## T. ERIC STAFFORD & ASSOCIATES, LLC

November 14, 2005



## REQUEST FOR DECLARATORY STATEMENT

To: Florida Building Commission

Florida Department of Community Affairs 2555 Oak Shumard Blvd

Tallahassee, FL 32399

Attn: Mo Madani

From: T. Eric Stafford, PE

On Behalf of:

Institute for Building and Home Safety 4775 East Fowler Avenue Tampa, FL 33617

And

Mercedes Homes 1535 Cogswell Street Suite C-19 Rockledge, FL 32955

RE: Section 1609.1.1 of the 2004 Florida Building Code, Building

Section 1609.1.1 of the 2004 Florida Building Code, Building (FBCB) requires the determination of wind loads on all be buildings to be determined in accordance with Section 6 of ASCE 7. The 2005 Supplement to the 2004 FBCB requires the use of the 2002 edition of ASCE 7 (ASCE 7-02).

With regard to the application of the external pressure coefficients on the main wind-force resisting system (MWFRS) for use under the low-rise buildings provisions of Method 2 – Analytical Procedure, Section 6.5.12.2.2 and Figure 6-10 specific the applicable pressure coefficient for specific locations on the building. The Basic Load

2038 Club Road • Birmingham, AL 35244 205-987-9034 • 205-985-4375 (fax) Cases of Figure 6-10 show 8 separate combinations of wind pressure application produce structural actions that account for wind acting on a building from any direction.

In particular, the load cases shown for design of the MWFRS in the longitudinal direction depict the application of zones 2E and 2, and 3E and 3 across the span of the roof respectively, and could imply that uplift reactions for a truss would have to be designed for loads associated with these pressure coefficients applied in this manner. However, it is our contention that the application of pressure coefficients for the design of the MWFRS in the longitudinal would not apply to trusses which span in the transverse direction. The arrows shown on the figures clearly indicate that the coefficients apply specifically to "Direction of MWFRS Being Design." In the longitudinal direction, this would apply to members such as shear walls, moment frames, etc. that are resisting loads in that direction. The longitudinal coefficients should not be used for the determination of uplift reactions for trusses that span in the transverse direction. Uplift reactions for trusses that span in the transverse direction would be determined by the external pressure coefficients associated with those shown for the transverse directions, using zones 2E and 3E, and 2 and 3 across the span of the roof respectively.

Please confirm our interpretation of this issue.

Sincerely,

T. Eric Stafford, PE

2038 Club Road • Birmingham, AL 35244 205-987-9034 • 205-985-4375 (fax)

Nov 14 05 02:25p T. Eric Stafford