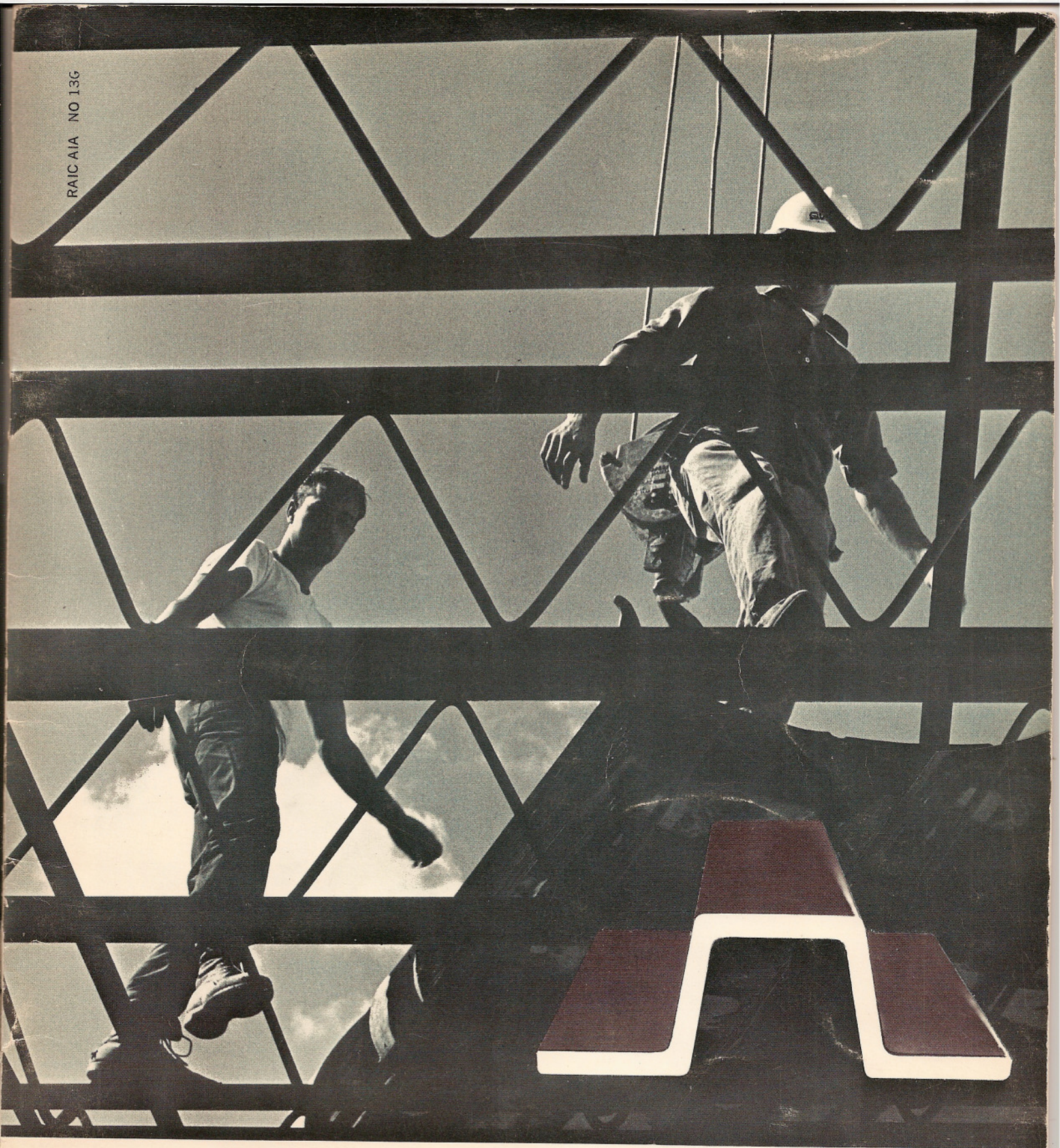


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GWS OPEN WEB STEEL JOISTS
WESTERN (W) 1973 SERIES

Great West Steel Industries Ltd.

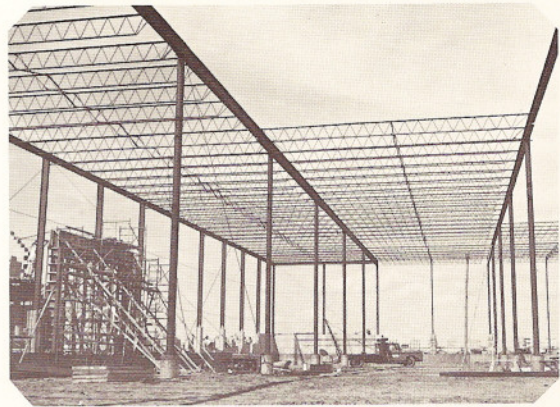


Great West Steel Industries Ltd.

GREAT WEST STEEL INDUSTRIES LTD.,

Vancouver, with plants in Edmonton, Alberta; Calgary, Alberta; Saskatoon, Saskatchewan; New Westminster, B.C.; Toronto, Ontario; Fontana, California; and sales offices in Seattle, Washington; San Francisco, California; Montreal, P.Q.; Winnipeg, Manitoba; serves all the areas of North America. This catalogue contains the (W) Western Series Joist which are used in Western Canada and the Pacific Northwest United States.

The company is fully approved by the Canadian Welding Bureau, and is a member of the Canadian Construction Association.



The **GWS** Open Web Steel Joists are produced using modern engineering design and fabrication methods.

The hot rolled chord sections are high strength steel of 55,000 P.S.I. minimum guaranteed yield stress, using closely controlled chemistry to obtain the qualities of ductility and weldability with high yield stress. All the steel used in these joists is hot rolled in Western Canada and readily available at all times.

Modern fabrication methods using automatic equipment for web bending, resistance welding and other operations permit exceptionally economical fabrication.

Loading tables contained in this catalogue show total allowable dead plus live loads together with the allowable live load permissible, without undue deflection, for spans from 10 feet to 120 feet.

This catalogue has been prepared for the convenience of Architects, Engineers and Owners in Western Canada and the North Western United States who will find the new joist series a valuable contribution to the economic and efficient design of buildings. Design of Optimum Economy has been evolved by the use of IBM computers.

Separate catalogues covering the joists fabricated in Eastern Canada (E) Series and California (C) Series are also available.



Canadian Construction Association



Canadian Welding Bureau

The company provides the building industry with the following products:

- SHORT SPAN JOISTS
- INTERMEDIATE SPAN JOISTS
- LONG SPAN JOISTS
- STRUCTURAL STEEL
- MISCELLANEOUS IRON
- MECHANICAL HANDLING EQUIPMENT

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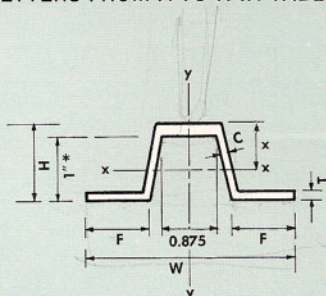


OPEN WEB STEEL JOISTS

CHORD DIMENSIONS AND PROPERTIES

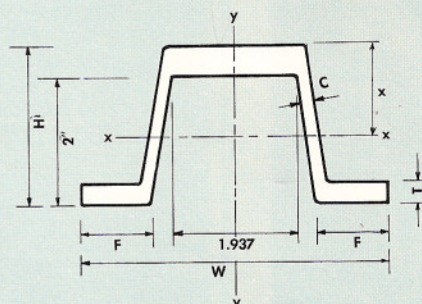
SHALLOW HAT SECTION

(LETTERS FROM A TO K IN TABLES)



DEEP HAT SECTION

(LETTERS FROM M TO R IN TABLES)



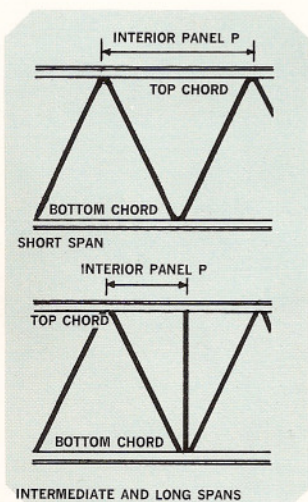
CHORD DIMENSION AND PROPERTIES

JOIST	NOMINAL SIZE AND WT./FT. IN LBS.				AREA IN. ²	MEASUREMENT IN INCHES					I _{xx}	S _{xx}	r _{xx}	r _{yy}	x
						W	F	H	T	C					
B	2 1/2	@	1.802		0.530	2 1/2	5/8	1.132	0.132	0.110	0.098	0.164	0.420	0.667	0.600
C	3 1/4	@	2.169		0.638	3 1/4	1	1.134	0.134	0.111	0.109	0.160	0.422	0.838	0.685
D	3 1/4	@	2.574		0.757	3 1/4	1	1.176	0.176	0.118	0.147	0.209	0.437	0.852	0.698
E	3 1/4	@	3.033		0.892	3 1/4	1	1.222	0.222	0.127	0.181	0.248	0.448	0.873	0.720
F	4 1/8	@	3.600		1.059	4 1/8	1 7/16	1.212	0.212	0.123	0.209	0.265	0.435	1.110	0.790
G	4 1/8	@	4.280		1.259	4 1/8	1 7/16	1.266	0.266	0.133	0.232	0.289	0.438	1.117	0.820
H	4 1/8	@	5.083		1.495	4 1/8	1 7/16	1.320	0.320	0.141	0.291	0.342	0.440	1.125	0.848
J	4 1/8	@	5.991		1.762	4 1/8	1 7/16	1.381	0.381	0.152	0.350	0.402	0.442	1.134	0.873
K	4 1/8	@	6.763		1.989	4 1/8	1 7/16	1.432	0.432	0.161	0.393	0.438	0.444	1.144	0.897
L	4 1/8	@	7.606		2.237	4 1/8	1 7/16	1.484	0.481	0.170	0.436	0.474	0.446	1.155	0.922
X	5 1/4	@	8.000		2.353	4 3/4	1 1/16	2.290	0.290	0.254	1.750	1.460	0.847	1.399	1.155
M	5 1/4	@	8.517		2.505	4 3/4	1 1/16	2.319	0.319	0.259	1.823	1.559	0.853	1.443	1.170
N	5 1/4	@	9.506		2.796	4 3/4	1 1/16	2.374	0.374	0.269	2.098	1.754	0.866	1.451	1.200
P	5 1/4	@	10.557		3.105	4 3/4	1 1/16	2.433	0.433	0.279	2.393	1.955	0.877	1.457	1.220
Q	5 1/4	@	11.706		3.443	4 3/4	1 1/16	2.498	0.498	0.290	2.719	2.167	0.888	1.463	1.260
R	5 1/4	@	12.903		3.795	4 3/4	1 1/16	2.565	0.565	0.302	3.063	2.382	0.898	1.468	1.290



OPEN WEB STEEL JOISTS

JOIST DIMENSIONS AND PROPERTIES



The first numbers indicate the nominal depth of the joist in inches, the letter which follows indicates the top chord size.

In most cases the actual depth is equal or slightly greater than the nominal depth.

JOIST DIMENSION AND PROPERTIES

JOIST TYPE	NOMINAL DEPTH	CHORD SIZE		INTERIOR PANEL 'P'	ACTUAL DEPTH	SPACE BETWEEN CHORDS	MOMENT OF INERTIA	MOMENT OF RESISTANCE
	In.	Top	Btm.	In.	In.	In.	In. ⁴	Ft.-Kips
8B	8	B	B	24	8.014	5.75	11.12	8.05
8C	8	C	B	24	8.016	5.75	14.60	10.28
8D	8	D	C	24	8.060	5.75	17.96	12.51
8E	8	E	D	24	8.148	5.75	21.48	14.90
8F	8	F	E	24	8.184	5.75	26.01	17.80
10B	10	B	B	24	10.014	7.75	21.4	10.46
10C	10	C	B	24	10.016	7.75	23.90	13.30
10D	10	D	C	24	10.060	7.75	29.22	16.00
10E	10	E	D	24	10.148	7.75	34.86	19.10
10F	10	F	E	24	10.184	7.75	42.00	22.70
10G	10	G	F	24	10.228	7.75	50.96	27.20
12B	12	B	B	24	12.014	9.75	32.0	12.85
12C	12	C	B	24	12.016	9.75	35.53	16.10
12D	12	D	C	24	12.060	9.75	43.26	19.50
12E	12	E	D	24	12.148	9.75	51.52	23.20
12F	12	F	E	24	12.184	9.75	61.87	27.60
12G	12	G	F	24	12.228	9.75	74.80	33.10
12H	12	H	G	24	12.336	9.75	89.80	39.50
14B	14	B	B	24	14.014	11.75	44.7	15.25
14C	14	C	B	24	14.016	11.75	49.46	19.00
14D	14	D	C	24	14.060	11.75	60.06	23.10
14E	14	E	D	24	14.148	11.75	71.45	27.40
14F	14	F	E	24	14.184	11.75	85.62	32.50
14G	14	G	F	24	14.228	11.75	103.24	39.00
14H	14	H	G	24	14.336	11.75	123.75	46.40
16B	16	B	B	24	16.014	13.75	59.5	17.70
16C	16	C	B	24	16.016	13.75	65.71	21.90
16D	16	D	C	24	16.060	13.75	79.63	26.50
16E	16	E	D	24	16.148	13.75	94.65	31.60
16F	16	F	E	24	16.184	13.75	113.24	37.40
16G	16	G	F	24	16.228	13.75	136.28	44.80
16H	16	H	G	24	16.336	13.75	163.16	53.40
16J	16	J	H	24	16.451	13.75	195.06	63.70
18B	18	B	B	24	18.014	15.75	76.4	20.10
18C	18	C	B	24	18.016	15.75	84.2	24.80
18D	18	D	C	24	18.060	15.75	101.9	30.00
18E	18	E	D	24	18.148	15.75	121.1	36.70
18F	18	F	E	24	18.184	15.75	144.7	42.40
18G	18	G	F	24	18.228	15.75	173.9	50.60
18H	18	H	G	24	18.336	15.75	208.0	60.20
18J	18	J	H	24	18.451	15.75	248.4	71.90
18K	18	K	J	24	18.563	15.75	288.6	81.12
18L	18	L	K	24	18.666	15.75	328.7	91.70



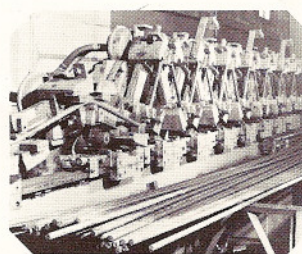
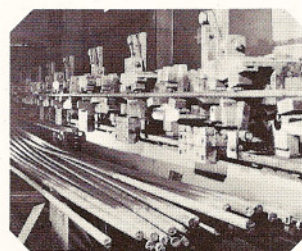
OPEN WEB STEEL JOISTS

JOIST DIMENSIONS AND PROPERTIES

JOIST DIMENSIONS AND PROPERTIES - continued

JOIST TYPE	NOMINAL DEPTH	CHORD SIZE		INTERIOR PANEL 'P'	ACTUAL DEPTH	SPACE BETWEEN CHORDS	MOMENT OF INERTIA	MOMENT OF RESISTANCE
	In.	Top	Btm.	In.	In.	In.	In. ⁴	Ft.-Kips
20B	20	B	B	24	20.014	17.75	95.5	22.50
20C	20	C	B	24	20.016	17.75	105.1	27.70
20D	20	D	C	24	20.060	17.75	127.0	33.60
20E	20	E	D	24	20.148	17.75	150.9	39.90
20F	20	F	E	24	20.184	17.75	180.0	47.40
20G	20	G	F	24	20.228	17.75	216.1	56.50
20H	20	H	G	24	20.336	17.75	258.4	67.20
20J	20	J	H	24	20.451	17.75	308.2	80.20
20K	20	K	J	24	20.563	17.75	357.9	90.37
20L	20	L	K	24	20.666	17.75	407.5	102.52
22B	22	B	B	24	22.014	19.75	116.4	24.90
22C	22	C	B	24	22.016	19.75	128.3	30.70
22D	22	D	C	24	22.060	19.75	154.9	37.00
22E	22	E	D	24	22.148	19.75	183.9	44.00
22F	22	F	E	24	22.184	19.75	219.3	52.20
22G	22	G	F	24	22.228	19.75	263.0	62.30
22H	22	H	G	24	22.336	19.75	314.2	74.20
22J	22	J	H	24	22.451	19.75	374.5	88.40
22K	22	K	J	24	22.563	19.75	434.7	99.62
22L	22	L	K	24	22.666	19.75	494.7	112.96
24B	24	B	B	24	24.014	21.75	139.9	27.20
24C	24	C	B	24	24.016	21.75	153.8	33.50
24D	24	D	C	24	24.060	21.75	185.6	40.60
24E	24	E	D	24	24.148	21.75	220.2	48.20
24F	24	F	E	24	24.184	21.75	262.4	57.00
24G	24	G	F	24	24.228	21.75	314.4	68.00
24H	24	H	G	24	24.336	21.75	375.5	81.00
24J	24	J	H	24	24.451	21.75	447.3	96.50
24K	24	K	J	24	24.563	21.75	518.9	108.87
24L	24	L	K	24	24.666	21.75	590.4	123.40
26C	26	C	B	24	26.016	23.75	181.7	36.50
26D	26	D	C	24	26.060	23.75	219.0	44.00
26E	26	E	D	24	26.148	23.75	259.8	52.40
26F	26	F	E	24	26.184	23.75	309.4	62.00
26G	26	G	F	24	26.228	23.75	370.4	73.90
26H	26	H	G	24	26.336	23.75	442.2	88.00
26J	26	J	H	24	26.451	23.75	526.5	104.80
26K	26	K	J	24	26.563	23.75	610.7	118.12
26L	26	L	K	24	26.666	23.75	694.5	133.84
28C	28	C	B	24	28.016	25.75	211.8	39.40
28D	28	D	C	24	28.060	25.75	255.2	47.60
28E	28	E	D	24	28.148	25.75	302.6	56.50
28F	28	F	E	24	28.184	25.75	360.2	67.00
28G	28	G	F	24	28.228	25.75	431.1	79.70
28H	28	H	G	24	28.336	25.75	514.4	95.00
28J	28	J	H	24	28.451	25.75	612.3	113.20
28K	28	K	J	24	28.563	25.75	709.9	127.36
28L	28	L	K	24	28.666	25.75	807.1	144.28
30C	30	C	B	24	30.016	27.75	244.3	42.40
30D	30	D	C	24	30.060	27.75	294.1	51.10

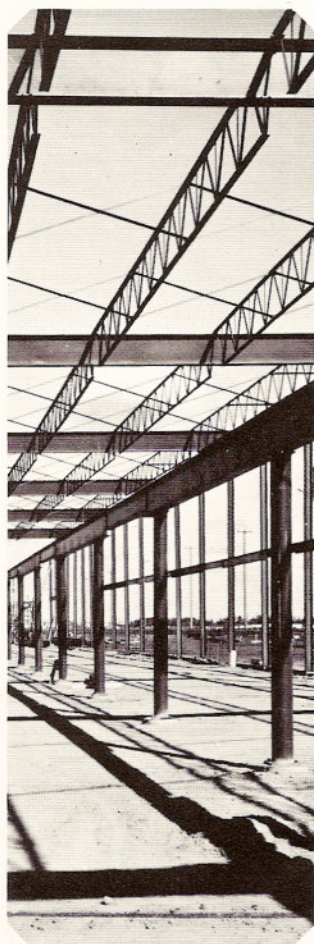
Photos below show bar bending equipment used in fabrication of **GWS** Short Span Steel Joists.





OPEN WEB STEEL JOISTS

JOIST DIMENSIONS AND PROPERTIES



JOIST DIMENSIONS AND PROPERTIES - *continued*

JOIST TYPE	NOMINAL DEPTH	CHORD SIZE		INTERIOR PANEL 'P'	ACTUAL DEPTH	SPACE BETWEEN CHORDS	MOMENT OF INERTIA	MOMENT OF RESISTANCE
		Top	Btm.					
	In.			In.	In.	In.	In. ⁴	Ft.-Kips
30E	30	E	D	24	30.148	27.75	348.8	60.60
30F	30	F	E	24	30.184	27.75	415.0	71.80
30G	30	G	F	24	30.228	27.75	496.3	85.50
30H	30	H	G	24	30.336	27.75	592.1	102.10
30J	30	J	H	24	30.451	27.75	704.4	121.10
30K	30	K	J	24	30.563	27.75	816.5	136.61
30L	30	L	K	24	30.666	27.75	928.2	154.72
32C	32	C	B	24	32.016	29.75	279.1	45.20
32D	32	D	C	24	32.060	29.75	335.9	54.60
32E	32	E	D	24	32.148	29.75	398.2	64.90
32F	32	F	E	24	32.184	29.75	473.6	76.70
32G	32	G	F	24	32.228	29.75	566.2	91.50
32H	32	H	G	24	32.336	29.75	675.3	108.80
32J	32	J	H	24	32.451	29.75	803.1	129.50
32K	32	K	J	24	32.563	29.75	930.7	145.86
32L	32	L	K	24	32.666	29.75	1057.6	165.16
36C	36	C	B	24	36.016	33.75	355.6	51.00
36D	36	D	C	24	36.060	33.75	427.6	61.50
36E	36	E	D	24	36.148	33.75	506.8	73.10
36F	36	F	E	24	36.184	33.75	602.4	86.40
36G	36	G	F	24	36.228	33.75	719.7	103.00
36H	36	H	G	24	36.336	33.75	858.0	122.80
36J	36	J	H	24	36.451	33.75	1020.	146.00
36K	36	K	J	24	36.563	33.75	1181.	164.36
36M	36	M	X	48	35.859	31.25	1368.	181.24
36N	36	N	X	48	35.914	31.25	1450.	205.65
36P	36	P	M	48	36.002	31.25	1573.	223.11
36Q	36	Q	N	48	36.122	31.25	1757.	259.57
36R	36	R	P	48	36.248	31.25	1952.	277.52
42B	42	B	B	24	42.014	39.75	446.0	48.80
42C	42	C	B	24	42.016	39.75	487.7	59.70
42D	42	D	C	24	42.060	39.75	586.1	72.00
42E	42	E	D	24	42.148	39.75	694.4	85.60
42F	42	F	E	24	42.184	39.75	824.7	101.00
42G	42	G	F	24	42.228	39.75	984.5	120.50
42H	42	H	G	24	42.336	39.75	1173.	143.40
42J	42	J	H	24	42.451	39.75	1393.	170.80
42K	42	K	J	24	42.563	39.75	1614.	192.10
42M	42	M	X	48	41.859	37.25	1901.	213.80
42N	42	N	X	48	41.914	37.25	2015.	242.33
42P	42	P	M	48	42.002	37.25	2183.	264.29
42Q	42	Q	N	48	42.122	37.25	2437.	305.71
42R	42	R	P	48	42.248	37.25	2705.	328.76
48M	48	M	X	48	47.859	43.25	2521.	246.37
48N	48	N	X	48	47.914	43.25	2672.	279.01
48P	48	P	M	48	48.002	43.25	2892.	305.48
48Q	48	Q	N	48	48.122	43.25	3228.	351.84
48R	48	R	P	48	48.248	43.25	3581.	379.98



OPEN WEB STEEL JOISTS

JOIST DEFLECTION, CAMBER & BRIDGING

JOIST DIMENSIONS AND PROPERTIES - continued

JOIST TYPE	NOMINAL DEPTH	CHORD SIZE		INTERIOR PANEL 'P'	ACTUAL DEPTH	SPACE BETWEEN CHORDS	MOMENT OF INERTIA	MOMENT OF RESISTANCE
	In.	Top	Btm.	In.	In.	In.	In. ⁴	Ft.-Kips
54M	54	M	X	48	53.859	49.25	3228.	278.93
54N	54	N	X	48	53.914	49.25	3421.	315.69
54P	54	P	M	48	54.002	49.25	3702.	346.66
54Q	54	Q	N	48	54.122	49.25	4129.	397.98
54R	54	R	P	48	54.248	49.25	4581.	431.21
60M	60	M	X	48	59.859	55.25	4023.	311.50
60N	60	N	X	48	59.914	55.25	4264.	352.37
60P	60	P	M	48	60.002	55.25	4611.	387.85
60Q	60	Q	N	48	60.122	55.25	5142.	444.11
60R	60	R	P	48	60.248	55.25	5703.	482.44
66M	66	M	X	48	65.859	61.25	4906.	344.06
66N	66	N	X	48	65.914	61.25	5200.	389.05
66P	66	P	M	48	66.002	61.25	5620.	429.03
66Q	66	Q	N	48	66.122	61.25	6266.	490.25
66R	66	R	P	48	66.248	61.25	6948.	533.68
72M	72	M	X	48	71.859	67.25	5875.	376.63
72N	72	N	X	48	71.914	67.25	6227.	425.73
72P	72	P	M	48	72.002	67.25	6729.	470.22
72Q	72	Q	N	48	72.122	67.25	7501.	536.38
72R	72	R	P	48	72.248	67.25	8316.	584.91

DEFLECTION

The joist design is based upon CSA Standard S16—1965.

The deflection of the joist is calculated from the following adjusted simple span beam formula:

$$\text{Deflection in inches} = (1.10) \frac{5wL^4}{384EI} (1728)$$

Where

1.10 = Correction factor

w = Uniform load in pounds per linear foot of joist

L = Design span in feet (approximately = clear span + 4 inches)

E = 29,000,000 pounds per square inch

I = Moment of inertia of the joist in.⁴ (see joist prop.)

1728 = Dimensional constant

CAMBER

Joists are fabricated with the following approximate cambers:

3/16"	for 10 ft. span
3/8"	for 20 ft. span
1/2"	for 30 ft. span
3/4"	for 40 ft. span
7/8"	for 50 ft. span
1"	for 60 ft. span
1 1/2"	for 70 ft. span
1 7/8"	for 80 ft. span
2 1/4"	for 90 ft. span
2 1/2"	for 100 ft. span
2 3/4"	for 120 ft. span



BRIDGING

Bridging should be spaced in accordance with CSA S-16 (1965). Two types of bridging are permitted, diagonal or horizontal. Normally diagonal bridging is used for joists over 24" in depth.

Maximum Spacing: Along compression chord 170ryy and tension chord 240ryy (except not to exceed 120ryy between support and adjacent line of bridging). If support is steel 240ryy may be used.

SECTION	B	C	D	E	F	G	H	J	K	L	X	M	N	P	Q	R
120ryy	6'-8	8'-4	8'-6	8'-8	11'-1	11'-2	11'-3	11'-4	11'-5	11'-6	14'-0	14'-5	14'-6	14'-6	14'-7	14'-8
170ryy	9'-5	11'-2	12'-0	12'-4	15'-8	15'-9	15'-11	16'-0	16'-2	16'-4	19'-10	20'-5	20'-6	20'-7	20'-8	20'-9
240ryy	13'-4	16'-8	17'-0	17'-4	22'-2	22'-4	22'-6	22'-8	22'-10	23'-0	28'-0	28'-10	29'-0	29'-0	29'-2	29'-4



DESCRIPTION OF LOAD TABLES

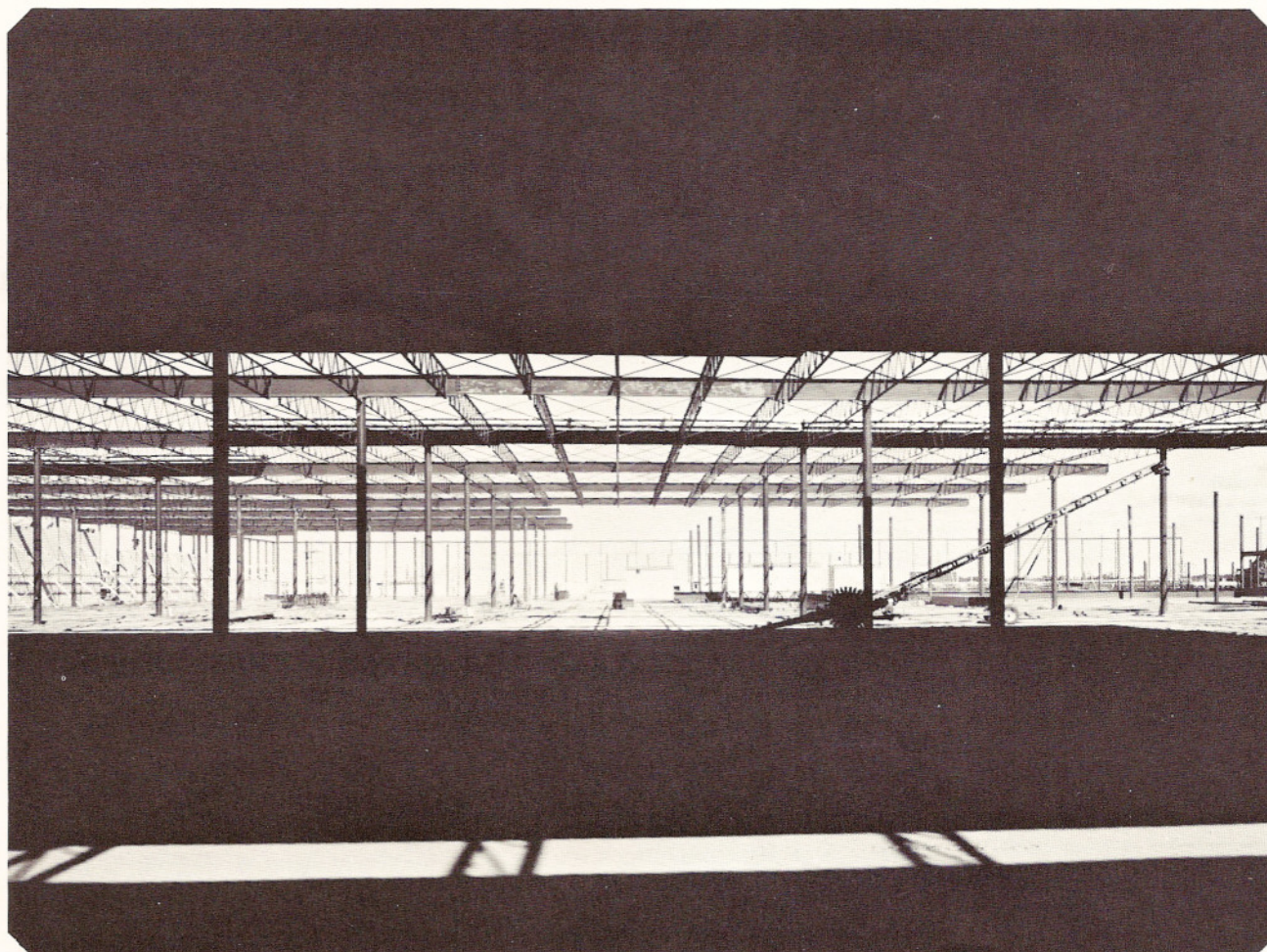
The joists shown in the load tables are the most frequently specified joists only. For joist sizes not shown in tables, contact the engineering offices of your nearest Great West Steel plant. Joist sizes 34 inch, 38 inch and 40 inch are not shown in the tables but can be fabricated as standard.

Black figures in the fourth column of tables indicate the calculated allowable capacity of the joist in pounds per foot. The colored figures in the same column indicate the allowable live load in pounds per foot as limited by maximum deflection of $1/360$ of the span. In cases where $1/240$ of the span is the limiting deflection multiply the colored figure by 1.5 to obtain the allowable live load.

The joist types are designated as follows. The first digit or digits indicate the joist depth in inches. The following letter indicates the size of the top chord. The last digit or digits indicates the size of web bar in sixteenths of an inch for short span joists only. Intermediate and long span joists are indicated by only the depth digits and the chord letter. Webs of intermediate and long span joists are designed for each specific load case.

Panel P (see Joist Dimensions and Properties table) is 24 inches for intermediate span joists and 48 inches for long span joists. Intermediate span joists utilize shallow hat section top chord. The long span joists utilize deep hat section top chord.

Calculations in these tables conform to requirements of the Canadian Standards Association S-16 (1969) and the National Building Code.





OPEN WEB STEEL JOISTS

CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.
10 FEET	8B 9	4.54	644	14 FEET <i>Continued</i>	12B10	4.94	524	17 FEET <i>Continued</i>	10E11	7.11	528
			434				455		10F12	8.42	277
11 FEET	8B 9	4.54	532	15 FEET	8B 9	4.54	286		12B10	4.94	628
			326				128		12C10	5.31	333
12 FEET	8B 9	4.54	447		8C10	5.13	365		12D11	6.37	355
			251		8D10	5.90	444		12E12	7.54	254
	8C10	5.13	571		8E11	7.01	529		14B10	5.06	445
	10B 9	4.61	581		8F12	8.30	632		14C11	5.74	282
13 FEET	8B 9	4.54	381		10B 9	4.61	371				539
			197		10C10	5.21	472				343
	8C10	5.13	486		10D11	6.24	568				642
	8D10	5.90	592		12B10	4.94	456				409
	10B 9	4.61	495		12C11	5.60	572				422
	10C10	5.21	629				411				355
14 FEET	8B 9	4.54	328	16 FEET	10B 9	4.61	326	18 FEET	10B 9	4.61	258
			158				204		10C10	5.21	143
	8C10	5.13	419		10C10	5.21	415		10D10	5.98	328
	8D10	5.90	510		10D10	5.98	500		12B 9	4.69	160
	8E11	7.01	608		10E11	7.11	596		12C10	5.31	395
	10B 9	4.61	426		12B10	4.94	401		10E11	7.11	195
17 FEET	8B 9	4.54	305		12C10	5.31	503		10F12	8.42	471
			207		12D11	6.37	609		12B 9	4.69	233
	8C10	5.13	542		14B10	5.06	476		10F12	8.42	281
	10C10	5.21	340		14C11	5.74	593		12B 9	4.69	317
				17 FEET			471		12C10	5.31	214
					10B 9	4.61	289		12D11	6.37	397
					10C10	5.21	368		12E12	7.54	237
					10D10	5.98	442		14B10	5.06	481
							232	19 FEET	14C11	5.74	289
									14D12	6.84	345
									16B11	5.52	376
									16C11	5.89	299
											331
											402
								19 FEET			437
											399
											540
											440
								19 FEET			



OPEN WEB STEEL JOISTS

CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	
19 FEET Continued	12B 9	4.69	284 182	20 FEET Continued	16C11	5.89	438 320	22 FEET Continued	12F12	8.57	456 226	
	12C10	5.31	356 202		16D12	7.03	530 388		12G13	10.15	547 274	
	12D11	6.37	432 246		16E13	8.29	632 462		14B10	5.06	252 164	
	12E11	7.23	514 293		18B11	5.68	402 373		14C10	5.43	314 181	
	12F12	8.57	611 352		18C12	6.45	496 411		14D11	6.51	381 220	
	14B10	5.06	337 254		18D12	7.22	600 497		14E12	7.71	452 262	
	14C11	5.74	421 281		21 FEET	12B 9	4.69		233 135	14F12	8.73	537 314
	14D11	6.51	511 342			12C10	5.31		292 149	14G13	10.35	644 378
	14E12	7.71	607 406			12D10	6.09		353 182	16B10	5.19	292 218
	16B11	5.52	392 339			12E11	7.23		420 217	16C11	5.89	361 241
	16C11	5.89	485 374			12F12	8.57		500 260	16D12	7.03	438 292
	16D12	7.03	587 453			12G13	10.15		600 315	16E12	7.89	522 347
20 FEET	10B 9	4.61	209 104	14B10		5.06	276 187	16F13	9.31	618 415		
	10C 9	4.98	266 116	14C10		5.43	344 208	18B11	5.68	332 280		
	10D10	5.98	320 142	14D11		6.51	419 253	18C12	6.45	409 309		
	10E11	7.11	382 170	14E12		7.71	497 301	18D12	7.22	495 374		
	10F11	8.13	454 205	14F13		9.10	589 361	18E	6.58	606 444		
	10G13	9.98	544 248	16B10		5.19	321 251	20B12	6.28	371 350		
	12B 9	4.69	257 156	16C11	5.89	397 277	20C12	6.65	457 385			
	12C10	5.31	322 173	16D12	7.03	480 335	20D	5.97	555 466			
	12D11	6.37	390 211	16E12	7.89	573 399	23 FEET	12B 9	4.69	194 103		
	12E11	7.23	464 251	18B11	5.68	364 322		12C10	5.31	243 114		
	12F12	8.57	552 302	18C12	6.45	449 355		12D10	6.09	294 138		
	14B10	5.06	305 218	18D12	7.22	544 430		12E11	7.23	350 165		
	14C11	5.74	380 241	22 FEET	12B 9	4.69		212 117	12F12	8.57	417 198	
	14D11	6.51	462 293		12C10	5.31		266 130	12G12	9.81	500 240	
	14E12	7.71	548 348		12D10	6.09		322 158	12H13	11.63	597 288	
	14F13	9.10	650 418		12E11	7.23		383 188	14B10	5.06	230 143	
	16B10	5.19	354 290					14C10	5.43	287 158		



OPEN WEB STEEL JOISTS

CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.
23 FEET <i>Continued</i>	14D11	6.51	349	24 FEET <i>Continued</i>	14E11	7.37	380	25 FEET <i>Continued</i>	14G13	10.35	499
	14E12	7.71	414		14F12	8.73	451		14H14	12.22	593
	14F12	8.73	491		14G13	10.35	541		16B10	5.19	226
	14G13	10.35	589		14H14	12.22	644		16C11	5.89	280
	16B10	5.19	267		16B10	5.19	245		16D11	6.66	339
	16C11	5.89	331		16C11	5.89	304		16E12	7.89	404
	16D11	6.66	400		16D11	6.66	368		16F13	9.31	478
	16E12	7.89	477		16E12	7.89	438		16G13	10.56	573
	16F13	9.31	565		16F13	9.31	519		18B11	5.68	257
	18B11	5.68	303		16G14	10.99	622		18C11	6.05	317
	18C11	6.05	375		18B11	5.68	279		18D12	7.22	384
	18D12	7.22	453		18C11	6.05	344		18E	6.58	469
	18E	6.58	555		18D12	7.22	416		18F	8.40	542
	18F	8.40	641		18E	6.58	509		18G	9.42	647
	20B12	6.28	340		18F	8.40	588		20B11	5.85	288
	20C12	6.65	418		20B11	5.85	312		20C12	6.65	354
	20D	5.97	508		20C12	6.65	384		20D12	7.42	430
	20E	6.87	603		20D	5.97	466		20E	6.81	510
			484		20E	6.81	554		20F	8.54	606
					22B12	6.49	345		22B12	6.49	318
24 FEET	12B 9	4.69	178	25 FEET	22C	5.93	426	26 FEET	14B 9	4.78	180
	12C10	5.31	223		22D	6.10	513		14C10	5.43	224
	12D10	6.09	270		22E	7.17	611		14D11	6.51	273
	12E11	7.23	322						14E11	7.37	324
	12F11	8.26	383		14B10	5.06	195		14F12	8.73	384
	12G12	9.81	459		14C10	5.43	243				190
	12H13	11.63	548		14D11	6.51	295				
	14B10	5.06	211		14E11	7.37	350				
	14C10	5.43	263		14F12	8.73	416				
	14D11	6.51	320				214				
			169								



OPEN WEB STEEL JOISTS

CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.
26 FEET <i>Continued</i>	14G13	10.35	461	27 FEET	14B 9	4.78	167	27 FEET <i>Continued</i>	22D	6.10	406
	14H14	12.22	549		14C10	5.43	208		22E	7.17	482
	16B10	5.19	209		14D10	6.20	253		22F	8.85	572
	16C11	5.89	259		14E11	7.37	300		24B12	6.71	298
	16D11	6.66	313		14F12	8.73	356		24C	5.52	367
	16E12	7.89	373		14G13	10.35	427		24D	6.25	445
	16F12	8.92	442		14H13	11.83	509		24E	7.46	528
	16G13	10.56	530		14J14	13.93	609		24F	8.97	625
	16H14	12.47	631		16B10	5.19	194		26B	5.44	325
	18B11	5.68	237		16C10	5.56	240		26C	5.84	400
	18C11	6.05	293		16D11	6.66	290		26D	6.84	482
	18D12	7.22	355		16E12	7.89	346		26E	7.96	575
	18E12	8.08	434		16F12	8.92	410				
	18F	8.40	501		16G13	10.56	491	28 FEET	14B 9	4.78	155
	18G	9.42	598		16H14	12.47	586		14C10	5.43	193
	20B11	5.85	266		18B11	5.68	220		14D10	6.20	235
	20C12	6.65	327		18C11	6.05	272		14E11	7.37	279
	20D12	7.42	397		18D12	7.22	329		14F12	8.73	331
	20E	6.81	472		18E12	8.08	402		14G12	9.98	397
	20F	8.54	560		18F	8.40	465		14H13	11.83	473
	22B12	6.49	294		18G	9.42	555		14J14	13.93	566
	22C	5.93	363		20B11	5.85	246		16B10	5.19	180
	22D	6.10	437		20C12	6.65	303		16C10	5.56	223
	22E	7.17	520		20D12	7.42	368		16D11	6.66	270
	22F	8.85	617		20E	6.81	437		16E11	7.53	322
	24B12	6.71	321		20F	8.54	520		16F12	8.92	381
	24C	5.52	396		20G	9.62	620		16G13	10.56	457
	24D	6.25	480		22B12	6.49	273		16H14	12.47	544
	24E	7.46	570		22C12	6.86	336		16J14	14.18	595
			489				254				347



OPEN WEB STEEL JOISTS

CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.	CLEAR SPAN	JOIST TYPE	JOIST WEIGHT PER FT. IN LBS.	TOTAL SAFE LOAD PER FT. IN LBS.
28 FEET <i>Continued</i>	18B11	5.68	205 136	29 FEET	16C10	5.56	208 105	29 FEET <i>Continued</i>	24G	10.30	646 503
	18C11	6.05	253 149		16D11	6.66	252 127		26C	5.78	347 291
	18D12	7.22	306 181		16E11	7.53	300 151		26D	6.79	418 350
	18E12	8.08	374 215		16F12	8.92	355 181		26E	7.96	498 416
	18F	8.40	432 257		16G13	10.56	426 218		26F	9.08	589 495
	18G	9.42	516 309		16H14	12.47	507 261	30 FEET			
	18H	11.22	613 370		16J14	14.18	570 312		16C10	5.56	194 95
	20B11	5.85	229 169		18C11	6.05	235 134		16D11	6.66	235 115
	20C12	6.65	282 187		18D11	6.82	285 163		16E11	7.53	280 136
	20D12	7.42	342 226		18E12	8.08	349 193		16F12	8.92	332 163
	20E	6.75	407 268		18F	8.40	403 231		16G13	10.56	398 197
	20F	8.54	483 320		18G	9.42	481 278		16H14	12.47	474 236
	20G	9.62	576 384		18H	11.22	572 333		16J14	14.18	548 282
	22B12	6.49	254 207		20C12	6.65	263 168		18B10	5.32	178 110
	22C12	6.86	313 228		20D12	7.42	319 203		18C11	6.05	220 121
	22D	6.10	377 275		20E	6.75	379 241		18D11	6.82	266 147
	22E	7.17	448 327		20F	8.54	450 288		18E12	8.08	326 175
	22F	8.85	532 390		20G	9.62	537 346		18F	8.40	376 209
	22G	10.17	635 467		20H	11.54	639 413		18G	9.28	449 251
	24B12	6.71	277 249		22C12	6.86	292 205		18H	11.22	535 300
	24C	5.50	341 273		22D	6.11	351 248		18J	13.25	639 359
	24D	6.25	414 330		22E	7.17	418 294		20B11	5.85	200 138
	24E	7.36	491 391		22F	8.70	496 351		20C12	6.65	246 152
	24F	8.93	581 466		22G	10.14	592 421		20D12	7.42	298 183
	26B	5.43	303 277		24B12	6.71	258 224		20E	6.75	354 218
	26C	5.81	372 323		24C	5.50	318 246		20F	8.54	421 260
	26D	6.82	448 389		24D	6.25	386 297		20G	9.62	502 312
	26E	7.98	534 462		24E	7.36	458 352		20H	11.52	597 373
	26F	9.11	632 550		24F	8.90	542 420		22B12	6.49	221 168