

Analysis of Changes for the 7th Edition (2020) Florida Codes

Changes to the Florida Building Code, Test Protocols for the High-Velocity Hurricane Zones

This *Analysis of Changes for the 7th Edition (2020) of the Florida Codes* is intended to provide a comprehensive comparison of the provisions in the *6th Edition (2017) Florida Building Code, Test Protocols for the High-Velocity Hurricane Zones (HVHZ)* and the *7th Edition (2020) Florida Building Code, Test Protocols for the HVHZ*. As a result of new Florida-specific amendments, certain provisions and criteria have changed. This *Analysis* will serve a useful tool to facilitate the transition to the new code.

This *Analysis* is arranged so that comparable provisions in the two codes can be easily located. The left two columns contain section numbers and a brief overview of the corresponding requirements from the *6th Edition (2017) Test Protocols for the HVHZ*. The next two columns contain section numbers and a brief overview of the corresponding requirements in the *7th Edition (2020) Test Protocols for the HVHZ*. The far right column contains a brief analysis or comment on the differences between the provisions.

This *Analysis* is not intended to replace or interpret the provisions contained in either the *6th Edition (2017)* or the *7th Edition (2020) Test Protocols for the HVHZ*. This information simply points out the differences. The *Analysis* is not designed to be used without the aid of the representative code books, as all the details pertaining to a specific section may or may not be provided. However, this *Analysis* will provide an easy means for identifying differences in the two codes, as well as enabling the user to locate issue specific provisions in the *7th Edition (2020) Test Protocols for the HVHZ* by means of a numbered section cross reference.

This *Analysis* provides a cross-reference for the majority of the sections that changed in the *7th Edition (2020) Test Protocols for the HVHZ*. In some cases, sections were grouped together due to substantial differences. This grouping enables the extent of the differences to be more readily identified.

Notable changes deemed to be the most significant or to have the greatest impact have been highlighted in yellow.

6 th Edition (2017) Test Protocols for the HVHZ		7 th Edition (2020) Test Protocols for the HVHZ		Analysis
Section	Requirement	Section	Requirement	
RAS 111: Standard Requirements for Attachment of Perimeter Woodblocking and Metal Flashing				
3.3.1	Woodblocking fastener criteria	3.3.1	Woodblocking fastener criteria	The term perimeter zone has been changed to Zone 2 and the term corner zone has been changed to Zone 3 for correlation with changes in ASCE 7-16.
3.4.5	Preservative treatment	3.4.5	Preservative treatment	The required AWPA preservative treatment standard has been updated to AWPA U-1, Use Category 2 or higher.
Table 2	Hooke Strip/Continuous Cleat Thickness Requirements for Edge Metal and Copings Face Dimensions	Table 2	Hooke Strip/Continuous Cleat Thickness Requirements for Edge Metal and Copings Face Dimensions	The note to Table 2 has been revised to clarify when a hook strip/cleat is required.
RAS 115: Standard Procedures for Asphalt Shingle Installation				
4.2	Underlayment fastening	4.2	Underlayment fastening	Section revised to more broadly apply to underlayments that are wider than 36 inches.
5.3	Eave and gable drip edge metal	5.3	Eave and gable drip edge metal	Section revised to clarify that eave and gable drip metal are to be joined by a minimum 4-inch lap. Also clarifies that eave and gable drip metal are to be installed over the underlayment.
RAS 117: Standard Requirements for Bonding or Mechanical Attachment of Insulation Panels and Mechanical Attachment of Anchor and/or Base Sheets to Substrates				
1.2	Testing	1.2	Testing	Section revised to no longer require signed and sealed engineering design calculations when using the design wind pressure tables in RAS 128 and as specified herein. All other calculations are required to be prepared, signed and sealed by a professional engineer or registered architect.
3.10	Tapered insulation	3.10	Tapered insulation	The requirement that polyisocyanurate tapered insulation have minimum average thickness of 1 inch has been deleted. New language requires all tapered insulation to have the minimum thickness as specified in

				the Roofing System Assembly Product Approval.
8.1	Perimeter and corner roof areas	8.1	Perimeter and corner roof areas	The reference to the various design wind pressure zones on the roof have been updated for correlation with ASCE 7-16. The maximum extrapolation permitted to Zone 1, Zone 2 or Zone 3 has been increased from 280% to 300%.
9.1	Example of data extrapolation (insulation attachment)	9.1	Example of data extrapolation (insulation attachment)	The example has been updated for correlation with ASCE 7-16.
9.2	Extrapolation	9.2	Extrapolation	The maximum extrapolation permitted has been increased from 280% to 300%.
9.3	Insulation panel overlapping an elevated pressure zone	9.3	Insulation panel overlapping an elevated pressure zone	Reference to field, perimeter, and corner areas of the roof have been deleted for correlation with ASCE 7-16
9.6	Mean roof heights greater than 60 ft.	-	-	Section deleted.
10.4	Example of data extrapolation (anchor or base sheet attachment)	10.4	Example of data extrapolation (anchor or base sheet attachment)	The example has been updated for correlation with ASCE 7-16.
11.2	Example of data extrapolation (architectural appearance applications)	11.2	Example of data extrapolation (architectural appearance applications)	The example has been updated for correlation with ASCE 7-16.
RAS 118: Installation of Mechanically Fastened Roof Tile Systems				
2.01(A)1	Tile fastener corrosion resistance	2.01(A)1	Tile fastener corrosion resistance	The criteria for the coastal building zones, identified as within 1500 feet landward of the reach of mean high tide, has been added to this section since the term is no longer defined in Chapter 16 HVHZ of the FBCB.
2.07(A)	Preservative treatment (Battens)	2.07(A)	Preservative treatment (Battens)	The required AWPA preservative treatment standard has been updated to AWPA U-1, Use Category 2 or higher.
-	-	3.06(C)	Termination of pipes, vents, and stacks	New section added requiring pipes, vents, and stacks to terminate a minimum of 2 in. above the upper most adjacent finished tile surface.
RAS 119: Installation of Mechanically Fastened Roof Tile Systems				
2.01(A)1	Tile fastener corrosion resistance	2.01(A)1	Tile fastener corrosion resistance	The criteria for the coastal building zones, identified as within 1500 feet landward of the reach of mean high tide, has been added to

				this section since the term is no longer defined in Chapter 16 HVHZ of the FBCB.
2.07(A)	Preservative treatment (Battens)	2.07(A)	Preservative treatment (Battens)	The required AWPA preservative treatment standard has been updated to AWPA U-1, Use Category 2 or higher.
RAS 120: Mortar and Adhesive Set Tile Application				
2.01(A)1	Tile fastener corrosion resistance	2.01(A)1	Tile fastener corrosion resistance	The criteria for the coastal building zones, identified as within 1500 feet landward of the reach of mean high tide, has been added to this section since the term is no longer defined in Chapter 16 HVHZ of the FBCB.
2.07(A)	Preservative treatment (Battens)	2.07(A)	Preservative treatment (Battens)	The required AWPA preservative treatment standard has been updated to AWPA U-1, Use Category 2 or higher. New language requires battens to not be bowed or twisted. New language requires vertical battens to be a minimum nominal 1 inch by 4 inch and horizontal battens to be a minimum nominal 1 inch by 2 inch.
3.01(D)	Anchor/Base Sheet/Self-Adhered underlayment system	3.01(D)	Anchor/Base Sheet/Self-Adhered underlayment system	New language requires head laps to be backnailed 12 inches o.c. with approved nails through tin caps or prefabricated fasteners.
-	-	3.06(C)	Termination of pipes, vents, and stacks	New section added requiring pipes, vents, and stacks to terminate a minimum of 2 in. above the upper most adjacent finished tile surface.
RAS 127: Procedure for Determining the Moment of Resistance and Minimum Characteristic Resistance Load to Install a Tile System on a Building of a Specified Roof Slope and Height Using Allowable Stress Design (ASD) in Accordance with ASCE 7				
The entire standard, including tabulated design wind pressures and equations, has been updated for correlation with ASCE 7-16				
RAS 128: Standard Procedure for Determining Applicable Wind Allowable Stress Design Pressures for Low Slope Roof in Accordance with ASCE 7				
The entire standard, including tabulated design wind pressures and equations, has been updated for correlation with ASCE 7-16				
RAS 130: Installation Criteria for Roof Shingles and Shake Application				
4.1	Underlayment (wood shingles)	4.1	Underlayment (wood shingles)	The minimum number of plies and type of underlayment required for wood shingles on spaced sheathing has been deleted. The requirement that the laps of underlayment

				be fastened at 6 inches on center has been deleted.
4.3	Valleys (wood shingles)	4.3	Valleys (wood shingles)	Section editorially revised for clarity.
4.7	Optional interlayment (wood shingles)	4.7	Optional interlayment (wood shingles)	Section deleted.
4.10	Hips and ridges (wood shingles)	4.10	Hips and ridges (wood shingles)	New language added requiring the weather exposure of hip and ridge units to be same exposure as field shingles.
5.1	Underlayment (wood shakes)	5.1	Underlayment (wood shakes)	The minimum number of plies and type of underlayment required for wood shakes on solid and spaced sheathing has been deleted. The requirement that the laps of underlayment be fastened at 6 inches on center has been deleted.
5.8	Spacing between shakes	5.8	Spacing between shakes	The minimum spacing between shakes has been increased from ¼ inch to 3/8 inch.
5.10	Hips and ridges (wood shakes)	5.10	Hips and ridges (wood shakes)	New language added requiring the weather exposure of hip and ridge units to be same exposure as field shingles.
RAS 137: Standard Requirements for Mechanical Attachment of Single-Ply Roof Coverings to Various Substrates				
RAS 137 has been updated for correlation with ASCE 7-16. The maximum extrapolation to perimeter and corner areas has been increased from 280 percent to 300 percent. The example of data extrapolation has been updated for correlation with ASCE 7-16.				
TAS 103: Test Procedure for Self-Adhered Underlayments for Use in Tile Roof Systems				
1.1	Scope	1.1	Scope	Scope editorially revised to reflect changes in referenced standards.
1.2	Test procedures	1.2	Test procedures	Test procedures have been editorially revised to reflect changes in referenced standards.
1.3	Test methods	1.3	Test methods	Crack cycling test has been deleted. Tensile Adhesion and Accelerated weathering tests have been added.
2.1	ASTM standards	2.1	ASTM standards	ASTM C794, D570 and D1938 have been deleted. ASTM D4073 and D1623 have been added.
2.4	Reserved	2.4	Florida Building Code, Building	Reference to the Florida Building Code, Building has been added.
10.1.3.3	Temperature (breaking strength and elongation)	10.1.3.3	Temperature (breaking strength and elongation)	The required temperature of specimens and test grips during conditioning and test has

				been changed from complying with ASTM D2523 to be 73.4° +/- 3.6°F.
10.1.4.2	Breaking strength	10.1.4.2	Breaking strength	Section editorially revised for clarity.
10.1.4.3	Elongation	10.1.4.3	Elongation	The reference to ultimate load condition for determining a test specimen's elongation value has been delete.
Table 2	Minimum Elongation Values (%)	Table 2	Minimum Elongation Values (%)	Table editorially revised for clarity.
13.1.1	Sampling (ultraviolet resistance)	13.1.1	Sampling (ultraviolet resistance)	The sampling size has been changed from two 18in. x 18 in. specimens to two 18 in. x 48 in. specimens.
13.1.2.2	Exposure time (ultraviolet resistance)	13.1.2.2	Exposure time (ultraviolet resistance)	The exposure time has been increased from 200 hours (10 hours per day for 20 days) to 460 (+/- 2) continuous hours.
13.1.2.3	Temperature (ultraviolet resistance)	13.1.2.3	Temperature (ultraviolet resistance)	Section revised to require the specimen temperature to be maintained at 135-140°F throughout the period.
14.2	Sampling (accelerated aging)	14.2	Specimen preparation (accelerated aging)	Section editorially revised for clarity.
14.3.1.4	Procedure (accelerated aging)	14.3.1.4	Procedure (accelerated aging)	Reference to samples has been changed from Section 13.1.3.1 to Section 14.2.
14.3.1.5.1	Breaking strength (report)	14.3.1.5.1	Breaking strength (report)	Section editorially revised for clarity.
14.3.1.5.2	Elongation (report)	14.3.1.5.2	Elongation (report)	Section editorially revised for clarity.
-	-	18.1.2	Puncture point	New criteria added specifying puncture point criteria.
-	-	18.1.2.1	Frame	New section requiring each specimen to be attached to a frame consisting of nominal wood members spaced 24 inches on center.
-	-	18.1.2.2	Sag	New section requiring the test specimens to have a maximum sag of 1 inch measured from the top of the framing member.
-	-	18.1.2.3	Puncture point drop height	New section requiring the puncture point to be dropped from a height of 30 inches above the top of the framing member in five different locations.
19.1	Preparation (tile slippage resistance)	19.1	Preparation (tile slippage resistance)	Section revised to require the test frame to be composed of minimum 2 inch by 4 inch nominal lumber spaced at 24 inches on center.

19.2	Substrate (tile slippage resistance)	19.2	Substrate (tile slippage resistance)	Section editorially revised for clarity. The requirement that the test frame be reinforced on the back side with two angle irons has been deleted.
19.3	Adhering underlayment to the substrate (tile slippage resistance)	19.3	Adhering underlayment to the substrate (tile slippage resistance)	New language added requiring the underlayment to be adhered to the substrate with a side lap and back nailed in accordance with the manufacturer's installation instructions. The side lap width and the back nailing details are required to be included in the final test report.
19.4	Conditioning (tile slippage resistance)	19.4	Conditioning (tile slippage resistance)	The time required for cooling of the deck has been changed to a minimum time.
19.6	Tile stacks conditions (tile slippage resistance)	19.6	Tile stacks conditions (tile slippage resistance)	The amount time the tile stacks are required to sit on the underlayment surface has been reduced from 72 hours to 36 hours minimum.
19.7	Report (tile slippage resistance)	19.7	Report (tile slippage resistance)	Section revised for clarity. Any delamination of the underlayment facing from the adhesive layer is now required to be reported.
19.10	Alternate stacking configurations (tile slippage resistance)	19.10	Alternate stacking configurations (tile slippage resistance)	New language added requiring details of any alternate stacking configurations to be included in the final test report.
20.0	Crack cycling	-	-	Section deleted in its entirety and shown as Reserved.
21.1.2.1	Conditioning (peel adhesion)	21.1.2.1	Conditioning (peel adhesion)	The conditioning temperature has been changed from 75° +/- 2°F to 73.4° +/- 3.6°F.
21.1.3.1	Report (peel adhesion)	21.1.3.1	Report (peel adhesion)	Section revised for correlation with changes to Section 21.1.2.1.
22.1	Granule adhesion (mineral surfaced material)	22.1	Granule adhesion (mineral surfaced material)	Section revised to also apply to materials with a fine surfacing.
-	-	23.0	For underlayments to be used with adhesive set tile systems	New test added covering the determination of the tensile adhesion bond between a tile adhesive and the underlayment surface.
-	-	24.0	Accelerated weathering	New section requiring underlayments for which an outdoor exposure greater than 30 days is desired, to comply with the requirements of this section.

TAS 104: Test Procedure for Nail-On Underlayment for Use in Tile Roof Systems

1.1	Scope	1.1	Scope	Scope editorially revised to reflect changes in referenced standards.
1.2	Test procedures	1.2	Test procedures	Test procedures have been editorially revised to reflect changes in referenced standards.
1.3	Test methods	1.3	Test methods	Tensile Adhesion and Accelerated weathering tests have been added.
2.1	ASTM standards	2.1	ASTM standards	ASTM D570 and D1938 have been deleted. ASTM D4073 and D1623 have been added.
5.1	Conditioning	5.1	Conditioning	New language added requiring the specimens to be selected in accordance with ASTM D5147. The term "cold bend" testing has been changed to "low temperature flexibility" testing.
6.4	Thickness	6.4	Thickness	Section revised to clarify that the required thickness measurement at the selvage edge only applies to granular surfaced products.
9.1.4.2	Breaking strength (report)	9.1.4.2	Breaking strength (report)	Section editorially revised for clarity.
Table 2	Minimum Elongation Values (%)	Table 2	Minimum Elongation Values (%)	Table editorially revised for clarity.
12.1.1	Sampling (ultraviolet resistance)	12.1.1	Sampling (ultraviolet resistance)	The sampling size has been changed from two 18in. x 18 in. specimens to two 18 in. x 48 in. specimens.
12.1.2.1	Conditioning (ultraviolet resistance)	12.1.2.1	Conditioning (ultraviolet resistance)	The required wattage of the lamps producing ultraviolet light has been reduced from 300 Watts to 275 Watts.
12.1.2.2	Exposure time (ultraviolet resistance)	12.1.2.3	Exposure time (ultraviolet resistance)	The exposure time has been increased from 200 hours (10 hours per day for 20 days) to 460 (+/- 2) continuous hours.
12.1.2.3	Temperature (ultraviolet resistance)	12.1.2.3	Temperature (ultraviolet resistance)	Section revised to require the specimen temperature to be maintained at 135°-140°F throughout the period.
13.2	Sampling (accelerated aging)	13.2	Specimen preparation (accelerated aging)	Section editorially revised for clarity.
13.2.1	Room temperature (accelerated aging)	13.2.1	Room temperature (accelerated aging)	The required room temperature been changed from 73° +/- 5° to 73.4° +/- 3.6°F
13.2.3.4.1	Breaking strength (report)	13.2.3.4.1	Breaking strength (report)	Section editorially revised for clarity.
13.2.3.4.2	Elongation (report)	13.2.3.4.2	Elongation (report)	Section editorially revised for clarity.
14.1.1	Specimens (cyclic elongation)	14.1.1	Specimens (cyclic elongation)	The requirement that the roofing nails be 10d has been deleted. The required length

				of time in the cold box has been reduced from 48 hours to 24 hours.
-	-	16.1.2	Puncture point	New criteria added specifying puncture point criteria.
-	-	16.1.2.1	Frame	New section requiring each specimen to be attached to a frame consisting of nominal wood members spaced 24 inches on center.
-	-	16.1.2.2	Sag	New section requiring the test specimens to have a maximum sag of 1 inch measured from the top of the framing member.
-	-	16.1.2.3	Puncture point drop height	New section requiring the puncture point to be dropped from a height of 30 inches above the top of the framing member in five different locations.
17.1	Preparation (tile slippage resistance)	17.1	Preparation (tile slippage resistance)	Section revised to require the test frame to be composed of minimum 2 inch by 4 inch nominal lumber spaced at 24 inches on center.
17.2	Substrate (tile slippage resistance)	17.2	Substrate (tile slippage resistance)	Section editorially revised for clarity. The requirement that the test frame be reinforced on the back side with two angle irons has been deleted.
17.3	Adhering underlayment to the substrate (tile slippage resistance)	17.3	Adhering underlayment to the substrate (tile slippage resistance)	New language added requiring the underlayment to be nailed to the substrate with a side lap in accordance with the manufacturer's installation instructions. The side lap width is required to be included in the final test report.
17.4	Conditioning (tile slippage resistance)	17.4	Conditioning (tile slippage resistance)	The time required for cooling of the deck has been changed to a minimum time.
17.6	Tile stacks conditions (tile slippage resistance)	17.6	Tile stacks conditions (tile slippage resistance)	The stacking configuration has been revised for clarity. The amount time the tile stacks are required to sit on the underlayment surface has been reduced from 72 hours to 36 hours minimum.
17.7	Report (tile slippage resistance)	17.7	Report (tile slippage resistance)	Section revised for clarity. Any delamination of the underlayment facing from the adhesive layer is now required to be reported. Additionally, any "tear drop"

				conditions at fastener penetrations are now required to be reported.
17.10	Alternate stacking configurations (tile slippage resistance)	17.10	Alternate stacking configurations (tile slippage resistance)	Section revised to only apply to alternate stacking configurations. New language added requiring details of any alternate stacking configurations to be included in the final test report.
18.1	Granule adhesion (mineral surfaced material)	18.1	Granule adhesion (mineral surfaced material)	Section revised to also apply to materials with a fine surfacing.
-	-	19.0	For underlayments to be used with adhesive set tile systems	New test added covering the determination of the tensile adhesion bond between a tile adhesive and the underlayment surface.
TAS 105: Test Procedure for Field Withdrawal Resistance Testing				
8.1	Withdrawal tests (anchor or base sheet, insulation, and membrane attachment testing)	8.1	Withdrawal tests (anchor or base sheet, insulation, and membrane attachment testing)	The description of the roof wind pressure zones has been updated for correlation with ASCE 7-16.
8.6	Stair towers, mechanical penthouses, and mechanical rooms	8.6	Stair towers, mechanical penthouses, and mechanical rooms	The description of the roof wind pressure zones has been updated for correlation with ASCE 7-16.
Appendix A	Recording sheet	Appendix A	Recording sheet	The description of the roof wind pressure zones in the recording sheet table have been updated for correlation with ASCE 7-16.
TAS 107: Test Procedure for Wind Resistance Testing of Non-Rigid, Discontinuous Roof System Assemblies (Modified from ASTM D 3161)				
1.1	Scope	1.1	Scope	Section revised to remove the resistance to wind blow-off from the scope of this test procedure.
8.2.1	Underlayment	8.2.1	Underlayment	Section revised to clarify that the underlayment is to be either 2 layers of ASTM D226 Type I or one layer of ASTM D226 Type II.
8.3.1	Self-sealing asphalt shingles	8.3.1	Self-sealing asphalt shingles	Section revised to require self-sealing asphalt shingles with multiple tabs to be applied to duplicate test decks, parallel to the short dimension of the test deck, in compliance with the manufacturer's instructions. New language requires products with single tabs to be applied to duplicate test decks, parallel to the short dimension of the test deck, in such a mass

				that there is at least one full shingle in each course.
-	-	8.3.2	Exposed portions	New section requiring exposed portions of any partial product tab or shingle to be secured with face nailing or stapling such that the partial product tabs or shingles will remain in place for the entire duration of the test.
10.2.3	Failure	10.2.3	Failure	Section revised to require that any steep slope roofing product assembly that fails to restrain full product tabs is considered as having failed the test.
10.2.4	End of test	10.2.4	End of test	Section revised to require test is stopped and the exposure time is recorded if failure occurs during the test as defined in Section 10.2.3.
TAS 110: Testing Requirements for Physical Properties of Roof Membranes, Insulation, Coatings and Other Roofing Components				
-	-	1.2	Manufacturing location	New section added requiring the manufacturing location of tested products to be verified by the testing laboratory and be included in the report.
Table 4	Single-ply roof assemblies	Table 4	Single-ply roof assemblies	Thermoplastic Olefin Elastomer (TPO) sheet roofing testing standard have been added to the table: Standard specification: ASTM D6878 Static puncture resistance: ASTM D5602 Dynamic puncture resistance: ASTM D5635 Breaking strength: ASTM D751 Elongation at reinforcement break: ASTM D751
Table 8	Roofing insulation	Table 8	Roofing insulation	The standard specification for EPS and XPS roofing insulation has been revised to clarify that minimum Type IX is required. New entries have been added for gypsum, cementitious, and lightweight insulating concrete: Gypsum – ASTM C1177 Type X Cementitious – ASTM C1325 Type A or B

				Lightweight insulating concrete – ASTM C869 for cellular and ASTM C332 for aggregate.
Table 9	Fiber cement, discontinuous roof assemblies	Table 9	Fiber cement, discontinuous roof assemblies	The table note has been revised to exempt TAS 103 and TAS 104 underlayments from the enhanced accelerated weathering testing in conjunction with applicable physical properties test. The reference to ASTM D5147 has been deleted. The length of exposure has been revised to clarify cycle A-1 in ASTM D4798 applies.
Table 10	Non-rigid, discontinuous (shingle) roof assemblies	Table 10	Non-rigid, discontinuous (shingle) roof assemblies	The table note has been revised to exempt TAS 103 and TAS 104 underlayments from the enhanced accelerated weathering testing in conjunction with applicable physical properties test. The reference to ASTM D5147 has been deleted. The length of exposure has been revised to clarify cycle A-1 in ASTM D4798 applies.
Table 11(b)	Slate tile assemblies	Table 11(b)	Slate tile assemblies	The table note has been revised to exempt TAS 103 and TAS 104 underlayments from the enhanced accelerated weathering testing in conjunction with applicable physical properties test. The reference to ASTM D5147 has been deleted. The length of exposure has been revised to clarify cycle A-1 in ASTM D4798 applies.
Table 15	Nonstructural metal panel roof assemblies	Table 15	Nonstructural metal panel roof assemblies	New entry added for nonstructural standing seam metal panels. A static water leakage test is required in accordance with FM 4474 Appendix G or ASTM E2140. New not permits an optional test to allow a minimum slope of 1:12. Additional new note permits standing seam metal roof panels that pass the requirements of FM 4474 Appendix G or ASTM E2140 to be installed to a minimum slope of 1:12.
Table 17	Non-rigid tile/shakes/slate/shingles products	Table 17	Non-rigid tile/shakes/slate/shingles products	New entry added for nonstructural standing seam metal panels. A static water leakage test is required in accordance with FM 4474

				Appendix G or ASTM E2140. New not permits an optional test to allow a minimum slope of 1:12. Additional new note permits standing seam metal roof panels that pass the requirements of FM 4474 Appendix G or ASTM E2140 to be installed to a minimum slope of 1:12.
TAS 114: Test Procedures for Roofing Assemblies in the High-Velocity Hurricane Zone Jurisdiction				
-	-	Appendix D 1.2	Applicability	New section added stating this procedure is not applicable to roofing assemblies applied onto a steel deck substrate.
TAS 124: Test Procedure for Field Uplift Resistance of Existing membrane Roof Systems and In Situ Testing for Reroof and New Construction Applications				
1.1	Scope	1.1	Scope	Section revised to add single-ply roofing systems to scope of this test procedure
1.2	Intent	1.2	Intent	Section revised to clarify the intent of this test procedure is to confirm the performance of a new roof system assembly or the wind resistance of an existing roof system assembly where a bonded recover roof system is to be installed.
4.1	Significance and use	4.1	Significance and use	Section revised to add single-ply roofing systems to scope of this test procedure
6.2.4	Limitations and precautions	6.2.4	Limitations and precautions	Section revised to clarify that the testing required in this protocol is to be conducted on mechanically attached roof systems with fastener spacing of no more than 2 feet in any or direction or fully adhered systems. Deflection measurements are not required for testing mechanically attached roof system assemblies.
7.1	Sampling	7.1	Sampling	The roof design wind pressure zones have been updated for correlation with ASCE 7-16.
7.2	Number of samples	-	-	Section deleted in its entirety.
9.1.1	Test procedure (bell chamber tests over an existing roof system assembly)	9.1.1	Test procedure (bell chamber tests over an existing roof system assembly)	New language added permitting the use of other approved compatible sealants or adhesives. New bullet item added stating that deflection measurements are not

				required when testing mechanically attached roof system assemblies.
9.1.8	Incremental pressure increases	9.1.8	Incremental pressure increases	The roof design wind pressure zones have been updated for correlation with ASCE 7-16.
9.3.4	Flood coat	9.3.4	Flood coat	New language added permitting the use of other approved compatible sealants or adhesives.
-	-	11.2.8	Field uplift resistance testing (report for bell chamber tests or bonded pull tests)	New section requiring the field uplift resistance testing to be performed in the preceding three months, unless otherwise authorized by the building official.
TAS 124	Bell Chamber Test Results	TAS 124	Bell Chamber Test Results	The roof design wind pressure zones have been updated for correlation with ASCE 7-16.
TAS 124	Bonded Pull Test Results	TAS 124	Bonded Pull Test Results	The roof design wind pressure zones have been updated for correlation with ASCE 7-16.
TAS 131: Standard Requirements for Unreinforced Thermoplastic Olefin Elastomer Based Sheet Used in Single-Ply Roof Systems				
1.1	Scope	1.1	Scope	Section revised to remove reinforced thermoplastic olefin elastomer sheet from the scope of this standard.
1.4	Test agencies	1.4	Test agencies and manufacturing location	New language required the manufacturing location of tested products to be verified by the testing laboratory and be included in the report.
2.1	ASTM Standards	2.1	ASTM Standards	ASTM D1822 and ASTM G154 have been deleted.
5.2	Grades	-	-	Section deleted.
5.3	Sheet construction	-	-	Section deleted.
6.1	Materials and manufacture	6.1	Materials and manufacture	The reference to Sections 5.2.1 and 5.2.2 has been deleted as both sections have been deleted.
Table 1	Physical Requirements for TPO Elastomer Sheets	Table 1	Physical Requirements for Unreinforced TPO Elastomer Sheets	The existing table has been deleted and replaced with a new table that only applies to unreinforced TPO elastomer sheets.
10	Test methods	10	Test methods	Test references have been revised to remove requirements applicable to reinforced TPO membranes. TAS 131 now

				only applies to unreinforced TPO membranes.
Appendix A	Test Procedure for Thickness Measurement of Coating Over Class SR Olefin Elastomer Based Sheet Roofing	-	-	Appendix A has been deleted in its entirety.