



PLASTIC LUMBER YARD®

Plastic lumber for all your outdoor needs and then some.

Voice: 610.277.3900 Fax: 610.277.3970 E-mail: info@plasticlumberyard.com

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Engineering Data

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PREMIUM HDPE, B-GRADE, & UTILITY PLASTIC LUMBER

Test Type	Note	ASTM Standard	Average Results		Standard Deviation		
Density / Specific Gravity (g/cc)	I	D6111-97	0.68559		0.00434		
Compression	I	D6108-97	Secant Modulus (psi)				
			92,249		3,328		
			Stress at 3% Strain (psi)				
		1,734	46				
Flexure	II	D6109-97	Secant Modulus (psi)				
			112,000		1,560		
			Stress at 3% Strain (psi)				
		2,358	29.4				
Fastener Pullout Failure Load (lbs.)	I	D6117-97	452		5		
Fastener Shear Maximum Load (lbs.)	I	D6117-97	2,464		67		
Thermal Expansion (in/in ^o F)	II	D6341-98	4.965 x 10 ⁻⁵		2.057 x 10 ⁻⁶		
Friction Coefficient	II	D2394-83	Material	Dry		Wet	
				Static	Sliding	Static	Sliding
			Leather	0.27	0.22	0.32	0.29
Rubber	0.55	0.46	0.70	0.67			
Flame Spread	II	E108 Modified per D6662	PASSED				

Notes: I Testing conducted by Battelle of Columbus, OH

II Warnock Hershey Certified for ASTM D6662-01 by Intertek Testing Services NA Ltd. of Coquitlam, BC.

For further information on our ASTM standards please contact your Plastic Lumber Yard representative.

For further information on Intertek Testing Services NA Ltd. and the Warnock Hershey certification, please contact ITS at: www.ETLSemko.com

For Further information and their processes please contact ASTM at: www.astm.org

Chemical Resistance

Since high density polyethylene has a high resistance to most acids and chemicals,

Plastic Lumber is not affected by exposure to most substances.

Ultraviolet Weathering

An ultraviolet stabilizer is incorporated at the time of manufacture. It protects the plastic from ultraviolet light degradation and ensures that the outside of the product will not degrade in exterior applications.

TECHNICAL DATA MOLDED GRADE PLASTIC LUMBER

TEST	ENGLISH UNITS			METRIC UNITS	
	ASTM TEST	VALUE	UNITS	VALUE	UNITS
FLEXURAL STRENGTH	D6109-97	1355	PSI	95	KG/CM ²
FLEXURAL MODULES	D6109-97	95939	PSI	6744	KG/CM ²
COMPRESSION STRENGTH	D6108-97	1420	PSI	100	KG/CM ²
COMPRESSION MODULES	D6108-97	51000	PSI	3585	KG/CM ²
SPECIFIC GRAVITY	D6111-97	0.861	G/CC	0.861	G/CC
FLASH POINT		644	DEG F	340	DEG C
MOISTURE ABSORPTION		0.06	% BY WEIGHT	0.06	% BY WEIGHT
THERMAL EXPANSION	D6341-98	0.000033	INCH/INCH/DEG F		
AVERAGE NAIL PULL OUT	D6117-97	504	LBS		
STATIC COEFFICIENT OF FRICTION - DRY	D2394-83(99)	.48			
STATIC COEFFICIENT OF FRICTION - WET	D2394-83(99)	.40			
SLIDING COEFFICIENT OF FRICTION - DRY	D2394-83(99)	.22			
SLIDING COEFFICIENT OF FRICTION - WET	D2394-83(99)	.43			

THIS DATA REPRESENTS AVERAGE VALUES **NOT** MINIMUMS. SAFETY FACTORS MUST BE ADDED INTO THE DESIGN.

Chemical Resistance

Since high density polyethylene has a high resistance to most acids and chemicals, Plastic Lumber is not affected by exposure to most substances.

Ultraviolet Weathering

An ultraviolet stabilizer is incorporated at the time of manufacture. It protects the plastic from ultraviolet light degradation and ensures that the outside of the product will not degrade in exterior applications.

TECHNICAL DATA

STRUCTURAL GRADE PLASTIC LUMBER

TEST	ENGLISH UNITS			METRIC UNITS	
	ASTM TEST	VALUE	UNITS	VALUE	UNITS
FLEXURAL STRENGTH	D6109-97	2750	PSI	193	KG/CM ²
FLEXURAL MODULES	D6109-97	306080	PSI	15503	KG/CM ²
COMPRESSION STRENGTH	D6108-97	2340	PSI	165	KG/CM ²
COMPRESSION MODULES	D6108-97	114900	PSI	8077	KG/CM ²
SPECIFIC GRAVITY	D6111-97	0.93	G/CC	0.93	G/CC
FLASH POINT		644	DEG F	340	DEG C
MOISTURE ABSORPTION		0.06	% BY WEIGHT	0.06	% BY WEIGHT
THERMAL EXPANSION	D6341-98	0.000033	INCH/INCH/DEG F		
AVERAGE NAIL PULL OUT	D6117-97	504	LBS	229	KG
STATIC COEFFICIENT OF FRICTION - DRY	D2394-83(99)	.53			
STATIC COEFFICIENT OF FRICTION - WET	D2394-83(99)	.51			
SLIDING COEFFICIENT OF FRICTION - DRY	D2394-83(99)	.23			
SLIDING COEFFICIENT OF FRICTION - WET	D2394-83(99)	.51			
FLAME SPREAD	E84(03a)	62			
FLAME SPREAD CLASSIFICATION	E84(03a)	60			
SMOKE DEVELOPED	E84(03a)	230			
SMOKE DEVELOPED CLASSIFICATION	E84(03a)	250			
SPONTANEOUS IGNITION	D-1929	824	DEG F	440	DEG C

THIS DATA REPRESENTS AVERAGE VALUES **NOT** MINIMUMS. SAFETY FACTORS MUST BE ADDED INTO THE DESIGN.

Chemical Resistance

Since high density polyethylene has a high resistance to most acids and chemicals, Plastic Lumber is not affected by exposure to most substances.

Ultraviolet Weathering

An ultraviolet stabilizer is incorporated at the time of manufacture. It protects the plastic from ultraviolet light degradation and ensures that the outside of the product will not degrade in exterior applications.

PREMIUM GRADE PLASTIC LUMBER

SPAN TABLE

MAXIMUM ALLOWABLE SPANS

LUMBER SIZE (INCHES)	MAXIMUM UNIFORM LOAD	
	40 PSF	100PSF
	SPAN (INCHES)	
$\frac{3}{4} \times 5\frac{1}{2}$	12	9
$\frac{3}{4} \times 6$	12	9
$1 \times 5\frac{1}{2}$	16	11
$1\frac{1}{2} \times 5\frac{1}{2}$	16	11
$1\frac{1}{2} \times 5\frac{1}{2}$	23	17

1. SPANS ARE FOR MEMBERS USED AS PLANKING (FLAT-WISE BENDING).
2. MEMBERS SHALL BE SUPPORTED BY A MINIMUM OF JOISTS (2 SPANS) AND SHALL BE FASTENED AT EACH JOIST.
3. USE OF MEMBERS AS STAIR TREADS IS OUTSIDE THE SCOPE OF THIS TABLE.

MOLDED GRADE PLASTIC LUMBER SPAN TABLE 78° F

DECKING MODE

60 Lbs/Sq FOOT LIVE LOAD

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	FEET	
5/4 X4, 6	1.125	20.0	1.7	
2X6,8,10,12	1.5	26.7	2.2	
3X4,6,8,10	2.4	42.7	3.6	
4X4,6	3.4	60.5	5.0	
5 X 5	4.4	78.3	6.5	
6 X 6, 12	5.4	96.1	8.0	

DECKING MODE

150Lbs/Sq FOOT LIVE LOAD

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	FEET	
5/4 X4, 6	1.125	17.1	1.4	
2X6,8,10,12	1.5	22.8	1.9	
3X4,6,8,10	2.4	36.5	3.0	
4X4,6	3.4	51.7	4.3	
5 X 5	4.4	67.0	5.6	
6 X 6, 12	5.4	82.2	6.8	

100Lbs/Sq FOOT LIVE LOAD

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	FEET	
5/4 X4, 6	1.125	17.1	1.4	
2X6,8,10,12	1.5	22.8	1.9	
3X4,6,8,10	2.4	36.5	3.0	
4X4,6	3.4	51.7	4.3	
5 X 5	4.4	67.0	5.6	
6 X 6, 12	5.4	82.2	6.8	

200Lbs/Sq FOOT LIVE LOAD

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	FEET	
5/4 X4, 6	1.125	17.1	1.4	
2X6,8,10,12	1.5	22.8	1.9	
3X4,6,8,10	2.4	36.5	3.0	
4X4,6	3.4	51.7	4.3	
5 X 5	4.4	67.0	5.6	
6 X 6, 12	5.4	82.2	6.8	

MOLDED GRADE PLASTIC LUMBER SPAN TABLE 122°

DECKING MODE

60 Lbs/SQ FOOT LIVE LOAD

SIZE	ACTUAL SIZE	MAXIMUM SPAN	
	THICKNESS	INCHES	FEET
5/4 x 4,6	1.125	17.3	1.4
2 x 6,8,10,12	1.5	23.1	1.9
3 x 4,6,8,10	2.4	37.0	3.1
4 x 4,6	3.4	52.4	4.4
5 x 5	4.4	67.8	5.7
6 x 6,12	5.4	83.3	6.9

DECKING MODE

150 Lbs/SQ FOOT LIVE LOAD

SIZE	ACTUAL SIZE	MAXIMUM SPAN	
	THICKNESS	INCHES	FEET
5/4 x 4,6	1.125	13.1	1.1
2 x 6,8,10,12	1.5	17.4	1.5
3 x 4,6,8,10	2.4	27.8	2.3
4 x 4,6	3.4	39.4	3.3
5 x 5	4.4	51.0	4.3
6 x 6,12	5.4	62.6	5.2

100 Lbs/SQ FOOT LIVE LOAD

SIZE	ACTUAL SIZE	MAXIMUM SPAN	
	THICKNESS	INCHES	FEET
5/4 x 4,6	1.125	14.8	1.2
2 x 6,8,10,12	1.5	19.8	1.6
3 x 4,6,8,10	2.4	31.6	2.6
4 x 4,6	3.4	44.8	3.7
5 x 5	4.4	58.0	4.8
6 x 6,12	5.4	71.2	5.9

200 Lbs/SQ FOOT LIVE LOAD

SIZE	ACTUAL SIZE	MAXIMUM SPAN	
	THICKNESS	INCHES	FEET
5/4 x 4,6	1.125	11.9	1.0
2 x 6,8,10,12	1.5	15.9	1.3
3 x 4,6,8,10	2.4	25.4	2.1
4 x 4,6	3.4	36.	3.0
5 x 5	4.4	46.5	3.9
6 x 6,12	5.4	57.1	4.8

STRUCTURAL GRADE PLASTIC LUMBER

JOIST MODE

SPAN TABLE

JOIST MODE

60 Lbs/Sq FOOT LIVE LOAD
12 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	67.4	5.6
2 x 8	1.5	7.3	91.2	7.6
2 x 10	1.5	9.25	115.5	9.6
2 x 12	1.5	11.3	141.1	11.8
3 x 4	2.4	3.4	49.7	4.1
3 x 6	2.4	5.5	80.3	6.7
3 x 8	2.4	7.4	105.7	8.8
3 x 10	2.4	9.3	131.8	11.0
3 x 12	2.4	11.3	158.9	13.2
4 x 4	3.4	3.4	55.8	4.6
4 x 6	3.4	5.4	88.6	7.4
5 x 5	4.4	4.4	78.7	6.6
6 x 6	5.4	5.4	103.4	8.6
6 x 12	5.4	11.3	197.9	16.5

100 Lbs/Sq FOOT LIVE LOAD
12 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	57.7	4.8
2 x 8	1.5	7.3	78.0	6.5
2 x 10	1.5	9.25	98.9	8.2
2 x 12	1.5	11.3	120.8	10.1
3 x 4	2.4	3.4	42.5	3.5
3 x 6	2.4	5.5	68.8	5.7
3 x 8	2.4	7.4	91.5	7.6
3 x 10	2.4	9.3	114.4	9.5
3 x 12	2.4	11.3	138.3	11.5
4 x 4	3.4	3.4	47.7	4.0
4 x 6	3.4	5.4	75.8	6.3
5 x 5	4.4	4.4	67.3	5.6
6 x 6	5.4	5.4	88.5	7.4
6 x 12	5.4	11.3	175.1	14.6

150 Lbs/Sq FOOT LIVE LOAD
12 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	50.8	4.2
2 x 8	1.5	7.3	68.7	5.7
2 x 10	1.5	9.25	87.0	7.3
2 x 12	1.5	11.3	106.3	8.9
3 x 4	2.4	3.4	37.4	3.1
3 x 6	2.4	5.5	60.5	5.0
3 x 8	2.4	7.4	81.0	6.8
3 x 10	2.4	9.3	101.5	8.5
3 x 12	2.4	11.3	122.8	10.2
4 x 4	3.4	3.4	42.0	3.5
4 x 6	3.4	5.4	66.7	5.6
5 x 5	4.4	4.4	59.3	4.9
6 x 6	5.4	5.4	77.9	6.5
6 x 12	5.4	11.3	157.1	13.1

200 Lbs/Sq FOOT LIVE LOAD
12 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	46.3	3.9
2 x 8	1.5	7.3	62.6	5.2
2 x 10	1.5	9.25	79.4	6.6
2 x 12	1.5	11.3	97.0	8.1
3 x 4	2.4	3.4	34.1	2.8
3 x 6	2.4	5.5	55.2	4.6
3 x 8	2.4	7.4	74.1	6.2
3 x 10	2.4	9.3	92.9	7.7
3 x 12	2.4	11.3	112.6	9.4
4 x 4	3.4	3.4	38.3	3.2
4 x 6	3.4	5.4	60.9	5.1
5 x 5	4.4	4.4	54.1	4.5
6 x 6	5.4	5.4	71.0	5.9
6 x 12	5.4	11.3	144.8	12.1

STRUCTURAL GRADE PLASTIC LUMBER

JOIST MODE

SPAN TABLE

JOIST MODE

60 LBS/SQ FOOT LIVE LOAD
12 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	57.6	4.8
2 x 8	1.5	7.3	77.9	6.5
2 x 10	1.5	9.25	98.7	8.2
2 x 12	1.5	11.3	120.5	10.0
3 x 4	2.4	3.4	42.4	3.5
3 x 6	2.4	5.5	68.6	5.7
3 x 8	2.4	7.4	89.5	7.5
3 x 10	2.4	9.3	111.6	9.3
3 x 12	2.4	11.3	134.5	11.2
4 x 4	3.4	3.4	47.6	4.0
4 x 6	3.4	5.4	75.7	6.3
5 x 5	4.4	4.4	67.2	5.6
6 x 6	5.4	5.4	88.3	7.4
6 x 12	5.4	11.3	167.6	14.0

100 LBS/SQ FOOT LIVE LOAD
12 INCH CENTER FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	49.3	4.1
2 x 8	1.5	7.3	56.7	5.6
2 x 10	1.5	9.25	84.5	7.0
2 x 12	1.5	11.3	103.2	8.6
3 x 4	2.4	3.4	36.3	3.0
3 x 6	2.4	5.5	58.7	4.9
3 x 8	2.4	7.4	77.5	6.5
3 x 10	2.4	9.3	96.9	8.1
3 x 12	2.4	11.3	117.1	9.8
4 x 4	3.4	3.4	40.8	3.4
4 x 6	3.4	5.4	64.8	5.4
5 x 5	4.4	4.4	57.5	4.8
6 x 6	5.4	5.4	73.2	6.1
6 x 12	5.4	11.3	148.2	12.4

150 LBS/SQ FOOT LIVE LOAD
12 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	43.4	3.6
2 x 8	1.5	7.3	58.7	4.9
2 x 10	1.5	9.25	74.3	6.2
2 x 12	1.5	11.3	90.8	7.6
3 x 4	2.4	3.4	32.0	2.7
3 x 6	2.4	5.5	51.7	4.3
3 x 8	2.4	7.4	68.6	5.7
3 x 10	2.4	9.3	85.9	7.2
3 x 12	2.4	11.3	104.0	8.7
4 x 4	3.4	3.4	35.9	3.0
4 x 6	3.4	5.4	57.0	4.8
5 x 5	4.4	4.4	50.6	4.2
6 x 6	5.4	5.4	66.5	5.5
6 x 12	5.4	11.3	133.0	11.1

200 LBS/SQ FOOT LIVE LOAD
12 INCH CENTER FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	39.6	3.3
2 x 8	1.5	7.3	53.5	4.5
2 x 10	1.5	9.25	67.8	5.7
2 x 12	1.5	11.3	82.8	6.9
3 x 4	2.4	3.4	29.1	2.4
3 x 6	2.4	5.5	47.2	3.9
3 x 8	2.4	7.4	62.8	5.2
3 x 10	2.4	9.3	78.7	6.6
3 x 12	2.4	11.3	95.3	7.9
4 x 4	3.4	3.4	32.7	2.7
4 x 6	3.4	5.4	52.0	4.3
5 x 5	4.4	4.4	46.2	3.8
6 x 6	5.4	5.4	59.6	5.0
6 x 12	5.4	11.3	122.6	10.2

STRUCTURAL GRADE PLASTIC LUMBER SPAN TABLE

JOIST MODE

60 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	61.3	5.1
2 x 8	1.5	7.3	82.8	6.9
2 x 10	1.5	9.25	105.0	8.7
2 x 12	1.5	11.3	128.2	10.7
3 x 4	2.4	3.4	45.1	3.8
3 x 6	2.4	5.5	73.0	6.1
3 x 8	2.4	7.4	96.7	8.1
3 x 10	2.4	9.3	120.9	10.1
3 x 12	2.4	11.3	146.0	12.2
4 x 4	3.4	3.4	50.7	4.2
4 x 6	3.4	5.4	80.5	6.7
5 x 5	4.4	4.4	71.5	6.0
6 x 6	5.4	5.4	93.9	7.8
6 x 12	5.4	11.3	183.8	15.3

100 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	52.4	4.4
2 x 8	1.5	7.3	70.9	5.9
2 x 10	1.5	9.25	89.8	7.5
2 x 12	1.5	11.3	109.7	9.1
3 x 4	2.4	3.4	38.6	3.2
3 x 6	2.4	5.5	62.5	5.2
3 x 8	2.4	7.4	83.5	7.0
3 x 10	2.4	9.3	104.6	8.7
3 x 12	2.4	11.3	126.5	10.5
4 x 4	3.4	3.4	43.4	3.6
4 x 6	3.4	5.4	68.9	5.7
5 x 5	4.4	4.4	61.2	5.1
6 x 6	5.4	5.4	80.4	6.7
6 x 12	5.4	11.3	161.5	13.5

DECKING MODE

60 LBS/SQ FOOT LIVE LOAD
78° F LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	26.2	26.2	2.2
2 x 6,8,10,12	1.5	35.0	35.0	2.9
3 x 4,6,8,10	2.4	55.9	55.9	4.7
4 x 4,6	3.4	79.2	79.2	6.6
5 x 5	4.4	102.5	102.5	8.5
6 x 6,12	5.4	125.8	125.8	10.5

100 LBS/SQ FOOT LIVE LOAD
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	22.4	22.4	1.9
2 x 6,8,10,12	1.5	29.9	29.9	2.5
3 x 4,6,8,10	2.4	47.8	47.8	4.0
4 x 4,6	3.4	67.8	67.8	5.6
5 x 5	4.4	87.7	87.7	7.3
6 x 6,12	5.4	107.6	107.6	9.0

STRUCTURAL GRADE PLASTIC LUMBER SPAN TABLE

JOIST MODE

150 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	46.2	3.8
2 x 8	1.5	7.3	62.4	5.2
2 x 10	1.5	9.25	79.1	6.6
2 x 12	1.5	11.3	96.6	8.0
3 x 4	2.4	3.4	34.0	2.8
3 x 6	2.4	5.5	55.0	4.6
3 x 8	2.4	7.4	73.9	6.2
3 x 10	2.4	9.3	92.6	7.7
3 x 12	2.4	11.3	112.2	9.3
4 x 4	3.4	3.4	38.2	3.2
4 x 6	3.4	5.4	60.6	5.1
5 x 5	4.4	4.4	53.8	4.5
6 x 6	5.4	5.4	70.7	5.9
6 x 12	5.4	11.3	144.3	12.0

200 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	42.1	3.5
2 x 8	1.5	7.3	56.9	4.7
2 x 10	1.5	9.25	72.1	6.0
2 x 12	1.5	11.3	88.1	7.3
3 x 4	2.4	3.4	31.0	2.6
3 x 6	2.4	5.5	50.2	4.2
3 x 8	2.4	7.4	67.5	5.6
3 x 10	2.4	9.3	84.7	7.1
3 x 12	2.4	11.3	102.7	8.6
4 x 4	3.4	3.4	34.8	2.9
4 x 6	3.4	5.4	55.3	4.6
5 x 5	4.4	4.4	49.1	4.1
6 x 6	5.4	5.4	64.5	5.4
6 x 12	5.4	11.3	132.6	11.1

DECKING MODE

150 LBS/SQ FOOT LIVE LOAD
78° F LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	19.7	19.7	1.6
2 x 6,8,10,12	1.5	26.3	26.3	2.2
3 x 4,6,8,10	2.4	42.1	42.1	3.5
4 x 4,6	3.4	59.6	59.6	5.0
5 x 5	4.4	77.1	77.1	6.4
6 x 6,12	5.4	94.7	94.7	7.9

200 LBS/SQ FOOT LIVE LOAD
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	18.0	18.0	1.5
2 x 6,8,10,12	1.5	24.0	24.0	2.0
3 x 4,6,8,10	2.4	38.4	38.4	3.2
4 x 4,6	3.4	54.4	54.4	4.5
5 x 5	4.4	70.3	70.3	5.9
6 x 6,12	5.4	86.3	86.3	7.2

STRUCTURAL GRADE PLASTIC LUMBER SPAN TABLE

JOIST MODE

60 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	52.3	4.4
2 x 8	1.5	7.3	70.8	5.9
2 x 10	1.5	9.25	89.7	7.5
2 x 12	1.5	11.3	109.5	9.1
3 x 4	2.4	3.4	38.5	3.2
3 x 6	2.4	5.5	62.3	5.2
3 x 8	2.4	7.4	83.9	7.0
3 x 10	2.4	9.3	102.3	8.5
3 x 12	2.4	11.3	123.6	10.3
4 x 4	3.4	3.4	43.3	3.6
4 x 6	3.4	5.4	68.8	5.7
5 x 5	4.4	4.4	61.0	5.1
6 x 6	5.4	5.4	80.2	6.7
6 x 12	5.4	11.3	155.6	13.0

100 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	44.8	3.7
2 x 8	1.5	7.3	60.6	5.0
2 x 10	1.5	9.25	76.7	6.4
2 x 12	1.5	11.3	93.7	7.8
3 x 4	2.4	3.4	33.0	2.7
3 x 6	2.4	5.5	53.4	4.4
3 x 8	2.4	7.4	71.6	6.0
3 x 10	2.4	9.3	88.5	7.4
3 x 12	2.4	11.3	107.2	8.9
4 x 4	3.4	3.4	37.0	3.1
4 x 6	3.4	5.4	58.8	4.9
5 x 5	4.4	4.4	52.2	4.4
6 x 6	5.4	5.4	68.7	5.7
6 x 12	5.4	11.3	136.7	11.4

DECKING MODE

60 LBS/SQ FOOT LIVE LOAD
120° F LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	24.1	24.1	2.0
2 x 6,8,10,12	1.5	32.1	32.1	2.7
3 x 4,6,8,10	2.4	51.3	51.3	4.3
4 x 4,6	3.4	72.7	72.7	6.1
5 x 5	4.4	94.1	94.1	7.8
6 x 6,12	5.4	115.5	115.5	9.6

100 LBS/SQ FOOT LIVE LOAD
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 x 4,6	1.125	20.6	20.6	1.7
2 x 6,8,10,12	1.5	27.4	27.4	2.3
3 x 4,6,8,10	2.4	43.9	43.9	3.7
4 x 4,6	3.4	62.2	62.2	5.2
5 x 5	4.4	80.5	80.5	6.7
6 x 6,12	5.4	98.8	98.8	8.2

STRUCTURAL GRADE PLASTIC LUMBER SPAN TABLE

JOIST MODE

150 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED BY DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2x6	1.5	5.4	39.4	3.3
2x8	1.5	7.3	53.3	4.4
2x10	1.5	9.25	67.5	5.6
2x12	1.5	11.3	82.5	6.9
3x4	2.4	3.4	29.0	2.4
3x6	2.4	5.5	47.0	3.9
3x8	2.4	7.4	62.5	5.2
3x10	2.4	9.3	78.4	6.5
3x12	2.4	11.3	95.0	7.9
4x4	3.4	3.4	32.6	2.7
4x6	3.4	5.4	51.8	4.3
5x5	4.4	4.4	46.0	3.8
6x6	5.4	5.4	60.4	5.0
6x12	5.4	11.3	122.2	10.2

200 LBS/SQ FOOT LIVE LOAD
16 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED BY DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2x6	1.5	5.4	36.0	3.0
2x8	1.5	7.3	48.6	4.1
2x10	1.5	9.25	61.6	5.1
2x12	1.5	11.3	75.3	6.3
3x4	2.4	3.4	26.5	2.2
3x6	2.4	5.5	42.8	3.6
3x8	2.4	7.4	57.6	4.8
3x10	2.4	9.3	71.7	6.0
3x12	2.4	11.3	87.0	7.2
4x4	3.4	3.4	29.7	2.5
4x6	3.4	5.4	47.2	3.9
5x5	4.4	4.4	41.9	3.5
6x6	5.4	5.4	55.1	4.6
6x12	5.4	11.3	112.3	9.4

DECKING MODE

150 LBS/SQ FOOT LIVE LOAD
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 X4,6	1.125	18.1	18.1	1.5
2X6,8,10,12	1.5	24.1	24.1	2.0
3X4,6,8,10	2.4	38.6	38.6	3.2
4X4,6	3.4	54.7	54.7	4.6
5 X 5	4.4	70.8	70.8	5.9
6 X 6, 12	5.4	86.9	86.9	7.2

200 LBS/SQ FOOT LIVE LOAD
120° F – LIMITED BY DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	THICKNESS	INCHES	INCHES	FEET
5/4 X4,6	1.125	16.5	16.5	1.4
2X6,8,10,12	1.5	22.0	22.0	1.8
3X4,6,8,10	2.4	35.2	35.2	2.9
4X4,6	3.4	49.9	49.9	4.2
5 X 5	4.4	64.6	64.6	5.4
6 X 6, 12	5.4	79.2	79.2	6.6

STRUCTURAL GRADE PLASTIC LUMBER

JOIST MODE

SPAN TABLE

JOIST MODE

60 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

150 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER DISTANCE FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	53.5	4.5
2 x 8	1.5	7.3	72.4	6.0
2 x 10	1.5	9.25	91.7	7.6
2 x 12	1.5	11.3	112.0	9.3
3 x 4	2.4	3.4	39.4	3.3
3 x 6	2.4	5.5	63.8	5.3
3 x 8	2.4	7.4	85.2	7.1
3 x 10	2.4	9.3	106.6	8.9
3 x 12	2.4	11.3	129.0	10.7
4 x 4	3.4	3.4	44.3	3.7
4 x 6	3.4	5.4	70.3	5.9
5 x 5	4.4	4.4	62.4	5.2
6 x 6	5.4	5.4	82.0	6.8
6 x 12	5.4	11.3	164.3	13.7

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	40.3	3.4
2 x 8	1.5	7.3	54.5	4.5
2 x 10	1.5	9.25	69.1	5.8
2 x 12	1.5	11.3	84.4	7.0
3 x 4	2.4	3.4	29.7	2.5
3 x 6	2.4	5.5	48.0	4.0
3 x 8	2.4	7.4	64.7	5.4
3 x 10	2.4	9.3	81.2	6.8
3 x 12	2.4	11.3	98.5	8.2
4 x 4	3.4	3.4	33.4	2.8
4 x 6	3.4	5.4	53.0	4.4
5 x 5	4.4	4.4	47.0	3.9
6 x 6	5.4	5.4	61.8	5.2
6 x 12	5.4	11.3	127.4	10.6

100 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

200 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER FOR JOIST
78° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	45.8	3.8
2 x 8	1.5	7.3	61.9	5.2
2 x 10	1.5	9.25	78.5	6.5
2 x 12	1.5	11.3	95.9	8.0
3 x 4	2.4	3.4	33.7	2.8
3 x 6	2.4	5.5	54.6	4.5
3 x 8	2.4	7.4	73.4	6.1
3 x 10	2.4	9.3	91.9	7.7
3 x 12	2.4	11.3	111.4	9.3
4 x 4	3.4	3.4	37.9	3.2
4 x 6	3.4	5.4	60.2	5.0
5 x 5	4.4	4.4	53.4	4.5
6 x 6	5.4	5.4	70.2	5.9
6 x 12	5.4	11.3	143.3	11.9

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	36.8	3.1
2 x 8	1.5	7.3	49.7	4.1
2 x 10	1.5	9.25	63.0	5.3
2 x 12	1.5	11.3	77.0	6.4
3 x 4	2.4	3.4	27.1	2.3
3 x 6	2.4	5.5	43.8	3.7
3 x 8	2.4	7.4	59.1	4.9
3 x 10	2.4	9.3	74.2	6.2
3 x 12	2.4	11.3	90.1	7.5
4 x 4	3.4	3.4	30.4	2.5
4 x 6	3.4	5.4	48.3	4.0
5 x 5	4.4	4.4	42.9	3.6
6 x 6	5.4	5.4	56.4	4.7
6 x 12	5.4	11.3	116.9	9.7

STRUCTURAL GRADE PLASTIC LUMBER

JOIST MODE

SPAN TABLE

JOIST MODE

60 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED DEFLECTION

150 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER DISTANCE FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	45.7	3.8
2 x 8	1.5	7.3	61.8	5.2
2 x 10	1.5	9.25	78.3	6.5
2 x 12	1.5	11.3	95.7	8.0
3 x 4	2.4	3.4	33.7	2.8
3 x 6	2.4	5.5	54.5	4.5
3 x 8	2.4	7.4	72.1	6.0
3 x 10	2.4	9.3	90.3	7.5
3 x 12	2.4	11.3	109.2	9.1
4 x 4	3.4	3.4	37.8	3.2
4 x 6	3.4	5.4	60.1	5.0
5 x 5	4.4	4.4	53.3	4.4
6 x 6	5.4	5.4	70.1	5.8
6 x 12	5.4	11.3	139.2	11.8

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	34.4	2.9
2 x 8	1.5	7.3	46.6	3.9
2 x 10	1.5	9.25	59.0	4.9
2 x 12	1.5	11.3	72.1	6.0
3 x 4	2.4	3.4	25.4	2.1
3 x 6	2.4	5.5	41.0	3.4
3 x 8	2.4	7.4	54.8	4.6
3 x 10	2.4	9.3	68.8	5.7
3 x 12	2.4	11.3	83.4	7.0
4 x 4	3.4	3.4	28.5	2.4
4 x 6	3.4	5.4	45.2	3.8
5 x 5	4.4	4.4	40.2	3.3
6 x 6	5.4	5.4	52.8	4.4
6 x 12	5.4	11.3	107.9	9.0

100 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER FOR JOIST
120° F – LIMITED DEFLECTION

200 Lbs/Sq FOOT LIVE LOAD
24 INCH CENTER FOR JOIST
120° F – LIMITED DEFLECTION

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	39.1	3.3
2 x 8	1.5	7.3	52.9	4.4
2 x 10	1.5	9.25	67.0	5.6
2 x 12	1.5	11.3	81.9	6.8
3 x 4	2.4	3.4	28.8	2.4
3 x 6	2.4	5.5	46.6	3.9
3 x 8	2.4	7.4	62.1	5.2
3 x 10	2.4	9.3	77.8	6.5
3 x 12	2.4	11.3	94.3	7.9
4 x 4	3.4	3.4	32.4	2.7
4 x 6	3.4	5.4	51.4	4.3
5 x 5	4.4	4.4	45.6	3.8
6 x 6	5.4	5.4	60.0	5.0
6 x 12	5.4	11.3	121.3	10.1

SIZE	ACTUAL SIZE		MAXIMUM SPAN	
	WIDTH	HEIGHT	INCHES	FEET
2 x 6	1.5	5.4	31.4	2.6
2 x 8	1.5	7.3	42.5	3.5
2 x 10	1.5	9.25	53.8	4.5
2 x 12	1.5	11.3	65.7	5.5
3 x 4	2.4	3.4	23.1	1.9
3 x 6	2.4	5.5	37.4	3.1
3 x 8	2.4	7.4	50.1	4.2
3 x 10	2.4	9.3	62.9	5.2
3 x 12	2.4	11.3	76.3	6.4
4 x 4	3.4	3.4	26.0	2.2
4 x 6	3.4	5.4	41.3	3.4
5 x 5	4.4	4.4	36.6	3.1
6 x 6	5.4	5.4	48.1	4.0
6 x 12	5.4	11.3	99.	8.2

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