

TRIMAX BUILDING PRODUCTS PLANK SPAN TABLE

Trimax 5/4 X Plank (t = 1.0")						
Basic Material Properties	E (psi) = 265,000 (73°F)			F _b (psi) = 2,200 (73°F)		
Effective Properties (High Temp Reduction)	E' (psi) = 109,687 (125°F)			F' _b (psi) = 446 (125°F)		
	Span (inches)			Span (inches)		
Deflection	12			16		19.2
Limit	Simple	Multiple		Simple	Multiple	Simple
L/480**	118	155		50	65	29
L/360**	157	206		66	87	38
L/240**	235	309		99	131	57
L/240 (Long Term)	157	206		66	87	38
Stress	575	575		323	323	225

TABLE NOTES

1. Table provides limiting uniform load in pounds per square foot (psf) based on the noted deflection criteria. Stress is based on simple span only and thus may occasionally limit span.
2. Effective Modulus Of Elasticity, $E' = E \cdot C_t$. Allowable stress under uniform load is based on a temperature modified $F'_b = F_{bu} \cdot C_d \cdot C_t / 2.5$. The duration factor, C_d , is taken as 1.0 and C_t is based on 125 degrees Fahrenheit. The factor of safety is 2.5.
3. Double starred deflection limits are based on instantaneous deflection (neglecting creep), and are usually compared to live load only. The L/240 long term row is consistent with the ASTM draft specification and considers creep (creep factor = 1.5) with the limiting uniform load being the TOTAL load value.
4. Effective moment of inertia and section modulus have been reduced assuming 2X4 planks with an 1/8" gap between boards. The values are conservative for wider planks.
5. Multiple span deflection criteria are taken as the 3 span condition ("Skip loading") for uniform load

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TRIMAX BUILDING PRODUCTS PLANK SPAN TABLE

Trimax 6/4 X Plank (t = 1.5")								
Basic Material Properties	E (psi) = 265,000 (73°F)				Fbt(psi) = 2,200 (73°F)			
Effective Properties (High Temp Reduction)	E' (psi) = 109,687 (125°F)				F'b(psi) = 446 (125°F)			
	Span (inches)		Span (inches)		Span (inches)		Span (inches)	
Deflection	12		16		19.2		24	
Limit	Simple	Multiple	Simple	Multiple	Simple	Multiple	Simple	Multiple
L/480**	941	1238	397	522	230	302	118	155
L/360**	1255	1651	530	696	306	403	157	206
L/240**	1883	2476	794	1044	460	604	235	309
L/240 (Long Term)	1255	1651	530	696	306	403	157	206
Stress	2299	2299	1293	1293	898	898	575	575

Trimax 6/4 X Plank (t = 1.5") (Continued)								
Basic Material Properties	E (psi) = 265,000 (73°F)				Fbt(psi) = 2,200 (73°F)			
Effective Properties (High Temp Reduction)	E' (psi) = 109,687 (125°F)				F'b(psi) = 446 (125°F)			
	Span (inches)			Span (inches)			Span (inches)	
Deflection	30			32			36	
Limit	Simple	Multiple		Simple	Multiple		Simple	Multiple
L/480**	60	79		50	65		35	46
L/360**	80	106		66	87		46	61
L/240**	120	158		99	131		70	92
L/240 (Long Term)	80	106		66	87		46	61
Stress	368	368		323	323		255	255

TABLE NOTES

1. Table provides limiting uniform load in pounds per square foot (psf) based on the noted deflection criteria. Stress is based on simple span only and thus may occasionally limit span.
2. Effective Modulus Of Elasticity, $E' = E \cdot C_t$. Allowable stress under uniform load is based on a temperature modified $F'b = F_{bu} \cdot C_d \cdot C_t / 2.5$. The duration factor, C_d , is taken as 1.0 and C_t is based on 125 degrees Fahrenheit. The factor of safety is 2.5.
3. Double starred deflection limits are based on instantaneous deflection (neglecting creep), and are usually compared to live load only. The L/240 long term row is consistent with the ASTM draft specification and considers creep (creep factor = 1.5) with the limiting uniform load being the TOTAL load value.
4. Effective moment of inertia and section modulus have been reduced assuming 2X4 planks with an 1/8" gap between boards. The values are conservative for wider planks.
5. Multiple span deflection criteria are taken as the 3 span condition ("Skip loading") for uniform load

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TRIMAX BUILDING PRODUCTS PLANK SPAN TABLE

Trimax 3 X Plank (t = 2.5")								
Basic Material Properties	E (psi) = 265,000 (73°F)				Fbt(psi) = 2,200 (73°F)			
Effective Properties (High Temp Reduction)	E' (psi) = 109,687 (125°F)				F'b(psi) = 446 (125°F)			
	Span (inches)		Span (inches)		Span (inches)		Span (inches)	
Deflection	12		16		19.2		24	
Limit	Simple	Multiple	Simple	Multiple	Simple	Multiple	Simple	Multiple
L/480**	1839	2418	776	1020	449	590	230	302
L/360**	2451	3224	1034	1360	599	787	306	403
L/240**	3677	4836	1551	2040	898	1181	460	604
L/240 (Long Term)	2451	3224	1034	1360	599	787	306	403
Stress	3592	3592	2021	2021	1403	1403	898	898

Trimax 3 X Plank (t = 2.5") (Continued)								
Basic Material Properties	E (psi) = 265,000 (73°F)				Fbt(psi) = 2,200 (73°F)			
Effective Properties (High Temp Reduction)	E' (psi) = 109,687 (125°F)				F'b(psi) = 446 (125°F)			
	Span (inches)		Span (inches)		Span (inches)		Span (inches)	
Deflection	30		32		36		48	
Limit	Simple	Multiple	Simple	Multiple	Simple	Multiple	Simple	Multiple
L/480**	118	155	97	128	68	90	29	38
L/360**	157	206	129	170	91	119	38	50
L/240**	235	309	194	255	136	179	57	76
L/240 (Long Term)	157	206	129	170	91	119	38	50
Stress	575	575	505	505	399	399	225	225

TABLE NOTES

1. Table provides limiting uniform load in pounds per square foot (psf) based on the noted deflection criteria. Stress is based on simple span only and thus may occasionally limit span.
2. Effective Modulus Of Elasticity, $E' = E \cdot Ct$. Allowable stress under uniform load is based on a temperature modified $F'b = Fbu \cdot Cd \cdot Ct / 2.5$. The duration factor, Cd , is taken as 1.0 and Ct is based on 125 degrees Fahrenheit. The factor of safety is 2.5.
3. Double starred deflection limits are based on instantaneous deflection (neglecting creep), and are usually compared to live load only. The L/240 long term row is consistent with the ASTM draft specification and considers creep (creep factor = 1.5) with the limiting uniform load being the TOTAL load value.
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