

Testing Your Perimeter Before Mother Nature Does

INDUSTRY BACKGROUND

SMACNA

The Sheet Metal & Air Conditioning Contractors Association (SMACNA) has long been involved in providing guidance on metal gauges, cleat gauge, and fastener placement through its recommended details. It is important to note that they provide no performance numbers to match jobsite requirements. The details are not tested to any performance standards and are a prescriptive standard, not a performance standard.

ANSI/SPRI ES-1

Key Players:

- The American National Standard Institute (ANSI) is a non-profit organization that does third party endorsements of performance testing processes and procedures.
- The Single-Ply Roofing Industry (SPRI) is comprised of manufacturers and professionals in the single-ply roofing industry.

From Idea to Code

The standard was canvassed throughout the industry to develop consensus and followed the below steps on its way to becoming an international code:

- 1. Developed by SPRI
- 2. Approved by ANSI
- 3. Approved by ICC
- 4. Added to the 2003 and 2006 IBC

FM

Factory Mutual (FM) is formed of a conglomerate of insurance companies. In order to limit their exposure to loss, FM has developed testing standards for materials used on the properties they insure.

The standard became popular to use even on buildings that were not FM insured, simply because the roofing industry has no standard of its own.

Meeting the FM Loss Prevention data Bulletin 1-49 does not make the edge ANSI/SPRI ES-1 tested. FM tested should not be confused with ANSI/SPRI ES-1 testing; they are two separate and unique testing methods. Specifiers should carefully list which testing requirement(s) are needed for each building project. Likewise, roofers should fully understand the different testing methodologies in order to supply the appropriate product for each project.

<u>IBC</u>

The International Building Code's (IBC) 2003 and 2006 editions contain a provision that low-slope roof systems' edge metal flashing (coping, fascias, gravel-stops) must be specifically tested and designed to resist wind loads according to the ANSI/SPRI ES-1 standard. To comply with IBC's provision for edge securement for low-slope roofs, edge metal flashing must be tested and shown to stay in place when subjected to design wind loads. This is a significant departure from what has been standard industry practice where edge metal flashings usually were designed based on established guidelines or dictated by regional practices.