Analysis of Changes for the 6th Edition (2017) Florida Codes

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

This *Analysis of Changes for the 6th Edition (2017) of the Florida Codes* is intended to provide a comprehensive comparison of the provisions in the *5th Edition (2014) Florida Building Code, Test Protocols for the High-Velocity Hurricane Zones* (HVHZ) and the *6th Edition (2017) 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 *5th Edition (2014) Test Protocols for the HVHZ*. The next two columns contain section numbers and a brief overview of the corresponding requirements in the *6th Edition (2017) 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 *5th Edition (2014)* or the *6th Edition (2017) 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 *6th Edition (2017) 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 *6th Edition (2017) 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.

5th Edition (2014) Test Protocols for the	**6th Edition (2017) Test Protocols for the**	**Analysis**

HVHZ		HVHZ		
Section	**Requirement**	**Section**	**Requirement**	
All	Test Protocols for the HVHZ	All	Test Protocols for the HVHZ	Numerous editorial corrections to eliminate nonmandatory language, replace terminology with that used in other Florida Building Codes and referenced standards, and correct grammar. Removes references to withdrawn standards.
RAS 109				
9.1	Water vapor in humid air	-	-	Section deleted.
17.2	Coatings	17.2	Coatings	Adds “other approved coatings” to the list of materials suitable as coatings.
21.3	Final inspection time limits	-	-	Section requiring the Roof Assembly manufacturer to complete a final inspection certification not later than 30 days after completion of the application has been deleted.
RAS 115: Standard Procedures for Asphalt Shingle Installation				
12.1	Hips and ridges	12.1	Hips and ridges	Revised to permit the exposure to exceed 5 inches where specified in the roof assembly’s product approval.
RAS 117: Standard Requirements for Bonding or Mechanical Attachment of Insulation Panels and Mechanical Attachment of Anchor and/or Base Sheets to Substrates				
3.1	Insulation, general	3.1	Insulation, general	Section revised to permit alternate fasteners spacings at insulation panel edges where specified in the product approval. Requirement that fastener spacings be evenly distributed over panel area has been deleted.
6.2	Rigid roof insulation panels	6.2	Rigid roof insulation panels	Revised to permit rigid roof insulation panels to be applied directly over lightweight concrete decks where specified in the product approval.
RAS 150: Prescriptive BUR Requirements				
4.1	Materials	4.1	Materials	Replaces “Underwriters Laboratories” with “approved agency.”
4.13.1	Mineral surface roofing	4.13.1	Mineral surface roofing	Revised to prohibit mineral surfaced roofing from being applied on inclines greater-than one-half inch per foot.

4.13.3.4	Acrylic coatings	4.13.3.4	Acrylic coatings	Revised to require acrylic coatings to comply with ASTM D 6083.
5.1	Application, roof insulation	5.1	Application, roof insulation	Deletes single-ply roof coverings as a roof covering that roof insulation is permitted to provide an acceptable base.
TAS 100: Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof systems				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
-	-	8.1.1.1	Deck, test specimens	New section permitting the use of other approved test deck configurations.
11.1.9	Volume of water, report	-	-	Section deleted.
TAS 100(A): Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed in the Ridge Area				
1.1	Scope	1.1	Scope	Adds hip and ridge shingles to the scope.
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
8.1.3.1	Testing agency, deck	8.1.3.1	Testing agency, deck	Revised to require ventilation to comply with the FBCB. Requires the net-free are of the ventilation products to be recorded and reported in the test report.
9.3	Conditioning, alternative	9.3	Conditioning, alternative	The minimum temperature range has been changed from120°F to 135°F to 135°F to 140°.
-	-	9.6	Additional fastening	New section permits additional fastener installation during testing to ensure roof covering performance does not interfere with the evaluation of ventilation materials. Additional fasteners are not permitted to contribute to the wind load resistance of the ventilation materials.
TAS 103: Test Procedure for Self-Adhered Underlayments for Use in Discontinuous Roof Systems				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
5.1	Conditioning	5.1	Conditioning	Revised to require specimens to be selected in accordance with ASTM D 5147.
6.4	Thickness measurements	6.4	Thickness measurements	Revised to require measurements to be at the selvage edge for granular surfaced products.
7.1.3.1	Report	7.1.3.1	Report	Conditions for failure have been revised as any test specimen that exhibits any significant separation between the membrane and tested substrate.

10.1.2.2	QUV Exposure	10.1.2.2	UV Exposure	Revised to require UV Exposure to be in accordance with the apparatus and configuration in Section 13.1.2.1.
10.1.3.3	Temperature of specimens	10.1.3.3	Temperature of specimens	Revised to require the temperatures of specimens and test grips during conditioning and testing to comply with ASTM D 2523.
10.1.3.4	Temperature of specimens and test grips	-	-	Section deleted.
10.1.4.2	Report, breaking strength	10.1.4.2	Report, breaking strength	Revised to clarify that heat aging is to be in accordance with Section 10.1.2.1 and UV Exposure in accordance with Section 10.1.2.2.
Table 1	Minimum Breaking Strength Values	Table 1	Minimum Breaking Strength Values	Revised to require the breaking strength to be 25lbf/inch of width after heat aging and UV Exposure.
10.1.4.3	Report, elongation	10.1.4.3	Report, elongation	Revised to clarify that heat aging is to be in accordance with Section 10.1.2.1 and UV Exposure in accordance with Section 10.1.2.2.
Table 2	Minimum elongation values	Table 2	Minimum elongation values	Minimum elongation values for after heat aging and after UV Exposure have been revised.
11.0 through 11.1.2.1	Water absorption	-	-	Section deleted.
13.1 through 13.1.3.4	Ultraviolet resistance	13.1 through 13.1.3.3	Ultraviolet resistance	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
14.1 through 14.1.3.4.2	Accelerated aging	14.1 through 14.1.5.2	Accelerated aging	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
15.1 through 15.1.3	Cyclic elongation	15.1 through 15.1.2	Cyclic elongation	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
18.1	Puncture resistance	18.1	Puncture resistance	Removes reference to legacy ICBO acceptance criteria.
19.7	Tile sliding	19.7	Tile sliding	New language requires reporting of any tile

				sliding which has damaged any portion of the top surface of the underlayment.
-	-	19.10	Alternate stacking	New section permitting alternate stacking configurations as part of a Product Approval.
20.1 through 20.1.4	Crack cycling	20.1 through 20.1.2	Crack cycling	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
21.1.2.1	Peel adhesion	21.1.2.1	Peel adhesion	Removes reference to legacy ICBO acceptance criteria and refers to Sections 13 and 14.
TAS 104: Test Procedure for Nail-On Underlayment for Use in Discontinuous Roof Systems				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
8.1	Tear resistance	8.1	Tear resistance	Revised to require tear propagation resistance of materials in accordance with ASTM Test Method D 4073.
8.1.3	Tear propagation value	8.1.3	Tear propagation value	The minimum tear propagation value has been changed from 3.5 lbf to 20 lbf.
9.1.3.3	Breaking strength and elongation, procedure	9.1.3.3	Breaking strength and elongation, procedure	Temperature for required test has been changed to 73.4°F ± 3.6°F.
9.1.3.4	Specimens and testing grips	9.1.3.4	Specimens and testing grips	Temperature for conditioning has been changed to 73.4°F ± 3.6°F.
9.1.4.2	Report, breaking strength	9.1.4.2	Report, breaking strength	Revised to clarify that heat aging is to be in accordance with Section 9.1.2.1 and UV Exposure in accordance with Section 9.1.2.2.
9.1.4.3	Report, elongation	9.1.4.3	Report, elongation	Revised to clarify that heat aging is to be in accordance with Section 9.1.2.1 and UV Exposure in accordance with Section 9.1.2.2.
Table 1	Minimum Breaking Strength Values	Table 1	Minimum Breaking Strength Values	Revised to require the breaking strength to be 25lbf/inch of width after heat aging and UV Exposure.
Table 2	Minimum elongation values	Table 2	Minimum elongation values	Minimum elongation values for after heat aging and after UV Exposure have been revised.
10.0 through 10.1.3.1	Water absorption	-	-	Section deleted.

11.1	Low temperature flexibility	11.1	Low temperature flexibility	Required temperature for testing of membranes has been changed from 5°F to 10°F.
11.1.2.1	Low temperature flexibility, report	11.1.2.1	Low temperature flexibility, report	New language stating that specimens exhibiting no cracking at -10°F shall be considered as passing the low temperature flexibility test.
12.1 through 12.1.3.4	Ultraviolet resistance	12.1 through 12.1.3.3	Ultraviolet resistance	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
13.1 through 13.1.3.4.2	Accelerated aging	13.1 through 13.1.3.4.2	Accelerated aging	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
14.1 through 14.1.3	Cyclic elongation	14.1 through 14.1.2	Cyclic elongation	Removes reference to legacy ICBO acceptance criteria. Updates to performance criteria to reflect changes in referenced standards.
16.1	Puncture resistance	16.1	Puncture resistance	Removes reference to legacy ICBO acceptance criteria.
-	-	17.10	Alternate stacking	New section permitting alternate stacking configurations as part of a Product Approval.
TAS 107: Test Procedure for Wind Resistance Testing of Non-Rigid, Discontinuous Roof System Assemblies (Modified from ASTM D 3161)				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
TAS 110: Testing Requirements for Physical Properties of Roof Membranes, Insulation, Coatings and Other Roofing Components				
2.0	Conventional asphalt built-up and modified bitumen roof assemblies	2.0	Conventional asphalt built-up and modified bitumen roof assemblies	Reference standards for membrane roll roofing products have been updated and withdrawn standards have been deleted. Requires accelerated weather in compliance with ASTM D 4798 for membranes used as capsheets. Requires asphalt lap cement used in wet cement or underwater applications to also include testing in accordance with ASTM D 3409.
4.0	Single-ply roof assemblies	4.0	Single-ply roof assemblies	New table added for single-ply membrane products and other components specifying applicable reference standards. New not exempts dynamic pull-over testing of single-ply membranes for mechanically attached

				single-ply roof assemblies tested for uplift pressure resistance in accordance with Appendix B of TAS 114.
5.0	Liquid polyethylene roof assemblies	5.0	Liquid applied roof assemblies	Reference test standards for liquid applied roof assemblies have been updated and withdrawn standards have been deleted.
7.0	Coatings	7.0	Coatings	Reference test standards for roof coatings have been updated and withdrawn standards have been deleted.
8.0	Roof insulation	8.0	Roof insulation	Reference test standards for roof insulation have been updated and withdrawn standards have been deleted.
10.0	Non-rigid, discontinuous (shingle) roof assemblies	10.0	Non-rigid, discontinuous (shingle) roof assemblies	Adds ASTM D 1970 for self-adhered underlayments.
11.0	Rigid, discontinuous (tile) roof assemblies	11.0	Rigid, discontinuous (tile) roof assemblies	Reference test standards for rigid, discontinuous (tile) roof assembles have been updated and withdrawn standards have been deleted. Table in Section 13.3 regarding tile has been relocated to Section 11.0.
14.0	Attic ventilation products	14.0	Attic ventilation products	Reference test standards for attic ventilation products have been updated and withdrawn standards have been deleted. Table in Section 15 regarding tile has been relocated to Section 14.0.
15.0	Metal panel roof assebmlies	15.0	Non-structural metal panel roof assemblies	Reference test standards for non-structural metal panel roof assemblies have been updated and withdrawn standards have been deleted.
17.0	Non-rigid tiles/shakes/slate/shingles products (plastic)	17.0	Non-rigid tiles/shakes/slate/shingles products (plastic)	Adds ASTM D 1970 for self-adhered underlayments.
TAS 111(A): Test Procedure for Roof Edge Termination Performance				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
TAS 111(B): Test Procedure for Edge metal Pull-Off Performance				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
TAS 111(C): Test Procedure for Coping Cap Pull-Off Performance				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
TAS 114: Test Procedures for Roofing Assemblies in the High-Velocity Hurricane Zone Jurisdiction				

1.1	Scope	1.1	Scope	Fatigue, Indentation, and Temperature (FIT) criteria has been removed from the cope of this standard.
8.1.1	General, performance requirements and tests	8.1.1	General, performance requirements and tests	Language permitting the applicant to submit up to five roof system assemblies in its application for product approval has been deleted.
8.2	Combustibility, note	8.2	Combustibility, note	Note requiring fire testing to be done after a minimum 28-day cure period has been deleted.
8.8	FIT testing	-	-	Section deleted.
9.0 through 9.2.2.2	Manufacturing and field installation requirements	-	-	Section deleted.
Appendix A 2.3	Fire rating	-	-	Section deleted.
Appendix F 4.1	Evaluation of results	Appendix F 4.1	Evaluation of results	Requirement that the cover thickness be checked at the points of impact has been deleted.
Appendix K	Test procedures for FIT classification of modified bitumen roof system assemblies	-	-	Appendix deleted.
TAS 121: Standard Requirements for Testing and Approval of Roofing Adhesives, Mastics and Coatings				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
6.3	Product approval markings	-	-	Section deleted.
8.1 through 8.2	Rejection and reinspection	-	-	Section deleted.
TAS 124: Test Procedure for Field Uplift Resistance of Existing Membrane Roof Systems and In Situ Testing for Reroof and New Construction Applications				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
TAS 125: Standard Requirements for Metal Roofing Systems				
5.1.1	Structural metal roofing systems	5.1.1	Structural metal roofing systems	The deflection limit for structural metal roof panels has been changed from L/240 to L/180
TAS 132: Standard Requirements for Testing and Approval of Sealants Used in Roofing				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
9.2	Packing materials	9.2	Packing materials	Sections deleted and replaced with

through 9.4.2				language requiring packaging materials to be marked by the manufacturer as required by the approval entity.
10.0 through 10.3	Rejection and reinspection	-	-	Section deleted.
TAS 138: Standard Requirements for Aluminum Pigmented Emulsified Asphalt Used as a Protective Coating for Roofing				
3.1	Definitions	3.1	Definitions	Deletes the RCI Glossary of Terms.
8.4	Accelerated weathering, test methods	8.4	Accelerated weathering, test methods	Deletes “Test Method A” from the reference to ASTM G 155.
8.4.2.1	Cleaning aluminum panels	8.4.2.1	Cleaning aluminum panels	1,1,1 trichlorethane is no longer permitted to be used to clean the aluminum panels.
8.4.6.1	Failure end point	8.4.6.1	Failure end point	Revised to clarify this section only applies if failure occurs.
10.1	Packaged material labels	10.1	Packaged material labels	Revised to require packed materials to bear a label indicating compliance with this specification.
10.2	Packaging materials marking	10.2	Packaging materials marking	Revised to require packaging materials to be marked by the manufacturer as required by the product approval entity.
11.0 through 11.3	Rejection and reinspection	-	-	Section deleted.