Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at rcquinn@earthlink.net. Comments welcomed!

Who can seal a Federal Emergency Management Agency (FEMA) Elevation Certificate (EC)?
It's surprising how often this question comes up – and the answer is always the same. The bottom line: Each state's rules that govern professional practices supersede the language on the EC and the language in local floodplain management ordinances.

The EC states that when certification of surveyed elevation is required, the form must be "signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information" (emphasis added). "By law" refers to the laws of the state where the building in question is located. A surveyor, engineer or architect certified, registered or licensed in one state can't practice in any other state unless also certified in those other states.

The EC is written to be applicable in every state and every community, and the fact that it lists land surveyor, engineer or architect does not grant each of those professionals the authority to sign the EC if the state laws do not permit them to certify elevation information. See below for links to the latest EC and the *Floodplain Management Bulletin on the Elevation Certificate* (FEMA 467-1).

Many local floodplain management ordinances refer to certification by registered or licensed surveyors, engineers or architects. This can be confusing if a state's laws do not permit all three professions to certify elevations. It is important to note that if a state does not, for example, permit architects to certify elevations, then the fact that a local ordinance implies they can does not matter.

Is FEMA's Elevation Certificate required?

Technically – no. NFIP communities are required only to "obtain" elevations, meaning the data could be provided in a different format. The exception is Community Rating System (CRS) communities which, as part of their commitment to the CRS, agree to require FEMA's ECs.

So why would a community accept certification of elevations in a different format? Good question, because building owners have to provide ECs when they apply for NFIP flood insurance. So, communities that accept certification in a different format actually end up making owners spend more to have the surveyor (or engineer) either transfer the surveyed data to the EC or visit the site again to gather all the necessary information for the EC.

The International Code Series uses the term "registered design professional" (see IBC Section 1612.5 and IRC Section R322.1.10). The definition doesn't list the three professions, but clearly relies on registration or licensing to practice as defined "by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed."

Is the FEMA Floodproofing Certificate for design – or is it an "as-built" certification?
This one has been a bit of a puzzle to me for many years. The reason the question comes up is the verb tense on the certificate itself.

The introductory paragraph clearly states that "floodproofing design certification" is required, and that the FEMA form can be used for that purpose. But further down, in Section II, where the elevation of floodproofing is to be noted, uses this phrasing: "Building is floodproofed to an elevation of . . ." (emphasis added).

But then it should be cleared up in the statement of certification, which says the professional engineer or architect certifies that "based upon development and/or review of structural design, specifications, and plans for construction, the design and methods of construction are in accordance with accepted standards of practice for meeting" the performance statements from the NFIP regulations. So, the certification is based on the professional who either develops the plans or reviews the plans. There's nothing in the statement to imply it is an as-built certification. This is backed up in 44 CFR 60.3(c)(4) which has the same phrasing regarding development or review the design and methods of construction.

And of course, the same discussion about who can sign applies here, although the form itself isn't as clear as the Elevation Certificate. The Floodproofing [design] Certificate should be signed by engineers and architects who are registered in the state in which the building is to be constructed.

Does the Substantial Improvement/Substantial Damage (SI/SD) rule "prohibit" improvements?
Of course not! But why do I include this question in my column? Because I regularly hear local officials – perhaps too casually – say something along the lines of "you can't improve the building more than 50%." Loyal readers know that I can be a stickler about precise phrasing, which always kicks into gear when I hear that. Of course owners can improve their buildings more than 50% – with an important qualification that should be familiar to everyone who has a role in regulating flood hazard areas. Buildings in flood hazard areas can be improved more than 50% as long as they are brought into compliance with the requirements for new construction. Sure, that may be an inhibitor for some owners, but we shouldn't discourage owners from reducing their exposure to flooding.

How to you inform owners about the SI/SD rules?
The previous question brought to mind another concern. I've seen materials developed by communities that actually read like instructions to avoid triggering SI/SD. I understand that it can be expensive to bring a building into compliance. But as floodplain managers, shouldn't one of our goals be to encourage owners to protect their homes, not find ways to remain at-risk?

Giving owners information about the requirements is a good idea, and it's easy, especially now that FEMA has developed a sample "Substantial Improvement/Damage Notice to Property Owners" that's included in the *SI/SD Desk Reference* (FEMA P-758). The packet is set up to explain the requirements and includes a list of what should be included in applications for work on existing buildings. It also lists costs that must be included and those that may be excluded, and includes sample affidavits for owners and contractors to sign.

Affidavits are a good idea. One of the more memorable situations I dealt with years ago, when I was a State Coordinator, was resolved when we recommended a community require an affidavit. A homeowner had an estimate from a contractor that, given the scope of the work, was ridiculously low. We advised the community to ask the contractor to sign a statement that all of the expected work would be accomplished for estimated cost. It didn't take long for him to back down and provide a valid estimate. The home ended up not only being elevated, but also being moved back from the shoreline. I've often wondered how that home fared during the several flood events that have occurred in the 20-some years since.

Under NFIP rules, are modular buildings treated like stick-built or manufactured homes?
The NFIP regulations don't use the term "modular", nor do the International Building Code and International Residential Code. It turns out that "modular" refers to a construction method, and not a type of home.

Wikipedia describes modular buildings as "sectional, prefabricated buildings that consist of multiple sections called modules. The modules are six-sided boxes constructed in a remote facility, then delivered to their intended site of use." It goes on to describe setting the modules onto the building's permanent foundation – built at the site. Two ways that modular homes differ from manufactured homes are described: (1) modulars do not have built-in axles or frames (steel chassis that is integral to the floor system), which means modulars are transported on flat-bed trucks; and (2) modulars must conform to applicable building codes for their intended use, while manufactured homes are built to US Department of Housing and Urban Development (HUD) specifications. Modulars are designed to be installed on a perimeter wall foundation or basement, and materials used in modulars are the same as site-built homes.

So, the answer is pretty clear. Modular buildings and modular homes are attached to permanent, site-built foundations and those foundations must comply with the same requirements as site-built buildings, and not the rules for manufactured homes. And that means if sites are in flood hazard areas, the foundation must comply with the limitations based on flood zone and be high enough so that the lowest floor (or bottom of the lowest horizontal structural member) is at or above the specified elevations.

Links:

FEMA Form 086-0-33, NFIP Elevation Certificate:
www.fema.gov/library/viewRecord.do?id=1383

FEMA 467-1, Floodplain Management Bulletin on the Elevation Certificate:
www.fema.gov/library/viewRecord.do?id=1727

FEMA Form 086-0-34, NFIP Floodproofing Certificate:
http://www.fema.gov/library/viewRecord.do?id=1600

FEMA P-758: Substantial Improvement / Substantial Damage Desk Reference:
http://www.fema.gov/library/viewRecord.do?id=4160

[RCQ]

New Online Letter of Map Change (LOMC) Application

FEMA is launching the Online Letter of Map Change (LOMC) - a new way to submit a request to change a property's flood zone designation. The new Online LOMC application allows anyone to electronically submit required documents and property information when they are requesting FEMA remove their property from a Special Flood Hazard Area (SFHA). As of December 17th, applicants can use this new website to request a Letter of Map Amendment (LOMA) instead of using the MT-EZ paper form. A LOMA is a letter from FEMA stating that an existing structure or parcel of land will not be inundated by the base flood. LOMA-eligible requests must be concerning properties on naturally high ground, which have not been elevated by fill. FEMA will roll out more features in the coming months! This application will allow ASFPM members to better meet the needs of their customers. The benefits include:

- *Applicants may save information online and finish applying at their convenience*
- *Clear and intuitive interface makes applying user-friendly*
- *Frequent applicants can manage multiple LOMA requests online*
- *More efficient communications with LOMA processing staff*
- *Applicants can check their application status in real-time*
- *Coming soon! Request all LOMC types via the Online LOMC*

To learn more about this exciting new tool, visit www.fema.gov/online-lomc.