

ANSI/SPRI/FM 4435/ES-1 2022 Testing in the Industry

All states have adopted a version of International Building Code (IBC) that requires edge metal to be tested per ANSI/SPRI ES-1 or ANSI/SPRI/FM 4435/ES-1 (ES-1), and many fabricators are claiming that they meet the ES-1 test requirement. To verify this claim, request a copy of the product's test report or an ES-1 certificate from the fabricator. If the fabricator is sub-listed under NRCA's ES-1 testing program, confirm they are listed on the NRCA website.

The NRCA's Role

The National Roofing Contractors Association (NRCA) has tested specific edge metal systems per ANSI/SPRI ES-1. To produce ES-1 certified NRCA systems the fabricator must be sub-listed with the NRCA. For more information go to:



<https://nrca.net/technical/guidelines-resources/shop-fabricated-edge-metal-testing/its>

FM Approvals' Role

FM Approvals' guidelines were for a very long time the only industry standard available. That changed with the development and acceptance of the original ANSI/SPRI ES-1 standard in 1998, and later ANSI/SPRI/FM 4435/ES-1, which combined the FM and SPRI standards in 2011. ANSI/SPRI/FM 4435/ES-1 is the test required by IBC and used for FM Approval. Meeting the requirements of FM Global's Loss Prevention Data Sheet 1-49 does not make an edge ANSI/SPRI/FM 4435/ES-1 tested.

The Bottom Line

The public wants performance testing for roof edge systems, including parapet coping caps. All states have adopted a version of IBC that requires edge metal to be tested per ES-1. This means that fabricators of metal roof edge systems must provide products that have been tested per ANSI/SPRI/FM 4435/ES-1, or they will not be in compliance with the enacted code. Make sure that ANSI/SPRI/FM 4435/ES-1 testing is specified within the Quality Assurance Sub-Section of the General Section 076200 or in Section 077100. The wording can be as simple as this (as stated in the IBC itself):

The metal edge securement, except gutter, shall be installed as tested in accordance with the most current version of the ANSI/SPRI/FM 4435/ES-1, Test Standard for Edge Systems Used with Low-Slope Roofing Systems.

For more information on the IBC and which versions states have adopted, visit <https://www.iccsafe.org/adoptions/>