Experiences with FM Global guidelines

Concerns regarding FM Global field uplift testing guidelines persist

by Mark S. Graham

NRCA CONTINUES to receive frequent questions regarding how to comply with FM Global's roofing-related guidelines. Although FM Global has not publicly made any changes to its guidelines in recent months, some new information is available that can help you if you are involved with roofing projects where FM Global guidelines apply.

NRCA survey

Earlier this year, NRCA's Technical Operations Committee surveyed NRCA members regarding their experiences with FM Global guidelines.

NRCA received reports for more than 8,000 roofing projects. Compliance with FM Global guidelines was reported to be specified in about 26 percent of those projects. FM Global was reported to be the property insurer in about 3 percent of those projects.

Field uplift testing based on Property Loss Prevention Data Sheet 1-52 (FM 1-52), "Field Uplift Tests," was conducted on less than 1 percent of the projects reported to NRCA. Of those projects, roof systems passed field uplift tests only about 55 percent of the time.

NRCA's post-survey follow-up with numerous survey respondents revealed significant inconsistencies with how FM 1-52 field uplift testing is being conducted and how the test results are reported. In a number of instances, little or no report other than an indication of a roof system having passed or failed the test is provided to the building owner, roof system manufacturer or roofing contractor.

Also, several survey respondents reported FM Global required field uplift tests to be conducted on existing roof systems (including one that has been in place for more than 23 years), apparently as a condition of FM Global's insurance renewal process.

Survey respondents also reported field uplift testing conducted by two testing companies in particular resulted in test failures at significantly higher rates than rates other testing companies experienced.

Although the survey results are not statistically representative or significant of the overall U.S. roofing industry, the information provides a clear basis for roofing professionals' continuing concerns with FM Global guidelines.

Online documents

FM Approvals' Approval Guide and FM Global Property Loss Prevention Data Sheets are available for free at www.approvalguide.com and www.fmglobaldatasheets.com, respectively.

Also, FM Global has updated its RoofNav application, which is accessible at www.roofnav.com, with helpful expanded searching capabilities.

If you are involved with a roofing project where compliance with FM Global guidelines is specified or required because the building owner is FM Global-insured, I encourage you to be familiar with the applicable guidelines and potential pitfalls associated with compliance. The online availability of documents should help.

Closing thoughts

Given the results of NRCA's survey, clearly it is time for FM Global to re-evaluate its reliance on field uplift testing as a post-construction, quality-assurance measure.

NRCA maintains—as it has for years—the most effective means of ensuring the quality of low-slope roof system application is by the continuous visual monitoring of the application process at the time of roof system installation.

NRCA has published four documents that detail the steps that should be monitored: *Quality Control Guidelines for the Application of Built-up Roofing*, *Quality Control Guidelines for the Application of Polymer-modified Bitumen Roofing*, *Quality Control Guidelines for the Application of Thermoset Single-ply Roof Membranes* and *Quality Control Guidelines for the Application of Spray Polyurethane Foam-based Roofing*.

From 7:45 to 9:15 a.m. Wednesday, Feb. 4, 2009, during the 2009 International Roofing Expo® in Las Vegas, I will conduct an educational session discussing complying with FM Global guidelines in greater detail.

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