Wind Loads on a Typical Low-Income Caribbean House – A Code Review

S. Naranjit & I.D.C. Imbert

Abstract

The housing sector in the Caribbean accounts for a large proportion of the total building stock. Furthermore, being generally depressed region, the social cost associated with large scale catastrophic loss of housing is considerably higher in this region than in the more developed regions. This places a great responsibility on the society to protect its residential buildings from the ravages of hurricanes. The present study examines the suitability of the two regional codes, the Caribbean Uniform Building Code and the Barbados Association of Professional Engineers Wind Code, with respect to hurricane loading on these structures. This is done by comparing the design loading as specified by these codes for a typical Caribbean house to wind-tunnel measurements for a model of this house in a simulated atmospheric boundary layer.