

# Building a More Resilient Future: through FORTIFIED HOME™, FEMA P-804 and HUD Programs

NAIC/American Indian and Alaskan  
Native Liaison Committee

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# Intro Video – Who is IBHS

# FORTIFIED Home™



The National Standard for  
Resilient Construction

# FORTIFIED Home™

- Hazard specific
- Addresses building systems
- Tiered approach
- Existing and new buildings

# FORTIFIED Home™



# Systems Evaluated Under FORTIFIED



Hurricane



High Wind/High Wind & Hail



Roof and Attic Vent System

Roof System\*

\*Class 3 or 4 Impact Rating for HWH



Openings, Gables  
and Attached Structures

Gables, Porches, Carports  
and Chimneys



Structure (Continuous  
Load Path) and Chimney

Garage Doors and Structure  
(Continuous Load Path)

# FORTIFIED Home™ Basics

- Strengthen homes against specific natural hazards
- System based approach to resilience
- Comprehensive verification through inspections
- All requirements must be met to achieve designation
- Multiple designation levels for each natural hazard
  - Higher designations = increasing disaster resistance
  - Higher designations require completion of lower level requirements

# Evaluation Basics

- Trained & certified 3<sup>rd</sup> party evaluators
- Inspection and verification
- Collect detailed data and documentation/photos
- Evaluator submits data to IBHS
- Documentation of any needed upgrades required
- FORTIFIED Home designations last for 5-years



# FORTIFIED Home™ Eligible Dwellings

- New and existing homes can qualify
  - Single-family detached homes
  - Two-family dwelling units
  - Manufactured homes
  - Townhouses
- Property types NOT eligible:
  - Mixed use buildings and Commercial buildings. (See FORTIFIED Commercial)
  - Multi-unit residential not listed above



# Program Basics

- Hurricane: Same basic requirements as FEMA P-804
- FORTIFIED = FEMA P-804
  - Bronze = Basic 1
  - Silver = Intermediate 2
  - Gold = Advanced 3
- FORTIFIED provides validation and documentation
- Re-designation at 5 year intervals - focuses on roof

# Natural Partnership on P-804

## FEMA P-804: (Hurricane Retrofit Guidance)

Pre-calculated/approved benefits where design winds > 120 mph

### Without Roof Replacement

Intermediate = \$13,153

Advanced = \$40,252

### With Roof Replacement

Intermediate = \$24,920

Advanced = \$52,018

# Key Bronze (Level 1) Requirements

- Improve fastening of deck (if needed)
- Seal roof deck – (4 different options)
- Install wind-rated roof cover
- Gable end wall sheathing and outlookers
- Address attic ventilation water intrusion (hurricane prone areas)
- Install impact rated roof cover (hail prone areas)

# FORTIFIED Home™ Hurricane Bronze Designation

Ensure adequate gable end sheathing is present

Nail or re-nail sheathing

Seal roof deck

- Gable ends:
- block rake vents
  - anchor outlookers

Cover or remove gable end vents

Install wind rated roof cover

Install rated ridge & off-ridge vents

Ensure soffit vent covers are adequately attached

# Water Intrusion - Sealed Roof Deck Video

# Key Silver (Level 2) Requirements

## Hurricane

- Brace gable ends
- Anchor carports/porches
- Wind rated garage doors
- Protect openings

## High Wind

- Gable wall sheathing
- Brace gable ends
- Anchor carports/porches
- Anchor wood frame chimneys

# Attached Structure Video



# Key Gold (Level 3) Requirements

## Hurricane

- Anchor wood frame chimneys
- Pressure rated windows and doors
- Continuous load path and minimum wall sheathing requirements

## High Wind

- Garage door must be pressure rated
- Continuous load path and minimum wall sheathing requirements

# Load Path Video

# Benefits to Homeowners

- Peace of mind
- Property protection
- Limit loss of use (Resilience)
- Social responsibility (Sustainability)
- Financial incentives (where available)

# Benefits to Builders and Contractors

- Build trust
- Sell value over price
- Be an expert, leader in the community
- Social responsibility
- Financial incentives (where available)

# “Habitat for Humanity Contractor

Our passion is to build a stronger house, a better house, a more affordable house, a more resilient house... so Fortified fell right into what we wanted to do.

Ryan R.



# Property Loss Mitigation Holds Communities Together

Reduce  
Spending

Income  
Tax Base

**Resilient  
Communities**

Local  
Economy

Property  
Tax Base

Local  
Jobs

# Other Federal Partners

- HUD (FORTIFIED referenced in initiatives)
  - Coastal tribe relocation
  - CDBG-DR South Carolina and Texas Grants under Public Law 114-113: \$300M
- Federal Home Loan Bank (Support for Strengthen Alabama Homes - \$1M in 2016)

# State and Local Government Partners

- Strengthen Alabama Homes (uses FORTIFIED Requirements for retrofit program)
  - \$2.5M from State
  - \$2.0M from AIUA
  - \$1.0M from Federal Home Loan Bank
- Coastal Alabama Counties adopted FORTIFIED as high wind supplement to local codes



# Existing Non-Profit Partnerships

- Habitat International (encouraging local chapters to use FORTIFIED)
- Smart Home America (grass roots support for local use and adoption of elements)
- Tulsa Partners (grass roots pilot for High Wind & Hail programs)



# Thank You

## Questions?