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September 29, 2021

Mr. Thomas Campbell  
Mr. Mo Madani  
Florida Building Commission Staff  
2601 Blair Stone Road  
Tallahassee, FL 32399

Re: IBHS Comments on Ensuring the Safety of Existing Buildings in Florida: Codes, Standards, and Inspections (Draft 2.1)

## General Comments

While we appreciate the opportunity to provide feedback on this draft appendix to the IPMC and support efforts to ensure that existing buildings are safe, we have several concerns related to process, implementation and funding related to this document and its potential adoption by local jurisdictions.

First, this proposed appendix has not been developed according to a process typically accorded codes and standards used by local jurisdictions in Florida. Building codes developed by the ICC and the Florida Building Commission are developed through consensus-based procedures that include input and representation from stakeholders and subject matter experts. By providing comments and participating in this review, we are concerned that there will be a perception that the HRAC has endorsed this document. While members of the HRAC have significant experience related to hurricane research and construction codes, we believe this document needs more input and participation from other subject matter experts that are involved in the inspection and restoration of existing buildings. We recommend that the Florida Building Commission appoint a workgroup tasked with developing a document that could be adopted by local jurisdictions for inspections of existing buildings. This workgroup should operate using similar consensus-based procedures used to develop other Florida Building Codes and could use the ICC Draft 2.1 as a starting point. We are not suggesting the Florida Building Commission mandate inspections of existing buildings as it does not have that authority, but to serve as a vehicle to develop such a document that could be adopted by local jurisdictions. We understand that many communities are looking for guidance right now. However, we believe a more deliberative process with more subject matter experts is essential for such an important undertaking. Clear objectives and defined provisions are needed for a successful program, and ultimately will protect all parties against misinterpretations and potential future problems.

Second, we think much more consideration is needed regarding implementation and funding of a such a program. At the last HRAC meeting, most of the code officials in attendance indicated that they currently do not have the resources nor the time to administer such an inspection program. Funding sources and costs associated with inspections, assessments, or evaluations (whether by private party engineers or authorities having jurisdiction) must be determined.

## Specific Comments on the Draft Appendix

1. Section 3 (definition of Extreme Wind Area) – What is the basis of the wind speed and exposure category triggers in this definition? Additionally, the term Extreme Wind Area doesn't appear to be used anywhere else in the document.
2. Section 3 (definition of Extreme Rainfall Area) – this is an important issue that is not defined.
3. Section 3 (definition of Risk Category) – Table 1604.5 in this document is slightly different than the same table in the Florida Building Code, Building (FBCB). For example, in the FBCB Table 1604.5, screen enclosures are listed under Risk Category 1 not 2. If this document is for Florida, The Table should be identical to what is in the FBCB. Also, in Section 4, reference should be to Table 1604.5 of the FBCB not the IBC.
4. Section 3 (definition of special building environmental factors) – These factors need refinement. For example, the wind-borne debris region includes inland areas that are up to 60 miles from the coast and excludes many coastal areas.
5. Section 3 (definition of wind-borne debris region) – The definition of wind-borne debris regions does not align with the FBCB.
6. Section 5 (Maintenance Inspection) – After the first paragraph need to add: Minimal knowledge of building science, exterior enclosure design and construction principles and practice is required for this process. Alternatively, services of knowledgeable building design, restoration and/or maintenance professionals will be required for this task. This is needed because it is not expected that most building owners are familiar with load bearing elements, walls, joists, trusses, etc.
7. Section 5 (Types of Inspections; Part B – Periodic Inspection) – Last paragraph after “by a qualified agency” insert that meet requirements of ASTM E329 and accredited by an accrediting body... This would clarify the term “qualified agency.”
8. Resource Material; I Structural Evaluation (Part D; Masonry Bearing Walls) – Add the following: Periodic inspection of mortar and grout in joints of masonry units is required to ensure integrity of joints and no loss of joint materials.

9. Resource Material; I Structural Evaluation (Part F; Concrete Framing Systems) – First paragraph after the “... relative to actual supported loads, will be necessary” add the following: If nondestructive testing is recommended by the structural engineer of the record to evaluate the in-situ concrete strength, testing of concrete cores obtained and tested in accordance with ASTM C42 and conditioned in accordance with ACI 318, or by penetration resistance in accordance with ASTM C803 will be required.
10. Resource Material; I Structural Evaluation – Recommend adding a subsection discussing inspection of and problems associated with EIFS and stucco systems on the exterior wall of buildings (e.g. cracking and water penetration at joint and/or around door and window opening, etc.).
11. In the structural evaluation section, under subpart F (Concrete Framing Systems), there needs to be some mention of guidelines for design and discharge drainage of surface waters. For example, proper drainage must be provided and maintained for surface waters on slabs that are exposed to outside environment around the main building such that it would not affect the integrity of the concrete slab or parts of the building underneath. Proper sloping of the concrete slab and methods and devices to discharge the surface waters must be provided. Also, additional live loading involved on slabs due to potential ponding water and waterproofing of the slab shall be considered in the design. A key concern is relatively flat concrete slabs above parts of the building such as parking garages, storage areas, etc.

Sincerely,



Anne Cope  
Chief Engineer, IBHS