

**FLORIDA BUILDING COMMISSION**  
**GREEN AND ENERGY EFFICIENT ROOFS SUBCOMMITTEE TO THE**  
**FLORIDA ENERGY CODE WORKGROUP**

**April 7, 2010—Meeting II**

**Hilton University of Florida**  
**1714 SW 34<sup>th</sup> Street—Gainesville, Florida 32607—1.352.371.3600**

*Meeting Objectives*

- ✓ To Approve Regular Procedural Topics (Agenda and Summary Report)
- ✓ To Hear Relevant Presentations on Vegetated Roofs in the Code
- ✓ To Discuss Energy Credits for Use of Vegetated Roofs in the Florida Energy Code
- ✓ To Discuss Relevant Standards for Inclusion in the Florida Energy Code
- ✓ To Decide on Proposed Credits for Vegetated Roofs in the Florida Energy Code
- ✓ To Discuss and Evaluate Level of Acceptability of Proposed Options
- ✓ To Consider Public Comment
- ✓ To Adopt Consensus Recommendations for Submittal to Energy Code Workgroup and FBC
- ✓ To Identify Needed Next Steps and Agenda Items for Next Meeting

*All Agenda Times—Including Public Comment and Adjournment—Are Subject to Change*

*Meeting Agenda—Wednesday, April 7, 2010*

- 1:00 Welcome and Opening**
- Agenda Review and Approval**
- Approval of February 2, 2010 Facilitator’s Summary Report**
- Presentations on Vegetated Roofs Technologies and Relevant Standards Overview**
- Use of Vegetated Roofs in the Florida Energy Code Discussion and Recommendations**
- Florida Energy Code Credits for Vegetated Roofs Decision**
- General Public Comment**
- Adoption of Workgroup’s Consensus Recommendations for Submittal to Commission**
- Review of Subcommittee Delivery and Meeting Schedule and Next Steps**

*Adjourn*

**Contact Information and Project Webpage**

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**Green and Energy Efficient Roofs Subcommittee Members**

Ralph Davis, C.W. Macomber, Larry Maxwell, Craig Parrino, Lorraine Aulisio Ross, Chris Schulte, Drew Smith, Jeff Sonne, Bob Volin, and Marty Wanielista.

**7. EVALUATE REQUIREMENTS FOR GREEN ROOFS RECOGNITION IN FLORIDA BUILDING CODE**

**Evaluate Requirements For Green Roofs Recognition In the Florida Building Code**

The Energy Act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. Energy efficient roofs are one category. The Building Code act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies. This task will be evaluated by the Commission’s Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup. To date the following issues have been identified for evaluation:

- Green roof energy performance, structural and water protection characteristics in Florida environment.
- Cool roof options and energy performance in Florida environment.
- Alternative roof systems and components effect on roof/ceiling heating cooling loads and calculations for Florida environment (solar pool heater and DHW thermal arrays, pv arrays, pv roof tiles, mass and metal roof covering, evaporatively cooled, radiant barrier systems).

**7h. Evaluate Requirements for Green Roofs Recognition in Florida Building Code**

**Subtask 45**

*Schedule:*

Cool Roofs Workgroup appointed	4/8/09
Workgroup meeting	2/2/10
Proposals for 2010 FBC submitted for adoption (See 2010 FBC development schedule)	3/10

*Status: Pending*

*% Complete*



10%

**Workgroups Consensus Recommendations**

The Florida Energy Code Workgroup voted to adopt the Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup’s recommendation that the Florida Building Code, Energy Conservation, be amended to provide minimum energy code credits (points) for the use of vegetated roofs. Additional energy credits may be achieved if documentation is provided to support the additional energy efficiency credits.

## OVERVIEW AND PROJECT SCOPE

Governor Crist directed the Commission to increase building energy efficiency requirements by 15% in his July 2007 Executive Order 127. In addition, the 2008 Legislature through passage of The Energy Act of 2008 created a suite of energy related assignments for the Building Commission. The Energy Code provisions were a major focus of the Commission during 2008, and the Commission increased the thermal efficiency requirements for the Florida Energy Code by 15% and integrated the enhanced requirements into the 2007 Florida Building Code. The Commission reviewed energy related code amendments adopted in the 2007 Florida Building Code Update to determine their cumulative level of increased efficiency, and adopted additional amendments required to achieve Governor Crist's directive of 15% increased efficiency. During 2008 the Energy Code was amended by administrative rule and then the revised Energy Code was adopted into the 2007 Florida Building Code during the 2008 "glitch" cycle concurrently with the March 1, 2009 effective date for the 2007 Florida Building Code. Working with stakeholders using consensus-building workgroups, the Commission was able to achieve the 15% increase in efficiency in buildings and implement code amendments that are efficient, consistent, understandable and enforceable for the full spectrum of Energy Code users. The Commission's Energy Code Workgroup will develop recommendations regarding energy conservation measures for increasing efficiency requirements in the 2010 FBC by 20% as required by law.

### **Study Energy Conservation Measures and Develop a Plan for 20% Increased Efficiency Requirement for 2010 FBC**

Section 109, HB 7153 establishes a schedule for increases in building energy efficiency requirements. This task expands the study of energy conservation measures for residential buildings to investigation of efficiency options for commercial buildings and the development of a plan to implement the requirements of the new law. Section 553.9061 "Scheduled increases in thermal efficiency standards." was created to establish percent increases in efficiency to be implemented in the 2010, 2013, 2016 and 2019 Code.

With the adoption of the Glitch Amendments to the 2007 Edition of the Florida Building Code and the revisions to Rule 9B-13 Thermal Efficiency Standards, the Commission implemented a strategy for increasing the energy efficiency provisions of the Code by 15%. The Commission's Energy Code Workgroup and Energy TAC are working with stakeholder to evaluate options for achieving an additional 5% increase for the 2010 Edition of the Code, and for achieving the progressive increases in efficiency required for subsequent editions of the code.

# GREEN ROOFS SUBCOMMITTEE PROCEDURAL GUIDELINES

## **PARTICIPANTS' ROLE**

- ✓ The Subcommittee process is an opportunity to explore possibilities. Offering or exploring an idea does not necessarily imply support for it.
- ✓ Listen to understand. Seek a shared understanding even if you don't agree.
- ✓ Be focused and concise—balance participation & minimize repetition. Share the airtime.
- ✓ Look to the facilitator(s) to be recognized. Please raise your hand to speak.
- ✓ Speak one person at a time. Please don't interrupt each other.
- ✓ Focus on issues, not personalities. Avoid stereotyping or personal attacks.
- ✓ To the extent possible, offer options to address other's concerns, as well as your own.
- ✓ Participate fully in discussions, and complete meeting assignments as requested.
- ✓ Serve as an accessible liaison, and represent and communicate with member's constituent group.

## **FACILITATORS' ROLE (FCRC Consensus Center @ FSU)**

- ✓ Design and facilitate a participatory Subcommittee process.
- ✓ Assist the Subcommittee to build consensus on a package of recommendations for delivery to the Florida Building Commission.
- ✓ Provide process design and procedural recommendations to staff and the Subcommittee.
- ✓ Assist participants to stay focused and on task.
- ✓ Assure that participants follow ground rules.
- ✓ Prepare and post agenda packets, worksheets and meeting summary reports.

## **GUIDELINES FOR BRAINSTORMING**

- ✓ Speak when recognized by the Facilitator(s).
- ✓ Offer one idea per person without explanation.
- ✓ No comments, criticism, or discussion of other's ideas.
- ✓ Listen respectfully to other's ideas and opinions.
- ✓ Seek understanding and not agreement at this point in the discussion.

## **THE NAME STACKING PROCESS**

- ✓ Determines the speaking order.
- ✓ Participant raises hand to speak. Facilitator(s) will call on participants in turn.
- ✓ Facilitator(s) may interrupt the stack (change the speaking order) in order to promote discussion on a specific issue or, to balance participation and allow those who have not spoken on an issue an opportunity to do so before others on the list who have already spoken on the issue.

## **ACCEPTABILITY RANKING SCALE**

During the meetings, members will be asked to develop and rank options, and following discussions and refinements, may be asked to do additional rankings of the options if requested by members and staff. Please be prepared to offer specific refinements or changes to address your reservations. The following scale will be utilized for the ranking exercises:

<b>Acceptability Ranking Scale</b>	<b>4 =</b> <i>acceptable, I agree</i>	<b>3 =</b> <i>acceptable, I agree with minor reservations</i>	<b>2 =</b> <i>not acceptable, I don't agree unless major reservations addressed</i>	<b>1 =</b> <i>not acceptable</i>
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## SUBCOMMITTEE'S CONSENSUS PROCESS

The Subcommittee will seek to develop a package of consensus-based recommendations for submittal to the Florida Building Commission. General consensus is a participatory process whereby, on matters of substance, the members strive for agreements which all of the members can accept, support, live with or agree not to oppose. *In instances where, after vigorously exploring possible ways to enhance the members' support for the final decision on a recommendation, and the Subcommittee finds that 100% acceptance or support is not achievable, final decisions will require at least 75% favorable vote of all members present and voting.* This super majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues with the participation of all members and which all can live with. In instances where the Subcommittee finds that even 75% acceptance or support is not achievable, publication of recommendations will include documentation of the differences and the options that were considered for which there is more than 50% support from the Subcommittee.

The Subcommittee will develop its recommendations using consensus-building techniques with the assistance of the facilitator. Techniques such as brainstorming, ranking and prioritizing approaches will be utilized. Where differences exist that prevent the Subcommittee from reaching a final consensus decision (i.e. with support of at least 75% of the members) on a recommendation, the Subcommittee will outline the differences in its documentation.

The Subcommittee's consensus process will be conducted as an open process consistent with applicable law. Subcommittee members, staff, and facilitator will be the only participants seated at the table. Only Subcommittee members may participate in discussions and vote on proposals and recommendations. The facilitator, or a Subcommittee member through the facilitator, may request specific clarification from a member of the public in order to assist the Subcommittee in understanding an issue. Observers/members of the public are welcome to speak during the public comment period provided at each meeting, and all comments submitted on the public comment forms provided in the agenda packets will be included in the facilitator's summary reports.

Facilitator will work with staff and Subcommittee members to design agendas and worksheets that will be both efficient and effective. The staff will help the Subcommittee with information and meeting logistics.

To enhance the possibility of constructive discussions as members educate themselves on the issues and engage in consensus-building, members agree to refrain from public statements that may prejudge the outcome of the Subcommittee's consensus process. In discussing the Subcommittee process with the media, members agree to be careful to present only their own views and not the views or statements of other participants. In addition, in order to provide balance to the Subcommittee process, members agree to represent and consult with their stakeholder interest groups.

**PUBLIC COMMENT FORM**

The Florida Building Commission, the Florida Energy Code Workgroup, and the Green and Energy Efficient Roofs Subcommittee encourage written comments—All written comments will be included in the meeting summary report.

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Meeting Date: \_\_\_\_\_

*Please make your comment(s) as specific as possible, and offer suggestions to address your concerns.*

*Please limit comment(s) to topics within the scope of the Subcommittee, and refrain from any personal attacks or derogatory language.*

*The facilitator may, at his discretion, limit public comment to a maximum of three-minutes (3) per person, depending on the number of individuals wishing to speak.*

COMMENT: \_\_\_\_\_

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**Please give completed form(s) to the Facilitator for inclusion in the meeting summary report.**