



Thank you for choosing AES!

We are here to help. It is vitally important that you understand the Fortified Process. If you're selling a Fortified Roof, you should know how to deliver one. This guide is not designed to teach you how to install a fortified roof.

The following link will take you to the [fortifiedhome.org](https://fortifiedhome.org/building-professionals/) building professionals website:

<https://fortifiedhome.org/building-professionals/>

This will provide you with official information on training and certifications. AES strongly advises you to become certified.

In the following pages, you will see a guide created by AES to assist in documenting the installation of a Fortified Hurricane-Standard Roof. This is only a guide and is not a substitute for adequate Fortified Training.

You've heard the saying knowledge is power. In this case, it is vitally important. If you are not sure on how to install a Fortified Hurricane-Standard Roof, please let AES know immediately.

AES has been monitoring live construction for over 20 years. We pride ourselves on working with professionals. We will do everything possible to capture and deliver the required information to IBHS.

As a fortified evaluator, we are required to visit the site of a fortified hurricane standard roof installation a minimum of two times. AES will make additional trips as necessary to capture the appropriate documentation.

Communication and logistics are vital components of the fortified hurricane standard roof evaluation process. Working together, the designation process can be smooth and efficient.

Please review this guide and contact us directly with any questions or concerns.

E-mail: aes@aesfortified.com



Failure to submit adequate or acceptable documentation may result in the denial of a FORTIFIED designation.

FORTIFIED Homeowners have peace-of-mind when storms hit, in part, because they trust IBHS research has guided them to implement the most critical upgrades to protect their homes from severe weather. That confidence is multiplied by the independent third-party verification required to achieve a FORTIFIED designation at any level (Roof, Silver or Gold).

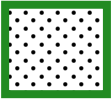
The documentation provided by certified FORTIFIED Evaluators enables IBHS to enforce the FORTIFIED standards. Requiring appropriate and adequate documentation ensures that adequately rated, FORTIFIED-compliant materials are used and installed in compliance with both the FORTIFIED standards and manufacturer requirements.

DOCUMENTATION IS MORE THAN TAKING PICTURES

While photos are an extremely important method of verifying FORTIFIED requirements at a homesite, they only represent a portion of the documentation required for a FORTIFIED designation.

Depending on designation level, installation documentation may include the following:

- Photo documentation of product packaging
- Photo documentation of installation
- Certified testing reports and/or manufacturer installation instructions for certain products
- FORTIFIED Compliance Forms
- Additional documentation which may be required depending on individual specific site conditions and design elements

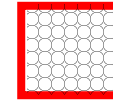


GREEN CODED SECTIONS -

DOCUMENTATION REQUIRED FOR FORTIFIED ROOF DESIGNATION

- A. Sloped and/or low-slope roofs over the living space of the home and attached garages.
- B. Upper-level balconies and/or decks over the living space of the home.
 - Exposed walking surfaces must be treated as a low-slope roof section.
 - May include widow's walk (not shown in Figures)
- C. Bay windows and/or bump-out roof areas over the living space of the home
- D. Any roof type that ties into the main roof cover.

Use "COLOR CODED LEGEND" to identify roof areas required to attain FORTIFIED ROOF designation.



RED CODED SECTIONS - NOT REQUIRED TO BE DOCUMENTED FOR FORTIFIED ROOF DESIGNATION

- E. Exterior roofs that are not over living space of the home and/or tied into the main roof cover.
 - If exterior roof is separate from the main home or the main roof
- F. Architectural features that project from the wall of the home (such as eyebrows and awnings)

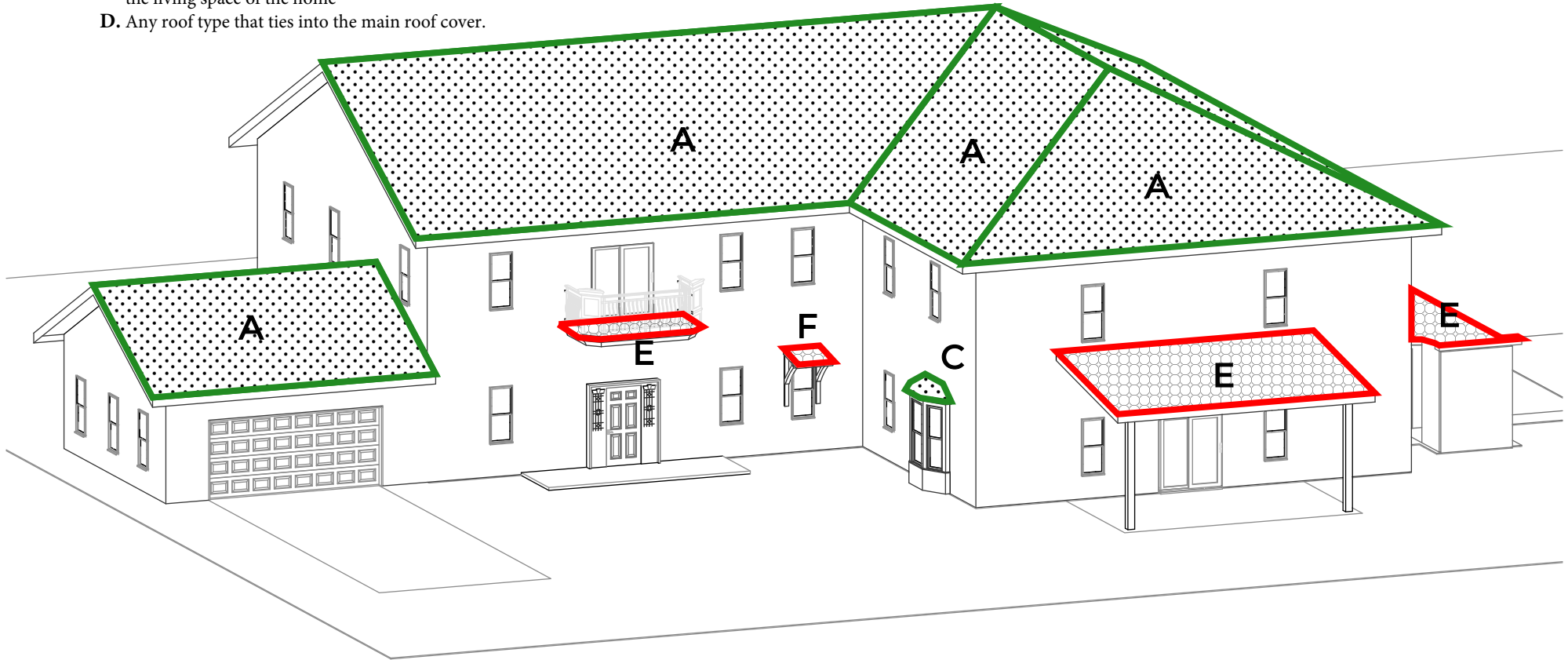
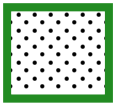


Figure 1 – Sample House (front)



DEFINITION FOR FORTIFIED NEW ROOF DESIGNATION

For a qualifying home to be eligible for the FORTIFIED New Roof Designation all roof covers on or attached to the building must be replaced when reroofing. Only roof sections outside of exterior foundational walls may be exempt if there is a separation from the main roof cover. Documentation must be submitted confirming separation from main roof cover due to the presence of existing parapet walls, flashing where the roof covering is completely interrupted or terminated (excluding any type of valley), or difference of elevation (excluding hips, ridges, and change of slope).

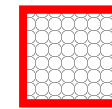


GREEN CODED SECTIONS -

DOCUMENTATION REQUIRED FOR FORTIFIED ROOF DESIGNATION

- A. Sloped and/or low-slope roofs over the living space of the home and attached garages.
- B. Upper-level balconies and/or decks over the living space of the home.
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 - May include widow's walk (not shown in Figures)
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Use "COLOR CODED LEGEND" to identify roof areas required to attain FORTIFIED ROOF designation.



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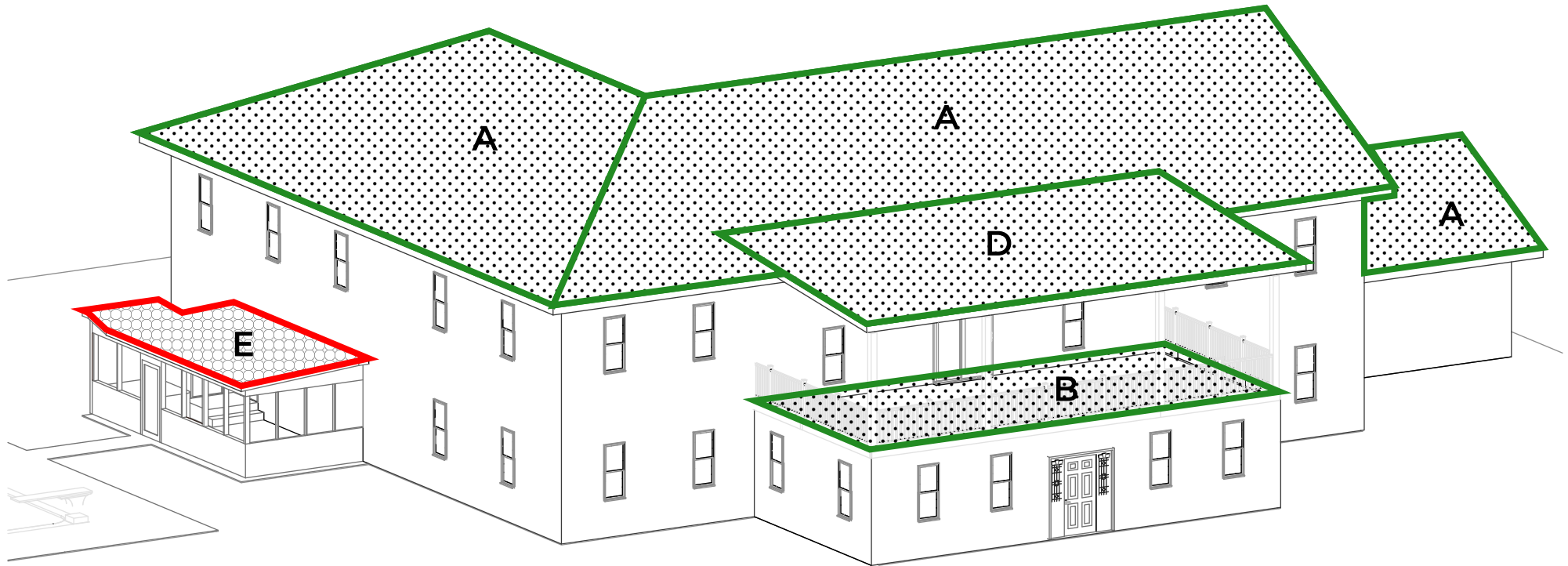


Figure 2 – Sample House (back)



DEFINITION FOR FORTIFIED NEW ROOF DESIGNATION

For a qualifying home to be eligible for the FORTIFIED New Roof Designation all roof covers on or attached to the building must be replaced when reroofing. Only roof sections outside of exterior foundational walls may be exempt if there is a separation from the main roof cover. Documentation must be submitted confirming separation from main roof cover due to the presence of existing parapet walls, flashing where the roof covering is completely interrupted or terminated (excluding any type of valley), or difference of elevation (excluding hips, ridges, and change of slope).



New and Existing Homes

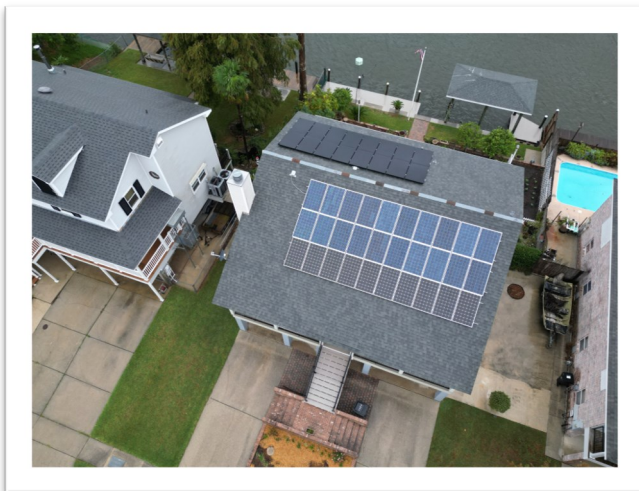
The Following Site Conditions Require Special Attention! If These Conditions Are Present Contact Your Evaluator Before You Proceed.



Decorative Vents



Ridge Tiles



Solar Panels

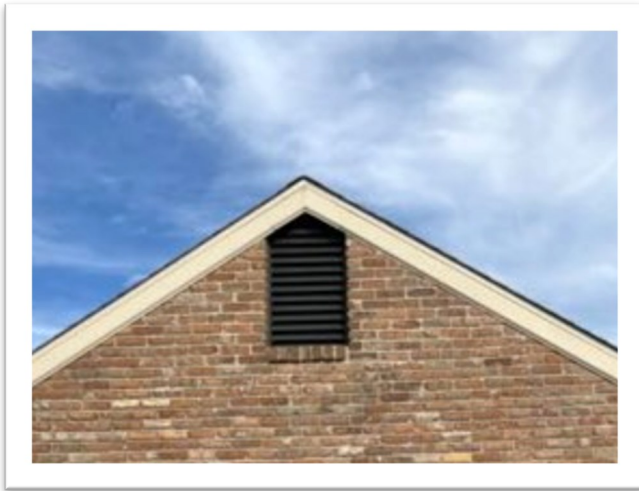


Attached Structures

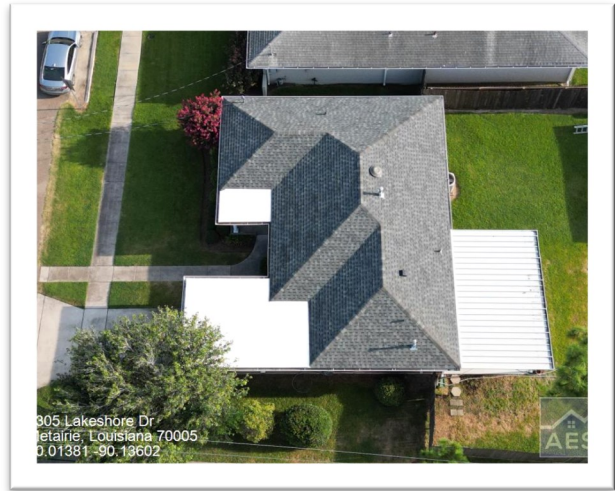


New and Existing Homes

The Following Site Conditions Require Special Attention! If These Conditions Are Present Contact Your Evaluator Before You Proceed.



Gable Vents



Low Slope Roof



HVAC Condenser

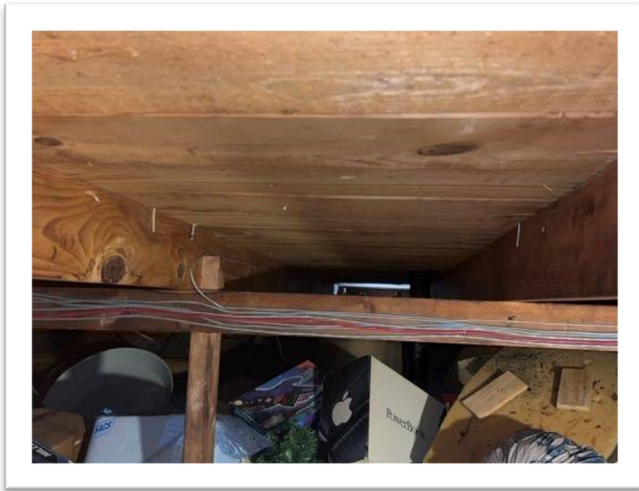


Metal Roof

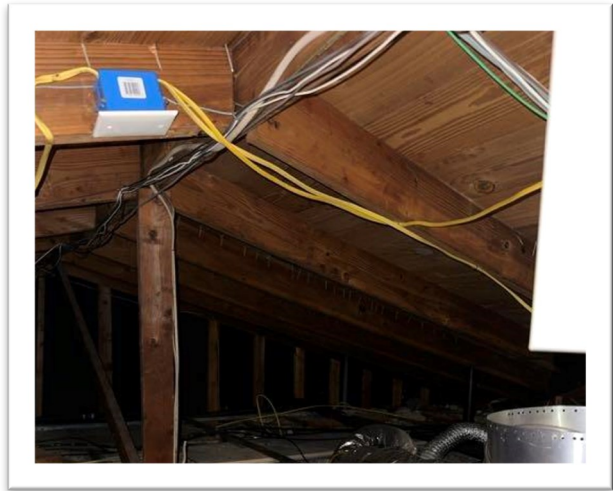


Board Lumber

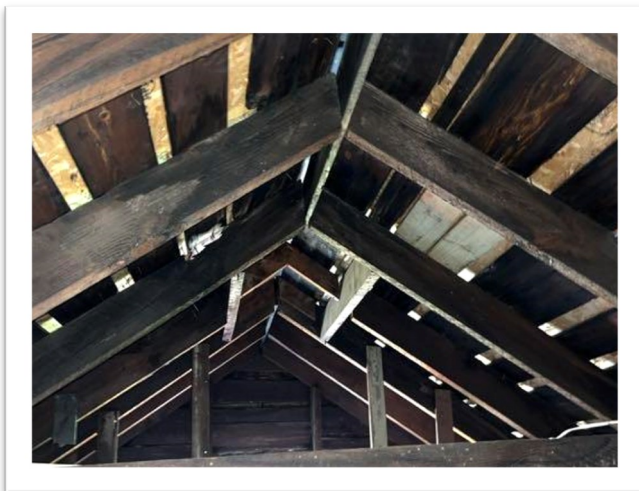
Board Lumber with gaps greater than $\frac{1}{8}$ of an inch may require a re-deck with $\frac{7}{16}$ inch thick decking material. The Deck nail needs to be 3-3- $\frac{1}{4}$ inch round head ring shank.



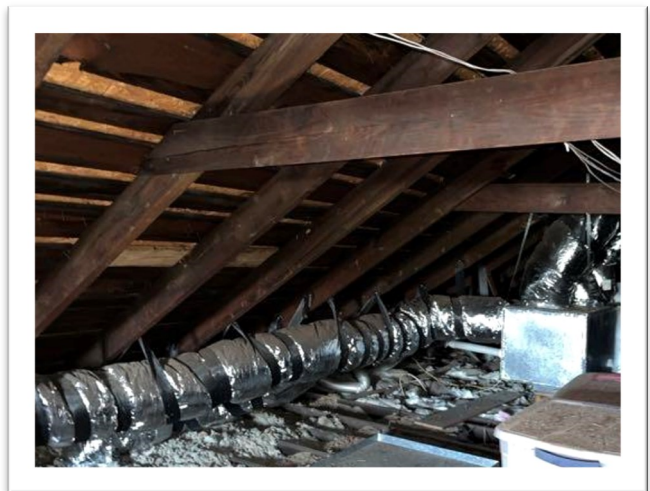
Board Lumber



Board Lumber



Board Lumber



Board Lumber

ROOF DECK ATTACHMENT - RE-DECKING OVER SAWN LUMBER

OR WOOD BOARD ROOF DECK WITH NO GAPS

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.

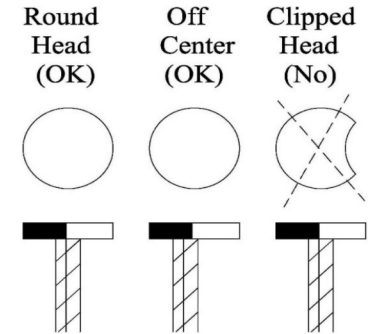
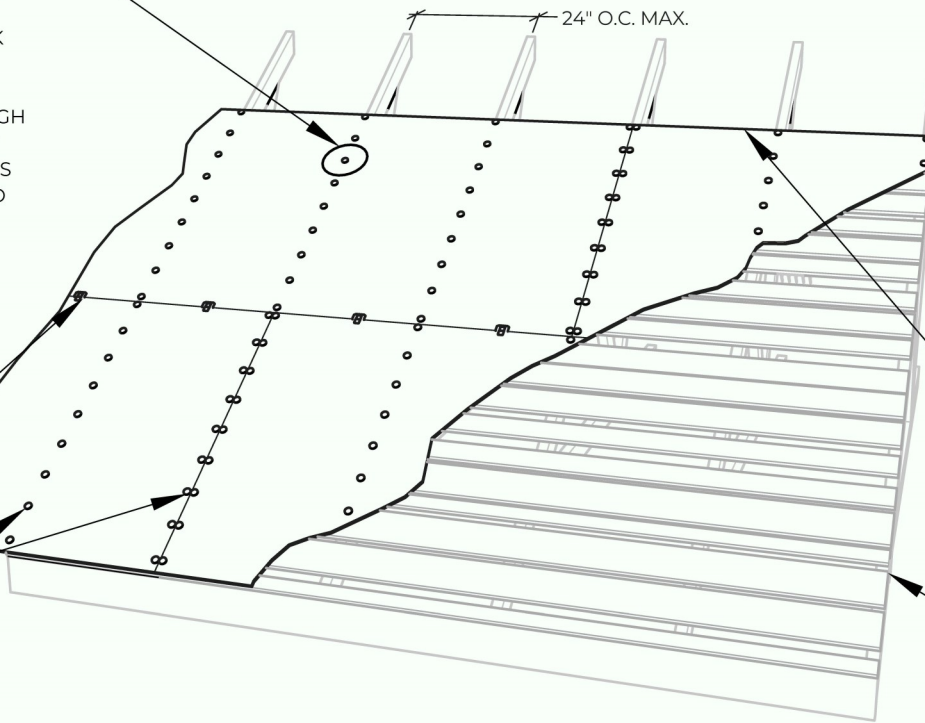


FIGURE 1.

RSRS-04 (0.120" DIA. X 3" MIN.) OR RSRS-05 (0.131" DIA. X 3" MIN.) ROOF SHEATHING RING SHANK NAILS @ 4" O.C. INTO ROOF FRAMING MEMBERS. NAIL LENGTH MUST BE LONG ENOUGH TO ENSURE 1-5/8" EMBEDMENT INTO ROOF FRAMING MEMBERS THROUGH PLYWOOD/OSB AND EXISTING DECK BOARDS. ALT: #8 X 3" MIN. LONG WOOD SCREWS @ 6" O.C.

PANEL CLIPS BY OTHERS.

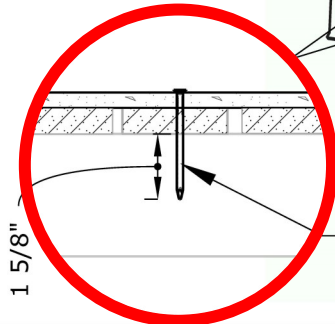


ROOF FRAMING MEMBERS W/ 2" MIN. NOMINAL THICKNESS.

NEW STRUCTURAL WOOD PANEL ROOF SHEATHING (PLYWOOD OR OSB) BY OTHERS INSTALLED OVER EXISTING DECK BOARDS. REFER TO F-RS-2 AND/OR F-RS-3 FOR SHEATHING THICKNESS REQUIREMENTS (MIN. 7/16").

EXISTING ROOF DECK BOARDS WITH GAPS GREATER THAN 1/8"

FASTENERS 4 IN. O.C. PENETRATING WOOD FRAMING MIN. 1 - 5/8".



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2020)
FORTIFIED HOME™ - HIGH WIND (2020)

DESCRIPTION:

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

DRAWING #:

F-RR-5

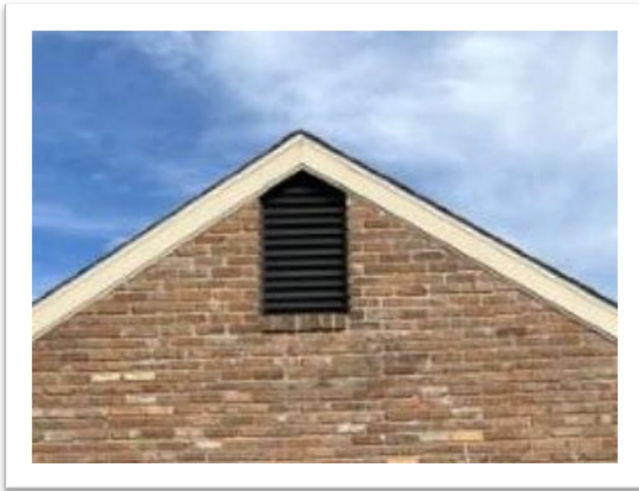
DATE:

11/01/2020



Board Lumber

TEMPORARY GABLE VENT SHUTTERING. ALL GABLE VENTS MUST HAVE A REMOVABLE COVER AS PER IBHS DRAWING.



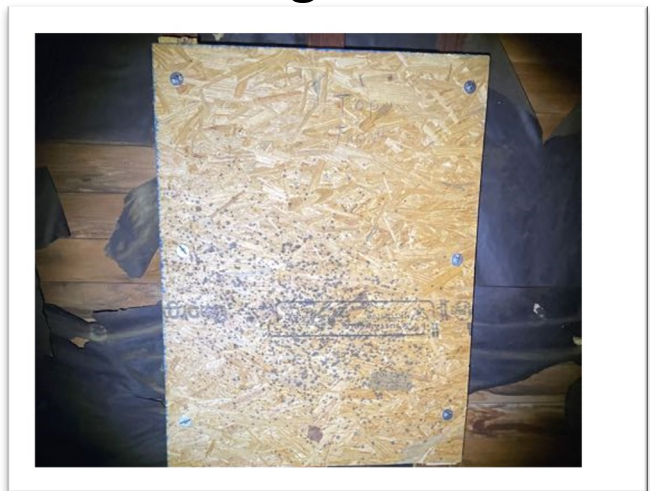
Roof Vents



Ridge Tiles



Solar Panels



Attached Structures

TEMPORARY GABLE VENT SHUTTERING

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.

WOOD STRUCTURAL PANEL OR OTHER NONPOROUS FLAT SHUTTER CUT TO FIT W/ 7/16" MIN. THICKNESS. PRE-DRILL HOLES AT FASTENER LOCATIONS. SHAPE MAY VARY, BUT NOT TO EXCEED MAX. DIMENSIONS AND FASTENER SPACING SHOWN.



OUTLINE OF GABLE VENT BEYOND SHUTTER

PERMANENT, CORROSION RESISTANT FASTENER THROUGH PRE-DRILLED HOLES. REFER TO TABLE F-GS-1 FOR FASTENER INFORMATION. MINIMUM OF (2) FASTENERS PER EACH PANEL SIDE REQUIRED.

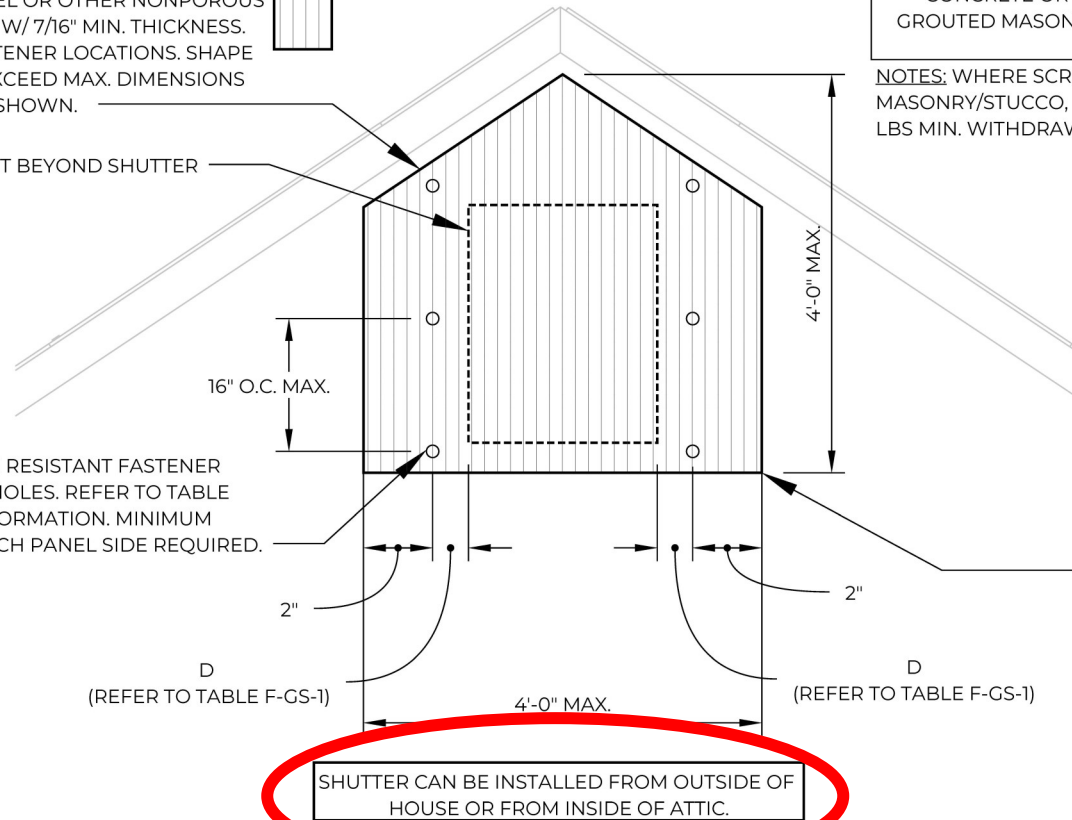


TABLE F-GS-1: FASTENING SCHEDULE FOR GABLE VENT COVER.

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	1.5"

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

NOTE: SELF-ADHESIVE WEATHER STRIPPING CAN BE USED TO SEAL THE SHUTTERS TO THE TRIM BOARDS AROUND VENT EDGES. IF SHUTTER IS INSTALLED ON INSIDE OF ATTIC, ENSURE THAT ANY WATER THAT ACCUMULATES IN THE CAVITY CAN DRAIN TO THE OUTSIDE OF THE HOUSE AND NOT INTO THE WALL BELOW.

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



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2020)

DESCRIPTION:

TEMPORARY GABLE VENT SHUTTERING

DRAWING #:

F-GS-1

DATE:

11/01/2020



Existing Home Issues

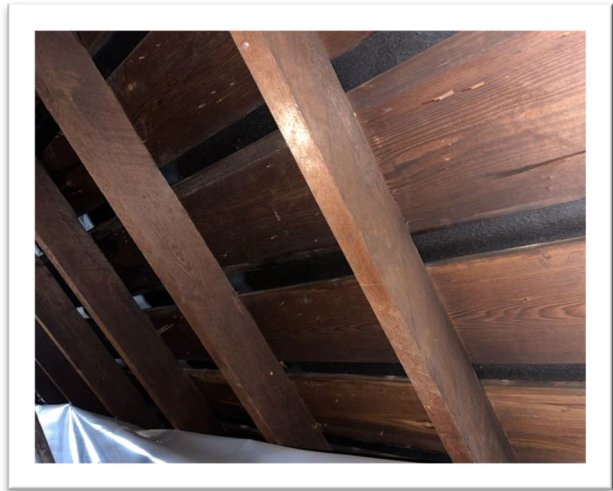
No Dry Stack Foundations!

Board Lumber Gaps no more than 1/8 inch!

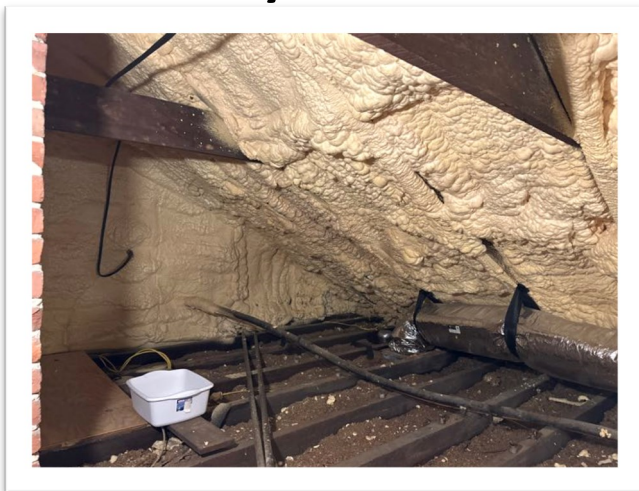
Spray Foam— Rafter Spacing 24 Inches !



Dry Stack



Board Lumber



Spray Foam

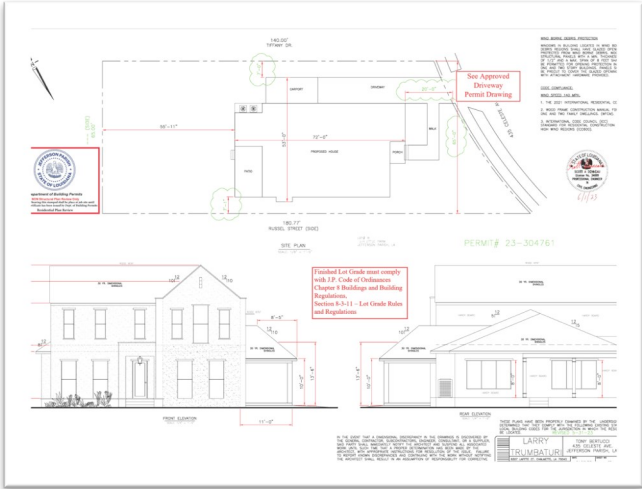


Rafter Spacing



Roof Pitch

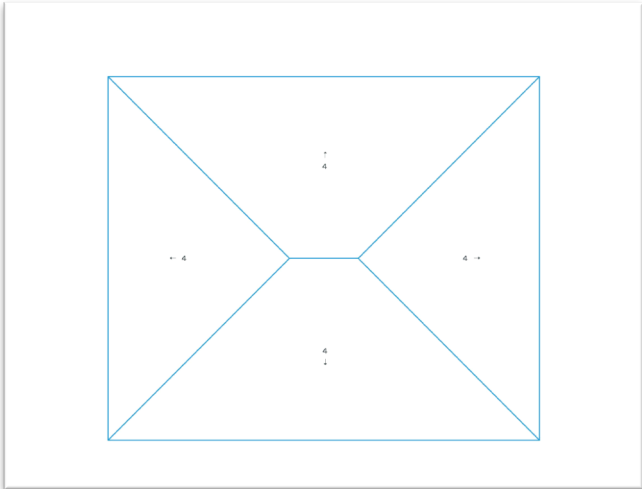
Please provide completed roof installation photos. Roof Pitch determination is required. This can be provided from a Phone app, Building Plans, pitch gage or a third party roof report showing the pitch of the roof.



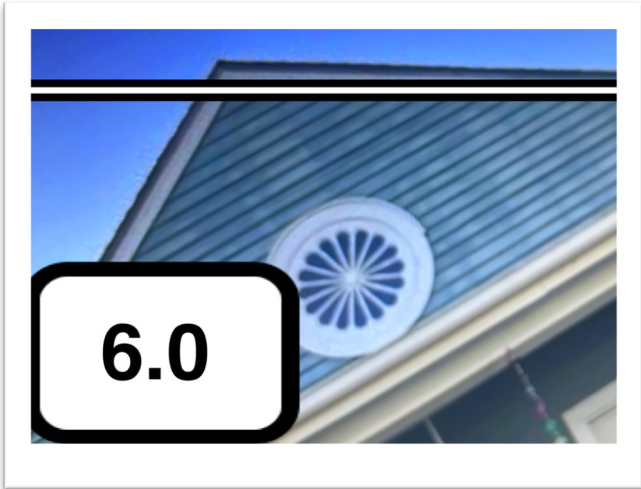
Roof Pitch



Roof Pitch



Roof Pitch

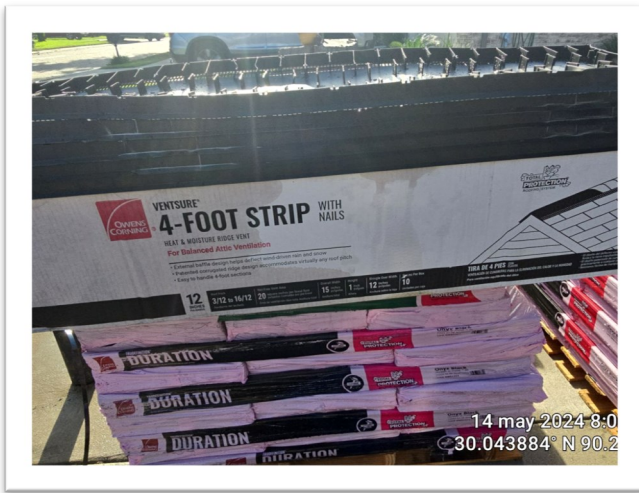


Roof Pitch



Roof Mounted Ventilation

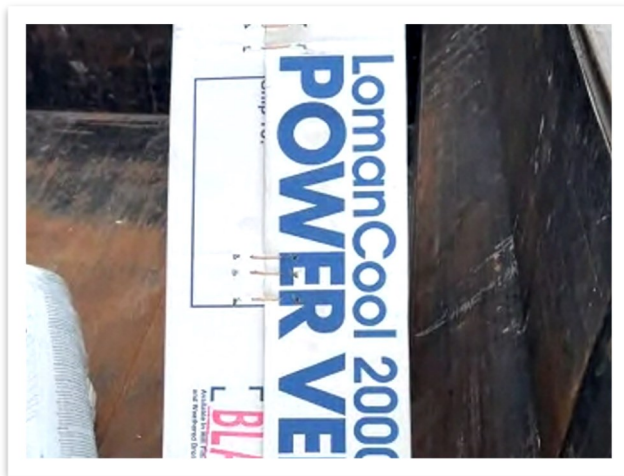
Roof Mounted vents much have supporting documentation. Required (TAS-100 A) Testing



Ridge Vent



Wind Powered



Power Vent



Installation



4 Photos of the Subject Property

4 Elevation Photos-Front-Left-Right-Rear

Showing the entire structure from Foundation to roof.



Front



Left Side



Right Side



Rear



4 Foundation Photos

For slab on grade and stem-wall foundations, 1 photo minimum is acceptable.

For other types of foundations, such as elevated foundations, 4 photos minimum showing foundation type and any positive connections to structure are required. Photos should be close enough to clearly see connections/anchorage. **If the Foundation Is Raised add 4 additional Photos from underneath the property.**

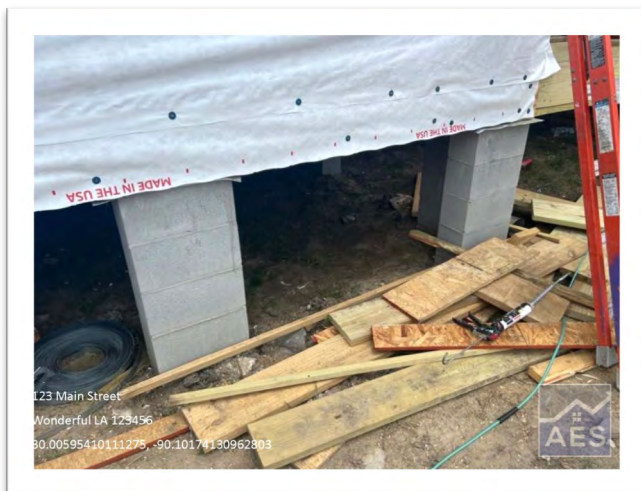
Observation of dry-stack foundation automatically DISQUALIFIES the home



Foundation



Foundation



Foundation



Foundation



Verify Sealed Roof Labels

1 legible photo of each label for each approved synthetic underlayment, 30# felt, self-adhered underlayment, and/or seam tape product showing ASTM.



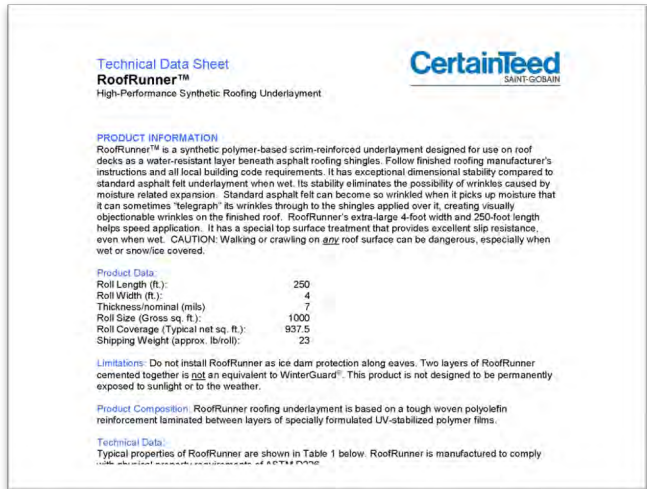
Underlayment



Seam Tape



Self-adhered



Material Specs



3 Photos Asphalt Shingle Roof Covers

1 photo of shingle packaging showing manufacturer and product name
1 photo of shingle packaging showing shingle ASTM rating and class. You can also Download the spec sheet from the manufacturer.



Shingle Package



Shingle Package



Shingle Package

Pristine Appearance. Protected Appeal. Pinnacle® Pristine architectural shingles provide stunning color that lasts while protecting homeowner's roofs from black streaks caused by algae with Scotchgard® Protector by 3M.

Length: 43" / 1066.8 mm
Width: 14" / 355.6 mm

Exposure: 6" / 152.4 mm
Shingles Per Bundle: 18-30

FEATURES	ASTM	UL
Available in 17 Colors	D7158, Class H Wind Resistance, Rated at 150 mph	790, Class A Fire Resistance
Scotchgard® Protector	D6381, Uplift Resistance	2218, Class 3 Impact Resistance
Class 3 Impact Rating	D3281, Type 1	2390, Class H Wind Resistance
120 mph Wind Limited Warranty**	D3161, Class F, Tested at 110 mph	
FASTACT® Double Sealant Lines	D3462, As Manufactured	
Algae Lifetime* Algae Resistance	E108, Class A Fire Resistance	
Lifetime Limited Warranty**		
Algae Signature Select® Eligible!		

SAFETY, STORAGE AND HANDLING
WARNING: Roofing application can be dangerous. Observe all precautions and safety guidelines in accordance with proper roofing trade practices. Minimize roof traffic. Perform regular roof maintenance in appropriate weather.
IMPORTANT PRECAUTIONS: Store on flat surface. Protect from weather during storage and on job site. Sealant protection tape is placed on back of each shingle and does not have to be removed before applying.
For additional safety, storage and handling instructions go to: AtlasRoofing.com/roof-shingles/wds

CODES AND COMPLIANCES
Means AC-208 Criteria
CAN/CSA-A123.5-M90
Florida Building Code Approved - FI 16305
Miami-Dade County Product Control Approved

Spec- Sheet



4 Photos Roof Structure Members

4 photos minimum showing at least 3 exposed roof members (i.e. trusses, rafters) with tape measure between roof members to show on center spacing.



Rafter Spacing



Rafter Spacing



Rafter Spacing



Rafter Spacing



4 Photos Roof Deck Thickness

4 photos of sheathing type and thickness, i.e. plywood/OSB/Zip Panel grade stamp or sheathing edge with tape measure.



Roof Deck Thickness



Roof Deck Thickness



Roof Deck Thickness



Roof Deck Thickness

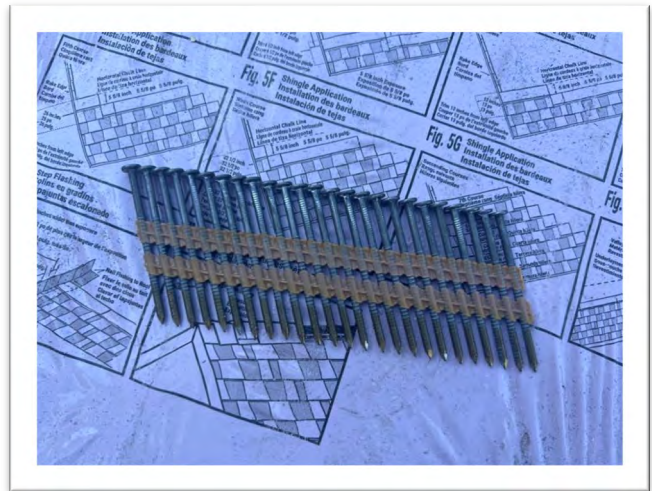


4 Photos Deck Fastener Type

4 photos 1 photo showing type of fastener used - photos must show either carton label indicating nail type and size, or full nails clearly showing ring shank with tape measure showing length (required minimum SD ring shank as specified in Section 2.6)



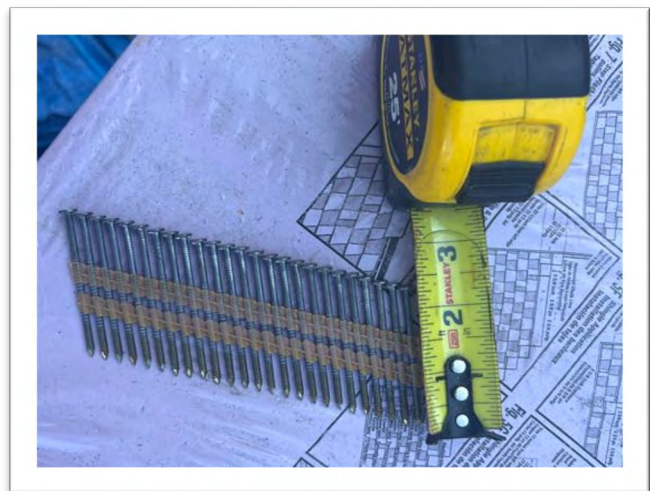
Deck Nail Type



Deck Nail Type



Deck Nail Type

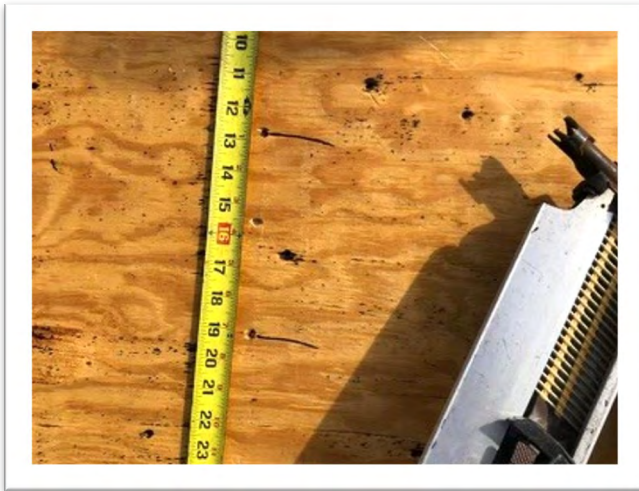


Deck Nail Type



8 Photos Roof Deck Attachment

8 total photos showing maximum nail spacing: **4 photos must be taken from above roof deck showing nail spacing 4 inches on center with tape measure in four different locations** and 4 photos must be provided from 4 locations within the attic. Each photo in attic must include 2 consecutive structural roof members. (Showing shiners-nails that have missed the rafters)



Decking Attachment



Decking Attachment



Decking Attachment



Decking Attachment

HURRICANE- NEW CONSTRUCTION ROOF DECK ATTACHMENT STRUCTURAL WOOD PANELS



- GENERAL NOTES:**
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 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}	Maximum Nail Spacing (All Roof Areas) ¹
ASCE 7-10	7/16" <i>See Notes 1, 2, 3</i>	RSRS-01; 0.113" dia. x 2-3/8" Roof Sheathing Ring Shank Nail	4" O.C.
ASCE 7-16	15/32" <i>See Notes 1, 3</i>		

- 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 \emptyset ; No clipped-head nails, common nails or staples shall be allowed. Refer to Figure 1.

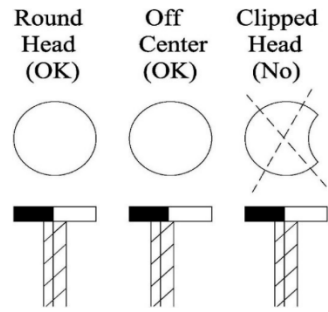
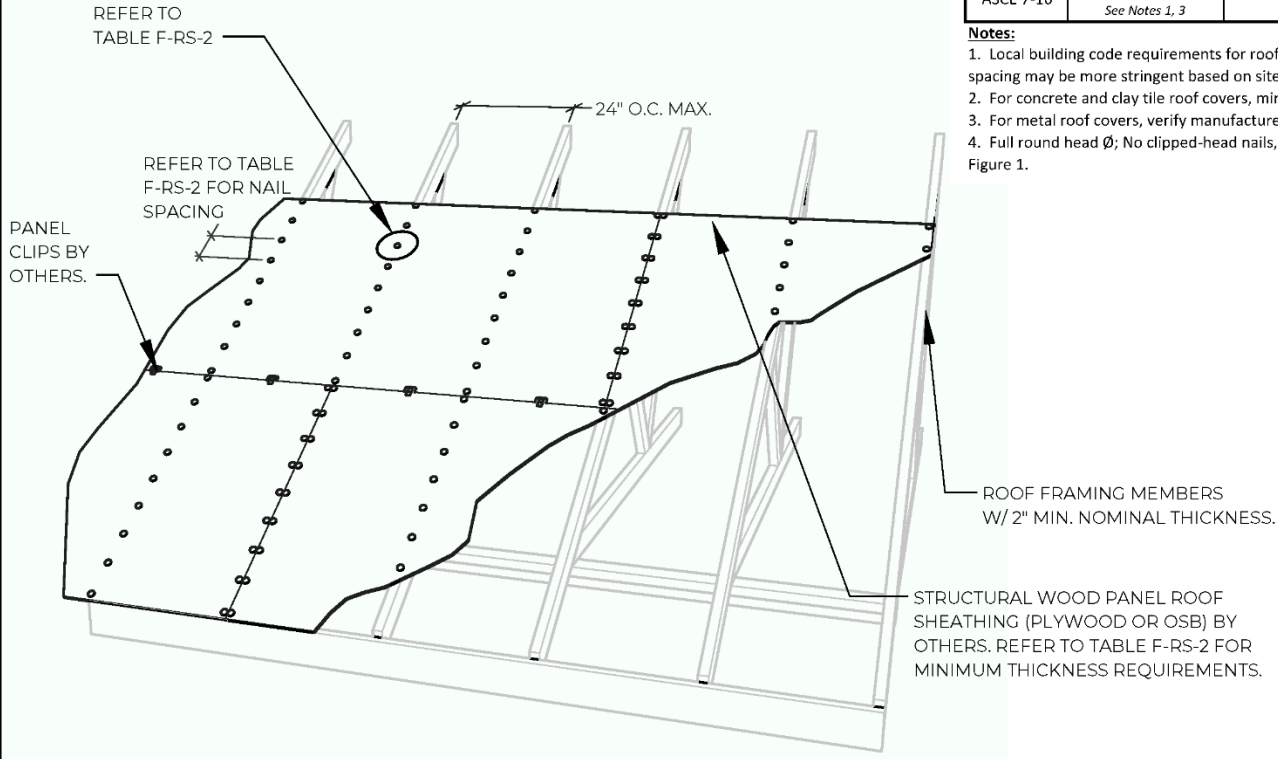


FIGURE 1.

	<p>APPLICABLE STANDARDS:</p> <p>FORTIFIED HOME™ - HURRICANE (2020)</p>	<p>DESCRIPTION:</p> <p>HURRICANE - NEW CONSTRUCTION ROOF DECK ATTACHMENT - STRUCTURAL WOOD PANELS</p>	<p>DRAWING #:</p> <p>F-RS-2</p>
			<p>DATE:</p> <p>11/01/2020</p>

HURRICANE- RE-NAILING THE ROOF DECK EXISTING HOME (RENOVATION)(WOOD STRUCTURAL PANELS)



- GENERAL NOTES:**
- REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
 - 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.

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

+ ADDITIONAL 0.113" X 2-3/8" 8D RING SHANK NAILS @ = 4" O.C.

KEY:

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

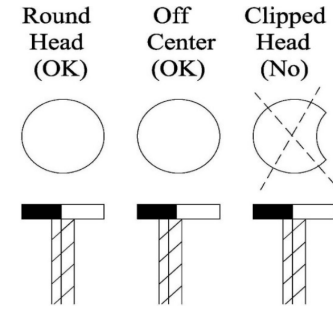
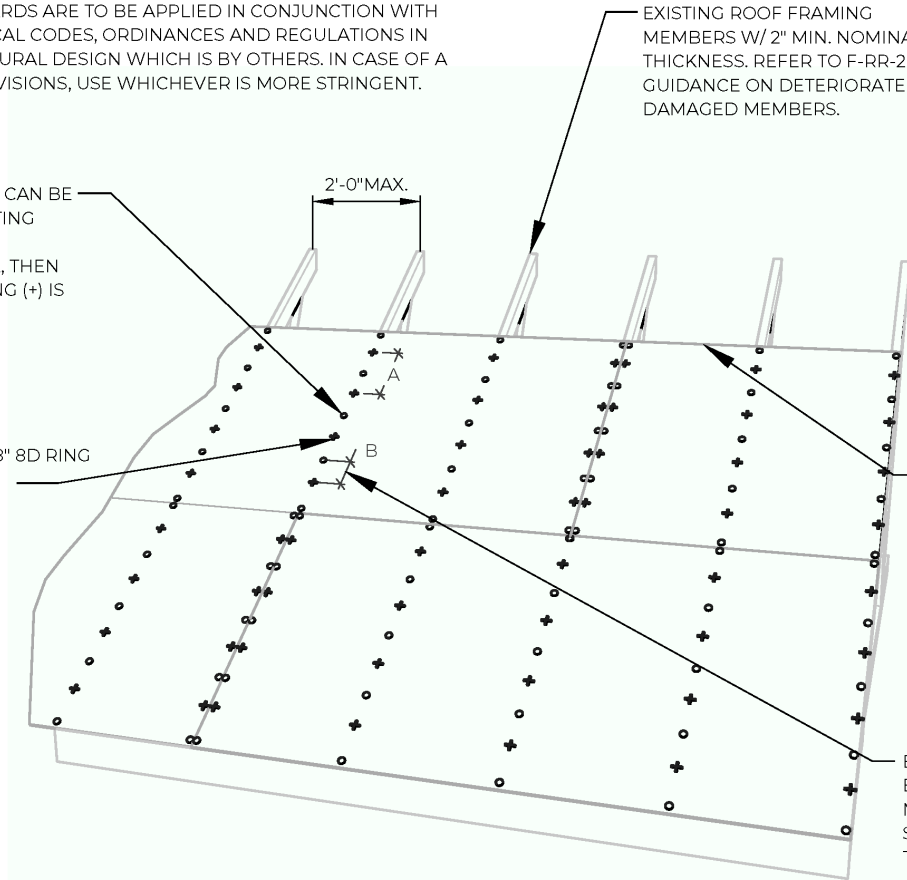


FIGURE 1.

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

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.

	APPLICABLE STANDARDS:	DESCRIPTION:	DRAWING #:
	FORTIFIED HOME™ - HURRICANE (2020)	HURRICANE - RE-NAILING THE ROOF DECK (WOOD STRUCTURAL PANELS)	F-RR-3
			DATE: 11/01/2020

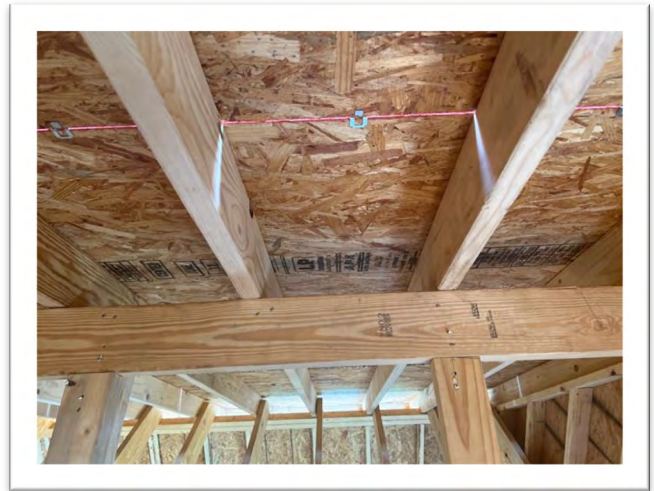


8 Photos Roof Deck Attachment

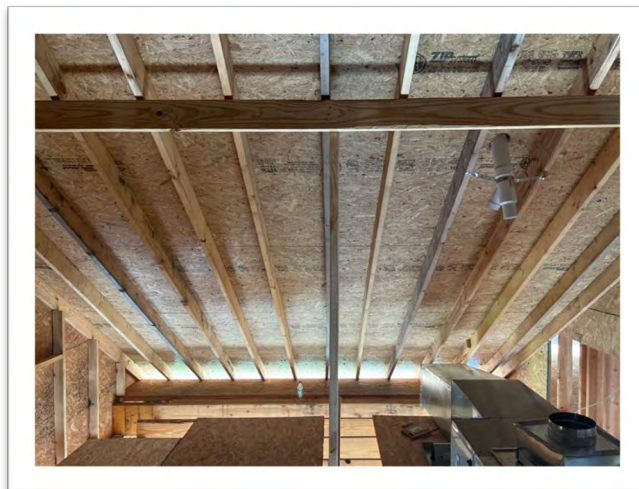
8 total photos showing maximum nail spacing: 4 photos must be taken from above roof deck showing nail spacing 4 inches on center with tape measure in four different locations and 4 photos must be provided from 4 locations within the attic. Each photo in attic must include 2 consecutive structural roof members. (Showing shiners-nails that have missed the rafters)



Attic Rafter Photos



Attic Rafter Photos



Attic Rafter Photos



Attic Rafter Photos



10 Photos Taped Seams and Underlayment

4 overall photos (one from each elevation) after seams are taped

4 overall photos (one from each elevation) after underlayment/anchor sheet is installed.

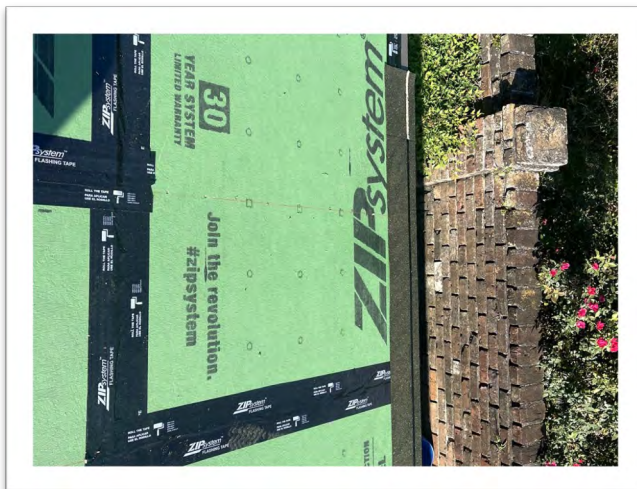
2 closer photos showing underlayment/anchor sheet nailing pattern.



Seam Tape



Seam Tape



Seam Tape



Seam Tape

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



1. GENERAL NOTES:
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 160 MPH OR GREATER).
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.

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 711-13 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 ASPHALT 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.

HOLD BACK BUTTON CAPS AT EDGES TO AVOID INSTALLING DRIP EDGE OVER BUTTON CAPS. REFER TO F-DE-1 AND/OR F-DE-3 FOR DRIP EDGE INSTALLATION.

ROOF SHEATHING ; REFER TO FORTIFIED STANDARD DETAILS F-RS-1, F-RS-2, AND F-RS-3.

6" MIN. OVERLAP FOLDED OVER RIDGE ON BOTH SIDES.

4" MIN. (TYP.)

12" O.C. (MAX.)

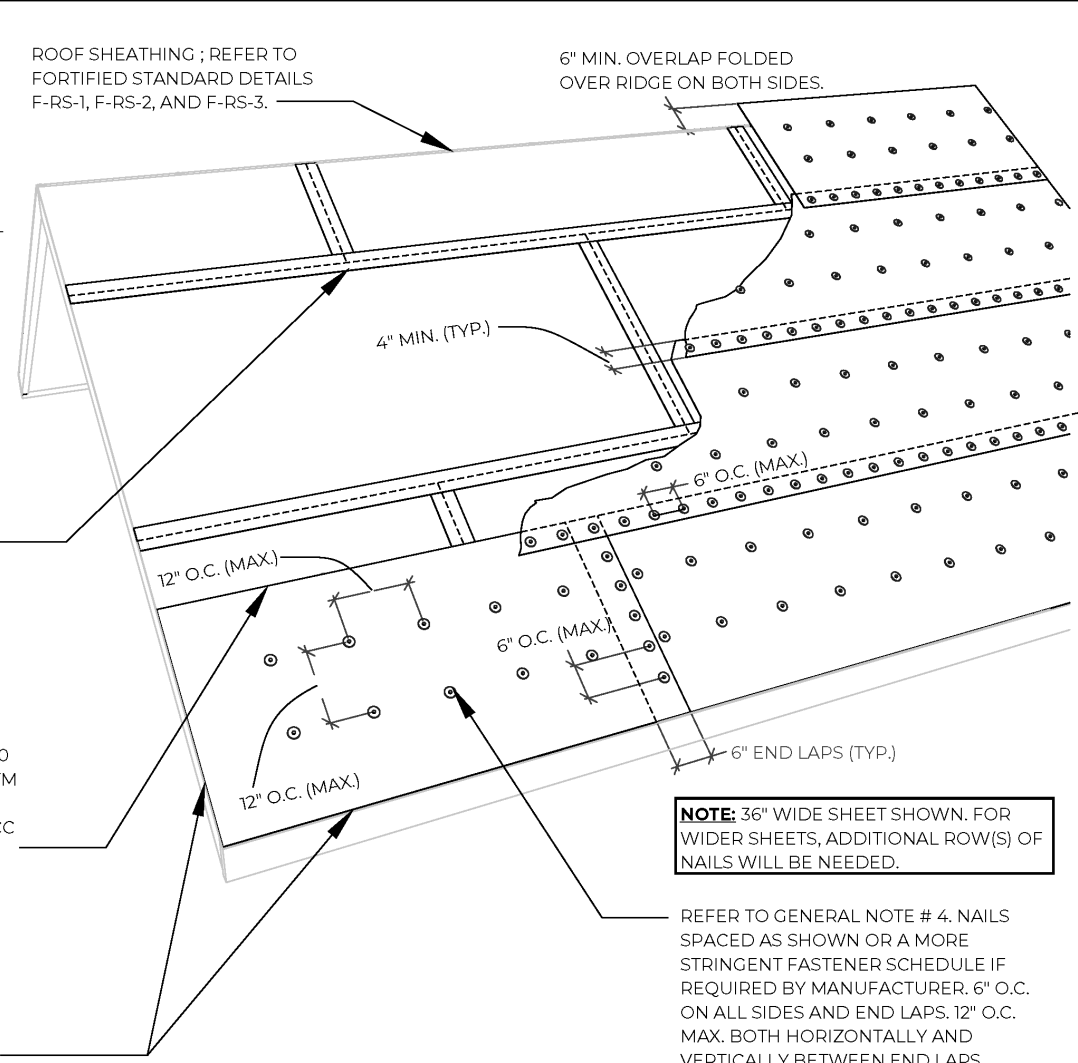
6" O.C. (MAX.)

12" O.C. (MAX.)

6" END LAPS (TYP.)

NOTE: 36" WIDE SHEET SHOWN. FOR WIDER SHEETS, ADDITIONAL ROW(S) OF NAILS WILL BE NEEDED.

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.



APPLICABLE STANDARDS:

FORTIFIED HOME™ - HURRICANE (2020)
FORTIFIED HOME™ - HIGH WIND (2020)

DESCRIPTION:

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

DRAWING #:

F-SRD-2

DATE:

11/01/2020

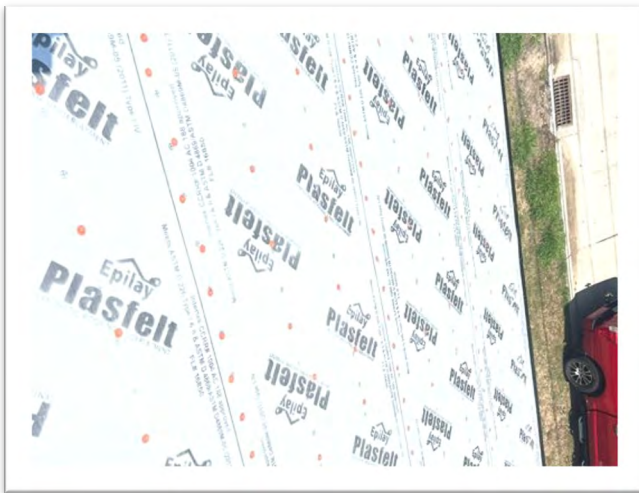


8 Photos Taped Seams and Underpayment

4 overall photos (one from each elevation) after seams are taped.

4 overall photos (one from each elevation) after underlayment/anchor sheet is installed. Try to capture photos from each elevation! (Not Shown)

2 closer photos showing underlayment/anchor sheet nailing pattern.



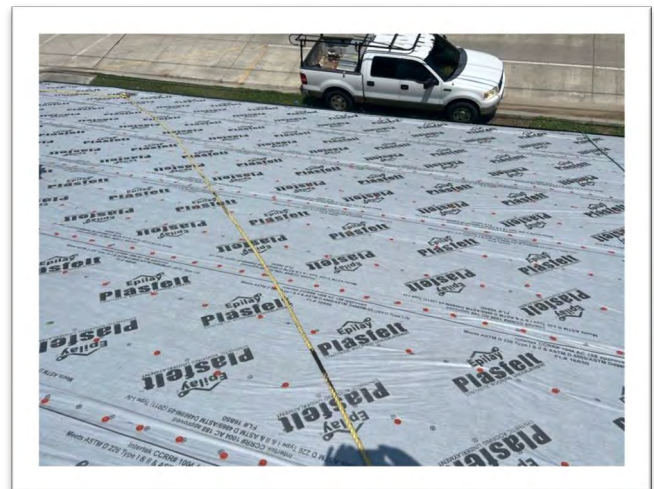
Underlayment



Underlayment



Underlayment



Underlayment

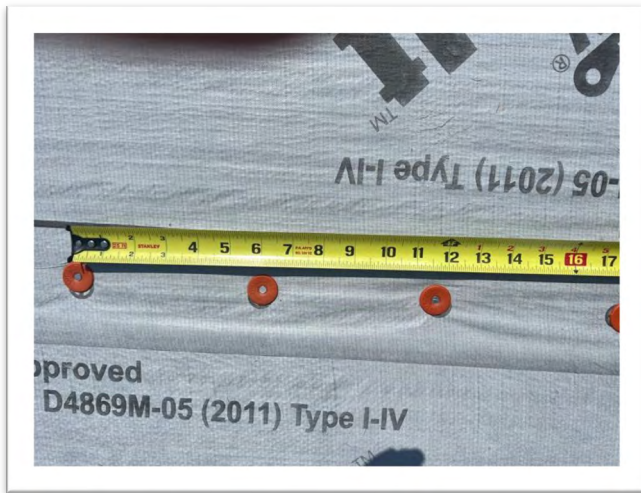


10 Photos Taped Seams and Underlayment

4 overall photos (one from each elevation) after seams are taped

4 overall photos (one from each elevation) after underlayment/anchor sheet is installed.

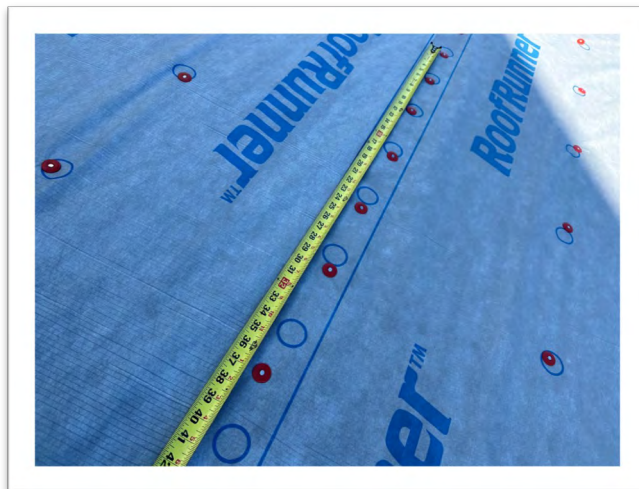
2 closer photos showing underlayment/anchor sheet nailing pattern.



Nailing Pattern



Nailing Pattern

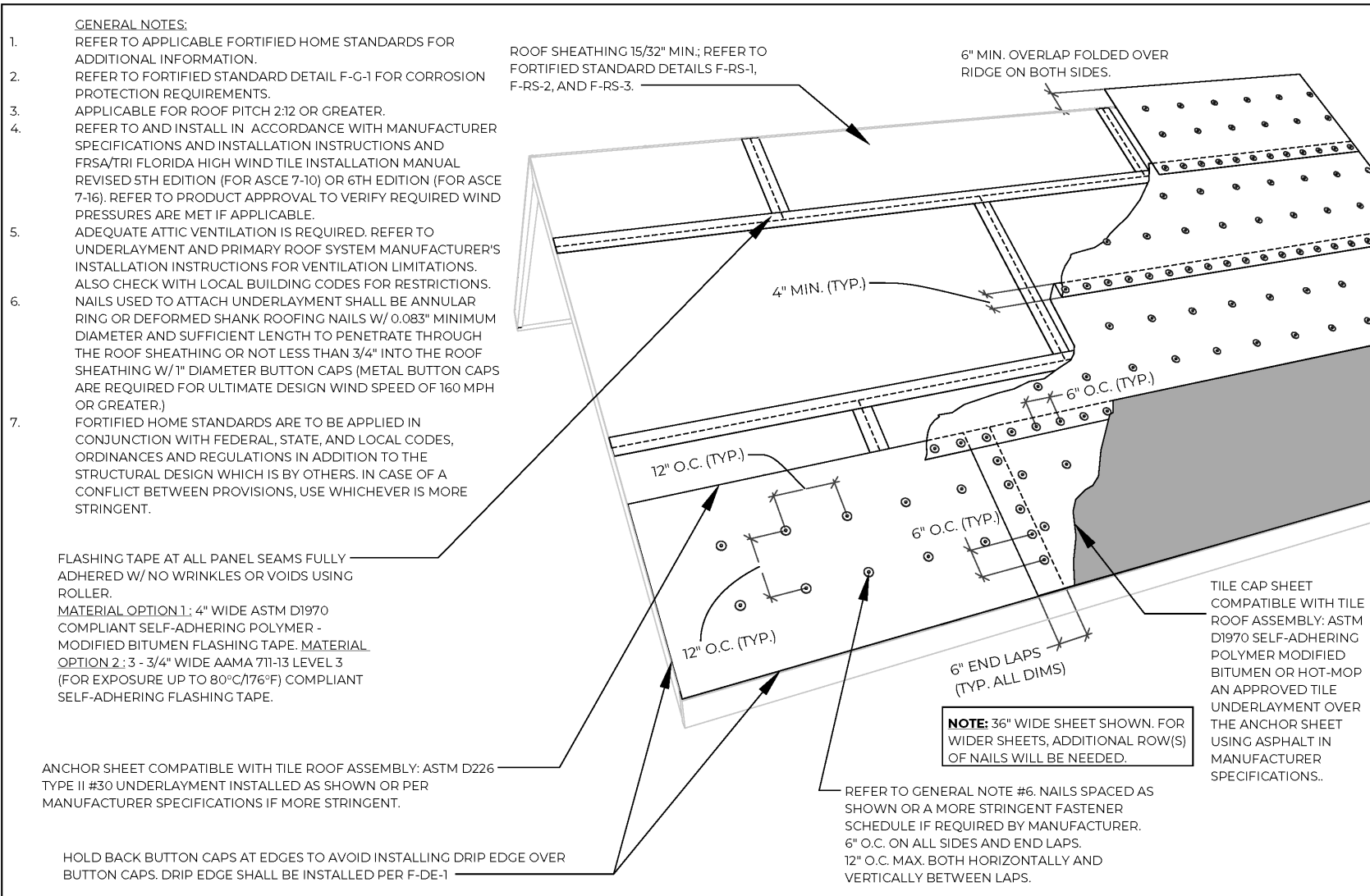


Nailing Pattern



Nailing Pattern

STEEP SLOPE SEALED ROOF DECK FLASHING TAPE AND UNDERLAYMENT NAIL PATTERN



- GENERAL NOTES:**
- REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
 - REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
 - APPLICABLE FOR ROOF PITCH 2:12 OR GREATER.
 - REFER TO AND INSTALL IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS AND FRSA/TRI FLORIDA HIGH WIND TILE INSTALLATION MANUAL REVISED 5TH EDITION (FOR ASCE 7-10) OR 6TH EDITION (FOR ASCE 7-16). REFER TO PRODUCT APPROVAL TO VERIFY REQUIRED WIND PRESSURES ARE MET IF APPLICABLE.
 - 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.
 - 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 160 MPH OR GREATER.)
 - 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 711-13 LEVEL 3 (FOR EXPOSURE UP TO 80°C/176°F) COMPLIANT SELF-ADHERING FLASHING TAPE.

ANCHOR SHEET COMPATIBLE WITH TILE ROOF ASSEMBLY: ASTM D226 TYPE II #30 UNDERLAYMENT INSTALLED AS SHOWN OR PER MANUFACTURER SPECIFICATIONS IF MORE STRINGENT.

HOLD BACK BUTTON CAPS AT EDGES TO AVOID INSTALLING DRIP EDGE OVER BUTTON CAPS. DRIP EDGE SHALL BE INSTALLED PER F-DE-1

ROOF SHEATHING 15/32" MIN.; REFER TO FORTIFIED STANDARD DETAILS F-RS-1, F-RS-2, AND F-RS-3.

6" MIN. OVERLAP FOLDED OVER RIDGE ON BOTH SIDES.

4" MIN. (TYP.)

12" O.C. (TYP.)

12" O.C. (TYP.)

6" O.C. (TYP.)

6" O.C. (TYP.)

6" END LAPS (TYP. ALL DIMS)

NOTE: 36" WIDE SHEET SHOWN. FOR WIDER SHEETS, ADDITIONAL ROW(S) OF NAILS WILL BE NEEDED.

REFER TO GENERAL NOTE #6. 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 LAPS.

TILE CAP SHEET COMPATIBLE WITH TILE ROOF ASSEMBLY: ASTM D1970 SELF-ADHERING POLYMER MODIFIED BITUMEN OR HOT-MOP AN APPROVED TILE UNDERLAYMENT OVER THE ANCHOR SHEET USING ASPHALT IN MANUFACTURER SPECIFICATIONS.

	<p>APPLICABLE STANDARDS:</p> <p>FORTIFIED HOME™ - HURRICANE (2020) FORTIFIED HOME™ - HIGH WIND (2020)</p>	<p>DESCRIPTION:</p> <p>STEEP SLOPE SEALED ROOF DECK - FLASHING TAPE, UNDERLAYMENT AND ROOF TILE CAP SHEET - CONCRETE AND CLAY TILE ROOF COVERS</p>	<p>DRAWING #:</p> <p>F-SRD-5</p>
			<p>DATE: 11/01/2020</p>



6 Photos 2-Ply Underlayment

4 overall photos (one from each elevation) showing installed underlayment

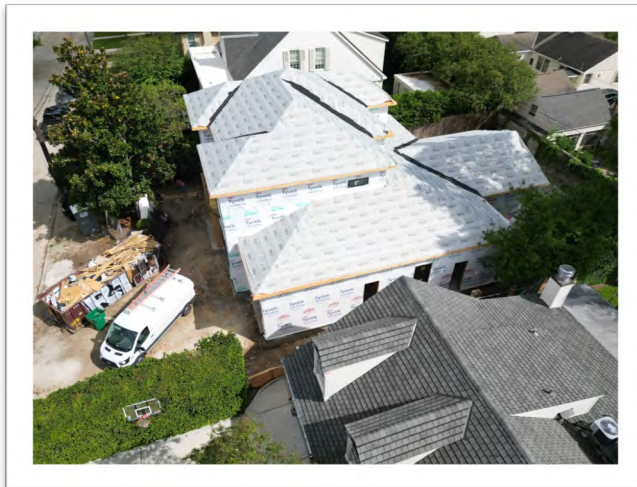
2 closer photos showing underlayment nailing pattern



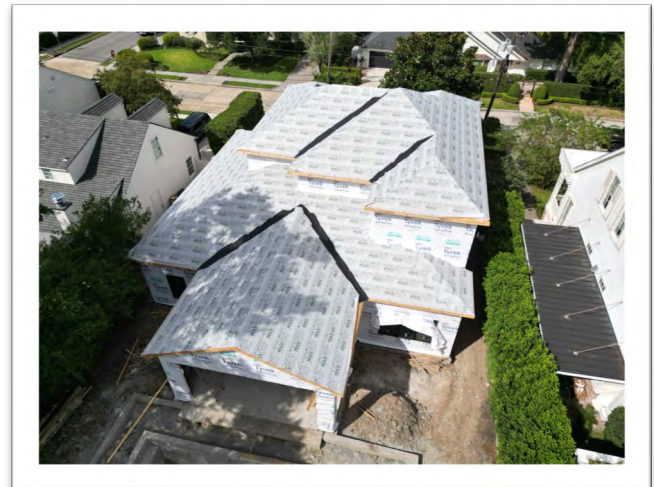
2-Ply Underlayment



2-Ply Underlayment



2-Ply Underlayment



2-Ply Underlayment



6 Photos 2-Ply Underlayment

4 overall photos (one from each elevation) showing installed underlayment
2 closer photos showing underlayment nailing pattern



2-Ply Nailing Pattern



2-Ply Nailing Pattern



2-Ply Nailing Pattern

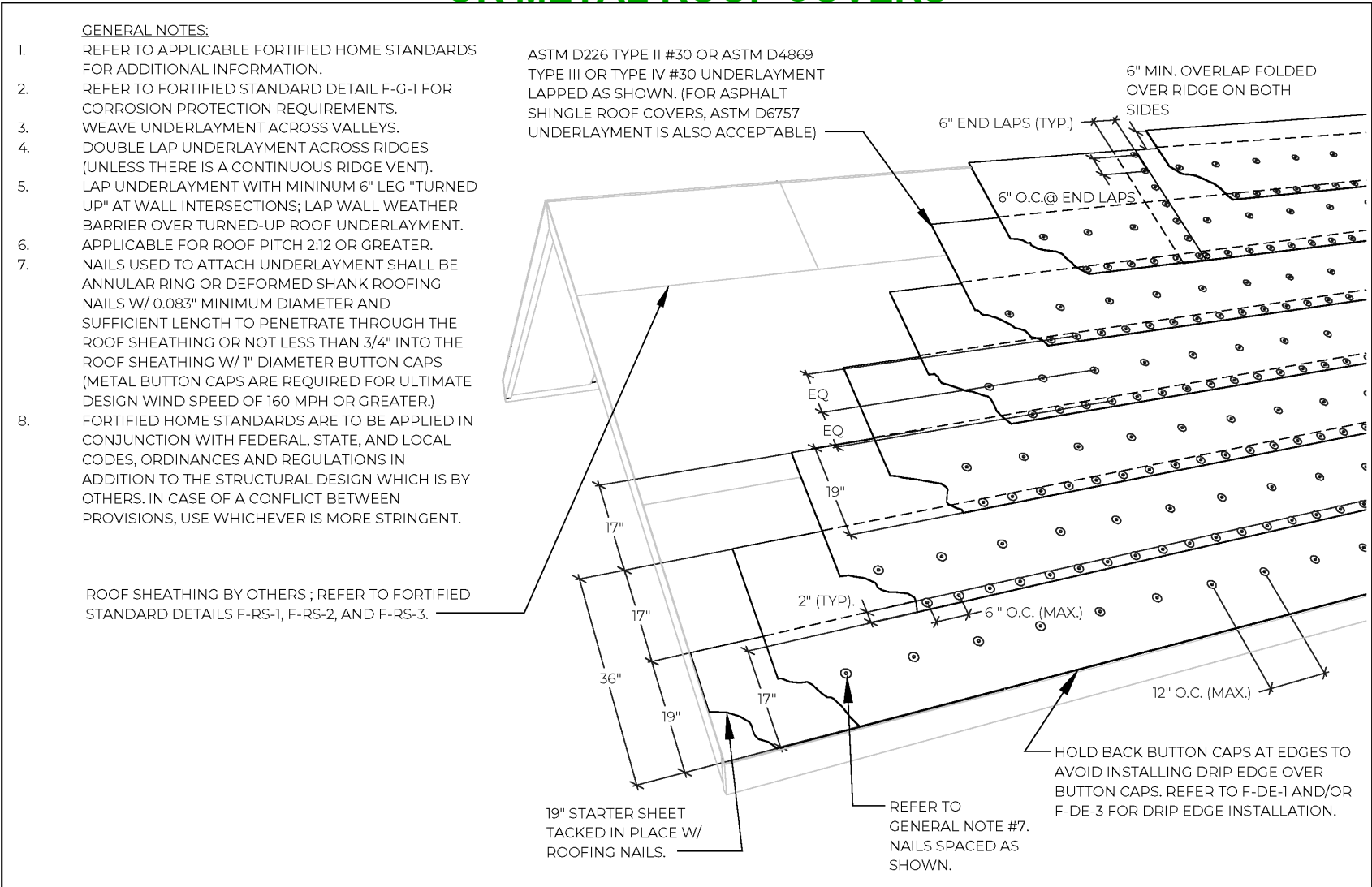


2-Ply Nailing Pattern

STEEP SLOPE SEALED ROOF DECK - TWO LAYERS FELT UNDERLAYMENTSHINGLE OR METAL ROOF COVERS



F-SRD-3



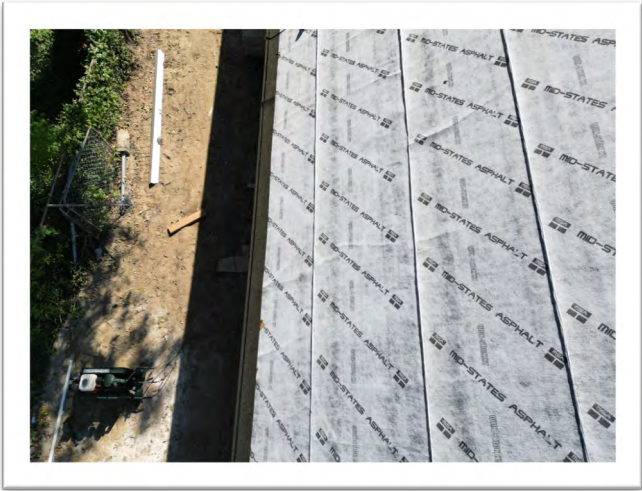
	APPLICABLE STANDARDS: FORTIFIED HOME™ - HURRICANE (2020) FORTIFIED HOME™ - HIGH WIND (2020)	DESCRIPTION: STEEP SLOPE SEALED ROOF DECK - TWO LAYERS FELT UNDERLAYMENT - SHINGLE OR METAL ROOF COVERS	DRAWING #: F-SRD-3
			DATE: 11/01/2020



4-8 Photos Self-Adhered Membrane

4 overall photos (one from each elevation) showing installed membrane before bond break is applied

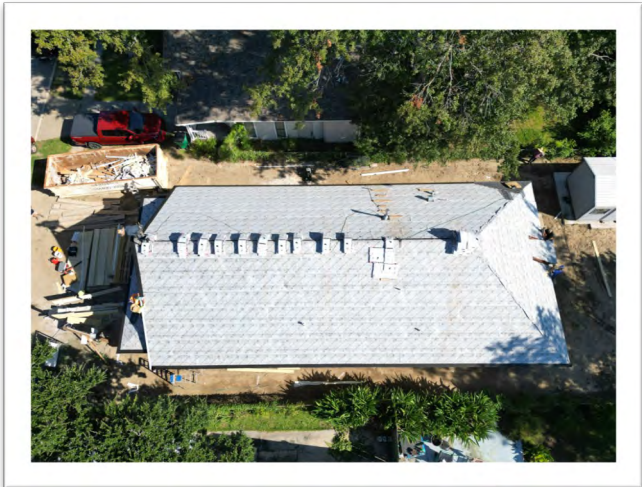
if bond break is applied, 4 photos from different eave/rake locations showing bond break held back 8" from edge.



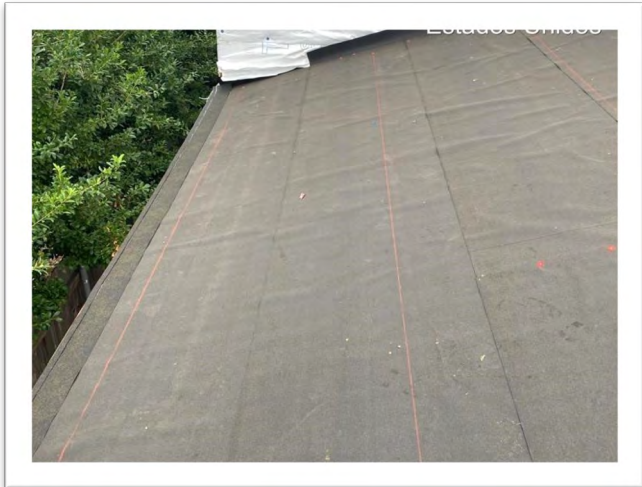
Self-Adhered Membrane



Self-Adhered Membrane

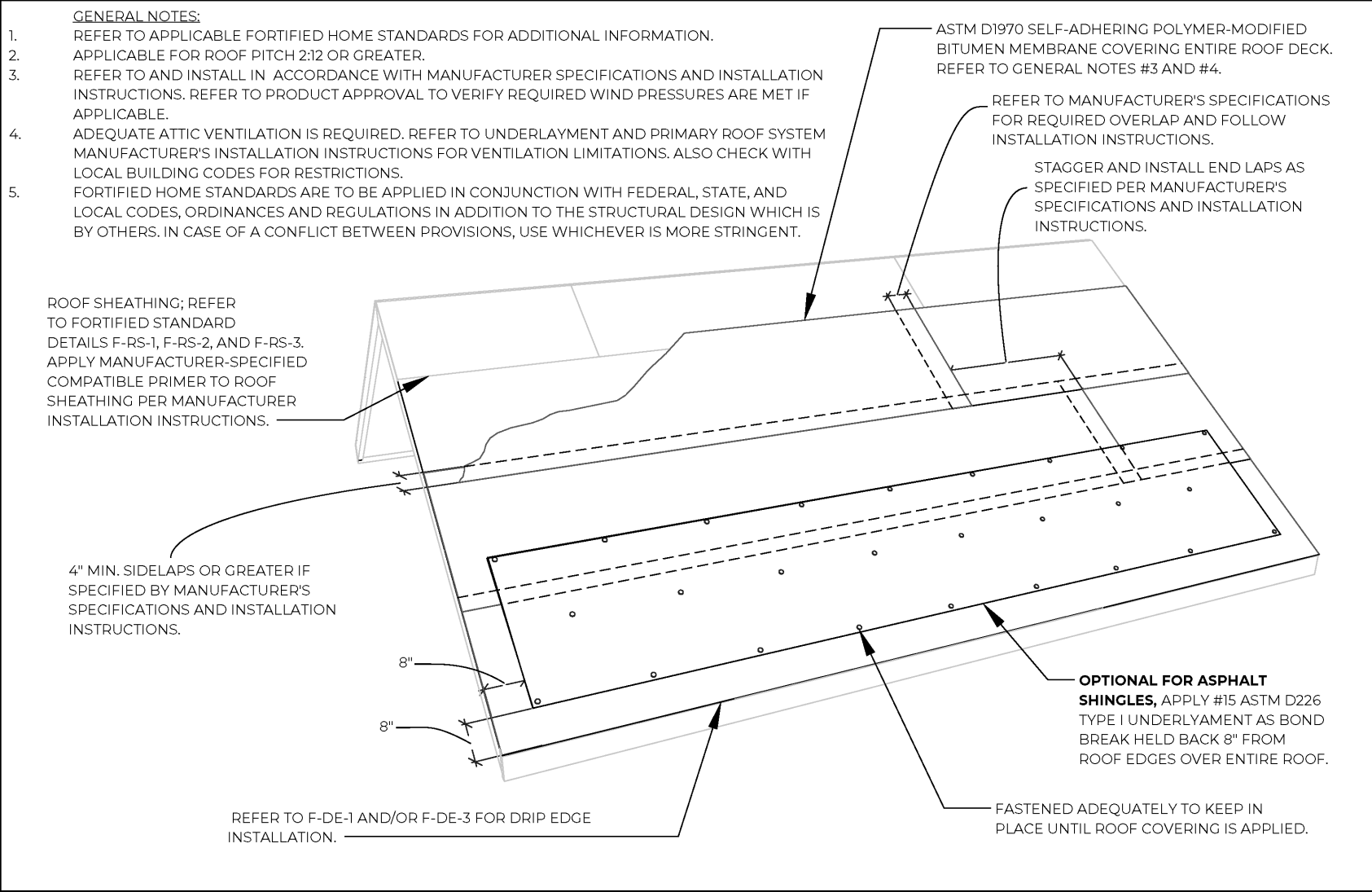


Self-Adhered Membrane



Self-Adhered Membrane

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



Insurance Institute for Business & Home Safety®

F-SRD-4



APPLICABLE STANDARDS:
FORTIFIED HOME™ - HURRICANE (2020)
FORTIFIED HOME™ - HIGH WIND (2020)

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

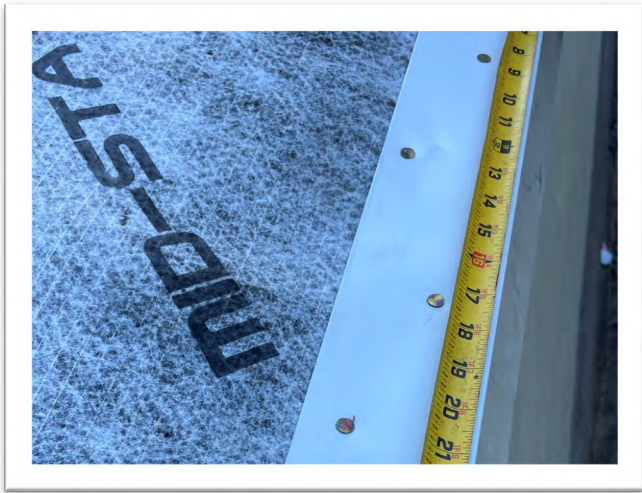
DRAWING #:
F-SRD-4

DATE: 11/01/2020



4 Photos Verify Drip Edge

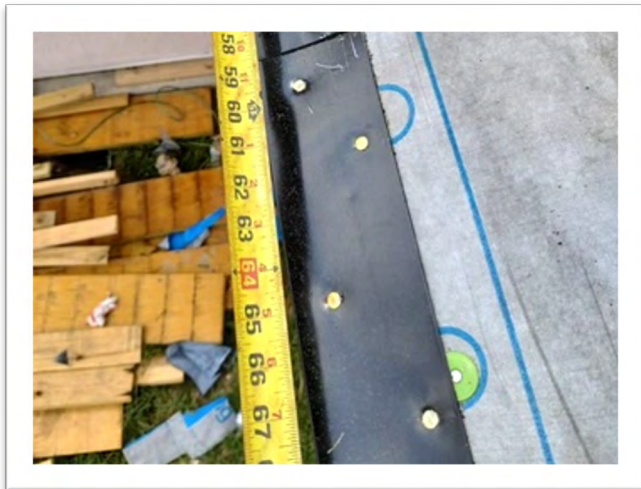
4 photos from different areas showing drip edge installation and nailing pattern. Show Tape Measure for more accurate data capture.



Drip Edge



Drip Edge



Drip Edge



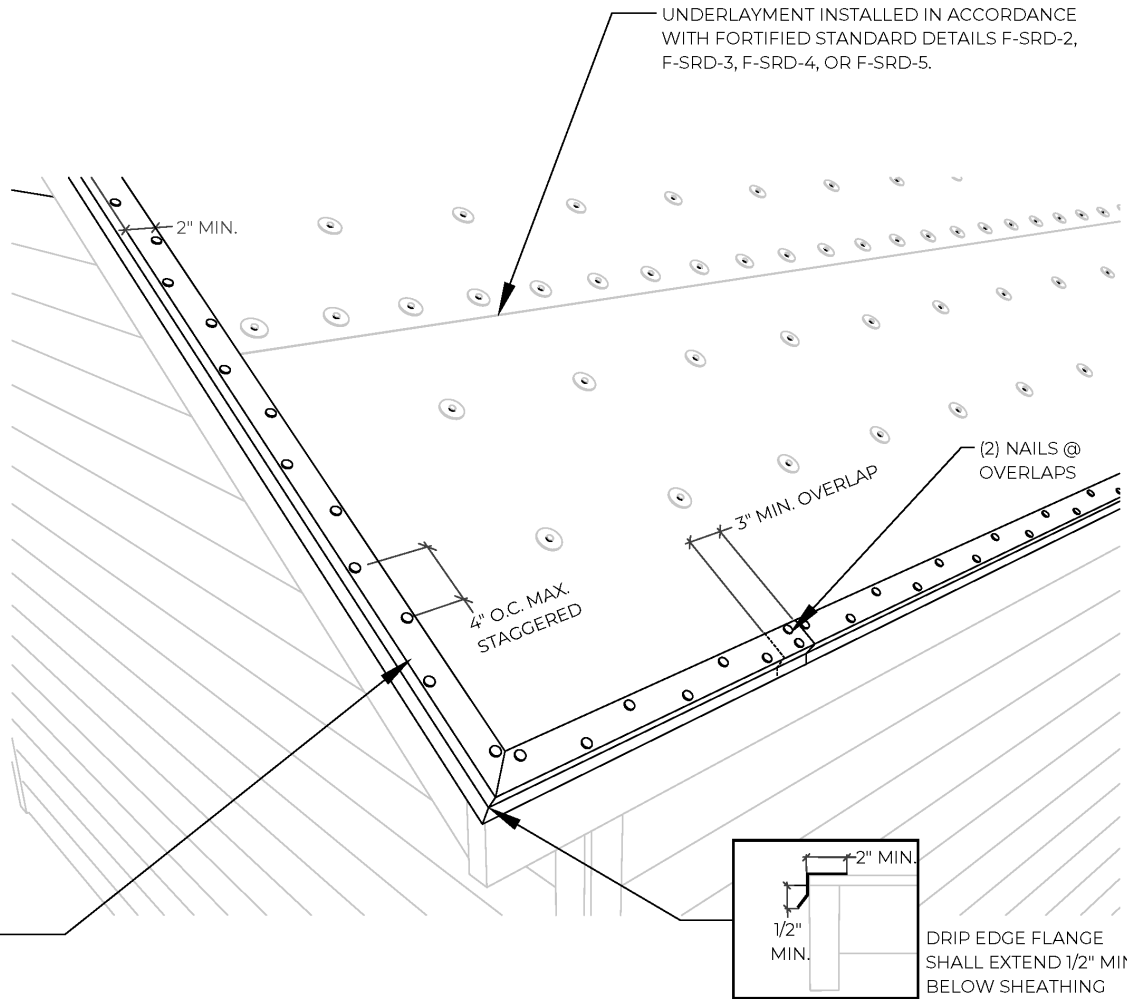
Drip Edge

HURRICANE - DRIP EDGE INSTALLATION OVER UNDERLAYMENT



- GENERAL NOTES:**
- REFER TO APPLICABLE FORTIFIED HOME STANDARDS FOR ADDITIONAL INFORMATION.
 - REFER TO FORTIFIED STANDARD DETAIL F-G-1 FOR CORROSION PROTECTION REQUIREMENTS.
 - 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.
 - APPLICABLE FOR ROOF PITCH 2:12 OR GREATER. FOR ROOF SLOPES LESS THAN 2:12, REFER TO MANUFACTURER'S DRIP EDGE INSTALLATION REQUIREMENTS.
 - 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.



	APPLICABLE STANDARDS:	DESCRIPTION:	DRAWING #:
	FORTIFIED HOME™ - HURRICANE (2020)	HURRICANE - DRIP EDGE INSTALLATION OVER UNDERLAYMENT	F-DE-1
			DATE: 11/01/2020

F-DE-1

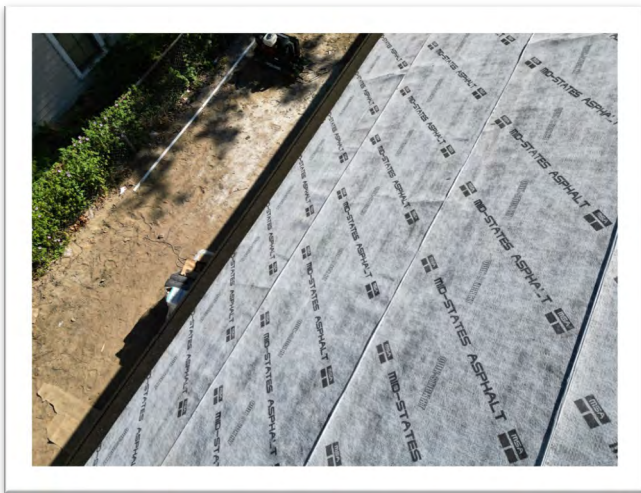


8 Photos Asphalt Shingle Roof Covers

1 photo of shingle packaging showing manufacturer and product name

1 photo of shingle packaging showing shingle ASTM rating and class. You can also Download the spec sheet from the manufacturer.

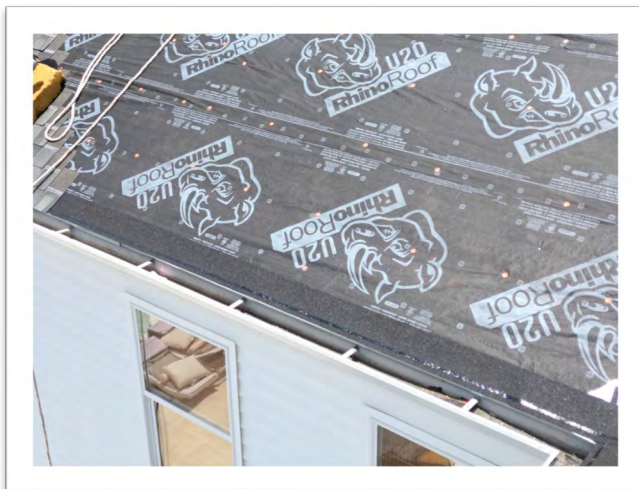
4 photos of starter strip installation from different areas (include eave and rake)



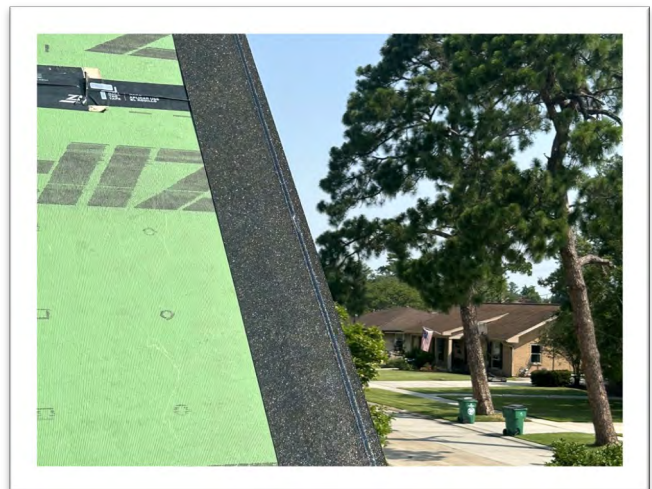
Starter Strip



Starter Strip



Starter Strip

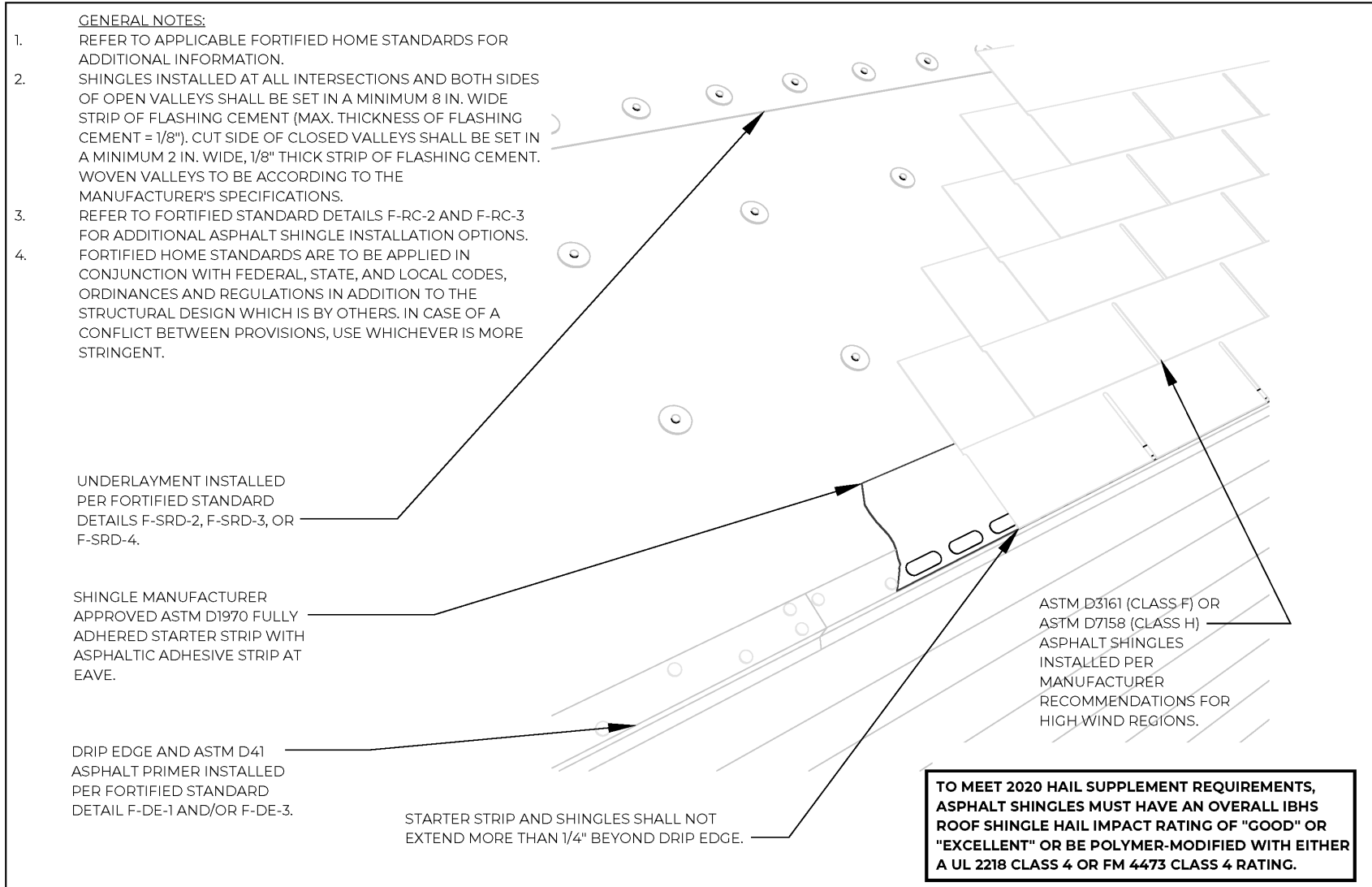


Starter Strip

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



F-RC-1

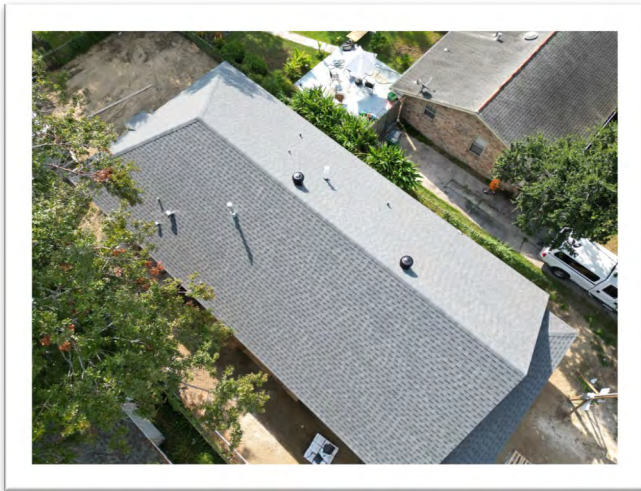


	APPLICABLE STANDARDS:	DESCRIPTION:	DRAWING #:
	FORTIFIED HOME™ - HURRICANE (2020) FORTIFIED HOME™ - HIGH WIND (2020)	ASPHALT SHINGLE INSTALLATION GUIDANCE FOR STEEP SLOPE - OPTION 1: PEEL AND STICK STARTER STRIP INSTALLATION AT EAVE OR RAKE	F-RC-1
			DATE: 11/01/2020

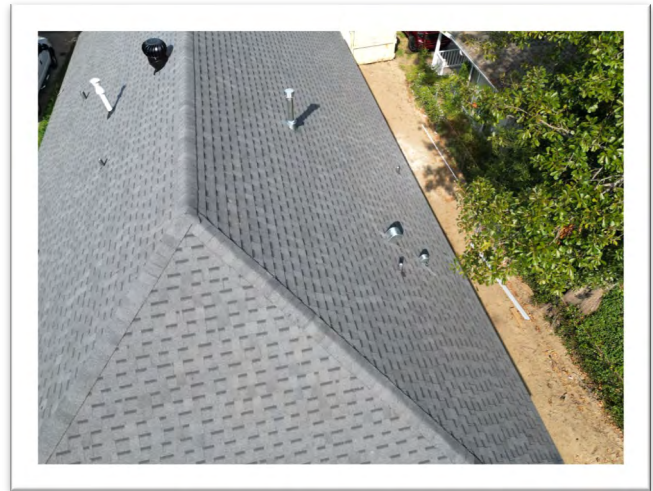


Multipliable Photos Of The Completed Roof Installation.

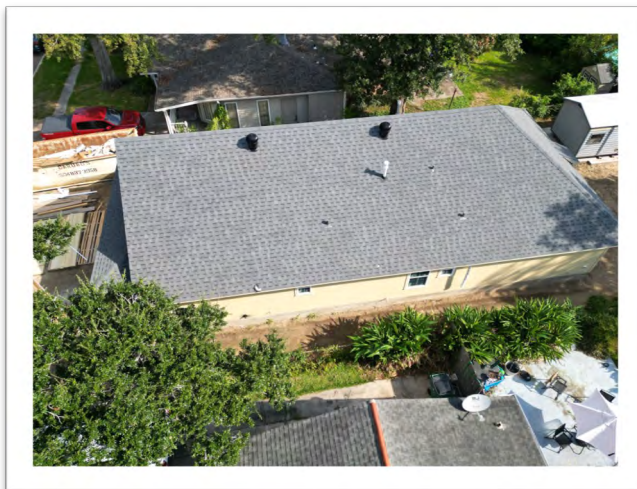
Please provide completed roof installation photos.



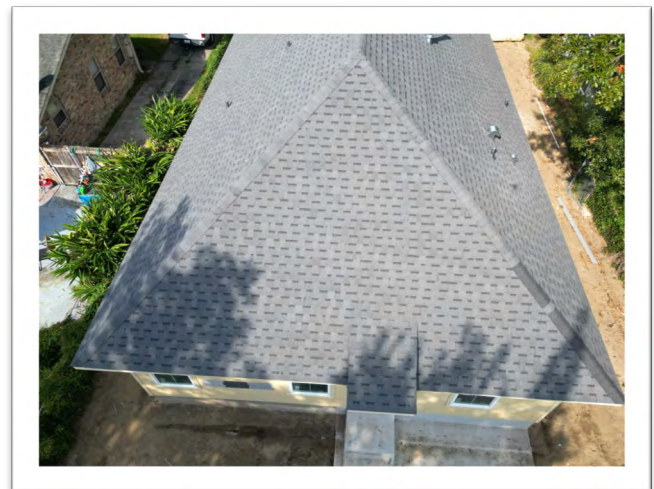
Completed Roof



Completed Roof



Completed Roof



Completed Roof