ICC CODE TECHNOLOGY COMMITTEE

BALANCED FIRE PROTECTION – FEATURES STUDY GROUP MEETING #9

November 27 – 28, 2007

DRAFT AGENDA

Wyndham DFW Airport
4441 Hwy 114 @ Esters Road
Irving, TX 75063

November 27: 9:00 am – 5:00 pm

1.0 Welcome and introductions – Co-chairs Collins & Dargan

The meeting was called to order at 9:00 am on November 27. Dave Collins and Kate Dargan were both absent. Ron Nickson assumed the role of chair. Ron welcomed those in attendance. Self introductions were made.

Voting members present: Carl Baldassarra, Laura Blaul, Dave Frable, Sam Francis, Jay Hall (alternate for Jim Messersmith), Ron Nickson, Larry Perry, Dennis Richardson, Emory Rodgers, Jerry Sanzone, Jon Siu, Rick Thornberry, Carl Wren

Members absent: Dave Collins, Kate Dargan, Sean DeCrane, Robert Wills

Staff liaison: Mike Pfeiffer

Due the number of members absent, staff went over the voting majorities required: 75% of those voting and 50 % of the total committee to pass an action (9 affirmative votes required)

2.0 Approve agenda

Approved.

3.0 Approve minutes of Meeting # 8 August 1 - 3, 2007

Approved as revised. The revision being to Item 7.5 as follows:

"Numerous tables….deadline. Rick to submit code changes that BFP Features would review at the next meeting."

4.0 2007/2008 Code changes

4.1 2008 CDH hearing order

The hearing order will be comprised of two tracks – the order being the reverse of the 2006 Orlando hearings. A member forum is planned to gather input from the attendees relative to the code development process.

4.2 Posted proposals related to BFP Features H & A

G110. This was discussed at the end of the agenda. This is a CTC BFP Features SG proposal. During the discussion on this code change and G224, the proponent of G224 noted the significant differences between this proposal and G224. The SG went over the noted differences and determined their position as it relates to potential modifications to G110 (see G224). It was noted that the heights in proposed T 503.1(1) should be the same

as current T 503. The following are the modifications to be presented to G110:

AREA, *FIRE COMPARTMENT. The floor area of a fire compartment ~~area included within surrounding exterior walls, compartment walls, (or exterior walls and firewalls)~~ exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the fire compartment area if such areas are included within the horizontal projection of the roof or floor above.*

503.2.2.2.1 Vertical continuity. *Fire compartment barriers shall extend from the foundation ~~to the underside of the roof deck.~~ to a termination point at least 30 inches above both adjacent roofs.*

Exceptions: **As proposed**

503.2.2.2.2 Supporting construction. *The supporting construction for fire compartment barrier walls shall be protected to afford the required fire-resistance rating of the fire compartment barrier supported.*

Exceptions:

1. The supporting construction for a 1 hr. fire compartment barrier wall in buildings of Type IIB, IIIB and VB construction, not protected throughout by sprinklers in accordance with Section 903.3.1.1 or 903.3.1.2, shall be supported by a structure having a layer of 20 minute fire-resistance rated finish protection.
2. The supporting construction for a 1 hr. fire compartment barriers in buildings of Type IIB, IIIB and VB construction that are protected by sprinklers throughout in accordance with Section 903.3.1.1 ~~or 903.3.1.2~~ shall not be required to be protected.

503.2.2.5 Other openings fire compartment barriers. *Openings in ~~1 hour~~ fire compartment barriers for ducts and air transfer openings ~~air handling~~ shall be protected in accordance with Section 707 and 716 ~~with~~ fire dampers ~~having a~~ shall have a minimum fire protection rating of 1 hour.*

G111. As modified. Modification – Delete "any" in the exception to 3403.1 and in 3410.2.3. The term serves no code related purpose and may cause interpretive problems. It was noted that the cost statement should state the proposal will not increase the cost of construction – this will be stated in testimony.

G113. Oppose. Jon Siu presented an adjusted height and area spreadsheet relative to the impact on the code that G113 would have. It was noted that the allowable building size for smaller buildings would be further reduced.

G114. During the discussion , it was noted that this proposal, as well as others, deal with cells in the height and area table. Members of the committee indicated that they have spent some 9 meetings discussing a potential BFP Features position and the outcome of the discussion was their comprehensive change in G110 and the individual "anomalies" in Table 503 for which Features has submitted a code change. As such, the group needs to take a position in support of their actions to date and oppose the others.

Oppose. As has been noted by Features in their position paper, life safety is not just height and area related. It involves life safety which includes all aspects of balanced fire protection, including sprinkler protection and adequate egress facilities. G110 is the Features position on comprehensive revisions to the height and area provisions.

G115, G117 – G120. Support. G115 and G117 cost statement should state that the proposals will increase the cost of construction – this will be stated in testimony. It was suggested that the co-chairs solicit industry support.

G116. Oppose. It was noted that a one story Type VB building is permitted in this proposal.

G123. Oppose. A modified version of this proposal was previously approved by the SG but was then reconsidered. At that time it included a 5' height increase, this is a 10' height increase.

G124. No position. Ken Kraus stated this is not a joint proposal. G110 relies on sprinklers as part of its basis, however, this proposal indicates that sprinkler protection could be a concern. This seems to be an inconsistent approach should the SG support G124. Vote to oppose did not get the necessary 9 votes.

G125. No position. Features submittals for unrated construction reduce the height for certain occupancies. This further reduces the height. Vote to oppose did not get the necessary 9 votes.

G126. No position. Members of the SG supported the concept but could not reach agreement on a possible modification to FS17. Vote to oppose did not get the necessary 9 votes.

G 127. Oppose. This issue has been debated for some time now.

G133. Oppose. G110 has been proposed on behalf of the SG.

G137. Oppose. Ken Kraus stated this is not a joint proposal. The proposal lacks justification and does not just impact taller buildings.

G138. Oppose. Similar to G137, except this is more comprehensive as it also addresses mixed occupancies.

G139. Oppose. The IIB and IIIB tables in the reason should read "5 story" for B, M and R-1/R-2 under the "3x current IBC" column.

G224. Oppose. This proposal is a parallel proposal to G110 to place G110, with changes, into the appendix. The key differences between G110 and G224 were noted as follows in italics (as printed in the reason statement to G224). These items were discussed individually with modifications to G110 (applicable section number noted) considered.

1. Adequate fire department access to the fire compartments.
IFC requires 150'. No action.

2. Footnote a to Table 503.1(2) which establishes when a building and/or fire compartment is not considered to be sprinklered.
All compartments must be sprinklered in order for the building to be considered a fully sprinklered building.

3. The compartment area limits for sprinklered compartments. The table we have provided is based upon a 1500 gpm fire flow rather than the 2000 gpm fire flow used in the Study Group proposal. It should be noted that the numbers for the nonsprinklered condition are also based on a 1500 gpm basic fire flow (not changed in our proposal).
T 503.1(3): Features considered a modification to G110 to revise the values based on 1500 gpm for all entries except H-1 through H-3. Motions failed.

4. Determination of the maximum building area factor and the recognition that the number of compartments allowed for the sprinklered case should be greater than for the nonsprinklered case.
504.2: No action.

5. Clarification of the maximum allowable building area and the establishment of an absolute maximum allowable building area regardless of the number of compartments allowed within a building.
503.2.1: No action.

6. Clarification of what a fire compartment consists of.
Definition revised to the following:

AREA, FIRE COMPARTMENT. The floor area of a fire compartment ~~area included within surrounding exterior walls, compartment walls, (or exterior walls and firewalls)~~ exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the fire compartment area if such areas are included within the horizontal projection of the roof or floor above.

7. Fire-resistance ratings for compartment separations especially for the sprinklered building case.
503.2.2: Each of the occupancies were considered individually in terms of modifications to increase the ratings. Failed.

8. A requirement for the supporting construction of fire-resistance rated compartment enclosures providing the same degree of fire-resistance as the compartment enclosure.
503.2.2.2.2: Motion to delete the exceptions. Failed. Motion to delete the reference to Section 903.3.1.2. Motion passed.

9. Protection of openings in fire compartment barriers.
Section 503.2.2.5 revised as follows:

503.2.2.5 Other openings fire compartment barriers. Openings in ~~1-hour~~ fire compartment barriers for ducts and air transfer openings ~~air-handling~~ shall be protected in accordance with Section 707 and 716 ~~with~~ fire dampers ~~having a~~ shall have a minimum fire protection rating of 1 hour.

10. The application of smoke management methods for adjacent fire compartments that intercommunicate with each other and when the requirement for smoke management should be triggered.
Hold for further study on the whole issue of smoke management.

11. The need for a definition for fire compartment barrier.

No action.

12. The rounding off to the nearest 1000 of the fire compartment areas in the tables.
No action.

13. Reformatting of the tables so that they look more like the current Table 503 which will provide for ease of transition.
No action.

14. Termination of vertical fire compartment barriers that intersect the roof and pass through the roof with a parapet with certain exceptions allowed.
503.2.3.2.1. Motion to revise to clarify that the vertical continuity must extend 30 " above the roof. Passed.

15. Clarification of what is a building versus what is a compartment when there are multiple compartments within a building.
No action.

16. Automatic sprinkler system thresholds and application of various sprinkler trade-offs.
L509: The group looked at the proposed revised sprinkler thresholds in G224. It was noted that the proposal needed work as the thresholds proposed dealt with area and height and it should only address height. No action.

The Features SG voted to oppose G224.

F298. Oppose. Although indicated to the contrary in the reason, the SG feels this proposal is tied to G110 due to its reference to "compartment area". This is viewed as conflicting with G110, as this is tied to Appendix B in the IFC. This text should be in either Ch 1 or 5 in the IFC.

4.3 BFP Features proposals – modifications for Palm Springs?
See item 4.2

4.4 Recommended Positions on changes related BFP Features to CTC

November 28: 8:00 am – 4:00 pm

5.0 CTC study group reports related to BFP Features

5.1 BFP Methodology
Staff noted that the effort has been basically on hold since the inception of the BFP Features activity. To date, a work plan was developed (March 9, 2006). This issue will be placed before the CTC to determine the SG's future.

5.2 BFP Roof vents
To date, the SG has not come to a consensus on this issue. Presentations are planned, both for and against roof vents in the current code, for the Dec CTC meeting.

5.3 BFP Vertical openings
There has been some discussion that due to failure to reach consensus on the issue of vertical openings as reflected in the three code changes this cycle (FS 118, FS 161, FS 162), that the SG should be disbanded. This item will be brought to the attention of the

CTC in December.

5.4 Care facilities

Recent activity on this area of study has focused on modifications to G23- 07/08. To date, Draft 2 of the comprehensive report (September 19, 2007) has been completed and posted. This draft includes issues which impact height and area.

6.0 BFP code issues – future development

6.1 Exiting (Frable, Wren, Blaul, Richardson, Baldassarra)

6.2 Compartmentation (Collins, Wren, Perry, Messersmith, DeCrane)

6.3 Smoke management (Thornberry, Blaul, Baldassarra)

6.4 Fire resistance ratings (Sanzone, Siu)

6.5 Performance measures for building safety inspection and maintenance (Dargan)

No activity on 6.1 - 6.5. It was noted that the co-chairs need to assess the status of these activities and provide direction.

7.0 Risk assessment – Scoring system methodology

7.1 Status update

7.2 Future development

No activity on 7.1 - 7.2. It was noted that only 2 members have responded to the posted information on the WPI site – there may be problems with the site. Rick Thornberry indicated that the AFSCC has solicited financial support as they have underwritten the effort. It was noted that the co-chairs need to assess the status of this activities and provide direction.

8.0 New business

None

9.0 Future meetings and Assignments

Next meeting: Tentatively set for January 15 – 16, 2008

There is no agenda or compiled materials to support a meeting. The next activity will be a conference call on January 15, 2008.

The next meeting of the CTC BFP Features Group will be in conjunction with the May CTC meeting. The CTC meeting is slated for May 22-23 but this may change due to the Memorial Day holiday weekend.

10.0 Adjourn

The meeting was adjourned at approximately 12:10 on November 28.

CTC website for posted materials: **http://www.iccsafe.org/cs/cc/ctc/balanced.html**

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DRAFT MINUTES

List of Attendees

Ken Kraus	Los Angeles Fire Dept.
Farid Alfawakhiri	AISI
Vickie Lovell	Intercode, Inc.
Mike Ashley	AFSCC
John Valiulis	Hilti, Inc.
David Dratnol	Isolatek International
John Woestman	Builders Hardware
Jerri Morrey	Jerry Morey, Architect
Kurt Roeper	Ingersol Rand
Bill McHugh	Firestop Contractors Int'l. Assoc.
Christine Reed	CA Fire Chiefs
Robert Davidson	Davidson Code Concepts
Dennis Pitts	AF & PA