

**SOUTHEAST FLORIDA**

**REGIONAL COMPACT**

**CLIMATE  
CHANGE**



# Resilient Code Can Happen

Florida International University

March 14, 2019



**SMART HOME  
AMERICA**

**Informed Decisions  
Make a Smart Home**

# Our Vision

Stronger, Sustainable,  
More Resilient Communities

# Why We Exist

BEFORE



AFTER



# Our Partners

**State Farm**



TRAVELERS INSTITUTE



# Building Resilience, from the ground-up



# Stakeholders

**Goal:** Share information through existing, community touchpoints

Consumers

Building Officials

Real Estate

Insurers

Elected Officials

NGO's

Contractors

Appraisers

Manufacturers

Suppliers

Architects & Engineers

Academics

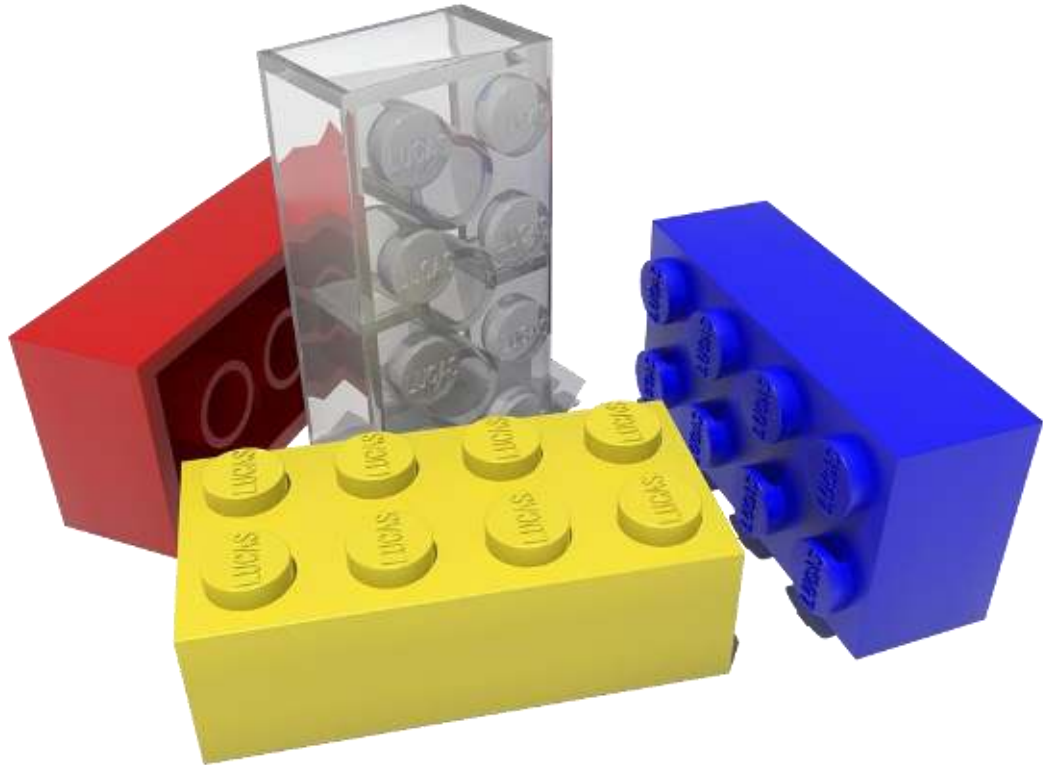
# Multi-Hazard Resilience



**Wind + Flood + Insurance**



# The Building Blocks of a Resilient Community



Current Building Codes

Mitigation funding options

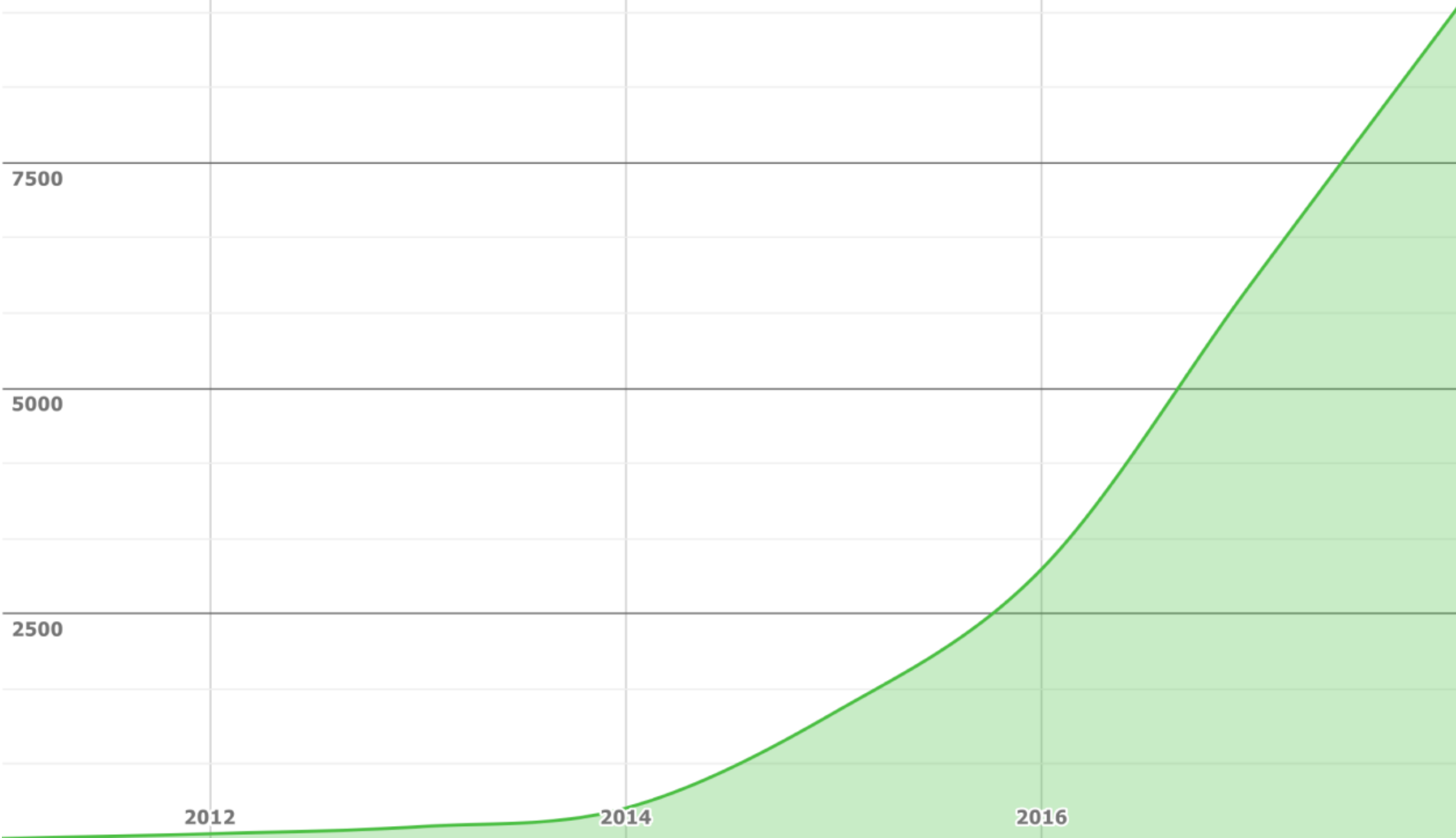
FORTIFIED Home™ Construction

Insurance = economic resilience

State and Local policies that enhance  
community resilience

# FORTIFIED Designations 2011 - 2018

Year





\$40M - 105 fans – 175 mph gusts – 30 Megawatts

# Building Codes

A grayscale photograph of architectural blueprints. A ruler is placed diagonally across the bottom right, and a pen lies horizontally across the bottom left. The blueprints show various technical drawings, including a cross-section of a wall with a window and a door. A central white box with a black border contains the text 'The MINIMUM Standard'.

**The MINIMUM Standard**

# FORTIFIED Home™ Approach

- Definable
- Consistent
- Verified
- Systems Based



# Hazard-Specific Building Standards

## Hurricane



**Roof and Attic Ventilation System**



**Openings, Gables and Attached Structures**



**Structure (CLP) and Chimneys**

*Location and Design Wind Speed are key determining factors in deciding which standard(s) apply.*



# The Impact of FORTIFIED

Reduce insured losses by as much as 50% just by getting the roof right!



© Insurance Institute for Business & Home Safety







# EVALUATION PROCESS & BENEFITS

# A National Standard



FEMA



USDA

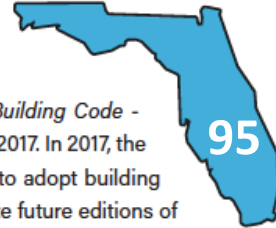


U.S. Small Business  
Administration



# IBHS 2018 Rating the States

## Florida



### BUILDING CODE ADOPTION

Florida continues to be a leader in building code safety. The 6th Edition (2017) of the *Florida Building Code - Residential* (FBCR), which is based on the 2015 edition of the IRC, became effective December 31, 2017. In 2017, the State of Florida enacted legislation that makes major changes to the process the state employs to adopt building codes in the future. Under the new law, the Florida Building Commission (Commission) will update future editions of the code using the existing FBCR as the base text, with all existing Florida-specific requirements carried forward. The Commission will then consider technical amendments to the code in two phases. See **Highlights of Significant Changes** for further discussion of this legislation.

<b>CERTIFICATION AND EDUCATION OF BUILDING OFFICIALS</b>	Florida has a mandated program for building official certification and training. The program requires individuals to take code-specific courses prior to taking a certification/licensing exam, but a combination of experience and education can qualify candidates as well. The state has a one- and two-family dwelling inspector certification category, which is limited to residential dwelling inspections.
<b>LICENSING OF CONTRACTORS</b>	The state requires licensing of general, plumbing, mechanical, electrical, and roofing contractors. The contractor licenses require passing examinations along with continuing education in every category. Mechanisms are in place enabling the state to discipline a contractor for violations or noncompliance with the code.
<b>KEY AREAS FOR IMPROVEMENT</b>	The lack of requirement for continuing education of building officials specific to the residential code to maintain certification and/or a license is one area that could be improved. Also, in the future it will be necessary to pay close attention to the new code development process to ensure important improvements to the IRC are not bypassed as the state places greater emphasis on the FBCR.

### 2018 AND 2015 STATE SCORES

STATE	2018 SCORE (NEW)	2015 SCORE
FLORIDA	95	94
VIRGINIA	94	95
SOUTH CAROLINA	92	92
NEW JERSEY	90	89
CONNECTICUT	89	88
RHODE ISLAND	87	87
NORTH CAROLINA	83	84
LOUISIANA	83	82
MASSACHUSETTS	81	79
MARYLAND	78	78
GEORGIA	68	69
NEW YORK	64	56
MAINE	54	55
NEW HAMPSHIRE	46	48
TEXAS	34	36
MISSISSIPPI	28	28
ALABAMA	27	26
DELAWARE	17	17

#1

# FBC Performance in IRMA

## 2017 FEMA Hurricane MAT Recovery Advisories

### • USVI Recovery Advisories (5)

- **Rebuilding Your Flood-Damaged House**
- Attachment of Rooftop Equipment in High-Wind Regions
- Installation of Corrugated Metal Roof Systems
- Design, Installation, and Retrofit of Doors, Windows, and Shutters
- Rooftop Solar Panel Attachment

### • Puerto Rico Recovery Advisories (6)

- Rooftop Equipment Maintenance and Attachment in High-Wind Regions
- **Siting, Design, and Construction in Coastal Zones**
- Safe Rooms and Storm Shelters for Life Safety Protection from Hurricanes
- **Minimizing Flood Damage to Existing Structures**
- Protecting Windows and Openings in Buildings
- Repair and Replacement of Wood Residential Roof Systems



## 2017 FEMA Hurricane MAT Recovery Advisories

### • Texas Recovery Advisories (2)

- **Dry Floodproofing Planning and Design Considerations**
- Asphalt Shingle Roofing for High Wind Regions

### • Florida Recovery Advisories (3)

- **Dry Floodproofing Planning and Implementation**
- Soffit Installation in High-Wind Regions
- Roof Repair and Replacement Requirements in the 6th Edition (2017) FBC



# FORTIFIED VS Florida Building Code

## FORTIFIED

- Holistic & systematic
- Consistent, national standard
- Third-Party Evaluator
- Comprehensive verification and documentation
- Sealed roof deck & ring shank nails

## FBC

- Components based
- State code
- Enforcement and standards vary based on location
- Necessary documentation collected on materials and installation

# What Does “Built to Code” Mean to Consumers?

- The challenge
  - No value or meaning
  - Consumers think “built to code” same everywhere
  - Hard to differentiate between other new homes and less expensive existing homes
- In most locations, “built to code” does not automatically qualify a home for FORTIFIED designation

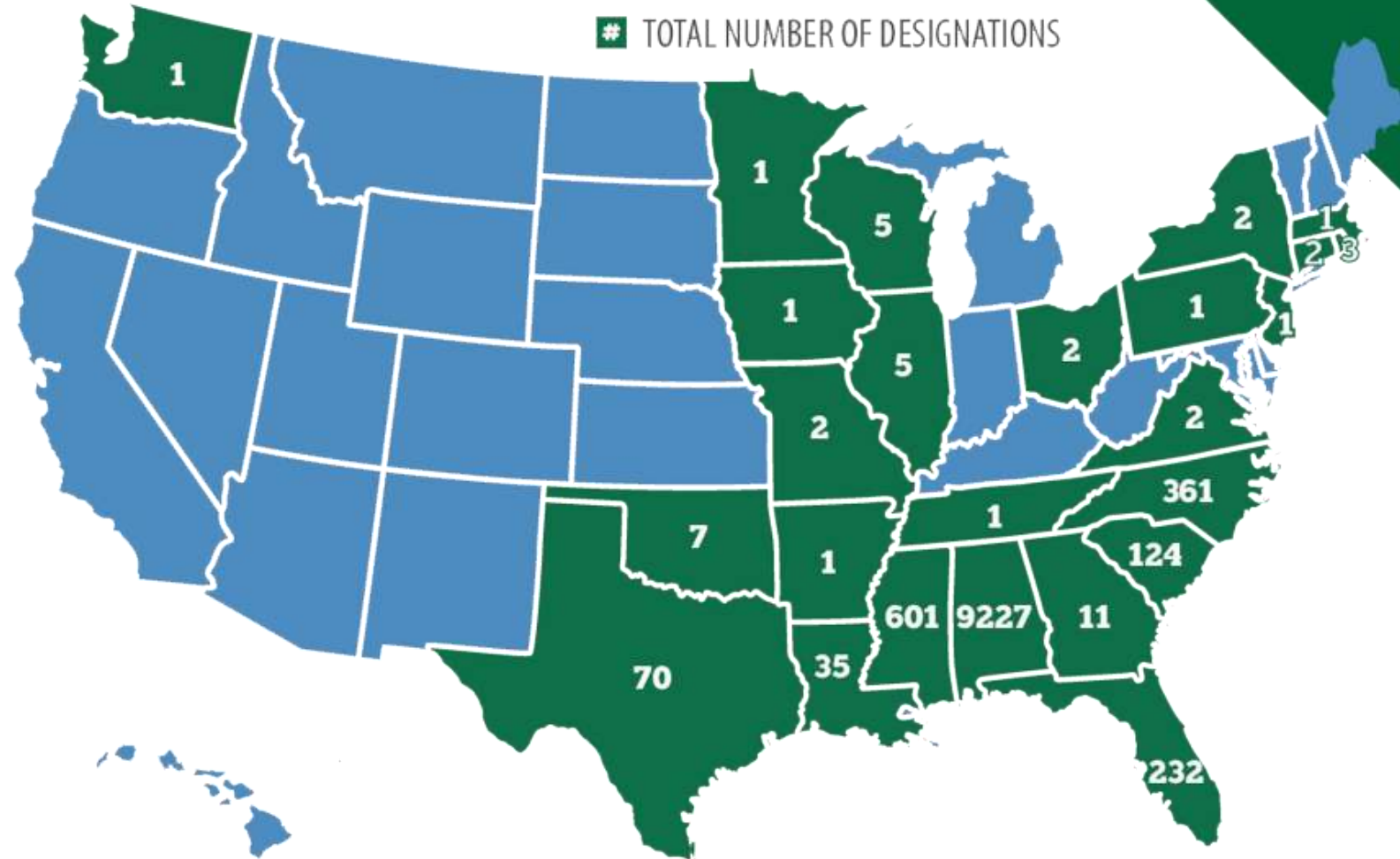


# DESIGNATIONS

AS OF  
JAN  
2019



Total Designations  
**10,700**



# More Information

[SmartHomeAmerica.org](http://SmartHomeAmerica.org)

[DontGoof.org](http://DontGoof.org)





# Thank You

## Contact Information



Hank Hodde

Planning and Policy Manager

[hank@smarthomeamerica.org](mailto:hank@smarthomeamerica.org)

251.206.5634 @BuildResilient