



## BREIHOLZ QAZI ENGINEERING, INC.

Civil and Structural Engineering  
Seismic Hazard Reduction

January 28, 2010

Mr. David Masters  
Cellular Concrete Technologies, LLC  
192 Technology Drive, Suite B  
Irvine, CA 92618

Re: Product Review / Professional Opinion  
Stable Air™ Structural Lightweight Concrete  
Project Number: 4-007D

Dear Mr. Masters,

In response to a review of the Stable Air™ Structural Lightweight Concrete product research, development and performance, two issues come to light – seismic performance and quality assurance.

Seismic design, as you know, is a direct and fundamental function of the mass of the structure. The earthquake forces on a structure in response to ground motion are determined by the mass of the building. When the mass of a structure can be reduced by utilizing air-entrained lightweight concrete, it is much easier to provide an earthquake resistant building. The national and world vulnerability to damaging earthquakes is increasing daily and any building technology that can reduce this trend is much needed for life safety and reduction of property damage.

In regard to quality assurance, there is likely to be more quality in the design and the constructed product when air-entrained concrete is specified on any project. The specification itself triggers a design concrete mix, which typically requires a special inspector to verify the reinforced concrete is constructed as intended. However, with or without inspection, the quality and expectations of air-entrained structural concrete are superior to an undersigned, regular weight concrete mix. As an honorary member of the Structural Engineers Association of California and former chair of the Quality Assurance Committee, improving the quality of building materials is fundamental to our mission.

In regard to quality control, the capability of your patented Stable Air™ product to predict the in-place weight consistently within 3% is remarkable after to rigors of mixing, pumping and placing and says volumes regarding the quality of your air from precise sized bubbles. My familiarity with the process of generating air-entrained concrete tells me your success stems from producing the foam outside the concrete mix (versus the questionable, sometimes unpredictable chemical reaction within the mix) and utilizing a surfactant that keeps the air bubbles as small as possible.

