



To: ICC-ES Evaluation Committee
From: Kurt Stochlia, P.E.
Date: May 21, 2008
Subject: ICC-ES Staff Memorandum Dated April 1, 2008, Misc 1 on the May 2008 Alternate Criteria Process Agenda, Subject MISC1-0508-R1 (KS/BG)

MEMO

ICC-ES has received numerous letters (which are posted on the ICC-ES web site) in response to the staff letter dated April 28, 2008, and the staff memo dated April 1, 2008. A list of the letters received is enclosed with this memo. The ICC-ES staff would like to thank the writers of the letters for their constructive comments on a difficult and controversial subject. The following attempts to provide a summary of the comments in the letters and puts forth some questions and issues that need to be resolved. It appears that before we can make a determination on the suitability of specific seismic coefficients and factors, for proprietary products installed in code-defined seismic force resisting systems and complete seismic force resisting systems not included in Table 12.2-1 of ASCE 7, we should first agree on the approach.

There appear to be four basic approaches for ICC-ES to consider regarding the assignment of seismic coefficients and factors to proprietary lateral-force-resisting (LFR) products and systems:

- Ignore the issue and publish evaluation reports that are silent on seismic coefficients and factors that should be applicable to the product or system described in the evaluation reports.
- Develop seismic coefficients and factors based on the approach in ATC-63.
- Develop seismic coefficients and factors based on a shaker table data approach.
- Develop seismic coefficients and factors based on an “equivalency” approach.

The following are comments on each of the approaches.

- Although to ignore the issue in evaluation reports would be the easiest approach for ICC-ES, we believe there is a need for this type of information for both code officials and designers. Comments in the letters support this opinion. Additional information as to why ICC-ES is addressing this issue at this time is noted in the staff memo dated April 1, which is enclosed with the staff letter dated April 28.

- The ATC-63 approach appears to eventually be a viable approach for the future. Although ICC-ES would like to pursue this as an option, it might lack practical application for the typical evaluation report applicant. The document is incomplete and a final version has yet to be published. Also, the document currently does not have any code standing (requirements) and ICC-ES would have to consider it as an alternative approach to code-complying systems. This would require submittal of some form of documentation justifying the approach as an alternative to the code.
- ICC-ES has been approached and we are currently in discussions with an applicant who is considering a shaker table data approach.
- An “equivalency” approach has been used by ICC-ES, (with help from a knowledgeable task group) to develop AC322 and revisions to AC130. This approach appears to have promise if developed correctly, with input from knowledgeable sources.

An additional consideration should be the time element involved in the development of criteria that would resolve the seismic issues.

It would be advantageous if solutions were pursued collectively by industries rather than by individual companies.

Staff believes that any approach should involve input from a knowledgeable committee or panel. The ICC-ES staff requests input from the Evaluation Committee and interested parties regarding the following:

1. Are there any other viable approaches?
2. Is it possible to streamline the approach outlined in ATC-63?
3. Would an approach similar to that outlined in AC215 be viable for another product?
4. Since it appears that input from knowledgeable sources (committees or panels) is important, how would these committees or panels be formed? Who would have oversight? Would the committees or panels be made up of volunteers? Who would pay for the process? What would be a reasonable time frame within which the committee or panel should act?
5. Would the committees or panels be reviewing information or producing information, or both?

6. It appears that expert input needs to be provided in two phases. The first would be in making a decision as to whether a given approach is viable, or which approach is the most viable. Once a decision has been made as to a type of approach (such as an equivalency approach), discussions can begin on the details, such as which parameters are important and what numbers should be or have been assigned to the parameters. We see this as essential roles of the committees or panels. The two phases would not necessarily involve the same "experts."
7. The equivalency approach used to develop AC322 appears to be one type of equivalency (large database). Would another type of equivalency using a smaller database be possible?
8. Probably the most pressing question is, What can be done in the near future?

ICC-ES is soliciting input from interested parties regarding the items noted in this memo and the letters received.

Enclosure

Enclosure

Simpson Gumpertz & Heger Inc.	Letter dated: May 13, 2008
Western Wall & Ceiling Contractors Association	Letter dated: May 6, 2008
J. R. Harris & Company	Dated: May, 2008
Sacks Industrial Corporation/Structa Wire Corp	Letter dated: May 2, 2008
Sacks Industrial Corporation/Structa Wire Corp	Letter dated: May 2, 2008
Sacks Industrial Corporation/Structa Wire Corp	Letter dated: May 13, 2008
Weyerhaeuser	Letter dated: May 14, 2008
Washington State University	Letter dated: May 12, 2008
Composite Framing Systems, Inc.	Letter dated: April 29, 2008
Graeme Dick, S.E.	Letter dated: April 2, 2008
Graeme Dick, S.E.	Letter dated: April 28, 2008
Graeme Dick, S.E.	Letter dated: April 27, 2008
Graeme Dick, S.E.	Letter dated: April 29, 2008
Graeme Dick, S.E.	Letter dated: April 29, 2008
Graeme Dick, S.E.	Letter dated: May 6, 2008
Graeme Dick, S.E.	Letter dated: May 21, 2008
Shelter Works	Letter dated: May 14, 2008
Portland State University	Letter dated: May 14, 2009
The University of Texas at Austin	Letter dated: May 2, 2008
Structural Engineers Association of California	Letter dated: May 12, 2008
R. F. Nelson & Associates Structural Engineers	Letter dated: May 13, 2008
American Forest & Paper Association	Letter dated: May 14, 2008
Bob Bachman, S.E.	E-mail dated May 18, 2008