INDUSTRY INFORMATION BULLETIN

To: Commercial Roofing Roof System and Component Suppliers
    Commercial Roofing Roof System Specifiers

From: Mike Ennis, SPRI Technical Director

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Industry Alert

SPRI would like you to be aware that:

- Significant changes have been made by FM Approvals to FM 4470 with regard to steel deck stresses on FM-Global insured buildings;
- Changes will be effective as of 12/31/2012; and
- Changes may affect FM Global-insured building specifications.

What is FM 4470?

Specifiers need to know that:

- FM 4470 is the Approval Standard for Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction;
- FM Approval Standards present criteria for FM Approval of various types of products and services as guidance for FM Approvals personnel, manufacturers, users and authorities having jurisdiction; and
- The criteria contained in the FM Approval Standard should be followed for FM Global-insured buildings.

Does Building Code require the use of FM 4470?

The International Building Code (IBC) determines the requirements for building design and currently includes the following:

- Meeting the criteria established in FM 4470 is not a requirement of the IBC;
- There are sections within the 2012 edition of the IBC where FM Approvals standards are referenced;
- Chapter 15 on Roofing, Section 1504.3 requires that roof coverings installed on roofs that are mechanically attached or adhered to the roof deck must be designed to resist the design wind load pressures for components and cladding;
- To demonstrate compliance with the above requirements, roof systems with built-up, modified bitumen, fully adhered or mechanically attached single-ply, through fastened metal panel roof systems, and
- Roofs (roof slope < 2:12) shall resist impact damage based on the other types of membrane roof coverings; must be tested in accordance with FM 4474, UL 580 or UL 1897 (Section 1504.3.1); and
- Section 1504.7 that defines requirements for the impact resistance of roof coverings states, "Roof coverings installed on low-slope results of tests conducted in accordance with ASTM D 3746, ASTM D 4272, CGSB 37-GP-52M or the "Resistance to Foot Traffic Test" in Section 5.5 of FM 4470.

In Closing

- The IBC references specific FM Approvals test procedures; however, meeting the criteria established in FM 4470 is not a requirement of the building code. Design professionals may want to consider this when deciding if they want to use the requirements in FM 4470 as part of their roofing specification. Finally, each party or entity is encouraged to decide for itself what action it will take that is considered - for each such party or entity - to be in its own best interest to take.