

# JDB CODE SERVICES, INC.

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## Updated 6-21-2015 to Include Public Comments

April 24, 2016

Doug Buck, Director Governmental Affairs  
2600 Centennial Place  
Tallahassee, Florida 32308

Subject: Report on Florida Building Commission Technical Advisory Committee (TAC) Meetings

Dear Mr. Buck:

I am pleased to report we were relatively successful at the recent Florida Building Commission (FBC) Technical Advisory Committee (TAC) meetings held at Tallahassee and Gainesville, Florida. I believe there are a number of items we should pursue with public comment in the second round of hearings which I have identified in the following matrix.

Going forward, the Commission staff is scheduled to have the results of the hearings posted on the Building Code Information System website (BCIS at [www.floridabuilding.org](http://www.floridabuilding.org)) by May 6, 2016. They may have the results posted earlier, and when posted the second forty-five-day Public comment period on the TAC recommendations will commence. At the end of the public comment period the TACs will convene again to consider public comments on their recommendations.

The second round of TAC hearings to consider Public comments on TAC recommendations is currently scheduled for July 18-21, 2016, at Gainesville, Florida, but this is subject to change depending on the date of posting. Due to hotel arrangements, I do not believe this will change, but it has changed in past cycles. I will notify you of any changes in the dates. I will be monitoring the BCIS for any Public comments of interest and will notify you if any are received. In addition to on-line Public comment, a member of the public could come to the second hearing and oppose or support TAC recommendations with oral testimony. The TAC may uphold the first hearing recommendations, modify the recommendations, or reverse the recommendations. I will be in attendance at the second round of TAC hearings to represent industry interests.

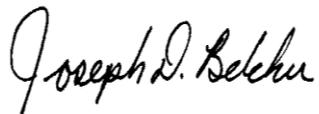
Once the second round of TAC hearings is completed, the schedule calls for the TAC consideration of Public comments to be posted by August 1, 2016. The TAC recommendations will be heard by the full Florida Building Commission (Commission) in Rule Development Workshops scheduled to be conducted August 18-19, 2016, at Fort Lauderdale, Florida. This will be another opportunity for the public or a Commissioner to provide testimony in opposition to TAC recommendations. The Commission will start with a consent agenda and motion to approve the consent agenda which consists of the TAC recommendations on the proposed changes. Any Commissioner may pull items from the consent agenda for individual discussion. Depending on action at the second round of TAC hearings, with your assistance I will request a Commissioner remove those items for which we oppose the TAC recommendation from the consent agenda to allow us to make our case to the full Commission. I will be present at the Commission meetings to represent industry interests.

Once the Rule Development Workshops are completed, the current Commission Work Plan calls for staff to post a Draft Florida Building Code, 6th Edition (2017), on the BCIS by September 19, 2016. I will review the Draft when posted to make certain industry interests are properly represented. At that time the supplements with the changes will be provided to ICC for integration into the 2015 I-Codes. An integrated Draft of the Florida Building Code, 6th Edition (2017) is scheduled to be posted on the BCIS by April 21, 2017. I will review the integrated Draft to make certain industry interests are properly represented.

A Final Rule Hearing on the FBC, 6th Edition (2017), will be conducted by the Commission on June 8, 2017, at which hearing the Commission will approve the final version of the code. The scheduled effective date of the code is December 31, 2017. I will be present at the Commission meeting to make certain industry interests are properly represented.

Should you have any questions, need further information, or wish to discuss these or any other matters, please do not hesitate to contact me at your earliest convenience.

Respectfully,

A handwritten signature in black ink that reads "Joseph D. Belcher". The signature is written in a cursive, flowing style.

Joseph D. Belcher, Code Consultant  
JDB Code Services, Inc.

Mod and Vote <sup>1</sup>	Impact	Discussion
<b>Mods Submitted on Behalf of FHBA</b>		
F6799 <sup>2</sup> NAR 5-3	Delete Tables R302.1(1) and R302.1(2) and add Table R302.1	<p>Reasons given for a No Affirmative Recommendation vote were that the Mod: 1. does not meet the legal standing under the requirements for strengthening or equivalency of the code; 2. degrades the effectiveness and eliminates an alternative that provides greater level of protection; and, 3. is not technically justified. The suggestion was made to limit the change to existing platted subdivisions and two TAC members stated they would support the Mod with such a limit (Apfelbeck and Bahadori). It was explained that the Mod basically implemented what was enacted in Chapter 2016-129 (HB535), but there seems to be a belief that the bill applies solely to the FBC, 5<sup>th</sup> Edition, and not the FBC, 6<sup>th</sup> Edition.</p> <p><b>While the code consultant does not believe we can reverse the recommendation of the TAC, I recommend the submission of a public comment for the second TAC hearing. I further recommend we begin preparation to make a strong appearance by members before the full Florida Building</b></p>

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<sup>1</sup> The Commission and TACs are permitted to vote approved or approved as modified. Due to the wording in the statute, they are not permitted to disapprove a proposal. Legal counsel established it was permissible to do a vote for a Negative Affirmative Recommendation (NAR) which is essentially a vote for disapproval. In many cases, the TAC provides guidance to the proponent for crafting a Public comment for the second round of hearings which will make the change acceptable. Regarding voting, a 75% majority is required for passage of any motion.

<sup>2</sup> The letter designator indicates which TAC heard the Modification (Mod): CA = Code Administration; EN = Energy; F = Fire; M = Mechanical; P = Plumbing; S = Structural; SP = Special Occupancy.

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p><b>Commission at the scheduled August 18-19, 2016, meetings at Fort Lauderdale to overturn the TAC recommendation.</b></p> <p><b>PC Submitted ☒</b></p> <p>F6799 FHBA requests the Fire TAC recommend approval of the modification as submitted. A TAC member stated the changes were not technically justified. In fact, the reason given for making the change in the base code contained no technical justification. A recent report commissioned by the Florida Building Commission and authored by the University of Florida did not demonstrate any fire spread problem based on the code specified Fire Separation Distances contained in all the previous editions of the Florida Building Code. (<i>Evaluation of Fire Separation Requirements for Zero Lot Line Residential Developments, UF</i>) The study does, however, indicate installing sprinklers is less costly than providing fire resistant walls and fire rated soffits as required by the base code where fire separation distance is less than five feet. The additional cost to meet the increased fire separation distance, in our opinion, was the whole intent of the change in the base code: make existing proven methods more expensive to “provide the incentive” for adding fire sprinklers. This is not a valid basis for a code change.</p> <p>Excerpt from REASON Statement for ICC Code Change RB184-09/10:</p> <p>“Reason: In the last code cycle, Proposal RB67-07/08 (which was withdrawn at the Final Action Hearings) provided as one of its sprinkler alternatives a reduction in exterior wall fire ratings that we believe still is a reasonable and justifiable sprinkler incentive. This proposal will provide a reasonable sprinkler alternative in the RC (<i>sic</i>) when residential sprinkler systems are installed.</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p data-bbox="921 282 1932 558">This proposal provides a significant financial and design incentive for residential sprinklers. From a financial perspective, the proposal permits cost reductions related to exterior wall construction and, in the case of a planned community, could result in more developable lots. From a design advantage perspective, the proposal permits homes to have larger footprints without triggering fire-rated exterior walls and permits more flexible use of windows on walls facing property lines.” (Emphasis provided.)</p> <p data-bbox="827 597 2022 748">A comment received during the Public Hearings before the Fire TAC cited the destruction of homes in the Pidgeon Forge, TN fire. That fire was a wildland/urban interface fire (WUI) and it is unknown if any compliance with the ICC or NFPA standards for mitigating WUI fires were in place. The WUI standards are not adopted in Florida or by the base code.</p> <p data-bbox="827 787 2011 1105">The Florida Legislature recognizing the flawed basis of this change to the base code, mandated the Florida Building Commission revise the FBC-R, 5<sup>th</sup> Edition, (2014) to reflect the fire separation distance requirements of the FBC-R 2010. These fire separation distances have been in place since the first adoption of the FBC-R with no demonstrated fire spread problem. FHBA does not believe the Florida Legislature intended this to be a change applicable for twelve to eighteen months. FHBA believes the revisions are meant to be carried forward to the FBC-R 6<sup>th</sup> Edition (2017). The recommendation of the Fire TAC (5-3 vote) is counter to the to the desires expressed in the legislation enacted by the 2016 Legislative Session.</p>
F6801 NAR 1-7	Modify measurement for determining where guards are required. The Mod deleted the	The TAC stated there was no Florida specific need. One TAC member (Apfelbeck) suggested a ridiculous scenario that no builder would build as part of the justification for disapproval.

Mod and Vote <sup>1</sup>	Impact	Discussion
	<p>36" horizontal requirements. (NAHB)<sup>3</sup></p>	<p><b>I recommend we contact NHBA for additional information as this was one of the changes NHBA suggested state associations pursue when adopting the 2015 I-Code. Recommend submission of a public comment.</b></p> <p><b>PC Submitted <input checked="" type="checkbox"/> Alt Lang</b></p> <p>F6801 FHBA requests the Fire TAC recommend approval of the modification with the alternate language below.</p> <p>R312.1.1 Where required. Guards shall be located along open-sided walking surfaces of all decks, porches, balconies, including stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within <del>36</del> <u>24</u> inches (914 <u>610</u> mm) horizontally to the edge of the open side. Insect screening shall not be counted as a guard.</p> <p>RATIONALE: One member of the Fire TAC provided an example of a six-inch space between a floor (deck) and a change of elevation greater than thirty inches. While considered a draconian example, with no horizontal dimension specified, it could be claimed the code permits such an arrangement. The proposed alternate language changing the dimension from thirty-six inches to twenty-four inches is seen a reasonable requirement which will provide adequate protection. The specified dimension will be almost the width of two stair treads providing ample space to recognize a large change in elevation.</p>

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3 Impact statements followed by (NAHB) indicate changes that were suggested to states adopting the 2015 I-Codes by NAHB.

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		<p>The requirement to measure the difference in elevation between a walking surface and the adjacent grade has been in the code for many years. When the requirement was changed in the base code there was no justification or proof that a problem existed. At no time during the public hearing, nor the Final Action Hearing was any technical justification presented to substantiate the change requiring the building official to measure 36 inches away from the leading edge of the walking surface or tread to determine when a guardrail should or should not be required. There are no studies that can support claims that this will have an effect on reducing possible injuries. While the proponent promoted this as a means for consistent enforcement of the guard requirements, there is no evidence of increased risk to the safety of the occupant if measuring from the edge of the walking surface to grade below as was the practice for many, many years is used. This proposal is consistent with the intent expressed in Florida Statute of providing requirements which will allow effective and reasonable protection for public safety, health, and general welfare for all the people of Florida at the most reasonable cost to the consumer.</p>
<p>F6802 NAR 1-7</p>	<p>Modify window fall protection provisions.</p>	<p>The TAC stated there was no Florida specific need. One TAC member (Apfelbeck) stated studies demonstrating justification including data and science is needed. Schiffer suggested changing 24-inch dimension to 36-inch to agree with building code and providing a reference to ASTM F2090. The change as proposed deleted all reference to dimensions and did reference ASTM F2090</p> <p><b>Research indicates there were an estimated 98.415 children (95% confidence level) treated in US hospitals for window fall-related injuries from 1990 to 20084. Florida specific data could not be</b></p>

4 Vaughn A. Harris, BS, Lynne M. Rochette, PhD, and Gary A. Smith, MD, Dr. PH; PEDIATRICS Volume 128, Number 3; *Pediatric Injuries Attributable to Falls from Windows in the United States in 1990 –2008*, September 2011.

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>found. The cost of providing fall protection is estimated at \$11.00. Due to the nature of injuries and the age of the injured accounting for the majority of the falls (0 to 4 years of age 64.8%), I recommend we not pursue this change further.</p>
<p>F6803 AS 8-0</p>	<p>Modify wall height requirements for mezzanines; Add P2904 sprinkler system</p>	
<p>EN6805 NAR 1-6</p>	<p>Adds definition for Projection Factor; Adds new section addressing projection factor for residential construction. (NAHB)</p>	<p>The TAC stated there was no Florida specific need for the change. The reason for denial is considered non-persuasive as shading is allowed for commercial structures. When large permanent projections shade a window or glass door there is no reason to not allow credit for the energy savings in decreased solar heat gain through the glass. When asked for guidance as to what may make the change acceptable, a TAC member stated a change in the factors used may make the provisions acceptable.</p> <p><b>The code consultant is working with a TAC member, the AAMA representative, and others to determine acceptable factors. Recommend submission of a public comment incorporating ASHRAE 90.1-2013 Shading Factors. ASHRAE 90.1-13 Definition for Projection Factor:</b></p> <p><b><i>projection factor (PF):</i> the ratio of the horizontal depth of the external shading projection divided by the sum of the height of the fenestration and the distance from the top of the fenestration to the bottom of the farthest point of the external shading projection, in consistent units.</b></p> <p><b>ASHRAE 90.1 SHGC Multipliers for Permanent Projections:</b></p>

Mod and Vote <sup>1</sup>	Impact	Discussion																																	
		<p style="text-align: center;"><b>Table 5.5.4.4.1 SHGC Multipliers for Permanent Projections</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th data-bbox="848 383 1045 472">Projection Factor</th> <th data-bbox="1045 383 1360 472">SHGC Multiplier (all Other Orientations)</th> <th data-bbox="1360 383 1598 472">SHGC Multiplier (North-Oriented)</th> </tr> </thead> <tbody> <tr><td data-bbox="848 472 1045 521">0–0.10</td><td data-bbox="1045 472 1360 521">1.00</td><td data-bbox="1360 472 1598 521">1.00</td></tr> <tr><td data-bbox="848 521 1045 570">&gt;0.10–0.20</td><td data-bbox="1045 521 1360 570">0.91</td><td data-bbox="1360 521 1598 570">0.95</td></tr> <tr><td data-bbox="848 570 1045 618">&gt;0.20–0.30</td><td data-bbox="1045 570 1360 618">0.82</td><td data-bbox="1360 570 1598 618">0.91</td></tr> <tr><td data-bbox="848 618 1045 667">&gt;0.30–0.40</td><td data-bbox="1045 618 1360 667">0.74</td><td data-bbox="1360 618 1598 667">0.87</td></tr> <tr><td data-bbox="848 667 1045 716">&gt;0.40–0.50</td><td data-bbox="1045 667 1360 716">0.67</td><td data-bbox="1360 667 1598 716">0.84</td></tr> <tr><td data-bbox="848 716 1045 764">&gt;0.50–0.60</td><td data-bbox="1045 716 1360 764">0.61</td><td data-bbox="1360 716 1598 764">0.81</td></tr> <tr><td data-bbox="848 764 1045 813">&gt;0.60–0.70</td><td data-bbox="1045 764 1360 813">0.56</td><td data-bbox="1360 764 1598 813">0.78</td></tr> <tr><td data-bbox="848 813 1045 862">&gt;0.70–0.80</td><td data-bbox="1045 813 1360 862">0.51</td><td data-bbox="1360 813 1598 862">0.76</td></tr> <tr><td data-bbox="848 862 1045 911">&gt;0.80–0.90</td><td data-bbox="1045 862 1360 911">0.47</td><td data-bbox="1360 862 1598 911">0.75</td></tr> <tr><td data-bbox="848 911 1045 959">&gt;0.90–1.00</td><td data-bbox="1045 911 1360 959">0.44</td><td data-bbox="1360 911 1598 959">0.73</td></tr> </tbody> </table> <p><b>5.5.4.4.1 SHGC of Vertical Fenestration.</b> Vertical fenestration shall have an SHGC not greater than that specified in Tables 5.5-1 through 5.5-8.</p> <p><b>Exceptions:</b></p> <p><b>1. For demonstrating compliance for vertical fenestration shaded by opaque permanent projections that will last as long as the building itself, the SHGC in the proposed building shall be</b></p>	Projection Factor	SHGC Multiplier (all Other Orientations)	SHGC Multiplier (North-Oriented)	0–0.10	1.00	1.00	>0.10–0.20	0.91	0.95	>0.20–0.30	0.82	0.91	>0.30–0.40	0.74	0.87	>0.40–0.50	0.67	0.84	>0.50–0.60	0.61	0.81	>0.60–0.70	0.56	0.78	>0.70–0.80	0.51	0.76	>0.80–0.90	0.47	0.75	>0.90–1.00	0.44	0.73
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Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>reduced by using the multipliers in Table 5.5.4.4.1. Permanent projections consisting of open louvers shall be considered to provide shading, provided that no sun penetrates the louvers during the peak sun angle on June 21.</p> <p>2. For demonstrating compliance for vertical fenestration shaded by partially opaque permanent projections (e.g., framing with glass or perforated metal) that will last as long as the building itself, the projection factor (PF) shall be reduced by multiplying it by a factor of <math>O_s</math>, which is derived as follows:</p> $O_s = (A_i \times O_i) + (A_f \times O_f)$ <p>where</p> <p><math>O_s</math> = percent opacity of the shading device</p> <p><math>A_i</math> = percent of the area of the shading device that is a partially opaque infill</p> <p><math>O_i</math> = percent opacity of the infill for glass <math>O_i = (100\% - T_s)</math>, where <math>T_s</math> is the solar transmittance as determined in accordance with NFRC 300; for perforated or decorative metal panels, <math>O_i</math> = percentage of solid material</p> <p><math>A_f</math> = percent of the area of the shading device that represents the framing members</p> <p><math>O_f</math> = percent opacity of the framing members; if solid, then 100%</p> <p>The SHGC in the proposed building then shall be reduced by using the multipliers in Table 5.5.4.4.1 for each fenestration product.</p> <p>3. Vertical fenestration that is located on the street side of the street-level story only, provided that</p> <p>a. the street side of the street-level story does not exceed 20 ft in height,</p>

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		<p><b>b. the fenestration has a continuous overhang with a weighted average PF greater than 0.5, and</b></p> <p><b>c. the fenestration area for the street side of the street-level story is less than 75% of the gross wall area for the street side of the street-level story.</b></p> <p><b>When this exception is utilized, separate calculations shall be performed for these sections of the building envelope, and these values shall not be averaged with any others for compliance purposes. No credit shall be given here or elsewhere in the building for not fully utilizing the fenestration area allowed.</b></p> <p><b>4. For dynamic glazing, the minimum SHGC shall be used to demonstrate compliance with this section. Dynamic glazing shall be considered separately from other vertical fenestration, and area-weighted averaging with other vertical fenestration that is not dynamic glazing shall not be permitted.</b></p> <p><b>5. Vertical fenestration that is north-oriented shall be allowed to have a maximum solar heat gain coefficient SHGC-0.05 greater than that specified in Tables 5.5-1 through 5.5-8. When this exception is utilized, separate calculations shall be performed for these sections of the building envelope, and these values shall not be averaged with any others for compliance purposes.</b></p> <p><b>PC To consider submission at TAC Meeting <input type="checkbox"/></b></p>
<p>EN6806</p> <p>NAR 4-3</p>	<p>Permit air leakage testing of low-rise R-2 as permitted for commercial. (NAHB)</p>	<p>The reason for disapproval given by the TAC was the provisions are not enforceable and that ASHRAE Standards require tests for zones in AC units. In addition, the FSEC representative testified in opposition stating the proposal does not address “pollution between units.” When queried regarding the fact that the code allows such testing for a four story apartment or greater multi-family building, but not a 1 to 3 story building, there was no response.</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p><b>The code consultant will research ASHRE requirements and the FBC-EC provisions for commercial buildings and recommend a public comment addressing this issue. (ASHRAE 90.1 §5.4.3)</b></p> <p><b>PC Submitted</b> ☒</p> <p>EN6806 FHBA requests the Energy TAC recommend approval of the modification as submitted.</p> <p>RATIONALE: The reason given by the TAC as shown on the tracking chart for the Mod is that the provision is “not enforceable. ASHREA standards require tests for zones in AC units”. The requested Mod simply applies provisions permitted for a four story or greater residential occupancy to three story or less multi-family occupancies. If the provision is in fact “unenforceable, how is Section C402.5 enforced for commercial buildings (which include R-2 more than three stories)? The statement that “ASHRAE standards require test for zones in AC units” as a reason to vote the request down is nonsensical. The Section of the base code referred to, Section 402.5, is a mandatory section on air leakage and makes no reference to ASHRAE standards. If the building was designed under ASHRAE standards, the provisions of ASHRAE would apply. If the building is designed using the FBC-EC, the provisions of the FBC-EC apply. It simply makes no sense to say a method suitable for a four story R-2 occupancy would not be acceptable for a three story R-2 occupancy, or a R-3 attached multi-family project such as townhouses.</p> <p>Regarding the Public Comment by FSEC on the original proposal, the Section cited was correct. The intention of the change is to allow R-2 occupancies of less than four stories to comply with the provisions applicable to R-2 occupancies of four stories or greater.</p>
S6812 (FBC-B)	Adds provisions for custom one-of-a-kind doors.	There was considerable opposition to this provision which has been in the code since the inception. Testifying in opposition was Fenestration Manufacturers Association. American Architectural Manufacturers Association, World Mill Association, and an impact door manufacturer from the

Mod and Vote <sup>1</sup>	Impact	Discussion
<p>NAR 1-10</p> <p>S6813 (FBC-R)</p> <p>NAR 1-10</p>		<p>HVHZ. Apparently, there have been serious abuses of the provisions in the field. I believe we have worked the main issues out amongst the stakeholders by requiring components to meet ANSI/WMA 100. The code consultant has not had the opportunity to review the standard as yet, but the TAC recommended approval of adoption of the standard on Mod S6478.</p> <p><b>Assuming the standard is acceptable, the code consultant recommends submission of a public comment requiring substitute door hardware components to meet the provisions of ANSI/WMA 100.</b></p> <p><b>The following was sent to the One-of-a-Kind Workgroup made up of members of the fenestration industry including Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), and others as a proposed Public Comment to Mods S6812 (FBC-B) and S 6813 (FBC-R). A conference call to discuss draft is scheduled for 10 am (EST) on Thursday May 12, 2016. (Changes are in red text.)</b></p> <p><u>2. Custom doors. Custom (one-of-a-kind) exterior door assemblies shall be tested by an approved testing laboratory or be <b>designed and</b> engineered in accordance with accepted engineering practices <b>by a Florida Registered Design Professional. Signed and sealed copies of the rational analysis and calculations shall be provided to the building official upon permit application.</b></u></p> <p><b>PC ☒ S6812 Alt Lang</b></p> <p>S6812 FHBA requests the Structural TAC recommend approval of the alternate language as follows.</p> <p><b>1709.5 Exterior window and door assemblies.</b> The design pressure rating of exterior windows and doors in buildings shall be determined in accordance with section 1709.5.1 or 1709.5.2.</p> <p><b>Exception:</b></p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p data-bbox="919 298 2028 505"> <u>1.</u> Structural wind design pressures for window units smaller than the size tested in accordance with 1709.5.1 and 1709.5.2 shall be permitted to be higher than the design value of the tested unit provided that such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such design pressure calculations are used, they shall be validated by an additional test of the window having the highest allowable design pressure. </p> <p data-bbox="919 537 2028 708"> <u>2.</u> <u>2. Custom doors. Custom (one-of-a-kind) exterior door assemblies shall be tested by an approved testing laboratory or be <b>designed and engineered in accordance with accepted engineering practices by a Florida Registered Design Professional. Signed and sealed copies of the rational analysis and calculations shall be provided to the building official upon permit application.</b></u> </p> <p data-bbox="827 729 2022 963"> RATIONALE: FHBA worked with members of the fenestration industry that opposed the modification to develop the alternate language. The group included Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), Insurance Institute for Business and Home Safety (IBHS) and others as a proposed Public Comment to Mods S6812 (FBC-B) and S 6813 (FBC-R). All participating associations agreed to the changes. </p> <p data-bbox="919 1016 1178 1045"> <b>PC <input checked="" type="checkbox"/> S6813 Alt Lang</b> </p> <p data-bbox="827 1066 2007 1096"> S6813 FHBA requests the Structural TAC recommend approval of the alternate language as follows. </p> <p data-bbox="919 1149 1178 1179"> <b>R609.2 Performance.</b> </p> <p data-bbox="919 1211 2007 1344"> Exterior windows and doors shall be designed to resist the design wind loads specified in Table R301.2(2) adjusted for height and exposure in accordance with Table R301.2(3) or determined in accordance with ASCE 7 using the allowable stress design load combinations of ASCE 7. Design wind loads for exterior glazing not part of a labeled assembly shall be </p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>permitted to be determined in accordance with Chapter 24 of the International Building Code.</p> <p><b><u>R609.2.1. Custom doors.</u></b></p> <p><u>Custom doors. Custom (one-of-a-kind) exterior door assemblies shall be tested by an approved testing laboratory or be <b>designed and engineered</b> in accordance with accepted engineering practices by a Florida Registered Design Professional. Signed and sealed copies of the rational analysis and calculations shall be provided to the building official upon permit application.</u></p> <p>RATIONALE: FHBA worked with members of the fenestration industry that opposed the modification to develop the alternate language. The group included Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), Insurance Institute for Business and Home Safety (IBHS) and others as a proposed Public Comment to Mods S6812 (FBC-B) and S 6813 (FBC-R). All participating associations agreed to the changes.</p>
<p>S6814 (FBC-R)</p> <p>NAR 0-10</p> <p>S6815 (FBC-B)</p> <p>NAR 0-10</p>	<p>Adds provisions allowing interchanging of door components.</p>	
<p>EN6821</p>	<p>Modify air leakage rate for Standard Reference Design.</p>	<p>There was considerable opposition to this provision which has been in the code since the inception. Testifying in opposition was Fenestration Manufacturers Association. American Architectural</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
<p>Withdrawn for EN6920</p> <p>NAR 0-7</p>		<p>Manufacturers Association, World Mill Association, and an impact door manufacturer from the HVHZ. Apparently, there have been serious abuses of the provisions in the field. I believe we have worked the main issues out amongst the stakeholders by requiring component hardware to meet the provisions of ANSI/WMA 100. The suggestion is to change the language to require signed and sealed documents to ensure the design is truly one-of-a-kind.</p> <p>The code consultant recommends submission of a public comment requiring a rational analysis and signed and sealed documentation that the custom one-of-a-kind door meets the code requirements.</p> <p>The following was sent to the One-of-a-Kind Workgroup made up of members of the fenestration industry including Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), and others as a proposed Public Comment to Mods S6815 (FBC-B) and S 6814 (FBC-R). A conference call to discuss draft is scheduled for 10 am (EST) on Thursday May 12, 2016. (Changes are in red text.)</p> <p><u>R609.9 Door components. Door components evaluated by an approved product evaluation entity, certification agency, testing laboratory or engineer may be interchangeable in exterior door assemblies provided that the door component(s) provide equal or greater structural performance as demonstrated by accepted engineering practices.</u></p> <p><u>R609.9.1 Optional exterior door component testing. With the exception of HVHZ, exterior side-hinged door assemblies not covered by Section R612.3 shall be permitted to have the option to have the components of the assembly tested and rated for structural integrity in accordance with <del>ANSI A250.13</del>-ANSI/WMA 100-</u></p> <p><u>Following the structural testing of exterior door components, there shall be no permanent deformation of any perimeter frame or panel member in excess of 0.4 percent of its span after the load is removed. After each specified loading, there shall be no glass</u></p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p><u>breakage, permanent damage to fasteners, hardware parts, or any other damage that causes the door to be inoperable, as applicable.</u></p> <p><u>1709.5.3 Door components evaluated by an approved product evaluation entity, certification agency, testing laboratory or engineer may be interchangeable in exterior door assemblies provided that the door components provide equal or greater structural performance as demonstrated by accepted engineering practices.</u></p> <p>PC ☒ 6814 Alt Lang</p> <p>S6814 FHBA requests the Structural TAC recommend approval of the alternate language as follows.</p> <p><del>R609.9 Door components. Substitution of door components shall comply with ANSI/WMA 100. Door components evaluated by an approved product evaluation entity, certification agency, testing laboratory or engineer may be interchangeable in exterior door assemblies provided that the door component(s) provide equal or greater structural performance as demonstrated by accepted engineering practices.</del></p> <p><del>R609.9.1 Optional exterior door component testing. With the exception of HVHZ, exterior side-hinged door assemblies not covered by Section R612.3 shall be permitted to have the option to have the components of the assembly tested and rated for structural integrity in accordance with ANSI A250.13. ANSI/WMA 100.</del></p> <p><del>Following the structural testing of exterior door components, there shall be no permanent deformation of any perimeter frame or panel member in excess of 0.4 percent of its span after the load is removed. After each specified loading, there shall be no glass</del></p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p><del>breakage, permanent damage to fasteners, hardware parts, or any other damage that causes the door to be inoperable, as applicable.</del></p> <p>RATIONALE: FHBA worked with members of the fenestration industry that opposed the modification to develop the alternate language. The group included Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), Insurance Institute for Business and Home Safety (IBHS) and others as a proposed Public Comment to Mods S6812 (FBC-B) and S 6813 (FBC-R). All participating associations agreed to the changes</p> <p>PC ☒ 6815</p> <p>S6815 FHBA requests the Structural TAC recommend approval of the modification as submitted</p> <p>RATIONALE: FHBA worked with members of the fenestration industry that opposed the modification to develop the alternate language. The group included Fenestration Manufacturers Association (FMA), American Architectural Manufacturers Association (AAMA), World Millwork Association (WMA), Insurance Institute for Business and Home Safety (IBHS) and others as a proposed Public Comment to Mods S6812 (FBC-B) and S 6813 (FBC-R). All participating associations agreed to the changes.</p>
<p>F6822 AM NAR 5-3</p>	<p>Reinstates exception for zero lot line fire separation distance; Substitutes reference to Table R302.1 for reference to Tables R302.1(1) and R302.1(2).</p>	<p>A member of the TAC suggested Approval as Modified by retaining the language shown stricken which referred to Table R302.2.1(2) for dwellings with sprinkler systems. The motion failed 5-3 (75% majority is required for approval.) A vote of 8-0 approved the request by a TAC member for reconsideration (Schock) seconded by Apfelbeck. The vote on AS submitted was NAR 3-5.</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
AS NAR 2-6		<p>The TAC would not recognize that the legislative mandates applied to the FBC 6<sup>th</sup> Edition. The thought was since the law specifies the FBC 5<sup>th</sup> Edition, it does not apply to the FBC 6<sup>th</sup> Edition. A determination of the application of the law to the FBC 6<sup>th</sup> Edition is necessary. DBPR staff indicated they believed the statutory changes to the FBC 5<sup>th</sup> Edition would carry forward to the FBC 6<sup>th</sup> Edition.</p> <p><b>While the code consultant does not believe we can reverse the recommendation of the TAC, I recommend the submission of a public comment for the second TAC hearing. I further recommend we begin preparation to make a strong appearance by members before the full Florida Building Commission at the scheduled August 18-19, 2016, meetings at Fort Lauderdale to overturn the TAC recommendation.</b></p> <p><b>PC <input checked="" type="checkbox"/> Submitted</b></p> <p>F6822 FHBA requests the Fire TAC recommend approval of the modification as submitted</p> <p>RATIONALE: The tracking chart gives no reason for the NAR vote. As a dissenting vote on the Fire TAC, I can only believe that the intent is to go around the legislative prohibition of mandating fire sprinklers in one- and two- family dwellings and townhouses. Certain members of the Fire TAC continue to act in opposition to legislative directives. The proposal as presented is verbatim from the FBC-R 2010 and FBC-R 2009 Supplement to the FBC-R 2007. The proposal is also verbatim from Chapter 2016-129 LOF which directs the Florida Building Commission to modify the FBC-R 5<sup>th</sup> Edition (2014) to adopt the Exception for zero lot line developments. While the law stipulates the FBC-R 5<sup>th</sup> Edition, it is imprudent to believe the Florida Legislature intended the provisions to apply only until the next edition of the code.</p> <p>Regardless of the actions of the legislature, the zero lot line provisions have been employed in thousands of dwellings in Florida. There are no reported fire problems based on the fire separation distance requirements contained in all the previous editions of the Florida Building Code-Residential or Building.</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
E7078 NAR 0-9	Removes expansion of arc fault protection to kitchen and laundry areas from code.	<p>The opposition had a burn victim appear claiming she was burned by a fire caused by sparking. Several fire marshals also testified in opposition.</p> <p><b>The code consultant recommends no public comment be submitted on this change.</b></p>
<b>Mods of Interest to FHBA Submitted by Others</b>		
CA6462 AS 7-1 S6462 NAR 0-11	Removes snow load and seismic exclusion from Preface.	<p>The changes were heard by both the Code Administration and the Structural TACs. The change to the Preface was submitted by Commissioner Schock. The change to Chapter 1 was submitted by DBPR Florida Building Commission staff. There was apparent confusion on the Code Administration TAC. A Commissioner (Brown) moved for a vote for reconsideration which was defeated by a 4-4 vote. Schock stated he had an engineer that said a high rise building he was designing in the Jacksonville area was governed by seismic loads prevailing over wind loads. There was no documentation of the design or any other factual evidence submitted. The impact to members building other than one- and two- family dwellings throughout the state would be an increase in engineering costs to comply with the requirement for designers to evaluate buildings for snow and seismic loads. It is anticipated there would be a delay in issuing permits where the submitted plans did not address snow and seismic loads.</p>
CA6430 NAR 0-8 S6430 NAR 0-11	Adds exclusion from snow and seismic loads to Chapter 1 of FBC in mandatory language. Presently permissive statement in Preface	<p>The FHBA code consultant joined the Institute for Building and Home Safety (IBHS) and others in requesting disapproval of any attempt to require broad application of snow load and seismic design requirements throughout the state. The Code Administration TAC did not agree, but the Structural TAC agreed and requested the stakeholders propose a suggested resolution to the issue. [The make-up of the Code Administration TAC is heavy with members that currently work for building departments, or formerly worked with building departments (Five members)]. Discussion is ongoing</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>regarding application to buildings in Risk Category Groups III and IV and limiting the application to areas where the mapped short-period spectral response acceleration, <math>S_s</math>, is less than 0.4 g. Limitation to Risk Category III and IV buildings would not impact Group B or Group R high- or low- rise buildings. I am including Table 1604.5 from the Florida Building Code - Building which defines the Risk Categories at the end of this report.</p> <p>In discussion the IBHS representative, a structural engineer that sits on the ASCE 7 committee, states that there is no need to evaluate any buildings in Florida for seismic design and this opinion is shared by the Masonry Association of Florida Structural Engineer and the code consultant. Commissioner Schock is concerned about the seismic loading and seems amenable to restricting application to Risk Group III and IV high-rise buildings; however, we believe even this is unnecessary in Florida.</p> <p><b>It is recommended public comments be submitted in support of CA/S6462 and in support of CA/S6462. This would remove the permissive language exempting enforcement of the snow and Seismic loads from the Preface and add mandatory exemption to the code body. The PC would suggest Commissioner Schock obtain the analysis used by the engineer reporting seismic loads prevailed in the building under design to allow peer review evaluation of the methods used and the analysis.</b></p> <p><b>PC <input checked="" type="checkbox"/> Submitted</b></p> <p>CA6462/S6462 The Florida Home Builders Association (FHBA), the Builders Association of South Florida – High Rise Council (BASF-HRC) the Masonry Association of Florida (MAF), and the Florida Independent Concrete and Associated Products (FICAP) and request the Code Administration and</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>Structural TAC recommend approval of modification contingent upon approval of Mod CA6430/S6430. Should Mod 6430 fail, the aforementioned groups oppose Mod 6462.</p> <p>RATIONALE: Mod 6462 removes the exception for considerations of snow and seismic load from the Preface of the code. The language in the Preface is at best ill located and is permissive language. The reason given for the proposal is that an engineer stated the seismic loads for high rise building under design prevailed over the wind loads. The building site is in the northeast portion of the state. In discussion the proponent indicated the engineer's design was not reviewed. If approved without the approval of Mod 6430, this proposal will have a major impact on the cost of the design of structures across the state for no proven need. A review of the seismic history of Florida indicates no damaging earthquakes have affected the state. All national seismic sources, including the USGS, indicate Florida has an extremely low probability of suffering an earthquake. While there has been recorded seismic activity in the state, the lack of damage reported from earthquakes in Florida proves the wind design criteria results in more than adequate structural stability.</p> <p>If to be seriously considered, the imposition of seismic design in Florida should at best be the subject of a study. At the very minimum, the design which prompted the proposal should be submitted for a peer review by engineers familiar with seismic design. Seismic design is considerably more complicated than wind design and requires a high degree of experience. Mod 6462 should be recommended for approval only if Mod 6430 is recommended for approval. If Mod 6430 is recommended for disapproval, Mod 6462 should be recommended for disapproval as well.</p> <p>Mod 6430 places the exception to the snow and seismic loads of the code in the body of the code and makes the exception mandatory. Under this Mod the permissive language would remain in the</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>Preface of the code, but mandatory language would be added to the administrative chapter of the code. Mod 6430 should be recommended for approval.</p>
<p>E6460 NAR 3-6</p>	<p>This modification expands the requirements for the installation of lightning protection systems to all new buildings and additions, except one- and two- family dwellings per NFPA 780. It also requires the installation of surge protection devices for all normal and emergency electrical systems, except one- and two- family dwellings per NFPA 70, NEC.</p>	<p>This proposal vastly expands the requirements for lightning protection for all members building other than one- and- two- family dwellings. An exception is provided for buildings and additions evaluated by the <i>Risk Assessment Guide</i> contained in <i>NFPA 780, Standard for the Installation of Lightning Protection Systems</i> or an alternate approved by the authority having jurisdiction. The stated reason for the Electrical TAC vote of NAR was that more information and details were needed.</p> <p><b>The code consultant recommends close monitoring of this Mod for public comment by the proponent or others attempting to reverse the recommendation of the Electrical TAC.</b></p>
<p>S6952 NAR 6-5</p>	<p>Carries forward modification to Wind Zone 4 of ASTM E 1996.</p>	<p>The proposal has the potential to indirectly members building other than one- and two- family dwellings and townhouses less than three stories by adding more stringent provisions to the opening protection requirements than the adopted reference standards or the Florida Building Code-Residential. The TAC statement for the NAR was the change “... diminishes applicable wind requirements for protection of structures in Florida – weakens the code”. This is untrue. The provisions were accepted by Commission in the Glitch Cycle for the FBC 5<sup>th</sup> Edition. Identical provisions appear in the base code for the Florida Building Code-Residential (IRC 2015) and were put in the base code at the request of NAHB.</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p><b>The code consultant will be submitting a public comment on this Mod for another client. It is recommended the FHBA support the International Hurricane Protection Association position in this endeavor.</b></p>
<p>SP6883 NAR 0-7 S6883 NAR 0-10</p>	<p>Rewrites CCCL Rules.</p>	<p>Mod 6883 proposes to rewrite the section of the code addressing construction seaward of the Coastal Construction Control Line (CCCL). The main reasons for the rewrite given were to clarify the provisions. The proposal is in fact a major code change negatively impacting construction in the coastal areas of Florida. Under current code language there are essentially two types of flood resistance provisions, FEMA requirements and the CCCL provisions. The CCCL provisions were enacted by the Florida Legislature years ago and migrated to the code as state agency rules addressing construction when the code was created. The proposal, among other things, essentially takes the current FEMA designated A, AE, and X Flood Zones and makes them all V Zones, the most restrictive flood zone. Many uses currently permitted would be forbidden. Uses such as restaurants and cafes, bars, shops, bath facilities, and many more that we see on the first level of coastal structures would be prohibited. The only uses that would be permitted are storage, building access, and parking. Excavations permitting sub-level parking garages would be prohibited.</p> <p>The code consultant representing the BASF High Rise Council and the Florida Home Builders Association (FHBA) presented opposition to the proposal. Upon hearing our objections, the proponent, the Department of Emergency Management requested a Negative Roll Call vote to allow the proponent and the opponents time to develop language to resolve the differences. Gene Chalecki, Program Administrator of the Department of Environmental Protection (DRP) and a member of the Special Occupancy TAC, moved for a No Affirmative Recommendation. Chalecki recommended the interested parties meet to develop alternate language to resolve the issues. The TAC voted unanimously to support the recommendation. The code consultant is working with the other organizations to make certain either acceptable language is proposed or the proposal is</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		<p>defeated. Chalecki further stated in conversation after the meeting that it was not the intent of DEP to prohibit current uses which are actually based on interpretations by DEP of former DEP rules which have been upheld by Declaratory Statements issued by the Florida Building Commission.</p> <p>The proponents at both TACs requested the NAR to allow resolution of issues raised by the High Rise Council. (See Update dated 04-02-2016 for further details on impact of proposal.)</p>
<p>EN6980 NAR 0-7</p>	<p>Limit prescriptive compliance glazed fenestration area as a fraction of total house conditioned area (20%).</p>	<p><b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b></p>
<p>EN6981 NAR 0-7</p>	<p>Limit prescriptive U-factor Alternative compliance glazed fenestration area as a fraction of total house conditioned area.</p>	<p><b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b></p>
<p>EN6982 NAR 0-7</p>	<p>Limit prescriptive Total UA Alternative compliance glazed fenestration area as a fraction of total house conditioned area.</p>	<p><b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b></p>

Mod and Vote <sup>1</sup>	Impact	Discussion
EN6925 NAR 5-2	Deletes reductions in SHGC for shading – Commercial.	<b>Mod would have a negative impact on members building other than one- and two- family dwellings. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation. Discuss with Arlene.</b>
EN6934 NAR 0-7	This proposal would limit the performance method by bring in prescriptive provisions.	<b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b>
EN6935 NAR 0-7	Removes trade-offs for cooling, heating, and water heating equipment.	<b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b>
EN6920 NAR 0-7		<p>After discussion with Arlene Stewart it was decided to withdraw the FHBA proposal (EN6821) in favor of the proposal by FSEC Mod EN6920. Modification EN6920 was voted down 0-7 and the reason given for the NAR is not clear. The change would have increased the air leakage rate from 5 ACH to 7 ACH in the Standard Reference Design Proposed Design column of Table R405.5.2(1).</p> <p><b>The code consultant will submit a public comment to reinstate the change requested in Mod EN6821.</b></p> <p><b>PC <input checked="" type="checkbox"/> Submitted for EN6920 AS</b></p> <p>EN6920 FHBA requests the Energy TAC recommend approval of the modification as submitted</p> <p>RATIONALE: The reason shown for the negative vote on the Tracking Chart indicates there may have been confusion on the vote. The Mod referenced in the Tracking Chart reason “NAR- basis of previous vote and to correlate language with mod 6765.” does not make sense because Mod 6756</p>

Mod and Vote <sup>1</sup>	Impact	Discussion
		deals with an ANSI duct testing standard. There is no indication what “previous vote” is being referenced. Mod 6920 deals with changing the air leakage rate for residences that are not tested from 5 ACH50 to 7 ACH50 for the proposed design as approved elsewhere in the code and as specified by Florida Statute.
EN7004 NAR 3-4	Places requirement to use area averaged emittance for evaluation of attic radiant barrier systems.	<b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b>
EN6933 NAR 0-7	Mod would prohibit credit for on-site renewable power sources.	FHBA joined the Leading Builders of America and others in opposing insulation and window manufacturers on this change to the Energy Rating Index method for demonstrating energy efficiency.  <b>Mod would have a negative impact on members. The code consultant will be vigilant for any public comments submitted to reverse the TAC recommendation.</b>

**TABLE 1604.5  
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES**

RISK CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: <ul style="list-style-type: none"> <li>• Agricultural facilities.</li> <li>• Certain temporary facilities.</li> <li>• Minor storage facilities.</li> <li>• Screen enclosures.</li> </ul>
II	Buildings and other structures except those listed in Risk Categories I, III and IV
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: <ul style="list-style-type: none"> <li>• Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.</li> <li>• Buildings and other structures containing elementary school, secondary school or day care facilities with an occupant load greater than 250.</li> <li>• Buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500.</li> <li>• Group I-2 occupancies with an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities.</li> <li>• Group I-3 occupancies.</li> <li>• Any other occupancy with an occupant load greater than 5,000<sup>a</sup>.</li> <li>• Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Risk Category IV.</li> <li>• Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: <ul style="list-style-type: none"> <li>Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the <i>Florida Fire Prevention Code</i>; and</li> <li>Are sufficient to pose a threat to the public if released <sup>b</sup>.</li> </ul> </li> </ul>
IV	Buildings and other structures designated as essential facilities, including but not limited to: <ul style="list-style-type: none"> <li>• Group I-2 occupancies having surgery or emergency treatment facilities.</li> <li>• Fire, rescue, ambulance and police stations and emergency vehicle garages.</li> <li>• Designated earthquake, hurricane or other emergency shelters.</li> <li>• Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.</li> <li>• Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.</li> <li>• Buildings and other structures containing quantities of highly toxic materials that: <ul style="list-style-type: none"> <li>Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the <i>Florida Fire Prevention Code</i>; and</li> <li>Are sufficient to pose a threat to the public if released <sup>b</sup>.</li> </ul> </li> <li>• Aviation control towers, air traffic control centers and emergency aircraft hangars.</li> <li>• Buildings and other structures having critical national defense functions.</li> <li>• Water storage facilities and pump structures required to maintain water pressure for fire suppression.</li> </ul>

a. For purposes of occupant load calculation, occupancies required by Table 1004.1.2 to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.

b. Where approved by the building official, the classification of buildings and other structures as Risk Category III or IV based on their quantities of toxic, highly toxic or explosive materials is permitted to be reduced to Risk Category II, provided it can be demonstrated by a hazard assessment in accordance with