

5th Annual Guam Affordable Housing Symposium

Challenges to Alternative Building Systems

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Introduction and Background

- Principal Architect for TRMA+ Architects, 27 years in practice.
- Bachelor of Architecture degree from the University of Oregon.
- Chairman Guam Historic Preservation Review Board and Guam Preservation Trust.
- Past-President of the AIA Guam and Micronesia Chapter.
- Member of the U.S. Green Building Council
- LEED Accredited Professional (AP)
- Member of Guam Energy Task Force.
- Sandy Beach Homes Saipan, Summer Green Residences, Great Homes Ironwood Heights I & II.

Environmental Conditions

- Earthquakes and Seismic Design
- Typhoons
- Fire Protection IBC and International Residential Code (fire sprinklers)
- Infestation, Termites & Moisture Damage



Alternative Systems

- Wood-based Systems
 - Historical Vernacular Architecture (Mamposteria, 2 story e.g. Lujan House)



- Australian Wood Homes





Steel Homes

- Insulated Steel-framed structure on concrete base
 - Concrete Core



Insulated Concrete and Lightweight Concrete Alternatives

- Lightweight concrete - aerated additives
- Precast panel systems
- Insulated formwork
- Insulated panel with concrete shell
- EIFS

