

November 5, 2012

To: Representatives, Distributors, and Authorized Applicators

RE: FM Approval Ratings Change – INDUSTRY ALERT

Concerns with potential for overstress of steel decks has led FM Global to re-assess all single-ply manufacturers' currently approved, mechanically fastened assemblies. The re-assessment will focus on joist spacing, gauge of steel deck as well as deck tensile strength. It is expected for those assemblies with wider membranes, thinner gauge steel and greater joist spacing to be affected the most, where the assessment results in downgrading the rating.

Example: 22 GA. Steel Deck – 6'-0" Joist Spacing with Sure-Weld® TPO 8' sheet (90" row / 12" o.c. HP-Xtra Fastener) is currently FM 1-90, may be downgraded to a FM 1-75 depending on joist spacing, gauge of deck and tensile strength of deck.

For FM to continue offering the rating, some of the modifications that are listed below may be required

- Increase Tensile Strength of Steel Deck (i.e. 33 ksi to 80 ksi)
- Increase Steel Deck Thickness (i.e. 22 Ga to a 20 Ga.)
- Decrease Joist Spans (i.e. 6'-0" spacing to 5'-0" spacing)

These upgrades may be possible on a new construction project, but are not feasible in re-roofing applications.

Please view [this letter](#) from FM Approvals, dated October 18th, 2012.

These changes are expected to be implemented by FM by December 31, 2012 along with the assignment of new RoofNav numbers to the affected assemblies. In the meantime, if a project is FM insured, it is important to either contact the local FM Engineer directly or share the attached FM Letter with the specifier so that the proper assembly is selected. On non-FM insured assemblies, the specifier should be advised to utilize current ASCE-7 Standards to determine the appropriate assembly and fastening requirements. Carlisle recommends that you consider using the online ASCE-7 Calculator tool on the Carlisle website. Carlisle can certainly assist with ASCE-7 calculation as well.

Carlisle recommends that you notify any customers requiring Factory Mutual ratings of the impending change and its potential to impact project costs.

Please direct any questions or concerns to Local FM Engineer or Carlisle's Project Review Group at 1-800-479-6832.

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