



2017 TFG
Conference

Non-Petroleum Insulation System for Cold Climate Construction

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This presentation will present designers and builders with an overview of a viable, non-petroleum-based wall insulation option for timber-framed and light-framed buildings. Recent advances in creating low-density LSC has been proven for high performance home design and construction for the Upper Midwest and cold climates. Properly installed, the technology is builder-friendly, resource-efficient, naturally mold-, mildew-, and pest-resistant, and energy efficient. Recent research in the lab and on the jobsite have advanced Light Straw-Clay (LSC), a centuries-old building technology, to meet modern construction practices and code requirements.

The presentation will include photos of projects under construction, video clips of the fabrication and installation process, a to-scale wall mockup, and samples of materials.

Topics to be covered are:

- ◆ LSC myths presented and de-bunked
- ◆ Integration of advanced framing systems with straw-clay infill: designing to reduce labor
- ◆ New laboratory test data establishes the link between LSC density and R-value
- ◆ LSC's role in passive solar heating and cooling design: thermal mass vs. R-value
- ◆ New onsite fabrication equipment and process options
- ◆ Overview of LSC strategies for wind bracing and detailing for air-sealing
- ◆ Introduction to the re-written and improved IRC Appendix R and Commentary for LSC construction soon to be released for 2018

In addition, the user-friendly character inherent in this construction technology provides community-building opportunities. The presentation will describe how this aspect is a marketing advantage that can be readily manageable by savvy builders, and can fit smoothly into the work flow of a construction schedule.

About the Speakers

Lou Host-Jablonski

Lou Host-Jablonski is an architect with almost 4 decades of design work, hands-on research, and teaching experience related to sustainable building practices. He specializes in environments for children, housing and community buildings, and design for persons with disabilities. Working with his collaborators over 20+ years, Mr. Host-Jablonski has helped develop the world's most advanced light straw-clay construction system. He is principal architect at Design Coalition, a non-profit architectural office working in the Wisconsin and the Upper Midwest since 1972.