

## ArcticLight MSS™ is:

- \* Innovative
  - \* Efficient
- \* Affordable
  - \* Resilient
- \* Locally-Manufactured
- \* Available for 2023 construction season



## <u>PanAlaska</u>

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## Introducing the ArcticLight Modular Structural System manufactured in Fairbanks, Alaska by PanAlaska, LLC

Recognizing the need for affordable, efficient, quality structures in Alaska, two local Fairbanks engineers have developed a new approach to residential and commercial construction – the *ArcticLight Modular Structural System* $^{\text{TM}}$ .

The ArcticLight MSS™ consists of an internal light-gauge steel framework embedded within a matrix of expanded polystyrene (EPS) foam insulation. The 12-inch-thick panelized system delivers a composite insulative value of R-50 and can be assembled on site with simple hand tools and minimal labor effort — a 1200 square foot house structure may be erected in as few as 3 days with only 2 people and no specialized tooling or equipment. The basic MSS panel is 4 feet wide by 10 feet tall and weighs only 140 lbs., easily placed and connected with the bolt-together assembly. Floors and trusses are installed with connectors that do not require fasteners. Additional bolt-together in-fill, header and king-stud panels complete the basic structure in a fully customizable layout. With the addition of the MSS light-gauge steel roof trusses, a complete structural system can be completed and ready for temporary heat and finishes in a few days.

The advantages of the ArcticLight MSS™:

- Affordable The MSS system is currently estimated to be 20%-30% less expensive compared to conventional stick-built on-site construction.
- Labor saving No skilled labor required for assembly, and installation time on-site is dramatically minimized.
- Efficient and Affordable to own The R-50 walls will reduce energy consumption and cost over the entire life of the structure.
- Availability No supply chain or delivery issues. The panels are manufactured locally in Fox,
  Alaska, and the modular system assures availability of the panels in days, as opposed to weeks
  or months.
- Constructability Can be constructed in inclement weather such as snow or rain with simple gloved-hand operable tools.
- Weather-proof ArcticLight MSS panels are fully weather-resistant and may be exposed to rain and snow for extended lengths of time without degradation or risk of rot or mildew.
- Environmentally friendly Can be constructed of recycled materials, and the entire structural framework and insulation can be 100% recycled.
- Manufactured locally The manufacturing facility is located on Fox, Alaska. Customer service
  and technical assistance is available at the factory and on-site if needed. Local manufacturing
  further reduces the cost, lead-time and environmental impact by dramatically reducing freight.
- Flexible and Adaptable The ArcticLight MSS is easily expandable and can be modified by simply unbolting the panels and reassembling them with additional panel into a new larger configuration.