REPORT TO THE FLORIDA BUILDING COMMISSION

DECEMBER 5, 2011—MEETING XX

GAINESVILLE, FLORIDA

FACILITATION, MEETING AND PROCESS DESIGN BY

CONSENSUS CENTER

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This document is available in alternate formats upon request to Dept. of Community Affairs, Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.
OVERVIEW AND PROJECT SCOPE

At the January 26, 2005 Commission meeting, Chairman Raul L. Rodriguez, AIA appointed a small coordinating group consisting of Commissioners and other stakeholder representatives, charged with identifying what research is being conducted related to building failure issues resulting from the 2004 hurricanes, identifying any research gaps on key issues identified but not being researched, and finally, to ensure that the Commission is provided with all relevant research findings on each of the major issues, prior to the Commission considering code enhancements resulting from lessons learned.

The Hurricane Research Advisory Committee (HRAC) meets on an ongoing basis for the purpose of receiving updates on current research initiatives, providing recommendations on needed research projects and funding for same, and providing recommendations regarding proposed code amendments relevant to hurricane and storm protection and resistance enhancements.

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, made the following appointments to the Hurricane Research Advisory Council. Members are charged with representing their stakeholder group’s interests, and working with other interest groups to develop consensus recommendations (research and code amendments) as needed for submittal to the Florida Building Commission.

<table>
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<tr>
<th>MEMBER</th>
<th>REPRESENTATION</th>
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<tr>
<td>Joe Crum, CBO</td>
<td>Building Officials</td>
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<tr>
<td>Jack Glenn, CBO</td>
<td>Home Builders</td>
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<tr>
<td>Jaime Gascon</td>
<td>Local Government</td>
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<tr>
<td>John Ingargiola</td>
<td>Federal Government (FEMA)</td>
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<tr>
<td>Do Kim, P.E.</td>
<td>Insurance Industry/Engineers</td>
</tr>
<tr>
<td>Craig Parrino, P.E.</td>
<td>Product Manufacturers (concrete products)</td>
</tr>
<tr>
<td>Richard Reynolds</td>
<td>Insurance Industry</td>
</tr>
<tr>
<td>Tim Reinhold, PhD, P.E.</td>
<td>Insurance Industry/Researchers</td>
</tr>
<tr>
<td>Jim Schock, CBO</td>
<td>Building Officials</td>
</tr>
<tr>
<td>Chris Schulte</td>
<td>Roofing Contractors</td>
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REPORT OF THE DECEMBER 5, 2011 MEETING

OPENING AND MEETING ATTENDANCE
Jeff Blair, Commission Facilitator, welcomed participants and opened the meeting at 9:08 AM.

The following Committee members were present:

Members Absent
Joe Crum, John Ingargiola, and Tim Reinhold.

Commissioners Present

DCA Staff Present

Meeting Facilitation
The meeting was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: http://consensus.fsu.edu/

PROJECT WEBPAGE
Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:
http://consensus.fsu.edu/FBC/hrac.html

AGENDA REVIEW AND APPROVAL
The Committee voted unanimously, 6 - 0 in favor, to approve the agenda as presented including the following objectives:

- To Approve Regular Procedural Topics (Agenda and Summary Report)
- To Review Current Research Project Updates and Results
- To Discuss Additional Research Supporting Hurricane Resistant Construction Standards Development
- To Consider Public Comment
- To Adopt Recommendations for Submittal to the Commission for Enhancements to the Florida Building Code System
- To Identify Needed Next Steps, Assignments and Agenda Items for Next Meeting
APRIL 4, 2011 FACILITATOR’S SUMMARY REPORT REVIEW AND APPROVAL
Jeff Blair, Commission Facilitator, asked if any members had corrections or additions to the April 4, 2011 Report, and none were offered. The Committee voted unanimously, 6 - 0 in favor, to approve the April 4, 2011 Facilitator’s Summary Report as presented.

PRESENTATION ON FISCAL YEAR 2011-2012 HURRICANE RESISTANCE RESEARCH
Kurt Gurley, Forrest Masters and David Prevatt from the University of Florida provided PowerPoint presentation updates on hurricane resistance research and answered members’ questions. UF reported on five Research Topics as follows:

<table>
<thead>
<tr>
<th>RESEARCH TOPIC</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>Testing of tile frangibility and puncture of metal window shutters.</td>
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<tr>
<td>2</td>
<td>Testing of wind resistance of clay and concrete roofing tiles.</td>
</tr>
<tr>
<td>3</td>
<td>Testing of uplift strength of clay tiles installed on self-adhering roofing membranes.</td>
</tr>
<tr>
<td>5</td>
<td>Investigating the performance of vegetative roof systems appropriate to Florida building for performance in hurricane wind and rain conditions.</td>
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Following is an overview of the research topics presented by the University of Florida researchers:

1.) Tile Frangibility and Puncture of Metal Window Shutters
Kurt Gurley

2.) Wind Resistance of Clay and Concrete Roofing Tiles
Forrest Masters

3.) Uplift Strength of Clay Tiles Installed on Self-Adhering Roofing Membrane
David Prevatt

4.) Wind Resistance of Asphalt Roof Shingles Ongoing University of Florida Research Update
Forrest Masters presented on residential roof covering investigation of wind resistance of asphalt shingles. Southeast Region Research Initiative (SERRI) supported research.

5.) Vegetative Roof Systems
David Prevatt

An overview of the presentations may be reviewed at the project webpage as follows:
http://consensus.fsu.edu/FBC/hrac.html
Fiscal Year 2012-2013 Hurricane Resistance Research Thrusts Recommendations

Forrest Masters (University of Florida) recommended the Commission support research regarding hurricane wind and water intrusion resistance as follows:

1. Support research on wind-driven rain deposition on the building facade and development of system-level water penetration resistance requirements—ASCE Wind Driven Rain Effects on Buildings.
2. Expand tile research program to include hip and ridge attachments to finalize methodology.
3. Continue asphalt shingle research based on needs identified in summer 2011 (subprojects will be concluding).
4. Green roofs.

Following questions and answers, public comment, and discussion the Committee took the following action:

Committee Action:
Motion—The HRAC voted unanimously, 7 - 0 in favor, to recommend the Florida Building Commission authorize DBPR to continue funding UF’s existing roofing projects (except green roofs) and to fund wind-driven rain deposition on building facade and development of system-level water penetration resistance requirements, and structural wood panel structural attachment research based on spending authority approved by the 2012 Florida Legislature for Fiscal Year 2012/2013, and to leverage additional funding sources to the extent possible (e.g., FEMA/DHS, NOAA/Sea Grant and RCMP/DEM.

General Public Comment
Members of the public were invited to provide the Committee with comments. There were no general public comments provided. Members of the public were provided opportunities spoke on each of the substantive discussion issues before the Committee.

Next Steps
The Committee will continue to meet as needed to review research project updates, provide recommendations on needed research projects and funding for same, and provide recommendations regarding proposed code amendments relevant to hurricane and storm protection enhancements.

Adjourn
The Committee voted unanimously, 7 - 0 in favor, to adjourn at 12:00 AM.