



September 27, 2024

Scott Farmer
Executive Director
North Carolina Housing Finance Agency
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Executive Director Farmer:

The Insurance Institute for Business & Home Safety (IBHS) is pleased to offer the following comments for your consideration in response to the North Carolina Housing Finance Agency (NCHFA)'s [First Draft 2025 QAP](#) for public comment.

We strongly encourage NCHFA to require or incentivize through the scoring criteria a designation from IBHS's FORTIFIED™ program for all projects seeking LIHTC funding in North Carolina.

Based on decades of scientific research, IBHS's [FORTIFIED™ program](#) is a set of voluntary, beyond-code construction upgrades that improve a building's resistance to the effects of high winds, hurricanes and even tornadoes. The FORTIFIED program is available for single-family houses, multifamily properties, and commercial structures. The program features a technical standard and an independent verification process that ensures that buildings obtaining a FORTIFIED designation from IBHS have, in fact, reduced their risk. To date, more than 72,000 structures have been designated by the FORTIFIED program across the country.

To require FORTIFIED for all projects, we suggest the following edits be made to NCHFA's [APPENDIX B: 2025 Design Quality Standards and Requirements](#):

V. RESILIENT CONSTRUCTION

Commit to resilient construction standards. All projects must obtain from the Insurance Institute for Business & Home Safety a [FORTIFIED](#) designation.

To incentivize resilient construction standards, we suggest the following edits be made to NCHFA's [First Draft 2025 QAP](#):

V. SELECTION CRITERIA AND THRESHOLD REQUIREMENTS

F. SPECIAL CRITERIA AND TIEBREAKERS

2. RESILIENT CONSTRUCTION (MAXIMUM 3 POINTS)

Developments built with resilient construction standards and that receive a FORTIFIED Multifamily designation from the Insurance Institute for Business and Home Safety (IBHS) will be awarded up to 3 points as described below. Resilient construction standards are optional.

To reduce damage to residential, commercial and multifamily structures and help businesses re-open more quickly following severe weather, the Insurance Institute for Business & Home Safety (IBHS) developed [FORTIFIED™ Multifamily](#), a voluntary, resilient construction and re-roofing standard and designation/compliance program. FORTIFIED employs an incremental approach with three levels of designations available so design professionals can work with building owners to choose a desired level of protection that best suits their budgets and resilience goals.

FORTIFIED Roof – 1 point
FORTIFIED Silver – 2 points
FORTIFIED Gold – 3 points

As set forth below, IBHS’s FORTIFIED program provides a science-based, field-proven tool for NCHFA to incorporate resilience standards into the 2025 QAP. Investment in resilience will create safer homes that can withstand the increasingly severe weather North Carolina faces. In addition, it will make these properties lower risk (and therefore more attractive risks) for property insurers.

Background

IBHS is a 501(c)(3) organization enabled by the property insurance industry’s investment to fund building safety research that leads to real-world solutions for home and business owners, helping to create more resilient communities. We conduct this work from our Research Center, located in Richburg, South Carolina.

Severe weather disrupts lives, displaces families, and drives financial loss. IBHS delivers top-tier science and translates it into action so we can prevent avoidable suffering, strengthen our homes and businesses, inform the insurance industry, and support thriving communities. The perils we study at IBHS are part of the natural world in which we live, but social and economic disasters occur when these perils meet human populations that live or work in harm’s way. To break the cycle of destruction, it is essential to address all aspects of the building performance chain: where you build, how you design and construct, and how well you maintain and repair. As a building science institute, IBHS focuses on the ways that weather behaves, what makes homes and businesses vulnerable, and how our buildings can be more resilient. We exist to help ensure that the spaces where people live, learn, work, worship, and gather are safe, stable, and as strong as the best science can equip them to be.

Resilience is a Housing Issue

We encourage NCHFA to treat resilience as a housing issue. NCHFA’s mission is to “provide safe, affordable housing opportunities to enhance the quality of life of North Carolinians.” We assert that this mission cannot be met without investments in resilient construction.

Homes are not “quality” unless they are sufficiently resilient to withstand knowable risk from severe weather. Investing in resilience for affordable housing helps ensure that people are not only housed, but that they *remain* housed following natural disasters. Quality housing that withstands severe weather allows working families to return home following natural disasters, which in turn supports local economies and economic revitalization by preventing businesses from closing from low demand and want of workers, protecting the local tax base.

Housing is not “affordable” unless it provides savings to the resident not just on the day of purchase (or lease signing), but on an ongoing basis as well. Investments in resilience provide ongoing savings to

residents. Generally, risk reduction results in avoided damages from severe weather and reduced insurance premiums reflecting the reduction in risk.

Further, given the risks facing North Carolina housing—particularly in coastal communities—requiring or incentivizing resilient construction represents good stewardship of public resources. The FORTIFIED program can help publicly funded buildings escape the costly build-damage-rebuild cycle that can take place in areas at risk of hurricanes and other high wind events.

The North Carolina Insurance Underwriting Association (NCIUA)'s [Strengthen Your Roof](#) program awards eligible policyholders \$8,000 grants for FORTIFIED roofs. In 2022, the North Carolina legislature allocated \$7 million in matching funds to expand this program.

As a significant source of funding for affordable housing in North Carolina, NCHFA's LIHTC program could become a critical tool for strengthening the resilience in the state by joining the NCIUA and the North Carolina state legislature in using FORTIFIED as a construction standard.

FORTIFIED Strengthens Resilience

FORTIFIED provides property owners with the ability to achieve three increasing levels of resilience:

FORTIFIED Roof is the foundation of FORTIFIED because an estimated 70 to 90 percent of catastrophic homeowners' insurance claims include roof damage, and damaged roofs can lead to water intrusion that significantly amplifies damage. FORTIFIED Roof provides a system that strengthens the roof through (i) more and stronger nails, (ii) locked-down edges, and (iii) a sealed roof deck, which work in concert to keep the wind and rain out.

FORTIFIED Silver adds increased levels of resilience through requirements on windows, doors, and siding.

FORTIFIED Gold adds requirements related to a continuous load path from the roof to the foundation.

Studies following Hurricane Sally (in Alabama) and Hurricanes Matthew, Florence, Dorian, and Isaias (in North Carolina) concluded that FORTIFIED designated homes are less likely to have an insurance claim and, for those homes with insurance claims, claims that are smaller on average.

The value of FORTIFIED has also been explored in a 2022 [study](#) from the University of Alabama's Culverhouse College of Business, which concluded that building or retrofitting to FORTIFIED has relatively minimal costs and a strong rate of return. Findings include:

By constructing a new multifamily building to FORTIFIED Gold, property owners could realize an 8.1 to 72 percent internal rate of return on a marginal cost increase of no more than 1.5 percent of total cost of construction. For investments in retrofitting an existing multifamily building to FORTIFIED Roof, a property owner could realize an 8.3 to 35 percent internal rate of return on the investment for the property owner.

Further, a new [IBHS study](#) exploring opportunities to enhance the resilience of Section 8 multifamily and single-family housing in the Atlantic and Gulf coast regions estimates that retrofitting these properties with a FORTIFIED Roof could decrease losses by 30-50 percent.

Public Investment in FORTIFIED

FORTIFIED keeps roofs on, water out, blue tarps off, families in place, and communities intact. As a result, federal and state agencies are increasingly turning to FORTIFIED when investing in resilient housing.

- The Louisiana Housing Corporation **requires** a FORTIFIED Roof as a minimum construction standard in its [2024 QAP](#) and provides additional scoring consideration for projects that build to FORTIFIED Silver and Gold.
- The Louisiana Housing Corporation **requires** FORTIFIED Gold as a minimum construction standard for [projects funded by HUD CDBG-DR grants](#).
- The Mississippi Home Corporation incentivizes FORTIFIED Multifamily in its [2024 QAP](#) scoring criteria.
- Alabama, Louisiana, and South Carolina help pay for FORTIFIED retrofits through grant programs managed by the state insurance departments. These states will soon be joined by grant programs in Kentucky, Minnesota, and Oklahoma, all of which have been enacted into law since 2023 although not yet operational.
- The Federal Home Loan Bank of Dallas invests in FORTIFIED through two mechanisms: as part of the scoring criteria for its [Affordable Housing Program](#) and through a new [FORTIFIED Fund grant program](#).
- The U.S. Department of Housing and Urban Development's new [Green and Resilient Retrofit Program \(GRRP\)](#) includes FORTIFIED as a covered expense for eligible property owners.

In addition to creating more resilient housing for North Carolina residents, resilience requirements in housing programs like the LIHTC program have an important effect on workforce and skills development. We have observed in Alabama and Louisiana that references to the FORTIFIED program in government programs creates opportunities to educate developers, builders, and contractors about FORTIFIED. Once these essential participants in the housing market build to FORTIFIED because of program or funding requirements, they develop a comfort level with the work and costs associated with FORTIFIED. This can result in voluntary take-up on other projects unconnected to government funding sources. In this way, QAP resilience requirements can have an even broader impact on the built environment than those projects funded by grantees.

Requiring or incentivizing FORTIFIED in NCHFA's LIHTC program could significantly increase the number of North Carolinians who live and do business in resilient homes and buildings.

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Weather events become natural disasters by devastating communities, damaging property, disrupting local economies, and dislocating families. This need not be the case. Solutions exist to strengthen the resilience of our homes—investments by NCHFA’s can turn these solutions into a reality for North Carolina residents.

Thank you for the opportunity to contribute to this critical issue. If you have any questions, please do not hesitate to contact me at mnewman@ibhs.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'MN', followed by a long horizontal flourish.

Michael Newman
General Counsel
Insurance Institute for Business & Home Safety