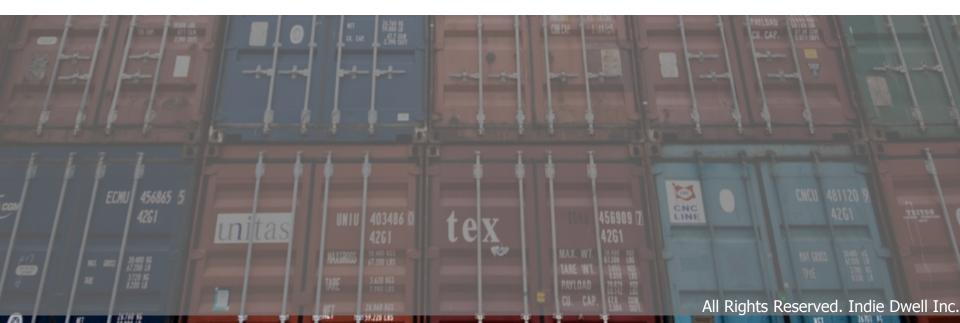


# indie IW 1

High Quality, Affordable Housing for All





"We can't solve problems by using the same kind of thinking we used when we created them." Albert Einstein

"Insanity is doing the same thing over and over again and expecting different results." Albert Einstein

"You never change things by fighting the existing reality.

To change something, build a new model that makes the existing model obsolete." Buckminster Fuller



#### Who We Are





#### **Mission Statement**

Revolutionize the building industry by producing dwellings that not only betters its occupants health and well-being, but simultaneously improves the health of the environment and empowers community.



#### The Problem

#### Affordable Housing Crisis:

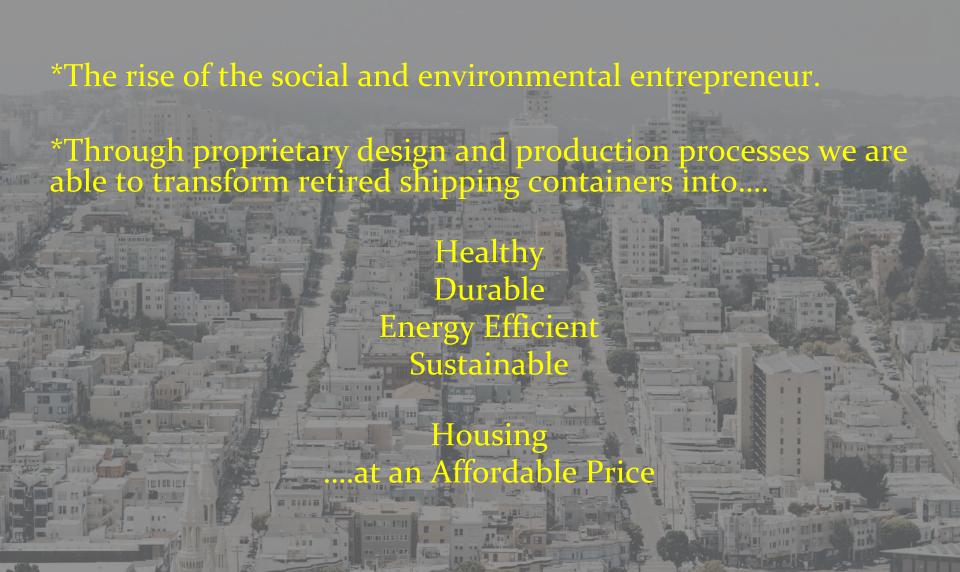
According to city of Boise Spokesperson Mike Journee, for extremely low income (30% MFI) to very low income earners (50% MFI) Boise has a deficit of more than 8,095 units.

The Idaho Housing and Finance Association states there is less than 2% of the affordable housing stock available for rent.

The City of Boise says 35% of Boise residents qualify for some type of affordable housing.



## The Solution











#### Value



- \* Factory-built for low costs and higher quality
- \* ~80% reduction in on-site construction time
- \* Easily transportable (Economic development and workforce development)
- \* 50% to 100% energy reduction and operating costs
  - \*Net Zero Ready
- \* Quieter (additional sound proofing)
- \* Reduced maintenance costs and upkeep (very durable)

## Finish Quality



- \* Solid-core steel exterior walls
- \* Steel-stud interior walls (No wood, or nails)
- \* Solid-core interior doors
- \* Marmoleum flooring (jute and flax seed)
- \* Hurricane/earthquake proof
- \* Energy Recovery Ventilator (ERV)
- \* High-performance Pella windows (Energy Star)
- \* Siding has 30 year warranty
- \* Exterior paint has 15 year warranty
- \* Frigidaire Energy Star appliances
- \* 100% LED lighting
- \* Samsung high-performance mini-split heating/cooling system



## Modular vs Manufactured

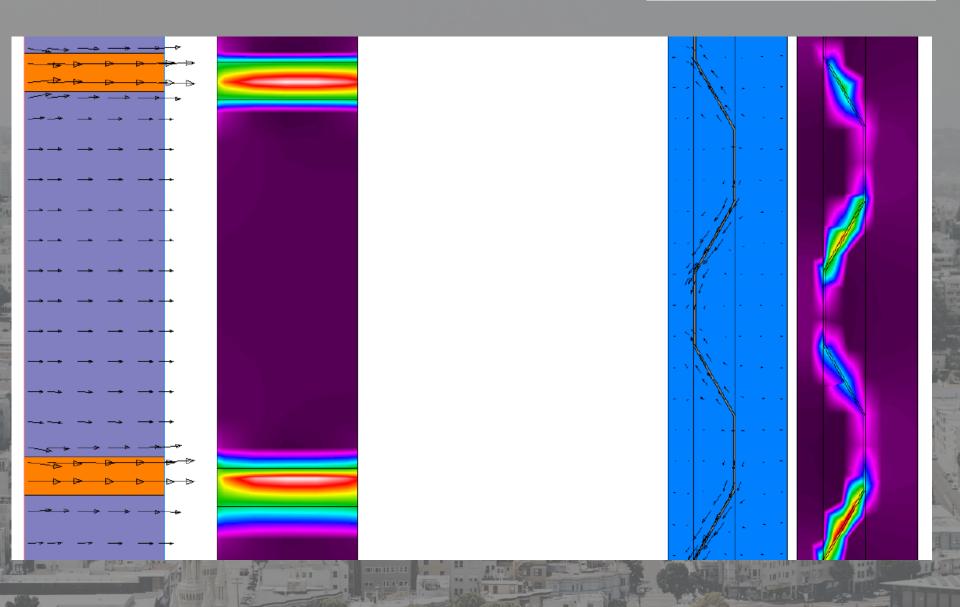
Modular Building Definition – Any building or building component <u>other than a manufactured home</u> that is of closed construction and either entirely or substantially prefabricated or assembled at a place other than the building site. (IC§39-4301)

Modular homes create wealth empowerment, while manufactured homes do not.



## **Building Science**





#### **Building Science**





D. Woods, C. Patil University of Idaho Integrated Design Lab 9/18/2017

IDL Memo on Insulation Comparison for Two Wall Assemblies

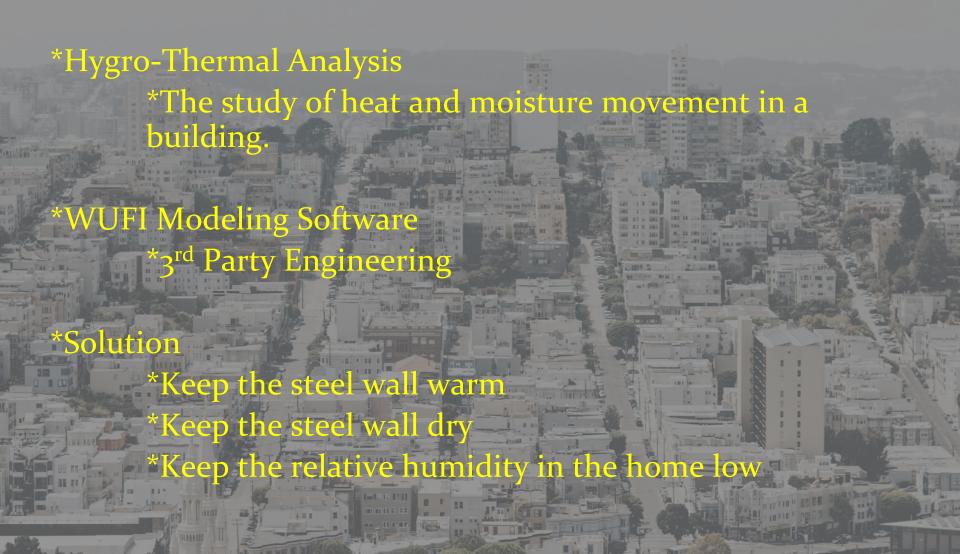
#### **Executive Summary:**

Wall Assemblies	Effective R-value	Nominal Code Value:
ID Code Baseline: 2x6 @16" O.C. w/R-20 batts	16.2	R-20
Proposed steel with R4 rigid foam - 1" ext. 2" int.	16.9	R-21*

The Integrated Design Lab compared the thermal properties of a code baseline wall to a proposed assembly of corrugated steel and rigid foam insulation. The comparison was done using a heat transfer program from the University of California at Berkeley called THERM<sup>1</sup>. The model showed that the thermal bridging due to the 2x6 beams reduces the effective insulation provided by the batts. In contrast, the proposed metal wall assembly with continuous rigid insulation can achieve this same effective R-value with less depth because there are no thermal breaks.



## **Building Science**





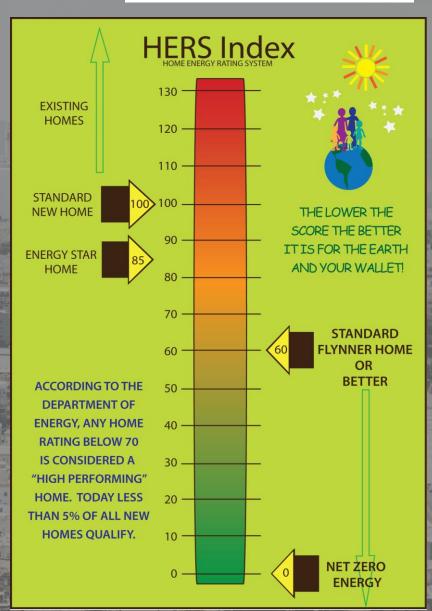
#### **Energy Performance**

\*Home Energy Rating Score

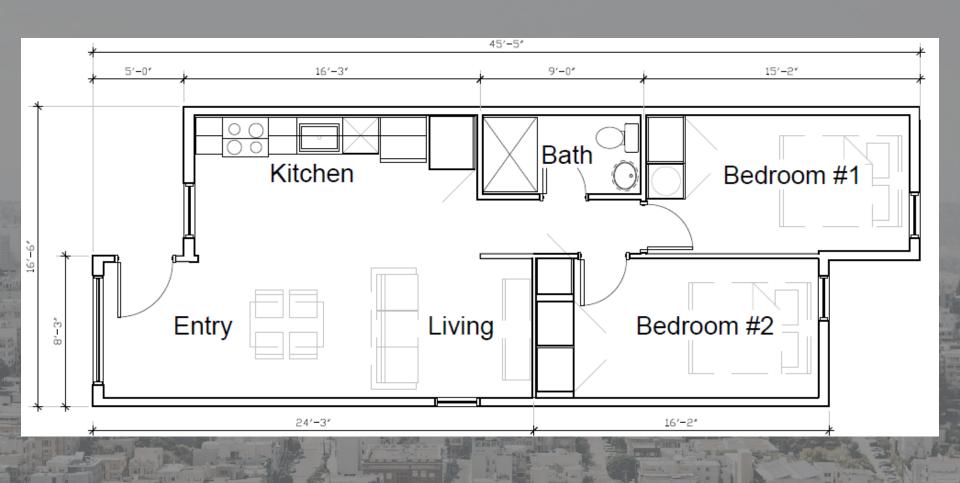
\*Modeled = 61

\*Estimated < 50

\*Monthly cost to operate <\$50







# 640 SQFT, 2-Bedroom, 1-Bath





SQFT, 2-Bedroom, 1-Bath







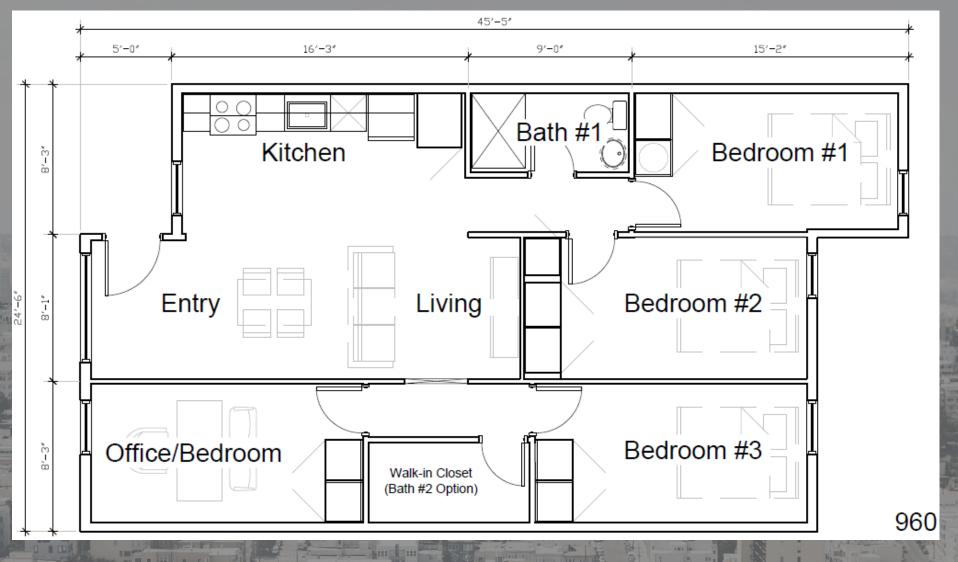
640 SQFT, 2-Bedroom, 1-Bath











## 960 SQFT, 4-Bedroom, 2-Bath





### **PRICING**

```
* 640 sqft unit = $77,800
    *Installation
    *Utility hook-ups
* Treasure Valley Site Costs = $15,000
    *Site work
    *Foundation
     Permits
   OTAL = \$92,800
```



