

**Rosalind Fazel**

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**From:** mark@gilligan.name  
**Sent:** Thursday, February 19, 2009 10:24 PM  
**To:** Rosalind Fazel  
**Subject:** MISC1 Comments

*Comments on Criteria MISC1.*

Mark Gilligan  
Mark K Gilligan SE  
510-548-8029  
mark@gilligan.name

*Comments:*

I welcome the changes in ACI 318-08 since they correct an illogical provision in Appendix D. Applying the 0.75 factor to steel elements makes it impossible to have a design whereby the calculated failure mode is a ductile steel mechanism. I believe the proposal to be ill advised. As I understand it ICC-ES does not adopt reference standards for inclusion into the code. That is left to ICC or to the local building department. It would be appropriate to state that a given product complies with ACI 318-08. It would be appropriate to let building officials know the problem with the existing provision and that the problem has been corrected in ACI 318-08. They should then be able to make their own decision.

## Rosalind Fazel

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**From:** emontague@strongtie.com  
**Sent:** Tuesday, March 03, 2009 1:27 AM  
**To:** Rosalind Fazel  
**Subject:** MISC1 Comments  
**Attachments:** MISC 1-0209 anchorage.pdf

### *Comments on Criteria **MISC1**.*

Emory Montague  
Simpson Strong-Tie  
(925) 560-9133  
emontague@strongtie.com

*Comments:*  
See attached.

### *Attachments:*

- MISC 1-0209 anchorage.pdf

March 2, 2009

Mr. Brian Gerber  
Principal Structural Engineer, ICC-ES  
5360 Workman Mill Road  
Whittier, California 90601  
Via Email

**RE: MISC 1-0209 Acceptance of ACI 318-08 D.3.3**

The following is in response to your request for comments regarding ACI 318-08 Appendix D for use in designing anchorages to concrete. Simpson Strong-Tie is in favor of allowing ACI 318-08 Section D.3.3 for anchorage design. The intent of Section D.3.3 is to insure ductility in anchorages in seismic areas. ACI 318-08 Section D.3.3.3 clarifies that the application of the 0.75 factor is to apply only to the brittle concrete failure modes. Section D.3.3.4 requires that the brittle failure mode capacities exceed the ductile steel anchor capacity so that the ductile steel anchor governs the design. Reducing the steel capacity by 0.75 lowers the limit that the brittle failure modes would be designed to resulting in a less conservative design for the concrete failure modes. Additionally, ICC-ES has already published a report (ESR-2089) which has anchor designs that do not apply the 0.75 factor to the anchor steel strength.

Simpson Strong-Tie is also in favor of allowing ACI 318-08 D.3.3.6 which is similar to the 2006 IBC Section 1908.1.16 modifications to ACI 318-05 except it reduces anchor capacity instead of amplifying the demand load.

Finally, Sections D.5.2.9 and D.6.2.9 in ACI 318-08 regarding anchor reinforcement design should be allowed as it is currently allowed in the commentary of ACI 318-05 Section RD.4.2.1. The commentary section states that "For anchors exceeding the limitations of D.4.2.2 or for situations where geometric restrictions limit breakout capacity, or both, reinforcement oriented in the direction of load and proportioned to resist the total load within the breakout prism, and fully anchored on both sides of the breakout planes, may be provided instead of calculating breakout capacity." The revisions to ACI 318-08 expand on this allowance and give specific design requirements. Providing anchor reinforcement will increase the ductility of anchorages which is desirable in seismic areas.

Thank you for allowing us to comment on this proposal.

Sincerely,

A handwritten signature in black ink that reads "Emory Montague".

Emory Montague, S.E.  
Senior Engineering Project Manager  
Simpson Strong-Tie