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James S. Tribolet, S.E.

ASSOCIATE OFFICES

Phoenix Arizona Tucson Arizona Doug Haigh County of Kauai Public Works Building Department 4444 Rice Street, Suite 175 Lihue, Hawaii 96766

March 8, 2017

Re: "Storm Stoppers Panels" and Conformance to Hawaii State Building Code Requirements for Glazing Protection

Dear Mr. Haigh,

At the request of John D. Smith, owner of Storm Stoppers, I have reviewed the test data for the Original 3/8" Storm Stoppers Hurricane Protection Panels, manufactured by Mr. Smith's company, Keddo Enterprises, LLC of Orlando, Florida. The attached test data included the following:

- The Large Missile 2 x 4 Impact Test in ASTM E1996-06, using Missile Level C for Wind Zones 1 and 2 (winds < 130 mph), performed by the National Certified Testing Laboratories, Structural Performance Test NCTL-210-3128-1, dated January 27, 2006.
- 2. The 143 mph Wall of Wind Test WOW12-2014-38, performed by Florida International University, final revision dated September 23, 2014.

I also reviewed the 2 page letter written by Structural Engineer Barrett C. Crook, P.E. of Kitty Hawk Engineering in Kitty Hawk, North Carolina, dated March 3, 2017 (attached).

Following my review of test reports and Mr. Crook's letter, I agree with Mr. Crook's professional assessment that the Wall of Wind Test provides a more realistic test than the Cyclic Air Test described in Section 5.4.1.1 of ASTM E1996-06. The Wall of Wind Test recreates the extreme positive and negative wind pressures in a hurricane, combined with high intensity wind-driven rain. In contrast, no wind is generated in Cyclic Air Test, and the use of polyethylene film to seal air gaps in the test specimen further alters the test results.

Based on my review of the above materials, my professional opinion is that the "Storm Stoppers" Panels conform to Section 1609.1.2 of the Hawaii State Building Code, "Protection of Openings" which prescribes the requirements for glazed opening protection in wind-borne debris areas.

PROFESSIONAL

If you have any questions, please contact me.

Sincerely,

James S. Tribolet, S.E.

TLCP Hawaii Structural, Inc.