renewable technologies + building solutions

# **Technical Overview**

## **Structural Engineered Bamboo**

**Sustainable Building Solutions** 

+

"The Strongest and Most Renewable Structural Material in the World"

www.renuteq.com

**ReNüTeq® Frame™ -** Series - RadLam® & Steel Connectors + SEB (Structural Engineered Bamboo)



## **Highest Performance**

**RadLam®** SEB is over twice the strength of any engineered Timber or Bamboo Product with an MOE of over 4,000 Ksi (27,579 Mpa), and is manufactured in the United States and Fabricated in the USA and Europe. It's proprietary slat materials are sourced from the strongest bamboo species in the world. Guadua is locally sourced from South America, and manufactured per ASTM 5456 Standards.



**RadLam® RLB (Radial Laminated Bamboo) Patented Product** Is manufactured into Structural Components and Lam-Stock" for performance structural Glu-Lam and component applications.

Learn more about: ReNüTeq® Frame™ - Series - RadLam® Steel Connectors + SEB (Structural Engineered Bamboo)



info@renuteq.com

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#### **Technology Overview:**

Renewable structural material technology SEB (Structural Engineered Bamboo) products: **RadLam®** is uniquely combined with expertly designed steel hardware to create structural solutions specifically for the client and project requirements.

ReNüTeq provides kitted structures and building solutions made from the most rapidly renewable resource

available. SEB (Structural Engineered Bamboo) is integrated seamlessly into commercial buildings/towers, roof structures, solar canopies, structural glazing, and Electric Vehicle Charging Structures.

#### Sizing | Shape:

- GluLam Beam Sizing: Curved and Straight
- GluLam Dimensions Limited by Transit
- Cambered & Tapered Beams
- Thickness: 1.5"(38mm -3.5"(88.9mm)
- Width: up to 4" to 4'-0"(1.22m)

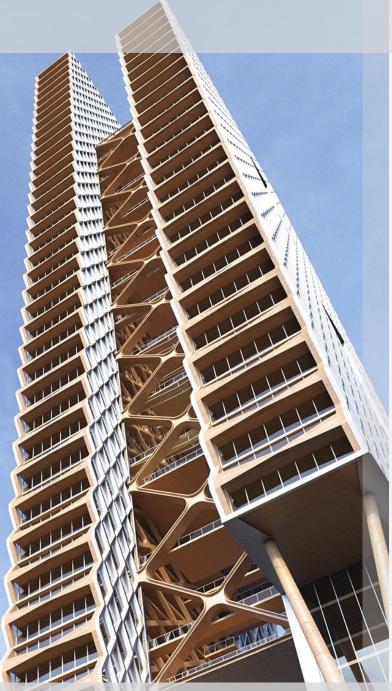
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Lam-Stock Lengths: up to 24'-0"(7m)



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Tower Proposed in Chicago IL. USA. Perkins & Will Architects

#### **Applications | Sustainability:**

The applications for SEB (Structural Engineered Bamboo) products: **RadLam**<sup>®</sup> range from residential structures to multi-story towers. SEB is an ideal solution where the highest structural performance is required and ultimate aesthetics is a must. The Sustainability Case for SEB is unmatched by any other building product available.

Learn more about +ReNüTeq Sustainability and Sourcing Practices+.

#### Structural Applications:

- GluLam Beams | Columns
- GluLam Post and Beam Systems
- SEB Roof Structures
- Structural Glass Systems
- Roof Glass Systems
- Single and Multi-Story Structures
- Post and Beam Tower Structures







#### Standards | Certifications | Sustainability

- Structural Product Per ASTM 5456
- Complies to ICC-ES AC47
- Engineered Bamboo ASTM 07.02.03
- Compliant to IBC (International Building Code)
- Certified Exterior Grade Type 1 Adhesives
- Architectural Grade Finishes
- Exterior Rated Structural Materials.
- Conforms to European Norms

#### LEED V- 4 - BREEAM Qualified

MRc1 - Building Life Cycle Impact Reduction MRc3 - Building Product Disclosure - Sourcing

- EQc2- Low Emitting Materials (No added formaldehyde)
- INc1 Innovation in Design -(Life Cycle/Environment Impact)



**ReNüTeq** has **implemented** patented technology that focuses on optimizing the highest performance fiber of the culm utilizing the highest performance species of bamboo in the world: Guadua sourced from Latin America is the largest and fastest growing, and is over 2 times stronger than any other bamboo species making ReNüTeq's SEB (Structural Engineered Bamboo) products the strongest natural resource for the building industry.

ReNüTeq is the world's technology leader for structural engineered bamboo for structural and performance applications with operations in the USA, Europe, and South America.



# Revealed the solutions of the solutions

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USA

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