

Minutes for Uniformity/Code Forum for April 8th 2008

Mr. Hilton welcomed everyone attending and started the meeting at 1:00pm.

There was no old business.

1. Suspended ceiling requirements. We seem to be the only jurisdiction in the state making them do.....

There is not much in the 2006 IBC specific to suspended/acoustical ceilings. Nearly all of the information will be found in ASCE 7 or Cisca Standards. Gilbert brought a document he put together with information for ceiling requirements. He mentioned that by 2011, it is possible that everything would be in one document. Items mentioned that were incorrectly done or no longer required were the struts no longer required if area is under 1000 square feet, installation of spreader bars, and 2" perimeter grid. The new products by Armstrong and Chicago Metallic and several other are approved and must be installed per their ES report. It is also required that special inspection be made on these ceilings. Gilbert says"

Special inspection of suspended ceilings is not being required by the majority of jurisdictions, simply because the jurisdictional inspectors have more knowledge and expertise in this area.

The jurisdictional inspectors while looking at suspended ceilings will typically look at electrical, mechanical etc. at the same time

The committee looking at suspended ceilings after the quakes in California, noted numerous failures of suspended ceilings do to the fact they were installed incorrectly with NO inspections.

Also not being noted in IBC 109.3 as a required inspection, they were concerned these ceilings would not be inspected.

Ceilings < 1000 sq.ft. do not require horizontal restraint per ASCE 7, but I believe would still require 2 inch wall angle and spreader bars.

Hopefully this clarification helps.

2. Discussion of 102.1.3 of the Energy Code.

Plans Examiners need to review carefully the COM check submitted with the plans. Inspectors should be doing an inspection from the checklist that is included with the Com Check. You can get good information from www.nfrc.org on window requirements. We are going to talk with Roger Evans about doing a basic class on looking at a Com Check. Also there is training offered by the Utah State Energy Program for the year.

3. Keyed vs thumb tab deadbolts. Although there was a lot of discussion on this and a written interpretation from ICC, we could not really come to an agreement on this. Mike Barrett was assigned to do further research on this.

4. Residential Decks. Chris Kimball wrote.... "At the Utah Chapter Uniformity meeting yesterday, I was asked to re-send this email to everyone. Since I originally sent it I have found out some additional information and included it herein. I hope everyone will consider enforcing these items. While they have been required by the code for some time, there was not a prescriptive way to comply until now. We can give the permit applicants an option, either comply with the approved connection details, or provide an adequate design that meets the code requirements. "

Item #1 - Deck Guardrail Post Connection

Recently Structure magazine addressed the connection of guardrail posts to residential deck structures. IRC Table R301.5 requires that deck handrails be designed for a 200# concentrated load applied in any direction along the top of the rail. The article discusses studies that were performed to see what constituted a code-conforming connection of the guardrail posts to the deck. I was very surprised at the findings. Not only did assemblies using 1/2-inch lag screws not meet the code requirements, but some beefy-looking connections using 1/2-inch thru-bolts did not meet the force requirements. The article provides two details that do meet the code-prescribed force levels. Detail #1 (see attached image) is for posts attached inside the band joist. Detail #2 (see attached image) is for posts attached outside the band joist. These details require a holdown at each post (Simpson HD2A was used in testing). It is also important to note that the centerline of the holdown must be within two inches from the top of the joists. I believe we have all been on decks where you do not feel safe resting against a guardrail. I hope everyone will begin requiring that a holdown be installed at each guardrail post. If you would like to read the entire article please go to the following link:

<http://www.structuremag.org/article.aspx?articleID=303>

Item #2 - Lateral Deck Connection to Structure

Simpson Strong-Tie sends out a quarterly newsletter entitled "Structural Report" that I always receive by email. For those of you who do not receive this, you should consider subscribing as it is brief yet provides a lot of very useful information. In October of 2007 they addressed an IRC requirement for the lateral connection of decks to exterior walls (<http://www.strongtie.com/ftp/newsletter/SR-07-10.pdf>). When I looked in the IRC I could not find this requirement, yet IRC R502.2.2 requires decks attached to the primary structure provide a positive attachment designed for both vertical and lateral loads. This section also states specifically that this attachment cannot consist of toenails or nails subject to withdrawal. Most ledger connections I have seen only address gravity loads, with no consideration for lateral loads as required by IRC R502.2.2. So the IRC requires a lateral attachment, but what should that attachment consist of? Well the new 2007 Supplement to the IRC provides prescriptive requirements for the gravity connection of the ledger to the primary structure as well as a minimum of two 1500# holdowns for the lateral connection of the deck to the primary structure. These requirements will be included in the 2009 IRC. While the state has not adopted the 2007 IRC supplement, I believe it is okay for us to reference it as it clarifies the current requirements of IRC R502.2.2. It now provides prescriptive connection requirements. If permit applicants do not choose to use the prescriptive connection requirements, they must provide a design that takes into account the lateral connection of the deck to the primary structure. I have

attached a PDF of that portion of the 2007 IRC Supplement which addresses these revisions made to IRC R502.2.2. If you would like to review the entire IRC and IBC supplements please go to the following links:

2007 IRC Supplement: <http://www.iccsafe.org/cs/codes/2007-08cycle/2007Supplement/IRC07S.pdf>

2007 IBC Supplement: <http://www.iccsafe.org/cs/codes/2007-08cycle/2007Supplement/IBC07S.pdf>

I hope this may be of some help to you. Please feel free to call me if you have any questions or concerns.

Thanks,

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5. Questar's new requirement re: 4 oz vs 2 lb gas lines. When inspectors do a gas line inspection it is very important to write in the size of gas meter that is to be installed. We are going to set up a meeting regarding this because that is not in the IRC or IMC or IFGC and really we cannot require or enforce this requirement. See below.



Questar Gas Company
1117 West 200 South
P.O. Box 45500
Salt Lake City, UT 84145-0500
Tel: 801.521.5000

Standard Residential Pressure For New Construction

Questar Gas' standard residential pressure is four ounces. Questar Gas has received increasing numbers of requests for two-pound-pressure meter sets. Unfortunately, hundreds of these requests have included incorrect information about the necessity of a two-pound meter set.

The Questar Gas Utah Tariff states:

"The sizing and design of meter sets will be established by Company personnel on the basis of the expected deliverability requirements of the customer."

The criteria Questar Gas will use to determine whether a two-pound set is necessary are:

- A deliverability requirement of at least 701 cubic feet per hour;
- The deliverability requirement on a four-ounce meter set will require a fuel-line diameter of 1 1/2 inches or larger in diameter;
- The deliverability requirement on an existing four-ounce set has increased during a retrofit, requiring more fuel than the existing fuel line can supply;
- The equipment specifies a two-pound-pressure requirement.

All other meter installations will be standard four-ounce pressure.

Section 402.1 of the International Fuel Gas Code has been amended to read: In residential occupancies, natural gas service lines shall be no less than 1 inch (25mm) in diameter.

Requests for two-pound meter sets on strip malls, apartment complexes, multiunit condos, or town homes, will be considered on a case-by-case basis.

We are going to try to set up a meeting with Questar to discuss this.

6. R-2 vs R-3 Townhouses vs condos. We discussed the difference between a “townhouse” and a “condo”. A townhouse could be sold as a condo. We also discussed running electrical feeders through the townhouse which is not addressed by the IRC or NEC. Some cities have required an easement when running feeders through another unit. Gas lines cannot go under someone else’s unit.

7. New requirement on civil vs structural engineers stamping structural plans.

Definitions of Significant Structures from text of bill (summary.) 2008 S.B. 200 PROFESSIONAL ENGINEERS LICENSING AMENDMENTS

Significant structures include:

(i) Buildings and structures representing a substantial hazard to human life including:

- (A) Public assembly with an occupant load greater than 300;
- (B) Elementary & secondary school, or day care facilities with an occupant load over 250;
- (C) Buildings with an occupant load greater than 500 for colleges or adult education facilities;
- (D) Health care facilities with an occupant load of 50 without surgery or emergency facilities;
- (E) Jails and detention facilities with a gross area greater than 3,000 square feet; or
- (F) Any occupancy with an occupant load greater than 5,000;

(ii) Buildings and other structures designated as essential facilities, including:

- (A) Health care facilities having surgery or emergency treatment facilities over 3,000 SF.
- (B) Fire, rescue, and police stations and emergency vehicle garages 24 feet tall or 5,000+ sf.
- (C) Designated emergency shelters over 3,000 sf;
- (D) Designated emergency operation centers over 24’ tall or 5,000+ sf;
- (E) Public utility facilities required as emergency backup facilities over 3,000 sf;
- (F) Structures over 24 feet high or 5,000+sf. with highly toxic materials over allowances.
- (G) Air traffic control centers, and emergency aircraft hangars over 35’ or 20,000 sf.

(iii) Buildings and other structures requiring special consideration, including:

- (A) Structures or buildings that are:
 - (I) Normally occupied by human beings; and
 - (II) Five stories or more in height; or
 - (III) With average roof height over 60 feet above the average ground level; or
- (B) All buildings over 200,000 aggregate gross square feet in area.

This new requirement goes into effect on June 1, 2008. This will require a structural engineer to stamp structural plans of all buildings defined above.

8. NEC vs IRC electrical section. Question was whether to delete the Electrical portion of the IRC and go with the NEC or not. This comes up for public comments on the 15th of May at the Building Code Commission Meeting. PLEASE DO NOT GO TO THIS MEETING AND EXPRESS YOUR VIEW IF YOU HAVE NOT DONE ANY RESEARCH ON WHY THIS CHANGE IS BEING PROPOSED.

If you have any questions on this, please contact Scott Marsell, Gilbert Gonzales or Ryan Jackson as they are on the appointed committee to research this.

9. Disaster Preparedness (are we all on the same page)? Mike Barrett from SL County will be getting us some information on this and we will determine how we can coordinate throughout the state.

At approximately 3:30, Mr. Hilton adjourned the meeting. Next meeting will be on May 13, 2008 at Sandy City Hall.