

To: Daniela Salume <daniela.salume@cityofkeywest-fl.gov>; Matthew Crawford <matthew.crawford@cityofkeywest-fl.gov>
Subject: [EXTERNAL] HARC Windows

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Daniela/Matt,

It was great meeting you both earlier. I cleared my schedule for the 16th and would be happy to speak to the board regarding windows and doors.

Here are some of the points to consider:

- 1. Wood windows are rated IZ3 (Impact glazing zone 3)
 - a. IZ3 testing only goes up to 170mph wind speeds.

1609.1.2.2 Application of ASTM E1996.

The text of Section 6.2.2 of ASTM E1996 shall be substituted as follows:

6.2.2 Unless otherwise specified, select the wind zone based on the strength design wind speed, V_{ult} , as follows:

6.2.2.1 *Wind Zone 1*—130 mph \leq ultimate design wind speed, $V_{ult} < 140$ mph.

6.2.2.2 *Wind Zone 2*—140 mph \leq ultimate design wind speed, $V_{ult} < 150$ mph at greater than one mile (1.6 km) from the coastline. The coastline shall be measured from the mean high water mark.

6.2.2.3 *Wind Zone 3*—150 mph (58 m/s) \leq ultimate design wind speed, $V_{ult} \leq 170$ mph (63 m/s), or 140 mph (54 m/s) \leq ultimate design wind speed, $V_{ult} \leq 170$ mph (63 m/s) and within one mile (1.6 km) of the coastline. The coastline shall be measured from the mean high water mark.

6.2.2.4 *Wind Zone 4*—ultimate design wind speed, $V_{ult} > 170$ mph (63 m/s).
 - i.
 - b. Per the building code, we are required to install windows that are rated for 180mph winds (risk category II is for residential homes)

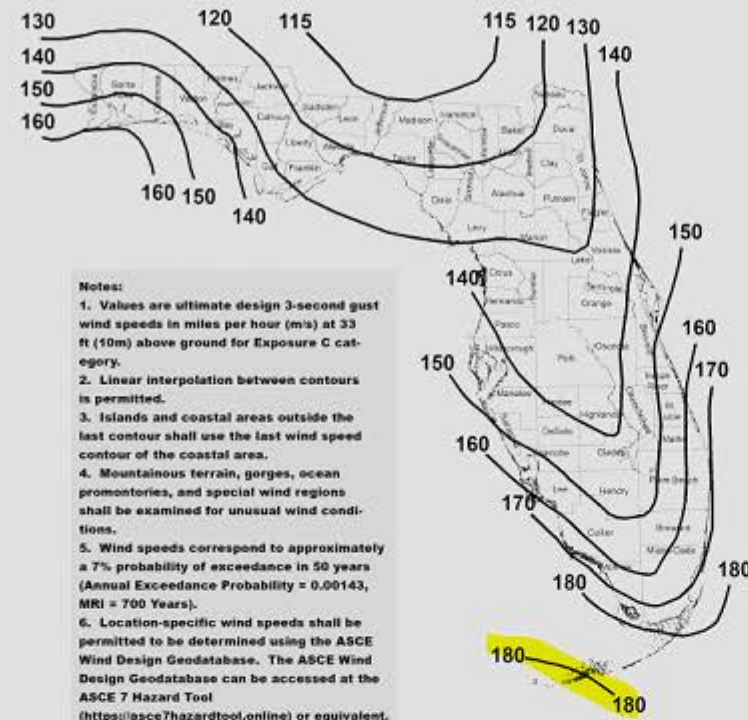


FIGURE 1609.3(1)
ULTIMATE DESIGN WIND SPEEDS, V_{ULT} , FOR RISK CATEGORY II BUILDINGS AND OTHER STRUCTURES

- i.
2. Florida statute 553.80

Florida Statute §553.80⑦ – Material & Construction Requirements

⑦ A local government may not adopt or enforce any ordinance, rule, or regulation that requires building materials, products, or construction methods for a local building permit or development order which are different from or in addition to the Florida Building Code, except as otherwise specifically authorized by this chapter.

This subsection is intended to ensure that builders and property owners are not subjected to excessive or unnecessary expenses caused by local mandates that exceed statewide standards.

What This Means

- **Uniform Standards:** Local governments must follow the **Florida Building Code** and cannot add extra material or construction requirements.
- **Cost Protection:** Prevents municipalities from forcing builders to use **more expensive materials** than those already approved under the Florida Product Approval system.
- **Exceptions:** Only allowed if another part of Chapter 553 specifically authorizes stricter local rules (e.g., floodplain management in coastal areas).

- a.
- b. I'm no lawyer, but considering wood windows and doors are 5X the cost of aluminum products, I'm sure this law applies.

3. Insurance

- a. Insurance companies only pay for the "replacement cost" of a damaged item. If an aluminum window cost \$500 and the same wood window costs \$2600, they only cover the \$500 replacement value.
- b. Wind insurance companies are required by law to offer a 20% "protected openings" discount for their customers.

- i. If a homeowner within the HARC district wants to capitalize on this discount, it is illegal to deny them

- 1. Florida Statute §553.79(20) states that local governments may not prohibit or prevent an owner from installing or replacing hurricane protection (including impact-resistant windows and doors) if the work is intended to qualify for an insurance premium discount under Florida law.

4. This isn't anything legally binding but should be considered in my opinion. The city does not play by the HARC guidelines

- a. City hall has aluminum windows with LowE glass (circa 1926)
- b. Gato building has aluminum windows with LowE glass (circa 1871)
- c. City hall has a giant solar panel carport (circa 1926)
- i. Carports are not allowed in the HARC district

Let me know when/if you want to meet up and get a crash course on running design pressures.

Regards,

Oscar Fernandez
Key West Windows
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