

TAS-100: Wind-Driven Rain Test Standard Defines DECRA Roofing System Performance

In the roofing business, ‘LEAK’ is a four-letter word. Miami-Dade, the most stringent code jurisdiction in the Western Hemisphere requires that manufacturers prove wind-driven rain performance in order to market and sell their products in South Florida’s high velocity hurricane zone (HVHZ).

The test standard that sets the high bar to achieve this HVHZ market access is the TAS-100. This test specification blasts a rain rate equivalent of 8.8 inches per hour, driven via a wind generator machine for a 90-minute cycle. While the rain rate remains constant at each interval, the wind speed cycles start at 35 mph velocity for a set time-frame, and eventually top out at 110 mph wind velocity – all while delivering that punishing 8.8 inches per hour rain fall rate.

A wind generator tunnel concentrates the wind force directly onto the test roof. The test roof deck contains a full roof system installation which includes valley, eave, ridge and gable treatments. Roofing underlayment is also applied per Florida code.

The TAS-100 test is pass/ fail only with failure defined as:

1. Any test specimen which exhibits water infiltration through the roof sheathing shall be considered a failing the wind-driven rain test; and,
2. Any test specimen which has the prepared roof covering or any portion thereof blow off, tear or blow upward without reseating during the test shall be considered as failing the wind-driven rain test.

Suffice to say, in order to obtain HVHZ qualification, a metal roofing system must meet these test conditions. All properly installed DECRA roof systems pass the TAS-100 wind-driven rain test procedure.

Trust . . . but verify. DECRA metal roofing systems are designed and configured to withstand decades of storm and wind activity – all backed by a Lifetime Limited Warranty for single family homes; a 50 Year Limited Warranty for commercial roof applications.