FORTIFIED Re-Roofing Checklist

✓		Reference
	1. Pre-Qualifications	
	1.1. $^{7}/_{16}$ in. minimum roof deck sheathing and 24 in. o.c. maximum rafter framing required. Roof decks with less than 7/16 in. sheathing can be re-decked with 7/16 in. sheathing(3.1). Retrofit solutions provided by a professional engineer may be considered.	
	2. Roofing Scope	
	2.1. Is the home within 3,000 ft of saltwater? *If yes, hot-dip galvanized and/or stainless steel fasteners are required.*	See Technical Bulletin FH 2018-01 for more information. *(http://disastersafety.org/wp-content/uploads/2018/04/FH-2018-01_technical-bulletin_corrosion-resistant-fasteners.pdf)*
	2.2. Remove all existing roofing material. Replace any damaged wood.	
	2.3. Re-nail the roof deck with 8d ring-shank nails(3.2) at 6 in. o.c.; 4 in. o.c. at the gable ends. *Documentation: Photograph the fastener package and the spacing of the installed new fasteners in four locations, including at least one gable.*	 *https://vimeo.com/271121168*
	2.4. Seal the roof deck (choose one of the following three options).	
	2.4.1. **Option 1** - Install a self-adhered (peel-and-stick) membrane(3.3) over the entire roof deck. Recommend #15 felt as bond break between membrane and shingles. Note: Manufacturers emphasize the need for adequate attic ventilation when this type of membrane is applied over the entire roof. *Documentation: Photograph the installed self-adhered underlayment.* **- OR-**	
	2.4.2. **Option 2** - Install a 4-in.-wide (nominal) roof deck flashing tape(3.4) over all roof sheathing panel seams and cover the deck with a #30 felt or an equivalent synthetic underlayment(3.5). Note: Attach underlayment with button cap nails at 6 in. o.c. along the laps and 12 in. o.c. spacing, vertically and horizontally, between the laps. *Documentation: Photograph (a) the tape installation and (b) the underlayment installation over the tape showing the button cap nail spacing(3.6) (nails, not staples!).* **-OR-**	 https://vimeo.com/271121653
	2.4.3. **Option 3** - Install a two-layer #30 felt underlayment system(3.7). Installation instructions for a two-layer #30 felt underlayment system: Cut 17 in. off one side of the roll and install the remaining 19-in.-wide strip of underlayment. Tack in place. Install a 36-in.-wide roll of underlayment over the 19-in.-wide course of underlayment along the eave. Continue, overlapping the sheets 19 in. (leaving a 17-in. exposure). Attach underlayment with button cap nails at 6 in. o.c. along the laps and one row centered about 9 inches between the laps fastened with button cap nails at 12 in. o.c. **IMPORTANT NOTE: Synthetic underlayments do not qualify for this method.** *Documentation: Photograph (a) laps and fasteners and (b) packaging label indicating ASTM designation of the underlayment*	 https://vimeo.com/271121486
	2.5 Install proper flashing at all penetrations and roof/wall intersections, at valleys, at gables and at eaves.	See FORTIFIED General Flashing Guidelines for Steep-Sloped Roofs for more information. *(http://disastersafety.org/wp-content/uploads/2018/01/fortified_home_general_flashing_guidelines_for_steep-sloped_roofs.pdf)*
	2.6 Install drip edge(3.8) over the underlayment at rakes and eaves and fasten at 4 in. o.c. *Documentation: Photograph the drip edge fastening.*	 *https://vimeo.com/271122117*
	2.7 Asphalt shingles	

	2.7.1 Starter strips adhered at the eave and rake. Either embed the starter strip in roofing cement or use self-adhered starter strips. *Documentation: Photograph the starter strip installation.*	 *https://vimeo.com/271122173*
	2.7.2 Asphalt shingles(3.9) must be high-wind rated and be installed with six nails per high-wind installation instructions. *Documentation: Photograph the section of the shingle package that shows the wind rating.*	
	***NOTE**: All other roof coverings (metal, tile, low-sloped roofs, wood shakes/shingles) must be rated and installed for the site-specific wind speed and design pressures.*	
	2.8 All ridge and off-ridge roof vents must be tested in accordance with TAS 100 (A) and/or have Miami-Dade County approval. *Documentation: Take photos of the vent packaging that shows the vent make and model.*	
	2.9 Any gable end wall vents need to have temporary storm protection available. Note that the vent protection is temporary and must be available for installation in the event of a storm. *Documentation: Take photos that show the temporary storm protection in place. Remove the temporary protection when the storm passes.*	 See page 24 in the Hurricane Standard for gable end vent protection. *(https://disastersafety.org/wp-content/uploads/FORTIFIED-Home-Hurricane-Standards-2019.pdf)*
	***IMPORTANT**! After installation, the Roofing Compliance Form (https://disastersafety.org/wp-content/uploads/2018/08/FH_hurricane-Roofing-Compliance-Form.pdf) MUST be completed and provided to the FORTIFIED Evaluator.*	

	3 Qualifying Products and Systems	
	3.1 For existing roof sheathing less than 7/16 in. - remove existing sheathing and install 7/16 in. roof sheathing directly to rafters/trusses per Section 2.3 or, if the existing sheathing is in good condition, install 7/16 in. sheathing over the existing sheathing by attaching the 7/16 in. sheathing to the rafters/trusses below using 10d ring-shank nails (0.120 in.x 3.0 in.) at 6 in. o.c.; 4 in. o.c. at the gable ends. 3.2 8d ring-shank nails must be at least 0.113-in. diameter and 2⅜-in. long.	
	3.3 Self-adhered membrane must meet ASTM D1970 requirements.	
	3.4 Roof deck flashing tape must be a 4-in.-wide (nominal) ASTM D1970 or an AAMA 711-13, Level 3 compliant self-adhering flashing tape.	*http://disastersafety.org/wp-content/uploads/2018/01/Choosing-the-Right-Tape_FINAL.pdf*
	3.5 #30 felt or synthetic underlayment equivalent must be an ASTM D226 Type II or ASTM D4869 Type IV underlayment or a synthetic underlayment equivalent that has an ICC approval as ASTM D226 Type II or ASTM D4869 Type IV.	
	3.6 Button cap nails must be annular-ring or deformed-shank roofing fasteners with minimum 1-in.-diameter caps.	
	3.7 #30 felt must be an ASTM D226 Type II or ASTM D4869 Type IV organic felt underlayment. **Synthetic underlayments are not allowed for the two-layer system**. Installation instructions for a two-layer #30 felt underlayment system: Cut 17 in. off one side of the roll and install the remaining 19-in.-wide strip of underlayment. Tack in place. Install a 36-in.-wide roll of underlayment over the 19-in.-wide course of underlayment along the eave. Continue, overlapping the sheets 19-in. (leaving a 17-in. exposure).	
	3.8 Drip edge must extend ½ in. below sheathing and extend back on the roof a minimum of 2 in., overlap 3 in. at joints, meet code requirement for metal gauge, and be fastened at 4 in. o.c., staggered.	
	3.9 Asphalt shingles must have an ASTM D7158 Class H and/or ASTM D3161 Class F wind rating.	
	4 Additional Information	
	4.1 FORTIFIED Resources	*http://disastersafety.org/fortified/resources*
	4.2 Requirements for FORTIFIED Roof™ – New Roof designation	*https://disastersafety.org/wp-content/uploads/2019/03/FORTIFIED-Home-Hurricane-New-Roof-Requirements.pdf*
	4.3 Inside FORTIFIED - Instructional videos and one-pagers on re-roofing to FORTIFIED Roof standards.	*https://disastersafety.org/fortified/fortified-home-guidance-steep-slope-roofs*