

# DIY Home Resilience: Protecting Your Fenwick Island Home from Natural Hazards

A practical guide to safeguarding your coastal property through simple, effective homeowner projects



# **Understanding Fenwick Island's Natural Hazards**

Before we begin our DIY journey, it's essential to understand what we're protecting against. Fenwick Island faces specific threats due to its coastal location:

## **Coastal Flooding**

The most frequent and potentially devastating hazard, with rising sea levels increasing risks yearly

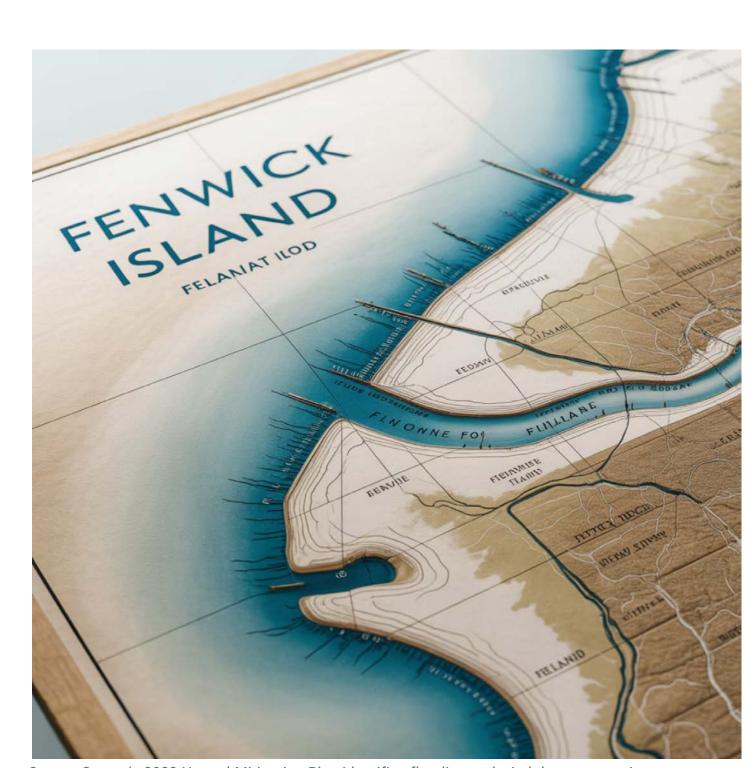
#### **Hurricanes & Nor'easters**

Powerful storm systems bringing destructive winds, storm surge, and heavy rainfall

# **Severe Thunderstorms**

Can cause wind damage, lightning strikes, and localized flash flooding





# **Why DIY Mitigation Matters**





83%

\$4-6

Damage Reduction

ROI

**Critical Window** 

FEMA studies show properly mitigated homes experience up to 83% less damage during severe weather

For every \$1 spent on hazard mitigation, homeowners save \$4-6 in potential damages

The typical time between storm warning and impact, when DIY preparations are most valuable

Delaware Sea Grant emphasizes that individual homeowner actions are not just personal protection—they contribute significantly to community-wide resilience and recovery.

48hrs

# **Strengthen Your Roof and Structure**

#### Why It Matters

Wind damage often begins at the roof. When high winds get underneath roofing materials or between connections, catastrophic structural failure can follow.

During hurricanes, even a small roof breach can lead to significant interior water damage and compromise the entire structure.



#### **Install Hurricane Straps**

Metal connectors that secure roof-to-wall connections, preventing roof lift-off in high winds. Available at hardware stores for \$1-2 each.



#### **Reinforce Entry Points**

Install deadbolts on all exterior doors and additional slide bolts on garage doors to prevent wind-pressure failure.



#### **Inspect & Repair Roofing**

Replace loose shingles, secure flashing, and seal gaps around chimneys and vents to prevent water intrusion.





# **Protect Windows and Glass**

Window protection is one of the most effective DIY projects to prevent catastrophic home damage during storms. Flying debris can shatter windows, allowing wind and water to enter and potentially cause structural failure.

#### **Storm Shutters**

Pre-made aluminum shutters can be installed by homeowners. Accordion-style options store alongside windows for quick deployment.

DIY Cost: \$15-25 per square foot

#### Impact-Resistant Film

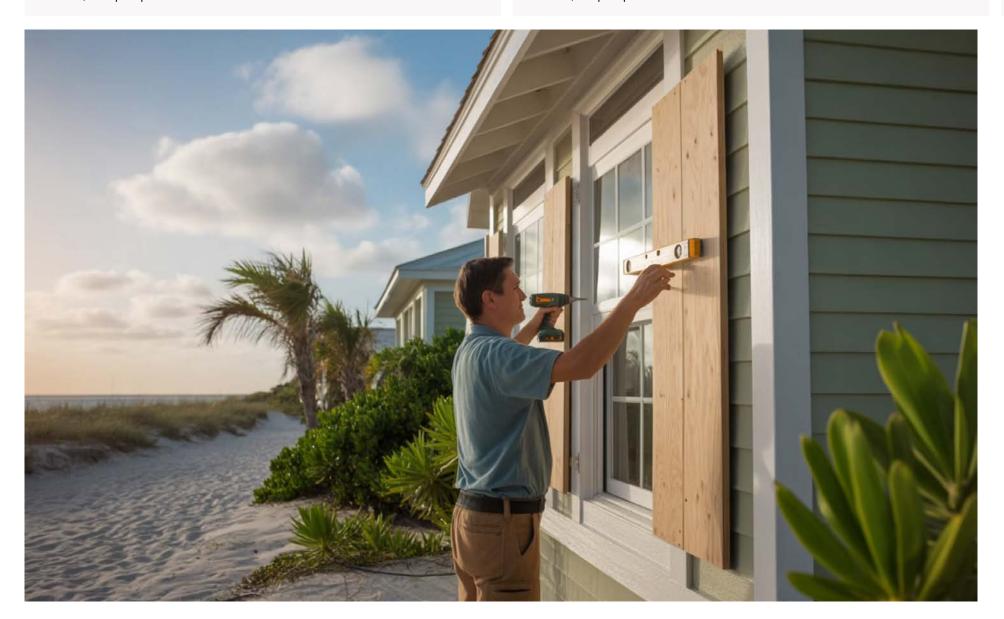
Applied to existing windows, this transparent film holds glass together when shattered. Not hurricane-proof but reduces injury risk.

DIY Cost: \$7-10 per square foot

#### **Plywood Covers**

Cut 5/8" exterior-grade plywood to overlap window frames by 8". Pre-drill mounting holes and store labeled for quick installation.

DIY Cost: \$1-2 per square foot





# Manage Flood Risks with Breakaway Walls



### A Critical Modification for Elevated Homes

Many Fenwick Island homes are already elevated to reduce flood damage. However, solid walls beneath elevated structures can trap floodwater and cause structural failure.

# 1 Replace Solid Walls

Remove enclosed walls under elevated homes and replace with properly designed breakaway walls that will collapse during floods without damaging the main structure.

# 2 Use Permeable Materials

Install insect screening, wooden lattice panels, or louvered vent designs that allow water to flow through rather than build up pressure against your home's foundation.

# 3 Clear Underneath Space

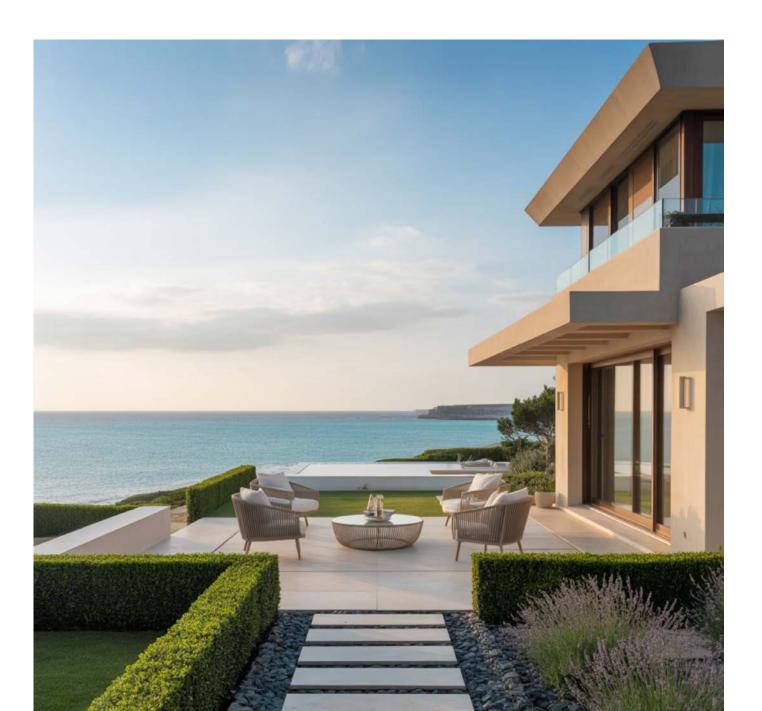
Remove stored items from under your home, especially before flood season. These can become dangerous projectiles during flooding events.



# **Landscape and Yard Maintenance**



Your yard is your home's first line of defense against storms. Strategic landscaping and regular maintenance can significantly reduce hazard risks.



# **Tree Management**

- · Remove dead branches and limbs that extend over your roof
- Consider removing trees within 20 feet of your home
- Prune trees to create wind passages rather than solid barriers

#### **Secure Outdoor Items**

- Install ground anchors for furniture, grills, and propane tanks
- Create a designated storage area for quick pre-storm cleanup
- Replace gravel/rock landscaping with softer materials

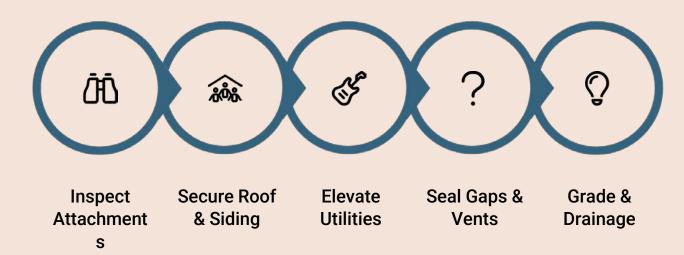
# **Water Management**

- · Clean gutters and downspouts regularly
- Install downspout extensions to direct water away from foundation
- Grade soil to slope away from your home (1" per foot)

1

# Prepare Your Home's Exterior

Beyond your roof and windows, several other exterior elements require attention to create a fully resilient home. These projects range from simple weekend tasks to more involved upgrades.



# Weekend DIY Project: Seal Foundation Gaps

- 1. Inspect your foundation and exterior walls for cracks or gaps
- 2. Clean areas thoroughly and allow to dry completely
- 3. Apply hydraulic cement to active leaks or foundation cracks
- 4. Use waterproof silicone caulk around pipes and wire entries
- 5. Consider applying waterproof masonry sealer to porous foundations

This simple project typically costs under \$50 in materials but can prevent thousands in water damage during heavy rains and minor flooding events.





# Insurance and Emergency Preparedness



Physical preparations must be complemented by proper insurance coverage and emergency planning.

# **Review Insurance Coverage**

Standard homeowner's policies typically exclude flood damage. Obtain separate flood insurance through the National Flood Insurance Program (NFIP) or private carriers. Don't wait—policies have a 30-day waiting period before taking effect.

# **Document Your Property**

Take detailed photos and videos of your home's interior and exterior. Store digital copies in cloud storage and keep physical copies in waterproof containers away from your home.

# **Create Emergency Plans**

Establish evacuation routes, meeting locations, and communication protocols for your family. Prepare a disaster supply kit with food, water, medications, and essential documents.

# Take Action Today: Build a Safer Fenwick Island Home



# Start Small, Start Now

Begin with one project this month. Even simple steps like cleaning gutters or securing outdoor items make a difference.



# **Use Local Resources**

Download the Delaware Sea Grant's Homeowners Handbook and review Sussex County mitigation guides for specific regional advice.



# **Build Community Resilience**

Share what you've learned with neighbors.
Coordinated community efforts multiply
the effectiveness of individual actions.

"The time to prepare is before the storm. Every action you take today helps protect what matters most tomorrow."



# Questions?



# DEMA.DELAWARE.GOV

Phillip Cane State Hazard Mitigation Officer (SHMO) Phillip.Cane@delaware.gov

(w) 302-505-0904