



November 11, 2009

David Walls, Executive Director
CA Building Standards Commission
2525 Natomas Park Drive, Suite #130
Sacramento, CA 95833

Re: Concrete & Cement amendments to CA Green Building Code
(sections A5.405.5 – A5.405.5.3.2.3)

Dear Mr. Walls:

The California Construction & Industrial Materials Association (CalCIMA) thanks you and your office for their efforts to address concerns with regard to the originally proposed amendments for the concrete and cement provisions to the California Green Building Code.

As you may know, CalCIMA is the state-wide association for ready mixed concrete, aggregate, and industrial mineral producers in California. CalCIMA represents more than 100 companies and over 500 production facilities in California. Our members provide the locally produced materials to build California's roads, homes, bridges, waterways, hospitals, and schools.

From our review, the proposed code amendments should advance efforts to reduce energy inputs and increase the use and types of recycled materials in concrete production. This version expands the available recycled inputs to include not only a broader array of supplementary cementitious materials (SCMs), but also recycled aggregates and water. In addition, this version is more user-friendly, with simplified formulas, and includes discretion for project engineers to make adjustments as necessary for issues of structural integrity.

We offer these additional comments and recommendations.

- 1) **A5.405.5.2.1 Supplementary Cementitious Materials (SCM).** We greatly appreciate that specific reference to Caltrans specifications has been removed for fly ash, slag, and pozzolans (A5.405.2.1). As we mentioned in prior discussions, we had several concerns with specifically citing Caltrans specifications: the considerable differences between paving and building specifications, particularly paving specifications for a particular organization within a general building code; the newness and untested nature of the Caltrans specifications; and the unfamiliarity of the Caltrans specifications to structural engineers, architects, and other users in the building construction industry.

However, we are concerned that Caltrans specifications have been added with reference to the ultra fine fly ash and metakaolin sections (A5.405.5.2.1.2 and A5.405.5.2.1.3). For the reasons given previously, we do not recommend the California Green Building Code cite individual organization's project requirements, particularly those pertaining to a different type of construction application.

A further concern is that the proposed code language says to follow ASTM standards "....*and* the Caltrans specification." Such a construction would be problematic in most applications. At the least, the sentence should be changed to say, in effect, "ASTM *or*"

Recommendation: For A5.405.5.2.1.2 and A5.405.5.2.1.3, remove Caltrans specification references and change "*and*" to "*or*."

- 2) **A5.405.5.2.1.1 Mix Design Equation.** While Section A5.405.5.2 above includes a provision to allow discretion by an engineer and while the Mix Design Equation section also includes an exception for engineer discretion for high early strength concrete, we recommend one change to ensure the engineer has sufficient discretion in all potential instances (*changes in italics*).

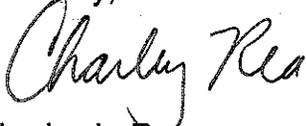
Recommendation: Exception: Minimums for concrete products requiring high early strength *or other special architectural or design consideration* may be lower as directed by the engineer

- 3) **Industry 'Sustainability' Proposal.** We also greatly appreciate the consideration given by you and your office to the "sustainability" proposal presented by industry. We realize the sustainability proposal was a significant one, and that there was not sufficient time to explore all its ramifications and provide detailed examples. However, we are hopeful the Board will give it serious consideration in the next round of code updates.

Recommendation: We encourage the Commission to consider the sustainability proposal in the next round of code development. We would commit to participate in such a process, and believe it should include a broad array of stakeholders, including concrete, cement, architectural, and structural engineering representatives.

Again, we appreciated the opportunity to work with you and your personnel the past several months. We look forward to participating in advisory and other working groups as the next cycle of Green Building Code development begins.

Sincerely,

A handwritten signature in black ink that reads "Charles L. Rea". The signature is written in a cursive style with a large initial "C".

Charles L. Rea
Director of Communications & Policy

Cc: Bob Raymer – Chair, Green Building Advisory Committee