Technical Bulletin 3 Update

The Federal Emergency Management Agency (FEMA) has released an update to Technical Bulletin 3 on requirements for dry floodproofing non-residential and mixed-use buildings. It expands in detail each section and explanation. Floodproofing is now explained as a 10-step process. There is a longer explanation of how dry floodproofed buildings are rated with credits for these techniques, aside from the basic rule of floodproofing to 1 ft above the BFE for credit; it is based on the specific information about the techniques that accompany the insurance application. Mixed-use building techniques are expanded. The bulletin also explains where floodproofing is allowed under the NFIP in terms of flood zones and velocities. Next, the NFIP regulations from the Code of Federal Regulations (CFR) Chapter 60.3 (C) (3) (4) (8) are presented with more detail on how they apply to various flood zones. It is followed by a section on higher standards and how they may impact floodproofing requirements.

The bulletin also covers the various versions of building codes that can be adopted as well as the American Society of Civil Engineers standard, Flood Resistant Design and Construction (ASCE 24), which applies to structures that are subject to building codes. It is the standard for materials and practice, and highly recommended due to the technical requirements of dry floodproofing, and promotion of building codes by FEMA. A table compares the latest changes to ASCE 24 and the International Building Code (IBC) compared to NFIP minimum requirements. In most cases, they meet or exceed the NFIP.

New, are interpretations on flood shields from ASCE as well as FEMA on their configurations for dry floodproofing requirements. They meet ASCE’s requirements, however, FEMA does not consider them to be impermeable nor able to resist flood loads; it is contrary to the NFIP requirements. It is one of only two interpretations where the NFIP is more restrictive than ASCE 24, the other is related to seepage. Also included is the American National Standard for Flood Mitigation Equipment, a suggested technical reference on floodproofing equipment and products that are tested for performance. The update includes more supplemental references than the 1993 version.

The bulletin discusses planning considerations for dry floodproofing, followed by individual categories. It gives a list of general concerns that should be considered before moving forward; local regulations, personnel safety, maintenance, operations, cleaning, site-specific conditions, and residual risk. The building should undergo an assessment beforehand for structural integrity to determine whether it is a good candidate for floodproofing. Owners should understand the residual risk, the risk remaining in case of failure of measures, what financial impacts it would lead to, and what can be offset by insurance. There are more considerations for flood warning time than before, emphasizing the site-specificity of each case, credible sources, flooding source, and the floodplain topography. The time is not how long it takes water to reach the height of floodproofing, but to reach the site and enter places where active measures have not been deployed. Each active measure implementation time must be considered in flood warning time. This includes notification, travel time, weather interference of deployment, installation, required tools, and evacuation.

The operations plan now includes a decision tree for the sequence and timeline, with triggers and benchmarks that initiate the process. Additionally, there should be accompanying maps for storage locations, equipment, tools and materials for installations, as well as instructions. The inspection and maintenance plan section stresses the importance it plays in the success of floodproofing and that...
deficiencies in this area have played a significant part in floodproofing failure. The new considerations are following manufacturer recommendations for inspections and keeping their contact information updated. Owners are to examine inspection reports and make changes or repairs accordingly.

Previously, there were minimum engineering considerations: buoyancy, hydrodynamic and static forces and their engineering equations. For the design process in the update, measures must be designed and constructed with ASCE 24 or equivalent. They also recommend FEMA P-936 Floodproofing Non-Residential Buildings (2013) guidance. The section begins with a flowchart for designing floodproofing systems. The steps for creating a floodproof design is to first establish the Flood Design Class from ASCE 24 based on building use and risk to public if the building becomes damaged or impaired. Next, consider the flood loads, similar to the minimum considerations of the previous version. There are now considerations for wave loads, though floodproofing is still not allowed in V Zones or Coastal A Zones with a Limit of Moderate Wave Action. Combinations of these loads must also be considered.

There is guidance on assessing the existing building before designing such as cracks in the walls or foundation that could lead to seepage, strengthening walls and floors, installing waterproof membranes, and locating where sump pumps will be. Consider the soil of the site and its characteristics. Next, consider utility systems and equipment; will they be elevated, protected by backflow valves, or repairable if below the flood protection level? Elevation is the best practice. Design of flood shields and deployment time must be decided if there are windows and or doors that will be below the protection level. Then, the waterproofing system that makes the building substantially impermeable to flood water, limiting the rate of seepage to no more than 4 inches/24 hour period without the use of water removal devices. For this, the anticipated seepage must be estimated. In addition to wall systems, seepage through joints and penetrations must be estimated; sealants may be of use. Seepage around flood shields depends on flood duration and quality of the seal. Drainage pathways for expected seepage should be specified, where drains and pumps will be installed. ASCE 24 requires sump pumps for water removal and should be installed at the lowest point; they cannot be completely relied on because the chance of power failure, back up emergency power is necessary. Lastly, the floodproofing certificate is certified by a licensed professional, and operations and maintenance plans should be reviewed with the building owner.

FEMA is supportive of additional technical references and standards, such as building codes and performance-tested products, that go above NFIP minimum standards. The update is more holistic and comprehensive, with in-depth explanations of each topic’s relationship to one another for better decision making and coordinating various concerns. The bulletin is clearer on how a building is appropriately floodproofed, compliant, and protected.

**Top Ten Tips for Filing a Claim**

1. **Documentation Before a Flood Happens**
   Floods are extremely stressful events. Preparation beforehand can make a substantial impact on your recovery phase, including filing your flood loss claim. Take the time before a disaster occurs to thoroughly document your items protected by contents coverage. Trying to do so after damage occurs will be difficult, time consuming, and you may miss items. Having documents together will streamline your estimate and Proof of Loss (POL) process. Photos or videos of these items along with a description, date/place of purchase, model and serial number, cost, and receipts are needed documentation that supports the estimate.

2. **Documentation After a Flood Happens**
   You will want to document the damage to your protected items as thoroughly as possible, both contents and structural items. Take plenty of clear and thorough images. This will factor into your estimate for your claim. Separate the damaged from the undamaged items, and do not discard anything until it has been documented, you may keep samples of things as proof before discarding.

3. **Work Thoroughly with your Agent and Adjuster**
   After a loss, contact your agent first to report it. You will send them written notice of a loss. From here, your adjuster will work with you to set up a time to view your property. The adjuster often documents the damage in the “scoping” of loss. They will then create a detailed estimate for your claim. This supports your POL. If you disagree with the covered loss amount in their report, work with them to reach an agreement. If you cannot, try the adjuster’s supervisor, or the insurer. If no agreement can be reached, you may file an appeal, request your appraisal provision in your policy, or file a

Story Continued on Next Page
lawsuit against FEMA.

4. Additional Payment
If you have submitted a POL, and find there is more damage that was not discovered in the first estimate, and the payment does not cover the repairs needed, you may request an additional payment by repeating the documentation and filing process. This will need to be supported by a contractor’s review and a detailed estimate showing quantities and unit costs (no lump sums).

5. Work with Your Local Officials
After an event, local officials will be conducting inspections of homes and determining whether they are safe to enter, what repairs are needed, permit requirements, and whether they are substantially damaged. Cooperate as much as possible. You will receive documentation of their determinations after their inspection about the condition of your home, permitting, and repairs. Ensure to follow all regulations and instructions, ask any appropriate questions on guidance. Being substantially damaged triggers the availability to file an Increased Cost of Compliance (ICC) claim for mitigation.

6. Act in a Timely Manner
There are important deadlines that must be met when filing a claim. You have 60 days from the time of loss to submit your POL. Request for additional payment must be completed within 60 days or within FEMA’s extension time limit. If your claim was denied or partially denied, you have 60 days to file an appeal from the date of your denial letter. If you file a lawsuit, it must be done so within one year of your written denial. These deadlines cannot be extended unless authorized by FEMA.

7. Remote and in-Person Inspection Options
Many companies are currently offering remote inspection options. Typically, a link is sent to your device, and you go through your property damage via videotelephony. You become an active part of your claims process. If you choose this option, try to familiarize yourself with your device’s video functions ahead of time. There may be structural items they need to see that you are unfamiliar with, or measurements that you will need to take. Ask for an explanation, and ensure you capture all the damage you have noticed. This option typically works better for smaller claims than larger, complex ones.

8. Extent of Damage
There may be damage that you cannot see behind walls or under floors. Your community official should require, if flooded badly enough, that wallboard/plaster and insulation be removed. Try to make sure that everything is as dry as possible before making repairs. Mold can spread quickly and cause further structural damage. Your official may take moisture measurements to ensure it is dry enough. There are ways to speed up the drying process, follow guidance from inspectors and local officials.

9. Licensed contractors
Sometimes after a disaster, unscrupulous individuals try to take advantage of those flooded by offering services at a discount or other special offers. There is no licensing at the state level in Kansas, general contractors will be licensed through their city, county, or jurisdiction. Any business in Kansas must register through the Kansas Secretary of State’s Office. Their website has a business entity search database where you can search for businesses and their status in Kansas. Check with your community about licensed contractors authorized to work there before working with a contractor.

10. ICC Coverage and mitigation
ICC coverage is part of the standard flood insurance policy. Your claim may provide up to $30,000 to mitigate your home to meet current regulations and prevent damage in the future if your structure has been determined to be substantially damaged. You will file a separate POL and your local official should help you choose the right mitigation options. Elevation, floodproofing (non-residential), relocation, acquisition, or demolition.

Staff Changes
NFIP Specialist, Cheyenne Sun Eagle joined the floodplain team in May of 2020. She is working to ascertain her Certified Floodplain Manager (CFM) credential in the near future. She works with communities directly on their floodplain management programs, including ordinance and map adoptions, the community rating system, outreach projects, and answering floodplain management inquiries. Prior to joining DWR, she completed a B.S. in Environmental Science at Haskell Indian Nations University in Lawrence, Kansas, followed by an M.A. in Geography at the University of Kansas.
Training Opportunities

The Floodplain Management Program will host the following training sessions throughout Kansas. If you are interested in any of the no-cost training opportunities, please contact Cheyenne Sun Eagle at 785-296-0854 or Steve Samuelson at 785-296-4622. A training registration form is in this newsletter.

Flood Insurance Claims Handbook Overview
This course will cover various aspects of the NFIP claim process. Such highlights will include the claim process, coverages, appeals, and other considerations. The format will be an online webinar using the Zoom software platform. This class has been approved for 1 hour of Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM) credential.

Virtual Training on April 29, 2021 from 11:00 a.m.—12:00 p.m.

How to File a LOMC
The class is broken into two days and will be worth 2 hours each for a total of 4 hours Continuing Education Credit (CEC) toward the Certified Floodplain Manager (CFM) credential. We do encourage attending both trainings for a full picture of the process.

PART 1
Part 1 of the How to File a LOMR class will include an overview of the LOMC process, the options for LOMC’s, fee’s, methods, and timelines. It will also include aspects of the MT Applications, including examples. MT Applications review will continue in Part 2.

Virtual Training on April 28, 2021 from 1:00-3:00 PM.

PART 2
Part 2 of the How to File a LOMR class will discuss aspects of the MT Applications, including examples. MT Applications review will be a continuation from Part 1. Part 2 will include an exercise that will take attendees from start to finish of prepping a model and filling out the MT Application. This training will also consider lessons learned from floodplain administrators, engineers and reviewers.

Virtual Training on April 29, 2021 from 1:00-3:00 PM.

Find more information about floodplain management from Kansas Department of Agriculture Division of Water Resources online at: http://agriculture.ks.gov/divisions-programs/dwr/floodplain

Email saves money on postage. The electronic newsletter also has links and the photos are in color. In the case that you are getting this newsletter by postal mail and would prefer email please contact Cheyenne Sun Eagle at: cheyenne.suneagle@ks.gov.

To find and register for upcoming training, as well as recordings of previous trainings, please see our new Floodplain Management Training webpage at: https://agriculture.ks.gov/divisions-programs/dwr/floodplain/training
Kansas Department of Agriculture
Division of Water Resources
Floodplain Program
Training Registration Form

Name __________________________________________

Title __________________________________________

Organization ________________________________________

Address __________________________________________

City ____________________ State ________________ Zip ________________

Telephone ____________________ Fax ____________________

E-mail __________________________________________

Name, date and location of training you will attend ________________________________

__________________________________________________________________________

*Please share this invitation with anyone else who could benefit from the training.

**Classroom locations will be sent to registered participants one week before the training.

**To find and register for upcoming training, as well as recordings of previous trainings, please see our new Floodplain Management Training webpage at: https://agriculture.ks.gov/divisions-programs/dwr/floodplain/training

** Any individual with a disability may request accommodation in order to participate in training. Persons who require special accommodations must make their needs known at least five working days prior to training. For more information, including special accommodations, please contact Cheyenne Sun Eagle at 785-296-0854 or email Cheyenne.Suneagle@ks.gov.

Please scan and email your registration to: cheyenne.suneagle@ks.gov

Or mail to:

KANSAS DEPARTMENT OF AGRICULTURE
FLOODPLAIN MANAGEMENT PROGRAM
1131 SW Winding Road, Suite 400
TOPEKA, KS  66615

For questions about training, please contact Cheyenne Sun Eagle by email at cheyenne.suneagle@ks.gov or by phone at 785-296-0854. May also contact Steve Samuelson by email at steve.samuelson@ks.gov or by phone at 785-296-4622.
Please help us keep our records current. If the name that appears on this newsletter is for an individual no longer with your organization, please call 785-296-0854 or email cheyenne.suneagle@ks.gov to report the change.

ASFPM 2021 National Conference

The 2021 Association of State Floodplain Managers National Conference will be held May 9-13, virtually. This conference is an excellent opportunity for floodplain managers to receive training on mapping technologies, regulations, permitting, outreach and best practices. It is estimated the conference will be attended by more than 1,000 floodplain management professionals. This conference is great chance to meet people for networking and to learn the latest news in floodplain management. Visit www.floods.org for more information.

Kansas Association For Floodplain Management Conference in Mulvane

The 2021 KAFM conference will be September 1-3rd, at the Kansas Star Event Center in Mulvane, Ks

KDA/DWR Water Structures
Floodplain Program Staff

Steve Samuelson, CFM, NFIP Coordinator 785-296-4622 steve.samuelson@ks.gov
Tara Lanzrath, CFM, Floodplain Mapping Coordinator 785-296-2513 tara.lanzrath@ks.gov
William Pace, CFM, Floodplain Mapping Specialist 785-296-4622 william.pace@ks.gov
Joanna Rohlf, CFM, Floodplain Mapping Specialist 785-296-7769 joanna.rohlf@ks.gov
Cheyenne Sun Eagle, NFIP Specialist 785-296-0854 cheyenne.suneagle@ks.gov

Mailing Address:
1131 SW Winding Road, Suite 400
Topeka, KS 66615

http://agriculture.ks.gov/dwr