

### Tropical Hardwood Decking and Lumber – Expectations, Grading Rules and Definitions

**NOT ALL WOOD IS CREATED EQUAL** At Timber Holdings we believe that an informed consumer is our best customer and an educated customer is good for business. It's really very simple. We believe our customers have the right to select the quality of the products they order and that they are entitled to receive what they specify. When tropical hardwoods are specified or purchased without clearly defining grade expectations, there is no assurance of the quality and consistency of the product delivered and no accountability standard set for a vendor. And since grade affects price, what looks like a good deal on paper might not look nearly as good on your project.

**WE SET THE STANDARDS** In the absence of industry established and defined quality control standards for tropical hardwood decking and lumber, Timber Holdings developed and published grading rules and specification language for Architects and other specification professionals which have set the standards for over 30 years. The Iron Woods Grade has represented the highest possible standard for over 35 years.

Timber Holdings has created this guide to assist specifiers and end users in determining grade expectations and value requirements as well as to understand some of the common grade names that might be encountered in the market. We strongly encourage specifiers and consumers to utilize these standards in their decision making process and to specifically reference these standards in their purchase orders.

**GRADE - EXPECTATIONS** As with most natural wood products, tropical hardwoods possess natural "Appearance Characteristics" that add to their unique beauty. Those that are appreciated include color variation and distinctive grain patterns. Other characteristics in all types of lumber that develop naturally or through manufacturing are known as "Physical Characteristics", "Sound Defects", Unsound Defects and "Milling Defects". The following is a summary of the typical characteristics one might find in a wood grade specification.

#### **Appearance Characteristics**

- 1) Color variation
- 2) Mixed grain
- 3) Drying checks
- 4) Reverse/Roey Grain
- 5) Birdseve
- 6) Pin knots
- 7) Water stain
- 8) Discoloration
- 9) Sticker marks
- 10) Knife marks

#### **Physical Characteristics**

- 1) Bow
- 2) Crook
- 3) Cup
- 4) Twist

#### **Milling Defects**

- 1) Skip
- 2) Torn grain
- 3) Non-compliant profiling

### **Sound Defects**

- 1) Pin holes
- 2) Sound knots

#### **Unsound Defects**

- 1) Large borer holes
- 2) Splits
- 3) Unsound knots
- 4) Shake
- 5) Sapwood

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# **Appearance Characteristics**







Birdseye



**Reverse Grain** 



**Sticker Marks** 



**Knife Marks** 



**Color Variation** 



**Mixed Grain** 



**Water Stain** 

# **Milling Defects**



Skip



**Torn Grain** 



Non-Compliant Molding

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# **Sound Defects**





Small Worm Hole Tight Knot

# **Unsound Defects**









Large Grub Hole Split

Sap Wood

**Shake** 



**Loose Knot** 









**IRON WOODS** (Premium Select Architectural Grade) - *Inspected and Hand Selected for Superior Appearance on 4 sides and 4 Edges.* 

### **Grading Face, Back Face, and Edges – Clear All Heart:**

Include - Appearance Characteristics.

Include - Physical Characteristics which can be removed using normal installation methods, tools, or sanding.

**Exclude - Sound Defects** 

**Exclude - Unsound Defects** 

Exclude - Milling Defects.









## FEQ (First Export Quality/First One Face/A Grade) – Inspected for serviceable appearance on 1 face and two edges.

Include - Appearance Characteristics

Include - Physical Characteristics that can be removed using normal installation methods, tools, or sanding.

Include - Sound Defects

### **Grading Face – Clear All Heart:**

**Exclude - Unsound Defects** 

**Exclude - Milling Defects** 

### **Back Face and Edges:**

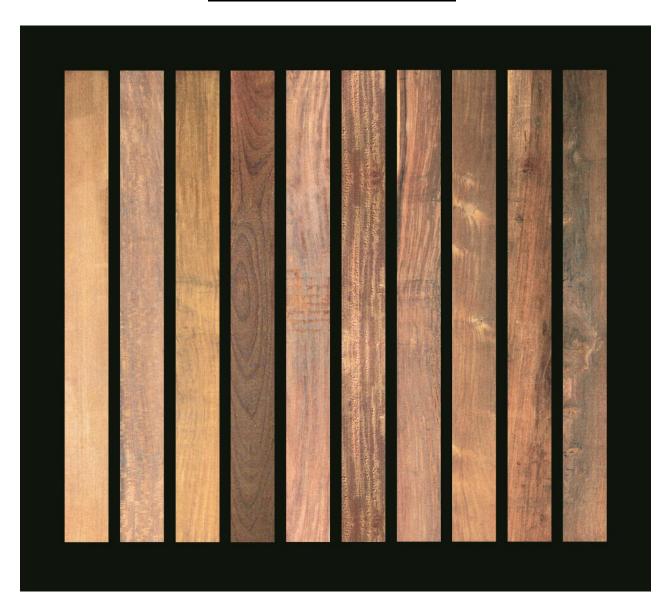
Include – Unsound Defects

Include – Milling Defects









**FAS** (First and Seconds/B Grade) – Uninspected, *FAS represents the standard mill or broker grade.*Mix of FEQ/F1F and Common/Select









### **COM/SEL** (Common/Select/C Grade) - Com/Sel represents the lowest grade generated during production.

**Include - Appearance Characteristics** 

Include- Physical Characteristics that can be removed using normal installation methods, tools or sanding.

Include - Sound Defects.
Include - Unsound Defects

**Grading Face:** 

Include Milling Defects which can be removed through sanding.

**Back Face and Edges:** Include Milling Defects







#### **GRADE NOTES**

**AD** - Lumber is air dried on sticks to allow for ventilation during transport and storage. Lumber will typically have moisture content of 18% and higher.

KD - Lumber will be dried to have moisture content of 18% or lower.

**SUBGRADE ALLOWANCES** – Industry standards allow for any grade to include up to 5 percent of the next lower grade to be included in any volume supplied.

**PERFORMANCE EXPECTATIONS** Tropical Hardwood Products are among the best choices for exterior constructions and applications. Tropical Hardwoods are generally more durable, more resistant to damage, easier to maintain and more environmentally sustainable than alternative products like PVC, or composite materials. And unlike petroleum based products wood can be cleaned, reconditioned, restored, reclaimed and reused making wood truly "Green By Nature"

APPEARANCE EXPECTATIONS It is the variation in character that gives wood a natural beauty.

When specifying wood products for exterior construction it is important to have realistic appearance expectations. When used outdoors wood products will not retain the appearance associated with their use in interior applications like furniture or flooring. Wood will not hold its original color over time without cleaning and reapplication of finishes. Wood by its nature will be subject to some limited amount of natural reaction as it cannot be predicted how a natural product like wood will behave in any given environment or conditions. It is woods natural characteristics that define its beauty.



