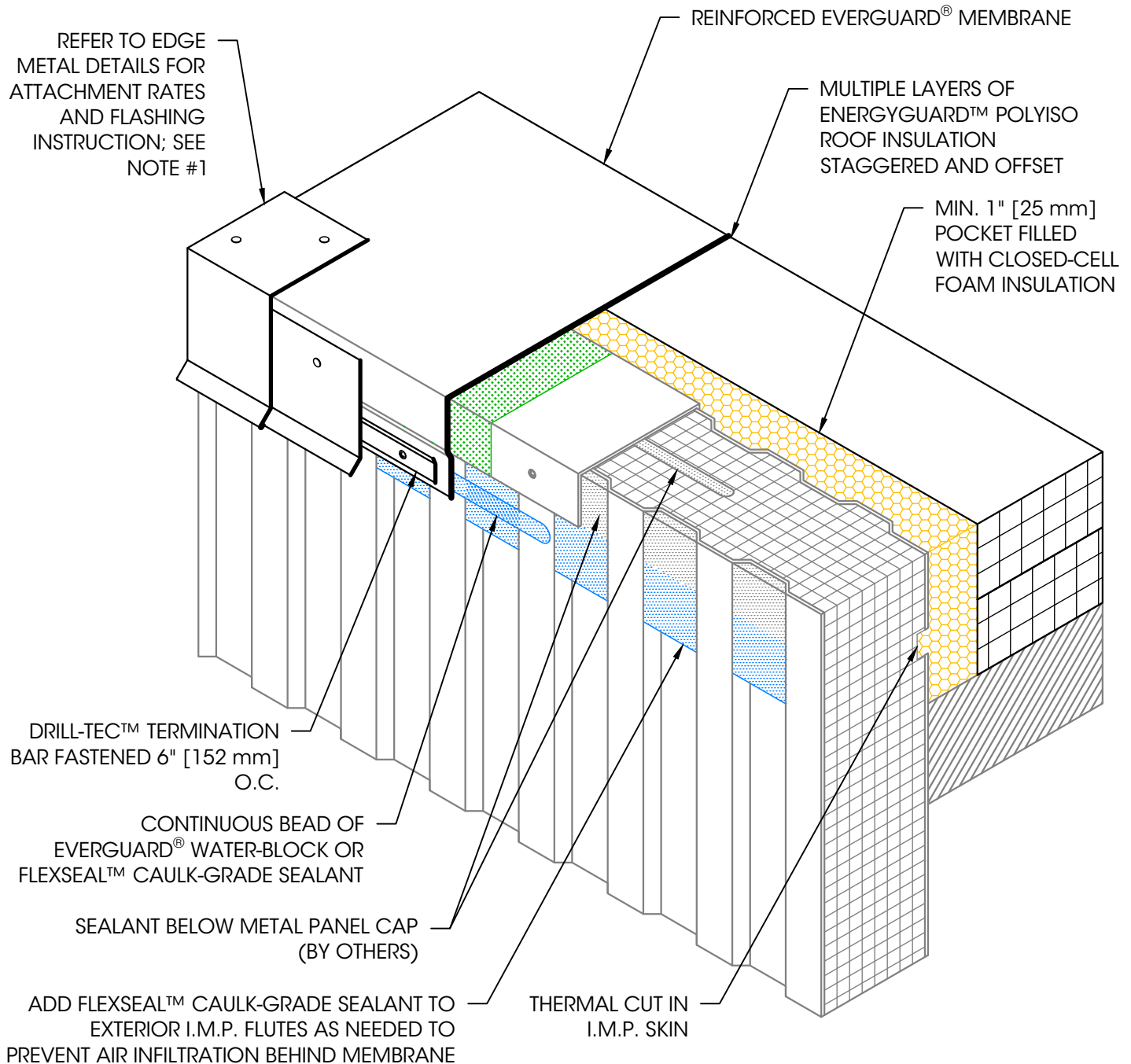
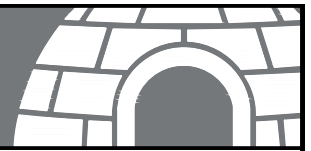


Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7 and tested for capacity in accordance with the test methods in the applicable edition of ANSI/SPRI ES-1.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall.

| LEGEND | | EverGuard EZ Fascia | | Roof Area:
Roof Edge | | Detail No:

232E |
|--------|----------|---------------------|--|---------------------------|------------------|-------------------------------|
| | ADHESIVE | | | Issue Date:
11/13/2023 | Scale:
N.T.S. | |
| | SEALANT | | | | | |



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7. Additional requirements apply for guarantee coverage of attachment to insulated metal wall panels. Contact coldstorage.assistance@gaf.com for details.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall.

LEGEND

| | |
|--|----------|
| | ADHESIVE |
| | SEALANT |

Preparation of I.M.P. Walls for Edge Termination

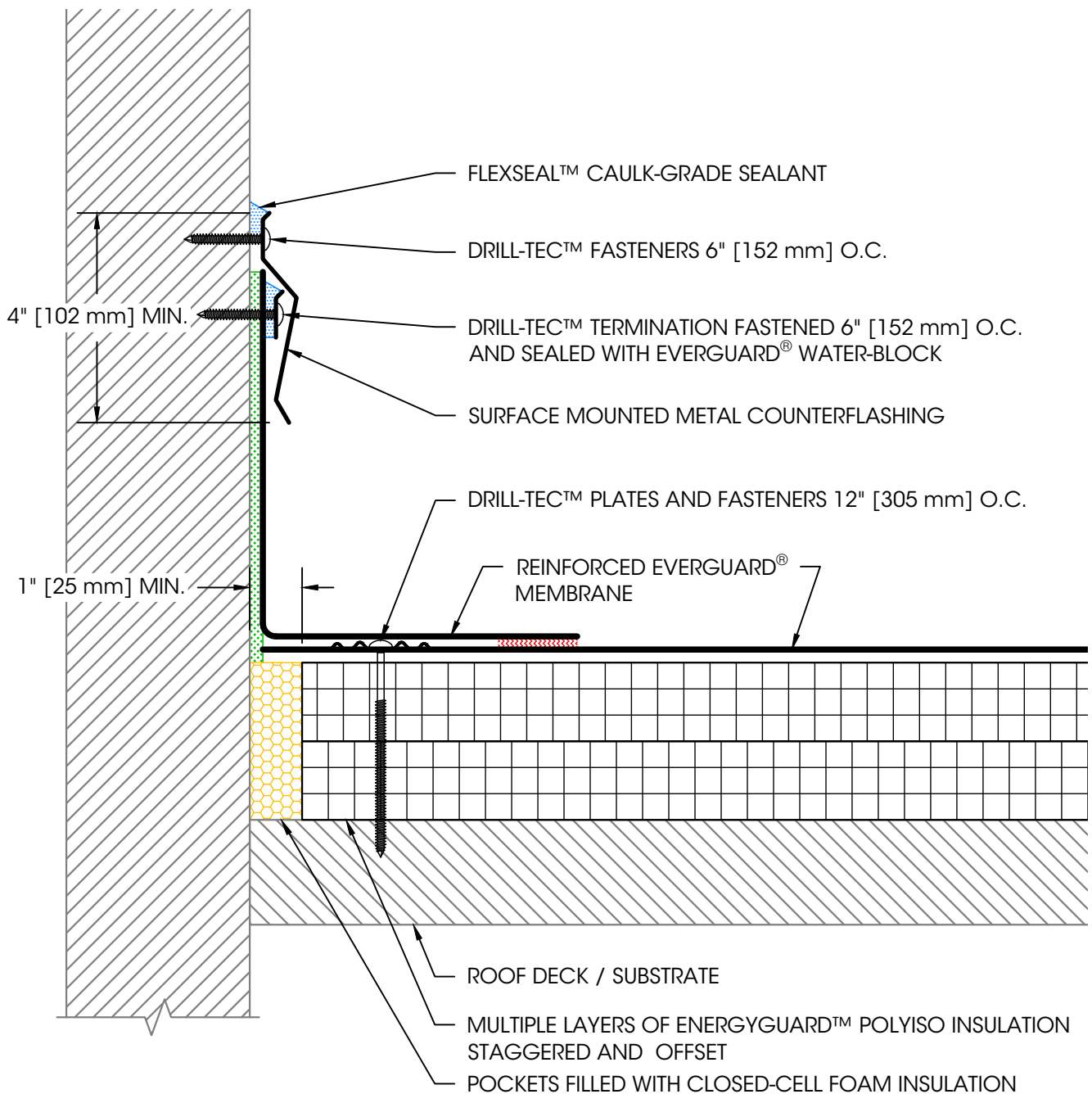
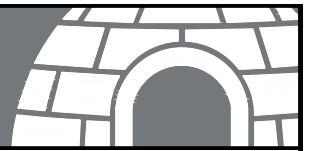
Roof Area:
Field of Roof

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

237



Notes:

1. Exposed walls and curbs must be waterproofed and maintained above the base flashing in order for any surface mounted termination to be effective.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Wall Flashing with Surface Mounted Counterflashing

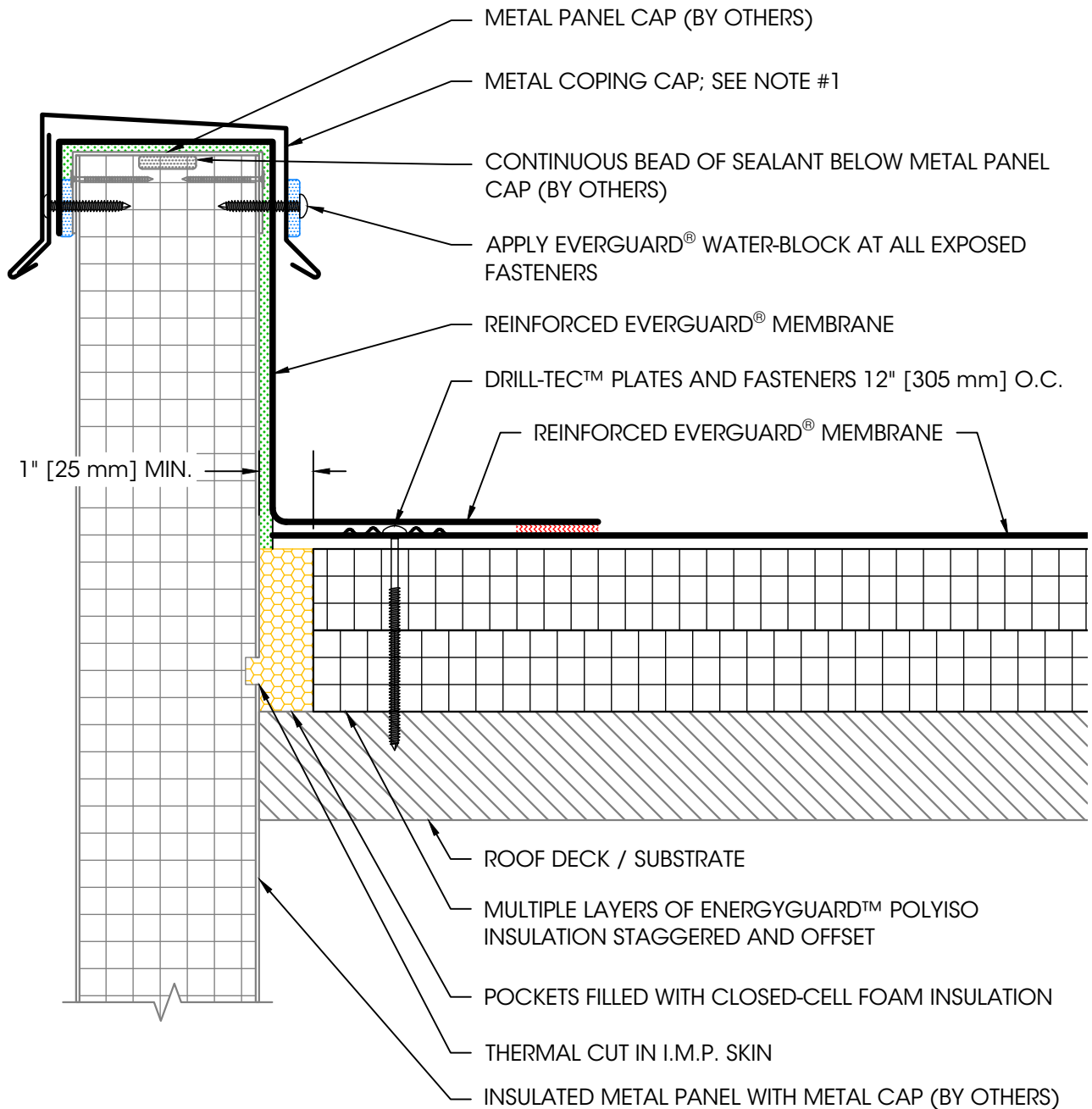
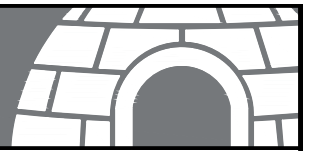
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

301B



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7. Additional requirements apply for guarantee coverage of attachment to insulated metal wall panels. Contact coldstorage.assistance@gaf.com for details.
2. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

I.M.P. Parapet Wall with Coping Cap

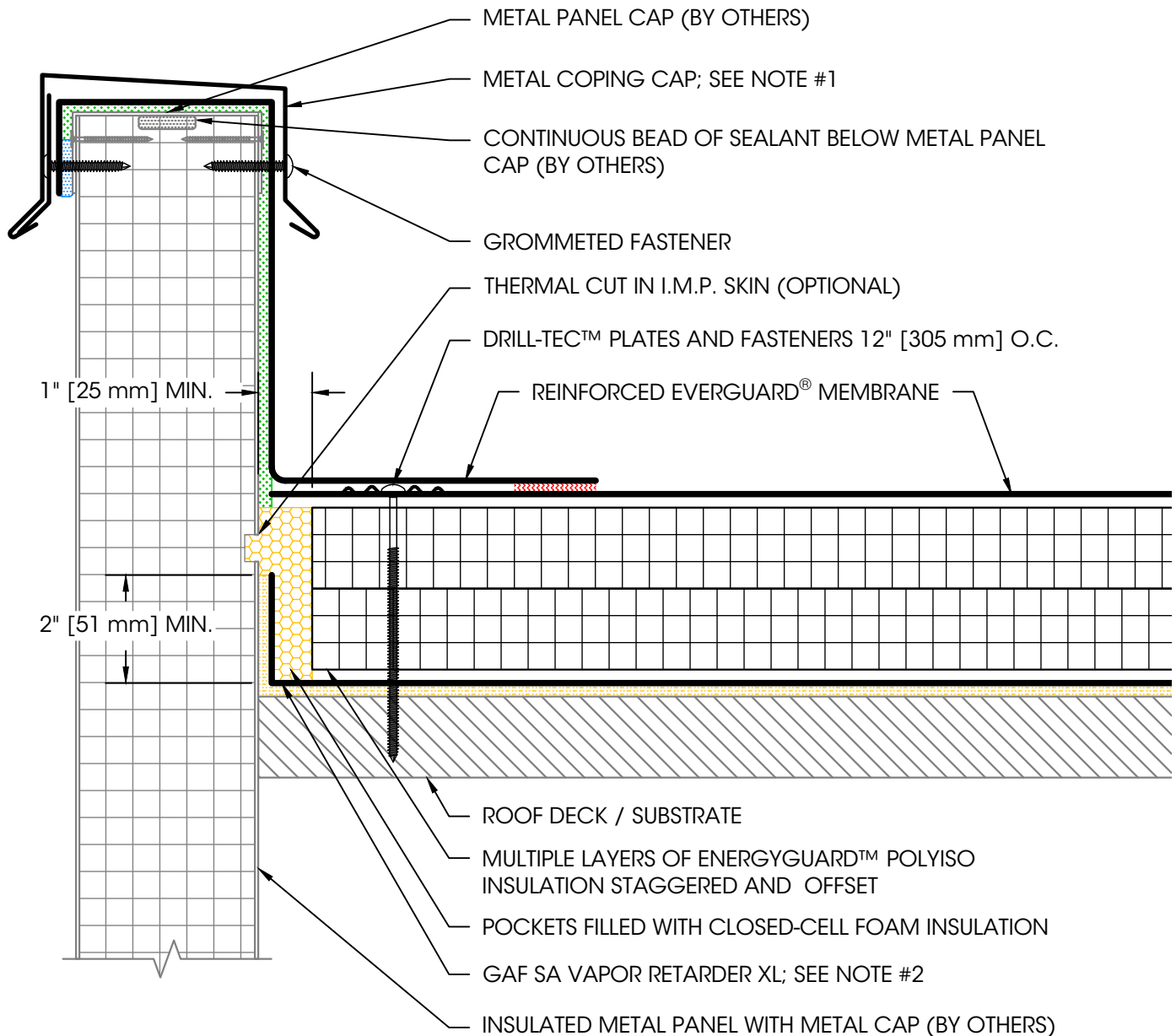
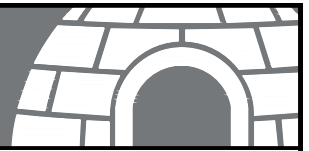
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

303B



Notes:

1. Edge metal should be designed for wind resistance in accordance with the applicable edition of ASCE 7. Additional requirements apply for guarantee coverage of attachment to insulated metal wall panels. Contact coldstorage.assistance@gaf.com for details.
2. A vapor retarder may be used at the deck level if there are concerns with potential moisture issues due to certain construction processes or other sources during building use.
3. Refer to GAF SA Primer installation instructions for general guidelines.
4. Maintain separation between vapor retarder and membrane / adhesive to avoid potential incompatibility issues.
5. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |
| | PRIMER |

I.M.P. Wall with Coping Cap & SA Vapor Retarder

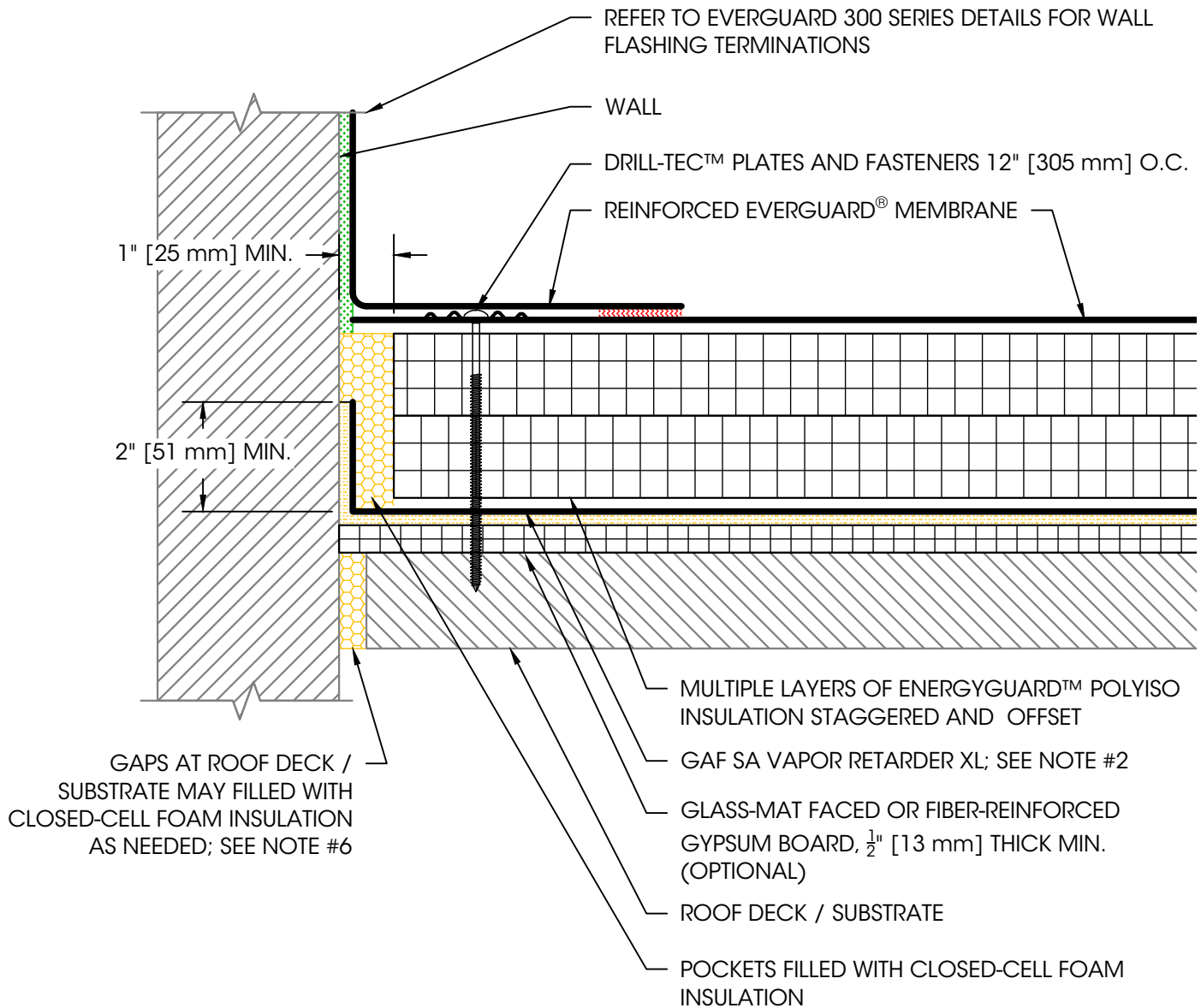
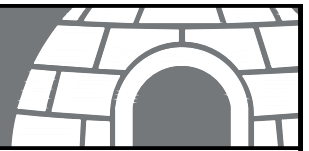
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

303C



Notes:

1. Use detail in conjunction with the standard flashing and termination details for the approved roof system.
2. A vapor retarder may be used at the deck level if there are concerns with potential moisture issues due to certain construction processes or other sources during building use.
3. Refer to GAF SA Primer installation instructions for general guidelines.
4. Maintain separation between vapor retarder and membrane / adhesive to avoid potential incompatibility issues.
5. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.
6. Wall to roof deck interface must be fully air sealed.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | PRIMER |

SA Vapor Retarder Termination at Wall

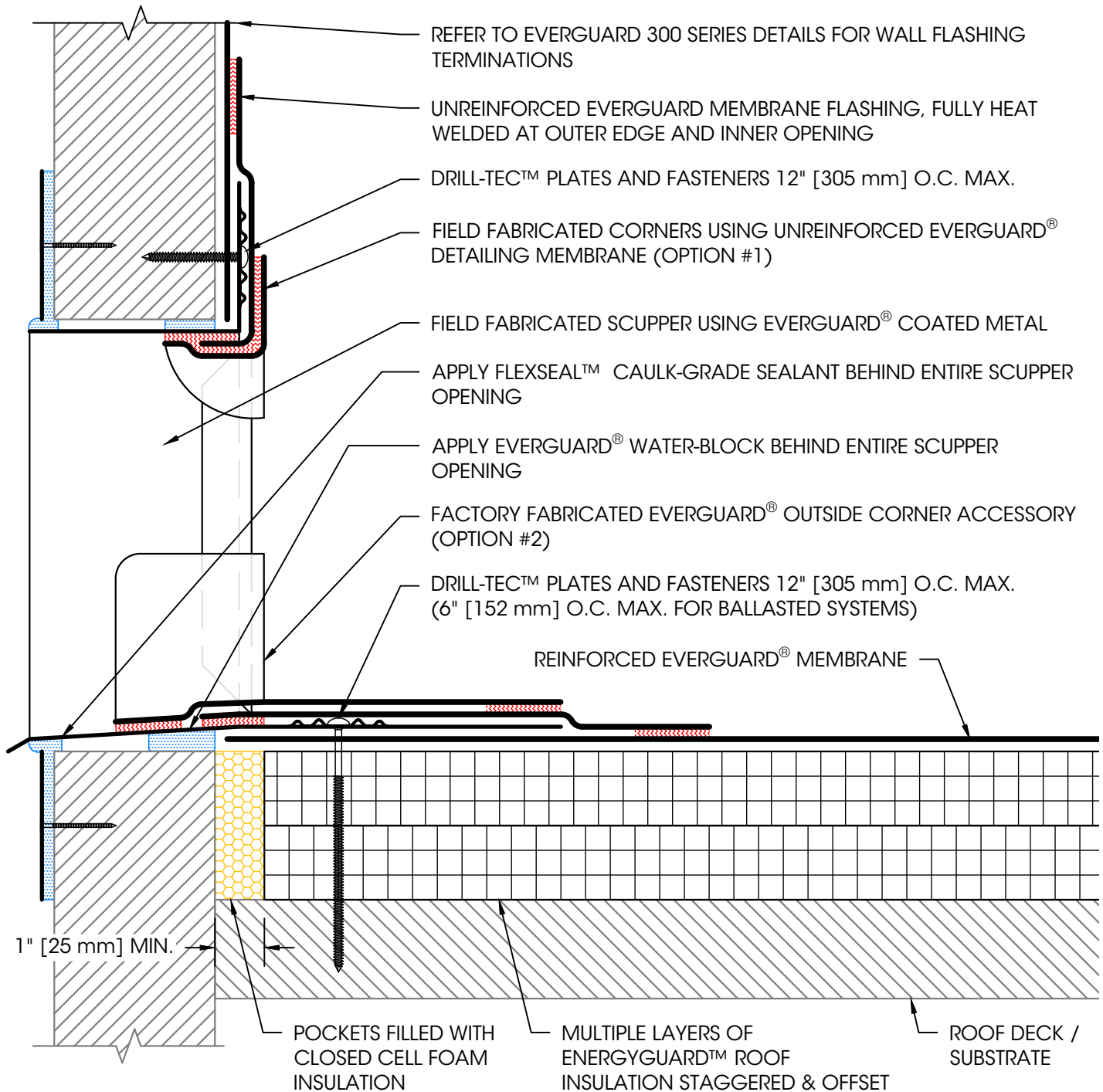
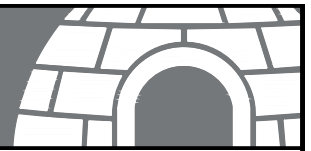
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

309



Notes:

1. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.
2. All (4) roof-side corners of scupper must be completely sealed using EverGuard® Unreinforced Detailing Membrane or EverGuard® Preformed Corner accessories.
3. Scupper must be sealed off on exterior face of building.

LEGEND

HEAT WELD
SEALANT

Field Fabricated Coated Metal Scupper

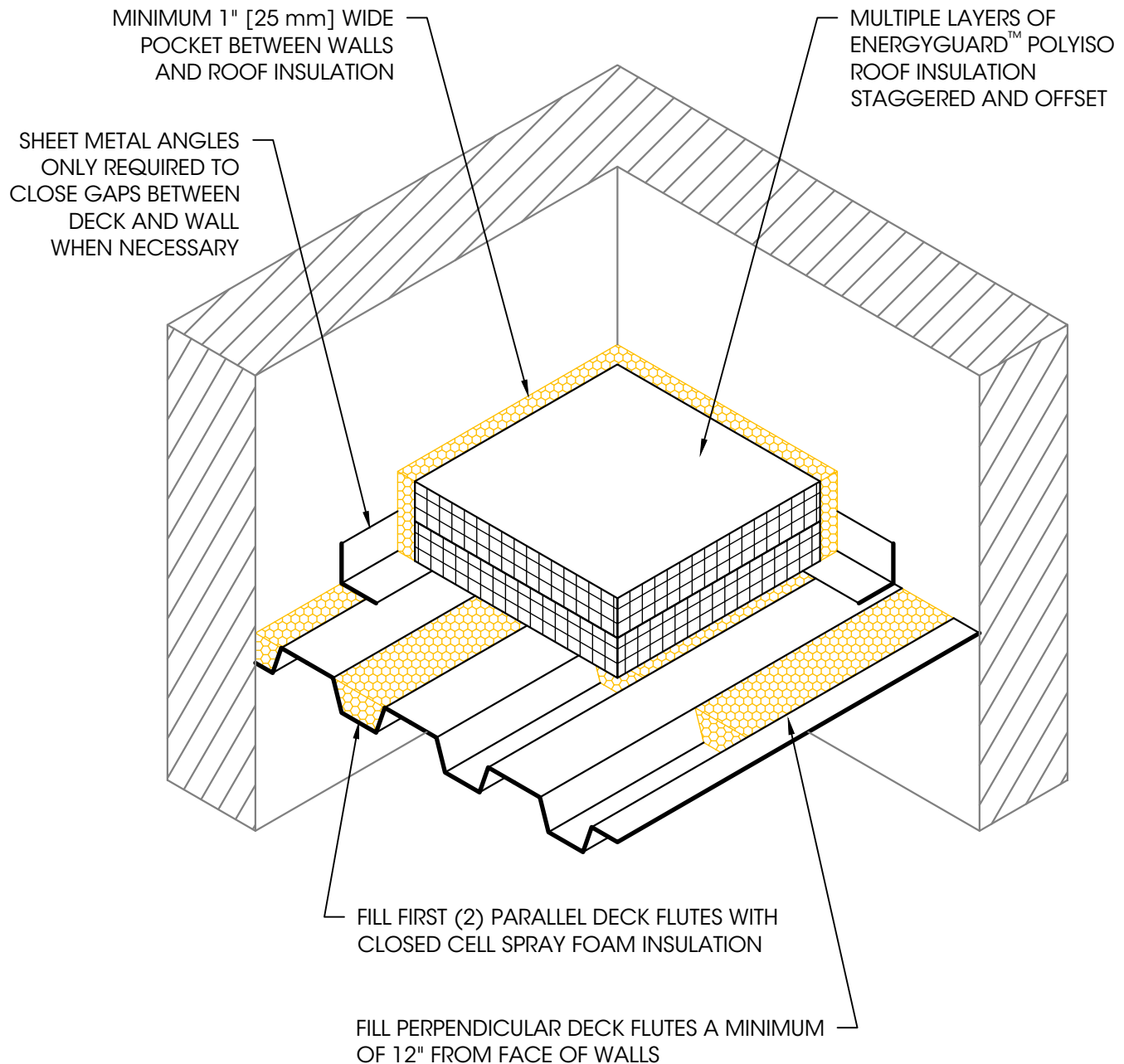
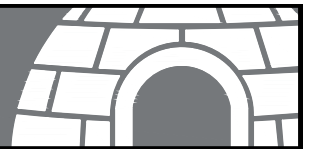
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

311A



Air Seal at Interface of Steel Deck and Wall

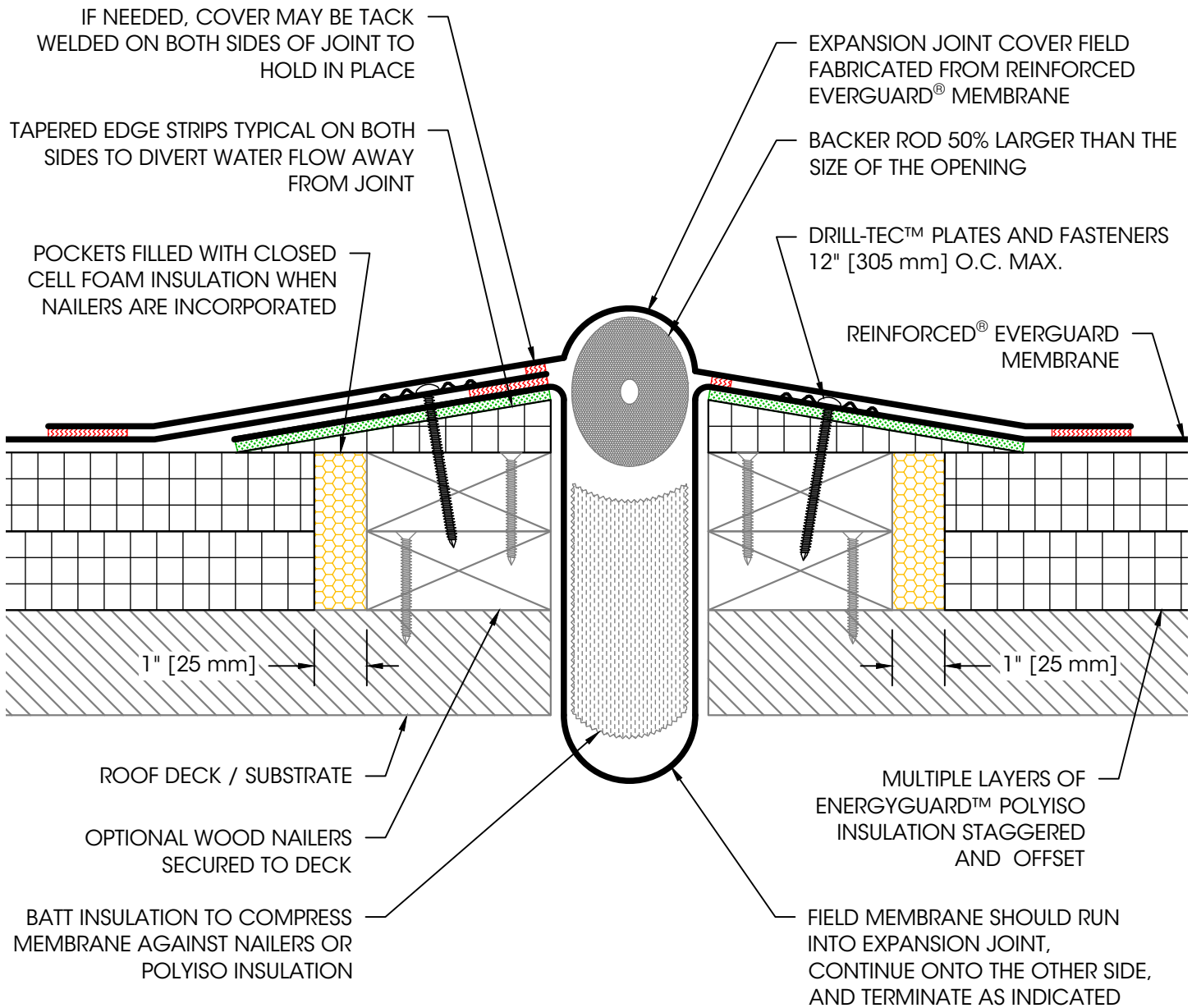
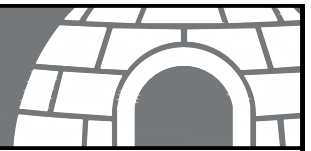
Roof Area:
Walls & Curbs

Issue Date:
11/13/2023

Scale:
1' = 1-1/2"

Detail No:

350



Notes:

1. For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from face of wall on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |

Field Fabricated Expansion Joint - Flat Type

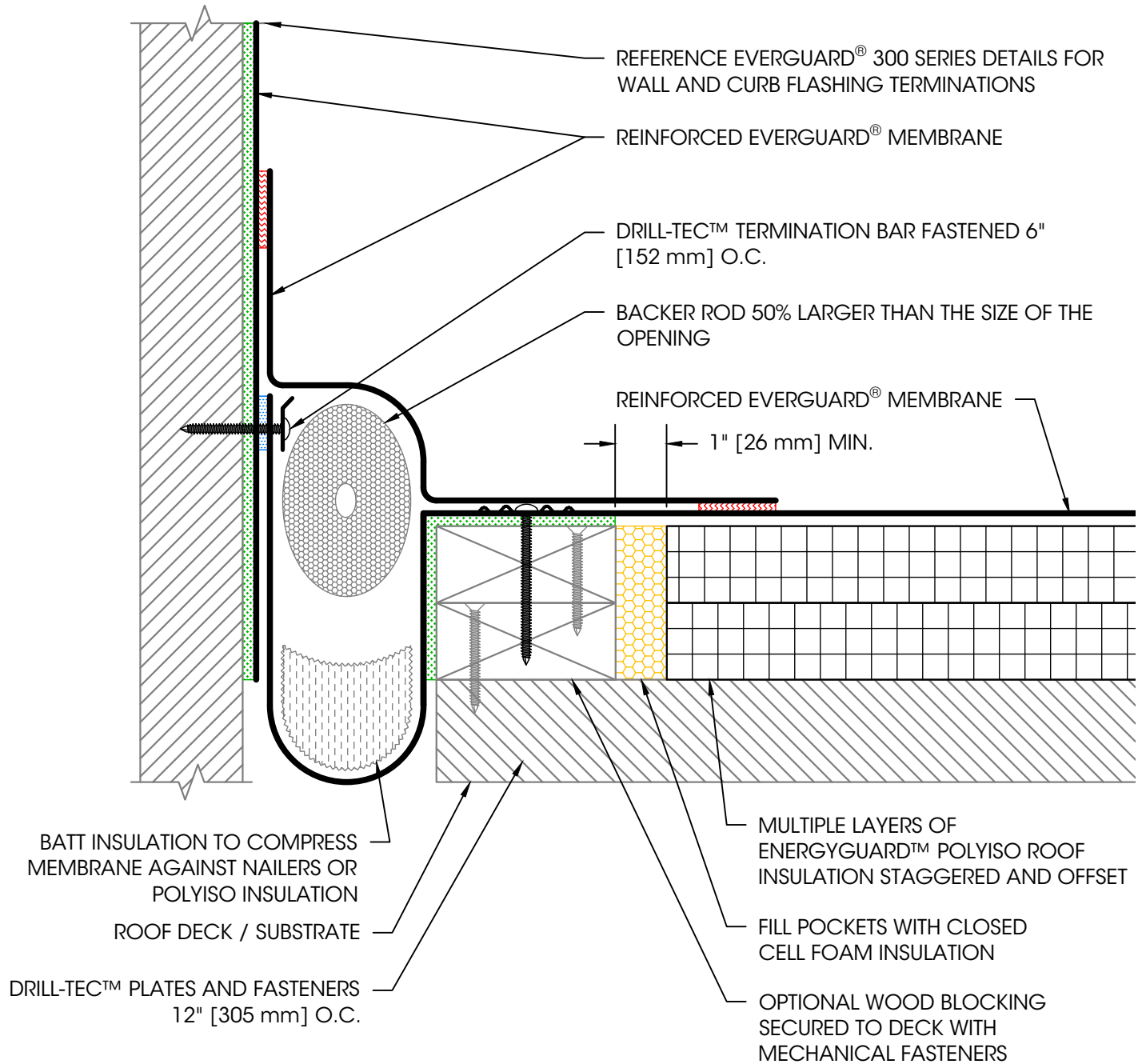
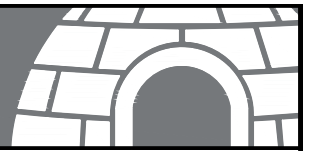
Roof Area:
Expansion Joints

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

401D



Notes:

1. For steel roof decks: Fill topside of steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from either edge of expansion joint
2. Expansion joints should be fabricated using smooth backed membrane only.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Field Fabricated Wall to Deck Expansion Joint

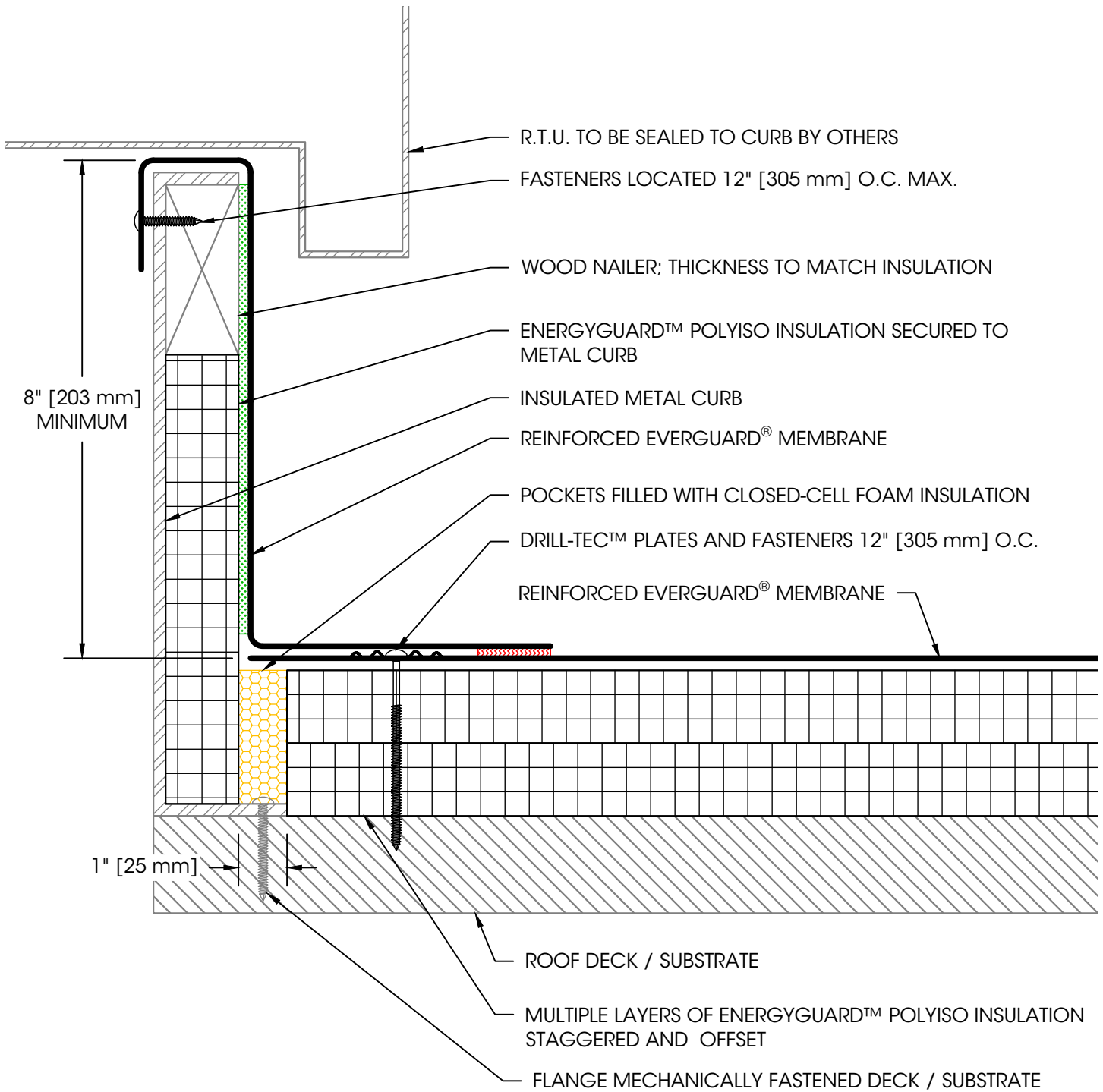
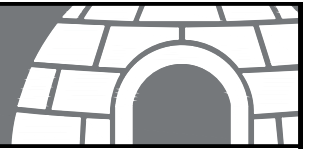
Roof Area:
Expansion Joints

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

403D



Notes:

- For steel roof decks: Fill steel deck flutes with closed cell spray foam insulation prior to the installation of above deck insulation a minimum of 12" [305 mm] from opening on each side.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |

R.T.U Curb Flashing

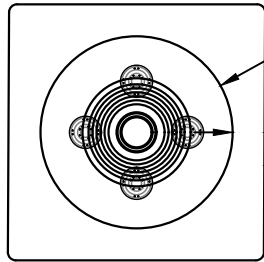
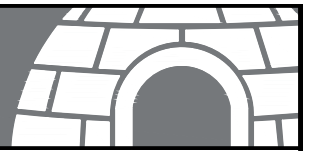
Roof Area:
Penetrations

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

503C



PLAN VIEW
(SEE NOTE #2)

EVERGUARD® PREMOLDED VENT BOOT

2" [51 mm] MIN.

REINFORCED EVERGUARD® MEMBRANE TARGET PATCH

SHOWN WITH TARGET PATCH MADE FROM REINFORCED EVERGUARD® MEMBRANE; SEE NOTE #2

2" [51 mm] MIN.

VENT STACK OR PIPE PENETRATION

EVERGUARD® WATER-BLOCK OR FLEXSEAL™ CAULK-GRADE SEALANT

STAINLESS STEEL BAND CLAMP

EVERGUARD® PREMOLDED VENT BOOT

DRILL-TEC™ PLATES & FASTENERS, MIN. (4) PER PENETRATION

1" [25 mm] MIN.

REINFORCED EVERGUARD® MEMBRANE

POCKETS FILLED WITH CLOSED-CELL FOAM INSULATION

MULTIPLE LAYERS OF ENERGYGUARD™ POLYISO INSULATION STAGGERED AND OFFSET

ROOF DECK / SUBSTRATE

Notes:

1. Do not cut through the side of the EverGuard® Premolded Pipe Boot to wrap around the pipe, it must be pulled over the top.
2. A target patch is required when the plates and fasteners extend into the flange area of the boot, or if the insulation thickness exceeds 12" [305 mm].
3. This detail is for use at locations with ambient interior temperatures only.

LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Premolded Pipe Boot Installation

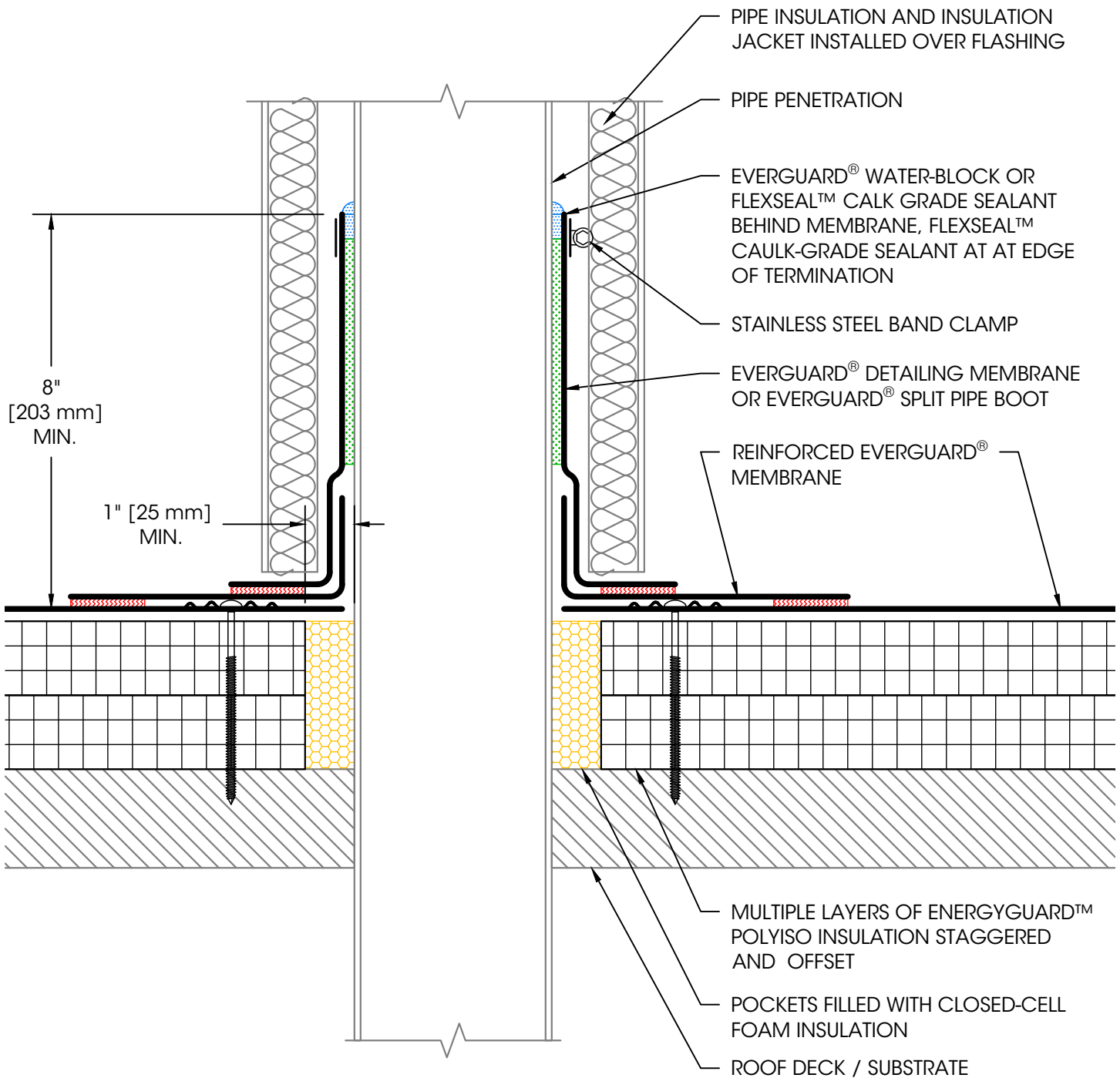
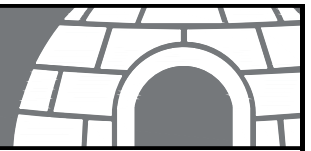
Roof Area:
Penetrations

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

506B



LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Pipe Penetration with Insulation Over Flashing

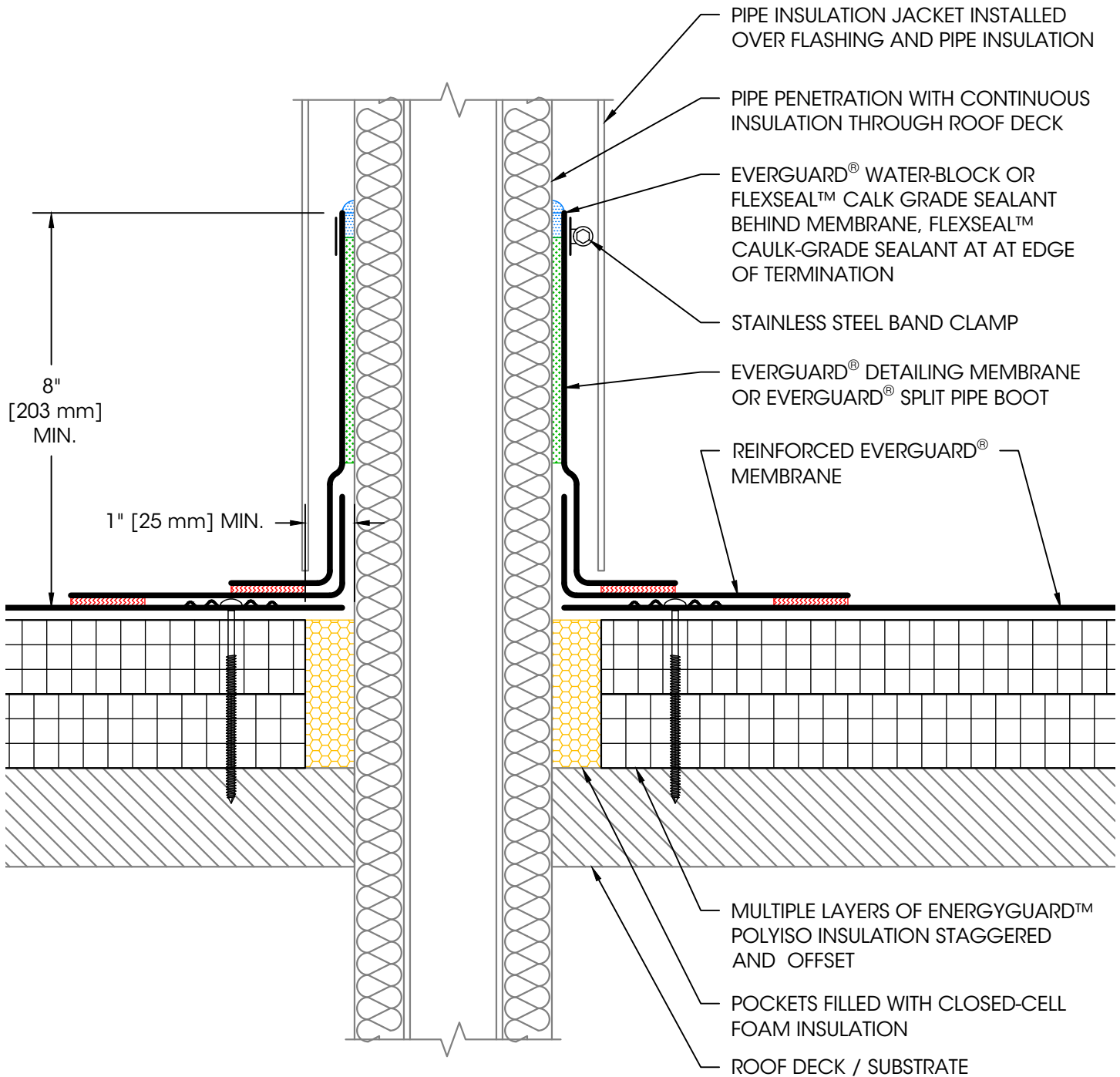
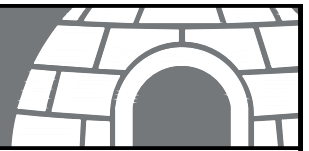
Roof Area:
Penetrations

Issue Date:
7/28/2024

Scale:
N.T.S.

Detail No:

506C



LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Insulated Pipe Penetration Flashing

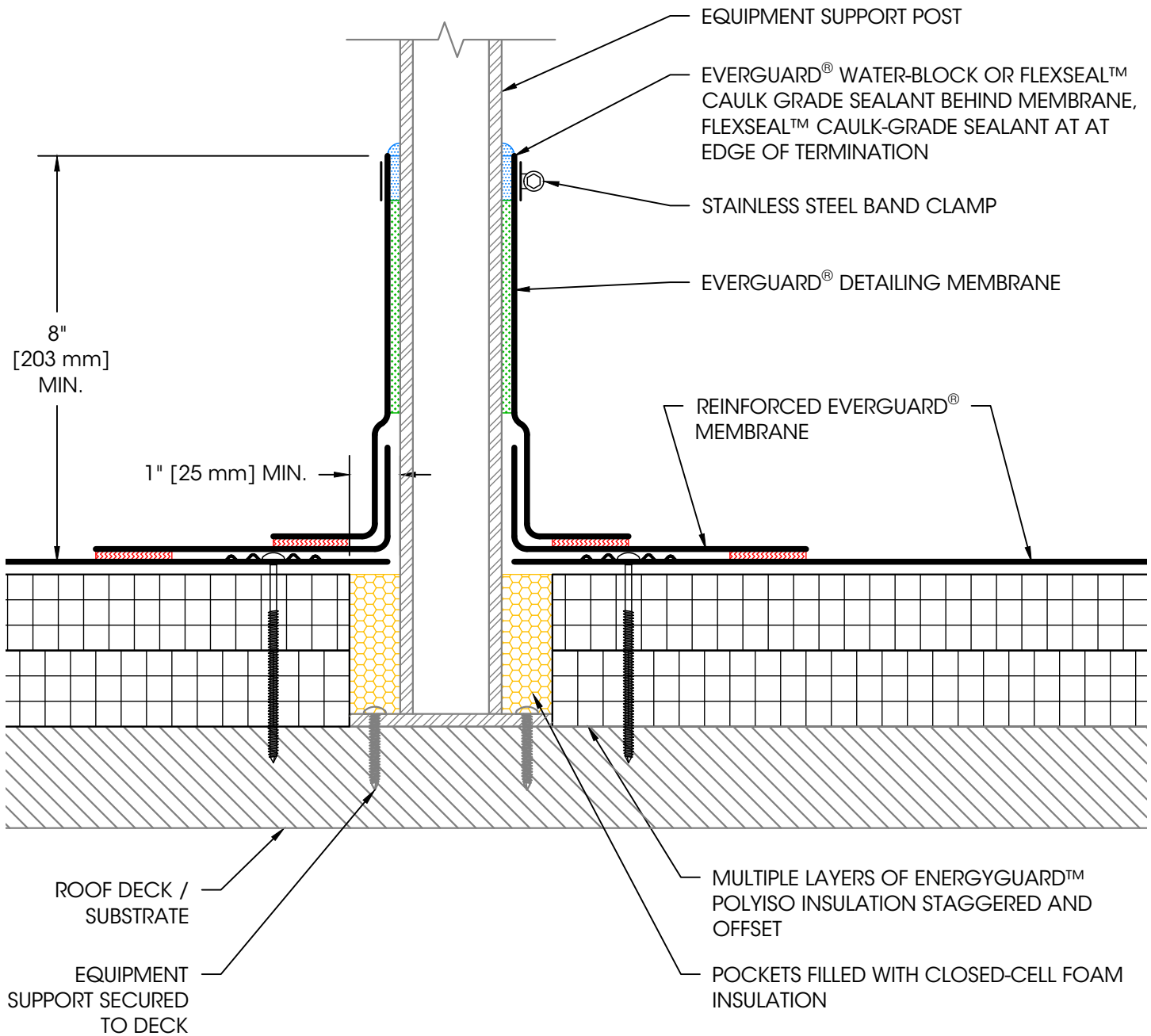
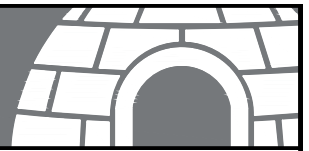
Roof Area:
Penetrations

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

506D



LEGEND

| | |
|--|-----------|
| | HEAT WELD |
| | ADHESIVE |
| | SEALANT |

Deck Mounted Equipment Support Flashing

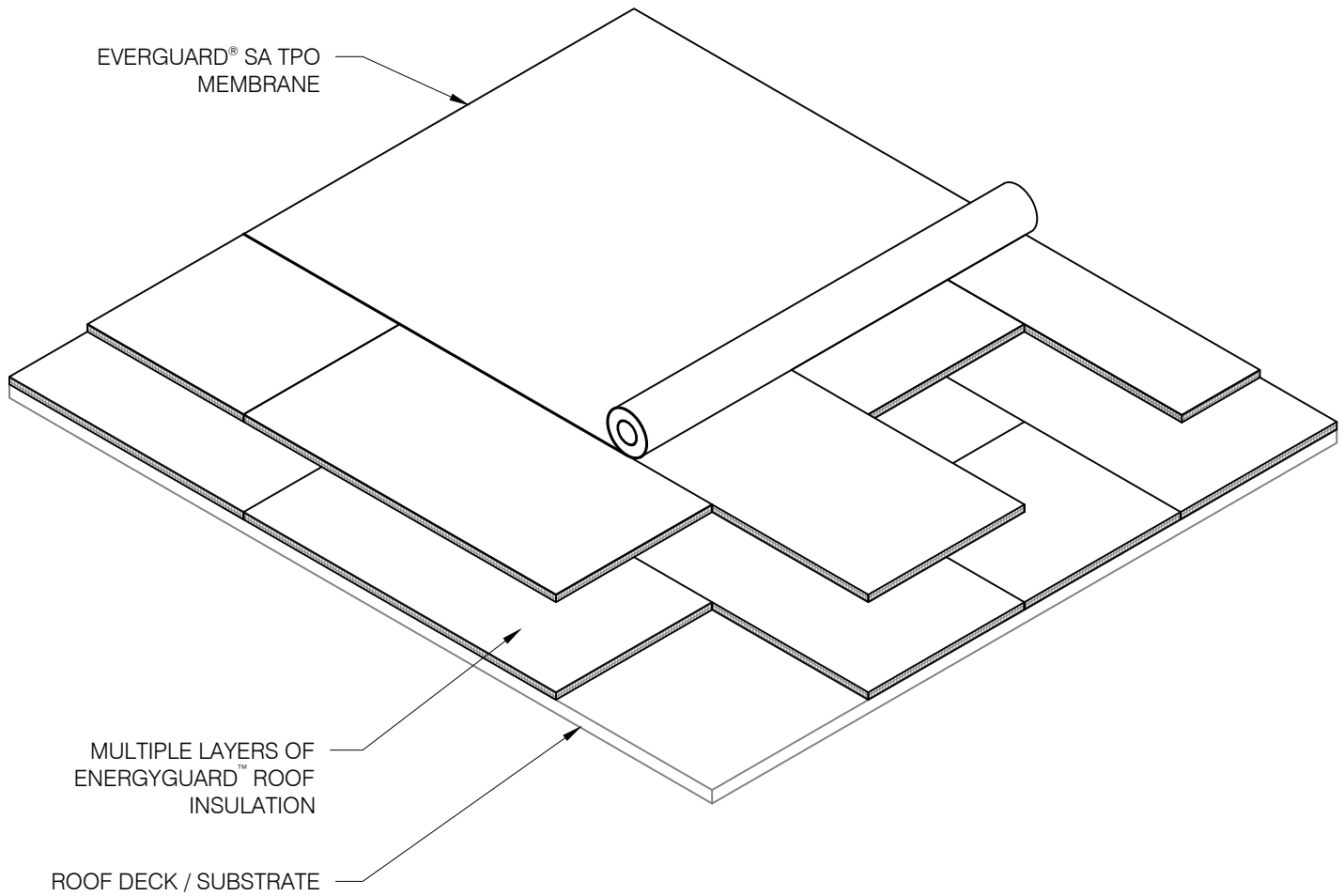
Roof Area:
Penetrations

Issue Date:
11/13/2023

Scale:
N.T.S.

Detail No:

511C

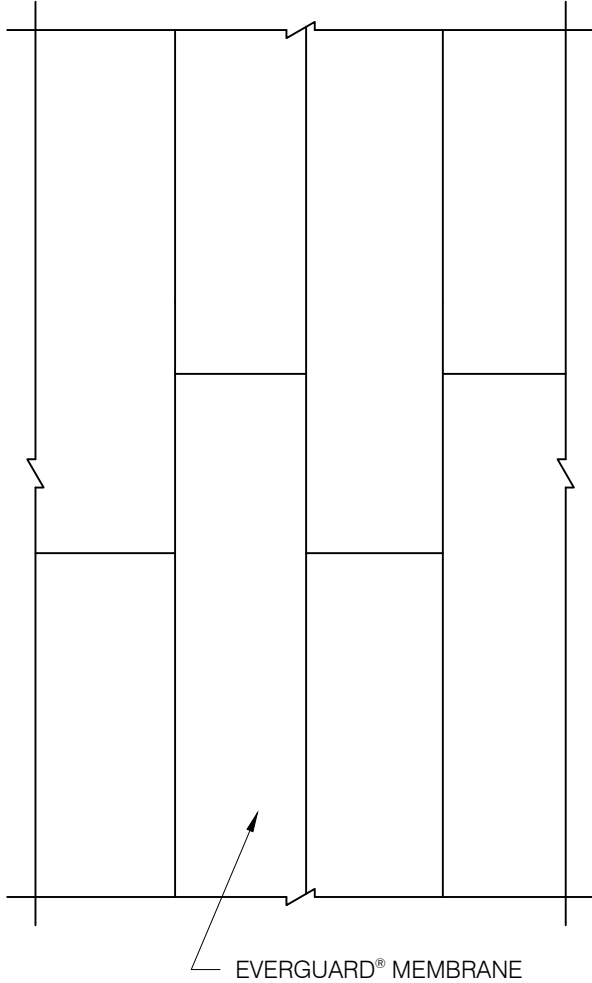


NOTES:

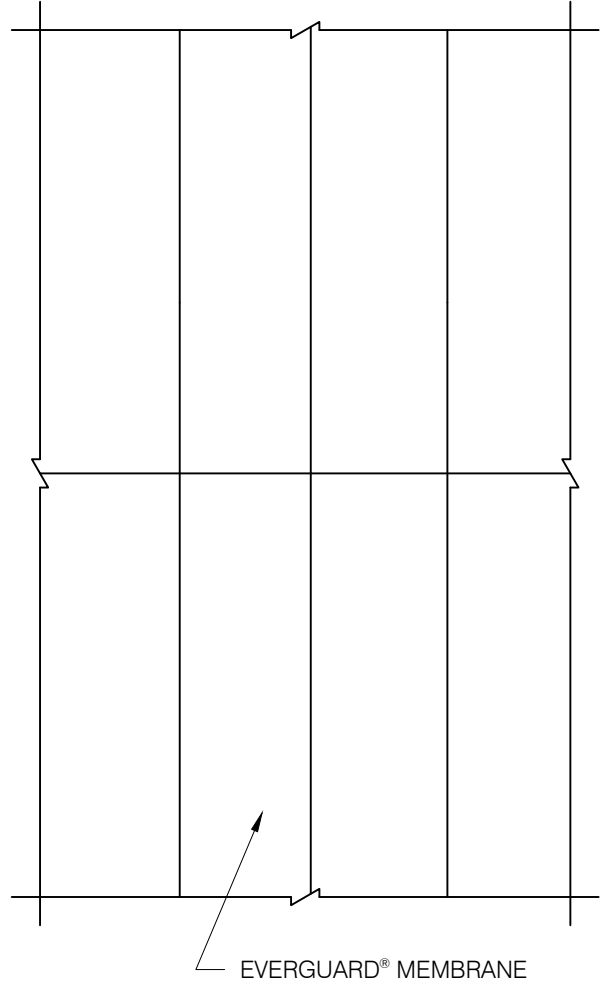
1. REFER TO THE EVERGUARD® TPO SA SELF-ADHERED ROOFING SYSTEM MANUALS ATTACHMENT TABLES FOR APPROVED INSULATION/SUBSTRATE AND ATTACHMENT.
2. INSULATION BOARDS MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" [152 mm] BETWEEN LAYERS.

| LEGEND | SYSTEM DETAIL | | | DETAIL |
|--------|---------------|------------|--------|--------|
| | ROOF AREA | ISSUE DATE | SCALE | 100 |
| | FIELD OF ROOF | 05/17/22 | N.T.S. | |

OPTION #1
STAGGERED SHEETS



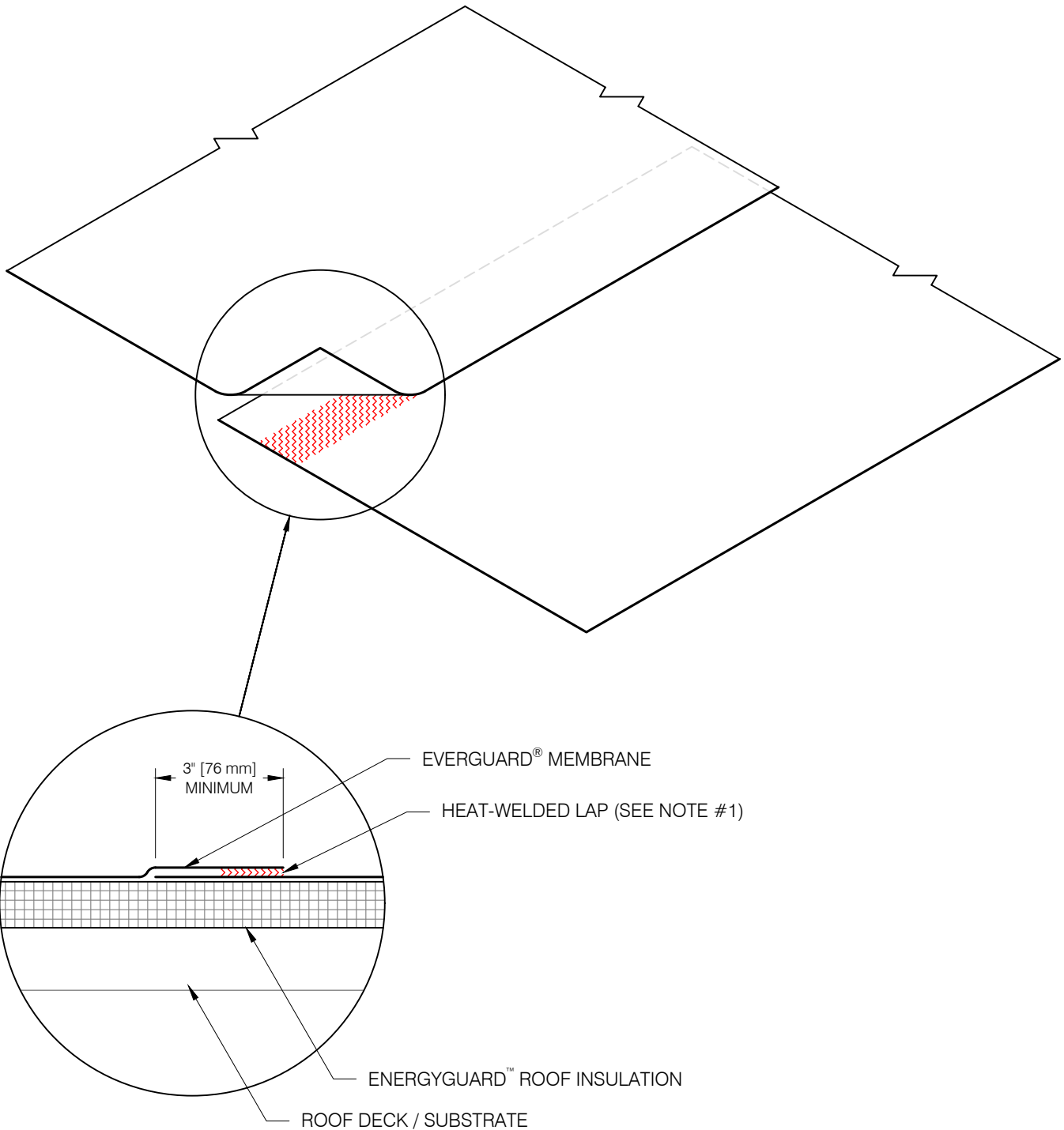
OPTION #2
ALIGNED SHEETS



NOTES:


1. REFER TO DETAILS #102A & 103A FOR MEMBRANE ATTACHMENT.

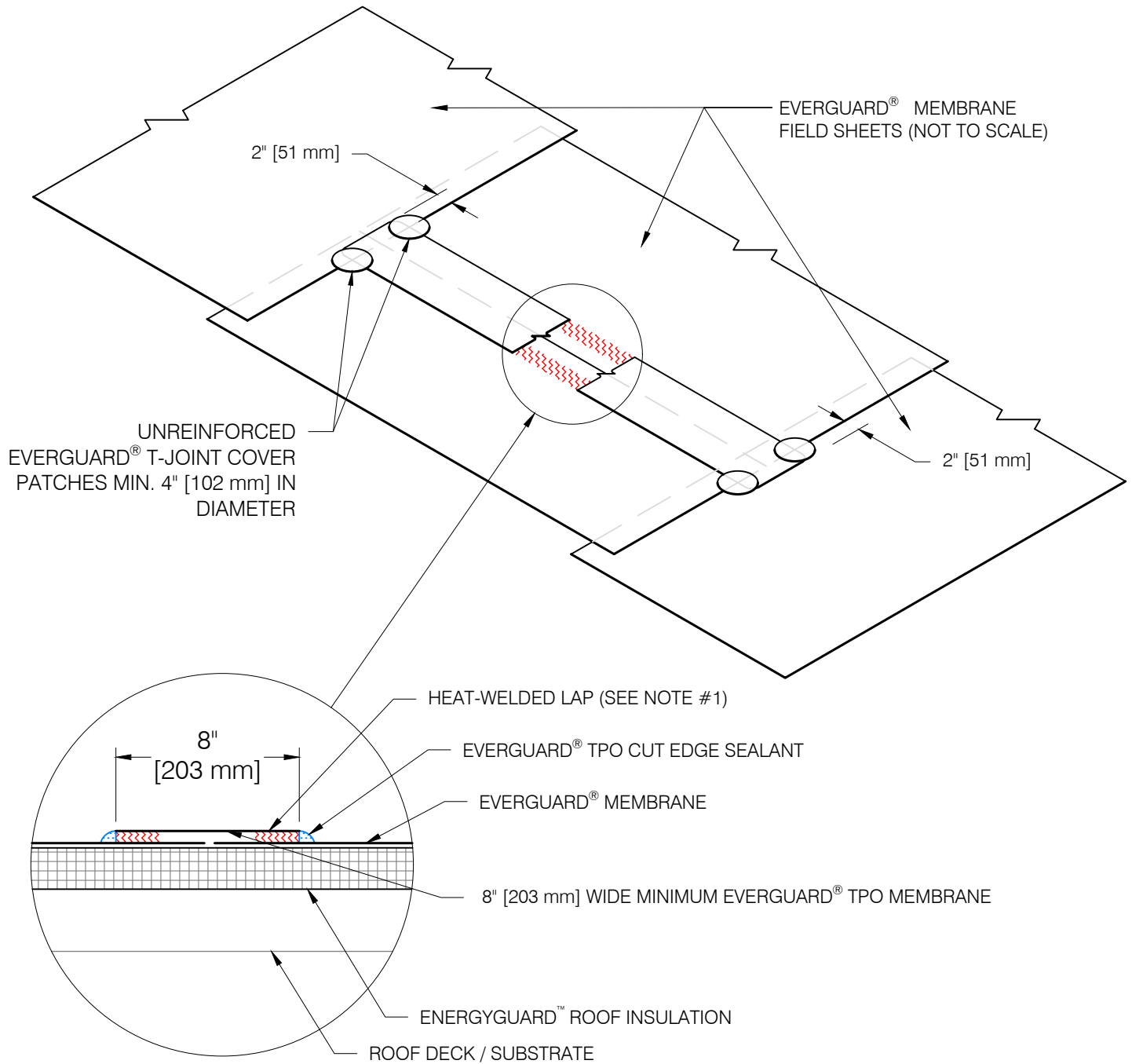
| LEGEND | MEMBRANE LAYOUT - FULL SHEETS | | | DETAIL |
|--------|-------------------------------|------------|--------|--------|
| | ROOF AREA | ISSUE DATE | SCALE | 101B |
| | FIELD OF ROOF | 05/17/22 | N.T.S. | |



NOTES:


1. FOR HEAT-WELDED LAPS, USE 1-1/2" [38.1 mm] WELD WITH MACHINE AUTOMATIC WELDER.

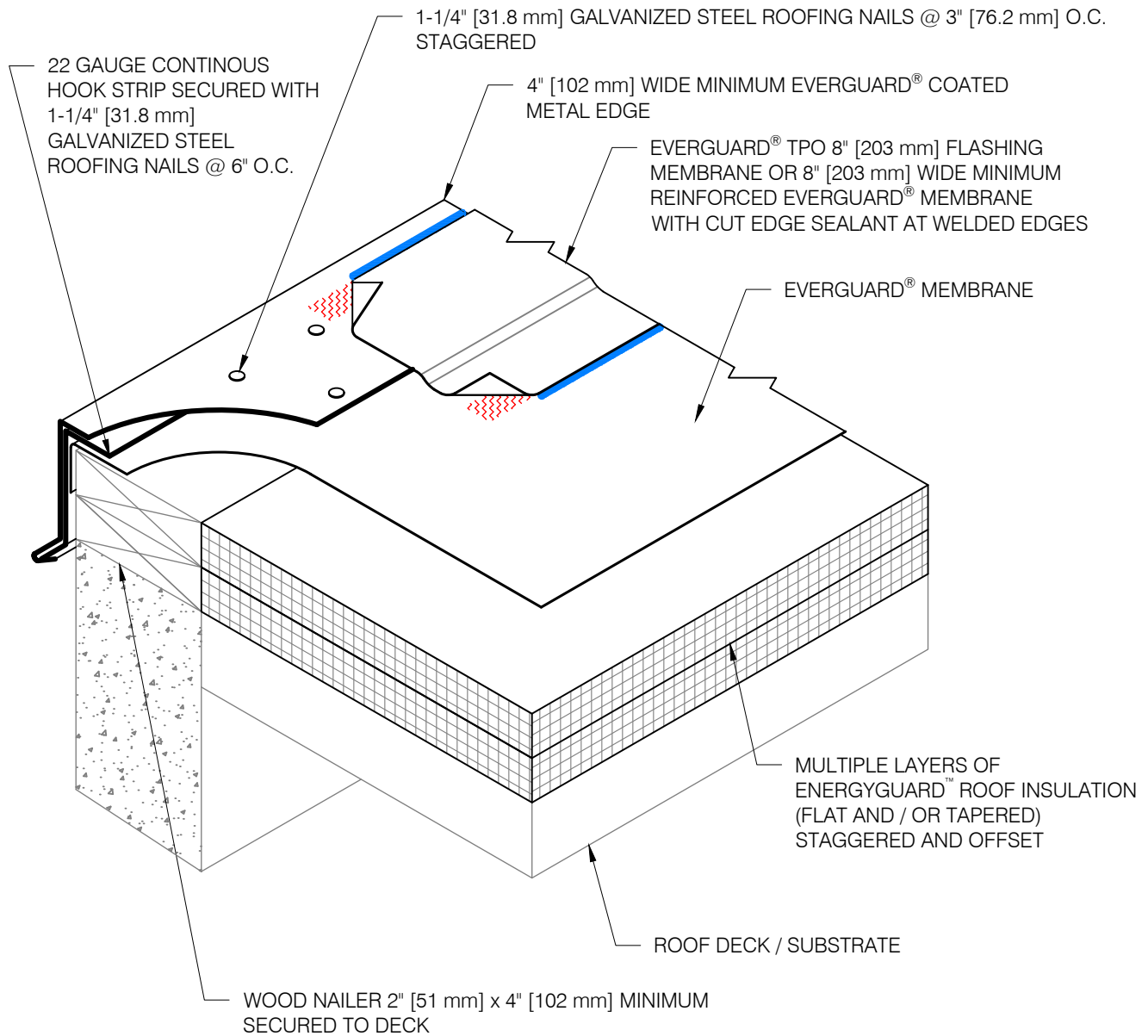
| LEGEND | | SIDE LAP | | | DETAIL |
|--|-----------|---------------|------------|--------|--------|
|  | HEAT WELD | | | | 102A |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | FIELD OF ROOF | 05/17/22 | N.T.S. | |



NOTES:



1. FOR HEAT-WELDED LAPS, USE 1-1/2" [38.1 mm] WELD WITH MACHINE AUTOMATIC WELDER.

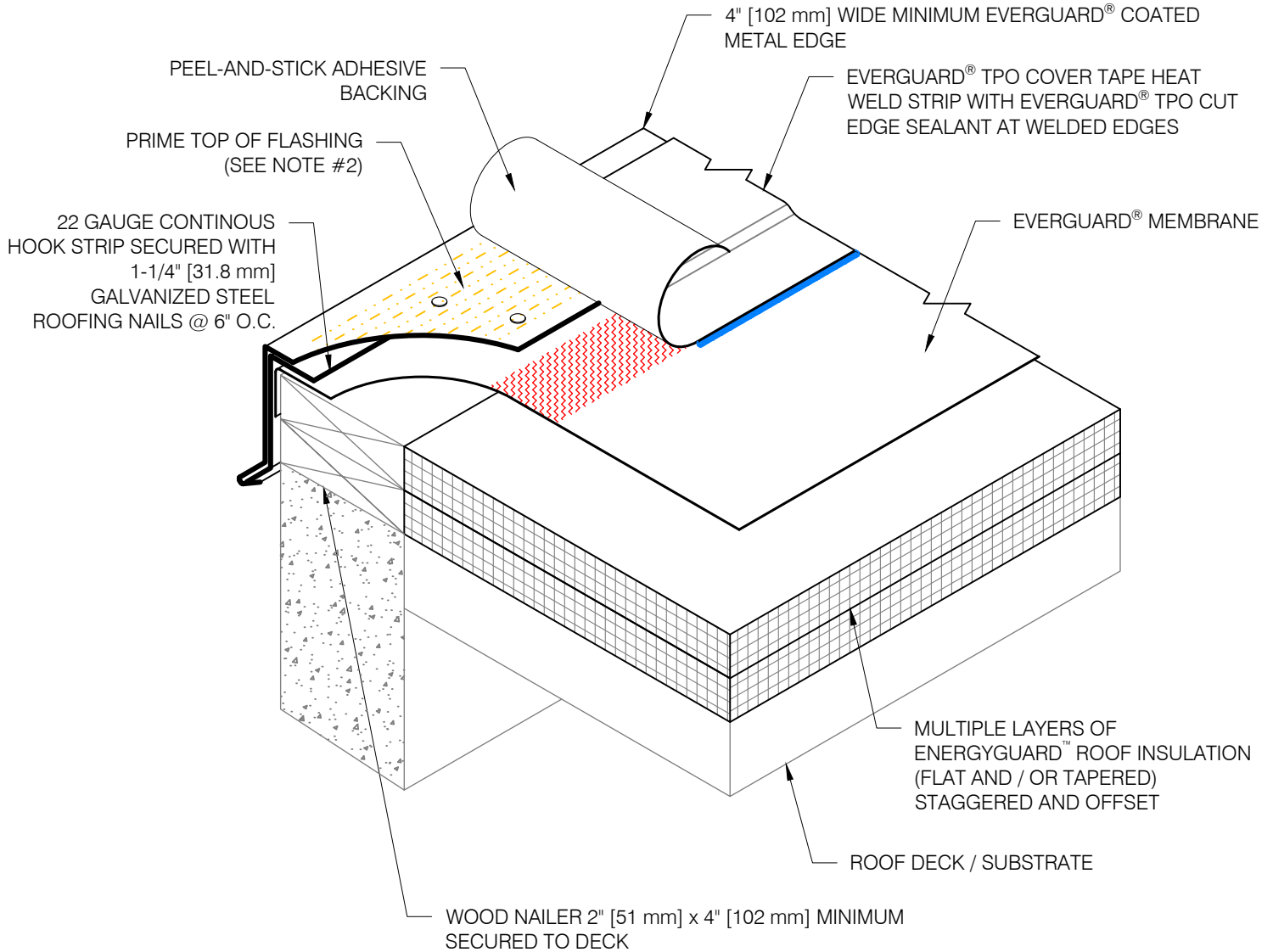
| LEGEND | | END LAP WITH COVER STRIP | | | DETAIL |
|--|------------------|--------------------------|------------|--------|--------|
|  | HEAT WELD | | | | 103A |
|  | CUT EDGE SEALANT | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | FIELD OF ROOF | 05/17/22 | N.T.S. | |



NOTES:

1. FOR HEAT-WELDED LAPS, USE 1-1/2" [38.1 mm] WELD WITH MACHINE AUTOMATIC WELDER AND / OR 2" [50.8 mm] WELD WITH HAND WELDER.
2. DO NOT OVERLAP ENDS OF FLASHING WITH FLASHING STRIP.
3. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED FOR ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

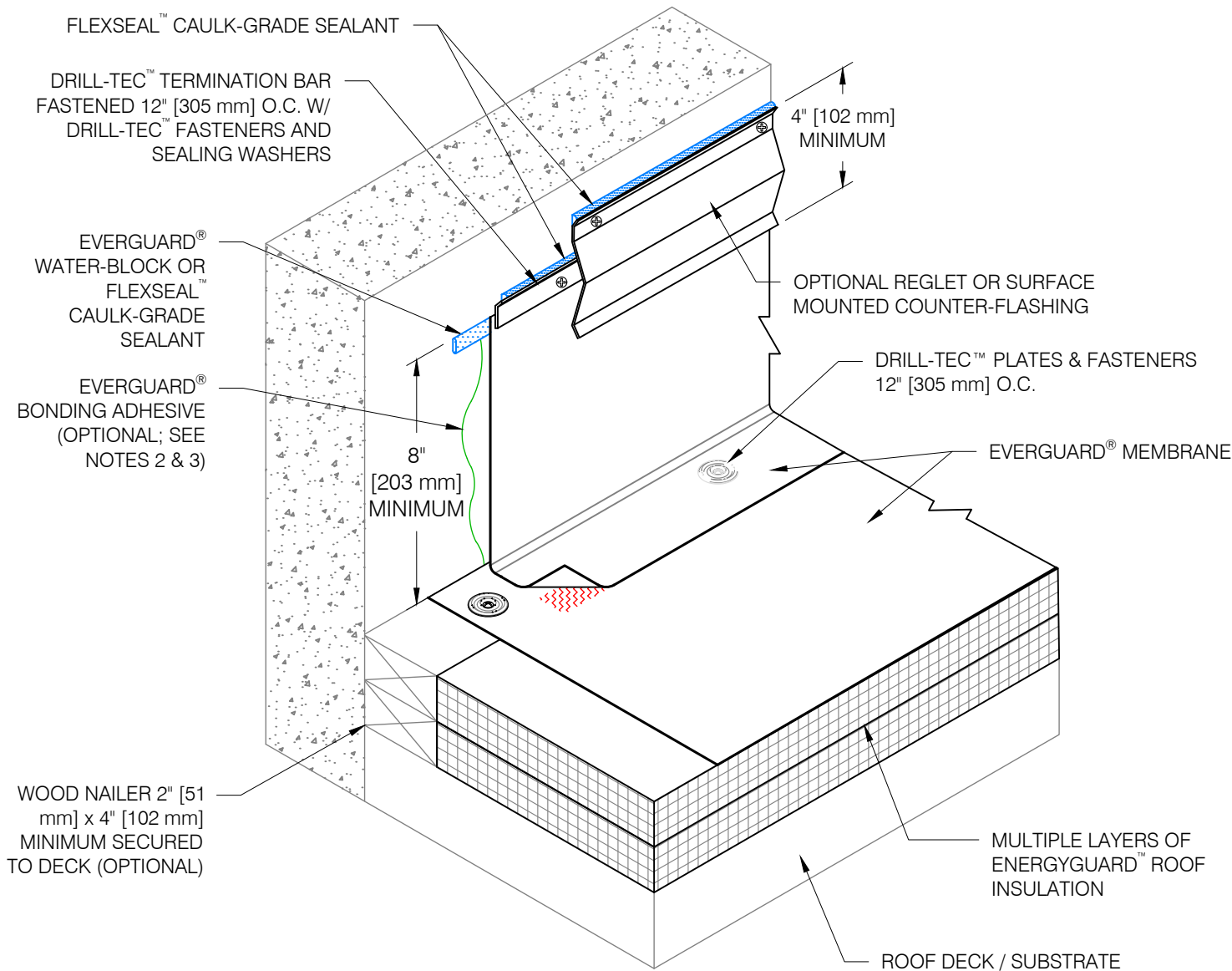
| LEGEND | | COATED METAL DRIP EDGE | | | DETAIL |
|--|------------------|------------------------|------------|--------|--------|
|  | HEAT WELD | | | | 201B |
|  | CUT EDGE SEALANT | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | ROOF EDGE | 05/17/22 | N.T.S. | |



NOTES:

1. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER OR EVERGUARD® CLEANWELD™ CONDITIONER AND ALLOW TO DRY.
2. PRIME TOP OF FLASHING WITH TPO PRIMER OR LOW VOC TPO PRIMER.
3. DO NOT SPILL PRIMER ON HEAT WELDED SEAM AREA.
4. DO NOT OVERLAP ENDS OF FLASHING WITH FLASHING STRIP.
5. HEAT WELD THE COVER TAPE (NON-ADHESIVE SIDE ONLY) TO THE MEMBRANE AREA USING A 1-1/2" [38.1 mm] WELD WITH MACHINE AUTOMATIC WELDER.
6. CONTACT GAF FOR APPROPRIATE RECOMMENDATIONS NEEDED FOR ANSI/SPRI/FM4435/ES-1 DESIGN CRITERIA.

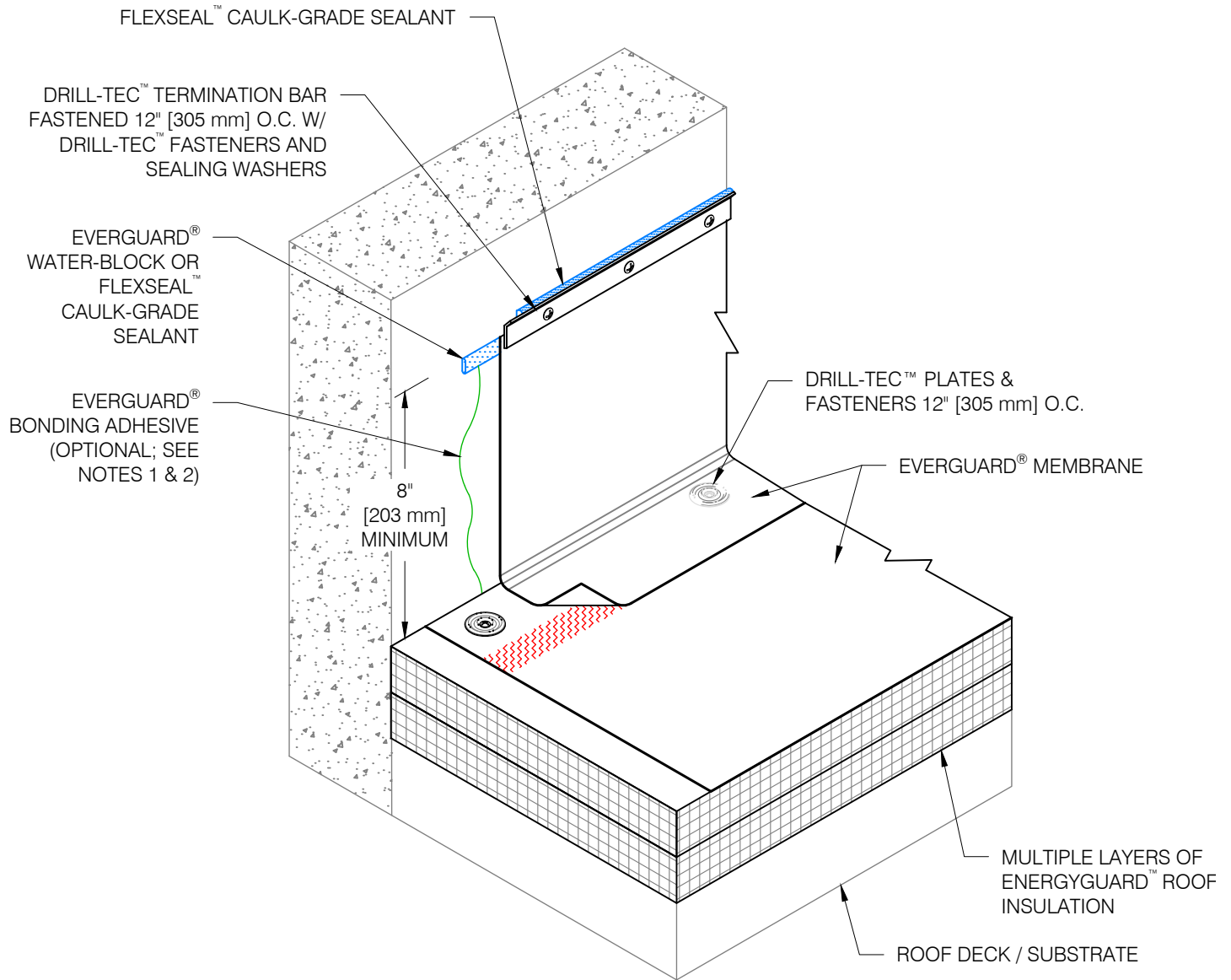
| LEGEND | | TPO COVER TAPE HEAT WELD STRIP OVERLAP AT ROOF EDGE | | | DETAIL |
|--------|------------------|---|------------|--------|--------|
| | HEAT WELD | | | | 218 |
| | ADHESIVE | | | | |
| | CUT EDGE SEALANT | | | | |
| | PRIMER | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | 218 |
| | | ROOF EDGE | 05/17/22 | N.T.S. | |



NOTES:




- EXISTING REGLET IS ACCEPTABLE IF METAL IS IN GOOD CONDITION.
- IF EVERGUARD® SA MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
- IF EVERGUARD® SMOOTH BACK MEMBRANE IS USED FOR WALL FLASHING, ADHESIVE IS REQUIRED FOR HEIGHTS 30" - 66" [762 mm - 1.68 m].
- EXPOSED WALLS/CURBS MUST BE WATERPROOFED AND MAINTAINED ABOVE THE BASE FLASHING IN ORDER FOR ANY SURFACE-MOUNTED TERMINATION TO BE EFFECTIVE.

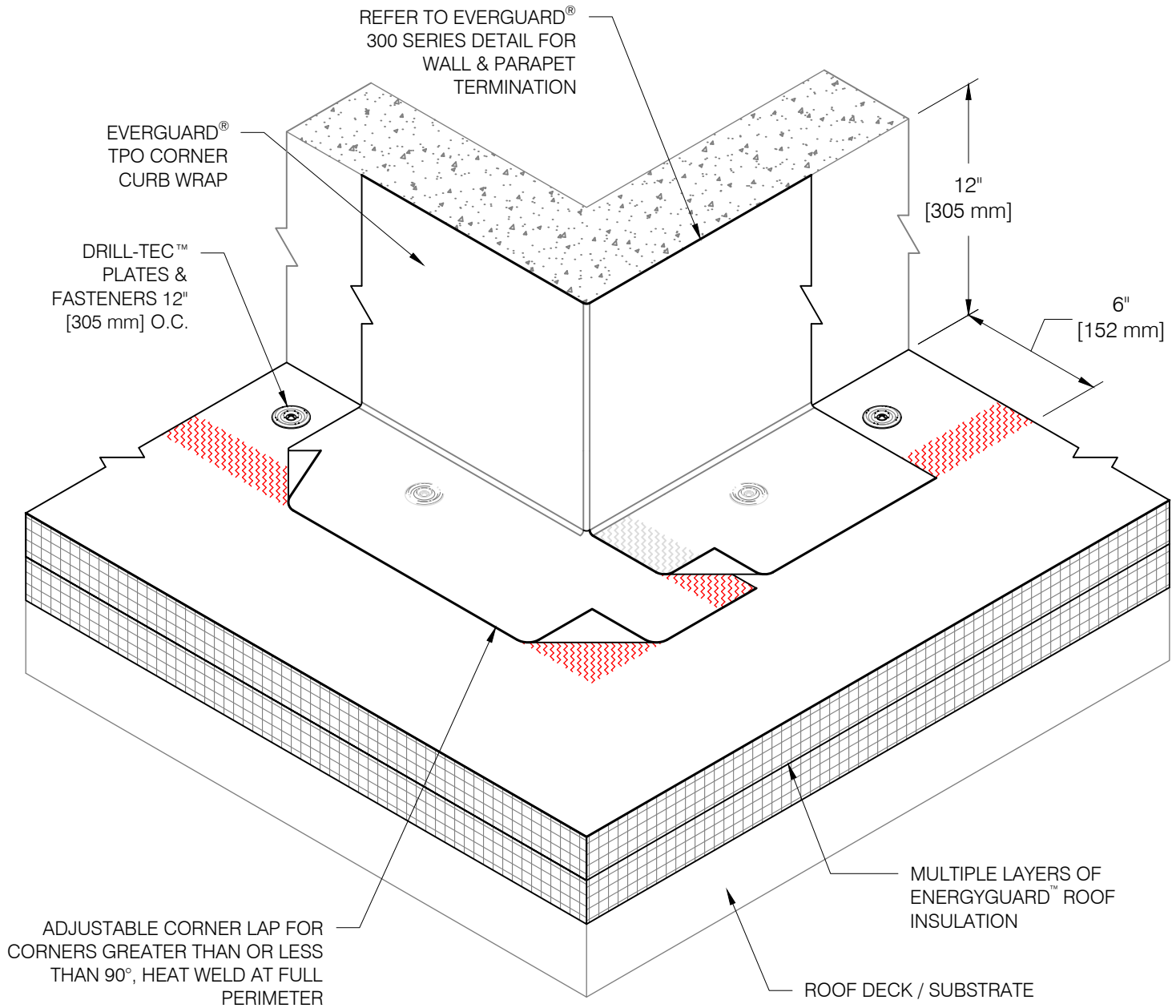
| LEGEND | | WALL FLASHING WITH COUNTER-FLASHING | | | DETAIL |
|--------|-----------|-------------------------------------|------------|--------|--------|
| | HEAT WELD | ROOF AREA | ISSUE DATE | SCALE | 301A |
| | ADHESIVE | | | | |
| | SEALANT | WALL & CURB | 05/17/22 | N.T.S. | |



NOTES:


1. IF EVERGUARD® SA MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
2. IF EVERGUARD® SMOOTH BACK MEMBRANE IS USED FOR WALL FLASHING, ADHESIVE IS REQUIRED FOR HEIGHTS 30" - 66" [762 mm - 1.68 m].

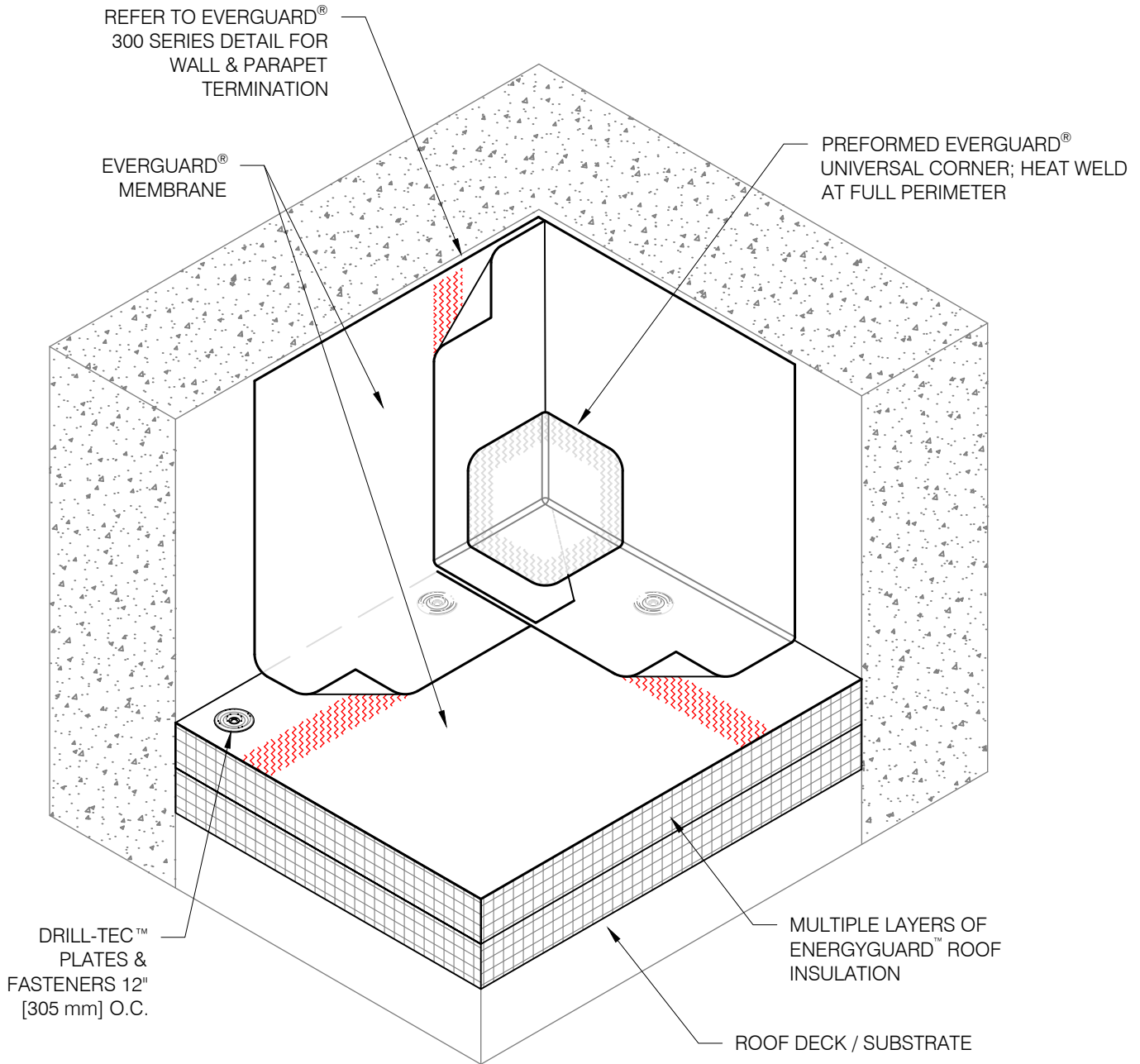
| LEGEND | | WALL & CURB FLASHING WITH TERMINATION BAR | | | DETAIL |
|--|-----------|---|------------|--------|--------|
|  | HEAT WELD | | | | 302A |
|  | ADHESIVE | | | | |
|  | SEALANT | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | WALL & CURB | 05/17/22 | N.T.S. | |



NOTES:

1. FOUR CORNER CURB WRAP PIECES ARE NEEDED FOR COMPLETION; VARYING SIZES MAY BE REQUIRED.
2. CORNER WRAP MAY BE ADHERED OR INSTALLED DRY.

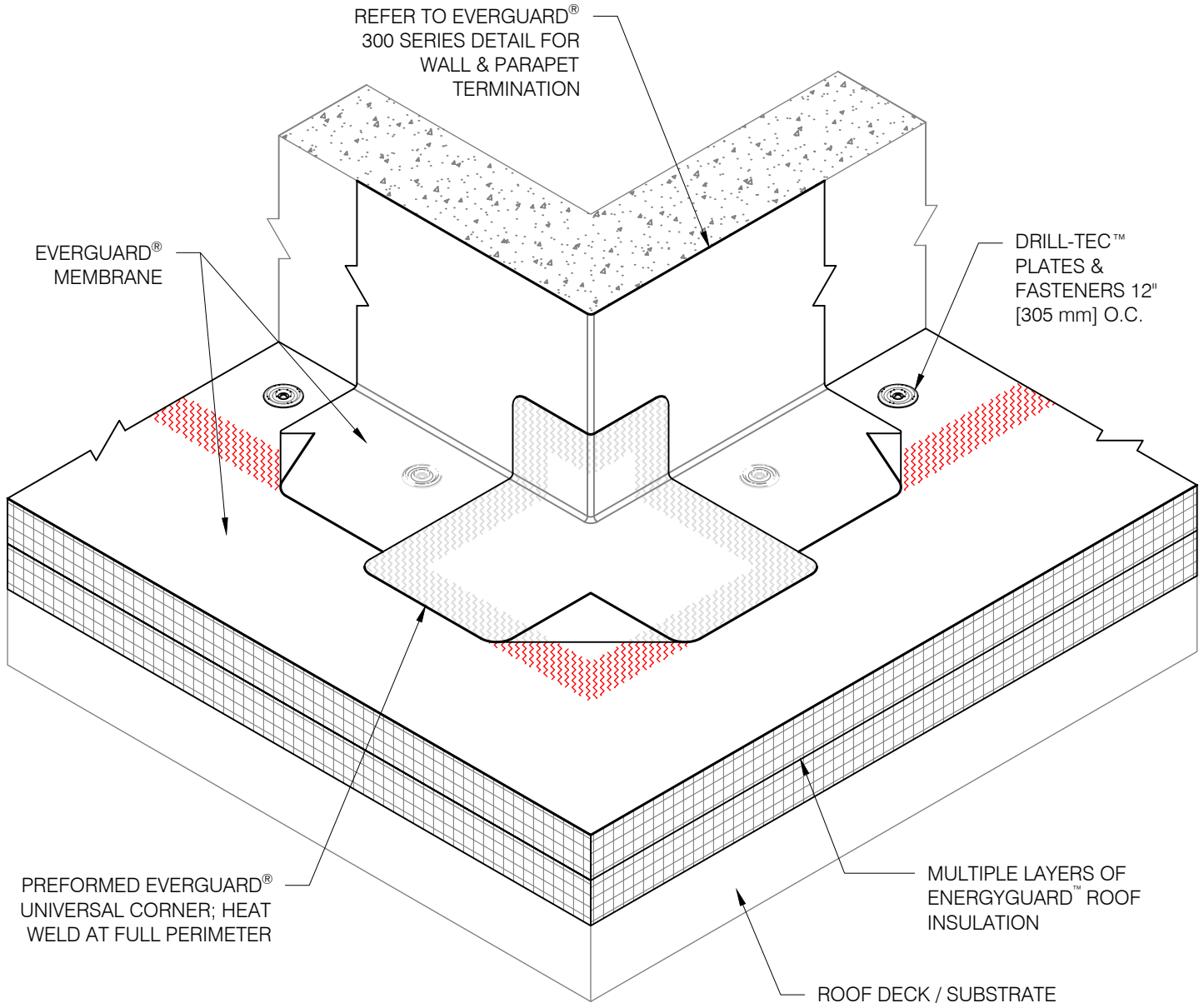
| LEGEND | | CORNER CURB WRAP | | | DETAIL |
|--|-----------|------------------|------------|--------|--------|
|  | HEAT WELD | | | | 325 |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | WALL & CURB | 05/17/22 | N.T.S. | |



NOTES:


1. WALL FLASHING MAY BE ADHERED OR INSTALLED DRY (REFER TO 300 DETAIL SERIES).
2. INSIDE CORNERS MAY ALSO BE FIELD FABRICATED USING UNREINFORCED MEMBRANE.

| LEGEND | | UNIVERSAL PREFORMED CORNER - INSIDE REINFORCEMENT | | | DETAIL |
|--------|-----------|---|------------|--------|--------|
| | HEAT WELD | | | | 327A |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | WALL & CURB | 05/17/22 | N.T.S. | |

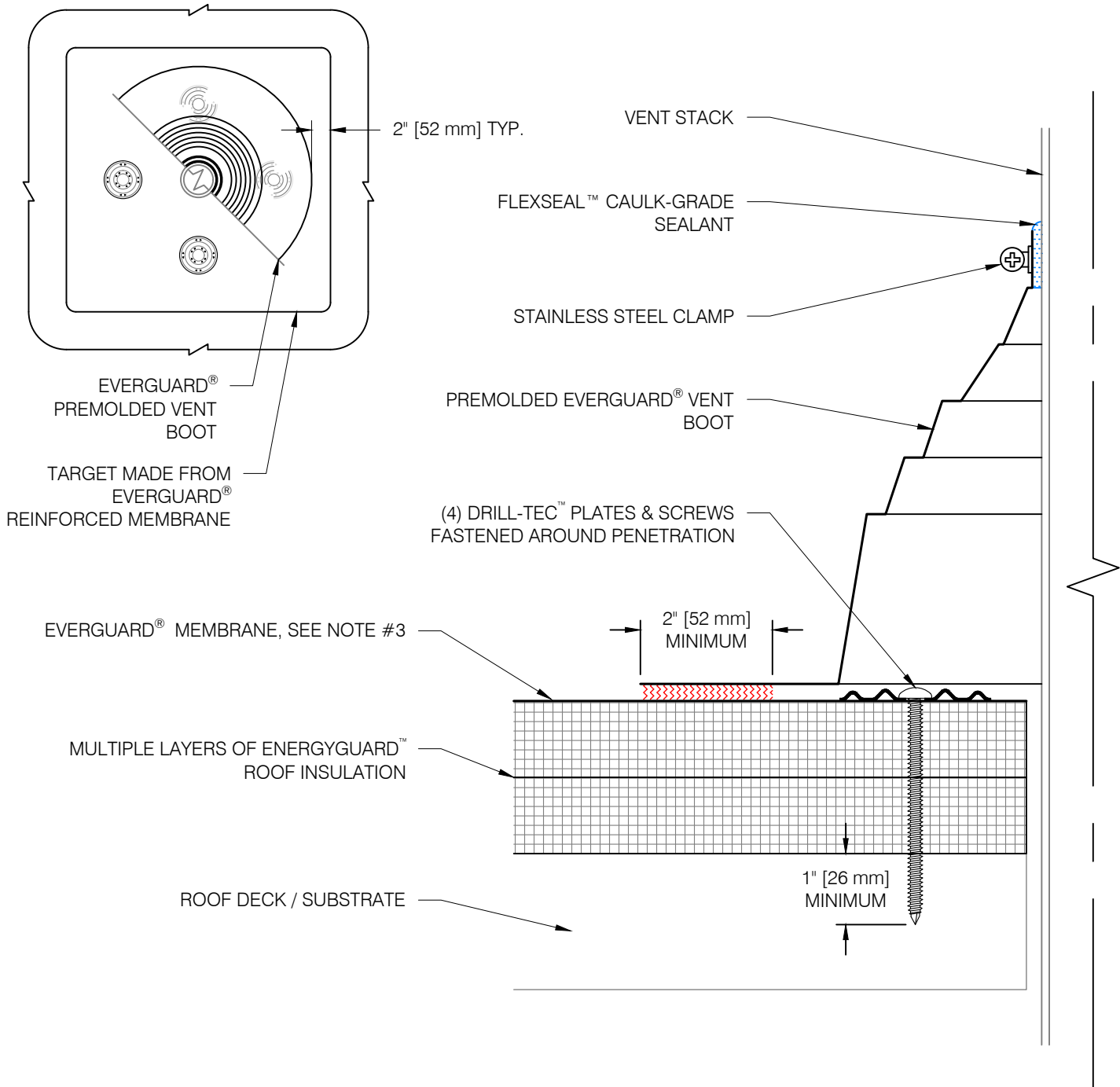


NOTES:

1. FLASHING MAY BE ADHERED OR INSTALLED DRY (REFER TO 300 DETAIL SERIES).
2. KEEP FASTENERS BACK FROM CORNER 6" [152 mm] MAXIMUM.



| LEGEND | | UNIVERSAL PREFORMED CORNER - OUTSIDE REINFORCEMENT | | | DETAIL |
|--|-----------|--|------------|--------|--------|
|  | HEAT WELD | | | | 329A |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | WALL & CURB | 05/17/22 | N.T.S. | |

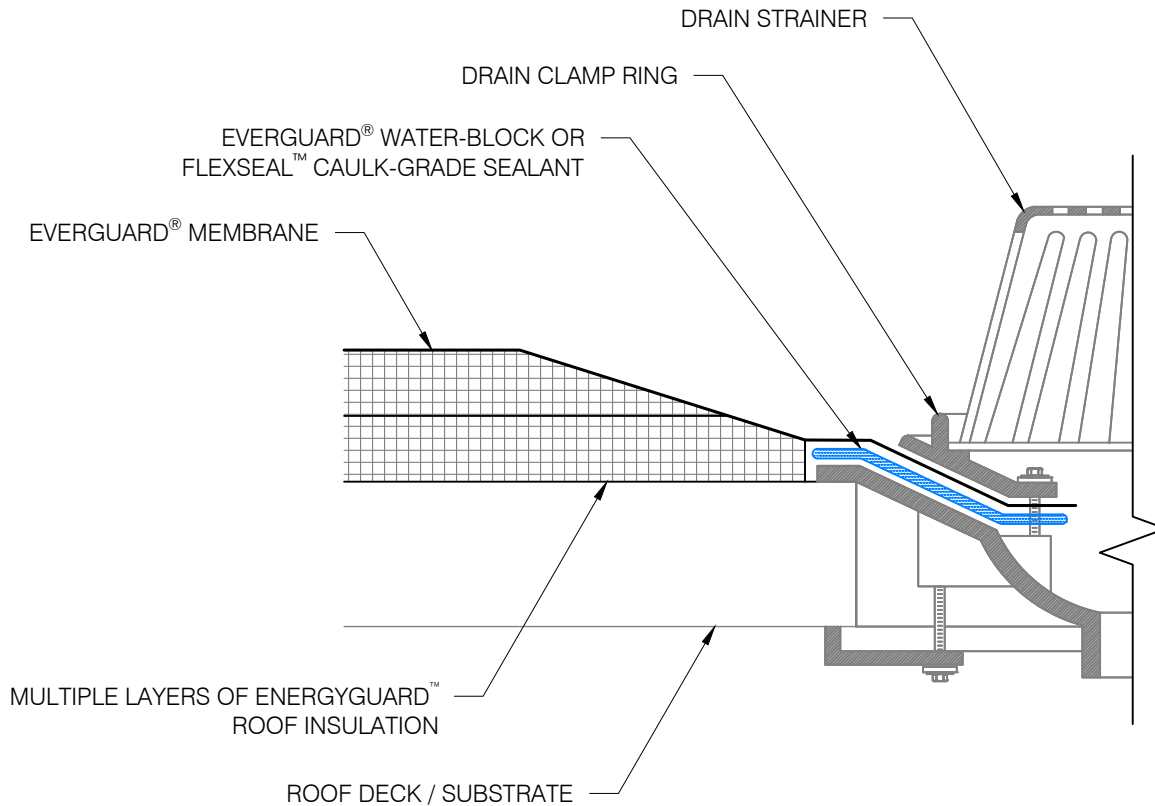
ALTERNATE INSTALLATION (SEE NOTE #3)



NOTES:


- DO NOT CUT THROUGH THE SIDE OF THE PREMOLDED BOOT; IT MUST BE INSTALLED OVER THE VENT PIPE.
- FOUR DRILL-TEC™ PLATES & SCREWS MUST BE FASTENED AROUND PENETRATION.
- IF THE PLATES AND FASTENERS INTRUDE INTO THE BOOT FLANGE AREA, THEN A TARGET MUST BE FIRST INSTALLED OVER THE PLATES AND FASTENERS PRIOR TO BOOT INSTALLATION.

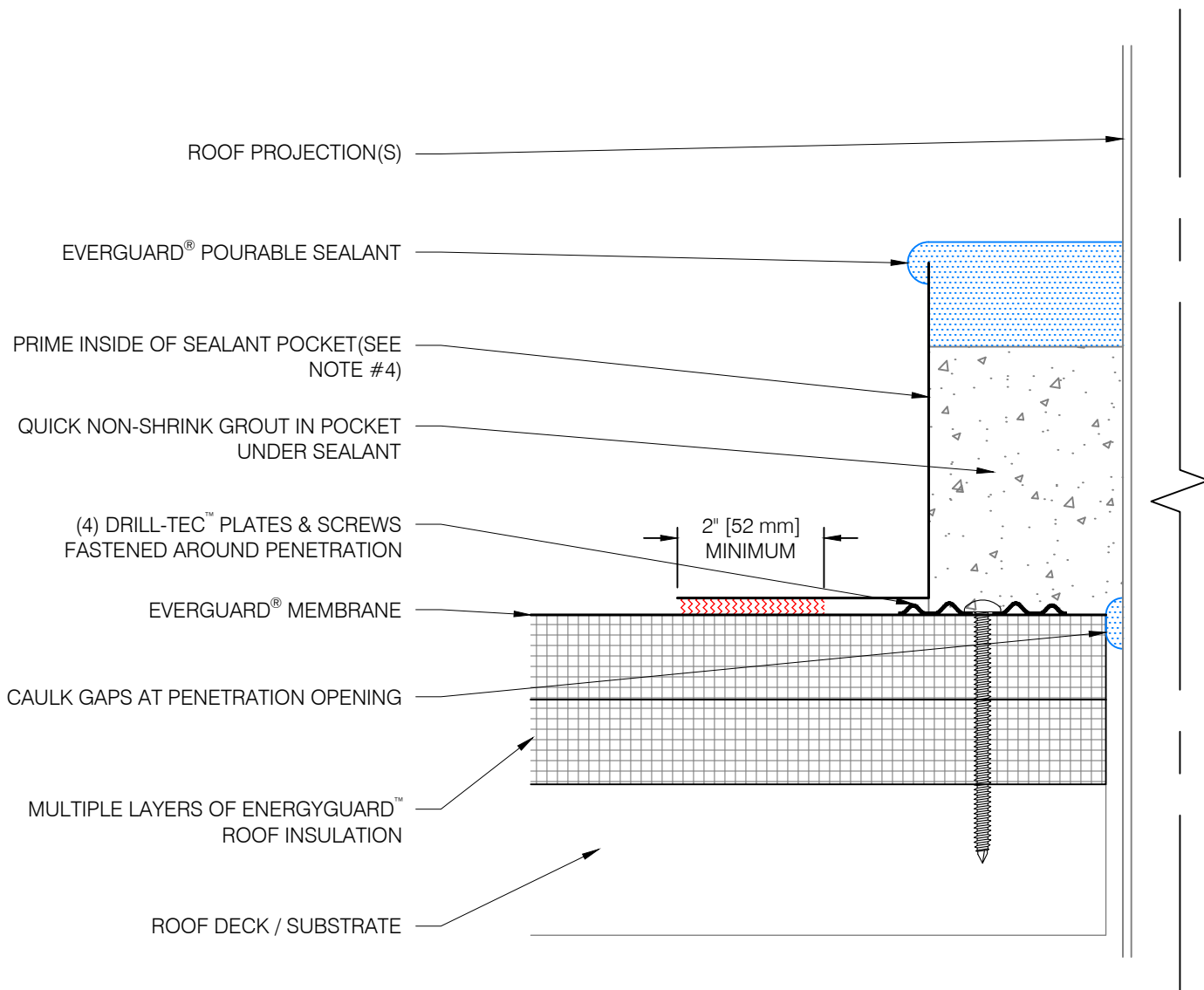
| LEGEND | | PREFORMED VENT BOOT | | | DETAIL |
|--|-----------|---------------------|------------|---------|--------|
|  | HEAT WELD | | | | 506A |
|  | SEALANT | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | PENETRATIONS | 05/17/22 | 6" = 1' | |



NOTES:



1. A FIELD WELD CANNOT PASS WITHIN 9" [227 mm] OF THE CLAMPING, OR WITHIN THE DRAIN SUMP ITSELF.
2. MEMBRANE MUST EXTEND 1" [25.4 mm] MINIMUM BEYOND THE BOLT HOLES; CLAMPING RING BOLTS MUST PENETRATE THE MEMBRANE.
3. TAPER INSULATION TO CREATE A ROOF SUMP 36" x 36" [0.914 m X 0.914 m] MINIMUM IN SIZE (WHERE APPLICABLE).
4. USE ONE FULL TUBE OF FLEXSEAL™ CAULK-GRADE SEALANT OR EVERGUARD® WATER-BLOCK PER DRAIN.

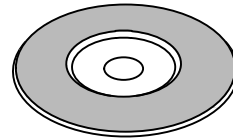
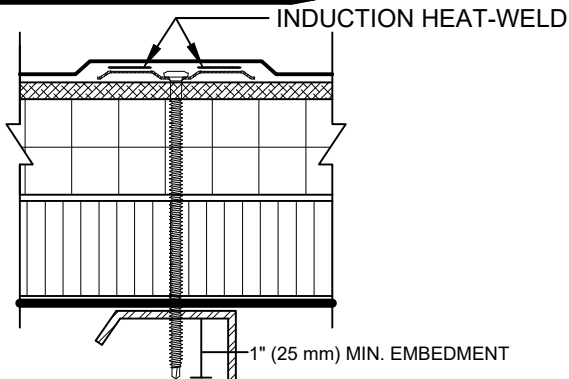
| LEGEND | | DRAIN - STANDARD FLASHING | | | DETAIL |
|--|---------|---------------------------|------------|--------|--------|
|  | SEALANT | | | | 513A |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | PENETRATIONS | 05/17/22 | N.T.S. | |



NOTES:

1. ALLOW 2" [52 mm] CLEARANCE AROUND THE PROJECTION; IF MULTIPLE PROJECTIONS EXIST, ALLOW 1" [25.4 mm] BETWEEN THE PROJECTION & POCKET.
2. THE EXISTING PROJECTION(S) MUST BE CLEAN OF ALL DEBRIS PRIOR TO INSTALLATION.
3. FOUR DRILL-TEC™ PLATES & SCREWS MUST BE FASTENED AROUND PENETRATION.
4. EVERGUARD® POURABLE SEALANT POCKET MUST BE PRIMED WITH TPO PRIMER OR LOW VOC TPO PRIMER.
5. IF THE SEALANT POCKET MUST BE CUT, STRIP IN CUT WITH UNREINFORCED TPO STRIP 4" [102 mm] WIDE MINIMUM AND RUN OUT ONTO DECK SHEET 2" [52 mm] MINIMUM.
6. IF PLATES AND FASTENERS ENCROACH INTO THE SEAM AREA OF THE POCKET, THEN A TARGET PATCH MUST BE ADDED FIRST TO THE COVER FASTENERS.
7. POURABLE SEALANT IS CONSIDERED A MAINTENANCE ITEM AND IS EXCLUDED FROM GUARANTEE COVERAGE.

| LEGEND | | POURABLE SEALANT POCKET | | | DETAIL |
|--|-----------|-------------------------|------------|---------|--------|
|  | HEAT WELD | | | | 525 |
|  | SEALANT | | | | |
| | | ROOF AREA | ISSUE DATE | SCALE | |
| | | PENETRATIONS | 07/26/22 | 6" = 1' | |



DRILL-TEC™ RHINO-BOND®
XHD PLATE



DRILL-TEC™ PURLIN
FASTENER

NOTE:

TPO= YELLOW PLATE
PVC= BLACK PLATE

REINFORCED EVERGUARD®
MEMBRANE (SMOOTH ONLY)

DRILL-TEC™ PURLIN FASTENER &
DRILL-TEC™ RHINO-BOND® XHD PLATE.
SEE NOTE 1.

GAF APPROVED COVER BOARD OR
SECOND LAYER OF INSULATION IF
REQUIRED. SEE NOTE 2.

ENERGYGUARD™
ROOF INSULATION
SEE NOTE 2.

STRUCTURAL PURLIN

EXISTING METAL
ROOF PANELS

APPROVED FLUTE FILLER

AIR/VAPOR RETARDER - AS
REQUIRED

NOTE:

1. REFER TO THE DRILL-TEC™ RHINO-BOND® PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.
3. PRELIMINARY FASTENING MAY BE REQUIRED.

GAF

**DRILL-TEC™ RHINO-BOND® ASSEMBLY
- PURLIN ATTACHMENT**

DRAWING #
100F

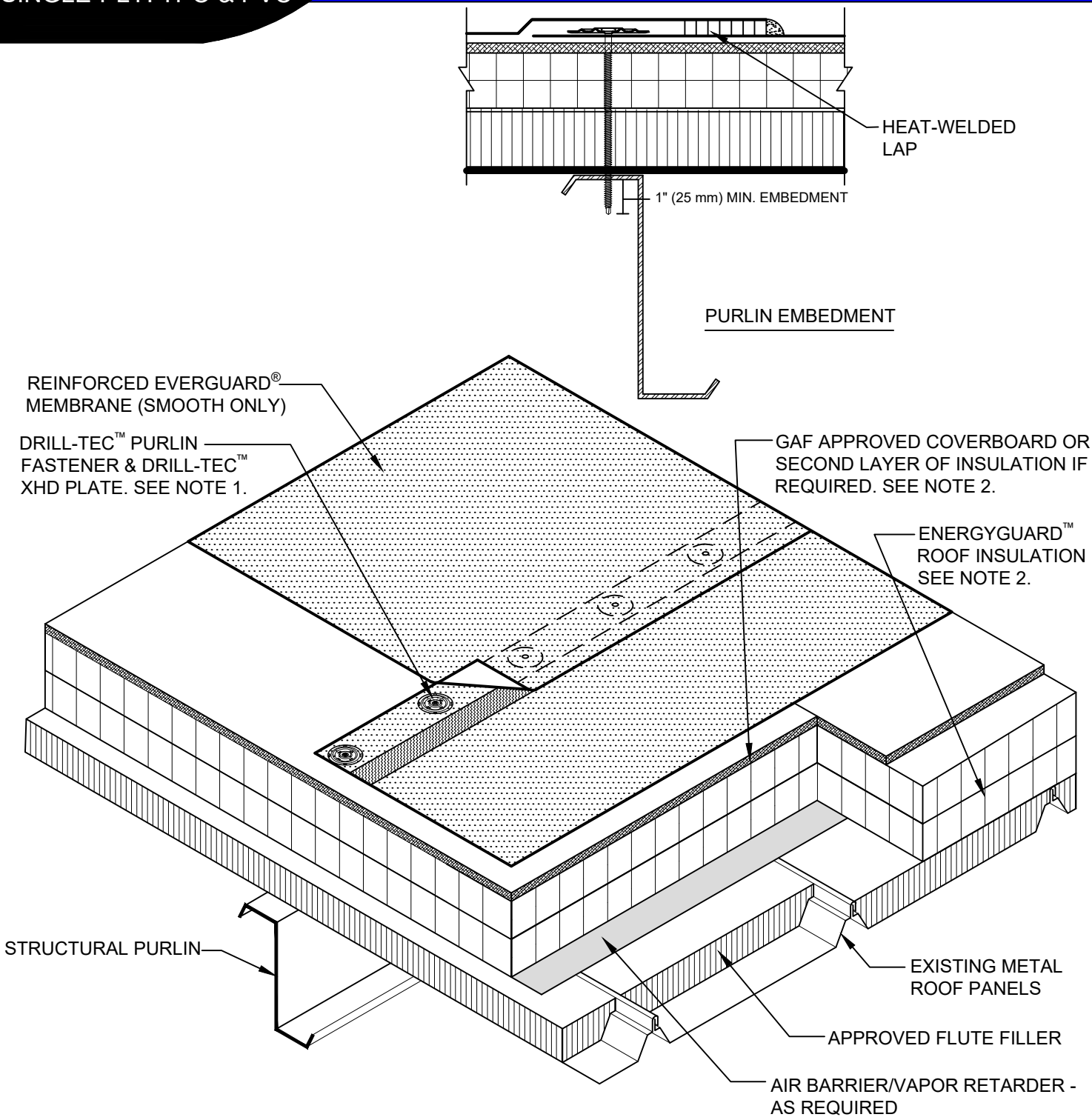
THIS DETAIL APPLIES TO:
RHINO-BOND® SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

HEAT-WELDED



NOTE:

1. RREFER TO THE MECHANICALLY FASTENED PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.
3. PRELIMINARY FASTENING MAY BE REQUIRED.



PURLIN ASSEMBLY - FASTENERS LOCATED IN SEAMS

DRAWING #
100G

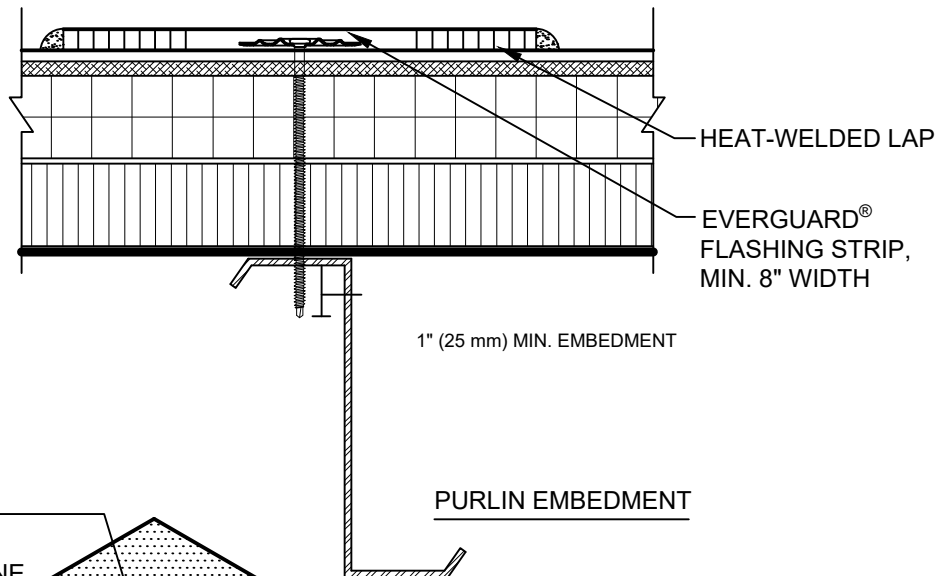
THIS DETAIL APPLIES TO:
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE
8/17/20

SCALE
N.T.S.

LEGEND

 HEAT-WELDED



EVERGUARD® TPO UTILITY FLASHING MEMBRANE (TPO ONLY) OR MIN. 8" (203 mm) WIDE REINFORCED EVERGUARD® MEMBRANE

DRILL-TEC™ PURLIN FASTENER & DRILL-TEC™ XHD PLATE. SEE NOTE 1.

GAF APPROVED COVER BOARD OR SECOND LAYER OF INSULATION IF REQUIRED. SEE NOTE 2.

ENERGYGUARD™ ROOF INSULATION SEE NOTE 2.

STRUCTURAL PURLIN

REINFORCED EVERGUARD® MEMBRANE

EXISTING METAL ROOF PANELS

APPROVED FLUTE FILLER

AIR/VAPOR RETARDER - AS REQUIRED

NOTE:

1. REFER TO THE MECHANICALLY FASTENED PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. INSULATION BOARDS INSTALLED IN SINGLE OR MULTIPLE LAYERS MUST HAVE THE JOINTS BETWEEN THE BOARDS STAGGERED IN ALL DIRECTIONS A MINIMUM OF 6" (152 mm) BETWEEN LAYERS.
3. PRELIMINARY FASTENING MAY BE REQUIRED.

GAF

**MECHANICALLY ATTACHED ASSEMBLY PURLIN DETAIL
- FASTENERS LOCATED IN SEAMS**

DRAWING #
100H

THIS DETAIL APPLIES TO:

MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE

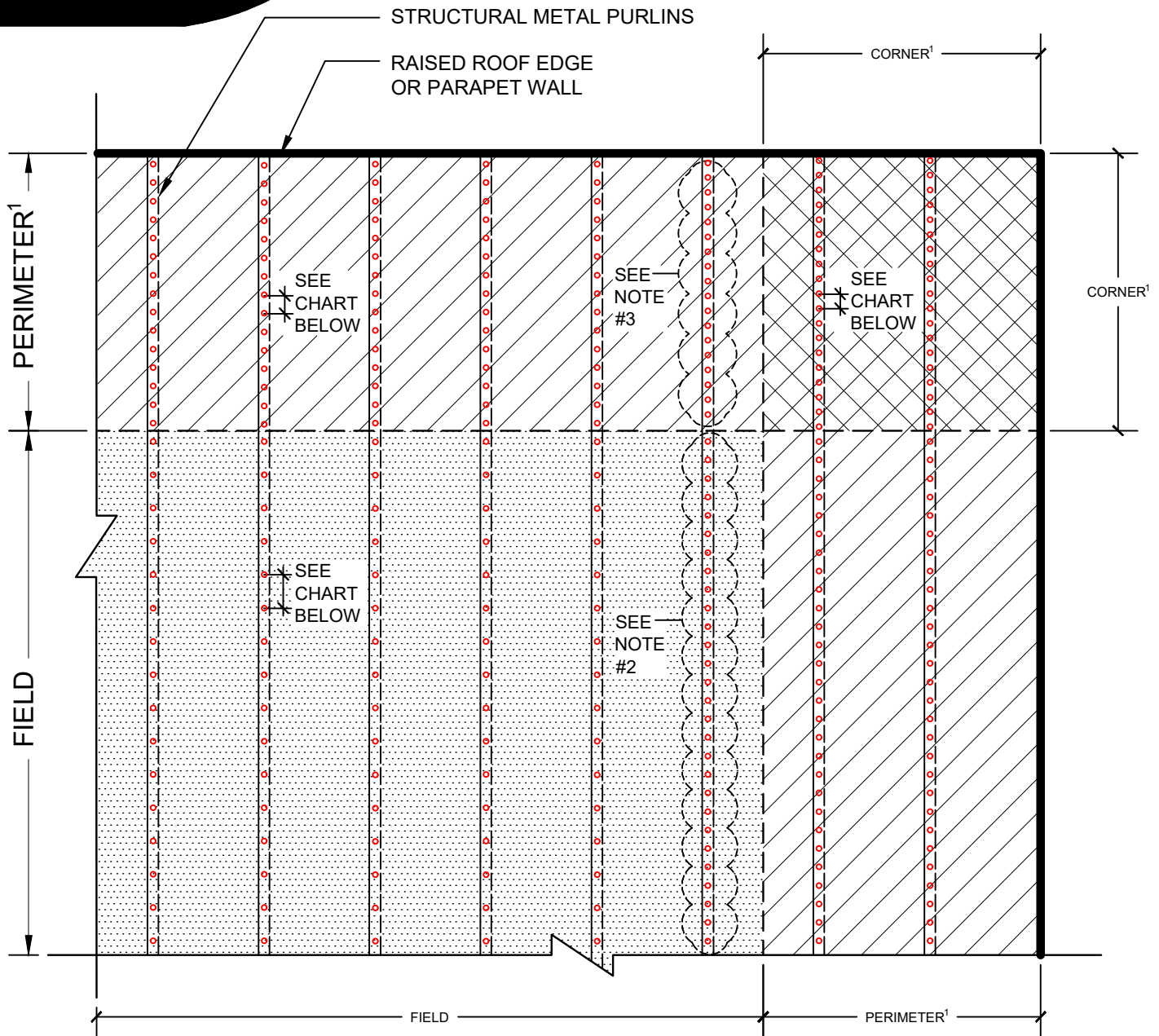
8/17/20

SCALE

N.T.S.

LEGEND

 HEAT-WELDED



| MAXIMUM FASTENER SPACING | | | |
|--------------------------|------------|----------------|-------------|
| PURLIN TYPE | FIELD ZONE | PERIMETER ZONE | CORNER ZONE |
| MIN. 16 GA. | 12" O.C. | 10" O.C. | 8" O.C. |
| MIN. 14 GA. | 18" O.C. | 12" O.C. | 9" O.C. |
| MIN. 12 GA. | 18" O.C. | 12" O.C. | 9" O.C. |

NOTE:

1. SEE EVERGUARD® SPEC MANUAL TO DETERMINE PERIMETER AND CORNER ZONES.
2. DEFAULTS TO PERIMETER FASTENING RATE.
3. DEFAULTS TO CORNER FASTENING RATE.

GAF

PURLIN FASTENING ZONES - MECHANICALLY ATTACHED ASSEMBLY

DRAWING #
108B

THIS DETAIL APPLIES TO:

MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE

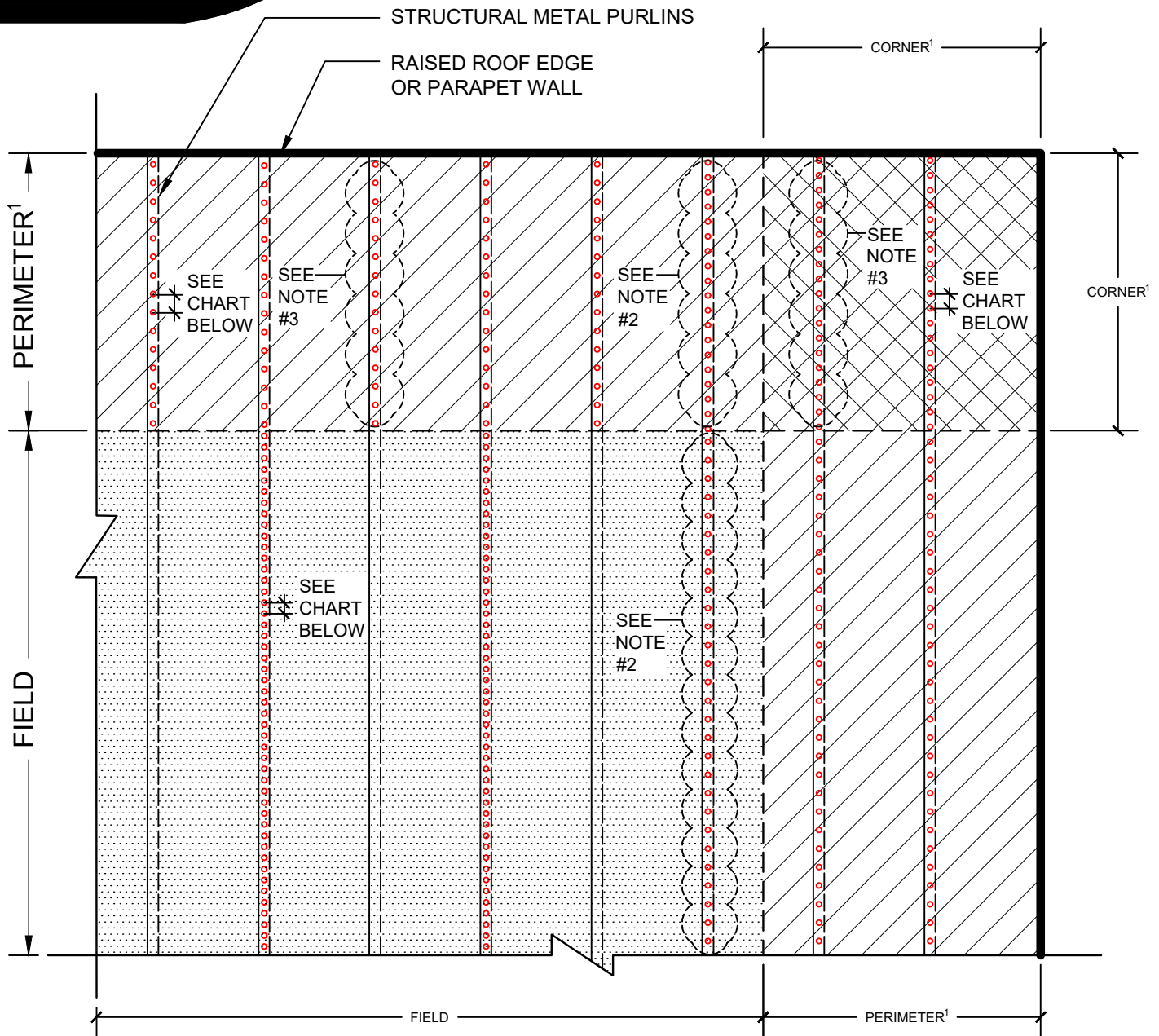
8/17/20

SCALE

N.T.S.

LEGEND

- FIELD ZONE
 PERIMETER ZONE
 CORNER ZONE



| MAXIMUM FASTENER SPACING | | | |
|--------------------------|------------|----------------|-------------|
| PURLIN TYPE | FIELD ZONE | PERIMETER ZONE | CORNER ZONE |
| MIN. 16 GA. | 6" O.C. | 10" O.C. | 8" O.C. |
| MIN. 14 GA. | 9" O.C. | 12" O.C. | 9" O.C. |
| MIN. 12 GA. | 9" O.C. | 12" O.C. | 9" O.C. |

NOTE:

1. SEE EVERGUARD® SPEC MANUAL TO DETERMINE PERIMETER AND CORNER ZONES.
2. DEFAULTS TO PERIMETER FASTENING RATE.
3. DEFAULTS TO CORNER FASTENING RATE.

GAF
EVERY OTHER PURLIN FASTENING ZONES
- MECHANICALLY ATTACHED ASSEMBLY

 DRAWING #
108C

THIS DETAIL APPLIES TO:

MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE

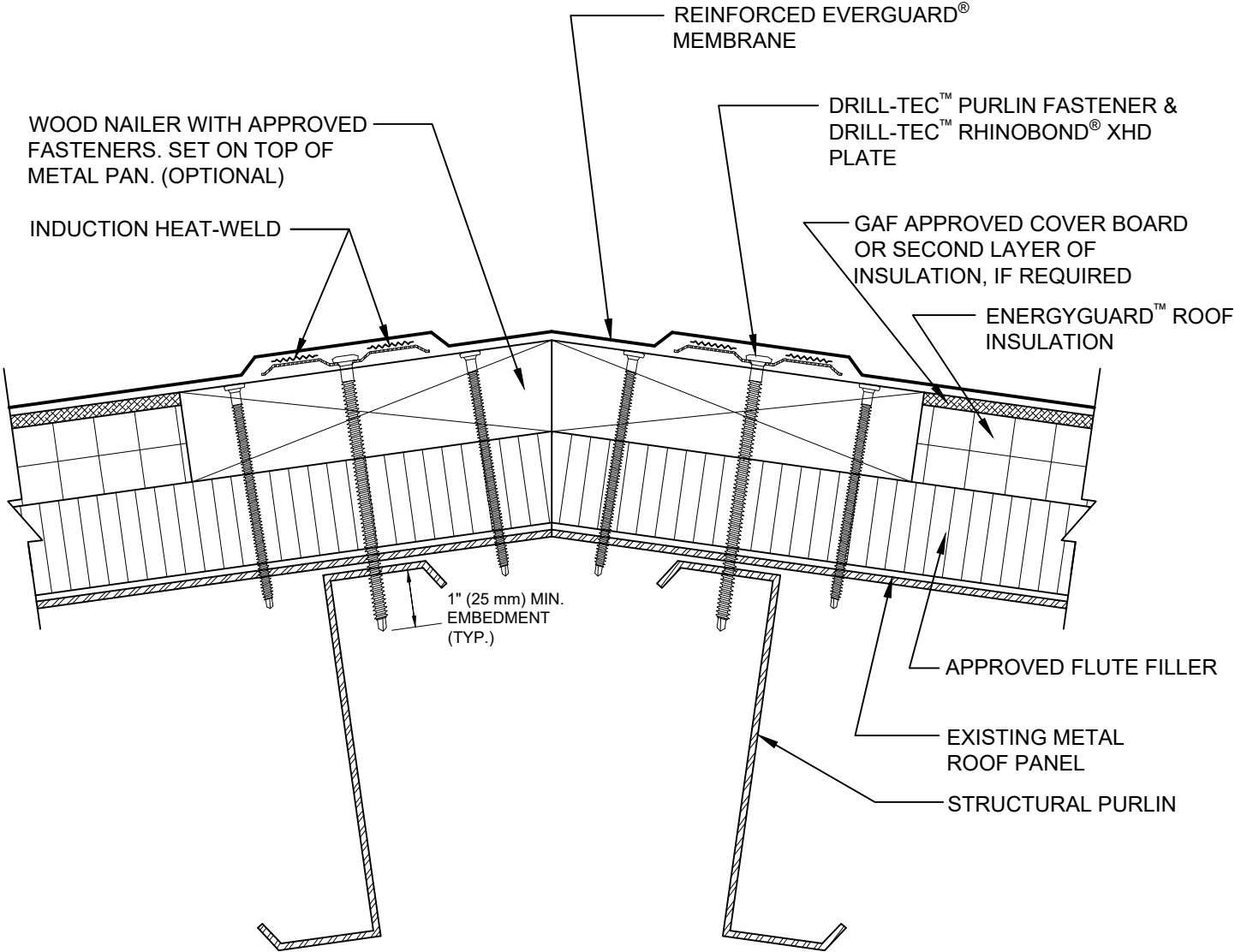
8/17/20

SCALE

N.T.S.

LEGEND

- FIELD ZONE
- PERIMETER ZONE
- CORNER ZONE



NOTE:

- 1. REFER TO THE DRILL-TEC™ RHINOBOND® PURLIN ATTACHED SYSTEMS TABLE FOR DETAILED INSTALLATION REQUIREMENTS.
- 2. REFER TO APPROPRIATE EVERGUARD® 100 SERIES LAP DETAIL.



RIDGE FLASHING
- DRILL-TEC™ RHINOBOND® & PURLIN ATTACHMENT

DRAWING #
110F

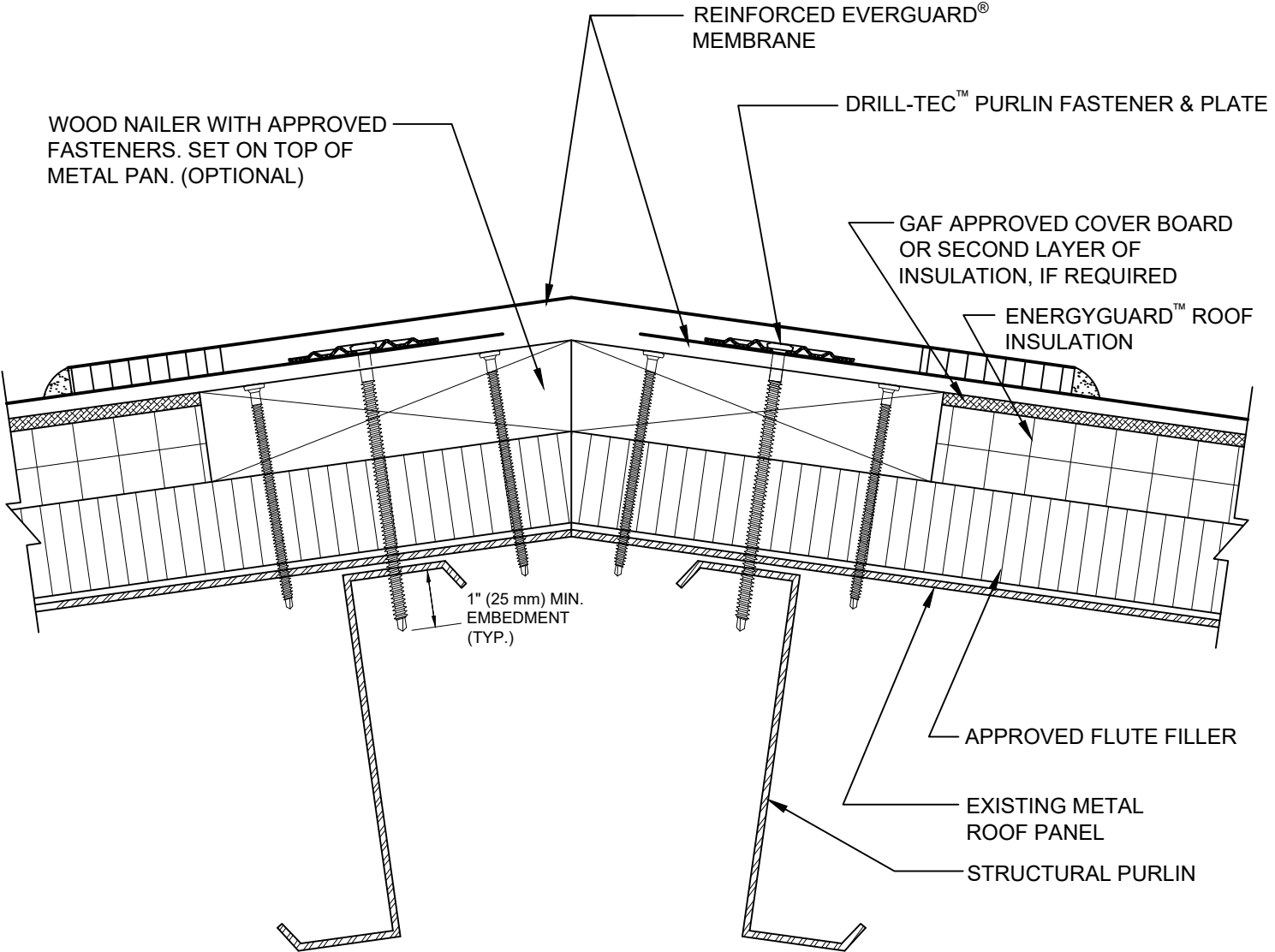
THIS DETAIL APPLIES TO:
INDUCTION WELDED
SYSTEMS

ISSUE / REVISION DATE
8/11/21

SCALE
N.T.S.

LEGEND

~~~~~ HEAT-WELDED



NOTE:

1. REFER TO THE MECHANICALLY FASTENED PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. REFER TO APPROPRIATE EVERGUARD® 100 SERIES LAP DETAIL.



RIDGE FLASHING  
- PURLIN ATTACHMENT


DRAWING #  
**110G**

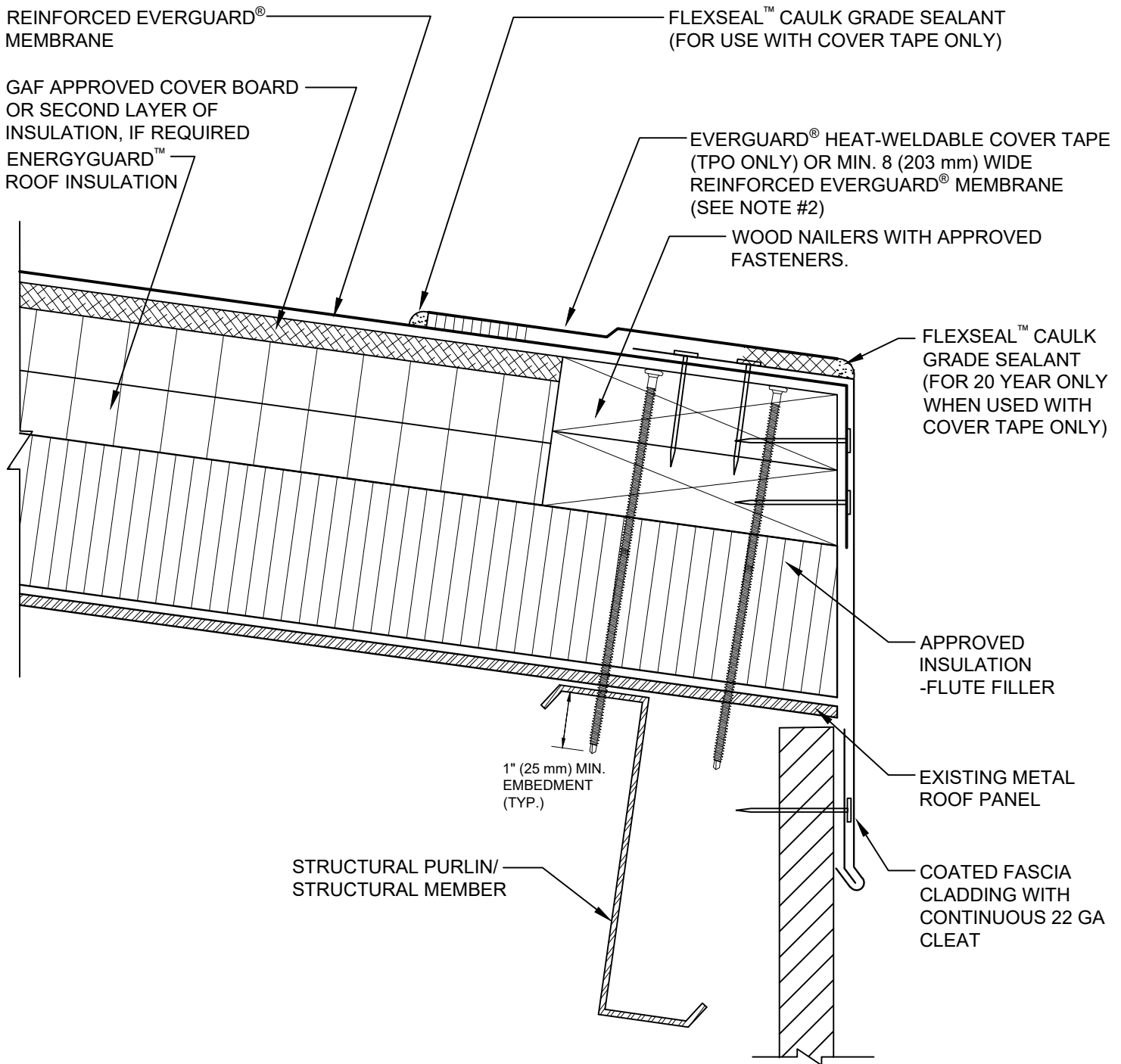
THIS DETAIL APPLIES TO:  
MECHANICALLY ATTACHED SYSTEMS

ISSUE / REVISION DATE  
**8/11/21**

SCALE  
N.T.S.

LEGEND

 HEAT-WELDED

**NOTE:**

1. REFER TO THE MECHANICALLY PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. USE STRIPPING DETAIL APPROPRIATE TO THE MEMBRANE, METAL TYPE AND GUARANTEE PERIOD. REFER TO EVERGUARD® 200 SERIES DETAILS.
3. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.

**GAF**

### METAL ROOF EDGE DETAIL - PURLIN ATTACHEMNT

DRAWING #  
**202F**

THIS DETAIL APPLIES TO:  
RHINOBOND® SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

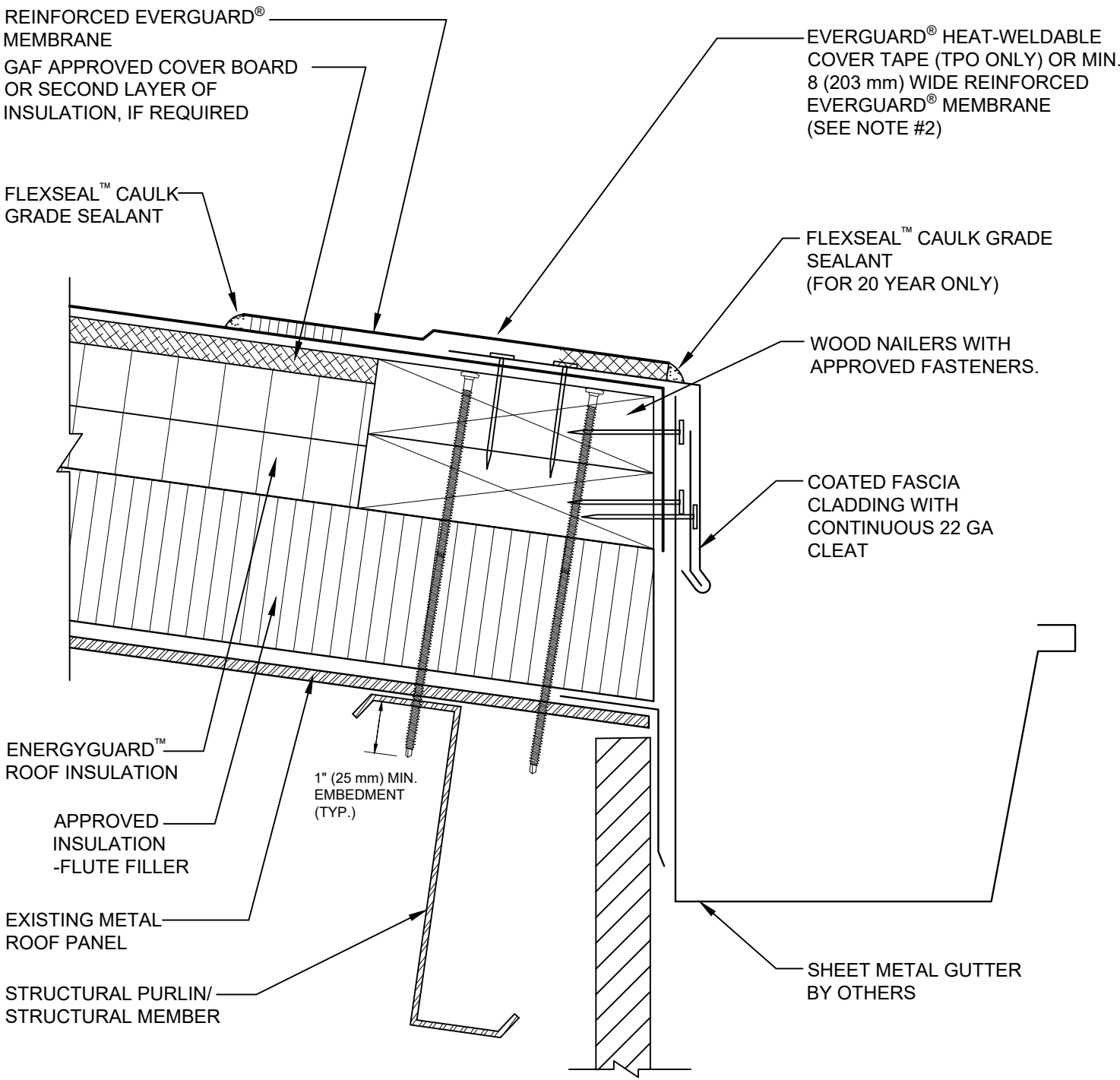
ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

**LEGEND**

- HEAT-WELDED LAP
- PEEL-N-STICK ADHESIVE (SEE NOTE #3)





NOTE:

1. REFER TO THE MECHANICALLY PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. USE STRIPPING DETAIL APPROPRIATE TO THE MEMBRANE, METAL TYPE AND GUARANTEE PERIOD. REFER TO EVERGUARD® 200 SERIES DETAILS.
3. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.



METAL ROOF GUTTER DETAIL  
- PURLIN ATTACHEMNT

DRAWING #  
**202G**

THIS DETAIL APPLIES TO:  
RHINO BOND® SYSTEMS  
MECHANICALLY ATTACHED SYSTEMS

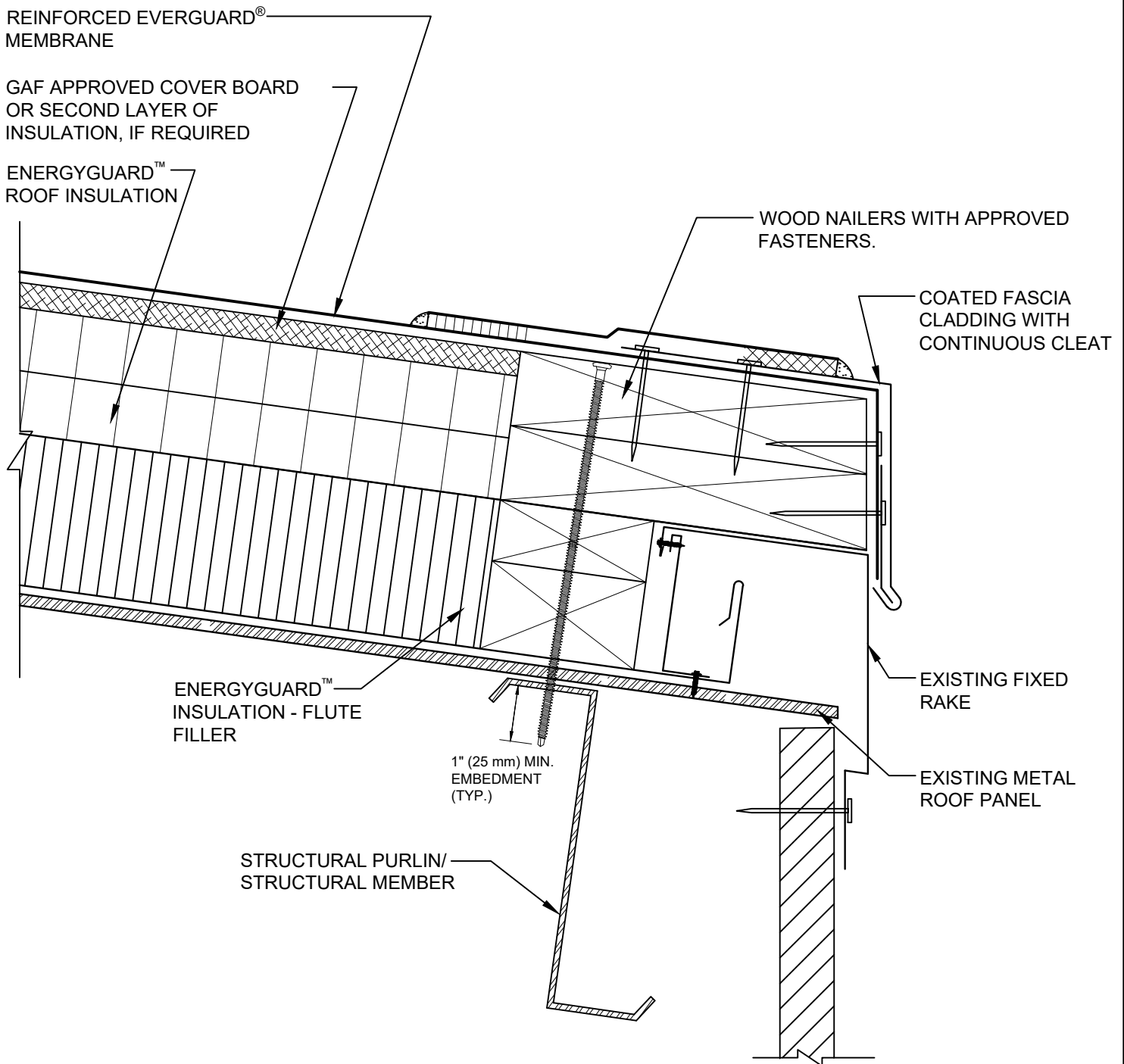
ISSUE / REVISION DATE  
**8/17/20**

SCALE  
N.T.S.

LEGEND

- HEAT-WELDED LAP
- PEEL-N-STICK ADHESIVE (SEE NOTE #3)



**NOTE:**

1. REFER TO THE MECHANICALLY PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. USE STRIPPING DETAIL APPROPRIATE TO THE MEMBRANE, METAL TYPE AND GUARANTEE PERIOD. REFER TO EVERGUARD® 200 SERIES DETAILS.
3. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.

**GAF**
**METAL ROOF EDGE DETAIL**  
**- FIXED RAKE EDGE**

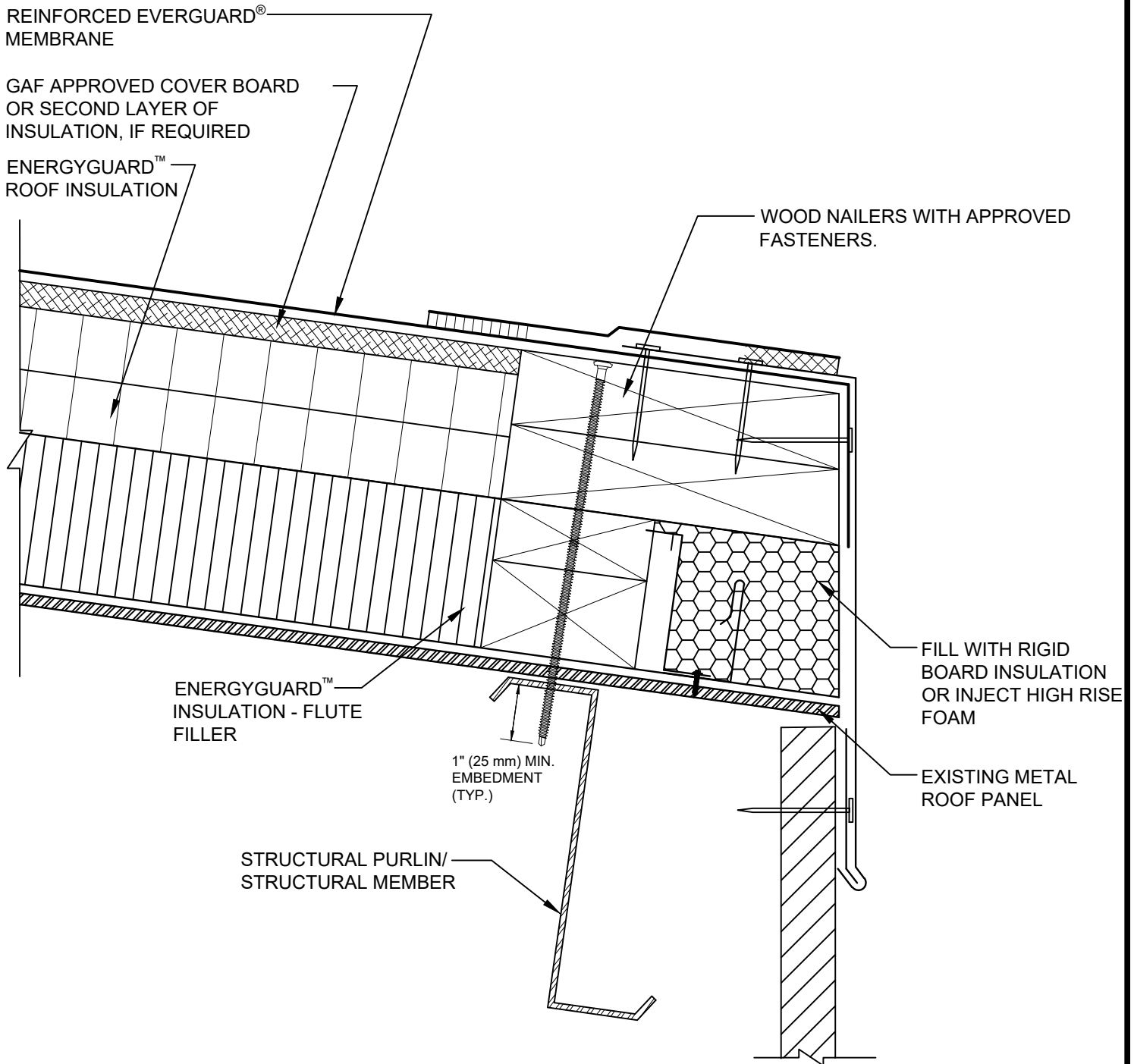
 DRAWING #  
**202H**

 THIS DETAIL APPLIES TO:  
 RHINO BOND® SYSTEMS  
 MECHANICALLY ATTACHED SYSTEMS

 ISSUE / REVISION DATE  
**8/17/20**

 SCALE  
 N.T.S.
**LEGEND**

HEAT-WELDED LAP  
 PEEL-N-STICK ADHESIVE  
 (SEE NOTE #3)

**NOTE:**

1. REFER TO THE MECHANICALLY PURLIN ATTACHMENT TABLE FOR ADDITIONAL INFORMATION.
2. USE STRIPPING DETAIL APPROPRIATE TO THE MEMBRANE, METAL TYPE AND GUARANTEE PERIOD. REFER TO EVERGUARD® 200 SERIES DETAILS.
3. REMOVE EXISTING FLOATING RAKE AND CLIP.
4. CLEAN METAL AND MEMBRANE WITH EVERGUARD® TPO SEAM CLEANER AND ALLOW TO DRY. ONCE DRY, PRIME METAL AND MEMBRANE WITH EVERGUARD® TPO PRIMER BEFORE INSTALLING EVERGUARD® TPO COVER TAPE.

**GAF**
**METAL ROOF EDGE DETAIL**  
**- FLOATING RAKE EDGE**

 DRAWING #  
**2021**

 THIS DETAIL APPLIES TO:  
 RHINO-BOND® SYSTEMS  
 MECHANICALLY ATTACHED SYSTEMS

 ISSUE / REVISION DATE  
**8/17/20**

 SCALE  
 N.T.S.
**LEGEND**

HEAT-WELDED LAP  
 PEEL-N-STICK ADHESIVE  
 (SEE NOTE #3)

The GAF logo consists of the letters "GAF" in a bold, white, sans-serif font, centered within a solid red square.

We  
protect  
what  
matters  
most™