

PRESCRIPTIVE REQUIREMENTS FOR FORTIFIED ROOF

2020 FORTIFIED Home™ Standard

- **Required Roof areas:** The roof areas that are required to meet FORTIFIED Roof requirements for designation are outlined in Technical Bulletin [FH 2022-02](#).
- **Roof structural member spacing:** FORTIFIED requires minimum 2x4 nominal wood roof structural members (i.e. trusses or rafters) spaced no more than 24 inches apart. For other roof member types and/or spacing, engineering assessment is required per section 2.5 of the [2020 FORTIFIED Home Standard](#).
- **Roof deck attachment:** FORTIFIED requires the use of 8D ring shank nails. Ring shank nails have a series of raised rings or spirals along their shafts, which double the wind uplift resistance of the roof.
 - For wood board roof deck fastening (without overlay), follow [F-RS-1](#) for new construction or re-roofing.
 - For wood structural panel (plywood or OSB) roof deck fastening, follow [F-RS-2](#) or [F-RS-3](#) as applicable for new construction.
 - For wood structural panel (plywood or OSB) roof deck re-nailing, follow [F-RR-1](#), [F-RR-2](#), [F-RR-3](#), and [F-RR-4](#) as applicable for re-roofing.
 - For installing wood structural panel overlay over existing wood board roof decking with excessive gaps, follow [F-RR-5](#).
- **Roof deck thickness:** The roof deck is the layer of plywood or oriented strand board that goes over the framing. These panels and boards must meet the minimum thickness requirements for your area.
 - State of Louisiana and IBHS ASCE 7-16 guidelines require all contractors to use 15/32 plywood. FORTIFIED min new const 15/32, FORTIFIED min reroof overlay is 15/32
 - 7/16 is acceptable when re-nailing existing structural wood panels.
- **Sealed roof deck:** A secondary water barrier seals the gaps between the roof deck sheathing panels. This prevents water from entering the house if the shingles are compromised. A sealed roof deck reduces the amount of water entering your home if the shingles are damaged by 95% according to the Insurance Institute for Business and Home Safety (IBHS):
 - **Method 1 (for asphalt shingles and metal):** Detail [F-SRD-2](#) "Sealed Roof Deck-Flashing Tape and Underlayment".
 - [F-SRD-2A](#) sealed roof deck installations using 40-in to 42-inch underlayment rolls.
 - [F-SRD-2B](#) sealed roof deck installations using 48-inch underlayment rolls
 - [F-SRD-2C](#) sealed roof deck installations using 60-inch underlayment rolls

- **Method 2 (for asphalt shingles and metal):** Detail [F-SRD-3](#) "Sealed Roof Deck-2Ply Felt Underlayment".
 - [F-SRD-7](#) sealed roof deck installations using 40-in to 48-inch synthetic underlayment rolls.
 - [F-SRD-8](#) sealed roof deck installations using 60-in synthetic underlayment rolls.
- **Method 3 (for asphalt shingles and metal):** [F-SRD-4](#) "Sealed Roof Deck-Self-Adhered Underlayment." (showing optional bond break for asphalt shingles)
- **Drip edge and flashing:** The drip edge holds the roof's underlayment in place and becomes the anchor point for the roof cover. All drip edge metal on reroofs must be new.
 - **FORTIFIED New Construction Flashing Requirements:**
 - All drip edge must be NEW material (minimum 26 ga. galvanized metal)
 - All flashing must be NEW.
 - **FORTIFIED Re-roofing Flashing Requirements:**
 - All drip edge metal must be replaced with NEW material (minimum 26 ga. galvanized metal)
 - Other existing flashings and edgings shall NOT be re-installed where rusted, damaged, or deteriorated in compliance with IRC 2024 section R908.5, and shall be reconstructed in accordance with approved roof assembly manufacturer's installation instructions per section R908.6. The roofing contractor is responsible for reconstruction and/or replacement of existing flashings to meet building code requirements.
- **Starter strip:** Asphalt shingle self-adhered starter shingle, or a starter shingle fully embedded in roof mastic installed along the edges of the roof before the shingles per FORTIFIED Standard Details [F-RC-1](#), [F-RC-2](#), or [F-RC-3](#) as applicable. Starter shingles create a bond with the eave drip and underlayment to prevent wind and water from penetrating the roof edge. This keeps subsequent layers of shingles secured to the secondary barrier.
- **Roof cover:** The final layer of a FORTIFIED Roof system is the roof cover. Roof cover materials can include asphalt shingles, metal panels, clay or concrete tiles, and low-slope roof systems. All these roof coverings must be rated to withstand high-wind speeds or wind pressures when installed correctly as specified in sections 4.7 and 4.8 of the [2020 FORTIFIED Home Standard](#).

- **Accessory Roof Components:**

Roof-mounted solar panels (Photovoltaics) must meet the requirements of section 4.10 of the [2020 FORTIFIED Home Standard](#).

Technical Bulletins provide guidance on FORTIFIED compliance for several situations that fall outside of the Standard. All technical resources for the 2020 FORTIFIED Home Standard can be found at

<https://fortifiedhome.org/technical-documents/>. The following technical bulletins address several accessory roof components applicable to Louisiana:

- Cement and Clay hip and ridge tiles installed over asphalt shingles, must meet the requirements of FORTIFIED Technical Bulletin [FH 2023-05](#). Currently Hecker hip and ridge tiles have the product approval required per FH 2023-05.
- Roof-mounted HVAC units must comply with [FH 2024-01](#)
- Accessory roof structures must comply with [FH 2023-03](#)
- Leaf guards and gutters must comply with [FH 2023-09](#)
- Rain diverters must comply with [FH 2024-02](#)
- Roof-mounted elevated decks must comply with [FH 2022-03](#)

- **Attic vents:** All attic ventilation must prevent wind-driven rain from entering the attic space. FORTIFIED requires all attic ridge vents, off-ridge vents and intake vents be manufactured and tested to meet TAS 100-A wind driven rain rating. Gable vents that are not specifically TAS 100-A rated to prevent water intrusion must be protected by a panel fabricated and installed using permanent fasteners meeting FORTIFIED Standard Detail [F-GS-1](#). These vent covers are temporary and should not be left installed when not in use for storm protection.

- **Hail:** The FORTIFIED Hail supplement may be achieved in conjunction with a High Wind or Hurricane designation, as described in section 7 of the [2020 FORTIFIED Home Standard](#), if roof covers, skylights, and roof-mounted PV systems meet the specified FORTIFIED Hail impact requirements. Shingle roof covers must meet IBHS Hail impact overall good or excellent rating per <https://ibhs.org/hail/shingle-performance-ratings/>