

Written Testimony of Mr. Rob Howard, President of Howard Building Science, Inc.
Before the House Energy and Commerce Committee
Subcommittee on Energy, Climate, and Grid Security
Hearing on “Green Building Policies: Jeopardizing the American Dream of Homeownership”
May 22, 2024

Good morning. Chairman McMorris Rodgers, Ranking Member Pallone, Chairman Duncan, Ranking Member DeGette, thank you for allowing me to testify this afternoon.

My name is Rob Howard. I am the President of Howard Building Science, a homebuilding company based in Granite Falls, N.C. and a Building Science Lecturer at Appalachian State University. I earned my General Contractors license in 2004, so I have been building sustainable, affordable housing for 20 years. I serve on the Board of Directors of the Watauga Community Housing Trust. I was recently appointed to the residential builder seat on the North Carolina Building Code Council.

My construction career started at Habitat for Humanity of Catawba Valley in 2001. That same year, Advanced Energy started their System Vision program to help affordable housing providers build energy efficient homes that include a two-year comfort and energy use guarantee. I like to say that I have never built a home to code. I have always looked at the building code as the baseline, but not the finish line. One of my mentors, Arnie Katz, used to say that a home built to code is the worst home you can build by law. I believe that we can do better than that. We should build homes that are not just affordable to buy, but also affordable to own and operate.

I have heard some complain that building to code makes houses less affordable. My experience has been the opposite. Yes, there is an upfront cost, and I have found that it is generally in the range of what the Department of Energy, HUD and the national labs have estimated – somewhere around \$6,000 or \$7,000 per home. But when you amortize that over a 30-year mortgage – as anyone concerned about affordability would be doing – you’re talking about maybe \$50 a month in additional monthly payment. And I have found – again just as the Department of Energy and HUD have estimated – that the monthly energy bill savings are larger than that. So the homeowner is spending less on net each month, and gets a better, more efficient, more comfortable house that’s also more durable. And over time they’re saving thousands and thousands of dollars.

It’s sorta like buying a cell phone plan. You may find some carriers have very low upfront costs for the phone, but if the monthly payments are two or three times the size as other plans, that catches up to you quickly and you are ultimately spending much more.

Unfortunately in the housing market, it’s just not as easy to know what your energy bills will be upfront as it is to know a fixed cell phone payment, particularly with new houses where you can’t look at what the energy bills have been historically. I think if it were, buyers would demand homes built at least to code. And I agree with my colleague here that the appraisal process

should do a better job of taking into account and valuing the energy efficiency of a home – that would be a critical market signal.

I am currently building a pocket neighborhood of 11 small homes on 1.25 acres in downtown Granite Falls, NC. Sometimes referred to as a Cottage Court, Duke Street Cottages is an example of Missing Middle Housing that provides a greater diversity of housing choice in a community where most new construction are large custom homes on large lots that are out of reach for most people.

These are **starter homes** that are ideal for first-time homebuyers, but they are also perfect for retirees who want to downsize into single level living. My most recent customers are both first-time homebuyers. One of them is a nurse at the local hospital in her 20's and the other is a retired school teacher in her 70's.

These are above-code, **all-electric homes** with high efficiency inverter heat pumps for space conditioning, heat pump water heaters, ventless heat pump dryers, and induction ranges. They also have mechanical ventilation systems to ensure healthy indoor air quality. With no wood burning or gas appliances, we have no concerns about carbon monoxide or other byproducts of combustion.

These are **DOE Zero Energy Ready Homes** that are roughed-in for future solar panels and EV charging. The 45L tax credit for builders of energy efficient homes offers a \$5000 incentive for building to the DOE Zero Energy Ready Home standards, which are based on the 2021 International Energy Conservation Code. In my experience, the \$5000 tax credit comes very close to offsetting the additional cost of insulation, air sealing, high efficiency HVAC and water heating equipment, and mechanical ventilation systems. Of course, these upgrades will eventually pay for themselves with energy savings.

My wife and I kept one of the homes at Duke Street Cottages for ourselves. Our daughter just finished her sophomore year of college and our son is graduating from high school tomorrow. We downsized from almost 4000 square feet to 1400 square feet. Our utility bills went from almost \$400 per month to under \$100 per month. Our new home is obviously smaller, but it is also comfortable, quiet, low maintenance, and extremely efficient.

In summary, I believe that a new home should not only be affordable to buy, but also affordable to own and operate. While certification programs help chart a path to move our industry forward, building and energy codes can have a much broader impact on all new home construction, including health, safety, durability, comfort, and energy savings.

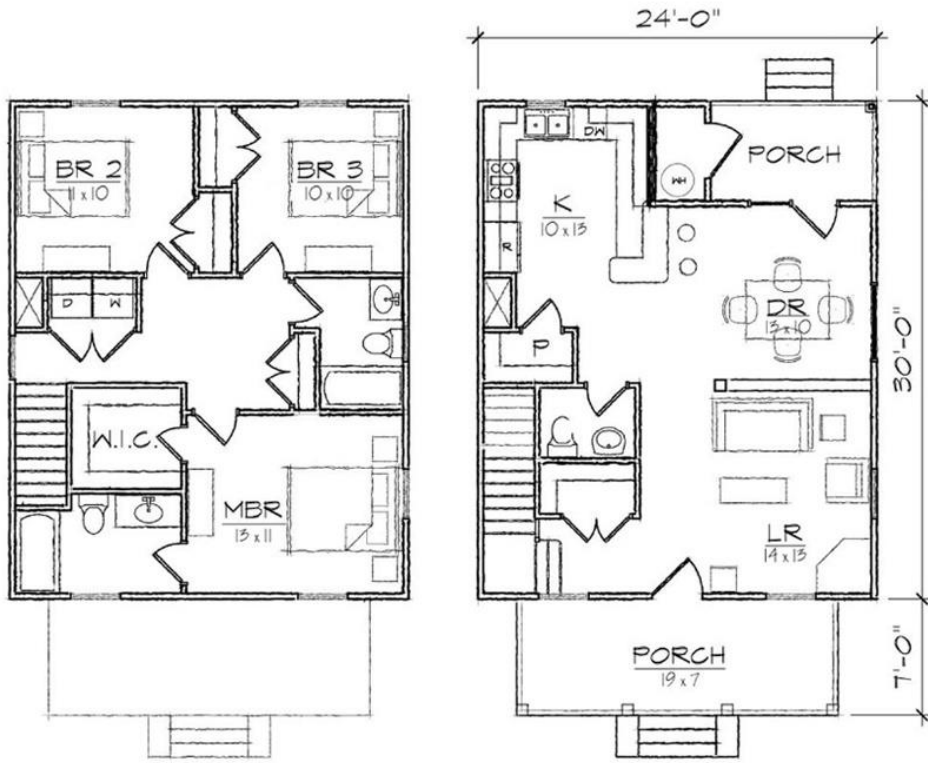
Thank you again for the opportunity to testify today.

Appendices:

- A. Duke Street Cottages Site Plan
- B. Duke Street Cottages Howard Plan – 800 square feet, 2 bedroom, 1 bath
- C. Duke Street Cottages Franklin Plan – 1400 square feet, 3 bedrooms, 2.5 baths
- D. Duke Street Cottages construction photos
- E. Zero Energy Ready Home certificate





















Howard Building Science

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Project: Duke Street Cottages
Granite Falls, NC

