Housing's New Reality: Build It to Survive

From hurricanes and wildfire to mold and extreme heat, homes are being tested in ways they weren't designed for. This week, new research shows what happens when we build them better—and what can happen when we don't. Plus, tariffs threaten construction costs, factory-built housing gains momentum, and 3D-printed homes get their biggest real-world test yet. Hi, I'm Ronan. Here's what's happening in sustainable building.

New research offers some pretty compelling evidence that stronger building codes actually work. Researchers used drone and satellite imagery from Hurricane Irma to analyze wind damage to more than one million homes across eight South Florida counties. They compared homes built just before and after Florida adopted its stronger 2001 building code, which required measures such as stronger roof-to-wall connections and thicker roof decking. The results were striking. Homes built under the stronger code were 22 percent less likely to suffer wind damage, and when they were damaged, the severity was about 27 percent lower. There was a financial impact, too. Damaged homes sold before repairs went for about 13 percent less, or roughly $29,000 less, than undamaged homes. It’s large-scale evidence that stronger codes don’t just improve resilience. They can protect property value, too.

https://phys.org/news/2026-08-aerial-imagery-hurricane-stronger-codes.html

Building codes may be getting better, but getting the details right still matters. The Wall Street Journal reports that homeowners are increasingly taking builders to court over mold, with lawsuits alleging problems ranging from improperly installed HVAC systems to windows and attic ventilation. Major builders including D.R. Horton and Lennar have faced claims, while builders argue that homeowner maintenance can also contribute to moisture problems. The larger lesson isn't that tighter homes cause mold, but tighter construction leaves less room for mistakes. Air sealing, flashing, drainage, HVAC sizing, ventilation and humidity control all have to work together.

https://www.wsj.com/us-news/law/mold-is-driving-americas-homeowners-crazyand-they-want-builders-to-pay-5cc180b7

California has finally adopted long-delayed wildfire protection rules, but they’re weaker than what scientists and firefighters recommended. A 2020 law called for a five-foot non-combustible Zone Zero around homes, which research suggests can nearly double a home’s chance of surviving a wildfire. After homeowner pushback over cost and

aesthetics, the new rules require just one non-combustible foot, with some vegetation allowed beyond it. The rules affect about 2 million homes, and critics warn the compromise could weaken resilience as California's wildfire and insurance risks grow.

https://www.bloomberg.com/news/articles/2026-08-19/california-adopts-weaker-home-protection-rules-as-wildfires-grow?

What happens to a home when the power goes out during extreme heat or wildfire smoke? Lisa White, co-executive director of Phius says passive buildings can remain habitable two to ten times longer than conventional homes during an outage. In the latest *Valuation Metric*, Sara Gutterman talks with White about passive survivability and why resilience may be redefining what we should expect from our homes. Here's a clip:

https://youtu.be/teKacrKv6EM?si=9nhSzMer_QTVHTig

New COGNITION Smart Data shows resiliency is becoming one of housing's strongest value drivers. Homebuyers who have experienced climate-related disasters are placing greater importance on resilient home features, builders are seeing demand grow, and most industry professionals believe resilient homes command higher resale values. The biggest hurdle remains upfront cost. But as insurance premiums, extreme weather and repair costs rise, buyers are increasingly looking beyond the purchase price to what a home will cost and how well it will protect them over time. Our new free report, *A Growing Resiliency Economy*, explores what buyers want, what's holding the market back, and why resiliency is becoming a cornerstone of Value Per Square Foot. Click the link in the notes to download it for free.

https://www.greenbuildermedia.com/blog/resiliency-one-of-housings-strongest-value-drivers

Speaking of extreme heat, here's another weather related issue builders must pay attention to: Extreme heat is stressing the ground beneath our homes. After five successive heat waves, London is seeing record insurance claims for subsidence as its clay soils dry, shrink, and shift beneath building foundations. Homeowners are reporting major cracks, sticking doors, and other structural damage. And this isn't just a London problem. Large areas of the U.S. also have expansive clay soils that swell when wet and shrink when they dry. For builders in those regions, increasingly intense heat and drought add another reason to pay close attention to soil testing, foundation design, drainage, and moisture conditions around the home.

https://www.bloomberg.com/news/articles/2026-08-23/londoners-find-horrendous-cracks-in-homes-after-heat-waves?srnd=phx-green

As summers get hotter, America's reliance on air conditioning is becoming an energy problem of its own. Axios reports that engineers are increasingly looking at ways to keep buildings comfortable without simply adding more AC. That matters because cooling can account for roughly half of peak electricity demand in Texas on the hottest days, and hotter temperatures mean AC use is expected to keep climbing across the country. One solution is surprisingly simple: Stop the heat from getting inside in the first place. Smart windows and shading, reflective roofs, better ventilation and new radiative cooling coatings can reduce heat gain, while more efficient cooling systems and energy storage can shift electricity use away from peak hours.

https://www.axios.com/newsletters/axios-future-of-energy-2d530500-9f33-11f1-9330-e501d7ab6ef0?utm_source=chatgpt.com

The renewed U.S.-Canada trade war is putting housing affordability back in the crosshairs. That's because building supply chains go both directions across the border. Canada itself has already documented that tariffs and uncertainty are disrupting construction supply chains, and Statistics Canada said last month that retaliatory tariffs were contributing to construction cost pressures. There's evidence this isn't theoretical. A 2026 analysis by Cushman & Wakefield estimated that the tariff environment already in place as of May could raise Canadian construction-material costs by 9.2% and overall project costs by nearly 1 percent. And the Canadian government has previously identified specific U.S.-made housing products vulnerable to trade disruption, including windows, doors, toilets, equipment replacement parts and aluminum studs.

https://www.marketwatch.com/story/u-s-automakers-and-home-builders-are-among-the-big-losers-as-trump-launches-a-trade-war-against-canada-063c1d4c?utm_source=chatgpt.com

Washington is betting on manufactured housing to help solve the affordability crisis, but cheaper homes don't necessarily mean affordable payments. The new bipartisan housing law could cut construction costs by as much as $10,000 per home by eliminating an outdated steel-frame requirement. But 44 percent of manufactured-home buyers rely on personal property loans, which can carry interest rates near 10 percent, several points higher than typical mortgages. Now Democratic Senators Jeff Merkley, John Hickenlooper and Peter Welch have introduced legislation that would give Fannie Mae and Freddie Mac 30 months to begin taking on some of the risk from these loans.

https://www.politico.com/news/2026/08/23/congress-made-it-cheaper-to-build-manufactured-homes-theyre-still-expensive-to-buy-01042996

Keller Williams has launched KW Modular, a new agent group designed to train real estate professionals on selling factory-built homes and connect them directly with modular manufacturers. The program comes as modular construction gains attention as a potential answer to some of housing's biggest problems, including labor shortages, high construction costs and long build times. KW Modular says modular homes can cost 10 to 25 percent less than comparable site-built homes and can be completed considerably faster. What's notable here is who's making the move. This isn't a modular manufacturer trying to sell more houses. It's a major real estate brokerage preparing its agents for what it believes could be the next wave of American homebuilding.

https://www.inman.com/2026/08/13/kw-stakes-claim-in-modular-housing-with-new-agent-group/?

We've been hearing about 3D-printed homes for years. Now Colorado is putting the technology to a much bigger test. A 55-acre development called Cleora in SUH-LIE-DUH plans 106 residences, with more than 65 expected to be 3D printed. Two autonomous printers are already onsite and several homes are complete. The concrete wall systems promise better thermal performance and resistance to wildfire, high winds, mold and severe weather. The project is also partnering with Colorado Mountain College to train students in construction robotics and 3D printing. But here's the reality check: 3D printing isn't cheaper or faster than conventional construction yet. Developers are betting that scale and repetition will change that. And that may be the real significance of Cleora: taking 3D-printed housing from demonstration project to real-world neighborhood.

https://theaiinsider.tech/2026/08/13/ric-robotics-building-65-3d-printed-homes-as-part-of-colorado-development/?utm_source=chatgpt.com

This week's Editor's Product Pick comes from OX Engineered Products. The company has expanded its ThermoPLY line with ThermoPLY Utility Board AB, bringing its air-barrier technology to non-structural applications like knee walls, attics, fireplaces, tubs, and shower surrounds. What's interesting is its dual-purpose design. The lightweight board provides a mechanically attached air barrier and draft stop to help meet energy and ENERGY STAR requirements, but can also serve as temporary floor and surface protection during construction, with a poly barrier to guard against spills. It's a simple idea: one product that supports both building-envelope performance and jobsite efficiency.

https://bldpressroom.com/ox-engineered-products/utilityboard

That’s it for this week. If there’s one theme running through these stories, it’s that housing performance is becoming harder to ignore. We’ll keep watching what’s changing and what it means for the future of housing. See you next week.