Redefining Resilient
Building True Forever Homes

June 29, 2022
Since 2015 the United States has experienced roughly 100 more wildfires every year.

The number of wildfires is increasing...

...and they’re burning more land.
We are losing homes faster than we can rebuild them...

...under the pressure, we build the way we always have, instead of the way we should.
Why wood? A uniquely American History...

European Heavy Timber
Infilled with:
- Wattle & Daub
- Brick

American immigrants did not have resources for bricks or daub, but they had plenty of wattle...

...realizing that the wattle shed just fine on its own, they eliminated the heavy timber, and an industry was born.
Things we have to do to keep wood from burning:

- Wrap it
- Spray it
- Treat it
Building Envelope Vulnerabilities
1 STEP FORWARD

2 STEPS BACK
What we’ve been describing so far is fire resistance... 

...when what we really want to talk about is resilience
But what does it mean to be resilient?
Resistance

Safety now

Resilience

Safety forever
Temperatures are rising
Average annual temperatures in the Western US have increased 1.9°F since 1970.

Snow melts sooner
Winter snowpack melts up to 4 weeks earlier than in previous decades.

Climate change is fueling wildfires. Here’s how.

Fires are getting worse
Wildfires are larger and costlier than ever before, and their emissions are worsening global warming.

Forests are drier, longer
Ecosystems are primed for wildfires to ignite and spread.

You can help.
Fighting climate change is the best strategy we have to reduce the risk of wildfires. Until we take action, summers will continue getting hotter, forests will get drier, and more and more people will face the threat of wildfires.

You can help.
Climate change is fueling wildfires. Here’s how.
47% of Global CO$_2$ Emissions Are Produced by Buildings

- 27% Building Operation
- 10% Building Materials & Construction
- 10% Other Construction Industry
- 10% Industry
- Transportation
- Other

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Rebuilding with Wood Construction Fuels CO₂ Emissions

Homes are destroyed

Wildfires Rage
Larger, Frequent, and more costly

Cycle of Insanity

Climate Change is fueled
Ecosystems are primed for wildfires to ignite and spread
Let’s break the cycle
What if I told you....
We can design and build a home that is not only fire resistant, but climate resilient.
Nerd alert.
It turns out that a process that is good for fire survivors is also good for the planet.
ORIGIN STORY
Laurie and Tony image, how it started, who we are, green bonafide, trauma informed care - type 2 non-comb. & Net Zero
Santa Rosa Fire rebuild construction experiences:

- Budget/schedule overruns
- Incompetence/dishonesty
- Combustible construction
What is a PHNX Home?
Forever homes for Everyone
How is PHNX Different?

The Old Way

- Combustible Type V-B Construction
- Grid dependent
- Gas appliances
- Dependence on volatile labor/material markets
- Out of control budgets
- Typical delivery 2+ years
- Compounds the trauma of losing your home
- Maintenance Costs

The PHNX Way

- Non-Combustible Type I-A
- Battery backup
- All Electric / Net-Zero
- Predictable proprietary products & systems
- PHNX 10% Concept Budget
- Typical delivery < 18 months
- Streamlined trauma informed PHNX design process
- Future Savings
**Resistance**
- Type IA – Non-Combustible (Highest Possible Fire Resistance)
- Insulated Concrete Forms
- Standing Seam Metal Roof
- Aluminum Clad/Tempered Glass Windows

**Resilience**
- Net-Zero Energy Use
- No Fossil Fuels
- Grid Independent
- Up to 80% Less Construction Waste
- Durable "Forever" Home

**Excellence**
- Award-Winning Team
- Experienced Industry Leaders
- Quality Products & Materials
- Trending Interior Design
- Daylight & Natural Ventilation

**Transparency**
- Predictable Budget
- Streamlined Schedule
- Affordable
- Less Stressful Trauma-Informed Approach
PHNX1 Timeline

Palos Family Loses Home
Tick Fire Oct 2019

PHNX Engaged/Design Begins
April 2020

Plancheck Submittal
Sept 2020

Construction Start
Feb 2021

MOVE IN!!
Jan 2022

21 months start to finish!
PHNX 1
Completed
Winter 2022

PHNX3
Const. Start
Aug '22

PHNX2
Const. Start
July '22

PHNX4
Const. Start
Fall '22

PHNX5, 6 & 7
(on the boards)
Rancho Cucamonga, Big Bear, Chatsworth

Santa Clarita
Capistrano Beach
San Diego
Fire Resistance to Climate Resilience

**Fire Resistant**
- Non-Combustible Type II Construction
- Battery backup / Net-Zero
- All Electric
- Predictable proprietary products & systems
- PHNX Budget within insurance limits
- Typical construction < 9 months
- Streamlined trauma informed PHNX design process

**Climate Resilient**
- Durable, high R-value, no rot or pests
- Energy efficient
- Fossil fuel independent
- Reduces construction waste by as much as 80%, high recycled content
- A PHNX Home will get built
- Less disruption to the environment
- Less stressful process promotes the well-being of *all* humans involved
Fire & Disaster Resistance
- Type II Non-Combustible Construction
- Insulated Concrete Forms
- Standing Seam Metal Roof
- Aluminum Clad/Tempered Glass Windows

Climate Resilience
- Net-Zero Energy Use
- No Fossil Fuels
- Grid Independent
- Up to 80% Less Construction Waste
- Durable "Forever" Home

Design Excellence
- Award-Winning Team
- Experienced Industry Leaders
- Quality Products & Materials
- Trending Interior Design
- Daylight & Natural Ventilation

Clarity & Transparency
- Predictable Budget
- Streamlined Schedule
- Affordable
- Less Stressful Trauma-Informed Approach