



**ICC CODE TECHNOLOGY COMMITTEE  
MEETING #15  
May 21 - 22, 2008**

**DRAFT MINUTES**

**Four Points Sheraton BWI Airport  
7032 Elm Road  
Baltimore, MD 21240  
(410) 859 - 3300**

**Wednesday, May 21, 2008: 8:00 am – 5:00 pm**  
**Thursday, May 22, 2008: 8:00 am – 3:00 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 May 21<sup>st</sup>, welcoming those in attendance.

Members present (company/representation): Erin Ashley (National Ready Mix Concrete Association), Carl Baldassarra (Schirmer Engineering- Vice Chair), Bob Boyer (Palm Beach County, FL), Dave Collins (AIA), Barry Gupton (North Carolina Department of Insurance), Paul Heilstedt (self- Chair), Wade Hill (Metro Nashville, TN), Wayne Jewell (Southfield, MI), Ray Kothe (NAHB), Mike Love (Montgomery County, MD), Ron Nickson (NMHC), William Schock (San Leandro, CA), Carl Wren (Austin, TX)

Members absent: Dick Bukowski (NIST), Ron Clements (Chesterfield, VA)

Staff liaison: Mike Pfeiffer

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

**2.0 Elect Chair/ Vice Chair for 2008**

A motion was made seconded and passed to re-elect Paul Heilstedt as Chair. A motion was made, seconded and passed to re-elect Carl Baldassarra as Vice Chair.

**3.0 Approve agenda**

Approved

**4.0 Approve minutes of CTC Meeting #14 December 5 - 6, 2007**

Approved

**5.0 Carbon Monoxide Alarms**

**5.1 Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**IRC: RB 71**

**IFGC: FG 48**

Committee action on both changes was Disapproval, consistent with CTC Final Report. No public comment.

## **6.0 Climbable Guards**

### **6.1 Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**IBC: E 83 – E 89, S 72**

**IRC: RB 53, RB 58 – RB 60**

E83: Withdrawn by proponent

E84: Committee action for Disapproval in favor of CTC change E85. No public comment

E85: CTC code change. Committee action for Approval for Parts 1 and 2. No public comment.

E86: Committee action for Disapproval in favor of CTC change E85. No public comment

E87: Withdrawn by proponent

E88: CTC did not take a position on this proposal prior to the hearings.

E89: CTC did not take a position on this proposal prior to the hearings.

S72: Committee action for Disapproval consistent with CTC position. No public comment.

RB 53: Committee action for Disapproval consistent with CTC position. No public comment.

RB 58: Committee action for Disapproval consistent with CTC position based on approval of E85. No public comment.

RB59: Committee action for Disapproval consistent with CTC position based on approval of E85. No public comment.

RB60: Committee action for Disapproval consistent with CTC position based on approval of E85. No public comment.

### **6.2 Research program update**

Tom Kinney presented the final NOMMA report dated December 2007 which included the peer review. This report was previously posted. The CTC thanked Tom and NOMMA for their considerable effort in researching the fall safety of children due to guards and climbing.

### **6.3 Study Group report**

The posted “Draft Final Report” dated May 21, 2008 was approved. This concludes this CTC Area of Study.

## **7.0 Child Window Safety**

### **7.1 Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**IRC: RB 173, RB 174**

RB173: Committee action was Disapproval on Parts 1 and 2. CTC decided to submit public comments based on the submitted modifications considered at the Code Development Hearings, namely:

- Increase the minimum sill height to 36 inches
- Clarify the text for the operable sections of the window and the prohibition on the passage of the 4” sphere and remove the proposed reference to SMA 6001.

There was further discussion on the status of the referenced standard ASTM F2090 relative to window opening control devices. It was noted that there was a meeting tomorrow of the standard committee to expand the scope of the standard to such devices. The CTC will submit a public comment deleting the proposed text dealing with the operational features in favor of a reference to the standard. It was noted that the standard is currently referenced in the code text.

The three public comments will be drafted and be the subject of a follow-up CTC conference call prior to the Public Comment deadline of June 9<sup>th</sup>.

## **7.2 Study group report**

Nothing discussed beyond item 7.1.

## **8.0 Care Facilities**

### **8.1 Working meeting – Review of CTC Study Group latest draft (SG meets on May 20<sup>th</sup>)**

The Study Group met prior to the CTC meeting on May 20<sup>th</sup>. During this meeting they compiled Draft 3. CTC reviewed the draft with the following direction:

- Post Draft 3
- Continue to review and refine, taking into account care related changes that occur in the current cycle
- Finalize the report for CTC review and approval
- Implement the provisions in the report with code changes submitted for the 2009/2010 cycle

### **8.2 Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**IBC: G 22 – G 24, G 30 – 36, G 225, E51**

G22: Committee action for Disapproval consistent with CTC position. No public comment.

G23: It was noted that the code committee approved the code change As Modified. CTC decided to submit public comments based on the submitted modifications considered at the Code Development Hearings, namely:

- In Part 1, replace Section 421.2 in its entirety with comprehensive provisions dealing with smoke compartments.
- For Part 2, the code committee approved CTC's modification for fire protection but also removed the term "rendered" in Item 2 to Section 903.2.2. The term rendered should be included in the text in order to make it clear that the "four or more" threshold is a function of the facility and that the facility caused the patient to be incapable of self preservation.

G24: Modification by the code committee is consistent with CTC definition for "outpatient clinic". No public comment.

G30: The code committee approved as modified the proposed new definitions. These definitions include exhaustive laundry lists which are not advisable in the code nor should the terms be defined with requirements built into the definitions. Submit public comment for Disapproval.

G31: Committee action was Disapproval. No public comment.

G32: Committee action was Approval. This approval has the net effect of providing less fire protection as the occupant load increases. Submit public comment for Disapproval.

G33: Committee action for Disapproval consistent with CTC position. No public comment.

G34: Committee action for Disapproval consistent with CTC position. No public comment.

G35: CTC did not take a position on this proposal prior to the hearings.

G36: Committee action for As Modified consistent with CTC position. No public comment.

G225: CTC did not take a position on this proposal prior to the hearings.

E51: The CTC was presented information noting that the patients with dementia and similar ailments require a balance between security and fire safety, while at the same time not creating a situation where doors need to be continually monitored by staff. CTC will submit a public comment patterned after current 1008.1.8.6 to address these special needs.

The public comments noted above will be drafted and be the subject of a follow-up CTC conference call prior to the Public Comment deadline of June 9<sup>th</sup>.

## **9.0 Review of NIST WTC Recommendations**

### **9.1 a. Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**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**

S59: Committee action for Disapproval consistent with CTC position. No public comment.

S81: CTC code change. Submit public comment in anticipation of standard being completed.

S101: Committee action for Disapproval. It was noted that NCSEA is investigating to determine if they will submit a public comment for which CTC could co-sponsor. Concerns noted that the code change was too broad – it should be limited to only high rises in Categories III or IV. A motion to set the threshold at 420' failed. Submit public comment.

F84: Committee action for As Modified consistent with CTC position. No public comment.

F85: Committee action for Approval consistent with CTC position. No public comment.

F86: Committee action for Disapproval consistent with CTC position. No public comment.

F87: The “repeater” task group has been working to resolve the concerns with respect to this proposal which was Approved and CTC’s F171. The task group has been working with the proponents of F87 in this regard. The CTC concerns are:

- Too restrictive for existing buildings where wired communications are in place
- Clarification of the signal not being required to be amplified outside the building – the signal strength to be received and accommodated in the building.
- Allow the AHJ to determine the time frame for retroactive requirement
- Location of requirement for the minimum signal strength – in the appendix or in the code?

CTC to submit a public comment, preferably a joint comment with the proponent.

F95: Committee action for As Modified consistent with CTC position. No public comment.

F171: Do not pursue CTC code change in favor of F87.

F204: Committee action for Disapproval consistent with CTC position. No public comment.

F211: Committee action for Disapproval consistent with CTC position. No public comment.

FS7: Committee action for Disapproval consistent with CTC position. No public comment.

FS113 – FS 115: All three code changes related to structural frame. CTC needs to submit a public comment which coordinates the code committee action to be make it clear that bracing which is required to provide lateral stability for the structural frame needs to be protected as part of the structural frame. Submit public comment to FS115.

G46: The “sprinkler redundancy” task group has been working with both the Ad Hoc TRB and the NIBS/MMC committees in an effort to resolve their differences. The concerns that need to be addressed:

- With two risers interconnected, there is possibility that a single breach could render up to 6 floors unprotected. A possible solution being two risers serving alternate floors.
- Sprinkler riser location to be in enclosed exits which are remotely located per the egress requirements of Chapter 10.
- Making sure the supply provisions at the streets do not allow for a single event to render the system unusable.

Submit a public comment based on the criteria noted above, preferably a joint comment with TRB and NIBS/MMC.

G51: Committee action for Disapproval consistent with CTC position. No public comment.

G52: Committee action for Disapproval consistent with CTC position. No public comment.

G53: Committee action for As Modified consistent with CTC position. No public comment.

G56: Committee action for Disapproval consistent with CTC position. No public comment.

G57: Committee action for Disapproval consistent with CTC position. No public comment.

G58: Committee action for Disapproval consistent with CTC position. No public comment.

G60: Withdrawn by proponent.

G61: Committee action for Disapproval consistent with CTC position. No public comment.

G65: Committee action for Disapproval consistent with CTC position. No public comment.

G66 & G67: CTC affirmed their position that the additional stair approved last cycle lacked sufficient justification. As such, the CTC preference is to submit a public comment to G67 in support of its elimination. In the event this fails, CTC will submit public comments to address two issues:

- If the occupant –use elevators of E14 is approved, the additional stair should not be required
- The additional stair should not be required where the floor plate is small enough and the resulting occupant load can be accommodated by the total remaining exit stair width with a stair assumed as not in service.

G68: The clarification offered by the code committee on the approval of the code change is acceptable to the CTC. No public comment.

G69: The CTC maintains its position that density of the fireproofing material has not been demonstrated to correlate with bond strength. Porosity of the material plays a crucial role as well. There is still a question of the event being mitigated and why the material strength needs to increase with height of the building. Submit public comment in support of the proposal.

G108: CTC is in general support of a risk assessment for certain buildings. CTC feels that the thresholds are too low and that item 3 places an unreasonable burden on the AHJ to make such a determination without definitive criteria. Work with Ad Hoc TRB and NIBS/MMC to see if a reasonable compromise can be reached and submit a joint public comment.

G193 – G200: Fire service elevators. Committee action for Disapproval consistent with CTC position on all of these changes. No public comment.

E3 & E4: CTC favors E3 over CTC change E4. Committee action for Approval on E3 consistent with CTC position. No public comment.

E14: CTC feels that this is necessary first step in the evolution of egress in high rises – the use of elevators to evacuate the building. Issues:

- Should this be an alternative to the additional exit stair
- What is the fire record of such high rises?
- Mandatory vs optional?
- The proposal places a limit on the number of occupants which can be accommodated such that there is still a reasonable amount of stair capacity

Submit a public comment tied to the additional stair – occupant elevators as an alternative to the additional stair.

E135: Committee action for Disapproval consistent with CTC position. No public comment.

E145- E149: did not take a position on this proposal prior to the hearings.

The public comments noted above will be drafted and be the subject of a follow-up CTC conference call prior to the Public Comment deadline of June 9<sup>th</sup>.

**b. Holistic approach to high rises (from Dec/2007 meeting; item 8.1; G58)**

The issue is one of the current piece meal approach employed by the code development process to study and resolve high rise safety issues vs a more holistic approach. In this regard, NIST held a conference in April – limited primarily to means of egress issues. Not action by CTC at this time.

## **10.0 Balanced Fire Protection**

### **10.1 Vertical openings study group**

#### **a. Working meeting – Review of CTC Vertical Opening Study Group findings (SG meets on May 20<sup>th</sup>)**

The study group met prior to the CTC meeting on May 20<sup>th</sup>. The focus of the meeting was the review of code changes FS118, FS 161 and FS162. It was reported that the outcome of the meeting was that agreement could not be reached by members of the study group on the submittal of a public comment(s).

“Majority report”: The study group further reported that it feels that it can not reach consensus on the code changes in the current cycle but should proceed for the next cycle and drafted the issues noted in Appendix A to these minutes as the basis for their direction.

“Minority report”: The proposal (FS162) is one and one half years in development and consensus could not be achieved even though objective comments have been responded to. The proposal is a significant improvement over current provisions for opening protection which are highly fragmented and disjointed.

CTC stated that the group should continue to investigate the issue noted (Appendix A) and develop a proposal for CTC review prior to the 2009/2010 code change deadline.

#### **b. Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

**IBC: FS 118, FS 161, FS 162**

FS 118: CTC position is to support the Approval as Submitted action by the code committee.

FS 161: CTC is to support the proposal in concept, subject to review of specific modifications offered in the public comments, if any.

FS 162: CTC position is to support the Disapproval action by the code committee.

### **10.2 Features study group**

#### **a. Working meeting – Review of CTC Features Study Group findings (SG meets on May 19<sup>th</sup>)**

The study group met before the CTC meeting on May 19<sup>th</sup>. During the Features study group meeting, the focus of the meeting was to review revised compartment areas of G110 based on a “blended flow basis”. The net effect is to reduce the areas by approximately ½. These values are based on a unsprinklered building having a 1000 gpm fire flow and a sprinklered building having a 1500 gpm fire flow. The study group will pursue public comments on the following code changes: G110, G115, G117, G118, G119, G120

#### **b. Working meeting – Review of CDH action on 2007/2008 cycle code changes and develop public comments, if any**

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

Based on the action taken by the Features study group, CTC considered only code changes G110, G115, G117, G118, G119, G120.

G110: CTC supported the revised compartment areas noted by the results of the study group.

G115, G117 – G120: All five of these code changes were disapproved by the code committee. The changes propose to reduce the height of unprotected construction for Groups B, M, R-, R-2, R-4, S-1 and S-2. CTC voted to support the proposals.

### **10.3 Roof vent study group**

#### **a. Presentations (item held over from Dec/2007 meeting)**

Prior to the presentations starting, it was noted that it was 2:00 pm on May 22<sup>nd</sup> and the meeting was slated to adjourn at approximately 3:30 pm. The presentations were initiated with the study group noting the history on this issue and the lack of consensus on how to address the issue. The order of the presentations was agreed to be:

- Rich Schulte and others, if any
- Rick Thornberry and others, if any
- Question and answer

The following was presented and have been posted:

Schulte: “Balanced fire protection: Are smoke/heat (roof) vents necessary for occupant and firefighter safety in one-story industrial and industrial storage buildings protected by standard spray sprinklers?”

Beyler: “Smoke and heat venting in sprinklered facilities”

Issues:

- Study group needs time to work it out. They’ve developed a work plan. It’s a small group having difficulty reaching consensus.
- Full scale testing at the California site that was being considered will not occur
- Full scale testing requires EPA approval
- Do the presentations reflect current IBC provisions or potential future roof vent provisions?
- Roof vents are an integral tool for fire fighting operations
- The current provisions in the IBC requiring roof vents require justification

In the interest of time, the CTC had to stop the discussion at 4:00 pm and adjourn the meeting. The discussion will continue at the next CTC meeting.

#### **b. Working meeting – Review of CDH action on 2007/2008 cycle code changes for roof vents and develop public comments, if any**

**IFC: F 191 – F 200**

**IBC: E 112 – 115**

No action taken as the presentations in 10.3 were not completed.

### **10.4 Methodology**

#### **a. Study Group report**

No report. Hold for next meeting.

### **11.0 Emergency Evacuation with Elevators**

#### **11.1 Study group goals and objectives**

##### **a. Relationship with NIST WTC Recommendations area of study**

Not discussed. Hold for next meeting.

### **12.0 Old business**

None.



### **13.0 New business**

#### **13.1 Two possible areas of study for the CTC to consider**

##### **a. Marking standards for rating of fire-resistance and fire protection rated glazing**

This item was considered as the first order of business on Thursday as requested by those present to speak on the item. Staff noted that this issue is the result of a successful motion considered at the Palm Springs hearings by the IBC – Fire Safety Committee. The IBC - FS committee recommended that the ICC Board either create an ad hoc to study this issue or to have it added to the CTC agenda. The issues stem from the perennial code changes that seem to be considered at the ICC hearings regarding the protocol and criteria for labeling fire rated glass. Information presented to the CTC:

- The issue has been resolved based on the consistent action taken by the code committee over the years on this issue and CTC need not study it.
- This is an industry issue and should be solved by the industry. The counter argument was one of an objective third party such as CTC to study the issue.
- This issue was brought before NFPA 80 and could not be solved. It is also before the fire rated glazing council.
- Just because the issue is disapproved at the code hearings is not basis in and of itself for CTC not to investigate
- Even if CTC studies the issue, it will not stop code change submittals from occurring. It was countered that the CTC results of the study would be used as the counter argument to any subsequent code changes.

CTC considered the views both for and against taking this on as an area of study. CTC concluded that its forum is indeed the type of venue for such issues to be debated with the CTC acting as an objective third party. CTC will recommend to the ICC Board to add this area of study to CTC's agenda.

##### **b. Unenclosed stairs – exit or exit access**

Not discussed. Hold for conference call and follow up recommendation to the ICC Board.

### **14.0 Future Meetings (tentative)**

#### **14.1 CTC Meeting #16: August 13 – 14, 2008**

Staff noted that there is high probability that this meeting will not be held. The next meeting will be by conference call to finalize the public comments to be submitted this cycle.

#### **CTC Meeting #17: October 15 – 16, 2008**

#### **CTC Meeting #18: December 10 – 11, 2008**

#### **14.2 Establish tentative meeting #16 agenda**

See above.

### **15.0 Adjourn**

The meeting was adjourned at approximately 4:00 pm on May 22<sup>nd</sup>.

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

**Appendix A**  
**CTC Vertical Opening Study Group**  
**Draft of Chapter 7 issues**  
**(May 20, 2008)**

**Scope: 701, 702, 704 – 717 w/in scope**

**Outside of scope: Test protocol (703), 718 plaster, 719 insulation, 720 & 721 ratings**

**Ch 7 broad issues:**

- **Format (F)**
- **Definitions (D)**
- **Technical requirements (T)**
- **Migration limits (M)**
- **Other issues (O)**

**Task groups:**

**Format: 4, 12, 15**

**Non regulated issues: 1, 2, 3, 13, 14**

**Clarity 5, 6, 10, 11, 18, 19**

**Design features 7, 8, 9, 16, 17**

**Ch 7 specific issues:**

1. T : Horizontal assemblies currently in Ch 7 are, by definition, rated. What do you do with non rated roof and floor assemblies?
2. T/F: What do you do with non rated wall assemblies?
3. T: What to do with openings in assemblies req'd to be rated only per T 601. Bearing wall in T601 is rated – openings req'd to be protected?
4. T/F: Do loops/dead ends in Ch 7. FS 161 was intended to start to fix the problems, such as:
  - o 712.4 says go to 707; 707.8 says go back to 712; 707.2 # 3 sends you back to 712.4
  - o 716.1 says it governs unless need to go to 712 but 712 sends you back to 716
  - o 712.4.2 says “go to 707 or comply w/ this section”....nothing in 707
  - o 712.4.1.2 deals with horiz assemblies and Except #1 deals with walls
5. D/T: Difference between an opening, penetrations, joint and duct/air transfer openings?
  - o Can a stair be called a penetration? An opening?
6. D/T: Defn's for flame stop, fire stop, fire blocking, draft stop
7. T/F: Penetrations in concealed vs unconcealed locations
8. T: Membrane penetrations – E 5 standard.....712.3.2 & 712.4.1.2
9. T: 100 sq in/ 100 sq ft.....100 sq ft can be a strip 1 ft by 100 ft
10. T/F/D: Penetration types: through, partial (ie confined within hollow core slab), membrane
11. T: Look at exceptions to 707.2 and clarify.
12. F: Where to keep the atrium provisions? ..just another type of floor opening
13. T: 710 smoke partitions – tie it to specific sections which are req'd to be smoke partitions. What's a barrier to the transfer of smoke in I-2. Corridors require smoke partitions. Incidental use and smoke partitions.
14. T: Joints in non rated floors.
15. F: Consistency in the title and formats of the 4 sections concerning: openings, joints, ducts, penetrations
16. T: How to verify structural integrity of horizontal openings in 711.4
17. T: Assume a convenience stair is permitted. How about unprotected openings x feet away from the stair opening – need to protect the openings? Why protect the openings when you have this large hole which allows free passage?
18. T: Number of floors connected and the rules for compliance. Do the rules need to be consistent across the board. Are they considered “unprotected”? Each of the following allow for greater than a 2 floor connection:

- Escalator openings
  - Ducts in non rated assembly in 716
  - Atrium
  - Convenience stairs
  - NC items penetration of non rated floor – 3 floors
  - Ducts less than 3 stories rated or non rated floors
  - Mezzanines
- 19. D:** Definitions in Ch 7 vs definitions in referenced standards - consistent

**ICC CODE TECHNOLOGY COMMITTEE  
MEETING #15**

**DRAFT MINUTES**

**List of Attendees**

<b>Mike Ashley</b>	<b>AFSCC</b>
<b>Eric Babcock</b>	<b>Hughes Associates/NYSOMH</b>
<b>Dave Cooper</b>	<b>SMA</b>
<b>Todd Daniel</b>	<b>NOMMA</b>
<b>Dave Dratnol</b>	<b>Isolatek International</b>
<b>Roger Flynn</b>	<b>NOMMA</b>
<b>Dave Frable</b>	<b>US GSA/PBS</b>
<b>Sam Francis</b>	<b>AF&amp;PA</b>
<b>Jay Hall</b>	<b>PCA</b>
<b>Diana Hanson</b>	<b>NADRA</b>
<b>Megan Headley</b>	<b>US Glass Magazine</b>
<b>Joel Herman</b>	<b>NOMMA</b>
<b>Harold Hicks</b>	<b>Atlantic Code Consultants</b>
<b>Jonathan Humble</b>	<b>AISI</b>
<b>Greg Keith</b>	<b>The Boeing Company</b>
<b>Marshall Klein</b>	<b>Marshall Klein &amp; Associates, Inc.</b>
<b>Bill Koffel</b>	<b>Koffel Associates</b>
<b>Vickie Lovell</b>	<b>Intercode Inc.</b>
<b>George Martin</b>	<b>Howard County DILP</b>
<b>John McCormick</b>	<b>CCI</b>
<b>Bill McHugh</b>	<b>Firestop Contractors International Association</b>
<b>Randy Melvin</b>	<b>Winchester Homes Inc.</b>
<b>Jim Messersmith</b>	<b>PCA</b>
<b>Dan Nichols</b>	<b>State of New York</b>
<b>Kristine Oppong</b>	<b>Nystrom, Inc.</b>
<b>Jake Pauls</b>	<b>Jake Pauls Consulting Services</b>
<b>Larry Perry</b>	<b>BOMA International</b>
<b>Katrina Ralston</b>	<b>Feeney &amp; NOMMA</b>
<b>Sarah Rice</b>	<b>Schirmer Engineering</b>
<b>Emory Rodgers</b>	<b>DHCD Virginia</b>
<b>Betsy Rodriguez</b>	<b>NOMMA</b>
<b>Kurt Roeper</b>	<b>Ingersoll Rand</b>
<b>Julie Ruth</b>	<b>AAMA</b>
<b>Bob Sampson</b>	<b>Acralight International</b>
<b>Richard Schulte</b>	<b>Schulte Associates</b>
<b>Kate Steel</b>	<b>Steel Consulting, SAFTI First</b>
<b>Rick Thornberry</b>	<b>The Code Consortium</b>
<b>John Valiulis</b>	<b>Hilti, Inc.</b>
<b>Rich Walke</b>	<b>Underwriters Laboratories</b>
<b>John Williams</b>	<b>WA Dept of Health</b>
<b>John Woestman</b>	<b>BHMA &amp; WDMA</b>
<b>Tom Zuzik, Jr.</b>	<b>Artistic Railings and NOMMA</b>