CocoVeneer products

Characteristics of coconut veneer and veneer products.

Thanks to Rob McGavin and the QDAF team for veneer, product assembly and testing results.

Content

- Material characteristics of coconut veneer.
  - Density and strength
- Product assembly: architectural and structural.
- Potential market advantages and constraints.
Veneer characteristics: density

Distribution of veneer air-dry density

Example of density radial variation from the centre to the outside of a coconut log

Veneer characteristics: stiffness

Veneer MOE
Average MOE is relatively low compared to most commercial wood species.

The correlation of MOE to density.
Impact of temperature and adhesion

Advanced veneer and other product from coconut wood

Product options

The range for veneer-based products includes:

- Structural products:
  - plywood and laminated veneer lumber (LVL).
- Architectural products:
  - appearance veneer on board, engineered flooring, multilaminar products.

Source veneer was sorted into density groups.

- Low density (<400 kg/m³)
- Medium density (400-600 kg/m³)
- Medium-high density (600-800 kg/m³)
- High density (>800kg/m³).

Test products of each type were assembled and are being tested.
Products: plywood

Plywood: Overlay & structural

Products: LVL

Laminated veneer lumber (LVL)
Products: overlay

Veneer overlay on board

Products: Engineered flooring

Engineered flooring overlay
Products: multilaminar

Multilaminar blocks for resawing

Products: multilaminar

Sawn multilaminar section: edge grain.

Advanced veneer and other product from coconut wood
Products: multilaminar

Sawn multilaminar section: end grain

Products: multilaminar

Sawn and turned multilaminar section
Further product assembly

Further product testing: plywood
Further product testing: LVL

Product summary

• A range of appearance and structural product opportunities exist for coconut veneer.
  – The project has not yet fully explored the range of possible product opportunities.
• Coconut veneer has some unique qualities that enable potentially high value niche markets to be pursued.
  – Attractive colour, even toned surface, high density, sustainability.