



January 18, 2016

Mr. Carmen Bellavia
EternaTile, Inc.
111 Briny Ave. Suite 2204
Pompano Beach, Florida 33062

RE: RAS 127 Design Wind Pressure for Eterna Classic Roof Tiles

Dear Mr. Bellavia,

Roof tile pull tests per the Miami-Dade TAS 101 (adhesive attachment) and TAS 102 (mechanical attachment) test standards were recently performed by Architectural Testing, Inc. on Eterna Classic roof tile specimens. The adhesive set specimens obtained an average ultimate load of 295.2 lb_f and the mechanically attached specimens obtained an average ultimate load of 152.4 lb_f.

The Miami-Dade Roofing Application Standard (RAS) No. 127 provides a procedure for converting the roof tile pull test results to allowable design wind pressures. The design wind pressures can also be converted to basic wind speed using the equation $q = V^2 / 383.6$, where q is the pressure in psf and V is the velocity in mph. RAS 127 requires that information obtained from the Miami-Dade Notice of Acceptance be used in the calculations. Since the Eterna Classic roof tile Notice of Acceptance is not yet available, the following calculations are preliminary and based solely upon the test results and assume a 4:12 roof slope.

Using the tile footprint dimensions of 12" x 18-3/4" for the calculations show the test results would qualify the adhesive set tile for a 103.5 psf design wind pressure and the mechanically attached tile for a 53.8 psf design wind pressure. The adhesive set tile equates to a 200 mph wind speed and the mechanically attached tile equates to a 143 mph wind speed.

Using the overall tile dimensions of 13-1/4" x 22-1/2" for the calculations show the test results would qualify the adhesive set tile for a 76.5 psf design wind pressure and the mechanically attached tile for a 39.8 psf design wind pressure. The adhesive set tile equates to a 171 mph wind speed and the mechanically attached tile equates to a 123 mph wind speed.

A comprehensive test report including test specimen description and test data will be forthcoming. If you have any questions, please feel free to contact me at your convenience.

Sincerely,

ARCHITECTURAL TESTING, INC.

Alan Rule
Technician Team Leader