

Structural Technical Advisory Committee  
Florida Building Commission  
Orlando Florida  
Meeting Minutes  
October 10, 2005

(1) Attendees: Chris Schulte, Jack Glenn, Dan Lavrich, Rusty Carroll, Charlie Everly, Paul Kidwell, Craig Parrino, and George Wiggins, Bob Bitterli

(2) Approved the Minutes from the August 22, 2005 meeting and the Agenda with an amendment to add item #. 6 “Review and discuss the product approval new website, requiring wind speed for all product.”

(3) The following is the status of the Declaratory Statements addressed by the Committee:

DCA05-DEC-173 by Thomas J. Baird, Attorney, Okeechobee County (deferred).  
DCA05-DEC-176 by John Hearing, Chair, Florida Executive Co., WYCA (withdrawn)  
DCA05-DEC-177 by Billy Tyson, CBO, Madison County (incomplete)

(4) Review the courses listed for recommendation to the Education TAC.

The Committee voted to subject the proposed training courses to review through the Commission’s training course accreditation process. With the understanding that the Education TAC will move the courses through the accreditation process for compliance with the code.

**(Action from the Commission on task is needed)**

(5) Presentation on potential code changes to the Florida Building Code, Residential, for the purpose of improving the Residential Code so that the prescriptive provisions are applicable to area where the wind speed is 100 mph and greater.

The Committee discussed this item and the following is a summary of the discussion:

- Subgroup works better to review the work proposed and could contain TAC members and others.
- TAC was put together with representation from various groups, not judicial panel, but standards panel, can change proposals submitted.
- Need to review assumptions for foundations, uplift loads, and wind passing over roof, load path to foundation or into masonry to resist uplift force. SSTD 10 investigated uplift. An earthquake engineer found 2x5 foundation necessary. Assumptions made in SSTD 10, justify practice over the years.
- We need to move forward with prescriptive requirements to assist building officials.

- Existing standards, foundations, limitations of IRC. ICC changed thresholds for IRC, limitations in high wind speed zones.
- Revise chapters to make applicable to 100 and greater using work by ICC and the Structural TAC.
- ICC final draft for the high wind provisions is March 2006, (Florida December 1<sup>st</sup>.)
- Next ICC meeting is in Orlando October 26<sup>th</sup>.
- Draft document July 2005, schedule and concept change developing standard 18-month process, international code developed with all the requirements for residential buildings.
- Residential volume doesn't provide structural criteria for wind speed 100 and greater.
- Opposed to cook book approaches.
- Peer review, the TAC and ICC will do peer review.
- ICC will review the work proposed at the committee meeting in 2 weeks.
- ICC Hurricane Construction Resistance Committee, code development, uses peer/consensus type review process. Outside interests can comment and help in the development process. Trying to satisfy needs of Florida.
- Florida can be the leader in developing wind design.
- What will happen if we adopt something then ICC adopts something different?
- Prescriptive requirements of 150 mph. Broward requiring calculations on single-family houses does peer review. Prescriptive not working in specific designs.
- The TAC has not finalized any wind speed prescriptive envelope.
- TAC is to review presentations, will work?
- Single-family structures are larger, multistory, structures that are inherently unstable in lateral loads. All wind speeds have to be resisted. What is prescriptive going to cover? Complex unstable buildings?
- 50% of residences go beyond prescriptive design. Prescriptive does not fit every situation. A building code, minimum design.
- Prescriptive provides tool for building official for evaluating designs. No assurance with professional design.
- Prescriptive design allows false sense of security.
- Guidelines for simple limited building sizes and shapes. Buildings survived hurricanes when built to the standard.
- Provide wood frame manual at cost of publishing and attach to FRC. Not changing what is in the code except general requirements from materials requirements.

Charley Everly's presentation on foundation: the following is a summary of comments on the presentation.

- Constant stress level, Texas Tech measuring horizontal resistance of tornado structures.
- Has not seen buildings damage, which does not justify current practice.
- Hurricane damage could not determine failure or partial failure to foundation.
- Never seen foundations pulled out of the ground is a wall construction problem.
- Taking 60% of the deadload? IRC does not require compliance with ASCE 7.

- Walls failed because roof diaphragm failed, not enough, not finding failures in foundations, not designed for mass uplift.
- What are the foundations that are being used that are not failing?
- Single-family dwellings, wood frame using monolithic footings, wind forces transient.
- Confusion over the document, take prescriptive out to eliminate confusion. Remove parts not applicable to Florida.
- Masonry standard complete enough to make a submission by the deadline.
- Will not design footing in pieces, tie together, effect is whole building.
- Buildings not strong enough to get failure down to the foundation?
- Six weeks to meet deadline? Wants good sound product.
- Oct 25<sup>th</sup> meeting of the ICC at the Embassy Suites, 3-4 hours on foundations issue with regard to prescriptive requirements.
- Why investigate foundations?
- Change to footings arbitrarily?
- IRC permits less than 10x20 foundation, will see foundation failures, not everything is slab on grade, flood areas use stem wall foundation, separate slab from engagement in wall, so that settlement can crack.
- Use buoyancy in foundations? Water standing in the house.
- Include 6 ft slab in the assumption.
- ICC consider whole slab, will figure as much as sampling engineers contribute, needs to be end walls, middle of the building,

For the purpose of reviewing and further refinement of the proposed code changes on the subject of improving the prescriptive provisions of the FBC, Residential, between now and December 1, 2005, the Committee decided to establish the following subgroups. The Subgroups will meet between now and December 1, 2005 to review the refine proposed changes on the subject:

Foundation: Dan Lavrich, Bob Bitterli, Charlie Everly, Jack Glenn

Wall covers: Bob Bitterli, Jaime Gascon, Jack Glenn, David Lewis

Roofing: Rusty, Mark Zehnal, Jimmy Buckner, Chris Schulte, Bob McCormick, Jack Glenn

Masonry: Mark Scala, Craig Parrino, Charley Everly, Ichbal Shahk, Jack Glenn

Wood: Jeffrey Stone, Eddie Fernandez, Jack Glenn, George Wiggins, Bill Dunbaugh, David Lewis

**(Action from the Commission with regard to establishing the subgroups is needed)**

Subgroups are subject to sunshine act.

(6) Reviewed and provided recommendation for approval to the Commission with regard to the equivalency of the following standards:

- ASTM D 505-2000 as equivalent to ASTM D 5055-02.
- AAMA 501-94 as equivalent to AAMA 501-05.
- AAMA 103.3-83 as equivalent to AAMA 103.3.

**Action from the Commission is needed.**

(7) Product Approval Page on New Web Site with regard to the limitation of use “wind speed”.

The Committee recommends that limitation of use “mph wind speed” be removed from the main screen of the new proposed product approval website. Wind speed is not applicable to products and for sure will create confusion. **Action from the Commission is needed.**