# Important FM updates

## FM updates its roofing-related property loss-prevention data sheets

by Kurt Fester, BECxP, CxA+BE

In October 2025, Factory Mutual updated some of its technical data sheets. If you are involved with roofing projects where FM Global guidelines are specified or required because the building owner is FM Global-insured, you should familiarize yourself with the roofing-related changes to the Property Loss Prevention Data Sheets.

FM Global is the single largest industrial insurer in the world. The loss-prevention data sheets it produces, though not part of a building code, serve as a guide and expectation for buildings it insures to help reduce the chance of property loss from fires and weather conditions, for example. The data sheets are divided into 13 categories, and nearly all the data sheets applicable to roof system installation fall into the category construction, which has the designation "1-."

FM 1-15, "Roof-Mounted Solar Photovoltaic Panels," serves as a guide related to fires and natural hazards. An interim revision to this data sheet includes the option of an FM-approved

coating as a way for a roof assembly to meet FM fire exposure and classification criteria when the existing assembly is not replaced. Before this addition, the data sheet limited existing roof assemblies to specific FM-approved Class 1A-rated metal panel and single-ply roof systems.

FM defines a roof PV coating as "an FM-approved product used to minimize fire spread by application to an existing roof cover system in conjunction with PV panels."

It also now includes a requirement that only noncombustible mounting systems and racking be used.

FM 1-28, "Wind Design," recommends design wind pressures for roofs and walls based on (but not the same as) ASCE 7, "Minimum Design Loads and Associated Criteria for Buildings and Other Structures." An October 2025 interim revision to this data sheet provided additional supporting information for designing roof-mounted equipment in tropical cyclone and tornado-prone regions.

A figure (see figure to right) was added showing the annual tornado counts per state between 1994-2024, as well as a couple of pointers to sections on securement of equipment and curbs. The data sheet also clarifies small HVAC equipment belongs on the list of roof-mounted equipment that must "secure appurtenances" in accordance with the section on roof-level equipment.

FM 1-34, "Hail Damage," provides guidelines for minimizing the potential for hail damage to buildings, roof-mounted equipment and other outdoor equipment. In sections addressing severe and very severe hail, the phrase "Install FM Approved roofs according to the manufacturer's instructions and follow any manufacturers geographic limitations, which may exclude certain roof membranes in areas with larger hail" was modified to "Install FM Approved roofs according to the manufacturer's instructions."

The data sheet no longer references FM 1-32, "Inspection and Maintenance of Roof Assemblies," which was folded into data sheets 1-28 and 1-29, "Summary Update for Adhered Roofing Systems." It also has updated hail report maps in Appendix D.

FM 1-40, "Flood," relates tangentially to roofs, and the section about stormwater runoff and terrain management was rewritten for clarity. The technical content was not changed, but the words are different.

FM 5-11, "Lightning," falls in the electrical category. It mostly addresses protecting industrial power distribution systems from things like lightning strikes but can apply to roofs where rooftop lightning-protection systems are installed. An interim update to this data sheet updated Table 1, FM Loss Statistics to Lightning Strikes (2014-2024), with the most recent loss data information. The table lists types of losses, the number and gross total in millions of dollars.

All data sheets are available for free at fm.com/resources/fm-data-sheets.

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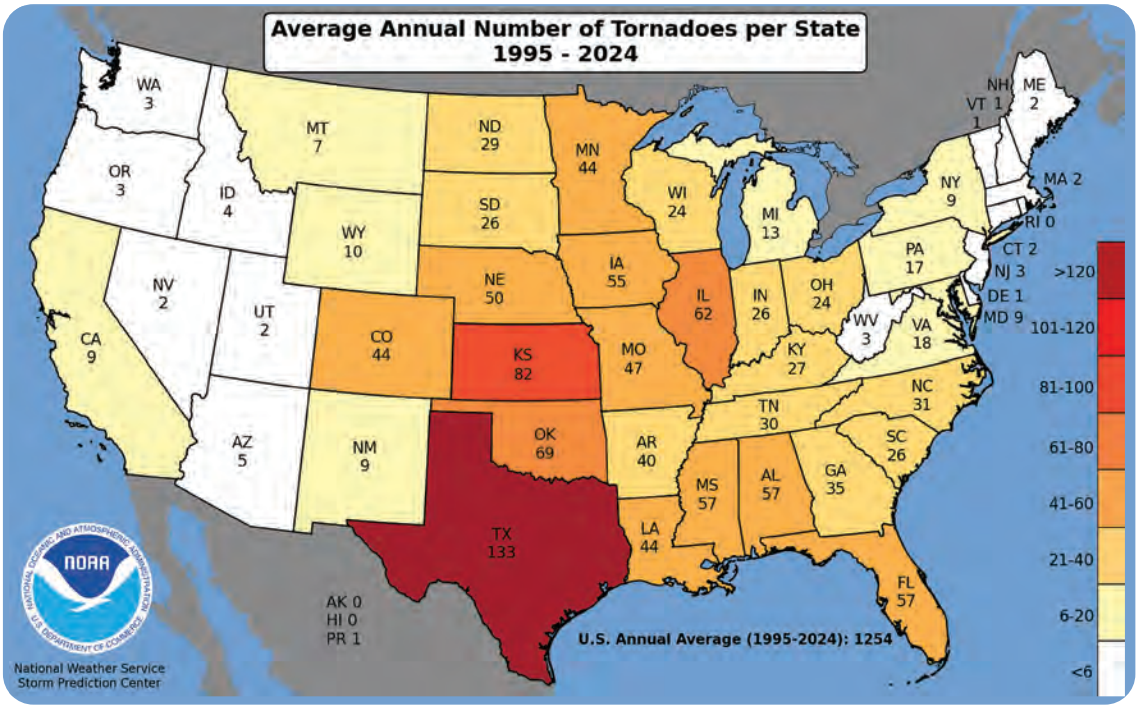


New FM 1-28 figure on tornadoes