

## Sources of Information on Flood-Resistant Design and Construction<sup>1</sup>

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## Introduction

The primary purpose of the publications referenced in this article is to assist engineers, architects, contractors, and property owners in locating detailed information on how to design and construct flood-resistant buildings and structures.

Appropriate design and construction practices are necessary for any site development, including new and substantially improved structures. Requests for information

on construction requirements should be directed to the community. The state National Flood Insurance Program (NFIP) Coordinator and the appropriate Federal Emergency Management Agency (FEMA) regional offices will also provide relevant information.

FEMA offers a wide array of materials for land development professionals and designated communities regarding NFIP construction requirements in identified flood-prone areas. The following list is an overview of a number of FEMA materials related to flood-resistant design and construction.

## Online FEMA Resources

- https://www.fema.gov/emergency-managers/ risk-management/building-science/building-codes
- https://www.ldaf.state.la.us/wp-content/uploads/2021/05/ FEMA-Coastal-Hazards-and-Considerations.pdf
- https://www.fema.gov/sites/default/files/2020-07/ asce24\_highlights\_dec2010.pdf
- http://www.fema.gov/permit-floodplain-development
- https://www.fema.gov/pdf/floodplain/nfip\_sg\_unit\_5.pdf
- https://www.fema.gov/glossary/start-construction
- https://www.fema.gov/glossary/new-construction
- 1. This document is DH203 (formerly DH0435), one of a series of the Food and Resource Economics Department, UF/IFAS Extension. Original publication date June 1998. Revised January 2016, October 2019, and November 2023. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication. The funding for the revision of this publication was provided by the James S. and Dorothy F. Wershow Endowment. This publication is part of the Disaster Handbook, a component of the Comprehensive Disaster Preparedness and Recovery Education Module. There are ten Disaster Handbook documents by Olexa and Olevnik: DH138, DH199, DH200, DH201, DH202, DH203, DH204, DH206, DH215, and DH219.
- 2. Michael T. Olexa, professor, Food and Resource Economics Department, and director, Center for Agricultural and Natural Resource Law; and Sean Olevnik, senior legal researcher and student, UF Levin College of Law; UF/IFAS Extension, Gainesville, FL 32611.

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- https://www.fema.gov/media-library/assets/ documents/3293
- https://www.fema.gov/sites/default/files/2020-07/ fema499\_flyer\_052219.pdf
- https://pdhonline.com/courses/c816/FEMA499\_9\_1.pdf

## **Other FEMA Resources**

FEMA resources are available for ordering via telephone, toll-free, at 1-800-480-2520.

- Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings, FEMA/NFIP Technical Bulletin 3 https://www.fema. gov/sites/default/files/documents/fema\_technical-bulletin-3\_1-2021.pdf
- Design Guidelines for Flood Damage Reduction, FEMA-15
- Elevated Residential Structures, FEMA-54 https:// www.cranfordnj.org/sites/g/files/vyhlif436/f/uploads/ fema\_54\_-\_elevated\_residential\_structures.pdf
- Coastal Construction Manual, FEMA-55 https://www. fema.gov/sites/default/files/2020-08/fema55\_voli\_combined.pdf
- Protecting Manufactured Homes from Floods and Other Hazard, FEMA-85 http://www.fema.gov/sites/default/ files/2020-08/fema\_p85.pdf
- Reducing Losses in High Risk Flood Hazard Areas: A
   Guide for Local Officials, FEMA-116 https://nebula.
   wsimg.com/63bd44e9c6e5ce9497a28d87dd3c2fa1?Acces
   sKeyId=4B39373A4238385DA60C&disposition=0&allow
   origin=1
- Answers to Questions About Substantially Damaged Buildings, FEMA-213 https://www.fema.gov/sites/ default/files/2020-07/fema\_p213\_08232018.pdf
- Repairing Your Flooded Home, FEMA-234 https://nchh. org/resource-library/fema\_repairing-your-flooded-home. pdf
- Mitigation of Flood and Erosion Damage to Residential Buildings in Coastal Areas, FEMA-257 https://www.fema. gov/sites/default/files/2020-07/fema257.pdf
- How to read a Flood Map, FEMA RiskMAP https://www. fema.gov/sites/default/files/documents/how-to-readflood-insurance-rate-map-tutorial.pdf
- Flood Emergency and Residential Repair Handbook, FEMA-13\* https://babel.hathitrust.org/cgi/ pt?id=umn.31951d00285430f&seq=4

- Engineering Principles and Practices for Retrofitting Flood Prone Residential Buildings, FEMA-259 https:// www.fema.gov/sites/default/files/2020-08/fema259\_complete\_rev.pdf
- Managing Floodplain Development in Approximate Zone A Areas: A Guide for Obtaining and Developing Base (100-Year) Flood Elevations, FEMA-265 https://www. fema.gov/sites/default/files/documents/fema\_approx-zone-a-guide.pdf
- Protecting Floodplain Resources, FEMA-268 https:// www.cabarruscounty.us/files/assets/public/planningand-development/documents/fema-268-protectingfloodplain-resources.pdf
- Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding, FEMA-312. https://www. fema.gov/sites/default/files/2020-08/FEMA\_P-312.pdf

\*Note: FEMA is the Federal Emergency Management Agency; FIMA is the Flood Insurance and Mitigation Administration, a division of FEMA.