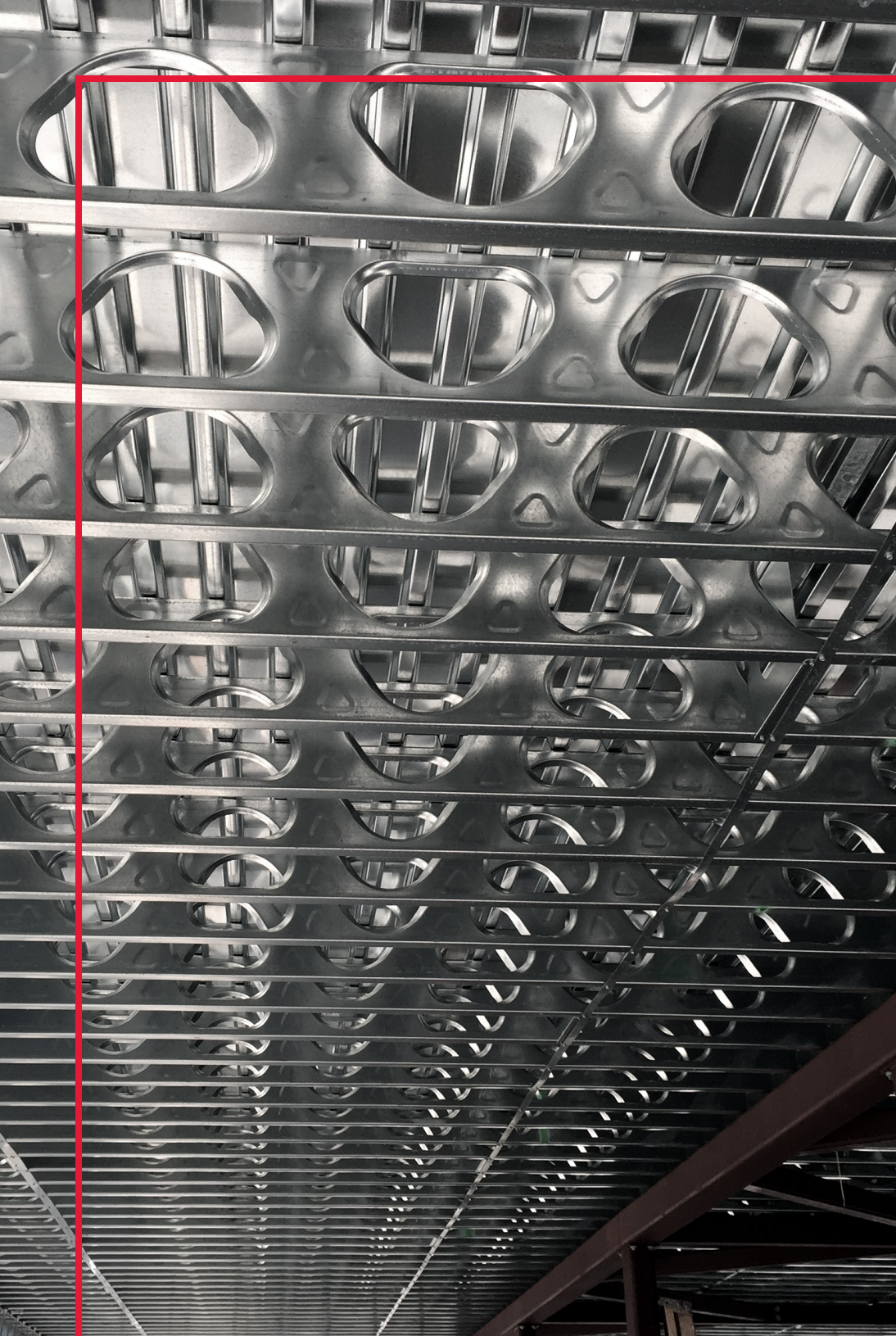


PRODUCT CATALOG



 **JoistRite**<sup>®</sup>

**MARINO WARE**<sup>®</sup>

**YOUR SUCCESS DEPENDS ON QUALITY BUILDING PRODUCTS AND SO DOES OURS.**

JoistRite®, from Marino\WARE® is a specially designed, patented, cold-formed steel joist section that has one of the highest strength-to-mass ratios of any structural material in the market today. As an added benefit, JoistRite also provides excellent fire and acoustic properties.

The JoistRite line of products is specifically engineered to provide the construction industry with an innovative, time-saving and cost-effective building system.

**FEATURES**

**A PRECISION PRODUCT**

JoistRite is supplied as a precision product. Sections are manufactured to length in the plant, minimizing the need for on-site cutting. Another labor-saving feature.

**SPEEDS UP CONSTRUCTION AND REDUCES LABOR COSTS**

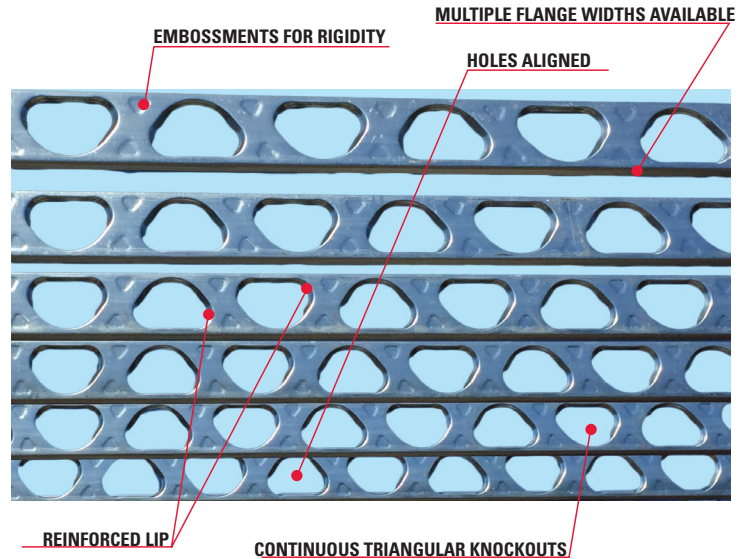
The “open web” design created by the triangular shaped knockouts substantially reduces the weight of JoistRite, making handling much easier and safer. The holes also speed up the installation of electrical, plumbing, and heating services by virtually eliminating the need to cut or drill holes, resulting in reduced labor costs.

**A DURABLE BUILDING PRODUCT**

JoistRite will not swell, warp, burn, rot, or attract or support insect (termite) infestations. The high-quality zinc coating (G-60) helps to protect JoistRite from time-dependent deterioration mechanisms involving moisture.

**DESIGN FLEXIBILITY**

Architects, Engineers, and Builders have the option to use stick or frame construction, or a combination of both. With JoistRite, almost any structural design is possible. JoistRite is supplied in a complete range of sizes to meet engineering specifications for wind-bearing and load-bearing walls, floor, ceiling joists, and roof trusses. It is strong enough to support up to seven stories as a self-supporting, load-bearing structure and can be utilized in much higher structures when used as an infill application.



**TECHNICAL SERVICES + SUPPORT | #DesignGroup**

Our commitment to quality products extends to best-in-class design support. The Marino\WARE® DesignGroup™ offers a full range of technical support and engineering services, including professionally engineered stamped shop drawings, design and installation assistance on all Marino\WARE manufactured products, and expert advice on structural, nonstructural, fire and acoustic assemblies.

If you have questions or need more information on any of the products listed in this catalog, contact our Technical Services department at [technicalservices@marinoware.com](mailto:technicalservices@marinoware.com), or at 866.545.1545. In most cases Technical Services representatives can provide an immediate response.

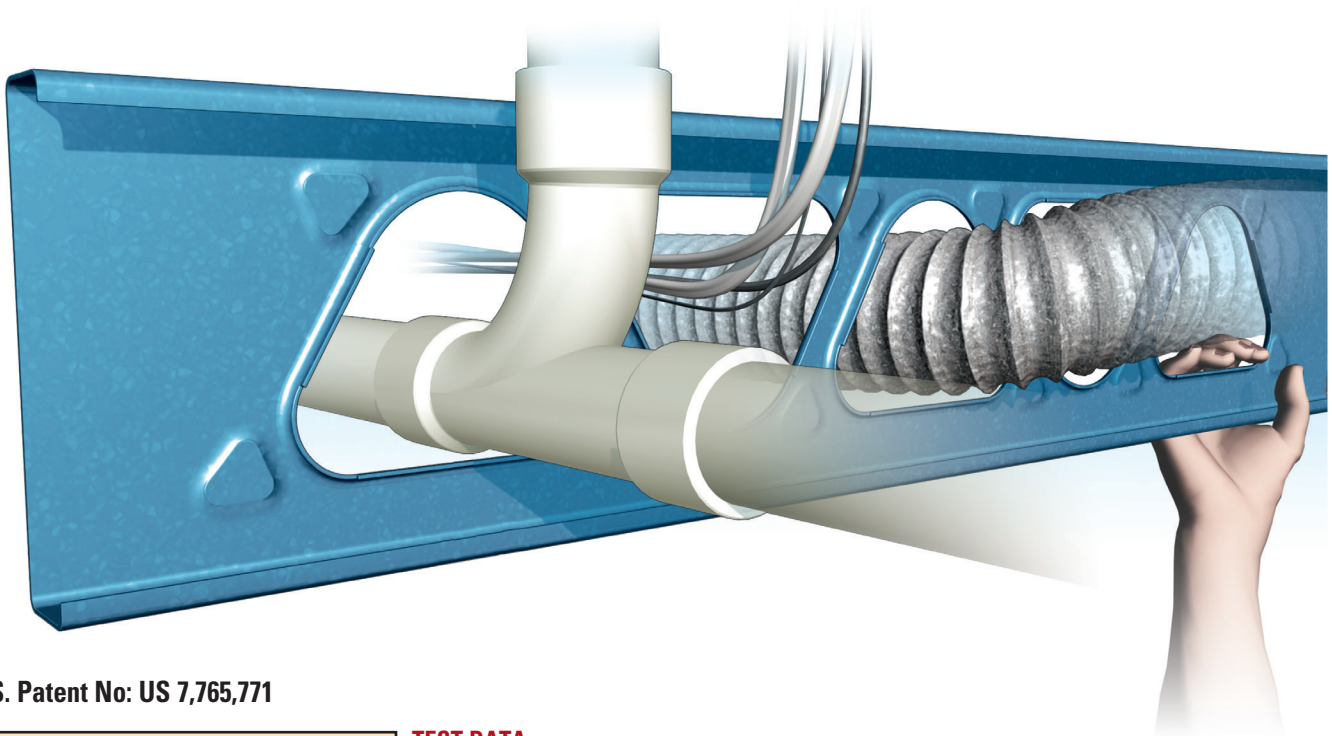
**Warranty & Limitations**

All products presented herein are warranted to the buyer to be free from defects in material and workmanship. The foregoing warranty is non-assignable and in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied by operation of law or otherwise, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. All details and specifications presented herein are intended as a general guide for the use of Marino\WARE® framing systems. These products should not be used without evaluation by a qualified engineer or architect to determine their suitability for a specific use.

Marino\WARE assumes no responsibility for failure resulting from use of its details or specifications, or for failure resulting from improper application or installation of these products.

**Governing Law**

All issues arising in connection with your order and all transactions associated with it shall be interpreted according to the laws of the State of New Jersey, and all actions or other proceedings arising out of such issues shall be brought only in Superior Court, State of New Jersey, County of Essex, or United States District Court for the District of New Jersey. No action may be brought more than one year after accrual of the cause of action therefore.



U.S. Patent No: US 7,765,771

**JoistRite Identification System**

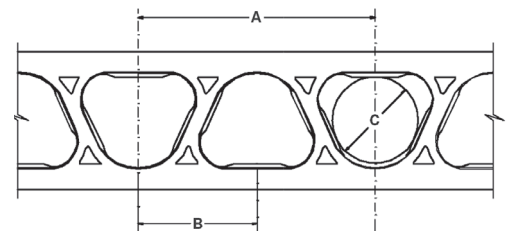
**1000-JR-200-54**

- Member Depth 10" = 1000 1/100 in.
- Style: JR = JoistRite
- Flange Width: 2" = 2.00" = 200x1/100 in.
- Material Thickness: Minimum Base Metal Thickness: .054 in. = 54 mils (1 mil = 1/1000 in.)

**TEST DATA**

UL G563, G577, G588, G597, L567, L580, P546, H503 | STC=52 & 59 IIC=45, 68 & 74  
 MEA=139-04-M  
 WHI Report 3101528 - 1 Hour Fire Rating WHI Report 3099463 - 1.5 Hour Fire Rating NGC - 2 Hour Fire Rating  
 ICC ES ESR-1741

\* For UL Designs, minimum 9-14" joist required.



**STEEL THICKNESS:**

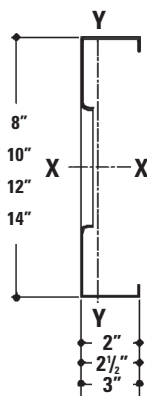
Product	Design		Minimum		ASTM C955 Color Code
	Mils	(in.)	(mm)	(in.)	
43	0.0451	1.15	0.0428	1.09	Yellow
54	0.0566	1.44	0.0538	1.37	Green
68	0.0713	1.81	0.0677	1.72	Orange
97	0.1017	2.58	0.0966	2.45	Red

**HOLE SIZES:**

Section Depth in.	A Pitch in.	B 1/2 Pitch in.	C Max. Diameter in.
8	14.0	7.00	5.5
10	28.0	14.00	7.0
12	35.0	17.50	9.0
14	35.0	17.50	9.0

**SYMBOLS AND DEFINITIONS**

- $F_y$  Yield stress of steel used for design.
- $I_x$  Moment of inertia of net section about x-axis.
- $S_x$  Section modulus of net section about x-axis.
- $r_x$  Radius of gyration of net section about x-axis.
- $I_y$  Moment of inertia of net section about y-axis.
- $r_y$  Radius of gyration of net section about y-axis.
- $I_{x_{\text{red}}}$  Effective moment of inertia of net section about x-axis based on a stress of  $0.6F_y$  (deflection determination).
- $S_{x_{\text{e}}}$  Effective section modulus of net section about x-axis based on a stress of  $F_y$  (strength determination).
- $M_a$  Allowable bending moment.
- $V_a$  Allowable shear force.
- $J$  Saint-Venant torsion constant of net section.
- $C_w$  Torsional warping constant of net section.
- $r_o$  Polar radius of gyration of net section about shear center.



**FINISH:**

Galvanized in accordance with ASTM A1003. Products will be furnished with a G-60 hot-dipped galvanized coating.

**GRADES OF STEEL:**

18 gauge joists  
 $F_y$  (min) = 33 ksi  
 16, 14 and 12 gauge joists  
 $F_y$  (min) = 50 ksi  
 Manufactured to desired lengths.  
 Other web sizes available upon request.

# PHYSICAL AND STRUCTURAL SECTION PROPERTIES

Physical Properties							Net Properties						Net Effective Properties				Torsional Properties			
Members	Hole size (in.)	Web (in.)	Flange (in.)	Lip (in.)	Design Thickness (in.)	Weight (plf)	Area (in <sup>2</sup> )	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	r <sub>x</sub> (in.)	I <sub>y</sub> (in <sup>4</sup> )	r <sub>y</sub> (in.)	I <sub>xed</sub> (in <sup>4</sup> )	S <sub>x<sub>e</sub></sub> (in <sup>3</sup> )	Ma (k-in.)	Va (k)	J x10 <sup>3</sup> (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	r <sub>o</sub> (in.)	
<b>8" MEMBERS [43 mil Fy = 33 ksi; 54, 68 and 97 mil Fy = 50 ksi]</b>																				
800JR200-43	5.25	8.00	2.00	0.75	0.0451	1.58	0.386	5.11	1.28	3.64	0.223	0.760	5.11	1.23	22.9	0.620	0.261	3.81	4.11	
800JR200-54	5.25	8.00	2.00	0.75	0.0566	1.97	0.478	6.32	1.58	3.64	0.272	0.754	6.32	1.53	43.1	0.960	0.510	4.67	4.10	
800JR200-68	5.25	8.00	2.00	0.75	0.0713	2.45	0.592	7.81	1.95	3.63	0.330	0.746	7.81	1.95	55.0	1.48	1.00	5.72	4.09	
800JR200-97	5.25	8.00	2.00	0.75	0.1017	3.42	0.814	10.7	2.67	3.62	0.433	0.729	10.7	2.67	75.2	2.47	2.81	7.70	4.06	
800JR250-43	5.25	8.00	2.50	0.75	0.0451	1.73	0.431	5.82	1.46	3.68	0.379	0.938	5.76	1.32	24.5	0.620	0.292	6.36	4.39	
800JR250-54	5.25	8.00	2.50	0.75	0.0566	2.16	0.535	7.22	1.80	3.67	0.465	0.932	7.16	1.57	44.2	0.960	0.571	7.83	4.38	
800JR250-68	5.25	8.00	2.50	0.75	0.0713	2.69	0.663	8.93	2.23	3.67	0.566	0.924	8.93	1.99	56.2	1.48	1.12	9.63	4.37	
800JR250-97	5.25	8.00	2.50	0.75	0.1017	3.76	0.916	12.3	3.07	3.66	0.751	0.906	12.3	3.03	85.4	2.47	3.16	13.1	4.34	
800JR300-43	5.25	8.00	3.00	0.75	0.0451	1.89	0.476	6.54	1.63	3.71	0.589	1.11	6.28	1.38	25.7	0.62	0.323	9.74	4.71	
800JR300-54	5.25	8.00	3.00	0.75	0.0566	2.35	0.591	8.11	2.03	3.70	0.723	1.11	7.66	1.61	45.2	0.96	0.631	12.0	4.70	
800JR300-68	5.25	8.00	3.00	0.75	0.0713	2.94	0.734	10.1	2.51	3.70	0.884	1.10	9.74	2.06	58.0	1.48	1.25	14.8	4.69	
800JR300-97	5.25	8.00	3.00	0.75	0.1017	4.11	1.02	13.9	3.46	3.69	1.18	1.08	13.9	3.22	90.6	2.47	3.51	20.2	4.66	
<b>10" MEMBERS [43 mil Fy = 33 ksi; 54, 68 and 97 mil Fy = 50 ksi]</b>																				
1000JR200-43	7.0	10.00	2.00	0.75	0.0451	1.84	0.404	8.51	1.70	4.59	0.226	0.749	8.51	1.64	30.5	0.910	0.274	6.00	4.95	
1000JR200-54	7.0	10.00	2.00	0.75	0.0566	2.30	0.501	10.5	2.11	4.59	0.276	0.743	10.5	2.04	57.5	1.40	0.535	7.37	4.94	
1000JR200-68	7.0	10.00	2.00	0.75	0.0713	2.86	0.621	13.0	2.61	4.58	0.335	0.735	13.0	2.61	73.4	2.16	1.05	9.03	4.93	
1000JR200-97	7.0	10.00	2.00	0.75	0.1017	4.01	0.856	17.9	3.58	4.57	0.441	0.718	17.9	3.58	101	4.13	2.95	12.2	4.91	
1000JR250-43	7.0	10.00	2.50	0.75	0.0451	1.99	0.449	9.62	1.93	4.63	0.386	0.927	9.53	1.75	32.5	0.910	0.304	10.0	5.19	
1000JR250-54	7.0	10.00	2.50	0.75	0.0566	2.49	0.558	11.9	2.39	4.63	0.473	0.921	11.8	2.09	58.8	1.40	0.595	12.4	5.18	
1000JR250-68	7.0	10.00	2.50	0.75	0.0713	3.11	0.692	14.8	2.96	4.62	0.577	0.913	14.8	2.65	74.6	2.16	1.17	15.2	5.17	
1000JR250-97	7.0	10.00	2.50	0.75	0.1017	4.35	0.958	20.4	4.07	4.61	0.767	0.895	20.4	4.03	114	4.13	3.30	20.7	5.14	
1000JR300-43	7.0	10.00	3.00	0.75	0.0451	2.15	0.494	10.7	2.15	4.66	0.601	1.10	10.3	1.83	34.0	0.910	0.335	15.3	5.46	
1000JR300-54	7.0	10.00	3.00	0.75	0.0566	2.68	0.614	13.3	2.67	4.66	0.739	1.10	12.6	2.13	60.0	1.40	0.656	19.0	5.45	
1000JR300-68	7.0	10.00	3.00	0.75	0.0713	3.35	0.764	16.6	3.31	4.65	0.904	1.09	16.0	2.73	76.8	2.16	1.29	23.4	5.43	
1000JR300-97	7.0	10.00	3.00	0.75	0.1017	4.70	1.06	22.9	4.57	4.65	1.21	1.07	22.9	4.25	120	4.13	3.65	31.9	5.41	
<b>12" MEMBERS [Fy = 50 ksi]</b>																				
1200JR200-54	9.0	12.00	2.00	0.75	0.0566	2.50	0.510	15.8	2.64	5.57	0.270	0.728	15.8	2.56	72.2	1.08	0.544	10.6	5.87	
1200JR200-68	9.0	12.00	2.00	0.75	0.0713	3.12	0.632	19.6	3.27	5.57	0.328	0.721	19.6	3.27	92.2	1.66	1.07	13.0	5.86	
1200JR200-97	9.0	12.00	2.00	0.75	0.1017	4.38	0.871	26.9	4.49	5.56	0.432	0.704	26.9	4.49	127	3.15	3.00	17.5	5.84	
1200JR250-54	9.0	12.00	2.50	0.75	0.0566	2.69	0.566	17.9	2.98	5.61	0.465	0.906	17.7	2.61	73.6	1.08	0.605	17.7	6.07	
1200JR250-68	9.0	12.00	2.50	0.75	0.0713	3.37	0.703	22.1	3.69	5.61	0.567	0.898	22.1	3.31	93.4	1.66	1.19	21.8	6.06	
1200JR250-97	9.0	12.00	2.50	0.75	0.1017	4.72	0.973	30.5	5.09	5.60	0.754	0.880	30.5	5.03	142	3.15	3.35	29.7	6.04	
1200JR300-54	9.0	12.00	3.00	0.75	0.0566	2.89	0.623	19.9	3.31	5.65	0.729	1.08	18.8	2.66	75.0	1.08	0.665	27.2	6.30	
1200JR300-68	9.0	12.00	3.00	0.75	0.0713	3.61	0.774	24.7	4.11	5.64	0.892	1.07	23.9	3.40	95.9	1.66	1.31	33.6	6.29	
1200JR300-97	9.0	12.00	3.00	0.75	0.1017	5.07	1.08	34.1	5.69	5.63	1.20	1.06	34.1	5.28	149	3.15	3.71	45.9	6.27	
<b>14" MEMBERS [Fy = 50 ksi]</b>																				
1400JR200-54	9.0	14.00	2.00	0.75	0.0566	2.89	0.623	24.3	3.47	6.24	0.329	0.726	24.3	3.35	94	1.33	0.665	16.2	6.44	
1400JR200-68	9.0	14.00	2.00	0.75	0.0713	3.61	0.774	30.1	4.31	6.24	0.400	0.719	30.1	4.31	121	2.08	1.31	19.9	6.43	
1400JR200-97	9.0	14.00	2.00	0.75	0.1017	5.07	1.08	41.7	5.95	6.23	0.531	0.703	41.7	5.95	168	4.11	3.71	27.0	6.41	
1400JR250-54	9.0	14.00	2.50	0.75	0.0566	3.08	0.679	27.0	3.86	6.31	0.559	0.907	26.8	3.41	96.1	1.33	0.725	27.2	6.63	
1400JR250-68	9.0	14.00	2.50	0.75	0.0713	3.85	0.846	33.6	4.80	6.30	0.684	0.899	33.6	4.36	123	2.08	1.43	33.5	6.62	
1400JR250-97	9.0	14.00	2.50	0.75	0.1017	5.41	1.18	46.6	6.65	6.29	0.916	0.883	46.6	6.59	186	4.11	4.06	45.7	6.60	
1400JR300-54	9.0	14.00	3.00	0.75	0.0566	3.27	0.736	29.8	4.26	6.36	0.870	1.09	28.4	3.48	97.9	1.33	0.786	41.6	6.83	
1400JR300-68	9.0	14.00	3.00	0.75	0.0713	4.09	0.917	37.1	5.29	6.36	1.07	1.08	36.0	4.48	126	2.08	1.55	51.5	6.82	
1400JR300-97	9.0	14.00	3.00	0.75	0.1017	5.76	1.28	51.5	7.35	6.35	1.44	1.06	51.5	6.89	194	4.11	4.41	70.6	6.80	

**NOTES:**

1. The inside corner radius is the maximum of (3/32 - t/2) or 1.5t.
2. Net section properties are based on the gross section elements excluding the hole.
3. Net effective section properties are based on the effective section elements excluding the hole.

# MAXIMUM FLOOR JOIST SPANS (FT)

## NOTES:

1. Values shown in table are the least of strength and deflection limits without regard to the composite contribution of facing materials.
2. Web stiffeners are required at all support and concentrated load locations and the minimum end bearing shall be 1 1/2".
3. Joists shall be restrained against rotation at each end and shall be attached to track components or restrained by the installation of lateral bracing.
4. Applications involving multiple spans, cantilevers, concentrated loads, impact loading, etc., shall be investigated separately.
5. Compression flange shall be braced by the attachment of continuous diaphragm-rated sheathing or decking. Additionally, mechanical bridging shall be completed before loading the floor/roof system.
6. Verify fire ratings for any load reductions.
7. Maintain 10" solid ends per ICC-ES report.

SECTION IDENTIFICATION	15 psf Dead Load plus 40 psf Live Load						40 psf Dead Load plus 40 psf Live Load						15 psf Dead Load plus 60 psf Live Load					
	L/360			L/480			L/360			L/480			L/360			L/480		
	Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.		
	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
800JR200-43	16.6	14.4	11.3	16.1	14.4	11.3	13.8	11.6	7.8	13.8	11.6	7.8	14.3	12.3	8.3	14.1	12.3	8.3
800JR200-54	19.0	17.3	15.1	17.3	15.7	13.7	17.3	15.7	12.0	17.3	15.7	12.0	16.6	15.1	12.8	15.1	13.7	12.0
800JR200-68	20.4	18.6	16.2	18.6	16.9	14.7	18.6	16.9	14.7	18.6	16.9	14.7	17.9	16.2	14.2	16.2	14.7	12.9
800JR200-97	22.7	20.6	18.0	20.6	18.7	16.4	20.6	18.7	16.4	20.6	18.7	16.4	19.8	18.0	15.7	18.0	16.4	14.3
800JR250-43	17.2	14.9	11.3	16.8	14.9	11.3	14.3	11.6	7.8	14.3	11.6	7.8	14.8	12.4	8.3	14.7	12.4	8.3
800JR250-54	19.8	18.0	15.8	18.0	16.4	14.3	18.0	16.4	12.0	18.0	16.4	12.0	17.3	15.8	12.8	15.8	14.3	12.5
800JR250-68	21.4	19.4	17.0	19.4	17.6	15.4	19.4	17.6	15.3	19.4	17.6	15.3	18.7	17.0	14.8	17.0	15.4	13.5
800JR250-97	23.8	21.6	18.9	21.6	19.6	17.1	21.6	19.6	17.1	21.6	19.6	17.1	20.8	18.9	16.5	18.9	17.1	15.0
800JR300-43	17.7	15.3	11.3	17.3	15.3	11.3	14.6	11.6	7.8	14.6	11.6	7.8	15.1	12.4	8.3	15.1	12.4	8.3
800JR300-54	20.3	18.4	16.1	18.4	16.8	14.6	18.4	16.8	12.0	18.4	16.8	12.0	17.7	16.1	12.8	16.1	14.6	12.8
800JR300-68	22.0	20.0	17.5	20.0	18.2	15.9	20.0	18.2	15.5	20.0	18.2	15.5	19.2	17.5	15.3	17.5	15.9	13.9
800JR300-97	24.7	22.5	19.6	22.5	20.4	17.8	22.5	20.4	17.8	22.5	20.4	17.8	21.6	19.6	17.2	19.6	17.8	15.6
1000JR200-43	19.2	16.6	13.2	19.1	16.6	13.2	15.9	13.6	9.1	15.9	13.6	9.1	16.5	14.3	9.7	16.5	14.3	9.7
1000JR200-54	22.6	20.5	17.9	20.5	18.6	16.3	20.5	18.6	14.0	20.5	18.6	14.0	19.7	17.9	14.9	17.9	16.3	14.2
1000JR200-68	24.2	22.0	19.2	22.0	20.0	17.5	22.0	20.0	17.5	22.0	20.0	17.5	21.2	19.2	16.8	19.2	17.5	15.3
1000JR200-97	26.9	24.5	21.4	24.5	22.2	19.4	24.5	22.2	19.4	24.5	22.2	19.4	23.5	21.4	18.7	21.4	19.4	17.0
1000JR250-43	19.9	17.2	13.2	19.8	17.2	13.2	16.5	13.6	9.1	16.5	13.6	9.1	17.0	14.5	9.7	17.0	14.5	9.7
1000JR250-54	23.5	21.3	18.6	21.3	19.4	16.9	21.3	19.2	14.0	21.3	19.2	14.0	20.5	18.6	14.9	18.6	16.9	14.8
1000JR250-68	25.3	23.0	20.1	23.0	20.9	18.2	23.0	20.9	17.6	23.0	20.9	17.6	22.1	20.1	17.5	20.1	18.2	15.9
1000JR250-97	28.1	25.6	22.3	25.6	23.2	20.3	25.6	23.2	20.3	25.6	23.2	20.3	24.6	22.3	19.5	22.3	20.3	17.7
1000JR300-43	20.3	17.6	13.2	20.3	17.6	13.2	16.8	13.6	9.1	16.8	13.6	9.1	17.4	14.5	9.7	17.4	14.5	9.7
1000JR300-54	24.0	21.8	19.0	21.8	19.8	17.3	21.8	19.4	14.0	21.8	19.4	14.0	20.9	19.0	14.9	19.0	17.3	14.9
1000JR300-68	26.0	23.6	20.6	23.6	21.4	18.7	23.6	21.4	17.9	23.6	21.4	17.9	22.7	20.6	18.0	20.6	18.7	16.4
1000JR300-97	29.2	26.6	23.2	26.6	24.1	21.1	26.6	24.1	21.1	26.6	24.1	21.1	25.5	23.2	20.3	23.2	21.1	18.4
1200JR200-54	25.9	23.5	19.6	23.5	21.3	18.6	23.5	20.2	13.5	23.5	20.2	13.5	22.6	20.5	14.4	20.5	18.6	14.4
1200JR200-68	27.8	25.2	22.0	25.2	22.9	20.0	25.2	22.9	19.6	25.2	22.9	19.6	24.3	22.0	19.3	22.0	20.0	17.5
1200JR200-97	30.9	28.0	24.5	28.0	25.5	22.3	28.0	25.5	22.3	28.0	25.5	22.3	27.0	24.5	21.4	24.5	22.3	19.4
1200JR250-54	26.8	24.4	19.6	24.4	22.2	19.4	24.4	20.2	13.5	24.4	20.2	13.5	23.5	21.3	14.4	21.3	19.4	14.4
1200JR250-68	28.9	26.3	23.0	26.3	23.9	20.9	26.3	23.9	19.7	26.3	23.9	19.7	25.3	23.0	20.0	23.0	20.9	18.2
1200JR250-97	32.2	29.2	25.5	29.2	26.6	23.2	29.2	26.6	23.2	29.2	26.6	23.2	28.1	25.5	22.3	25.5	23.2	20.3
1200JR300-54	27.4	24.9	19.6	24.9	22.6	19.6	24.9	20.2	13.5	24.9	20.2	13.5	23.9	21.6	14.4	21.7	19.8	14.4
1200JR300-68	29.7	27.0	23.5	27.0	24.5	21.4	27.0	24.5	20.0	27.0	24.5	20.0	25.9	23.5	20.6	23.5	21.4	18.7
1200JR300-97	33.4	30.3	26.5	30.3	27.6	24.1	30.3	27.6	24.1	30.3	27.6	24.1	29.2	26.5	23.2	26.5	24.1	21.0
1400JR200-54	29.8	27.1	23.7	27.1	24.6	21.5	27.1	24.3	16.6	27.1	24.3	16.6	26.1	23.7	17.7	23.7	21.5	17.7
1400JR200-68	32.1	29.1	25.4	29.1	26.5	23.1	29.1	26.5	22.5	29.1	26.5	22.5	28.0	25.4	22.2	25.4	23.1	20.2
1400JR200-97	35.7	32.4	28.3	32.4	29.5	25.7	32.4	29.5	25.7	32.4	29.5	25.7	31.2	28.3	24.8	28.3	25.7	22.5
1400JR250-54	30.8	28.0	24.1	28.0	25.5	22.2	28.0	24.5	16.6	28.0	24.5	16.6	26.9	24.5	17.7	24.5	22.2	17.7
1400JR250-68	33.2	30.2	26.4	30.2	27.4	24.0	30.2	27.4	22.6	30.2	27.4	22.6	29.0	26.4	23.0	26.4	24.0	20.9
1400JR250-97	37.1	33.7	29.4	33.7	30.6	26.7	33.7	30.6	26.7	33.7	30.6	26.7	32.4	29.4	25.7	29.4	26.7	23.3
1400JR300-54	31.4	28.5	24.1	28.5	25.9	22.6	28.5	24.8	16.6	28.5	24.8	16.6	27.4	24.9	17.7	24.9	22.6	17.7
1400JR300-68	34.0	30.9	27.0	30.9	28.1	24.5	30.9	28.1	22.9	30.9	28.1	22.9	29.7	27.0	23.6	27.0	24.5	21.4
1400JR300-97	38.3	34.8	30.4	34.8	31.6	27.6	34.8	31.6	27.6	34.8	31.6	27.6	33.5	30.4	26.6	30.4	27.6	24.1

# MAXIMUM FLOOR JOIST SPANS (FT)

SECTION IDENTIFICATION	40 psf Dead Load plus 60 psf Live Load						15 psf Dead Load plus 125 psf Live Load						40 psf Dead Load plus 125 psf Live Load					
	L/360			L/480			L/360			L/480			L/360			L/480		
	Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.			Single Span Joist Spacing (in.) o.c.		
	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
800JR200-43	12.3	9.3	6.2	12.3	9.3	6.2	8.9	6.6	4.4	8.9	6.6	4.4	7.5	5.6	3.8	7.5	5.6	3.8
800JR200-54	16.1	14.4	9.6	15.1	13.7	9.6	13.0	10.3	6.9	11.8	10.3	6.9	11.6	8.7	5.8	11.6	8.7	5.8
800JR200-68	17.2	15.7	13.5	16.2	14.7	12.9	14.0	12.7	10.6	12.7	11.5	10.1	14.0	12.7	9.0	12.7	11.5	9.0
800JR200-97	19.1	17.4	15.2	18.0	16.4	14.3	15.5	14.1	12.3	14.1	12.8	11.2	15.5	14.1	12.3	14.1	12.8	11.2
800JR250-43	12.4	9.3	6.2	12.4	9.3	6.2	8.9	6.6	4.4	8.9	6.6	4.4	7.5	5.6	3.8	7.5	5.6	3.8
800JR250-54	16.7	14.4	9.6	15.8	14.3	9.6	13.6	10.3	6.9	12.3	10.3	6.9	11.6	8.7	5.8	11.6	8.7	5.8
800JR250-68	18.0	16.4	13.7	17.0	15.4	13.5	14.6	13.3	10.6	13.3	12.1	10.5	14.6	13.0	9.0	13.3	12.1	9.0
800JR250-97	20.0	18.2	15.9	18.9	17.1	15.0	16.2	14.8	12.9	14.8	13.4	11.7	16.2	14.8	12.9	14.8	13.4	11.7
800JR300-43	12.4	9.3	6.2	12.4	9.3	6.2	8.9	6.6	4.4	8.9	6.6	4.4	7.5	5.6	3.8	7.5	5.6	3.8
800JR300-54	17.1	14.4	9.6	16.1	14.4	9.6	13.7	10.3	6.9	12.6	10.3	6.9	11.6	8.7	5.8	11.6	8.7	5.8
800JR300-68	18.6	16.9	13.9	17.5	15.9	13.9	15.0	13.7	10.6	13.7	12.4	10.6	15.0	13.3	9.0	13.7	12.4	9.0
800JR300-97	20.9	19.0	16.6	19.6	17.8	15.6	16.9	15.4	13.4	15.4	14.0	12.2	16.9	15.4	13.4	15.4	14.0	12.2
1000JR200-43	14.3	10.9	7.2	14.3	10.9	7.2	10.3	7.8	5.2	10.3	7.8	5.2	8.8	6.6	4.4	8.8	6.6	4.4
1000JR200-54	19.0	16.8	11.2	17.9	16.3	11.2	15.4	12.0	8.0	14.0	12.0	8.0	13.6	10.2	6.8	13.6	10.2	6.8
1000JR200-68	20.4	18.6	15.6	19.2	17.5	15.3	16.6	15.1	12.3	15.1	13.7	12.0	16.6	14.9	10.5	15.1	13.7	10.5
1000JR200-97	22.7	20.6	18.0	21.4	19.4	17.0	18.4	16.7	14.6	16.7	15.2	13.3	18.4	16.7	14.3	16.7	15.2	13.3
1000JR250-43	14.5	10.9	7.2	14.5	10.9	7.2	10.3	7.8	5.2	10.3	7.8	5.2	8.8	6.6	4.4	8.8	6.6	4.4
1000JR250-54	19.8	16.8	11.2	18.6	16.8	11.2	16.0	12.0	8.0	14.6	12.0	8.0	13.6	10.2	6.8	13.6	10.2	6.8
1000JR250-68	21.3	19.3	15.8	20.1	18.2	15.8	17.3	15.7	12.3	15.7	14.3	12.3	17.3	15.0	10.5	15.7	14.3	10.5
1000JR250-97	23.7	21.6	18.8	22.3	20.3	17.7	19.2	17.5	15.3	17.5	15.9	13.9	19.2	17.5	15.1	17.5	15.9	13.9
1000JR300-43	14.5	10.9	7.2	14.5	10.9	7.2	10.3	7.8	5.2	10.3	7.8	5.2	8.8	6.6	4.4	8.8	6.6	4.4
1000JR300-54	20.0	16.8	11.2	19.0	16.8	11.2	16.0	12.0	8.0	14.9	12.0	8.0	13.6	10.2	6.8	13.6	10.2	6.8
1000JR300-68	21.9	19.6	16.0	20.6	18.7	16.0	17.8	16.1	12.3	16.1	14.7	12.3	17.6	15.3	10.5	16.1	14.7	10.5
1000JR300-97	24.7	22.4	19.6	23.2	21.1	18.4	20.0	18.2	15.9	18.2	16.5	14.4	20.0	18.2	15.5	18.2	16.5	14.4
1200JR200-54	21.6	16.2	10.8	20.5	16.2	10.8	15.4	11.6	7.7	15.4	11.6	7.7	13.1	9.8	6.5	13.1	9.8	6.5
1200JR200-68	23.4	21.3	16.6	22.0	20.0	16.6	19.0	17.3	11.8	17.3	15.7	11.8	19.0	15.1	10.0	17.3	15.1	10.0
1200JR200-97	26.0	23.7	20.5	24.5	22.3	19.4	21.1	19.2	16.8	19.2	17.4	15.2	21.1	19.2	16.0	19.2	17.4	15.2
1200JR250-54	21.6	16.2	10.8	21.3	16.2	10.8	15.4	11.6	7.7	15.4	11.6	7.7	13.1	9.8	6.5	13.1	9.8	6.5
1200JR250-68	24.4	21.6	16.6	23.0	20.9	16.6	19.8	17.8	11.8	18.0	16.3	11.8	19.4	15.1	10.0	18.0	15.1	10.0
1200JR250-97	27.1	24.7	21.5	25.5	23.2	20.3	22.0	20.0	17.5	20.0	18.2	15.9	22.0	20.0	16.9	20.0	18.2	15.9
1200JR300-54	21.6	16.2	10.8	21.6	16.2	10.8	15.4	11.6	7.7	15.4	11.6	7.7	13.1	9.8	6.5	13.1	9.8	6.5
1200JR300-68	25.0	21.9	16.6	23.5	21.4	16.6	20.3	17.8	11.8	18.4	16.8	11.8	19.7	15.1	10.0	18.4	15.1	10.0
1200JR300-97	28.2	25.6	22.3	26.5	24.1	21.0	22.8	20.8	18.1	20.8	18.9	16.5	22.8	20.8	17.3	20.8	18.9	16.5
1400JR200-54	25.1	19.9	13.3	23.7	19.9	13.3	19.0	14.2	9.5	18.5	14.2	9.5	16.1	12.1	8.0	16.1	12.1	8.0
1400JR200-68	27.0	24.6	20.1	25.4	23.1	20.1	21.9	19.9	14.8	19.9	18.1	14.8	21.9	18.9	12.6	19.9	18.1	12.6
1400JR200-97	30.1	27.4	23.6	28.3	25.7	22.5	24.4	22.2	19.4	22.2	20.2	17.6	24.4	22.2	18.4	22.2	20.2	17.6
1400JR250-54	25.3	19.9	13.3	24.5	19.9	13.3	19.0	14.2	9.5	19.0	14.2	9.5	16.1	12.1	8.0	16.1	12.1	8.0
1400JR250-68	28.0	24.8	20.2	26.4	24.0	20.2	22.7	20.7	14.8	20.7	18.8	14.8	22.3	18.9	12.6	20.7	18.8	12.6
1400JR250-97	31.3	28.4	24.8	29.4	26.7	23.3	25.3	23.0	20.1	23.0	20.9	18.3	25.3	23.0	19.4	23.0	20.9	18.3
1400JR300-54	25.6	19.9	13.3	24.9	19.9	13.3	19.0	14.2	9.5	19.0	14.2	9.5	16.1	12.1	8.0	16.1	12.1	8.0
1400JR300-68	28.7	25.1	20.5	27.0	24.5	20.5	23.3	21.1	14.8	21.1	19.2	14.8	22.6	18.9	12.6	21.1	18.9	12.6
1400JR300-97	32.3	29.4	25.4	30.4	27.6	24.1	26.2	23.8	20.8	23.8	21.6	18.9	26.2	23.8	19.8	23.8	21.6	18.9

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

**NOTES:**

1. Strength is the maximum allowable load based on the strength of the framing member with the compression flange fully braced.
2. L/360 and L/480 is the maximum allowable load for the respective deflection limits based on the compression flange fully braced.
3. ICC ESS ESR 1741 publishes the lower value of strength or deflection. This catalog publishes both values.

SECTION >>>>	800JR200-43			800JR200-54			800JR200-68			800JR200-97			800JR250-43			800JR250-54		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
<b>8 STRENGTH</b>	155	116	78	240	180	120	370	278	185	617	463	309	155	116	78	240	180	120
L/360	436	327	218	540	405	270	667	500	333	912	684	456	492	369	246	611	458	305
L/480	327	245	164	405	304	202	500	375	250	684	513	342	369	277	184	458	344	229
<b>9 STRENGTH</b>	138	103	69	213	160	107	329	247	165	549	412	274	138	103	69	213	160	107
L/360	306	230	153	379	284	190	468	351	234	640	480	320	345	259	173	429	322	214
L/480	230	172	115	284	213	142	351	263	176	480	360	240	259	194	130	322	241	161
<b>10 STRENGTH</b>	124	93	62	192	144	96	296	222	148	494	370	247	124	93	62	192	144	96
L/360	223	167	112	276	207	138	341	256	171	467	350	233	252	189	126	313	235	156
L/480	167	126	84	207	155	104	256	192	128	350	263	175	189	142	94	235	176	117
<b>11 STRENGTH</b>	113	85	56	174	131	87	269	202	135	415	311	207	113	85	56	174	131	87
L/360	168	126	84	208	156	104	256	192	128	351	263	175	189	142	95	235	176	117
L/480	126	94	63	156	117	78	192	144	96	263	197	132	142	106	71	176	132	88
<b>12 STRENGTH</b>	103	78	52	160	120	80	247	185	123	348	261	174	103	78	52	160	120	80
L/360	129	97	65	160	120	80	198	148	99	270	203	135	146	109	73	181	136	90
L/480	97	73	48	120	90	60	148	111	74	203	152	101	109	82	55	136	102	68
<b>13 STRENGTH</b>	90	68	45	148	111	74	217	163	108	297	223	148	95	72	48	148	111	74
L/360	102	76	51	126	94	63	155	117	78	213	159	106	115	86	57	142	107	71
L/480	76	57	38	94	71	47	117	87	58	159	120	80	86	64	43	107	80	53
<b>14 STRENGTH</b>	78	58	39	137	103	69	187	140	94	256	192	128	83	63	42	137	103	69
L/360	81	61	41	101	76	50	124	93	62	170	128	85	92	69	46	114	85	57
L/480	61	46	31	76	57	38	93	70	47	128	96	64	69	52	34	85	64	43
<b>15 STRENGTH</b>	68	51	34	128	96	64	163	122	81	223	167	111	73	54	36	128	96	64
L/360	66	50	33	82	61	41	101	76	51	138	104	69	75	56	37	93	69	46
L/480	50	37	25	61	46	31	76	57	38	104	78	52	56	42	28	69	52	35
<b>16 STRENGTH</b>	60	45	30	112	84	56	143	107	72	196	147	98	64	48	32	115	86	58
L/360	55	41	27	67	51	34	83	62	42	114	85	57	61	46	31	76	57	38
L/480	41	31	20	51	38	25	62	47	31	85	64	43	46	35	23	57	43	29
<b>17 STRENGTH</b>	53	40	26	99	75	50	127	95	63	174	130	87	57	42	28	102	76	51
L/360	45	34	23	56	42	28	69	52	35	95	71	48	51	38	26	64	48	32
L/480	34	26	17	42	32	21	52	39	26	71	53	36	38	29	19	48	36	24
<b>18 STRENGTH</b>	47	35	24	89	66	44	113	85	57	155	116	77	50	38	25	91	68	45
L/360	38	29	19	47	36	24	59	44	29	80	60	40	43	32	22	54	40	27
L/480	29	22	14	36	27	18	44	33	22	60	45	30	32	24	16	40	30	20
<b>19 STRENGTH</b>	42	32	21	80	60	40	102	76	51	139	104	69	45	34	23	82	61	41
L/360	33	24	16	40	30	20	50	37	25	68	51	34	37	28	18	46	34	23
L/480	24	18	12	30	23	15	37	28	19	51	38	26	28	21	14	34	26	17
<b>20 STRENGTH</b>	38	29	19	72	54	36	92	69	46	125	94	63	41	31	20	74	55	37
L/360	28	21	14	35	26	17	43	32	21	58	44	29	31	24	16	39	29	20
L/480	21	16	10	26	19	13	32	24	16	44	33	22	24	18	12	29	22	15
<b>21 STRENGTH</b>	35	26	17	65	49	33	83	62	42	114	85	57	37	28	19	67	50	33
L/360	24	18	12	30	22	15	37	28	18	50	38	25	27	20	14	34	25	17
L/480	18	14	9	22	17	11	28	21	14	38	28	19	20	15	10	25	19	13
<b>22 STRENGTH</b>	31	24	16	59	44	30	76	57	38	104	78	52	34	25	17	61	46	30
L/360	21	16	10	26	19	13	32	24	16	44	33	22	24	18	12	29	22	15
L/480	16	12	8	19	15	10	24	18	12	33	25	16	18	13	9	22	17	11
<b>23 STRENGTH</b>	29	22	14	54	41	27	69	52	35	95	71	47	31	23	15	56	42	28
L/360	18	14	9	23	17	11	28	21	14	38	29	19	21	16	10	26	19	13
L/480	14	10	7	17	13	9	21	16	11	29	22	14	16	12	8	19	14	10
<b>24 STRENGTH</b>	26	20	13	50	37	25	64	48	32	87	65	44	28	21	14	51	38	26
L/360	16	12	8	20	15	10	25	19	12	34	25	17	18	14	9	23	17	11
L/480	12	9	6	15	11	7	19	14	9	25	19	13	14	10	7	17	13	8
<b>25 STRENGTH</b>	24	18	12	46	34	23	59	44	29	80	60	40	26	20	13	47	35	24
L/360	14	11	7	18	13	9	22	16	11	30	22	15	16	12	8	20	15	10
L/480	11	8	5	13	10	7	16	12	8	22	17	11	12	9	6	15	11	8
<b>26 STRENGTH</b>	23	17	11	42	32	21	54	41	27	74	56	37	24	18	12	44	33	22
L/360	13	10	6	16	12	8	19	15	10	27	20	13	14	11	7	18	13	9
L/480	10	7	5	12	9	6	15	11	7	20	15	10	11	8	5	13	10	7
<b>27 STRENGTH</b>	21	16	10	39	30	20	50	38	25	69	52	34	22	17	11	40	30	20
L/360	11	9	6	14	11	7	17	13	9	24	18	12	13	10	6	16	12	8
L/480	9	6	4	11	8	5	13	10	7	18	13	9	10	7	5	12	9	6
<b>28 STRENGTH</b>	19	15	10	37	27	18	47	35	23	64	48	32	21	16	10	38	28	19
L/360	10	8	5	13	9	6	16	12	8	21	16	11	11	9	6	14	11	7
L/480	8	6	4	9	7	5	12	9	6	16	12	8	9	6	4	11	8	5
<b>29 STRENGTH</b>	18	14	9	34	26	17	44	33	22	60	45	30	19	15	10	35	26	18
L/360	9	7	5	11	8	6	14	10	7	19	14	10	10	8	5	13	10	6
L/480	7	5	3	8	6	4	10	8	5	14	11	7	8	6	4	10	7	5
<b>30 STRENGTH</b>	17	13	8	32	24	16	41	31	20	56	42	28	18	14	9	33	25	16
L/360	8	6	4	10	8	5	13	9	6	17	13	9	9	7	5	12	9	6
L/480	6	5	3	8	6	4	9	7	5	13	10	6	7	5	3	9	7	4

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	800JR250-68			800JR250-97			800JR300-43			800JR300-54			800JR300-68			800JR300-97		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
8 STRENGTH	370	278	185	617	463	309	155	116	78	240	180	120	370	278	185	617	463	309
L/360	762	572	381	1047	786	524	536	402	268	654	490	327	831	623	416	1183	887	591
L/480	572	429	286	786	589	393	402	301	201	490	368	245	623	468	312	887	665	444
9 STRENGTH	329	247	165	549	412	274	138	103	69	213	160	107	329	247	165	549	412	274
L/360	535	402	268	736	552	368	376	282	188	459	344	230	584	438	292	831	623	415
L/480	402	301	201	552	414	276	282	212	141	344	258	172	438	328	219	623	467	311
10 STRENGTH	296	222	148	494	370	247	124	93	62	192	144	96	296	222	148	494	370	247
L/360	390	293	195	536	402	268	274	206	137	335	251	167	426	319	213	606	454	303
L/480	293	220	146	402	302	201	206	154	103	251	188	125	319	239	160	454	341	227
11 STRENGTH	269	202	135	449	337	224	113	85	56	174	131	87	269	202	135	449	337	224
L/360	293	220	147	403	302	201	206	155	103	251	189	126	320	240	160	455	341	227
L/480	220	165	110	302	227	151	155	116	77	189	141	94	240	180	120	341	256	171
12 STRENGTH	247	185	123	396	297	198	103	78	52	160	120	80	247	185	123	412	309	206
L/360	226	169	113	310	233	155	159	119	79	194	145	97	246	185	123	350	263	175
L/480	169	127	85	233	175	116	119	89	60	145	109	73	185	139	92	263	197	131
13 STRENGTH	222	166	111	337	253	169	95	72	48	148	111	74	222	171	114	358	268	179
L/360	178	133	89	244	183	122	125	94	62	152	114	76	194	145	97	276	207	138
L/480	133	100	67	183	137	92	94	70	47	114	86	57	145	109	73	207	155	103
14 STRENGTH	191	143	96	291	218	145	87	66	44	137	103	69	197	148	99	308	231	154
L/360	142	107	71	195	147	98	100	75	50	122	91	61	155	116	78	221	166	110
L/480	107	80	53	147	110	73	75	56	38	91	69	46	116	87	58	166	124	83
15 STRENGTH	166	125	83	253	190	127	76	57	38	128	96	64	172	129	86	269	201	134
L/360	116	87	58	159	119	79	81	61	41	99	74	50	126	95	63	179	135	90
L/480	87	65	43	119	89	60	61	46	30	74	56	37	95	71	47	135	101	67
16 STRENGTH	146	110	73	223	167	111	67	50	33	118	88	59	151	113	75	236	177	118
L/360	95	71	48	131	98	65	67	50	33	82	61	41	104	78	52	148	111	74
L/480	71	54	36	98	74	49	50	38	25	61	46	31	78	58	39	111	83	55
17 STRENGTH	130	97	65	197	148	99	59	44	30	104	78	52	134	100	67	209	157	105
L/360	79	60	40	109	82	55	56	42	28	68	51	34	87	65	43	123	92	62
L/480	60	45	30	82	61	41	42	31	21	51	38	26	65	49	32	92	69	46
18 STRENGTH	116	87	58	176	132	88	53	40	26	93	70	47	119	89	60	186	140	93
L/360	67	50	33	92	69	46	47	35	24	57	43	29	73	55	36	104	78	52
L/480	50	38	25	69	52	34	35	26	18	43	32	22	55	41	27	78	58	39
19 STRENGTH	104	78	52	158	118	79	47	36	24	83	63	42	107	80	54	167	126	84
L/360	57	43	28	78	59	39	40	30	20	49	37	24	62	47	31	88	66	44
L/480	43	32	21	59	44	29	30	23	15	37	27	18	47	35	23	66	50	33
20 STRENGTH	94	70	47	142	107	71	43	32	21	75	57	38	97	72	48	151	113	76
L/360	49	37	24	67	50	34	34	26	17	42	31	21	53	40	27	76	57	38
L/480	37	27	18	50	38	25	26	19	13	31	24	16	40	30	20	57	43	28
21 STRENGTH	85	64	42	129	97	65	39	29	19	68	51	34	88	66	44	137	103	69
L/360	42	32	21	58	43	29	30	22	15	36	27	18	46	34	23	65	49	33
L/480	32	24	16	43	33	22	22	17	11	27	20	14	34	26	17	49	37	25
22 STRENGTH	77	58	39	118	88	59	35	27	18	62	47	31	80	60	40	125	94	62
L/360	37	27	18	50	38	25	26	19	13	31	24	16	40	30	20	57	43	28
L/480	27	21	14	38	28	19	19	14	10	24	18	12	30	22	15	43	32	21
23 STRENGTH	71	53	35	108	81	54	32	24	16	57	43	28	73	55	37	114	86	57
L/360	32	24	16	44	33	22	23	17	11	28	21	14	35	26	17	50	37	25
L/480	24	18	12	33	25	17	17	13	8	21	15	10	26	20	13	37	28	19
24 STRENGTH	65	49	33	99	74	49	30	22	15	52	39	26	67	50	34	105	79	52
L/360	28	21	14	39	29	19	20	15	10	24	18	12	31	23	15	44	33	22
L/480	21	16	11	29	22	15	15	11	7	18	14	9	23	17	12	33	25	16
25 STRENGTH	60	45	30	91	68	46	27	21	14	48	36	24	62	46	31	97	73	48
L/360	25	19	12	34	26	17	18	13	9	21	16	11	27	20	14	39	29	19
L/480	19	14	9	26	19	13	13	10	7	16	12	8	20	15	10	29	22	15
26 STRENGTH	55	42	28	84	63	42	25	19	13	45	33	22	57	43	29	89	67	45
L/360	22	17	11	31	23	15	16	12	8	19	14	10	24	18	12	34	26	17
L/480	17	12	8	23	17	11	12	9	6	14	11	7	18	14	9	26	19	13
27 STRENGTH	51	39	26	78	59	39	24	18	12	41	31	21	53	40	27	83	62	41
L/360	20	15	10	27	20	14	14	10	7	17	13	9	22	16	11	31	23	15
L/480	15	11	7	20	15	10	10	8	5	13	10	6	16	12	8	23	17	12
28 STRENGTH	48	36	24	73	55	36	22	16	11	38	29	19	49	37	25	77	58	39
L/360	18	13	9	24	18	12	13	9	6	15	11	8	19	15	10	28	21	14
L/480	13	10	7	18	14	9	9	7	5	11	9	6	15	11	7	21	16	10
29 STRENGTH	45	33	22	68	51	34	20	15	10	36	27	18	46	34	23	72	54	36
L/360	16	12	8	22	16	11	11	8	6	14	10	7	17	13	9	25	19	12
L/480	12	9	6	16	12	8	8	6	4	10	8	5	13	10	7	19	14	9
30 STRENGTH	42	31	21	63	47	32	19	14	10	33	25	17	43	32	21	67	50	34
L/360	14	11	7	20	15	10	10	8	5	12	9	6	16	12	8	22	17	11
L/480	11	8	5	15	11	7	8	6	4	9	7	5	12	9	6	17	13	8

See page 7 for notes.



# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	1000JR200-43			1000JR200-54			1000JR200-68			1000JR200-97			1000JR250-43			1000JR250-54		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
	SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16
8 STRENGTH	181	136	91	280	210	140	432	324	216	827	620	413	181	136	91	280	210	140
L/360	726	545	363	899	675	450	1112	834	556	1526	1144	763	813	610	407	1011	758	505
L/480	545	408	272	675	506	337	834	626	417	1144	858	572	610	458	305	758	568	379
9 STRENGTH	161	121	80	249	187	124	384	288	192	735	551	367	161	121	80	249	187	124
L/360	510	383	255	632	474	316	781	586	391	1072	804	536	571	428	286	710	532	355
L/480	383	287	191	474	355	237	586	439	293	804	603	402	428	321	214	532	399	266
10 STRENGTH	145	109	72	224	168	112	346	259	173	661	496	331	145	109	72	224	168	112
L/360	372	279	186	460	345	230	570	427	285	781	586	391	416	312	208	517	388	259
L/480	279	209	139	345	259	173	427	320	214	586	439	293	312	234	156	388	291	194
11 STRENGTH	132	99	66	204	153	102	314	236	157	555	416	277	132	99	66	204	153	102
L/360	279	210	140	346	259	173	428	321	214	587	440	294	313	235	156	389	292	194
L/480	210	157	105	259	195	130	321	241	160	440	330	220	235	176	117	292	219	146
12 STRENGTH	121	91	60	187	140	93	288	216	144	466	350	233	121	91	60	187	140	93
L/360	215	161	108	266	200	133	330	247	165	452	339	226	241	181	121	299	225	150
L/480	161	121	81	200	150	100	247	185	124	339	254	170	181	136	90	225	168	112
13 STRENGTH	111	84	56	172	129	86	266	199	133	397	298	199	111	84	56	172	129	86
L/360	169	127	85	210	157	105	259	194	130	356	267	178	190	142	95	236	177	118
L/480	127	95	63	157	118	79	194	146	97	267	200	133	142	107	71	177	132	88
14 STRENGTH	103	78	52	160	120	80	247	185	123	343	257	171	103	78	52	160	120	80
L/360	135	102	68	168	126	84	208	156	104	285	214	142	152	114	76	189	141	94
L/480	102	76	51	126	94	63	156	117	78	214	160	107	114	85	57	141	106	71
15 STRENGTH	90	68	45	149	112	75	218	163	109	298	224	149	96	72	48	149	112	75
L/360	110	83	55	136	102	68	169	127	84	231	174	116	123	93	62	153	115	77
L/480	83	62	41	102	77	51	127	95	63	174	130	87	93	69	46	115	86	57
16 STRENGTH	79	59	40	140	105	70	191	143	96	262	197	131	85	64	42	140	105	70
L/360	91	68	45	112	84	56	139	104	70	191	143	95	102	76	51	126	95	63
L/480	68	51	34	84	63	42	104	78	52	143	107	72	76	57	38	95	71	47
17 STRENGTH	70	53	35	132	99	66	169	127	85	232	174	116	75	56	38	132	99	66
L/360	76	57	38	94	70	47	116	87	58	159	119	80	85	64	42	105	79	53
L/480	57	43	28	70	53	35	87	65	43	119	89	60	64	48	32	79	59	39
18 STRENGTH	63	47	31	118	89	59	151	113	76	207	155	104	67	50	33	121	91	60
L/360	64	48	32	79	59	39	98	73	49	134	100	67	71	54	36	89	67	44
L/480	48	36	24	59	44	30	73	55	37	100	75	50	54	40	27	67	50	33
19 STRENGTH	56	42	28	106	80	53	136	102	68	186	139	93	60	45	30	109	81	54
L/360	54	41	27	67	50	34	83	62	42	114	85	57	61	46	30	75	57	38
L/480	41	30	20	50	38	25	62	47	31	85	64	43	46	34	23	57	42	28
20 STRENGTH	51	38	25	96	72	48	122	92	61	168	126	84	54	41	27	98	73	49
L/360	46	35	23	58	43	29	71	53	36	98	73	49	52	39	26	65	49	32
L/480	35	26	17	43	32	22	53	40	27	73	55	37	39	29	20	49	36	24
21 STRENGTH	46	35	23	87	65	43	111	83	55	152	114	76	49	37	25	89	67	44
L/360	40	30	20	50	37	25	61	46	31	84	63	42	45	34	22	56	42	28
L/480	30	23	15	37	28	19	46	35	23	63	47	32	34	25	17	42	31	21
22 STRENGTH	42	31	21	79	59	40	101	76	51	139	104	69	45	34	22	81	61	40
L/360	35	26	17	43	32	22	53	40	27	73	55	37	39	29	20	49	36	24
L/480	26	20	13	32	24	16	40	30	20	55	41	28	29	22	15	36	27	18
23 STRENGTH	38	29	19	72	54	36	93	69	46	127	95	63	41	31	20	74	56	37
L/360	31	23	15	38	28	19	47	35	23	64	48	32	34	26	17	43	32	21
L/480	23	17	11	28	21	14	35	26	18	48	36	24	26	19	13	32	24	16
24 STRENGTH	35	26	18	67	50	33	85	64	42	117	87	58	38	28	19	68	51	34
L/360	27	20	13	33	25	17	41	31	21	57	42	28	30	23	15	37	28	19
L/480	20	15	10	25	19	12	31	23	15	42	32	21	23	17	11	28	21	14
25 STRENGTH	32	24	16	61	46	31	78	59	39	107	81	54	35	26	17	63	47	31
L/360	24	18	12	29	22	15	36	27	18	50	38	25	27	20	13	33	25	17
L/480	18	13	9	22	17	11	27	21	14	38	28	19	20	15	10	25	19	12
26 STRENGTH	30	23	15	57	43	28	72	54	36	99	74	50	32	24	16	58	43	29
L/360	21	16	11	26	20	13	32	24	16	44	33	22	24	18	12	29	22	15
L/480	16	12	8	20	15	10	24	18	12	33	25	17	18	13	9	22	17	11
27 STRENGTH	28	21	14	53	39	26	67	50	34	92	69	46	30	22	15	54	40	27
L/360	19	14	9	23	18	12	29	22	14	40	30	20	21	16	11	26	20	13
L/480	14	11	7	18	13	9	22	16	11	30	22	15	16	12	8	20	15	10
28 STRENGTH	26	19	13	49	37	24	62	47	31	86	64	43	28	21	14	50	37	25
L/360	17	13	8	21	16	10	26	19	13	36	27	18	19	14	9	24	18	12
L/480	13	10	6	16	12	8	19	15	10	27	20	13	14	11	7	18	13	9
29 STRENGTH	24	18	12	46	34	23	58	44	29	80	60	40	26	19	13	47	35	23
L/360	15	11	8	19	14	9	23	18	12	32	24	16	17	13	9	21	16	11
L/480	11	9	6	14	11	7	18	13	9	24	18	12	13	10	6	16	12	8
30 STRENGTH	23	17	11	43	32	21	54	41	27	75	56	37	24	18	12	44	33	22
L/360	14	10	7	17	13	9	21	16	11	29	22	14	15	12	8	19	14	10
L/480	10	8	5	13	10	6	16	12	8	22	16	11	12	9	6	14	11	7
31 STRENGTH	21	16	11	40	30	20	51	38	25	70	52	35	23	17	11	41	31	20
L/360	12	9	6	15	12	8	19	14	10	26	20	13	14	10	7	17	13	9
L/480	9	7	5	12	9	6	14	11	7	20	15	10	10	8	5	13	10	7
32 STRENGTH	20	15	10	37	28	19	48	36	24	66	49	33	21	16	11	38	29	19
L/360	11	9	6	14	11	7	17	13	9	24	18	12	13	10	6	16	12	8
L/480	9	6	4	11	8	5	13	10	7	18	13	9	10	7	5	12	9	6
33 STRENGTH	19	14	9	35	26	18	45	34	22	62	46	31	20	15	10	36	27	18
L/360	10	8	5	13	10	6	16	12	8	22	16	11	12					

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	1000JR250-68			1000JR250-97			1000JR300-43			1000JR300-54			1000JR300-68			1000JR300-97		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
8 STRENGTH	432	324	216	827	620	413	181	136	91	280	210	140	432	324	216	827	620	413
L/360	1262	947	631	1739	1304	869	883	662	441	1077	808	538	1368	1026	684	1951	1463	976
L/480	947	710	473	1304	978	652	662	496	331	808	606	404	1026	770	513	1463	1098	732
9 STRENGTH	384	288	192	735	551	367	161	121	80	249	187	124	384	288	192	735	551	367
L/360	887	665	443	1221	916	611	620	465	310	756	567	378	961	721	481	1370	1028	685
L/480	665	499	332	916	687	458	465	349	232	567	425	284	721	541	360	1028	771	514
10 STRENGTH	346	259	173	661	496	331	145	109	72	224	168	112	346	259	173	661	496	331
L/360	646	485	323	890	668	445	452	339	226	551	414	276	701	525	350	999	749	500
L/480	485	364	242	668	501	334	339	254	169	414	310	207	525	394	263	749	562	375
11 STRENGTH	314	236	157	601	451	301	132	99	66	204	153	102	314	236	157	601	451	301
L/360	486	364	243	669	502	334	339	255	170	414	311	207	526	395	263	751	563	375
L/480	364	273	182	502	376	251	255	191	127	311	233	155	395	296	197	563	422	281
12 STRENGTH	288	216	144	525	394	263	121	91	60	187	140	93	288	216	144	551	413	276
L/360	374	281	187	515	386	258	261	196	131	319	239	160	405	304	203	578	434	289
L/480	281	210	140	386	290	193	196	147	98	239	179	120	304	228	152	434	325	217
13 STRENGTH	266	199	133	448	336	224	111	84	56	172	129	86	266	199	133	472	354	236
L/360	294	221	147	405	304	203	206	154	103	251	188	125	319	239	159	455	341	227
L/480	221	165	110	304	228	152	154	116	77	188	141	94	239	179	120	341	256	171
14 STRENGTH	247	185	123	386	290	193	103	78	52	160	120	80	247	185	123	407	305	203
L/360	236	177	118	324	243	162	165	124	82	201	151	100	255	192	128	364	273	182
L/480	177	132	88	243	182	122	124	93	62	151	113	75	192	144	96	273	205	137
15 STRENGTH	221	166	111	336	252	168	97	72	48	149	112	75	228	171	114	355	266	177
L/360	191	144	96	264	198	132	134	100	67	163	123	82	208	156	104	296	222	148
L/480	144	108	72	198	148	99	100	75	50	123	92	61	156	117	78	222	167	111
16 STRENGTH	194	146	97	296	222	148	89	66	44	140	105	70	200	150	100	312	234	156
L/360	158	118	79	217	163	109	110	83	55	135	101	67	171	128	86	244	183	122
L/480	118	89	59	163	122	81	83	62	41	101	76	50	128	96	64	183	137	91
17 STRENGTH	172	129	86	262	196	131	78	59	39	132	99	66	177	133	89	276	207	138
L/360	132	99	66	181	136	91	92	69	46	112	84	56	143	107	71	203	153	102
L/480	99	74	49	136	102	68	69	52	34	84	63	42	107	80	53	153	114	76
18 STRENGTH	154	115	77	234	175	117	70	53	35	123	93	62	158	119	79	246	185	123
L/360	111	83	55	153	114	76	77	58	39	95	71	47	120	90	60	171	128	86
L/480	83	62	42	114	86	57	58	44	29	71	53	35	90	68	45	128	96	64
19 STRENGTH	138	103	69	210	157	105	63	47	31	111	83	55	142	106	71	221	166	110
L/360	94	71	47	130	97	65	66	49	33	80	60	40	102	77	51	146	109	73
L/480	71	53	35	97	73	49	49	37	25	60	45	30	77	57	38	109	82	55
20 STRENGTH	124	93	62	189	142	95	57	43	28	100	75	50	128	96	64	199	150	100
L/360	81	61	40	111	83	56	56	42	28	69	52	34	88	66	44	125	94	62
L/480	61	45	30	83	63	42	42	32	21	52	39	26	66	49	33	94	70	47
21 STRENGTH	113	85	56	172	129	86	51	39	26	91	68	45	116	87	58	181	136	90
L/360	70	52	35	96	72	48	49	37	24	60	45	30	76	57	38	108	81	54
L/480	52	39	26	72	54	36	37	27	18	45	33	22	57	43	28	81	61	40
22 STRENGTH	103	77	51	156	117	78	47	35	23	83	62	41	106	79	53	165	124	82
L/360	61	46	30	84	63	42	42	32	21	52	39	26	66	49	33	94	70	47
L/480	46	34	23	63	47	31	32	24	16	39	29	19	49	37	25	70	53	35
23 STRENGTH	94	71	47	143	107	72	43	32	21	76	57	38	97	73	48	151	113	75
L/360	53	40	27	73	55	37	37	28	19	45	34	23	58	43	29	82	62	41
L/480	40	30	20	55	41	27	28	21	14	34	25	17	43	32	22	62	46	31
24 STRENGTH	86	65	43	131	99	66	39	30	20	69	52	35	89	67	44	138	104	69
L/360	47	35	23	64	48	32	33	25	16	40	30	20	51	38	25	72	54	36
L/480	35	26	18	48	36	24	25	18	12	30	22	15	38	29	19	54	41	27
25 STRENGTH	80	60	40	121	91	61	36	27	18	64	48	32	82	61	41	128	96	64
L/360	41	31	21	57	43	28	29	22	14	35	26	18	45	34	22	64	48	32
L/480	31	23	16	43	32	21	22	16	11	26	20	13	34	25	17	48	36	24
26 STRENGTH	74	55	37	112	84	56	34	25	17	59	44	30	76	57	38	118	89	59
L/360	37	28	18	51	38	25	26	19	13	31	24	16	40	30	20	57	43	28
L/480	28	21	14	38	28	19	19	14	10	24	18	12	30	22	15	43	32	21
27 STRENGTH	68	51	34	104	78	52	31	23	16	55	41	27	70	53	35	109	82	55
L/360	33	25	16	45	34	23	23	17	11	28	21	14	36	27	18	51	38	25
L/480	25	18	12	34	25	17	17	13	9	21	16	11	27	20	13	38	29	19
28 STRENGTH	63	48	32	97	72	48	29	22	14	51	38	26	65	49	33	102	76	51
L/360	29	22	15	41	30	20	21	15	10	25	19	13	32	24	16	46	34	23
L/480	22	17	11	30	23	15	15	12	8	19	14	9	24	18	12	34	26	17
29 STRENGTH	59	44	30	90	67	45	27	20	13	48	36	24	61	46	30	95	71	47
L/360	26	20	13	36	27	18	19	14	9	23	17	11	29	22	14	41	31	20
L/480	20	15	10	27	21	14	14	10	7	17	13	8	22	16	11	31	23	15
30 STRENGTH	55	41	28	84	63	42	25	19	13	44	33	22	57	43	28	89	66	44
L/360	24	18	12	33	25	16	17	13	8	20	15	10	26	19	13	37	28	19
L/480	18	13	9	25	19	12	13	9	6	15	11	8	19	15	10	28	21	14
31 STRENGTH	52	39	26	79	59	39	24	18	12	42	31	21	53					

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	1200JR200-54			1200JR200-68			1200JR200-97			1200JR250-54			1200JR250-68			1200JR250-97		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
8 STRENGTH	270	202	135	414	311	207	786	589	393	270	202	135	414	311	207	786	589	393
L/360	1351	1013	676	1672	1254	836	2298	1723	1149	1512	1134	756	1889	1417	944	2605	1954	1302
L/480	1013	760	507	1254	941	627	1723	1292	862	1134	850	567	1417	1062	708	1954	1465	977
9 STRENGTH	240	180	120	368	276	184	698	524	349	240	180	120	368	276	184	698	524	349
L/360	949	712	475	1175	881	587	1614	1210	807	1062	796	531	1327	995	663	1829	1372	915
L/480	712	534	356	881	661	440	1210	908	605	796	597	398	995	746	497	1372	1029	686
10 STRENGTH	216	162	108	332	249	166	629	471	314	216	162	108	332	249	166	629	471	314
L/360	692	519	346	856	642	428	1176	882	588	774	580	387	967	725	484	1334	1000	667
L/480	519	389	259	642	482	321	882	662	441	580	435	290	725	544	363	1000	750	500
11 STRENGTH	196	147	98	301	226	151	571	429	286	196	147	98	301	226	151	571	429	286
L/360	520	390	260	643	482	322	884	663	442	581	436	291	727	545	363	1002	751	501
L/480	390	292	195	482	362	241	663	497	331	436	327	218	545	409	272	751	564	376
12 STRENGTH	180	135	90	276	207	138	524	393	262	180	135	90	276	207	138	524	393	262
L/360	400	300	200	496	372	248	681	511	340	448	336	224	560	420	280	772	579	386
L/480	300	225	150	372	279	186	511	383	255	336	252	168	420	315	210	579	434	289
13 STRENGTH	166	124	83	255	191	128	484	363	242	166	124	83	255	191	128	484	363	242
L/360	315	236	157	390	292	195	535	402	268	352	264	176	440	330	220	607	455	304
L/480	236	177	118	292	219	146	402	301	201	264	198	132	330	248	165	455	341	228
14 STRENGTH	154	116	77	237	178	118	430	322	215	154	116	77	237	178	118	449	337	225
L/360	252	189	126	312	234	156	429	322	214	282	212	141	352	264	176	486	365	243
L/480	189	142	95	234	176	117	322	241	161	212	159	106	264	198	132	365	273	182
15 STRENGTH	144	108	72	221	166	111	374	281	187	144	108	72	221	166	111	419	314	210
L/360	205	154	102	254	190	127	349	261	174	229	172	115	287	215	143	395	296	198
L/480	154	115	77	190	143	95	261	196	131	172	129	86	215	161	107	296	222	148
16 STRENGTH	135	101	67	207	155	104	329	247	165	135	101	67	207	155	104	389	277	184
L/360	169	127	84	209	157	105	287	215	144	189	142	94	236	177	118	326	244	163
L/480	127	95	63	157	118	78	215	162	108	142	106	71	177	133	89	244	183	122
17 STRENGTH	127	95	63	195	146	98	292	219	146	127	95	63	195	146	98	327	245	163
L/360	141	106	70	174	131	87	239	180	120	158	118	79	197	148	98	271	204	136
L/480	106	79	53	131	98	65	180	135	90	118	89	59	148	111	74	204	153	102
18 STRENGTH	120	90	60	184	138	92	260	195	130	120	90	60	184	138	92	292	219	146
L/360	119	89	59	147	110	73	202	151	101	133	100	66	166	124	83	229	172	114
L/480	89	67	44	110	83	55	151	113	76	100	75	50	124	93	62	172	129	86
19 STRENGTH	114	85	57	170	127	85	233	175	117	114	85	57	172	129	86	262	196	131
L/360	101	76	50	125	94	62	172	129	86	113	85	56	141	106	70	194	146	97
L/480	76	57	38	94	70	47	129	96	64	85	63	42	106	79	53	146	109	73
20 STRENGTH	108	81	54	153	115	77	211	158	105	108	81	54	155	116	78	236	177	118
L/360	86	65	43	107	80	54	147	110	74	97	73	48	121	91	60	167	125	83
L/480	65	49	32	80	60	40	110	83	55	73	54	36	91	68	45	125	94	63
21 STRENGTH	103	77	51	139	104	70	191	143	96	103	77	51	141	106	70	214	161	107
L/360	75	56	37	92	69	46	127	95	64	84	63	42	104	78	52	144	108	72
L/480	56	42	28	69	52	35	95	71	48	63	47	31	78	59	39	108	81	54
22 STRENGTH	98	74	49	127	95	63	174	131	87	98	74	49	128	96	64	195	146	98
L/360	65	49	32	80	60	40	110	83	55	73	55	36	91	68	45	125	94	63
L/480	49	37	24	60	45	30	83	62	41	55	41	27	68	51	34	94	70	47
23 STRENGTH	91	68	45	116	87	58	159	119	80	93	69	46	117	88	59	179	134	89
L/360	57	43	28	70	53	35	97	73	48	64	48	32	79	60	40	110	82	55
L/480	43	32	21	53	40	26	73	54	36	48	36	24	60	45	30	82	62	41
24 STRENGTH	83	63	42	106	80	53	146	110	73	85	64	42	108	81	54	164	123	82
L/360	50	38	25	62	46	31	85	64	43	56	42	28	70	52	35	96	72	48
L/480	38	28	19	46	35	23	64	48	32	42	31	21	52	39	26	72	54	36
25 STRENGTH	77	58	38	98	74	49	135	101	67	78	59	39	99	75	50	151	113	76
L/360	44	33	22	55	41	27	75	56	38	50	37	25	62	46	31	85	64	43
L/480	33	25	17	41	31	21	56	42	28	37	28	19	46	35	23	64	48	32
26 STRENGTH	71	53	36	91	68	45	125	93	62	72	54	36	92	69	46	140	105	70
L/360	39	30	20	49	37	24	67	50	33	44	33	22	55	41	28	76	57	38
L/480	30	22	15	37	27	18	50	38	25	33	25	17	41	31	21	57	43	28
27 STRENGTH	66	49	33	84	63	42	116	87	58	67	50	34	85	64	43	130	97	65
L/360	35	26	18	44	33	22	60	45	30	39	29	20	49	37	25	68	51	34
L/480	26	20	13	33	24	16	45	34	22	29	22	15	37	28	18	51	38	25
28 STRENGTH	61	46	31	78	59	39	107	81	54	62	47	31	79	59	40	120	90	60
L/360	32	24	16	39	29	20	54	40	27	35	26	18	44	33	22	61	46	30
L/480	24	18	12	29	22	15	40	30	20	26	20	13	33	25	17	46	34	23
29 STRENGTH	57	43	29	73	55	36	100	75	50	58	44	29	74	55	37	112	84	56
L/360	28	21	14	35	26	18	48	36	24	32	24	16	40	30	20	55	41	27
L/480	21	16	11	26	20	13	36	27	18	24	18	12	30	22	15	41	31	21
30 STRENGTH	53	40	27	68	51	34	94	70	47	54	41	27	69	52	34	105	79	52
L/360	26	19	13	32	24	16	44	33	22	29	21	14	36	27	18	49	37	25
L/480	19	14	10	24	18	12	33	25	16	21	16	11	27	20	13	37	28	19
31 STRENGTH	50	37	25	64	48	32	88	66	44	51	38	25	65	48	32	98	74	49
L/360	23	17	12	29	22	14	39	30	20	26	19	13	32	24	16	45	34	22
L/480	17	13	9	22	16	11	30	22	15	19	15	10	24	18	12	34	25	17
32 STRENGTH	47	35	23	60	45	30	82	62	41	48	36	24	61	45	30	92	69	46
L/360	21	16	11	26	20	13	36	27	18	24	18	12	30	22	15	41	31	20
L/480	16	12	8	20	15	10	27	20	13	18	13	9						

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	1200JR300-54			1200JR300-68			1200JR300-97			1400JR200-54			1400JR200-68			1400JR200-97		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
8 STRENGTH	270	202	135	414	311	207	786	589	393	-	-	-	-	-	-	-	-	-
L/360	1606	1205	803	2040	1530	1020	2912	2184	1456	-	-	-	-	-	-	-	-	-
L/480	1205	904	602	1530	1147	765	2184	1638	1092	-	-	-	-	-	-	-	-	-
9 STRENGTH	240	180	120	368	276	184	698	524	349	-	-	-	-	-	-	-	-	-
L/360	1128	846	564	1433	1075	716	2045	1534	1023	-	-	-	-	-	-	-	-	-
L/480	846	635	423	1075	806	537	1534	1150	767	-	-	-	-	-	-	-	-	-
10 STRENGTH	216	162	108	332	249	166	629	471	314	265	199	133	416	312	208	822	616	411
L/360	822	617	411	1044	783	522	1491	1118	745	1061	796	531	1317	988	659	1820	1365	910
L/480	617	463	308	783	587	392	1118	839	559	796	597	398	988	741	494	1365	1024	683
11 STRENGTH	196	147	98	301	226	151	571	429	286	241	181	121	378	283	189	747	560	373
L/360	618	463	309	785	589	392	1120	840	560	797	598	399	990	742	495	1368	1026	684
L/480	463	348	232	589	441	294	840	630	420	598	449	299	742	557	371	1026	769	513
12 STRENGTH	180	135	90	276	207	138	524	393	262	221	166	111	346	260	173	685	514	342
L/360	476	357	238	604	453	302	863	647	431	614	461	307	762	572	381	1053	790	527
L/480	357	268	178	453	340	227	647	485	324	461	345	230	572	429	286	790	593	395
13 STRENGTH	166	124	83	255	191	128	484	363	242	204	153	102	320	240	160	632	474	316
L/360	374	281	187	475	357	238	679	509	339	483	362	242	599	450	300	828	621	414
L/480	281	211	140	357	267	178	509	382	254	362	272	181	450	337	225	621	466	311
14 STRENGTH	154	116	77	237	178	118	449	337	225	190	142	95	297	223	148	570	428	285
L/360	300	225	150	381	285	190	543	408	272	387	290	193	480	360	240	663	497	332
L/480	225	169	112	285	214	143	408	306	204	290	218	145	360	270	180	497	373	249
15 STRENGTH	144	108	72	221	166	111	419	314	210	177	133	88	277	208	139	497	372	248
L/360	244	183	122	309	232	155	442	331	221	314	236	157	390	293	195	539	404	270
L/480	183	137	91	232	174	116	331	248	166	236	177	118	293	220	146	404	303	202
16 STRENGTH	135	101	67	207	155	104	387	291	194	166	124	83	260	195	130	436	327	218
L/360	201	151	100	255	191	127	364	273	182	259	194	130	322	241	161	444	333	222
L/480	151	113	75	191	143	96	273	205	137	194	146	97	241	181	121	333	250	167
17 STRENGTH	127	95	63	195	146	98	343	257	172	156	117	78	244	183	122	387	290	193
L/360	167	126	84	213	159	106	303	228	152	216	162	108	268	201	134	370	278	185
L/480	126	94	63	159	120	80	228	171	114	162	122	81	201	151	101	278	208	139
18 STRENGTH	120	90	60	184	138	92	306	230	153	147	111	74	231	173	115	345	259	172
L/360	141	106	71	179	134	90	256	192	128	182	136	91	226	169	113	312	234	156
L/480	106	79	53	134	101	67	192	144	96	136	102	68	169	127	85	234	176	117
19 STRENGTH	114	85	57	175	131	87	275	206	137	140	105	70	219	164	109	310	232	155
L/360	120	90	60	152	114	76	217	163	109	155	116	77	192	144	96	265	199	133
L/480	90	67	45	114	86	57	163	122	82	116	87	58	144	108	72	199	149	100
20 STRENGTH	108	81	54	159	120	80	248	186	124	133	100	66	202	152	101	279	209	140
L/360	103	77	51	131	98	65	186	140	93	133	99	66	165	123	82	228	171	114
L/480	77	58	39	98	73	49	140	105	70	99	75	50	123	93	62	171	128	85
21 STRENGTH	103	77	51	145	108	72	225	169	112	126	95	63	183	137	92	253	190	127
L/360	89	67	44	113	85	56	161	121	80	115	86	57	142	107	71	197	147	98
L/480	67	50	33	85	63	42	121	91	60	86	64	43	107	80	53	147	111	74
22 STRENGTH	98	74	49	132	99	66	205	154	102	121	90	60	167	125	84	231	173	115
L/360	77	58	39	98	74	49	140	105	70	100	75	50	124	93	62	171	128	85
L/480	58	43	29	74	55	37	105	79	53	75	56	37	93	70	46	128	96	64
23 STRENGTH	94	70	47	121	90	60	187	141	94	115	87	58	153	115	76	211	158	106
L/360	68	51	34	86	64	43	123	92	61	87	65	44	108	81	54	150	112	75
L/480	51	38	25	64	48	32	92	69	46	65	49	33	81	61	41	112	84	56
24 STRENGTH	87	65	43	111	83	55	172	129	86	109	82	55	140	105	70	194	145	97
L/360	59	45	30	76	57	38	108	81	54	77	58	38	95	71	48	132	99	66
L/480	45	33	22	57	42	28	81	61	40	58	43	29	71	54	36	99	74	49
25 STRENGTH	80	60	40	102	77	51	159	119	79	101	75	50	129	97	65	179	134	89
L/360	53	39	26	67	50	33	95	72	48	68	51	34	84	63	42	116	87	58
L/480	39	30	20	50	38	25	72	54	36	51	38	25	63	47	32	87	66	44
26 STRENGTH	74	55	37	94	71	47	147	110	73	93	70	46	120	90	60	165	124	83
L/360	47	35	23	59	45	30	85	64	42	60	45	30	75	56	37	104	78	52
L/480	35	26	18	45	33	22	64	48	32	45	34	23	56	42	28	78	58	39
27 STRENGTH	68	51	34	87	66	44	136	102	68	86	65	43	111	83	55	153	115	77
L/360	42	31	21	53	40	27	76	57	38	54	40	27	67	50	33	92	69	46
L/480	31	24	16	40	30	20	57	43	28	40	30	20	50	38	25	69	52	35
28 STRENGTH	64	48	32	81	61	41	127	95	63	80	60	40	103	77	52	143	107	71
L/360	37	28	19	48	36	24	68	51	34	48	36	24	60	45	30	83	62	41
L/480	28	21	14	36	27	18	51	38	25	36	27	18	45	34	22	62	47	31
29 STRENGTH	59	44	30	76	57	38	118	88	59	75	56	37	96	72	48	133	100	66
L/360	34	25	17	43	32	21	61	46	31	44	33	22	54	41	27	75	56	37
L/480	25	19	13	32	24	16	46	34	23	33	24	16	41	30	20	56	42	28
30 STRENGTH	55	42	28	71	53	35	110	83	55	70	52	35	90	67	45	124	93	62
L/360	30	23	15	39	29	19	55	41	28	39	29	20	49	37	24	67	51	34
L/480	23	17	11	29	22	15	41	31	21	29	22	15	37	27	18	51	38	25
31 STRENGTH	52	39	26	66	50	33	103	77	52	65	49	33	84	63	42	116	87	58
L/360	28	21	14	35	26	18	50	38	25	36	27	18	44	33	22	61	46	31
L/480	21	16	10	26	20	13	38	28	19	27	20	13	33	25	17	46	34	23
32 STRENGTH	49	37	24	62	47	31	97	73	48	61	46	31	79	59	39	109	82	55
L/360	25	19	13	32	24	16	46	34	23	32	24	16	40	30	20	56	42	28
L/480	19	14	9	24	18	12	34	26	17	24	18	12	30	23	15	42	31	21
33 STRENGTH	4																	

# SINGLE SPAN MAXIMUM FLOOR JOIST LOADS (PSF)

SECTION >>>>	1400JR250-54			1400JR250-68			1400JR250-97			1400JR300-54			1400JR300-68			1400JR300-97		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
	SPAN, L (ft)	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16
10 STRENGTH	265	199	133	416	312	208	822	616	411	265	199	133	416	312	208	822	616	411
L/360	1173	880	587	1468	1101	734	2035	1526	1017	1239	929	620	1573	1180	786	2249	1687	1125
L/480	880	660	440	1101	826	551	1526	1145	763	929	697	465	1180	885	590	1687	1265	844
11 STRENGTH	241	181	121	378	283	189	747	560	373	241	181	121	378	283	189	747	560	373
L/360	881	661	441	1103	827	552	1529	1147	764	931	698	466	1182	886	591	1690	1268	845
L/480	661	496	330	827	620	414	1147	860	573	698	524	349	886	665	443	1268	951	634
12 STRENGTH	221	166	111	346	260	173	685	514	342	221	166	111	346	260	173	685	514	342
L/360	679	509	339	850	637	425	1178	883	589	717	538	359	910	683	455	1302	976	651
L/480	509	382	255	637	478	319	883	662	442	538	403	269	683	512	341	976	732	488
13 STRENGTH	204	153	102	320	240	160	632	474	316	204	153	102	320	240	160	632	474	316
L/360	534	400	267	668	501	334	926	695	463	564	423	282	716	537	358	1024	768	512
L/480	400	300	200	501	376	251	695	521	347	423	317	212	537	403	268	768	576	384
14 STRENGTH	190	142	95	297	223	148	587	440	293	190	142	95	297	223	148	587	440	293
L/360	427	321	214	535	401	268	742	556	371	452	339	226	573	430	287	820	615	410
L/480	321	240	160	401	301	201	556	417	278	339	254	169	430	322	215	615	461	307
15 STRENGTH	177	133	88	277	208	139	548	411	274	177	133	88	277	208	139	548	411	274
L/360	348	261	174	435	326	218	603	452	301	367	275	184	466	350	233	666	500	333
L/480	261	196	130	326	245	163	452	339	226	275	207	138	350	262	175	500	375	250
16 STRENGTH	166	124	83	260	195	130	483	362	242	166	124	83	260	195	130	505	379	253
L/360	286	215	143	358	269	179	497	373	248	303	227	151	384	288	192	549	412	275
L/480	215	161	107	269	202	134	373	279	186	227	170	113	288	216	144	412	309	206
17 STRENGTH	156	117	78	244	183	122	428	321	214	156	117	78	244	183	122	448	336	224
L/360	239	179	119	299	224	149	414	311	207	252	189	126	320	240	160	458	343	229
L/480	179	134	90	224	168	112	311	233	155	189	142	95	240	180	120	343	258	172
18 STRENGTH	147	111	74	231	173	115	382	286	191	147	111	74	231	173	115	399	299	200
L/360	201	151	101	252	189	126	349	262	174	212	159	106	270	202	135	386	289	193
L/480	151	113	75	189	142	94	262	196	131	159	120	80	202	152	101	289	217	145
19 STRENGTH	140	105	70	219	164	109	343	257	171	140	105	70	219	164	109	358	269	179
L/360	171	128	86	214	161	107	297	222	148	181	135	90	229	172	115	328	246	164
L/480	128	96	64	161	120	80	222	167	111	135	102	68	172	129	86	246	184	123
20 STRENGTH	133	100	66	205	154	102	309	232	155	133	100	66	208	156	104	323	243	162
L/360	147	110	73	184	138	92	254	191	127	155	116	77	197	147	98	281	211	141
L/480	110	82	55	138	103	69	191	143	95	116	87	58	147	111	74	211	158	105
21 STRENGTH	126	95	63	186	139	93	280	210	140	126	95	63	191	143	95	293	220	147
L/360	127	95	63	159	119	79	220	165	110	134	100	67	170	127	85	243	182	121
L/480	95	71	47	119	89	59	165	124	82	100	75	50	127	96	64	182	137	91
22 STRENGTH	121	90	60	169	127	85	256	192	128	121	90	60	174	130	87	267	200	134
L/360	110	83	55	138	103	69	191	143	96	116	87	58	148	111	74	211	158	106
L/480	83	62	41	103	78	52	143	107	72	87	65	44	111	83	55	158	119	79
23 STRENGTH	115	87	58	155	116	77	234	175	117	115	87	58	159	119	80	245	183	122
L/360	96	72	48	121	91	60	167	125	84	102	76	51	129	97	65	185	139	92
L/480	72	54	36	91	68	45	125	94	63	76	57	38	97	73	48	139	104	69
24 STRENGTH	111	83	55	142	107	71	215	161	107	111	83	55	146	110	73	225	168	112
L/360	85	64	42	106	80	53	147	110	74	90	67	45	114	85	57	163	122	81
L/480	64	48	32	80	60	40	110	83	55	67	50	34	85	64	43	122	92	61
25 STRENGTH	102	77	51	131	98	66	198	148	99	104	78	52	135	101	67	207	155	103
L/360	75	56	38	94	70	47	130	98	65	79	59	40	101	75	50	144	108	72
L/480	56	42	28	70	53	35	98	73	49	59	45	30	75	57	38	108	81	54
26 STRENGTH	95	71	47	121	91	61	183	137	91	97	72	48	124	93	62	191	144	96
L/360	67	50	33	84	63	42	116	87	58	71	53	35	89	67	45	128	96	64
L/480	50	38	25	63	47	31	87	65	43	53	40	26	67	50	34	96	72	48
27 STRENGTH	88	66	44	112	84	56	170	127	85	90	67	45	115	87	58	177	133	89
L/360	60	45	30	75	56	37	103	78	52	63	47	31	80	60	40	114	86	57
L/480	45	34	22	56	42	28	78	58	39	47	35	24	60	45	30	86	64	43
28 STRENGTH	82	61	41	105	78	52	158	118	79	83	62	42	107	80	54	165	124	82
L/360	53	40	27	67	50	33	93	70	46	56	42	28	72	54	36	102	77	51
L/480	40	30	20	50	38	25	70	52	35	42	32	21	54	40	27	77	58	38
29 STRENGTH	76	57	38	97	73	49	147	110	74	78	58	39	100	75	50	154	115	77
L/360	48	36	24	60	45	30	83	63	42	51	38	25	64	48	32	92	69	46
L/480	36	27	18	45	34	23	63	47	31	38	29	19	48	36	24	69	52	35
30 STRENGTH	71	53	36	91	68	46	137	103	69	73	54	36	93	70	47	144	108	72
L/360	43	33	22	54	41	27	75	57	38	46	34	23	58	44	29	83	62	42
L/480	33	24	16	41	31	20	57	42	28	34	26	17	44	33	22	62	47	31
31 STRENGTH	67	50	33	85	64	43	129	97	64	68	51	34	88	66	44	135	101	67
L/360	39	30	20	49	37	25	68	51	34	42	31	21	53	40	26	76	57	38
L/480	30	22	15	37	28	18	51	38	26	31	23	16	40	30	20	57	42	28
32 STRENGTH	63	47	31	80	60	40	121	91	60	64	48	32	82	62	41	126	95	63
L/360	36	27	18	45	34	22	62	47	31	38	28	19	48	36	24	69	51	34
L/480	27	20	13	34	25	17	47	35	23	28	21</							

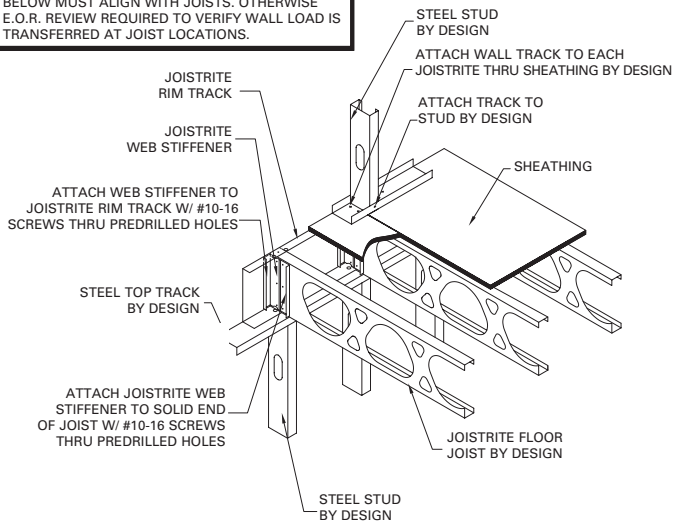
**NOTE:** THESE SUGGESTED DETAILS SHOULD BE VERIFIED BY THE DESIGNER OF RECORD

**NOTE:** FIRE RATED ASSEMBLIES MAY HAVE DIFFERENT REQUIREMENTS FROM THESE STANDARD DETAILS. FIRE RATED DESIGN REQUIREMENTS SUPERSEDE THESE DETAILS.

# CONNECTION DETAILS

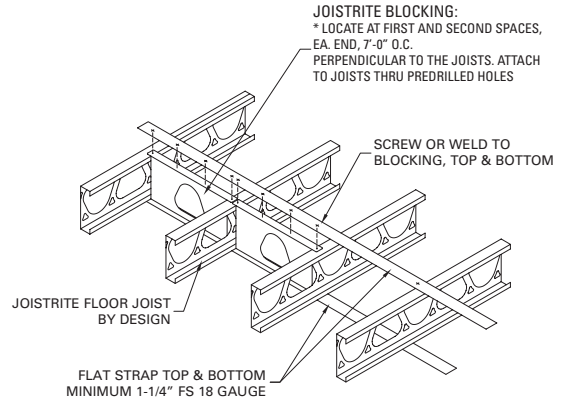
## 1. JOISTRITE BEARING ON STEEL STUD

**NOTE:** LOAD-BEARING WALL FRAMING ABOVE AND BELOW MUST ALIGN WITH JOISTS. OTHERWISE E.O.R. REVIEW REQUIRED TO VERIFY WALL LOAD IS TRANSFERRED AT JOIST LOCATIONS.

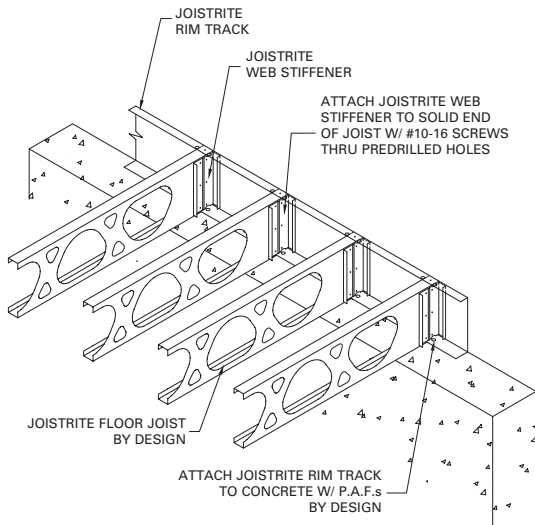


## 2. JOISTRITE BRIDGING AND BLOCKING

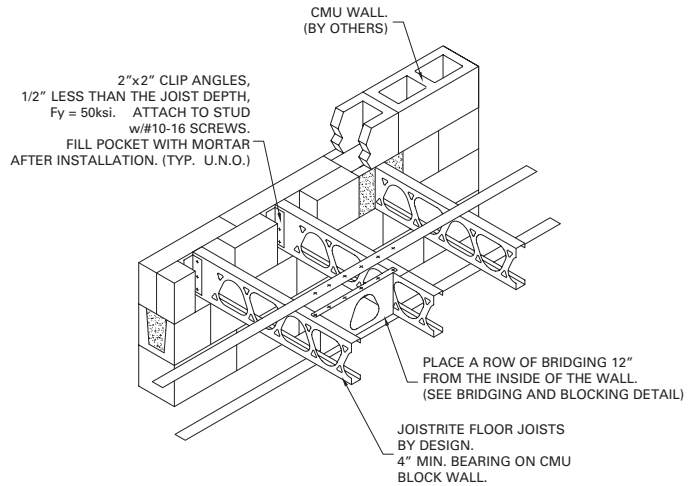
**NOTE:** TOP STRAP MAY BE ELIMINATED WITH THE PROPER ATTACHMENT OF DIAPHRAGM-RATED SHEATHING OR DECKING.



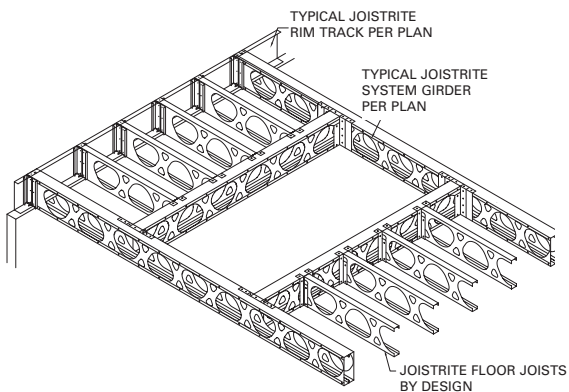
## 3. JOISTRITE BEARING ON MASONRY



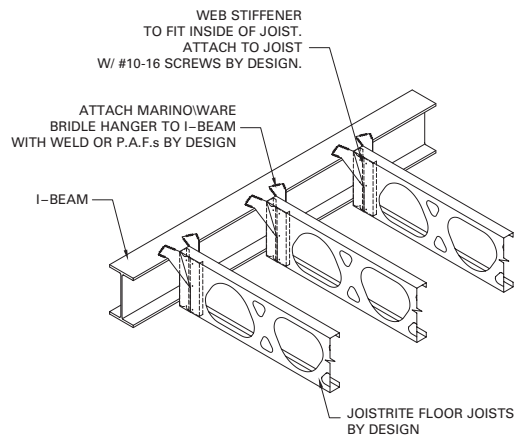
## 4. JOISTRITE BEARING ON POKETED CMU WALL



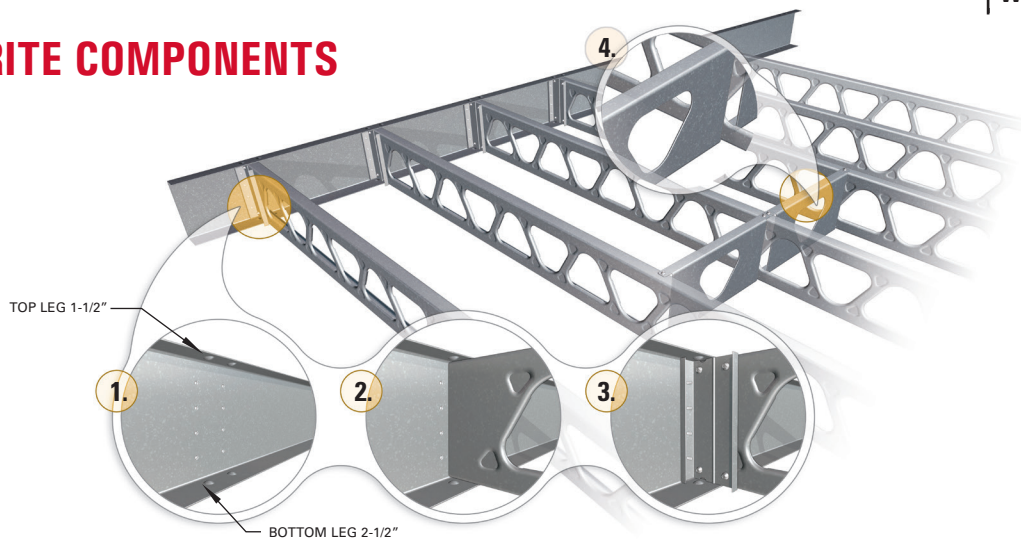
## 5. TYPICAL JOISTRITE FLOOR OPENING



## 6. JOISTRITE CONNECTION TO I-BEAM



# JOISTRITE COMPONENTS



### 1. Track [16 ga. (54 mil standard)]

- Preset spacing for joists – built in “dimples,” located at conventional intervals along the track, surround the joist for easy initial placement.
- Predrilled holes – act as guides that assist in lining up components while eliminating the need to fasten screws through both joist and track.

### 2. Track and Joist

- Exclusive Snap-Lock technology – allows joists to lock into place with little effort and with less labor.

### 3. Web Stiffeners

- JoistRite Web Stiffeners are the very first to come with predrilled holes and precut to fit standard joist sizes, allowing for easier installation.

### 4. Blocking

- Unlike traditional blocking, JoistRite Blocking comes equipped with unique tabs that eliminate the need for additional accessory clips and fasteners – and additional clamping or fastening. The product is also precut to fit between the joists, resulting in more stability based on less labor.

## SOLID BLOCKING (JB)

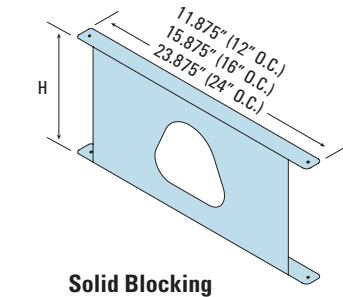
**MATERIAL:** 16 ga (54 mil) 50ksi

**FINISH:** Galvanized – G90

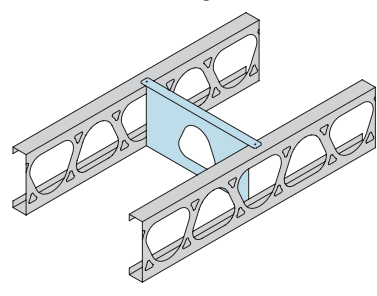
### INSTALLATION:

- Position the pre-cut Joist Blocking to fit securely between the joists.
- (4) #10 - 16 screws are required to secure the blocking to the joist flanges using the pre-punched holes.
- Solid blocking should be installed 7' o.c. maximum along the joist length.
- Fits up to 2" flange joist product.
- Blocking for 2-1/2" and 3" flanges available as a special order.

Model No.	Size (H)	Spacing (o.c.)	Box Quantity
800JB-12	8"	12	10
925JB-12	9-1/4"	12	10
1000JB-12	10"	12	10
1125JB-12	11-1/4"	12	10
1200JB-12	12"	12	10
1400JB-12	14"	12	10
800JB-16	8"	16	10
925JB-16	9-1/4"	16	10
1000JB-16	10"	16	10
1125JB-16	11-1/4"	16	10
1200JB-16	12"	16	10
1400JB-16	14"	16	10
800JB-24	8"	24	10
925JB-24	9-1/4"	24	10
1000JB-24	10"	24	10
1125JB-24	11-1/4"	24	10
1200JB-24	12"	24	10
1400JB-24	14"	24	10



**Solid Blocking**



## WEB STIFFENER (JS)

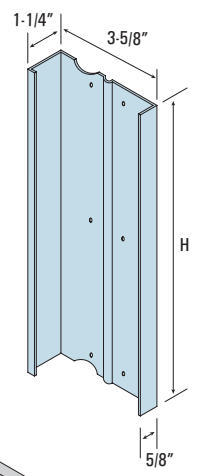
**MATERIAL:** 16 ga (54 mil) 50ksi

**FINISH:** Galvanized – G90

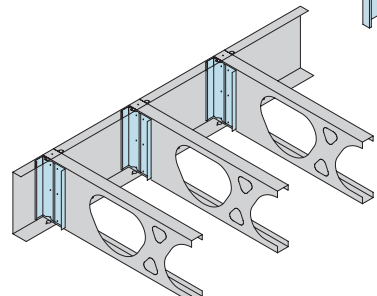
### INSTALLATION:

- Web stiffeners are centered within the load or reaction bearing width.
- Web stiffeners require full bearing along their supported ends.
- (4-6) #10 - 16 screws are required to attach the stiffener to the joist web using pre-punched holes.

Model No.	Joist Size	Height (H)	Box Quantity
8JS-362	8"	7-11/16"	24
925JS-362	9-1/4"	8-15/16"	24
10JS-362	10"	9-11/16"	24
1125JS-362	11-1/4"	10-15/16"	24
12JS-362	12"	11-11/16"	24
14JS-362	14"	13-11/16"	24



**Web Stiffener**



## **YOUR SUCCESS DEPENDS ON QUALITY BUILDING PRODUCTS AND SO DOES OURS.**

For over 30 years, Marino\WARE®, a division of Ware Industries Inc., has served our customers with top quality cold-formed steel framing products, while delivering better solutions to design and construction challenges. We are committed to providing a superior customer experience through a vast selection of readily available products, a knowledgeable sales team, comprehensive technical support and services, prompt delivery through our fleet of trucks, and an extensive distribution network.

Our best-in-class product development team delivers innovative solutions to installation and cost challenges with products designed to save time, labor, and materials. In addition, we utilize the latest in roll forming techniques, maintain the latest level of technology available to the steel framing industry, and strictly adhere to all ASTM specifications.

Marino\WARE is 100% American-owned and operated. We take pride in creating local jobs, supporting local communities, and manufacturing products that reflect the uncompromising skill and ethics of our professional team. We operate state-of-the-art production facilities in New Jersey, Georgia, and Indiana, as well as a sales office in New York.

Visit [MarinoWARE.com](http://MarinoWARE.com) to experience our full line of innovative solutions.

**For more information, please contact Marino\WARE® Technical Services at 866.545.1545**

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