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February 2, 2009

TO: PARTIES INTERESTED IN ANCHORAGE TO CONCRETE

SUBJECT: Acceptance of ACI 318-08 D.3.3 (MISC 1-0209)

Dear Madam or Sir:

ICC-ES has been approached to consider adoption of ACI 318-08 Appendix D, specifically D.3.3. ACI 318-08 D.3.3 contains several changes from ACI 318-05 relative to anchoring to concrete in Seismic Design Categories C, D, E, and F. Significantly, D.3.3.3 allows the 0.75 reduction in design strength to apply to concrete failure modes only (breakout in tension, pullout in tension, side-face blowout of headed anchor in tension, breakout in shear, and pryout in shear) and excludes steel failure modes both in tension and shear, whereas ACI 318-05 requires the 0.75 reduction to apply to all failure modes, including steel.

Also, D.3.3.6 has been added, which allows for a nonductile failure mode provided either a 0.4 or 0.5 reduction in design strength is taken.

Staff review of other sections referenced in ACI 318-08 D.3.3 indicates these sections are generally unchanged or only editorially revised, with two exceptions.

First, D.5.2.9 and D.6.2.9 have been added, introducing anchor reinforcement as an alternative to computing breakout strength. Anchor reinforcement is additional reinforcement placed adjacent to the anchor with sufficient development length beyond the expected breakout plane.

Second, Section D.6.2.1 has been revised to include a new factor, $\Psi_{h,v}$ (defined in D.6.2.8) that will permit an increase in shear breakout strength in relatively thin members.

These two revisions potentially will increase anchor strengths beyond what ACI 318-05 allows. Therefore, excluding them at this time should result in conservative designs.

In summary, the purpose of this letter is to ask whether the option of allowing seismic design of anchorage to concrete in accordance with ACI 318-08 D.3.3 can be accepted as an alternative to designs complying with ACI 318-05 D.3.3 including the modifications set forth in IBC Section 1908.1.16. Sections referenced in ACI 318-08 D.3.3, outside of subsections in D.3.3 itself, will correspond to provisions in ACI 318-05.

You are cordially invited to submit written comments, within 30 days of the date of this letter. Please use the comment form on the web site attaching any letters to the form. An explanation of the alternate criteria process can be found on our web site at http://www.icc-es.org/Criteria_Development/alternative_criteria_process.shtml.

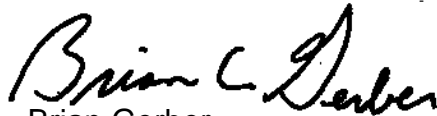
All comments received in the 30-day comment period will be considered. During this same 30-day period, however, the proposal will be balloted to the Evaluation Committee. If the public comments raise major issues, generate controversy, or require the criteria to be substantially rewritten, then ICC-ES staff may decide to reballot the subject; or place a revised draft on the web site for further public comment; or put the item on the agenda for a future Evaluation Committee meeting.

Correspondence received and a memo outlining staff's resolution of the comments in the correspondence will be posted on the web site shortly after the close of the comment period.

Your cooperation is requested in forwarding to the Los Angeles business/regional office all material directed to the Evaluation Committee. Parties interested in the deliberations of the committee should refrain from communicating, whether in writing or verbally, with committee members. The committee reserves the right to refuse communications that do not comply with this request.

Please submit all comments using the form on the web site. Attach any letters to the comment form. If you have any questions (not comments), please contact the undersigned at (800) 423-6587, extension 3260, or Mahmut Ekenel, at extension 3253. You may also reach us by e-mail at es@icc-es.org.

Yours very truly,


Brian Gerber
Principal Structural Engineer

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Enclosure

cc: Evaluation Committee