



ICC CODE TECHNOLOGY COMMITTEE
MEETING #16
November 13 – 14, 2008

DRAFT MINUTES
Four Points Sheraton Chicago O’Hare
10249 W. Irving Park Road
Schiller Park, IL 60176
(847) 671 - 6000

Thursday, November 13, 2008: 8:00 am – 5:00 pm
Friday, November 14, 2008: 8:00 am – 4:00 pm

1.0 Welcome and introductions - Chair Heilstedt

1.1 Call to order; introductions; welcoming remarks

Chair Heilstedt called the meeting to order at approximately 8:00 am on November 13th , welcoming those in attendance.

Members present (company/representation): Carl Baldassarra (Schirmer Engineering- Vice Chair), Bob Boyer (Palm Beach County, FL), Dick Bukowski (NIST), Ron Clements (Chesterfield, VA), Dave Collins (AIA), Paul Heilstedt (self- Chair), Wade Hill (Metro Nashville, TN), Wayne Jewell (Southfield, MI), Mike Love (Montgomery County, MD), Ron Nickson (NMHC), William Schock (San Leandro, CA), Carl Wren (Austin, TX)

Members absent: Erin Ashley (National Ready Mix Concrete Assoc), Barry Gupton (North Carolina Department of Insurance), Ray Kothe (NAHB)

Staff liaison: Mike Pfeiffer

Attendees: A list of attendees is provided at the end of these minutes.

2.0 Approve agenda

Agenda approved with Item 9.3 noted as not to be considered until no earlier than 8:00 am on Friday.

3.0 Approve minutes of CTC Meeting #15 May 21 - 22, 2008

Approved

4.0 Carbon Monoxide Alarms

4.1 Working meeting – Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

IRC: RB 71

IFGC: FG 48

It was noted that these two code changes are not related. CTC position to date has been to oppose mandatory CO alarms in the code. RB 71 was approved as modified, resulting in a mandatory requirement in the 2009 IRC. An appeal has been filed with ICC on the action taken on RB 71. FG 48 was disapproved.

CTC action in 2009/2010 cycle: No further code change consideration on this subject.

5.0 Climbable Guards

5.1 Working meeting – Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

IBC: E 83 – E 89, S 72

IRC: RB 53, RB 58 – RB 60

Approved code change E85, submitted by CTC, represents CTC's position on this subject. However, it was noted that the issue of guard height relative to "seatboards" vs "fixed seating" warrants further investigation.

Jake Pauls raised concerns with the report issued by NOMMA which was used by the CTC in its report on this area of study. He noted that this issue is not resolved. He specifically cited concerns with Table 10 in the NOMMA report relative to guard heights – stating that the height should be 42". CTC indicated that the CTC report is based on the information provided to date.

CTC action: Review the issue of seatboards to determine if a change is warranted. If new information is brought forth, CTC will review and determine if the CTC report needs to be revised.

6.0 Child Window Safety

6.1 Working meeting – Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

IRC: RB 173, RB 174

RB 173 Part I for the IRC was approved as modified by public comment 2 and Part II for the IBC was disapproved. RB 174 disapproved.

6.2 Review of window opening control device provisions in updated ASTM F2090

The standard's process is currently considering negatives that were submitted. As such, it is not publicly available as it is not complete yet.

CTC action in 2009/2010 cycle. SG to review:

- Review 36" minimum sill height (CTC public comment 1 to RB 173 Part I)
- Evaluate new standard relative to incorporation by reference in the code
- Reconcile RB 173 action between IRC and IBC

7.0 Care Facilities

7.1 Working meeting – Review Final Action on 2007/2008 cycle code changes

IBC: G 22 – G 24, G 30 – 36, G 225

The focus for the 2007/2008 cycle has been ambulatory health care and predominately G23 which was approved as modified. Approved code changes G24, G30 and G36 need to be evaluated within the context of where the care facility study group is moving relative to the 2009/2010 cycle.

7.2 Working meeting – Review/revise CTC Interim Draft Report 3

The day before the CTC meeting, the SG met to evaluate the draft. It was decided that the SG needed to take a more surgical approach to this area of study – reviewing the issues and concerns with the current text of the code. Issues:

- 24 hours: Hours of operation? Length of stay?
- Responsiveness to an emergency during "normal business hours" of 8 am – 5 pm vs 11 pm at night?
- Number of patients: Dentist office with 1-4 patients vs a day surgery center with 10 – 15 patients
- Criteria to determine a "supervised environment"
- Criteria to determine "capable of self preservation". Identify in terms of response: slow, prompt, etc?
- The use of "laundry lists" in the code to define use groups (ie I-1 vs I-2)
- Number of patients – less than 5, what occupancy?
- Locking arrangements for occupancies such as "mental hospitals" – see E51 – 07/08
- Travel distance for an occupancy such as a sprinklered ambulatory health care facility – Group B - 300'?

- Maintain a reference to the IRC for occupancies such as I-4 and R-4?

Based on the above, the CTC revised Draft 3, using the current text of the IBC as the basis. This included pursuing G23 public comments submitted by CTC which did not pass last cycle. This will be posted as Draft 4 and serve as the starting point for the SG to continue their work.

7.3 Develop work plan to implement Care Facility recommendations into 2009/2010 cycle

CTC action in 2009/2010 cycle: SG to review/update Draft 4.

8.0 Review of NIST WTC Recommendations

8.1 a. Working meeting - Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

IBC: S 59, S81, S101

IFC: F 84 – F87 (Repeater task group), F 95, F 171, F 204, F 211

IBC: FS 7, FS 113 - FS 115

IBC: G 46 (Sprinkler redundancy task group), G 51 – G 53, G 56 – G 58, G 60, G 61, G 65 – G69, G 108, G 193 – G 200

IBC: E 3 , E 4, E 14, E 135, E 145 – E 149

CTC action in 2009/2010 cycle:

S59 - D: CTC will review Ad Hoc Terror Resistant Building follow-up proposals should one be submitted.

S81 - WP: CTC to resubmit in anticipation of the wind tunnel standard being completed

S101- AMPC 1: CTC to look at Public comment 2 which failed

F84 - AM: No CTC action

F85 - AS: No CTC action

F86 - D: No CTC action

F87 – AMPC 1: No CTC action

F95 – AM: No CTC action

F171 – D: No CTC action

F204 – D: No CTC action

F211 – AMPC: It was noted that others may revisit this approved proposal due to the scope being too broad. CTC to review such submittal(s) to determine position.

FS7 – D: No CTC action

FS113 – AS: No CTC action

FS115 Part I – AMPC 1,2: The terms “primary structural frame” and “secondary members” are now defined as a result of public comment 2. CTC prefers their public comment #1 - listing the attributes in the body of the code. A definition may result in mis-application should the term be used elsewhere in the code. Submit change.

G46 – AMPC: No CTC action

G66- D; G67 – D: In order to pursue the issue of the additional stair, a holistic review of the high rise package of code requirements is needed. It was noted that NIST was looking at this issue but the effort will not come to fruition for some time. No CTC action at this time.

G68 – AS; G69 – WP: It was noted that NIST is looking at new tests and test standards. Questions still remain as to the assumed event that the fire proofing density is intended to address. There may be a “middle ground” in terms of column requirements being held to a higher standard than the floors. CTC will be looking to follow-up. Issues to note:

- AISI report on the subject matter
- Density has not been confirmed by research as the critical factor in adherence of the fire proofing
- The code now includes in-depth requirements for special inspection which are intended to make sure the fireproofing stays in place

G108 – D: There is a need for a documented methodology which is being evaluated by NIST. NIST

will not be recommending thresholds has this is a public policy issue. No CTC action at this time.
G195 – AMPC: No CTC action
E3 – D; E4 – D: The CTC is still puzzled by the membership’s response on this issue. The intent is that the IBC refer to the IFC for necessary emergency preparedness. Resubmit.

b. Working meeting – Review NIST WTC report for CTC positions that may require further NIST input

The group reviewed the posted document “NIST strategy following 07/08 cycle”. As noted for code change G66 and G67, NIST is reviewing the issue of egress. Following approval of G63-06/07 and E14-07/08, ASME is still active in its review of elevator use for fire fighter access and occupant evacuation, respectively. No CTC action at this time.

8.2 Working meeting - Review WTC 7 Report findings and determine CTC position for next cycle
No CTC action at this time. Waiting on NIST studies noted previously.

8.3 Holistic approach to high rises (from Dec/2007 meeting; item 8.1; G58)
No report.

9.0 Balanced Fire Protection (BFP)

9.1 Vertical openings

a. Review Final Action on 2007/2008 cycle code changes

IBC: FS 118, FS 161, FS 162

All three code changes were disapproved.

b. Vertical Openings Study Group Report

The group has not formally met since the May 20, 2008 SG meeting which resulted in Appendix A of the CTC May 21, 2008 minutes. There has been activity among some of the members of the SG, resulting in a draft. Any drafts that are to be considered need to be forwarded to the SG for review and deliberation.

c. Review Appendix A of CTC May 21, 2008 minutes and determine scope of work

No activity

9.2 Features

a. Working meeting - Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

G 110, G 111, G113, G 115 – G 120, G 123 - G 127, G 133, G137 - G139, G224, F298

With the exception of G115, G117 and G120, all the proposals were either disapproved or withdrawn. The 3 approved proposals dealt with height considerations in unprotected types of construction for Groups B, M and S-2, respectively.

b. Features Study Group Report

Dave Collins noted that he was going to go back to the study group to discuss future direction on the subject of height and area and the future of the SG in total. CTC needs to know why exactly the height and area provisions need to be revised. The future of this SG will be determined before the next CTC meeting.

9.3 Roof vents

a. Completion of roof vent presentations from May/2008 CTC meeting

Carl Baldassarra summarized the history of the Study Group including the presentations started but left uncompleted at the last CTC meeting. These presentations are being readdressed during this meeting with direction that the opposing sides center the presentations on the current code requirements. Both presentations have been previously posted.

Rich Schulte provided his Power Point slides summarizing his opposition to keeping roof vents in the current code language. Schulte concluded that he believes interior firefighting should not be attempted when the sprinklers do not control a fire. Schulte noted that he supports, and he indicated that he had received support from the fire service in California for, moving away from roof venting in sprinkler protected buildings toward mechanical smoke removal or smoke control systems.

Rick Thornberry (representing the vent industry) summarized his memory of the Study Group history and made several recommendations. He also summarized the reasons why the proposed testing of vents in an old DOD facility was not performed. He noted that his California fire service contacts still support roof vents and that the California amendments will (did) reinstate roof vents even when ESFR sprinklers are being used.

Craig Beyler gave a short summary of his previous presentation describing the value of smoke and heat vents. His position is that these vents increase visibility and eliminates the need for FF to perform manual roof venting activities. He presented the results of FDS fire models and validation fires done by NIST as part of the work done at UL. He showed results that seemed to indicate that the variation between model sprinkler operation and validation tests is more a function of the variation in actual fire and sprinkler response and not a model variation problem. Dr. Beyler's presentation seems to support a new venting scheme and does not specifically address current vent requirements. He suggests that his results be incorporated in the Fall 2009 edition of NFPA 204 and then for the revised NFPA 204 to be incorporated into the next edition of the IBC.

This is a long standing area of dispute and heated disagreements with the potential to significantly impact the design of unlimited area buildings as well the design of big box and other warehouse/storage related occupancies. Several CTC members noted support for removing roof venting from the code. There were also questions as to who would be designing the roof venting that will comply with the upcoming requirements of NFPA 204.

b. Working meeting - Review Final Action on 2007/2008 cycle code changes and determine CTC position for next cycle

IFC: F 191 – F 200

IBC: E 112 – 115

The CTC did not discuss the action taken on the noted code changes. Following the presentations of 9.3a, CTC directed that a code change be developed to indicate that the design and installation of smoke and heat vents and draft curtains be as specified in 910 and in accordance with NFPA 204 for unsprinklered buildings. The SG is to review this issue and address the ganged vent concept and mechanical smoke control in large footprint buildings and in ESFR protected buildings.

9.4 Methodology

a. Methodology Study Group Report

No report

b. Determine future of effort

Lack of activity is noted by the CTC. CTC decided to consider the future of this effort at the next meeting.

9.5 BFP Overall

a. Working meeting – Develop BFP progress report

No activity

10.0 Emergency Evacuation with Elevators

10.1 a. Determine relationship with NIST WTC Recommendations area of study

This area of study is clearly tied to the WTC effort and with E14-07/08 being approved, details on operation may be considered in future cycles. Discontinue this activity as a specific area of study

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Draft Agenda

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based on the approval of E14 and the ASME effort that is on-going and maintain the subject matter as part of the NIST WTC area of study.

11.0 New area of study - Labeling of Fire Rated Glazing

11.1 Review code change history/current provisions

The history of the provisions and code change efforts were presented. The CTC attempted to narrow the scope of the any disagreement and enforcement difficulties.

11.2 Establish scope and objectives

The proposed S/O Statement was presented and discussed. See appendix A.

11.3 Establish Study Group, if needed

See appendix A for list of members.

12.0 New area of study - Unenclosed exit stairs

12.1 Review code change history/current provisions

Done at prior CTC meeting.

12.2 Establish scope and objectives

The proposed S/O Statement was discussed and approved by CTC. See Appendix B.

12.3 Establish Study Group, if needed

See appendix B for list of members.

13.0 New business

John Norquist and Jon Davis presented a proposal dealing with Safer Streets and better emergency services. The proposal deals with the design of streets for pedestrians, vehicles and good emergency access and public safety. The CTC advised the presenters that new areas of study for the CTC are assigned by the CTC Board of Directors based on the outcome of the code development process. The CTC recommended that a code development proposal should be developed and placed before the members for discussion. Pursuant to that discussion the Board may consider the matter for the CTC.

14.0 Old business

None

15.0 Future Meetings (tentative)

15.1 CTC Meeting # 17: January/2009

CTC Meeting # 18: March/2009

CTC identified 3 options for the next CTC meeting:

January 12 – 13; February 18 – 19; March 11 - 12

15.2 Establish tentative meeting #17 agenda

No activity

16.0 Adjourn

The meeting was adjourned at approximately 2:00 on November 14th.

CTC website for posted materials: <http://www.iccsafe.org/cs/cc/etc/index.html>

Appendix A
Area of Study – Labeling of Fire Rated Glazing

Scope & Objectives
Approved 11/13/08

Scope:

During the previous code development cycles, numerous code changes have been submitted relative to the appropriate marking standards for fire rated glazing. This issue has been debated by the industry and within the standards writing organizations without resolution. As a public safety issue, the I-Codes should establish the regulations.

Objective:

Identify root causes of problems selecting, specifying, installing, and inspecting fire protective and fire resistive glazing and other assembly components including the frames. Propose identification requirements and other related code changes.

Issues to consider (not all inclusive)

- Mark frame and glass?
- How should the label look in order for the code enforcer to know it is installed correctly and in accordance with code?
- Code official should not have to go to a listing to verify code compliance
- The manufacturer provides the specifications. Do they have requisite code knowledge as to when a label is required and is the glazing specified code compliant based on the fire rating requirements in the code?
- Distinction between fire resistance rating and fire protection rating
- The issue is more involved than just the labeling requirements of IBC Section 715.2

Study Group Members

- Carl Wren, Chair, CTC member
- Michael Love, CTC member
- Bob Davidson, NASFM
- Jeff Razwick, Technical Glass Products
- Kate Steel, Fire & Safety Glazing Council
- Rich Walke, UL
- Thom Zaremba, Pilkington Fire Protection Glass

Appendix B

Area of Study – Unenclosed exits

Scope & Objectives

Approved 11/13/08

Scope:

The current code allows limited use of unenclosed exit stairs. During the previous code development cycles, numerous code changes have been submitted to clarify the intent and application of the code provisions relative to issues such as: exit versus exit access; travel distance measurements; contribution to the minimum number of required exits; etc. Due to the inter-relationship of code provisions, this requires a comprehensive analysis in order to clarify the code requirements.

Objectives:

A. The Unenclosed Interior Stairway Work Group will answer the following questions based on the current Means of Egress system that is composed of exit, exit access and exit discharge components:

1. Can an unenclosed interior stairway qualify as an exit?
2. If an un-enclosed interior stairway can qualify as an exit what is the entrance to the exit (where does the exit begin)?
3. If an un-enclosed interior stairway can qualify as an exit where does the exit discharge begin (where does the exit end)?
4. How is travel distance measured when an un-enclosed interior stairway is used as an element in a means of egress?
5. Does the Minimum Number of Exits Section (1019.1 in the 2006 IBC) require entry to the required exits on each story?

B. The Unenclosed Interior Stairway Work Group will draft recommend code changes, as determined necessary, to effectively communicate the code requirements based on the answers to the above questions.

C. If the committee agrees that changes to the code, as interpreted by the answers to the above questions, are warranted they will be drafted and forwarded to CTC for consideration.

Study Group Members

- Ron Clements, Chair, CTC member
- Wayne Jewell, CTC member
- Greg Keith, Boeing Co.
- Mike Perrino, Code Consultants, Inc.
- Sarah Rice, Schirmer Engineering
- Steve Thomas, Colorado Code Consulting (07/08 IBC- Egress Committee Vice chair)

**ICC CODE TECHNOLOGY COMMITTEE
MEETING #16**

DRAFT MINUTES

List of Attendees

Farid Alfawarhiri	AISI
Mike Ashley	AFSCC
Tony Crimi	AC ConsultingSolutions/IFC
Bob Davidson	Davidson Code Concepts - NASFM
Dave Frable	US GSA/PBS
Jay Hall	PCA
Gary Hamilton	FCIA
Diana Hanson	NADRA
Joe Hetzel	DASMA
Harold Hicks	Atlantic Code Consultants
Nestor Iwankiw	Hughes Associates
Greg Keith	The Boeing Company
Scott Lang	Honeywell
Anthony Leto	The Wagner Companies
Vickie Lovell	Intercode Inc.
Rob Mueller	Mueller Ornamental Iron/NOMMA
Jim Messersmith	PCA
Jeri Morey	Self
Mark O'Malley	O'Malley Welding/NOMMA
John Parssinen	ILI
Jake Pauls	Jake Pauls Consulting Services
Larry Perry	BOMA International
Lynn Parquette	Elite Architectural Iron/NOMMA
Jeff Razwick	TGP
Sarah Rice	Schirmer Engineering
Julie Ruth	AAMA
Richard Schulte	Schulte Associates
Kate Steel	Steel Consulting, SAFTI First
Steve Thorsell	ICC- ES
Rich Walke	Underwriters Laboratories
John Woestman	BHMA & WDMA
Thom Zaremba	Roetzel and Andress