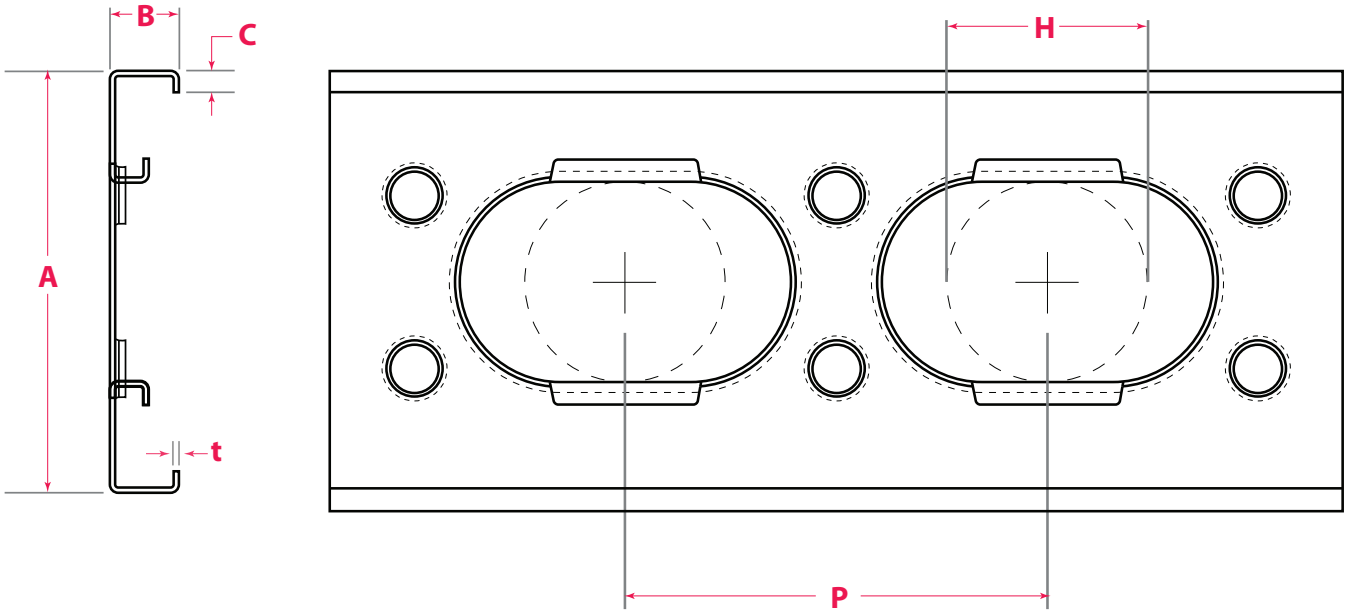
IMPERIAL BUILDING PRODUCTS

MegaJoist - Lightweight Steel Framing



Load Tables for Floor Joist Application

January 2014

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Commentary

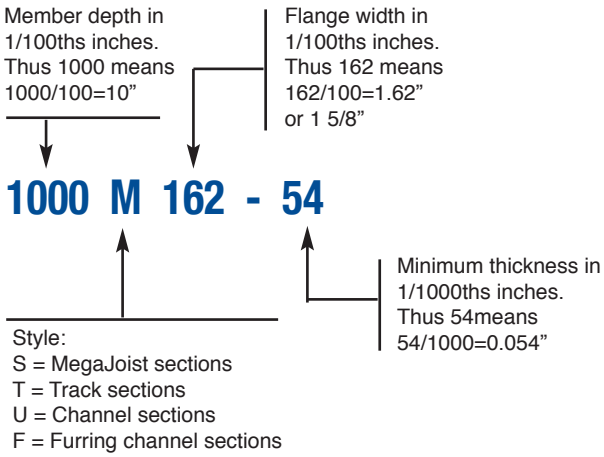
1. Introduction

The technical data contained herein is intended as an aid to the design professional and should not be used to replace the judgment of a qualified Engineer or Architect.

2. Product Identification

The cold-formed steel framing manufacturers use a universal designator system for their products. The designator is a four part code which identifies depth, flange width, member type and material thickness.

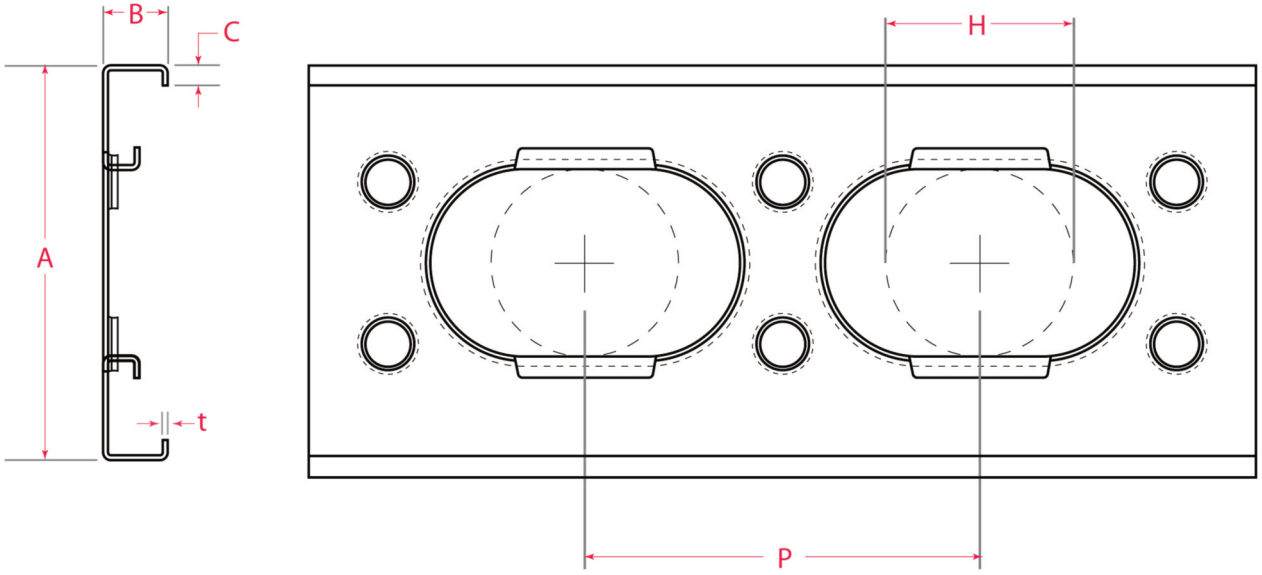
Example: 1000M162-54



3. Section Geometries

3.1 Section geometries are identified by the product designation as defined in the previous section.

3.2 MegaJoist dimensions are as follows:



SECTION DEPTH	FLANGE	LIP	HOLE DIA.	PITCH
A	B	C	H	P
8.000"	1.625"/2.000"/2.500"/3.000"	0.500"/0.625"/0.625"/0.625"	4.750"	10.000"
10.000"	1.625"/2.000"/2.500"/3.000"	0.500"/0.625"/0.625"/0.625"	6.750"	12.000"
12.000"	1.625"/2.000"/2.500"/3.000"	0.500"/0.625"/0.625"/0.625"	6.750"	12.000"
14.000"	1.625"/2.000"/2.500"/3.000"	0.500"/0.625"/0.625"/0.625"	6.750"	12.000"

3.3 MegaJoist and Track Inside Bend Radii

For joist and track, the inside radius equals the maximum of (3/32" - t/2) or 1.5t where t = thickness exclusive of coating in inches. The resulting radii are provided in the following table to the right.

Thickness (in.)	Inside Radius (in.)
0.0346	0.07645
0.0451	0.07120
0.0566	0.08490
0.0713	0.10695
0.1017	0.15255

4. MegaJoist Section Property Tables

4.1 Structural properties are computed in accordance with CSA Standard CAN/CSA-S136-12, North American Specification for the Design of Cold-Formed Steel Structural Members.

4.2 Steel shall meet the requirements of CAN/CSA-S136-12 with a minimum yield strength of 33 ksi for design thicknesses less than or equal to 0.0451" and 50 ksi for design thicknesses greater than or equal to 0.0566".

4.3 Section properties are computed on the basis of the design thicknesses shown in the tables. Design thicknesses are exclusive of coating.

4.4 Perforations are shown on the part drawings. The distance from the centreline of the last perforation to the end of a wall stud or joist is assumed to be 12" minimum.

4.5 The fully braced factored moment resistances, M_{rx} and M_{ry} are derived using effective section properties. The increase in yield from the cold work of forming has been utilized where applicable.

4.6 The maximum unbraced length, L_u, which precludes lateral buckling in beams is calculated from the formulae in the Commentary on North American Specification for the Design of Cold-Formed Steel Structural Members, 2012 Edition, published by the American Iron and Steel Institute (Formulae CC3.1.2.1-11, C-C3.1.2.1-12 & C-C3.1.2.1-14). K_y, K_t and C_b are set equal to one.

4.7 Factored resistances include the following phi factors:
Moment Φ_b = 0.90 (yielding), 0.85 (distortional buckling)

Shear Φ_v = 0.80

Web Crippling See Item 4.9

4.8 The deflection inertia, I_{xd}, includes the effects of local buckling at the stress level resulting from specified live loads (approximated by 0.6 x F_y). This inertia is only appropriate for checking serviceability limit states.

4.9 Web Crippling
Web crippling capacities are based on the provisions of CAN/CSA-S136-12 with the end one-flange loading fastened to support condition (Table C3.4.1-2) and a 0.75 resistance factor. A 3.5" minimum bearing length is assumed.

4.10 Distortional Buckling
Distortional buckling properties and factored resistance are based on an unperforated section. Neither S136-12, Sections A – G, nor do these tables include provisions for the weak axis distortional buckling of joists (lips in compression). Where weak axis distortional buckling is a design concern, additional calculation is required.

5. Track Section Property Tables

5.1 The previous Commentary Items 4.1 - 4.3 apply.

5.2 The factored moment resistance, M_{rx}, is derived using effective section properties with the cold work of forming conservatively neglected. Factored shear and moment resistances, V_r and M_{rx}, include a 0.8 and 0.9 resistance factor respectively.

5.3 The deflection inertia, I_{xd}, includes the effects of local buckling at the stress level resulting from specified live loads (approximated by 0.6 x F_y). This inertia is only appropriate for checking serviceability limit states.

6. Floor Joist Load Tables

6.1 The load tables are computed in accordance with the requirements of the National Building Code of Canada 2010 and CAN/CSA S136-12, North American Specification for the Design of Cold-Formed Steel Structural Members.

6.2 Joist material, geometry and properties conform to the Joist Section Property Tables and Commentary Item 4.

6.3 Strength loads are limited by end shear or mid-span moment. Strength loads are to be checked against the sum of the factored live and dead loads. The live load factor is 1.5 and the dead load factor is 1.25. Deflection loads are to be checked against specified (unfactored) design live loads.
For the joist tables the sheathing is not relied on to reduce the effect of distortional buckling. The factored moment resistance is the lesser of the fully restrained moment for local buckling and the resisting moment for distortional buckling with $k\varphi = 0$.

6.4 No vibration limit state has been imposed.

6.5 Joists are analyzed as single span members with adequate web stiffeners provided at the location of reactions or concentrated loads. Spans are not limited by web crippling. Design web stiffeners to accommodate concentrated loads or reactions. Refer to CAN/CSA S136-12.

6.6 Joists are assumed to be fully restrained with respect to lateral instability and with respect to torsionally eccentric loads not applied through the shear centre. Loads are assumed to be uniformly distributed.

6.7 Allowable specified loads for other deflection limits can be calculated by multiplying the L/360 specified loads by the following factors:

Required Deflection Limit	Factor
L/480	0.750
L/360	1.000
L/300	1.200
L/240	1.500
L/180	2.000

6.8 Provide floor sheathing supplemented by bridging as required by S136012 *(S136-12 references the North American Standard for Cold-Formed Steel Framing – Floor and Roof System Design, AISI S210-12, where detailed requirements are provided)*.

7. Symbols

A = out to out depth of stud (in.)
= nominal depth of track (in.)

Area = fully effective (unreduced for local buckling) area ($in.^2$)

B = out to out width of flange (in.)

C = out to out depth of lip stiffener (in.)

C_w = warping torsional constant ($in.^6$)

F_y = minimum yield strength (ksi)

I_x = fully effective (unreduced for local buckling) moment of inertia about the major axis ($in.^4$)

I_{xd} = effective moment of inertia about the major axis for checking deflections with specified (unfactored) loads ($in.^4$)

I_y = fully effective (unreduced for local buckling) moment of inertia about the minor axis (in.4)

J = St. Venant torsional constant ($in.^4$)

j = torsional-flexural buckling parameter for singly symmetric beam-columns (in.)

m = distance from centreline of web to the shear centre (in.)

M_{rx} = fully braced factored moment resistance about the major axis (in.kips)

M_{ry} = fully braced factored moment resistance about the minor axis with the web in compression or with the lips in compression (in.kips)

L_u = maximum unbraced length of flexural members which precludes lateral buckling (in.)

P_r = factored web crippling resistance (kips)

r = inside bend radius (in.)

r_x = fully effective (unreduced for local buckling) radius of gyration about the major axis (in.)

r_y = fully effective (unreduced for local buckling) radius of gyration about the minor axis (in.)

S_f = fully effective (unreduced for local buckling) section modulus.

t = design steel thickness exclusive of coating (in.)

V_r = factored shear resistance (kips)

Weight = weight per foot based on uncoated, unperforated steel (lbs./ft.)

x_{cg} = distance to centroid from back of web for the fully effective section (unreduced for local buckling) (in.)

x_o = distance from shear centre to centroid (in.)

8. Design Example

Given:
Specified (unfactored) live load = 40 psf

Specified (unfactored) dead load = 15 psf

Required joist depth for architectural considerations = 8 in.
16'-0" single span

Calculations:
Factored load = $\alpha_D D + \alpha_L L = (1.25)(15) + (1.50)(40)$ = 78.8 psf

Try 800M162-54 (50 ksi) MegaJoist (with design t = 0.0566" and F_y = 50 ksi) spaced at 16" o.c.

Strength = 91 > 78.8 psf OK

L/360 = 45 > 40 psf OK

Conclusion:

Use 800M162-54 (50 ksi) joist (with design t = 0.0566" and F_y = 50 ksi) spaced at 16" o.c.

Provide web stiffeners over the supports designed in accordance with the requirements of CAN/CSA-S136-07. Provide top flange floor sheathing in combination with bottom flange bridging to meet the requirements of S136-07.

Where vibration is a concern, additional engineering is required.

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The load tables and technical information contained in this catalogue were prepared by Dr. Roger A. LaBoube, Ph.D, P.E. Professor LaBoube received his engineering degrees from the University of Missouri-Rolla. He has approximately 14 years of industry experience, with ten of those years with Butler Manufacturing Company in Research and Development.

Since 1978, Dr. LaBoube has held faculty positions at Iowa State University, the University of Kansas, and the Missouri University of Science & Technology (formerly University of Missouri-Rolla). Dr. Laboube is Curator's Teaching Professor Emeritus of Civil Engineering and Director of the Center for Cold-Formed Steel Structures at Missouri University of Science & Technology.

Dr. Laboube is active professionally in the following activities:

- A member of the AISI Committee on Specifications for the Design of Cold-Formed Steel Structural Members.
- Currently serves as Chairman of the Education Subcommittee of the Committee on Specifications.
- A member of the AISI Committee on Framing Standards and chairs the Design Methods Subcommittee.
- Co-author with Dr. Wei-Wen Yu, Cold-Formed Steel Design, 4th edition, John Wiley & Sons.
- Has authored or co-authored the following AISI design guides:

The Design Guide for Cold-Formed Steel Trusses

Design Guide for Beams with Web Openings

A Design Guide for Designing with Standing Seam Roof Panels (co-author)

- Is actively involved in cold-formed steel research.
- Has served as a consultant to manufacturers and consulting engineers on numerous topics related to cold-formed steel members and connections.

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MegaJoist Section Properties

S-T-U-F Designator	DIMENSIONS				PROPERTIES							
	Thickness t (in.)	Depth A (in.)	Flange B (in.)	Lip C (in.)	Weight (lbs/ft)	Yield F_y (ksi)	Area ($in.^2$)	x_{cg} (in.)	m (in.)	x_o (in.)	Cw ($in.^6$)	J ($in.^4$)
800M162-43	0.0451	8.000	1.625	0.500	1.828	33	0.537	0.348	0.595	-0.921	1.994	0.000364
800M162-54	0.0566	8.000	1.625	0.500	2.278	50	0.670	0.348	0.587	-0.908	2.415	0.000715
800M162-68	0.0713	8.000	1.625	0.500	2.843	50	0.836	0.349	0.577	-0.890	2.897	0.001416
1000M162-43	0.0451	10.000	1.625	0.500	2.134	33	0.627	0.301	0.539	-0.818	3.299	0.000425
1000M162-54	0.0566	10.000	1.625	0.500	2.663	50	0.783	0.302	0.531	-0.805	4.000	0.000836
1000M162-68	0.0713	10.000	1.625	0.500	3.329	50	0.978	0.303	0.521	-0.788	4.806	0.001658
1200M162-54	0.0566	12.000	1.625	0.500	3.049	50	0.896	0.268	0.485	-0.724	6.045	0.000957
1200M162-68	0.0713	12.000	1.625	0.500	3.814	50	1.121	0.269	0.475	-0.708	7.270	0.001899
1400M162-54	0.0566	14.000	1.625	0.500	3.434	50	1.009	0.241	0.446	-0.659	8.566	0.001078
1400M162-68	0.0713	14.000	1.625	0.500	4.299	50	1.263	0.243	0.437	-0.644	10.309	0.002141
800M200-43	0.0451	8.000	2.000	0.625	1.981	33	0.582	0.489	0.807	-1.273	3.677	0.000395
800M200-54	0.0566	8.000	2.000	0.625	2.471	50	0.726	0.489	0.799	-1.259	4.480	0.000775
800M200-68	0.0713	8.000	2.000	0.625	3.086	50	0.907	0.488	0.788	-1.241	5.422	0.001537
1000M200-43	0.0451	10.000	2.000	0.625	2.288	33	0.672	0.426	0.738	-1.142	6.043	0.000456
1000M200-54	0.0566	10.000	2.000	0.625	2.856	50	0.839	0.427	0.731	-1.129	7.373	0.000896
1000M200-68	0.0713	10.000	2.000	0.625	3.571	50	1.050	0.427	0.720	-1.111	8.937	0.001778
1200M200-54	0.0566	12.000	2.000	0.625	3.241	50	0.953	0.379	0.674	-1.025	11.119	0.001017
1200M200-68	0.0713	12.000	2.000	0.625	4.057	50	1.192	0.380	0.663	-1.008	13.492	0.002020
1400M200-54	0.0566	14.000	2.000	0.625	3.626	50	1.066	0.342	0.625	-0.939	15.752	0.001138
1400M200-68	0.0713	14.000	2.000	0.625	4.542	50	1.335	0.343	0.615	-0.923	19.127	0.002262
800M250-43	0.0451	8.000	2.500	0.625	2.134	33	0.627	0.654	1.039	-1.671	6.188	0.000425
800M250-54	0.0566	8.000	2.500	0.625	2.663	50	0.783	0.654	1.031	-1.656	7.568	0.000836
800M250-68	0.0713	8.000	2.500	0.625	3.329	50	0.978	0.653	1.020	-1.637	9.205	0.001658
1000M250-43	0.0451	10.000	2.500	0.625	2.441	33	0.717	0.575	0.960	-1.512	10.184	0.000486
1000M250-54	0.0566	10.000	2.500	0.625	3.049	50	0.896	0.575	0.952	-1.498	12.472	0.000957
1000M250-68	0.0713	10.000	2.500	0.625	3.814	50	1.121	0.574	0.941	-1.480	15.196	0.001899
1200M250-54	0.0566	12.000	2.500	0.625	3.434	50	1.009	0.513	0.885	-1.370	18.843	0.001078
1200M250-68	0.0713	12.000	2.500	0.625	4.299	50	1.263	0.513	0.875	-1.352	22.983	0.002141
1400M250-54	0.0566	14.000	2.500	0.625	3.819	50	1.122	0.464	0.828	-1.264	26.752	0.001198
1400M250-68	0.0713	14.000	2.500	0.625	4.784	50	1.406	0.465	0.817	-1.247	32.653	0.002383
1400M300-54	0.0566	14.000	3.000	0.625	4.012	50	1.179	0.599	1.039	-1.610	41.382	0.001259
1400M300-68	0.0713	14.000	3.000	0.625	5.027	50	1.477	0.599	1.028	-1.591	50.696	0.002503

MegaJoist Section Properties

S-T-U-F Designator	PROPERTIES											
	M_{rx_LB} (in-kips)	L_u (in.)	M_{ry_LB} web comp (in-kips)	M_{ry_LB} lips comp (in-kips)	Shear V_r (kips)	Web Cripp. P_t (kips)	I_x defl ($in.^4$)	I_y ($in.^4$)	Sf (in^3.)	j (in.)	r_x (in.)	r_y (in.)
800M162-43	30.275	39.5	3.46	4.31	1.345	0.477	4.501	0.160	1.158	4.840	2.937	0.546
800M162-54	55.368	31.7	6.40	8.02	2.676	1.091	5.600	0.195	1.434	4.862	2.927	0.539
800M162-68	74.874	31.4	7.96	10.01	5.401	1.640	7.071	0.235	1.773	4.895	2.913	0.530
1000M162-43	38.686	38.5	3.47	4.37	1.070	0.458	7.524	0.168	1.605	6.999	3.577	0.518
1000M162-54	70.816	30.9	6.43	8.13	2.125	1.053	9.391	0.205	1.990	7.044	3.566	0.511
1000M162-68	96.969	30.5	8.00	10.16	4.281	1.590	11.980	0.247	2.465	7.107	3.550	0.503
1200M162-54	86.222	30.1	6.44	8.21	1.763	1.019	14.300	0.212	2.622	9.778	4.190	0.487
1200M162-68	119.052	29.7	8.03	10.27	3.546	1.546	18.393	0.256	3.253	9.880	4.173	0.478
1400M162-54	101.579	29.4	6.45	8.27	1.506	0.987	20.367	0.218	3.329	13.063	4.805	0.465
1400M162-68	141.096	28.9	8.05	10.34	3.026	1.505	26.379	0.263	4.136	13.210	4.787	0.456
800M200-43	38.453	49.9	5.22	6.47	1.345	0.477	5.302	0.292	1.326	4.394	3.018	0.708
800M200-54	67.640	40.3	9.73	12.09	2.676	1.091	6.573	0.357	1.643	4.402	3.009	0.701
800M200-68	98.130	39.9	12.25	15.15	5.401	1.640	8.142	0.435	2.035	4.414	2.996	0.693
1000M200-43	43.703	48.9	5.24	6.58	1.070	0.458	8.603	0.309	1.817	6.067	3.676	0.678
1000M200-54	76.882	39.4	9.77	12.29	2.125	1.053	10.769	0.378	2.256	6.089	3.666	0.671
1000M200-68	109.071	39.1	12.31	15.40	4.281	1.590	13.666	0.460	2.799	6.121	3.652	0.662
1200M200-54	93.439	38.6	9.79	12.43	1.763	1.019	16.334	0.394	2.944	8.225	4.306	0.643
1200M200-68	133.500	38.3	12.35	15.58	3.546	1.546	20.865	0.480	3.658	8.282	4.291	0.634
1400M200-54	109.956	37.8	9.80	12.53	1.506	0.987	23.199	0.406	3.707	10.807	4.935	0.617
1400M200-68	157.876	37.4	12.38	15.72	3.026	1.505	29.800	0.495	4.612	10.892	4.918	0.609
800M250-43	39.076	61.1	7.20	9.08	1.345	0.477	6.016	0.500	1.504	4.298	3.097	0.893
800M250-54	68.772	49.3	13.48	17.02	2.676	1.091	7.383	0.615	1.866	4.299	3.088	0.886
800M250-68	92.860	49.0	17.10	21.44	5.401	1.640	9.252	0.752	2.316	4.301	3.077	0.877
1000M250-43	48.085	60.3	7.23	9.25	1.070	0.458	10.203	0.531	2.041	5.619	3.771	0.861
1000M250-54	84.682	48.6	13.53	17.35	2.125	1.053	12.670	0.653	2.536	5.630	3.762	0.854
1000M250-68	124.893	48.3	17.19	21.86	4.281	1.590	15.753	0.800	3.151	5.645	3.749	0.845
1200M250-54	96.801	47.9	13.56	17.59	1.763	1.019	18.454	0.683	3.280	7.329	4.416	0.823
1200M250-68	135.548	47.5	17.24	22.16	3.546	1.546	23.577	0.837	4.081	7.362	4.402	0.814
1400M250-54	113.788	47.2	13.58	17.77	1.506	0.987	26.173	0.707	4.100	9.393	5.057	0.794
1400M250-68	159.985	46.8	17.29	22.39	3.026	1.505	33.567	0.866	5.106	9.446	5.042	0.785
1400M300-54	116.206	56.3	17.81	23.01	1.506	0.987	27.256	1.115	4.493	8.568	5.165	0.973
1400M300-68	164.652	55.9	22.79	30.05	3.026	1.505	36.305	1.371	5.600	8.602	5.151	0.963

Track Section Properties

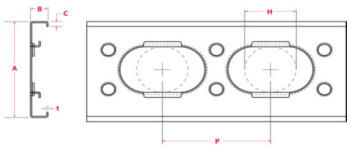
S-T-U-F Designator	DIMENSION			PROPERTIES						
	Thickness t (in.)	Depth A (in.)	Flange B (in.)	WEIGHT (lb/ft)	YIELD F_y (ksi)	Area (in.^{2})	x_{cg} (in.)	x_o (in.)	C_w (in.^{6})	J (in.^{4})
800T125-43	0.0451	8.071	1.25	1.61	33	0.473	0.166	0.436	0.589	0.000321
800T125-54	0.0566	8.085	1.25	2.02	50	0.594	0.171	0.432	0.735	0.000634
800T125-68	0.0713	8.107	1.25	2.54	50	0.748	0.177	0.427	0.920	0.001270
800T200-43	0.0451	8.071	2.00	1.84	33	0.541	0.349	0.913	2.120	0.000367
800T200-54	0.0566	8.085	2.00	2.31	50	0.679	0.353	0.908	2.660	0.000725
800T200-68	0.0713	8.107	2.00	2.91	50	0.854	0.358	0.902	3.360	0.001450
1000T125-43	0.0451	10.071	1.25	1.92	33	0.563	0.143	0.383	0.965	0.000382
1000T125-54	0.0566	10.085	1.25	2.41	50	0.707	0.148	0.376	1.210	0.000755
1000T125-68	0.0713	10.107	1.25	3.03	50	0.890	0.154	0.372	1.510	0.001510
1000T200-43	0.0451	10.071	2.00	2.15	33	0.631	0.302	0.819	3.509	0.000428
1000T200-54	0.0566	10.085	2.00	2.69	50	0.792	0.306	0.809	4.430	0.000845
1000T200-68	0.0713	10.107	2.00	3.39	50	0.997	0.312	0.803	5.580	0.001690
1200T125-54	0.0566	12.085	1.25	2.79	50	0.820	0.131	0.337	1.804	0.000876
1200T125-68	0.0713	12.107	1.25	3.51	50	1.030	0.138	0.329	2.270	0.001750
1200T200-54	0.0566	12.085	2.00	3.08	50	0.905	0.272	0.736	6.654	0.000966
1200T200-68	0.0713	12.107	2.00	3.88	50	1.140	0.277	0.725	8.430	0.001930
1400T125-54	0.0566	14.085	1.25	3.18	50	0.933	0.119	0.302	2.541	0.000997
1400T125-68	0.0713	14.107	1.25	4.00	50	1.180	0.125	0.296	3.190	0.001990
1400T200-54	0.0566	14.085	2.00	3.46	50	1.018	0.244	0.670	9.450	0.001087
1400T200-68	0.0713	14.107	2.00	4.36	50	1.280	0.250	0.661	11.900	0.002170

Track Section Properties

S-T-U-F Designator	PROPERTIES									
	r_x (in.)	r_y (in.)	I_x (in.4)	I_y (in.4)	S_f (in.3)	M_{rx} (in-kips)	L_u (in.)	Shear V_r (kips)	I_x defl. (in.4)	j (in.)
800T125-43	2.82	0.311	3.770	0.0459	0.924	19.00	23.8	1.320	3.34	6.95
800T125-54	2.83	0.310	4.750	0.0569	1.160	37.00	19.3	2.600	4.26	7.01
800T125-68	2.83	0.307	6.000	0.0705	1.450	54.70	19.2	5.220	5.83	7.08
800T200-43	3.01	0.569	4.890	0.1750	1.200	20.10	40.3	1.320	3.82	5.04
800T200-54	3.01	0.567	6.150	0.2180	1.500	39.20	32.7	2.600	4.88	5.07
800T200-68	3.02	0.564	7.790	0.2720	1.890	58.90	32.7	5.220	6.81	5.10
1000T125-43	3.43	0.290	6.630	0.0470	1.305	24.35	22.9	1.052	5.89	10.62
1000T125-54	3.43	0.289	8.330	0.0588	1.630	47.50	18.5	2.080	7.13	10.60
1000T125-68	3.44	0.286	10.500	0.0730	2.050	70.80	18.5	4.170	9.86	10.70
1000T200-43	3.64	0.539	8.361	0.1830	1.646	25.58	39.4	1.052	6.73	7.24
1000T200-54	3.64	0.537	10.500	0.2280	2.060	50.00	32.0	2.080	8.03	7.20
1000T200-68	3.65	0.534	13.300	0.2850	2.590	75.70	32.0	4.170	11.30	7.24
1200T125-54	4.03	0.271	13.335	0.0600	2.186	57.92	17.8	1.733	11.47	15.14
1200T125-68	4.04	0.269	16.800	0.0747	2.750	87.00	17.8	3.460	15.10	15.10
1200T200-54	4.27	0.511	16.464	0.2360	2.699	60.79	31.2	1.733	12.97	9.96
1200T200-68	4.27	0.508	20.800	0.2940	3.390	92.60	31.2	3.460	17.10	9.91
1400T125-54	4.63	0.256	19.977	0.0610	2.814	68.31	17.2	1.484	16.42	20.37
1400T125-68	4.63	0.254	25.200	0.0761	3.540	103.00	17.1	2.970	21.60	20.30
1400T200-54	4.88	0.487	24.221	0.2420	3.412	71.53	30.5	1.484	18.41	13.13
1400T200-68	4.88	0.485	30.600	0.3020	4.290	109.00	30.5	2.970	24.20	13.10

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		800M162-43			800M162-54			800M162-68			800M200-43		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
9	Strength	214	161	107	383	287	192	527	395	263	245	184	123
	L/360	270	202	135	336	252	168	424	318	212	318	238	159
10	Strength	173	130	87	310	233	155	427	320	213	199	149	99
	L/360	197	148	98	245	184	122	309	232	155	232	174	116
11	Strength	143	108	72	257	192	128	352	264	176	164	123	82
	L/360	148	111	74	184	138	92	232	174	116	174	131	87
12	Strength	120	90	60	216	162	108	296	222	148	138	103	69
	L/360	114	85	57	142	106	71	179	134	89	134	101	67
13	Strength	103	77	51	184	138	92	252	189	126	118	88	59
	L/360	90	67	45	111	84	56	141	105	70	105	79	53
14	Strength	88	66	44	158	119	79	218	163	109	101	76	51
	L/360	72	54	36	89	67	45	113	84	56	84	63	42
15	Strength	77	58	39	138	103	69	190	142	95	88	66	44
	L/360	58	44	29	73	54	36	92	69	46	69	51	34
16	Strength	68	51	34	121	91	61	167	125	83	78	58	39
	L/360	48	36	24	60	45	30	75	57	38	57	42	28
17	Strength	60	45	30	107	81	54	148	111	74	69	52	34
	L/360	40	30	20	50	37	25	63	47	31	47	35	24
18	Strength	54	40	27	96	72	48	132	99	66	61	46	31
	L/360	34	25	17	42	31	21	53	40	26	40	30	20
19	Strength	48	36	24	86	64	43	118	89	59	55	41	28
	L/360	29	22	14	36	27	18	45	34	23	34	25	17
20	Strength	43	33	22	78	58	39	107	80	53	50	37	25
	L/360	25	18	12	31	23	15	39	29	19	29	22	14
21	Strength	39	29	20	70	53	35	97	73	48	45	34	23
	L/360	21	16	11	26	20	13	33	25	17	25	19	13
22	Strength	36	27	18	64	48	32	88	66	44	41	31	21
	L/360	18	14	9	23	17	11	29	22	15	22	16	11
23	Strength	33	25	16	59	44	29	81	60	40	38	28	19
	L/360	16	12	8	20	15	10	25	19	13	19	14	10

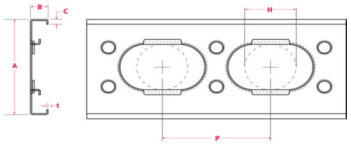
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		800M200-54			800M200-68			800M250-43			800M250-54		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
10	Strength	354	265	177	518	388	259	209	157	105	371	278	186
	L/360	287	215	144	356	267	178	263	197	131	323	242	161
11	Strength	292	219	146	428	321	214	173	130	86	307	230	153
	L/360	216	162	108	267	200	134	198	148	99	242	182	121
12	Strength	246	184	123	360	270	180	145	109	73	258	193	129
	L/360	166	125	83	206	154	103	152	114	76	187	140	93
13	Strength	209	157	105	306	230	153	124	93	62	220	165	110
	L/360	131	98	65	162	121	81	120	90	60	147	110	73
14	Strength	181	135	90	264	198	132	107	80	53	189	142	95
	L/360	105	79	52	130	97	65	96	72	48	118	88	59
15	Strength	157	118	79	230	173	115	93	70	46	165	124	82
	L/360	85	64	43	105	79	53	78	58	39	96	72	48
16	Strength	138	104	69	202	152	101	82	61	41	145	109	72
	L/360	70	53	35	87	65	43	64	48	32	79	59	39
17	Strength	122	92	61	179	134	90	72	54	36	128	96	64
	L/360	58	44	29	72	54	36	54	40	27	66	49	33
18	Strength	109	82	55	160	120	80	65	48	32	115	86	57
	L/360	49	37	25	61	46	31	45	34	23	55	41	28
19	Strength	98	74	49	143	108	72	58	43	29	103	77	51
	L/360	42	31	21	52	39	26	38	29	19	47	35	24
20	Strength	88	66	44	129	97	65	52	39	26	93	70	46
	L/360	36	27	18	44	33	22	33	25	16	40	30	20
21	Strength	80	60	40	117	88	59	47	36	24	84	63	42
	L/360	31	23	16	38	29	19	28	21	14	35	26	17
22	Strength	73	55	37	107	80	53	43	32	22	77	58	38
	L/360	27	20	13	33	25	17	25	19	12	30	23	15
23	Strength	67	50	33	98	73	49	40	30	20	70	53	35
	L/360	24	18	12	29	22	15	22	16	11	27	20	13
25	Strength	61	46	31	90	67	45	36	27	18	64	48	32
	L/360	21	16	10	26	19	13	19	14	10	23	18	12

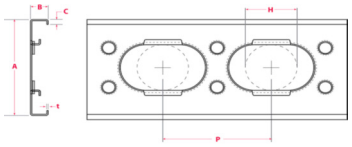
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		800M250-68			800M300-54			800M300-68			1000M162-43		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
11	Strength	421	316	211	316	237	158	435	327	218	176	132	88
	L/360	304	228	152	258	194	129	332	249	166	247	185	124
12	Strength	354	266	177	265	199	133	366	274	183	148	111	74
	L/360	234	176	117	199	149	100	256	192	128	190	143	95
13	Strength	302	226	151	226	169	113	312	234	156	126	94	63
	L/360	184	138	92	157	117	78	201	151	101	150	112	75
14	Strength	260	195	130	195	146	97	269	202	134	109	81	54
	L/360	147	111	74	125	94	63	161	121	80	120	90	60
15	Strength	227	170	113	170	127	85	234	176	117	95	71	47
	L/360	120	90	60	102	76	51	131	98	65	97	73	49
16	Strength	199	149	100	149	112	75	206	154	103	83	62	42
	L/360	99	74	49	84	63	42	108	81	54	80	60	40
17	Strength	176	132	88	132	99	66	182	137	91	74	55	37
	L/360	82	62	41	70	53	35	90	67	45	67	50	33
18	Strength	157	118	79	118	88	59	163	122	81	66	49	33
	L/360	69	52	35	59	44	29	76	57	38	56	42	28
19	Strength	141	106	71	106	79	53	146	109	73	59	44	29
	L/360	59	44	29	50	38	25	64	48	32	48	36	24
20	Strength	127	96	64	95	72	48	132	99	66	53	40	27
	L/360	51	38	25	43	32	22	55	41	28	41	31	21
21	Strength	116	87	58	87	65	43	119	90	60	48	36	24
	L/360	44	33	22	37	28	19	48	36	24	36	27	18
22	Strength	105	79	53	79	59	39	109	82	54	44	33	22
	L/360	38	28	19	32	24	16	41	31	21	31	23	15
23	Strength	96	72	48	72	54	36	100	75	50	40	30	20
	L/360	33	25	17	28	21	14	36	27	18	27	20	14
24	Strength	89	66	44	66	50	33	91	69	46	37	28	18
	L/360	29	22	15	25	19	12	32	24	16	24	18	12
25	Strength	82	61	41	61	46	31	84	63	42	34	26	17
	L/360	26	19	13	22	17	11	28	21	14	21	16	11

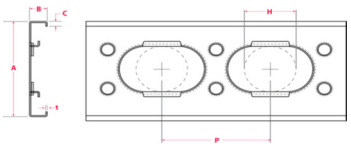
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		1000M162-54			1000M162-68			1000M200-43			1000M200-54		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
12	Strength	265	199	133	370	277	185	172	129	86	306	230	153
	L/360	238	178	119	303	227	152	218	163	109	272	204	136
13	Strength	226	169	113	315	236	158	146	110	73	261	196	131
	L/360	187	140	93	238	179	119	171	128	86	214	161	107
14	Strength	195	146	97	272	204	136	126	95	63	225	169	113
	L/360	150	112	75	191	143	95	137	103	69	172	129	86
15	Strength	170	127	85	237	178	118	110	82	55	196	147	98
	L/360	122	91	61	155	116	78	111	84	56	139	105	70
16	Strength	149	112	75	208	156	104	97	73	48	172	129	86
	L/360	100	75	50	128	96	64	92	69	46	115	86	57
17	Strength	132	99	66	184	138	92	86	64	43	153	114	76
	L/360	84	63	42	107	80	53	77	57	38	96	72	48
18	Strength	118	88	59	164	123	82	76	57	38	136	102	68
	L/360	70	53	35	90	67	45	64	48	32	81	61	40
19	Strength	106	79	53	148	111	74	69	51	34	122	92	61
	L/360	60	45	30	76	57	38	55	41	27	69	51	34
20	Strength	95	72	48	133	100	67	62	46	31	110	83	55
	L/360	51	38	26	65	49	33	47	35	23	59	44	29
21	Strength	87	65	43	121	91	60	56	42	28	100	75	50
	L/360	44	33	22	57	42	28	41	30	20	51	38	25
22	Strength	79	59	39	110	83	55	51	38	26	91	68	46
	L/360	39	29	19	49	37	25	35	26	18	44	33	22
23	Strength	72	54	36	101	76	50	47	35	23	83	63	42
	L/360	34	25	17	43	32	22	31	23	15	39	29	19
24	Strength	66	50	33	92	69	46	43	32	21	77	57	38
	L/360	30	22	15	38	28	19	27	20	14	34	26	17
25	Strength	61	46	31	85	64	43	40	30	20	71	53	35
	L/360	26	20	13	34	25	17	24	18	12	30	23	15
26	Strength	56	42	28	79	59	39	37	27	18	65	49	33
	L/360	23	18	12	30	22	15	21	16	11	27	20	13

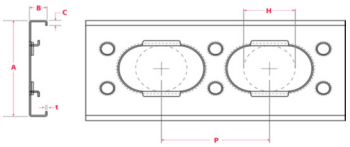
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		1000M200-68			1000M250-43			1000M250-54			1000M250-68		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
13	Strength	361	271	181	155	116	78	276	207	138	382	287	191
	L/360	272	204	136	203	152	101	252	189	126	313	235	157
14	Strength	311	233	156	134	100	67	238	178	119	329	247	165
	L/360	218	163	109	163	122	81	202	151	101	251	188	125
15	Strength	271	203	136	117	87	58	207	155	104	287	215	143
	L/360	177	133	88	132	99	66	164	123	82	204	153	102
16	Strength	238	179	119	102	77	51	182	137	91	252	189	126
	L/360	146	109	73	109	82	54	135	101	68	168	126	84
17	Strength	211	158	106	91	68	45	161	121	81	223	168	112
	L/360	122	91	61	91	68	45	113	85	56	140	105	70
18	Strength	188	141	94	81	61	40	144	108	72	199	149	100
	L/360	102	77	51	76	57	38	95	71	47	118	89	59
19	Strength	169	127	85	73	54	36	129	97	65	179	134	89
	L/360	87	65	44	65	49	33	81	61	40	100	75	50
20	Strength	153	114	76	66	49	33	116	87	58	161	121	81
	L/360	75	56	37	56	42	28	69	52	35	86	65	43
21	Strength	138	104	69	59	45	30	106	79	53	146	110	73
	L/360	64	48	32	48	36	24	60	45	30	74	56	37
22	Strength	126	95	63	54	41	27	96	72	48	133	100	67
	L/360	56	42	28	42	31	21	52	39	26	65	48	32
23	Strength	115	86	58	50	37	25	88	66	44	122	92	61
	L/360	49	37	25	37	27	18	46	34	23	57	42	28
24	Strength	106	79	53	46	34	23	81	61	40	112	84	56
	L/360	43	32	22	32	24	16	40	30	20	50	37	25
25	Strength	98	73	49	42	31	21	75	56	37	103	77	52
	L/360	38	29	19	29	21	14	35	27	18	44	33	22
26	Strength	90	68	45	39	29	19	69	52	34	96	72	48
	L/360	34	25	17	25	19	13	32	24	16	39	29	20
27	Strength	84	63	42	36	27	18	64	48	32	89	66	44
	L/360	30	23	15	23	17	11	28	21	14	35	26	17

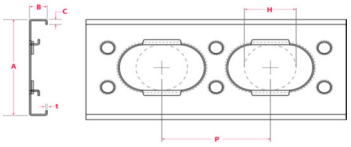
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2, 3]	Section Identification											
		1000M300-54			1000M300-68			1200M162-54			1200M162-68		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
14	Strength	245	184	123	341	256	170	226	169	113	319	239	159
	L/360	214	161	107	272	204	136	228	171	114	293	220	146
15	Strength	214	160	107	297	223	148	196	147	98	278	208	139
	L/360	174	131	87	222	166	111	185	139	93	238	179	119
16	Strength	188	141	94	261	196	130	173	129	86	244	183	122
	L/360	144	108	72	183	137	91	153	114	76	196	147	98
17	Strength	166	125	83	231	173	116	153	115	76	216	162	108
	L/360	120	90	60	152	114	76	127	95	64	164	123	82
18	Strength	148	111	74	206	155	103	136	102	68	193	145	96
	L/360	101	76	50	128	96	64	107	80	54	138	103	69
19	Strength	133	100	67	185	139	93	122	92	61	173	130	87
	L/360	86	64	43	109	82	54	91	68	46	117	88	59
20	Strength	120	90	60	167	125	84	111	83	55	156	117	78
	L/360	73	55	37	93	70	47	78	59	39	100	75	50
21	Strength	109	82	55	151	114	76	100	75	50	142	106	71
	L/360	63	48	32	81	61	40	67	51	34	87	65	43
22	Strength	99	75	50	138	104	69	91	68	46	129	97	65
	L/360	55	41	28	70	53	35	59	44	29	75	57	38
23	Strength	91	68	45	126	95	63	84	63	42	118	89	59
	L/360	48	36	24	61	46	31	51	39	26	66	50	33
24	Strength	84	63	42	116	87	58	77	58	38	108	81	54
	L/360	43	32	21	54	41	27	45	34	23	58	44	29
25	Strength	77	58	38	107	80	53	71	53	35	100	75	50
	L/360	38	28	19	48	36	24	40	30	20	51	39	26
26	Strength	71	53	36	99	74	49	65	49	33	92	69	46
	L/360	33	25	17	43	32	21	36	27	18	46	34	23
27	Strength	66	49	33	92	69	46	61	45	30	86	64	43
	L/360	30	22	15	38	28	19	32	24	16	41	31	20
28	Strength	61	46	31	85	64	43	56	42	28	80	60	40
	L/360	27	20	13	34	26	17	28	21	14	37	27	18

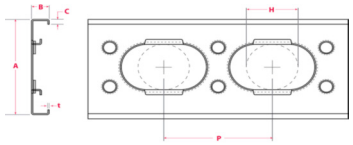
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2, 3]	Section Identification											
		1200M200-54			1200M200-68			1200M250-54			1200M250-68		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
15	Strength	230	173	115	322	241	161	246	184	123	343	258	172
	L/360	212	159	106	270	203	135	239	179	119	305	229	153
16	Strength	202	152	101	283	212	141	216	162	108	302	226	151
	L/360	174	131	87	223	167	111	197	148	98	252	189	126
17	Strength	179	134	90	250	188	125	191	144	96	267	201	134
	L/360	145	109	73	186	139	93	164	123	82	210	157	105
18	Strength	160	120	80	223	168	112	171	128	85	239	179	119
	L/360	122	92	61	156	117	78	138	104	69	177	133	88
19	Strength	143	108	72	201	150	100	153	115	77	214	161	107
	L/360	104	78	52	133	100	66	118	88	59	150	113	75
20	Strength	129	97	65	181	136	90	138	104	69	193	145	97
	L/360	89	67	45	114	85	57	101	76	50	129	97	64
21	Strength	117	88	59	164	123	82	125	94	63	175	131	88
	L/360	77	58	39	98	74	49	87	65	44	111	83	56
22	Strength	107	80	53	150	112	75	114	86	57	160	120	80
	L/360	67	50	34	86	64	43	76	57	38	97	73	48
23	Strength	98	73	49	137	103	68	105	78	52	146	110	73
	L/360	59	44	29	75	56	37	66	50	33	85	64	42
24	Strength	90	67	45	126	94	63	96	72	48	134	101	67
	L/360	52	39	26	66	49	33	58	44	29	75	56	37
25	Strength	83	62	41	116	87	58	89	66	44	124	93	62
	L/360	46	34	23	58	44	29	52	39	26	66	49	33
26	Strength	77	57	38	107	80	54	82	61	41	114	86	57
	L/360	41	30	20	52	39	26	46	34	23	59	44	29
27	Strength	71	53	36	99	74	50	76	57	38	106	80	53
	L/360	36	27	18	46	35	23	41	31	20	52	39	26
28	Strength	66	50	33	92	69	46	71	53	35	99	74	49
	L/360	33	24	16	42	31	21	37	28	18	47	35	23
29	Strength	62	46	31	86	65	43	66	49	33	92	69	46
	L/360	29	22	15	37	28	19	33	25	17	42	32	21

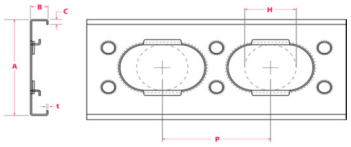
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		1200M300-54			1200M300-68			1400M162-54			1400M162-68		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
16	Strength	220	165	110	314	236	157	188	141	94	275	206	138
	L/360	225	169	112	283	212	141	217	163	109	281	211	141
17	Strength	199	149	100	278	209	139	171	128	85	244	183	122
	L/360	187	141	94	236	177	118	181	136	91	235	176	117
18	Strength	178	133	89	248	186	124	152	114	76	217	163	109
	L/360	158	118	79	199	149	99	153	114	76	198	148	99
19	Strength	159	120	80	223	167	111	136	102	68	195	146	98
	L/360	134	101	67	169	127	84	130	97	65	168	126	84
20	Strength	144	108	72	201	151	101	123	92	62	176	132	88
	L/360	115	86	58	145	109	72	111	83	56	144	108	72
21	Strength	130	98	65	182	137	91	112	84	56	160	120	80
	L/360	99	75	50	125	94	63	96	72	48	124	93	62
22	Strength	119	89	59	166	125	83	102	76	51	145	109	73
	L/360	86	65	43	109	82	54	84	63	42	108	81	54
23	Strength	109	82	54	152	114	76	93	70	47	133	100	67
	L/360	76	57	38	95	71	48	73	55	37	95	71	47
24	Strength	100	75	50	140	105	70	86	64	43	122	92	61
	L/360	67	50	33	84	63	42	64	48	32	83	63	42
25	Strength	92	69	46	129	97	64	79	59	39	113	85	56
	L/360	59	44	29	74	56	37	57	43	28	74	55	37
26	Strength	85	64	43	119	89	59	73	55	36	104	78	52
	L/360	52	39	26	66	49	33	51	38	25	66	49	33
27	Strength	79	59	39	110	83	55	68	51	34	97	72	48
	L/360	47	35	23	59	44	29	45	34	23	59	44	29
28	Strength	73	55	37	103	77	51	63	47	31	90	67	45
	L/360	42	31	21	53	40	26	41	30	20	53	39	26
29	Strength	68	51	34	96	72	48	59	44	29	84	63	42
	L/360	38	28	19	48	36	24	36	27	18	47	35	24
30	Strength	64	48	32	89	67	45	55	41	27	78	59	39
	L/360	34	26	17	43	32	21	33	25	16	43	32	21

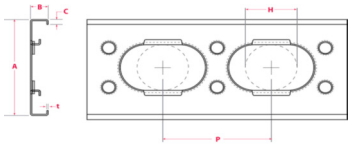
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		1400M200-54			1400M200-68			1400M250-54			1400M250-68		
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
18	Strength	167	126	84	254	191	127	167	126	84	274	206	137
	L/360	174	130	87	223	167	112	196	147	98	252	189	126
19	Strength	159	119	79	228	171	114	159	119	79	246	184	123
	L/360	148	111	74	190	142	95	167	125	83	214	160	107
20	Strength	146	109	73	206	154	103	151	113	75	222	167	111
	L/360	127	95	63	163	122	81	143	107	71	183	138	92
21	Strength	132	99	66	187	140	93	143	107	71	201	151	101
	L/360	109	82	55	141	105	70	124	93	62	158	119	79
22	Strength	121	90	60	170	128	85	130	98	65	183	138	92
	L/360	95	71	48	122	92	61	107	81	54	138	103	69
23	Strength	110	83	55	156	117	78	119	89	60	168	126	84
	L/360	83	62	42	107	80	54	94	71	47	121	90	60
24	Strength	101	76	51	143	107	71	109	82	55	154	116	77
	L/360	73	55	37	94	71	47	83	62	41	106	80	53
25	Strength	93	70	47	132	99	66	101	76	50	142	107	71
	L/360	65	49	32	83	63	42	73	55	37	94	70	47
26	Strength	86	65	43	122	91	61	93	70	47	131	99	66
	L/360	58	43	29	74	56	37	65	49	33	83	63	42
27	Strength	80	60	40	113	85	56	86	65	43	122	91	61
	L/360	52	39	26	66	50	33	58	44	29	75	56	37
28	Strength	74	56	37	105	79	53	80	60	40	113	85	57
	L/360	46	35	23	59	44	30	52	39	26	67	50	33
29	Strength	69	52	35	98	73	49	75	56	37	106	79	53
	L/360	42	31	21	53	40	27	47	35	23	60	45	30
30	Strength	65	49	32	91	69	46	70	53	35	99	74	49
	L/360	38	28	19	48	36	24	42	32	21	54	41	27
31	Strength	61	46	30	86	64	43	66	49	33	92	69	46
	L/360	34	26	17	44	33	22	38	29	19	49	37	25
32	Strength	57	43	28	80	60	40	62	46	31	87	65	43
	L/360	31	23	15	40	30	20	35	26	17	45	34	22

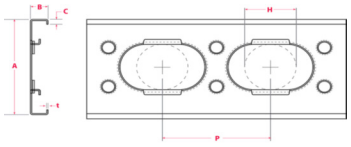
NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.

IMPERIAL BUILDING PRODUCTS

Factored Uniformly Distributed Single-Span MegaJoist Load in psf [1]



Span (feet)	Design Condition [2,3]	Section Identification											
		1400M300-54			1400M300-68								
		MegaJoist Spacing (inches)											
		12	16	24	12	16	24	12	16	24	12	16	24
19	Strength	159	119	79	258	193	129						
	L/360	174	130	87	231	173	116						
20	Strength	151	113	75	233	175	116						
	L/360	149	112	74	198	149	99						
21	Strength	143	108	72	211	158	106						
	L/360	129	96	64	171	128	86						
22	Strength	137	103	68	192	144	96						
	L/360	112	84	56	149	112	75						
23	Strength	125	94	63	176	132	88						
	L/360	98	73	49	130	98	65						
24	Strength	115	86	57	162	121	81						
	L/360	86	65	43	115	86	57						
25	Strength	106	79	53	149	112	75						
	L/360	76	57	38	102	76	51						
26	Strength	98	73	49	138	103	69						
	L/360	68	51	34	90	68	45						
27	Strength	91	68	45	128	96	64						
	L/360	61	45	30	81	60	40						
28	Strength	84	63	42	119	89	59						
	L/360	54	41	27	72	54	36						
29	Strength	79	59	39	111	83	55						
	L/360	49	37	24	65	49	33						
30	Strength	74	55	37	103	78	52						
	L/360	44	33	22	59	44	29						
31	Strength	69	52	34	97	73	48						
	L/360	40	30	20	53	40	27						
32	Strength	65	48	32	91	68	45						
	L/360	36	27	18	48	36	24						
33	Strength	61	46	30	86	64	43						
	L/360	33	25	17	44	33	22						

NOTES: 1 - For a detailed explanation of this table refer to the Design Criteria Section.

2 - Strength values are based upon factored loads; deflection values are based on specified loads.

3 - For other deflection load limits refer to the method of calculation in the Design Criteria section.