Who the Guide is For

As a homeowner, you need clear information about the retrofitting options that are available to help reduce flood damage to your home, as well as guidance on selecting the option that is best for you. FEMA P-312 is intended for homeowners who have little or no knowledge of flood protection methods or building construction techniques.

In order to avoid repetitive flood damage to your home, you need to know what damage-reduction methods are available, the degree to which they are successful, how much they cost, and whether they are likely to meet your needs. These issues are addressed by the guide. In addition, the guide explains how the degree of flood risk can vary from one location to another. By knowing the basic questions to ask your local officials, you are guided toward the retrofitting technique that is appropriate for you.

Under State or local laws, ordinances, or regulations, some retrofitting techniques may not be used in certain circumstances. This is another important reason to consult your local officials.

City of Indepedence - Floodplain Management
Contact: David Cowan
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Want to Learn More?

Homeowner's Guide to Retrofitting: Six Ways to Protect Your Home From Flooding, FEMA P-312, Second Edition

FEMA P-312 can be downloaded from FEMA's web site: http://www.fema.gov/library/viewRecord.do?id=1420.

You can also call 1-800-480-2520 to order a copy of FEMA P-312 or other FEMA publications, including those listed below.

Related Publications

- **FEMA 259**, *Engineering Principles and Practices for Retrofitting Flood-Prone Residential Buildings* (recommended for architects and engineers)
- **FEMA 348**, *Protecting Building Utilities from Flood Damage*
- **FEMA 499**, *Home Builder's Guide to Coastal Construction Technical Fact Sheets*
- **FEMA P-85**, *Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide*, Second Edition
- **FEMA P-550**, *Recommended Residential Construction for Coastal Areas*, Second Edition

FEMA

FEMA L-235
Catalog No. 10047-1

Homeowner's Guide to Retrofitting

Six Ways To Protect Your House From Flooding

FEMA L-235 / December 2009

FEMA

What is "Retrofitting"?

Retrofitting means making changes to an existing building to protect it from flooding or other hazards such as high winds and earthquakes. FEMA publication P-312, Second Edition, *Homeowner's Guide to Retrofitting: Six Ways to Protect Your Home From Flooding*, provides information that will help you decide whether your home is a candidate for retrofitting.

The guide describes six retrofitting methods that can help to protect your home from flooding.

Elevation is raising your home so that the lowest floor is above the flood level. This is the most common way to avoid flood damage.

Wet floodproofing is making uninhabited parts of your home resistant to flood damage when water is allowed to enter during flooding.

Relocation is moving your home to higher ground to protect it from flooding.

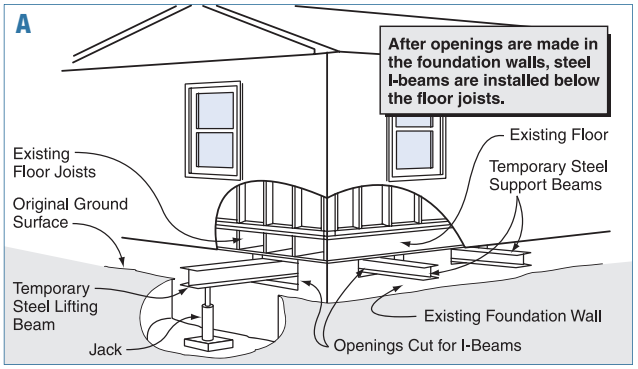
Dry floodproofing is sealing your home's exterior walls to protect your home from flooding.

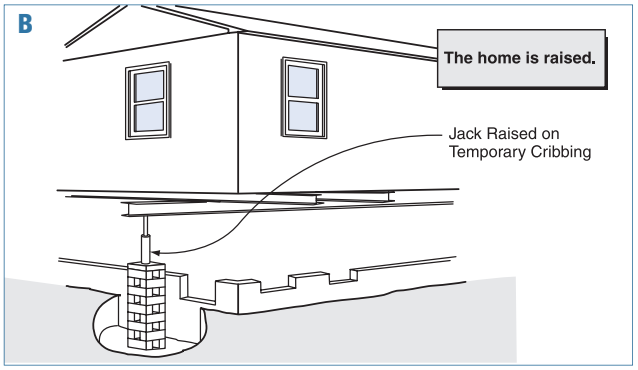
Levee and floodwall protection is constructing barriers to prevent floodwaters from entering your home.

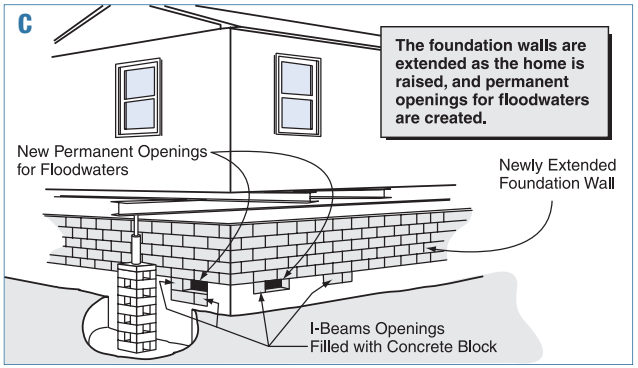
Demolition is razing your home and rebuilding properly on the same property or buying a home elsewhere.

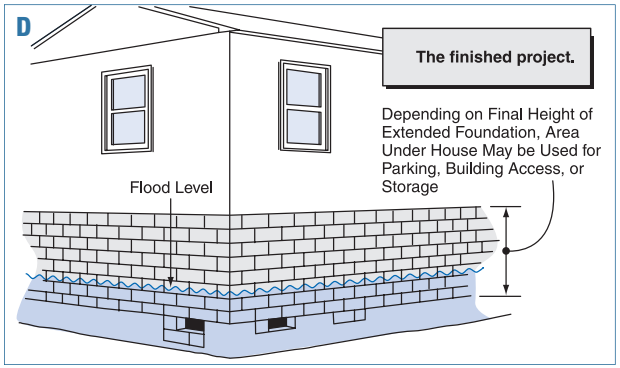
FEMA P-312 uses photographs and illustrations to help explain how each of the six retrofitting methods works.

For example, this series of illustrations from the guide shows how a home on a basement or crawlspace foundation can be elevated above the flood level on extended foundation walls.









The Next Step

Whether or not your home has been damaged by flooding, contact your local floodplain administrator or building official before retrofitting. This is a critical step to reducing potential flood losses. Local officials know the retrofitting methods that meet State and local government requirements.

Financial Assistance

FEMA P-312 provides information on government and non-government financial assistance (e.g., loans, grants, and insurance payments) that can help homeowners with retrofitting projects.

For example, under FEMA's National Flood Insurance Program (NFIP), a policy holder may qualify for Increased Cost of Compliance (ICC) coverage. If your home is substantially damaged by flooding, ICC coverage may help to pay for some types of retrofitting. The Hazard Mitigation Assistance grant programs are designed to provide financial assistance for retrofit projects. FEMA P-312 describes financial assistance and how you might qualify.