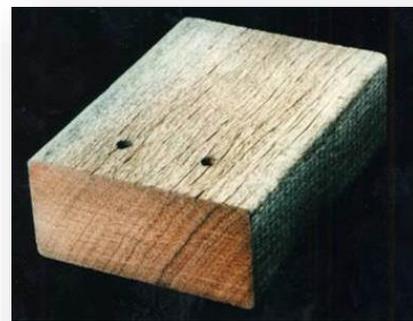


## Iron Woods® Boardwalk Decking



**Treated Pine 5 Years Atlantic City**



**Iron Woods® Ipe 30 Years Atlantic City**

A recent memorandum by the U.S. Army Core of Engineers on the subject of the impracticality of Non-Ipe lumber for boardwalk decking during the post Hurricane Sandy reconstruction summarized as follows; “The purpose of this memo is to provide clear evidence and justification for the necessity of specifying Ipe “Or Equal” Cumaru tropical hardwood lumber species for boardwalk decking” A copy of this document along with comprehensive specification language for the species discussed can be found on our website [www.ironwoods.com](http://www.ironwoods.com)

The following is a summary of current materials and their availability suitable for commercial boardwalk specifications. All of the materials discussed are readily available and certified under our comprehensive Green By Nature™ compliance program. Some of the wood species listed are available with FSC certification for LEED/USGBC based specifications. All wood species discussed are available in Iron Woods® Premium Select Architectural, FEQ or FAS qualities.

## Iron Woods® Ipe



Ipe – *Tabebuia* spp (Lapacho Group) remains the premier exterior hardwood species having the highest natural resistance to termites and marine borers combined with a dimensional stability green to dry over any other species available. Ipe continues to be readily available in a broad range of nominal and rough dimensions ranging from 1x4 all the way up to 4x12 and lengths up to 20', free of heart center and free of sapwood.

Sourcing large volumes of fixed dimensions and lengths in Ipe remains a challenge and virtually impossible in longer lengths. Designers should develop specifications that allow the use of random lengths 6' to 20' in order to facilitate reliable supply and lowest cost.

Optimal net dimensions for Ipe boardwalk decking are as follows:

Air Dried 1x3.5, 1x5.5, 1.5x3.5, 1.5x5.5, 1.5x7.25, 2.5x5.5, 2.5x7.25, 2.5x11.25, 3.5x5.5, 3.5x7.25, 3.5x11.25.

*Note: When specifying for poorly ventilated decks always specify greater thickness to width ratios such as 1x3.5, 1.5x3.5, 2.5x5.5, 3.5x5.5.*

*Note: Face Screwing is the only installation method recommended in commercial boardwalk applications.*

Delivery typically begins from stocks and completes with 90 -120 days subject to project volume requirements.

A partial list of boardwalk projects currently using Ipe include... Long Beach, Atlantic City, Far Rockaway, Jones Beach, Coney Island Boardwalk, Robert Moses State Park, Avon, Freedom Park, Strawberry Plains Audubon, Swamp Creek Sanctuary Audubon, Hudson River Park, High Line, Liberty Island Ferry Concourse, Disney, Sea World, Green Bay and Milwaukee Riverwalk, Duluth Lake Walk, The Highline.....The truth is that you will find Ipe in boardwalk constructions throughout the United States and the rest of the world.

## Cumaru



Cumaru (*Dipterix odorata*) continues to be readily available in a broad range of nominal and rough dimensions ranging from 5/4x6 all the way up to 12x12 and lengths up to 20', free of heart center and free of sapwood.

Cumaru is an excellent alternative to Ipe for commercial applications where it is not in direct contact with marine borers. Less dimensionally stable than Ipe, greater thickness to width ratios improve performance.

Optimal net dimensions for decking as follows:

Kiln Dried 1x5.5 12-16% Moisture Content to assure dimensional stability in application.

Air Dried 1.5x3.5, 1.5x5.5, 2.5x5.5, 2.5x7.25, 3.5x5.5, 3.5x7.25, 3.5x11.25. Moisture Content 18"

*Note, When specifying for poorly ventilated decks always specify greater thickness to width ratio's, such as 1x3.5, 1.5x3.5, 2.5x5.5, 3.5x5.5.*

*Note: Face Screwing is the only installation method recommended in commercial boardwalk applications.*

Cumaru is one wood species where it is still possible to specify large volumes of single dimensions and lengths which make it ideal for large commercial constructions. Designers are however encouraged to develop specifications that allow the use of random lengths, 6' to 20', in order to facilitate reliable supply and lowest possible cost.

Cumaru prices typically fall 10-20% below Ipe prices. Cumaru is also readily available as an FSC certified product with associated price premium.

Delivery is typically starting 60 days and completing with 120 -150 days subject to project volume requirements.

Some projects currently using Cumaru include Atlantic City, Coney Island, Beidler Forest Audubon, Absecon, Disney....This list is growing due to the price advantage associated with Cumaru.

**FASTENERS**

At Timber Holdings we believe that fasteners should be as strong and durable as the decking they are charged to hold down. First Developed for Atlantic City, Iron Woods Boardwalk Screws represent the state of the art in Boardwalk Deck Connection. Our super duty boardwalk screws are manufactured using high grade T-302 stainless steel heavy gauge wire, TPI passivated to improve corrosion resistance. Their heavy gauge and deep threads provide superior deck to stringer connections improving structural integrity and resistance to all nature has to dish out. While designed to outlast the decking that they hold down, their gauge and strength allow for their easy removal and re-use should decking replacement be required. You know the old adage, "Anything worth doing is worth doing well" At timber Holdings "We take life cycle performance seriously"

