

STEEL STRUCTURALS

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You Can Speed Up Production by Using Our Cutting Facilities

Approximately six out of every ten orders received now call for some pre-production cutting. More and more customers are realizing that this is one way to contend with high production costs.

Here's our equipment line-up for steel structurals —

IN-PLANT FACILITIES

BAND SAWING

FLAME CUTTING

CIRCULAR COLD CUT SAWS

SAW TOLERANCE $\pm \frac{1}{16}$ "

CSA G40.21

Standard for Structural Steels

Issued by Canadian Standards Association (CSA)

This standard, known as CSA G40.21 covers six types of structural quality plates, shapes and bars for general construction and engineering purposes.

The six different types covered are:

Type G – General Construction Steel

Type W – Weldable Steels

Type T – Weldable Low Temperature Steels

Type R – Atmospheric Corrosion Resistant Structural Steels

Type A – Atmospheric Corrosion Resistant Structural Steel

Type Q – Quenched and Tempered Low Alloy Steel Plate

AVAILABILITY

These seven strength levels and six types have been combined into eighteen grades as follows:

Type	Yield Strength ksi - mPa						
	33 230	38 260	44 300	50 350	60 400	70 480	100 700
G	33G 230G			50G 350G	60G 400G		
W	33W 230W	38W 260W	44W 300W	50W 350W	60W 400W	70W 480W	
T		38T 260T	44T 300T	50T 350T	60T 400T	70T 480T	
R				50R 350R			
A				50A 350A	60A 400A		
Q							100Q 500Q

TYPE G – A general construction steel meeting minimum strength requirements, but not recommended for low temperature service. Primarily designed for applications requiring bolting. However, can be welded under carefully controlled shop conditions, but not recommended for field welding where control may be difficult to maintain.

TYPE W – Weldable steels for general construction. Available in six strength grades. These steels are widely used for bridges and other dynamically loaded structures. Grade 44W is recommended for normal building construction where field or shop welding procedures are used. Not specifically recommended for low temperature applications.

TYPE T – Weldable, low temperature steel. A superior quality, weldable structural steel, with chemical composition that makes it suitable for low temperature applications. Possesses good notch toughness in the “as rolled” condition. Used for bridge construction for all types of loading. Certified minimum impact test requirement available. Easily weldable, using good shop or field practices, by all the usual methods.

TYPE R – Steels with an atmospheric corrosion resistance of approximately four times that of carbon steel without copper. This type of steel usually limited to ½" in thickness and up to this thickness may be readily welded using good shop and field practices. Most popular applications unpainted roofing, siding, facia and curtainwall.

TYPE A – Top quality steels for plates and shapes. High strength, low alloy steels with good low temperature properties and providing good long term atmospheric corrosion resistance. Weldable in all thicknesses. Widely used in painted or unpainted condition for bridge construction, for exposed beams and columns and for other types of construction.

TYPE Q – QUENCHED AND TEMPERED LOW ALLOY STEEL PLATE. Steels that display a very high yield strength and good resistance to brittle fracture. Suitable for bridges and other structures. May be welded providing the techniques used do not adversely affect the properties of the plate.

CSA G40.21 Comparison Equivalents

COMPARISON OF PREVIOUS STANDARDS WITH CSA G40.20 AND CSA G40.21

Previous Standard	G40.21	Chemical Composition Comparison	Mechanical Property Comparison
CSA G40.1	–	Requirements entirely covered by CSA G40.20 “General Requirements”.	
CSA G40.4	33G 230G	Grade 33G has limits on maximum carbon and manganese contents.	Tensile strength of Grade 33G is 55-72 ksi while tensile strength of 40.4 is 60-72 ksi. Yield strength is same.
	33W 230W	Grade 33W has much tighter limits on maximum carbon, manganese and phosphorus.	Mechanical properties of 33W same as 33G above. Limited to 4 inches in thickness.
CSA G40.5 Grade D	33G 330G	Same comments as for G40.4.	Same comments as for G40.4.
CSA G40.8 Grade A	38W 260W	Slight reduction in maximum carbon and manganese contents in Grade 38W.	Yield strength of Grade 38W is 2 ksi lower in thicknesses of ½" or less (group 1 and 2 shapes), and 2 ksi higher in thicknesses over 1" to 1½" (group 3 and 4 shapes). Minimum tensile strength is reduced 5 ksi in Grade 38W.
CSA G40.8 Grade B	38T 260T	Virtually no change in chemical composition.	Same comments as for G40.8 Grade A.
CSA G40.9	–	Requirements entirely covered in CSA G40.20 “General Requirements”.	

Cont'd

CSA G40.21

Comparison Equivalents

COMPARISON OF PREVIOUS STANDARDS WITH CSA G40.20 AND CSA G40.21

Previous Standard	G40.21	Chemical Composition Comparison	Mechanical Property Comparison
CSA G40.11 Grade A	50R 350R	Identical.	Identical.
CSA G40.11 Grade B	50A 350A	Identical.	Identical.
CSA G40.12 Grade A	44W 300W	Virtually Identical.	Identical with maximum tensile value in Grade 44W.
CSA G40.12 Grade B	44T 300T	Identical.	Same with maximum tensile value in 44T. 2 ksi higher yield strength over 1½" to 2½" (4 ksi higher over 2½" to 4") in Grade 44T.
CSA G40.13	—	Requirements entirely covered in CSA G40.20 "General Requirements".	
CSA G40.14 Grade 50	50G 350G	Identical.	Same except tensile strength 5 ksi lower in Grade 50G.
CSA G40.14 Grade 60	60G 400G	Identical.	Identical.
CSA G40.18	100Q	Identical.	Identical.
ASTM A36	33G 230G	Approximately the same.	Yield strength and tensile strength 3 ksi lower in Grade 33G.
	38W 260W	Lower carbon content in Grade 38W.	Up to 1½" thick, yield point and tensile strength is 2 ksi higher in Grade 38W.
ASTM A36 KFG	38T 260T	Lower carbon content in Grade 38T.	Up to 2½" thick, yield point is 2 ksi higher in Grade 38T. Over 2½" yield point is same. Tensile strength is 2 ksi higher in Grade 38T.
ASTM A131 Grade A	33G 230G	Grade 33G has limits on maximum carbon and manganese contents.	Yield point on 33G is 33 ksi instead of 32 ksi and tensile strength is 55-70 ksi instead of 58-71 ksi.
ASTM A131 Grade B	33W 230W	Higher manganese content permitted in Grade 33W.	Yield point on 33W is 33 ksi instead of 32 ksi and tensile strength is 55-70 ksi instead of 58-71 ksi.
ASTM A242 Type 1	50R 350R	Chemical composition in Grade 50R has lower maximum manganese and has minimum and maximum limits on alloy contents.	Same up to maximum thickness of 50R (½") except for maximum tensile strength.
ASTM A283 Grade D	33G 230G	Grade 33G has limits on maximum carbon and manganese contents.	Same except tensile strength on 33G is 55-70 ksi instead of 60-72 ksi.
ASTM A440	50G 350G	Same except copper content not required in Grade 50G.	Grade 50G not available in plate. Properties similar for shapes and bar size shapes.

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CSA G40.21 Comparison Equivalents

COMPARISON OF PREVIOUS STANDARDS WITH CSA G40.20 AND CSA G40.21

Previous Standard	G40.21	Chemical Composition Comparison	Mechanical Property Comparison
ASTM A441 SK	50W 350W	Higher manganese contents permitted and copper content not required in Grade 50W. Columbium may be used instead of vanadium.	Tensile strength of Grade 50W is 65-90 ksi instead of 70 ksi decreasing to 67 ksi over $\frac{3}{4}$ " to $1\frac{1}{2}$ " thickness. Yield strength of Grade 50W is 50 ksi up to $1\frac{1}{2}$ " thickness instead of decreasing to 46 ksi over $\frac{3}{4}$ " thickness.
ASTM A441 Killed	50T 350T	Higher manganese content permitted and copper not required in Grade 50T. Columbium may be used instead of vanadium.	Tensile strength of Grade 50T is 65-90 ksi instead of 70 ksi minimum, decreasing to 67 ksi over $\frac{3}{4}$ " to $1\frac{1}{2}$ " thickness. Yield strength of Grade 50T is 50 ksi minimum up to $1\frac{1}{2}$ " thickness instead of decreasing to 46 ksi over $\frac{3}{4}$ " thickness.
ASTM A514	100Q	Identical without specific proprietary Grades in A514.	Identical.
ASTM A572 Grade 42	44W 300W	Slightly higher carbon and manganese contents permitted in Grade 44W.	Tensile strength is 65-85 ksi for Grade 44W instead of 60 ksi minimum. Yield point is 44 ksi up to $1\frac{1}{2}$ " thickness instead of 42 ksi.
ASTM A572 Grade 45	44W 300W	Higher manganese content permitted in Grade 44W.	Tensile strength is 65-85 ksi for Grade 44W instead of 60 ksi minimum. Yield point is 44 ksi instead of 45 ksi.
ASTM A572 Grade 50	50W 350W	Higher manganese content permitted in Grade 50W.	Tensile strength is 65-90 ksi for Grade 50W instead of 65 ksi minimum.
ASTM A572 Grade 60	60W 400W	Lower carbon content and higher permitted manganese content on Grade 60W.	Tensile strength is 75-100 ksi for Grade 60W instead of 65 ksi minimum.
ASTM A588	50A 350A	Majority of grades in A588 are covered in Grade 50A chemical requirements.	Identical.

EQUAL LEG ANGLES



Imperial			Imperial		
Size ins.	Thk. ins.	Wt. lbs./ft.	Size ins.	Thk. ins.	Wt. lbs./ft.
3/4 x 3/4	1/8	.59	3 1/2 x 3 1/2	1/4	5.8
1 x 1	1/8	.80		5/16	7.2
	3/16	1.16		3/8	8.5
	1/4	1.49		7/16	9.8
1 1/4 x 1 1/4				1/2	11.1
	1/8	1.01	4 x 4	1/4	6.6
	3/16	1.48		5/16	8.2
1 1/2 x 1 1/2	1/4	1.92		3/8	9.8
	1/8	1.23		7/16	11.3
	3/16	1.80		1/2	12.8
1 3/4 x 1 3/4	1/4	2.34		5/8	15.7
	1/8	1.44	5 x 5	3/4	18.5
	3/16	2.12		5/16	10.3
2 x 2	1/4	2.77		3/8	12.3
	1/8	1.65		7/16	14.3
	3/16	2.44		1/2	16.2
	1/4	3.19		5/8	20.0
	5/16	3.92		3/4	23.6
	3/8	4.70		7/8	27.2
2 1/2 x 2 1/2	1/8	2.08	6 x 6	5/16	12.4
	3/16	3.07		3/8	14.9
	1/4	4.10		7/16	17.2
	5/16	5.00		1/2	19.6
	3/8	5.90		9/16	21.9
	1/2	7.70		5/8	24.2
3 x 3				3/4	28.7
	3/16	3.7		7/8	33.1
	1/4	4.9	8 x 8	1	37.4
	5/16	6.1		1/2	26.4
	3/8	7.2		9/16	29.3
	7/16	8.3		5/8	32.7
	1/2	9.4		3/4	38.9
				7/8	45.0
				1	51.0
				1 1/8	56.9

UNEQUAL LEG ANGLES



Imperial			Imperial		
Size ins.	Thk. ins.	Wt. lbs./ft.	Size ins.	Thk. ins.	Wt. lbs./ft.
2 x 1¼ x ⅜ ₁₆			5 x 3	¼	6.6
2 x 1½	⅜ ₁₆	2.12	5 x 3½	⅝ ₁₆	8.2
	¼	2.77		⅜	9.8
2½ x 2	⅜ ₁₆	2.75		7 ₁₆	11.3
	¼	3.62		½	12.8
	⅝ ₁₆	4.50	5 x 3	¼	7.0
3 x 2	⅜	5.30		⅝ ₁₆	8.7
	⅜ ₁₆	3.07		⅜	10.4
	¼	4.10		7 ₁₆	12.0
	⅝ ₁₆	5.00		½	13.6
	⅜	5.90	6 x 3½	⅝	16.8
3 x 2½	7 ₁₆	6.80		¾	19.8
	½	7.70		⅝ ₁₆	9.8
	⅜ ₁₆	3.7		⅜	11.7
3 x 2½	¼	4.5		½	15.3
	⅝ ₁₆	5.6	6 x 4	¼	8.3
	⅜	6.6		⅝ ₁₆	10.3
	½	8.5		⅜	12.3
3½ x 2½	¼	4.9		7 ₁₆	14.3
	⅝ ₁₆	6.1		½	16.2
	⅜	7.2		⅝ ₁₆	18.1
	½	9.4		⅝	20.0
3½ x 3	¼	5.4		¾	23.6
	⅝ ₁₆	6.6		7 ₈	27.2
	⅜	7.9	7 x 4	1	30.6
	7 ₁₆	9.1		⅜	13.6
	½	10.2		½	17.9
4 x 3	¼	5.8	8 x 4	½	19.6
	⅝ ₁₆	7.2		⅝	24.2
	⅜	8.5		¾	28.7
	½	11.1		7 ₈	33.1
	⅝ ₁₆	13.6	8 x 6	1	37.4
4 x 3½	¼	6.2		½	23.0
	⅝ ₁₆	7.7		⅝ ₈	28.5
	⅜	9.1		¾	33.8
	7 ₁₆	10.6		7 ₈	39.1
	½	11.9		1	44.2
	⅝ ₈	14.7			

STANDARD CHANNELS

CSA G40.21 – 44 W

STOCK LENGTHS 20.0 40.0 60.0



Metric	Imperial	Depth mm	Flange		Web Thickness mm	Section Modulus 10 ³ mm ³
			Width mm	Thickness (mean) mm		
C75 x 5	C3 x 3.5	76	34	6.9	3.4	16.7
x 6	x 4.1		35	6.9	4.3	17.6
x 7	x 5.0		37	6.9	6.6	19.7
x 9	x 6.0		40	6.9	9.0	22.3
C100 x 7	C4 x 4.5	102	38	7.5	3.2	30.0
x 8	x 5.4		40	7.5	4.7	31.6
x 9	x 6.25		42	7.5	6.3	34.6
x 11	x 7.25		43	7.5	8.2	37.4
C130 x 10	C5 x 6.7	127	44	8.1	4.8	48.6
x 13	x 9.0		47	8.1	8.3	57.6
x 17	x 11.5		52	8.1	12.0	61.1
C150 x 12	C6 x 8.2	152	48	8.7	5.1	70.5
x 16	x 10.5		51	8.7	8.0	81.8
x 19	x 13.0		54	8.7	11.1	93.6
C180 x 15	C7 x 9.8	178	53	9.3	5.3	99.6
x 18	x 12.25		55	9.3	8.0	113
x 22*	x 14.75		58	9.3	10.6	127

Imperial	Metric	Depth ins.	Flange		Web Thickness ins.	Section Modulus ins. ³
			Width ins.	Thickness (mean) ins.		
C3 x 3.5	C75 x 5	3.00	1.36	.273	.125	1.02
x 4.1	x 6		1.41	.273	.170	1.10
x 5.0	x 7		1.50	.273	.258	1.24
x 6.0	x 9		1.60	.273	.356	1.38
C4 x 4.5	C100 x 7	4.00	1.52	.296	.145	1.83
x 5.4	x 8		1.58	.296	.184	1.93
x 6.25	x 9		1.65	.296	.247	2.10
x 7.25	x 11		1.72	.296	.321	2.29
C5 x 6.7	C130 x 10	5.00	1.75	.320	.190	3.00
x 9.0	x 13		1.88	.320	.325	3.56
x 11.5	x 17		2.03	.320	.472	4.10
C6 x 8.2	C150 x 12	6.00	1.92	.343	.200	4.38
x 10.5	x 16		2.03	.343	.314	5.06
x 13.0	x 19		2.16	.343	.437	5.80
C7 x 9.8	C180 x 15	7.00	2.09	.366	.210	6.08
x 12.25	x 18		2.19	.366	.314	6.93
x 14.75	x 22*		2.30	.366	.419	7.75

*Not produced in Canada

Cont'd

STANDARD CHANNELS

CSA G40.21 – 44 W

STOCK LENGTHS 20.0 40.0 60.0



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
C200 x 17	C8 x 11.5	203	57	9.9	5.6	133
x 21	x 13.75		59	9.9	7.7	147
x 28	x 18.75		64	9.9	12.4	180
C230 x 20	C9 x 13.4	229	61	10.5	5.9	173
x 22	x 15.0		63	10.5	7.2	186
x 30	x 20.0		67	10.5	11.4	222
C250 x 23	C10 x 15.3	254	65	11.1	6.1	219
x 30	x 20.0		69	11.1	9.6	257
x 37	x 25.0		73	11.1	13.4	299
x 45*	x 30.0		76	11.1	17.1	337
C310 x 31*	C12 x 20.7*	305	74	12.7	7.2	351
x 37*	x 25.0*		77	12.7	9.8	393
x 45*	x 30.0*		80	12.7	13.0	442
C380 x 50*	C15 x 33.9*	381	86	16.5	10.2	687
x 60*	x 40.0*		89	16.5	13.2	760
x 74*	x 50.0*		94	16.5	18.2	881

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
C8 x 11.5	C200 x 17	8.00	2.26	.390	.220	8.14
x 13.75	x 21		2.34	.390	.303	9.03
x 18.75	x 28		2.53	.390	.487	11.0
C9 x 13.4	C230 x 20	9.00	2.43	.413	.233	10.6
x 15.0	x 22		2.48	.413	.285	11.3
x 20.0	x 30		2.65	.413	.448	13.5
C10 x 15.3	C250 x 23	10.00	2.60	.436	.240	13.5
x 20.0	x 30		2.74	.436	.379	15.8
x 25.0	x 37		2.89	.436	.526	18.2
x 30.0	x 45*		3.03	.436	.673	20.7
C12 x 20.7*	C310 x 31*	12.00	2.94	.501	.282	21.5
x 25.0*	x 37*		3.05	.501	.387	24.1
x 30.0*	x 45*		3.17	.501	.510	27.0
C15 x 33.9*	C380 x 50*	15.00	3.40	.650	.400	42.0
x 40.0*	x 60*		3.52	.650	.520	46.5
x 50.0*	x 74*		3.72	.650	.716	53.8

*Not produced in Canada

MISCELLANEOUS CHANNELS

SPECIFICATION ASTM A572 GR50

STOCK LENGTHS 20.0 40.0 60.0 feet

Metric	Imperial	Depth mm	Width mm	Flange	Web Thickness mm	Section Modulus 1000mm ³
				Thickness (mean) mm		
MC 75 x 10.6	MC 3 x 7.1	76	49	8.9	7.9	30
MC 100 x 20.6	MC 4 x 13.8	102	64	12.7	12.7	73
MC 150 x 9.7	MC 6 x 6.5	152	47	7.4	4.1	59
x 10.4	x 7.0	152	48	7.4	4.6	61
x 17.9	x 12.0	152	63	9.5	7.9	102
x 22.5	x 15.1	152	75	12.1	8.0	136
x 22.8	x 15.3	152	89	9.8	8.6	139
x 24.3	x 16.3	152	76	12.1	9.5	142
x 26.8	x 18.0	152	89	12.1	9.6	162
MC 175 x 26.2	MC 7 x 17.6	178	76	12.2	9.7	177
x 28.5	x 19.1	178	88	12.7	8.89	202
x 33.8	x 22.7	178	91	12.7	12.7	223

Imperial	Metric	Depth ins.	Width ins.	Flange	Web Thickness ins.	Section Modulus ins. ³
				Thickness (mean) ins.		
MC 3 x 7.1	MC 75 x 10.6	3.0	1.940	0.350	0.310	1.82
MC 4 x 13.8	MC 100 x 20.6	4.0	2.500	0.500	0.500	4.43
MC 6 x 6.5	MC 150 x 9.7	6.0	1.850	0.290	0.160	3.59
x 7.0	x 10.4	6.0	1.880	0.290	0.180	3.74
x 12.0	x 17.9	6.0	2.500	0.380	0.310	6.24
x 15.1	x 22.5	6.0	2.940	0.480	0.320	8.32
x 15.3	x 22.8	6.0	3.500	0.390	0.340	8.47
x 16.3	x 24.3	6.0	3.000	0.480	0.380	8.68
x 18.0	x 26.8	6.0	3.500	0.480	0.380	9.91
MC 7 x 17.6	MC 175 x 26.2	7.0	3.000	0.480	0.380	10.80
x 19.1	x 28.5	7.0	3.450	0.500	0.350	12.30
x 22.7	x 33.8	7.0	3.600	0.500	0.500	13.60

Cont'd

MISCELLANEOUS CHANNELS

SPECIFICATION ASTM A572 GR50

STOCK LENGTHS 20.0 40.0 60.0 feet

Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 1000mm ³
MC 200 x 9.8	MC 8 x 6.6	203	44	6.6	3.6	74
x 12.7	x 8.5	203	48	7.9	4.5	95
x 27.9	x 18.7	203	76	12.7	9.0	215
x 29.8	x 20.0	203	77	12.7	10.2	223
x 31.9	x 21.4	203	88	13.3	9.5	253
x 34.0	x 22.8	203	89	13.3	10.8	261
MC 230 x 35.6	MC 9 x 23.9	229	88	13.97	10.16	310
x 37.8	x 25.4	229	89	13.97	4.5	95
MC 250 x 9.7	MC 10 x 6.5	254	28.702	5.08	3.81	72
x 12.5	x 8.4	254	48	7.112	4.5	95
x 33.0	x 22.0	254	84	14.6	7.4	336
x 37.0	x 25.0	254	86	14.6	9.7	360
x 42.4	x 28.5	254	100	14.6	10.8	414
x 50.0	x 33.6	254	104	14.6	14.6	456
x 61.2	x 41.1	254	110	14.6	20.2	518

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
MC 8 x 6.6	MC 200 x 9.8	8.0	1.750	0.260	0.140	4.50
x 8.5	x 12.7	8.0	1.870	0.310	0.180	5.83
x 18.7	x 27.9	8.0	2.980	0.500	0.350	13.10
x 20.0	x 29.8	8.0	3.030	0.500	0.400	13.60
x 21.4	x 31.9	8.0	3.450	0.530	0.380	15.40
x 22.8	x 34.0	8.0	3.500	0.530	0.430	16.00
MC 9 x 23.9	MC 230 x 35.6	9.0	3.450	0.550	0.400	18.90
x 25.4	x 37.8	9.0	3.500	0.550	0.450	19.60
MC 10 x 6.5	MC 250 x 9.7	10.0	1.130	0.200	0.150	4.42
x 8.4	x 12.5	10.0	1.500	0.280	0.170	6.40
x 22.0	x 33.0	10.0	3.315	0.575	0.290	20.50
x 25.0	x 37.0	10.0	3.410	0.575	0.380	22.00
x 28.5	x 42.4	10.0	4.321	0.575	0.425	25.30
x 33.6	x 50.0	10.0	4.100	0.575	0.575	27.80
x 41.1	x 61.2	10.0	3.950	0.575	0.796	31.50

Cont'd

MISCELLANEOUS CHANNELS

SPECIFICATION ASTM A572 GR50

STOCK LENGTHS 20.0 40.0 60.0 feet

Metric	Imperial	Depth mm	Width mm	Flange	Web Thickness mm	Section Modulus 1000mm ³
				Thickness (mean) mm		
MC 310 x 15.8	MC 12 x 10.6	305	48	7.874	4.5	95
x 46.0	x 31.0	305	93	17.8	9.4	554
x 52.0	x 35.0	305	96	17.8	11.9	593
x 60.0	x 40.0	305	99	17.8	15	641
x 67.0	x 45.0	305	102	17.8	18.1	689
x 74.0	x 50.0	305	105	17.8	21.2	738
MC 330 x 40.7	MC 13 x 27.3	330	48	15.494	4.5	95
x 47.3	x 31.8	330	102	15.5	9.5	602
x 52.0	x 35.0	330	103	15.5	11.4	635
x 60.0	x 40.0	330	106	15.5	14.2	685
x 74.0	x 50.0	330	112	15.5	20	792
MC 460 x 63.5	MC 18 x 42.7	457	100	15.9	11.4	1010
x 68.2	x 45.8	457	102	15.9	12.7	1050
x 77.2	x 51.9	457	104	15.9	15.2	1140
x 86.0	x 58.0	457	107	15.9	17.8	1230

Imperial	Metric	Depth ins.	Width ins.	Flange	Web Thickness ins.	Section Modulus ins. ³
				Thickness (mean) ins.		
MC 12 x 10.60	MC 310 x 15.8	12.0	1.500	0.310	0.190	9.23
x 31.0	x 46.0	12.0	3.670	0.700	0.370	33.70
x 35.0	x 52.0	12.0	3.765	0.700	0.465	36.10
x 40.0	x 60.0	12.0	3.890	0.700	0.590	39.10
x 45.0	x 67.0	12.0	4.010	0.700	0.710	41.90
x 50.0	x 74.0	12.0	4.135	0.700	0.935	44.90
MC 13 x 27.3	MC 330 x 40.7	13.0	3.890	0.610	0.270	33.70
x 31.8	x 47.3	13.0	4.000	0.610	0.375	36.70
x 35.0	x 52.0	13.0	4.072	0.610	0.447	38.80
x 40.0	x 60.0	13.0	4.185	0.610	0.560	41.90
x 50.0	x 74.0	13.0	4.412	0.610	0.787	48.30
MC 18 x 42.7	MC 460 x 63.5	18.0	3.950	0.625	0.450	61.50
x 45.8	x 68.2	18.0	4.000	0.625	0.500	64.20
x 51.9	x 77.2	18.0	4.100	0.625	0.600	69.60
x 58.0	x 86.0	18.0	4.200	0.625	0.700	75.00

WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W100 x 19	W4 x 13	106	103	8.8	7.1	89.9
W130 x 24	W5 x 16	127	127	9.1	6.1	139
x 24	x 19	131	128	10.9	6.9	168
W150 x 13	W6 x 8.5	148	100	4.9	4.3	82.8
x 14	x 9	150	100	5.5	4.3	91.6
x 18	x 12	153	102	7.1	5.8	120
x 24	x 16	160	102	10.3	6.6	168
W150 x 22	W6 x 15	152	152	6.6	5.8	160
x 30	x 20	157	153	9.3	6.6	219
x 37	x 25	162	154	11.6	8.1	275
W200 x 15	W8 x 10	200	100	5.2	4.3	127
x 19	x 13	203	102	6.5	5.8	163
x 22	x 15	206	102	8.0	6.2	194
W200 x 21	W8 x 14	203	133	6.4	5.0	195
x 27	x 18	207	133	8.4	5.8	249
x 31	x 21	210	134	10.2	6.4	299
W200 x 36	W8 x 24	201	165	10.2	6.2	342
x 42	x 28	205	166	11.8	7.2	399

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W4 x 13	W100 x 19	4.16	4.06	.345	.280	5.46
W5 x 16	W130 x 24	5.01	5.00	.360	.240	8.51
x 19	x 28	5.15	5.03	.430	.270	10.2
W6 x 8.5	W150 x 13	5.83	3.94	.194	.170	5.14
x 9	x 14	5.90	3.94	.215	.170	5.56
x 12	x 18	6.03	4.00	.280	.230	7.31
x 16	x 24	6.28	4.03	.405	.260	10.2
W6 x 15	W150 x 22	5.99	5.99	.260	.230	9.72
x 20	x 30	6.20	6.02	.365	.260	13.4
x 25	x 37	6.38	6.08	.455	.320	16.7
W8 x 10	W200 x 15	7.89	3.94	.205	.170	7.81
x 13	x 19	7.99	4.00	.255	.230	9.91
x 15	x 22	8.11	4.02	.315	.245	11.8
W8 x 14	W200 x 21	7.98	5.21	.250	.195	11.8
x 18	x 27	8.14	5.25	.330	.230	15.2
x 21	x 31	8.28	5.27	.400	.250	18.2
W8 x 24	W200 x 36	7.93	6.50	.400	.245	20.9
x 28	x 42	8.06	6.54	.465	.285	24.3

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric		Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W200 x	46	W8 x 31	203	203	11.0	7.2	448
	x 52	x 35	206	204	12.6	7.9	512
	x 59	x 40	210	205	14.2	9.1	582
	x 71	x 48	216	206	17.4	10.2	709
	x 86	x 58	222	209	20.6	13.0	853
	x 100	x 67	229	210	23.7	14.5	989
W250 x	18	W10 x 12	251	101	5.3	4.8	179
	x 22	x 15	254	102	6.9	5.8	227
	x 25	x 17	257	102	8.4	6.1	266
	x 28	x 19	260	102	10.0	6.4	307
W250 x	24	W10 x 16	253	145	6.4	5.0	274
	x 33	x 22	258	146	9.1	6.1	379
	x 39	x 26	262	147	11.2	6.6	459
	x 45	x 30	266	148	13.0	7.6	534
W250 x	49	W10 x 33	247	202	11.0	7.4	572
	x 58	x 39	252	203	13.5	8.0	693
	x 67	x 45	257	204	15.7	8.9	806

Imperial		Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W8 x	31	W200 x 46	8.00	8.00	.435	.285	27.5
	x 35	x 52	8.12	8.02	.495	.310	31.2
	x 40	x 59	8.25	8.07	.560	.360	35.5
	x 48	x 71	8.50	8.11	.685	.400	43.3
	x 58	x 86	8.75	8.22	.810	.510	52.0
	x 67	x 100	9.00	8.28	.935	.570	60.4
W10 x	12	W250 x 18	9.87	3.96	.210	.190	10.9
	x 15	x 22	9.99	4.00	.270	.230	13.8
	x 17	x 25	10.11	4.01	.330	.240	16.2
	x 19	x 28	10.24	4.02	.395	.250	18.8
W10 x	16	W250 x 24	9.95	5.71	.250	.195	16.6
	x 22	x 33	10.17	5.75	.360	.240	23.2
	x 26	x 39	10.33	5.77	.440	.260	27.9
	x 30	x 45	10.47	5.81	.510	.300	32.4
W10 x	33	W250 x 49	9.73	7.96	.435	.290	35.0
	x 39	x 58	9.92	7.98	.530	.315	42.1
	x 45	x 67	10.10	8.02	.620	.350	49.1

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W250 x 73	W10 x 49	253	254	14.2	8.6	891
x 80	x 54	256	255	15.6	9.4	982
x 89	x 60	260	256	17.3	10.7	1100
x 101	x 68	264	257	19.6	11.9	1240
x 115	x 77	269	259	22.1	13.5	1410
x 131	x 88	275	261	25.1	15.4	1610
x 149	x 100	282	263	28.4	17.3	1840
x 167	x 112	289	265	31.8	19.2	2080
W310 x 21	W12 x 14	303	101	5.7	5.1	244
x 24	x 16	305	101	6.7	5.6	280
x 28	x 19	309	102	8.9	6.0	351
x 33	x 22	313	102	10.8	6.6	415
W310 x 31	W12 x 21	306	164	7.4	5.0	428
x 39	x 26	310	165	9.7	5.8	549
x 45	x 30	313	166	11.2	6.6	634
x 52	x 35	317	167	13.2	7.6	750

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W10 x 49	W250 x 73	9.98	10.00	.560	.340	54.6
x 54	x 80	10.09	10.03	.615	.370	60.0
x 60	x 89	10.22	10.08	.680	.420	66.7
x 68	x 101	10.40	10.13	.770	.470	75.7
x 77	x 115	10.60	10.19	.870	.530	85.9
x 88	x 131	10.84	10.26	.990	.605	98.5
x 100	x 149	11.10	10.34	1.12	.680	112
x 112	x 167	11.36	10.42	1.25	.755	126
W12 x 14	W310 x 21	11.91	3.97	.225	.200	14.9
x 16	x 24	11.99	3.99	.265	.220	17.1
x 19	x 28	12.16	4.00	.350	.235	21.3
x 22	x 33	12.31	4.03	.425	.260	25.4
W12 x 21	W310 x 31	12.04	6.45	.290	.195	26.1
x 26	x 39	12.22	6.49	.380	.230	33.4
x 30	x 45	12.34	6.52	.440	.260	38.6
x 35	x 52	12.50	6.56	.520	.300	45.6

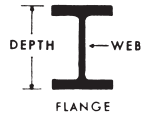
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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange	Web Thickness mm	Section Modulus 10 ³ mm ³
				Thickness (mean) mm		
W310 x 60	W12 x 40	303	203	13.1	7.5	842
x 67	x 45	306	204	14.6	8.5	942
x 74	x 50	310	205	16.3	9.4	1060
W310 x 79	W12 x 53	306	254	14.6	8.8	1160
x 86	x 58	310	254	16.3	9.1	1280
W310 x 97	W12 x 65	308	305	15.4	9.9	1440
x 107	x 72	311	306	17.0	10.9	1590
x 118	x 79	314	307	18.7	11.9	1750
x 129	x 87	318	308	20.6	13.1	1940
x 143	x 96	323	309	22.9	14.0	2150
x 158	x 106	327	310	25.1	15.5	2360
x 179	x 120	333	313	28.1	18.0	2680
x 202	x 136	341	315	31.8	20.1	3050
x 226	x 152	348	317	35.6	22.1	3420
x 253	x 170	356	319	39.6	24.4	3830
x 283	x 190	365	322	44.1	26.9	4310
x 313	x 210	374	325	48.3	30.0	4790
x 342	x 230	382	328	52.6	32.6	5260
W360 x 33	W14 x 22	349	127	8.5	5.8	474
x 39	x 26	353	128	10.7	6.5	580

Imperial	Metric	Depth ins.	Width ins.	Flange	Web Thickness ins.	Section Modulus ins. ³
				Thickness (mean) ins.		
W12 x 40	W310 x 60	11.94	8.00	.515	.295	51.9
x 45	x 67	12.06	8.04	.575	.335	58.1
x 50	x 74	12.19	8.08	.640	.370	64.7
W12 x 53	W310 x 79	12.06	10.00	.575	.345	70.6
x 58	x 86	12.19	10.01	.640	.360	78.0
W12 x 65	W310 x 97	12.12	12.00	.605	.390	87.9
x 72	x 107	12.25	12.04	.670	.430	97.4
x 79	x 118	12.38	12.08	.735	.470	107
x 87	x 129	12.53	12.12	.810	.515	118
x 96	x 143	12.71	12.16	.900	.550	131
x 106	x 158	12.89	12.22	.990	.610	145
x 120	x 179	13.12	12.32	1.10	.710	163
x 136	x 202	13.41	12.40	1.25	.790	186
x 152	x 226	13.71	12.48	1.40	.870	209
x 170	x 253	14.03	12.57	1.56	.960	235
x 190	x 283	14.38	12.67	1.74	1.06	263
x 210	x 313	14.71	12.79	1.90	1.18	292
x 230	x 342	15.05	12.90	2.07	1.29	321
W14 x 22	W360 x 33	13.74	5.00	.335	.230	29.0
x 26	x 39	13.91	5.02	.420	.255	35.3

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W360 x 45	W14 x 30	352	171	9.8	6.9	691
x 51	x 34	355	171	11.6	7.2	796
x 57	x 38	358	172	13.1	7.9	897
W360 x 64	W14 x 43	347	203	13.5	7.7	1030
x 72	x 48	350	204	15.1	8.6	1150
x 79	x 53	354	205	16.8	9.4	1280
W360 x 91	W14 x 61	353	254	16.4	9.5	1510
x 101	x 68	357	255	18.3	10.5	1690
x 110	x 74	360	256	19.9	11.4	1840
x 122	x 82	363	257	21.7	13.0	2010
W360 x 134	W14 x 90	356	369	18.0	11.2	2330
x 147	x 99	360	370	19.8	12.3	2570
x 162	x 109	364	371	21.8	13.3	2830
x 179	x 120	368	373	23.9	15.0	3120
x 196	x 132	372	374	26.2	16.4	3420

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W14 x 30	W360 x 45	13.84	6.73	.385	.270	42.0
x 34	x 51	13.98	6.74	.455	.285	48.6
x 38	x 57	14.10	6.77	.515	.310	54.6
W14 x 43	W360 x 64	13.66	8.00	.530	.305	62.7
x 48	x 72	13.79	8.03	.595	.340	70.3
x 53	x 79	13.92	8.06	.660	.370	77.8
W14 x 61	W360 x 91	13.89	10.00	.645	.375	92.2
x 68	x 101	14.04	10.04	.720	.415	103
x 74	x 110	14.17	10.07	.785	.450	112
x 82	x 122	14.31	10.13	.855	.510	123
W14 x 90	W360 x 134	14.02	14.52	.710	.440	143
x 99	x 147	14.16	14.56	.780	.485	157
x 109	x 162	14.32	14.60	.860	.525	173
x 120	x 179	14.48	14.67	.940	.590	190
x 132	x 196	14.66	14.72	1.03	.645	209

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



		Depth	Width	Flange	Web	Section
Metric	Imperial	mm	mm	Thickness (mean) mm	Thickness mm	Modulus 10 ³ mm ³
W360 x 216	W14 x 145	375	394	27.7	17.3	3790
x 237	x 159	380	395	30.2	18.9	4150
x 262	x 176	387	398	33.3	21.1	4620
x 287	x 193	393	399	36.6	22.6	5070
x 314	x 211	399	401	39.6	24.9	5530
x 347	x 233	407	404	43.7	27.2	6140
x 382	x 257	416	406	48.0	29.8	6790
x 421	x 283	425	409	52.6	32.8	7510
x 463	x 311	435	412	57.4	35.8	8280
x 509	x 342	446	416	62.7	39.1	9170
x 551	x 370	455	418	67.6	42.0	9940
x 592	x 398	465	421	72.3	45.0	10800
x 634	x 426	474	424	77.1	47.6	11600
W360 x 677	W14 x 455	483	428	81.5	51.2	12400
x 744	x 500	498	432	88.9	55.6	13700
x 818	x 550	514	437	97.0	60.5	15300
x 900	x 605	531	442	106	65.9	17000
x 990	x 665	550	448	115	71.9	18900
x 1086	x 730	569	454	125	78.0	20900

		Depth	Width	Flange	Web	Section
Imperial	Metric	ins.	ins.	Thickness (mean) ins.	Thickness ins.	Modulus ins. ³
W14 x 145	W360 x 216	14.78	15.50	1.09	.680	232
x 159	x 237	14.98	15.56	1.19	.745	254
x 176	x 262	15.22	15.65	1.31	.830	281
x 193	x 287	15.48	15.71	1.44	.890	310
x 211	x 314	15.72	15.80	1.56	.980	338
x 233	x 347	16.04	15.89	1.72	1.07	375
x 257	x 382	16.38	16.00	1.89	1.18	415
x 283	x 421	16.74	16.11	2.07	1.29	459
x 311	x 463	17.12	16.23	2.26	1.41	506
x 342	x 509	17.54	16.36	2.47	1.54	559
x 370	x 551	17.92	16.48	2.66	1.66	607
x 398	x 592	18.29	16.59	2.84	1.77	656
x 426	x 634	18.67	16.70	3.04	1.88	707
W14 x 455	W360 x 677	19.02	16.84	3.21	2.02	756
x 500	x 744	19.60	17.01	3.50	2.19	838
x 550	x 818	20.24	17.20	3.82	2.38	931
x 605	x 900	20.92	17.42	4.16	2.60	1040
x 665	x 990	21.64	17.65	4.52	2.83	1150
x 730	x 1086	22.42	17.89	4.91	3.07	1280

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W410 x 39	W16 x 26	399	140	8.8	6.4	634
x 46	x 31	403	140	11.2	7.0	773
W410 x 54	W16 x 36	403	177	10.9	7.5	924
x 60	x 40	407	178	12.8	7.7	1060
x 67	x 45	410	179	14.4	8.8	1200
x 74	x 50	413	180	16.0	9.7	1330
x 85	x 57	417	181	18.2	10.9	1510
W410 x 100	W16 x 67	415	260	16.9	10.0	1920
x 114	x 77	420	261	19.3	11.6	2200
x 132	x 89	425	263	22.2	13.3	2540
x 149	x 100	431	265	25.0	14.9	2870
W460 x 52	W18 x 35	450	152	10.8	7.6	943
x 60	x 40	455	153	13.3	8.0	1120
x 68	x 46	459	154	15.4	9.1	1290

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W16 x 26	W410 x 39	15.69	5.50	.345	.250	38.4
x 31	x 46	15.88	5.52	.440	.275	47.2
W16 x 36	W410 x 54	15.86	6.98	.430	.295	56.5
x 40	x 60	16.01	7.00	.505	.305	64.7
x 45	x 67	16.13	7.04	.565	.345	72.7
x 50	x 74	16.26	7.07	.630	.380	81.0
x 57	x 85	16.43	7.12	.715	.430	92.2
W16 x 67	W410 x 100	16.33	10.24	.665	.395	117
x 77	x 114	16.52	10.30	.760	.455	134
x 89	x 132	16.75	10.36	.875	.525	155
x 100	x 149	16.97	10.42	.985	.585	175
W18 x 35	W460 x 52	17.70	6.00	.425	.300	57.6
x 40	x 60	17.90	6.02	.525	.315	68.4
x 46	x 68	18.06	6.06	.605	.360	78.8

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WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange	Web Thickness mm	Section Modulus 10 ³ mm ³
				Thickness (mean) mm		
W460 x 61	W18 x 41	450	189	10.8	8.1	1130
x 67	x 45	454	190	12.7	8.5	1300
x 74	x 50	457	190	14.5	9.0	1460
x 82	x 55	460	191	16.0	9.9	1610
x 89	x 60	463	192	17.7	10.5	1770
x 97	x 65	466	193	19.0	11.4	1910
x 106	x 71	469	194	20.6	12.6	2080
W460 x 113	W18 x 76	463	280	17.3	10.8	2400
x 128	x 86	467	282	19.6	12.2	2730
x 144	x 97	472	283	22.1	13.6	3080
x 158	x 106	476	284	23.9	15.0	3350
x 177	x 119	482	286	26.9	16.6	3780
x 193	x 130	489	283	30.5	17.0	4190
x 213	x 143	495	285	33.5	18.5	4620
x 235	x 158	501	287	36.6	20.6	5080
x 260	x 175	509	289	40.4	22.6	5650
x 286	x 192	517	291	44.4	24.4	6240
W530 x 66	W21 x 44	525	165	11.4	8.9	1340
x 74	x 50	529	166	13.6	9.7	1550
x 85	x 57	535	166	16.5	10.3	1810

Imperial	Metric	Depth ins.	Width ins.	Flange	Web Thickness ins.	Section Modulus ins. ³
				Thickness (mean) ins.		
W18 x 41	W460 x 61	17.70	7.45	.425	.320	69.0
x 45	x 67	17.86	7.48	.499	.335	79.3
x 50	x 74	17.99	7.50	.570	.355	88.9
x 55	x 82	18.11	7.53	.630	.390	98.3
x 60	x 89	18.24	7.56	.695	.415	108
x 65	x 97	18.35	7.59	.750	.450	117
x 71	x 106	18.47	7.64	.810	.495	127
W18 x 76	W460 x 113	18.21	11.04	.680	.425	146
x 86	x 128	18.39	11.09	.770	.480	166
x 97	x 144	18.59	11.14	.870	.535	188
x 106	x 158	18.73	11.20	.940	.590	204
x 119	x 177	18.97	11.26	1.060	.655	231
x 130	x 193	19.25	11.160	1.200	.670	256
x 143	x 213	19.49	11.220	1.320	.730	282
x 158	x 235	19.72	11.300	1.440	.810	310
x 175	x 260	20.04	11.375	1.590	.890	344
x 192	x 286	20.35	11.455	1.750	.960	382
W21 x 44	W530 x 66	20.66	6.50	.450	.350	81.6
x 50	x 74	20.83	6.53	.535	.380	94.5
x 57	x 85	21.06	6.56	.650	.405	111

Cont'd

WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W530 x 72	W21 x 48	524	207	10.9	8.9	1520
x 82	x 55	528	209	13.3	9.5	1810
x 92	x 62	533	209	15.6	10.2	2070
x 101	x 68	537	210	17.4	10.9	2300
x 109	x 73	539	211	18.8	11.6	2480
x 123	x 83	544	212	21.2	13.1	2800
x 138	x 93	549	214	23.6	14.7	3140
W530 x 150	W21 x 101	543	312	20.3	12.7	3710
x 165	x 111	546	313	22.2	14.0	4060
x 182	x 122	551	315	24.4	15.2	4480
x 196	x 132	554	316	26.3	16.5	4840
x 219	x 147	560	318	29.2	18.3	5390
x 248	x 166	571	315	34.5	19.0	6220
W610 x 82	W24 x 55	599	178	12.8	10.0	1870
x 92	x 62	603	179	15.0	10.9	2140
W610 x 84	W24 x 56	596	226	11.7	9.2	2020
x 91	x 61	598	227	12.7	9.7	2200
x 101	x 68	603	228	14.9	10.5	2530
x 113	x 76	608	228	17.3	11.2	2880
x 125	x 84	612	229	19.6	11.9	3220
x 140	x 94	617	230	22.2	13.1	3630
x 153	x 103	623	229	24.9	14.0	4020

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W21 x 48	W530 x 72	20.62	8.14	.430	.350	93.0
x 55	x 82	20.80	8.22	.522	.375	110
x 62	x 92	20.99	8.24	.615	.400	127
x 68	x 101	21.13	8.27	.685	.430	140
x 73	x 109	21.24	8.30	.740	.455	151
x 83	x 123	21.43	8.36	.835	.515	171
x 93	x 138	21.62	8.42	.930	.580	192
W21 x 101	W530 x 150	21.36	12.29	.800	.500	227
x 111	x 165	21.51	12.34	.875	.550	249
x 122	x 182	21.68	12.39	.960	.600	273
x 132	x 196	21.83	12.44	1.04	.650	295
x 147	x 219	22.06	12.51	1.15	.720	329
x 166	x 248	22.48	12.42	1.36	.750	380
W24 x 55	W610 x 82	23.57	7.00	.505	.395	114
x 62	x 92	23.74	7.04	.590	.430	131
W24 x 56	W610 x 84	23.46	8.90	.461	.355	126
x 61	x 91	23.54	8.94	.500	.380	136
x 68	x 101	23.73	8.96	.585	.415	154
x 76	x 113	23.92	8.99	.680	.440	176
x 84	x 125	24.10	9.02	.770	.470	196
x 94	x 140	24.31	9.06	.875	.515	222
x 103	x 153	24.53	9.00	.980	.550	245

WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W610 x 155	W24 x 104	611	324	19.0	12.7	4220
x 174	x 117	616	325	21.6	14.0	4780
x 195	x 131	622	327	24.4	15.4	5400
x 217	x 146	628	328	27.7	16.5	6070
x 241	x 162	635	329	31.0	17.9	6780
x 262	x 176	641	327	34.0	19.0	7360
W690 x 125	W27 x 84	678	253	16.3	11.7	3500
x 140	x 94	684	254	18.9	12.4	3980
x 152	x 102	688	254	21.1	13.1	4380
x 170	x 114	693	256	23.6	14.5	4910
x 192	x 129	702	254	27.9	15.5	5640
W690 x 217	W27 x 146	695	355	24.8	15.4	6790
x 240	x 161	701	356	27.4	16.8	7490
x 265	x 178	706	358	30.2	18.4	8270
x 289	x 194	714	356	34.0	19.0	9140
W760 x 134	W30 x 90	750	264	15.5	11.9	4010
x 147	x 99	753	265	17.0	13.2	4410
x 161	x 108	758	266	19.3	13.8	4900
x 173	x 116	762	267	21.6	14.4	5400
x 185	x 124	766	267	23.6	14.9	5820
x 196	x 132	770	268	25.4	15.6	6240
x 220	x 148	779	266	30.0	16.5	7140

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W24 x 104	W610 x 155	24.06	12.75	.750	.500	258
x 117	x 174	24.26	12.80	.850	.550	291
x 131	x 195	24.48	12.86	.960	.605	329
x 146	x 217	24.74	12.90	1.09	.650	371
x 162	x 241	25.00	12.96	1.22	.705	414
x 176	x 262	25.24	12.89	1.34	.750	450
W27 x 84	W690 x 125	26.71	9.96	.640	.460	213
x 94	x 140	26.92	9.99	.745	.490	243
x 102	x 152	27.09	10.02	.830	.515	267
x 114	x 170	27.29	10.07	.930	.570	299
x 129	x 192	27.63	10.01	1.100	.610	345
W27 x 146	W690 x 217	27.38	13.96	.975	.605	411
x 161	x 240	27.59	14.02	1.08	.660	455
x 178	x 265	27.81	14.08	1.19	.725	502
x 194	x 289	28.11	14.04	1.34	.750	556
W30 x 90	W760 x 134	29.53	10.40	.610	.470	245
x 99	x 147	29.65	10.45	.670	.520	269
x 108	x 161	29.83	10.48	.760	.545	299
x 116	x 173	30.01	10.50	.850	.565	329
x 124	x 185	30.17	10.52	.930	.585	355
x 132	x 196	30.31	10.54	1.00	.615	380
x 148	x 220	30.67	10.48	1.18	.650	436

Cont'd

WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W760 x 257	W30 x 173	773	381	27.1	16.6	8840
x 284	x 191	779	382	30.1	18.0	9790
x 314	x 211	786	384	33.4	19.7	11000
x 350	x 235	795	382	38.1	21.1	12200
W840 x 176	W33 x 118	835	292	18.8	14.0	5900
x 193	x 130	840	292	21.7	14.7	6630
x 210	x 141	846	293	24.4	15.4	7340
x 226	x 152	851	294	26.8	16.1	7990
x 251	x 169	859	292	31.0	17.0	9000
W840 x 299	W33 x 201	855	400	29.2	18.2	11200
x 329	x 221	862	401	32.4	19.7	12400
x 359	x 241	868	403	35.6	21.1	13600
W920 x 201	W36 x 135	903	304	20.1	15.2	7200
x 223	x 150	911	304	23.9	15.9	8270
x 238	x 160	915	305	25.9	16.5	8880
x 253	x 170	919	306	27.9	17.3	9520
x 271	x 182	923	307	30.0	18.4	10200
x 289	x 194	927	308	32.0	19.4	10900
x 313	x 210	932	309	34.5	21.1	11800

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W30 x 173	W760 x 257	30.44	14.98	1.06	.655	539
x 191	x 284	30.68	15.04	1.18	.710	598
x 211	x 314	30.94	15.10	1.31	.775	663
x 235	x 350	31.30	15.06	1.50	.830	746
W33 x 118	W840 x 176	32.86	11.48	.740	.550	359
x 130	x 193	33.09	11.51	.855	.580	406
x 141	x 210	33.30	11.54	.960	.605	448
x 152	x 226	33.49	11.56	1.06	.635	487
x 169	x 251	33.82	11.50	1.22	.670	549
W33 x 201	W840 x 299	33.68	15.74	1.15	.715	684
x 221	x 329	33.93	15.80	1.28	.775	757
x 241	x 359	34.18	15.86	1.40	.830	829
W36 x 135	W920 x 201	35.55	11.95	.790	.600	439
x 150	x 223	35.85	11.98	.940	.625	504
x 160	x 238	36.01	12.00	1.02	.650	542
x 170	x 253	36.17	12.03	1.10	.680	580
x 182	x 271	36.33	12.08	1.18	.725	623
x 194	x 289	36.49	12.12	1.26	.765	664
x 210	x 313	36.69	12.18	1.36	.830	719

WIDE FLANGE BEAMS (W)

CSA G40.21 – 50W /

ASTM A572 GR50 / A992

STOCK LENGTHS 40.0' THRU 65.0' – 5.0' INCREMENTS



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W920 x 342	W36 x 231	912	418	32.0	19.3	13700
x 365	x 247	916	419	34.3	20.3	14600
x 387	x 262	921	420	36.6	21.3	15600
x 417	x 282	928	422	39.9	22.5	17000
x 446	x 302	933	423	42.7	24.0	18200
W1000 x 222	W40 x 149	970	300	21.1	16.0	8410
x 249	x 167	980	300	26.0	16.5	9820
x 272	x 183	990	300	31.0	16.5	11200
x 314	x 211	1000	300	35.9	19.1	12900
x 350	x 235	1008	302	40.0	21.1	14300
x 393	x 264	1016	303	43.9	24.4	15900
x 414	x 294	1026	305	49.0	26.9	17770
x 493	x 327	1036	308	54.1	30.0	19660

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W36 x 231	W920 x 342	35.90	16.47	1.26	.760	837
x 247	x 365	36.08	16.51	1.35	.800	895
x 262	x 387	36.26	16.55	1.44	.840	953
x 282	x 417	36.52	16.60	1.57	.885	1030
x 302	x 446	36.74	16.66	1.68	.945	1110
W40 x 149	W1000 x 222	38.20	11.81	.830	.630	513
x 167	x 249	38.60	11.81	1.025	.650	600
x 183	x 272	39.00	11.81	1.200	.650	683
x 211	x 314	39.40	11.81	1.415	.750	786
x 235	x 350	39.70	11.89	1.575	.830	875
x 264	x 393	40.00	11.93	1.730	.960	971
x 294	x 414	40.40	12.01	1.930	1.060	1080
x 327	x 493	40.80	12.13	2.130	1.180	1200

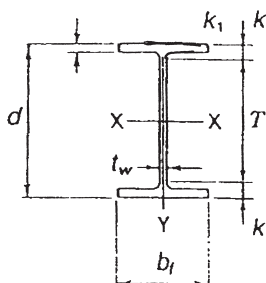
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W SHAPES

DIMENSIONS

CSA G40.21 – 50W

ASTM A572 GR50 / A992



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ³ mm ³
W1000 x 258	W40 x 174	970	400	21.1	16.5	10352
x 296	x 199	982	400	27.1	16.5	12600
x 321	x 215	990	400	31.0	16.5	14100
x 371	x 249	1000	400	36.1	19.0	16300
x 412	x 277	1008	402	40.0	21.1	18100
x 443	x 297	1012	402	41.9	23.6	19100
x 483	x 324	1020	404	46.0	25.4	20980
x 539	x 362	1030	407	51.1	28.4	23270
x 554	x 372	1032	408	52.0	29.5	23900
x 591	x 397	1040	409	55.9	31.0	25560
x 642	x 431	1048	412	60.0	34.0	27700
x 748	x 503	1068	417	70.1	39.1	32500
x 883	x 593	1092	424	82.0	45.5	38400
W1100 x 343	W44 x 230	1090	400	31.0	18.0	15900
x 390	x 262	1100	400	36.1	20.1	18300
x 433	x 290	1108	402	40.1	22.1	20400
x 499	x 335	1118	405	45.0	25.9	23100

Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
W40 x 174	W1000 x 258	38.2	15.750	0.830	0.65	639
x 199	x 296	38.7	15.750	1.065	0.65	769
x 215	x 321	39.0	15.750	1.220	0.65	858
x 249	x 371	39.4	15.750	1.420	0.75	992
x 277	x 412	39.7	15.830	1.575	0.83	1100
x 297	x 443	39.8	15.825	1.650	0.93	1170
x 324	x 483	40.2	15.910	1.770	1.00	1280
x 362	x 539	40.6	16.020	2.010	1.12	1420
x 372	x 554	40.6	16.060	2.045	1.16	1460
x 397	x 591	41.0	16.120	2.200	1.22	1560
x 431	x 642	41.3	16.220	2.360	1.34	1690
x 503	x 748	42.1	16.420	2.760	1.54	1980
x 593	x 883	43.0	16.690	3.230	1.79	2340
W44 x 230	W1100 x 343	42.9	15.750	1.220	0.71	969
x 262	x 390	43.3	15.750	1.420	0.79	1120
x 290	x 433	43.6	15.830	1.580	0.87	1240
x 335	x 499	44.0	15.950	1.770	1.02	1410

BEARING PILES (B.P.)

STOCK LENGTHS: 40, 50 AND 60 FEET



Metric	Imperial	Depth mm	Width mm	Flange Thickness (mean) mm	Web Thickness mm	Section Modulus 10 ⁶ mm ³
HP200 x 54	HP8 x 36	204	207	11.3	11.3	488
HP250 x 62	HP10 x 42	246	256	10.7	10.5	711
x 85	x 57	254	260	14.4	14.4	968
HP310 x 79	HP12 x 53	299	306	11.0	11.0	1090
x 94	x 63	303	308	13.1	13.1	1300
x 110	x 74	308	310	15.5	15.4	1540
x 125	x 84	312	312	17.4	17.4	1740
x 132	x 89	314	313	18.3	18.3	1830
HP360 x 108	HP14 x 73	346	370	12.8	12.8	1750
x 132	x 89	351	373	15.6	15.6	2140
x 152	x 102	356	376	17.9	17.9	2470
x 174	x 117	361	378	20.4	20.4	2820

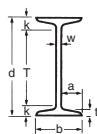
Imperial	Metric	Depth ins.	Width ins.	Flange Thickness (mean) ins.	Web Thickness ins.	Section Modulus ins. ³
HP8 x 36	HP200 x 54	8.02	8.16	.445	.445	29.8
HP10 x 42	HP250 x 62	9.70	10.08	.420	.415	43.4
x 57	x 85	9.99	10.22	.565	.565	58.8
HP12 x 53	HP310 x 79	11.78	12.04	.435	.435	66.8
x 63	x 94	11.94	12.13	.515	.515	79.1
x 74	x 110	12.13	12.22	.610	.605	93.8
x 84	x 125	12.28	12.30	.685	.685	106
x 89	x 132	12.35	12.33	.720	.720	112
HP14 x 73	HP360 x 108	13.61	14.58	.505	.505	107
x 89	x 132	13.83	14.70	.615	.615	131
x 102	x 152	14.01	14.78	.705	.705	150
x 117	x 174	14.21	14.88	.805	.805	172

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STANDARD I-BEAMS S-SHAPES

CSA G40.21 – 50W

ASTM A572 GR50 / A992



Imperial	Metric	Depth d inches	Width b inches	Flange	
				Thickness t inches	
S3 x 5.7	S75 x 8	3.00	2.33	.260	
x 7.5	x 11	3.00	2.51	.260	
S4 x 7.7	S100 x 11	4.00	2.66	.293	
x 9.5*	x 14.1*	4.00	2.80	.293	
S5 x 10.0	S130 x 15	5.00	3.00	.326	
S6 x 12.5	S150 x 19	6.00	3.33	.359	
x 17.25	x 26	6.00	3.56	.359	
S8 x 18.4	S200 x 27	8.00	4.00	.425	
x 23.0	x 34	8.00	4.17	.425	
S10 x 25.4	S250 x 38	10.00	4.66	.491	
x 35.0	x 52	10.00	4.94	.491	
S12 x 31.8	S310 x 47	12.00	5.00	.544	
x 35.0	x 52	12.00	5.08	.544	
x 40.8*	x 60.7*	12.00	5.25	.659	
x 50.0*	x 74*	12.00	5.48	.659	1
S15 x 42.9*	S380 x 64*	15.00	5.50	.622	
x 50.0*	x 74*	15.00	5.64	.622	
S18 x 54.7*	S460 x 81.4*	18.00	6.00	.691	
x 70.00*	x 104*	18.00	6.25	.691	
S20 x 66.0*	S510 x 98*	20.00	6.26	.795	
x 75.0*	x 112*	20.00	6.39	.795	
x 86.0*	x 128*	20.30	7.06	.920	
x 96.0*	x 143*	20.30	7.20	.920	
S24 x 80.0*	S610 x 119*	24.00	7.00	.870	
x 90.0*	x 134*	24.00	7.13	.870	
x 100.0*	x 149*	24.00	7.24	.870	
x 106.0*	x 158*	24.50	7.87	1.090	
x 121.0*	x 180*	24.50	8.05	1.090	

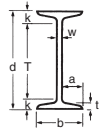
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STANDARD I-BEAMS S-SHAPES

CSA G40.21 – 50W

ASTM A572 GR50 / A992



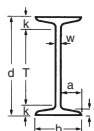
				Thickness w inches	Distances a in. T in. k in.			Web Section Modulus ins. ³
Imperial		Metric						
S3 x 5.7		S75 x 8		.170	1⅛	1¾	⅝	1.68
x 7.5		x 11		.349	1⅛	1¾	⅝	1.95
S4 x 7.7		S100 x 11		.193	1¼	2⅝	1⅛	3.04
x 9.5*		x 14.1*		.326	1¼	2⅝	1⅛	3.39
S5 x 10.0		S130 x 15		.214	1⅜	3½	¾	4.92
S6 x 12.5		S150 x 19		.232	1½	4⅜	13/16	7.37
x 17.25		x 26		.465	1½	4⅜	13/16	8.77
S8 x 18.4		S200 x 27		.271	1⅞	6⅞	15/16	14.4
x 23.0		x 34		.441	1⅞	6⅞	15/16	16.2
S10 x 25.4		S250 x 38		.311	2⅞	7⅞	1⅛	24.7
x 35.0		x 52		.594	2⅞	7⅞	1⅛	29.4
S12 x 31.8		S310 x 47		.350	2⅞	9⅝	1⅜	36.4
x 35.0		x 52		.428	2⅞	9⅝	1⅜	38.2
x 40.8*		x 60.7*		.462	2⅞	9¼	1⅜	45.4
x 50.0*		x 74*		.687	2⅞	9¼	1⅜	50.8
S15 x 42.9*		S380 x 64*		.411	2½	12⅜	1⅝	59.6
x 50.0*		x 74*		.550	2½	12⅜	1⅝	64.8
S18 x 54.7*		S460 x 81.4*		.461	2¾	15⅞	1⅞	89.4
x 70.00*		x 104*		.711	2¾	15⅞	1⅞	103
S20 x 66.0*		S510 x 98*		.505	2⅞	16¾	1⅝	119
x 75.0*		x 112*		.635	2⅞	16¾	1⅝	128
x 86.0*		x 128*		.660	3¼	16⅝	1⅜	155
x 96.0*		x 143*		.800	3¼	16⅝	1⅜	165
S24 x 80.0*		S610 x 119*		.500	3¼	20⅝	1⅛	175
x 90.0*		x 134*		.625	3¼	20⅝	1⅛	187
x 100.0*		x 149*		.745	3¼	20⅝	1⅛	199
x 106.0*		x 158*		.620	3⅝	20⅝	1⅝	240
x 121.0*		x 180*		.800	3⅝	20⅝	1⅝	258

*Not available from Canadian Mills

STANDARD I-BEAMS S-SHAPES

CSA G40.21 – 50W

ASTM A572 GR50 / A992



Metric	Imperial	Depth d mm	Flange	
			Width b mm	Thickness t mm
S75 x 8	S3 x 5.7	76	59	6.6
x 11	x 7.5	76	64	6.6
S100 x 11	S4 x 7.7	102	68	7.4
x 14.1*	x 9.5*	102	71	7.4
S130 x 15	S5 x 10.0	127	76	8.3
S150 x 19	S6 x 12.5	152	85	9.1
x 26	x 17.25	152	91	9.1
S200 x 27	S8 x 18.4	203	102	10.8
x 34	x 23.0	203	106	10.8
S250 x 38	S10 x 25.4	254	118	12.5
x 52	x 35.0	254	126	12.5
S310 x 47	S12 x 31.8	305	127	13.8
x 52	x 35.0	305	129	13.8
x 60.7*	x 40.8*	305	133	16.7
x 74*	x 50.0*	305	139	16.7
S380 x 64*	S15 x 42.9*	381	140	15.8
x 74*	x 50.0*	381	143	15.8
S460 x 81.4*	S18 x 54.7*	457	152	17.6
x 104*	x 70.0*	457	159	17.6
S510 x 98.2*	S20 x 66.0*	508	159	20.2
x 112*	x 75.0*	508	162	20.2
x 128*	x 86.0*	516	179	23.4
x 143*	x 96.0*	516	183	23.4
S610 x 119*	S24 x 80.0*	610	178	22.1
x 134*	x 90.0*	610	181	22.1
x 149*	x 100.0*	610	184	22.1
x 158*	x 106.0*	622	200	27.7
x 180*	x 121.0*	622	204	27.7

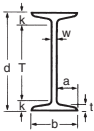
*Not available from Canadian Mills

Cont'd

STANDARD I-BEAMS S-SHAPES

CSA G40.21 – 50W

ASTM A572 GR50 / A992

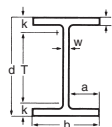


Metric	Imperial	Web Thickness w mm	a mm	Distance T mm	k mm	Section Modulus 10³ mm³
S75 x 8	S3 x 5.7	4.3	28	44	16	27.4
x 11	x 7.5	8.9	28	44	16	32.0
S100 x 11	S4 x 7.7	4.8	32	68	17	50.3
x 14.1*	x 9.5*	8.3	32	68	17	55.9
S130 x 15	S5 x 10.0	5.4	36	90	19	80.5
S150 x 19	S6 x 12.5	5.9	40	111	20	121
x 26	x 17.25	11.8	40	111	20	143
S200 x 27	S8 x 18.4	6.9	48	155	24	237
x 34	x 23.0	11.2	48	155	24	266
S250 x 38	S10 x 25.4	7.9	55	202	26	405
x 52	x 35.0	15.1	56	201	26	484
S310 x 47	S12 x 31.8	8.9	59	246	29	598
x 52	x 35.0	10.9	59	246	29	629
x 60.7*	x 40.8*	11.7	61	235	35	744
x 74*	x 50.0*	17.4	61	235	35	833
S380 x 64*	S15 x 42.9*	10.4	65	314	34	980
x 74*	x 50.0*	14.0	65	314	34	1060
S460 x 81.4*	S18 x 54.7*	11.7	70	383	37	1470
x 104*	x 70.0*	18.1	71	383	37	1690
S510 x 98.2*	S20 x 66.0*	12.8	73	428	40	1960
x 112*	x 75.0*	16.1	73	428	40	2090
x 128*	x 86.0*	16.8	81	424	46	2550
x 143*	x 96.0*	20.3	82	424	46	2710
S610 x 119*	S24 x 80.0*	12.7	83	524	43	2890
x 134*	x 90.0*	15.9	83	524	43	3080
x 149*	x 100.0*	18.9	83	524	43	3270
x 158*	x 106.0*	15.7	92	522	50	3940
x 180*	x 121.0*	20.3	92	522	50	4220

*Not available from Canadian Mills

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W



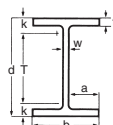
Imperial	Metric	Depth d in.	Width b in.	Flange
				Thickness t in.
WWF14 x 92	WWF350 x 137	13.78	13.78	.787
x 104	x 155	13.78	13.78	.866
x 118	x 176	13.78	13.78	.984
x 128	x 192	13.78	13.78	1.100
x 142	x 212	13.78	13.78	1.180
x 159	x 238	13.78	13.78	1.380
x 177	x 263	13.78	13.78	1.570
x 211	x 315	13.78	13.78	1.970
WWF16 x 105	WWF400 x 157	15.75	15.75	.787
x 119	x 178	15.75	15.75	.866
x 135	x 202	15.75	15.75	.984
x 147	x 220	15.75	15.75	1.100
x 163	x 243	15.75	15.75	1.180
x 183	x 273	15.75	15.75	1.380
x 203	x 303	15.75	15.75	1.570
x 243	x 362	15.75	15.75	1.970
x 298*	x 444*	15.75	15.75	2.360
WWF18 x 119	WWF450 x 177	17.72	17.72	.787
x 134	x 201	17.72	17.72	.866
x 152	x 228	17.72	17.72	.984
x 166	x 248	17.72	17.72	1.100
x 184	x 274	17.72	17.72	1.180
x 207	x 308	17.72	17.72	1.380
x 229	x 342	17.72	17.72	1.570
x 275	x 409	17.72	17.72	1.970
x 337*	x 503*	17.72	17.72	2.360
WWF20 x 132	WWF500 x 197	19.69	19.69	.787
x 150	x 223	19.69	19.69	.866
x 170	x 254	19.69	19.69	.984
x 185	x 276	19.69	19.69	1.100
x 205	x 306	19.69	19.69	1.180

*Not available from Canadian Mills

Cont'd

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W

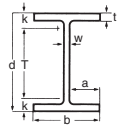


Imperial	Metric	Web Thickness w in.	a in.	Distances T in.	k in.	Section Modulus (Sx) Inches-3
WWF14 x 92	WWF350 x 137	.433	6 ⁵ / ₈	11 ³ / ₈	1 ³ / ₁₆	143.4
x 104	x 155	.551	6 ⁵ / ₈	11 ¹ / ₄	1 ¹ / ₄	157.4
x 118	x 176	.630	6 ⁵ / ₈	11	1 ³ / ₈	175.1
x 128	x 192	.630	6 ⁵ / ₈	10 ³ / ₄	1 ¹ / ₂	190.4
x 142	x 212	.787	6 ¹ / ₂	10 ¹ / ₂	1 ⁵ / ₈	203.2
x 159	x 238	.787	6 ¹ / ₂	10	1 ⁷ / ₈	227.0
x 177	x 263	.787	6 ¹ / ₂	9 ⁵ / ₈	2 ¹ / ₁₆	248.4
x 211	x 315	.787	6 ¹ / ₂	8 ⁷ / ₈	2 ⁷ / ₁₆	287.4
WWF16 x 105	WWF400 x 157	.433	7 ⁵ / ₈	13 ³ / ₈	1 ³ / ₁₆	190.4
x 119	x 178	.551	7 ⁵ / ₈	13 ¹ / ₄	1 ¹ / ₄	209.3
x 135	x 202	.630	7 ¹ / ₂	13	1 ³ / ₈	233.7
x 147	x 220	.630	7 ¹ / ₂	12 ³ / ₄	1 ¹ / ₂	254.5
x 163	x 243	.787	7 ¹ / ₂	12 ³ / ₈	1 ¹¹ / ₁₆	272.8
x 183	x 273	.787	7 ¹ / ₂	12	1 ⁷ / ₈	305.1
x 203	x 303	.787	7 ¹ / ₂	11 ⁵ / ₈	2 ¹ / ₁₆	335.6
x 243	x 362	.787	7 ¹ / ₂	10 ⁷ / ₈	2 ⁷ / ₁₆	391.2
x 298*	x 444*	1.180	7 ¹ / ₄	10	2 ⁷ / ₈	445.5
WWF18 x 119	WWF450 x 177	.433	8 ⁵ / ₈	15 ³ / ₈	1 ³ / ₁₆	244.1
x 134	x 201	.551	8 ⁵ / ₈	15 ¹ / ₈	1 ⁵ / ₁₆	268.5
x 152	x 228	.630	8 ¹ / ₂	14 ⁷ / ₈	1 ⁷ / ₁₆	300.2
x 166	x 248	.630	8 ¹ / ₂	14 ³ / ₄	1 ¹ / ₂	328.3
x 184	x 274	.787	8 ¹ / ₂	14 ³ / ₈	1 ¹¹ / ₁₆	352.1
x 207	x 308	.787	8 ¹ / ₂	14	1 ⁷ / ₈	395.4
x 229	x 342	.787	8 ¹ / ₂	13 ⁵ / ₈	2 ¹ / ₁₆	436.3
x 275	x 409	.787	8 ¹ / ₂	12 ³ / ₄	2 ¹ / ₂	511.4
x 337*	x 503*	1.180	8 ¹ / ₄	12	2 ⁷ / ₈	587.0
WWF20 x 132	WWF500 x 197	.433	9 ⁵ / ₈	17 ¹ / ₄	1 ³ / ₁₆	304.5
x 150	x 223	.551	9 ⁵ / ₈	17 ¹ / ₈	1 ¹ / ₄	335.6
x 170	x 254	.630	9 ¹ / ₂	16 ⁷ / ₈	1 ³ / ₈	375.9
x 185	x 276	.630	9 ¹ / ₂	16 ⁵ / ₈	1 ¹ / ₂	411.3
x 205	x 306	.787	9 ¹ / ₂	16 ³ / ₈	1 ⁵ / ₈	441.8

*Not available from Canadian Mills

WELDED WIDE FLANGE BEAMS
WWF-SHAPES

CSA G40.21 – 50W



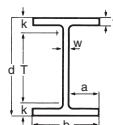
Imperial	Metric	Depth d in.	Width b in.	Flange
				Thickness t in.
WWF20 x 230	WWF500 x 343	19.69	19.69	1.380
x 256	x 381	19.69	19.69	1.570
x 306	x 456	19.69	19.69	1.970
x 377*	x 561*	19.69	19.69	2.360
x 437*	x 651*	19.69	19.69	2.360
WWF22 x 188	WWF550 x 280	21.65	21.65	.980
x 282	x 420	21.65	21.65	1.570
x 338	x 503	21.65	21.65	1.970
x 416*	x 620*	21.65	21.65	2.360
x 484*	x 721*	21.65	21.65	2.360
WWF24 x 248	WWF600 x 369	23.62	23.62	1.180
x 309	x 460	23.62	23.62	1.570
x 370	x 551	23.62	23.62	1.970
x 456	x 680	23.62	23.62	2.360
x 532	x 793	23.62	23.62	2.360
WWF26 x 268	WWF650 x 400	25.59	25.59	1.180
x 335	x 499	25.59	25.59	1.570
x 401	x 598	25.59	25.59	1.970
x 496	x 739	25.59	25.59	2.360
x 580	x 864	25.59	25.59	2.360
WWF28 x 102	WWF700 x 152	27.56	11.81	.790
x 117	x 175	27.56	11.81	.980
x 132	x 196	27.56	15.75	.870
x 144	x 214	27.56	15.75	.980
x 164	x 245	27.56	15.75	1.180
WWF31 x 108	WWF800 x 161	31.50	11.81	.790
x 123	x 184	31.50	11.81	.980
x 150	x 223	31.50	15.75	.980
x 170	x 253	31.50	15.75	1.180
x 201	x 300	31.50	19.69	1.180
x 228	x 339	31.50	19.69	1.380

*Not available from Canadian Mills

Cont'd

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W

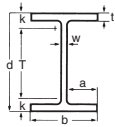


Imperial	Metric	Web Thickness w in.	a in.	Distances T in.	k in.	Section Modulus (S _x) Inches-3
WWF20 x 230	WWF500 x 343	.787	9½	16	1 ¹³ / ₁₆	496.7
x 256	x 381	.787	9½	15½	2 ¹ / ₁₆	549.8
x 306	x 456	.787	9½	14¾	2 ⁷ / ₁₆	646.9
x 377*	x 561*	1.180	9¼	14	2 ¹³ / ₁₆	750.6
x 437*	x 651*	2.360	8 ⁵ / ₈	14	2 ¹³ / ₁₆	781.1
WWF22 x 188	WWF550 x 280	.630	10 ⁵ / ₈	19¼	1 ³ / ₁₆	459.5
x 282	x 420	.787	10 ³ / ₈	17½	2 ¹ / ₁₆	677.4
x 338	x 503	.787	10 ³ / ₈	16¾	2 ⁷ / ₁₆	799.4
x 416*	x 620*	1.180	10¼	16	2 ¹³ / ₁₆	927.6
x 484*	x 721*	2.360	9 ⁵ / ₈	16	2 ¹³ / ₁₆	976.4
WWF24 x 248	WWF600 x 369	.790	11 ³ / ₈	20¼	1 ¹¹ / ₁₆	653.0
x 309	x 460	.790	11 ³ / ₈	19½	2 ¹ / ₁₆	817.7
x 370	x 551	.790	11 ¹ / ₄	18¾	2 ⁷ / ₁₆	970.3
x 456	x 680	1.180	11¼	17 ⁷ / ₈	2 ⁷ / ₈	1129
x 532	x 793	2.360	10 ⁵ / ₈	17 ⁷ / ₈	2 ⁷ / ₈	1184
WWF26 x 268	WWF650 x 400	.790	12 ³ / ₈	22¼	1 ¹¹ / ₁₆	768.9
x 335	x 499	.790	12 ³ / ₈	21½	2 ¹ / ₁₆	970.3
x 401	x 598	.790	12 ³ / ₈	20 ⁵ / ₈	2 ⁷ / ₁₆	1153
x 496	x 739	1.180	12¼	19 ⁷ / ₈	2 ⁷ / ₈	1349
x 580	x 864	2.360	11 ⁵ / ₈	19 ⁷ / ₈	2 ⁷ / ₈	1422
WWF28 x 102	WWF700 x 152	.430	5¾	25 ¹ / ₈	1 ³ / ₁₆	290.5
x 117	x 175	.430	5¾	24¾	1 ³ / ₈	344.2
x 132	x 196	.430	7 ⁵ / ₈	25	1¼	400.3
x 144	x 214	.430	7 ⁵ / ₈	24¾	1 ³ / ₈	443.6
x 164	x 245	.430	7 ⁵ / ₈	24 ³ / ₈	1 ⁹ / ₁₆	513.8
WWF31 x 108	WWF800 x 161	.430	5¾	29 ¹ / ₈	1 ³ / ₁₆	342.3
x 123	x 184	.430	5¾	28¾	1 ³ / ₈	405.2
x 150	x 223	.430	7 ⁵ / ₈	28¾	1 ³ / ₈	519.9
x 170	x 253	.430	7 ⁵ / ₈	28 ³ / ₈	1 ⁹ / ₁₆	602.3
x 201	x 300	.430	9 ⁵ / ₈	28 ³ / ₈	1 ⁹ / ₁₆	738.4
x 228	x 339	.430	9 ⁵ / ₈	27 ⁷ / ₈	1 ¹³ / ₁₆	836.0

*Not available from Canadian Mills

WELDED WIDE FLANGE BEAMS
WWF-SHAPES

CSA G40.21 – 50W



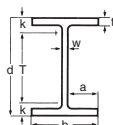
		Depth d in.	Width b in.	Flange	
Imperial	Metric			Thickness t in.	
WWF35 x 113	WWF900 x 169	35.43	11.81	.790	
x 128	x 192	35.43	11.81	.980	
x 155	x 231	35.43	15.75	.980	
x 176	x 262	35.43	15.75	1.180	
x 207	x 309	35.43	19.69	1.180	
x 233	x 347	35.43	19.69	1.380	
x 280	x 417	35.43	21.65	1.570	
WWF39 x 134	WWF1000 x 200	39.37	11.81	.790	
x 150	x 223	39.37	11.81	.980	
x 176	x 262	39.37	15.75	.980	
x 197	x 293	39.37	15.75	1.180	
x 228	x 340	39.37	19.69	1.180	
x 253	x 377	39.37	19.69	1.380	
x 300	x 447	39.37	21.65	1.570	
WWF43 x 157	WWF1100 x 234	43.31	11.81	.980	
x 183	x 273	43.31	15.75	.980	
x 204	x 304	43.31	15.75	1.180	
x 236	x 351	43.31	19.69	1.180	
x 260	x 388	43.31	19.69	1.380	
x 307	x 458	43.31	21.65	1.570	
WWF47 x 177	WWF1200 x 263	47.24	11.81	.980	
x 203	x 302	47.24	15.75	.980	
x 223	x 333	47.24	15.75	1.180	
x 255	x 380	47.24	19.69	1.180	
x 281	x 418	47.24	19.69	1.380	
x 327	x 487	47.24	21.65	1.570	

*Not available from Canadian Mills

Cont'd

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W

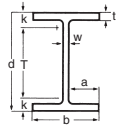


Imperial	Metric	Web Thickness w in.	a in.	Distances T in.	k in.	Section Modulus (Sx) Inches-3
WWF35 x 113	WWF900 x 169	.430	5 $\frac{3}{4}$	33	1 $\frac{3}{16}$	397.3
x 128	x 192	.430	5 $\frac{3}{4}$	32 $\frac{5}{8}$	1 $\frac{3}{8}$	468.7
x 155	x 231	.430	7 $\frac{5}{8}$	32 $\frac{5}{8}$	1 $\frac{3}{8}$	598.6
x 176	x 262	.430	7 $\frac{5}{8}$	32 $\frac{1}{4}$	1 $\frac{9}{16}$	695.7
x 207	x 309	.430	9 $\frac{5}{8}$	32 $\frac{1}{4}$	1 $\frac{9}{16}$	848.2
x 233	x 347	.430	9 $\frac{5}{8}$	31 $\frac{7}{8}$	1 $\frac{3}{4}$	964.2
x 280	x 417	.430	10 $\frac{5}{8}$	31 $\frac{1}{4}$	2 $\frac{1}{16}$	1178
WWF39 x 134	WWF1000 x 200	.550	5 $\frac{5}{8}$	37	1 $\frac{1}{4}$	481.5
x 150	x 223	.550	5 $\frac{5}{8}$	36 $\frac{5}{8}$	1 $\frac{7}{16}$	560.8
x 176	x 262	.550	7 $\frac{5}{8}$	36 $\frac{5}{8}$	1 $\frac{7}{16}$	707.9
x 197	x 293	.550	7 $\frac{5}{8}$	36 $\frac{1}{4}$	1 $\frac{5}{8}$	811.6
x 228	x 340	.550	9 $\frac{5}{8}$	36 $\frac{1}{4}$	1 $\frac{5}{8}$	982.5
x 253	x 377	.550	9 $\frac{5}{8}$	35 $\frac{3}{4}$	1 $\frac{13}{16}$	1111
x 300	x 447	.550	10 $\frac{1}{2}$	35 $\frac{1}{4}$	2 $\frac{1}{8}$	1355
WWF43 x 157	WWF1100 x 234	.550	5 $\frac{5}{8}$	40 $\frac{1}{2}$	1 $\frac{3}{8}$	634.6
x 183	x 273	.550	7 $\frac{5}{8}$	40 $\frac{1}{2}$	1 $\frac{3}{8}$	793.3
x 204	x 304	.550	7 $\frac{5}{8}$	40 $\frac{5}{8}$	1 $\frac{9}{16}$	909.3
x 236	x 351	.550	9 $\frac{5}{8}$	40 $\frac{5}{8}$	1 $\frac{9}{16}$	1105
x 260	x 388	.550	9 $\frac{5}{8}$	39 $\frac{5}{8}$	1 $\frac{13}{16}$	1245
x 307	x 458	.550	10 $\frac{1}{2}$	39 $\frac{5}{8}$	2 $\frac{1}{16}$	1513
WWF47 x 177	WWF1200 x 263	.630	5 $\frac{5}{8}$	44 $\frac{3}{8}$	1 $\frac{7}{16}$	738.4
x 203	x 302	.630	7 $\frac{1}{2}$	44 $\frac{3}{8}$	1 $\frac{7}{16}$	915.4
x 223	x 333	.630	7 $\frac{1}{2}$	44	1 $\frac{5}{8}$	1044
x 255	x 380	.630	9 $\frac{1}{2}$	44	1 $\frac{5}{8}$	1251
x 281	x 418	.630	9 $\frac{1}{2}$	43 $\frac{5}{8}$	1 $\frac{13}{16}$	1410
x 327	x 487	.630	10 $\frac{1}{2}$	43	2 $\frac{1}{8}$	1703

*Not available from Canadian Mills

WELDED WIDE FLANGE BEAMS
WWF-SHAPES

CSA G40.21 – 50W



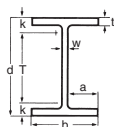
		Depth d in.	Width b in.	Flange	
Imperial	Metric			Thickness t in.	
WWF55 x 240	WWF1400 x 358	55.12	15.75	1.180	
x 272	x 405	55.12	19.69	1.180	
x 316	x 471	55.12	21.65	1.380	
x 344	x 513	55.12	21.65	1.570	
x 401	x 597	55.12	21.65	1.970	
WWF63 x 289	WWF1600 x 431	62.99	19.69	1.180	
x 333	x 496	62.99	21.65	1.380	
x 361	x 538	62.99	21.65	1.570	
x 389	x 580	62.99	21.65	1.770	
x 417	x 622	62.99	21.65	1.970	

		Web Thickness w in.	a in.	Distances		Section Modulus (Sx) Inches-3
Imperial	Metric			T in.	k in.	
WWF55 x 240	WWF1400 x 358	.630	7½	51⅞	1⅝	1269
x 272	x 405	.630	9½	51⅞	1⅝	1513
x 316	x 471	.630	10½	51½	1⅜ ₁₆	1843
x 344	x 513	.630	10½	50⅞	2⅞	2050
x 401	x 597	.630	10½	50⅞	2½	2447
WWF63 x 289	WWF1600 x 431	.630	9½	59¾	1⅝	1788
x 333	x 496	.630	10½	59⅞	1⅜ ₁₆	2166
x 361	x 538	.630	10½	58¾	2⅞	2410
x 389	x 580	.630	10½	58⅞	2⅝ ₁₆	2642
x 417	x 622	.630	10½	58	2½	2874

*Not available from Canadian Mills

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W



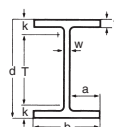
Metric	Imperial	Flange			Web	Section Modulus 10³mm³
		Depth d mm	Width b mm	Thickness t mm	Thickness w mm	
WWF350 x 137	WWF14 x 92	350	350	20	11	2350
x 155	x 104	350	350	22	14	2580
x 176	x 118	350	350	25	16	2870
x 192	x 128	350	350	28	16	3120
x 212	x 142	350	350	30	20	3330
x 238	x 159	350	350	35	20	3720
x 263	x 177	350	350	40	20	4070
x 315	x 211	350	350	50	20	4710
WWF400 x 157	WWF16 x 105	400	400	20	11	3120
x 178	x 119	400	400	22	14	3430
x 202	x 135	400	400	25	16	3830
x 220	x 147	400	400	28	16	4170
x 243	x 163	400	400	30	20	4470
x 273	x 183	400	400	35	20	5000
x 303	x 203	400	400	40	20	5500
x 362	x 243	400	400	50	20	6410
x 444*	x 298*	400	400	60	30	7300
WWF450 x 177	WWF18 x 119	450	450	20	11	4000
x 201	x 134	450	450	22	14	4400
x 228	x 152	450	450	25	16	4920
x 248	x 166	450	450	28	16	5380
x 274	x 184	450	450	30	20	5770
x 308	x 207	450	450	35	20	6480
x 342	x 229	450	450	40	20	7150
x 409	x 275	450	450	50	20	8380
x 503*	x 337*	450	450	60	30	9620
WWF500 x 197	WWF20 x 132	500	500	20	11	4990
x 223	x 150	500	500	22	14	5500
x 254	x 170	500	500	25	16	6160
x 276	x 185	500	500	28	16	6740
x 306	x 205	500	500	30	20	7240

*Not available from Canadian Mills

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WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W



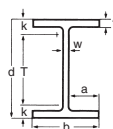
Metric	Imperial	Flange			Web	Section Modulus 10³mm³
		Depth d mm	Width b mm	Thickness t mm	Thickness w mm	
WWF500 x 343	WWF20 x 230	500	500	35	20	8140
x 381	x 256	500	500	40	20	9010
x 456	x 306	500	500	50	20	10600
x 561*	x 377*	500	500	60	30	12300
x 651*	x 437*	500	500	60	60	12800
WWF550 x 280	WWF22 x 188	550	550	25	16	7530
x 420	x 282	550	550	40	20	11100
x 503	x 338	550	550	50	20	13100
x 620*	x 416*	550	550	60	30	15200
x 721*	x 484*	550	550	60	60	16000
WWF600 x 369	WWF22 x 248	600	600	30	20	10700
x 460	x 309	600	600	40	20	13400
x 551	x 370	600	600	50	20	15900
x 680	x 456	600	600	60	30	18500
x 793	x 532	600	600	60	60	19400
WWF650 x 400	WWF26 x 268	650	650	30	20	12600
x 499	x 335	650	650	40	20	15900
x 598	x 401	650	650	50	20	18900
x 739	x 496	650	650	60	30	22100
x 864	x 580	650	650	60	60	23300
WWF700 x 152	WWF28 x 102	700	300	20	11	4760
x 175	x 117	700	300	25	11	5640
x 196	x 132	700	400	22	11	6560
x 214	x 144	700	400	25	11	7270
x 245	x 164	700	400	30	11	8420
WWF800 x 161	WWF31 x 108	800	300	20	11	5610
x 184	x 123	800	300	25	11	6640
x 223	x 150	800	400	25	11	8520
x 253	x 170	800	400	30	11	9870
x 300	x 201	800	500	30	11	12100
x 339	x 228	800	500	35	11	13700
WWF900 x 169	WWF35 x 113	900	300	20	11	6510
x 192	x 128	900	300	25	11	7680
x 231	x 155	900	400	25	11	9810
x 262	x 176	900	400	30	11	11400
x 309	x 207	900	500	30	11	13900
x 347	x 233	900	500	35	11	15800
x 417	x 280	900	550	40	11	19300

*Not available from Canadian Mills

Cont'd

WELDED WIDE FLANGE BEAMS WWF-SHAPES

CSA G40.21 – 50W



Metric	Imperial	Depth d mm	Width b mm	Flange Thickness t mm	Web Thickness w mm	Section Modulus 10 ³ mm ³
WWF1000 x 200	WWF39 x 134	1000	300	20	14	7890
x 223	x 150	1000	300	25	14	9190
x 262	x 176	1000	400	25	14	11600
x 293	x 197	1000	400	30	14	13300
x 340	x 228	1000	500	30	14	16100
x 377	x 253	1000	500	35	14	18200
x 447	x 300	1000	550	40	14	22200
WWF1100 x 234	WWF43 x 157	1100	300	25	14	10400
x 273	x 183	1100	400	25	14	13000
x 304	x 204	1100	400	30	14	14900
x 351	x 236	1100	500	30	14	18100
x 388	x 260	1100	500	35	14	20400
x 458	x 307	1100	550	40	14	24800
WWF1200 x 263	WWF47 x 177	1200	300	25	16	12100
x 302	x 203	1200	400	25	16	15000
x 333	x 223	1200	400	30	16	17100
x 380	x 255	1200	500	30	16	20500
x 418	x 281	1200	500	35	16	23100
x 487	x 327	1200	550	40	16	27900
WWF1400 x 358	WWF55 x 240	1400	400	30	16	20800
x 405	x 272	1400	500	30	16	24800
x 471	x 316	1400	550	35	16	30200
x 513	x 344	1400	550	40	16	33600
x 597	x 401	1400	550	50	16	40100
WWF1600 x 431	WWF63 x 289	1600	500	30	16	29300
x 496	x 333	1600	550	35	16	35500
x 538	x 361	1600	550	40	16	39500
x 580	x 389	1600	550	45	16	43300
x 622	x 417	1600	550	50	16	47100
WWF1800 x 510	WWF71 x 342	1800	500	30	20	36000
x 575	x 386	1800	550	35	20	43100
x 617	x 414	1800	550	40	20	47400
x 659	x 442	1800	550	45	20	51800
x 700	x 470	1800	550	50	20	56000
WWF2000 x 542	WWF79 x 364	2000	500	30	20	41400
x 607	x 407	2000	550	35	20	49300
x 648	x 435	2000	550	40	20	54200
x 732	x 491	2000	550	50	20	63900

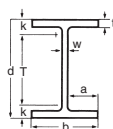
*Not available from Canadian Mills

MISCELLANEOUS BEAMS M-SHAPES

CSA G40.21 – 50W

ASTM A572 GR50 / A922

METRIC



Metric	Imperial	Depth d mm	Width b mm	Flange Thickness t mm	Web Thickness Web mm	Section Modulus 10 ³ mm ³
M 100 x 8.9	B 4 x 6.0	97	97	4.1	3.3	41.2
M 150 x 5.5	B 6 x 3.7	150	51	3.3	2.5	33.0
M 150 x 6.6	B 6 x 4.4	152	47	4.3	2.9	39.3
M 200 x 9.2	B 8 x 6.5	203	58	4.5	3.3	71.9
M 250 x 11.9	B 10 x 8.0	253	68	4.6	3.6	114.0
M 250 x 13.4	B 10 x 9.0	254	68	5.2	4.0	127.0
M 310 x 14.9	B 12 x 10.8	304	83	4.6	3.8	170.0
M 310 x 16.1	B 12 x 11.0	304	78	5.3	4.1	182.0
M 310 x 17.6	B 12 x 11.8	305	78	5.7	4.5	197.0

IMPERIAL

Imperial	Metric	Depth d ins.	Width b ins.	Flange Thickness t ins.	Web Thickness Web ins.	Section Modulus ins. ³
B 4 x 6.0	M 100 x 8.9	3.79	3.91	0.160	0.130	2.50
B 6 x 3.7	M 150 x 5.5	5.91	2.01	0.130	0.098	2.01
B 6 x 4.4	M 150 x 6.6	5.98	1.85	0.169	0.114	2.40
B 8 x 6.5	M 200 x 9.2	7.85	2.28	0.186	0.133	4.62
B 10 x 8.0	M 250 x 11.9	9.81	2.69	0.183	0.139	6.99
B 10 x 9.0	M 250 x 13.4	9.86	2.69	0.206	0.157	7.82
B 12 x 10.8	M 310 x 16.1	11.87	3.07	0.206	0.162	10.37
B 12 x 11.0	M 310 x 17.6	11.91	3.07	0.225	0.177	11.11
B 12 x 11.8	M 310 x 17.6	12.01	3.07	0.224	0.177	12.02