**Structural Technical Advisory Committee – Errata**

**7th Edition (2020) Florida Building Code – Test Protocols for High-Velocity Hurricane Zones**

**ROOFING APPLICATION STANDARD (RAS) No. 127-20**

**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**

**S-FBC-RAS 127-Errata #1**

Gaspar Rodriguez – Miami-Dade

Good morning Mo,

This email is to request that the following corrections to typographical errors in the Florida Building Code Test Protocols for High Velocity Hurricane Zone, Roofing Application Standard 127 (RAS 127) be submitted in the upcoming errata session.

The errors in four tables in RAS 127 are typographical errors which should be amended in the Code to indicate the correct data.  Attached are the corrected Tables.  Tables 3, 6 and 12 reflecting the correct roof wind zones.  Table 8 reflects the correctly calculated values.

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| **TABLE 3 — GABLE ROOFS** **MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE –****>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY “C”** |
| **Roof Mean Height** | **Roof Pressure Zones** |
| **1, 2e and 2r** | **2n and ~~2r~~3r** | **3e** |
| ≤15’ | -67 | -74 | -115 |
| >15 to ≤20’ | -71 | -78 | -122 |
| >20’ to ≤25’ | -74 | -82 | -127 |
| >25’ to ≤30’ | -78 | -85 | -132 |
| >30 to ≤35’ | -80 | -88 | -137 |
| >35 to ≤40’ | -82 | -91 | -141 |
| >40’ to ≤45’ | -85 | -93 | -146 |
| >45’ to ≤50’ | -86 | -95 | -147 |
| >50’ to ≤55’ | -88 | -97 | -151 |
| >55’ to ≤60’ | -89 | -98 | -153 |

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| **TABLE 6 — GABLE ROOFS****MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -****>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY “D”** |
| **Roof Mean Height** | **Roof Pressure Zones** |
| **1, 2e and 2r** | **2n and ~~2r~~3r** | **3e** |
| ≤15’ | -82 | -90 | -140 |
| >15 to ≤20’ | -86 | -94 | -146 |
| >20’ to ≤25’ | -87 | -98 | -151 |
| >25’ to ≤30’ | -92 | -101 | -157 |
| >30 to ≤35’ | -94 | -103 | -161 |
| >35 to ≤40’ | -97 | -106 | -165 |
| >40’ to ≤45’ | -99 | -109 | -168 |
| >45’ to ≤50’ | -101 | -111 | -172 |
| >50’ to ≤55’ | -102 | -112 | -174 |
| >55’ to ≤60’ | -104 | -114 | -177 |

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| **TABLE 8 — HIP ROOFS** **MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE –** **>4:12 to ≤6:12 RISK CATEGORY II EXPOSURE CATEGORY “C”** |
| **Roof Mean Height** | **Roof Pressure Zones** |
| **1**  | **2e, 2r and 3** | **~~3~~** |
| ≤15’ | ~~-71~~ -54 | ~~-91~~ -74 | ~~-111~~ |
| >15 to ≤20’ | ~~-75~~ -57 | ~~-97~~ -78 | ~~-118~~ |
| >20’ to ≤25’ | ~~-79~~ -59 | ~~-101~~ -82 | ~~-124~~ |
| >25’ to ≤30’ | ~~-82~~ -62 | ~~-105~~ -85 | ~~-129~~ |
| >30 to ≤35’ | ~~-84~~ -64 | ~~-109~~ -88 | ~~-133~~ |
| >35 to ≤40’ | ~~-87~~ -66 | ~~-112~~ -90 | ~~-137~~ |
| >40’ to ≤45’ | ~~-89~~ -67 | ~~-114~~ -92 | ~~-140~~ |
| >45’ to ≤50’ | ~~-91~~ -69 | ~~-117~~ -95 | ~~-143~~ |
| >50’ to ≤55’ | ~~-93~~ -70 | ~~-120~~ -97 | ~~-146~~ |
| >55’ to ≤60’ | ~~-94~~ -72 | ~~-122~~ -99 | ~~-149~~ |

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| **TABLE 12 — HIP ROOFS** **MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -** **>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY “D”** |
| **Roof Mean Height** | **Roof Pressure Zones** |
| **1**  | **~~2r~~2e** | **~~2e~~2r** | **3**  |
| ≤15’ | -69 | -119 | -123 | -156 |
| >15 to ≤20’ | -73 | -124 | -129 | -163 |
| >20’ to ≤25’ | -75 | -129 | -133 | -169 |
| >25’ to ≤30’ | -78 | -134 | -138 | -175 |
| >30 to ≤35’ | -80 | -137 | -142 | -180 |
| >35 to ≤40’ | -82 | -141 | -145 | -184 |
| >40’ to ≤45’ | -84 | -143 | -148 | -188 |
| >45’ to ≤50’ | -85 | -146 | -151 | -192 |
| >50’ to ≤55’ | -87 | -149 | -154 | -195 |
| >55’ to ≤60’ | -88 | -151 | -156 | -198 |

Please contact me if any further information is required.

Regards,

**Gaspar J Rodriguez,** Senior Code Officer, Roofing
**Miami-Dade County Department of Regulatory and Economic Resources**

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**TAC Recommendation: AS**

**Commission Action:**

**7th Edition (2020) Florida Building Code – Building**

**CHAPTER 20 ALUMINUM**

**S-FBC-B-Ch. 20-Errata #2**

Joe Belcher

July 8, 2021

Florida Building Commission

C/O Mo Madani, FBC Technical Manager

Office of Codes and Standards
Department of Business and Professional Regulation
2601 Blair Stone Road
Tallahassee, Florida 32399

Subject: Errata Request for FBC-B Tables 2002.4 and 2002.4A – Mod S8395 with General Comment 1

Mr. Madani:

I am submitting this request for an errata on behalf of the Aluminum Association of Florida (AAF). We did not believe Tables 2002.4 and 2002.4A would need to be modified during our initial assessment because the values were based on testing. However, we engaged Dr. Timothy Reinhold, PE, to review and update the Guide to Aluminum Construction in High Wind Areas. We learned the rows of the tables related to solid surfaces needed modification to comply with ASCE 7-16. The current values in the rows for solid roof surfaces in the FBC-B 7th Edition (2020) do not comply with ASCE 7-16. The tables contained in the AAF Guide to Aluminum Construction in High Wind Areas are correct.

I submitted a General Comment to Mod S8395 (S8395-G1) containing the corrected tables. However, the changes were not adopted because they were not submitted as Alternate Language. The tables showing the corrections in the legislative format follow. Adopting the corrected tables will enhance the code by complying with the updated wind design standard.

Should you need anything further, please do not hesitate to contact me at your earliest convenience. Thanking you in advance for your assistance, I remain,

Respectfully yours,



Joseph D. Belcher

Cc: Randy Davenport, President, AAF

 Dr. Timothy Reinhold, P.E.

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| --- | --- |
| **Table 2002.4** |  |
| **DESIGN WIND PRESSURES SCREENED ENCLOSURES a, b, f, g, h** **(STRENGTH DESIGN OR LRFD ONLY)** |  |
|   | ULTIMATE DESIGN WIND SPEED Vult (mph) |  |
|  | 110 | 120 | 130 | 140 | 150 | 160 | 170 |  |
| Surface | Design Pressures by Exposure Category (psf) |  |
| B | C | D | B | C | D | B | C | D | B | C | D | B | C | D | B | C | D | B | C | D |  |
| Horizontal Pressures on Windward Surfaces d | 17 | 24 | 28 | 20 | 28 | 33 | 23 | 32 | 38 | 27 | 38 | 44 | 31 | 43 | 51 | 36 | 49 | 58 | 40 | 56 | 66 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Horizontal Pressures on Leeward Surfaces d | 13 | 18 | 21 | 15 | 22 | 26 | 20 | 26 | 31 | 21 | 29 | 34 | 22 | 34 | 40 | 25 | 39 | 46 | 29 | 44 | 52 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Vertical Pressures on Screen Surfaces c | 4 | 7 | 8 | 6 | 8 | 9 | 6 | 9 | 11 | 8 | 11 | 12 | 9 | 12 | 14 | 10 | 14 | 16 | 11 | 15 | 18 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Vertical Pressures on Solid Surfaces e | ~~14~~ 17 | ~~19~~24 | ~~23~~29 | ~~17~~21 | ~~23~~29 | ~~27~~34 | ~~20~~24 | ~~27~~34 | ~~32~~40 | ~~23~~28 | ~~32~~39 | ~~37~~46 | ~~25~~32 | ~~36~~45 | ~~42~~53 | ~~29~~36 | ~~41~~51 | ~~48~~60 | ~~33~~41 | ~~46~~58 | ~~54~~68 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For SI: 1 pound per square foot = 9.479 kN/m2.

**NOTES:**

a. Pressures apply to enclosures with a mean enclosure roof height of 30 feet (10 m). For other heights, multiply the pressures in this table by the factors in Table 2002.4A.

b. Apply horizontal pressures to the area of the enclosure projected on a vertical plane normal to the assumed wind direction, simultaneously inward on the windward side and outward on the leeward side.

c. Apply vertical pressures upward and downward to the area of the enclosure projected on a horizontal plane.

d. Apply horizontal pressures simultaneously with vertical pressures.

e. Table pressures are MWFRS Loads. The design of solid roof panels and their attachments shall be based on component and cladding loads for enclosed, ~~or~~ partially enclosed structures, or attached canopies as appropriate.

f. Table pressures apply to 20 × 20 × 0.013" mesh screen. For 18 ×14 × 0.013" mesh screen, pressures on screen surfaces may be multiplied by 0.88. For screen densities greater than 20 × 20 × 0.013", use pressures for enclosed buildings.

g. Table pressures may be interpolated using ASCE 7 methodology.

h. For allowable stress design (ASD) pressures shall be permitted to be multiplied by 0.6.

TABLE 2002.4A

HEIGHT ADJUSTMENT FACTORS

|  |  |
| --- | --- |
| **MEAN ROOF HEIGHT** | **EXPOSURE** |
| **B** | **C** | **D** |
| 0-15 | ~~1~~ 0.81 | 0.86 | 0.89 |
| 20 | ~~1~~ 0.89 | 0.92 | 0.93 |
| 25 | ~~1~~ 0.94 | 0.96 | 0.97 |
| 30 | 1 | 1 | 1 |
| 35 | 1.05 | 1.03 | 1.03 |
| 40 | 1.09 | 1.06 | 1.05 |
| 45 | 1.12 | 1.09 | 1.07 |
| 50 | 1.16 | 1.11 | 1.09 |
| 55 | 1.19 | 1.14 | 1.11 |
| 60 | 1.22 | 1.16 | 1.13 |

**TAC Recommendation: AS**

**Commission Action:**