TROPICAL

Wood Values from test (ASTM D143)				Compression			-
	Wood Name	Extreme Fiber Stress in Bending "FB" Single Member	Modulus of Elasticity	Parallel to Grain	Perpendicu Iar to Grain	Shear parallel to Grain	
Inputs	Jatoba	25,100	2,870,000	14,200	2,870	1,245	-

Allowable values For Wood (Based on ASTM D245)

Dimension Lumber 1" to 4" thick by 2" and wider

				Compression		
Wood Name	Grade	Extreme Fiber Stress in Bending "FB" Single Member	Modulus of Elasticity	Parallel to Grain ll	Perpendicu Iar to Grain	Shear parallel to Grain
Jatoba	Architectural	7,100	3,050,000	4,650	1,720	540
	FEQ	5,250	3,050,000	3,600	1,720	270
	COM/ SEL	4,350	3,050,000	2,700	1,720	270
	FAS	4,350	3,050,000	2,700	1,720	270

Values in PSI

Beam & Stringers 4" and thicker, width more than 2" grater than thickness

Wood Name	Grade	Extreme Fiber Stress in Bending "FB" Single Member	Modulus of Elasticity	Comp	Shoar	
				Parallel to Grain ll	Perpendicu lar to Grain	parallel to Grain
Jatoba	Architectural	8,750	3,050,000	4,650	1,720	540
	FEQ	5,800	3,050,000	3,600	1,720	270
	COM/ SEL	4,350	3,050,000	2,700	1,720	270
	FAS	4,350	3,050,000	2,700	1,720	270

Values in PSI

Additional Grading notes:

<u>Architectural:</u>

- 1. It is not allow pin knots bigger than 1/2" at any face and/or edge
- 2. Maximum permitted slope is 1" in 12"

FEQ:

- 1. It is not allow knots bigger than 3/4" at narrow face or edges
- 2. It is not allow centerline knots bigger than 1-3/4" at wide face
- 3. It is not allow edge knots bigger than 3/4" at wide face
- 4. Maximum permitted slope is 1" in 8"
- 5. Length of end split and surface split shall be per ASTM D245 (5.4.3)

COM/ SEL / FAS:

- 1. It is not allow knots bigger than 3/4" at narrow face or edges
- 2. It is not allow centerline knots bigger than 1-3/4" at wide face
- 3. It is not allow edge knots bigger than 3/4" at wide face
- 4. Maximum permitted slope is 1" in 6"
- 5. Length of end split and surface split shall be per ASTM D245 (5.4.3)

Notes:

1. Grader shall classify, measure and inspect knots, splits, checks and shakes as Standard ASTM D 245 mandates, for dimension lumber and Beams & stringers.

2. Use allowable values in conjunction of adjusted coefficients.

3. Results are for preliminary design only; not valid for construction unless accompanied by a sealed test report by an accredited laboratory.

