FORTIFIED
A PROGRAM OF IBHS
™

STANDARD DETAILS



FORTIFIED ROOF | FORTIFIED SILVER | FORTIFIED GOLD

FOR USE WITH THE 2025 FORTIFIED HOME STANDARD

Version 2024.1

Hurricane

FORTIFIED Home Standard Details – Hurricane Set

For use with the 2025 FORTIFIED Home™ Standard

Table of Contents

		Applicable Level		
Detail Number	**Detail Title**	**Roof**	**Silver**	**Gold**
F-G-1	Corrosion Protection Requirements	✓	✓	✓
F-G-2	Roof and Wall Zone Diagram	✓	✓	✓
F-RS-1	Roof Deck Attachment - Sawn Lumber or Wood Board Roof Deck with No Gaps	✓	✓	✓
F-RS-2	Hurricane and High Wind - New Construction Roof Deck Attachment - Structural Wood Panels	✓	✓	✓
F-SRD-1	Roof Deck Attachment and Sealed Roof Deck from Within Using Spray Foam	✓	✓	✓
F-SRD-2	Steep Slope Sealed Roof Deck - Flashing Tape and Underlayment- Shingle or Metal Roof Covers	✓	✓	✓
F-SRD-2A	Steep Slope Sealed Roof Deck - Flashing Tape and Underlayment- Shingle or Metal Roof Covers Using 40 to 42 Inchwide Synthetic Underlayment	✓	✓	✓
F-SRD-2B	Steep Slope Sealed Roof Deck - Flashing Tape and Underlayment- Shingle or Metal Roof Covers Using 48 Inchwide Synthetic Underlayment	✓	✓	✓
F-SRD-2C	Steep Slope Sealed Roof Deck - Flashing Tape and Underlayment- Shingle or Metal Roof Covers Using 60 Inchwide Synthetic Underlayment	✓	✓	✓
F-SRD-3	Steep Slope Sealed Roof Deck - Two Layers Felt Underlayment - Shingle or Metal Roof Covers	✓	✓	✓
F-SRD-4	Steep Slope Sealed Roof Deck - Self-Adhered Membrane (Showing Bond Break for Asphalt Shingles) - Shingle and Metal Roof Covers	✓	✓	✓
F-SRD-5	Steep Slope Sealed Roof Deck - Flashing Tape, Underlayment and Roof Tile Cap Sheet - Concrete and Clay Tile Roof Covers	✓	✓	✓
F-SRD-6	Steep Slope Sealed Roof Deck - Self-Adhered Membrane - Concrete and Clay Tile Roof Covers	✓	✓	✓
F-SRD-7	Steep Slope Sealed Roof Deck – Two Layers Synthetic Underlayment (40" and 48" Wide Rolls)	✓	✓	✓
F-SRD-8	Steep Slope Sealed Roof Deck – Two Layers Synthetic Underlayment (60" Wide Roll)	✓	✓	✓
F-DE-1	Hurricane and High Wind - Drip Edge Installation Over Underlayment	✓	✓	✓
F-RC-1	Asphalt Shingle Installation Guidance for Steep Slope - Option 1: Peel and Stick Starter Strip Installation at Eave or Rake	✓	✓	✓
F-RC-2	Asphalt Shingle Installation Guidance for Steep Slope - Option 2: Shingle Strip Starter Installation at Eave or Rake	✓	✓	✓
F-RC-3	Asphalt Shingle Installation Guidance for Steep Slope - Option 3: Shingles Set Directly in Flashing Cement at Rake Only	✓	✓	✓
F-RR-1	Re-Roofing Deck Replacement Fastening Detail	✓	✓	✓
F-RR-2	Re-Roofing New Scab Member Detail for Damaged or Deteriorated Wood Framing Member	✓	✓	✓
F-RR-3	Hurricane and High Wind- Re-Nailing the Roof Deck (Wood Structural Panels)	✓	✓	✓
F-RR-5	Fastening Wood Structural Panel Roof Sheathing Over Existing 1x Roof Deck Boards with Gaps	✓	✓	✓
F-GS-1	Temporary Gable Vent Shuttering	✓	✓	✓
F-GE-1	Prescriptive Gable End Outlooker Framing and Anchorage	N/A	✓	✓
F-S-1	Soffit Retrofit Detail	N/A	✓	✓
F-CTD-1	Prescriptive Chimney Tie-Down Detail for Chimneys up to 5 ft	N/A	✓	✓

FORTIFIED Home Standard Details

Naming Convention

FORTIFIED Home Standard Detail numbers are comprised of three alphanumeric identifications to provide general categorization:

1. First alphabetic identification – FORTIFIED Detail:
    a. F = FORTIFIED

2. Second alphabetic identification – Secondary Category
    a. G = General Information
    b. RS = Roof Sheathing
    c. SRD = Sealed Roof Deck
    d. DE = Drip Edge
    e. RC = Roof Cover
    f. RR = Re-Roof
    g. GS = Gable Shuttering
    h. GE = Gable End
    i. S = Soffit
    j. CTD = Chimney Tie Down

3. Numeric identification – chronological order detail was completed

    Example: F-RS-1
    Fortified Detail → **R**oof **S**heathing Detail→ First (**1**) Detail in this category

FORTIFIED HOME™

Corrosion Protection Requirements for Fasteners & Connectors in Coastal Regions

For all connections described in this table: if corrosion is observed at time of re-designation, designation may not be renewed.

Requirements & Best Practices for FORTIFIED Roof™ Designations

	REQUIREMENTS		BEST PRACTICES
	Distance to saltwater shoreline[1]		*Distance to brackish water shoreline*
ROOF CONNECTIONS	**0-300 ft**	**300-3000 ft**	**0-300 ft**
Roofing nails for shingles Concrete and clay roof tile fasteners Roof vent fasteners	Category A	Category B (or better)	Category B (or better)
Metal roof system including panels and exposed fasteners, clips, etc.	Follow manufacturer's corrosion resistance guidance for coastal areas. If not provided by manufacturer, the following corrosion resistance categories may be accepted for exposed fasteners and clips		
	Category A	Category B (or better)	
Fasteners used for attachment of underlayment to roof deck	Category B (or better)		
Roof-mounted equipment exposed connections and fasteners	Category A	Category B (or better)	

Requirements and Best Practices for FORTIFIED Silver™ and FORTIFIED Gold™ Designations

	REQUIREMENTS		BEST PRACTICES
	Distance to saltwater shoreline[1]		*Distance to brackish water shoreline*
EXTERIOR EXPOSED CONNECTIONS (including under soffits and elevated foundations)	**0-300 ft**	**300-3000 ft**	**0-300 ft**
Silver: • Soffit fasteners • Exposed attached structure connectors, anchors, fasteners	Category A *Aluminum Soffits* ***NOT*** *Allowed*	Category B (or better) *Aluminum Soffits Allowed*	Category B (or better)
Gold: Exposed CLP connectors, anchors, fasteners			

	BEST PRACTICES		BEST PRACTICES
	Distance to saltwater shoreline[1]		*Distance to brackish water shoreline*
INTERIOR CONNECTIONS (including enclosed in attic or within wall cavity)	**0-300 ft**	**300-3000 ft**	**0-300 ft**
Silver: • Gable bracing metal connectors and fasteners • Gable outlooker hangers, clips and fasteners • Chimney framing metal connectors and fasteners	Category B (or better)		Category C (or better)
Gold: Enclosed CLP connectors, anchors, fasteners	Category C (or better)		

Corrosion Resistance Categories[2,3]

CATEGORY A - STAINLESS STEEL OR EQUIVALENT

Metal connectors:
• Stainless steel per ASTM A316

Fasteners:
• Stainless steel per ASTM A304 or A316
• Proprietary coated fasteners require documentation of equivalent corrosion protection performance to stainless steel, such as equivalence testing per **ICC-ES AC257 Exposure Condition 4**, or other comparative testing documentation

CATEGORY B - ENHANCED GALVANIZED OR EQUIVALENT

Metal connectors:
• Galvanized per ASTM A653 with G185 coating
• Hot-dip galvanized per ASTM A123

Fasteners with diameters over 3/8 in.:
• Hot-dip galvanized per ASTM A153 Class C

Fasteners with diameters up to 3/8 in. shall meet one of the following:
• Hot-dip galvanized per ASTM A153 Class D
• Galvanized per ASTM A641 Class 3
• Per ASTM G85, Annex 5, Corrosion resistance exhibiting not more than 5% red rust after the following:
  — **for nails:** 280 hours
  — **for roof tile fasteners:** 1000 hours
  — **for other carbon steel fasteners:** 360 hours
• In lieu of testing listed above, proprietary coated fasteners require documentation of equivalent or superior corrosion protection performance to the galvanization options listed above, such as equivalence testing per **ICC-ES AC257 Exposure Condition 4**, or other comparative testing documentation
• Testing per ASTM B117 with corrosion resistance exhibiting not more than 5% red rust after 1,000 hours exposure may be accepted if no other testing is available

CATEGORY C - STANDARD GALVANIZED

Metal connectors:
• Galvanized per ASTM A653 with G90 coating

Fasteners:
• Galvanized per ASTM A641 Class 1

NOTES

1. For the purposes of FORTIFIED Home designation, "saltwater shoreline" shall be considered as the ocean or gulf coastline along the mainland United States including seaward island coastlines. This includes the Atlantic, Pacific, and Gulf of Mexico coastlines, as well as the coastline of any Bay or Sound with no land barrier separating it from being completely open to the ocean or Gulf of Mexico. Distances are measured from the closest feature of the subject building to the ocean or gulf coastline.
2. Fastener and connector materials and coatings must be compatible with materials and coatings they come into contact with to prevent galvanic corrosion due to dissimilar materials.
3. Fasteners in contact with chemically treated wood shall be in accordance with the requirements of the IBC/IRC or locally adopted code as applicable.

Effective November 1, 2021

APPLICABLE STANDARDS: FORTIFIED HOME™ - HURRICANE (2025), FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION: CORROSION PROTECTION REQUIREMENTS

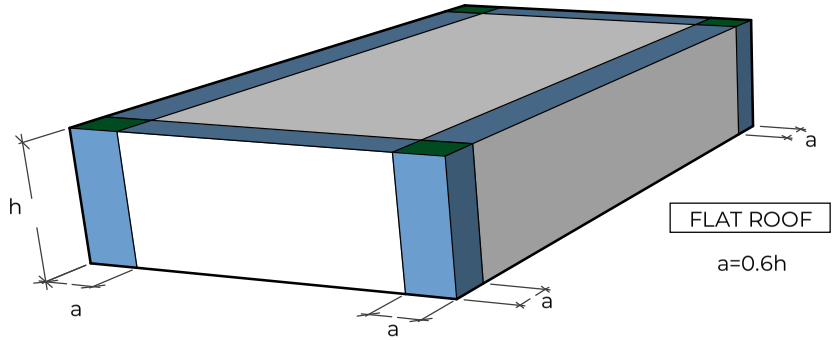
DRAWING #: F-G-1

DATE: 11/01/2024

INTERIOR ZONES
ROOFS - ZONE 1/ WALLS - ZONE 4

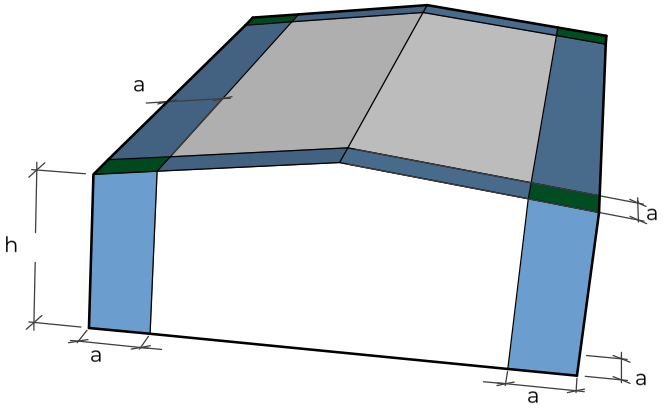
END ZONES
ROOFS - ZONE 2/ WALLS - ZONE 5

CORNER ZONES
ROOFS - ZONE 3



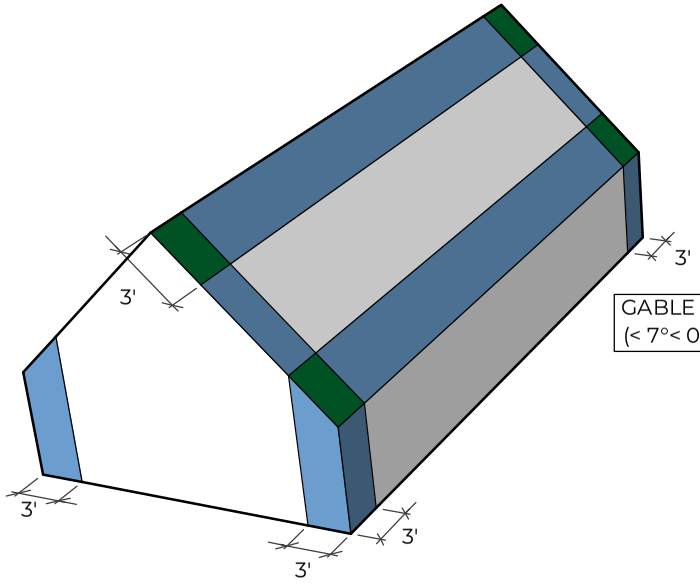
FLAT ROOF

a=0.6h

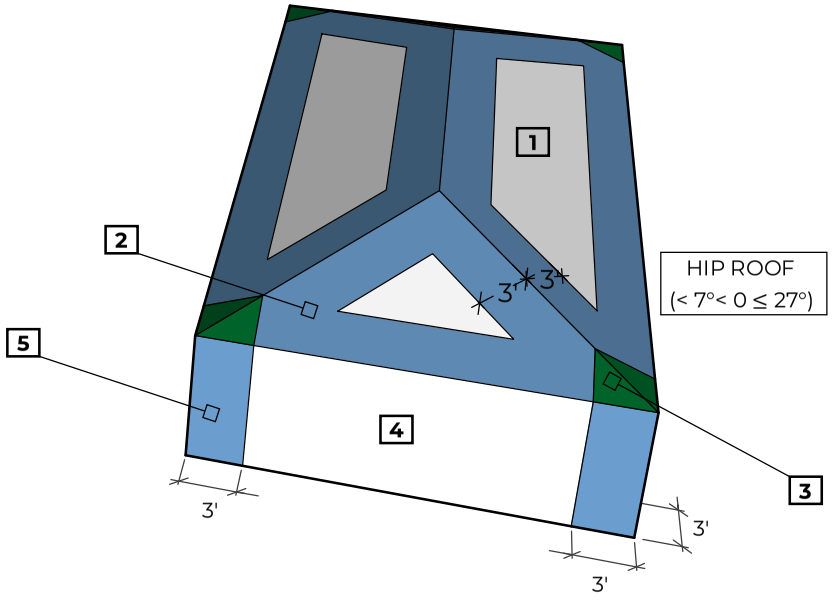


GABLE ROOF
(0 ≤ 7°)

a= 0.6h



GABLE ROOF
(< 7°< 0 ≤ 45°)



HIP ROOF
(< 7°< 0 ≤ 27°)

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

FORTIFIED HOME

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

ROOF AND WALL ZONE DIAGRAM

DRAWING #:

F-G-2

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. APPLICABLE FOR SHINGLE OR METAL ROOF COVERS.
3. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.
4. FOR **RE-ROOFING**, EXISTING NAILING MUST BE DOCUMENTED TO MEET TABLE F-RS-1 OR BOARDS MUST BE RE-NAILED PER TABLE F-RS-1. FOR **NEW CONSTRUCTION**, NAILING MUST MEET TABLE F-RS-1. RING SHANK NAILS OR SMOOTH SHANK NAILS WITH EQUAL DIAMETER AND EMBEDMENT ARE ACCEPTABLE.

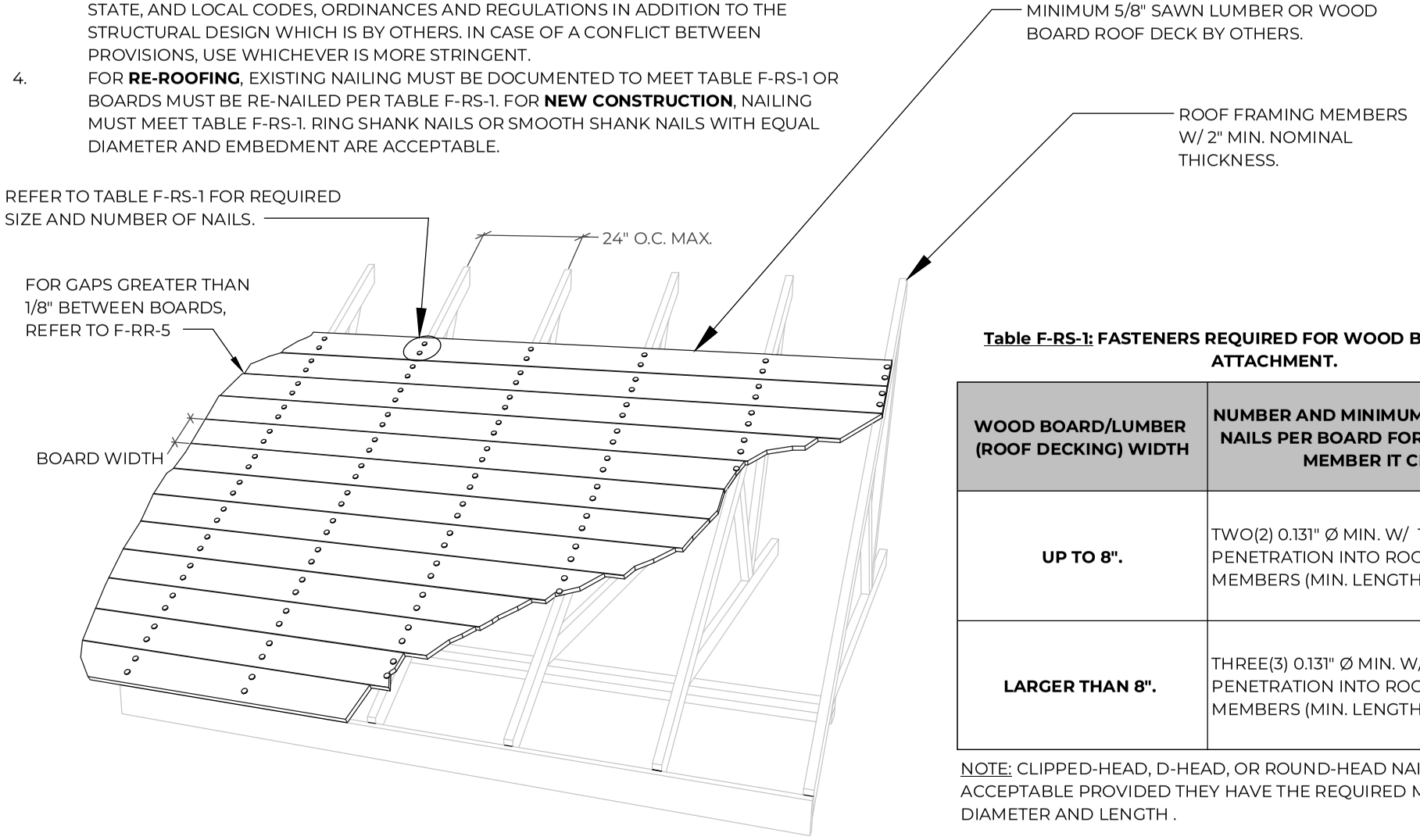


Table F-RS-1: FASTENERS REQUIRED FOR WOOD BOARD DECKING ATTACHMENT.

WOOD BOARD/LUMBER (ROOF DECKING) WIDTH	NUMBER AND MINIMUM DIMENSIONS OF NAILS PER BOARD FOR EACH FRAMING MEMBER IT CROSSES
UP TO 8".	TWO(2) 0.131" Ø MIN. W/ 1 - 5/8" PENETRATION INTO ROOF FRAMING MEMBERS (MIN. LENGTH OF NAIL= 2 - 1/2")
LARGER THAN 8".	THREE(3) 0.131" Ø MIN. W/ 1 - 5/8" PENETRATION INTO ROOF FRAMING MEMBERS (MIN. LENGTH OF NAIL= 2 - 1/2")

NOTE: CLIPPED-HEAD, D-HEAD, OR ROUND-HEAD NAILS SHALL BE ACCEPTABLE PROVIDED THEY HAVE THE REQUIRED MINIMUM DIAMETER AND LENGTH .

FORTIFIED HOME

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

ROOF DECK ATTACHMENT - SAWN LUMBER OR WOOD BOARD ROOF DECK WITH NO GAPS

DRAWING #:

F-RS-1

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

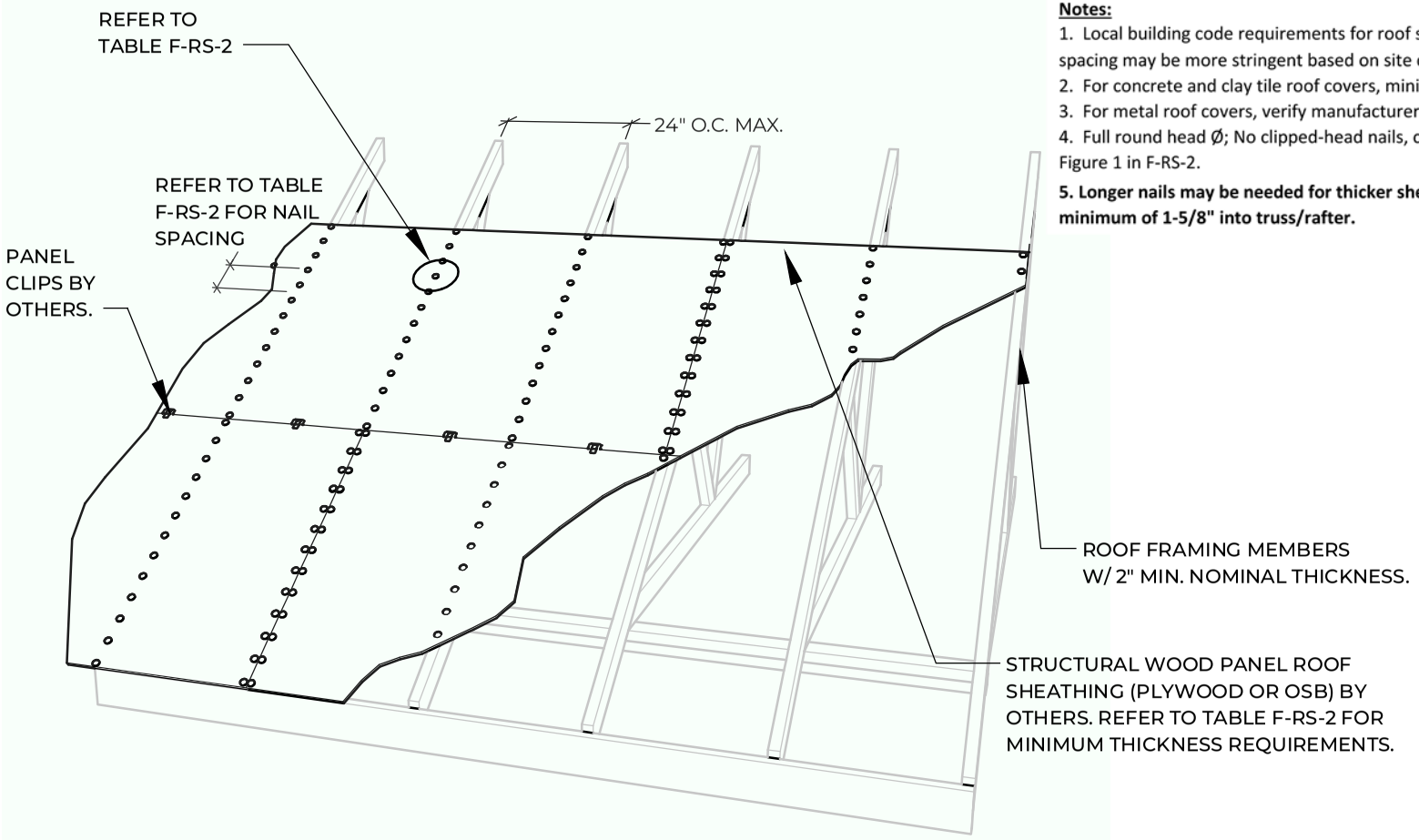
Table F-RS-2: MINIMUM REQUIREMENTS FOR ROOF SHEATHING THICKNESS AND FASTENING

ASCE Edition	Minimum Roof Sheathing Thickness[1,2,3]	Minimum Nail Size/Type[1,4,5]	Maximum Nail Spacing (All Roof Areas)[1]
ASCE 7-22 *and prior*	7/16" *See Notes 1, 2, 3*	RSRS-01; 0.113" dia. x 2-3/8" Roof Sheathing Ring Shank Nail	4" O.C. *(13 nails per 4-ft section)*

Notes:

1. Local building code requirements for roof sheathing thickness and/or nail size/attachment spacing may be more stringent based on site conditions.
2. For concrete and clay tile roof covers, minimum required sheathing thickness is 15/32".
3. For metal roof covers, verify manufacturer's sheathing thickness requirements are met.
4. Full round head Ø; No clipped-head nails, common nails or staples shall be allowed. Refer to Figure 1 in F-RS-2.

5. Longer nails may be needed for thicker sheathing. Nail must be long enough to penetrate a minimum of 1-5/8" into truss/rafter.



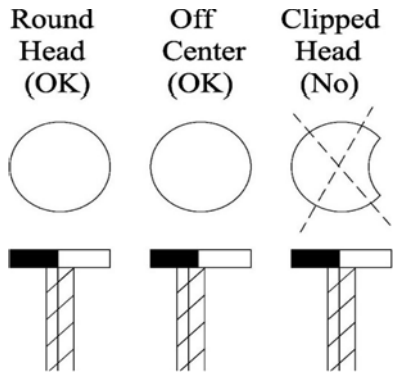


FIGURE 1.

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

HURRICANE AND HIGH WIND - NEW CONSTRUCTION ROOF DECK ATTACHMENT - STRUCTURAL WOOD PANELS

DRAWING #: F-RS-2

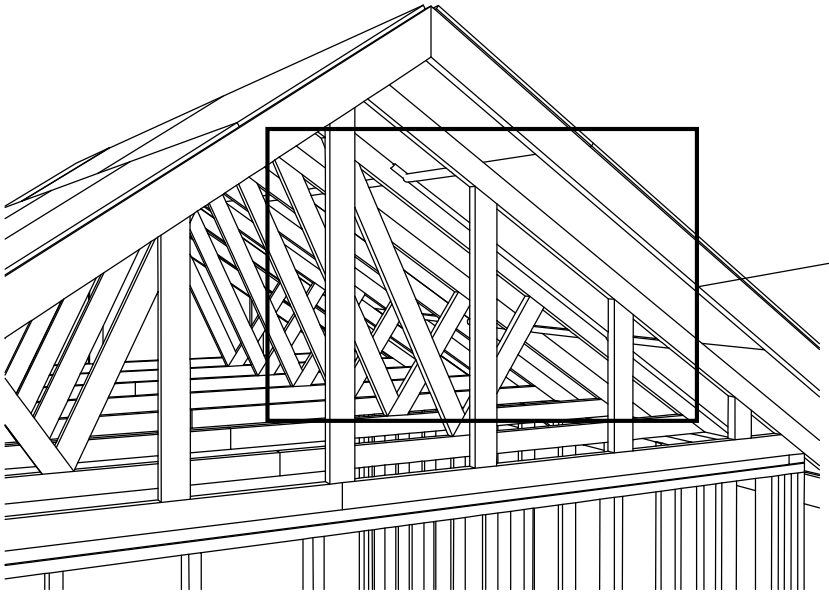
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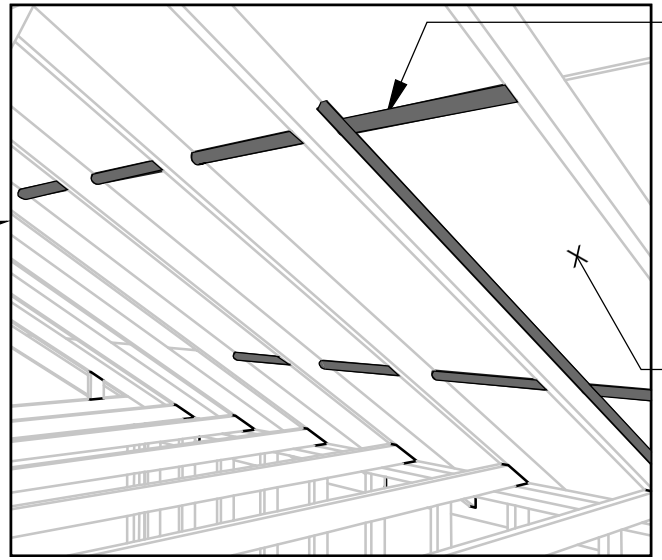
MINIMUM REQUIREMENTS FOR SPRAY ADHESIVES:

1. PRODUCT MUST BE TESTED AND EVALUATED IN ACCORDANCE WITH EITHER ASTM E330, STANDARD TEST METHOD FOR STRUCTURAL PERFORMANCE OF EXTERIOR WINDOWS, DOORS, SKYLIGHTS, AND CURTAIN WALLS BY UNIFORM STATIC AIR PRESSURE DIFFERENCE (APPLIED TO ROOF SHEATHING) OR TAS 202-94, CRITERIA FOR TESTING IMPACT AND NON-IMPACT RESISTANT BUILDING ENVELOPE COMPONENTS USING UNIFORM STATIC AIR PRESSURE. THE MINIMUM ALLOWABLE DESIGN UPLIFT PRESSURE MUST BE GREATER THAN OR EQUAL TO 110 PSF AND THE PROOF TEST PRESSURE ACHIEVED WITHOUT FAILURE OR STRUCTURAL DISTRESS MUST BE GREATER THAN OR EQUAL TO 165 PSF.
2. ADHESIVE MUST BE A TWO-COMPONENT SPRAY POLYURETHANE FOAM SYSTEM WITH A MINIMUM CORE DENSITY OF 1.5-3.0 PCF IN ACCORDANCE WITH ASTM D1622, STANDARD TEST METHOD FOR APPARENT DENSITY OF RIGID CELLULAR PLASTICS.
3. SPRAY POLYURETHANE FOAM ADHESIVE SYSTEM MUST BE INSTALLED BY A PROPERLY TRAINED AND QUALIFIED APPLICATOR IN ACCORDANCE WITH THE MANUFACTURER'S MAINTENANCE AND INSTALLATION GUIDELINES.
4. DOCUMENTATION FROM THE INSTALLING CONTRACTOR, ON COMPANY LETTERHEAD, IDENTIFYING THE MANUFACTURER AND PRODUCT USED FOR THE IMPROVED ROOF SHEATHING ATTACHMENT/SEALED ROOF DECK MUST BE PROVIDED TO THE CERTIFIED FORTIFIED EVALUATOR TO BE INCLUDED WITH FINAL DESIGNATION CHECKLIST. DOCUMENTATION SHOULD ALSO STATE THAT THE INSTALLATION MEETS THE MANUFACTURER'S REQUIREMENTS FOR AN ALLOWABLE DESIGN UPLIFT PRESSURE OF AT LEAST 110 PSF (PROOF TEST OF AT LEAST 165 PSF).
5. **USE THE MINIMUM DENSITY AND INSTALLATION REQUIREMENTS PRESCRIBED BY THE MANUFACTURER TO MEET A MINIMUM DESIGN UPLIFT PRESSURE ON THE SHEATHING OF 110 PSF.**

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION
2. EXISTING SHEATHING REQUIREMENTS: 7/16" MIN. THICKNESS REQUIRED WITH ROOF MEMBERS @ 24" O.C. MAX.
3. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.





UNDERSIDE OF ROOF DECK FROM WITHIN ATTIC

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE ROOF DECK ATTACHMENT AND SEALED ROOF DECK FROM WITHIN USING SPRAY FOAM

DRAWING #: F-SRD-1

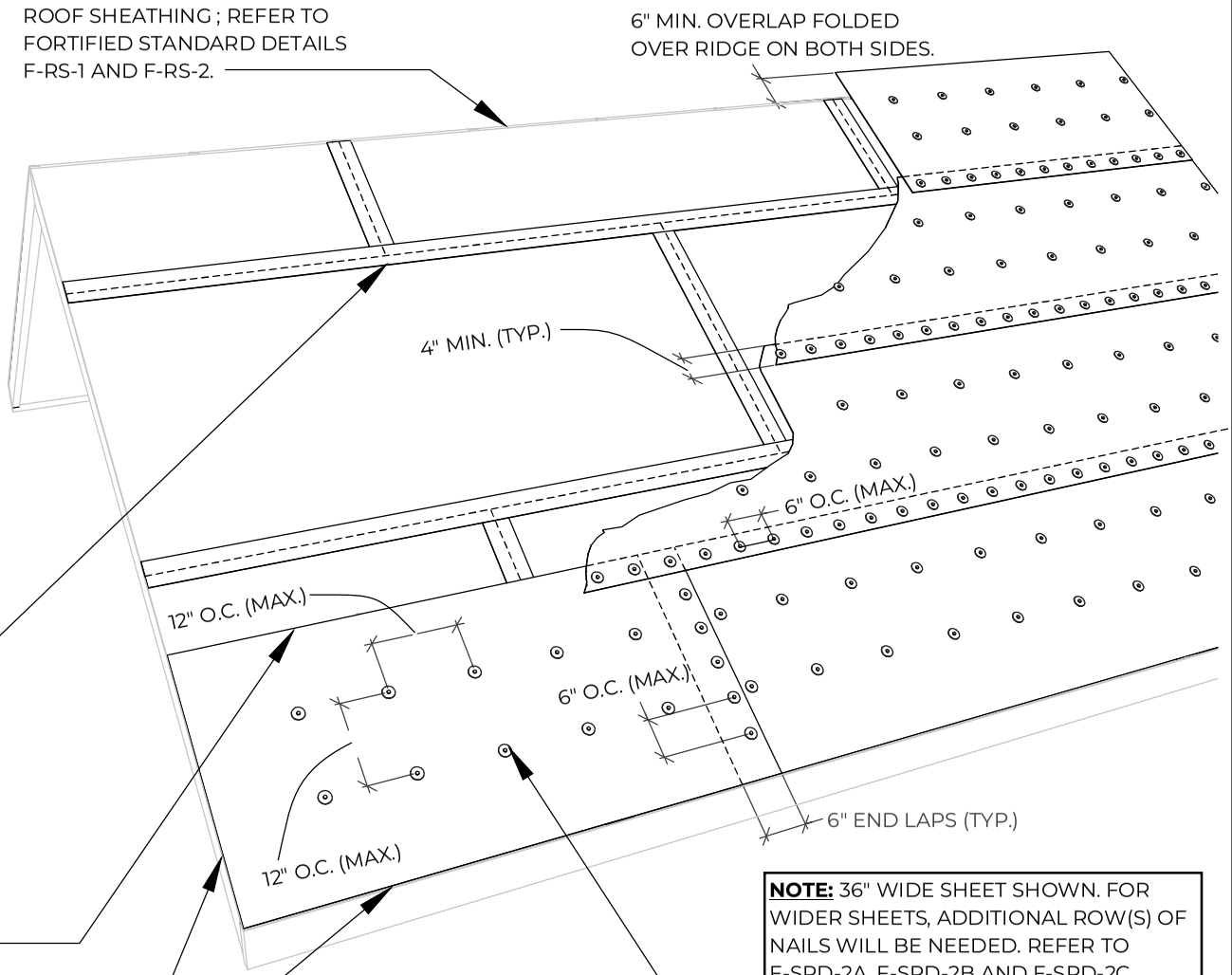
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GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
4. NAILS USED TO ATTACH UNDERLAYMENT SHALL BE ANNULAR RING OR DEFORMED SHANK ROOFING NAILS W/ 0.083" MINIMUM DIAMETER AND SUFFICIENT LENGTH TO PENETRATE THROUGH THE ROOF SHEATHING OR NOT LESS THAN 3/4" INTO THE ROOF SHEATHING W/ 1" DIAMETER BUTTON CAPS (METAL BUTTON CAPS ARE REQUIRED FOR ULTIMATE DESIGN WIND SPEED OF 170 MPH OR GREATER).
5. FOR WOOD SHAKE AND SHINGLE ROOF COVERS, SYNTHETIC/SELF-ADHERED UNDERLAYMENT IS NOT PERMITTED. REFER TO TECHNICAL BULLETIN FH 2021-03 FOR MORE INFORMATION.
6. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

FLASHING TAPE AT ALL PANEL SEAMS FULLY ADHERED W/ NO WRINKLES OR VOIDS USING ROLLER.
MATERIAL OPTION 1 : 4" WIDE ASTM D1970 COMPLIANT SELF-ADHERING POLYMER - MODIFIED BITUMEN FLASHING TAPE.
MATERIAL OPTION 2 : 3 - 3/4" WIDE AAMA 711 LEVEL 3 (FOR EXPOSURE UP TO 80°C/176°F) COMPLIANT SELF-ADHERING FLASHING TAPE.

ASTM D226 TYPE II #30 OR ASTM D4869 TYPE III OR TYPE IV #30 UNDERLAYMENT. (FOR ASHPALT SHINGLE ROOF COVERS, ASTM D6757 UNDERLAYMENT IS ALSO ACCEPTABLE)
ALT: REINFORCED SYNTHETIC ROOF UNDERLAYMENT WITH ICC APPROVAL AS ASTM D226 TYPE II ;
MINIMUM TEAR STRENGTH = 15 LBF PER ASTM D4533
MINIMUM TENSILE STRENGTH = 20 PSF PER ASTM D5035
PASS ASTM D4869 SHOWER TEST.
HORIZONTAL LAPS = 4" MIN.
END LAPS = 6" MIN.



NOTE: 36" WIDE SHEET SHOWN. FOR WIDER SHEETS, ADDITIONAL ROW(S) OF NAILS WILL BE NEEDED. REFER TO F-SRD-2A, F-SRD-2B AND F-SRD-2C.

REFER TO GENERAL NOTE # 4. NAILS SPACED AS SHOWN OR A MORE STRINGENT FASTENER SCHEDULE IF REQUIRED BY MANUFACTURER. 6" O.C. ON ALL SIDES AND END LAPS. 12" O.C. MAX. BOTH HORIZONTALLY AND VERTICALLY BETWEEN END LAPS.

HOLD BACK BUTTON CAPS AT EDGES TO AVOID INSTALLING DRIP EDGE OVER BUTTON CAPS. REFER TO F-DE-1 FOR DRIP EDGE INSTALLATION.

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE AND UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS

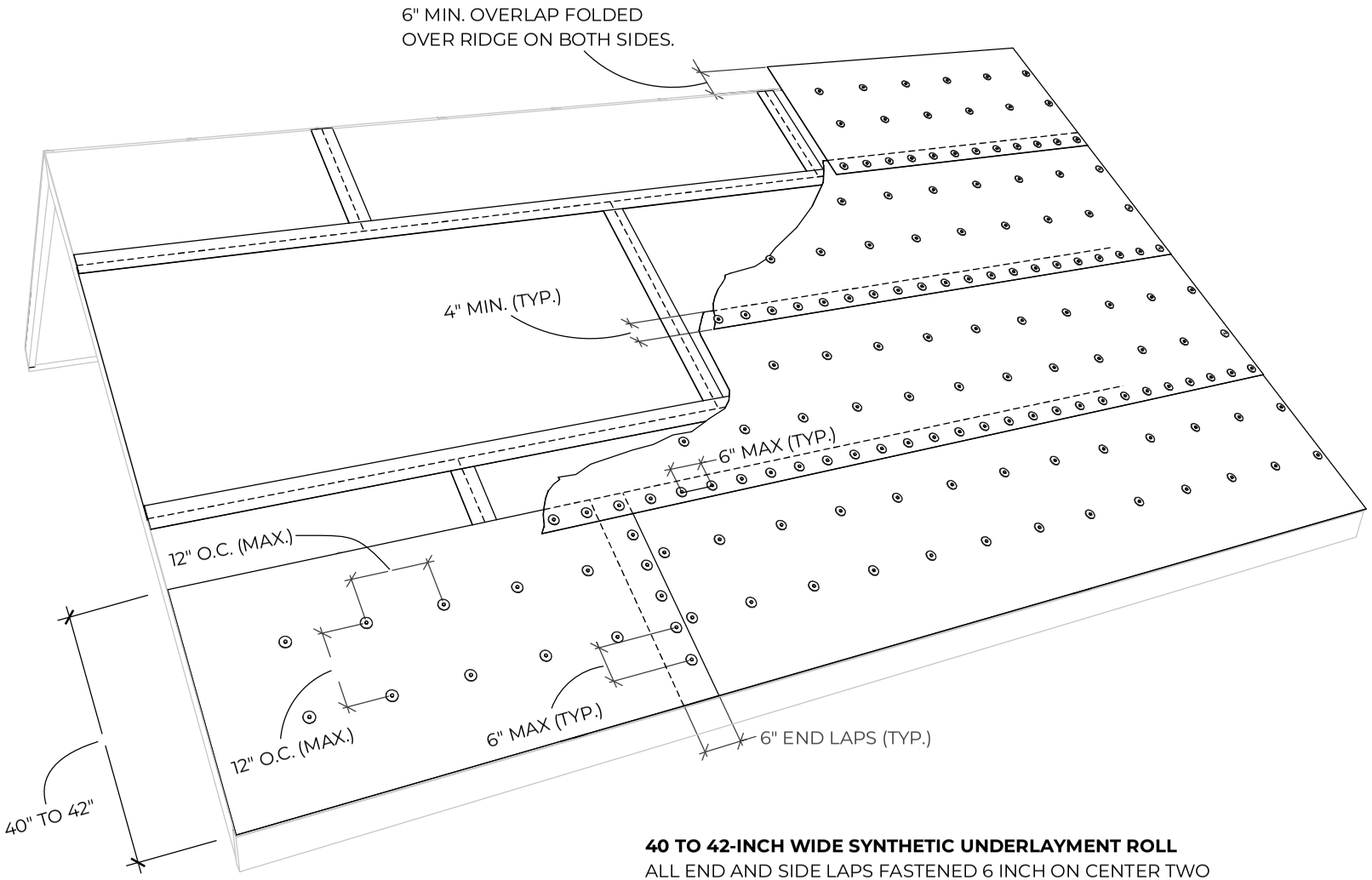
DRAWING #:

F-SRD-2

DATE: 11/01/2024

GENERAL NOTES:

1. THIS ILLUSTRATION IS PROVIDED AS A SUPPLEMENT TO STANDARD DETAIL DRAWING F-SRD-2. REFER TO F-SRD-2 FOR GENERAL NOTES. ADDITIONAL INFORMATION AND REQUIREMENTS NOT SHOWN HERE.

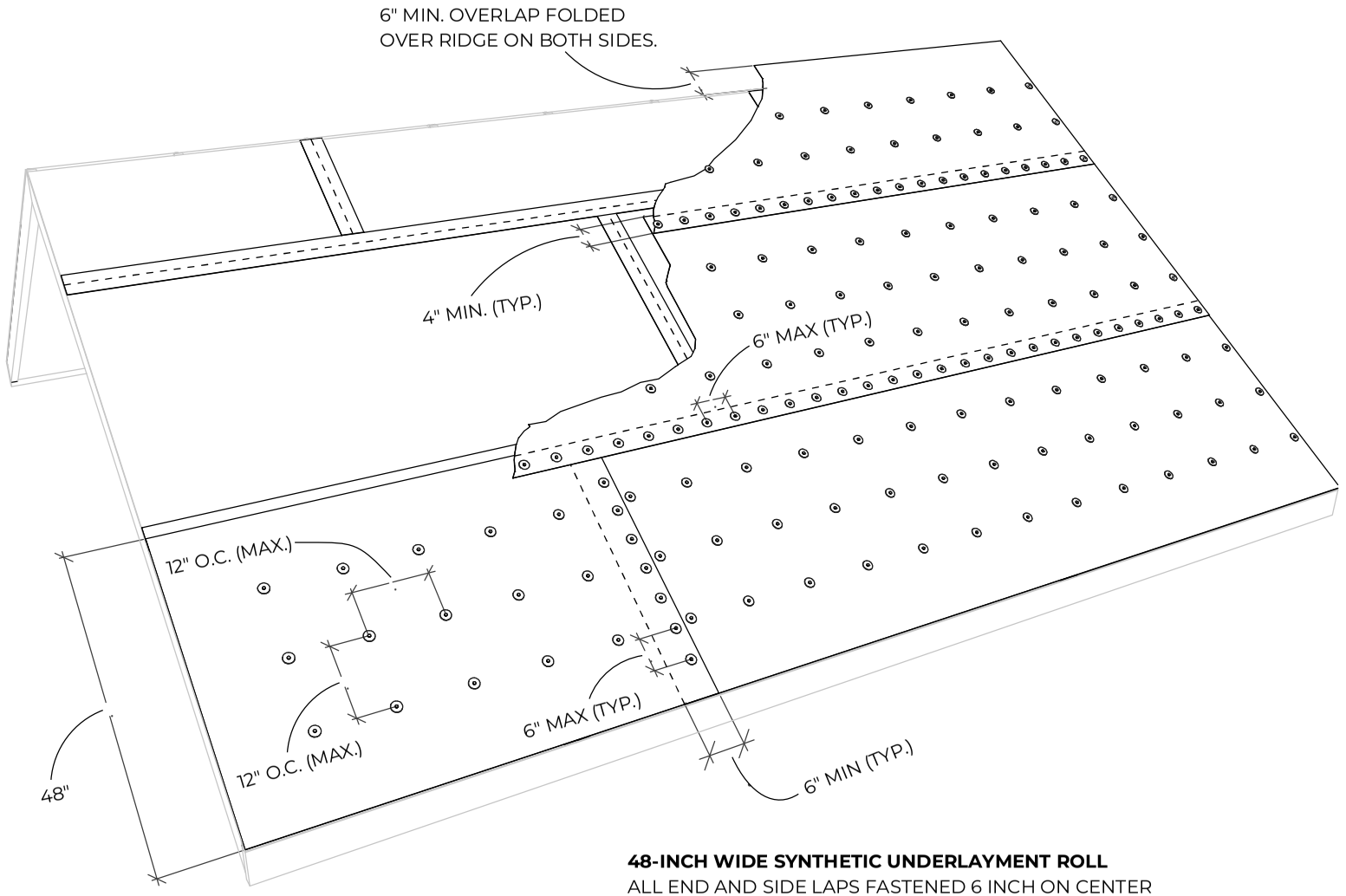


40 TO 42-INCH WIDE SYNTHETIC UNDERLAYMENT ROLL
ALL END AND SIDE LAPS FASTENED 6 INCH ON CENTER TWO (2) ROWS OF NAILS BETWEEN SIDE LAPS 12 INCHES ON CENTER.

FORTIFIED HOME	**APPLICABLE STANDARDS:** FORTIFIED HOME™ - HURRICANE (2025) FORTIFIED HOME™ - HIGH WIND (2025)	**DESCRIPTION:** STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE AND UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS USING 40 TO 42-INCHWIDE SYNTHETIC UNDERLAYMENT.	**DRAWING #:** F-SRD-2A **DATE:** 11/01/2024

GENERAL NOTES:

1. THIS ILLUSTRATION IS PROVIDED AS A SUPPLEMENT TO STANDARD DETAIL DRAWING F-SRD-2. REFER TO F-SRD-2 FOR GENERAL NOTES. ADDITIONAL INFORMATION AND REQUIREMENTS NOT SHOWN HERE.

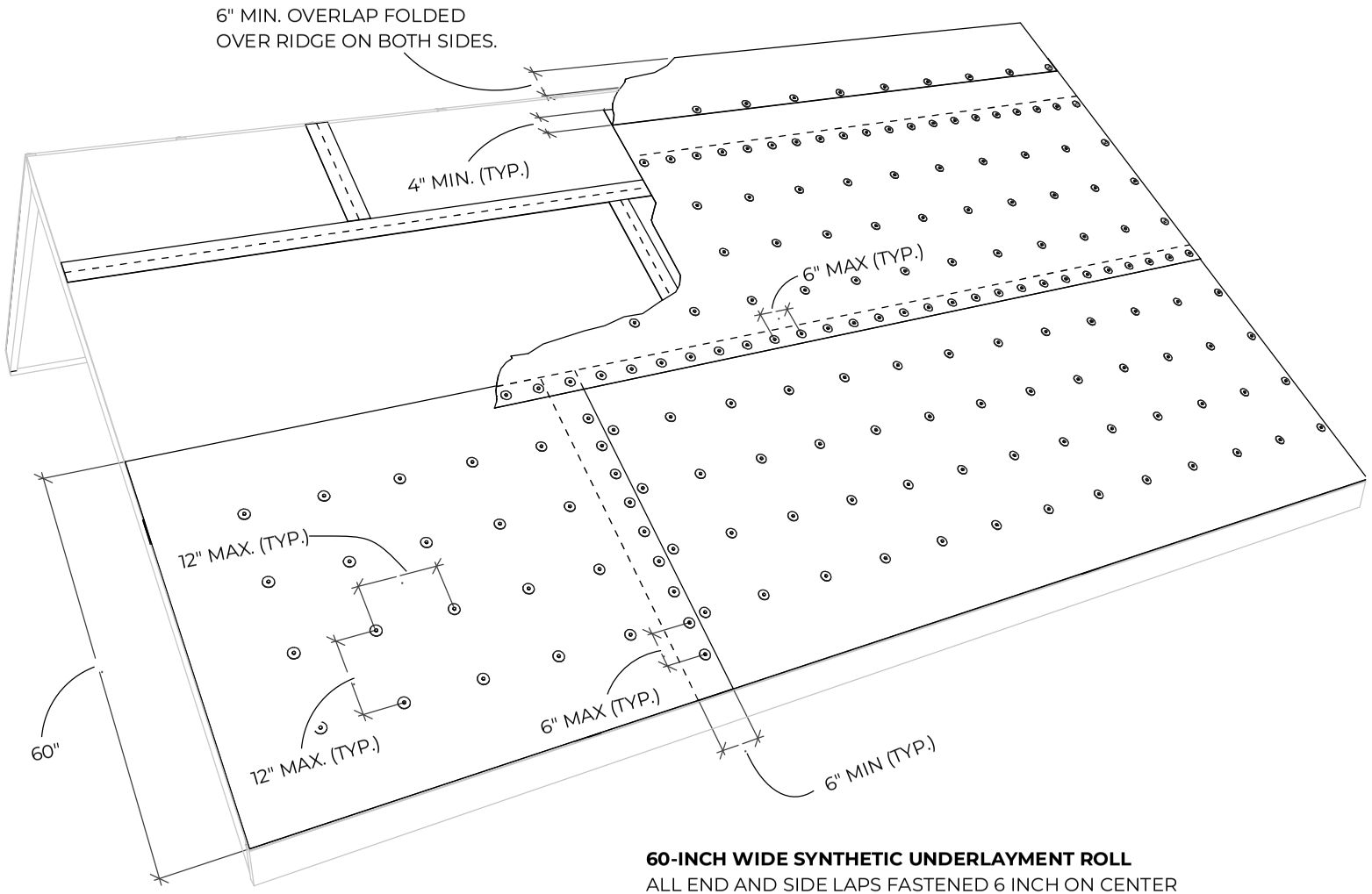


48-INCH WIDE SYNTHETIC UNDERLAYMENT ROLL
ALL END AND SIDE LAPS FASTENED 6 INCH ON CENTER
THREE (3) ROWS OF NAILS BETWEEN SIDE LAPS 12 INCHES ON CENTER.

FORTIFIED HOME	**APPLICABLE STANDARDS:** FORTIFIED HOME™ - HURRICANE (2025) FORTIFIED HOME™ - HIGH WIND (2025)	**DESCRIPTION:** STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE AND UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS USING 48-INCH WIDE SYNTHETIC UNDERLAYMENT.	**DRAWING #:** F-SRD-2B **DATE:** 11/01/2024

GENERAL NOTES:

1. THIS ILLUSTRATION IS PROVIDED AS A SUPPLEMENT TO STANDARD DETAIL DRAWING F-SRD-2. REFER TO F-SRD-2 FOR GENERAL NOTES. ADDITIONAL INFORMATION AND REQUIREMENTS NOT SHOWN HERE.

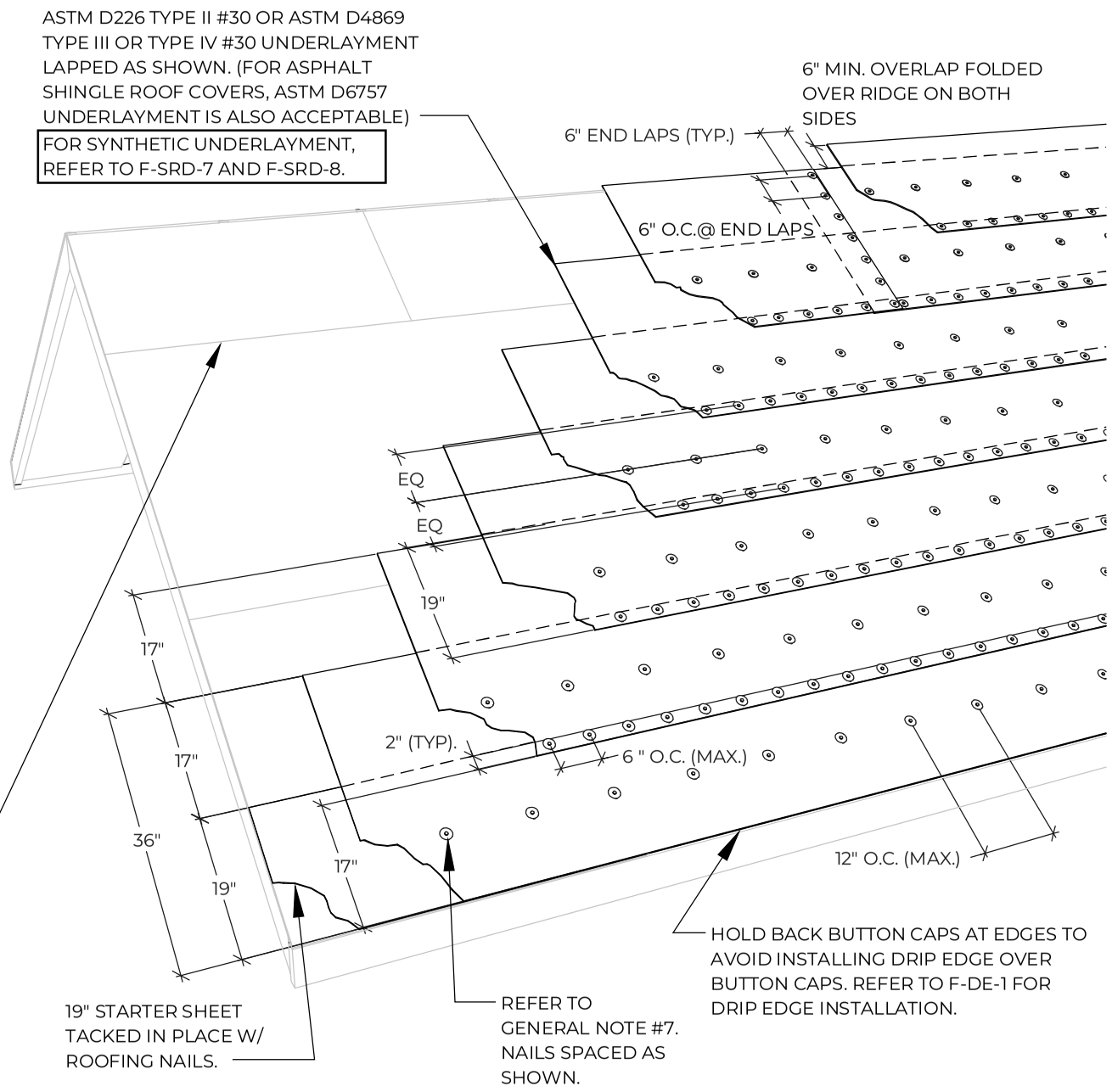


60-INCH WIDE SYNTHETIC UNDERLAYMENT ROLL
ALL END AND SIDE LAPS FASTENED 6 INCH ON CENTER
FOUR (4) ROWS OF NAILS BETWEEN SIDE LAPS 12 INCHES ON CENTER.

FORTIFIED HOME	**APPLICABLE STANDARDS:** FORTIFIED HOME™ - HURRICANE (2025) FORTIFIED HOME™ - HIGH WIND (2025)	**DESCRIPTION:** STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE AND UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS USING 60-INCH WIDE SYNTHETIC UNDERLAYMENT.	**DRAWING #:** F-SRD-2C **DATE:** 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. WEAVE UNDERLAYMENT ACROSS VALLEYS.
4. DOUBLE LAP UNDERLAYMENT ACROSS RIDGES (UNLESS THERE IS A CONTINUOUS RIDGE VENT).
5. LAP UNDERLAYMENT WITH MININUM 6" LEG "TURNED UP" AT WALL INTERSECTIONS; LAP WALL WEATHER BARRIER OVER TURNED-UP ROOF UNDERLAYMENT.
6. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
7. NAILS USED TO ATTACH UNDERLAYMENT SHALL BE ANNULAR RING OR DEFORMED SHANK ROOFING NAILS W/ 0.083" MINIMUM DIAMETER AND SUFFICIENT LENGTH TO PENETRATE THROUGH THE ROOF SHEATHING OR NOT LESS THAN 3/4" INTO THE ROOF SHEATHING W/ 1" DIAMETER BUTTON CAPS (METAL BUTTON CAPS ARE REQUIRED FOR ULTIMATE DESIGN WIND SPEED OF 170 MPH OR GREATER.)
8. FOR WOOD SHAKE AND SHINGLE ROOF COVERS, SYNTHETIC/SELF-ADHERED UNDERLAYMENT IS NOT PERMITTED. REFER TO TECHNICAL BULLETIN FH 2021-03 FOR MORE INFORMATION.
9. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

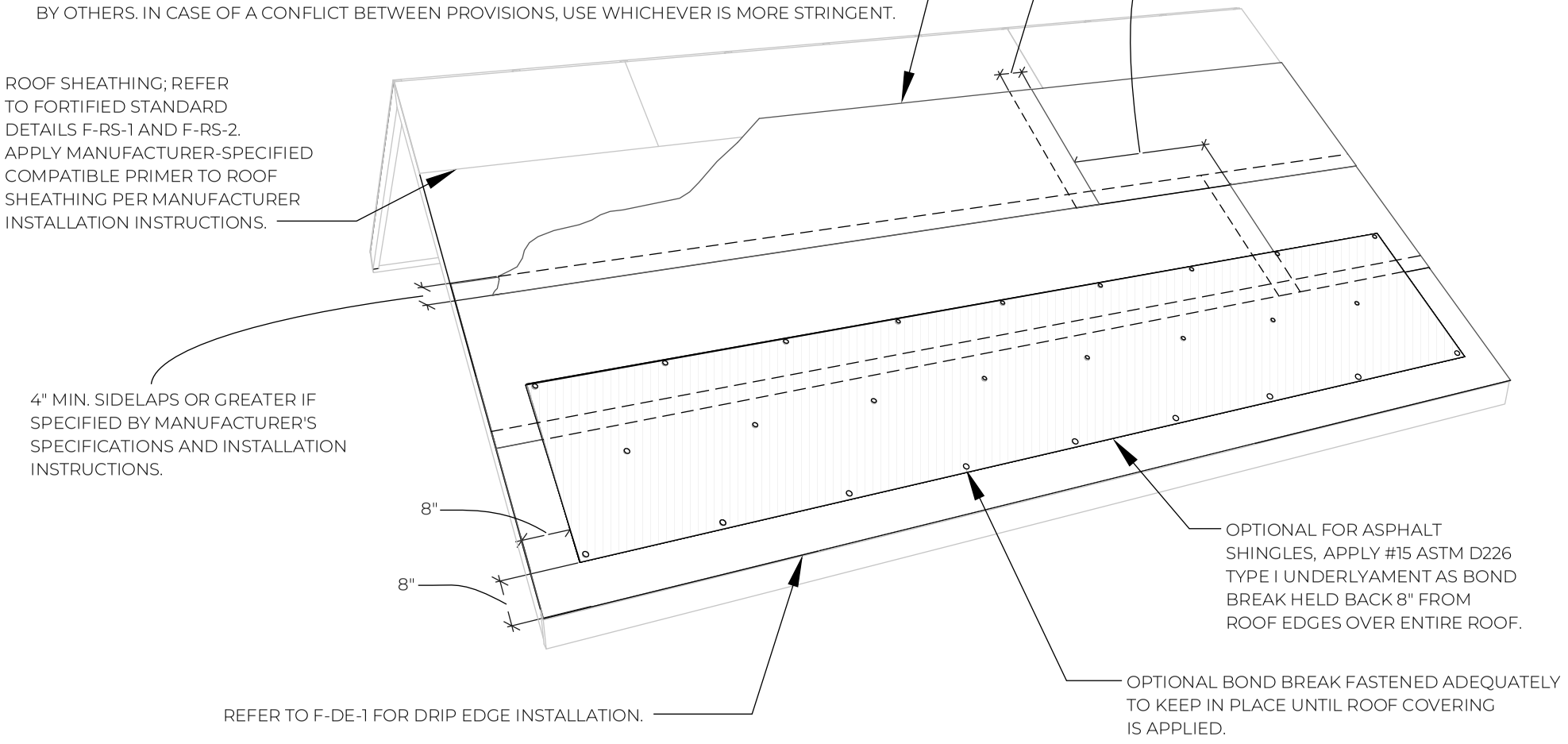
STEEP SLOPE SEALED ROOF DECK - TWO LAYERS **FELT** UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS

DRAWING #: F-SRD-3

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
3. REFER TO AND INSTALL IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS. REFER TO PRODUCT APPROVAL TO VERIFY REQUIRED WIND PRESSURES ARE MET IF APPLICABLE.
4. ADEQUATE ATTIC VENTILATION IS REQUIRED. REFER TO UNDERLAYMENT AND PRIMARY ROOF SYSTEM MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR VENTILATION LIMITATIONS. ALSO CHECK WITH LOCAL BUILDING CODES FOR RESTRICTIONS.
5. FOR WOOD SHAKE AND SHINGLE ROOF COVERS, SYNTHETIC/SELF-ADHERED UNDERLAYMENT IS NOT PERMITTED. REFER TO TECHNICAL BULLETIN FH 2021-03 FOR MORE INFORMATION.
6. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE SEALED ROOF DECK - SELF-ADHERED MEMBRANE (SHOWING BOND BREAK FOR ASPHALT SHINGLES) - SHINGLE AND METAL ROOF COVERS

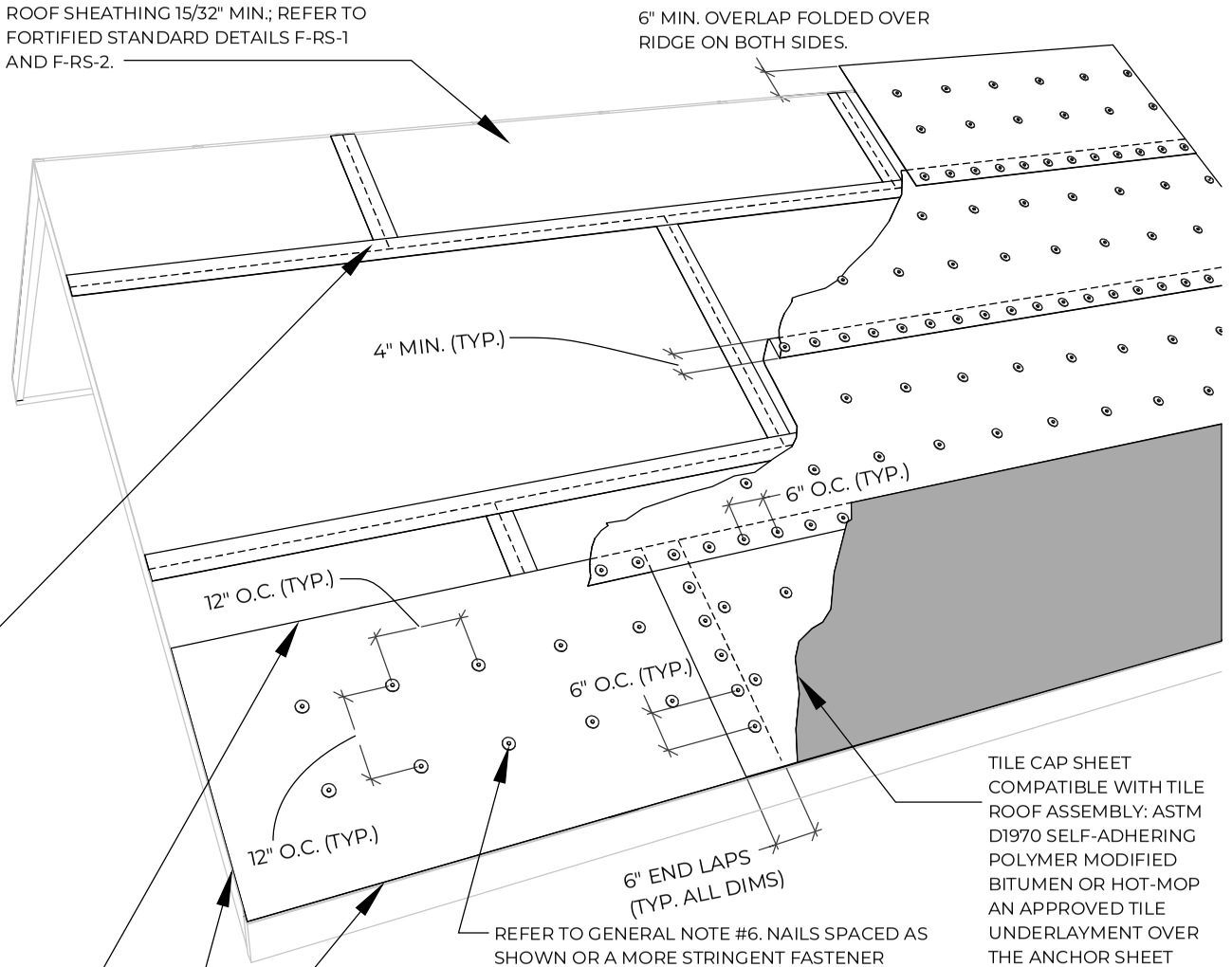
DRAWING #:

F-SRD-4

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
4. REFER TO AND INSTALL IN ACCORDANCE WITH ROOF TILE MANUFACTURER'S INFORMATION AND THE TESTED ASSEMBLY SHOWN IN THE PRODUCT APPROVAL. REFER TO PRODUCT APPROVAL TO VERIFY REQUIRED WIND PRESSURES ARE MET IF APPLICABLE.
5. ADEQUATE ATTIC VENTILATION IS REQUIRED. REFER TO UNDERLAYMENT AND PRIMARY ROOF SYSTEM MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR VENTILATION LIMITATIONS. ALSO CHECK WITH LOCAL BUILDING CODES FOR RESTRICTIONS.
6. NAILS USED TO ATTACH UNDERLAYMENT SHALL BE ANNULAR RING OR DEFORMED SHANK ROOFING NAILS W/ 0.083" MINIMUM DIAMETER AND SUFFICIENT LENGTH TO PENETRATE THROUGH THE ROOF SHEATHING OR NOT LESS THAN 3/4" INTO THE ROOF SHEATHING W/ 1" DIAMETER BUTTON CAPS (METAL BUTTON CAPS ARE REQUIRED FOR ULTIMATE DESIGN WIND SPEED OF 170 MPH OR GREATER.)
7. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



NOTE: 36" WIDE SHEET SHOWN. FOR WIDER SHEETS, ADDITIONAL ROW(S) OF NAILS WILL BE NEEDED. REFER TO F-SRD-2A, F-SRD-2B AND F-SRD-2C FOR FASTENING ANCHOR SHEETS WIDER THAN 36".

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

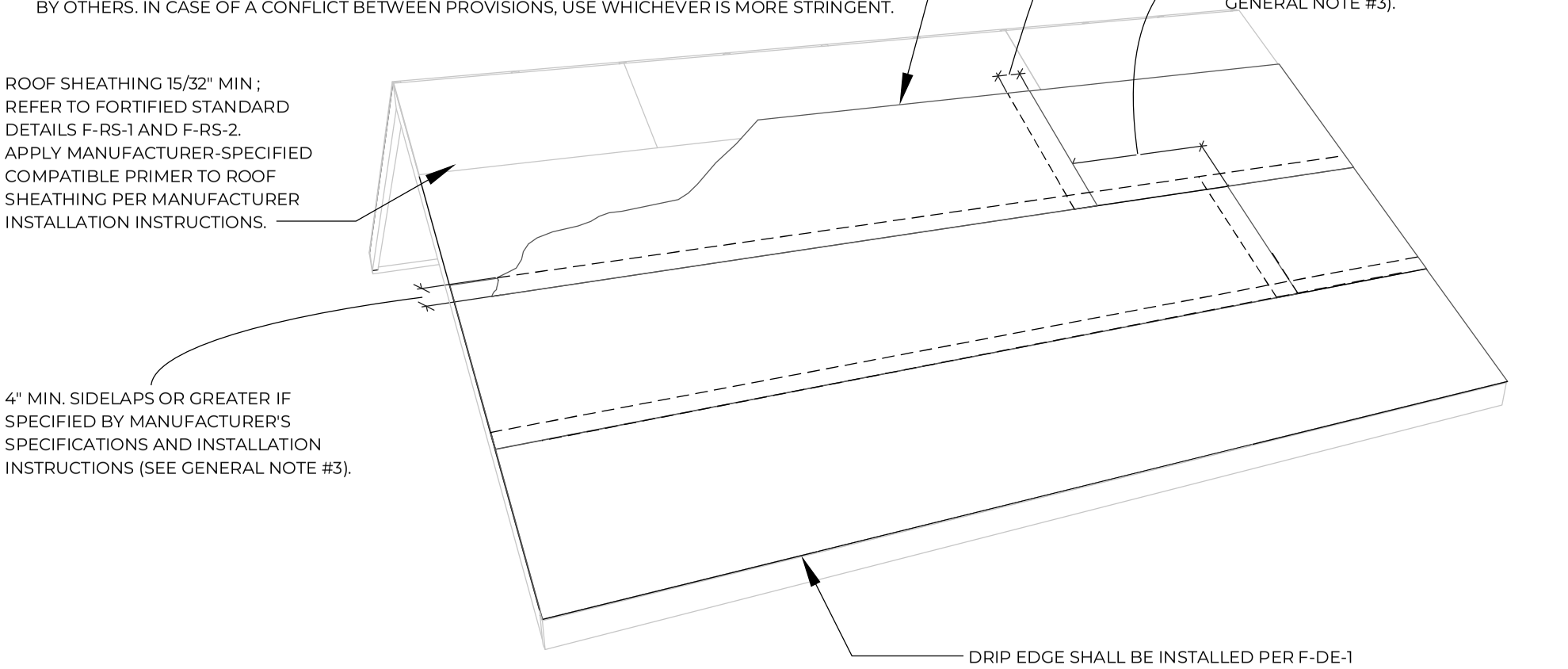
STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE, UNDERLAYMENT AND ROOF TILE CAP SHEET - CONCRETE AND CLAY TILE ROOF COVERS

DRAWING #: F-SRD-5

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
3. REFER TO AND INSTALL IN ACCORDANCE WITH ROOF TILE MANUFACTURER'S INFORMATION AND THE TESTED ASSEMBLY SHOWN IN THE PRODUCT APPROVAL. REFER TO PRODUCT APPROVAL TO VERIFY REQUIRED WIND PRESSURES ARE MET IF APPLICABLE.
4. ADEQUATE ATTIC VENTILATION IS REQUIRED. REFER TO UNDERLAYMENT AND PRIMARY ROOF SYSTEM MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR VENTILATION LIMITATIONS. ALSO CHECK WITH LOCAL BUILDING CODES FOR RESTRICTIONS.
5. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



FORTIFIED HOME

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE SEALED ROOF DECK - SELF-ADHERED MEMBRANE - CONCRETE AND CLAY TILE ROOF COVERS

DRAWING #: F-SRD-6

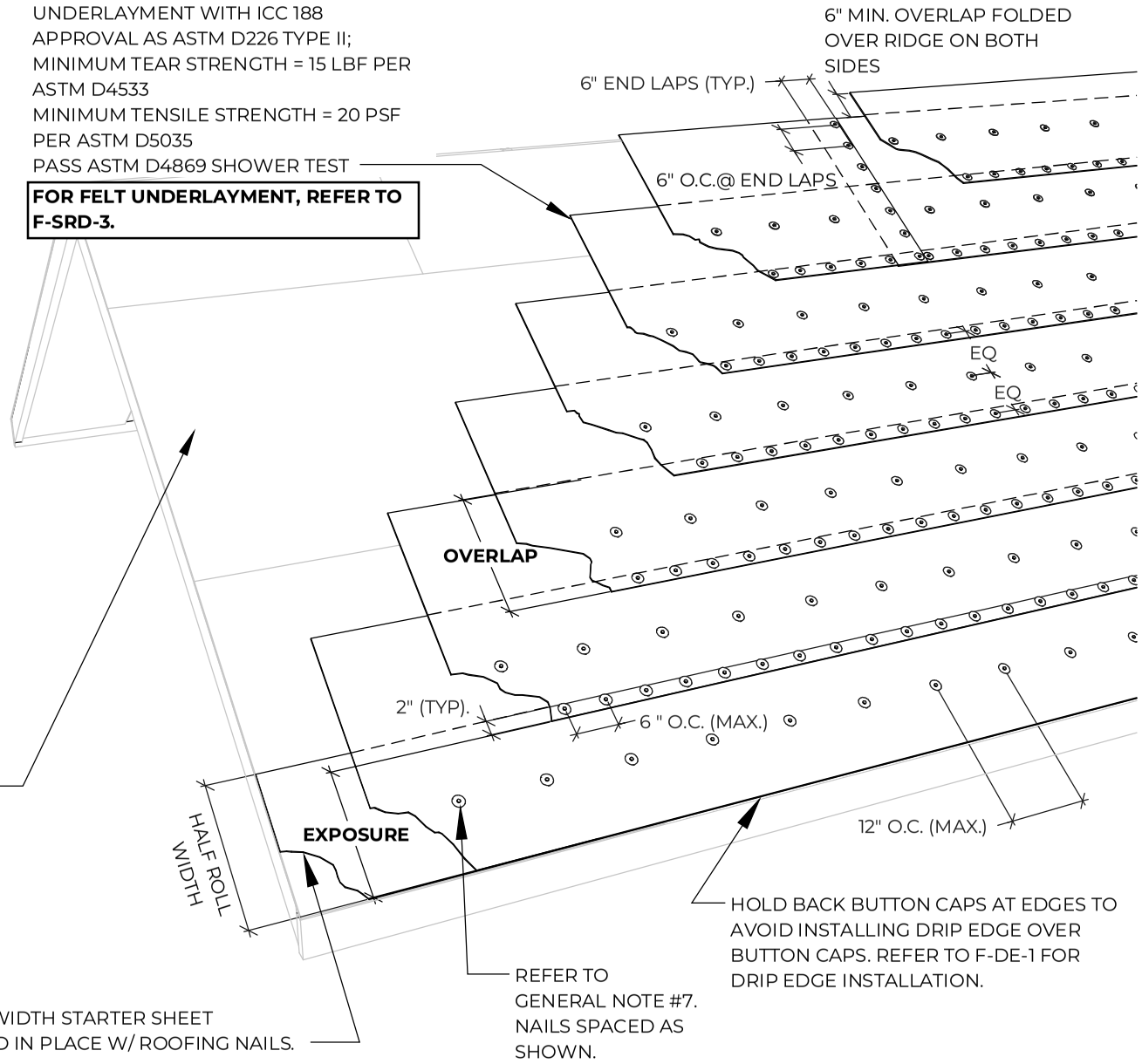
DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. WEAVE UNDERLAYMENT ACROSS VALLEYS.
4. DOUBLE LAP UNDERLAYMENT ACROSS RIDGES (UNLESS THERE IS A CONTINUOUS RIDGE VENT).
5. LAP UNDERLAYMENT WITH MININUM 6" LEG "TURNED UP" AT WALL INTERSECTIONS; LAP WALL WEATHER BARRIER OVER TURNED-UP ROOF UNDERLAYMENT.
6. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
7. NAILS USED TO ATTACH UNDERLAYMENT SHALL BE ANNULAR RING OR DEFORMED SHANK ROOFING NAILS W/ 0.083" MINIMUM DIAMETER AND SUFFICIENT LENGTH TO PENETRATE THROUGH THE ROOF SHEATHING OR NOT LESS THAN 3/4" INTO THE ROOF SHEATHING W/ 1" DIAMETER BUTTON CAPS (METAL BUTTON CAPS ARE REQUIRED FOR ULTIMATE DESIGN WIND SPEED OF 170 MPH OR GREATER.)
8. FOR WOOD SHAKE AND SHINGLE ROOF COVERS, SYNTHETIC/SELF-ADHERED UNDERLAYMENT IS NOT PERMITTED. REFER TO TECHNICAL BULLETIN FH 2021-03 FOR MORE INFORMATION.
9. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

ASTM D8257 SYNTHETIC UNDERLAYMENT
ALT: REINFORCED SYNTHETIC ROOF UNDERLAYMENT WITH ICC 188 APPROVAL AS ASTM D226 TYPE II;
MINIMUM TEAR STRENGTH = 15 LBF PER ASTM D4533
MINIMUM TENSILE STRENGTH = 20 PSF PER ASTM D5035
PASS ASTM D4869 SHOWER TEST

FOR FELT UNDERLAYMENT, REFER TO F-SRD-3.



ROOF SHEATHING BY OTHERS ; REFER TO FORTIFIED STANDARD DETAILS F-RS-1 AND F-RS-2.

OVERLAP= HALF ROLL WIDTH +2"
FOR 40" ROLL, **OVERLAP**=22"
FOR 48" ROLL, **OVERLAP**=26"

EXPOSURE= HALF ROLL WIDTH - 2"
FOR 40" ROLL, **EXPOSURE** = 18"
FOR 48" ROLL, **EXPOSURE** = 22"

HALF-WIDTH STARTER SHEET TACKED IN PLACE W/ ROOFING NAILS.

REFER TO GENERAL NOTE #7. NAILS SPACED AS SHOWN.

HOLD BACK BUTTON CAPS AT EDGES TO AVOID INSTALLING DRIP EDGE OVER BUTTON CAPS. REFER TO F-DE-1 FOR DRIP EDGE INSTALLATION.

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE SEALED ROOF DECK - TWO LAYERS **SYNTHETIC** UNDERLAYMENT (**40**" **AND 48**" **WIDE ROLLS**)

DRAWING #: F-SRD-7

DATE: 11/01/2024

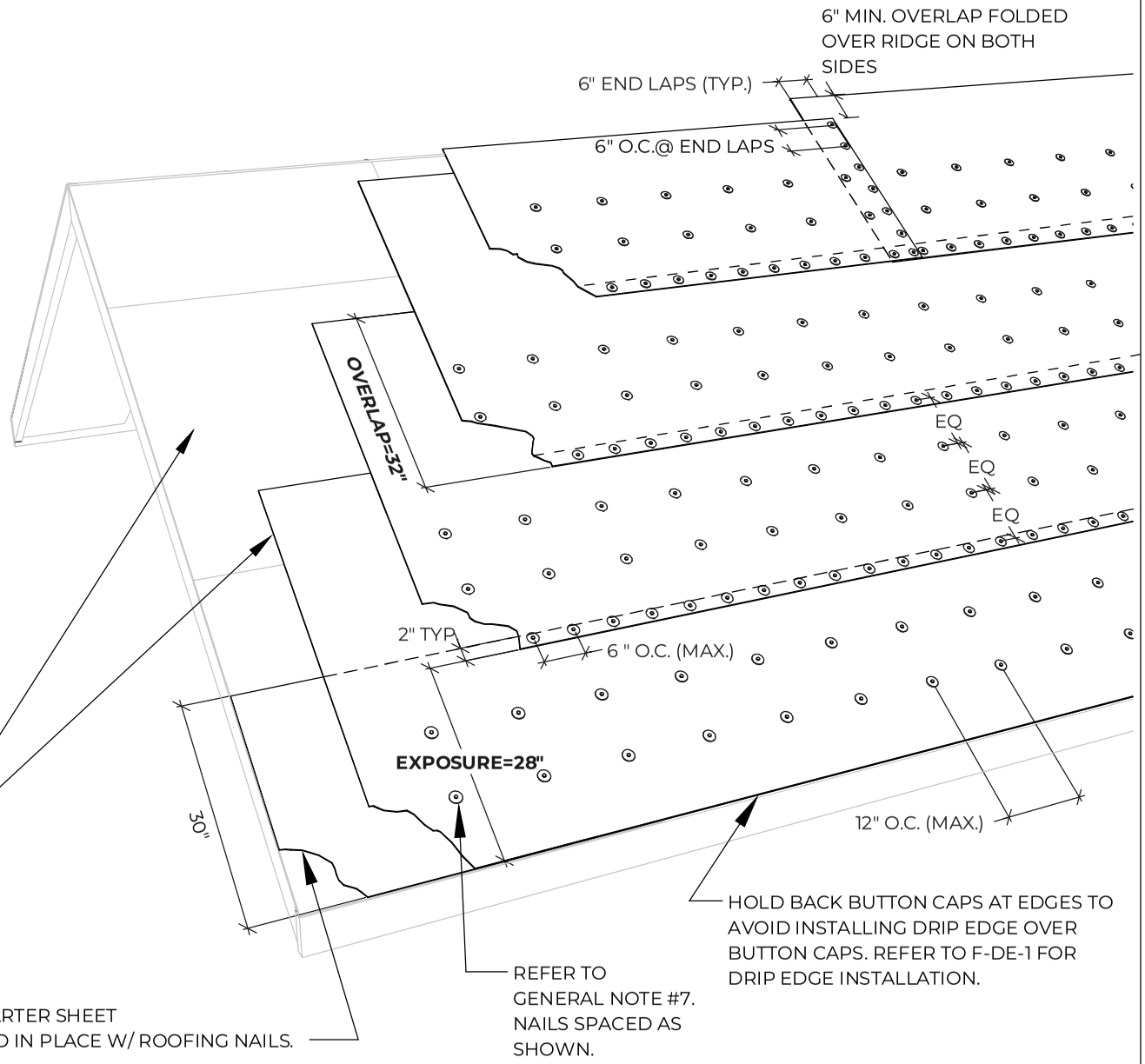
GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. WEAVE UNDERLAYMENT ACROSS VALLEYS.
4. DOUBLE LAP UNDERLAYMENT ACROSS RIDGES (UNLESS THERE IS A CONTINUOUS RIDGE VENT).
5. LAP UNDERLAYMENT WITH MININUM 6" LEG "TURNED UP" AT WALL INTERSECTIONS; LAP WALL WEATHER BARRIER OVER TURNED-UP ROOF UNDERLAYMENT.
6. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
7. NAILS USED TO ATTACH UNDERLAYMENT SHALL BE ANNULAR RING OR DEFORMED SHANK ROOFING NAILS W/ 0.083" MINIMUM DIAMETER AND SUFFICIENT LENGTH TO PENETRATE THROUGH THE ROOF SHEATHING OR NOT LESS THAN 3/4" INTO THE ROOF SHEATHING W/ 1" DIAMETER BUTTON CAPS (METAL BUTTON CAPS ARE REQUIRED FOR ULTIMATE DESIGN WIND SPEED OF 170 MPH OR GREATER.)
8. FOR WOOD SHAKE AND SHINGLE ROOF COVERS, SYNTHETIC/SELF-ADHERED UNDERLAYMENT IS NOT PERMITTED. REFER TO TECHNICAL BULLETIN FH 2021-03 FOR MORE INFORMATION.
9. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

ROOF SHEATHING BY OTHERS ; REFER TO FORTIFIED STANDARD DETAILS F-RS-1 AND F-RS-2

ASTM D8257 SYNTHETIC UNDERLAYMENT
ALT: REINFORCED SYNTHETIC ROOF UNDERLAYMENT WITH ICC 188 APPROVAL AS ASTM D226 TYPE II;
MINIMUM TEAR STRENGTH = 15 LBF PER ASTM D4533
MINIMUM TENSILE STRENGTH = 20 PSF PER ASTM D5035
PASS ASTM D4869 SHOWER TEST

FOR FELT UNDERLAYMENT, REFER TO F-SRD-3



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

STEEP SLOPE SEALED ROOF DECK - TWO LAYERS **SYNTHETIC** UNDERLAYMENT **(60" WIDE ROLL)**

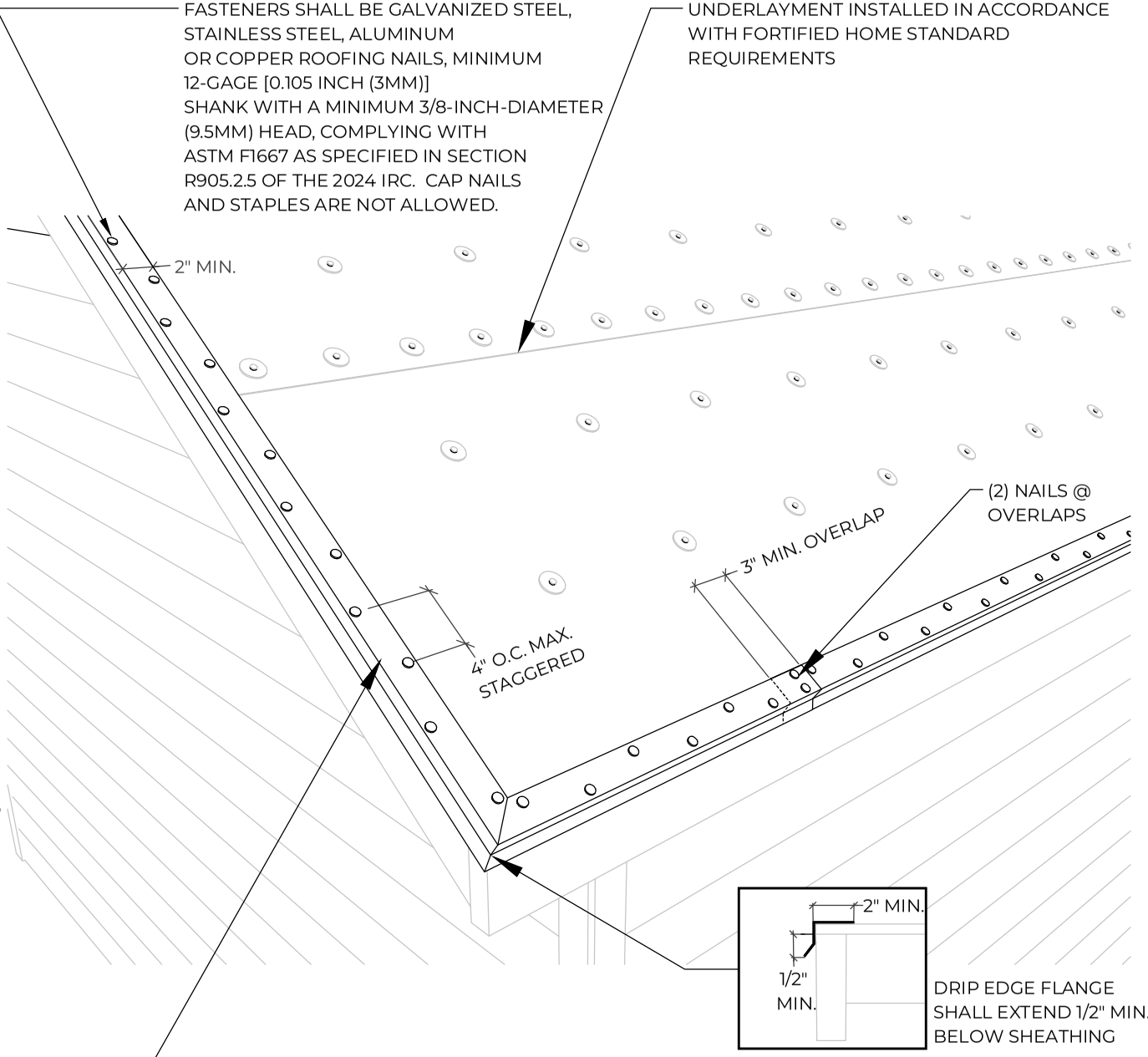
DRAWING #: F-SRD-8

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. BEST PRACTICES TO SEAL THE DRIP EDGE:
   SHINGLE ROOF COVERS; SEAL THE DRIP EDGE, UNDERLAYMENT AND STARTER STRIP AT THE EAVE BY EITHER USING A SELF-ADHERING STARTER STRIP OR APPLYING AN 8" WIDE LAYER OF COMPATIBLE FLASHING CEMENT WITH 1/8" MAX. THICKNESS OVER THE DRIP EDGE AND UNDERLAYMENT.
   FOR METAL ROOF COVERS; APPLY A COMPATIBLE MANUFACTURER-APPROVED SEALANT BETWEEN THE DRIP EDGE AND ADJACENT UNDERLAYMENT TO PREVENT WATER FROM ACCUMULATING UNDER THE DRIP EDGE OR USE A MANUFACTURER APPROVED 4" SELF-ADHERED SEAM TAPE.
4. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER. FOR ROOF SLOPES LESS THAN 2:12, REFER TO MANUFACTURER'S DRIP EDGE INSTALLATION REQUIREMENTS.
5. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

METAL DRIP EDGE (MINIMUM 26 GAUGE FOR STEEL) ALONG ALL EAVES AND GABLE RAKE EDGES INSTALLED OVER UNDERLAYMENT. MAKE SURE THE TOP SURFACE OF THE DRIP EDGE IS CLEAN, FREE OF OIL, AND IF REQUIRED BY THE STARTER STRIP MANUFACTURER, PRIMED WITH ASTM D41 PRIMER. FOR SEALING THE DRIP EDGE REFER TO GENERAL NOTE #3.
EXCEPTION: ASTM D1970 SELF-ADHERED MEMBRANE INSTALLED PER F-SRD-4 MAY BE INSTALLED OVER THE DRIP EDGE AT EAVES PROVIDED THE TOP SURFACE OF THE DRIP EDGE IS CLEAN, FREE OF OIL, AND PRIMED WITH ASTM D41 PRIMER PER MANUFACTURER REQUIREMENTS.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

HURRICANE AND HIGH WIND - DRIP EDGE INSTALLATION OVER UNDERLAYMENT

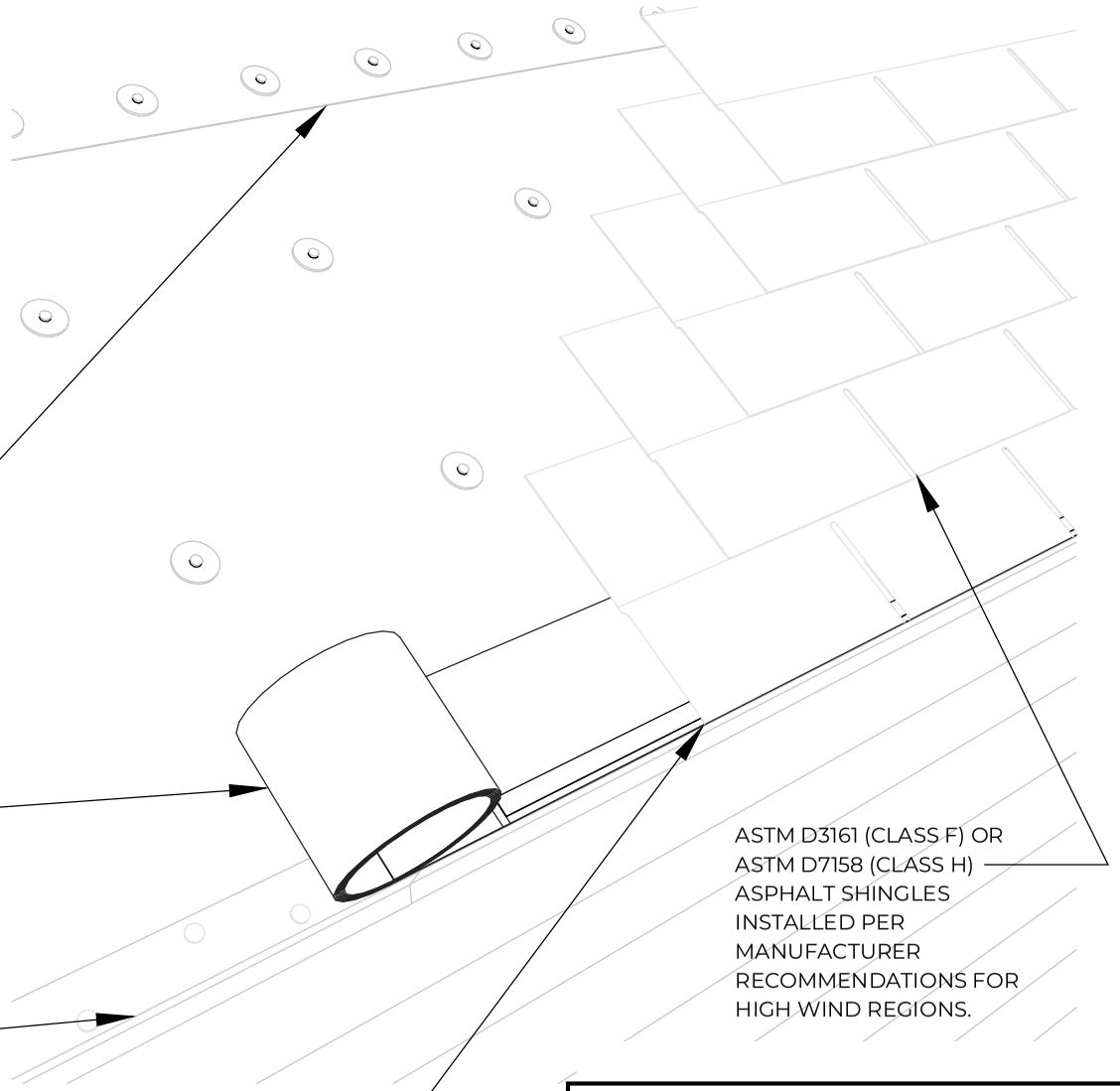
DRAWING #:

F-DE-1

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. SHINGLES INSTALLED AT ALL INTERSECTIONS AND BOTH SIDES OF OPEN VALLEYS SHALL BE SET IN A MINIMUM 8 IN. WIDE STRIP OF FLASHING CEMENT (MAX. THICKNESS OF FLASHING CEMENT = 1/8"). CUT SIDE OF CLOSED VALLEYS SHALL BE SET IN A MINIMUM 2 IN. WIDE, 1/8" THICK STRIP OF FLASHING CEMENT. WOVEN VALLEYS TO BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
3. REFER TO FORTIFIED STANDARD DETAILS F-RC-2 AND F-RC-3 FOR ADDITIONAL ASPHALT SHINGLE INSTALLATION OPTIONS.
4. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



TO MEET 2025 HAIL SUPPLEMENT REQUIREMENTS, ASPHALT SHINGLES MUST HAVE AN OVERALL IBHS ROOF SHINGLE HAIL IMPACT RATING OF "GOOD" OR "EXCELLENT" OR BE POLYMER-MODIFIED WITH EITHER A UL 2218 CLASS 4 OR FM 4473 CLASS 4 RATING.

FORTIFIED HOME™

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

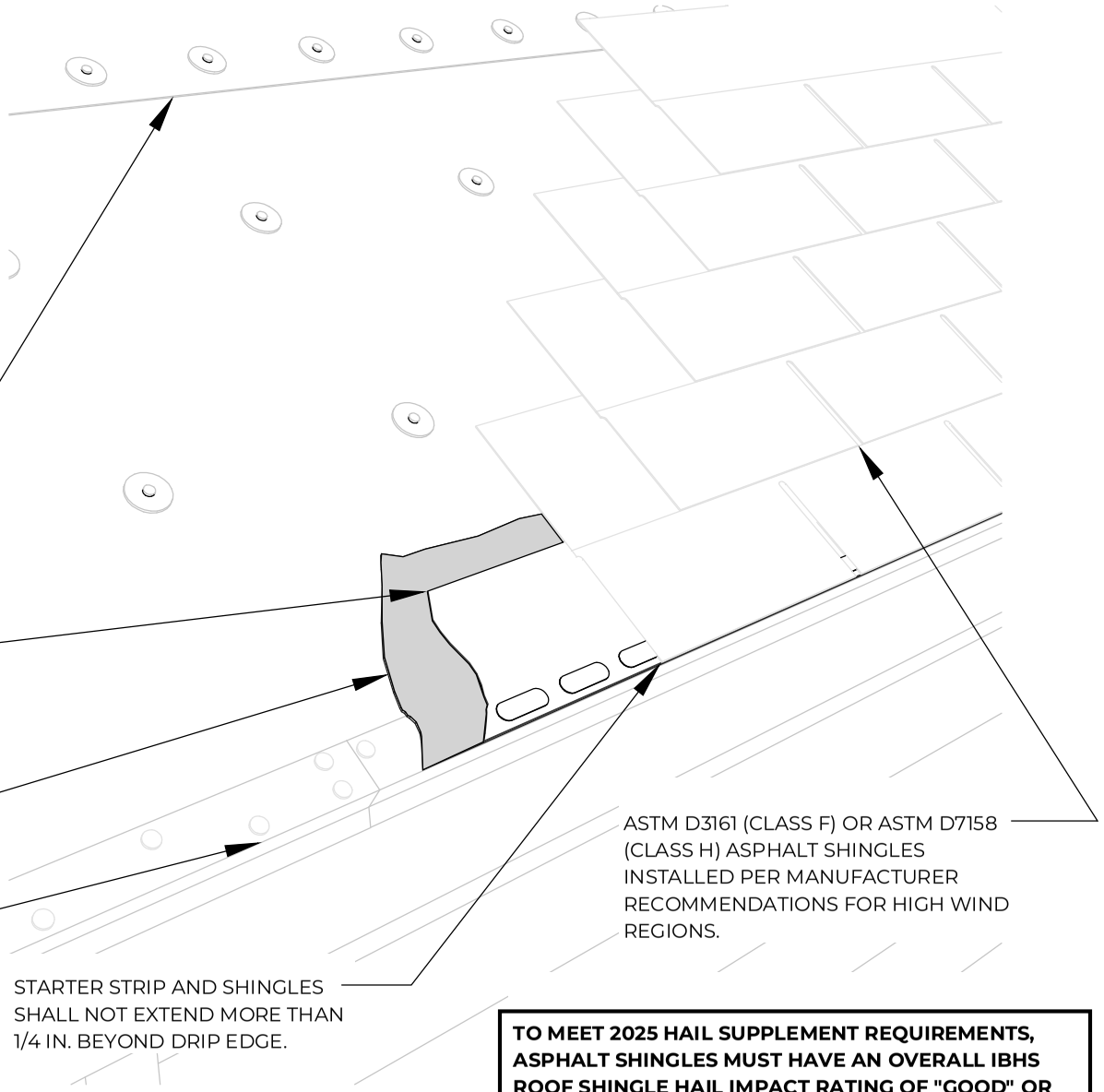
ASPHALT SHINGLE INSTALLATION GUIDANCE FOR STEEP SLOPE - OPTION 1: PEEL AND STICK STARTER STRIP INSTALLATION AT EAVE OR RAKE

DRAWING #: F-RC-1

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. SHINGLES INSTALLED AT ALL INTERSECTIONS AND BOTH SIDES OF OPEN VALLEYS SHALL BE SET IN A MINIMUM 8 IN. WIDE STRIP OF FLASHING CEMENT (MAX. THICKNESS OF FLASHING CEMENT = 1/8"). CUT SIDE OF CLOSED VALLEYS SHALL BE SET IN A MINIMUM 2 IN. WIDE, 1/8" THICK STRIP OF FLASHING CEMENT. WOVEN VALLEYS TO BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
3. REFER TO FORTIFIED STANDARD DETAILS F-RC-1 AND F-RC-3 FOR ADDITIONAL ASPHALT SHINGLE INSTALLATION OPTIONS.
4. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



TO MEET 2025 HAIL SUPPLEMENT REQUIREMENTS, ASPHALT SHINGLES MUST HAVE AN OVERALL IBHS ROOF SHINGLE HAIL IMPACT RATING OF "GOOD" OR "EXCELLENT" OR BE POLYMER-MODIFIED WITH EITHER A UL 2218 CLASS 4 OR FM 4473 CLASS 4 RATING.

FORTIFIED HOME™

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

ASPHALT SHINGLE INSTALLATION GUIDANCE FOR STEEP SLOPE - OPTION 2: SHINGLE STRIP STARTER INSTALLATION AT EAVE OR RAKE

DRAWING #: F-RC-2

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. SHINGLES INSTALLED AT ALL INTERSECTIONS AND BOTH SIDES OF OPEN VALLEYS SHALL BE SET IN A MINIMUM 8 IN. WIDE STRIP OF FLASHING CEMENT (MAX. THICKNESS OF FLASHING CEMENT = 1/8"). CUT SIDE OF CLOSED VALLEYS SHALL BE SET IN A MINIMUM 2 IN. WIDE, 1/8" THICK STRIP OF FLASHING CEMENT. WOVEN VALLEYS TO BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
3. REFER TO FORTIFIED STANDARD DETAILS F-RC-1 AND F-RC-2 FOR ADDITIONAL ASPHALT SHINGLE INSTALLATION OPTIONS.
4. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



TO MEET 2025 HAIL SUPPLEMENT REQUIREMENTS, ASPHALT SHINGLES MUST HAVE AN OVERALL IBHS ROOF SHINGLE HAIL IMPACT RATING OF "GOOD" OR "EXCELLENT" OR BE POLYMER-MODIFIED WITH EITHER A UL 2218 CLASS 4 OR FM 4473 CLASS 4 RATING.

FORTIFIED HOME™

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

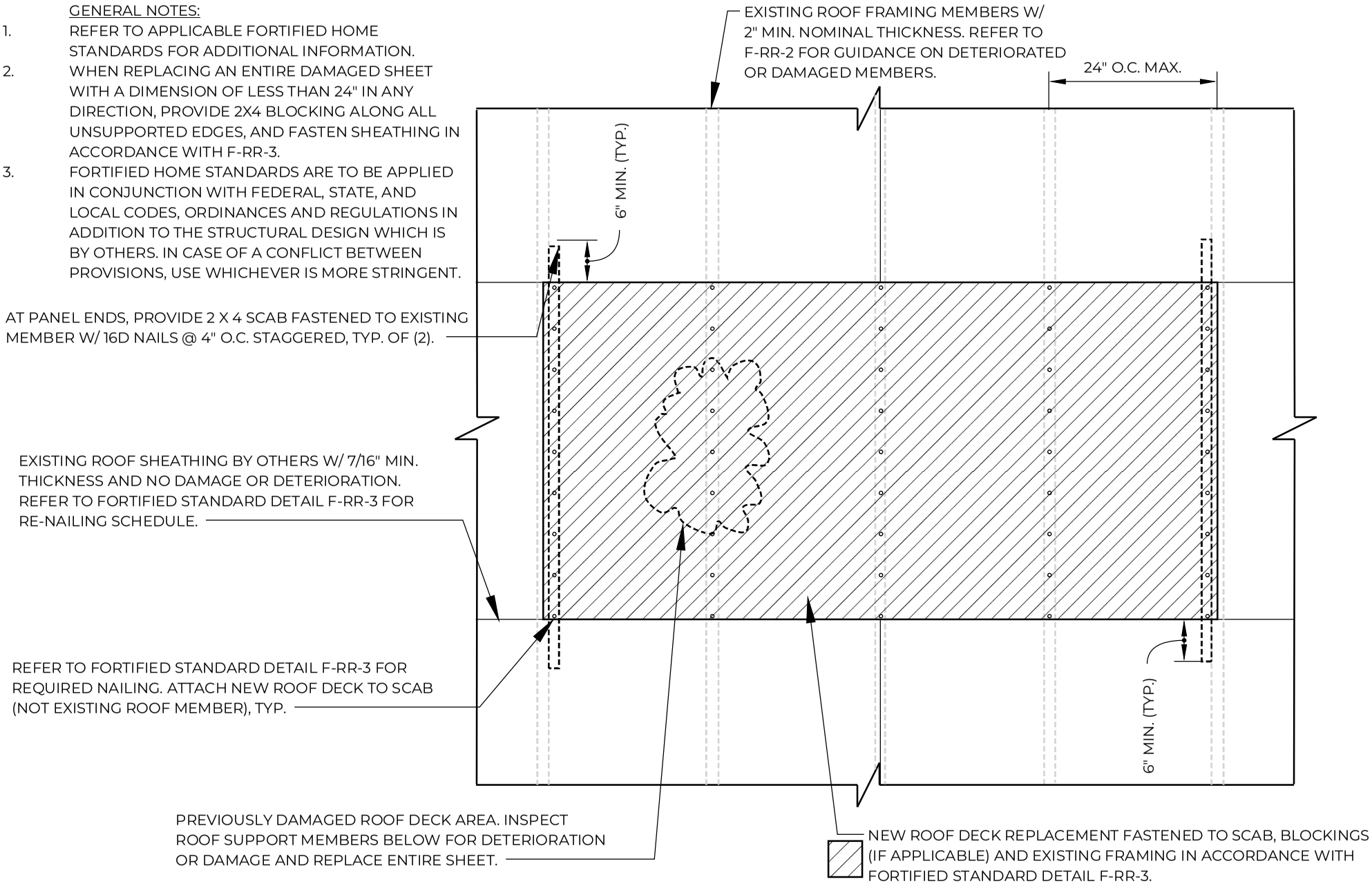
ASPHALT SHINGLE INSTALLATION GUIDANCE FOR STEEP SLOPE - OPTION 3: SHINGLES SET DIRECTLY IN FLASHING CEMENT AT RAKE ONLY

DRAWING #: F-RC-3

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. WHEN REPLACING AN ENTIRE DAMAGED SHEET WITH A DIMENSION OF LESS THAN 24" IN ANY DIRECTION, PROVIDE 2X4 BLOCKING ALONG ALL UNSUPPORTED EDGES, AND FASTEN SHEATHING IN ACCORDANCE WITH F-RR-3.
3. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

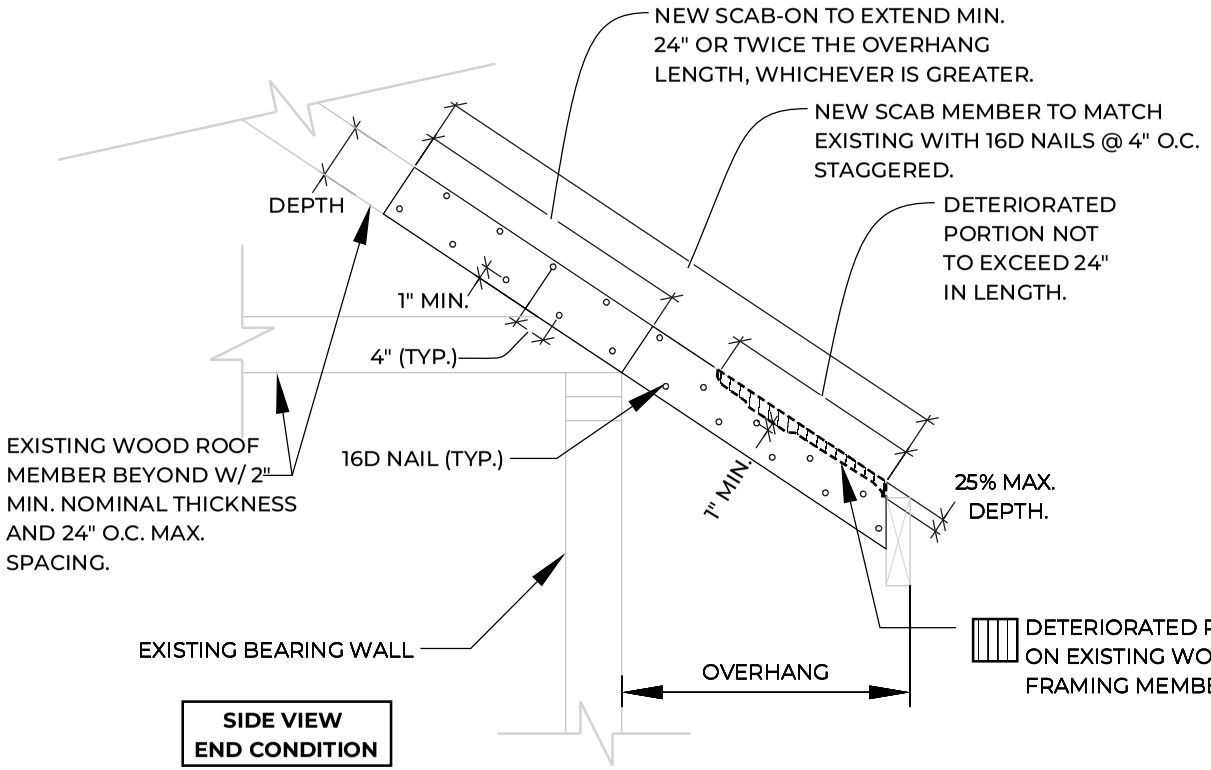
RE-ROOFING DECK REPLACEMENT FASTENING DETAIL

DRAWING #: F-RR-1

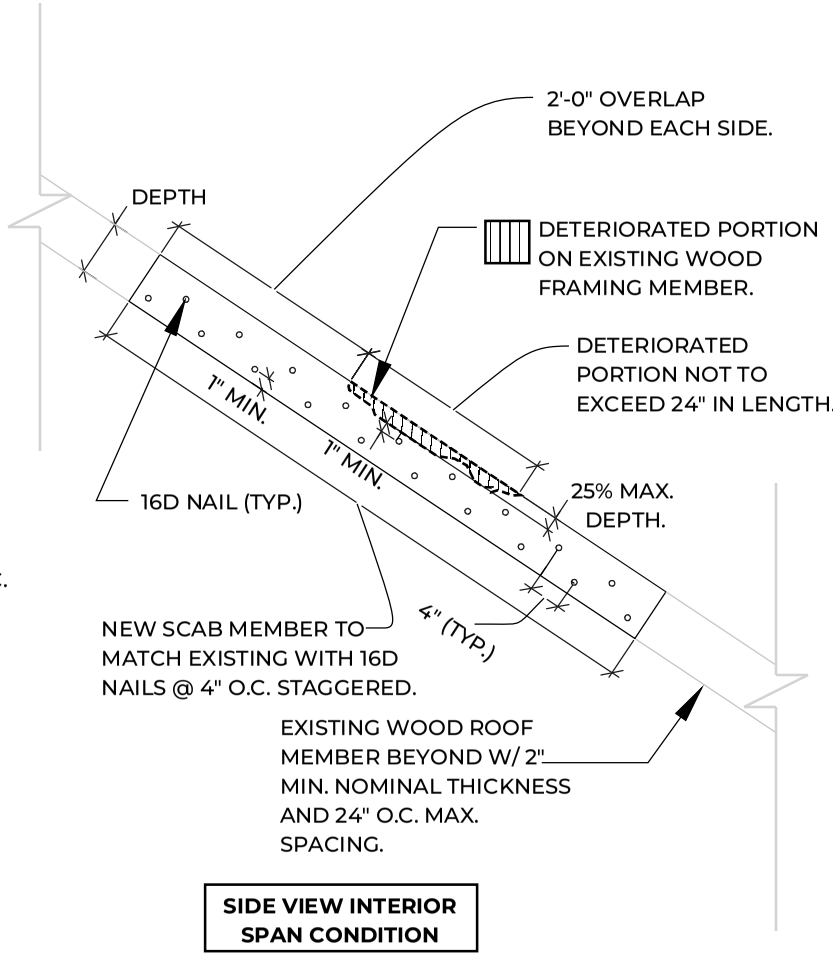
DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. SCAB WOOD MEMBERS MAY BE TRIMMED UP TO A MAXIMUM OF 1/2" AT THE BOTTOM TO FACILITATE INSTALLATION.
3. IF DAMAGE IS GREATER THAN THE CONDITIONS SHOWN, CONSULT A LICENSED PROFESSIONAL ENGINEER TO PROVIDE ENGINEERING DETAILS TO REPAIR THE DAMAGE.
4. DAMAGED/DETERIORATED AREA MUST BE A MINIMUM OF 6 IN. AWAY FROM ANY MECHANICAL CONNECTIONS (I.E. TRUSS/RAFTER HANGERS, TRUSS CONNECTOR PLATES, ETC.)
5. WHEN THE FASCIA OR SUB-FASCIA IS THE ROOF FRAMING MEMBER THAT IS DAMAGED OR DETERIORATED, REMOVE AND REPLACE THE DAMAGED/DETERIORATED SECTION PLUS AT LEAST 2 FT. BEYOND THAT SECTION ON EACH SIDE.
6. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.



SIDE VIEW END CONDITION



SIDE VIEW INTERIOR SPAN CONDITION

FORTIFIED HOME™	**APPLICABLE STANDARDS:** FORTIFIED HOME™ - HURRICANE (2025) FORTIFIED HOME™ - HIGH WIND (2025)	**DESCRIPTION:** RE-ROOFING NEW SCAB MEMBER DETAIL FOR DAMAGED OR DETERIORATED WOOD FRAMING MEMBER	**DRAWING #:** F-RR-2 **DATE:** 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.
3. FOR PREVIOUSLY FORTIFIED DESIGNATED HOMES WITH ULTIMATE SITE DESIGN WIND SPEED OF 160 MPH OR LESS IN EXPOSURE B OR C LOCATIONS, SUPPLEMENTAL FASTENING IS NOT REQUIRED.

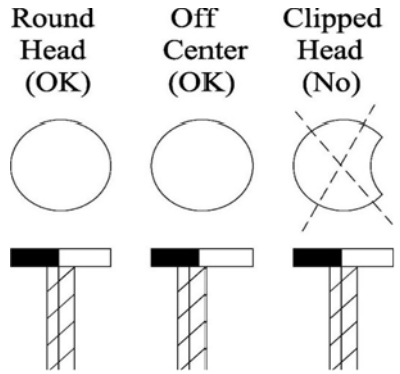
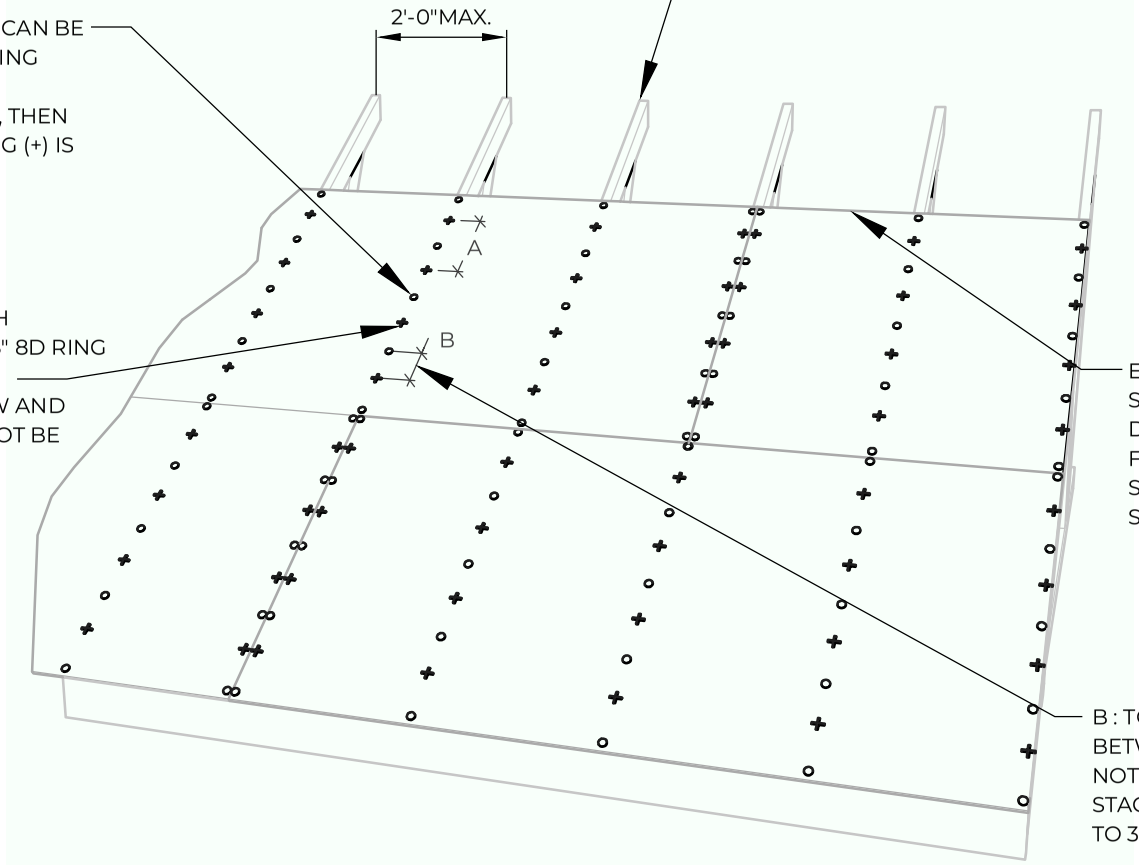


FIGURE 1.

O EXISTING FASTENERS; IF IT CAN BE DOCUMENTED THAT EXISTING NAILING MEETS THE REQUIREMENTS OF F-RS-2, THEN SUPPLEMENTAL FASTENING (+) IS NOT REQUIRED.

EXISTING ROOF FRAMING MEMBERS W/ 2" MIN. NOMINAL THICKNESS. REFER TO F-RR-2 FOR GUIDANCE ON DETERIORATED OR DAMAGED MEMBERS.



\+ RENAIL ROOF DECK WITH ADDITIONAL 0.113" X 2-3/8" 8D RING SHANK NAILS @ = 4" O.C. (SPACING BETWEEN NEW AND EXISTING NAILS SHALL NOT BE LESS THAN 2 INCHES.)

EXISTING STRUCTURAL WOOD PANEL ROOF SHEATHING (PLYWOOD OR OSB) W/ NO DAMAGE OR DETERIORATION. REFER TO F-RR-1 FOR DAMAGED OR DETERIORATED SHEATHING. REFER TO F-RS-2 FOR SHEATHING THICKNESS REQUIREMENTS.

B : TO AVOID WOOD SPLITTING, SPACING BETWEEN NEW AND EXISTING NAILS "B" SHALL NOT BE LESS THAN 2 IN. NAILS SHALL BE STAGGERED WHEN "B" IS LESS THAN OR EQUAL TO 3 IN.

KEY:

O = EXISTING FASTENERS
\+ = ADDITIONAL FASTENERS
A = SPACING OF ADDITIONAL FASTENERS
B = SPACING BETWEEN EXISTING AND ADDITIONAL FASTENER

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

HURRICANE AND HIGH WIND - RE-NAILING THE ROOF DECK
(WOOD STRUCTURAL PANELS)

DRAWING #: F-RR-3

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
3. LOCAL BUILDING CODE REQUIREMENTS FOR ROOF SHEATHING THICKNESS AND/OR NAIL SIZE/ATTACHMENT SPACING MAY BE MORE STRINGENT BASED ON SITE CONDITIONS.
4. FOR CONCRETE AND CLAY TILE ROOF COVERS, MINIMUM REQUIRED SHEATHING THICKNESS IS 15/32".
5. FULL ROUND HEAD DIAMETER; NO CLIPPED-HEAD NAILS, COMMON NAILS OR STAPLES SHALL BE ALLOWED. REFER TO FIGURE 1.
6. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

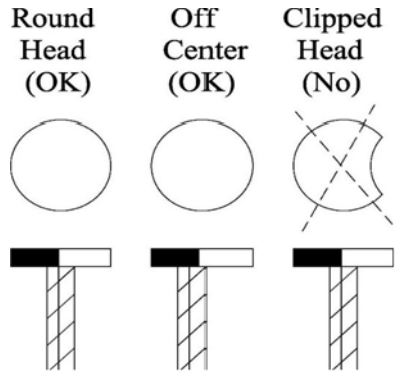
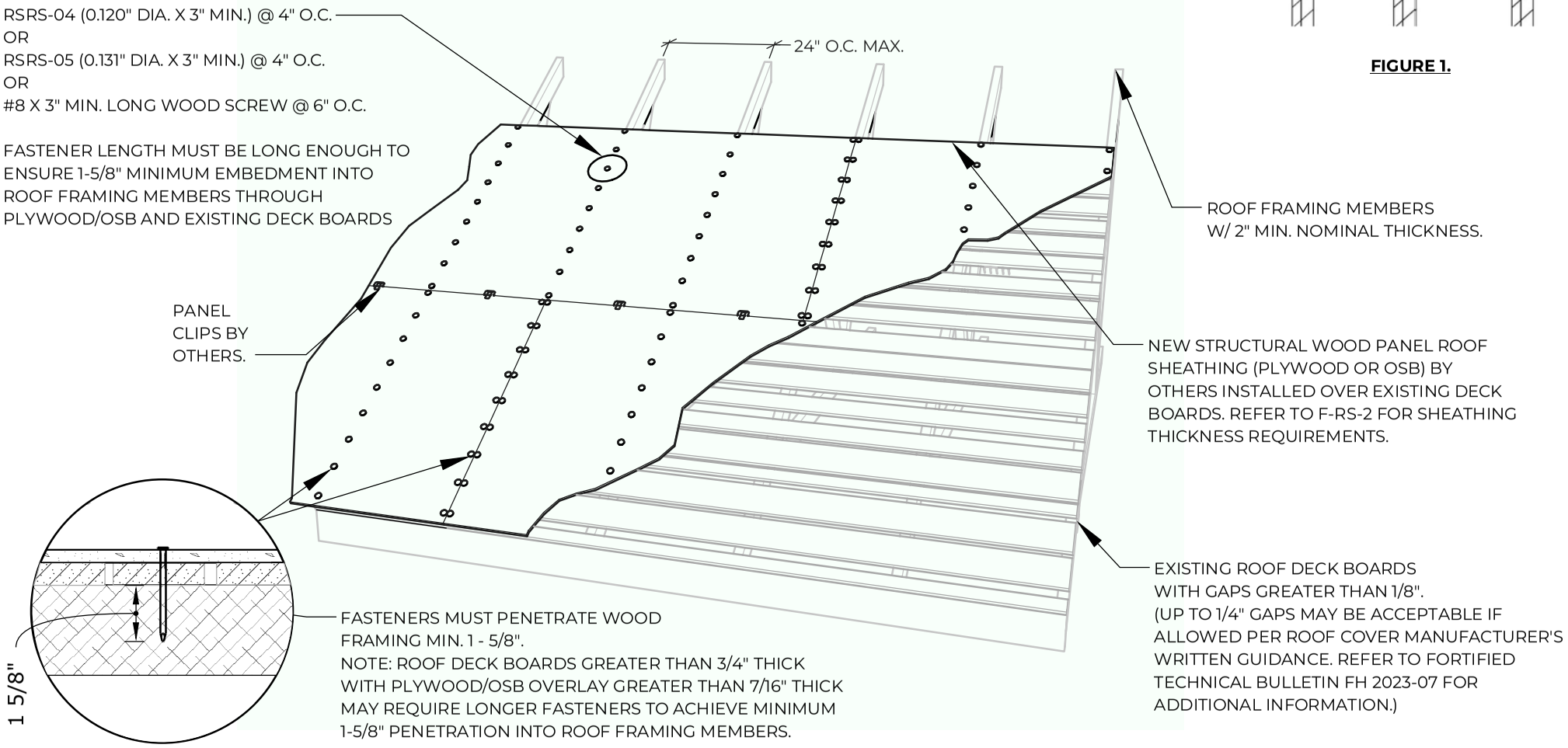


FIGURE 1.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

FASTENING WOOD STRUCTURAL PANEL ROOF SHEATHING OVER EXISTING 1X ROOF DECK BOARDS WITH GAPS OVER 1/8"

DRAWING #: F-RR-5

DATE: 11/01/2024

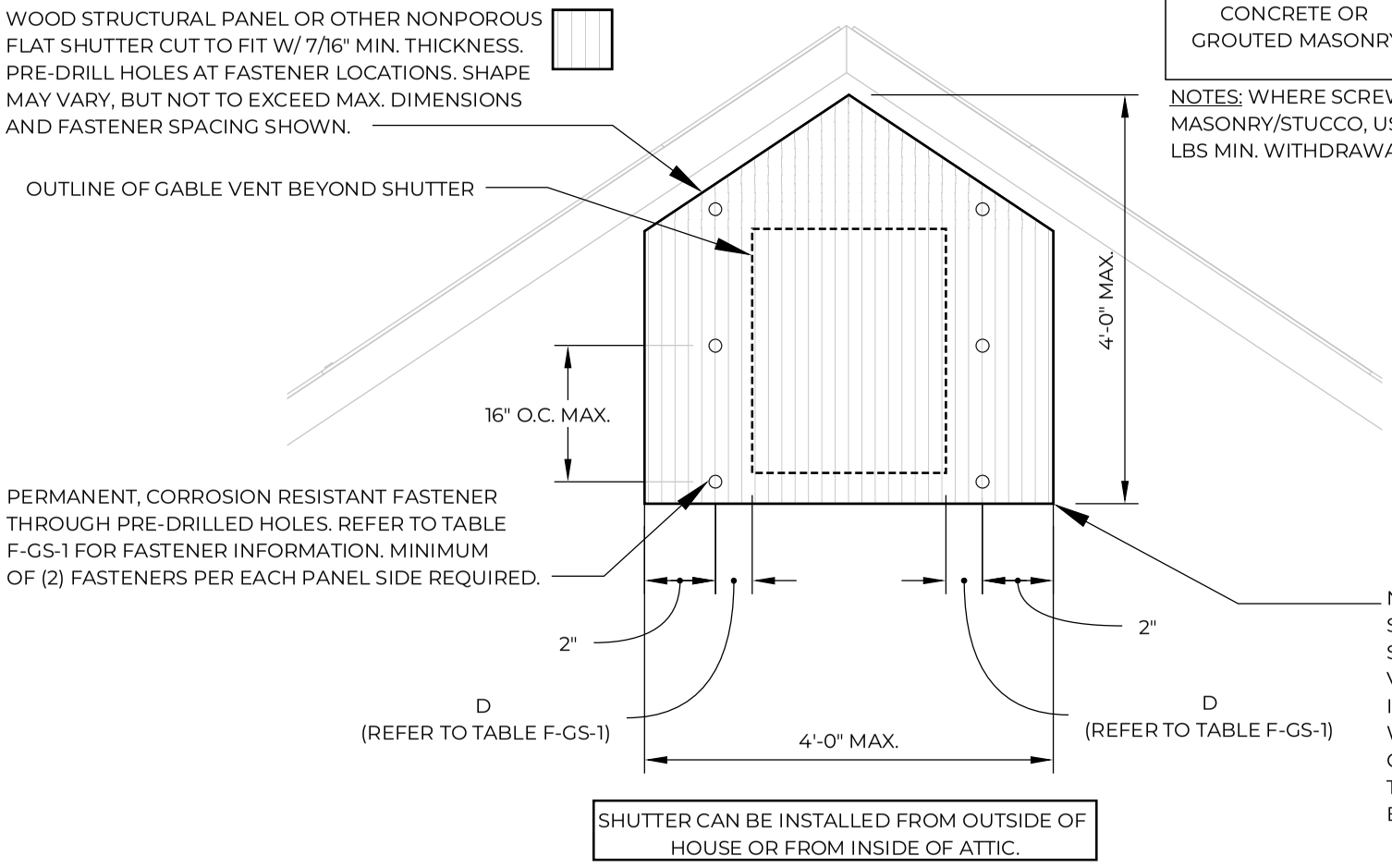
GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
3. **TO MAINTAIN PROPER ATTIC VENTILATION, VENT SHUTTERING MAY BE PERFORMED ON A TEMPORARY BASIS ONLY AND SHUTTERS ARE TO BE REMOVED AFTER A STORM THREAT IS OVER. ADEQUATE ATTIC VENTILATION MUST BE MAINTAINED ON A REGULAR BASIS.**
4. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

TABLE F-GS-1: FASTENING SCHEDULE FOR GABLE VENT COVER.

SUPPORT STRUCTURE TYPE	FASTENER TYPE & SIZE	END DISTANCE, D
WOOD	1/4" Ø LAG SCREWS W/ 2" EMBEDMENT & 1" Ø WASHER	1"
CONCRETE OR GROUTED MASONRY	1/4" Ø FASTENER W/ 2" EMBEDMENT & 1" Ø WASHER	2.5"

NOTES: WHERE SCREWS ARE ATTACHED TO MASONRY OR MASONRY/STUCCO, USE VIBRATION-RESISTANT ANCHORS W/ 1500 LBS MIN. WITHDRAWAL CAPACITY.



SHUTTER CAN BE INSTALLED FROM OUTSIDE OF HOUSE OR FROM INSIDE OF ATTIC.

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

DESCRIPTION:

TEMPORARY GABLE VENT SHUTTERING

DRAWING #: F-GS-1

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. SOFFIT PANELS IN GABLE END OVERHANGS CANNOT BE VENTED.
3. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.

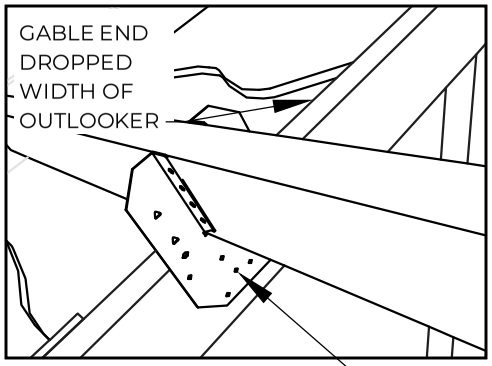
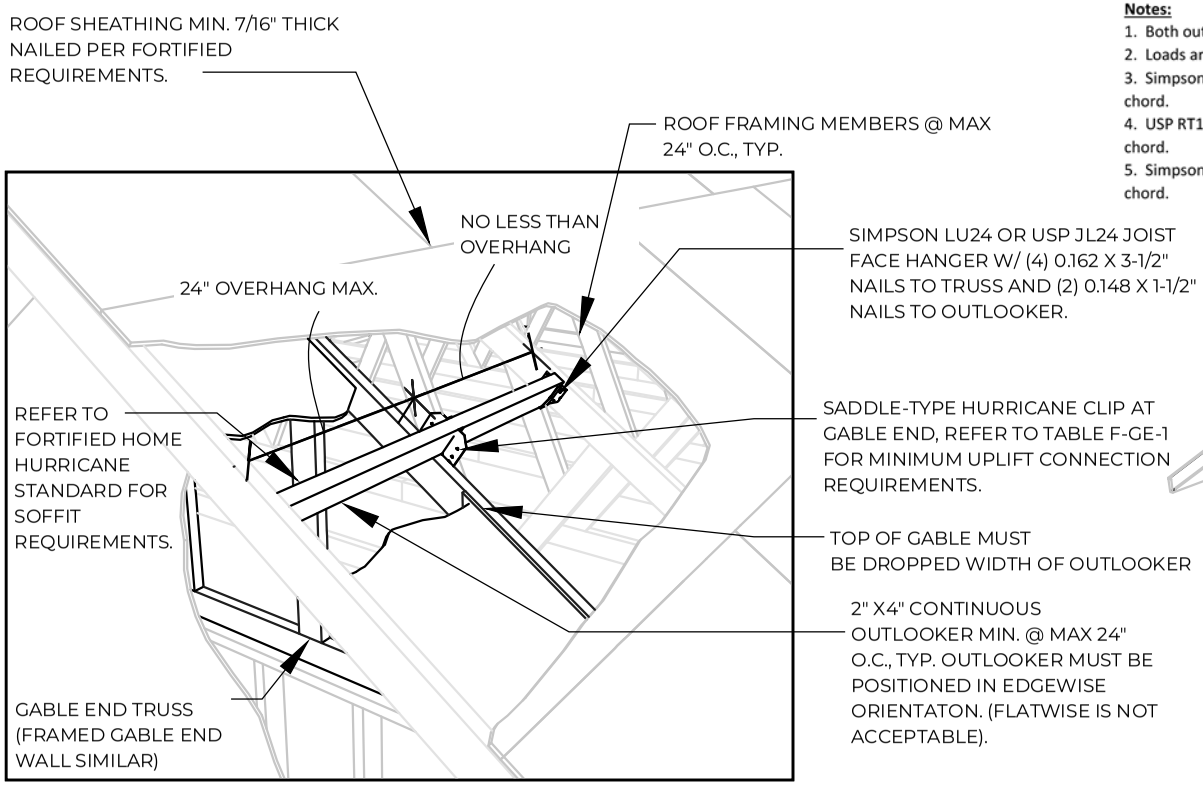


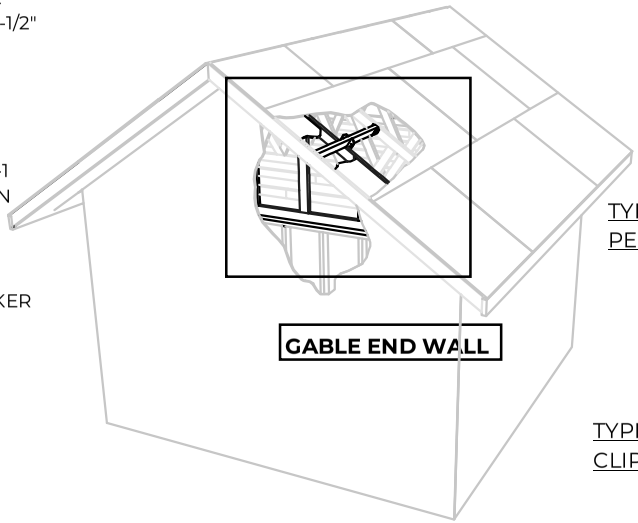
TABLE F-GE-1: RAKE OVERHANG OUTLOOKER MAXIMUM LENGTH AND CONNECTION REQUIREMENTS.

	Exposure B&C		Exposure D	
Ultimate Wind Speed, V_{ult} (mph)	Max. Overhang Length (in)[1]	Uplift Connection at Gable End[1,3,4,5]	Max. Overhang Length (in)[1]	Uplift Connection at Gable End[1,3,4,5]
130	24	Simpson H10A USP RT16A	22	Simpson H10A USP RT16A
140	22	Simpson H10A USP RT16A	18	Simpson H10A USP RT16A
150	20	Simpson H10A USP RT16A	16	Simpson H10A USP RT16A
160	16	Simpson H10A USP RT16A	14	Simpson H10A USP RT16A
170	14	Simpson H10A USP RT16A	14	Simpson H14
180	14	Simpson H14	-	-

Notes:

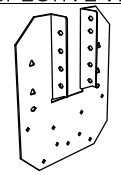
1. Both outlooker framing spacing and connector spacing are @ 24" O.C. max.
2. Loads are per the 2024 Wood Frame Construction Manual and ASCE 7-22.
3. Simpson H10A connection requires (9) 0.148 x 1-1/2 nails to outlooker and (9) 0.148 x 1-1/2 nails to gable end top chord.
4. USP RT16A connection requires (9) 0.148 x 1-1/2 nails to outlooker and (8) 0.148 x 1-1/2 nails to gable end top chord.
5. Simpson H14 connection requires (12) 0.131 x 1-1/2 nails to outlooker and (15) 0.131 x 2-1/2 nail to gable end top chord.







TYPICAL JOIST HANGER PERSPECTIVE VIEW



TYPICAL SADDLE - TYPE CLIP PERSPECTIVE VIEW

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

DESCRIPTION:

PRESCRIPTIVE GABLE END OUTLOOKER FRAMING AND ANCHORAGE

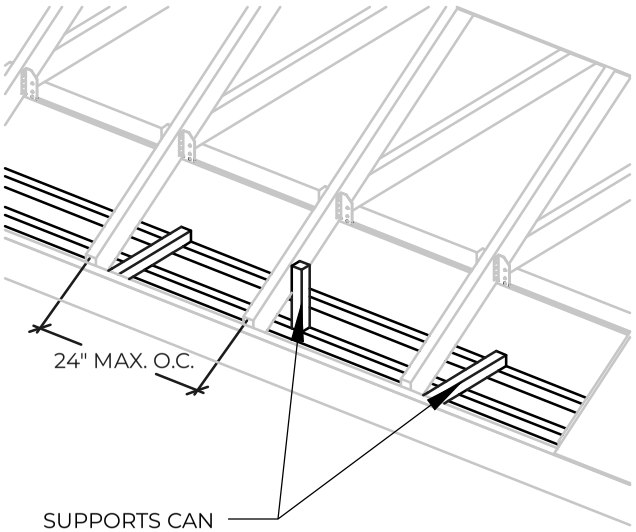
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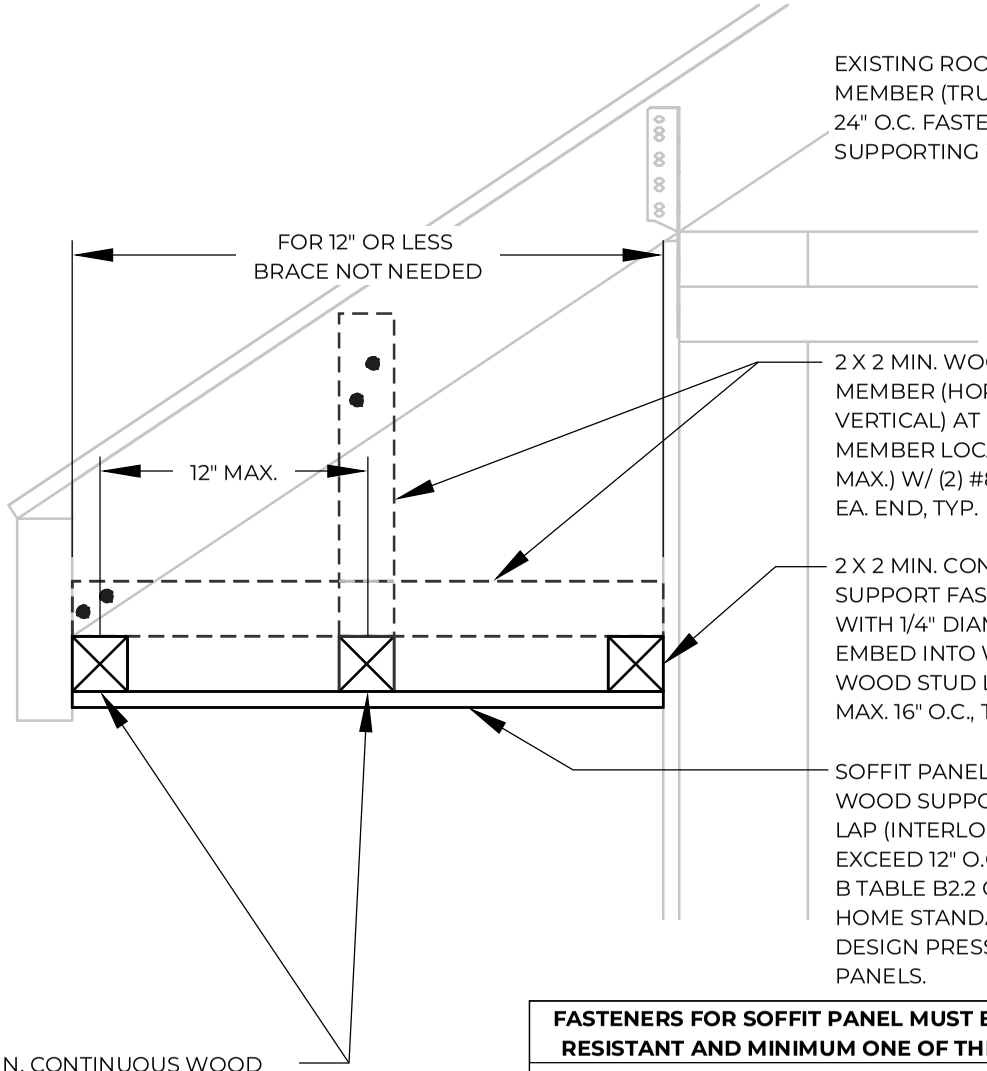
F-GE-1

DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.





FASTENERS FOR SOFFIT PANEL MUST BE CORROSION RESISTANT AND MINIMUM ONE OF THE FOLLOWING:
STAPLE 7/16" CROWN X 7/8" LENGTH X 16 GA.
NAIL 6D X 1" EMBEDMENT
SCREW #8 X 1" EMBEDMENT

APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

DESCRIPTION:

SOFFIT RETROFIT DETAIL

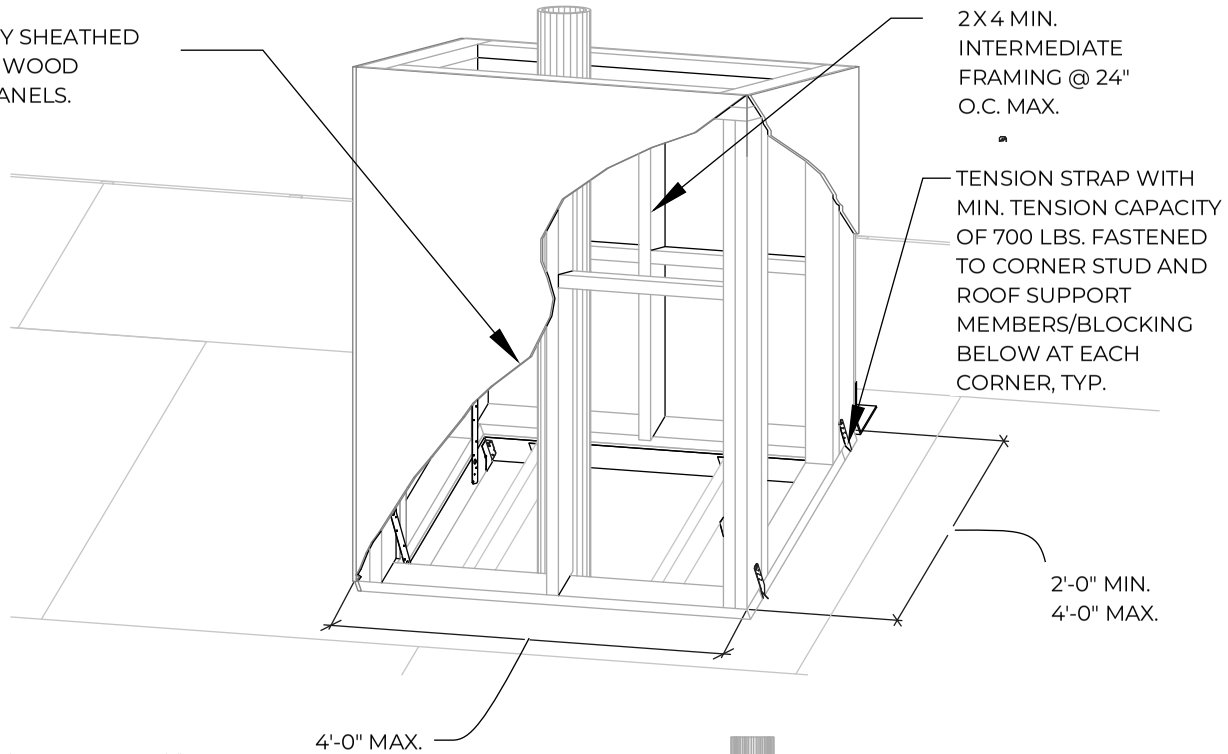
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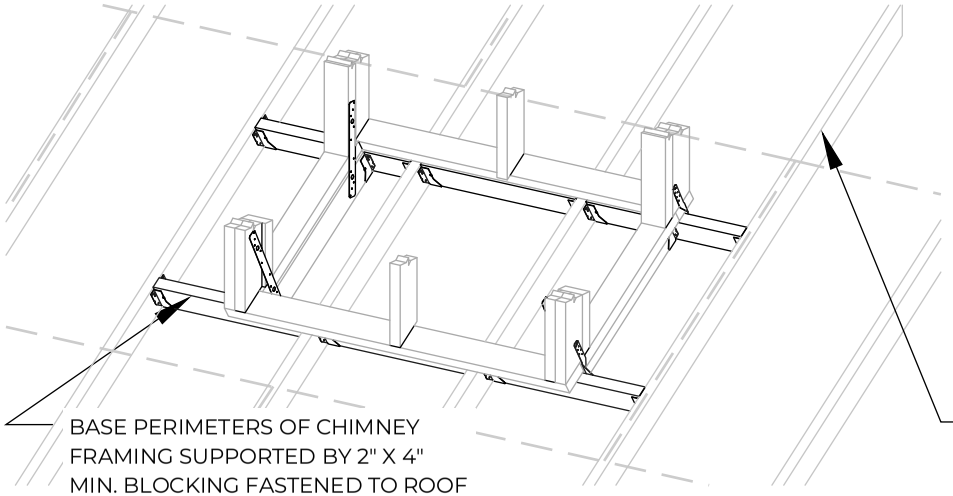
F-S-1

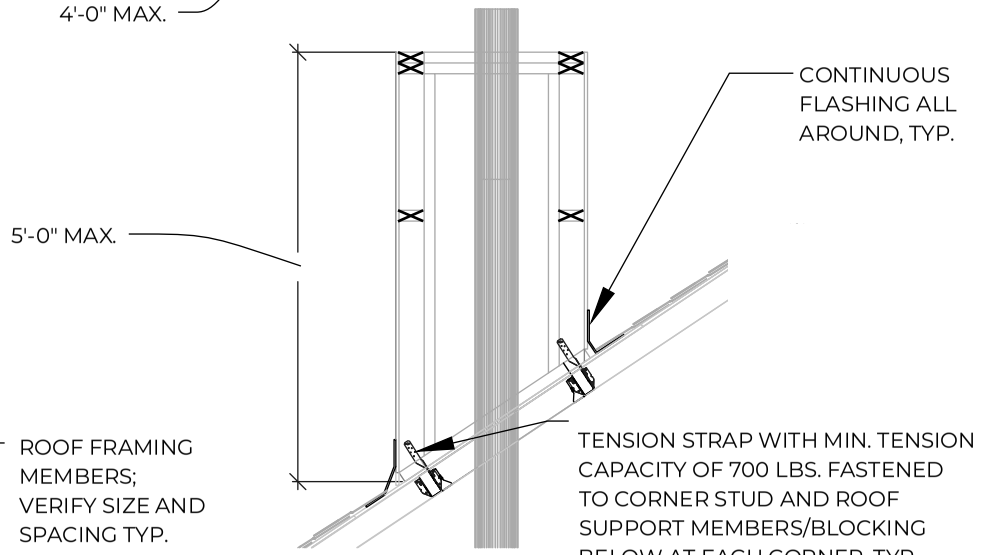
DATE: 11/01/2024

GENERAL NOTES:

1. REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
2. PRESCRIPTIVE RETROFIT GUIDANCE IS APPLICABLE FOR CHIMNEYS LOCATED IN THE INTERIOR ZONE OF THE ROOF (ZONE 1) AND EXTENDING LESS THAN 5 FT ABOVE THE ROOF DECK. ANCHORAGE FOR CHIMNEYS OUTSIDE OF THESE LIMITATIONS REQUIRES ENGINEERING REVIEW AND DETAILING BY A PROFESSIONAL ENGINEER.
3. FORTIFIED HOME STANDARDS ARE TO BE APPLIED IN CONJUNCTION WITH FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS IN ADDITION TO THE STRUCTURAL DESIGN WHICH IS BY OTHERS. IN CASE OF A CONFLICT BETWEEN PROVISIONS, USE WHICHEVER IS MORE STRINGENT.







APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2025)

FORTIFIED HOME™ - HIGH WIND (2025)

DESCRIPTION:

PRESCRIPTIVE CHIMNEY TIE-DOWN DETAIL FOR CHIMNEYS UP TO 5 FT

DRAWING #:

F-CTD-1

DATE: 11/01/24