July 8, 2008

Florida Building Commission
Paula P. Ford, Clerk of the Commission
Sadowisk Building
2555 Shumard Oak Boulevard
Tallahassee, Florida, 32399-2100

Re: Petition for Declaratory Statement before the Florida Building Commission

St. Johns County Building Department
Dan Arlington, Plans Examiner PX 2438
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St. Augustine, Florida, 32084
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2007 Florida Building Code Draft:

1609.4.3 Exposure Categories. An exposure category shall be determined in accordance with the following:

Exposure B. Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the building, whichever is greater.

Exception: For buildings whose mean roof height is less than or equal to 30 feet (9144 mm), the upwind distance is permitted to be reduced to 1,500 feet (457 m).

Exposure C. Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet (182.9 m) and width greater than 150 ft. in the upwind direction. Short-term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development buildout will occur within three years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines and shall extend downwind for a distance of 1500 feet. For buildings located within a distance of 600 feet of inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more roof sheathing uplift and roof-to-wall uplift loads shall be increased by 20 percent.
Exposure D. This exposure category is not applicable in Florida.

The new 2007 language, proposed by Dr. Jeff Stone (Modification # 2660-Revised) addresses recent research relative to wind loads on buildings sited near open bodies of inland waters; specifically two (2) areas, the roof sheathing uplift fasteners and the roof-to-wall connections. Sometime in the revision process, the word “uplift” was substituted for the original word “connection” making the intent unclear.

Questions:

1. The draft 2007 FBC, Section 1609.4.3 (Exposure C) requires a 20% increase in roof sheathing uplift and roof-to-wall uplift loads, in certain wind exposures.
   Is it the intent of 1609.4.3 to increase the entire continuous uplift path by 20%?

2. If “Yes”, is it the intent of 1609.4.3 to increase the load capacity of the roof trusses by 20%?

Sincerely,

[Signature]

Dan Arlington