

## Certificate of Compliance

### Technical Data - Iron Woods® Ipe

We hereby certify that Iron woods® Ipe has been tested per Standards as indicated below.

Features	Iron Woods® Ipe
Composition	Naturally Durable Hardwood Untreated
Species	Tabebuia spp. (Lapacho Group)
Surface	Dressed / Profiled / Roughsawn
Color	Natural
Installation	Stainless Steel Fasteners
Max overhang beyond joist	6"
Weight per net bf AD 18%+ (avg)	5.5 - 6 lbs
Weight per net bf KD 18% - (avg)	5 - 5.5 lbs
Lengths	To 20'

<b>Property Description</b>	<b>ASTM Standard</b>	<b>Iron Woods® Ipe</b>
Modules of Elasticity	ASTM D-143	292000 psi – Green / 3145000 psi - Dry
Bending Strength	ASTM D-143	22475 psi - Green / 25400 psi - Dry
Compression Parallel to Grain	ASTM D-143	10,350 psi – Green / 13,140 psi - Dry
Compression Perpendicular to Grain	ASTM D-143	3,060 psi – Green / 3,680 psi - Dry
Shear Parallel to Grain	ASTM D-143	2,290 psi - Dry
Screw Pull Out		Avg. 1102 lbs. Max Load
Coefficient of Friction - Leather	ASTM C1028-89	Dry - .55 FP / Wet .79 FP (ADA Compliant)
Coefficient of Friction - Neolite	ASTM C1028-89	Dry - .73 FP / Wet .69 FP (ADA Compliant)
Surface Burning	ASTM E-84 (1989)	NFPA Class A, UBC Class 1
Flame Spread (20 minutes)	ASTM E-84 (1989)	0
Flame Spread (10 minutes)	ASTM E-84 (1989)	5
Smoke Developed (10 minutes)	ASTM E-84 (1989)	3
Fuel Contribution (10 minutes)	ASTM E-84 (1989)	0



Acute Inhalation Combustion Toxicity	NYS Modified Pittsburg Protocol NYSUFPBC, Art 15, Part 1120,9 NYCRR	LC 50 Of 63.60g.
Combustion Toxicity Test	1120	Pass (19.7g or greater)
Surface Burning	ASTM E84 (2007)	NFPA Class B
Calculated Flame Spread (10 minutes )	ASTM E84 (2007)	33.37
Flame Spread Index	ASTM E84 (2007)	35
Calculated Smoke Developed	ASTM E84 (2007)	273.3
Smoke Developed Index	ASTM E84 (2007)	250

**Additional Compliance Fire**

City Of NY Dept. of Buildings	Fire Retardant Wood Code Sections 27-328	MEA # 220-01-M (Approved)
San Francisco Building Code	Code Section 1511.5 (rooftop decks )	(Approved)
CalFire Wildlife Urban Interface Areas	Code Section Chapter 7A (CSFM 12-7A-4)	(Approved)
Materials and Construction Methods	Exterior Wildlife Exposure: Decking	
International Building Code	Fire Resistant Wood	(Compliant)
International Residential Code	Fire Resistant Wood	(Compliant)

**Additional Compliance Technical**

Natural Decay Resistance Class	US Naval Research Laboratory	(Highly Resistant)
Marine Borer Resistance	US Naval Research Laboratory	(Highly Resistant)
Termite Resistance	US Naval Research Laboratory	(Highly Resistant)
International Building Code	Naturally Durable Wood	(Class 1 / Compliant)
International Residential Code	Naturally Durable Wood	(Class 1 / Compliant)
British Standards	BS EN 338:2003	D70

This certificate of compliance is a continuing, irrevocable representation and warranty of compliance with Iron Woods® Ipe Technical requirements and may continue to be relied upon by its customers for each purchase of goods or services unless prior timely prior written notice is given to our customers that the goods or services Timber Holdings USA proposes to sell to our customers do not comply with the Iron Woods® Ipe Technical Requirements. Such notice shall not be deemed to revoke or modify Certificates of Compliance previously provided by Timber Holdings USA.