## JDB CODE SERVICES, INC.

**Date:** August 2, 2013

**To:** Structural TAC of the Florida Building Commission

C/O Mo Madani, DBPR

**From:** Joe Belcher for the Aluminum Association of Florida (AAF)

**Subject:** Topic for Research Funding – Aluminum Screen Enclosures

Please consider this a request for conceptual support for funding for a project to test aluminum screen enclosures. We seek a recommendation to the full Florida Building Commission to expend a maximum of \$50,000.00 for full scale testing of the wind resistance of screen enclosures. If agreed upon in concept, AAF working with the Structural TAC and IIHBS will develop a detailed plan to execute the project.

Past storms have identified problems with screen enclosures in high wind events. The AAF has addressed the problems through scale model wind tunnel testing and extensive engineering analysis. The testing and analysis led to the development of the Guide to Aluminum Construction in High Wind Areas (Guide) by AAF and a large group of engineers practicing in the aluminum industry. The Guide was subsequently adopted as a prescriptive standard by the Florida Building Commission within the Florida Building Code. The industry is requesting assistance in the form of funding to test the efficacy of the Guide and to evaluate a sample of popular engineering currently employed in the field.

We have discussed the feasibility of such a project with Dr. Timothy Reinhold, PhD, PE, of the Insurance Institute for Business and Home Safety (IIBHS). The project is considered feasible with the fee for the lab and full scale wind testing at \$16,000.00 per day. The project would consist of full scale wind testing of two screen enclosures. One screen enclosure would be erected in compliance with the Guide to Aluminum Construction in High Wind Areas 2010; the other screen enclosure would be erected in compliance with popular engineering available today as identified by AAF. AAF agrees to provide all materials and labor to construct the screen enclosures at the IIBHS facility. Funds to a maximum of \$50,000.00 are sought from the Commission to cover the costs of the lab time (\$32,000.00 for two days), transportation of materials to the IIHBS facility, and to cover the costs for travel of the construction crew plus three representatives of AAF.

Thanking you in advance for your consideration in this matter.

Cc: David Johns, President AAF

Dr. Timothy Reinhold, P.E., IIBHS Senior VP, Research, Chief Engineer

James Schock, P.E. Chairman Structural TAC

David W. Miller, Chairman, AAF Technical Committee