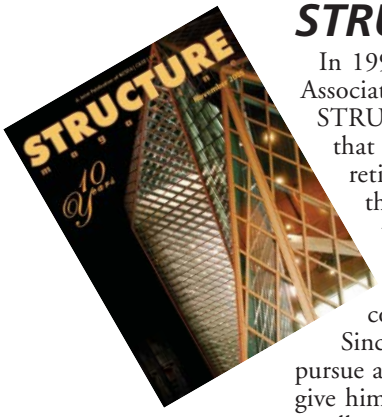
STRUCTURE magazine



In 1999, I became a member of the Structural Engineers Association of Utah; shortly thereafter I began to receive STRUCTURE. There was so much *good stuff* in each one that I saved them for a few months. However, since I am retired, I wondered what to do with them; so I gave them to a local architect and the local building inspector. But, there is so much good information in each issue; I discovered that it was really an excellent addition to my library and a continuing education course in structural engineering.

Since I now have a grandson who is enrolled in college to pursue a career in civil engineering, I am saving each issue to give him help in his structures classes. I believe it will be an excellent supplement to his textbooks. Keep up the good work; it is a great publication.

Carl H. Carpenter, P.E.

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Design of Anchors in Accordance with 2003 IBC

The author's have presented a concise description of the state of post-installed anchor design under the 2003 IBC. Under the non-linear provisions of FEMA 356, the design strength of such anchors is considered to be the mean ultimate strength minus one standard deviation. This value is significantly greater than the 5 percent fractile value being used in the IBC. Added to this, the value of Φ for all cases when considering concrete cone failure is considered to be 1.0. Since many provisions of the IBC require design for the full yield strength of the connected member, there is a large difference between the two documents, even when new anchors are being installed in a seismic retrofit.

It appears that the engineers developing the incorporation of the CCD Method into the IBC and those developing the separate FEMA documents covering seismic rehabilitation of existing structures need to coordinate their thinking. The author's comments and the comments of those involved with the development of FEMA 356 would be very useful.

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