

## Technical Bulletin – Iron Woods Ipe Decking Simple Spans Snow Load

### STRUCTURAL DESIGN INFORMATION - Simple Span with Snow Load

Iron Woods® Decking- IPE Species

		3010000	3010000	3010000	3010000	3010000
MODULUS OF ELASTICITY		3010000	3010000	3010000	3010000	3010000
BENDING - Allowable		3750	3750	3750	3750	3750
SHEAR - Allowable		425	425	425	425	425
SPECIES		IPE	IPE	IPE	IPE	IPE
WEIGHT PER CUBIC FOOT		75	75	75	75	75
<b>DECKING THICKNESS ( Net Inches)</b>		<b>0.75</b>	<b>1</b>	<b>1.5</b>	<b>2.5</b>	<b>3.5</b>
<b>Decking SPAN (Net Inches)</b>		<b>16</b>	<b>24</b>	<b>36</b>	<b>60</b>	<b>84</b>
DEAD LOAD-Decking		0.0326	0.0434	0.0651	0.1085	0.1519
DEAD LOAD- <i>Assumes Snow Load 300lb.</i>		2.0834	2.0834	2.0834	2.0834	2.0834
LIVE LOAD/PSF	<b>100</b>	0.6944	0.6944	0.6944	0.6944	0.6944
TOTAL LOAD	<b>W</b>	2.8104	2.8212	2.8429	2.8864	2.9298
SHEAR	<b>V</b>	22.4832	33.8550	51.1731	86.5905	123.0497
MAXIMUM MOMENT	<b>M</b>	89.9327	203.1298	460.5577	1298.8581	2584.0432
AREA	<b>A</b>	0.7500	1.0000	1.5000	2.5000	3.5000
SECTION	<b>S</b>	0.0938	0.1667	0.3750	1.0417	2.0417
INERTIA	<b>I</b>	0.0352	0.0833	0.2813	1.3021	3.5729
	<b>Fb</b>	959.2820	1218.7788	1228.1538	1246.9038	1265.6538
	<b>Fv</b>	44.9663	50.7825	51.1731	51.9543	52.7356
<b>Deflection (inches)</b>		<b>0.023</b>	<b>0.049</b>	<b>0.073</b>	<b>0.124</b>	<b>0.177</b>
		<i>Fb</i>				
		OKAY	<i>Fb</i> OKAY	<i>Fb</i> OKAY	<i>Fb</i> OKAY	<i>Fb</i> OKAY
		<i>Fv</i> OKAY	<i>Fv</i> OKAY	<i>Fv</i> OKAY	<i>Fv</i> OKAY	<i>Fv</i> OKAY
ASHTO Standard	L/360	0.044	0.067	0.100	0.167	0.233
<b>DEFLECTION</b>		<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>

This deck span calculator is designed to assist in the specification process. It is not a warranty of fitness or assumption of liability.

It is the responsibility of the end user to consult local building codes and verify compliance with a licensed engineer.