

Why Partner with WTSC?

The destructive power of Mother Nature's high winds and its devastating effects on our buildings has dramatically changed how "low slope" roof systems currently edge are designed, manufactured, and installed. According to Factory Mutual (FM), nearly 80 percent of all roofing failures begin at or are directly related to roof edge details that were improperly manufactured or installed at the building perimeter. Several recent major hurricanes and the resulting tornadic producing storms spawned from them have provided the construction industry with valuable insight into the importance of "wind tested" roof edge products. It's a known fact that the attachment of the roofing membrane to the building's substructure cannot resist the high wind loads created when a perimeter edge securement fails or separates from the building. When the roof edge fails, so does the rest of the roof assembly.

In 1998, the Single-Ply Roofing Institute (SPRI) developed a roof edge "wind load" test standard for low slope roofing called "Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems." This "standard" was developed through extensive and, at times exhaustive, research conducted by several of the roofing and construction industry's committees, including SPRI's Roof Accessories Subcommittee and the Roofing Industry Committee on Weather Issues (RICOWI).

As a result of this hard work and dedicated research, ES-1 has since been accepted by the American National Standard Institute (ANSI) as a national test standard for edge systems used with low slope roofing systems. These tests (referred to as RE-1, RE-2, and RE-3) use a pull-release, pull-release method of testing rather than the previously utilized continuous-pull test.

The pull-release method of testing more closely mimics a realistic wind situation because wind blows and acts on a building perimeter with periodic gusts rather than one long, continuous gust (or pull).

ANSI/SPRI ES-1 has now been adopted by the International Code Council (ICC) and included in the 2003 and 2006 International Building Code (IBC) as part of the "mandatory building code" in many states across the country. It's no longer just good practice to purchase or specify "wind tested" roof edge terminations...it has now become a real legal requirement for your company as well!

Wind Testing Services Corporation uses a state-ofthe-art ES-1 Testing Machine engineered, designed, and manufactured to ANSI/SPRI ES-1 guidelines. Capable of performing the RE-1, RE-2, and RE-3 ES-1 tests on your samples, this testing apparatus will accurately recreate "real life" wind loads on all of the perimeter edge details required to meet ANSI/SPRI ES-1. As a result of these tests, and the product data obtained from them, you can be assured that the products your shop manufactures exceeds your project's specified wind design loads. Consider WTSC as your "perimeter edge partner" for all your roofing assemblies.

To ensure that your company is up to "code", be sure to install roof edge products that meet minimum ANSI/SPRI ES-1 standards for all low slope construction projects. Wind Testing Services Corporation's ES-1 tests enable your perimeter roof edge products to have proper wind resistance, long-term performance and improved longevity, while at the same time protecting the building owner's valuable roofing investment. By utilizing WTSC as your perimeter edge partner, you can be assured that "you'll have the edge" in today's competitive marketplace.