# Local Cold-formed Steel Framing and Manufacturing

Ideal for Rural Alaska











Member of

#### Alaskan Framing Solutions: About Us







- Started production in March 2023.
- Alaska's only local manufacturer of panelized steel frames and components.
- Our technology is the future of construction in Alaska.
- Our products are ideal for all of Alaska.

#### Panelized Steel Frames: Product Highlights

- Easier to Transport
  - ► Frame is 3x lighter than wood
  - More durability with less bulk
- Quicker to Assemble
  - Days instead of weeks, with less people
  - Significant insurance discounts for builders and owners
- Better Product
  - Sustainable and Eco-friendly material
  - Mold-resistant, incombustible, dimensionally stable, and corrosion-resistant









## Past Projects: Bottom Line





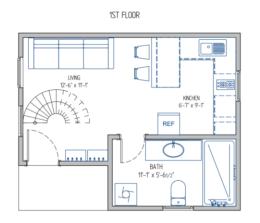


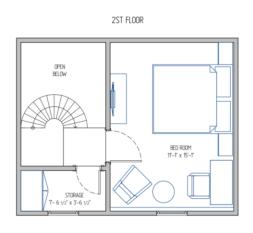


- **Better Product** superior material
- Better Installation more with less
- Better Logistics predictable construction schedules
- Better Price foundation, transport, labor, insurance

## Tiny Houses for Rural Alaska

#### Example Floorplan Rampart - 16' x 20'



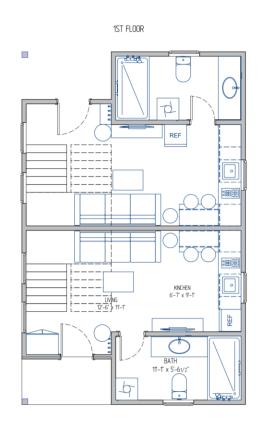


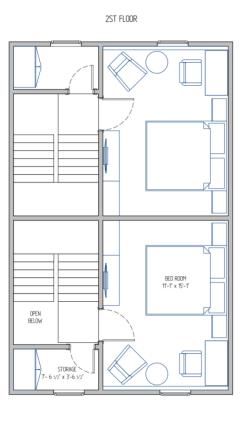


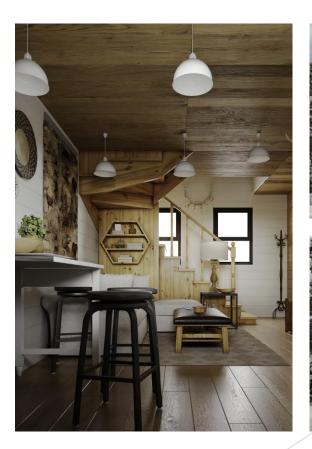




#### Example Floorplan Alcazar (Duplex) - 20' x 26'

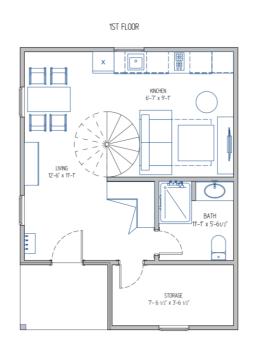


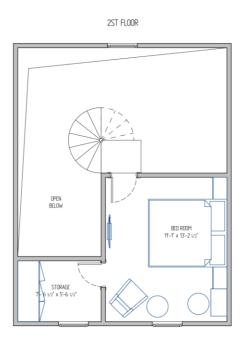






## Example Floorplan Fortress - 20' x 26'





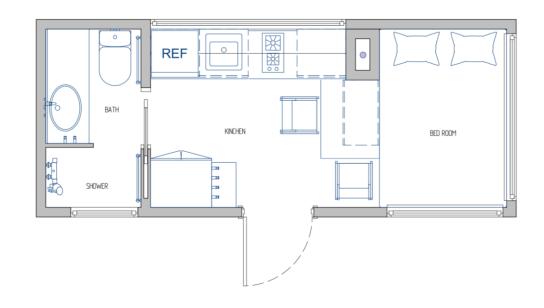






#### Example Floorplan Turret - 8' x 20'

1ST FLOOR









## Tackling Challenges in Rural Alaska

#### Rural Housing: Top Challenges

- Thawing Permafrost elevation alone is not enough
- Poor Insulation heat costs can outweigh income
- Poor Indoor Air Quality high rate of respiratory conditions
- Overcrowding 16,000 home shortage statewide (AHFC/CCHRC)

Need to quickly build homes that are <u>durable</u>, <u>cost-effective</u>, <u>energy</u> <u>efficient</u>, and <u>sustainable</u>.



#### Panelized Steel Frames: Made for Rural Alaska

Assembly Material Installation Transport Labor Time Lumber Frame Steel Frame **x**3 **x2 x**3 lighter faster cheaper Average Total (30%) (50%) (40%) Project Savings: 30%













Wooden undercarriages transfer heat through pilings/posts to the ground. This causes permafrost thawing and shifting foundations.

The Alyeska Pipeline uses steel components to radiate heat away from the pilings, before it transfers to the ground.

Our steel undercarriages accomplish the same thing. Heat radiates away before it reaches the pilings/posts and the ground.

### Thawing Permafrost: Preventing Heat Transfer

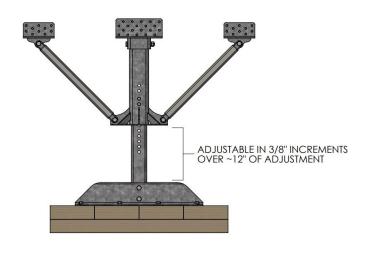


**Driven Pilings** 



Non-Adjustable Post on Pad

#### **RAISED VIEW**



Adjustable Foundation (example shown from North Arrow Enterprises LLC)

## Frame Support Options: *Examples*