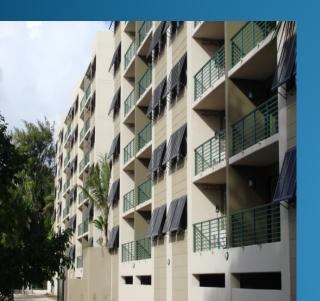
5th Annual Guam Affordable Housing Symposium

Challenges to Alternative Building Systems Michael Makio, AIA, Principal Taniguchi Ruth Makio Architects







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





