

Historical Record
Dimensions and Properties
ROLLED SHAPES

Steel and Wrought Iron
BEAMS & COLUMNS

As Rolled in U.S.A., Period 1873 to 1952
With Sources as Noted

Compiled and Edited by
Herbert W. Ferris



AMERICAN INSTITUTE OF STEEL CONSTRUCTION

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FOREWORD

Over a period of many years the American Institute of Steel Construction has received numerous requests for information on the properties of beam and column shapes which are no longer rolled. These requests usually come from architects, engineers, builders and investment trusts, interested in the alteration of, or addition to, existing structures which might have been originally constructed many years ago and for which no plans are presently available. It was felt that a valuable service would be rendered the engineering profession if all available information on the subject could be published in one reference book.

The Institute had in its library many catalogs and handbooks of steel producing mills showing sections rolled in this country since the inception of the industry. With the desire of supplementing this information so that the coverage would be as complete as possible, an extensive circularization was made of rolling mills, structural steel fabricators, engineers, railroads and libraries, asking for assistance. These various sources responded generously by loaning such historical material as they possessed. With the addition of sections currently produced it is believed that information on practically all beam and column sections produced in this country is provided.

Careful study of the Explanatory Notes will provide further information on the scope of this book. The tabular data is limited to steel and wrought iron beams and columns, since other sections such as angles, channels and tees were standardized at an early date and have been produced with few significant changes, for many years.

The early unit stresses as recommended by manufacturers are tabulated. In the light of present day recommendations, these early unit stresses can be considered ultra-conservative. To assist engineers who must assess and evaluate the strength of existing structures, the ASTM specification requirements for tensile strength and yield point are also tabulated, together with the working stress recommendations issued by the A.I.S.C.

We wish to extend our sincere thanks to the many engineers, fabricators, rolling mills and others who cooperated so generously in lending handbooks and catalogs which would not have been otherwise available. We also wish to thank Herbert W. Ferris of our staff for his willing assistance in compiling and editing this book.

JACK SINGLETON
Chief Engineer

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A.I.S.C. Iron and Steel Beams

1873 to 1952

The following pages of the published book are for “Notes” and are otherwise blank. They have been omitted to reduce file size.

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EXPLANATORY NOTES

GENERAL NOTES:

The aim of this Historical Record is to bring together into one convenient reference book a comprehensive tabulation of all rolled iron and steel beam and column shapes, many of which are not listed in current mill catalogs. The weights, areas, dimensions and properties of all rolled sections appearing in this tabulation were obtained directly from rolling mill catalogs and handbooks issued from 1873 to 1952.

Some of the shapes shown were first produced in the early 1930's and are being rolled today without change. Properties and dimensions of such sections may be found in current catalogs.

The early catalogs did not always furnish all of the information required. In those cases the missing data have been computed from such information as was given. All figures not taken from catalogs, are marked with asterisks.

Inaccuracies, and some minor errors, are apparent in the properties given in some of the earlier catalogs. Since designs may have been based on the information presented in these catalogs, original data were used in this tabulation.

The typical cross section used herein for dimension nomenclature, has sloping flanges. This was chosen to accentuate dimensions m and n . Many shapes have parallel flanges; they can be readily identified when m equals n and the percentage of slope of inside flange equals zero.

This presentation is in the form given in the catalogs of mills now rolling structural shapes.

AMERICAN STANDARD BEAMS

Under this classification are included beams similar in weight and dimensions to the AMERICAN STANDARD BEAMS adopted by the Association of American Steel Manufacturers on January 17, 1896. These were rolled both before and after that date. (There were rollings of so-called "Standard Beams" after the above date with weights and depths the same as American Standard Beams, but with other dimensions differing. Other rollings held the dimensions but changed the weights by a small percentage.)

BEAMS

Under this category are included shapes used more frequently as beams than as columns. If data is required for a section heavier than those listed under BEAMS, such data will be found under COLUMNS.

COLUMNS

The tabulation of columns, includes shapes designated in catalogs as Columns, and

shapes used as columns as indicated by tabular information given in various mill catalogs and in the A.I.S.C. Steel Construction Manual.

SECTION NUMBER

When a shape was rolled over a period of years by a mill, and the number or name of the shape varied in the catalogs issued by that mill during this period, the latest designation is shown in Column 1. When a shape has more than one number or name, all of them appear under "References" on each page.

No shape or section numbers, or names, are given in this tabulation for American Standard Beams or Wrought Iron Beams.

WEIGHT PER FOOT

Prior to 1896, most mills gave the weight of shapes in pounds per yard. These weights have been converted to pounds per foot for consistent tabulation.

DIMENSIONS

Dimensions d , b , t , m , n , R , R' for currently produced shapes are given in inches and decimals of an inch, just as they appear in the mill catalogs. In the case of obsolete shapes, where these dimensions are given in fractions of an inch in the catalogs, these fractions have been converted to their decimal equivalent.

PROPERTIES OF SECTIONS, AXIS 1-1 and AXIS 2-2

In the earlier catalogs Section Modulus S or $\frac{I}{C}$ and Radius of Gyration r , about one or both axes, were omitted; these have been computed and included herein.

In these early catalogs, the range of weights and the dimensions m and n were sometimes given for sections in a series, but dimensions b and t , and section properties, were given for the lowest weight only. The increment of the web thickness was given for each additional pound of weight for the section. This increase in the web thickness of shapes heavier than the lowest weight section of a series, has been used for computing dimensions b and t , the area, and I about axis 1-1, from the data given for the lightest section, even though small errors were known to exist occasionally in the original data. This method was implied in the catalogs.

EXAMPLE:

Given 15" I 80 lbs. and increment of web thickness for each pound increase in weight equal to 0.02"

	b	t		A	I (Axis 1-1)
From Catalog 15" I 80 lbs.	6.41	.77		23.5	785.9
For 15" I 100 lbs.					
Add (20. x .02) =	<u>.40</u>	<u>.40</u>	$(.40 \times 15) =$	<u>6.0</u>	$\frac{(.40 \times 15^3)}{12} = 112.5$
For 15" I 100 lbs.	6.81	1.17		29.5	898.4

Formulas used to determine I, S and r about Axis 1-1 and Axis 2-2 where not given in catalogs:

Axis 1 - 1

$$I = \frac{bd^3 - \frac{1}{2}(b-t) \left[(d-2n)^4 - (d-2m)^4 \right]}{12}$$

$$S = \frac{I}{1/2d}$$

$$r = \sqrt{\frac{I}{\text{Area}}}$$

Axis 2 - 2

$$I = \frac{2nb^3 + (d-2m)t^3 + 2 \frac{m-n}{(b-t)} \left[b^4 - t^4 \right]}{12}$$

$$S = \frac{I}{1/2b}$$

$$r = \sqrt{\frac{I}{\text{Area}}}$$

COMPUTED AREAS

When all dimensions were given but the area was not, it has been computed from the dimensions. The area of the fillets was not included in the section area in early catalogs. Later, some mills included the fillet areas in the section area. Where areas have been computed herein for sections rolled by these mills, the fillet areas of course are included.

PERCENTAGE OF FLANGE SLOPE

With few exceptions this information was not given in the early catalogs. When sufficient dimensions were given the percentage of flange slope has been computed.

REFERENCES

"References" appearing at the top of each page, and occasionally at the bottom of the page also, identify the rolling mills and dates of mill catalogs from which the data were taken.

The letters preceding the date designate the company that issued the catalog, as follows:

B	Bethlehem Steel Company 1907
C	The Carnegie Steel Company, Limited 1893 to 1896
C	Carnegie Steel Company 1900 to 1934
C A	Cambria Steel Company
CAM	Cambria Steel Company
C B	Carnegie Brothers & Co., Limited
CIL	Carnegie-Illinois Steel Corporation
C K	Carnegie, Kloman & Co., Union Iron Mills
C P	Carnegie, Phipps & Co., Limited
I L	Illinois Steel Company
I N	Inland Steel Company
J & L	Jones & Laughlins Limited 1893 to 1902
J & L	Jones & Laughlin Steel Company, Beginning 1903
J & L	Jones & Laughlin Steel Corporation, Beginning 1926
K	Kaiser Steel Corporation
L A	Lackawanna Steel Company
N J	New Jersey Steel & Iron Co.
P A	The Passaic Rolling Mill Co.
P E	A. & P. Roberts Company (Pencoyd Iron Works)
P H	The Phoenix Iron Company
P O	Pottsville Iron & Steel Co.
S	Bethlehem Steel Company, Beginning 1909
U S	United States Steel Company

**EARLY UNIT STRESSES USED IN TABLES OF ALLOWABLE LOADS AS
PUBLISHED IN CATALOGS OF THE FOLLOWING MILLS**

FOR WROUGHT IRON

Year	Rolling Mill	Unit Stress
1873	Carnegie Kloman & Co. ("Factor of Safety 3")	14000 psi
1874	New Jersey Steel & Iron Co.	12000 psi
1881-1884	Carnegie Brothers & Co., Ltd.	{12000 psi 10000 psi
1884	The Passaic Rolling Mill Co.	{12000 psi 10000 psi
1885	The Phoenix Iron Company	12000 psi
1885-1887	Pottsville Iron & Steel Co.	12000 psi
1889	Carnegie Phipps & Co., Ltd.	{12000 psi 10000 psi

FOR STEEL

1887	Pottsville Iron & Steel Co.	15600 psi
1889-1893	Carnegie Phipps & Co., Ltd. (Bldgs.)	16000 psi
	(Bridges)	12500 psi
1893-1908	Jones & Laughlins Ltd. }	{16000 psi
	Jones & Laughlin Steel Co. }	{12500 psi
1896	Carnegie Steel Co., Ltd. (Bldgs.)	16000 psi
	(Bridges)	12500 psi
1897-1903	The Passaic Rolling Mills Co.	{16000 psi 12000 psi
1898-1919	Cambria Steel Co.	{16000 psi 12500 psi
1900-1903	Carnegie Steel Company (Bldgs.)	16000 psi
	(Bridges)	12500 psi
1907-1911	Bethlehem Steel Co. (Bldgs.)	16000 psi
	(Moving loads)	12500 psi
1915	Lackawanna Steel Co.	{16000 psi 12500 psi

HISTORY OF A.S.T.M. AND A.I.S.C. STRUCTURAL STEEL SPECIFICATION STRESSES

Date	Specification	Remarks	ASTM Requirement	
			Tensile Strength psi	Minimum Yield Point psi
1900	ASTM, A7 Bridges	Rivet Steel	50,000 to 60,000	30,000
		Soft Steel	52,000 to 62,000	32,000
		Medium Steel	60,000 to 70,000	35,000
	ASTM, A9 Buildings	Rivet Steel	50,000 to 60,000	30,000
		Medium Steel	60,000 to 70,000	35,000
	1901-1904	ASTM, A7 Bridges	Rivet Steel	50,000 to 60,000
Soft Steel			52,000 to 62,000	1/2 T.S.
Medium Steel			60,000 to 70,000	1/2 T.S.
ASTM, A9 Buildings		Rivet Steel	50,000 to 60,000	1/2 T.S.
		Medium Steel	60,000 to 70,000	1/2 T.S.
1905-1908		ASTM, A7 Bridges	Structural Steel	Desired 60,000
	Rivet Steel		Desired 50,000	---(1)
	Steel Castings not less than		65,000	---(1)
	ASTM, A9 Buildings	Rivet Steel	50,000 to 60,000	1/2 T.S.
		Medium Steel	60,000 to 70,000	1/2 T.S.
	1909-1912	ASTM, A7 Bridges	Structural Steel	Desired 60,000
Rivet Steel			Desired 50,000	---(1)
Steel Castings not less than			65,000	---(1)
ASTM, A9 Buildings		Structural Steel	55,000 to 65,000	1/2 T.S.
		Rivet Steel	48,000 to 58,000	1/2 T.S.
1913		ASTM, A7 Bridges	Structural Steel	Desired 60,000
	Rivet Steel		Desired 50,000	---(1)
	Steel Castings were deleted from A7			
	ASTM, A9 Buildings	Structural Steel	55,000 to 65,000	1/2 T.S.
		Rivet Steel	48,000 to 58,000	1/2 T.S.
	1914-1923	ASTM, A7 Bridges	Structural Steel	55,000 to 65,000
Rivet Steel			46,000 to 56,000	1/2 T.S.
ASTM, A9 Buildings		Structural Steel	55,000 to 65,000	1/2 T.S.
		Rivet Steel	46,000 to 56,000	1/2 T.S.
1923	AISC	Allowable basic working stress	18,000 psi	

(1) No definite requirements for yield point other than it be recorded in test reports.

Date	Specification	Remarks	ASTM Requirement	
			Tensile Strength psi	Minimum Yield Point psi
1924-1931	ASTM, A7	Structural Steel	55,000 to 65,000	1/2 T.S. or not less than 30,000
		Rivet Steel	46,000 to 56,000	1/2 T.S. or not less than 25,000
	ASTM, A9	Structural Steel	55,000 to 65,000	1/2 T.S. or not less than 30,000
		Rivet Steel	46,000 to 56,000	1/2 T.S. or not less than 25,000
	AISC	Allowable basic working stress same as 1923 (18,000 psi)		
1932	ASTM, A140-32T issued as a tentative revision to ASTM, A7 (Bridges) & ASTM, A9 (Bldgs.)	Plates, Shapes, Bars	60,000 to 72,000	1/2 T.S. or not less than 33,000
		Eyebar flats un-annealed	67,000 to 82,000	1/2 T.S. or not less than 36,000
	ASTM, A141-32T issued as a tentative revision to ASTM, A7 and A9	Rivet Steel	52,000 to 62,000	1/2 T.S. or not less than 28,000
		AISC	Allowable basic working stress same as 1923 (18,000 psi)	
1933	ASTM, A140-32T discontinued and ASTM, A7-33 (Bridges) revised	Structural Steel	55,000 to 65,000	1/2 T.S. or not less than 30,000
		Plates, Shapes, Eyebars	60,000 to 72,000	1/2 T.S. or not less than 33,000
	Oct. 30, 1933 ASTM, A7 tentatively revised to ASTM, A7-33T (Bridges)	Eyebar flats un-annealed	67,000 to 82,000	1/2 T.S. or not less than 36,000

(continued on next page)

<u>Date</u>	<u>Specification</u>	<u>Remarks</u>	<u>ASTM Requirement</u>	
			<u>Tensile Strength</u> psi	<u>Minimum Yield Point</u> psi
1933 (Cont.)	ASTM, A140-32T discontinued and ASTM, A9 (Buildings) revised	Structural Steel	55,000 to 65,000	1/2 T.S. or not less than 30,000
	Oct. 30, 1933 ASTM, A9 tentatively revised to ASTM, A9-33T (Buildings)	Structural Steel	60,000 to 72,000	1/2 T.S. or not less than 33,000
	ASTM, A141-32T adopted as a standard 1933 AISC	Rivet Steel	52,000 to 62,000	1/2 T.S. or not less than 28,000
		Allowable basic working stress same as 1923 (18,000 psi)		
1934-1938	ASTM, A7-34 (Bridges) adopted as a standard	Plates, Shapes, Eyebars	60,000 to 72,000	1/2 T.S. or not less than 33,000
		Eyebar Flats un-annealed	67,000 to 82,000	1/2 T.S. or not less than 36,000
	ASTM, A9-34 (Bldgs.) adopted as a standard	Structural Steel	60,000 to 72,000	1/2 T.S. or not less than 33,000
	ASTM, A141-33	Rivet Steel	52,000 to 62,000	1/2 T.S. or not less than 28,000
1936	AISC	Revised allowable basic working stress to 20,000 psi.		
1939-1948	ASTM, A7-34 and ASTM, A9-34 consolidated into one specification (in 1939) for bridges and bldgs. to be known as ASTM, A7-39	Structural Steel	60,000 to 72,000	1/2 T.S. or not less than 33,000

(continued on next page)

Date	Specification	Remarks	ASTM Requirement	
			Tensile Strength psi	Minimum Yield Point psi
1939-1948 (Cont.)	ASTM, A141-36 ⁽²⁾	Rivet Steel	52,000 to 62,000	1/2 T.S. or not less than 28,000
	ASTM, A141-39 ⁽³⁾	Rivet Steel	52,000 to 62,000	1/2 T.S. or not less than 28,000
	AISC	Allowable basic working stress same as 1936 (20,000psi)		
1949	ASTM, A6-49T issued as a tentative revision to ASTM, A7-49T covering requirements for delivery			
	ASTM, A7-49T	Structural Steel	60,000 to 72,000	1/2 T.S. or not less than 33,000
	ASTM, A141-49T	Rivet Steel	52,000 to 62,000	min. 28,000
	AISC	Allowable basic working stress 20,000 psi		

- (2) This specification is in effect a revision of and replaces rivet steel formerly in A7 and A9.
(3) Prior to the adoption of these specifications as standards, they were published as tentative from 1932-1933.

BEAMS

STEEL

AMERICAN STANDARD

AND

SIMILAR BEAMS ROLLED BEFORE THE
STANDARD ROLLINGS WERE ADOPTED

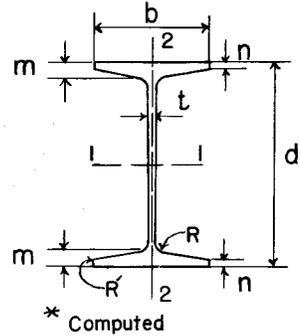
REFERENCES

- B Bethlehem Steel Company
- C The Carnegie Steel Company, Ltd. 1893-1896
- C Carnegie Steel Company 1900-1934
- CA Cambria Steel Company
- CAM Do
- CIL Carnegie-Illinois Steel Corporation
- CP Carnegie Phipps & Co., Limited
- IL Illinois Steel Company
- IN Inland Steel Company
- J&L Jones & Laughlins, Limited 1893-1902
- J&L Jones & Laughlin Steel Company 1903-1916
- J&L Jones & Laughlin Steel Corporation 1926-1952
- K Kaiser Steel Corporation
- L Lackawanna Steel Company
- NJ New Jersey Steel & Iron Co.
- PA The Passaic Rolling Mill Company
- PE A.&P. Roberts Company (Pencoyd Iron Works)
- PH The Phoenix Iron Company
- S Bethlehem Steel Company
- US United States Steel Company

2 1/2" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 B1907	3 S13-1922	4 S19-1926	5 S19-1926	7 C1896	8 C1913	9 C1921	15 J&L1900	20 PE1898-1	12 GAM1898
2 S13-1922	S19-1926	S30-1929	S30-1929	C1900	IL1914	C1923	J&L1902	PE1898-2	To 1919 INCL.
S19-1926	S43-1933	S47-1934	S47-1934	C1903	C1915	C1926	J&L1903	PE1900	
S30-1929	S47-1934	S51-1938	S51-1938	14	C1916	C1930	J&L1905	PE1901	10-11
S43-1933	S51-1938	S53-1943	S53-1943	IN 1921	C1917	C1931	J&L1906	22	See Below
S47-1934	S53-1943	S55-1946	S55-1946	16	C1919	IL1932	J&L1908	IN 1946	
S51-1938	S54-1946	S56-1948	S56-1948	J&L1910	C1920	C1934	21	19	
S53-1943	CP1892	C1893	C1893	17	IL1934	IL1934	PE1898-2	PE1898-1	
				13	J&L1916	J&L1926	GIL1940	PE1900	
					CAM1921	J&L1931		PE1901	



COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
5,10,22	120.0	35.13	24.0	8.048	.798	1.404	.800	.60	.30	16 2/3	3010.8	250.9	9.26	84.9	21.1	1.56
8,12,14,17	115.0	33.98	24.0	8.000	.750	1.404	.800	.60	.30	16 2/3	2955.5	246.3	9.33	83.2	20.8	1.57
4,9,13,18	115.0	33.67	24.0	7.987	.737	1.404	.800	.60	.30	16 2/3	2940.5	245.0	9.35	82.8	20.7	1.57
8,12,14,17	110.0	32.48	24.0	7.938	.688	1.404	.800	.60	.30	16 2/3	2883.5	240.3	9.42	81.0	20.4	1.58
4,9,13,18	110.0	32.18	24.0	7.925	.675	1.404	.800	.60	.30	16 2/3	2869.1	239.1	9.44	80.6	20.3	1.58
5,11,13,18,22	105.9	30.98	24.0	7.875	.625	1.404	.800	.60	.30	16 2/3	2811.5	234.3	9.53	78.9	20.0	1.60
8,12,14,17	105.0	30.98	24.0	7.875	.625	1.404	.800	.60	.30	16 2/3	2811.5	234.3	9.53	78.9	20.0	1.60
244B 21	100.0	29.42	24.0	7.690	.620	1.250	.680	.66	.30	16.1	2497.3	208.1*	9.21	57.53	15.0*	1.40
244B 19	100.0	29.42	24.0	7.540	.680	1.210	.640	.66	.30	16.6	2497.3	208.1*	9.21	57.53	15.3*	1.40
1,7,15	100.0	29.41	24.0	7.254	.754	1.142	.600	.60	.30	16 2/3	2380.3	198.4	9.00	48.56	13.4*	1.28
8,12,14,17	100.0	29.41	24.0	7.254	.754	1.142	.600	.60	.30	16 2/3	2379.6	198.3	9.00	48.6	13.4	1.28
B1 6	100.0	29.4*	24.0	7.196*	.746*	1.121	.600	.65	-	16.2*	2342.7*	195.2*	8.93*	46.98*	13.1*	1.26*
3,11,13,16,18,22	100.0	29.25	24.0	7.247	.747	1.142	.600	.60	.30	16 2/3	2371.8	197.6	9.05	48.4	13.4	1.29
1,7,15	95.0	27.94	24.0	7.192	.692	1.142	.600	.60	.30	16 2/3	2309.6	192.5	9.09	47.1	13.1*	1.30
8,12,14,17	95.0	27.94	24.0	7.193	.693	1.142	.600	.60	.30	16 2/3	2309.0	192.4	9.09	47.1	13.1	1.30
243B 19	95.0	27.92	24.0	7.480	.620	1.210	.640	.66	.30	16.6	2427.0	202.3*	9.32	55.93	15.0*	1.41
243B 21	95.0	27.92	24.0	7.450	.590	1.250	.680	.66	.30	16.6	2427.0	202.3*	9.32	55.93	15.0*	1.41
B1 6	95.0	27.9*	24.0	7.135*	.685*	1.121	.600	.65	-	16.2*	2271.9*	189.3*	9.02*	45.59*	12.8*	1.28*
2,9,13,16,18	95.0	27.79	24.0	7.186	.686	1.142	.600	.60	.30	16 2/3	2301.5	191.8	9.08	47.0	13.0	1.30
242B 20	90.0	26.47	24.0	7.420	.560	1.210	.640	.66	.30	16.6	2356.8	196.4	9.44	54.38	14.7*	1.44
1,7,15	90.0	26.47	24.0	7.131	.631	1.142	.600	.60	.30	16 2/3	2239.1	186.6	9.20	45.7	12.8*	1.31
8,12,14,17	90.0	26.47	24.0	7.131	.631	1.142	.600	.60	.30	16 2/3	2238.4	186.5	9.20	45.7	12.8	1.31
B1 6	90.0	26.40*	24.0	7.073*	.623*	1.121	.600	.65	-	16.2*	2201.0*	183.4*	9.13*	44.25*	12.5*	1.29*
3,11,13,16,18,22	90.0	26.30	24.0	7.124	.624	1.142	.600	.60	.30	16 2/3	2230.1	185.8	9.21	45.5	12.8	1.32
241B 21	85.0	25.00	24.0	7.220	.540	1.140	.600	.60	.30	16.2*	2181.7	181.8*	9.34	44.14	12.2*	1.33
1,7,15	85.0	25.00	24.0	7.070	.570	1.142	.600	.60	.30	16 2/3	2168.6	180.7	9.31	44.35	12.5*	1.33
8,12,14,17	85.0	25.00	24.0	7.070	.570	1.142	.600	.60	.30	16 2/3	2167.8	180.7	9.31	44.40	12.6	1.33
241B 19	85.0	25.00	24.0	7.060	.560	1.140	.600	.60	.30	16 2/3	2181.7	181.8*	9.34	44.14	12.5*	1.33
2,9,13,16,18	85.0	24.84	24.0	7.063	.563	1.142	.600	.60	.30	16 2/3	2159.8	180.0	9.33	44.20	12.5	1.33
B1 6	85.0	24.98*	24.0	7.012*	.562*	1.121	.600	.65	-	16.2*	2130.2*	177.5*	9.23*	42.93*	12.2*	1.31*
240B 20	80.0	23.53	24.0	7.000	.500	1.140	.600	.60	.30	16.6	2111.4	176.0*	9.47	42.84	12.2*	1.35
B1 6	80.0	23.50	24.0	6.950	.500	1.121	.600	.65	-	16.2*	2059.3	171.6	9.42	41.6	12.0*	1.34
1,7,15	80.0	23.32	24.0	7.000	.500	1.142	.600	.60	.30	16 2/3	2087.9	174.0	9.46	42.86	12.2*	1.36
8,12,17	80.0	23.32	24.0	7.000	.500	1.142	.600	.60	.30	16 2/3	2087.2	173.9	9.46	42.90	12.3	1.36
3,11,13,14,16,18,22	79.9	23.33	24.0	7.000	.500	1.142	.600	.60	.30	16 2/3	2087.2	173.9	9.46	42.9	12.2	1.36

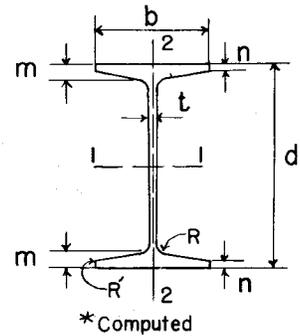
REFERENCES; SEE COLUMN (I) AND PAGE 4

10			11		
C1923	IL1932	GIL1946	C1921	C1931	GIL1940
C1926	C1934	GIL1948	C1923	IL1932	GIL1946
C1930	IL1934	US1950	C1926	C1934	GIL1948
C1931	GIL1940		C1930	IL1934	US1950

20" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

2 CPI892 C1893	3 C1896 C1903	4 C1921 C1923	6 B1907 7	8 S13-1922 S19-1926	10 CA1921 13	15 J&L1926 J&L1931	17 PA1897 PA1898	21 PE1898-1 PE1898-2	23 PH1906 PH1908	25 PH1938 26
5 See Below	C1913 IL1914	IL1925 C1926	S19-1926 S30-1929	S30-1929 S43-1933	J&L1900 J&L1902	16 LA 1909	PA1900 PA1901	PE1900 PE1901	PH1912 PH1915	K1950 27
9 CAM 1898	C1915 C1916	C1930 C1931	S43-1933 S47-1934	S47-1934 S51-1938	J&L1905 J&L1906	LA 1915 LA 1916	PA1903 19	PE1898-2 PE1900	PH1923 PH1929	IN1946 28
TO1919 INCL.	C1917 C1919	IL1932 C1934	S51-1938 S53-1943	S53-1943 S54-1946	J&L1908 J&L1916	18 PA 1900	PE1896 20	PE1900 PE1901	PH1906 PH1931	PH1906 PH1908
12 J&L 1896 J&L 1898	C1920	IL1934 CIL1940	11 IN 1921	S56-1948 J&L1910	14 PA 1903		PE1898-1 PA 1903		PH1938 PH1915	PH1912 PH1915



COL. (I)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
12	100.0	29.62	20.0	7.294	.894	1.18	.65	.70	-	16 ² / ₃	1662.3	166.2	7.49	52.92	14.5*	1.34
2,14	100.0	29.5*	20.0	7.300*	.900*	1.140	.660	.60	-	15.0*	1649.2*	164.9*	7.48*	52.8*	14.5*	1.34*
20	100.0	29.41	20.0	7.31	.81	1.25	.68	.73	.30	17.5*	1649.6	165.0	7.49	55.57	15.2*	1.37
3,6,9,11,13,16	100.0	29.41	20.0	7.284	.884	1.183	.650	.70	.36	16 ² / ₃ *	1655.6	165.6	7.50	52.65	14.5*	1.34
23	100.0	29.41	20.0	7.044	.894	1.25	.65	.70	.36	19.5*	1667.6	166.8	7.53	48.93	13.9*	1.29
22	100.0	29.41	20.0	7.03	.85	1.23	.68	.73	.30	17.8*	1649.6	165.0	7.49	55.57	15.8*	1.37
24	100.0	29.41	20.0	7.02	.87	1.25	.65	.70	.36	19.5*	1648.6	164.9	7.49	48.68	13.87	1.29
4,7,10,15	100.0	29.20	20.0	7.273	.873	1.183	.650	.70	.36	16 ² / ₃ *	1648.3	164.8	7.51	52.4	14.4	1.34
19	98.4	28.94	20.0	7.06*	.91*	1.09	.63	-	-	8.5	1567.4	156.7	7.36	45.53	12.9*	1.25
12	95.0	28.12*	20.0	7.220*	.820*	1.18	.65	.70	-	16 ² / ₃ *	1612.6*	161.3*	7.57*	51.00*	14.1*	1.35*
2,14	95.0	28.0*	20.0	7.225*	.825*	1.14	.66	.60	-	15.0*	1599.2*	159.9*	7.56*	50.82*	14.1*	1.35*
20	95.0	27.94	20.0	7.24	.74	1.25	.68	.73	.30	17.5*	1601.9	160.2	7.57	53.63	14.8	1.39
3,6,9,11,13,16	95.0	27.94	20.0	7.210	.810	1.183	.650	.70	.36	16 ² / ₃ *	1606.6	160.7	7.58	50.78	14.1	1.35
23	95.0	27.94	20.0	6.971	.821	1.25	.65	.70	.36	19.5*	1618.3	161.8	7.62	47.28	13.6*	1.30
24	95.0	27.94	20.0	6.95	.80	1.25	.65	.70	.36	19.5*	1599.5	160.0	7.57	46.89	13.49	1.30
22	95.0	27.94	20.0	6.95	.77	1.23	.68	.73	.30	17.8*	1601.9	160.2	7.57	53.63	15.4*	1.39
5,8,10,15,27	95.0	27.74	20.0	7.200	.800	1.183	.650	.70	.36	16 ² / ₃ *	1599.7	160.0	7.59	50.5	14.0	1.35
12	90.0	26.66*	20.0	7.147*	.747*	1.18	.65	.70	-	16 ² / ₃ *	1563.8*	156.4*	7.66*	49.24*	13.8*	1.36*
2,14	90.0	26.5*	20.0	7.150*	.750*	1.140	.660	.60	-	15.0*	1549.2*	154.9*	7.65*	48.98*	13.7*	1.36*
3,6,9,11,13,16	90.0	26.47	20.0	7.137	.737	1.183	.650	.70	.36	16 ² / ₃ *	1557.6	155.8	7.67	48.98	13.7*	1.36
20	90.0	26.47	20.0	6.900	.780	1.12	.61	.73	.30	16 ² / ₃ *	1501.7	150.2	7.53	41.88	12.1*	1.26
23	90.0	26.47	20.0	6.897	.747	1.25	.65	.70	.36	19.5*	1569.0	156.9	7.71	45.63	13.2*	1.32
24	90.0	26.47	20.0	6.88	.73	1.25	.65	.70	.36	19.5*	1550.5	155.1	7.65	45.17	13.13	1.31
22	90.0	26.47	20.0	6.88	.70	1.23	.68	.73	.30	17.8*	1501.7	150.2	7.53	41.88	12.2*	1.26
17	90.0	26.4	20.0	6.75	.78	1.13	.69	.75	-	14.7*	1506.1	150.6	7.55	42.3	12.5*	1.27
4,7,10,15	90.0	26.26*	20.0	7.126*	.726*	1.183	.650	.70	.36	16 ² / ₃ *	1550.3	155.0	7.68	48.7	13.7	1.36
12	85.0	25.18*	20.0	7.073*	.673*	1.18	.65	.70	-	16 ² / ₃ *	1515.1*	151.5*	7.76*	47.49*	13.4*	1.37*
2,14	85.0	25.0*	20.0	7.075*	.675*	1.140	.660	.60	-	15.0*	1499.2*	149.9*	7.74*	47.4*	13.4*	1.38*
3,6,9,11,13,16	85.0	25.00	20.0	7.063	.663	1.183	.650	.70	.36	16 ² / ₃ *	1508.5	150.9	7.77	47.25	13.4*	1.37
23	85.0	25.00	20.0	6.824	.674	1.25	.65	.70	.36	19.5*	1519.6	152.0	7.80	43.98	12.9*	1.33
20	85.0	25.00	20.0	6.82	.70	1.12	.61	.73	.30	16 ² / ₃ *	1453.1	145.3	7.62	40.33	11.8*	1.27
24	85.0	25.00	20.0	6.80	.65	1.25	.65	.70	.36	19.5*	1501.5	150.2	7.75	43.50	12.79	1.32
22	85.0	25.0	20.0	6.76	.68	1.16	.65	.73	.30	16 ² / ₃ *	1453.1	145.3	7.62	40.33	11.9*	1.27
18	85.0	25.0	20.0	6.45	.76	1.13	.69	.75	-	15.5*	1394.1	139.4	7.50	34.2	10.6*	1.17
5,8,10,15,27	85.0	24.80	20.0	7.053	.653	1.183	.650	.70	.36	16 ² / ₃ *	1501.7	150.2	7.78	47.0	13.3	1.38

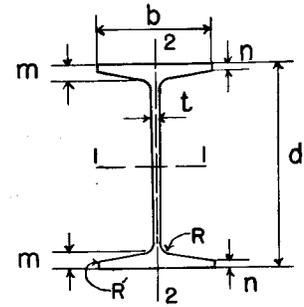
REFERENCES, SEE COLUMN (I) AND PAGE 4

5		
C1921	C1931	CIL1946
C1923	C1932	CIL1948
IL1925	C1934	US1950
C1926	IL1934	
C1930	CIL1940	

20" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

CPI 889
CPI 890
2, 3, 4, 5, 6, 7, 8,
9, 10, 11, 12, 13,
14, 15, 16, 17, 18,
19, 20, 21, 22, 23,
24, 25, 26, 27,
28
See Page 13



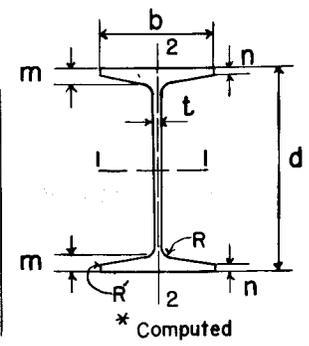
* Computed

COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
19	81.7	24.04	20.0	6.50*	.75*	.98	.55	—	—	15.0*	1312.5	131.2	7.39	31.37	9.7*	1.14
24	81.4	23.94	20.0	6.75	.60	1.25	.65	.70	.36	19.5*	1466.2	146.6	7.83	42.35	12.55	1.33
4,7,10,11,15,	81.4	23.74	20.0	7.000	.600	1.183	.650	.70	.36	16 ² / ₃	1466.3	146.6	7.86	45.8	13.1	1.39
12	80.0	23.79	20.0	6.485	.735	1.03	.55	.60	—	16 ² / ₃ *	1326.4	132.6	7.46	31.74	9.8*	1.15
3,6,9,12,13,16	80.0	23.73	20.0	7.000	.600	1.183	.650	.70	.36	16 ² / ₃ *	1466.3	146.6	7.86	45.81	13.1*	1.39
21	80.0	23.53	20.0	6.75	.63	1.12	.61	.73	.30	16 ² / ₃ *	1404.4	140.4	7.73	38.84	11.5*	1.28
28	80.0	23.53	20.0	6.750	.600	1.25	.65	.70	.36	19.5*	1470.3	147.0	7.90	42.33	12.5*	1.34
1,2,14	80.0	23.5	20.0	7.000	.600	1.140	.660	.60	—	15.0*	1449.2	144.9	7.85	45.6	13.0*	1.39
17	80.0	23.5	20.0	6.38	.69	1.05	.63	.65	—	14.8*	1345.1	134.5	7.55	33.2	10.4*	1.19
19	78.0	22.94	20.0	6.75	.60	1.09	.63	—	—	15.0*	1367.4	136.7	7.72	37.86	11.2*	1.28
12	75.0	22.32*	20.0	6.412	.662	1.03	.55	.60	—	16 ² / ₃ *	1278.6	127.9	7.57*	30.48*	9.5*	1.17*
2	75.0	22.1*	20.0	6.415*	.665*	.980	.550	.60	—	15.0*	1256.0	125.6	7.54*	29.8*	9.3*	1.16*
17	75.0	22.1	20.0	6.16	.66	1.02	.59	.63	—	15.6*	1246.9	124.7	7.53	28.2	9.2*	1.13
3,6,9,11,13, 14,16,23	75.0	22.06	20.0	6.399	.649	1.029	.550	.60	.30	16 ² / ₃ *	1268.8	126.9	7.58	30.25	9.5	1.17
21	75.0	22.06	20.0	6.39	.64	1.03	.55	.60	.30	16 ² / ₃ *	1277.1	127.8	7.61	30.05	9.4	1.17
24	75.0	22.06	20.0	6.39	.64	1.029	.550	.60	.30	16 ² / ₃ *	1268.8	126.9	7.58	30.24	9.47	1.17
5,8,10,15,25, 26,27	75.0	21.90	20.0	6.391	.641	1.029	.550	.60	.30	16 ² / ₃ *	1263.5	126.3	7.60	30.1	9.4	1.17
12	70.0	20.84*	20.0	6.338	.588	1.03	.55	.60	—	16 ² / ₃ *	1229.3	122.9	7.68*	29.26*	9.2*	1.18*
2	70.0	20.6*	20.0	6.340*	.590*	.980	.550	.60	—	15.0*	1206.0	120.6	7.65*	28.5*	9.0*	1.18*
18	70.0	20.6	20.0	6.07	.57	1.02	.59	.63	—	15.6*	1197.6	119.8	7.68	26.7	8.8*	1.15
3,6,9,11,13, 14,16,23	70.0	20.59	20.0	6.325	.575	1.029	.550	.60	.30	16 ² / ₃ *	1219.8	122.0	7.70	29.04	9.2	1.19
24	70.0	20.59	20.0	6.32	.57	1.029	.550	.60	.30	16 ² / ₃ *	1219.7	122.0	7.70	29.04	9.20	1.19
20	70.0	20.59	20.0	6.31	.56	1.03	.55	.60	.30	16 ² / ₃ *	1229.0	122.9	7.73	28.87	9.2*	1.18
22	70.0	20.59	20.0	6.27	.57	1.03	.55	.60	.30	17.5*	1229.0	122.9	7.73	28.87	9.2*	1.18
4,7,10,15,25	70.0	20.42	20.0	6.317	.567	1.029	.550	.60	.30	16 ² / ₃ *	1214.2	121.4	7.71	28.9	9.2	1.19
2	66 ² / ₃	19.6*	20.0	6.290*	.540*	.980	.550	.60	—	15.0*	1172.7*	117.3*	7.73*	27.9*	8.87*	1.19*
24	65.4	19.24	20.0	6.25	.50	1.029	.550	.60	.30	16 ² / ₃ *	1174.6	117.5	7.81	27.98	8.95	1.21
5,8,10,11,15, 25,26,27	65.4	19.08	20.0	6.250	.500	1.029	.550	.60	.30	16 ² / ₃ *	1169.5	116.9	7.83	27.9	8.9	1.21
21	65.0	19.12	20.0	6.25	.50	1.03	.55	.60	.30	16 ² / ₃ *	1179.7	118.0	7.86	27.72	8.9*	1.20*
17	65.0	19.1	20.0	6.00	.50	1.02	.59	.63	—	15.6*	1148.6	114.9	7.76	25.5	8.5*	1.16
3,6,9,12,13,14, 16,19,28	65.0	19.08	20.0	6.250	.500	1.029	.550	.60	.30	16 ² / ₃ *	1169.5	117.0	7.83	27.86	8.9	1.21
19	64.8	19.04	20.0	6.25	.50	.98	.55	—	—	15.0*	1145.8	114.6	7.76	26.70	8.5*	1.18
1,2	64.0	18.8	20.0	6.250	.500	.98	.55	.60	—	15.0*	1146.0	114.6	7.80	27.3	8.7*	1.20

18" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (1) AND PAGE 4

1	2	3	8		11	12	15	17	21	5
C1896	C1913	C1916	C1921	C1934	S13-1922	CA 1898 TO	J&L1896	J&L1926	PE1898	C1921
C1900	C1915	C1917	C1923	IL1934	S19-1926	CA 1919 INC.	J&L1898	J&L1931	PE1900	C1923
C1903	C1916	C1919	IL1925	GIL1940	S30-1929	20	J&L1900	18	23	C1926
C1913	C1917	C1920	C1926	GIL1946	S43-1933	PE 1896	J&L1903	LA 1909	PH1906	C1930
IL1914	C1919	13	C1930	GIL1948	S47-1934	26	J&L 1905	LA 1915	PH1908	C1931
C1915	C1920	CA1921	C 1931	US1950	S51-1938	PH 1938	J&L 1906	LA 1916	PH1912	
C1916	9	16	IL1932		S53-1943	27	J&L 1908	19	PH1915	
C1917	B1907	J&L1910			S54-1946	K 1950	J&L 1910	PA 1900	PH1923	
C1919	14				S56-1948	28	J&L 1916	PA 1901	PH1931	
C1920	INI921					IN 1946		PA 1903		

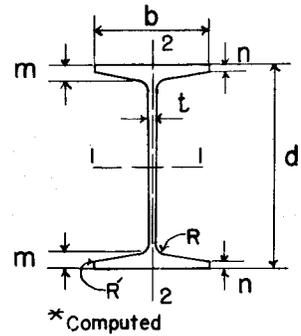


COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
2	90.0	26.47	18.0	7.245	.807	1.195	.659	.66	.34	16 ² / ₃ *	1260.4	140.0	6.90	52.0	14.4	1.40
21	90.0	26.46	18.0	7.08	.82	1.16	.61	—	—	17.6*	1188.0	132.0	6.70	46.03	13.0*	1.32
5	90.0	26.29	18.0	7.236	.796	1.195	.659	.66	.34	16 ² / ₃ *	1256.5	139.6	6.91	51.9	14.3	1.40
2	85.0	25.00	18.0	7.163	.725	1.195	.659	.66	.34	16 ² / ₃ *	1220.7	135.6	6.99	50.0	14.0	1.42
21	85.0	25.00	18.0	7.00	.74	1.16	.61	—	—	17.6*	1149.6	127.7	6.78	44.18	12.62*	1.33
5	85.0	24.81	18.0	7.154	.714	1.195	.659	.66	.34	16 ² / ₃ *	1216.6	135.2	7.00	49.8	14.0	1.42
2	80.0	23.53	18.0	7.082	.644	1.195	.659	.66	.34	16 ² / ₃ *	1181.0	131.2	7.09	48.1	13.6	1.43
21	80.0	23.53	18.0	6.66	.79	1.01	.52	.72	.30	16 ² / ₃ *	1063.4	118.2	6.72	33.12	9.95*	1.19
19	80.0	23.5	18.0	6.63	.70	1.19	.64	.75	—	18.5*	1131.2	125.7	6.94	39.5	11.9*	1.30
5	80.0	23.34	18.0	7.072	.632	1.195	.659	.66	.34	16 ² / ₃ *	1176.8	130.8	7.10	47.9	13.6	1.43
5	75.6	22.04	18.0	7.000	.560	1.195	.659	.66	.34	16 ² / ₃ *	1141.8	126.9	7.20	46.3	13.2	1.45
2	75.0	22.05	18.0	7.000	.562	1.195	.659	.66	.34	16 ² / ₃ *	1141.3	126.8	7.19	46.2	13.2	1.45
21	75.0	22.05	18.0	6.58	.71	1.01	.52	.72	.30	16 ² / ₃ *	1023.5	113.7	6.81	31.67	9.63*	1.20
19	75.0	22.1	18.0	6.55	.62	1.19	.64	.75	—	18.5*	1091.6	121.3	7.04	37.4	11.4*	1.30
26	75.0	21.93	18.0	6.332	.792	.922	.46	.56	.28	16 ² / ₃ *	957.2	106.3	6.61	25.6	8.1	1.08
19	70.0	20.60	18.0	6.37	.65	1.02	.52	.63	—	17.5*	973.1	108.1	6.87	28.8	9.0*	1.18
21	70.0	20.59	18.0	6.50	.62	1.01	.52	.72	.30	16 ² / ₃ *	981.7	109.1	6.91	30.23	9.30*	1.21
1,9,12,14, 15,18	70.0	20.59	18.0	6.259	.719	.922	.46	.56	.276	16 ² / ₃ *	921.3	102.4	6.69	24.62	7.9	1.09
23	70.0	20.59	18.0	6.245	.705	.922	.46	.56	.276	16 ² / ₃ *	921.3	102.4	6.69	24.62	7.88*	1.09
8,11,17,26, 13,27,28	70.0	20.46	18.0	6.251	.711	.922	.460	.56	.28	16 ² / ₃ *	917.5	101.9	6.70	24.5	7.8	1.09
16	70.0	20.42	18.0	6.249	.709	.922	.46	.56	.276	16 ² / ₃ *	916.5	101.8	6.70	24.46	7.8*	1.10
20	67.0	19.7	18.0	6.50	.56	1.02	.53	.66	.33	16.4*	973.5	108.2	7.03	30.29	9.32*	1.24

18" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

6 C1921	4 C1921	10 S13-1922	22 PH1906	1,2,3,5,8, 9,11,12,13,14, 15,16,17,18,20, 21,23,26,27 See Page 15
C1923	C1923	S19-1926	PH1908	
IL1925	7	S30-1929	PH1912	
C1926	IL1914	S43-1933	PH1915	
C1930	IL1925	S47-1934	24	
C1931	IL1932	S51-1938	PH1923	
IL1932	19	S53-1943	PH1929	
C1934	PA1900	28	PH193P	
IL1934	PA1901	JN 1946	25	
CIL1940	PA1903		PH1931	

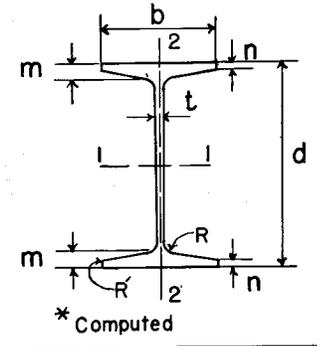


COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
12,14,15, 18	65.0	19.12	18.0	6.177	.637	.922	.460	.56	.276	16 ² / ₃ *	881.5	97.9	6.79	23.47	7.6	1.11
21	65.0	19.12	18.0	6.17	.63	.92	.46	.56	.27	16 ² / ₃ *	889.73	98.9	6.82	23.30	7.55	1.10
23	65.0	19.12	18.0	6.163	.623	.922	.460	.56	.276	16 ² / ₃ *	881.5	97.9	6.79	23.47	7.62	1.11
19	65.0	19.1	18.0	6.17	.64	.94	.47	.56	—	17.0*	886.1	98.5	6.81	23.9	7.7	1.12
6,10,17,26,13	65.0	18.98	18.0	6.169	.629	.922	.460	.56	.28	16 ² / ₃ *	877.7	97.5	6.80	23.4	7.6	1.11
16	65.0	18.92	18.0	6.166	.626	.922	.460	.56	.276	16 ² / ₃ *	876.2*	97.4*	6.81*	23.32*	7.6*	1.11*
1,9,12,14,15, 18	60.0	17.65	18.0	6.095	.555	.922	.460	.56	.276	16 ² / ₃ *	841.8	93.5	6.91	22.38	7.3	1.13
23	60.0	17.65	18.0	6.082	.542	.922	.460	.56	.276	16 ² / ₃ *	841.8	93.5	6.91	22.38	7.36	1.13
21	60.0	17.64	18.0	6.08	.54	.92	.46	.56	.27	16 ² / ₃ *	849.88	94.4	6.94	22.22	7.31	1.12
19	60.0	17.6	18.0	6.08	.55	.94	.47	.56	—	17.0*	846.5	94.1	6.94	22.7	7.5	1.13
6,10,17,26,13	60.0	17.50	18.0	6.087	.547	.922	.460	.56	.28	16 ² / ₃ *	837.8	93.1	6.92	22.3	7.3	1.13
16	60.0	17.43	18.0	6.083	.543	.922	.460	.56	.276	16 ² / ₃ *	835.9*	92.9*	6.93*	22.19*	7.3*	1.13*
19	55.0	16.2	18.0	6.00	.47	.94	.47	.56	—	17.0*	806.8	89.6	7.08	21.6	7.2	1.16
20	55.0	16.2	18.0	6.00	.46	.92	.46	.56	.27	16 ² / ₃ *	809.0	89.9	7.07	20.82	6.94	1.13
22	55.0	16.18	18.0	6.000	.460	.922	.460	.56	.276	16 ² / ₃ *	795.6	88.4	7.07	21.19	7.06	1.15
21	55.0	16.13	18.0	6.00	.46	.92	.46	.56	.27	16 ² / ₃ *	809.05	89.9	7.08	21.17	7.06	1.14
1,9,12,15,16, 18	55.0	15.93	18.0	6.000	.460	.922	.460	.56	.276	16 ² / ₃ *	795.6	88.4	7.07	21.19	7.1	1.15
25	54.7	16.09	18.0	6.000	.460	.922	.460	.56	.28	16 ² / ₃ *	799.8	88.9	7.05	21.42	7.14	1.15
8,11,13,14,17, 24,27,28	54.7	15.94	18.0	6.000	.460	.922	.460	.56	.28	16 ² / ₃ *	795.5	88.4	7.07	21.2	7.1	1.15
4	48.2	14.09	18.0	7.500	.380	.664	.340	.34	—	9.1*	737.1	81.9	7.23	30.0	8.0	1.46
3	48.0	14.08	18.0	7.500	.380	.664	.340	.34	—	9.1*	737.1	81.9	7.23	30.0	8.0	1.46
2	46.0	13.53	18.0	6.000	.322	.900	.427	.50	—	16 ² / ₃ *	733.2	81.5	7.36	19.9	6.6	1.21
7	46.0	13.34	18.0	6.000	.380	.730	.380	.38	—	12.5*	675.7	75.1	7.12	17.14	5.71	1.13

15" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

2	4	12	20	23	33	30
CP1892	C1896	B1907	J&L1900	LA 1909	PH1931	PH1906
3	C1900	S6-1919	J&L1902	LA 1915	PH1938	PH1908
C1893	C1903	S7-1920	J&L1903	LA 1916	34	PH1912
8	C1913	15	J&L1905	27	PH1938	PH1915
C1930	IL1914	CA 1898 TO	J&L1906	PE 1896	19	PH1923
C1931	C1915	CA 1919 INCL	J&L1908	32	J&L1896	PH1929
IL 1932	C1916	16	J&L1910	PH 1923	J&L 1898	
10	C1917	CA 1921	J&L 1910	PH 1929		
IL 1925	C1919		J&L1926	PH 1931		
	C1920		J&L1931			

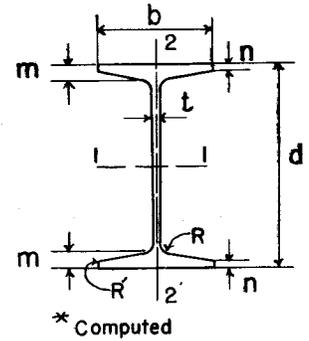


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
2	100.0	29.5*	15.0	6.81*	1.17*	1.23	.84	.72	—	13.8*	898.4*	119.8*	5.52*	52.03*	15.3*	1.33*
19,20,22	100.0	29.46	15.0	6.792	1.192	1.266	.80	.91	.48	16 ² / ₃	899.4	119.9	5.53	50.92	15.0*	1.31
30	100.0	29.41	15.0	6.792	1.192	1.267	.80	.90	.48	16 ² / ₃	900.5	120.1	5.53	50.98	15.01*	1.31
15	100.0	29.41	15.0	6.79	1.19	1.27	.80	.90	.48	16 ² / ₃	898.6	119.8	5.53	50.84	14.97*	1.31
4,10,12,23	100.0	29.41	15.0	6.774	1.184	1.276	.81	.91	.486	16 ² / ₃	900.5	120.1	5.53	50.98	15.05*	1.31
33,34	100.0	29.41	15.0	6.77	1.17	1.267	.80	.90	.48	16 ² / ₃	898.6	119.8	5.53	50.30	14.86	1.31
8,16	100.0	29.08	15.0	6.767	1.167	1.267	.80	.90	.48	16 ² / ₃	892.4	119.0	5.54	50.2	14.8	1.31
3	95.0	28.00*	15.0	6.71*	1.07*	1.23	.84	.72	—	13.8*	870.3*	116.0*	5.58*	49.36*	14.7*	1.33*
19,20,22	95.0	27.98	15.0	6.694	1.094	1.266	.80	.91	.48	16 ² / ₃	871.7	116.2	5.58	48.3	14.4	1.31
30	95.0	27.94	15.0	6.694	1.094	1.267	.80	.90	.48	16 ² / ₃	872.9	116.4	5.59	48.37	14.45*	1.32
15	95.0	27.94	15.0	6.69	1.09	1.27	.80	.90	.48	16 ² / ₃	871.0	116.1	5.58	48.25	14.42	1.31
4,10,12,23	95.0	27.94	15.0	6.675	1.085	1.276	.81	.91	.486	16 ² / ₃	872.9	116.4	5.59	48.37	14.49	1.32
33,34	95.0	27.94	15.0	6.67	1.07	1.267	.80	.90	.48	16 ² / ₃	871.1	116.1	5.58	47.74	14.32	1.31
8,16	95.0	27.59	15.0	6.668	1.068	1.267	.80	.90	.48	16 ² / ₃	864.5	115.3	5.60	47.7	14.3	1.31
19,20,22	90.0	26.51	15.0	6.596	.996	1.27	.80	—	—	16 ² / ₃	844.1	112.5	5.64	45.8	13.9	1.32
3	90.0	26.5*	15.0	6.61*	.97*	1.23	.84	.72	—	13.8*	842.2*	112.3*	5.64*	46.87*	14.2*	1.33*
30	90.0	26.47	15.0	6.596	.996	1.267	.80	.90	.48	16 ² / ₃	845.4	112.7	5.65	45.91	13.92*	1.32
15	90.0	26.47	15.0	6.59	.99	1.27	.80	.90	.48	16 ² / ₃	843.4	112.5	5.64	45.79	13.90*	1.32
4,10,12,23	90.0	26.47	15.0	6.577	.987	1.276	.81	.91	.486	16 ² / ₃	845.4	112.7	5.65	45.91	14.0*	1.32
33,34	90.0	26.47	15.0	6.57	.97	1.267	.80	.90	.48	16 ² / ₃	843.5	112.5	5.65	45.30	13.79	1.31
8,16	90.0	26.12	15.0	6.570	.970	1.267	.80	.90	.48	16 ² / ₃	837.0	111.6	5.66	45.2	13.8	1.32
27	85.1	25.03	15.0	6.71*	.91*	1.14	.71	—	—	14.8*	789.24	105.23	5.61	42.56	12.69*	1.30
3	85.0	25.00*	15.0	6.51*	.87*	1.23	.84	.72	—	13.8*	814.0*	108.5*	5.71*	44.56*	13.7*	1.34*
15	85.0	25.00	15.0	6.50	.90	1.27	.80	.90	.48	16 ² / ₃	815.9	108.8	5.71	43.46	13.37	1.32
30	85.0	25.00	15.0	6.498	.898	1.267	.80	.90	.48	16 ² / ₃	817.8	109.0	5.72	43.57	13.41*	1.32
19,20,22	85.0	25.04	15.0	6.498	.898	1.266	.80	.90	.48	16 ² / ₃	816.5	108.9	5.71	43.5	13.4	1.32
4,10,12,23	85.0	25.00	15.0	6.479	.889	1.276	.81	.91	.486	16 ² / ₃	817.8	109.0	5.72	43.57	13.4*	1.32
33,34	85.0	25.00	15.0	6.47	.87	1.267	.80	.90	.48	16 ² / ₃	815.9	108.8	5.71	42.96	13.28	1.31
8,16	85.0	24.65	15.0	6.472	.872	1.267	.80	.90	.48	16 ² / ₃	809.4	107.9	5.73	42.9	13.3	1.32
32,33	81.3	23.91	15.0	6.400	.80	1.267	.80	.90	.48	16 ² / ₃	795.5	106.1	5.78	41.76	12.91*	1.32
10	81.3	23.81	15.0	6.400	.800	1.27	.80	.90	.48	16 ² / ₃	795.5	106.1	5.78	41.8	13.1	1.32
8,16,22	81.3	23.57	15.0	6.400	.800	1.267	.80	.90	.48	16 ² / ₃	789.1	105.2	5.79	41.3	12.9	1.32

15" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1	7	13	18	28	30	2,3,4,10,12,15, 16,19,20,23, 27,34. See Page 17
CPI889	C1921	S13-1922	J&L1893	PE 1898	PH 1906	
CPI890	C1923	S19-1926	21	PE 1900	PH 1908	
CPI892	C1926	S30-1929	J&L1916	PE 1901	PH 1912	
5	C1930	S43-1933	25	29	PH 1915	
C1913	C1931	S47-1934	PA 1897	PH 1890	PH 1923	
C1915	C1934	S51-1938	PA 1898		PH 1929	
	IL1932	S53-1943	26			
	IL1934	17	PA 1900			
	CIL1940	IN 1921	PA 1901			
			PA 1903			

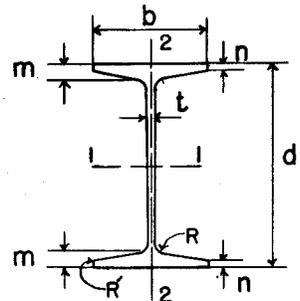


COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
4,12,23	80.0	23.81	15.0	6.400	.810	1.276	.81	.91	.486	16 ² / ₃ *	795.5	106.1	5.78	41.76	13.1	1.32
18	80.0	23.6*	15.0	6.465	.84	1.188	.813	.75	—	13 ¹ / ₃ *	787.4*	105.0*	5.78*	42.1*	13.0*	1.34*
15,19	80.0	23.57	15.0	6.40	.80	1.27	.80	.90	.48	16 ² / ₃ *	789.1	105.2	5.79	41.31	12.91*	1.32
19,20	80.0	23.56	15.0	6.392	.982	1.04	.59	.69	—	16 ² / ₃ *	719.3	95.9	5.53	32.50	10.2*	1.18
28	80.0	23.54	15.0	6.63	.83	1.17	.69	.73	.30	16 ² / ₃ *	773.84	103.2	5.73	40.69	12.3*	1.32
30	80.0	23.53	15.0	6.400	.80	1.267	.80	.90	.48	16 ² / ₃ *	795.5	106.1	5.78	41.76	13.05*	1.32
15	80.0	23.53	15.0	6.39	.98	1.04	.59	.69	.35	16 ² / ₃ *	718.8	95.8	5.53	32.46	10.16*	1.17
23	80.0	23.5	15.0	6.41	.77	1.23	.84	.72	—	13.8*	785.9	104.8	5.82	42.2	13.2*	1.35
26	80.0	23.5	15.0	6.39	.91	1.11	.69	.62	—	15.3*	747.8	99.7	5.64	37.0	11.6*	1.25
3	75.0	22.1*	15.0	6.34*	.84*	1.07	.73	.62	—	12.4*	728.4*	97.1*	5.74*	35.84*	11.3*	1.27*
1	75.0	22.1	15.0	6.31	.67	1.23	.84	.72	—	13.8*	757.7	101.0	5.86	40.1	12.7*	1.35
25,26	75.0	22.1	15.0	6.29	.81	1.11	.69	.62	—	15.3*	720.4	96.0	5.72	34.6	11.0*	1.25
19,20	75.0	22.08*	15.0	6.292	.884	1.04	.59	.69	—	16 ² / ₃ *	691.8*	92.2*	5.60*	30.70*	9.8*	1.18*
4,12,15,17, 21,23,30	75.0	22.06	15.0	6.292	.882	1.041	.59	.69	.354	16 ² / ₃ *	691.2	92.2	5.60	30.68	9.8	1.18
28	75.0	22.05	15.0	6.53	.73	1.17	.69	.73	.30	16 ² / ₃ *	745.99	99.5	5.82	38.64	11.8	1.32
29	75.0	22.05	15.0	6.375	.62	1.27	.85	.62	—	14.6*	757.7	101.0*	5.86	40.1	12.6*	1.35
7,10,13,16, 22,34	75.0	21.85	15.0	6.278	.868	1.041	.590	.69	.35	16 ² / ₃ *	687.2	91.6	5.61	30.6	9.8	1.18
27	70.4	20.70	15.0	6.36*	.76*	1.01	.60	—	—	14.6*	654.09	87.21	5.62	30.9	9.7*	1.22
19,20	70.0	20.61*	15.0	6.196	.786	1.04	.59	.69	—	16 ² / ₃ *	664.2*	88.6*	5.68*	29.03*	9.4*	1.19*
28	70.0	20.60	15.0	6.43	.63	1.17	.69	.73	.30	16 ² / ₃ *	718.71	95.8	5.91	36.73	11.4*	1.33
18	70.0	20.6	15.0	6.265	.64	1.188	.813	.75	—	13 ¹ / ₃ *	731.1	97.48	5.95	37.8	12.1*	1.35
3	70.0	20.6*	15.0	6.24*	.74*	1.07	.73	.62	—	12.4*	700.3*	93.4*	5.83*	33.94*	10.9*	1.28*
26	70.0	20.6	15.0	6.20	.72	1.11	.69	.62	—	15.3*	692.8	92.4	5.80	32.5	10.5*	1.26
4,12,15,17, 21,23,30	70.0	20.59	15.0	6.194	.784	1.041	.59	.69	.354	16 ² / ₃ *	663.6	88.5	5.68	29.00	9.4	1.19
7,10,13,16, 22,34	70.0	20.38	15.0	6.180	.770	1.041	.59	.69	.35	16 ² / ₃ *	659.6	87.9	5.69	28.8	9.3	1.19
27	69.2	20.38	15.0	6.40	.60	1.14	.71	—	—	14.8*	710.0	94.67	5.90	36.23	11.3*	1.33
18	69.2	20.36*	15.0	6.171	.671	1.125	.750	.75	—	13.6*	698.3*	93.11*	5.86*	33.8*	11.0*	1.29*
25	66 ² / ₃	19.7	15.0	6.13	.65	1.11	.69	.62	—	15.3*	676.3	90.1	5.87	31.7	10.3*	1.27
3	66 ² / ₃	19.6*	15.0	6.17*	.67*	1.07	.73	.62	—	12.4*	681.4*	90.9*	5.90*	32.67*	10.6*	1.29*
19,20	65.0	19.14*	15.0	6.098	.688	1.04	.59	.69	.354	16 ² / ₃ *	636.6*	84.9*	5.77*	27.44*	9.0*	1.20*
4,12,15,17, 21,23,30	65.0	19.12	15.0	6.096	.686	1.041	.59	.69	.354	16 ² / ₃ *	636.0	84.8	5.77	27.42	9.0*	1.20
28	65.0	19.11	15.0	6.27	.65	1.04	.57	.65	.30	16 ² / ₃ *	646.58	86.2	5.82	29.13	9.3*	1.23
26	65.0	19.1	15.0	6.10	.62	1.11	.69	.62	—	15.3*	665.3	88.7	5.90	30.7	10.1*	1.27
7,10,13,16, 22,34	65.0	18.91	15.0	6.082	.672	1.041	.590	.69	.35	16 ² / ₃ *	632.1	84.3	5.78	27.2	8.9	1.20

15" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1,7,13,17,18, 21,25,26,28, 29,30 See Page 18	2,3,4,10,12, 15,16,19,20, 22,23,27,32, 33,34 See Page 17	11 IL 1934 CIL 1946 CIL 1948 US 1950 14 S54-1946 S56-1948	24 NJ 1889 NJ 1891 35 K 1950
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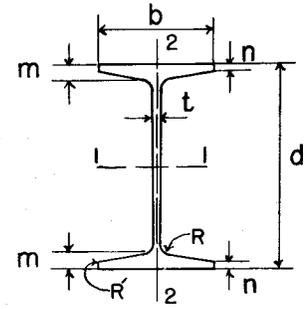
* Computed

COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE	WEB	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
33	60.8	17.88	15.0	6.00	.590	1.041	.590	.69	.35	16 ² / ₃ *	612.9	81.7	5.86	25.96	8.65	1.21
7,10,13,16,22, 30,32,34	60.8	17.68	15.0	6.000	.590	1.041	.590	.69	.35	16 ² / ₃ *	609.0	81.2	5.87	26.0	8.7	1.21
4,12,15,17,19, 20,21,23	60.0	17.67	15.0	6.000	.590	1.041	.590	.69	.354	16 ² / ₃ *	609.0	81.2	5.87	25.96	8.65	1.21
15	60.0	17.65	15.0	5.84	.75	.83	.41	.51	.25	16 ² / ₃ *	538.6	71.8	5.52	18.17	6.22*	1.01
28	60.0	17.64	15.0	6.17	.55	1.04	.57	.65	.30	16 ² / ₃ *	619.02	82.5	5.92	27.60	8.9*	1.25
29	60.0	17.64	15.0	6.125	.50	1.06	.66	.62	-	14.2*	644.0	85.9*	6.04	30.4	9.9*	1.32
1,2,3	60.0	17.6	15.0	6.04	.54	1.07	.73	.62	-	12.4*	644.0	85.9	6.04	30.4	10.1*	1.32
25,26	60.0	17.6	15.0	6.00	.52	1.11	.69	.62	-	15.3*	637.7	85.0	6.02	29.2	9.7*	1.29
18	59.0	17.3	15.0	5.968	.468	1.125	.750	.75	-	13.6*	640.9	85.3	6.08	30.3	10.2*	1.32
27	57.6	16.95	15.0	6.10	.50	1.01	.60	-	-	14.6*	583.78	77.84	5.87	26.95	8.8*	1.26
27	56.9	16.74	15.0	5.95*	.60*	.89	.50	-	-	14.6*	560.79	74.77	5.79	21.50	7.2*	1.13
18	56.5	16.7*	15.0	5.892	.572	.906	.500	.55	-	15.3*	543.7*	72.5*	5.71*	21.1*	7.2*	1.12*
3	55.0	16.2*	15.0	5.85*	.55*	.95	.55	.55	-	15.1*	557.8*	74.4*	5.87*	22.23*	7.6*	1.17*
26	55.0	16.2	15.0	5.85	.55	.95	.55	.56	-	15.1*	557.3	74.3	5.87	22.2	7.6*	1.17
30	55.0	16.18	15.0	5.755	.665	.834	.41	.51	.246	16 ² / ₃ *	511.0	68.1	5.62	17.06	5.93*	1.02
19,20	55.0	16.18	15.0	5.754	.664	.834	.41	.51	-	16 ² / ₃ *	511.0	68.1	5.62	17.06	5.93*	1.00
4,12,15,17,21, 23	55.0	16.18	15.0	5.746	.656	.834	.41	.51	.246	16 ² / ₃ *	511.0	68.1	5.62	17.06	5.93*	1.02
28	55.0	16.17	15.0	5.92	.58	.90	.46	.58	.28	16.5*	542.84	72.4	5.79	20.34	6.87*	1.12
7,10,13,16,22, 34	55.0	16.06	15.0	5.738	.648	.834	.41	.51	.25	16 ² / ₃ *	508.7	67.8	5.63	17.0	5.9	1.03
27	52.9	15.56	15.0	5.79*	.60*	.79	.41	-	-	14.6*	497.68	66.36	5.65	17.08	5.9*	1.05
19,20	50.0	14.84*	15.0	5.656	.566	.834	.41	.51	-	16 ² / ₃ *	489.2*	65.2*	5.74*	16.13*	5.70*	1.04*
30	50.0	14.71	15.0	5.657	.567	.834	.41	.51	.246	16 ² / ₃ *	483.4	64.5	5.73	16.04	5.67*	1.04
4,12,15,17,21, 23	50.0	14.71	15.0	5.648	.558	.834	.41	.51	.246	16 ² / ₃ *	483.4	64.5	5.73	16.04	5.67*	1.04
28	50.0	14.70	15.0	5.82	.48	.90	.46	.58	.28	16.5*	515.22	68.7	5.92	19.20	6.6*	1.14
1,2,3,24,25, 26,29	50.0	14.7	15.0	5.75	.45	.95	.55	.55	-	15.1*	529.7	70.6	6.00	21.0	7.3	1.20
7,10,11,13,14, 16,22,34,35	50.0	14.59	15.0	5.640	.550	.834	.41	.51	.25	16 ² / ₃ *	481.1	64.2	5.74	16.0	5.7	1.05
27	49.3	14.49	15.0	5.80	.45	.89	.50	-	-	14.6*	518.61	69.15	5.98	19.71	6.8	1.17
18	48.0	14.1	15.0	5.726	.406	.906	.500	.55	-	15.3*	459.9	66.1	5.93	19.2	6.7*	1.16
18	47.5	14.1*	15.0	5.642	.542	.750	.375	.55	-	14.7*	451.1*	60.1*	5.66*	14.5*	5.1*	1.01*
19,20	45.0	13.37*	15.0	5.558	.468	.834	.41	.51	-	16 ² / ₃ *	461.6*	61.5*	5.88*	15.17*	5.5*	1.07*
30	45.0	13.24	15.0	5.559	.469	.834	.41	.51	.246	16 ² / ₃ *	455.8	60.8	5.87	15.00	5.40*	1.06
4,12,15,17,21, 23	45.0	13.24	15.0	5.550	.460	.834	.41	.51	.246	16 ² / ₃ *	455.9	60.8	5.87	15.09	5.44*	1.07
28	45.0	13.23	15.0	5.54	.45	.83	.41	.51	.24	16.5*	460.3	61.4	5.90	14.97	5.4*	1.06
3	45.0	13.2*	15.0	5.58*	.48*	.78	.40	.55	-	14.9*	446.6*	59.5*	5.82*	14.72*	5.3*	1.06
26	45.0	13.2	15.0	5.56	.46	.78	.40	.50	-	14.9*	446.1	59.5	5.88	14.5	5.2*	1.06
7,10,13,16,22, 34	45.0	13.12	15.0	5.542	.452	.834	.41	.51	.25	16 ² / ₃ *	453.6	60.5	5.88	15.0	5.4	1.07

15" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1,5,7,13,17,18, 21,25,28,29, 30 See Page 18	2,4,10,12,15, 16,19,20,22, 23,27,32,33, 34 See Page 17	9 IL1914 IL1925 IL1932
11,14,24,35 See Page 19	6 C1916 C1917 C1919 C1920	31 PH1915 PH1923 PH1929

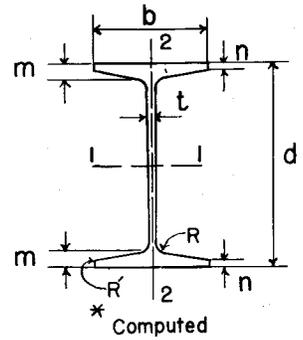


* Computed

COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
33	42.9	12.62	15.0	5.50	.41	.834	.41	.51	.25	16 ² / ₃ *	444.3	59.2	5.93	14.62	5.32	1.08
7,10,11,13,14, 16,17,22,30, 32,34,35	42.9	12.49	15.0	5.500	.410	.834	.41	.51	.25	16 ² / ₃ *	441.8	58.9	5.95	14.6	5.3	1.08
27	42.4	12.48	15.0	5.50	.41	.83	.41	.51	.24	16.5*	441.8	58.9	5.95	14.62	5.3	1.08
4,12,15,19, 20,21,23	42.0	12.48	15.0	5.500	.410	.834	.41	.51	.246	16 ² / ₃ *	441.8	58.9	5.95	14.62	5.3	1.08
25,26,	42.0	12.4	15.0	5.50	.40	.78	.40	.50	-	14.9*	429.6	57.3	5.90	14.0	5.1*	1.08
28	42.0	12.35	15.0	5.50	.41	.83	.41	.51	.24	16.5*	443.71	59.2	5.99	14.43	5.2*	1.08
27	41.2	12.11	15.0	5.56	.37	.79	.41	-	-	14.6*	433.0	57.73	5.98	14.85	5.3*	1.11
29	41.0	12.05	15.0	5.50	.40	.78	.40	.55	-	14.9*	424.1	56.5*	5.94	14.0	5.1*	1.08
1,2,3,24	41.0	12.0	15.0	5.50	.40	.78	.40	.55	-	14.9*	424.1	56.6	5.94	14.0	5.1*	1.08
18	39.0	11.5	15.0	5.475	.375	.750	.375	.55	-	14.7*	403.3	53.8	5.92	13.1	4.8*	1.06
6	37.5	10.91	15.0	6.750	.332	.602	.310	.30	-	9.1*	405.5	54.1	6.10	19.9	5.9	1.35
7	37.3	10.91	15.0	6.750	.332	.602	.310	.30	-	9.1*	405.5	54.1	6.10	19.9	5.9	1.35
5	36.0	10.63	15.0	5.500	.289	.805	.371	.45	-	16 ² / ₃ *	405.1	54.0	6.17	13.5	4.9	1.13
34	36.0	10.59	15.0	5.56	.34	.712	.313	.47	-	15.3*	381.5	50.9	6.00	12.0	4.33	1.07
31	36.0	10.59	15.0	5.50	.289	.805	.371	.45	-	16 ² / ₃ *	405.1	54.0	6.17	13.5	4.9*	1.13
33	36.0	10.59	15.0	5.50	.289	.805	.371	.45	.06	16 ² / ₃ *	400.9	53.4	6.15	13.5	4.91	1.13
9	35.0	10.22	15.0	5.50	.330	.65	.33	.33	-	12.4*	367.9	49.0	6.00	11.56	4.20	1.06
34	33.0	9.71	15.0	5.50	.28	.712	.313	.47	-	15.3*	365.0	48.7	6.13	11.6	4.22	1.09

12" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4



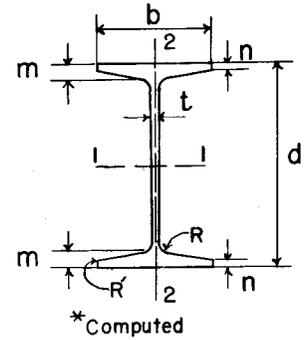
2	4	7	11	10	17	19	21	26	30	18
CP 1892	C 1896	C 1921	S 13-1922	B-1907 TO	J&L 1896	J&L 1908	LA 1909	PE 1896	PH 1923	J&L 1900
3	C 1900	C 1923	S 19-1926	S7-1920 IN.	J&L 1898	J&L 1910	LA 1915	28	PH 1929	J&L 1902
C 1893	C 1903	IL 1925	S 30-1929	14	J&L 1900	J&L 1916	LA 1916	PH 1890	32	J&L 1903
9	C 1913	C 1926	S 43-1933	CA 1921	J&L 1902	20	24	PH 1906	PH 1931	J&L 1905
CIL 1946	IL 1914	C 1930	S 47-1934	15	J&L 1903	J&L 1926	PA 1900	PH 1908	33	J&L 1906
CIL 1948	C 1915	C 1931	S 51-1938	IN 1921	J&L 1905	J&L 1931	PA 1901	PH 1912	PH 1938	
US 1950	C 1917	IL 1932	S 53-1943	16	J&L 1906	23	PA 1903	PH 1915	27	
13	C 1919	IL 1934	12	J&L 1893	35	PA 1897	25	PH 1923	PE 1898	
CA 1898 TO	C 1920	C 1934	S 54-1946	IN 1946	PA 1898	PE 1891	PH 1929	PE 1900	PE 1901	
CA 1919 INC.	CIL 1940	S 56-1948								

COL. (1)	WEIGHT		DEPTH d	FLANGE		WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT	AREA		WIDTH b	THICK t		m	n	R	R'		I	S	r	I	S	r
	Lb.	Sq.In.		In.	In.		In.	In.	In.	In.		In.	In. ⁴	In. ³	In.	In. ⁴	In. ³
26	66.9	19.68	12.0	6.04*	.85*	1.09	.70	-	-	15.0*	403.38	67.23	4.53	29.74	9.85*	1.23	
27	65.0	19.12	12.0	5.99	.80	1.10	.67	.66	.30	16 2/3*	403.48	67.3	4.59	28.93	9.66*	1.23	
24	65.0	19.1	12.0	6.25	.88	1.03	.56	.50	-	17.5*	393.3	65.6	4.55	28.8	9.22*	1.23	
16	60.0	17.70	12.0	5.973	.848	.844	.469	.50	-	14.6*	338.0*	56.3*	4.37*	21.03*	7.04*	1.09*	
27	60.0	17.64	12.0	5.87	.68	1.10	.67	.66	.30	16 2/3*	385.77	64.3	4.68	26.96	9.19*	1.24	
18	60.0	17.64	12.0	5.738	.948	.86	.46	.56	-	16 2/3*	339.46	56.6	4.39	18.86	6.57*	1.03	
24	60.0	17.6	12.0	6.12	.75	1.03	.56	.50	-	17.5*	375.7	62.6	4.63	26.9	8.79*	1.24	
2	56.7	16.7*	12.0	5.92*	.81*	.88	.50	.50	-	14.9*	341.8*	57.0*	4.52*	21.5*	7.3*	1.13*	
3	56 2/3	16.7*	12.0	5.917*	.807*	.88	.50	.50	-	14.9*	341.4*	56.9*	4.52*	21.4*	7.2*	1.13*	
26	55.5	16.32	12.0	5.75	.56	1.09	.70	-	-	15.0*	362.88	60.48	4.71	25.31	8.80*	1.24	
17	55.0	16.25	12.0	5.618	.828	.86	.46	.56	-	16 2/3*	321.89	53.6	4.45	17.54	6.24*	1.04	
28	55.0	16.18	12.0	5.618	.828	.859	.46	.56	.276	16 2/3*	321.0	53.5	4.45	17.46	6.22*	1.04	
4,10,13,15,19,21	55.0	16.18	12.0	5.612	.822	.859	.46	.56	.276	16 2/3*	321.0	53.5	4.45	17.46	6.2	1.04	
27	55.0	16.17	12.0	5.75	.56	1.10	.67	.66	.30	16 2/3*	368.06	61.3	4.77	25.12	8.74*	1.25	
23,24	55.0	16.1	12.0	6.00	.63	1.03	.56	.50	-	17.5*	358.1	59.7	4.72	25.2	8.40*	1.25	
7,11,14,20,33	55.0	16.04	12.0	5.600	.810	.859	.46	.56	.28	16 2/3*	319.3	53.2	4.46	17.3	6.2	1.04	
17	50.0	14.79*	12.0	5.496*	.706*	.86	.46	.56	-	16 2/3*	304.37*	50.7*	4.54*	16.20*	5.90*	1.05*	
28	50.0	14.71	12.0	5.495	.705	.859	.46	.56	.276	16 2/3*	303.3	50.6	4.54	16.12	5.87*	1.05	
4,10,13,15,19,21	50.0	14.71	12.0	5.489	.699	.859	.46	.56	.276	16 2/3*	303.3	50.6	4.54	16.12	5.9	1.05	
3	50.0	14.7*	12.0	5.75*	.640*	.88	.50	.50	-	14.9*	317.3*	52.9*	4.65*	19.4*	6.7*	1.15*	
24	50.0	14.7	12.0	5.75	.64	.88	.50	.50	-	14.9*	316.5	52.8	4.65	19.4	6.75*	1.15	
16	50.0	14.7	12.0	5.723	.598	.844	.469	.50	-	14.6*	302.0	50.3	4.53	18.1	6.33*	1.11	
27	50.0	14.7	12.0	5.68	.55	.98	.56	-	-	16.4*	332.08	55.4	4.75	20.79	7.32*	1.19	
7,9,11,12,14,20,33,35	50.0	14.57	12.0	5.477	.687	.859	.46	.56	.28	16 2/3*	301.6	50.3	4.55	16.0	5.8	1.05	
16	48.0	14.2*	12.0	5.718	.593	.844	.469	.50	-	14.6*	301.4*	50.2*	4.61*	18.0*	6.30*	1.13*	
26	47.6	14.00	12.0	5.45	.60	.86	.50	-	-	14.8*	299.76	49.96	4.63	16.52	6.06*	1.09	
17	45.0	13.32*	12.0	5.373*	.583*	.86	.46	.56	-	16 2/3*	286.66*	47.8*	4.64*	14.97*	5.57*	1.06*	
28	45.0	13.24	12.0	5.373	.583	.859	.46	.56	.276	16 2/3*	285.7	47.6	4.65	14.89	5.54*	1.06	
4,10,13,19,21	45.0	13.24	12.0	5.366	.576	.859	.46	.56	.276	16 2/3*	285.7	47.6	4.65	14.89	5.6	1.06	
27	45.0	13.23	12.0	5.37	.54	.88	.48	.52	.24	16 2/3*	292.25	48.7	4.70	15.41	5.74*	1.08	
3	45.0	13.2*	12.0	5.625*	.515*	.88	.50	.50	-	14.9*	299.3*	49.9*	4.76*	18.1*	6.4*	1.17*	
24	45.0	13.2	12.0	5.62	.51	.88	.50	.50	-	14.9*	298.9	49.8	4.76	18.0	6.41*	1.17	
7,11,14,20,33	45.0	13.10	12.0	5.355	.565	.859	.46	.56	.28	16 2/3*	284.1	47.3	4.66	14.8	5.5	1.06	
25	44.1	13.04*	12.0	5.34*	.68*	.672	.344	.50	-	14.1*	253.85*	42.31*	4.41*	11.40	4.27*	.93*	
32	40.8	12.00	12.0	5.25	.46	.859	.460	.56	.28	16 2/3*	270.9	45.1	4.75	13.79	5.25	1.07	
7,9,11,12,14,15,20,28,30,33,35	40.8	11.84	12.0	5.250	.460	.859	.46	.56	.28	16 2/3*	268.9	44.8	4.77	13.8	5.3	1.08	

1 1/2" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (1) AND PAGE 4

1	6	29	2,3,4,7,10,11,12,	B66
CP1889	C1916	PH1912	13,14,15,16,17,18,	C1921
CP1890	C1917	PH1915	19,20,21, 23,	C1923
5	C1919	PH1923	24,25,26,27,28,	
C1913	C1920	31	30,32,33,35	
C1915	8	PH1929	See Page 21	
9	IL1914	PH1931	22	
CIL1946	IL1925	34	NJ 1889	
CIL1948	IL1932	K1950	NJ 1891	
US1950				

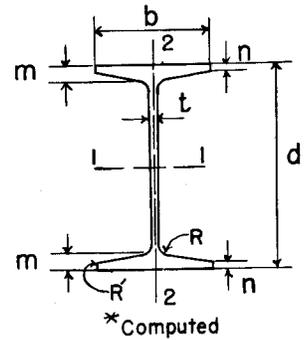


COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
4,10,13,17,19,21	40.0	11.84	12.0	5.250	.460	.859	.46	.56	.276	16 2/3*	268.9	44.8	4.77	13.81	5.3	1.08
23,24	40.0	11.8	12.0	5.50	.39	.88	.50	.50	—	14.9*	281.3	46.9	4.90	16.8	6.11*	1.20
27	40.0	11.77	12.0	5.25	.42	.88	.48	.52	.24	16 2/3*	274.68	45.8	4.83	14.26	5.43*	1.10
28	40.0	11.76	12.0	5.250	.460	.859	.46	.56	.276	16 2/3*	268.9	44.8	4.77	13.81	5.26*	1.08
13,15	40.0	11.76	12.0	5.215	.558	.738	.35	.45	.21	16 2/3*	245.9	41.0	4.57	10.95	4.2*	.96
22	40.0	11.73	12.0	5.50	.39	.91	.50	.50	—	16.0*	281.3	46.9*	4.90*	16.76	6.09*	1.20*
1,2,3,28	40.0	11.7	12.0	5.50	.39	.88	.50	.50	—	14.9*	281.3	46.9	4.90	16.8	6.1*	1.20
26	39.4	11.6	12.0	5.25	.40	.86	.50	—	—	14.8*	268.30	44.72	4.81	14.57	5.55*	1.12
2	39.0	11.5*	12.0	5.425	.525*	.72	.35	.50	—	15.1*	247.5*	41.3*	4.64*	12.1*	4.5*	1.03*
25	39.0	11.52*	12.0	5.213	.553*	.672	.344	.50	—	14.1*	235.56*	39.26*	4.52*	10.37*	3.98*	.95*
26	38.4	11.29	12.0	5.19	.53	.68	.33	—	—	15.0*	233.80	38.97	4.55	10.19	3.93*	.95
16	38.0	11.2	12.0	5.468	.343	.844	.469	.50	—	14.6*	265.4	44.2	4.86	15.6	5.71*	1.18
16	37.5	11.4*	12.0	5.414	.508	.703	.328	.50	—	15.3*	238.7*	39.8*	4.58*	11.5*	4.25*	1.00*
25	36.6	10.80*	12.0	5.153	.493*	.672	.344	.50	—	14.1*	226.92*	37.82*	4.58*	10.07*	3.91*	.97*
3	36.0	10.6*	12.0	5.35*	.45*	.72	.35	.50	—	15.1*	236.7*	39.5*	4.73*	11.53*	4.3*	1.04*
24	35.0	10.3	12.0	5.22	.44	.71	.34	.50	—	15.5*	232.9	38.8	4.77	10.5	4.02*	1.01
4,10,13,19,21,28	35.0	10.29	12.0	5.086	.436	.738	.35	.45	.21	16 2/3*	228.3	38.0	4.71	10.07	4.0	.99
17	35.0	10.29	12.0	5.085	.436	.739	.35	.45	—	16 2/3*	228.3	38.0	4.71	10.07	3.97*	.99
27	35.0	10.29	12.0	5.07	.42	.74	.35	.45	.21	16 2/3*	230.95	38.5	4.74	10.01	3.95*	.99
7,9,11,12,14,20,33,34	35.0	10.20	12.0	5.078	.428	.738	.350	.45	.21	16 2/3*	227.0	37.8	4.72	10.0	3.9	.99
25	34.1	10.04	12.0	5.090	.430*	.672	.344	.50	—	14.1*	217.85*	36.31*	4.66*	9.67*	3.80*	.98*
22	32.0	9.46	12.0	5.25	.32	.78	.38	.50	—	16.2*	229.2	38.2*	4.92*	11.64	4.43*	1.11*
1,2,3,28	32.0	9.4	12.0	5.25	.35	.72	.35	.50	—	15.1*	222.3	37.0	4.85	10.3	3.9*	1.04
32	31.8	9.35	12.0	5.00	.35	.738	.350	.45	.21	16 2/3*	217.0	36.2	4.82	9.50	3.80	1.01
7,9,11,12,14,15,20,25,30,33,34,35	31.8	9.26	12.0	5.000	.350	.738	.350	.45	.21	16 2/3*	215.8	36.0	4.83	9.5	3.8	1.01
25	31 2/3	9.31	12.0	5.029	.369*	.672	.344	.50	—	14.1*	209.07*	34.85*	4.74*	9.17*	3.65*	.99*
27	31.5	9.27	12.0	5.00	.35	.74	.35	.45	.21	16 2/3*	218.71	36.5	4.86	9.45	3.78*	1.01
23,24	31.5	9.3	12.0	5.13	.35	.71	.34	.50	—	15.5*	220.5	36.7	4.88	10.3	4.02*	1.04
17,26	31.5	9.3	12.0	5.00	.35	.739	.35	.45	—	16 2/3*	215.81	36.0	4.82	9.5	3.8*	1.01
4,10,13,19,21,28	31.5	9.26	12.0	5.000	.350	.738	.35	.45	.21	16 2/3*	215.8	36.0	4.83	9.50	3.8	1.01
26	30.6	9.01	12.0	5.00	.34	.68	.33	—	—	15.0*	207.9	34.65	4.80	9.00	3.60*	1.00
25	30.5	8.96	12.0	5.00	.34	.672	.344	.50	—	14.1*	204.89*	34.15*	4.78*	9.04	3.62*	1.00*
16	30.0	9.1	12.0	5.218	.312	.703	.328	.50	—	15.3*	211.7	35.3	4.82	10.2	3.91*	1.05
33	28.0	8.24	11.88	6.569	.314	.485	.225	.35	—	8 1/3*	193.6	32.6	4.85	13.9	4.28	1.30
6	28.0	8.15	12.0	6.000	.284	.540	.280	.26	—	9.1*	199.4	33.2	4.95	12.6	4.2	1.24
B66, 7	27.9	8.15	12.0	6.000	.284	.540	.280	.26	—	9.1*	199.4	33.2	4.95	12.6	4.2	1.24
31	27.5	8.09	12.0	5.061	.301	.662	.265	.40	.16	16 2/3*	191.5	31.9	4.88	8.01	3.17*	.99
29	27.5	8.09	12.0	5.00	.255	.710	.315	.40	—	16 2/3*	199.6	33.3	4.98	8.70	3.48*	1.04
5	27.5	8.04	12.0	5.000	.255	.710	.315	.40	—	16 2/3*	199.6	33.3	4.98	8.7	3.5	1.04
33	25.0	7.35	11.88	6.495	.240	.485	.225	.35	—	8 1/3*	182.8	30.8	4.98	13.4	4.12	1.35
8	25.0	7.35	12.0	5.00	.270	.570	.270	.270	—	12.7*	175.5	29.2	4.89	7.30	2.92	1.00
31	25.0	7.35	12.0	5.000	.240	.662	.265	.40	.16	16 2/3*	182.7	30.5	4.99	7.60	3.04*	1.02

10" AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (1) AND PAGE 4

1	4	7	11	13	15	19	22	24	28	31
CPI889	C1896	C1921	B 1907	S13-1922	CA 1898 TO	J&L1896	LA1909	PA1897	PE1898	PH1923
CPI890	C1900	C1923	S6-1919	S19-1926	CA 1919 INC.	J&L1898	LA1915	PA1898	PE1900	PH1929
2	C1903	IL1925	12	S30-1929	20	J&L1900	LA1916	PA1900	PE1901	32
CPI892	C1913	C1926	S7-1920	S43-1933	J&L1908	J&L1902	23	PA1901	29	PH1931
3	IL1914	CI930	16	S47-1937	J&L1916	J&L1903	NJ1889	PA1903	PH1890	33
CPI893	CI915	CI931	CA 1921	S51-1938	21	J&L1905	NJ1891	26	30	PH1938
10	CI916	CI934	17	S53-1943	J&L1926	J&L1906	25	PE1891	PH1906	34
CIL1946	CI917	IL1932	IN 1921	14	J&L1931	J&L1908	PA1900	27	PH1908	K 1950
CIL1948	CI919	IL1934	18	S54-1946		J&L1910	PA1901	PE1896	PH1912	35
US1950	CI920	CIL1940	J&L1893	S56-1948			PA1903		PH1915	IN 1946

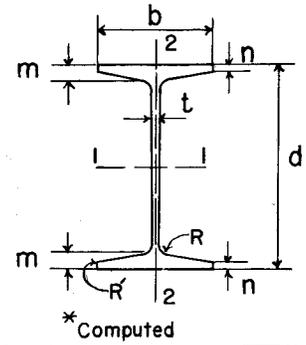


COL. (1)	WEIGHT PER FOOT	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
23	45.0	13.14	10.0	5.25	.45	1.15	.65	.45	-	20.8*	216.1	43.2*	4.06*	17.94	6.84*	1.17*
24	40.0	11.8	10.0	5.21	.58	.82	.47	.45	-	15.1*	178.5	35.7	3.89	13.5	5.2*	1.07
4,11,12,15,17,20,22,30,31	40.0	11.76	10.0	5.099	.749	.673	.31	.41	.186	16 ² / ₃ *	158.7	31.7	3.67	9.50	3.7	.90
28	40.0	11.75	10.0	5.15	.59	.81	.43	.54	.26	16 ² / ₃ *	175.48	35.1	3.86	12.36	4.80*	1.03
2,3	40.0	11.7*	10.0	5.20*	.57*	.82	.47	.45	-	15.1*	178.0*	35.6*	3.90*	13.44*	5.17*	1.07*
19	40.0	11.69	10.0	5.101	.751	.673	.31	.41	-	16 ² / ₃ *	158.85	31.8	3.68	9.51	3.7*	.90
7,13,16,21,33	40.0	11.69	10.0	5.091	.741	.673	.31	.41	.19	16 ² / ₃ *	158.0	31.6	3.68	9.4	3.7	.90
18	40.0	11.31*	10.0	5.180	.552	.813	.438	.438	-	16.2*	172.86*	34.6*	3.91*	12.70*	4.9*	1.06*
19	35.0	10.32*	10.0	4.954	.604	.673	.31	.41	-	16 ² / ₃ *	146.63*	29.3	3.77	8.54*	3.4*	.91*
3	35.0	10.3*	10.0	5.06*	.43*	.82	.47	.45	-	15.1*	166.1*	33.2*	4.02*	12.27*	4.85*	1.09*
4,11,12,15,17,20,22,30,31	35.0	10.29	10.0	4.952	.602	.673	.31	.41	.186	16 ² / ₃ *	146.4	29.3	3.77	8.52	3.4	.91
28	35.0	10.27	10.0	5.00	.44	.81	.43	.54	-	16 ² / ₃ *	163.14	32.6	3.99	11.19	4.48*	1.04
7,10,13,14,16,21,33,34,35	35.0	10.22	10.0	4.944	.594	.673	.31	.41	.19	16 ² / ₃ *	145.8	29.2	3.78	8.5	3.4	.91
27	34.9	10.28	10.0	4.90*	.50*	.74	.41	-	-	15.0*	153.94	30.79	3.87	10.02	4.09*	.99
1,2,3	33.0	9.7	10.0	5.00	.37	.82	.47	.45	-	15.1*	161.3	32.3	4.08	11.8	4.72*	1.10
29	33.0	9.7	10.5	5.00	.35	.82	.47	.45	-	15.0*	179.6	35.9*	4.54	11.8	4.72*	1.10
23,24	33.0	9.67	10.0	5.00	.37	.82	.47	.45	-	15.1*	161.3	32.3	4.08	11.81	4.72	1.10
2	32.0	9.4*	10.0	4.94*	.51*	.65	.32	.45	-	14.9*	139.4*	27.9*	3.85*	8.37*	3.39*	.95*
18	32.0	9.4	10.0	4.937	.313	.813	.438	.438	-	16.2*	152.6	30.5	4.02	10.8	4.4*	1.07
18	31.5	9.24*	10.0	4.945	.508	.625	.313	.438	-	14.1*	136.55*	27.3*	3.84*	8.15*	3.3*	.94*
27	30.3	8.91	10.0	4.70*	.50*	.60	.29	-	-	14.8*	129.08	25.82	3.81	6.69	2.85*	.87
26	30.13	8.74*	10.0	4.70*	.500	.59	.30	.45	-	13.8*	126.83*	25.4*	3.81*	6.65*	2.83*	.87*
3	30.0	8.95*	10.0	4.885*	.455*	.65	.32	.45	-	14.9*	134.6*	26.9*	3.88*	8.06*	3.30*	.95*
19	30.0	8.85*	10.0	4.807	.457	.673	.31	.41	-	16 ² / ₃ *	134.38	26.9*	3.90*	7.67*	3.20*	.93*
4,11,12,15,17,20,22,27,30,31	30.0	8.82	10.0	4.805	.455	.673	.31	.41	.186	16 ² / ₃ *	134.2	26.8	3.90	7.65	3.2	.93
28	30.0	8.82	10.0	4.79	.44	.67	.31	.41	.18	16 ² / ₃ *	135.41	27.1	3.92	7.58	3.16*	.93
24	30.0	8.8	10.0	4.89	.45	.65	.32	.45	-	14.9*	134.5	26.9	3.90	8.1	3.3*	.96
7,13,16,21,33	30.0	8.75	10.0	4.797	.447	.673	.31	.41	.19	16 ² / ₃ *	133.5	26.7	3.91	7.6	3.2	.93

10" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

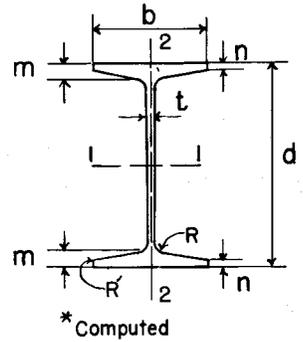
5	8	1,2,3,4,7,10,11
C1913	C1921	12,13,14,15,16
C1915	C1923	17,18,19,20,21
6	9	22,23,24,25
C1916	IL1914	26,27,28,29
C1917	IL1925	30,31,32,33
C1919	IL1932	34,35
C1920		See Page 23



COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
27	29.8	8.78	10.0	4.75	.35	.74	.41	-	-	14.9*	141.44	28.29	4.01	9.03	3.80*	1.01
26	28.0	8.12*	10.0	4.638*	.438	.59	.30	.45	-	13.8*	121.66*	24.3*	3.87*	6.35*	2.74*	.88*
25	27.0	7.9	10.0	4.81	.37	.65	.32	.45	-	14.9*	127.4	25.5	4.00	7.6	3.2*	.98
26	25.9	7.49*	10.0	4.575*	.375	.59	.30	.45	-	13.8*	116.4*	23.3*	3.94*	6.05*	2.64*	.90*
12	25.5	7.5	10.0	4.75	.32	.65	.32	.45	-	14.9*	123.7	24.7	4.06	7.32	3.08*	.99
29	25.5	7.47	10.5	4.75	.30	.65	.32	.45	-	14.8*	137.3	27.5*	4.52	7.32	3.08*	.99
32	25.4	7.47	10.0	4.66	.31	.673	.310	.41	.19	16 ² / ₃	122.9	24.6	4.06	6.89	2.96	.96
7,10,12,13,14, 16,21,31,33, 34,35	25.4	7.38	10.0	4.660	.310	.673	.310	.41	.19	16 ² / ₃	122.1	24.4	4.07	6.9	3.0	.97
23	25 1/8	7.50	10.0	4.75	.32	.65	.32	.45	-	14.9*	123.6	24.7*	4.06*	7.32	3.08*	.99*
3	25.0	7.5	10.0	4.74	.31	.65	.32	.45	-	14.9*	122.5	24.5	4.06	7.27	3.07*	.99
4,11,15,19,20, 22,27,30	25.0	7.37	10.0	4.660	.310	.673	.31	.41	.186	16 ² / ₃	122.1	24.4	4.07	6.89	2.96*	.97
28	25.0	7.34	10.0	4.66	.31	.67	.31	.41	.18	16 ² / ₃	123.07	24.6	4.10	6.81	2.92*	.96
24	25.0	7.3	10.0	4.75	.31	.65	.32	.45	-	14.9*	122.5	24.5	4.06	7.3	3.1*	.99
18	23.8	7.0	10.0	4.720	.281	.625	.313	.438	-	14.0*	117.7	23.5	3.88	7.09	3.0*	.95
27	23.5	6.91	10.0	4.50	.30	.60	.29	-	-	14.8*	112.42	22.48	4.03	5.76	2.56*	.91
26	23 1/3	6.87	10.0	4.50	.30	.59	.30	.45	-	13.8*	110.16*	22.0*	4.00*	5.73	2.55*	.91*
33	23.0	6.77	9.9	5.79	.29	.464	.235	.30	-	8 1/3*	112.1	22.6	4.09	9.57	3.30	1.19
8	22.4	6.54	10.0	5.500	.252	.498	.260	.22	-	9.0*	113.6	22.7	4.17	9.0	3.3	1.17
6	22.25	6.54	10.0	5.500	.252	.498	.260	.22	-	9.0*	113.6	22.7	4.17	9.0	3.3	1.17
5	22.0	6.52	10.0	4.670	.232	.647	.277	.37	-	16 ² / ₃	113.9	22.8	4.18	6.4	2.7	.99
9	22.0	6.42	10.0	5.000	.25	.55	.25	.25	-	12.6	110.3	22.1	4.15	6.87	2.75	1.03
33	21.0	6.18	9.9	5.74	.24	.464	.235	.30	-	8 1/3*	107.5	21.7	4.17	9.30	3.24	1.22

9" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4



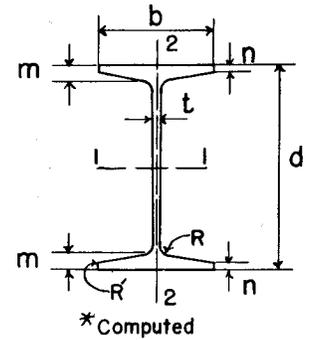
1	4	5	7	13	16	18	21	24
CP1889	C1896	C1921	S7-1920	J&L 1896 TO	LA1909	PA1897	PE1896	PH1906
CP1890	C1903	C1923	9	J&L1910 INC.	LA1915	PA1898	22	PH1908
2	C1913	IL1925	CA 1896 TO	14	LA1916	PA1900	PE1898	PH1912
CP1892	IL1914	C1926	CA 1919 INC.	J&L 1916	17	PA1901	PE1900	PH1915
3	C1915	C1930	10	15	NJ1889	PA1903	PE1901	26
C1893	C1916	C1931	CA 1921	J&L 1926	NJ1891	20	23	PH1931
6	C1917	8	11	J&L 1931	19	PE1888	PH1890	PH1938
B-1907	C1919	S13-1922	IN 1921		PA1900	PE1889	25	
S6-1919	C1920	S19-1926	12		PA1901	PE1891	PH1923	
		S30-1929	J&L 1893		PA1903		PH1929	

COL. (1)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT	AREA		WIDTH b In.					I	S		r	I	S	r		
	Lb.	Sq.In.						In.	In.	In.		In.	In. ⁴	In. ³	In.	In. ⁴	In. ³
17	35.0	10.36*	9.0	5.014*	.574*	.75	.42	.41	-	15.0*	126.6*	28.1*	3.50*	10.91*	4.35*	1.03*	
22	35.0	10.30	9.0	4.76	.72	.63	.29	.39	.17	16 ² / ₃	112.76	25.1	3.31	7.25	3.05*	.84	
13	35.0	10.29	9.0	4.787	.747	.627	.29	.39	-	16 ² / ₃	112.86	25.0	3.31	7.4	3.09*	.84	
24,25	35.0	10.29	9.0	4.787	.747	.627	.290	.39	.174	16 ² / ₃	111.8	24.8	3.29	7.31	3.05*	.84	
4,6,7,9,11,14,16	35.0	10.29	9.0	4.772	.732	.627	.290	.39	.17	16 ² / ₃ *	111.8	24.8	3.29	7.31	3.1	.84	
26	35.0	10.29	9.0	4.76	.72	.627	.290	.39	.174	16 ² / ₃	111.8	24.8	3.30	7.21	3.03	.84	
5,8,10,15	35.0	10.22	9.0	4.764	.724	.627	.290	.39	.17	16 ² / ₃	111.3	24.7	3.30	7.3	3.0	.84	
2,19	33.0	9.7*	9.0	4.95*	.51*	.75	.42	.41	-	15.0*	122.6*	27.2*	3.55*	10.43*	4.2*	1.04*	
13	30.0	8.96*	9.0	4.624	.584	.627	.29	.39	-	16 ² / ₃	102.66	22.8*	3.38*	6.49	2.8*	.85*	
12	30.0	8.94*	9.0	4.851	.476	.688	.375	.406	-	14.3*	112.1*	24.9*	3.54*	8.85*	3.6*	.99*	
3	30.0	8.9*	9.0	4.80*	.57*	.60	.28	.41	-	15.1*	102.5*	22.8*	3.39*	6.95*	2.90*	.88*	
24,25	30.0	8.82	9.0	4.624	.584	.627	.290	.39	.174	16 ² / ₃	101.9	22.6	3.40	6.42	2.78	.85	
4,6,7,9,11,14,16	30.0	8.82	9.0	4.609	.569	.627	.290	.39	.174	16 ² / ₃ *	101.9	22.6	3.40	6.42	2.8	.85	
5,8,10,15	30.0	8.76	9.0	4.601	.561	.627	.290	.39	.17	16 ² / ₃	101.4	22.5	3.40	6.4	2.8	.85	
22	30.0	8.82	9.0	4.60	.56	.63	.29	.39	.17	16 ² / ₃	102.80	22.8	3.41	6.37	2.77	.85	
26	30.0	8.82	9.0	4.60	.56	.627	.290	.39	.174	16 ² / ₃	101.9	22.6	3.40	6.37	2.77	.85	
19	30.0	8.8	9.0	4.85	.41	.75	.42	.41	-	15.0*	116.6	25.9	3.63	9.7	4.0*	1.05	
20	28.6	8.41	9.0	4.58	.56	.56	.28	.42	.21	13.9*	95.98	21.33	3.38	5.11	2.23*	.78	
17	28 1/3	8.33*	9.0	4.742*	.512*	.60	.28	.41	-	15.1*	99.0*	22.0*	3.45*	6.66*	2.81*	.89*	
12,17,18,23	27.0	7.9	9.0	4.75	.31	.75	.42	.41	-	15.0*	110.6	24.6	3.72	9.10	3.83*	1.07*	
2	26.0	7.69*	9.0	4.67*	.44*	.60	.28	.41	-	15.1*	94.32*	21.0*	3.50*	6.29*	2.69*	.90*	
21	25.4	7.48	9.0	4.462*	.442*	.57	.27	-	-	14.9*	90.50	20.11	3.48	5.34	2.38*	.84	
13	25.0	7.49*	9.0	4.461	.421	.627	.29	.39	-	16 ² / ₃	92.76	20.6*	3.52*	5.71*	2.56*	.87*	
4,6,7,9,11,14,16	25.0	7.35	9.0	4.446	.406	.627	.290	.39	.174	16 ² / ₃ *	91.9	20.4	3.54	5.65	2.5	.88	
24,25	25.0	7.35	9.0	4.461	.421	.627	.290	.39	.174	16 ² / ₃ *	91.9	20.4	3.54	5.65	2.53*	.88	
5,8,10,15	25.0	7.28	9.0	4.437	.397	.627	.290	.39	.17	16 ² / ₃	91.4	20.3	3.54	5.6	2.5	.88	
26	25.0	7.35	9.0	4.43	.39	.627	.290	.39	.174	16 ² / ₃ *	92.0	20.4	3.54	5.60	2.53	.87	
22	25.0	7.34	9.0	4.43	.39	.63	.29	.39	.17	16 ² / ₃	92.83	20.6	3.56	5.60	2.53	.87	
19	25.0	7.3	9.0	4.63	.40	.60	.28	.41	-	15.1*	92.3	20.5	3.54	6.1	2.63	.91	
12	24.5	7.2	9.0	4.671	.296	.688	.375	.406	-	14.3*	101.1	22.5	3.74	7.80	3.3*	1.04	
12	24.5	6.37*	9.0	4.445	.321	.563	.281	.406	-	13.7*	83.4*	18.5*	3.62*	4.96*	2.2*	.86*	
18	23 1/3	6.9	9.0	4.58	.35	.60	.28	.41	-	15.1*	89.0	19.8	3.60	5.9	2.58*	.93	
26	21.8	6.41	9.0	4.33	.29	.627	.290	.39	.174	16 ² / ₃ *	85.6	19.0	3.65	5.16	2.38	.90	
5,7,8,10,11,15,25	21.8	6.32	9.0	4.330	.290	.627	.290	.39	.17	16 ² / ₃ *	84.9	18.9	3.67	5.2	2.4	.90	
21	21.45	6.31	9.0	4.33	.29	.63	.29	.39	.17	16 ² / ₃	85.17	18.93	3.67	5.16	2.38	.90	
4,6,9,11,13,16	21.0	6.31	9.0	4.33	.290	.627	.290	.39	.174	16 ² / ₃ *	84.9	18.9	3.67	5.16	2.4	.90	
1,2,3,17,18,23	21.0	6.2	9.0	4.50	.27	.60	.28	.41	-	15.1*	84.3	18.7	3.70	5.56	2.47	.95	
24	21.0	6.18	9.0	4.330	.290	.627	.290	.39	.174	16 ² / ₃ *	84.9	18.9	3.67	5.16	2.38	.90	
14	21.0	6.18	9.0	4.315	.275	.627	.29	.39	.17	16 ² / ₃ *	84.0	18.7	3.68	5.2	2.4	.90	
22	21.0	6.17	9.0	4.33	.29	.63	.29	.39	.17	16 ² / ₃	84.94	18.9	3.71	5.06	2.34	.91	
21	20.5	6.04	9.0	4.30	.28	.57	.27	-	-	14.0*	80.78	17.95	3.66	4.72	2.20*	.88	
20	20.03	5.89	9.0	4.3	.28	.56	.28	.42	.21	13.9*	78.97	17.55	3.63	4.72	2.20*	.89	
12	19.75	5.8	9.0	4.390	.266	.563	.281	.406	-	13.7*	79.8	17.8	3.71	5.03	2.3*	.92	

8 " AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1 CP1889 CP1890 2 CP1892 3 C1893 5 C1913 C1915	4 C1896 TO C1919 INC. 6 C1916 TO C1923 INC. 7 C1921 TO C1940 INC. 9 IL1914	8 GIL1946 CIL1948 US1950 10 S13-1922 TO IL1925 IL1932 IL1934 13 S54-1946 S56-1948	11 B1907 TO S7-1920 INC. 12 S13-1922 TO S53-1943 INC. 15 CA1901 TO CA1919 INC. 16 CA1921	14 CA1898 17 IN1909 18 IN1921 19 J&L1893 22 J&L1908	20 J&L1896 TO J&L1903 INC. 21 J&L1905 J&L1906 23 J&L1910 24 J&L1916	25 J&L1926 J&L1931 26 LA1909 LA1915 LA1916 27 NJ1889 NJ1891	28 PA1897 TO PA1903 INC. 29 PA1900 PA1901 PA1903 30 PE1888 PE1889 PE1891	32 PE1898 TO PE1901 INC. 33 PH1890 34 PH1906 TO PH1915 INC. 35 PH1923 PH1929	36 PH1931 37 PH1938 38 K1950 39 IN1946
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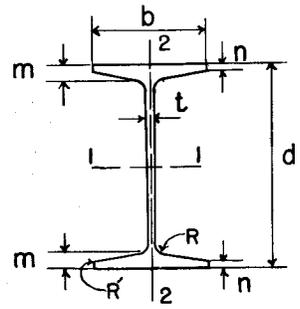
COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
19	32.0	8.56*	8.0	4.789	.539	.656	.344	.375	-	14.7*	82.85*	20.7*	3.11*	7.75*	3.24*	.95*
27	28 2/3	8.34*	8.0	4.734	.504*	.67	.35	.37	-	15.1*	81.88*	20.47*	3.13*	7.84*	3.31*	.97*
2	27.0	7.98*	8.0	4.685	.455*	.67	.35	.37	-	15.1*	79.8*	20.0*	3.16*	7.57*	3.23*	.97*
28	27.0	7.9	8.0	4.56	.48	.65	.35	.37	-	14.7*	77.6	19.4	3.14	6.91	3.03*	.93
23	25.5	7.54*	8.0	4.276	.546	.581	.27	.37	-	16 2/3*	68.68*	17.17*	3.02*	4.78*	2.24*	.80*
21	25.5	7.52*	8.0	4.272	.542	.581	.27	.37	-	16 2/3*	68.50*	17.12*	3.02*	4.76*	2.23*	.80*
34,35	25.5	7.5	8.0	4.276	.546	.581	.27	.37	.162	16 2/3*	68.4	17.1	3.02	4.75	2.22*	.80
4,9,11,17,18, 22,24,26	25.5	7.5	8.0	4.271	.541	.581	.27	.37	.162	16 2/3*	68.4	17.1	3.02	4.75	2.2	.80
32	25.5	7.5	8.0	4.26	.53	.58	.27	-	-	16 2/3*	69.14	17.3	3.04	4.70	2.21*	.79
36	25.5	7.5	8.0	4.26	.53	.581	.27	.37	.16	16 2/3*	68.4	17.1	3.02	4.71	2.21	.79
7,10,12,16, 25,37	25.5	7.43	8.0	4.262	.532	.581	.27	.37	.16	16 2/3*	68.1	17.0	3.03	4.7	2.2	.80
20	25.25	7.43	8.0	4.272	.542	.581	.27	.37	-	16 2/3*	68.64	17.2	3.04	4.76	2.23*	.80
14,15	25.25	7.43	8.0	4.26	.53	.581	.27	.37	.16	16 2/3*	68.0	17.0	3.03	4.71	2.21	.80
3	25.0	7.37*	8.0	4.51*	.51*	.56	.26	.37	-	15.0*	68.85*	17.2*	3.06*	5.34*	2.37*	.85*
27	25.0	7.35*	8.0	4.51*	.51*	.56	.26	.37	-	15.0*	68.8*	17.2*	3.06*	5.34*	2.37*	.85*
19	25.0	7.3	8.0	4.537	.287	.656	.344	.375	-	14.7*	71.8	17.9	3.13	6.66	2.94*	.95
19	25.0	7.3*	8.0	4.507	.507	.563	.25	.375	-	15.7*	68.35*	17.1*	3.06*	5.24*	2.33*	.85*
29	25.0	7.3	8.0	4.49	.40	.65	.35	.37	-	14.7*	74.4	18.6	3.20	6.56	2.92*	.95
30	24.3	7.15	8.0	4.26	.52	.52	.26	.40	.20	13.9*	64.31	16.08	3.00	3.80	1.78*	.73
23	23.0	6.80*	8.0	4.184	.454	.581	.27	.37	-	16 2/3*	64.75*	16.19*	3.09*	4.41*	2.11*	.81*
21	23.0	6.79*	8.0	4.181	.451	.581	.27	.37	-	16 2/3*	64.62*	16.16*	3.08*	4.41*	2.11*	.81*
34,35*	23.0	6.76	8.0	4.184	.454	.581	.27	.37	.162	16 2/3*	64.5	16.1	3.09	4.39	2.10*	.81
4,9,11,17,18, 22,24,26	23.0	6.76	8.0	4.179	.449	.581	.27	.37	.162	16 2/3*	64.5	16.1	3.09	4.39	2.10	.81
32	23.0	6.76	8.0	4.17	.44	.58	.27	-	-	16 2/3*	65.21	16.30	3.10	4.35	2.09*	.80
36	23.0	6.76	8.0	4.17	.44	.581	.27	.37	.16	16 2/3*	64.5	16.1	3.09	4.37	2.10	.81
7,8,10,12,13,16, 25,37,38,39	23.0	6.71	8.0	4.171	.441	.581	.27	.37	.16	16 2/3*	64.2	16.0	3.09	4.4	2.1	.81
20	22.75	6.79*	8.0	4.181	.451	.581	.27	.37	-	16 2/3*	64.62*	16.16*	3.08*	4.41*	2.11*	.81*
14,15	22.75	6.69	8.0	4.17	.44	.581	.27	.37	.16	16 2/3*	64.1	16.0	3.10	4.36	2.09	.81
1,2,27,33	22.0	6.5	8.0	4.50	.27	.67	.35	.37	-	15.1*	71.9	18.0	3.33	6.62	2.94*	1.01
28	22.0	6.4	8.0	4.38	.29	.65	.35	.37	-	14.7*	69.7	17.4	3.30	6.02	2.75*	.97
*																
37	23.0	6.77	8.0	5.47	.46	.409	.20	.30	.03	8 1/3*	65.4	16.4	3.10	7.07	2.59	1.02

8 " AMERICAN STANDARD BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

31
PE 1896

1,2,3,4,5,6,7,8,9,10,
11,12,13,14,15,16,17,
18,19,20,21,22,23,
24,25,26,27,28,
29,30,32,33,34,
35,36,37,38,39
See Page 26



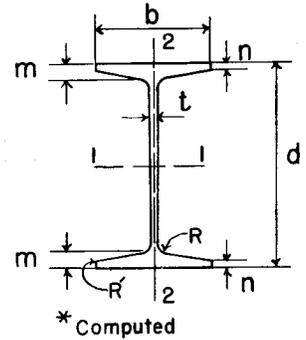
* Computed

COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
2	21.7	6.4*	8.0	4.387*	.387*	.56	.26	.37	-	15.0*	63.65*	15.9*	3.15*	4.88*	2.22*	.87*
31	21.2	6.24	8.0	4.14*	.40*	.53	.25	-	-	15.0*	60.28	15.07	3.11	3.96	1.91	.80
36,37	21.0	6.18	8.0	5.40	.38	.409	.20	.30	.03	8 1/3*	62.3	15.6	3.18	6.80	2.52	1.05
23	20.5	6.07*	8.0	4.092	.362	.581	.27	.37	-	16 2/3*	60.83*	15.21*	3.17*	4.09*	2.00*	.82*
21	20.5	6.06*	8.0	4.090	.360	.581	.27	.37	-	16 2/3*	60.74*	15.19*	3.17*	4.08*	2.00*	.82*
34,35	20.5	6.03	8.0	4.092	.362	.581	.27	.37	.162	16 2/3*	60.6	15.1	3.17	4.07	1.99*	.82
4,9,11,17,18, 22,24,26	20.5	6.03	8.0	4.087	.357	.581	.27	.37	.162	16 2/3*	60.6	15.1	3.17	4.07	2.0	.82
36,	20.5	6.03	8.0	4.08	.35	.581	.27	.37	.16	16 2/3*	60.6	15.2	3.17	4.04	1.98	.82
32	20.5	6.03	8.0	4.07	.34	.58	.27	-	-	16 2/3*	61.29	15.3	3.19	4.02	1.98	.82
7,10,12,16,25, 37	20.5	5.97	8.0	4.079	.349	.581	.27	.37	.16	16 2/3*	60.2	15.1	3.18	4.0	2.0	.82
20	20.25	6.06*	8.0	4.090	.360	.581	.27	.37	-	16 2/3*	60.74*	15.19*	3.17*	4.08*	2.00*	.82*
14,15	20.25	5.96	8.0	4.08	.35	.581	.27	.37	.16	16 2/3*	60.2	15.0	3.18	4.04	1.98*	.82
29	20.0	5.9	8.0	4.20	.32	.56	.27	.37	-	14.9*	59.9	15.0	3.22	4.33	2.06*	.86
36,37	19.0	5.59	8.0	5.32	.31	.409	.20	.30	.03	8 1/3*	59.2	14.8	3.26	6.45	2.42	1.08
36	18.4	5.41	8.0	4.00	.270	.581	.27	.37	.16	16 2/3*	57.3	14.3	3.25	3.78	1.89	.84
7,8,10,12,13, 16,18,25,35, 37,38,39	18.4	5.34*	8.0	4.00	.270	.581	.27	.37	.16	16 2/3*	56.9	14.2	3.26	3.8	1.9	.84
21,	18.0	5.34*	8.0	4.000	.270	.581	.27	.37	-	16 2/3*	56.90*	14.23*	3.26*	3.79*	1.90*	.84*
4,9,11,15,17, 18,22,23, 24,26,31	18.0	5.33	8.0	4.000	.270	.581	.27	.37	.162	16 2/3*	56.9	14.2	3.27	3.78	1.9	.84
1,2,3,27,33	18.0	5.3	8.0	4.25	.25	.56	.26	.37	-	15.0*	57.8	14.4	3.30	4.35	2.05*	.91
19	18.0	5.3	8.0	4.250	.250	.563	.25	.375	-	15.7*	57.3	14.3	3.28	4.27	2.01*	.89
32	18.0	5.29	8.0	4.00	.27	.58	.27	-	-	16 2/3*	57.36	14.3	3.29	3.72	1.86*	.84
34	18.0	5.29	8.0	4.000	.270	.581	.27	.37	.162	16 2/3*	56.9	14.2	3.27	3.78	1.89*	.84
28	18.0	5.2	8.0	4.13	.25	.56	.27	.37	-	14.9*	56.8	14.2	3.30	3.95	1.91*	.87
14	17.75	5.33	8.0	4.00	.27	.581	.27	.37	.16	16 2/3*	56.9	14.2	3.27	3.78	1.89*	.84
20	17.75	5.22	8.0	4.000	.270	.581	.27	.37	-	16 2/3*	56.87	14.2	3.31	3.78	1.89*	.84
5	17.5	5.15	8.0	4.330	.210	.583	.24	.33	-	16 2/3*	58.3	14.6	3.37	4.5	2.1	.93
6	17.5	5.12	8.0	5.000	.220	.457	.24	.18	-	9.0*	58.4	14.6	3.38	6.2	2.5	1.10
31	17.4	5.12	8.0	4.00	.26	.53	.25	-	-	15.0*	54.31	13.58	3.26	3.52	1.76*	.83
30	17.23	5.07	8.0	4.00	.26	.52	.26	.40	.20	13.9*	53.22	13.31	3.24	3.52	1.76*	.83
36,37	17.0	5.00	8.0	5.25	.24	.409	.20	.30	.03	8 1/3*	56.0	14.0	3.35	6.16	2.35	1.11

7" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

CPI889	C1896 TO	CIL1946	B 1907	CA1898 TO	J&L 1910	NJ 1889	PE1898 To	PH1938
CPI890	C1920 INC.	CIL1948	S6-1919	CA1919 INC.	19	NJ 1891	PE1901 Inc.	32
2	5	US1950	S7-1920	16	J&L 1926	22	28	IN 1946
CPI892	C1921 TO	7	11	J&L 1893	J&L 1931	PA 1897 TO	PH1906 To	
3	CIL1940 INC.	IL 1914	S54-1946	17	20	PA 1903 INC.	PH1915 Inc.	
C 1893	10	8	S56-1948	J&L 1896 TO	LA 1909	23	29	
	S13-1922 TO	IL 1925	14	J&L 1916 INC.	LA 1915	PA1900 TO	PH1923	
	S53-1943 INC.	IL 1932	IN 1909	24	LA 1916	PA 1903 INC.	PH 1929	
	13	IL 1934	15	PE 1888 TO	25	27	30	
	CA 1921	IN 1921	PE 1891 INC.	PE 1896	PH 1890	PH 1931		

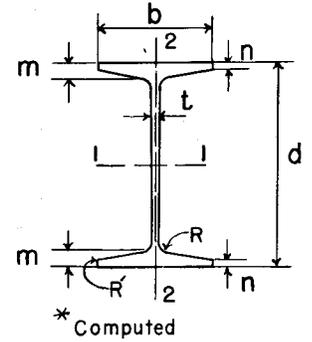


COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
21	26 ² / ₃	7.9*	7.0	4.53*	.55*	.65	.35	.33	-	15.0*	57.9*	16.54*	2.71*	6.90*	3.04*	.93*
16	25.2	7.4*	7.0	4.556*	.558*	.594	.313	.313	-	14.0*	54.7*	15.6*	2.72*	6.08*	2.67*	.91*
2	22.0	6.49*	7.0	4.334*	.354*	.65	.35	.33	-	15.0*	52.1*	14.9*	2.83*	5.91*	2.73*	.95*
23	22.0	6.4	7.0	4.17*	.36*	.63	.35	.31	-	14.7*	50.0	14.3	2.82*	5.19*	2.49*	.91*
21	21 ² / ₃	6.41*	7.0	4.265*	.495*	.53	.25	.33	-	14.9*	46.17*	13.19*	2.69*	4.31*	2.02*	.82*
24	20.2	5.94*	7.0	3.99*	.48*	.48	.24	.36	.18	13.7*	41.99	11.85*	2.64*	2.89*	1.45*	.70*
18	20.0	5.91*	7.0	3.872*	.462*	.534	.25	.35	.15	16 ² / ₃ *	42.32*	12.09*	2.68*	3.27*	1.69*	.74*
1,2,21,27	20.0	5.9	7.0	4.25*	.27*	.65	.35	.33	-	15.0*	49.7	14.2	2.91	5.52	2.60*	.97
4,7,9,12,14,15,17,20,28,29,30	20.0	5.88	7.0	3.868*	.458*	.534	.25	.35	.15	16 ² / ₃ *	42.2	12.1	2.68	3.24	1.68*	.74
26	20.0	5.88	7.0	3.86*	.45*	.53	.25	.35	.15	16 ² / ₃ *	42.55	12.2	2.69	3.20	1.66*	.74
3	20.0	5.87*	7.0	4.19*	.42*	.53	.25	.33	-	14.9*	44.0*	12.57*	2.74*	4.05*	1.93*	.83*
5,6,8,10,11,13,19,25,31,32	20.0	5.83	7.0	3.860*	.450*	.534	.250	.35	.15	16 ² / ₃ *	41.9	12.0	2.68	3.1	1.6	.74
22	20.0	5.7	7.0	4.09*	.28*	.63	.35	.31	-	14.9*	47.6	13.6	2.85*	4.86*	2.38*	.92*
2	19.0	5.63*	7.0	4.147*	.377*	.53	.25	.33	-	14.9*	42.8*	12.23*	2.76*	3.91*	1.89*	.83*
16	18.3	5.4*	7.0	4.266*	.268*	.594	.313	.313	-	14.0*	46.4	13.3	2.93*	5.02*	2.35*	.96*
16	18.0	5.3*	7.0	4.115*	.365*	.50	.25	.313	-	13 ¹ / ₃ *	41.2*	11.8*	2.79*	4.28*	2.08*	.90*
25	17.9	5.29*	7.0	3.89*	.38*	.49	.23	-	-	14.8*	39.43	11.27	2.75*	3.03*	1.56*	.76*
18	17.5	5.17	7.0	3.766*	.356*	.534	.25	.35	.15	16 ² / ₃ *	39.29*	11.23*	2.76*	2.95*	1.57*	.76*
4,7,9,12,14,15,17,20,28,29,30	17.5	5.15	7.0	3.763*	.353*	.534	.25	.35	.15	16 ² / ₃ *	39.2	11.2	2.76	2.94	1.55*	.76
26	17.5	5.15	7.0	3.75*	.34*	.53	.25	.35	.15	16 ² / ₃ *	39.58	11.3	2.77	2.90	1.55*	.75
23	17.5	5.1	7.0	3.98*	.34*	.52	.25	.31	-	14.8*	40.1	11.5	2.79	3.44	1.73*	.82
5,8,10,13,19,31	17.5	5.09	7.0	3.755*	.345*	.534	.250	.35	.15	16 ² / ₃ *	38.9	11.1	2.77	2.9	1.6	.76
1,2,21,27	15.5	4.6	7.0	4.00*	.23*	.53	.25	.33	-	14.9*	38.6	11.0	2.91	3.47	1.74*	.87
30	15.3	4.50	7.0	3.66*	.25*	.534	.25	.35	.15	16 ² / ₃ *	36.5	10.4	2.85	2.67	1.46	.77
5,6,8,10,11,13,15,19,29,31,32	15.3	4.43	7.0	3.660*	.250*	.534	.250	.35	.15	16 ² / ₃ *	36.2	10.4	2.86	2.7	1.5	.78
16	15.25	4.5	7.0	4.000*	.25*	.50	.25	.313	-	13 ¹ / ₃ *	37.9	10.8	2.89	3.38	1.69*	.86
26	15.0	4.42	7.0	3.66*	.25*	.53	.25	.35	.15	16 ² / ₃ *	36.61	10.5	2.88	2.64	1.44*	.78
4,7,9,12,14,17,18,20,25,28,29	15.0	4.42	7.0	3.660*	.25*	.534	.25	.35	.15	16 ² / ₃ *	36.2	10.4	2.86	2.67	1.5	.78
3	15.0	4.4	7.0	3.98*	.21*	.53	.25	.33	-	14.9*	38.0	10.86	2.92	3.42	1.72*	.87
22	15.0	4.4	7.0	3.88*	.23*	.52	.25	.31	-	14.8*	37.1	10.6	2.89	3.12	1.61*	.84
25	14.6	4.31	7.0	3.75*	.24*	.49	.23	-	-	14.8*	35.43	10.12	2.87	2.68	1.43*	.79
24	14.6	4.26	7.0	3.75*	.24*	.48	.24	.36	.18	13.7*	34.63	9.89	2.85	2.68	1.43*	.79

6" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1 CPI889 CPI890 2 CPI892 3 C1893 6 CIL1946 CIL1948 US1950	4 C1896 TO C1920 INC. 5 C1921 TO CIL1940 INC. 10 S13-1922 TO S53-1943 INC.	7 IL1914 8 IL1925 IL1932 IL1934 9 B 1907 S6-1919 S20-1920	12 CA1898 TO CA1919 INC. 17 J&L1896 TO J&L1916 INC. 21 IN 1909 PA 1897 TO PA1903 INC.	11 S54-1946 S56-1948 13 CA 1921 IN 1909 15 IN 1921 16 IN 1921	18 J&L1931 19 LA 1909 LA 1915 LA 1916 20 NJ1889 NJ1891 27 PE1900 PH1890	22 PA 1900 PA 1901 PA 1903 23 PE 1888 PE 1889 PE 1891 26 PE 1900 PE 1901	25 PE 1898 PE 1900 PE 1901 28 PH1906 PH1908 PH1912 PH1915	29 PH1923 PH1929 30 PH1931 31 PH1938 32 K 1950 33 IN 1946
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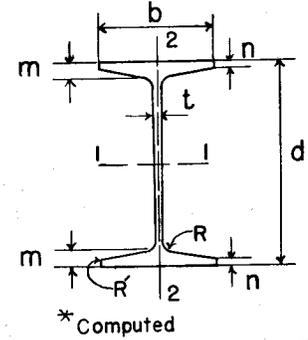


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
24,25	46.1	13.56	6.0	5.50*	.88*	1.06	.62	.75	-	19.0*	68.57	22.86	2.25	21.15	7.69*	1.25
24	41.0	12.06	6.0	5.25	.63	1.06	.62	.75	-	19.0*	64.07	21.36	2.30	17.86	6.80*	1.22
25	41.0	12.06	6.0	5.25	.63	1.06	.62	.75	-	19.0*	63.87	21.3	2.30	18.23	6.94*	1.23
24	37.4	10.99	6.0	5.13*	.75*	.87	.50	.75	-	16.9*	57.03	19.01	2.28	13.87	5.41*	1.12
25	37.4	10.99	6.0	5.13*	.75*	.87	.50	.75	-	16.9*	56.29	18.8	2.26	13.78	5.37*	1.12
24	32.3	9.49	6.0	4.88	.50	.87	.50	.75	-	16.9*	52.53	17.51	2.35	11.74	4.81*	1.11
25	32.3	9.49	6.0	4.88	.50	.87	.50	.75	-	16.9*	51.79	17.3	2.34	11.66	4.78*	1.11
26	27.7	8.15	6.0	4.936	.566*	.71	.34	.50	-	16.9*	45.36	15.1	2.36	8.99	3.64*	1.05
26	23.9	7.03	6.0	4.75	.38	.71	.34	.50	-	16.9*	41.98	14.0	2.44	7.89	3.32*	1.06
20	21 2/3	6.44*	6.0	3.745	.545*	.71	.28	.37	-	26.9*	33.61*	11.20*	2.28*	3.66*	1.95*	.75*
16	20.0	5.95*	6.0	3.980	.481*	.563	.313	.281	-	14.3*	32.06*	10.69*	2.32*	4.09*	2.14*	.83*
2	20.0	5.88	6.0	3.821*	.456*	.59	.34	.29	-	14.9*	32.13*	10.71*	2.34*	3.80*	2.02*	.81*
22	20.0	5.7	6.0	3.77	.50	.54	.31	.31	-	14.1*	30.8	10.3	2.32	3.40	1.80*	.77
20	18 1/3	5.44*	6.0	3.245	.495*	.65	.25	.37	-	29.1*	27.81*	9.27*	2.26*	2.14*	1.32*	.63*
3	18.0	5.27*	6.0	3.745	.475*	.50	.25	.29	-	15.3*	27.91*	9.30*	2.30*	2.86*	1.53*	.74*
22	17.5	5.0	6.0	3.64	.37	.54	.31	.31	-	14.1*	28.7	9.57	2.39	3.03	1.67*	.78
4,7,9,12,14,15, 17,19,28,29	17.25	5.07	6.0	3.575	.475	.488	.23	.33	.138	16 2/3*	26.2	8.7	2.27	2.4	1.3	.68
25	17.25	5.07	6.0	3.56	.46	.49	.23	.33	.14	16 2/3*	26.50	8.8	2.29	2.34	1.31*	.68
30	17.25	5.07	6.0	3.56	.46	.488	.23	.33	.14	16 2/3*	26.2	8.7	2.27	2.34	1.31	.68
5,6,8,10,11,13, 18,31,32,33	17.25	5.02	6.0	3.565	.465	.488	.230	.33	.14	16 2/3*	26.0	8.7	2.28	2.3	1.3	.68
20	16 2/3	4.97	6.0	3.50	.30	.71	.28	.37	-	26.9*	29.2	9.73*	2.42*	2.86	1.63*	.76*
16	16.6	4.9	6.0	3.765	.265	.563	.313	.281	-	14.3*	28.4	9.5	2.40	3.39	1.80*	.83
23	16.1	4.74	6.0	3.62	.44	.44	.22	.33	.16	13.8*	24.73	8.24	2.28	1.99	1.10*	.65
1,2,27	16.0	4.7	6.0	3.625	.26	.59	.34	.29	-	14.9*	28.6	9.54	2.47	3.24	1.79*	.83
16	15.5	4.51*	6.0	3.635	.385	.469	.208	.281	-	16.1*	24.47*	8.16*	2.33*	2.27	1.25*	.71*
24	15.2	4.47	6.0	3.56*	.38*	.45	.21	-	-	15.1*	24.02	8.01	2.32	2.14	1.20	.69
2	15.0	4.39*	6.0	3.598	.328*	.50	.25	.29	-	15.3*	25.26*	8.42*	2.40*	2.50*	1.39*	.75*
21	15.0	4.4	6.0	3.52	.25	.54	.31	.31	-	14.1*	26.4	8.81	2.47	2.74	1.56*	.79
4,7,9,12,14,15, 17,19,28,29	14.75	4.34	6.0	3.452	.352	.488	.23	.33	.138	16 2/3*	24.0	8.0	2.35	2.1	1.2	.69
25	14.75	4.34	6.0	3.44	.34	.49	.23	.33	.14	16 2/3*	24.28	8.1	2.36	2.06	1.20*	.69
30	14.75	4.34	6.0	3.44	.34	.488	.23	.33	.14	16 2/3*	24.0	8.0	2.35	2.07	1.20	.69
5,8,10,13,18,31	14.75	4.29	6.0	3.443	.343	.488	.230	.33	.14	16 2/3*	23.8	7.9	2.36	2.1	1.2	.69
20	13 1/3	3.97	6.0	3.0	.25	.65	.25	.37	-	29.1*	23.4	7.80*	2.43*	1.62	1.08*	.64*
1,2,3,27	13.0	3.8	6.0	3.50	.23	.50	.25	.29	-	15.3*	23.5	7.83	2.48	2.27	1.30*	.77
16	12.75	3.7	6.0	3.500	.250	.469	.208	.281	-	16.1*	23.1	7.7	2.49	2.22	1.27*	.77
30	12.5	3.68	6.0	3.33	.23	.488	.23	.33	.14	16 2/3*	22.0	7.3	2.43	1.85	1.11	.71
5,6,8,10,11,13, 15,18,29,31, 32,33	12.5	3.61	6.0	3.330	.230	.488	.230	.33	.14	16 2/3*	21.8	7.3	2.46	1.8	1.1	.72
24	12.27	3.61	6.0	3.33	.23	.49	.23	.33	.14	16 2/3*	21.8*	7.3*	2.46*	1.85*	1.11*	.72*
4,7,9,12,14, 17,19,28	12.25	3.61	6.0	3.33	.230	.488	.23	.33	.138	16 2/3*	21.8	7.3	2.46	1.9	1.1	.72
25	12.25	3.60	6.0	3.33	.23	.49	.23	.33	.14	16 2/3*	22.09	7.4	2.48	1.83	1.10*	.71
21	12.0	3.6	6.0	3.38	.22	.44	.23	.31	-	13.3*	21.7	7.25	2.47	1.91	1.13*	.73
24	11.9	3.51	6.0	3.40	.22	.45	.21	-	-	15.1*	21.14	7.05	2.45	1.83	1.08*	.72
23	11.6	3.42	6.0	3.4	.22	.44	.22	.33	.16	13.8*	20.77	6.92	2.46	1.85	1.09*	.73

5" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4	8	12	14	19	23	26	29
CP 1889	C 1896 TO	IL 1925	CA 1898 TO	IN 1909	LA 1909	PE 1888	PH 1890	PH 1931
GP 1890	G 1920 INC.	IL 1932	CA 1919 INC.	IN 1915	LA 1915	PE 1889	PH 1906	PH 1938
2	5	9	13	16	20	24	28	31
C 1892	C 1921 TO	B 1907	CA 1921	J&L 1893	NJ 1889	PE 1896	PH 1912	K 1950
3	10	11	17	18	22	25	29	32
C 1893	CIL 1940 INC.	S6-1919	J&L 1896 TO	JA 1926	PE 1898	PH 1915	PH 1923	IN 1946
6	S13-1922 TO	S7-1920	J&L 1916 INC.	J&L 1931	PA 1900	PE 1900	PH 1929	
CIL 1946	S53-1943 INC.	S54-1946	PA 1897 TO	PA 1901	PE 1901	PH 1929		
CIL 1948	7	S56-1948	PA 1903 INC.	PA 1903				
US 1950	IL 1914	S56-1948	PA 1903 INC.	PA 1903				

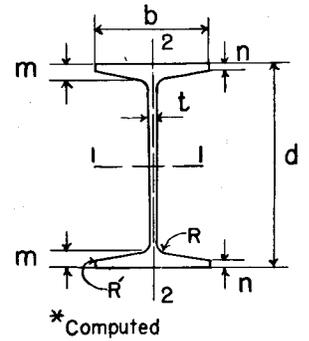


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
20	17 1/3	5.08*	5.0	3.386*	.516*	.54	.33	.25	-	14.6*	18.37*	7.35*	1.90*	2.58*	1.52*	.71*
16	16.0	4.84*	5.0	3.236*	.486*	.563	.313	.25	-	18.2*	17.57*	7.03*	1.91*	2.22*	1.37*	.68*
2	16.0	4.7*	5.0	3.307*	.437*	.54	.33	.25	-	14.6*	17.54*	7.02*	1.93*	2.38*	1.44*	.71*
3	15.0	4.48*	5.0	3.295*	.515*	.44	.23	.25	-	15.1*	15.47*	6.19*	1.86*	1.80*	1.09*	.63*
22	15.0	4.4	5.0	3.25	.38	.54	.33	.25	-	14.6*	16.9	6.77	1.97	2.24	1.38	.71
4,7,9,12,14,17,19,27,28,15	14.75	4.34	5.0	3.294	.504	.443	.21	.31	.126	16 2/3*	15.2	6.1	1.87	1.70	1.0	.63
29	14.75	4.34	5.0	3.28	.49	.443	.21	.31	.13	16 2/3*	15.2	6.1	1.87	1.68	1.02	.62
25	14.75	4.34	5.0	3.28	.49	.44	.21	.31	.13	16 2/3*	15.18	6.1	1.87	1.67	1.02	.62
5,6,8,10,11,13,18,30,31,32	14.75	4.29	5.0	3.284	.494	.443	.210	.31	.13	16 2/3*	15.0	6.0	1.87	1.7	1.0	.63
20	14.0	4.18*	5.0	3.236*	.456*	.44	.23	.25	-	15.1*	14.86*	5.94*	1.88*	1.68*	1.04*	.63*
1,2,20,21,26	13.0	3.8	5.0	3.13	.26	.54	.33	.25	-	14.6*	15.7	6.28	2.03	1.99	1.27	.72
16	13.0	3.8	5.0	3.060	.310	.563	.313	.25	-	18.2*	15.7	6.3	2.02	1.83	1.20	.69
16	13.0	3.78*	5.0	3.020	.396*	.50	.19*	.25	-	23.6*	13.86*	5.54*	1.91*	1.30*	.86*	.59*
23	12.5	3.68	5.0	3.20	.40	.40	.20	.30	-	14.3*	13.42	5.37	1.91	1.21	.76*	.57
24	12.3	3.61	5.0	3.17*	.37*	.40	.20	-	-	14.3*	13.34	5.34	1.92	1.38	.87*	.62
4,7,9,12,14,15,17,19,27,28	12.25	3.60	5.0	3.147	.357	.443	.21	.31	.126	16 2/3*	13.6	5.4	1.94	1.45	.92	.63
25	12.25	3.60	5.0	3.13	.34	.44	.21	.31	.13	16 2/3*	13.66	5.5	1.95	1.42	.91	.63
29	12.25	3.60	5.0	3.13	.34	.443	.21	.31	.13	16 2/3*	13.6	5.4	1.94	1.43	.91	.63
5,8,10,13,18,30	12.25	3.56	5.0	3.137	.347	.443	.21	.31	.13	16 2/3*	13.5	5.4	1.95	1.4	.91	.63
2	12.0	3.6*	5.0	3.118*	.338*	.44	.23	.25	-	15.1*	13.63*	5.45*	1.95*	1.48*	.95*	.64*
22	12.0	3.6	5.0	3.13	.34	.43	.22	.25	-	15.1*	13.5	5.39	1.96	1.44	.92*	.64
1,2,3,20,26	10.0	3.0	5.0	3.00	.22	.44	.23	.25	-	15.1*	12.4	4.96	2.05	1.29	.86*	.66
29	10.0	2.94	5.0	3.00	.21	.443	.21	.31	.13	16 2/3*	12.2	4.9	2.04	1.23	.82	.65
16	10.0	2.9	5.0	2.845	.220	.50	.19*	.25	-	23.6*	13.5	5.4	2.15	1.40	.98*	.69
5,6,8,10,11,13,15,18,28,30,31,32	10.0	2.87	5.0	3.00	.210	.443	.210	.31	.13	16 2/3*	12.1	4.8	2.05	1.2	.82	.65
21	9.75	2.9	5.0	3.0	.21	.43	.22	.25	-	15.1*	12.1	4.87	2.06	1.29	.86*	.67
25	9.75	2.87	5.0	3.00	.21	.44	.21	.31	.13	16 2/3*	12.12	4.9	2.05	1.21	.81	.65
4,7,9,12,14,17,19,24,27	9.75	2.87	5.0	3.000	.210	.443	.21	.31	.126	16 2/3*	12.1	4.8	2.05	1.2	.82	.65
24	9.4	2.76	5.0	3.00	.20	.40	.20	-	-	14.3*	11.58	4.63	2.05	1.14	.76*	.64
23	9.1	2.68	5.0	3.00	.20	.40	.20	.30	-	14.3*	11.34	4.89	2.06	1.12	.75*	.65

4" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1 CP 1889	4 C 1896 TO	8 IL 1925	11 S54-1946	15 J&L 1893	18 LA 1909	22 PE 1896	26 PH 1923
2 CP 1890	5 C 1920 INC.	9 IL 1932	12 S56-1948	16 J&L 1896 TO	19 LA 1915	23 PE 1898	27 PH 1929
3 C 1892	7 C 1921 TO	10 IL 1934	13 CA 1898 TO	17 J&L 1916 INC.	21 LA 1916	24 PE 1900	28 PH 1931
6 C 1893	10 C 1940 INC.	13 B 1907	14 CA 1919 INC.	20 J&L 1926	24 NJ 1889	25 PE 1901	29 PH 1938
10 C 1896	13 IL 1914	16 S 16-1919	17 CA 1921	21 J&L 1931	25 NJ 1891	28 PH 1890	30 K 1950
13 C 1948	16 S 13-1922 TO	19 S 17-1920	20 CA 1921	24 J&L 1931	28 PE 1888	30 PH 1906 TO	33 K 1950
16 C 1948	19 S 53-1943 INC.		21 IN 1921	27 PA 1897 TO	30 PE 1889	33 PH 1915 INC.	36 IN 1946
19 US 1950				30 PA 1903 INC.	33 PE 1891		

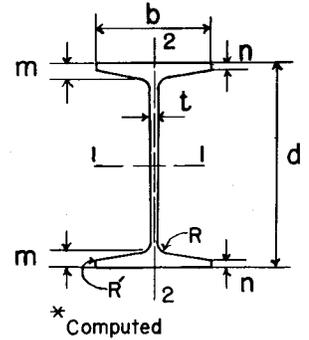


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
19	13 1/3	3.81*	4.0	2.99*	.48*	.48	.30	.22	-	14.3*	9.0*	4.5*	1.54*	1.60*	1.07*	.65*
2	13.0	3.79*	4.0	2.972*	.462*	.49	.30	.22	-	15.1*	8.88*	4.44*	1.53*	1.59*	1.07*	.65*
15	11.46	3.38*	4.0	2.875*	.375*	.469	.281	.219	-	15.0*	8.2*	4.10*	1.56*	1.34*	.93*	.63*
21	11.3	3.33*	4.0	2.82*	.44*	.42	.24	.30	-	15.1*	7.60	3.80	1.51	.92	.65*	.52
19	10 2/3	3.13*	4.0	2.95*	.43*	.38	.20	.22	-	14.3*	7.13*	3.57*	1.51*	1.01*	.68*	.57*
4,7,9,12,14,16,18,25,26	10.5	3.09	4.0	2.880	.410	.396	.19	.29	.114	16 2/3*	7.1	3.6	1.52	1.0	.70	.57
27	10.5	3.09	4.0	2.87	.40	.396	.19	.29	.11	16 2/3*	7.1	3.6	1.52	1.01	.70	.57
23	10.5	3.09	4.0	2.86	.39	.40	.19	.29	.11	16 2/3*	7.07	3.5	1.52	1.00	.70*	.57
5,8,10,13,17,28	10.5	3.05	4.0	2.87	.400	.396	.19	.29	.114	16 2/3*	7.1	3.5	1.52	1.0	.70	.57
15	10.2	3.0	4.0	2.780	.280	.469	.281	.219	-	15.0*	7.7	3.9	1.42	1.20	.86*	.55*
3	10.0	2.99*	4.0	2.81	.39	.38	.20	.22	-	14.9*	6.88*	3.44*	1.52*	.96*	.68*	.57*
15	10.0	2.94*	4.0	2.85	.41	.375	.188	.219	-	15.3*	6.85*	3.43*	1.53*	.95*	.67*	.57*
1,2,19,24	10.0	2.94	4.0	2.75	.24	.49	.30	.22	-	15.1*	7.7	3.86	1.62	1.22	.89*	.65
20	10.0	2.9	4.0	2.69	.39	.39	.22	.25	-	14.8*	6.84	3.42	1.53	.89	.66*	.55
4,7,9,12,14,16,18,25,26	9.5	2.79	4.0	2.807	.337	.396	.19	.29	.114	16 2/3*	6.8	3.4	1.55	.93	.66	.58
27	9.5	2.79	4.0	2.79	.32	.396	.19	.29	.11	16 2/3*	6.8	3.4	1.56	.93	.67	.58
23	9.5	2.79	4.0	2.79	.32	.40	.19	.29	.11	16 2/3*	6.68	3.3	1.55	.91	.65*	.57
5,6,8,10,11,13,17,28,29,30	9.5	2.76	4.0	2.796	.326	.396	.19	.29	.11	16 2/3*	6.7	3.3	1.56	.91	.65	.58
15	9.4	2.76*	4.0	2.75	.375	.391	.203	.25	-	15.8*	6.82*	3.4*	1.57*	.91*	.66*	.57*
2	9.0	2.64*	4.0	2.736*	.311*	.38	.20	.22	-	14.8*	6.49*	3.25*	1.57*	.87*	.64*	.58*
4,7,9,12,14,16,18,25,26	8.5	2.50	4.0	2.733	.263	.396	.19	.29	.114	16 2/3*	6.4	3.2	1.59	.85	.62	.58
27	8.5	2.50	4.0	2.72	.25	.396	.19	.29	.11	16 2/3*	6.4	3.2	1.60	.85	.62	.58
23	8.5	2.50	4.0	2.71	.24	.40	.19	.29	.11	16 2/3*	6.29	3.2	1.59	.83	.61*	.57
5,8,10,13,17,28	8.5	2.46	4.0	2.723	.253	.396	.19	.29	.11	16 2/3*	6.3	3.2	1.60	.83	.61	.58
21	8.4	2.46	4.0	2.46	.32	.35	.20	.24	-	14.0*	5.78	2.89	1.53	.53	.43*	.46
21	8.3	2.45	4.0	2.60	.22	.42	.24	.30	-	15.1*	6.43	3.22	1.62	.84	.65*	.59
2	8.0	2.39*	4.0	2.328*	.328*	.38	.14	.25	-	24.0*	5.39*	2.70*	1.50*	.45	.39*	.43*
15	7.9	2.3	4.0	2.69	.25	.375	.188	.219	-	15.3*	6.0	3.0	1.72	.78	.58*	.58
5,6,8,10,11,13,14,17,26,28,29,30	7.7	2.21	4.0	2.660	.190	.396	.19	.29	.11	16 2/3*	6.0	3.0	1.64	.77	.58	.59
27	7.5	2.26	4.0	2.66	.19	.396	.19	.29	.11	16 2/3*	6.0	3.0	1.63	.79	.59	.59
4,7,9,12,16,18,22,25	7.5	2.21	4.0	2.660	.190	.396	.19	.29	.114	16 2/3*	6.0	3.0	1.64	.77	.58*	.59
23	7.5	2.20	4.0	2.66	.19	.40	.19	.29	.11	16 2/3*	5.90	3.0	1.64	.76	.57*	.58
1,2,19	7.5	2.2	4.0	2.625	.20	.38	.20	.22	-	14.8*	5.9	2.95	1.63	.75	.57*	.58
20	7.5	2.2	4.0	2.50	.20	.39	.22	.25	-	14.8*	5.86	2.93	1.63	.70	.56*	.56
3	7.0	2.1	4.0	2.59	.17	.38	.20	.22	-	14.9*	5.7	2.85	1.66	.72	.56*	.59
15	6.85	2.0	4.0	2.56	.19	.391	.203	.25	-	15.9*	5.8	2.9	1.70	.71	.55*	.59
21	6.2	1.82	4.0	2.3	.16	.35	.20	.24	-	14.0*	4.93	2.47	1.65	.49	.43*	.52
20	6.0	1.8	4.0	2.19	.18	.35	.17	.25	-	17.1*	4.59	2.30	1.61	.38	.35*	.47*
2	6.0	1.8	4.0	2.18	.18	.38	.14	.25	-	24.0*	4.6	2.30	1.61	.36	.33*	.45

3 1/2" & 3" AMERICAN STANDARD BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 C1893 5 IL1914 6 IL1925 IL1932 IL1934 7 S6-1919 S7-1920	2 C1896 TO C1920 INC. 3 C1921 TO CIL1940 INC. 4 CIL1946 CIL1948 US 1950	8 S7-1920 TO S53-1943 INC. 9 S54-1946 S56-1948 10 CA 1898 TO CA1919 INC. 11 CA 1921	12 IN 1921 13 J&L1893 14 J&L1896 TO J&L1906 INC. 17 J&L1931	15 J&L1908 J&L1910 J&L1916 16 J&L1926 18 LA1909 LA1915 LA1916	19 PE1888 PE1889 20 PE1896 21 PE1898 PE1900 PE1901	22 PH1906 PH1908 PH1912 PH1915 23 PH1923 PH1929 24 PH1931	25 PH1938 26 IN 1946
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COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2			
						m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.	
								3 1/2"									
17	6.0	1.77	3.5	2.33	.170	.35	.17	.27	.10	16 2/3*	3.6	2.1	1.43	.45	.39	.51	
16	5.8	1.72	3.5	2.33	.170	.35	.17	.27	.10	16 2/3*	3.6	2.1	1.43	.45	.39	.51	
								3"									
19	9.07	2.67	3.0	2.62	.44	.40	.22	.30	.15	16.5*	3.43	2.29	1.13	.63	.48*	.49	
13	9.0	2.60*	3.0	2.520	.390	.469	.25	.25	-	20.6*	3.55*	2.37*	1.17*	.85*	.67*	.57*	
14,22,23	7.50	2.21	3.0	2.526	.366	.35	.17	.27	.102	16 2/3*	2.92	1.9	1.15	.61	.48*	.52	
25,7,10,12,5,18	7.50	2.21	3.0	2.521	.361	.35	.17	.27	.102	16 2/3*	2.9	1.9	1.15	.60	.48	.52	
24	7.50	2.21	3.0	2.51	.35	.350	.17	.27	.10	16 2/3*	2.9	1.9	1.14	.59	.47	.52	
21	7.5	2.20	3.0	2.50	.34	.35	.17	.27	.10	16 2/3*	2.87	1.9	1.14	.59	.47*	.52	
3,4,6,8,9,11, 16,17,25,26	7.5	2.17	3.0	2.509	.349	.350	.170	.27	.10	16 2/3*	2.9	1.9	1.15	.59	.47	.52	
13	7.0	2.0	3.0	2.320	.190	.469	.25	.25	-	20.6*	3.1	2.1	1.24	.65	.56*	.56	
1	7.0	2.09*	3.0	2.358	.298*	.38	.19	.25	-	18.4*	2.82*	1.88*	1.16*	.54*	.46*	.51*	
19	6.93	2.09	3.0	2.36	.32	.35	.18	.24	.12	16 2/3*	2.73	1.82	1.15	.43	.36*	.46	
19	6.83	2.01	3.0	2.40	.22	.40	.22	.30	.15	16.5*	2.93	1.95	1.21	.57	.48*	.53	
20	6.8	2.01	3.0	2.35*	.31*	.34	.19	-	-	14.7*	2.75	1.83	1.17	.50	.43*	.50	
14,22,23	6.5	1.91	3.0	2.428	.268	.35	.17	.27	.102	16 2/3*	2.70	1.8	1.19	.53	.44*	.52	
2,5,7,10,12, 15,18	6.5	1.91	3.0	2.423	.263	.35	.17	.27	.102	16 2/3*	2.7	1.8	1.19	.53	.44	.52	
24	6.50	1.91	3.0	2.41	.25	.350	.17	.27	.10	16 2/3*	2.7	1.8	1.19	.52	.43	.52	
21	6.5	1.91	3.0	2.40	.24	.35	.17	.27	.10	16 2/3*	2.64	1.8	1.17	.51	.43*	.52	
3,6,8,11,16, 17,25	6.50	1.88	3.0	2.411	.251	.350	.170	.27	.10	16 2/3*	2.7	1.8	1.19	.51	.43	.52	
13	6.3	1.81*	3.0	2.130	.250	.344	.219	.25	-	13.3*	2.52*	1.68*	1.18*	.41*	.38*	.48*	
1	6.0	1.8	3.0	2.26	.20	.38	.19	.25	-	18.4*	2.6	1.74	1.21	.47	.42*	.51	
24	5.7	1.68	3.0	2.33	.17	.350	.17	.27	.10	16 2/3*	2.5	1.7	1.22	.46	.40	.52	
3,4,6,8,9,11, 12,16,17,23, 25,26	5.70	1.64	3.0	2.330	.170	.350	.170	.27	.10	16 2/3*	2.5	1.7	1.23	.46	.40	.53	
2,5,7,10,14, 15,18	5.50	1.63	3.0	2.330	.170	.35	.17	.27	.102	16 2/3*	2.5	1.7	1.23	.46	.40	.53	
22	5.5	1.62	3.0	2.330	.170	.35	.17	.27	.102	16 2/3*	2.5	1.7	1.23	.46	.40*	.53	
21	5.5	1.62	3.0	2.33	.17	.35	.17	.27	.10	16 2/3*	2.43	1.6	1.23	.45	.39*	.53	
17	5.3	1.57	3.0	2.03	.156	.343	.218	.27	.125	13.3*	2.3	1.6	1.22	.34	.34	.47	
20	5.3	1.56	3.0	2.20	.16	.34	.19	-	-	14.7*	2.41	1.61	1.24	.40	.36*	.51	
19	5.3	1.56	3.0	2.20	.16	.35	.18	.24	.12	16 2/3*	2.37	1.58	1.23	.40	.36*	.51	
15	5.2	1.57	3.0	2.03	.156	.343	.218	.27	.125	13.3*	2.3	1.6	1.22	.34	.34	.47	
13	5.1	1.5	3.0	2.030	.156	.344	.219	.25	-	13.3*	2.3	1.5	1.23	.35	.34*	.47	

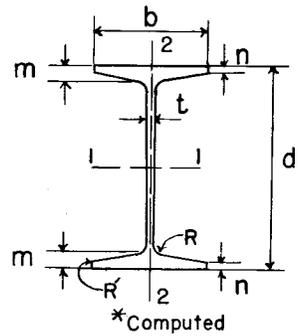
BEAMS
STEEL
WF REGULAR AND SPECIAL

REFERENCES

- B Bethlehem Steel Company
- C Carnegie Steel Company
- CIL Carnegie-Illinois Steel Corporation
- IL Illinois Steel Company
- K Kaiser Steel Corporation
- S Bethlehem Steel Company
- US United States Steel Company

36" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4



1 B36a, 36X16½ B36 36X12 S 43-1933 S 47-1934 36WF(B36a)36X16½ 36WF(B36) 36X12 S 51-1938 S 53-1943 S 54-1946 S 56-1948	2 G36 S29-1928 S34-1930 S35-1930 G36, 36X16½ S40-1931	3 S43-1933 S47-1934 S51-1938 S53-1943 4 S54-1946 S56-1948 5 S29-1928	10 C-1931 IL-1932 II CB 362 CB 361 CSP-1929 C-1929 CB362, 36X16½ CB361, 36X12 C-1930	12 CB362, 36X16½ C-1933 C-1934 IL-1934 36WF, CB362, 36X16½ CIL 1940	13 CB362, 36X16½ CB361, 36X12 C-1933 C-1934 IL-1934 36WF CB362, 36X16½ 36WF CB361, 36X12 CIL 1940 CIL 1946 CIL 1948 US 1950	14 CIL 1946
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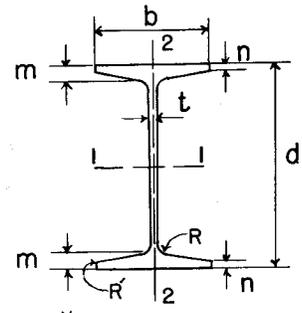
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB362N ¹⁰ 36X16½		300.0	88.23	36.720	16.657	.947	1.680	1.680	1.00	0	0	20303.4	1105.8	15.17	1296.7	155.7	3.83
CB362 36X16½	11	300.0	88.23	36.851	16.189	.958	1.7155	1.7155	1.00	0	0	20317.7	1102.7	15.18	1215.9	150.2	3.71
36WF CB362 36X16½	13	300.0	88.17	36.720	16.655	.945	1.680	1.680	1.02	0	0	20290.2	1105.1	15.17	1225.2	147.1	3.73
36WF (B36a) 36X16½	1	300.0	88.17	36.720	16.655	.945	1.680 [†]		.95	0	5.0	20290.2	1105.1	15.17	1225.2	147.1	3.73
G36 36X16½	2	300.0	88.12	36.720	16.655	.945	2.007	1.353	.95	0	8 ½ [*]	20262.0	1103.6	15.16	1177.7	141.4	3.66
G36 36X16½	2	280.0	82.45	36.500	16.600	.890	1.897	1.243	.95	0	8 ½ [*]	18811.0	1030.8	15.10	1081.4	130.3	3.62
CB362N ¹⁰ 36X16½		280.0	82.34	36.500	16.596	.886	1.570	1.570	1.00	0	0	18828.3	1031.7	15.12	1198.3	144.4	3.81
36WF CB362 36X16½	13	280.0	82.32	36.500	16.595	.885	1.570	1.570	1.02	0	0	18819.3	1031.2	15.12	1127.5	135.9	3.70
36WF (B36a) 36X16½	1	280.0	82.32	36.500	16.595	.885	1.570 [†]		.95	0	5.0	18819.3	1031.2	15.12	1127.5	135.9	3.70
CB362 36X16½	11	275.0	80.87	36.550	16.121	.890	1.565	1.565	1.00	0	0	18400.2	1006.8	15.08	1095.1	135.9	3.68
36WF CB362 36X16½	13	260.0	76.56	36.240	16.555	.845	1.440	1.440	1.02	0	0	17233.8	951.1	15.00	1020.6	123.3	3.65
36WF (B36a) 36X16½	1	260.0	76.56	36.240	16.555	.845	1.440 [†]		.95	0	5.0	17233.8	951.1	15.00	1020.6	123.3	3.65
G36 36X16½	2	260.0	76.50	36.240	16.555	.845	1.767	1.113	.95	0	8 ½ [*]	17205.0	949.5	15.00	973.7	117.6	3.57
CB362N ¹⁰ 36X16½		260.0	76.46	36.240	16.553	.843	1.440	1.440	1.00	0	0	17230.8	950.9	15.01	1090.5	131.8	3.78
G36 36X16½	2	250.0	73.61	36.120	16.530	.820	1.707	1.053	.95	0	8 ½ [*]	16457.0	911.2	14.95	923.8	111.8	3.54
CB362N ¹⁰ 36X16½		250.0	73.54	36.120	16.527	.817	1.380	1.380	1.00	0	0	16478.7	912.4	14.97	1040.1	125.9	3.76
CB362 36X16½	11	250.0	73.53	36.243	16.055	.824	1.4115	1.4115	1.00	0	0	16499.3	910.5	14.98	975.4	121.5	3.64
36WF CB362 36X16½	12	250.0	73.49	36.120	16.525	.815	1.380	1.380	1.02	0	0	16465.9	911.7	14.97	969.6	117.4	3.63
36WF (B36a) 36X16½	3	250.0	73.49	36.120	16.525	.815	1.380 [†]		.95	0	5.0	16465.9	911.7	14.97	969.6	117.4	3.63
36WF CB362 36X16½	14	245.0	72.03	36.060	16.512	.802	1.350	1.350	1.02	0	0	16092.2	892.5	14.95	944.7	114.4	3.62
36WF (B36a) 36X16½	4	245.0	72.03	36.060	16.512	.802	1.350 [†]		.95	0	5.0	16092.2	892.5	14.95	944.7	114.4	3.62
36WF CB362 36X16½	12	240.0	70.60	36.000	16.500	.790	1.320	1.320	1.02	0	0	15724.0	873.6	14.92	920.1	111.5	3.61
36WF (B36a) 36X16½	3	240.0	70.60	36.000	16.500	.790	1.320 [†]		.95	0	5.0	15724.0	873.6	14.92	920.1	111.5	3.61
CB362N ¹⁰ 36X16½		240.0	70.58	36.000	16.500	.790	1.320	1.320	1.00	0	0	15729.0	873.8	14.93	989.9	120.0	3.74
G36 36X16½	2	240.0	70.55	36.000	16.500	.790	1.647	.993	.95	0	8 ½ [*]	15696.0	872.0	14.92	873.5	105.9	3.52
G36 36X16½	5	231.0	67.85	35.880	16.480	.770	1.587	.933	.95	0	8 ½ [*]	14979.0	835.0	14.86	825.3	100.2	3.49

† Average thickness

36" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

10	S29-1928
11	S34-1930
13	S35-1930
See Page 36	7
	S34-1930
	S35-1930
	8
	S40-1931
	9
	S40-1931



*Computed

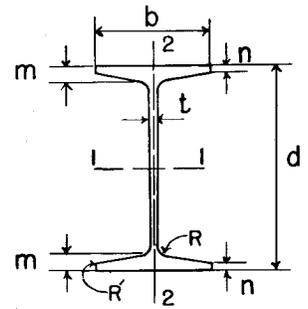
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
36WF CB362 36X16 1/2	13	230.0	67.73	35.880	16.475	.765	1.260	1.260	1.02	0	0	14988.4	835.5	14.88	870.9	105.7	3.59
36WF (B36a) 36X16 1/2	1	230.0	67.73	35.880	16.475	.765	1.260 [†]		.95	0	5.0	14988.4	835.5	14.88	870.9	105.7	3.59
G36 36X16 1/2	8	230.0	67.67	35.880	16.475	.765	1.587	.933	.95	0	8 1/3	14960.0	833.9	14.87	824.5	100.1	3.49
CB362 36X16 1/2	11	230.0	67.65	36.000	16.000	.769	1.290	1.290	1.00	0	0	15012.9	834.0	14.90	882.2	110.3	3.61
CB362N 36X16 1/2	10	230.0	67.63	35.880	16.473	.763	1.260	1.260	1.00	0	0	14985.6	835.3	14.89	940.2	114.2	3.73
36WF CB361 36X12	13	194.0	57.11	36.480	12.117	.770	1.260	1.260	.80	0	0	12103.4	663.6	14.56	355.4	58.7	2.49
36WF (B36) 36X12	1	194.0	57.11	36.480	12.117	.770	1.260 [†]		.75	0	5.0	12103.4	663.6	14.56	355.4	58.7	2.49
CB361 36X12	11	192.0	56.47	36.645	12.150	.740	1.257	1.257	1.00	0	0	12208.5	666.3	14.70	377.2	62.1	2.58
B36 36X12	9	192.0	56.46	36.500	12.110	.745	1.507	1.033	.75	0	8 1/3	12082.0	662.0	14.63	344.4	56.9	2.47
CB361N 36X12	10	192.0	56.45	36.500	12.109	.744	1.270	1.270	.80	0	0	12096.6	662.8	14.64	377.1	62.3	2.59
B36	7	190.0	55.87	36.520	12.111	.726	1.509	1.035	.75	0	8 1/3	12049.0	659.9	14.68	344.9	57.0	2.48
36WF CB361 36X12	13	182.0	53.54	36.320	12.072	.725	1.180	1.180	.80	0	0	11281.5	621.2	14.52	327.7	54.3	2.47
36WF (B36) 36X12	1	182.0	53.54	36.320	12.072	.725	1.180 [†]		.75	0	5.0	11281.5	621.2	14.52	327.7	54.3	2.47
B36 36X12	9	176.0	51.80	36.250	12.065	.700	1.382	.908	.75	0	8 1/3	10902.0	601.5	14.51	303.7	50.3	2.42
CB361N 36X12	10	176.0	51.76	36.250	12.063	.698	1.145	1.145	.80	0	0	10912.6	602.1	14.52	336.1	55.7	2.55
CB361 36X12	11	175.0	51.47	36.395	12.096	.686	1.132	1.132	1.00	0	0	10978.8	603.3	14.61	335.0	55.4	2.55
B36	6	173.0	50.94	36.250	12.065	.680	1.374	.900	.75	0	8 1/3	10784.0	595.0	14.55	301.1	49.9	2.43
36WF CB361 36X12	13	170.0	49.98	36.160	12.027	.680	1.100	1.100	.80	0	0	10470.0	579.1	14.47	300.6	50.0	2.45
36WF (B36) 36X12	1	170.0	49.98	36.160	12.027	.680	1.100 [†]		.75	0	5.0	10470.0	579.1	14.47	300.6	50.0	2.45
B36 36X12	9	167.0	49.15	36.120	12.035	.670	1.317	.843	.75	0	8 1/3	10271.0	568.7	14.46	282.3	46.9	2.40
CB361N 36X12	10	167.0	49.10	36.120	12.033	.668	1.080	1.080	.80	0	0	10281.5	569.3	14.47	314.6	52.3	2.53
B36	6	164.0	48.10	36.120	12.030	.645	1.309	.835	.75	0	8 1/3	10133.0	561.1	14.51	279.4	46.5	2.41
36WF CB361 36X12	13	160.0	47.09	36.000	12.000	.653	1.020	1.020	.80	0	0	9738.8	541.0	14.38	275.4	45.9	2.42
36WF (B36) 36X12	1	160.0	47.09	36.000	12.000	.653	1.020 [†]		.75	0	5.0	9738.8	541.0	14.38	275.4	45.9	2.42
CB361 36X12	11	160.0	47.06	36.183	12.045	.635	1.026	1.026	1.00	0	0	9933.2	549.1	14.53	299.8	49.8	2.52
CB361N 36X12	10	158.0	46.47	36.000	12.000	.635	1.020	1.020	.80	0	0	9683.8	538.0	14.44	294.6	49.1	2.52
B36 36X12	9	158.0	46.44	36.000	12.000	.635	1.257	.783	.75	0	8 1/3	9665.2	537.0	14.43	262.4	43.7	2.38

† Average thickness

36" BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

10	6	5
11	7	S29-1928
13	9	
See Page 37		
See Page 36		



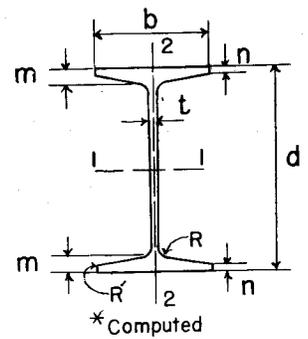
*Computed

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d in.	FLANGE WIDTH b in.	WEB THICK t in.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							in.	in.	in.	in.		In. ⁴	In. ³	in.	In. ⁴	In. ³	in.
B36	6	155.0	4558	36000	12.000	.615	1.249	.775	.75	0	8 1/3 *	9547.4	530.4	14.47	259.9	43.3	2.39
36WF (B36) 36X12	1	150.0	44.16	35840	11.972	.625	.940 †		.75	0	5.0	9012.1	502.9	14.29	250.4	41.8	2.38
36WF CB361 36X12	13	150.0	44.16	35840	11.972	.625	.940	.940	.80	0	0	9012.1	502.9	14.29	250.4	41.8	2.38
CB361 N10 36X12	10	150.0	44.10	35880	11.974	.609	.960	.960	.80	0	0	9118.7	508.3	14.38	275.4	46.0	2.50
B36 36X12	9	150.0	44.10	35880	11.975	.610	1.197	.723	.75	0	8 1/3 *	9104.0	507.5	14.37	243.4	40.7	2.35
B36	5	147.0	43.24	35880	11.975	.590	1.189	.715	.75	0	8 1/3 *	8986.2	500.9	14.42	240.9	40.2	2.36
CB361 36X12	11	147.0	43.23	36000	12.000	.590	.9345	.9345	1.00	0	0	9040.4	502.2	14.46	269.9	45.0	2.50
B36	7	147.0	43.23	35900	11.968	.583	1.199	.725	.75	0	8 1/3 *	9036.3	503.4	14.46	243.3	40.7	2.37

† Average thickness

3 3" BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4



	4	5	8	10	11
S34-1930	B33a 33X15 3/4	B33a 33X15 3/4	CB 332	CB 332, 33X15 3/4	CB 332, 33X15 3/4
S35-1930	B33, 33X 11 1/2	B33, 33X 11 1/2	CB 331	CB 331, 33X 11 1/2	CB 331, 33X 11 1/2
2	S43-1933	S43-1933	C, SP1929	C 1933	C 1933
S40-1931	S47-1934	S47-1934	C1929	C 1934	C 1934
3	33WF (B33a) 33X15 3/4	33WF (B33a) 33X15 3/4	CB332, 33X16	IL 1934	IL 1934
S29-1928	33WF (B33) 33X11 1/2	33WF (B33) 33X11 1/2	CB331, 33X 12	33WF CB332, 33X15 3/4	33WF CB332, 33X15 3/4
S34-1930	S51-1938	S51-1938	C 1930	33WF CB331, 33X11 1/2	33WF CB331, 33X11 1/2
S35-1930	S53-1943	S53-1943	9	CIL 1940	CIL 1940
6	S54-1946		C 1931		CIL 1946
S29-1928	S56-1948		IL 1932		US 1950

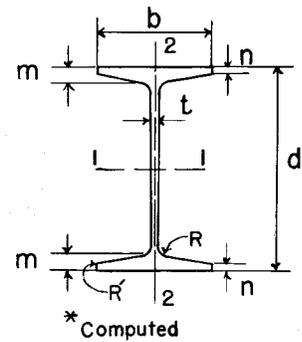
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G33	1	260.0	76.54	33.630	15.890	.875	1.863	1.237	.90	0	8 1/3	14868.0	884.2	13.94	939.8	118.3	3.50
CB332 8 33X16		260.0	76.47	33.786	16.150	.870	1.5185	1.5185	1.00	0	0	15037.7	890.2	14.02	1068.0	132.3	3.74
CB332N 9 33X15 3/4		260.0	76.46	33.750	15.923	.893	1.525	1.525	.85	0	0	14881.7	881.9	13.95	1028.1	129.1	3.67
G33	2	260.0	76.45	33.750	15.920	.890	1.838	1.212	.90	0	8 1/3	14872.0	881.3	13.95	928.5	116.6	3.48
G33	1	245.0	72.19	33.440	15.850	.835	1.768	1.142	.90	0	8 1/3	13895.0	831.0	13.87	869.2	109.7	3.47
G33	2	240.0	70.63	33.500	15.865	.835	1.713	1.087	.90	0	8 1/3	13575.0	810.5	13.86	835.0	105.3	3.44
CB332 8 33X16		240.0	70.58	33.546	16.090	.810	1.3985	1.3985	1.00	0	0	13750.6	819.8	13.96	972.5	120.9	3.71
CB332N 9 33X15 3/4		240.0	70.57	33.500	15.866	.836	1.400	1.400	.85	0	0	13578.0	810.6	13.87	933.6	117.7	3.64
33WF 4 (B33a) 33X15 3/4		240.0	70.52	33.500	15.865	.830	1.400 [†]		.90	0	5.0	13585.1	811.1	13.88	874.3	110.2	3.52
33WF 11 CB332 33X15 3/4		240.0	70.52	33.500	15.865	.830	1.400	1.400	.96	0	0	13585.1	811.1	13.88	874.3	110.2	3.52
G33	3	230.0	67.85	33.250	15.810	.795	1.673	1.047	.90	0	8 1/3	12935.0	778.0	13.81	799.6	101.2	3.43
G33	2	220.0	64.83	33.250	15.810	.780	1.588	.962	.90	0	8 1/3	12302.0	740.0	13.78	743.4	94.0	3.39
G33	3	220.0	64.80	33.120	15.780	.765	1.608	.982	.90	0	8 1/3	12278.0	741.4	13.77	752.2	95.3	3.41
33WF 11 CB 332 33X15 3/4		220.0	64.73	33.250	15.810	.775	1.275	1.275	.96	0	0	12312.1	740.6	13.79	782.4	99.0	3.48
33WF 4 (B33a) 33X15 3/4		220.0	64.73	33.250	15.810	.775	1.275 [†]		.90	0	5.0	12312.1	740.6	13.79	782.4	99.0	3.48
CB 332 8 33X16		220.0	64.70	33.272	16.046	.766	1.2615	1.2615	1.00	0	0	12385.5	744.5	13.84	870.0	108.4	3.67
CB332N 9 33X15 3/4		220.0	64.68	33.250	15.808	.778	1.275	1.275	.85	0	0	12295.7	739.6	13.79	840.8	106.4	3.61
G33	3	210.0	61.91	33.000	15.750	.735	1.548	.922	.90	0	8 1/3	11671.0	707.3	13.73	708.5	90.0	3.38
33WF 5 (B33a) 33X15 3/4		210.0	61.78	33.120	15.783	.748	1.210 [†]		.90	0	5.0	11664.5	704.4	13.74	735.6	93.2	3.45
33WF 10 CB 332 33X15 3/4		210.0	61.78	33.120	15.783	.748	1.210	1.210	.96	0	0	11664.5	704.4	13.74	735.6	93.2	3.45
G33	2	210.0	61.78	33.120	15.780	.750	1.523	.897	.90	0	8 1/3	11645.0	703.2	13.73	696.2	88.2	3.36
CB332N 9 33X15 3/4		210.0	61.76	33.120	15.782	.752	1.210	1.210	.85	0	0	11651.2	703.6	13.74	794.0	100.6	3.59
G33	6	202.0	59.53	32.880	15.735	.720	1.488	.862	.90	0	8 1/3	11114.0	676.0	13.66	667.3	84.8	3.35
G33	2	200.0	58.90	33.000	15.750	.720	1.463	.837	.90	0	8 1/3	11038.0	669.0	13.69	652.9	82.9	3.33
G33	1	200.0	58.87	32.880	15.715	.700	1.488	.862	.90	0	8 1/3	11055.0	672.4	13.70	664.6	84.6	3.36
CB 332 8 33X16		200.0	58.82	33.000	16.000	.720	1.1255	1.1255	1.00	0	0	11049.6	669.7	13.71	769.5	96.2	3.62
CB332N 9 33X15 3/4		200.0	58.81	33.000	15.750	.720	1.150	1.150	.85	0	0	11037.9	669.0	13.70	749.9	95.2	3.57
33WF 11 CB 332 33X15 3/4		200.0	58.79	33.000	15.750	.715	1.150	1.150	.96	0	0	11048.2	669.6	13.71	691.7	87.8	3.43
33WF 4 (B33a) 33X15 3/4		200.0	58.79	33.000	15.750	.715	1.150 [†]		.90	0	5.0	11048.2	669.6	13.71	691.7	87.8	3.43

† Average thickness

3 3" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	6	7
2	8	S54-1946
3	9	S56-1948
4	10	12
5	11	CIL 1946
See Page 39		CIL 1948
		US-1950



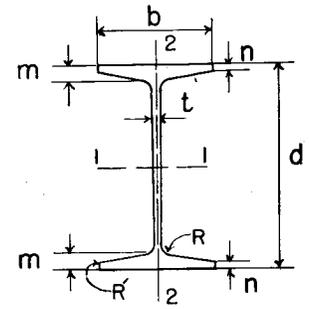
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB331 33X12	8	167.0	49.12	33.530	12.179	.719	1.062	1.062	1.00	0	0	8836.1	527.1	13.41	321.0	52.7	2.56
B33	1	165.0	48.52	33.500	11.350	.680	1.412	.968	.70	0	8 1/3*	8835.4	527.5	13.49	265.5	46.8	2.34
33WF (B33) CB331 33X11 1/2	11	152.0	44.71	33.500	11.565	.635	1.055	1.055	.75	0	0	8147.6	486.4	13.50	256.1	44.3	2.39
33WF (B33) 33X11 1/2	4	152.0	44.71	33.500	11.565	.635	1.055†		.70	0	5.0	8147.6	486.4	13.50	256.1	44.3	2.39
CB331N 33X11 1/2	9	152.0	44.69	33.500	11.566	.636	1.055	1.055	.70	0	0	8143.0	486.2	13.50	272.8	47.2	2.47
CB331 33X12	8	152.0	44.69	33.342	12.115	.655	.968	.968	1.00	0	0	7998.5	479.8	13.38	287.8	47.5	2.54
B33	6	152.0	44.69	33.250	11.320	.650	1.287	.843	.70	0	8 1/3*	7953.4	478.4	13.34	233.0	41.2	2.28
B33 33X11 1/2	2	152.0	44.68	33.500	11.565	.635	1.283	.827	.70	0	8 1/3*	8136.2	485.7	13.49	245.1	42.4	2.34
B33	1	152.0	44.65	33.270	11.312	.642	1.297	.853	.70	0	8 1/3*	7991.4	480.4	13.38	234.9	41.5	2.29
B33	3	143.0	42.05	33.120	11.285	.615	1.222	.778	.70	0	8 1/3*	7442.2	449.4	13.30	215.1	38.1	2.26
33WF (B33) 33X11 1/2	4	141.0	41.51	33.310	11.535	.605	.960†		.70	0	5.0	7442.2	446.8	13.39	229.7	39.8	2.35
33WF (B33) CB331 33X11 1/2	11	141.0	41.51	33.310	11.535	.605	.960	.960	.75	0	0	7442.2	446.8	13.39	229.7	39.8	2.35
B33 33X11 1/2	2	141.0	41.48	33.310	11.535	.605	1.188	.732	.70	0	8 1/3*	7430.8	446.2	13.38	218.7	37.9	2.30
CB331N 33X11 1/2	9	141.0	41.46	33.310	11.535	.605	.960	.960	.70	0	0	7434.5	446.4	13.39	246.2	42.7	2.44
CB331 33X12	8	138.0	40.58	33.164	12.056	.596	.879	.879	1.00	0	0	7223.0	435.6	13.34	257.5	42.7	2.52
B33	3	135.0	39.55	33.000	11.250	.580	1.162	.718	.70	0	8 1/3*	6967.4	422.3	13.27	198.7	35.3	2.24
33WF (B33) 33X11 1/2	5	132.0	38.84	33.150	11.510	.580	.880†		.70	0	5.0	6856.8	413.7	13.29	207.8	36.1	2.31
33WF (B33) CB331 33X11 1/2	10	132.0	38.84	33.150	11.510	.580	.880	.880	.75	0	0	6856.8	413.7	13.29	207.8	36.1	2.31
CB331N 33X11 1/2	9	132.0	38.82	33.150	11.511	.581	.880	.880	.70	0	0	6852.1	413.4	13.29	224.3	39.0	2.40
B33 33X11 1/2	2	132.0	38.81	33.150	11.510	.580	1.108	.652	.70	0	8 1/3*	6845.4	413.0	13.28	196.8	34.2	2.25
33WF (B33) CB331 33X11 1/2	12	130.0	38.26	33.100	11.510	.580	.855	.855	.75	0	0	6699.0	404.8	13.23	201.4	35.0	2.29
33WF (B33) 33X11 1/2	7	130.0	38.26	33.100	11.510	.580	.855†		.70	0	5.0	6699.0	404.8	13.23	201.4	35.0	2.29
B33	6	125.0	36.88	32.880	11.210	.540	1.102	.658	.70	0	8 1/3*	6482.7	394.3	13.26	182.3	32.5	2.22
B33	1	125.0	36.83	32.890	11.205	.535	1.107	.663	.70	0	8 1/3*	6498.2	395.1	13.28	183.2	32.7	2.23
33WF (B33) 33X11 1/2	5	125.0	36.78	33.000	11.500	.570	.805†		.70	0	5.0	6354.7	385.1	13.14	188.2	32.7	2.26
33WF (B33) CB331 33X11 1/2	10	125.0	36.78	33.000	11.500	.570	.805	.805	.75	0	0	6354.7	385.1	13.14	188.2	32.7	2.26
CB331 33X12	8	125.0	36.75	33.000	12.000	.540	.797	.797	1.00	0	0	6514.3	394.8	13.31	230.1	38.4	2.50
B33 33X11 1/2	2	125.0	36.75	33.000	11.500	.570	1.033	.577	.70	0	8 1/3*	6343.3	384.4	13.14	177.2	30.8	2.20
CB331N 33X11 1/2	9	125.0	36.73	33.000	11.500	.570	.805	.805	.70	0	0	6347.0	384.7	13.14	204.6	35.6	2.36

† Average thickness

30" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1	4	5	7	13	17	18
S34-1930	B30a, 30X15	B-1907	S3-1909	CB-302	CB302, 30X15	See Below
S35-1930	B30, 30X10 1/2	6	S4-1911	CB 301	CB301, 30X10 1/2	
2	S43-1933	B30a, 30X15	8	C1927	C1933	
S40-1931	S47-1934	S43-1933	S12-1922	CB302, 30X14	C1934	
3	30WF (B30a) 30X15	S47-1934	S15-1924	CB301, 30X10 1/2	IL1934	
S27-1928	30WF (B30) 30X10 1/2	30WF (B30a) 30X15	S16-1925	C1930	30WF CB302, 30X15	
S34-1930	S51-1938	S51-1938	S18-1926	16	30WF CB301, 30X10 1/2	
S35-1930	S53-1943	S53-1943	9	C1931	CIL 1940	
	S54-1946		S24-1927	IL1932		
	S56-1948					



* Computed

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT		DEPTH d	FLANGE		WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT	AREA		WIDTH b	THICK t		m	n	R	R'		I	S	r	I	S	r
		Lb.	Sq.In.		In.	In.		In.	In.	In.	In.		In.	In.	In.	In.	In.	In.
G30	1	240.0	70.60	30.750	15.200	.880	1.801	1.204	.85	0	8 1/3*	11423.0	742.9	12.72	779.2	105.2	3.36	
CB302N16 30X15		240.0	70.58	30.750	15.207	.882	1.500	1.500	.85	0	0	11427.6	743.3	12.72	8809	115.9	3.53	
CB302 30X14	13	240.0	70.58	30.781	14.218	.888	1.597	1.597	1.00	0	0	11356.0	737.9	12.69	7669	107.9	3.30	
G30 30X15	2	240.0	70.54	30.750	15.205	.880	1.798	1.202	.85	0	8 1/3*	11412.0	742.3	12.72	798.5	105.0	3.36	
G30	1	220.0	64.82	30.500	15.135	.815	1.676	1.079	.85	0	8 1/3*	10378.0	680.5	12.65	716.1	94.6	3.32	
G30 30X15	2	220.0	64.76	30.500	15.140	.815	1.673	1.077	.85	0	8 1/3*	10367.0	679.8	12.65	715.3	94.5	3.32	
CB302N16 30X15		220.0	64.70	30.500	15.139	.814	1.375	1.375	.85	0	0	10375.4	680.4	12.66	796.6	105.2	3.51	
CB302 30X14	13	220.0	64.70	30.522	14.146	.816	1.4675	1.4675	1.00	0	0	10320.4	676.3	12.63	6939	98.1	3.28	
30WF (B30a) 30X15	4	210.0	61.78	30.380	15.105	.775	1.315†		.85	0	5.0	9872.4	649.9	12.64	7079	93.7	3.38	
30WF CB302 30X15	18	210.0	61.78	30.380	15.105	.775	1.315	1.315	.91	0	0	9872.4	649.9	12.64	7079	93.7	3.38	
G30	3	200.0	58.92	30.250	15.065	.745	1.551	.954	.85	0	8 1/3*	9343.8	617.8	12.59	6342	84.2	3.28	
G30 30X15	2	200.0	58.86	30.250	15.070	.745	1.548	.952	.85	0	8 1/3*	9332.7	617.0	12.59	6334	84.1	3.28	
G30a	5	200.0	58.85	30.000	15.000	.750	1.721	.830	.90	0	12 1/2*	9154.7	610.3	12.47	599.7	80.0	3.19	
CB302N16 30X15		200.0	58.83	30.250	15.070	.745	1.250	1.250	.85	0	0	9343.2	617.7	12.60	714.1	94.8	3.48	
CB302 30X14	13	200.0	58.82	30.263	14.073	.743	1.338	1.338	1.00	0	0	9305.7	615.0	12.58	622.7	88.5	3.25	
30WF CB302 30X15	17	200.0	58.76	30.250	15.070	.740	1.250	1.250	.91	0	0	9340.5	617.6	12.61	665.7	88.3	3.37	
30WF (B30a) 30X15	6	200.0	58.76	30.250	15.070	.740	1.250†		.85	0	5.0	9340.5	617.6	12.61	665.7	88.3	3.37	
G30a	7	200.0	58.71	30.000	15.000	.750	1.591	.950	.90	0	9.0*	9150.6	610.0	12.48	630.2	84.0	3.28	
G30	8	200.0	58.52	30.125	15.040	.760	1.545	.950	.85	0	8 1/3*	9148.8	607.5	12.50	628.5	83.6	3.28	
30WF (B30a) 30X15	4	190.0	55.90	30.120	15.040	.710	1.185†		.85	0	5.0	8825.9	586.1	12.57	624.6	83.1	3.34	
30WF CB302 30X15	18	190.0	55.90	30.120	15.040	.710	1.185	1.185	.91	0	0	8825.9	586.1	12.57	624.6	83.1	3.34	
G30	3	190.0	55.90	30.120	15.030	.710	1.486	.889	.85	0	8 1/3*	8818.0	585.5	12.56	592.7	78.9	3.26	
CB302N16 30X15		190.0	55.88	30.120	15.037	.712	1.185	1.185	.85	0	0	8821.8	585.8	12.56	672.5	89.4	3.47	
G30 30X15	2	190.0	55.84	30.120	15.035	.710	1.483	.887	.85	0	8 1/3*	8806.7	584.8	12.56	591.9	78.7	3.26	
G30	8	190.0	55.52	30.000	15.000	.720	1.485	.890	.85	0	8 1/3*	8651.1	576.7	12.48	589.4	78.6	3.26	
G30	8	181.0	52.82	29.875	14.970	.690	1.425	.830	.85	0	8 1/3*	8181.0	547.6	12.45	552.0	73.7	3.23	

REFERENCES, SEE COLUMN (I) AND PAGE 4

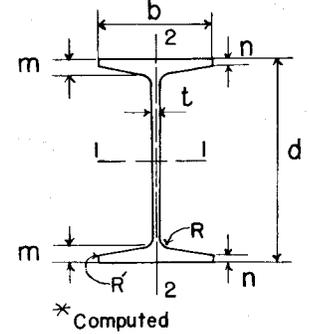
CB302, 30X15	18	30WF CB302, 30X15
CB301, 30X10 1/2		30WF CB301, 30X10 1/2
C1933		CIL 1940
C1934		CIL 1946
IL1934		CIL 1948
		US1950

† Average thickness

30" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	7	10
2	9	S15-1924
3	13	S16-1925
4	16	S18-1926
5	17	15
6	18	CB 301 & CB302
See Page 41		C1928 & C1929
		CB302, 30X14
		CB301, 30X10½
		C1930



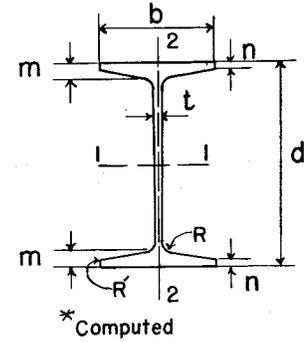
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G30	3	180.0	53.20	30.000	15.000	.680	1.426	.829	.85	0	8 1/3*	8343.1	556.2	12.52	555.1	74.0	3.23
G30	7	180.0	53.00	30.000	13.000	.690	1.589	1.035	.90	0	9.0*	8194.5	546.3	12.43	433.3	66.7*	2.86
G30 30X15	2	180.0	52.99	30.000	15.000	.675	1.423	.827	.85	0	8 1/3	8320.4	554.7	12.53	553.7	73.8	3.23
CB302N 30X15	16	180.0	52.96	30.000	15.000	.675	1.125	1.125	.85	0	0	8331.0	555.4	12.54	633.7	84.5	3.46
CB302 30X14	13	180.0	52.93	30.000	14.000	.670	1.2065	1.2065	1.00	0	0	8301.4	553.4	12.52	552.7	79.0	3.23
30WF CB302 30X15	17	180.0	52.89	30.000	15.000	.670	1.125	1.125	.91	0	0	8328.2	555.2	12.55	585.6	78.1	3.33
30WF (B30a) 30X15	6	180.0	52.89	30.000	15.000	.670	1.125 [†]		.85	0	5.0	8328.2	555.2	12.55	585.6	78.1	3.33
G30	5	175.0	51.35	30.000	12.000	.680	1.721	1.013	.90	0	12 1/2*	7851.8	523.5	12.37	346.4	57.7*	2.60
G30	9	173.0	50.94	29.750	14.955	.675	1.360	.765	.85	0	8 1/3*	7806.5	524.8	12.38	514.1	68.8	3.18
G30	3	173.0	50.80	29.880	14.980	.660	1.366	.769	.85	0	8 1/3*	7895.2	528.5	12.47	519.1	69.3	3.20
30WF (B30a) 30X15	4	172.0	50.65	29.880	14.985	.655	1.065 [†]		.85	0	5.0	7891.5	528.2	12.48	550.1	73.4	3.30
30WF CB302 30X15	18	172.0	50.65	29.880	14.985	.655	1.065	1.065	.91	0	0	7891.5	528.2	12.48	550.1	73.4	3.30
CB301 30X10½	15	165.0	48.52	30.742	10.725	.755	1.253	1.253	.70	0	0	7326.7	476.7	12.29	258.7	48.2	2.31
B30	1	163.0	48.00	30.650	10.680	.730	1.480	1.065	.65	0	8 1/3*	7270.7	474.4	12.31	239.8	44.9	2.24
CB301 30X10½	15	151.0	44.41	30.538	10.662	.692	1.151	1.151	.70	0	0	6663.7	436.4	12.25	233.4	43.8	2.29
B30	1	149.0	43.93	30.440	10.620	.670	1.375	.960	.65	0	8 1/3*	6606.6	434.1	12.26	214.5	40.4	2.21
CB301 30X10½	15	138.0	40.58	30.344	10.604	.634	1.054	1.054	.70	0	0	6049.5	398.7	12.21	210.1	39.6	2.28
B30	1	137.0	40.40	30.250	10.570	.620	1.280	.865	.65	0	8 1/3*	6026.7	398.5	12.21	192.6	36.4	2.18
CB301 30X10½	13	135.0	39.70	30.298	10.591	.621	1.031	1.031	.70	0	0	5907.3	389.9	12.20	204.8	38.7	2.27
30WF (B30) 30X10½	4	132.0	38.83	30.300	10.551	.615	1.000 [†]		.65	0	5.0	5753.1	379.7	12.17	185.0	35.1	2.18
30WF CB301 30X10½	18	132.0	38.83	30.300	10.551	.615	1.000	1.000	.70	0	0	5753.1	379.7	12.17	185.0	35.1	2.18
CB302N 30X10½	16	131.0	38.52	30.310	10.547	.602	1.005	1.005	.65	0	0	5745.6	379.1	12.21	197.1	37.4	2.26
B30 30X10½	2	131.0	38.47	30.310	10.545	.600	1.212	.798	.65	0	8 1/3	5738.5	378.7	12.21	177.9	33.7	2.15
B30	3	129.0	37.82	30.120	10.530	.580	1.215	.800	.65	0	8 1/3*	5622.7	373.4	12.19	177.6	33.7	2.17
B30	10	129.0	37.52	30.125	10.530	.580	1.215	.800	.65	0	8 1/3*	5566.5	369.6	12.18	177.5	33.7	2.18
CB301 30X10½	15	126.0	37.05	30.162	10.551	.581	.963	.963	.70	0	0	5486.7	363.8	12.17	189.0	35.8	2.26

[†] Average thickness

30" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

2	6	11	12	14
3	7	S12-1922	S24-1927	C1927
4	13	S15-1924	S27-1928	C1928
5	16	S16-1925	S34-1930	C1929
See Page 41		S18-1926	S35-1930	C1930
10	14			
See Page 42				

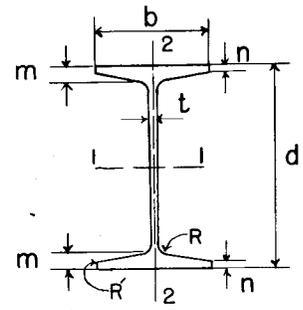


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
CB301 13 30X10 1/2		125.0	36.75	30.148	10.546	.576	.956	.956	.70	0	0	5441.7	361.0	12.17	187.4	35.5	2.26
30WF (B30) 30X10 1/2	4	124.0	36.45	30.160	10.521	.585	.930 [†]		.65	0	5.0	5347.1	354.6	12.11	169.7	32.3	2.16
30WF 18 CB301 30X10 1/2		124.0	36.45	30.160	10.521	.585	.930	.930	.70	0	0	5347.1	354.6	12.11	169.7	32.3	2.16
B30 2 30X10 1/2		122.0	35.87	30.120	10.525	.580	1.117	.703	.65	0	8 1/3*	5235.7	347.7	12.08	158.4	30.1	2.10
CB301N16 30X10 1/2		122.0	35.85	30.120	10.525	.580	.910	.910	.65	0	0	5238.2	347.8	12.09	177.3	33.7	2.22
B30 3		121.0	35.65	30.000	10.500	.550	1.155	.740	.65	0	8 1/3*	5269.7	351.3	12.16	164.3	31.3	2.15
B30 10		121.0	35.36	30.000	10.500	.550	1.155	.740	.65	0	8 1/3*	5213.6	347.6	12.14	164.3	31.3	2.16
B30 11		121.0	35.30	30.000	10.500	.540	1.183	.735	.65	0	9.0*	5239.6	349.3	12.18	165.0	31.4	2.16
B30 7		120.0	35.30	30.000	10.500	.540	1.183	.735	.65	0	9.0*	5239.6	349.3	12.18	165.0	31.4*	2.16
B30 5		120.0	35.25	30.000	10.000	.520	1.333	.740	.62	0	12 1/2*	5270.9	351.4	12.23	149.7	29.9*	2.11
30WF (B30) 30X10 1/2	4	116.0	34.13	30.000	10.500	.564	.850 [†]		.65	0	5.0	4919.1	327.9	12.00	153.2	29.2	2.12
30WF 18 CB301 30X10 1/2		116.0	34.13	30.000	10.500	.564	.850	.850	.70	0	0	4919.1	327.9	12.00	153.2	29.2	2.12
B30 2		115.0	33.85	30.000	10.500	.555	1.057	.643	.65	0	8 1/3*	4894.1	326.3	12.02	145.6	27.7	2.07
CB301N16 30X10 1/2		115.0	33.84	30.000	10.500	.555	.850	.850	.65	0	0	4896.6	326.4	12.03	164.5	31.3	2.20
CB301 14		115.0	33.81	30.000	10.500	.530	.882	.882	.70	0	0	4985.3	332.4	12.14	170.6	32.5	2.25
B30 3		115.0	33.80	29.880	10.480	.530	1.095	.680	.65	0	8 1/3*	4942.9	330.8	12.09	151.8	29.0	2.12
B30 10		115.0	33.50	29.880	10.480	.530	1.095	.680	.65	0	8 1/3*	4886.8	327.1	12.08	151.8	29.0	2.13
B30 12		110.0	32.45	29.780	10.470	.520	1.045	.630	.65	0	8 1/3*	4687.7	314.8	12.02	141.8	27.1	2.09
B30 2 30X10 1/2		108.0	31.85	29.880	10.475	.530	.997	.583	.65	0	8 1/3*	4556.2	305.0	11.96	132.9	25.4	2.04
CB301N16 30X10 1/2		108.0	31.77	29.880	10.473	.528	.790	.790	.65	0	0	4554.2	304.8	11.97	151.6	29.0	2.18
30WF (B30) 30X10 1/2	4	108.0	31.77	29.820	10.484	.548	.760 [†]		.65	0	5.0	4461.0	299.2	11.85	135.1	25.8	2.06
30WF 18 CB301 30X10 1/2		108.0	31.77	29.820	10.484	.548	.760	.760	.70	0	0	4461.0	299.2	11.85	135.1	25.8	2.06

† Average thickness

28" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4



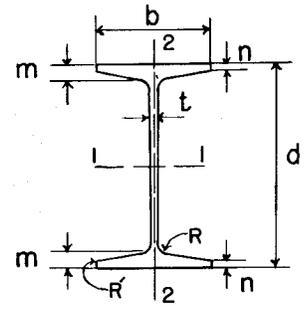
S34-1930	G 28	S12-1922	S27-1928	G 28
S35-1930	B 28	S15-1924	S34-1930	B 28
2	S 27-1928	S16-1925	S35-1930	S 34-1930
B 1907	S 34-1930	S18-1926	8	S 35-1930
3	S35-1930	6	S24-1927	G 28, 28X14 1/4
S3-1909	G 28, 28X14 1/4	S40-1931	9	B 28, 28X10
S4-1911	B 28, 28X10		S15-1924	S40-1931
	S40-1931		S16-1925	11
			S18-1926	S12-1922

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G 28	1	186.0	54.73	28.310	14.305	.730	1.521	.955	.80	0	8 1/3*	7604.0	537.2	11.79	539.7	75.5	3.14
G 28a	2	180.0	52.98	28.000	14.350	.690	1.659	.805	.84	0	12.5*	7269.0	519.2	11.72	507.6	70.7*	3.09
G 28a	3	180.0	52.86	28.000	14.350	.690	1.535	.920	.85	0	9.0*	7264.7	518.9	11.72	533.3	74.3*	3.18
G 28	4	175.0	51.45	28.120	14.285	.710	1.426	.860	.80	0	8 1/3*	7026.0	499.7	11.69	491.1	68.8	3.09
28X14 1/4	5	175.0	51.02	28.120	14.290	.700	1.436	.870	.80	0	8 1/3*	6988.7	497.1	11.70	496.2	69.4	3.12
G 28	6	166.0	48.75	28.000	14.250	.675	1.366	.800	.80	0	8 1/3*	6624.6	473.2	11.66	458.3	64.3	3.07
28X14 1/4	7	165.0	48.75	28.000	14.250	.675	1.366	.800	.80	0	8 1/3*	6624.6	473.2	11.66	458.3	64.3	3.07
G 28	8	165.0	48.47	28.000	12.500	.660	1.533	1.000	.85	0	9.0*	6562.7	468.8	11.64	371.9	59.5*	2.77
G 28	9	165.0	48.19	28.000	14.250	.660	1.376	.810	.80	0	8 1/3*	6577.9	469.9	11.68	462.8	65.0	3.10
G 28	10	162.5	47.81	28.000	12.000	.650	1.659	.950	.84	0	12.5*	6465.1	461.8	11.63	328.2	54.7*	2.62
G 28	11	156.0	45.95	27.880	14.215	.625	1.316	.750	.80	0	8 1/3*	6251.3	448.4	11.66	430.5	60.6	3.06
G 28	12	156.0	45.93	27.880	14.210	.635	1.306	.740	.80	0	8 1/3*	6218.6	446.1	11.64	425.4	59.9	3.04
28X14 1/4	13	147.0	43.27	27.750	14.185	.595	1.251	.685	.80	0	8 1/3*	5840.4	420.9	11.62	396.6	55.9	3.03
G 28	14	145.0	42.69	27.750	14.160	.585	1.241	.675	.80	0	8 1/3*	5772.3	416.0	11.63	389.8	55.1	3.02
28X14 1/4	15	133.0	39.09	28.590	10.160	.630	1.291	.894	.60	0	8 1/3*	5204.0	364.0	11.54	175.3	34.5	2.12
B 28	16	119.0	35.11	28.380	10.095	.565	1.186	.789	.60	0	8 1/3*	4647.4	327.5	11.50	153.7	30.5	2.09
B 28	17	113.0	32.98	28.120	10.030	.540	1.135	.740	.60	0	8 1/3*	4285.5	304.8	11.40	142.3	28.4	2.08
B 28	18	112.0	32.95	28.250	10.065	.535	1.121	.724	.60	0	8 1/3*	4328.5	306.4	11.46	141.2	28.1	2.07
28X10	19	106.0	30.93	28.000	10.000	.510	1.075	.680	.60	0	8 1/3*	3993.8	285.3	11.36	130.9	26.2	2.06
B 28	20	106.0	30.88	28.000	10.000	.500	1.102	.675	.60	0	9.0*	4014.1	286.7	11.40	131.5	26.3	2.06
B 28	21	105.0	31.04	28.000	9.600	.480	1.250	.680	.58	0	12.5*	4089.1	292.1	11.43	122.6	25.5*	1.98
B 28	22	105.0	30.88	28.000	10.000	.500	1.102	.675	.60	0	9.0*	4014.1	286.7	11.40	131.5	26.3*	2.06
B 28	23	104.0	30.66	28.120	10.030	.500	1.056	.659	.60	0	8 1/3*	4003.3	284.7	11.43	128.7	25.7	2.05
28X10	24	100.0	29.18	27.880	9.980	.490	1.015	.620	.60	0	8 1/3*	3723.4	267.1	11.30	120.2	24.1	2.03
B 28	25	97.0	28.61	28.000	10.000	.470	.996	.599	.60	0	8 1/3*	3711.5	265.1	11.39	117.4	23.5	2.03
28X10	26	92.0	27.02	27.750	9.940	.450	.950	.555	.60	0	8 1/3*	3443.0	248.1	11.29	108.0	21.7	2.00
B 28	27	91.0	26.86	27.880	9.980	.450	.936	.539	.60	0	8 1/3*	3441.1	246.9	11.32	106.7	21.4	1.99
28X10	28	85.0	24.96	27.690	9.980	.450	.841	.444	.60	0	8 1/3*	3075.2	222.1	11.10	91.0	18.2	1.91

27" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	2	6	7	8	12	11, 13 See Page 46
S43-1933	S43-1933	CB272	CB272	CB 271	CB272,27X14	
S47-1934	S47-1934	CB271	C1927	C1928	CB271,27X10	
S51-1938	S51-1938	C1927	C1928	C1929	C1933	
S53-1943	S53-1943	C1928	C1929	CB271,27X9¾	C1934	
S54-1946	3	C1929	CB272,27X14	C1930	IL 1934	
S56-1948	S54-1946	CB272,27X14	C1930	IO	27WF CB272,27X14	
	S56-1948	CB271,27X9¾	C1931	CB272N,27X14	27WF CB271,27X10	
		C1930		CB271N, 27X10	CIL1940	
				C1931	CIL1946	
				IL1932		



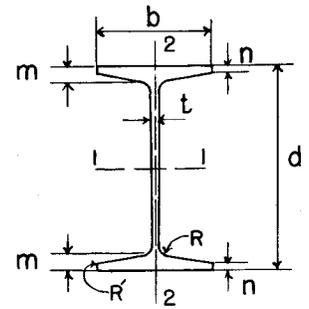
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB272 27X14	6	190.0	55.87	27.598	14.176	.756	1.284	1.284	.90	0	0	7376.9	534.6	11.49	610.7	86.2	3.31
27WF CB272 27X14	12	177.0	52.10	27.310	14.090	.725	1.190	1.190	.86	0	0	6728.6	492.8	11.36	518.9	73.7	3.16
27WF (B27a) 27X14	1	177.0	52.10	27.310	14.090	.725	1.190 [†]		.80	0	5.0	6728.6	492.8	11.36	518.9	73.7	3.16
CB272 27X14	6	175.0	51.47	27.400	14.118	.698	1.185	1.185	.90	0	0	6746.8	492.5	11.45	556.6	78.9	3.29
CB272N 27X14	10	175.0	51.46	27.452	14.091	.671	1.211	1.211	.90	0	0	6838.3	498.2	11.53	565.5	80.3	3.31
CB272N 27X14	10	166.0	48.81	27.328	14.058	.638	1.149	1.149	.90	0	0	6454.5	472.4	11.50	532.7	75.8	3.30
27WF CB272 27X14	11	163.0	47.93	27.120	14.035	.670	1.095	1.095	.86	0	0	6141.5	452.9	11.32	468.7	66.8	3.13
27WF (B27a) 27X14	2	163.0	47.93	27.120	14.035	.670	1.095 [†]		.80	0	5.0	6141.5	452.9	11.32	468.7	66.8	3.13
CB272 27X14	6	160.0	47.04	27.200	14.059	.639	1.085	1.085	.90	0	0	6121.8	450.1	11.41	503.2	71.6	3.27
27WF CB272 27X14	13	160.0	47.04	27.080	14.023	.658	1.075	1.075	.86	0	0	6018.6	444.5	11.31	458.0	65.3	3.12
27WF (B27a) 27X14	3	160.0	47.04	27.080	14.023	.658	1.075 [†]		.80	0	5.0	6018.6	444.5	11.31	458.0	65.3	3.12
CB272N 27X14	10	156.0	45.87	27.192	14.020	.600	1.081	1.081	.90	0	0	6035.6	443.9	11.47	497.1	70.9	3.29
27WF CB272 27X14	11	154.0	45.30	27.000	14.000	.635	1.035	1.035	.86	0	0	5775.8	427.8	11.29	437.6	62.5	3.11
27WF (B27a) 27X14	2	154.0	45.30	27.000	14.000	.635	1.035 [†]		.80	0	5.0	5775.8	427.8	11.29	437.6	62.5	3.11
27WF (B27a) 27X14	1	145.0	42.68	26.880	13.965	.600	.975 [†]		.80	0	5.0	5414.3	402.9	11.26	406.9	58.3	3.09
27WF CB272 27X14	12	145.0	42.68	26.880	13.965	.600	.975	.975	.86	0	0	5414.3	402.9	11.26	406.9	58.3	3.09
CB272N 27X14	7	145.0	42.64	27.000	14.000	.580	.985	.985	.90	0	0	5508.7	408.1	11.37	451.0	64.4	3.25
CB271 27X9¾	8	137.0	40.29	27.742	9.977	.688	1.126	1.126	.65	0	0	4975.9	358.7	11.11	187.1	37.5	2.16
CB271 27X9¾	8	124.0	36.47	27.536	9.913	.624	1.023	1.023	.65	0	0	4472.1	324.8	11.07	166.7	33.6	2.14
27WF CB271 27X10	12	114.0	33.53	27.280	10.070	.570	.932	.932	.64	0	0	4080.5	299.2	11.03	149.6	29.7	2.11
27WF (B27) 27X10	1	114.0	33.53	27.280	10.070	.570	.932 [†]		.60	0	5.0	4080.5	299.2	11.03	149.6	29.7	2.11
CB271N 27X10	10	112.0	32.94	27.582	10.077	.527	.949	.949	.65	0	0	4182.7	303.3	11.27	162.2	32.2	2.22
CB271 27X9¾	6	112.0	32.94	27.340	9.855	.566	.925	.925	.65	0	0	4007.6	293.2	11.03	148.0	30.0	2.12

† Average thickness

27" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

4 C1913 C1915 5 C1916 C1917 C1919 C1920 C1921 C1923	9 CB271 C1929 CB271,27X9 3/4 C1930	11 CB272,27X14 CB271,27X10 C1933 C1934 IL1934 27WFCB272,27X14 27WFCB271,27X10 CIL1940	13 CIL1946 CIL1948 USI950 2,3,6,10 See Page 45
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* Computed

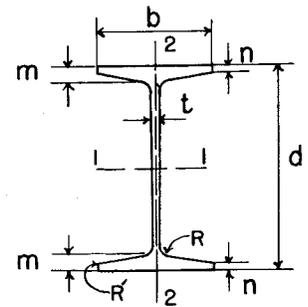
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT	AREA				m	n	R	R'		I	S	r	I	S	r
		Lb.	Sq.In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
27WF CB271 27X10	11	106.0	31.17	27.140	10.035	.535	.862	.862	.64	0	0	3761.2	277.2	10.98	136.1	27.1	2.09
27WF (B27) 27X10	2	106.0	31.17	27.140	10.035	.535	.862 [†]		.60	0	5.0	3761.2	277.2	10.98	136.1	27.1	2.09
CB27N 27X10	10	104.0	30.60	27.450	10.040	.490	.883	.883	.65	0	0	3867.1	281.8	11.24	149.2	29.7	2.21
27WF CB271 27X10	13	102.0	30.01	27.070	10.018	.518	.827	.827	.64	0	0	3604.1	266.3	10.96	129.5	25.9	2.08
27WF (B27) 27X10	3	102.0	30.01	27.070	10.018	.518	.827 [†]		.60	0	5.0	3604.1	266.3	10.96	129.5	25.9	2.08
CB271 27X9 3/4	6	101.0	29.70	27.166	9.799	.510	.838	.838	.65	0	0	3595.7	264.7	11.00	131.7	26.9	2.11
27WF CB27 27X10	11	98.0	28.82	27.000	10.000	.500	.792	.792	.64	0	0	3446.5	255.3	10.94	122.9	24.6	2.07
27WF (B27) 27X10	2	98.0	28.82	27.000	10.000	.500	.792 [†]		.60	0	5.0	3446.5	255.3	10.94	122.9	24.6	2.07
CB27N 27X10	10	97.0	28.53	27.326	10.010	.460	.821	.821	.65	0	0	3582.6	262.2	11.21	137.5	27.5	2.20
27WF CB271 27X10	13	94.0	27.65	26.910	9.990	.490	.747	.747	.64	0	0	3266.7	242.8	10.87	115.1	23.0	2.04
27WF (B27) 27X10	3	94.0	27.65	26.910	9.990	.490	.747 [†]		.60	0	5.0	3266.7	242.8	10.87	115.1	23.0	2.04
27WF (B27) 27X10	2	91.0	26.77	26.840	9.983	.483	.712 [†]		.60	0	5.0	3129.2	233.2	10.81	109.0	21.8	2.02
27WF CB271 27X10	11	91.0	26.77	26.840	9.983	.483	.712	.712	.64	0	0	3129.2	233.2	10.81	109.0	21.8	2.02
CB27N 27X10	10	91.0	26.76	27.162	10.005	.455	.739	.739	.65	0	0	3269.7	240.8	11.05	123.6	24.7	2.15
CB271 27X9 3/4	6	91.0	26.76	27.000	9.750	.461	.755	.755	.65	0	0	3217.0	238.3	10.97	116.9	24.0	2.09
B61	5	90.0	26.34	27.000	9.000	.524	.900	.515	.46	0	9.1*	2958.3	219.1	10.60	75.3	16.7	1.69
CB27N 27X10	10	85.0	25.00	27.000	10.000	.450	.658	.658	.65	0	0	2964.3	219.6	10.89	109.9	22.0	2.10
CB271 27X9 3/4	9	85.0	25.00	26.820	9.750	.461	.665	.665	.65	0	0	2899.3	216.2	10.77	103.0	21.1	2.03
B31	4	83.0	24.41	27.000	7.500	.424	1.185	.596	.65	0	16 2/3*	2888.6	214.0	10.88	53.1	14.1	1.47

† Average thickness

26" BEAMS

REFERENCES, SEE COLUMN (1) AND PAGE 4

1	3	5	6	7
S40-1931	B1907	S12-1922	S24-1927	S15-1924
2	4	S15-1924	S27-1928	S16-1925
S27-1928	S3-1909	S16-1925	S35-1930	S18-1926
S35-1930	S4-1911	S18-1926		8
				S12-1922

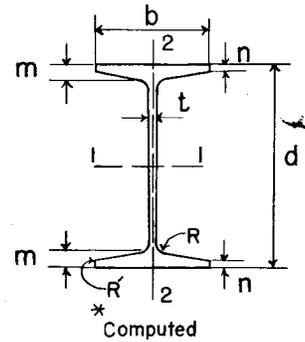


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G26	1	171.0	50.30	26.380	14.090	.685	1.467	.908	.75	0	8 1/3*	6148.0	466.1	11.06	492.6	69.9	3.13
G26	2	160.0	47.25	26.120	13.790	.670	1.392	.845	.75	0	8 1/3*	5629.4	431.0	10.92	432.8	62.8	3.03
G26a	3	160.0	47.00	26.000	13.600	.630	1.586	.775	.78	0	12.5*	5618.7	432.2	10.93	414.5	61.0*	2.97
G26a	4	160.0	46.91	26.000	13.600	.630	1.469	.885	.80	0	9.0*	5620.8	432.4	10.95	435.7	64.1*	3.05
G26	5	160.0	46.85	26.120	13.790	.670	1.392	.845	.75	0	8 1/3*	5576.6	427.0	10.91	432.8	62.8	3.04
G26	1	157.0	46.19	26.190	14.035	.630	1.372	.813	.75	0	8 1/3*	5603.2	427.9	11.01	442.7	63.1	3.10
G26	2	151.0	44.55	26.000	13.750	.630	1.332	.785	.75	0	8 1/3*	5289.8	406.9	10.90	402.8	58.6	3.01
G26	5	151.0	44.16	26.000	13.750	.630	1.332	.785	.75	0	8 1/3*	5237.1	402.9	10.89	402.7	58.6	3.02
G26	3	150.0	44.13	26.000	12.000	.620	1.586	.875	.78	0	12.5*	5200.4	400.0	10.86	306.5	51.1*	2.63
G26	4	150.0	43.94	26.000	12.000	.630	1.469	.955	.80	0	9.0*	5153.9	396.5	10.83	314.6	52.4*	2.68
G26	1	145.0	42.61	26.000	14.000	.595	1.277	.718	.75	0	8 1/3*	5098.0	392.2	10.94	395.7	56.5	3.05
G26	2	144.0	42.38	25.880	13.730	.610	1.272	.725	.75	0	8 1/3*	4983.4	385.1	10.84	375.0	54.6	2.97
G26	5	144.0	41.99	25.880	13.730	.610	1.272	.725	.75	0	8 1/3*	4930.6	381.0	10.84	375.0	54.6	2.99
G26	6	138.0	40.65	25.810	13.700	.580	1.237	.690	.75	0	8 1/3*	4779.9	370.4	10.84	357.4	52.2	2.97
B26	1	101.0	29.69	26.310	9.565	.515	1.069	.691	.55	0	8 1/3*	3385.7	257.4	10.68	115.7	24.2	1.97
B26	2	98.0	28.69	26.120	9.530	.500	1.042	.665	.55	0	8 1/3*	3231.2	247.4	10.61	110.6	23.2	1.96
B26	7	98.0	28.47	26.120	9.530	.500	1.042	.665	.55	0	8 1/3*	3200.9	245.1	10.60	110.6	23.2	1.97
B26	1	91.0	26.83	26.120	9.525	.475	.974	.596	.55	0	8 1/3*	3014.1	230.8	10.60	100.4	21.1	1.93
B26	2	91.0	26.76	26.000	9.500	.470	.982	.605	.55	0	8 1/3*	2993.1	230.2	10.58	100.9	21.2	1.94
B26	7	91.0	26.55	26.000	9.500	.470	.982	.605	.55	0	8 1/3*	2962.8	227.9	10.56	100.9	21.2	1.95
B26	8	91.0	26.49	26.000	9.500	.460	1.007	.600	.55	0	9.0*	2977.2	229.0	10.60	101.2	21.3	1.95
B26	3	90.0	26.63	26.000	9.150	.440	1.144	.600	.54	0	12.5*	3043.1	234.1	10.71	93.4	20.4*	1.87
B26	4	90.0	26.49	26.000	9.500	.460	1.007	.600	.55	0	9.0*	2977.2	229.0	10.60	101.2	21.3*	1.95
B26	2	85.5	25.11	25.880	9.480	.450	.922	.545	.55	0	8 1/3*	2772.5	214.3	10.51	91.7	19.3	1.91
B26	7	85.5	24.89	25.880	9.480	.450	.922	.545	.55	0	8 1/3*	2742.2	211.9	10.50	91.6	19.3	1.92
B26	1	85.0	25.04	26.000	9.500	.450	.914	.536	.55	0	8 1/3*	2783.4	214.1	10.54	91.0	19.2	1.91
B26	6	81.0	23.90	25.780	9.470	.440	.872	.495	.55	0	8 1/3*	2600.1	201.7	10.43	84.3	17.8	1.88

24" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1	10	12	13	15	21	22
B1907	S27-1928	B24b, 24X14	B24b, 24X14	S54-1946	CB243, 24X14	See Below
2	S35-1930	B24a, 24X12	B24, 24X9	S56-1948	CB241, 24X9	
S3-1909	11	B24, 24X9	S43-1933	19	C 1933	
S4-1911	S40-1931	S43-1933	S47-1934	CB244	C 1934	
5	20	S47-1934	24WF(24b) 24X14	CB243	IL 1933	
S12-1922	C1931	24WF(24b) 24X14	24WF(B24) 24X14	C1927	24WCB243, 24X14	
S15-1924	IL1932	24WF(B24a) 24X12	S51-1938	CB244, 24X14	24WCB241, 24X9	
S16-1925	23	24WF(B24) 24X9	S53-1943	CB243, 24X12	CIL 1940	
S18-1926	CIL1946	S51-1938	S54-1946	C1930		
	US1950	S53-1943	S56-1948			



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
CB244 19		160.0	47.06	24.664	14.123	.670	1.119	1.119	.80	0	0	5065.7	410.8	10.38	526.0	74.5	3.34
CB244N20		160.0	47.05	24.714	14.095	.665	1.124	1.124	.80	0	0	5092.2	412.1	10.40	525.2	74.5	3.34
24WF 22		160.0	47.04	24.720	14.091	.656	1.135	1.135	.70	0	0	5110.3	413.5	10.42	492.6	69.9	3.23
CB244 24X14		160.0	47.04	24.720	14.091	.656	1.135 [†]		.70	0	5.0	5110.3	413.5	10.42	492.6	69.9	3.23
G24a 11		160.0	47.04	24.720	14.090	.660	1.411	.851	.70	0	8 1/3*	5092.6	412.0	10.40	465.9	66.1	3.15
G24a 11		150.0	44.17	24.560	14.065	.635	1.331	.771	.70	0	8 1/3*	4719.6	384.3	10.34	426.1	60.6	3.11
CB244N20		150.0	44.12	24.562	14.063	.633	1.048	1.048	.80	0	0	4727.5	384.9	10.35	486.4	69.2	3.32
24WF 21		150.0	44.10	24.560	14.063	.628	1.055	1.055	.70	0	0	4733.5	385.5	10.36	452.5	64.3	3.20
CB243 24X14		150.0	44.10	24.560	14.063	.628	1.055 [†]		.70	0	5.0	4733.5	385.5	10.36	452.5	64.3	3.20
CB244 19		150.0	44.10	24.526	14.082	.629	1.050	1.050	.80	0	0	4720.5	384.9	10.35	489.3	69.5	3.33
G24a 5		149.0	43.57	24.120	13.290	.650	1.367	.840	.70	0	8 1/3*	4451.1	369.1	10.11	383.3	57.7	2.97
G24a 10		148.0	43.68	24.120	13.280	.640	1.367	.840	.70	0	8 1/3*	4478.0	371.3	10.13	382.5	57.6	2.96
24WF 15		145.0	42.62	24.490	14.043	.608	1.020 [†]		.70	0	5.0	4561.0	372.5	10.34	434.3	61.8	3.19
24WF 23		145.0	42.62	24.490	14.043	.608	1.020	1.020	.70	0	0	4561.0	372.5	10.34	434.3	61.8	3.19
CB243 24X14		145.0	42.62	24.490	14.043	.608	1.020	1.020	.70	0	0	4561.0	372.5	10.34	434.3	61.8	3.19
G24a 5		141.0	41.02	24.000	13.250	.610	1.307	.780	.70	0	8 1/3*	4174.2	347.9	10.09	356.4	53.8	2.95
G24a 11		140.0	41.21	24.410	14.030	.600	1.256	.696	.70	0	8 1/3*	4360.9	357.3	10.29	388.2	55.3	3.07
24WF 12		140.0	41.16	24.410	14.029	.594	.980 [†]		.70	0	5.0	4376.1	358.6	10.31	414.5	59.1	3.17
CB243 24X14		140.0	41.16	24.410	14.029	.594	.980	.980	.70	0	0	4376.1	358.6	10.31	414.5	59.1	3.17
CB244 19		140.0	41.16	24.388	14.041	.588	.981	.981	.80	0	0	4380.4	359.2	10.32	453.1	64.5	3.32
G24a 2		140.0	41.16	24.000	13.000	.600	1.358	.800	.70	0	9.0*	4201.4	350.1	10.10	346.9	53.4*	2.90
CB244N20		140.0	41.15	24.406	14.031	.601	.970	.970	.80	0	0	4360.0	357.3	10.29	447.1	63.7	3.30
G24a 10		140.0	41.13	24.000	13.240	.600	1.307	.780	.70	0	8 1/3*	4201.3	350.1	10.11	355.6	53.7*	2.94
G24a 1		140.0	41.03	24.000	13.000	.560	1.498	.720	.70	0	12.5*	4241.9	353.5	10.17	338.3	52.0	2.87
G24a 5		133.0	38.71	23.880	13.220	.580	1.247	.720	.70	0	8 1/3*	3912.4	327.7	10.05	330.7	50.0	2.92
G24a 10		132.0	38.82	23.880	13.210	.570	1.247	.720	.70	0	8 1/3*	3939.6	329.9	10.07	329.9	50.0	2.92

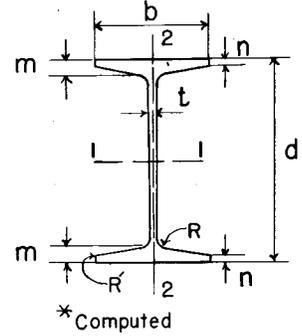
REFERENCES, SEE COLUMN (I) AND PAGE 4

22 CB243, 24X14 CB242, 24X12 CB241, 24X9 C1933 C1934 IL1934	24WF CB243, 24X14 24WF CB242, 24X12 24WF CB241, 24X9 CIL 1940 CIL 1946 CIL 1948 US 1950
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† Average thickness

24" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4



4	14	1, 2, 5, 10, 11, 13, 19, 20, 22
S10-1921	B24a, 24X12	See Page 48
S12-1922	S43-1933, S47-1934	
S15-1924	24WF (B24a) 24X12	
S16-1925	S51-1938	
S18-1926	S53-1943	
	S54-1946	
	S56-1948	

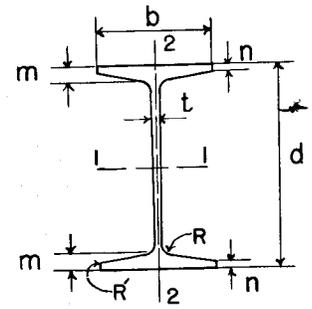
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB24419 24X14		130.0	38.23	24.250	14.000	.547	.912	.912	.80	0	0	4045.1	333.6	10.29	417.5	59.6	3.31
G24a 24X14	11	130.0	38.23	24.250	14.000	.570	1.176	.616	.70	0	8 1/3*	3993.1	329.3	10.22	348.9	49.8	3.02
24WF (B24b) 24X14	13	130.0	38.21	24.250	14.000	.565	.900 [†]		.70	0	5.0	4009.5	330.7	10.24	375.2	53.6	3.13
24WF CB243 24X14	22	130.0	38.21	24.250	14.000	.565	.900	.900	.70	0	0	4009.5	330.7	10.24	375.2	53.6	3.13
CB244N20 24X14	20	130.0	38.21	24.250	14.000	.570	.892	.892	.80	0	0	3999.3	329.8	10.23	408.4	58.3	3.27
G24	5	129.0	37.74	24.120	12.290	.580	1.258	.770	.65	0	8 1/3*	3844.8	318.8	10.09	278.2	45.3	2.72
G24	10	128.0	37.79	24.120	12.280	.570	1.258	.770	.65	0	8 1/3*	3867.1	320.7	10.12	277.5	45.2	2.71
G24	5	121.0	35.30	24.000	12.250	.540	1.198	.710	.65	0	8 1/3*	3585.3	298.8	10.08	256.9	41.9	2.70
G24	2	120.0	35.38	24.000	12.000	.530	1.246	.730	.70	0	9.0*	3607.3	300.6	10.10	249.4	41.6*	2.66
G24	10	120.0	35.36	24.000	12.240	.530	1.198	.710	.65	0	8 1/3*	3607.8	300.6	10.10	256.3	41.9	2.69
G24 24X12	11	120.0	35.36	24.310	12.090	.560	1.170	.690	.65	0	8 1/3*	3632.9	298.9	10.14	240.6	39.8	2.61
G24	1	120.0	35.31	24.000	12.000	.510	1.363	.645	.70	0	12.5*	3630.7	302.6	10.14	240.0	40.0*	2.61
CB243 24X12	19	120.0	35.29	24.310	12.089	.539	.942	.942	.80	0	0	3669.7	301.9	10.20	277.8	46.0	2.81
24WF CB242 24X12	22	120.0	35.29	24.310	12.088	.556	.930	.930	.70	0	0	3635.3	299.1	10.15	254.0	42.0	2.68
24WF (B24a) 24X12	14	120.0	35.29	24.310	12.088	.556	.930 [†]		.65	0	5.0	3635.3	299.1	10.15	254.0	42.0	2.68
CB243N20 24X12	20	120.0	35.28	24.310	12.089	.559	.922	.922	.80	0	0	3630.6	298.7	10.14	271.9	45.0	2.78
G24	5	114.0	33.12	23.880	12.220	.510	1.138	.650	.65	0	8 1/3*	3340.6	279.8	10.04	236.7	38.7	2.67
G24	10	113.0	33.18	23.880	12.210	.500	1.138	.650	.65	0	8 1/3*	3363.3	281.7	10.07	236.1	38.7	2.67
24WF (B24a) 24X12	14	110.0	32.36	24.160	12.042	.510	.855 [†]		.65	0	5.0	3315.0	274.4	10.12	229.1	38.0	2.66
24WF CB242 24X12	22	110.0	32.36	24.160	12.042	.510	.855	.855	.70	0	0	3315.0	274.4	10.12	229.1	38.0	2.66
CB243N20 24X12	20	110.0	32.35	24.160	12.043	.513	.847	.847	.80	0	0	3310.2	274.0	10.12	246.9	41.0	2.76
CB243 24X12	19	110.0	32.34	24.156	12.044	.494	.865	.865	.80	0	0	3343.5	276.8	10.17	252.2	41.9	2.79
G24 24X12	11	110.0	32.34	24.160	12.040	.510	1.095	.615	.65	0	8 1/3*	3307.8	273.8	10.11	215.6	35.8	2.58
G24	9	108.0	31.84	23.780	12.205	.495	1.088	.600	.65	0	8 1/3*	3184.3	267.8	10.00	220.6	36.2	2.63
G24	10	107.0	31.60	23.780	12.195	.485	1.088	.600	.65	0	8 1/3*	3173.1	266.9	10.02	220.0	36.1	2.64
B24b	10	104.5	30.88	24.090	9.775	.550	1.134	.750	.60	0	8 1/3*	2997.3	248.8	9.85	132.9	27.2	2.07
B24b	4	104.5	30.63	24.090	9.775	.550	1.134	.750	.60	0	8 1/3*	2967.7	246.4	9.84	132.9	27.2	2.08
G24 24X12	11	100.0	29.45	24.000	12.000	.470	1.015	.535	.65	0	8 1/3*	2982.5	248.5	10.06	190.3	31.7	2.54
24WF (B24a) 24X12	14	100.0	29.43	24.000	12.000	.468	.775 [†]		.65	0	5.0	2987.3	248.9	10.08	203.5	33.9	2.63
24WF CB242 24X12	22	100.0	29.43	24.000	12.000	.468	.775	.775	.70	0	0	2987.3	248.9	10.08	203.5	33.9	2.63
CB243 24X12	19	100.0	29.41	24.000	12.000	.450	.787	.787	.80	0	0	3020.5	251.7	10.14	226.9	37.8	2.78
CB243N20 24X12	20	100.0	29.39	24.000	12.000	.470	.767	.767	.80	0	0	2981.4	248.4	10.07	221.2	36.9	2.74

† Average thickness

24" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

3	8	1,2,10,11,12,
S3-1909	S16-1925	13,19,20,21,
S4-1911	S18-1926	22,23
S12-1922	9	See Page 48
S15-1924	S24-1927	14
6		See Page 49
S12-1922		
S15-1924		



* Computed

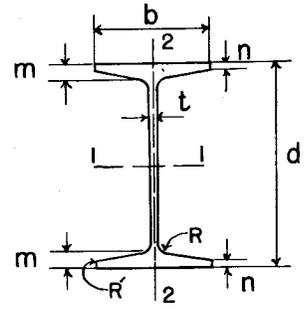
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B24b	10	99.5	29.40	24.000	9.750	.525	1.089	.705	.60	0	8 1/3*	2841.3	236.8	9.83	124.9	25.6	2.06
B24b	4	99.5	29.15	24.000	9.750	.525	1.089	.705	.60	0	8 1/3*	2811.7	234.3	9.82	124.8	25.6	2.07
B24b	10	95.5	28.05	23.910	9.730	.505	1.044	.660	.60	0	8 1/3*	2692.7	225.2	9.80	117.1	24.1	2.04
B24b	4	95.5	27.79	23.910	9.730	.505	1.044	.660	.60	0	8 1/3*	2663.1	222.8	9.79	117.1	24.1	2.05
CB242 24X9 3/4	19	94.0	27.64	24.308	9.844	.499	.817	.817	.60	0	0	2734.9	225.0	9.95	130.2	26.4	2.17
24WF CB241 24X9	22	94.0	27.63	24.290	9.061	.516	.872	.872	.54	0	0	2683.0	220.9	9.85	102.2	22.6	1.92
24WF (B24) 24X9	13	94.0	27.63	24.290	9.061	.516	.872†		.50	0	5.0	2683.0	220.9	9.85	102.2	22.6	1.92
B24a 24X10	11	93.0	27.36	24.260	10.040	.485	1.004	.606	.55	0	8 1/3*	2716.7	224.0	9.96	120.1	23.9	2.09
CB242N20 24X10	20	93.0	27.34	24.260	10.031	.481	.810	.810	.55	0	0	2725.4	224.7	9.98	136.5	27.2	2.23
B24a	10	90.5	26.47	24.120	9.515	.475	1.007	.630	.55	0	8 1/3*	2588.2	214.6	9.89	104.9	22.1	1.99
24WF (B24) 24X9	12	87.0	25.58	24.160	9.025	.480	.807†		.50	0	5.0	2467.8	204.3	9.82	92.9	20.6	1.91
24WF CB241 24X9	21	87.0	25.58	24.160	9.025	.480	.807	.807	.54	0	0	2467.8	204.3	9.82	92.9	20.6	1.91
B24a 24X10	11	85.0	24.99	24.120	10.000	.445	.934	.536	.55	0	8 1/3*	2464.3	204.3	9.93	106.9	21.4	2.07
CB242 24X9 3/4	19	85.0	24.99	24.154	9.797	.452	.740	.740	.60	0	0	2457.2	203.5	9.92	116.2	23.7	2.16
CB242N20 24X10	20	85.0	24.99	24.100	10.000	.450	.730	.730	.55	0	0	2454.6	203.7	9.91	121.9	24.4	2.21
B24a	10	84.5	24.97	24.000	9.500	.460	.947	.570	.55	0	8 1/3*	2405.7	200.5	9.82	95.8	20.2	1.96
B24a	6	84.5	24.80	24.000	9.250	.460	.980	.585	.55	0	9.0*	2381.9	198.5	9.80	91.1	19.7	1.92
B24a	8	84.5	24.75	24.000	9.500	.460	.947	.570	.55	0	8 1/3*	2380.1	198.3	9.81	95.8	20.2	1.97
B24a	2	84.0	24.80	24.000	9.250	.460	.980	.585	.55	0	9.0*	2381.9	198.5	9.80	91.1	19.7*	1.92
B24a	1	84.0	24.79	24.000	8.850	.450	1.095	.570	.55	0	12.5*	2391.6	199.3	9.82	82.0	18.5*	1.82
24WF (B24) 24X9	15	84.0	24.71	24.090	9.015	.470	.772†		.50	0	5.0	2364.3	196.3	9.78	88.3	19.6	1.89
24WF CB241 24X9	23	84.0	24.71	24.090	9.015	.470	.772	.772	.54	0	0	2364.3	196.3	9.78	88.3	19.6	1.89
B24	3	83.0	24.59	24.000	9.130	.520	.897	.510	.50	0	9.0*	2240.9	186.7	9.55	78.0	17.1*	1.78
B24	1	82.0	24.33	24.000	8.830	.500	1.001	.480	.47	0	12.5*	2240.3	186.7	9.60	71.1	16.1*	1.71
B24	11	81.0	23.86	24.120	9.040	.455	.919	.561	.50	0	8 1/3*	2288.4	189.8	9.79	80.9	17.9	1.84
CB241N20 24X9	20	81.0	23.84	24.120	9.041	.453	.740	.740	.55	0	0	2292.6	190.1	9.81	91.3	20.2	1.96
24WF CB241 24X9	21	80.0	23.54	24.000	9.000	.455	.727	.727	.54	0	0	2229.7	185.8	9.73	82.4	18.3	1.87
24WF (B24) 24X9	12	80.0	23.54	24.000	9.000	.455	.727†		.50	0	5.0	2229.7	185.8	9.73	82.4	18.3	1.87

† Average thickness

24" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

16	17	18	1,2,10,11,12, 19,20,21,23
C1913	C1916	C1921	See Page 48
C1915	C1917	C1923	See Page 49
	C1919	24	14
	C1920	IL1914	3,8
		IL1925	See Page 50



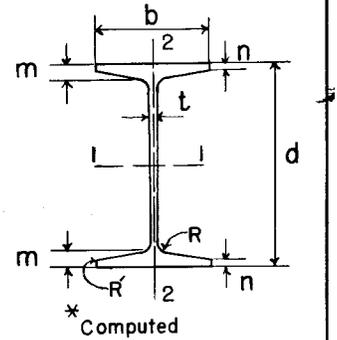
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B24	10	79.5	23.35	24.090	9.035	.430	.924	.565	.50	0	8 1/3 *	2266.7	188.2	9.85	81.2	18.0	1.87
B24	8	79.5	23.17	24.090	9.035	.430	.924	.565	.50	0	8 1/3 *	2245.3	186.4	9.84	81.2	18.0	1.87
24WF (B24) 24X9	15	76.0	22.37	23.910	8.985	.440	.682 †		.50	0	5.0	2096.4	175.4	9.68	76.5	17.0	1.85
24WF CB241 24X9	23	76.0	22.37	23.910	8.985	.440	.682	.682	.54	0	0	2096.4	175.4	9.68	76.5	17.0	1.85
CB242 24X9 3/4	19	76.0	22.35	24.000	9.750	.405	.663	.663	.60	0	0	2184.4	182.0	9.89	102.6	21.0	2.14
B62	18	74.2	21.70	24.000	9.000	.476	.787	.400	.42	0	9.0 *	1950.1	162.5	9.48	61.2	13.6	1.68
B24 24X9	11	74.0	21.81	24.000	9.000	.415	.859	.501	.50	0	8 1/3 *	2085.3	173.8	9.78	72.4	16.1	1.82
CB24IN20 24X9	20	74.0	21.77	24.000	9.000	.412	.680	.680	.55	0	0	2088.3	174.0	9.79	82.8	18.4	1.95
24WF CB241 24X9	21	74.0	21.77	23.870	8.975	.430	.662	.662	.54	0	0	2033.8	170.4	9.67	73.8	16.5	1.84
24WF (B24) 24X9	12	74.0	21.77	23.870	8.975	.430	.662 †		.50	0	5.0	2033.8	170.4	9.67	73.8	16.5	1.84
B62	17	74.0	21.70	24.000	9.000	.476	.787	.400	.42	0	9.0 *	1950.1	162.5	9.48	61.2	13.6	1.68
B24	10	73.5	21.70	24.000	9.000	.395	.879	.520	.50	0	8 1/3 *	2108.8	175.7	9.86	74.7	16.6	1.86
B24	8	73.5	21.52	24.000	9.000	.395	.879	.520	.50	0	8 1/3 *	2087.4	173.9	9.85	74.7	16.6	1.86
B24	3	73.5	21.47	24.000	9.000	.390	.897	.510	.50	0	9.0 *	2091.0	174.3	9.87	74.4	16.5 *	1.86
B24	1	72.0	21.21	24.000	8.700	.370	1.001	.480	.47	0	12.5 *	2090.5	174.2	9.93	67.7	15.6 *	1.79
B20	24	71.0	20.88	24.000	7.000	.480	.890	.480	.48	0	12.5 *	1815.0	151.2	9.32	33.98	9.71	1.26
B24 24X9	11	70.0	20.61	23.880	8.995	.410	.799	.441	.50	0	8 1/3 *	1924.9	161.2	9.66	65.0	14.5	1.78
CB24IN20 24X9	20	70.0	20.59	23.880	8.996	.408	.620	.620	.55	0	0	1929.1	161.6	9.68	75.4	16.8	1.91
CB241 24X8 1/2	19	70.0	20.58	24.000	8.500	.400	.663	.663	.60	0	0	1953.8	162.8	9.74	68.0	16.0	1.82
B24	10	70.0	20.62	23.880	9.000	.395	.819	.460	.50	0	8 1/3 *	1954.1	163.7	9.74	67.4	15.0	1.81
B32	16	69.5	20.44	24.000	7.000	.390	1.091	.540	.60	0	16 2/3 *	1928.0	160.7	9.71	39.3	11.2	1.39

† Average thickness

22" BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

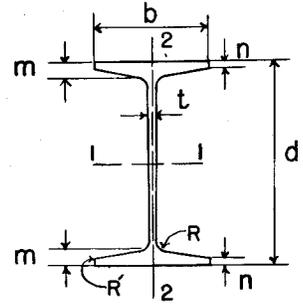
1	2	4	5	6
S10-1921	S24-1927	S27-1928	S24-1927	S34-1930
S12-1922	3	S34-1930	S27-1928	S35-1930
S15-1924	S24-1927	S35-1930	S34-1930	7
S16-1925	S29-1928		S35-1930	S40-1931
S18-1926	S35-1930			



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G22	6	132.0	38.96	22.380	13.095	.575	1.291	.769	.65	0	8 1/3	3501.2	312.9	9.48	339.3	51.8	2.95
G22	5	124.0	36.59	22.250	13.065	.545	1.226	.704	.65	0	8 1/3	3261.7	293.2	9.44	312.6	47.9	2.92
G22	7	116.0	34.13	22.120	13.035	.535	1.140	.620	.65	0	8 1/3	2988.1	270.2	9.36	279.1	42.8	2.86
G22	5	116.0	34.12	22.120	13.030	.510	1.161	.639	.65	0	8 1/3	3021.2	273.2	9.41	286.0	43.9	2.90
G22	5	108.0	31.89	22.000	13.000	.480	1.101	.579	.65	0	8 1/3	2804.3	254.9	9.38	261.9	40.3	2.87
G22	7	108.0	31.89	22.000	13.000	.500	1.080	.560	.65	0	8 1/3	2766.7	251.5	9.33	254.7	39.2	2.83
G22	7	101.0	29.69	21.880	12.975	.475	1.020	.500	.65	0	8 1/3	2557.2	233.7	9.28	231.3	35.7	2.79
G22	5	101.0	29.68	21.880	12.970	.450	1.041	.519	.65	0	8 1/3	2590.4	236.8	9.34	238.1	36.7	2.83
B22a	3	96.5	28.38	22.250	9.320	.525	1.120	.754	.55	0	8 1/3	2373.7	213.4	9.15	115.1	24.7	2.01
B22a	7	96.0	28.21	22.250	9.315	.545	1.088	.722	.55	0	8 1/3	2328.5	209.3	9.08	110.7	23.8	1.98
B22a	3	89.0	26.28	22.120	9.280	.485	1.055	.689	.55	0	8 1/3	2188.6	197.9	9.13	104.8	22.6	2.00
B22a	7	89.0	26.23	22.120	9.280	.510	1.023	.657	.55	0	8 1/3	2147.9	194.2	9.05	100.7	21.7	1.96
B22a	3	83.0	24.51	22.000	9.250	.455	.995	.629	.55	0	8 1/3	2026.5	184.2	9.09	95.8	20.7	1.98
B22a	7	83.0	24.45	22.000	9.250	.480	.963	.597	.55	0	8 1/3	1985.8	180.5	9.01	91.7	19.8	1.94
B22a	3	77.0	22.74	21.88	9.220	.425	.935	.569	.55	0	8 1/3	1866.7	170.6	9.06	87.0	18.9	1.96
B22a	7	77.0	22.67	21.890	9.215	.445	.908	.542	.55	0	8 1/3	1832.7	167.4	8.99	83.4	18.1	1.92
B22	7	73.0	21.52	22.380	8.555	.435	.884	.546	.50	0	8 1/3	1786.1	159.6	9.11	66.4	15.5	1.76
B22	4	73.0	21.51	22.250	8.545	.415	.913	.575	.50	0	8 1/3	1796.7	161.5	9.14	69.1	16.2	1.79
B22	1	71.5	20.88	22.120	8.535	.420	.883	.545	.50	0	8 1/3	1705.2	154.2	9.04	65.8	15.4	1.78
B22	1	68.5	20.04	22.060	8.520	.405	.853	.515	.50	0	8 1/3	1629.3	147.7	9.02	62.3	14.6	1.76
B22	4	67.5	19.84	22.120	8.520	.390	.848	.510	.50	0	8 1/3	1637.5	148.1	9.08	61.8	14.5	1.76
B22	7	67.0	19.74	22.250	8.525	.405	.819	.481	.50	0	8 1/3	1620.2	145.6	9.06	59.0	13.8	1.73
B22	1	65.5	19.08	22.000	8.500	.385	.823	.485	.50	0	8 1/3	1549.5	140.9	9.01	58.8	13.8	1.76
B22	4	62.5	18.38	22.000	8.500	.370	.788	.450	.50	0	8 1/3	1495.4	135.9	9.02	55.2	13.0	1.73
B22	7	62.0	18.19	22.120	8.505	.385	.754	.416	.50	0	8 1/3	1465.7	132.5	8.98	51.8	12.2	1.69
B22	4	58.0	17.14	21.880	8.490	.360	.728	.390	.50	0	8 1/3	1363.9	124.7	8.92	48.9	11.5	1.69
B22	2	58.0	17.10	21.810	8.475	.360	.728	.390	.50	0	8 1/3	1352.1	124.0	8.89	48.6	11.5	1.69
B22	7	58.0	17.06	22.000	8.500	.380	.694	.356	.50	0	8 1/3	1337.1	121.6	8.85	45.6	10.7	1.63
B22	6	54.5	16.04	21.750	8.490	.360	.663	.325	.50	0	8 1/3	1232.6	113.3	8.77	42.2	9.95	1.62

21" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4



1	2	8	9	11	12	12
S43-1933	S43-1933	CB 213	CB 213	CB 213, 21X13	CB213, 21X13	21WCB213, 21X13
S47-1934	S47-1934	CB 212	CB 212	CB212, 21X9	CB212, 21X9	21WCB212, 21X9
S51-1938	S51-1938	CB 211	CB 211	CB211, 21X8 1/4	CB211, 21X8 1/4	21WCB211, 21X8 1/4
S53-1943	S53-1943	C 1927	C 1929	C 1933	C 1933	CIL 1940
10	S54-1946	C 1929	CB 213, 21X13	C 1934	C 1934	CIL 1946
C1931	S56-1948	CB 213, 21X13	CB 212, 21X9	IL 1934	IL 1934	CIL 1948
IL1932	3	CB 212, 21X9	CB 211, 21X8	21WCB213, 21X13	21WCB212, 21X9	US 1950
13	S54-1946	CB 211, 21X8	C 1930	21WCB211-21X8 1/4	CIL 1940	
CIL1948	S56-1948	C 1930				
US1950						

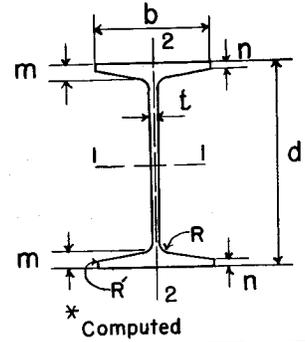
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
21W (B21b) 21X13	2	142.0	41.76	2.1460	13.132	.659	1.095 [†]	.65	0	5.0	3403.1	317.2	9.03	385.9	58.8	3.04	
21W CB213 21X13	12	142.0	41.76	2.1460	13.132	.659	1.095	1.095	.65	0	3403.1	317.2	9.03	385.9	58.8	3.04	
CB213 21X13	9	136.0	40.00	2.1492	13.141	.606	1.061	1.061	.75	0	3313.7	308.4	9.10	401.7	61.1	3.17	
21W CB213 21X13	11	132.0	38.81	2.1310	13.087	.614	1.020	1.020	.65	0	3141.6	294.8	9.00	353.8	54.1	3.02	
21W (B21b) 21X13	1	132.0	38.81	2.1310	13.087	.614	1.020 [†]	.65	0	5.0	3141.6	294.8	9.00	353.8	54.1	3.02	
CB213 21X13	9	128.0	37.65	2.1372	13.105	.570	1.001	1.001	.75	0	3103.4	290.4	9.08	375.9	57.4	3.16	
21W CB213 21X13	13	127.0	37.34	2.1240	13.061	.588	.985	.985	.65	0	3017.2	284.1	8.99	338.6	51.8	3.01	
21W (B21b) 21X13	3	127.0	37.34	2.1240	13.061	.588	.985 [†]	.65	0	5.0	3017.2	284.1	8.99	338.6	51.8	3.01	
21W B21b 21X13	1	122.0	35.85	2.1160	13.040	.567	.945 [†]	.65	0	5.0	2883.2	272.5	8.97	322.1	49.4	3.00	
21W CB213 21X13	11	122.0	35.85	2.1160	13.040	.567	.945	.945	.65	0	2883.2	272.5	8.97	322.1	49.4	3.00	
CB213 21X13	8	120.0	35.28	2.1248	13.070	.535	.939	.939	.75	0	2890.9	272.1	9.05	349.7	53.5	3.15	
CB213N10 21X13	10	116.0	34.12	2.1264	13.057	.507	.915	.915	.75	0	2819.7	265.2	9.09	339.7	52.0	3.16	
CB213 21X13	8	112.0	32.93	2.1126	13.034	.499	.878	.878	.75	0	2683.7	254.1	9.03	324.3	49.8	3.14	
21W CB213 21X13	12	112.0	32.93	2.1000	13.000	.527	.865	.865	.65	0	2620.6	249.6	8.92	289.7	44.6	2.96	
21W (B21b) 21X13	2	112.0	32.93	2.1000	13.000	.527	.865 [†]	.65	0	5.0	2620.6	249.6	8.92	289.7	44.6	2.96	
CB213N10 21X13	10	108.0	31.76	2.1138	13.023	.473	.852	.852	.75	0	2608.0	246.8	9.06	313.9	48.2	3.14	
CB213 21X13	8	104.0	30.57	2.1000	13.000	.465	.815	.815	.75	0	2475.3	235.7	9.00	298.7	45.9	3.13	
21W CB212 21X9	11	103.0	30.27	2.1290	9.071	.608	1.010	1.010	.65	0	2268.0	213.1	8.66	1199	26.4	1.99	
21W (B21a) 21X9	1	103.0	30.27	2.1290	9.071	.608	1.010 [†]	.55	0	5.0	2268.0	213.1	8.66	119.9	26.4	1.99	
CB213N10 21X13	10	101.0	29.69	2.1016	13.000	.450	.791	.791	.75	0	2413.8	229.7	9.02	289.8	44.6	3.12	
CB212 21X9	9	98.0	28.82	2.1358	9.097	.535	.994	.994	.75	0	2234.5	209.2	8.80	125.0	27.5	2.08	
CB212N10 21X9	10	96.0	28.24	2.1376	9.104	.524	.971	.971	.75	0	2196.5	205.5	8.82	122.4	26.9	2.08	
21W CB212 21X9	12	96.0	28.21	2.1140	9.038	.575	.935	.935	.65	0	2088.9	197.6	8.60	109.3	24.2	1.97	
21W B21a 21X9	2	96.0	28.21	2.1140	9.038	.575	.935 [†]	.55	0	5.0	2088.9	197.6	8.60	109.3	24.2	1.97	
CB213 21X9	8	92.0	27.05	2.1240	9.064	.502	.935	.935	.75	0	2086.4	196.5	8.78	116.3	25.7	2.07	

† Average thickness

21" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1,2,3,8,9,10, 14
11,12,13 IL1914
See Page 53 IL1925



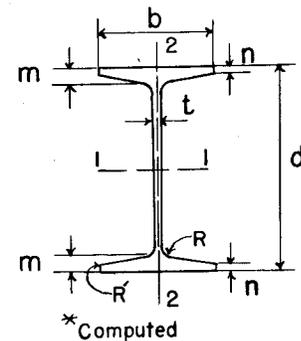
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB212N10 21X9	10	89.0	26.17	21.240	9.065	.485	.903	.903	.75	0	0	2024.9	190.7	8.80	112.4	24.8	2.07
21WF CB212 21X9	11	89.0	26.15	21.000	9.000	.537	.865	.865	.65	0	0	1919.2	182.8	8.57	99.4	22.1	1.95
21WF B21a 21X9	1	89.0	26.15	21.000	9.000	.537	.865 [†]		.55	0	50	1919.2	182.8	8.57	99.4	22.1	1.95
CB212 21X9	8	86.0	25.28	21.120	9.032	.470	.875	.875	.75	0	0	1939.3	183.6	8.76	107.7	23.8	2.06
CB212N10 21X9	10	83.0	24.41	21.122	9.032	.452	.844	.844	.75	0	0	1879.0	177.9	8.77	103.9	23.0	2.06
21WF CB212 21X9	12	82.0	24.10	20.860	8.962	.499	.795	.795	.65	0	0	1752.4	168.0	8.53	89.6	20.0	1.93
21WF B21a 21X9	2	82.0	24.10	20.860	8.962	.499	.795 [†]		.55	0	5.0	1752.4	168.0	8.53	89.6	20.0	1.93
CB212 21X9	8	80.0	23.53	21.000	9.000	.438	.815	.815	.75	0	0	1794.4	170.9	8.73	99.2	22.0	2.05
CB212N10 21X9	10	77.0	22.63	21.000	9.000	.420	.783	.783	.75	0	0	1732.1	165.0	8.75	95.3	21.2	2.05
CB211 21X8	9	76.0	22.34	21.370	8.109	.469	.793	.793	.55	0	0	1684.0	157.6	8.68	70.7	17.4	1.78
B21	14	75.0	22.05	21.000	7.000	.520	1.020	.620	.52	0	12.5*	1524.0	145.1	8.32	41.9	11.97	1.38
CB211N10 21X8 1/4	10	73.0	21.46	21.334	8.327	.427	.769	.769	.55	0	0	1650.1	154.7	8.77	74.2	17.8	1.86
21WF CB211 21X8 1/4	12	73.0	21.46	21.240	8.295	.455	.740	.740	.54	0	0	1600.3	150.7	8.64	66.2	16.0	1.76
21WF (B21) 21X8 1/4	2	73.0	21.46	21.240	8.295	.455	.740 [†]		.50	0	5.0	1600.3	150.7	8.64	66.2	16.0	1.76
CB211 21X8	8	70.0	20.59	21.248	8.073	.433	.732	.732	.55	0	0	1542.9	145.2	8.66	64.3	15.9	1.77
21WF CB211 21X8 1/4	12	68.0	20.02	21.130	8.270	.430	.685	.685	.54	0	0	1478.3	139.9	8.59	60.4	14.6	1.74
21WF (B21) 21X8 1/4	2	68.0	20.02	21.130	8.270	.430	.685 [†]		.50	0	5.0	1478.3	139.9	8.59	60.4	14.6	1.74
CB211N10 21X8 1/4	10	67.0	19.71	21.210	8.293	.393	.707	.707	.55	0	0	1506.2	142.0	8.74	67.3	16.2	1.85
CB211 21X8	8	64.0	18.82	21.126	8.036	.396	.671	.671	.55	0	0	1403.3	132.9	8.64	58.2	14.5	1.76
21WF CB211 21X8 1/4	11	63.0	18.52	21.000	8.250	.410	.620	.620	.54	0	0	1343.6	128.0	8.52	53.8	13.0	1.70
21WF (B21) 21X8 1/4	1	63.0	18.52	21.000	8.250	.410	.620 [†]		.50	0	5.0	1343.6	128.0	8.52	53.8	13.0	1.70

† Average thickness

21" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

4	6	1, 3, 8, 9
C1913	C1921	10, 11, 13
C1915	C1923	See Page 53
5	7	14
C1916	C1927	See Page 54
C1917		
C1919		
C1920		



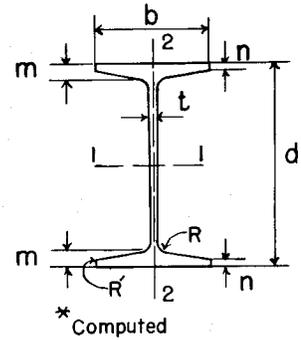
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB21IN 21X8 1/4	10	62.0	18.23	21.098	8.267	.367	.651	.651	.55	0	0	1382.0	131.0	8.71	61.4	14.9	1.84
21WF CB21 21X8 1/4	13	62.0	18.23	20990	8.240	.400	.615	.615	.54	0	0	1326.8	126.4	8.53	53.1	12.9	1.71
21WF (B21) 21X8 1/4	3	62.0	18.23	20990	8.240	.400	.615 [†]		.50	0	5.0	1326.8	126.4	8.53	53.1	12.9	1.71
B63	5	60.5	17.68	21.000	8.250	.428	.725	.370	.38	0	9.0*	1235.5	117.7	8.36	43.5	10.6	1.57
B63	6	60.4	17.68	21.000	8.250	.428	.725	.370	.38	0	9.0*	1235.5	117.7	8.36	43.5	10.6	1.57
CB21 21X8	7	60.0	17.64	21.034	8.015	.375	.625	.625	.55	0	0	1304.9	124.1	8.60	53.7	13.4	1.75
21WF CB21 21X8 1/4	11	59.0	17.36	20910	8.230	.390	.575	.575	.54	0	0	1246.8	119.3	8.47	49.2	12.0	1.68
21WF (B21) 21X8 1/4	1	59.0	17.36	20910	8.230	.390	.575 [†]		.50	0	5.0	1246.8	119.3	8.47	49.2	12.0	1.68
CB21IN 21X8 1/4	10	58.0	17.06	21.000	8.250	.350	.602	.602	.55	0	0	1279.1	121.8	8.66	56.4	13.7	1.82
CB21 21X8	8	58.0	17.05	21.000	8.000	.360	.608	.608	.55	0	0	1263.2	120.3	8.61	52.0	13.0	1.75
B22	14	58.0	16.90	21.000	6.500	.430	.810	.430	.43	0	12.5*	1143.0	108.8	8.22	24.5	7.54	1.20
B33	4	57.5	16.85	21.000	6.50	.357	.996	.484	.55	0	16 2/3*	1227.5	116.9	8.54	28.4	8.8	1.30
CB21 21X8	9	55.0	16.17	20890	8.000	.360	.553	.553	.55	0	0	1166.7	111.7	8.49	47.3	11.8	1.71

[†] Average thickness

20" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	3	5	6	8	10
B1907	S3-1909	S12-1922	S16-1925	S24-1927	S40-1931
2	S4-1911	S15-1924	S18-1926	S27-1928	11
S3-1909	S12-1922	S16-1925	7	S35-1930	C1931
S4-1911	S15-1924	S18-1926	S24-1927	9	IL1932
				S27-1928	
				S35-1930	

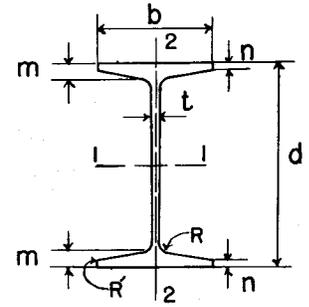


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G20a	9	149.0	43.84	20.120	12.780	.690	1.474	.971	.75	0	8 1/3*	3134.9	311.6	8.46	384.6	60.2	2.96
G20a	5	149.0	43.44	20.120	12.780	.690	1.475	.970	.75	0	8 1/3*	3106.6	308.8	8.46	384.5	60.2	2.97
G20	10	146.0	42.97	20.380	12.080	.710	1.477	1.003	.65	0	8 1/3*	3105.1	304.7	8.50	332.3	55.0	2.78
CB203N11	20X12	146.0	42.95	20.380	12.080	.710	1.240	1.240	.65	0	0	3108.8	305.1	8.51	364.9	60.4	2.91
G20a	9	142.0	41.71	20.000	12.750	.660	1.414	.911	.75	0	8 1/3*	2960.6	296.1	8.43	361.0	56.6	2.94
G20a	5	142.0	41.31	20.000	12.750	.660	1.415	.910	.75	0	8 1/3*	2932.3	293.2	8.43	360.9	56.6	2.96
G20a	1	140.0	41.28	20.000	12.500	.640	1.571	.830	.77	0	12.5*	2938.3	293.8	8.44	334.3	53.5*	2.85
G20a	2	140.0	41.19	20.000	12.500	.640	1.464	.930	.75	0	9.0*	2934.7	293.5	8.44	348.9	55.8*	2.91
G20	10	135.0	39.74	20.180	12.040	.670	1.377	.903	.65	0	8 1/3*	2829.3	280.4	8.44	299.7	49.8	2.75
CB203N11	20X12	135.0	39.71	20.180	12.039	.669	1.140	1.140	.65	0	0	2832.3	280.7	8.45	332.0	55.2	2.89
G20a	9	135.0	39.58	19.880	12.720	.630	1.354	.851	.75	0	8 1/3*	2788.9	280.6	8.39	337.7	53.1	2.92
G20a	5	135.0	39.18	19.880	12.720	.630	1.355	.850	.75	0	8 1/3*	2760.6	277.7	8.39	337.6	53.1	2.94
G20a	8	127.0	37.33	19.750	12.690	.600	1.289	.786	.75	0	8 1/3*	2607.3	264.0	8.36	313.0	49.3	2.90
G20	10	125.0	36.77	20.000	12.000	.630	1.287	.813	.65	0	8 1/3*	2584.0	258.4	8.38	270.6	45.1	2.71
CB203N11	20X12	125.0	36.76	20.000	12.000	.650	1.050	1.050	.65	0	0	2587.7	258.8	8.39	302.8	50.5	2.87
G20	9	120.0	35.24	20.120	12.030	.590	1.247	.770	.65	0	8 1/3*	2528.0	251.3	8.47	260.2	43.3	2.72
G20	5	120.0	34.95	20.120	12.030	.590	1.247	.770	.65	0	8 1/3*	2505.5	249.1	8.47	260.1	43.2	2.73
CB203N11	20X12	115.0	33.83	19.820	11.961	.591	.960	.960	.65	0	0	2348.3	237.0	8.33	274.2	45.8	2.85
G20	10	115.0	33.82	19.820	11.960	.590	1.197	.723	.65	0	8 1/3*	2343.9	236.5	8.32	242.1	40.5	2.68
G20	9	113.0	33.20	20.000	12.000	.560	1.187	.710	.65	0	8 1/3*	2362.8	236.3	8.44	240.8	40.1	2.69
G20	5	113.0	32.90	20.000	12.000	.560	1.187	.710	.65	0	8 1/3*	2340.2	234.0	8.43	240.8	40.1	2.71
G20	1	112.0	32.88	20.000	12.000	.520	1.338	.620	.65	0	12.5*	2368.9	236.9	8.49	232.8	38.8*	2.66
G20	2	112.0	32.81	20.000	12.000	.550	1.210	.695	.65	0	9.0*	2342.1	234.2	8.45	239.3	39.9*	2.70
G20	9	107.0	31.36	19.880	11.980	.540	1.127	.650	.65	0	8 1/3*	2206.5	222.0	8.39	222.4	37.1	2.66
G20	5	107.0	31.06	19.880	11.980	.540	1.127	.650	.65	0	8 1/3*	2184.0	219.7	8.39	222.3	37.1	2.68
G20	8	99.0	29.21	19.750	11.950	.510	1.062	.585	.65	0	8 1/3*	2034.4	206.0	8.35	202.1	33.8	2.63
B20a	10	98.0	28.89	20.380	9.095	.580	1.167	.813	.55	0	8 1/3*	2010.5	197.3	8.34	114.1	25.1	1.99
CB202N11	20X9	98.0	28.82	20.380	9.092	.577	.990	.990	.55	0	0	2009.7	197.2	8.35	124.3	27.4	2.08
CB202N11	20X9	88.0	25.87	20.180	9.036	.521	.890	.890	.55	0	0	1784.4	176.9	8.30	109.7	24.3	2.06
B20a	10	88.0	25.86	20.180	9.035	.520	1.067	.713	.55	0	8 1/3*	1782.4	176.7	8.30	99.4	22.0	1.96
B20a	1	82.0	24.23	20.000	8.510	.570	1.056	.560	.53	0	12.5*	1561.3	156.1	8.03	71.5	16.8*	1.72
B20a	3	82.0	24.17	20.000	8.890	.570	.955	.580	.55	0	9.0*	1559.8	156.0	8.03	79.9	18.0*	1.82
B20a	10	80.0	23.54	20.000	9.000	.485	.977	.623	.55	0	8 1/3*	1595.0	159.5	8.23	87.2	19.4	1.93
CB202N11	20X9	80.0	23.53	20.000	9.000	.485	.800	.800	.55	0	0	1596.3	159.6	8.24	97.4	21.6	2.03
B20a	6	78.0	22.77	20.090	8.905	.460	.977	.625	.50	0	8 1/3*	1568.3	156.1	8.30	84.6	19.0	1.93

20" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 B1907	6 S16-1925	10 S40-1931
2 S3-1909	S18-1926	11 C1931
S4-1911	7 S24-1927	11 L1932
4 S12-1922		
S15-1924		

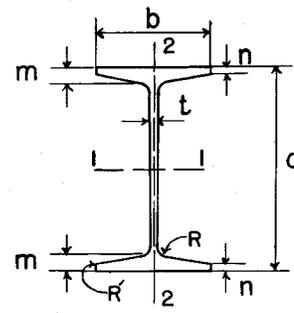


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB202N II		74.0	21.77	19.880	8.966	.451	.740	.740	.55	0	0	1466.7	147.6	8.21	89.1	19.9	2.02
B20 ^a 10		74.0	21.76	19.880	8.965	.450	.917	.563	.55	0	8 1/3 *	1464.7	147.4	8.20	78.9	17.6	1.90
B20 ^a 6		73.0	21.37	20.000	8.875	.430	.932	.580	.55	0	8 1/3 *	1467.8	146.8	8.29	78.5	17.7	1.92
B20 ^a 4		73.0	21.37	20.000	8.750	.430	.955	.580	.55	0	9.0 *	1466.5	146.7	8.28	75.9	17.3	1.88
B20 ^a 1		72.0	21.43	20.000	8.370	.430	1.056	.560	.53	0	12.5 *	1467.9	146.8	8.28	67.6	16.2	1.78
B20 ^a 2		72.0	21.37	20.000	8.750	.430	.955	.580	.55	0	9.0 *	1466.5	146.7	8.28	75.9	17.3	1.88
B20 2		69.0	20.26	20.000	8.145	.520	.818	.475	.45	0	9.0 *	1268.9	126.9	7.91	51.2	12.6	1.59
B20 ^a 7		68.5	20.12	19.880	8.855	.410	.872	.520	.55	0	8 1/3 *	1366.0	137.4	8.24	71.0	16.0	1.88
B20 1		68.0	19.95	20.000	7.690	.490	.930	.480	.45	0	12.5 *	1269.6	127.0	7.98	45.7	11.9	1.51
CB201N II		65.0	19.12	20.250	8.046	.416	.690	.690	.50	0	0	1309.9	129.4	8.28	60.0	14.9	1.77
B20 10		65.0	19.08	20.250	8.045	.415	.849	.531	.45	0	8 1/3 *	1305.6	128.9	8.27	53.5	13.3	1.67
B20 4		64.5	18.86	20.000	8.075	.450	.818	.475	.45	0	9.0 *	1222.1	122.2	8.05	49.8	12.3	1.62
B20 6		64.5	18.79	20.120	8.025	.400	.864	.545	.45	0	8 1/3 *	1283.2	127.6	8.26	54.3	13.5	1.70
B20 2		64.0	18.86	20.000	8.075	.450	.818	.475	.45	0	9.0 *	1222.1	122.2	8.05	49.8	12.3	1.62
B20 1		63.0	18.55	20.000	7.620	.420	.930	.480	.45	0	12.5 *	1223.0	122.3	8.12	44.3	11.6	1.54
B20 6		62.0	18.11	20.060	8.015	.390	.834	.515	.45	0	8 1/3 *	1227.9	122.4	8.23	51.5	12.9	1.69
CB201N II		60.0	17.65	20.120	8.025	.395	.625	.625	.50	0	0	1189.1	118.2	8.21	53.9	13.4	1.75
B20 1		60.0	17.65	20.000	7.580	.375	.930	.480	.45	0	12.5 *	1193.1	119.3	8.22	43.4	11.5	1.57
B20 10		60.0	17.63	20.120	8.025	.395	.784	.466	.45	0	8 1/3 *	1185.5	117.8	8.20	47.5	11.8	1.64
B20 4		59.5	17.36	20.000	8.000	.375	.818	.475	.45	0	9.0 *	1172.2	117.2	8.22	48.3	12.1	1.66
B20 6		59.5	17.33	20.000	8.000	.375	.804	.485	.45	0	8 1/3 *	1169.7	117.0	8.22	48.6	12.2	1.68
B20 2		59.0	17.36	20.000	8.000	.375	.818	.475	.45	0	9.0 *	1172.2	117.2	8.22	48.3	12.1	1.66
B20 1		58.5	17.15	20.000	7.550	.350	.930	.480	.45	0	12.5 *	1176.3	117.6	8.28	43.0	11.4	1.58
B20 7		56.0	16.51	19.880	8.000	.375	.744	.425	.45	0	8 1/3 *	1086.1	109.3	8.11	43.5	10.9	1.62
CB201N II		55.0	16.19	20.000	8.000	.370	.565	.565	.50	0	0	1075.6	107.6	8.15	48.3	12.1	1.73
B20 10		55.0	16.16	20.000	8.000	.370	.724	.406	.45	0	8 1/3 *	1071.9	107.2	8.14	41.8	10.5	1.61

18" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

I B1907 2 S3-1909 S4-1911 6 S12-1922 S15-1924 S16-1925 S18-1926	11 G18 S27-1928 S35-1930 G18, 18X11 ³ / ₄ S40-1931 I9 C1931 IL1932	13 B18b, 18X11 ³ / ₄ B18a, 18X8 ³ / ₄ B18, 18X7 ¹ / ₂ S43-1933 S47-1934 18WF B18b, 18X11 ³ / ₄ 18WF B18a, 18X8 ³ / ₄ 18WF B18, 18X7 ¹ / ₂ S51-1938 S53-1943	18 CB183 CB182 CB181 C1927 CB183, 18X12 CB182, 18X8 ¹ / ₂ CB181, 18X7 ¹ / ₂ C1930	20 CB183, 18X11 ³ / ₄ CB182, 18X8 ³ / ₄ CB181, 18X7 ¹ / ₂ C1933 C1934 IL1934 18WFCB183, 18X11 ³ / ₄ 18WFCB182, 18X8 ³ / ₄ 18WFCB181, 18X7 ¹ / ₂ CIL1940	14, 21 See Below
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*Computed

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
18WF CB183 18X11 ³ / ₄	20	124.0	36.45	18.640	11.889	.651	1.071	1.071	.60	0	0	2227.1	239.0	7.82	281.9	47.4	2.78
18WF B18b 18X11 ³ / ₄	13	124.0	36.45	18.640	11.889	.651	1.071 [†]		.60	0	5.0	2227.1	239.0	7.82	281.9	47.4	2.78
18WF B18b 18X11 ³ / ₄	14	114.0	33.51	18.480	11.833	.595	.991 [†]		.60	0	5.0	2033.8	220.1	7.79	255.6	43.2	2.76
18WF CB183 18X11 ³ / ₄	21	114.0	33.51	18.480	11.833	.595	.991	.991	.60	0	0	2033.8	220.1	7.79	255.6	43.2	2.76
18WF CB183 18X11 ³ / ₄	21	105.0	30.86	18.320	11.792	.554	.911	.911	.60	0	0	1852.5	202.2	7.75	231.0	39.2	2.73
18WF B18b 18X11 ³ / ₄	14	105.0	30.86	18.320	11.792	.554	.911 [†]		.60	0	5.0	1852.5	202.2	7.75	231.0	39.2	2.73
CB183 18X12	18	100.0	29.40	18.238	12.069	.498	.864	.864	.70	0	0	1783.4	195.6	7.79	253.4	42.0	2.94
G18 6	6	100.0	29.25	18.120	11.540	.520	1.129	.670	.60	0	8 ¹ / ₃ *	1725.7	190.5	7.68	202.6	35.1	2.63
CB183N 18X11 ³ / ₄	19	99.0	29.12	18.274	11.795	.485	.885	.885	.60	0	0	1771.1	194.5	7.81	242.2	41.1	2.88
G18 18X11 ³ / ₄	11	99.0	29.11	18.250	11.795	.485	1.120	.649	.60	0	8 ¹ / ₃ *	1767.7	193.7	7.79	211.2	35.8	2.69
18WF B18b 18X11 ³ / ₄	14	96.0	28.22	18.160	11.750	.512	.831 [†]		.60	0	5.0	1674.7	184.4	7.70	206.8	35.2	2.71
18WF CB183 18X11 ³ / ₄	21	96.0	28.22	18.160	11.750	.512	.831	.831	.60	0	0	1674.7	184.4	7.70	206.8	35.2	2.71
CB183 18X12	18	93.0	27.35	18.120	12.034	.463	.805	.805	.70	0	0	1648.4	181.9	7.76	234.0	38.9	2.93
G18 6	6	93.0	27.14	18.000	11.500	.480	1.069	.610	.60	0	8 ¹ / ₃ *	1593.4	177.0	7.66	185.1	32.2	2.61
G18 18X11 ³ / ₄	11	92.0	27.13	18.120	11.770	.460	1.055	.584	.60	0	8 ¹ / ₃ *	1628.5	179.8	7.75	192.2	32.7	2.66
G18 2	2	92.0	27.12	18.000	11.500	.480	1.087	.590	.60	0	9.0*	1591.4	176.8	7.66	182.6	31.8*	2.59
G18 1	1	92.0	27.09	18.000	11.500	.470	1.189	.500	.58	0	12.5*	1595.3	177.3	7.67	172.4	30.0*	2.52
CB183N 18X11 ³ / ₄	19	92.0	27.06	18.138	11.770	.460	.817	.817	.60	0	0	1631.8	179.9	7.76	222.2	37.8	2.87
G18 6	6	87.5	25.40	17.880	11.480	.460	1.009	.550	.60	0	8 ¹ / ₃ *	1472.8	164.7	7.61	168.9	29.4	2.58
G18 18X11 ³ / ₄	11	86.0	25.35	18.000	11.750	.440	.995	.524	.60	0	8 ¹ / ₃ *	1503.6	167.1	7.70	174.9	29.8	2.63
CB183 18X12	18	86.0	25.29	18.000	12.000	.429	.745	.745	.70	0	0	1514.1	168.2	7.74	214.7	35.8	2.91
CB183N 18X11 ³ / ₄	19	86.0	25.29	18.018	11.750	.440	.757	.757	.60	0	0	1506.6	167.2	7.72	204.8	34.9	2.85
18WF CB182 18X8 ³ / ₄	21	85.0	24.97	18.320	8.838	.526	.911	.911	.60	0	0	1429.9	156.1	7.57	99.4	22.5	2.00
18WF B18a 18X8 ³ / ₄	14	85.0	24.97	18.320	8.838	.526	.911 [†]		.50	0	5.0	1429.9	156.1	7.57	99.4	22.5	2.00

REFERENCES; SEE COLUMN (I) AND PAGE 4

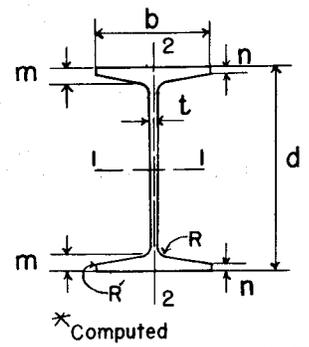
B18b, 18X11 ³ / ₄ B18a, 18X8 ³ / ₄ B18, 18X7 ¹ / ₂ S43-1933 S47-1934	14 18WF B18b, 18X11 ³ / ₄ 18WF B18a, 18X8 ³ / ₄ 18WF B18, 18X7 ¹ / ₂ S51-1938 S53-1943 S56-1948	21 CB183, 18X11 ³ / ₄ CB182, 18X8 ³ / ₄ CB181, 18X7 ¹ / ₂ C1933 C1934 IL1934	18WFCB183, 18X11 ³ / ₄ 18WFCB182, 18X8 ³ / ₄ 18WFCB181, 18X7 ¹ / ₂ CIL1940 CIL1946 CIL1948 US1950
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[†] Average thickness

18 " BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

3	8	12	1, 11, 14, 18, 19, 21
S3-1909	S24-1927	B18a, 18X8 3/4	See Page 58
S4-1911	9	B18, 18X7 1/2	
S12-1922	S24-1927	S40-1931	
S15-1924	S27-1928	2 2	
4	S35-1930	CIL 1946	
S10-1921	10	CIL 1948	
S12-1922	S27-1928	US1950	
S15-1924	S35-1930	2 3	
S16-1925		S56-1948	
S18-1926			



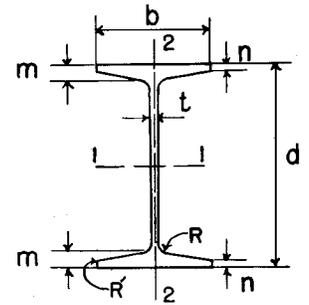
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G18	8	81.0	23.81	17.750	11.460	.440	.944	.485	.60	0	8 1/3*	1360.6	153.3	7.56	151.7	26.5	2.52
CB183N19 18X1 1/4		80.0	25.32	17.898	11.730	.420	.697	.697	.60	0	0	1383.4	154.6	7.67	187.6	32.0	2.82
G18 18X1 1/4	11	80.0	23.59	17.880	11.730	.420	.935	.464	.60	0	8 1/3*	1380.7	154.4	7.65	157.8	26.9	2.59
CB182 18X8 1/2	18	78.0	22.94	18.242	8.565	.471	.866	.866	.70	0	0	1318.8	144.6	7.58	90.9	21.2	1.99
B18a 18X8 3/4	12	77.0	22.70	18.160	8.790	.480	1.004	.658	.50	0	8 1/3*	1287.1	141.7	7.53	85.0	19.3	1.93
18WF CB182 18X8 3/4	21	77.0	22.63	18.160	8.787	.475	.831	.831	.60	0	0	1286.8	141.7	7.54	88.6	20.2	1.98
18WF B18a 18X8 3/4	14	77.0	22.63	18.160	8.787	.475	.831 [†]		.50	0	5.0	1286.8	141.7	7.54	88.6	20.2	1.98
CB182N19 18X8 3/4		77.0	22.65	18.152	8.790	.480	.824	.824	.60	0	0	1283.9	141.5	7.53	93.5	21.3	2.03
B18a	10	74.0	21.79	18.120	8.770	.440	.992	.645	.50	0	8 1/3*	1249.2	137.9	7.57	82.9	18.9	1.95
B18a	4	74.0	21.61	18.120	8.770	.440	.992	.645	.50	0	8 1/3*	1238.0	136.6	7.57	82.9	18.9	1.96
CB182 18X8 1/2	18	72.0	21.17	18.110	8.530	.436	.800	.800	.70	0	0	1208.1	133.4	7.55	82.9	19.4	1.98
CB182N19 18X8 3/4		70.0	20.59	18.000	8.750	.440	.748	.748	.60	0	0	1155.3	128.4	7.49	83.7	19.1	2.02
B18a 18X8 3/4	12	70.0	20.58	18.000	8.750	.440	.924	.578	.50	0	8 1/3*	1152.7	128.1	7.48	74.8	17.1	1.91
18WF B18a 18X8 3/4	14	70.0	20.56	18.000	8.750	.438	.751 [†]		.50	0	5.0	1153.9	128.2	7.49	78.5	17.9	1.95
18WF CB182 18X8 3/4	21	70.0	20.56	18.000	8.750	.438	.751	.751	.60	0	0	1153.9	128.2	7.49	78.5	17.9	1.95
B18a	10	69.0	20.37	18.000	8.750	.420	.932	.585	.50	0	8 1/3*	1153.7	128.2	7.53	75.6	17.3	1.93
B18a	4	69.0	20.20	18.000	8.750	.420	.932	.585	.50	0	8 1/3*	1142.5	126.9	7.52	75.6	17.3	1.93
CB182 18X8 1/2	18	67.0	19.69	18.000	8.500	.406	.745	.745	.70	0	0	1117.1	124.1	7.53	76.4	18.0	1.97
B18a	10	64.5	18.97	17.880	8.730	.400	.872	.525	.50	0	8 1/3*	1059.7	118.5	7.47	68.4	15.7	1.90
B18a	4	64.5	18.79	17.880	8.730	.400	.872	.525	.50	0	8 1/3*	1048.5	117.3	7.47	68.4	15.7	1.91
CB182N19 18X8 3/4		64.0	18.83	17.870	8.715	.405	.683	.683	.60	0	0	1047.2	117.2	7.46	75.5	17.3	2.00
B18a 18X8 3/4	12	64.0	18.81	17.870	8.715	.405	.859	.513	.50	0	8 1/3*	1044.6	116.9	7.45	66.7	15.3	1.88
18WF B18a 18X8 3/4	14	64.0	18.80	17.870	8.715	.403	.686 [†]		.50	0	5.0	1045.8	117.0	7.46	70.3	16.1	1.93
18WF CB182 18X8 3/4	21	64.0	18.80	17.870	8.715	.403	.686	.686	.60	0	0	1045.8	117.0	7.46	70.3	16.1	1.93
18WF CB181 18X7 1/2	22	60.0	17.64	18.250	7.558	.416	.695	.695	.43	0	0	984.0	107.8	7.47	47.1	12.5	1.63
18WF B18 18X7 1/2	23	60.0	17.64	18.250	7.558	.416	.695 [†]		.40	0	5.0	984.0	107.8	7.47	47.1	12.5	1.63
B18a	9	59.0	17.48	17.750	8.710	.380	.807	.460	.50	0	8 1/3*	960.3	108.2	7.41	60.7	13.9	1.86
B18	3	59.0	17.40	18.000	7.675	.495	.753	.430	.40	0	9.0*	883.3	98.1	7.12	39.1	10.2	1.50
B18	1	58.5	17.29	18.000	7.470	.480	.837	.400	.41	0	12.5*	883.6	98.2	7.15	35.9	9.6*	1.44
CB181 18X7 1/2	18	58.0	17.05	18.252	7.573	.393	.676	.676	.50	0	0	960.8	105.3	7.51	49.0	13.0	1.70

†Average thickness

18" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

5	15	17	1, 2, 13, 14,
S12-1922	C1913	C1921	18, 19, 20, 21
S15-1924	C1915	C1923	See Page 58
7	16	24	3, 9, 10, 12
S16-1925	C1916	IL1914	See Page 59
S18-1926	C1917	IL1925	
	C1919		
	C1920		



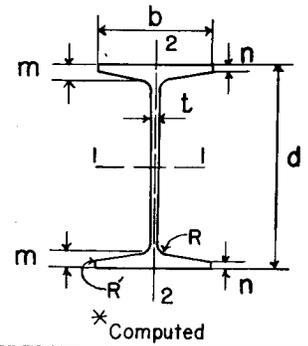
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B18 18X7 1/2	12	57.0	16.81	18.250	7.560	.380	.830	.530	.40	0	8 1/3	953.2	104.5	7.53	44.0	11.6	1.62
CB18IN 18X7 1/2	19	57.0	16.76	18.250	7.558	.378	.675	.675	.50	0	0	952.0	104.3	7.54	48.7	12.9	1.70
18WF B18 18X7 1/2	14	55.0	16.19	18.120	7.532	.390	.630 [†]		.40	0	5.0	889.9	98.2	7.41	42.0	11.1	1.61
18WF CB18I 18X7 1/2	21	55.0	16.19	18.120	7.532	.390	.630	.630	.43	0	0	889.9	98.2	7.41	42.0	11.1	1.61
B18	10	54.5	16.06	18.120	7.540	.370	.794	.495	.40	0	8 1/3*	896.1	98.9	7.47	41.1	10.9	1.60
B18	7	54.5	15.95	18.120	7.540	.370	.794	.495	.40	0	8 1/3*	888.5	98.1	7.46	41.1	10.9	1.60
B18	5	54.5	15.87	18.000	7.590	.410	.753	.430	.40	0	9.0*	842.0	93.6	7.28	37.7	9.9	1.54
B18	2	54.0	15.87	18.000	7.590	.410	.753	.430	.40	0	9.0*	842.0	93.6	7.28	37.7	9.9	1.54
B18	1	52.5	15.40	18.000	7.370	.375	.837	.400	.41	0	12.5*	832.9	92.5	7.35	34.4	9.3	1.49
B18	10	52.0	15.34	18.060	7.525	.355	.764	.465	.40	0	8 1/3*	851.7	94.3	7.45	38.7	10.3	1.59
CB18I 18X7 1/2	18	52.0	15.30	18.114	7.534	.354	.607	.607	.50	0	0	855.1	94.4	7.48	43.3	11.5	1.68
CB18IN 18X7 1/2	19	52.0	15.29	18.120	7.531	.351	.610	.610	.50	0	0	857.3	94.6	7.49	43.5	11.6	1.69
B18 18X7 1/2	12	52.0	15.29	18.120	7.530	.350	.765	.465	.40	0	8 1/3*	857.1	94.6	7.49	38.8	10.3	1.59
B18	3	52.0	15.24	18.000	7.555	.375	.753	.430	.40	0	9.0*	825.0	91.7	7.36	37.1	9.8	1.56
B18	7	52.0	15.22	18.060	7.525	.355	.764	.465	.40	0	8 1/3*	844.1	93.5	7.45	38.7	10.3	1.59
CB18I 18X7 1/2	18	51.0	15.00	18.024	7.555	.375	.562	.562	.50	0	0	810.0	89.9	7.35	40.5	10.7	1.64
18WF CB18I 18X7 1/2	21	50.0	14.71	18.000	7.500	.358	.570	.570	.43	0	0	800.6	89.0	7.38	37.2	9.9	1.59
18WF B18 18X7 1/2	14	50.0	14.71	18.000	7.500	.358	.570 [†]		.40	0	5.0	800.6	89.0	7.38	37.2	9.9	1.59
B18 18X7 1/2	12	49.0	14.47	18.060	7.510	.330	.735	.435	.40	0	8 1/3*	810.3	89.7	7.48	36.3	9.7	1.58
B18	10	49.0	14.44	18.000	7.500	.330	.734	.435	.40	0	8 1/3*	802.8	89.2	7.46	36.1	9.6	1.58
CB18IN 18X7 1/2	19	49.0	14.40	18.060	7.507	.327	.580	.580	.50	0	0	808.6	89.5	7.49	41.0	10.9	1.69
B18	7	49.0	14.32	18.000	7.500	.330	.734	.435	.40	0	8 1/3*	795.3	88.4	7.45	36.1	9.6	1.59
B18	5	49.0	14.25	18.000	7.500	.320	.753	.430	.40	0	9.0*	798.3	88.7	7.48	36.2	9.7	1.59
B18	2	48.5	14.25	18.000	7.500	.320	.753	.430	.40	0	9.0*	798.3	88.7	7.48	36.2	9.7	1.59
B18	1	48.5	14.23	18.000	7.300	.310	.837	.400	.41	0	12.5*	801.3	89.0	7.50	33.4	9.2	1.53
B64	17	48.2	14.09	18.000	7.500	.380	.664	.340	.34	0	9.0*	737.1	81.9	7.23	30.0	8.0	1.46
B64	16	48.0	14.08	18.000	7.500	.380	.664	.340	.34	0	9.0*	737.1	81.9	7.23	30.0	8.0	1.46
B18	9	47.0	13.90	17.940	7.495	.325	.704	.405	.40	0	8 1/3*	764.1	85.2	7.42	34.0	9.1	1.56
B18 18X7 1/2	12	47.0	13.84	18.000	7.500	.320	.705	.405	.40	0	8 1/3*	768.8	85.4	7.45	34.1	9.1	1.57
CB18IN 18X7 1/2	19	47.0	13.82	18.000	7.500	.320	.550	.550	.50	0	0	768.6	85.4	7.46	38.7	10.3	1.67
CB18I 18X7 1/2	18	47.0	13.82	18.000	7.500	.320	.550	.550	.50	0	0	768.6	85.4	7.46	38.7	10.3	1.67
18WF CB18I 18X7 1/2	20	47.0	13.81	17.900	7.492	.350	.520	.520	.43	0	0	736.4	82.3	7.30	33.5	9.0	1.56
18WF B18 18X7 1/2	13	47.0	13.81	17.900	7.492	.350	.520 [†]		.40	0	5.0	736.4	82.3	7.30	33.5	9.0	1.56
B34	15	46.0	13.53	18.000	6.000	.322	.900	.427	.50	0	16 2/3*	733.2	81.5	7.36	19.9	6.6	1.21
B23	24	46.0	13.34	18.000	6.000	.380	.730	.380	.38	0	12.5*	675.7	75.1	7.12	17.1	5.7	1.13

† Average thickness

16" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

2	3	5	9	10	10
S24-1927 S27-1928 S35-1930 4 S40-1931 7 C1927 C1930	B16a, B16 S24-1927 S27-1928 S35-1930 B16, 16X7 1/4 S40-1931 8 C1931 IL1932	B16b, 16X11 1/2 B16a, 16X8 1/2 B16, 16X7 S43-1933 S47-1934 16WF B16b, 16X11 1/2 16WF B16a, 16X8 1/2 16WF B16, 16X7 S51-1938 S53-1943	CB163, 16X11 1/2 CB162, 16X8 1/2 CB161, 16X7 C1933 C1934 IL1934 16WF CB163, 16X11 1/2 16WF CB162, 16X8 1/2 16WF CB161, 16X7 CIL1940	CB163, 16X11 1/2 CB162, 16X8 1/2 CB161, 16X7 C1933 C1934 IL1934	16WFCB163, 16X11 1/2 16WFCB162, 16X8 1/2 16WFCB161, 16X7 CIL1940 CIL1946 CIL1948 US1950



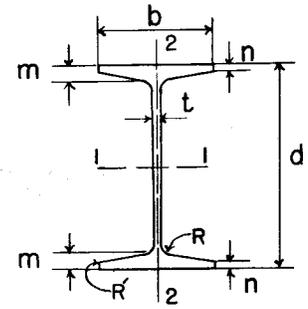
SECT. NO. OR NOM. SIZE	COL (1)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT Lb.	AREA Sq. In.				m	n	R	R'		I	S	r	I	S	r
		In.	In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB165 16X14	7	115.0	33.82	16.236	14.068	.532	.918	.918	.70	0	0	1665.6	205.2	7.02	426.2	60.6	3.55
16WF CB163 16X11 1/2	9	114.0	33.51	16.640	11.629	.631	1.035	1.035	.60	0	0	1642.6	197.4	7.00	254.6	43.8	2.76
16WF B16b 16X11 1/2	5	114.0	33.51	16.640	11.629	.631	1.035 [†]		.60	0	5.0	1642.6	197.4	7.00	254.6	43.8	2.76
CB165 16X14	7	107.0	31.46	16.110	14.032	.496	.855	.855	.70	0	0	1537.2	190.8	6.99	393.9	56.1	3.54
16WF CB163 16X11 1/2	9	105.0	30.87	16.480	11.582	.584	.955	.955	.60	0	0	1497.5	181.7	6.96	230.7	39.8	2.73
16WF B16b 16X11 1/2	5	105.0	30.87	16.480	11.582	.584	.955 [†]		.60	0	5.0	1497.5	181.7	6.96	230.7	39.8	2.73
CB165 16X14	7	100.0	29.41	16.000	14.000	.464	.800	.800	.70	0	0	1426.8	178.3	6.97	366.0	52.3	3.53
16WF CB163 16X11 1/2	10	96.0	28.22	16.320	11.533	.535	.875	.875	.60	0	0	1355.1	166.1	6.93	207.2	35.9	2.71
16WF B16b 16X11 1/2	6	96.0	28.22	16.320	11.533	.535	.875 [†]		.60	0	5.0	1355.1	166.1	6.93	207.2	35.9	2.71
G16 16X11 1/2	2	94.0	27.75	16.250	11.565	.485	1.116	.654	.60	0	8 1/3*	1341.4	165.1	6.95	199.9	34.6	2.68
G16 16X11 1/2	4	90.0	26.51	16.250	11.580	.490	1.056	.594	.60	0	8 1/3*	1274.1	156.8	6.93	185.1	32.0	2.64
CB164N 16X12	8	90.0	26.47	16.250	12.070	.480	.795	.795	.60	0	0	1285.5	158.2	6.97	233.2	38.6	2.97
CB164 16X12	7	90.0	26.46	16.240	12.076	.495	.783	.783	.65	0	0	1275.5	157.1	6.94	230.0	38.1	2.95
16WF CB163 16X11 1/2	10	88.0	25.87	16.160	11.502	.504	.795	.795	.60	0	0	1222.6	151.3	6.87	185.2	32.2	2.67
16WF B16b 16X11 1/2	6	88.0	25.87	16.160	11.502	.504	.795 [†]		.60	0	5.0	1222.6	151.3	6.87	185.2	32.2	2.67
G16 16X11 1/2	2	87.0	25.68	16.120	11.530	.450	1.051	.589	.60	0	8 1/3*	1230.8	152.7	6.92	181.3	31.5	2.66
CB164N 16X12	8	83.0	24.42	16.120	12.040	.450	.730	.730	.60	0	0	1172.3	145.4	6.93	212.5	35.3	2.95
CB164 16X12	7	83.0	24.41	16.120	12.039	.458	.723	.723	.65	0	0	1167.7	144.9	6.92	210.4	35.0	2.94
G16 16X11 1/2	4	83.0	24.36	16.120	11.540	.450	.991	.529	.60	0	8 1/3*	1161.6	144.1	6.90	166.4	28.8	2.61
G16 16X11 1/2	2	81.0	23.82	16.000	11.500	.420	.991	.529	.60	0	8 1/3*	1131.3	141.4	6.89	164.6	28.6	2.63
16WF B16a 16X8 1/2	6	78.0	22.92	16.320	8.586	.529	.875 [†]		.50	0	5.0	1042.6	127.8	6.74	87.5	20.4	1.95
16WF CB162 16X8 1/2	10	78.0	22.92	16.320	8.586	.529	.875	.875	.60	0	0	1042.6	127.8	6.74	87.5	20.4	1.95
CB164 16X12	7	76.0	22.34	16.000	12.000	.419	.663	.663	.65	0	0	1061.3	132.7	6.89	191.1	31.8	2.92
G16 16X11 1/2	4	76.0	22.34	16.000	11.500	.410	.931	.469	.60	0	8 1/3*	1058.6	132.3	6.88	149.3	26.0	2.59
CB164N 16X12	8	76.0	22.33	16.000	12.000	.410	.670	.670	.60	0	0	1065.5	133.2	6.91	193.1	32.2	2.94
G16 16X11 1/2	2	74.5	21.96	15.880	11.470	.390	.931	.469	.60	0	8 1/3*	1033.6	130.2	6.86	148.1	25.8	2.60

† Average thickness

16" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	6	6	2,3,4,7,8,10
B 1927	B 16b, 16X11 1/2 B 16a, 16X8 1/2 B 16, 16X7 S 43- 1933 S 47- 1934	16WFB16b, 16X11 1/2 16WFB16a, 16X8 1/2 16WFB16, 16X7 S 51- 1938 S 53- 1943 S 54- 1946 S 56- 1948	See Page 61



* Computed

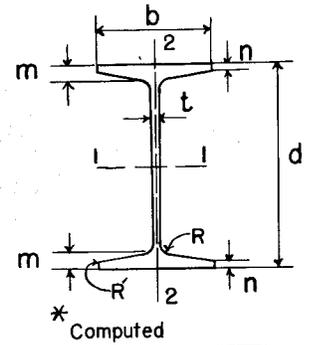
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B 16a	2	71.5	21.07	16.250	8.565	.455	1.001	.664	.50	0	8 1/3	973.5	119.8	6.80	79.0	18.4	1.94
16WF B 16a 16X8 1/2	6	71.0	20.86	16.160	8.543	.486	.795 [†]		.50	0	5.0	936.9	115.9	6.70	77.9	18.2	1.93
16WF CB 162 16X8 1/2	10	71.0	20.86	16.160	8.543	.486	.795	.795	.60	0	0	936.9	115.9	6.70	77.9	18.2	1.93
16WF CB 163 16X8 1/2	7	68.0	20.00	16.226	8.563	.438	.776	.776	.65	0	0	923.7	113.9	6.80	81.3	19.0	2.02
16WF B 16a 16X8 1/2	4	68.0	19.99	16.250	8.550	.435	.954	.616	.50	0	8 1/3	925.7	113.9	6.81	73.6	17.2	1.92
16WF CB 163N 16X8 1/2	8	68.0	19.99	16.230	8.510	.436	.785	.785	.60	0	0	924.4	113.9	6.80	80.8	19.0	2.01
B 16a	2	66.0	19.40	16.120	8.530	.420	.936	.599	.50	0	8 1/3	888.4	110.2	6.77	71.2	16.7	1.92
16WF B 16a 16X8 1/2	6	64.0	18.80	16.000	8.500	.443	.715 [†]		.50	0	5.0	833.8	104.2	6.66	68.4	16.1	1.91
16WF CB 162 16X8 1/2	10	64.0	18.80	16.000	8.500	.443	.715	.715	.60	0	0	833.8	104.2	6.66	68.4	16.1	1.91
16WF B 16a 16X8 1/2	4	63.0	18.55	16.120	8.530	.415	.889	.551	.50	0	8 1/3	845.9	105.0	6.75	66.3	15.5	1.89
16WF CB 163N 16X8 1/2	8	63.0	18.52	16.120	8.477	.403	.730	.730	.60	0	0	851.7	105.7	6.78	74.2	17.5	2.00
16WF CB 163 16X8 1/2	7	63.0	18.52	16.114	8.531	.406	.720	.720	.65	0	0	849.9	105.5	6.77	74.6	17.5	2.01
B 16a	2	60.5	17.89	16.000	8.500	.390	.876	.539	.50	0	8 1/3	812.1	101.5	6.74	64.3	15.1	1.90
16WF CB 163 16X8 1/2	7	58.0	17.06	16.000	8.500	.375	.663	.663	.65	0	0	776.6	97.1	6.75	68.0	16.0	2.00
16WF CB 163N 16X8 1/2	8	58.0	17.06	16.000	8.449	.375	.670	.670	.60	0	0	776.5	97.1	6.75	67.4	16.0	1.99
B 16a 16X8 1/2	4	58.0	17.05	16.000	8.500	.385	.829	.491	.50	0	8 1/3	769.7	96.2	6.72	59.4	14.0	1.87
16WF B 16a 16X8 1/2	6	58.0	17.04	15.860	8.464	.407	.645 [†]		.50	0	5.0	746.4	94.1	6.62	60.5	14.3	1.88
16WF CB 162 16X8 1/2	10	58.0	17.04	15.860	8.464	.407	.645	.645	.60	0	0	746.4	94.1	6.62	60.5	14.3	1.88
B 16a	2	56.5	16.63	15.880	8.485	.375	.816	.479	.50	0	8 1/3	742.3	93.5	6.68	57.8	13.6	1.86
B 16 16X7 1/4	3	50.0	14.78	16.250	7.320	.365	.773	.483	.40	0	8 1/3	669.0	82.3	6.73	36.6	10.0	1.57
B 16	1	50.0	14.72	16.120	7.290	.360	.780	.490	.40	0	8 1/3	658.7	81.7	6.69	36.6	10.0	1.58
16WF CB 162N 16X7 1/4	8	50.0	14.70	16.250	7.318	.360	.628	.628	.40	0	0	668.1	82.2	6.74	41.1	11.2	1.67
16WF CB 162 16X7	7	50.0	14.70	16.254	7.072	.362	.647	.647	.45	0	0	666.0	81.9	6.73	38.2	10.8	1.61
16WF CB 161 16X7	10	50.0	14.70	16.250	7.073	.380	.628	.628	.43	0	0	655.4	80.7	6.68	34.8	9.8	1.54
16WF B 16 16X7	6	50.0	14.70	16.250	7.073	.380	.628 [†]		.40	0	5.0	655.4	80.7	6.68	34.8	9.8	1.54

† Average thickness

16" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

II 2,3,4,7,8,10
 K1950 See Page 61
 K1952 1, 6
 See Page 62



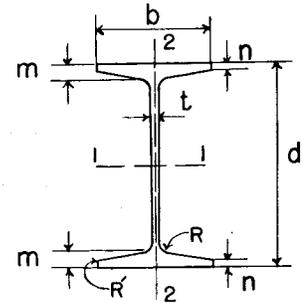
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
16WF 16X7	11	45.1	13.26	15.875	7.110	.417	.487 [†]		-	-	10.5	530.1	66.8	6.32	24.2	6.8	1.35
B16 16X7 1/4	3	45.0	13.26	16.120	7.285	.330	.708	.418	.40	0	8 1/3*	594.5	73.8	6.69	31.9	8.75	1.55
16WF B16 16X7	6	45.0	13.24	16.120	7.039	.346	.563 [†]		.40	0	5.0	583.3	72.4	6.64	30.5	8.70	1.52
16WF CB161 16X7	10	45.0	13.24	16.120	7.039	.346	.563	.563	.43	0	0	583.3	72.4	6.64	30.5	8.70	1.52
CB162N 16X7 1/4	8	45.0	13.23	16.120	7.286	.328	.563	.563	.40	0	0	594.6	73.8	6.70	36.3	10.0	1.66
CB162 16X7	7	45.0	13.23	16.128	7.036	.326	.584	.584	.45	0	0	595.0	73.8	6.71	34.0	9.7	1.60
B16 16X7	1	45.0	13.20	16.000	7.250	.320	.720	.430	.40	0	8 1/3*	588.6	73.6	6.68	32.2	8.88	1.56
CB162 16X7	7	43.0	12.65	15.934	7.085	.375	.487	.487	.45	0	0	523.8	65.7	6.44	28.9	8.2	1.51
B16 16X7 1/4	3	40.0	11.83	16.000	7.250	.295	.648	.358	.40	0	8 1/3*	526.2	65.8	6.67	27.6	7.61	1.53
CB162N 16X7 1/4	8	40.0	11.78	16.000	7.250	.292	.503	.503	.40	0	0	525.9	65.7	6.88	32.0	8.8	1.65
B16 16X7	1	40.0	11.78	15.880	7.215	.285	.660	.370	.40	0	8 1/3*	521.7	65.7	6.66	27.9	7.74	1.54
16WF B16 16X7	6	40.0	11.77	16.000	7.000	.307	.503 [†]		.40	0	5.0	515.5	64.4	6.62	26.5	7.6	1.50
16WF CB161 16X7	10	40.0	11.77	16.000	7.000	.307	.503	.503	.43	0	0	515.5	64.4	6.62	26.5	7.6	1.50
CB162 16X7	7	40.0	11.75	16.000	7.000	.290	.520	.520	.45	0	0	524.6	65.6	6.68	29.8	8.5	1.59
16WF 16X7	11	38.7	11.39	15.875	6.992	.299	.487 [†]		-	-	10.5	490.8	61.9	6.56	22.9	6.5	1.42
CB161 16X6	7	38.0	11.17	16.012	6.024	.314	.526	.526	.45	0	0	475.1	59.3	6.52	19.2	6.4	1.31
CB162N 16X7 1/4	8	37.0	10.88	15.880	7.248	.290	.443	.443	.40	0	0	470.0	59.2	6.57	28.1	7.8	1.61
B16 16X7 1/4	4	37.0	10.88	15.880	7.245	.290	.588	.298	.40	0	8 1/3*	469.2	59.1	6.57	23.7	6.55	1.48
16WF B16 16X7	6	36.0	10.59	15.850	6.992	.299	.428 [†]		.40	0	5.0	446.3	56.3	6.49	22.1	6.3	1.45
16WF CB161 16X7	10	36.0	10.59	15.850	6.992	.299	.428	.428	.43	0	0	446.3	56.3	6.49	22.1	6.3	1.45
B16 16X6	2	35.0	10.29	15.810	7.240	.285	.553	.263	.40	0	8 1/3*	435.8	55.1	6.51	21.4	5.92	1.44
CB161 16X6	7	35.0	10.29	15.930	6.000	.290	.485	.485	.45	0	0	435.5	54.7	6.50	17.5	5.8	1.30

† Average thickness

15" BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1	4	6	9
B1907	S12-1922	S16-1925	S40-1931
2	S15-1924	S18-1926	13
S3-1909	5	7	C1931
S4-1911	S12-1922	S24-1927	IL1932
3	S15-1924	S27-1928	
S3-1909	S16-1925	S35-1930	
S4-1911	S18-1926	8	
S12-1922		S27-1928	
S15-1924		S35-1930	

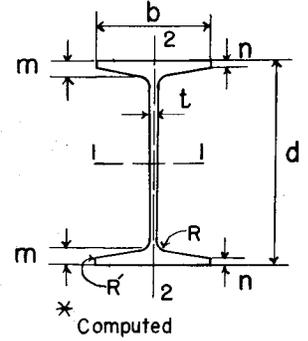


*Computed

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
G15b	8	147.0	43.30	15.120	11.780	.830	1.606	1.150	.90	0	8 1/3*	1685.4	222.9	6.24	347.5	59.0	2.83
G15b	5	147.0	42.73	15.120	11.780	.830	1.606	1.150	.90	0	8 1/3*	1666.2	220.4	6.24	347.3	59.0	2.85
G15b	8	141.0	41.44	15.000	11.750	.800	1.546	1.090	.90	0	8 1/3*	1596.8	212.9	6.21	328.5	55.9	2.82
G15b	5	141.0	40.86	15.000	11.750	.800	1.546	1.090	.90	0	8 1/3*	1577.7	210.4	6.21	328.3	55.9	2.83
G15b	1	140.0	41.28	15.000	11.750	.800	1.679	.995	.95	0	12.5*	1591.5	212.2	6.21	319.2	54.3*	2.78
G15b	2	140.0	41.27	15.000	11.750	.800	1.583	1.090	.95	0	9.0*	1592.7	212.4	6.21	331.0	56.3*	2.83
G15b	8	135.0	39.58	14.880	11.720	.770	1.486	1.030	.90	0	8 1/3*	1509.9	202.9	6.18	309.7	52.9	2.80
G15b	5	135.0	39.01	14.880	11.720	.770	1.486	1.030	.90	0	8 1/3*	1490.7	200.4	6.18	309.5	52.8	2.82
G15b	7	127.0	37.47	14.750	11.680	.730	1.421	.965	.90	0	8 1/3*	1415.6	191.9	6.15	289.1	49.5	2.78
G15a	8	111.0	32.75	15.120	11.290	.640	1.289	.845	.70	0	8 1/3*	1319.3	174.5	6.35	231.3	41.0	2.66
G15a	5	111.0	32.40	15.120	11.290	.640	1.289	.845	.70	0	8 1/3*	1306.3	172.8	6.35	231.2	41.0	2.67
CB153N13 15X11		108.0	31.77	15.320	11.097	.617	1.055	1.055	.55	0	0	1320.4	172.4	6.45	240.6	43.4	2.75
G15 15X11	9	108.0	31.75	15.320	11.095	.615	1.273	.837	.55	0	8 1/3*	1317.5	172.0	6.44	217.0	39.1	2.61
G15a	8	105.0	30.80	15.000	11.250	.600	1.229	.785	.70	0	8 1/3*	1231.3	164.2	6.32	214.4	38.1	2.64
G15a	5	105.0	30.45	15.000	11.250	.600	1.229	.785	.70	0	8 1/3*	1218.2	162.4	6.32	214.3	38.1	2.65
G15a	1	104.0	30.58	15.000	11.250	.600	1.346	.680	.75	0	12.5*	1219.7	162.6	6.32	203.3	36.1*	2.58
G15a	2	104.0	30.50	15.000	11.250	.600	1.249	.770	.75	0	9.0*	1220.1	162.7	6.32	213.0	37.9*	2.64
G15 15X11	9	99.0	29.14	15.160	11.040	.560	1.193	.757	.55	0	8 1/3*	1198.4	158.1	6.41	195.7	35.5	2.59
CB153N13 15X11		99.0	29.11	15.160	11.039	.559	.975	.975	.55	0	0	1200.4	158.4	6.42	218.8	39.6	2.74
G15a	8	99.0	29.00	14.880	11.220	.570	1.169	.725	.70	0	8 1/3*	1147.7	154.3	6.29	198.5	35.4	2.62
G15a	5	99.0	28.65	14.880	11.220	.570	1.169	.725	.70	0	8 1/3*	1134.7	152.5	6.29	198.4	35.4	2.63
G15a	7	94.0	27.66	14.800	11.190	.540	1.129	.685	.70	0	8 1/3*	1090.2	147.3	6.28	187.4	33.5	2.60
G15 15X11	9	91.0	26.77	15.000	11.000	.520	1.113	.677	.55	0	8 1/3*	1086.8	144.9	6.37	175.7	31.9	2.56
CB153N13 15X11		91.0	26.76	15.000	11.000	.520	.895	.895	.55	0	0	1089.1	145.2	6.38	198.7	36.1	2.73
G15 15X11	9	85.0	25.01	14.880	10.970	.490	1.053	.617	.55	0	8 1/3*	1004.9	135.1	6.34	161.0	29.3	2.54
CB153N13 15X11		85.0	24.99	14.880	10.970	.490	.835	.835	.55	0	0	1007.2	135.4	6.35	183.9	33.5	2.71
G15	8	80.5	23.66	15.120	10.790	.480	1.000	.570	.55	0	8 1/3*	977.4	129.3	6.43	143.1	26.5	2.46
G15	5	80.5	23.44	15.120	10.790	.480	1.000	.570	.55	0	8 1/3*	968.5	128.1	6.43	143.0	26.5	2.47
G15	8	74.0	21.76	15.000	10.750	.440	.940	.510	.55	0	8 1/3*	892.7	119.0	6.40	128.9	24.0	2.43
G15	5	74.0	21.55	15.000	10.750	.440	.940	.510	.55	0	8 1/3*	883.8	117.8	6.40	128.9	24.0	2.45
G15	1	73.0	21.52	15.000	10.500	.420	1.070	.440	.54	0	12.5*	886.5	118.2	6.42	116.6	22.2*	2.33
G15	2	73.0	21.49	15.000	10.500	.430	.974	.520	.55	0	9.0*	883.4	117.8	6.41	123.2	23.5*	2.39
B15b	1	72.0	21.27	15.000	7.150	.540	1.203	.790	.64	0	12.5*	797.9	106.4	6.13	55.1	15.4	1.61
B15a 15X7 1/2	9	72.0	21.20	15.310	7.585	.525	1.067	.773	.50	0	8 1/3*	837.2	109.4	6.28	62.1	16.4	1.71
CB152N13 15X7 1/2		72.0	21.18	15.310	7.580	.522	.920	.920	.55	0	0	838.2	109.5	6.29	67.0	17.7	1.78
B15b	4	71.5	20.95	15.000	7.500	.520	1.099	.785	.60	0	9.0*	796.2	106.2	6.16	61.3	16.3	1.71
B15b	8	71.5	21.04	15.000	7.500	.520	1.076	.785	.60	0	8 1/3*	799.5	106.6	6.16	60.9	16.2	1.70
B15b	6	71.5	20.79	15.000	7.500	.520	1.076	.785	.60	0	8 1/3*	789.4	105.3	6.16	60.8	16.2	1.71

15" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4
 1,2,3,4,5,6,7
 8,9,13
 See Page 64

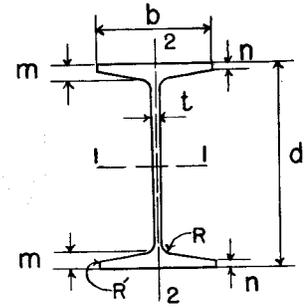


SECT. NO. OR NOM. SIZE	COL (1)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B15b	2	71.0	20.95	15.000	7.500	.520	1.099	.785	.60	0	9.0*	796.2	106.2	6.16	61.3	16.3*	1.71
G15	8	69.0	20.18	14.880	10.730	.420	.880	.450	.55	0	8 1/3*	815.3	109.6	6.36	115.8	21.6	2.40
G15	5	69.0	19.96	14.880	10.730	.420	.880	.450	.55	0	8 1/3*	806.4	108.4	6.36	115.8	21.6	2.41
CB152N13 15X7 1/2	13	66.0	19.41	15.160	7.538	.480	.845	.845	.55	0	0	760.0	100.3	6.26	60.5	16.0	1.77
B15a	9	66.0	19.38	15.160	7.540	.480	.992	.698	.50	0	8 1/3*	758.1	100.0	6.25	55.6	14.8	1.69
G15	7	64.5	19.09	14.820	10.700	.390	.850	.420	.55	0	8 1/3*	771.6	104.1	6.36	108.6	20.3*	2.39
B15a	1	64.0	18.85	15.000	7.200	.600	.953	.540	.50	0	12.5*	666.8	88.9	5.95	40.8	11.3*	1.47
B15a	3	64.0	18.81	15.000	7.195	.605	.887	.590	.50	0	9.0*	664.9	88.6	5.95	41.9	11.6*	1.49
CB152N13 15X7 1/2	13	60.0	17.63	15.000	7.500	.442	.765	.765	.55	0	0	680.7	90.8	6.21	53.9	14.4	1.75
B15a	9	60.0	17.58	15.000	7.500	.440	.912	.618	.50	0	8 1/3*	678.2	90.4	6.21	49.1	13.1	1.67
B15a	8	59.5	17.49	15.120	7.040	.450	.935	.660	.50	0	8 1/3*	676.2	89.4	6.22	42.8	12.2	1.56
B15a	6	59.5	17.32	15.120	7.040	.450	.935	.660	.50	0	8 1/3*	668.7	88.4	6.21	42.8	12.1	1.57
CB152N13 15X7 1/2	13	55.0	16.18	14.880	7.463	.405	.705	.705	.55	0	0	620.4	83.4	6.19	48.9	13.1	1.74
B15a	9	55.0	16.16	14.880	7.465	.405	.852	.558	.50	0	8 1/3*	618.4	83.1	6.19	44.2	11.8	1.65
B15a	8	54.5	16.05	15.000	7.000	.410	.875	.600	.50	0	8 1/3*	617.0	82.3	6.20	38.6	11.0	1.55
B15a	4	54.5	15.88	15.000	7.000	.410	.887	.590	.50	0	9.0*	610.0	81.3	6.20	38.3	10.9	1.55
B15a	6	54.5	15.87	15.000	7.000	.410	.875	.600	.50	0	8 1/3*	609.5	81.3	6.20	38.6	11.0	1.56
B15a	2	54.0	15.88	15.000	7.000	.410	.887	.590	.50	0	9.0*	610.0	81.3	6.20	38.3	10.9*	1.55
B15a	1	54.0	15.85	15.000	7.000	.400	.953	.540	.50	0	12.5*	610.5	81.4	6.21	37.2	10.6*	1.53
B15a	8	50.5	14.84	14.880	6.975	.385	.815	.540	.50	0	8 1/3*	563.3	75.7	6.16	34.7	9.96	1.53
B15a	6	50.5	14.66	14.880	6.975	.385	.815	.540	.50	0	8 1/3*	555.8	74.7	6.16	34.7	9.96	1.54
B15 15X6 3/4	9	49.0	14.43	15.250	6.835	.385	.789	.521	.40	0	8 1/3*	568.7	74.6	6.28	31.6	9.24	1.48
CB151N13 15X6 3/4	13	49.0	14.41	15.250	6.832	.382	.655	.655	.45	0	0	569.6	74.7	6.29	34.9	10.2	1.56
B15a	7	46.0	13.63	14.750	6.955	.365	.750	.475	.50	0	8 1/3*	508.2	68.9	6.11	30.8	8.85	1.50
B15	3	46.0	13.52	15.000	6.810	.440	.686	.400	.50	0	9.0*	484.8	64.6	5.99	25.2	7.40*	1.36
B15	1	46.0	13.46	15.000	6.810	.430	.749	.350	.38	0	12.5*	484.6	64.6	5.99	24.2	7.11*	1.34
B15 15X6 3/4	9	44.0	12.94	15.120	6.795	.345	.724	.456	.40	0	8 1/3*	505.9	66.9	6.25	27.6	8.12	1.46
CB151N13 15X6 3/4	13	44.0	12.93	15.120	6.793	.343	.590	.590	.45	0	0	507.1	67.1	6.26	30.9	9.1	1.55
B15	8	42.5	12.50	15.090	6.785	.325	.714	.445	.40	0	8 1/3*	492.0	65.2	6.27	26.9	7.93	1.47
B15	6	42.5	12.39	15.090	6.785	.325	.714	.445	.40	0	8 1/3*	486.8	64.5	6.27	26.9	7.92	1.47

15" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

10	12	1,2,3,4,5,6,7
C1913	C1921	8,9,13
C1915	C1923	See Page 64
11	14	
C1916	IL1914	
C1917	IL1925	
C1919		
C1920		



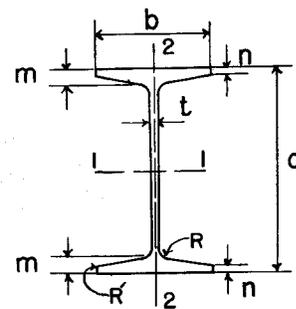
* Computed

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B 15	1	42.0	12.41	15.000	6.740	.360	.749	.350	.38	0	12.5*	464.9	62.0	6.12	23.4	6.94*	1.37
B 15	3	41.0	12.02	15.000	6.710	.340	.686	.400	.50	0	9.0*	456.7	60.9	6.16	24.0	7.15*	1.41
B 15	8	40.0	11.80	15.030	6.765	.305	.684	.415	.40	0	8 1/3*	463.3	61.6	6.27	25.1	7.42*	1.46
B 15	6	40.0	11.68	15.030	6.765	.305	.684	.415	.40	0	8 1/3*	458.1	61.0	6.26	25.1	7.41*	1.47
CB15IN 15X6 3/4	13	39.0	11.47	15.000	6.750	.300	.530	.530	.45	0	0	448.8	59.8	6.25	27.2	8.1	1.54
B 15 15X6 3/4	9	39.0	11.45	15.000	6.750	.300	.664	.396	.40	0	8 1/3*	447.0	59.6	6.25	23.9	7.09*	1.45
B 15	8	38.5	11.37	15.000	6.750	.290	.669	.400	.40	0	8 1/3*	447.6	59.7	6.27	24.1	7.15*	1.46
B 15	4	38.5	11.27	15.000	6.660	.290	.686	.400	.40	0	9.0*	442.6	59.0	6.27	23.4	7.03*	1.44
B 15	6	38.5	11.26	15.000	6.750	.290	.669	.400	.40	0	8 1/3*	442.4	59.0	6.27	24.1	7.15*	1.46
B 15	2	38.0	11.27	15.000	6.660	.290	.686	.400	.40	0	9.0*	442.6	59.0	6.27	23.4	7.03*	1.44
B 15	1	38.0	11.21	15.000	6.660	.280	.749	.350	.38	0	12.5*	442.4	59.0	6.28	22.5	6.76*	1.42
B65	11	37.5	10.91	15.000	6.750	.332	.602	.310	.30	0	9.0*	405.5	54.1	6.10	19.9	5.9	1.35
B65	12	37.3	10.91	15.000	6.750	.332	.602	.310	.30	0	9.0*	405.5	54.1	6.10	19.9	5.9	1.35
B35	10	36.0	10.63	15.000	5.500	.289	.805	.371	.45	0	16 2/3*	405.1	54.0	6.17	13.5	4.9	1.13
B 15	7	36.0	10.61	14.910	6.740	.280	.624	.355	.40	0	8 1/3*	410.9	55.1	6.22	21.7	6.45*	1.43
B 15	9	35.0	10.34	14.880	6.730	.280	.604	.336	.40	0	8 1/3*	396.3	53.3	6.19	20.6	6.13*	1.41
CB15IN 13	13	35.0	10.29	14.880	6.725	.275	.470	.470	.45	0	0	396.7	53.3	6.21	23.9	7.10*	1.52
B24	14	35.0	10.22	15.000	5.500	.330	.650	.330	.33	0	12.5*	367.9	49.0	6.00	11.6	4.20*	1.06

14" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

6	6	7	9	11	11
B 14d, 14X14 1/2 B 14c, 14X12 B 14b, 14X10 B 14a, 14X8 B 14, 14X6 3/4 S43-1933 S47-1934	14WFB14d, 14X14 1/2 14WFB14c, 14X12 14WFB14b, 14X10 14WFB14a, 14X8 14WFB14, 14X6 3/4 S51-1938 S53-1943 S54-1946 S56-1948	C1927 C1928 C1929 C1930 8 C1928 C1929 C1930	C1931 ILI932	CB145, 14X14 1/2 CB144, 14X12 CB143, 14X10 CB142, 14X8 CB141, 14X6 3/4 C1933 C1934 IL1934	14WFCB145, 14X14 1/2 14WFCB144, 14X12 14WFCB143, 14X10 14WFCB142, 14X8 14WFCB141, 14X6 3/4 CIL1940 CIL1946 CIL1948 US1950

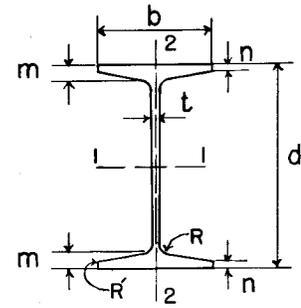


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2					
							d	b	t	m		n	R	R'	I	S	r	I	S	r
14WF CB145 14X14 1/2	11	136.0	39.98	14.750	14.740	.660	1.063	1.063	.60	0	0	1593.0	216.0	6.31	567.7	77.0	3.77			
14WF B14d 14X14 1/2	6	136.0	39.98	14.750	14.740	.660	1.063	1.063	.60	0	0	1593.0	216.0	6.31	567.7	77.0	3.77			
14WF CB145N 9 14X14 1/2	9	136.0	39.98	14.750	14.740	.662	1.063	1.063	.65	0	0	1592.3	215.9	6.31	567.7	77.0	3.77			
14WF CB146 7 14X15	7	135.0	39.70	14.452	15.239	.645	1.031	1.031	.65	0	0	1530.4	211.8	6.21	608.4	79.9	3.92			
14WF CB145N 9 14X14 1/2	9	127.0	37.33	14.620	14.690	.612	.998	.998	.65	0	0	1476.0	201.9	6.29	527.6	71.8	3.76			
14WF CB145 14X14 1/2	11	127.0	37.33	14.620	14.690	.610	.998	.998	.60	0	0	1476.7	202.0	6.29	527.6	71.8	3.76			
14WF B14d 14X14 1/2	6	127.0	37.33	14.620	14.690	.610	.998	.998	.60	0	0	1476.7	202.0	6.29	527.6	71.8	3.76			
14WF CB146 7 14X15	7	125.0	36.75	14.304	15.191	.597	.957	.957	.65	0	0	1402.1	196.0	6.18	559.4	73.7	3.90			
14WF CB145 14X14 1/2	11	119.0	34.99	14.500	14.650	.570	.938	.938	.60	0	0	1373.1	189.4	6.26	491.8	67.1	3.75			
14WF B14d 14X14 1/2	6	119.0	34.99	14.500	14.650	.570	.938	.938	.60	0	0	1373.1	189.4	6.26	491.8	67.1	3.75			
14WF CB145N 9 14X14 1/2	9	119.0	34.97	14.500	14.649	.571	.938	.938	.65	0	0	1372.2	189.3	6.26	491.7	67.1	3.75			
14WF CB146 7 14X15	7	115.0	33.82	14.154	15.145	.551	.882	.882	.65	0	0	1275.9	180.3	6.14	510.9	67.5	3.89			
14WF B14d 14X14 1/2	6	111.0	32.65	14.370	14.620	.540	.873	.873	.60	0	0	1266.5	176.3	6.23	454.9	62.2	3.73			
14WF CB145 14X14 1/2	11	111.0	32.65	14.370	14.620	.540	.873	.873	.60	0	0	1266.5	176.3	6.23	454.9	62.2	3.73			
14WF CB145N 9 14X14 1/2	9	111.0	32.62	14.370	14.618	.540	.873	.873	.65	0	0	1265.3	176.1	6.23	454.7	62.2	3.73			
14WF CB146 8 14X15	8	106.0	31.18	14.018	15.103	.509	.814	.814	.65	0	0	1164.1	166.1	6.11	467.6	61.9	3.87			
14WF CB145 7 14X12	7	105.0	30.88	14.370	12.101	.536	.990	.990	.65	0	0	1169.6	162.8	6.15	292.6	48.4	3.08			
14WF CB145N 9 14X14 1/2	9	103.0	30.27	14.250	14.576	.498	.813	.813	.65	0	0	1165.4	163.6	6.20	419.8	57.6	3.72			
14WF CB145 14X14 1/2	11	103.0	30.26	14.250	14.575	.495	.813	.813	.60	0	0	1165.8	163.6	6.21	419.7	57.6	3.72			
14WF B14d 14X14 1/2	6	103.0	30.26	14.250	14.575	.495	.813	.813	.60	0	0	1165.8	163.6	6.21	419.7	57.6	3.72			
14WF CB146 8 14X15	8	96.0	28.23	13.866	15.056	.462	.738	.738	.65	0	0	1042.1	150.3	6.08	419.9	55.8	3.86			

14" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

6,7,8,9,11
See Page 67

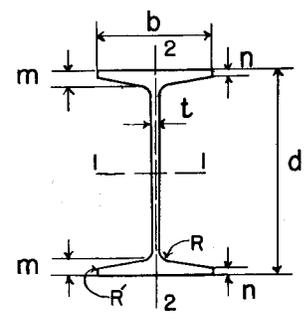


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
14WF 11 CB 145 14X14 1/2		95.0	27.94	14.120	14.545	.465	.748	.748	.60	0	0	1063.5	150.6	6.17	383.7	52.8	3.71
14WF 6 B 14d 14X14 1/2		95.0	27.94	14.120	14.545	.465	.748	.748	.60	0	0	1063.5	150.6	6.17	383.7	52.8	3.71
CB 145 7 14X12		95.0	27.93	14.186	12.050	.485	.898	.898	.65	0	0	1044.0	147.2	6.11	262.0	43.5	3.06
CB 145N 9 14X14 1/2		95.0	27.92	14.120	14.544	.466	.748	.748	.65	0	0	1062.5	150.5	6.17	383.7	52.8	3.71
CB 145N 9 14X14 1/2		87.0	25.56	14.000	14.500	.422	.688	.688	.65	0	0	966.2	138.0	6.15	349.7	48.2	3.70
14WF 6 B 14d 14X14 1/2		87.0	25.56	14.000	14.500	.420	.688	.688	.60	0	0	966.9	138.1	6.15	349.7	48.2	3.70
14WF 11 CB 145 14X14 1/2		87.0	25.56	14.000	14.500	.420	.688	.688	.60	0	0	966.9	138.1	6.15	349.7	48.2	3.70
CB 146 8 14X15		86.0	25.28	13.714	15.008	.414	.662	.662	.65	0	0	923.0	134.6	6.04	373.1	49.7	3.84
CB 145 7 14X12		85.0	24.99	14.000	12.000	.435	.805	.805	.65	0	0	921.3	131.6	6.07	232.0	38.7	3.05
14WF 11 CB 144 14X12		84.0	24.71	14.180	12.023	.451	.778	.778	.60	0	0	928.4	130.9	6.13	225.5	37.5	3.02
14WF 6 B 14c 14X12		84.0	24.71	14.180	12.023	.451	.778	.778	.60	0	0	928.4	130.9	6.13	225.5	37.5	3.02
CB 144N 9 14X12		84.0	24.68	14.180	12.021	.451	.778	.778	.65	0	0	927.2	130.8	6.13	225.4	37.5	3.02
CB 144N 9 14X12		78.0	22.94	14.060	12.000	.430	.718	.718	.65	0	0	850.5	121.0	6.09	206.9	34.5	3.00
14WF 11 CB 144 14X12		78.0	22.94	14.060	12.000	.428	.718	.718	.60	0	0	851.2	121.1	6.09	206.9	34.5	3.00
14WF 6 B 14c 14X12		78.0	22.94	14.060	12.000	.428	.718	.718	.60	0	0	851.2	121.1	6.09	206.9	34.5	3.00
CB 144 7 14X10		75.0	22.05	14.382	10.086	.468	.786	.786	.55	0	0	823.5	114.5	6.11	134.5	26.7	2.47
14WF 11 CB 143 14X10		74.0	21.76	14.190	10.072	.450	.783	.783	.60	0	0	796.8	112.3	6.05	133.5	26.5	2.48
14WF 6 B 14b 14X10		74.0	21.76	14.190	10.072	.450	.783	.783	.60	0	0	796.8	112.3	6.05	133.5	26.5	2.48
CB 143N 9 14X10		74.0	21.75	14.190	10.071	.451	.783	.783	.65	0	0	795.9	112.2	6.05	133.4	26.5	2.48
CB 143N 9 14X10		68.0	20.00	14.060	10.040	.420	.718	.718	.65	0	0	723.4	102.9	6.01	121.2	24.1	2.46
14WF 11 CB 143 14X10		68.0	20.00	14.060	10.040	.418	.718	.718	.60	0	0	724.1	103.0	6.02	121.2	24.1	2.46
14WF 6 B 14b 14X10		68.0	20.00	14.060	10.040	.418	.718	.718	.60	0	0	724.1	103.0	6.02	121.2	24.1	2.46
CB 144 7 14X10		68.0	19.99	14.238	10.043	.425	.714	.714	.55	0	0	738.8	103.8	6.08	120.6	24.0	2.46

14" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

5 B14a, 14X8 B14, 14X6¾ S43- 1933 S47- 1934 14WF B14a, 14X8 14WF B14, 14X6¾ S51- 1938 S53- 1943	10 CB142, 14X8 CB141, 14X6¾ C 1933 C 1934 IL 1934 14WF CB142, 14X8 14WF CB141, 14X6¾ CIL 1940	6, 7, 9, 11 See Page 67
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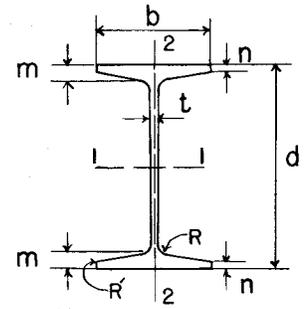


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
CB 144	7	61.0	17.94	14.094	10.000	.382	.642	.642	.55	0	0	656.2	93.1	6.05	107.1	21.4	2.44
CB 143N	9	61.0	17.94	13.910	10.000	.380	.643	.643	.65	0	0	640.8	92.1	5.98	107.3	21.5	2.45
14WF CB 143	11	61.0	17.94	13.910	10.000	.378	.643	.643	.60	0	0	641.5	92.2	5.98	107.3	21.5	2.45
14WF B14b	6	61.0	17.94	13.910	10.000	.378	.643	.643	.60	0	0	641.5	92.2	5.98	107.3	21.5	2.45
CB 143	7	58.0	17.05	14.242	8.070	.413	.716	.716	.55	0	0	609.4	85.6	5.98	62.8	15.6	1.92
14WF CB 142	10	58.0	17.06	14.060	8.098	.406	.718	.718	.60	0	0	597.9	85.0	5.92	63.7	15.7	1.93
14WF B14a	5	58.0	17.06	14.060	8.098	.406	.718	.718	.60	0	0	597.9	85.0	5.92	63.7	15.7	1.93
CB 142N	9	58.0	17.03	14.060	8.096	.406	.718	.718	.65	0	0	596.7	84.9	5.92	63.6	15.7	1.93
CB 143	7	53.0	15.59	14.122	8.035	.378	.656	.656	.55	0	0	552.5	78.2	5.95	56.8	14.1	1.91
14WF CB 142	11	53.0	15.59	13.940	8.062	.370	.658	.658	.60	0	0	542.1	77.8	5.90	57.5	14.3	1.92
14WF B14a	6	53.0	15.59	13.940	8.062	.370	.658	.658	.60	0	0	542.1	77.8	5.90	57.5	14.3	1.92
CB 142N	9	53.0	15.56	13.940	8.060	.370	.658	.658	.65	0	0	541.1	77.6	5.90	57.5	14.3	1.92
CB 143	7	48.0	14.12	14.000	8.000	.343	.595	.595	.55	0	0	496.0	70.9	5.93	50.8	12.7	1.90
14WF CB 142	11	48.0	14.11	13.810	8.031	.339	.593	.593	.60	0	0	484.9	70.2	5.86	51.3	12.8	1.91
14WF B14a	6	48.0	14.11	13.810	8.031	.339	.593	.593	.60	0	0	484.9	70.2	5.86	51.3	12.8	1.91
CB 142N	9	48.0	14.10	13.810	8.030	.340	.593	.593	.65	0	0	484.0	70.1	5.86	51.2	12.8	1.91
14WF CB 142	11	43.0	12.65	13.680	8.000	.308	.528	.528	.60	0	0	429.0	62.7	5.82	45.1	11.3	1.89
14WF B14a	6	43.0	12.65	13.680	8.000	.308	.528	.528	.60	0	0	429.0	62.7	5.82	45.1	11.3	1.89
CB 142N	9	43.0	12.64	13.680	8.000	.310	.528	.528	.65	0	0	428.3	62.6	5.82	45.1	11.3	1.89

14" BEAMS

REFERENCES, SEE COLUMN (1) AND PAGE 4

1	3	5, 10	12
B1927	S24-1927	See Page 69	K 1950
2	S27-1928	6, 7, 9, 11	K 1952
S24-1927	S35-1930	See Page 67	
S27-1928	S40-1931		
S35-1930	4		
	S40-1931		



* Computed

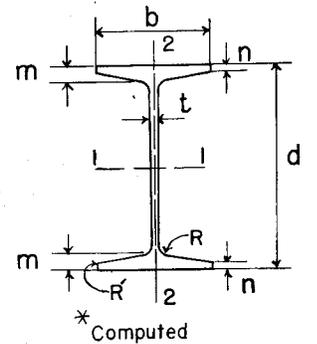
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B14	2	42.0	12.46	14.250	6.825	.340	.713	.443	.40	0	8 1/3*	436.5	61.3	5.92	27.3	8.0	1.48
B14	1	42.0	12.40	14.120	6.790	.340	.715	.445	.40	0	8 1/3*	426.8	60.5	5.87	27.0	7.94	1.48
B14	4	42.0	12.38	14.250	6.820	.335	.713	.443	.40	0	8 1/3*	435.3	61.1	5.93	27.2	7.98	1.48
CB141N	9	42.0	12.35	14.250	6.818	.333	.578	.578	.40	0	0	435.3	61.1	5.94	30.6	9.0	1.57
CB142	7	42.0	12.35	14.240	6.822	.342	.569	.569	.40	0	0	431.5	60.6	5.91	30.2	8.8	1.56
14WF	10	42.0	12.34	14.240	6.801	.338	.573	.573	.43	0	0	432.2	60.7	5.92	28.1	8.3	1.51
CB141	10	42.0	12.34	14.240	6.801	.338	.573	.573	.43	0	0	432.2	60.7	5.92	28.1	8.3	1.51
14WF	5	42.0	12.34	14.240	6.801	.338	.573	.573	.40	0	5.0	432.2	60.7	5.92	28.1	8.3	1.51
CB142	7	39.0	11.47	14.160	6.798	.318	.529	.529	.40	0	0	398.3	56.3	5.89	27.7	8.2	1.56
14WF	12	38.1	11.18	13.875	6.852	.389	.440	.440	-	-	10.5	346.7	49.9	5.57	19.2	5.6	1.31
CB142	7	38.0	11.18	14.000	6.855	.375	.449	.449	.40	0	0	357.5	51.1	5.66	24.2	7.1	1.47
14WF	11	38.0	11.17	14.120	6.776	.313	.513	.513	.43	0	0	385.3	54.6	5.87	24.6	7.3	1.49
CB141	11	38.0	11.17	14.120	6.776	.313	.513	.513	.43	0	0	385.3	54.6	5.87	24.6	7.3	1.49
14WF	6	38.0	11.17	14.120	6.776	.313	.513	.513	.40	0	5.0	385.3	54.6	5.87	24.6	7.3	1.49
B14	2	37.5	11.07	14.120	6.790	.305	.648	.378	.40	0	8 1/3*	383.7	54.3	5.89	23.4	6.91	1.46
B14	1	37.5	11.02	14.000	6.750	.300	.655	.385	.40	0	8 1/3*	377.4	53.9	5.85	23.4	6.93	1.46
B14	4	37.0	10.93	14.120	6.780	.295	.648	.378	.40	0	8 1/3*	381.3	54.0	5.91	23.3	6.88	1.46
CB141N	9	37.0	10.87	14.120	6.776	.291	.513	.513	.40	0	0	380.9	53.9	5.92	26.6	7.9	1.57
CB142	7	36.0	10.58	14.080	6.774	.294	.489	.489	.40	0	0	365.6	51.9	5.88	25.4	7.5	1.55
14WF	11	34.0	10.00	14.000	6.750	.287	.453	.453	.43	0	0	339.2	48.5	5.83	21.3	6.3	1.46
CB141	11	34.0	10.00	14.000	6.750	.287	.453	.453	.43	0	0	339.2	48.5	5.83	21.3	6.3	1.46
14WF	6	34.0	10.00	14.000	6.750	.287	.453	.453	.40	0	5.0	339.2	48.5	5.83	21.3	6.3	1.46
B14	1	33.0	9.73	13.880	6.715	.265	.595	.325	.40	0	8 1/3*	330.3	47.6	5.83	20.0	5.95	1.43
CB142	7	33.0	9.71	14.000	6.750	.270	.449	.449	.40	0	0	333.4	47.6	5.86	23.0	6.8	1.54
B14	3	33.0	9.70	14.000	6.750	.265	.588	.318	.40	0	8 1/3*	334.3	47.8	5.87	19.9	5.9	1.43
CB141N	9	33.0	9.69	14.000	6.750	.265	.453	.453	.40	0	0	334.7	47.8	5.88	23.2	6.9	1.55
14WF	12	32.4	9.53	13.875	6.733	.270	.440	.440	-	-	10.5	320.2	46.1	5.79	18.1	5.4	1.38
B14	3	30.0	8.89	13.880	6.750	.265	.528	.258	.40	0	8 1/3*	294.9	42.5	5.76	16.8	4.99	1.38
CB141	7	30.0	8.82	13.964	6.000	.270	.431	.431	.40	0	0	292.0	41.8	5.75	15.5	5.2	1.33
CB141N	9	30.0	8.81	13.880	6.745	.260	.393	.393	.40	0	0	294.3	42.4	5.78	20.1	6.0	1.51
14WF	11	30.0	8.81	13.860	6.733	.270	.383	.383	.43	0	0	289.6	41.8	5.73	17.5	5.2	1.41
CB141	11	30.0	8.81	13.860	6.733	.270	.383	.383	.43	0	0	289.6	41.8	5.73	17.5	5.2	1.41
14WF	6	30.0	8.81	13.860	6.733	.270	.383	.383	.40	0	5.0	289.6	41.8	5.73	17.5	5.2	1.41

† Average thickness

12" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

I B1907 2 S3-1909 S4-1911 4 S12-1922 S15-1924 S16-1925 S18-1926	II B12C, 12X12 B12B, 12X10 B12a, 12X8 B12, 12X6 1/2 S43-1933 S47-1934 7 S27-1928 S35-1930	II 12WFB12C, 12X12 12WFB12b, 12X10 12WFB12a, 12X8 12WFB12, 12X6 1/2 S51-1938 S54-1946 S56-1948 16 C1927	18 CB124C CB124B CB123B C1928 C1929 CB124C, 12X12 CB124B, 12X12 CB123B, 12X9 C1930	21 CB124, 12X12 CB123, 12X10 CB122, 12X8 CB121, 12X6 1/2 C1933 C1934 IL1934 19 C1931 IL1932	21 12WFCB124, 12X12 12WFCB123, 12X10 12WFCB122, 12X8 12WFCB121, 12X6 1/2 CIL1940 CIL1946 US 1950
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SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							in.	in.	in.	in.		In ⁴	In ³	In.	In ⁴	In ³	In.
CB125N19 12X12		85.0	24.98	12.500	12.106	.501	.796	.796	.60	0	0	722.0	115.5	5.38	235.5	38.9	3.07
12WF CB124 12X12	21	85.0	24.98	12.500	12.105	.495	.796	.796	.60	0	0	723.3	115.7	5.38	235.5	38.9	3.07
12WF B12c 12X12	11	85.0	24.98	12.500	12.105	.495	.796	.796	.60	0	0	723.3	115.7	5.38	235.5	38.9	3.07
CB124 16		83.0	24.41	12.000	10.196	.704	.830	.830	.55	0	0	598.9	99.8	4.95	147.0	28.8	2.45
CB124C18 12X12		82.0	24.11	12.000	12.000	.453	.800	.800	.55	0	0	650.8	108.5	5.20	230.5	38.4	3.09
CB125N19 12X12		79.0	23.22	12.380	12.081	.476	.736	.736	.60	0	0	661.9	106.9	5.34	216.4	35.8	3.05
12WF CB124 12X12	21	79.0	23.22	12.380	12.080	.470	.736	.736	.60	0	0	663.0	107.1	5.34	216.4	35.8	3.05
12WF B14c 12X12	11	79.0	23.22	12.380	12.080	.470	.736	.736	.60	0	0	663.0	107.1	5.34	216.4	35.8	3.05
G12a 7		76.5	22.50	12.120	10.290	.510	1.027	.620	.55	0	8 1/3*	594.2	98.1	5.14	132.1	25.7	2.42
G12a 4		76.5	22.29	12.120	10.290	.510	1.027	.620	.55	0	8 1/3*	589.0	97.2	5.14	132.1	25.7	2.43
CB124B18 12X12		76.0	22.35	12.000	12.270	.670	.608	.608	.55	0	0	560.2	93.4	5.01	187.5	30.6	2.90
CB124 16		75.0	22.05	12.000	10.000	.508	.830	.830	.55	0	0	570.7	95.1	5.09	138.5	27.7	2.51
12WF CB124 12X12	21	72.0	21.16	12.250	12.040	.430	.671	.671	.60	0	0	597.4	97.5	5.31	195.3	32.4	3.04
12WF B12c 12X12	11	72.0	21.16	12.250	12.040	.430	.671	.671	.60	0	0	597.4	97.5	5.31	195.3	32.4	3.04
CB125N19 12X12		72.0	21.15	12.250	12.041	.436	.671	.671	.60	0	0	596.2	97.3	5.31	195.3	32.4	3.04
G12a 7		70.5	20.79	12.000	12.250	.470	.967	.560	.55	0	8 1/3*	543.6	90.6	5.11	119.7	23.4	2.40
G12a 4		70.5	20.57	12.000	10.250	.470	.967	.560	.55	0	8 1/3*	538.4	89.7	5.12	119.7	23.4	2.41
G12a 1		70.0	20.60	12.000	10.000	.445	1.097	.500	.55	0	12.5*	540.9	90.2	5.12	109.5	21.9*	2.31
CB124B18 12X12		70.0	20.58	12.000	12.123	.523	.608	.608	.55	0	0	539.0	89.8	5.12	180.7	29.8	2.96
G12a 2		70.0	20.58	12.000	10.000	.460	1.004	.575	.55	0	9.0*	538.8	89.8	5.12	114.7	22.9*	2.36
CB123B18 12X9		66.0	19.41	12.260	9.073	.448	.795	.795	.55	0	0	525.7	85.8	5.20	99.1	21.8	2.26
G12a 7		66.0	19.32	11.880	10.230	.450	.907	.500	.55	0	8 1/3*	496.9	83.7	5.07	108.3	21.2	2.37
G12a 4		66.0	19.11	11.880	10.230	.450	.907	.500	.55	0	8 1/3*	491.7	82.8	5.07	108.3	21.2	2.38
12WF CB124 12X12	21	65.0	19.11	12.120	12.000	.390	.606	.606	.60	0	0	533.4	88.0	5.28	174.6	29.1	3.02
12WF B12c 12X12	11	65.0	19.11	12.120	12.000	.390	.606	.606	.60	0	0	533.4	88.0	5.28	174.6	29.1	3.02
CB124B18 12X12		65.0	19.11	12.000	12.000	.400	.608	.608	.55	0	0	521.3	86.9	5.22	175.2	29.2	3.03
CB125N19 12X12		65.0	19.09	12.120	12.000	.395	.606	.606	.60	0	0	532.0	87.8	5.28	174.6	29.1	3.02

12" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1, 2, 4, 7, 11,
18, 19, 21
See Page 71
9
S40-1931

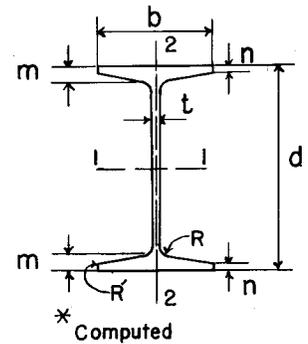
10
B12C, 12X12
B12b, 12X10
B12a, 12X8
B12, 12X6 1/2
S43- 1933
S47- 1934

10
12WFB12C, 12X12
12WFB12b, 12X10
12WFB12a, 12X8
12WFB12, 12X 6 1/2
S51- 1938

17
CB123
CB122
CB121
C1927
CB123, 12X8
CB122, 12X6 1/2
CB121, 12X6
C1930

20
CB124, 12X12
CB123, 12X10
CB122, 12X8
CB121, 12X 6 1/2
C1933
C1934
IL1934

20
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12WFCB123, 12X10
12WFCB122, 12X8
12WFCB121, 12X6 1/2
CIL1940

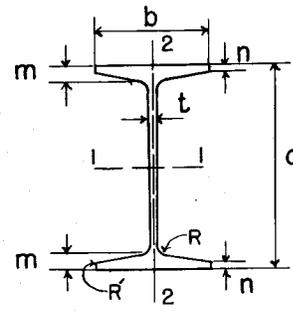


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT	AREA				m	n	R	R'		I	S	r	I	S	r
		Lb.	Sq.In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
12WF CB123 12X10	20	64.0	18.83	12.310	10.060	.405	.701	.701	.60	0	0	528.3	85.8	5.29	119.0	23.7	2.51
12WF B12b 12X10	10	64.0	18.83	12.310	10.060	.405	.701	.701	.60	0	0	528.3	85.8	5.29	119.0	23.7	2.51
CB124N 12X10	19	64.0	18.81	12.310	10.060	.409	.701	.701	.60	0	0	527.5	85.7	5.30	119.0	23.7	2.52
G12	7	61.0	17.92	12.120	10.030	.410	.866	.465	.45	0	8 1/3*	483.6	79.8	5.20	95.9	19.1	2.31
G12	4	61.0	17.77	12.120	10.030	.410	.866	.465	.45	0	8 1/3*	479.9	79.2	5.20	95.8	19.1	2.32
CB123B 12X9	18	60.0	17.65	12.118	9.034	.409	.724	.724	.55	0	0	472.0	77.9	5.17	89.0	19.7	2.25
G12 12X10	9	60.0	17.62	12.120	10.020	.390	.863	.461	.45	0	8 1/3*	479.1	79.1	5.21	94.9	18.9	2.32
12WF B12b 12X10	11	58.0	17.06	12.190	10.014	.359	.641	.641	.60	0	0	476.1	78.1	5.28	107.4	21.4	2.51
12WF CB123 12X10	21	58.0	17.06	12.190	10.014	.359	.641	.641	.60	0	0	476.1	78.1	5.28	107.4	21.4	2.51
CB124N 12X10	19	58.0	17.04	12.190	10.014	.363	.641	.641	.60	0	0	475.3	78.0	5.28	107.4	21.4	2.51
G12	7	55.5	16.35	12.000	10.000	.380	.806	.405	.45	0	8 1/3*	435.6	72.6	5.16	84.9	17.0	2.28
G12	4	55.5	16.21	12.000	10.000	.380	.806	.405	.45	0	8 1/3*	431.8	72.0	5.16	84.9	17.0	2.29
G12 12X10	9	55.0	16.18	12.000	10.000	.370	.803	.401	.45	0	8 1/3*	432.5	72.1	5.17	84.3	16.9	2.28
G12	2	55.0	16.18	12.000	9.750	.370	.837	.415	.45	0	9.0*	432.	72.0	5.17	81.1	16.6*	2.24
CB123B 12X9	18	55.0	16.17	12.000	9.000	.375	.665	.665	.55	0	0	428.4	71.4	5.15	80.9	18.0	2.24
G12	1	55.0	16.12	12.000	9.750	.350	.928	.340	.45	0	12.5*	432.0	72.0	5.18	76.1	15.6*	2.17
12WF B12b 12X10	11	53.0	15.59	12.060	10.000	.345	.576	.576	.60	0	0	426.2	70.7	5.23	96.1	19.2	2.48
12WF CB123 12X10	21	53.0	15.59	12.060	10.000	.345	.576	.576	.60	0	0	426.2	70.7	5.23	96.1	19.2	2.48
CB124N 12X10	19	53.0	15.57	12.060	10.000	.349	.576	.576	.60	0	0	425.4	70.5	5.23	96.1	19.2	2.48
G12	7	51.5	15.21	11.910	9.980	.360	.761	.360	.45	0	8 1/3*	400.6	67.3	5.13	76.9	15.4	2.25
G12	4	51.5	15.07	11.910	9.980	.360	.761	.360	.45	0	8 1/3*	396.9	66.6	5.13	76.9	15.4	2.26
12WF B12a 12X8	11	50.0	14.71	12.190	8.077	.371	.641	.641	.60	0	0	394.5	64.7	5.18	56.4	14.0	1.96
12WF CB122 12X8	21	50.0	14.71	12.190	8.077	.371	.641	.641	.60	0	0	394.5	64.7	5.18	56.4	14.0	1.96
CB123 12X8	17	50.0	14.69	12.258	8.071	.361	.655	.655	.50	0	0	400.5	65.4	5.22	57.5	14.2	1.98
CB123N 12X8	19	50.0	14.69	12.190	8.077	.375	.641	.641	.60	0	0	393.0	64.5	5.17	56.4	14.0	1.96
B12a	7	48.5	14.28	12.250	6.815	.395	.860	.593	.40	0	8 1/3*	373.2	60.9	5.11	35.1	10.29	1.57

12" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

3	6	1,7,11,19,21
S3-1909	S24-1927	See Page 71
S4-1911	8	9,10,17,20
S12-1922	B 12	See Page 72
S15-1924	S27-1928	
5	S35-1930	24
S16-1925	B12, 12X6 1/2	K 1950
S18-1926	S40-1931	K 1952



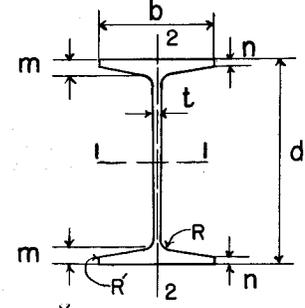
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
12WF 11 B12a 12X8		45.0	13.24	12.060	8.042	.336	.576	.576	.60	0	0	350.8	58.2	5.15	50.0	12.4	1.94
12WF 21 CB122 12X8		45.0	13.24	12.060	8.042	.336	.576	.576	.60	0	0	350.8	58.2	5.15	50.0	12.4	1.94
CB123 17 12X8		45.0	13.23	12.130	8.036	.326	.591	.591	.50	0	0	356.9	58.8	5.19	51.2	12.7	1.97
CB123N 19 12X8		45.0	13.21	12.060	8.042	.340	.576	.576	.60	0	0	349.3	57.9	5.14	50.0	12.4	1.95
B12a 6		44.5	13.10	12.250	6.445	.375	.818	.565	.40	0	8 1/3*	340.9	55.7	5.10	28.3	8.77	1.47
B12a 7		44.0	12.97	12.120	6.780	.360	.795	.528	.40	0	8 1/3*	335.1	55.3	5.08	31.1	9.18	1.55
B12a 6		40.0	11.84	12.120	6.410	.340	.753	.500	.40	0	8 1/3*	304.6	50.3	5.07	24.9	7.78	1.45
B12a 7		40.0	11.80	12.000	6.750	.330	.735	.468	.35	0	8 1/3*	301.2	50.2	5.05	27.6	8.18	1.53
12WF 11 B12a 12X8		40.0	11.77	11.940	8.000	.294	.516	.516	.60	0	0	310.1	51.9	5.13	44.1	11.0	1.94
12WF 21 CB122 12X8		40.0	11.77	11.940	8.000	.294	.516	.516	.60	0	0	310.1	51.9	5.13	44.1	11.0	1.94
CB123 17 12X8		40.0	11.76	12.000	8.000	.290	.526	.526	.50	0	0	313.7	52.3	5.17	44.9	11.2	1.95
CB123N 19 12X8		40.0	11.75	11.940	8.000	.298	.516	.516	.60	0	0	308.6	51.7	5.13	44.1	11.0	1.94
B12a 5		36.5	10.60	12.000	6.380	.310	.693	.440	.40	0	8 1/3*	269.2	44.9	5.04	21.9	6.88	1.44
B12a 1		36.0	10.63	12.000	6.300	.310	.764	.390	.41	0	12.5*	270.2	45.0	5.04	20.4	6.48*	1.38
B12a 3		36.0	10.61	12.000	6.300	.310	.710	.440	.40	0	9.0*	269.2	44.9	5.04	21.3	6.76*	1.42
CB122 17 12X6 1/2		36.0	10.59	12.236	6.568	.308	.538	.538	.35	0	0	280.1	45.8	5.14	25.4	7.7	1.55
12WF 11 B12 12X6 1/2		36.0	10.59	12.240	6.565	.305	.540 [†]		.35	0	5.0	280.8	45.9	5.15	23.7	7.2	1.50
12WF 21 CB121 12X6 1/2		36.0	10.59	12.240	6.565	.305	.540	.540	.37	0	0	280.8	45.9	5.15	23.7	7.2	1.50
CB122N 19 12X6 1/2		36.0	10.58	12.250	6.560	.300	.545	.545	.35	0	0	282.3	46.1	5.17	25.7	7.8	1.56
B12 8 12X6 1/2		36.0	10.58	12.250	6.555	.300	.675	.415	.35	0	8 1/3*	281.8	46.0	5.16	22.7	6.93	1.46
CB122 17 12X6 1/2		34.0	9.99	12.022	6.635	.375	.431	.431	.35	0	0	238.1	39.6	4.88	21.0	6.3	1.45
12WF 24 12X6 1/2		32.5	9.54	12.000	6.570	.310	.456 [†]		-	-	10.5	238.1	39.7	5.00	17.8	5.4	1.37
B12 3		32.0	9.44	12.000	6.205	.335	.594	.330	.35	0	9.0*	228.5	38.1	4.92	16.0	5.16*	1.30
CB122N 19 12X6 1/2		32.0	9.42	12.120	6.535	.275	.480	.480	.35	0	0	247.0	40.8	5.12	22.3	6.8	1.54
B12 9 12X6 1/2		32.0	9.42	12.120	6.530	.275	.610	.350	.35	0	8 1/3*	246.4	40.7	5.11	19.4	5.94	1.44
12WF 10 B12 12X6 1/2		32.0	9.41	12.120	6.533	.273	.480 [†]		.35	0	5.0	246.8	40.7	5.12	20.6	6.3	1.48
12WF 20 CB121 12X6 1/2		32.0	9.41	12.120	6.533	.273	.480	.480	.37	0	0	246.8	40.7	5.12	20.6	6.3	1.48
CB122 17 12X6 1/2		32.0	9.40	12.118	6.534	.274	.479	.479	.35	0	0	246.3	40.7	5.12	22.3	6.8	1.54

† Average thickness

12" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

12 S54-1946 S56-1948	14 C1916 C1917	22 C11946 C11948	1, 7, 19 See Page 71 9, 10, 17, 20
13 C1913 C1915	C1919 C1920 15	US1950 23 I11914 I11925	See Page 72 3, 5, 6, 8, 24 See Page 73
C1921 C1923			



*Computed

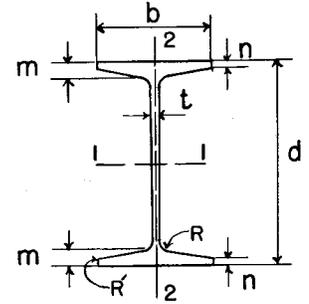
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
B12	7	31.5	9.36	12.120	6.525	.270	.610	.350	.35	0	8 1/3*	245.7	40.5	5.12	19.4	5.93	1.44
B12	1	31.0	9.13	12.000	6.160	.310	.645	.280	.35	0	12.5*	225.2	37.5	4.97	14.7	4.77*	1.27
12WF 12 B12 12X6 1/2		31.0	9.12	12.090	6.525	.265	.465†		.35	0	5.0	238.4	39.4	5.11	19.8	6.1	1.47
12WF 22 CB121 12X6 1/2		31.0	9.12	12.090	6.525	.265	.465	.465	.37	0	0	238.4	39.4	5.11	19.8	6.1	1.47
B12	5	31.0	9.02	12.060	6.270	.270	.605	.355	.35	0	8 1/3*	232.3	38.5	5.08	17.3	5.51	1.38
12WF 24 12X6 1/2		29.6	8.70	12.000	6.500	.240	.456†		-	-	10.5*	228.0	38.0	5.12	17.1	5.31	1.40
B12	3	28.5	8.42	12.000	6.120	.250	.594	.330	.35	0	9.0*	216.2	36.0	5.07	15.3	5.00*	1.35
B12	1	28.5	8.41	12.000	6.100	.250	.645	.280	.35	0	12.5*	216.6	36.1	5.07	14.2	4.66*	1.30
B12	5	28.5	8.40	12.000	6.250	.250	.575	.325	.35	0	8 1/3*	215.8	36.0	5.07	15.9	5.08	1.38
B12	7	28.0	8.28	12.000	6.500	.245	.550	.290	.35	0	8 1/3*	213.6	35.6	5.08	16.4	5.04	1.41
12WF 10 B12 12X6 1/2		28.0	8.23	12.000	6.500	.240	.420†		.35	0	5.0	213.5	35.6	5.09	17.5	5.4	1.46
12WF 20 CB121 12X6 1/2		28.0	8.23	12.000	6.500	.240	.420	.420	.37	0	0	213.5	35.6	5.09	17.5	5.4	1.46
CB122 17 12X6 1/2		28.0	8.22	12.000	6.500	.240	.420	.420	.35	0	0	213.4	35.6	5.10	19.2	5.9	1.53
CB122N19 12X6 1/2		28.0	8.22	12.000	6.500	.240	.420	.420	.35	0	0	213.4	35.6	5.10	19.2	5.9	1.53
B66	14	28.0	8.15	12.000	6.000	.284	.540	.280	.26	0	9.0*	199.4	33.2	4.95	12.6	4.2	1.24
B66	15	27.9	8.15	12.000	6.000	.284	.540	.280	.26	0	9.0*	199.4	33.2	4.95	12.6	4.2	1.24
B36	13	27.5	8.04	12.000	5.000	.255	.710	.315	.40	0	16 2/3*	199.6	33.3	4.98	8.7	3.5	1.04
12WF 22 CB121 12X6 1/2		27.0	7.97	11.960	6.500	.240	.400	.400	.37	0	0	204.1	34.1	5.06	16.6	5.1	1.44
12WF 12 B12 12X6 1/2		27.0	7.97	11.960	6.500	.240	.400†		.35	0	5.0	204.1	34.1	5.06	16.6	5.1	1.44
B12	7	25.0	7.44	11.880	6.495	.240	.490	.230	.35	0	8 1/3*	185.1	31.2	4.99	13.6	4.19	1.35
12WF 10 B12 12X6 1/2		25.0	7.39	11.870	6.500	.240	.355†		.35	0	5.0	183.4	30.9	4.98	14.5	4.5	1.40
12WF 20 CB121 12X6 1/2		25.0	7.39	11.870	6.500	.240	.355	.355	.37	0	0	183.4	30.9	4.98	14.5	4.5	1.40
B12	9	25.0	7.38	11.870	6.495	.240	.485	.225	.35	0	8 1/3*	182.8	30.8	4.98	13.4	4.12	1.35
B12	6	25.0	7.37	11.840	6.240	.240	.495	.245	.35	0	8 1/3*	181.4	30.6	4.96	12.6	4.03	1.31
CB122N19 12X6 1/2		25.0	7.36	11.868	6.500	.240	.354	.354	.35	0	0	182.9	30.8	4.98	16.2	5.0	1.48
B25	23	25.0	7.35	12.000	5.000	.270	.570	.270	.27	0	12.5*	175.5	29.2	4.89	7.3	2.92	1.00
CB121	17	25.0	7.34	11.924	6.000	.240	.382	.382	.35	0	0	183.0	30.7	4.99	13.8	4.6	1.37

†Average thickness

10" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

4	10	10	14	19	19
S12-1922	B10b, 10X10	10WF B10b, 10X10	C1927	CB103, 10X10	10WF CB103, 10X10
S15-1924	B10a, 10X8	10WF B10a, 10X8	16	CB102, 10X8	10WF CB102, 10X8
S16-1925	B10, 10X5 ³ / ₄	10WF B10, 10X5 ³ / ₄	C1928	CB101, 10X5 ³ / ₄	10WF CB101, 10X5 ³ / ₄
S18-1926	S43-1933	S51-1938	C1929	C1933	CIL1940
7	S47-1934	S53-1943	C1930	C1934	CIL1946
S27-1928		S54-1946	17	IL1934	CIL1948
S35-1930		S56-1948	C1931		US1950
8			IL1932		
S40-1931					

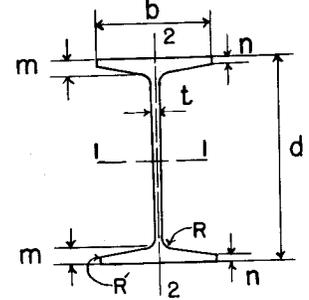


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT Lb.	AREA Sq.in.		WIDTH b In.	THICK t In.		m	n	R	R'		I	S	r	I	S	r
								In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB103N17 10X10		66.0	19.43	10.380	10.120	.460	.748	.748	.55	0	0	382.5	73.7	4.44	129.3	25.6	2.58	
10WF CB103 10X10	19	66.0	19.41	10.380	10.117	.457	.748	.748	.50	0	0	382.5	73.7	4.44	129.2	25.5	2.58	
10WF B10b 10X10	10	66.0	19.41	10.380	10.117	.457	.748	.748	.50	0	0	382.5	73.7	4.44	129.2	25.5	2.58	
CB103A16		64.0	18.81	10.000	10.441	.791	.558	.558	.45	0	0	308.8	61.8	4.05	106.3	20.4	2.38	
CB103 14		63.0	18.53	10.000	9.412	.787	.610	.610	.45	0	0	300.4	60.1	4.03	85.2	18.1	2.14	
10WF CB103 10X10	19	60.0	17.66	10.250	10.075	.415	.683	.683	.50	0	0	343.7	67.1	4.41	116.5	23.1	2.57	
10WF B10b 10X10	10	60.0	17.66	10.250	10.075	.415	.683	.683	.50	0	0	343.7	67.1	4.41	116.5	23.1	2.57	
CB103N17 10X10		60.0	17.65	10.250	10.075	.415	.683	.683	.55	0	0	343.5	67.0	4.41	116.5	23.1	2.57	
CB103A16		59.0	17.34	10.000	10.294	.644	.558	.558	.45	0	0	296.5	59.3	4.13	101.7	19.8	2.42	
CB103 14		56.0	16.47	10.000	9.206	.581	.610	.610	.45	0	0	283.2	56.6	4.15	79.5	17.3	2.20	
CB103N17 10X10		54.0	15.89	10.120	10.030	.370	.618	.618	.55	0	0	305.6	60.4	4.39	104.0	20.7	2.56	
10WF CB103 10X10	19	54.0	15.88	10.120	10.028	.368	.618	.618	.50	0	0	305.7	60.4	4.39	103.9	20.7	2.56	
10WF B10b 10X10	10	54.0	15.88	10.120	10.028	.368	.618	.618	.50	0	0	305.7	60.4	4.39	103.9	20.7	2.56	
CB103A16		54.0	15.87	10.000	10.147	.497	.558	.558	.45	0	0	284.3	56.9	4.23	97.3	19.2	2.48	
G10 7		50.0	14.62	10.120	9.040	.360	.807	.445	.40	0	8 1/3*	277.5	54.8	4.36	66.4	14.7	2.13	
G10 4		50.0	14.51	10.120	9.040	.360	.807	.445	.40	0	8 1/3*	275.5	54.4	4.36	66.4	14.7	2.14	
CB103 14		49.0	14.41	10.000	9.000	.375	.610	.610	.45	0	0	266.0	53.2	4.30	74.2	16.5	2.27	
10WF B10b 10X10	10	49.0	14.40	10.000	10.000	.340	.558	.558	.50	0	0	272.9	54.6	4.35	93.0	18.6	2.54	
10WF CB103 10X10	19	49.0	14.40	10.000	10.000	.340	.558	.558	.50	0	0	272.9	54.6	4.35	93.0	18.6	2.54	
CB103A16		49.0	14.40	10.000	10.000	.350	.558	.558	.45	0	0	272.0	54.4	4.35	93.0	18.6	2.54	
CB103N17 10X10		49.0	14.38	10.000	10.000	.340	.558	.558	.55	0	0	272.7	54.5	4.35	93.0	18.6	2.54	
G10 10X9	8	45.0	13.25	10.090	9.010	.330	.746	.384	.40	0	8 1/3*	252.1	50.0	4.36	58.3	12.9	2.10	
10WF B10a 10X8	10	45.0	13.24	10.120	8.022	.350	.618	.618	.50	0	0	248.6	49.1	4.33	53.2	13.3	2.00	
10WF CB102 10X8	19	45.0	13.24	10.120	8.022	.350	.618	.618	.50	0	0	248.6	49.1	4.33	53.2	13.3	2.00	
CB102N17 10X8		45.0	13.22	10.120	8.020	.350	.618	.618	.55	0	0	248.3	49.1	4.33	53.2	13.3	2.01	
G10 7		44.5	13.14	10.000	9.000	.320	.747	.385	.40	0	8 1/3*	246.7	49.3	4.33	58.2	12.9	2.10	
G10 4		44.5	13.03	10.000	9.000	.320	.747	.385	.40	0	8 1/3*	244.7	48.9	4.33	58.2	12.9	2.11	
G10 2		44.0	12.95	10.000	9.000	.310	.763	.370	.40	0	9.0*	244.2	48.8	4.34	57.3	12.7*	2.10	
G10 1		44.0	12.95	10.000	9.000	.300	.844	.300	.40	0	12.5*	244.3	48.9	4.34	53.6	11.9*	2.03	

10" BEAMS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1	6	9	11	18	18	4,7,8,10,17,19 See Page 75
B1907	S24-1927	B10b, 10X10	S54-1946	CB103, 10X10	10WF CB103, 10X10	
2	S27-1928	B10a, 10X8	S56-1948	CB102, 10X8	10WF CB102, 10X10	
S3-1909	S35-1930	B10, 10X5 3/4	15	GB101, 10X5 3/4	10WF CB101, 10X5 3/4	
S4-1911	22	S43, 1933	C1927	C 1933	CIL 1940	
3	K1950	S47, 1934	C1930	C 1934		
S3-1909	K1952	10WF B10b, 10X10	20	IL 1934		
S4-1911		10WFB10a, 10X8	CIL 1946			
S12-1922		10WF B10, 10X5 3/4	CIL 1948			
S15-1924		S51-1938	US1950			
		S53-1943				



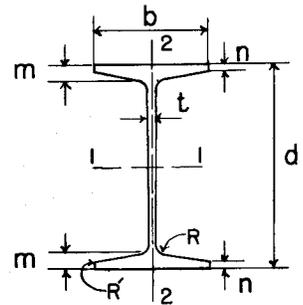
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB102	15	42.0	12.35	10.000	8.324	.644	.381	.381	.30	0	0	190.4	38.1	3.93	36.8	8.9	1.73
G10	8	42.0	12.34	10.000	9.000	.320	.701	.339	.40	0	8 1/3	230.9	46.2	4.33	52.6	11.7	2.07
G10	7	41.5	12.23	9.910	8.990	.310	.702	.340	.40	0	8 1/3	225.8	45.6	4.30	52.6	11.7	2.07
G10	4	41.5	12.12	9.910	8.990	.310	.702	.340	.40	0	8 1/3	223.8	45.2	4.30	52.6	11.7	2.08
CB102N17	10X8	41.0	12.06	10.000	8.000	.330	.558	.558	.55	0	0	222.3	44.5	4.29	47.7	11.9	1.99
10WF	18	41.0	12.06	10.000	8.000	.328	.558	.558	.50	0	0	222.4	44.5	4.29	47.7	11.9	1.99
10WF	9	41.0	12.06	10.000	8.000	.328	.558	.558	.50	0	0	222.4	44.5	4.29	47.7	11.9	1.99
10WF	11	39.0	11.48	9.940	7.990	.318	.528	.528	.50	0	0	209.7	42.2	4.27	44.9	11.2	1.98
10WF	20	39.0	11.48	9.940	7.990	.318	.528	.528	.50	0	0	209.7	42.2	4.27	44.9	11.2	1.98
10WF	18	37.0	10.88	9.880	7.978	.306	.498	.498	.50	0	0	196.9	39.9	4.25	42.2	10.6	1.97
10WF	9	37.0	10.88	9.880	7.978	.306	.498	.498	.50	0	0	196.9	39.9	4.25	42.2	10.6	1.97
CB102N17	10X8	37.0	10.85	9.880	7.975	.305	.498	.498	.55	0	0	196.6	39.9	4.26	42.1	10.6	1.97
CB102	15	36.0	10.58	10.000	8.147	.467	.381	.381	.30	0	0	175.6	35.1	4.07	34.4	8.5	1.80
CB102N17	10X8	33.0	9.72	9.750	7.965	.295	.433	.433	.55	0	0	170.8	35.0	4.19	36.5	9.2	1.94
10WF	19	33.0	9.71	9.750	7.964	.292	.433	.433	.50	0	0	170.9	35.0	4.20	36.5	9.2	1.94
10WF	10	33.0	9.71	9.750	7.964	.292	.433	.433	.50	0	0	170.9	35.0	4.20	36.5	9.2	1.94
CB102	15	31.0	9.11	10.000	8.000	.320	.381	.381	.30	0	0	163.4	32.7	4.23	32.5	8.1	1.89
CB101	15	30.0	8.82	10.228	6.068	.298	.495	.495	.30	0	0	163.2	31.9	4.30	18.5	6.1	1.45
10WF	22	29.1	8.55	9.875	5.935	.425	.389 [†]		-	-	10.5	131.5	26.6	3.92	11.2	3.7	1.14
B10	8	29.0	8.61	10.250	5.790	.280	.630	.400	.30	0	8 1/3	160.7	31.4	4.32	14.9	5.15	1.32
CB101N17	10X5 3/4	29.0	8.54	10.240	5.789	.279	.510	.510	.30	0	0	159.3	31.1	4.32	16.5	5.7	1.39
10WF	19	29.0	8.53	10.220	5.799	.289	.500	.500	.32	0	0	157.3	30.8	4.29	15.2	5.2	1.34
10WF	10	29.0	8.53	10.220	5.799	.289	.500 [†]		.30	0	50	157.3	30.8	4.29	15.2	5.2	1.34
B10	6	28.5	8.41	10.190	5.785	.285	.609	.380	.30	0	8 1/3	154.1	30.2	4.28	14.2	4.92	1.30
B10	3	28.5	8.34	10.000	5.990	.390	.522	.270	.30	0	90	134.6	26.9	4.02	12.1	4.05	1.21
B10	1	27.5	8.05	10.000	5.940	.340	.590	.240	.30	0	125	134.6	26.9	4.09	11.7	3.94	1.20

† Average thickness

10" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

5	13	7,8,10,17,19
S16-1925	C1916	See Page 75
S18-1926	C1917	1,3,6,9,11,15,
12	C1919	18,20,22
C1913	C1920	See Page 76
C1915	C1921	
21	C1923	
IL1914		
IL1925		



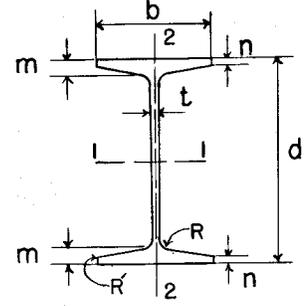
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
B10	7	26.0	7.68	10.090	5.770	.270	.559	.330	.30	0	8 1/3*	137.9	27.3	4.24	12.5	4.33	1.28
B10	8	26.0	7.65	10.120	5.770	.260	.565	.335	.30	0	8 1/3*	139.5	27.6	4.27	12.7	4.39	1.29
CB10I	17	26.0	7.65	10.120	5.770	.260	.450	.450	.30	0	0	139.7	27.6	4.27	14.4	5.0	1.37
IOW CB10I	18	26.0	7.65	10.120	5.769	.259	.450	.450	.32	0	0	139.7	27.6	4.27	13.4	4.6	1.32
IOW B10	9	26.0	7.65	10.120	5.769	.259	.450†		.30	0	5.0	139.7	27.6	4.27	13.4	4.6	1.32
CB10I	15	26.0	7.64	10.098	6.029	.259	.430	.430	.30	0	0	139.5	27.6	4.27	15.7	5.2	1.43
B10	5	26.0	7.61	10.090	5.770	.270	.559	.330	.30	0	8 1/3*	136.7	27.1	4.24	12.5	4.33	1.28
IOW B10	11	25.0	7.35	10.080	5.762	.252	.430†		.30	0	5.0	133.2	26.4	4.26	12.7	4.4	1.31
IOW CB10I	20	25.0	7.35	10.080	5.762	.252	.430	.430	.32	0	0	133.2	26.4	4.26	12.7	4.4	1.31
B10	1	24.5	7.15	10.000	5.850	.250	.590	.240	.30	0	12.5*	127.1	25.4	4.22	11.1	3.79	1.24
B10	7	23.5	6.96	10.000	5.750	.250	.514	.285	.30	0	8 1/3*	123.2	24.6	4.21	10.9	3.80	1.25
B10	3	23.5	6.94	10.000	5.850	.250	.522	.270	.30	0	9.0*	122.9	24.6	4.21	11.2	3.83	1.27
B10	5	23.5	6.89	10.000	5.750	.250	.514	.285	.30	0	8 1/3*	121.9	24.4	4.21	10.9	3.80	1.26
IOW B10	9	23.0	6.77	10.000	5.750	.240	.390†		.30	0	5.0	120.6	24.1	4.22	11.3	3.9	1.29
IOW CB10I	18	23.0	6.77	10.000	5.750	.240	.390	.390	.32	0	0	120.6	24.1	4.22	11.3	3.9	1.29
CB10I	15	23.0	6.76	10.000	6.000	.230	.381	.381	.30	0	0	122.2	24.4	4.25	13.7	4.6	1.43
CB10I	17	23.0	6.76	10.000	5.750	.240	.390	.390	.30	0	0	120.5	24.1	4.22	12.4	4.3	1.35
B10	8	23.0	6.76	10.000	5.750	.240	.505	.275	.30	0	8 1/3*	120.3	24.1	4.22	10.6	3.70	1.25
IOW B10	22	22.9	6.73	9.875	5.750	.240	.389†		-	-	10.5	116.6	23.6	4.16	9.9	3.5	1.22
B10	1	22.5	6.65	10.000	5.800	.200	.590	.240	.30	0	12.5*	122.8	24.6	4.27	10.8	3.72*	1.27
B67	13	22.4	6.54	10.000	5.500	.252	.498	.260	.22	0	9.0*	113.6	22.7	4.17	9.0	3.3	1.17
B67	13	22.25	6.54	10.000	5.500	.252	.498	.260	.22	0	9.0*	113.6	22.7	4.17	9.0	3.3	1.17
B37	12	22.0	6.52	10.000	4.670	.232	.647	.277	.37	0	16 2/3*	113.9	22.8	4.18	6.4	2.7	0.99
B26	21	22.0	6.42	10.000	5.000	.250	.550	.250	.25	0	12.5*	110.3	22.1	4.15	6.87	2.75	1.03
B10	6	21.0	6.28	9.900	5.740	.240	.464	.235	.30	0	8 1/3*	108.1	21.8	4.15	9.3	3.24	1.22
B10	8	21.0	6.24	9.910	5.750	.240	.460	.230	.30	0	8 1/3*	107.5	21.7	4.15	9.2	3.2	1.21
IOW B10	10	21.0	6.19	9.900	5.750	.240	.340†		.30	0	5.0	106.3	21.5	4.14	9.7	3.4	1.25
IOW CB10I	19	21.0	6.19	9.900	5.750	.240	.340	.340	.32	0	0	106.3	21.5	4.14	9.7	3.4	1.25
CB10I	17	21.0	6.18	9.900	5.750	.240	.340	.340	.30	0	0	106.3	21.5	4.15	10.8	3.8	1.32
CB10I	15	21.0	6.17	9.902	6.000	.230	.332	.332	.30	0	0	107.6	21.7	4.18	12.0	4.0	1.39

† Average thickness

9" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 B1907 2 S3-1909 S4-1911 3 S3-1909 S4-1911 S12-1922 S15-1924	4 S12-1922 S15-1924 5 S12-1922 S15-1924 S16-1925 S18-1926	6 S16-1925 S18-1926 7 S27-1928 S35-1930 8 S40-1931	9 CB 93 CB 92 C1927 CB 93, 9X9 CB 92, 9X6 1/2 C1930 10 C1927	11 B40 C1927 C1928 C1929 B40, 9X5 1/4 C1930 C1930	12 B 40 C1928 C1929 B 40, 9X5 1/4 C1930 13 C1931
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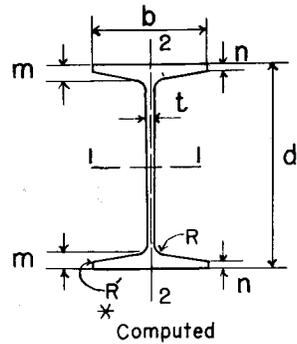


* Computed

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT Lb.	AREA SqIn.		WIDTH b In.	m In.		n In.	R In.	R' In.	I In. ⁴		S In. ³	r In.	I In. ⁴	S In. ³	r In.	
CB93 9X9	9	48.0	14.11	9.242	9.082	.398	.591	.591	.50	0	0	221.1	47.8	3.96	73.8	16.3	2.29	
G9	7	43.5	12.73	9.120	8.540	.350	.746	.405	.40	0	8 1/3*	195.4	42.8	3.92	51.3	12.0	2.01	
G9	5	43.5	12.62	9.120	8.540	.350	.746	.405	.40	0	8 1/3*	193.8	42.5	3.92	51.3	12.0	2.02	
CB93 9X9	9	43.0	12.65	9.122	9.041	.357	.531	.531	.50	0	0	195.5	42.9	3.93	65.4	14.5	2.28	
G9	7	38.5	11.35	9.000	8.500	.310	.686	.345	.40	0	8 1/3*	171.9	38.2	3.89	44.4	10.4	1.98	
G9	5	38.5	11.23	9.000	8.500	.310	.686	.345	.40	0	8 1/3*	170.3	37.9	3.89	44.4	10.4	1.99	
G9	2	38.0	11.22	9.000	8.500	.330	.704	.335	.40	0	9.0*	170.9	38.0	3.90	44.1	10.4	1.98	
G9	1	38.0	11.18	9.000	8.500	.290	.779	.265	.40	0	12.5*	169.8	37.7	3.90	40.7	9.58	1.91	
CB93 9X9	9	38.0	11.17	9.000	9.000	.316	.470	.470	.50	0	0	170.4	37.9	3.91	57.1	12.7	2.26	
G9	7	36.0	10.66	8.940	8.480	.290	.656	.315	.40	0	8 1/3*	160.5	35.9	3.88	41.0	9.67	1.96	
G9	5	36.0	10.55	8.940	8.480	.290	.656	.315	.40	0	8 1/3*	158.9	35.5	3.88	41.0	9.67	1.97	
CB92 9X6 1/2	9	35.0	10.29	9.192	6.556	.335	.566	.566	.50	0	0	155.4	33.8	3.89	26.6	8.1	1.61	
CB92 9X6 1/2	9	32.0	9.40	9.096	6.528	.307	.518	.518	.50	0	0	140.5	30.9	3.87	24.0	7.4	1.60	
CB92 9X6 1/2	9	29.0	8.53	9.000	6.500	.279	.470	.470	.50	0	0	126.0	28.0	3.84	21.5	6.6	1.59	
B40 9X5 1/4	11	25.0	7.34	9.000	5.380	.380	.496	.277	.275	0	8 3/4*	95.5	21.2	3.61	8.8	3.3	1.09	
B9	3	24.0	7.04	9.000	5.555	.365	.479	.245	.30	0	9.0*	92.1	20.5	3.62	8.8	3.17	1.12	
B9	1	23.0	6.76	9.000	5.500	.310	.544	.220	.29	0	12.5*	92.4	20.5	3.70	8.5	3.09	1.12	
B40N 9X5 1/4	13	23.0	6.76	9.000	5.316	.316	.496	.277	.275	0	8 3/4*	91.6	20.4	3.68	8.4	3.2	1.12	
B9	8	23.0	6.75	9.120	5.250	.260	.520	.300	.30	0	9.0*	99.2	21.8	3.83	10.1	3.65	1.22	
B9	7	22.0	6.51	9.060	5.510	.260	.499	.280	.30	0	8 1/3*	93.9	20.7	3.80	9.42	3.42	1.20	
B9	6	22.0	6.45	9.060	5.510	.260	.499	.280	.30	0	8 1/3*	92.9	20.5	3.80	9.42	3.42	1.21	
B9	1	21.0	6.22	9.000	5.440	.250	.544	.220	.29	0	12.5*	88.8	19.7	3.78	8.2	3.01	1.15	
B40	10	21.0	6.17	9.000	5.250	.250	.496	.277	.275	0	8 3/4*	87.6	19.5	3.77	8.1	3.1	1.14	
B9	7	20.5	6.09	9.000	5.500	.250	.469	.250	.30	0	8 1/3*	86.5	19.2	3.77	8.54	3.10	1.18	
B9	6	20.5	6.02	9.000	5.500	.250	.469	.250	.30	0	8 1/3*	85.5	19.0	3.77	8.53	3.10	1.19	
B40 9X5 1/4	12	20.5	6.02	9.000	5.234	.234	.496	.277	.275	0	8 3/4*	86.6	19.2	3.79	8.0	3.1	1.15	
B9	4	20.5	6.01	9.000	5.440	.250	.479	.245	.30	0	9.0*	85.1	18.9	3.76	8.2	3.02	1.17	
B9	2	20.0	6.01	9.000	5.440	.250	.479	.245	.30	0	9.0*	85.1	18.9	3.76	8.2	3.01	1.17	
B40N 9X5 1/4	13	20.0	5.88	9.000	5.218	.218	.496	.277	.275	0	8 3/4*	85.6	19.0	3.82	7.9	3.0	1.16	
B9	8	20.0	5.86	9.000	5.500	.235	.460	.235	.30	0	8.5*	84.1	18.7	3.79	8.26	3.0	1.19	
B9	1	19.0	5.68	9.000	5.380	.190	.544	.220	.29	0	12.5*	85.1	18.9	3.87	7.9	2.94	1.18	

8" BEAMS

REFERENCES: SEE COLUMN (I) AND PAGE 4



1 B1907	6 S27-1928	8 B8b, 8X8	9 B8b, 8X8	9 8WF88b, 8X8	18 CB83	19 C1931	20 CB83, 8X8
2	S35-1930	B8a, 8X6 1/2	B8a, 8X6 1/2	8WF88a, 8X6 1/2	CB82	C1933	CB82, 8X6 1/2
S3-1909	10	B8, 8X5 1/4	B8, 8X5 1/4	8WF88, 8X5 1/4	C1927	23	C1933
S4-1911	S54-1946	S43-1933	S43, 1933	S51-1938	C1928	CIL1946	C1934
4	S56-1948	S47-1934	S47, 1934	S53-1943	C1930	CIL1948	IL1934
S12-1922	15	8WF88b, 8X8		S54-1946	CB83N, 8X8	US1950	8WFCB83, 8X8
S15-1924	C1927	8WF88a, 8X6 1/2		S56-1948	CB82N, 8X6 1/2	24	8WFCB82, 8X6 1/2
S18-1926	C1928	8WF88, 8X5 1/4			C1931	K1950	CIL1940
	C1930	S51-1938			IL1932	K1952	

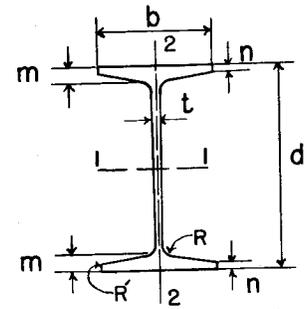
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							Ln.	Ln.	Ln.	Ln.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
G8	4	37.0	10.77	8.120	8.030	.330	.686	.365	.40	0	8 1/3*	131.1	32.3	3.49	38.7	9.65	1.90
G8	6	36.5	10.81	8.120	8.020	.310	.691	.370	.40	0	8 1/3*	132.6	32.6	3.50	39.0	9.72	1.90
CB83 8X8		36.0	10.58	8.198	8.046	.336	.499	.499	.45	0	0	131.3	32.0	3.52	43.4	10.8	2.02
8WF 88b 8X8	9	35.0	10.30	8.120	8.027	.315	.493	.493	.40	0	0	126.5	31.1	3.50	42.5	10.6	2.03
8WF CB83 8X8	20	35.0	10.30	8.120	8.027	.315	.493	.493	.40	0	0	126.5	31.1	3.50	42.5	10.6	2.03
CB83N 8X8	19	35.0	10.28	8.182	8.025	.315	.491	.491	.45	0	0	128.2	31.3	3.53	42.3	10.5	2.03
CB83N 8X8	19	33.0	9.70	8.124	8.010	.300	.462	.462	.45	0	0	119.8	29.5	3.51	39.6	9.9	2.02
8WF CB83 8X8	20	33.0	9.70	8.060	8.012	.300	.463	.463	.40	0	0	117.9	29.3	3.49	39.7	9.9	2.02
8WF 88b 8X8	8	33.0	9.70	8.060	8.012	.300	.463	.463	.40	0	0	117.9	29.3	3.49	39.7	9.9	2.02
G8	6	33.0	9.69	8.000	8.000	.290	.631	.310	.40	0	8 1/3*	116.1	29.0	3.46	33.6	8.39	1.86
G8	4	33.0	9.57	8.000	8.000	.300	.626	.305	.40	0	8 1/3*	114.2	28.6	3.45	33.2	8.29	1.86
G8	2	32.5	9.54	8.000	8.000	.290	.642	.295	.40	0	9.0*	114.4	28.6	3.46	32.9	8.23*	1.86
G8	1	32.5	9.52	8.000	8.000	.280	.713	.230	.40	0	12.5*	113.9	28.5	3.46	30.3	7.58*	1.78
8WF CB83 8X8	20	31.0	9.12	8.000	8.000	.288	.433	.433	.40	0	0	109.7	27.4	3.47	37.0	9.2	2.01
8WF 88b 8X8	9	31.0	9.12	8.000	8.000	.288	.433	.433	.40	0	0	109.7	27.4	3.47	37.0	9.2	2.01
CB83N 8X8	18	31.0	9.10	8.060	8.000	.290	.430	.430	.45	0	0	110.9	27.5	3.49	36.7	9.2	2.01
G8	4	31.0	9.01	7.940	7.990	.290	.596	.275	.40	0	8 1/3*	106.2	26.7	3.43	30.5	7.63	1.84
8WF 8X6 1/2	24	30.8	9.06	7.875	6.675	.420	.454 [†]	-	-	10.5		95.7	24.3	3.25	18.6	5.6	1.43
CB82N 8X6 1/2	18	30.0	8.81	8.196	6.559	.298	.498	.498	.45	0	0	107.8	26.3	3.50	23.4	7.1	1.63
G8	6	29.5	8.69	7.880	7.995	.285	.571	.250	.40	0	8 1/3*	100.7	25.6	3.41	28.4	7.10	1.81
8WF 88a 8X6 1/2	10	28.0	8.23	8.060	6.540	.285	.463	.463	.40	0	0	97.8	24.3	3.45	21.6	6.6	1.62
8WF CB82 8X6 1/2	23	28.0	8.23	8.060	6.540	.285	.463	.463	.40	0	0	97.8	24.3	3.45	21.6	6.6	1.62
CB82N 8X6 1/2	18	27.0	7.93	8.098	6.529	.268	.449	.449	.45	0	0	95.9	23.7	3.48	20.8	6.4	1.62
8WF CB82 8X6 1/2	20	27.0	7.93	8.030	6.528	.273	.448	.448	.40	0	0	94.1	23.4	3.44	20.8	6.4	1.62
8WF 88a 8X6 1/2	8	27.0	7.93	8.030	6.528	.273	.448	.448	.40	0	0	94.1	23.4	3.44	20.8	6.4	1.62
8WF 8X6 1/2	24	26.1	7.68	7.875	6.500	.245	.454 [†]	-	-	10.5		88.6	22.5	3.40	17.1	5.2	1.49
8WF CB82 8X6 1/2	20	24.0	7.06	7.930	6.500	.245	.398	.398	.40	0	0	82.5	20.8	3.42	18.2	5.6	1.61
8WF 88a 8X6 1/2	9	24.0	7.06	7.930	6.500	.245	.398	.398	.40	0	0	82.5	20.8	3.42	18.2	5.6	1.61
CB82N 8X6 1/2	18	24.0	7.06	8.000	6.500	.239	.400	.400	.45	0	0	84.2	21.1	3.46	18.3	5.6	1.61

[†]Average thickness

8" BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

3	11	14	17	22	1, 6, 9, 10, 19, 23, 24
S3-1909	C1913	C1927	C1928	CB81, 8X5 1/4	See Page 79
S4-1911	C1915	16	C1929	C1934	See Page 79
S12-1922	12	C1927	C1930	IL1934	8
S15-1924	C1916	C1928	21	8WFCB81, 8X5 1/4	See Page 79
5	C1917	C1929	CB81, 8X5 1/4	CIL1940	
S16-1925	C1920	C1930	C1934	CIL1946	
S18-1926	13	C1931	IL1934	CIL1948	
7	C1921	C1933	8WFCB81, 8X5 1/4	US1950	
S40-1931	C1923		CIL1940		



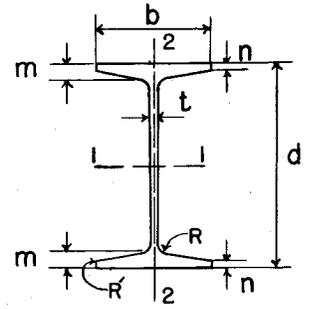
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA SqIn.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
8WF 8X5 1/4	24	22.5	6.61	8.000	5.395	.375	.352 [†]	-	-	10.5	68.3	17.1	3.23	7.5	2.8	1.08	
B8	1	21.25	6.25	8.000	5.370	.360	.493	.180	.28	0	12.5*	64.7	16.2	3.22	6.8	2.53*	1.05
B8	7	21.0	6.20	8.190	5.275	.260	.504	.296	.30	0	8 1/3*	73.5	17.9	3.44	8.59	3.26	1.18
8WF 8X5 1/4	8	21.0	6.18	8.190	5.272	.252	.403 [†]		.30	0	5.0	73.8	18.0	3.45	9.13	3.5	1.22
8WF CB81 8X5 1/4	21	21.0	6.18	8.190	5.272	.252	.403	.403	.32	0	0	73.8	18.0	3.45	9.13	3.5	1.22
B39	16	21.0	6.17	8.000	5.110	.360	.446	.238	.25	0	8 3/4*	63.4	15.9	3.21	6.6	2.6	1.03
8WF 8X5 1/4	10	20.0	5.88	8.140	5.268	.248	.378 [†]		.30	0	5.0	69.2	17.0	3.43	8.5	3.2	1.20
8WF CB81 8X5 1/4	23	20.0	5.88	8.140	5.268	.248	.378	.378	.32	0	0	69.2	17.0	3.43	8.5	3.2	1.20
B8	3	19.5	5.78	8.000	5.325	.325	.430	.205	.30	0	9.0*	60.6	15.1	3.24	6.7	2.51	1.08
B8	6	19.0	5.68	8.060	5.270	.270	.448	.240	.30	0	8 1/3*	63.7	15.8	3.35	7.2	2.73	1.13
B8	5	19.0	5.62	8.060	5.270	.270	.448	.240	.30	0	8 1/3*	62.9	15.6	3.35	7.2	2.73	1.13
B8 8X5 1/4	7	19.0	5.60	8.090	5.265	.250	.454	.246	.30	0	8 1/3*	64.3	15.9	3.39	7.32	2.78	1.14
8WF 8X5 1/4	8	19.0	5.59	8.090	5.264	.244	.353 [†]		.30	0	5.0	64.7	16.0	3.40	7.87	3.0	1.19
8WF CB81 8X5 1/4	21	19.0	5.59	8.090	5.264	.244	.353	.353	.32	0	0	64.7	16.0	3.40	7.87	3.0	1.19
B39N 8X5	19	19.0	5.59	8.000	5.037	.287	.446	.238	.25	0	8 3/4*	60.3	15.1	3.29	6.3	2.5	1.06
8WF 8X5 1/4	24	18.5	5.44	8.000	5.250	.230	.352 [†]		-	-	10.5	62.1	15.5	3.38	6.9	2.6	1.13
B8	1	18.0	5.37	8.000	5.260	.250	.493	.180	.28	0	12.5*	60.0	15.0	3.34	6.4	2.43*	1.09
B39	14	18.0	5.29	8.000	5.000	.250	.446	.238	.25	0	8 3/4*	58.7	14.7	3.33	6.1	2.4	1.07
B8	6	17.5	5.20	8.000	5.250	.250	.418	.210	.30	0	8 1/3*	57.7	14.4	3.33	6.39	2.44	1.11
B8	3	17.5	5.18	8.000	5.250	.250	.430	.205	.30	0	9.0*	57.4	14.3	3.33	6.4	2.43	1.11
B38	11	17.5	5.15	8.000	4.330	.210	.583	.240	.33	0	16 2/3*	58.3	14.6	3.37	4.5	2.1	0.93
B8	5	17.5	5.14	8.000	5.250	.250	.418	.210	.30	0	8 1/3*	56.9	14.2	3.33	6.39	2.43	1.11
B39	17	17.5	5.14	8.000	4.981	.231	.446	.238	.25	0	8 3/4*	57.4	14.5	3.36	6.0	2.4	1.08
B68	13	17.5	5.13	8.000	5.000	.220	.457	.240	.18	0	9.0*	58.4	14.6	3.38	6.2	2.5	1.10
B68	12	17.5	5.12	8.000	5.000	.220	.457	.240	.18	0	9.0*	58.4	14.6	3.38	6.2	2.5	1.10
B8 8X5 1/4	7	17.0	5.00	8.000	5.250	.235	.409	.201	.30	0	8 1/3*	56.0	14.0	3.35	6.16	2.35	1.11
8WF 8X5 1/4	9	17.0	5.00	8.000	5.250	.230	.308 [†]		.30	0	5.0	56.4	14.1	3.36	6.72	2.6	1.16
8WF CB81 8X5 1/4	22	17.0	5.00	8.000	5.250	.230	.308	.308	.32	0	0	56.4	14.1	3.36	6.72	2.6	1.16
B39 8X5	19	17.0	5.00	8.000	4.963	.213	.446	.238	.25	0	8 1/4*	57.2	14.3	3.38	6.0	2.4	1.09
B8	1	16.25	4.81	8.000	5.190	.180	.493	.180	.28	0	12.5*	57.0	14.3	3.44	6.1	2.35*	1.12

† Average thickness

8" BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

25
PH 1938
26
PH 1938A



* Computed

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							in.	in.	in.	in.		in. ⁴	in. ³	in.	in. ⁴	in. ³	in.
8X5 1/4	25	23.0	6.77	8.00	5.47	.46	.409	.20	.30	.03	8 1/3 *	65.4	16.4	3.10	7.07	2.59	1.02
8X5 1/4	25	21.0	6.18	8.00	5.40	.38	.409	.20	.30	.03	8 1/3 *	62.3	15.6	3.18	6.80	2.52	1.05
8X5 1/4	25	19.0	5.59	8.00	5.32	.31	.409	.20	.30	.03	8 1/3 *	59.2	14.8	3.26	6.45	2.42	1.08
8X5 1/4	25	17.0	5.00	8.00	5.25	.24	.409	.20	.30	.03	8 1/3 *	56.0	14.0	3.35	6.16	2.35	1.11
8X6 1/2	26	27.0	7.94	8.00	6.610	.355	.476	.320	.400	-	5.0 *	88.51	22.13	3.34	17.43	5.27	1.48
8X6 1/2	26	24.0	7.06	8.000	6.500	.245	.476	.320	.400	-	5.0 *	83.81	20.95	3.45	16.52	5.08	1.53

**WF SHAPES
STEEL
LIGHT COLUMNS
AND
STANCHIONS**

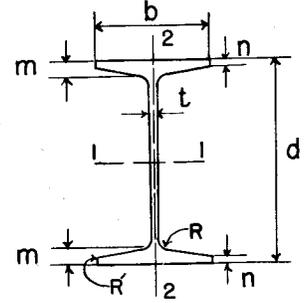
REFERENCES

- C** Carnegie Steel Company
- IL** Illinois Steel Company
- CIL** Carnegie-Illinois Steel Corporation
- K** Kaiser Steel Company
- S** Bethlehem Steel Company
- US** United States Steel Company

6" BEAMS, LIGHT COLUMNS & STANCHIONS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4	6	9	12
S35-1930	S43-1933	S51-1938	C1934	K1950
2	S47-1934	7	IL1934	
S35-1930	5	S53-1943	10	
S39-1930	B6	8	CIL 1940	
3	S43-1933	S53-1943	11	
S40-1931	S47-1934	S54-1946	CIL 1946	
S43-1933	6WF6, 6X6	S56-1948	CIL 1948	
S47-1934	S51-1938		US1950	



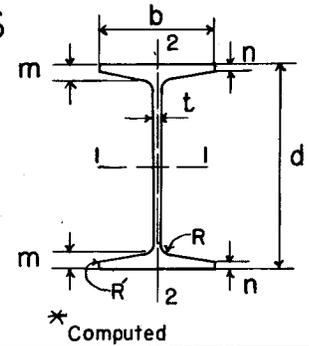
*Derived or Computed

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT		DIMENSIONS			SLOPE		AXIS 1-1			AXIS 2-2					
		PER FOOT	AREA	DEPTH	WIDTH	WEB THICK	INSIDE FLANGE	%	I	S	r	I	S	r			
															IN.	IN.	IN.
B6	4	41.0	12.04	6.75	6.245	.495	.750	.750	.30	0	0	91.2	27.0	2.75	30.5	9.77	1.59
B6	4	30.0	8.81	6.38	6.100	.350	.565	.565	.30	0	0	63.2	19.8	2.68	21.4	7.02	1.56
6WF B6 6X6	7	27.5	8.11	6.46	6.112	.352	.500	.500	.30	0	0	59.7	18.5	2.71	19.1	6.20	1.53
CBS6 6X6	10	27.5	8.09	6.46	6.112	.352	.500	.500	.25	0	0	59.6	18.4	2.71	19.0	6.20	1.53
6WF B6 6X6	6	27.5	8.09	6.28	6.085	.335	.514	.514	.30	0	0	56.6	18.0	2.65	19.3	6.35	1.55
B6	4	27.0	7.92	6.25	6.085	.335	.500	.500	.30	0	0	55.0	17.6	2.63	18.8	6.18	1.54
6WF B6 6X6	8	25.0	7.37	6.37	6.080	.320	.456	.456	.30	0	0	53.5	16.8	2.69	17.1	5.6	1.52
CBS6 6X6	11	25.0	7.35	6.37	6.080	.320	.456	.456	.25	0	0	53.5	16.8	2.69	17.1	5.6	1.52
CBS6 6X6	10	25.0	7.35	6.37	6.080	.320	.456	.456	.25	0	0	53.4	16.7	2.69	17.1	5.6	1.53
6WF B6 6X6	6	25.0	7.35	6.19	6.050	.300	.471	.471	.30	0	0	50.9	16.4	2.63	17.4	5.75	1.54
B6	4	23.0	6.76	6.12	6.025	.275	.435	.435	.30	0	0	46.3	15.1	2.62	15.9	5.27	1.53
6WF B6 6X6	7	22.5	6.63	6.28	6.050	.290	.411	.411	.30	0	0	47.4	15.1	2.67	15.2	5.00	1.51
6X6	12	22.5	6.62	6.00	6.063	.375	-	-	-	-	-	41.0	13.7	2.49	12.2	4.0	1.36
CBS6 6X6	10	22.5	6.61	6.28	6.050	.290	.411	.411	.25	0	0	47.3	15.0	2.67	15.2	5.00	1.52
6WF B6 6X6	6	22.5	6.61	6.10	6.020	.270	.425	.425	.30	0	0	45.0	14.8	2.61	15.5	5.14	1.53
BS6	1	20.5	6.06	6.188	6.060	.300	.388	.330	.30	0	2.0*	41.5	13.4	2.62	12.8	4.23	1.45
6WF B6 6X6	8	20.0	5.90	6.20	6.018	.258	.367	.367	.30	0	0	41.7	13.4	2.66	13.3	4.40	1.50
6WF B6 6X6	5	20.0	5.89	6.00	6.000	.250	.375	.375	.30	0	0	39.2	13.1	2.58	13.5	4.50	1.51
CBS6 6X6	11	20.0	5.88	6.20	6.018	.258	.367	.367	.25	0	0	41.7	13.4	2.66	13.3	4.40	1.50
CBS6 6X6	10	20.0	5.88	6.20	6.018	.258	.367	.367	.25	0	0	41.5	13.4	2.66	13.3	4.40	1.51
6X6	12	20.0	5.88	6.00	5.938	.250	-	-	-	-	-	38.8	12.9	2.57	11.4	3.8	1.39

6" BEAMS, LIGHT COLUMNS & STANCHIONS

REFERENCES; SEE COLUMN (I) AND PAGE 4

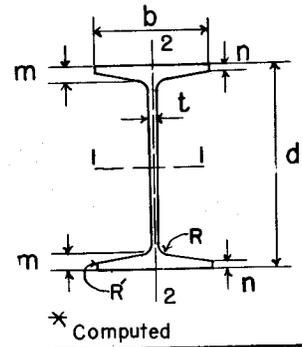
2, 3, 6, 7, 8,
9, 10, 11
See Page 84



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
BS6	2	18.0	5.33	6.094	6.030	.270	.343	.285	.30	0	2.0*	35.8	11.7	2.59	11.0	3.64	1.43
6WF B6 6X6	7	18.0	5.31	6.110	6.010	.250	.322	.322	.30	0	0	36.4	11.9	2.62	11.7	3.9	1.48
6WF B6 6X6	6	18.0	5.30	5.910	5.995	.245	.328	.328	.30	0	0	34.1	11.5	2.54	11.8	3.93	1.49
CBS6 6X6	10	18.0	5.29	6.110	6.010	.250	.322	.322	.25	0	0	36.2	11.9	2.62	11.6	3.90	1.48
BS6	3	18.0	5.28	6.090	6.025	.265	.343	.285	.25	0	2.0	35.5	11.7	2.59	11.0	3.64	1.44
CBS6 6X6	9	18.0	5.28	6.090	6.025	.265	.314	.314	.25	0	0	35.5	11.7	2.59	11.0	3.64	1.44
6WF B6 6X6	8	15.5	4.62	6.000	6.000	.240	.269	.269	.30	0	0	30.3	10.1	2.56	9.69	3.20	1.45
BS6	2	15.5	4.61	6.000	6.000	.240	.298	.240	.30	0	2.0*	30.3	10.1	2.56	9.19	3.06	1.41
CBS6 6X6	11	15.5	4.59	6.000	6.000	.240	.269	.269	.25	0	0	30.3	10.1	2.56	9.69	3.20	1.45
CBS6 6X6	9	15.5	4.59	6.000	6.000	.240	.269	.269	.25	0	0	30.1	10.0	2.56	9.19	3.06	1.42
BS6	3	15.5	4.59	6.000	6.000	.240	.298	.240	.25	0	2.0	30.1	10.0	2.56	9.19	3.06	1.42
CBS6 6X6	10	15.5	4.59	6.000	6.000	.240	.269	.269	.25	0	0	30.1	10.0	2.56	9.19	3.00	1.42
6WF B6 6X6	6	15.5	4.57	5.790	5.990	.240	.270	.270	.30	0	0	28.1	9.7	2.48	9.70	3.23	1.46

4" & 5" BEAMS, LIGHT COLUMNS & STANCHIONS

REFERENCES; SEE COLUMN (I) AND PAGE 4



5"			4"			
1	3	5	1	2	3	5
S47-1934	S51-1938	CIL1946	S43-1933	BS4,4X4	S43-1933	C1931
S48-1934	S53-1943	CIL1948	S47-1934	S43-1933	S47-1934	C1934
S51-1938	S54-1946	US1950	S51-1938	S47-1934	S51-1938	IL1934
S53-1943	S56-1948	6	S53-1943	S51-1938	S53-1943	CIL1940
S54-1946	4	CIL1948	7	S53-1943	S54-1946	6
S56-1948	C1934	US1950	K1950	S54-1946	S56-1948	CIL1946
2	IL1934	7	K1952	8	4	CIL1948
S51-1938	CIL1940	K1950		CB41		US1950
S53-1943	CIL1946	K1952		K1952	CIL1946	

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2							
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.					
							5"															
5X5	7	18.9	5.56	5.00	5.000	.313	-	-	-	-	-	23.8	9.5	2.08	7.8	3.1	1.20					
H2 5X5	6	18.9	5.54	5.000	5.000	.313	.417 [†]		.313	0	-	23.8	9.5	2.08	7.80	3.10	1.20					
BS58H2 5X5	4	18.9	5.47	5.000	5.000	.313	.503	.330	.313	0	7.4*	23.8	9.5	2.08	7.80	3.10	1.20					
5WF B5 5X5	3	18.5	5.45	5.120	5.025	.265	.420	.420	.30	0	0	25.4	9.94	2.16	8.89	3.54	1.28					
CB51 5X5	5	18.5	5.45	5.120	5.025	.265	.420	.420	.30	0	0	25.4	9.94	2.16	8.89	3.54	1.28					
5WF B5 5X5	3	16.0	4.70	5.000	5.000	.240	.360	.360	.30	0	0	21.3	8.53	2.13	7.51	3.00	1.26					
CB51 5X5	5	16.0	4.70	5.000	5.000	.240	.360	.360	.30	0	0	21.3	8.53	2.13	7.51	3.00	1.26					
5WF B5 5X5	2	13.5	3.98	4.860	4.990	.230	.292	.292	.30	0	0	17.1	7.02	2.07	6.05	2.43	1.23					
							4"															
4X4	7	13.8	3.99	4.000	4.000	.313	-	-	-	-	-	10.7	5.3	1.64	3.6	1.8	.95					
H1 4X4	5	13.8	3.99	4.000	4.000	.313	.453	.29	.313	-	8.8*	10.7	5.3	1.64	3.6	1.8	.95					
BS4 4X4	3	13.0	3.82	4.160	4.060	.280	.345 [†]		.25	0	2.0	11.31	5.45	1.72	3.76	1.85	.99					
H1 4X4	6	13.0	3.82	4.000	3.937	.250	.372 [†]		.313	0	-	10.4	5.2	1.65	3.4	1.7	.94					
4X4	8	13.0	3.82	4.000	3.940	.253	-	-	-	-	-	9.9	5.0	1.64	3.3	1.7	.95					
BS48CB41 284		10.0	2.93	4.000	4.000	.220	.265 [†]		.25	0	2.0 to 5.0	8.31	4.16	1.68	2.74	1.37	.97					
BS4 4X4	1	7.5	2.22	3.870	3.950	.170	.200 [†]		.25	0	2.0	6.06	3.13	1.65	1.96	.99	.94					

† Average thickness

LIGHT BEAMS, JOISTS
AND
JUNIOR BEAMS
STEEL

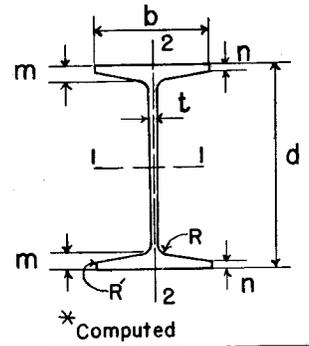
REFERENCES

- C Carnegie Steel Company
- CIL Carnegie-Illinois Steel Corporation
- IL Illinois Steel Company
- J&L Jones & Laughlin Steel Corporation
- S Bethlehem Steel Company
- US United States Steel Company

LIGHT BEAMS, JOISTS & Jr. BEAMS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1	3	4	5
S26-1927	BJ12-10-8-X4	BJ12-10-8-X4	CI934
S28-1928	S40-1931	S43-1933	IL1934
S35-1930	BI2L-BIOL-BBL-X4	S47-1934	CIL1940
S39-1930	S43-1933	12BJ-10BJ-8BJ-X4	CIL1946
2	S47-1934	S51-1938	CIL1948
S39-1930	12BL-10BL-8BL-X4	S53-1943	USI950
	S51-1938	S54-1946	6
	S53-1943	S56-1948	J&L1931
	S54-1946		15
	S56-1948		J&L1952



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
12BL BI2L 12X4	3	22.0	6.47	12.31	4.030	.260	12"				2.0	155.7	25.3	4.91	4.55	2.26	.84
CBL12 12X4	5	22.0	6.47	12.31	4.030	.260	.424	.424	.30	0	0	155.7	25.3	4.91	4.55	2.26	.84
BJ12	2	21.0	6.22	12.16	4.135	.250	.482	.320	.30	0	8 1/3*	147.0	24.2	4.86	4.30	2.08	.83
12BL BJ2L 12X4	3	19.0	5.62	12.16	4.010	.240	12"				2.0	130.1	21.4	4.81	3.67	1.83	.81
CBL12 12X4	5	19.0	5.62	12.16	4.010	.240	.349	.349	.30	0	0	130.1	21.4	4.81	3.67	1.83	.81
BJ12	1	18.5	5.44	12.00	4.125	.240	.402	.240	.30	0	8 1/3*	121.5	20.2	4.73	3.33	1.61	.78
12BL BI2L 12X4	3	16.5	4.86	12.00	4.000	.230	12"				2.0	105.3	17.5	4.65	2.79	1.39	.76
CBL12 12X4	5	16.5	4.86	12.00	4.000	.230	.269	.269	.30	0	0	105.3	17.5	4.65	2.79	1.39	.76
12BJ BJ12 12X4	4	14.0	4.14	11.91	3.970	.200	12"				2.0	88.2	14.8	4.61	2.25	1.13	.74
CBJ12 12X4	5	14.0	4.14	11.91	3.970	.200	.224	.224	.30	0	0	88.2	14.8	4.61	2.25	1.13	.74
Jr12	6	11.8	3.45	12.00	3.060	.175	-	.178	.24	0	-	72.2	12.0	4.57	.98	.64	.53
Jr12	15	11.8	3.45	12.00	3.063	.175	-	.178	.24	0	-	72.2	12.0	4.57	.98	.64	.53
Jr11	6	10.3	3.01	11.00	2.844	.165	11"				-	53.1	9.6	4.20	.75	.52	.50
10BL BIOL 10X4	3	19.0	5.61	10.25	4.020	.250	10"				2.0	96.2	18.8	4.14	4.19	2.08	.86
CBL10 10X4	5	19.0	5.61	10.25	4.020	.250	.394	.394	.30	0	0	96.2	18.8	4.14	4.19	2.08	.86
BJ10	2	19.0	5.60	10.16	4.010	.250	.477	.320	.30	0	8 1/3*	94.5	18.6	4.11	3.90	1.95	.83
10BL BIOL 10X4	3	17.0	4.98	10.12	4.010	.240	10"				2.0	81.8	16.2	4.05	3.45	1.72	.83
CBL10 10X4	5	17.0	4.98	10.12	4.010	.240	.329	.329	.30	0	0	81.8	16.2	4.05	3.45	1.72	.83
BJ10	2	16.5	4.86	10.00	4.000	.240	.397	.240	.30	0	8 1/3*	77.4	15.5	3.99	3.02	1.51	.79
10BL BIOL 10X4	3	15.0	4.40	10.00	4.000	.230	10"				2.0	68.8	13.8	3.95	2.79	1.39	.80
CBL10 10X4	5	15.0	4.40	10.00	4.000	.230	.269	.269	.30	0	0	68.8	13.8	3.95	2.79	1.39	.80
10BJ BJ10 10X4	4	11.5	3.39	9.87	3.950	.180	10"				2.0	51.9	10.5	3.92	2.01	1.02	.77
CBJ10 10X4	5	11.5	3.39	9.87	3.950	.180	.204	.204	.30	0	0	51.9	10.5	3.92	2.01	1.02	.77
Jr10	15/6	9.0	2.64	10.00	2.688	.155	-	.165	.21	0	-	39.0	7.8	3.85	.61	.45	.48

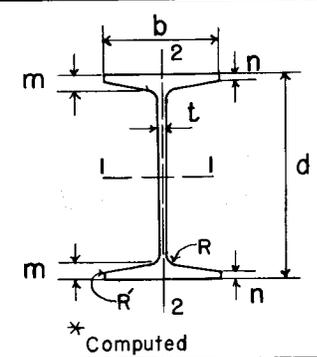
† Average thickness

LIGHT BEAMS, JOISTS & Jr. BEAMS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1,2,3,4,5,6,15
See Page 90

	7	9	11	12	13
S47-1934	S28-1928	BJ6, 6X4	S43, 1933	B6b, 6X3	
S48-1934	S35-1930	S40-1931	S47-1934	S47-1934	
S51-1938	S39-1930	B 6L	S51-1938	S48-1934	
S53-1943	10	S43-1933	S53-1943	6B(B6b), 6X3	
8	S40-1931	S47-1934	S54-1946	S51-1938	
C1933		S51-1938	S56-1948	S53-1943	
C1934		S53-1943		14	
		S54-1946		C1934	
		S56-1948			



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
Jr9	6	7.5	2.20	9.00	2.375	.145	-	.155	.195	0	-	26.2	5.8	3.45	.39	.33	.42
BJ8	2	16.0	4.74	8.12	3.875	.240	.451	.300	.30	0	8 1/3*	52.4	12.90	3.32	3.31	1.71	.84
8BL 8X4	3	15.0	4.43	8.12	4.015	.245	.314 [†]		.30	0	2.0	48.0	11.80	3.29	3.30	1.65	.86
CBL8 8X4	5	15.0	4.43	8.12	4.015	.245	.314	.314	.30	0	0	48.0	11.80	3.29	3.30	1.65	.86
BJ8	1	14.5	4.28	8.00	3.875	.240	.391	.240	.30	0	8 1/3*	44.9	11.20	3.24	2.73	1.41	.80
8BL 8X4	3	13.0	3.83	8.00	4.000	.230	.254 [†]		.30	0	2.0	39.5	9.88	3.21	2.62	1.31	.83
CBL8 8X4	5	13.0	3.83	8.00	4.000	.230	.254	.254	.30	0	0	39.5	9.88	3.21	2.62	1.31	.83
8BJ 8X4	4	10.0	2.95	7.90	3.940	.170	.204 [†]		.30	0	2.0	30.8	7.79	3.23	1.99	1.01	.82
CBJ8 8X4	5	10.0	2.95	7.90	3.940	.170	.204	.204	.30	0	0	30.8	7.79	3.23	1.99	1.01	.82
Jr8	15/6	6.5	1.92	8.00	2.281	.135	-	.154	.18	0	-	18.7	4.7	3.12	.34	.30	.42
B7	7	12.0	3.52	7.00	3.500	.188	.323 [†]		.30	0	5.0	29.8	8.5	2.91	2.10	1.18	.77
B42	8	12.0	3.52	7.00	3.500	.188	.425	.240	.25	0	11.2*	29.8	8.5	2.91	2.10	1.18	.77
Jr7	12/6	5.5	1.61	7.00	2.078	.126	-	.148	.165	0	-	12.1	3.5	2.74	.25	.24	.39
CBL6 6X4	5	16.0	4.72	6.25	4.030	.260	.404	.404	.25	0	0	31.7	10.10	2.59	4.32	2.14	.96
B6L 6X4	11	16.0	4.72	6.25	4.030	.260	.404 [†]		.25	0	2.0	31.7	10.10	2.59	4.32	2.14	.96
BJ6 6X4	10	14.0	4.11	6.12	4.015	.245	.358	.320	.25	0	2.0	26.4	8.63	2.54	3.57	1.78	.93
CBL6 6X4	5	12.0	3.53	6.00	4.000	.230	.279	.279	.25	0	0	21.7	7.24	2.48	2.89	1.44	.90
B6L 6X4	11	12.0	3.53	6.00	4.000	.230	.279 [†]		.25	0	2.0	21.7	7.24	2.48	2.89	1.44	.90
BJ6	9	11.0	3.25	6.00	3.330	.230	.359	.230	.25	0	8 1/3*	19.3	6.43	2.44	1.64	.98	.71
6B B6b 6X3	13	10.0	2.91	6.00	3.000	.188	.310 [†]		.30	0	5.0	17.8	5.90	2.47	1.30	.85	.66
B41	14	10.0	2.91	6.00	3.000	.188	.396	.240	.25	0	11.1	17.8	5.90	2.47	1.30	.85	.66
B108	6	9.4	2.77	6.00	2.938	.188	.330	.250	.25	0	5.8*	16.7	5.60	2.46	1.20	.78	.64
BJ6	12	8.5	2.50	5.83	3.940	.170	.194 [†]		.25	0	2.0	14.8	5.07	2.43	1.89	.96	.87
CBJ6 6X4	5	8.5	2.50	5.83	3.940	.170	.194	.194	.25	0	0	14.8	5.07	2.43	1.89	.96	.87
Jr6	15/6	4.4	1.30	6.00	1.844	.114	-	.142	.15	0	-	7.3	2.40	2.37	.17	.18	.36

† Average thickness

COLUMNS

STEEL

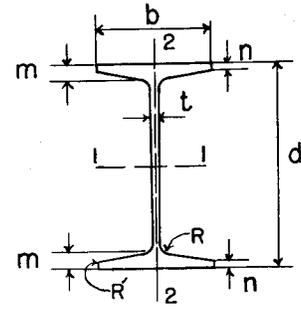
REFERENCES

- B Bethlehem Steel Company
- C Carnegie Steel Company
- CIL Carnegie-Illinois Steel Corporation
- IL Illinois Steel Company
- K Kaiser Steel Corporation
- PH The Phoenix Iron Company
- S Bethlehem Steel Company
- US United States Steel Company

16" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

- S22-1927
- 2
- S24-1927
- 3
- S27-1928
- S35-1930
- 4
- S35-1930

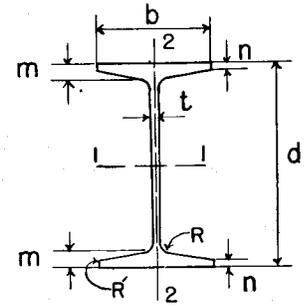


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2			
							m	n	R	R'		I	S	r	I	S	r	
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.	
H16	3	427.0	125.72	18.438	16.76	1.94	3.099	2.951	.60	0	2.0	6416.2	696.0	7.14	2355.9	281.1	4.33	
	3	413.0	121.48	18.250	16.70	1.88	3.005	2.857	.60	0	2.0	6121.5	670.8	7.10	2257.2	270.3	4.31	
	3	399.0	117.26	18.063	16.64	1.82	2.911	2.763	.60	0	2.0	5834.0	646.0	7.05	2160.3	259.6	4.29	
	3	384.0	113.07	17.875	16.58	1.76	2.818	2.669	.60	0	2.0	5553.6	621.4	7.01	2065.1	249.1	4.27	
	3	370.0	108.90	17.688	16.52	1.70	2.724	2.576	.60	0	2.0	5280.2	597.1	6.96	1971.7	238.7	4.26	
H16b	4	363.0	106.86	17.313	16.760	1.940	2.536	2.388	.60	0	2.0	4909.6	567.2	6.78	1914.5	228.5	4.23	
	3	356.0	104.75	17.500	16.46	1.64	2.630	2.482	.60	0	2.0	5013.7	573.0	6.92	1880.0	228.4	4.24	
H16	1,2	356.0	104.68	17.38	16.43	1.81	2.568	2.421	.60	0	2.0	4877.0	561.4	6.83	1827.0	222.3	4.18	
	1,2	342.0	100.63	17.313	16.40	1.58	2.536	2.388	.60	0	2.0	4754.0	549.2	6.87	1790.1	218.3	4.22	
	1,2	342.0	100.57	17.19	16.37	1.75	2.474	2.328	.60	0	2.0	4622.0	537.8	6.78	1737.0	212.3	4.16	
	3	328.0	96.53	17.125	16.34	1.52	2.443	2.294	.60	0	2.0	4500.9	525.7	6.83	1701.8	208.3	4.20	
	1,2	328.0	96.48	17.00	16.31	1.69	2.380	2.234	.60	0	2.0	4373.0	514.5	6.73	1650.0	202.3	4.14	
	3	314.0	92.45	16.938	16.28	1.46	2.349	2.201	.60	0	2.0	4254.5	502.4	6.78	1615.2	198.4	4.18	
	1,2	314.0	92.41	16.81	16.25	1.63	2.286	2.140	.60	0	2.0	4131.0	491.4	6.69	1564.0	192.5	4.11	
	3	301.0	88.56	16.750	16.23	1.41	2.255	2.107	.60	0	2.0	4018.4	479.8	6.74	1533.2	188.9	4.16	
	1,2	301.0	88.54	16.63	16.20	1.58	2.193	2.046	.60	0	2.0	3899.0	469.0	6.64	1483.0	183.1	4.09	
	H16a	4	293.0	86.24	16.375	16.460	1.640	2.068	1.919	.60	0	2.0	3685.1	405.1	6.54	1462.0	177.6	4.12
		3	288.0	84.69	16.563	16.18	1.36	2.161	2.013	.60	0	2.0	3788.4	457.5	6.69	1452.5	179.5	4.14
	H16	1,2	287.0	84.51	16.44	16.14	1.52	2.099	1.953	.60	0	2.0	3669.0	446.4	6.59	1400.0	173.5	4.07
3		274.0	80.67	16.375	16.12	1.30	2.068	1.919	.60	0	2.0	3560.7	434.9	6.64	1370.6	170.0	4.12	
1,2		274.0	80.51	16.25	16.08	1.46	2.005	1.859	.60	0	2.0	3445.0	424.0	6.54	1319.0	164.1	4.05	
3		265.0	78.00	16.250	16.08	1.26	2.005	1.857	.60	0	2.0	3412.4	420.0	6.61	1316.8	163.8	4.11	
1,2		265.0	77.86	16.13	16.04	1.42	1.943	1.796	.60	0	2.0	3300.0	409.3	6.51	1266.0	157.9	4.03	
3		256.0	75.35	16.125	16.04	1.22	1.943	1.794	.60	0	2.0	3266.7	405.2	6.58	1263.8	157.6	4.10	
1,2		256.0	75.21	16.00	16.00	1.38	1.880	1.734	.60	0	2.0	3157.0	394.6	6.48	1214.0	151.7	4.02	
3		247.0	72.70	16.00	16.00	1.18	1.880	1.732	.60	0	2.0	3123.7	390.5	6.55	1211.4	151.4	4.08	
1,2		247.0	72.57	15.88	15.96	1.34	1.818	1.671	.60	0	2.0	3016.0	380.0	6.45	1162.0	145.6	4.00	
3		238.0	70.07	15.875	15.96	1.14	1.818	1.669	.60	0	2.0	2983.4	375.9	6.53	1159.8	145.3	4.07	
1,2		238.0	69.95	15.75	15.92	1.30	1.755	1.609	.60	0	2.0	2879.0	365.5	6.41	1111.0	139.6	3.99	
3		230.0	67.60	15.750	15.93	1.11	1.755	1.607	.60	0	2.0	2848.9	361.8	6.49	1111.0	139.5	4.05	
1,2		230.0	67.49	15.63	15.89	1.27	1.693	1.546	.60	0	2.0	2747.0	351.6	6.38	1063.0	133.8	3.97	
3		221.0	65.14	15.625	15.90	1.08	1.693	1.544	.60	0	2.0	2716.9	347.8	6.46	1062.7	133.7	4.04	
1,2		221.0	64.88	15.50	15.85	1.23	1.630	1.484	.60	0	2.0	2614.0	337.3	6.35	1013.0	127.8	3.95	
3		212.0	62.53	15.500	15.86	1.04	1.630	1.482	.60	0	2.0	2584.1	333.4	6.43	1013.0	127.7	4.02	
1,2		212.0	62.29	15.38	15.81	1.19	1.568	1.421	.60	0	2.0	2484.0	323.1	6.31	964.0	122.0	3.93	
3		203.0	59.94	15.375	15.82	1.00	1.568	1.419	.60	0	2.0	2453.9	319.2	6.40	963.9	121.9	4.01	
2		203.0	59.70	15.25	15.77	1.15	1.505	1.359	.60	0	2.0	2356.0	309.0	6.28	916.0	116.1	3.92	
3		195.0	57.35	15.250	15.78	.96	1.505	1.357	.60	0	2.0	2326.1	305.1	6.37	915.5	116.0	4.00	
2		194.0	57.13	15.13	15.73	1.11	1.443	1.296	.60	0	2.0	2231.0	295.0	6.25	868.0	110.4	3.90	
3		186.0	54.77	15.125	15.74	.92	1.443	1.294	.60	0	2.0	2200.9	291.0	6.34	867.7	110.3	3.98	
2		186.0	54.56	15.00	15.69	1.07	1.380	1.234	.60	0	2.0	2108.0	281.1	6.22	821.0	104.6	3.88	
3		177.0	52.20	15.000	15.70	.88	1.380	1.232	.60	0	2.0	2078.0	277.1	6.31	820.7	104.5	3.96	
3	169.0	49.65	14.875	15.66	.84	1.318	1.169	.60	0	2.0	1957.6	263.2	6.28	774.2	98.9	3.95		
3	160.0	47.10	14.750	15.62	.80	1.255	1.107	.60	0	2.0	1839.5	249.4	6.25	728.5	93.3	3.93		
3	151.0	44.56	14.625	15.58	.76	1.193	1.044	.60	0	2.0	1723.8	235.7	6.22	683.4	87.7	3.92		
3	143.0	42.03	14.500	15.54	.72	1.130	.982	.60	0	2.0	1610.4	222.1	6.19	638.9	82.2	3.90		

14" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

7	11	8	9	13	14
H14e 14X16	C1928	B14f 14X16	B14f 14X16	CB146,14X16	CB146,14X16
H14d 14X16	C1929	B14e 14X16	B14e 14X16	CB145,14X14 1/2	CB145,14X14 1/2
H14 14X14 1/2	C1930	B14d 14X14 1/2	B14d 14X14 1/2	CB144,14X12	CB144,14X12
H14a 14X12	12	B14c 14X12	B14c 14X12	CB143,14X10	CB143,14X10
H14b 14X10	C1931	B14b 14X10	B14b 14X10	CB142,14X8	CB142,14X8
S40-1931	15	B14a 14X8	B14a 14X8	C1933	CIL1946
H14c 14X8	IL1934	S43-1933	S54-1946	C1934	CIL1948
S40-1931		S47-1934	S56-1948	CIL1940	US1950
		S51-1938			
		S53-1943			

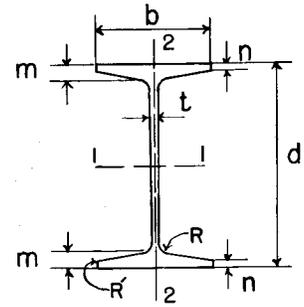


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H14d 7 14X16	7	426.0	125.34	18.690	16.700	1.880	3.033	3.033	.60	0	0	6613.0	707.6	7.26	2361.7	282.8	4.34
CB146N12 14X16	12	426.0	125.30	18.690	16.699	1.879	3.033	3.033	.65	0	0	6611.4	707.5	7.26	2361.2	282.8	4.34
14WF 14X16 8,9,13,14,15		426.0	125.25	18.690	16.695	1.875	3.033	3.033	.60	0	0	6610.3	707.4	7.26	2359.5	282.7	4.34
CB146 11 14X15	11	425.0	124.99	18.510	16.506	1.912	3.060	3.060	.65	0	0	6420.5	693.7	7.17	2301.0	278.8	4.29
CB146N12 14X16	12	412.0	121.16	18.500	16.647	1.827	2.938	2.938	.65	0	0	6309.7	682.1	7.22	2265.7	272.2	4.32
14WF 14X16 7,8,13,15		412.0	121.15	18.500	16.645	1.825	2.938	2.938	.60	0	0	6309.7	682.1	7.22	2264.9	272.1	4.32
CB146 11 14X15	11	405.0	119.2	18.246	16.423	1.829	2.928	2.928	.65	0	0	6010.5	658.8	7.10	2168.2	264.0	4.27
H14d 7 14X16	7	398.0	117.08	18.310	16.595	1.775	2.843	2.843	.60	0	0	6016.3	657.2	7.17	2171.7	261.7	4.31
CB146N12 14X16	12	398.0	117.05	18.310	16.595	1.775	2.843	2.843	.65	0	0	6015.2	657.0	7.17	2171.7	261.7	4.31
14WF 14X16 8,9,13,14,15		398.0	116.98	18.310	16.590	1.770	2.843	2.843	.60	0	0	6013.7	656.9	7.17	2169.7	261.6	4.31
CB146 11 14X16	11	385.0	113.22	17.978	16.340	1.746	2.794	2.794	.65	0	0	5609.4	624.0	7.04	2037.4	249.4	4.24
14WF 14X16 7,8,13,15		384.0	112.93	18.120	16.540	1.720	2.748	2.748	.60	0	0	5727.5	632.2	7.12	2078.1	251.3	4.29
CB146N12 14X16	12	384.0	112.92	18.120	16.541	1.721	2.748	2.748	.65	0	0	5726.9	632.1	7.12	2078.4	251.3	4.29
H14d 7 14X16	7	370.0	108.87	17.940	16.480	1.660	2.658	2.658	.60	0	0	5456.6	608.3	7.08	1987.9	241.2	4.27
CB146N12 14X16	12	370.0	108.83	17.940	16.479	1.659	2.658	2.658	.65	0	0	5455.1	608.2	7.08	1987.5	241.2	4.27
14WF 14X16 8,9,13,14,15		370.0	108.78	17.940	16.475	1.655	2.658	2.658	.60	0	0	5454.2	608.1	7.08	1986.0	241.1	4.27
CB146 11 14X15	11	365.0	107.34	17.710	16.255	1.661	2.660	2.660	.65	0	0	5221.4	589.7	6.97	1909.1	234.9	4.22
CB146N12 14X16	12	356.0	104.68	17.750	16.422	1.602	2.563	2.563	.65	0	0	5179.3	583.6	7.03	1896.4	231.0	4.26
14WF 14X16 7,8,13,15		356.0	104.68	17.750	16.420	1.600	2.563	2.563	.60	0	0	5179.4	583.6	7.03	1895.7	230.9	4.26
CB146 11 14X15	11	345.0	101.47	17.438	16.172	1.578	2.524	2.524	.65	0	0	4843.4	555.5	6.91	1783.5	220.6	4.19
14WF 14X16 7,8,9,13,14,15		342.0	100.59	17.560	16.365	1.545	2.468	2.468	.60	0	0	4911.5	559.4	6.99	1806.9	220.8	4.24
CB146N12 14X16	12	342.0	100.56	17.560	16.365	1.545	2.468	2.468	.65	0	0	4910.4	559.3	6.99	1806.9	220.8	4.24
H14d 7 14X16	7	328.0	96.52	17.380	16.300	1.480	2.378	2.378	.60	0	0	4658.3	536.0	6.95	1720.1	211.1	4.22
CB146N12 14X16	12	328.0	96.47	17.380	16.299	1.479	2.378	2.378	.65	0	0	4656.8	535.9	6.95	1719.7	211.0	4.22
14WF 14X16 8,13,15		328.0	96.43	17.380	16.295	1.475	2.378	2.378	.60	0	0	4656.1	535.8	6.95	1718.5	210.9	4.22
CB146 11 14X15	11	325.0	95.58	17.164	16.087	1.493	2.387	2.387	.65	0	0	4475.9	521.6	6.84	1659.9	206.4	4.17

14" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4	10	7,8,9,12,13,14,15
B 1907	S12-1922	C 1927	See Page 95
2	S15-1924	C 1928	
S3-1909	S16-1925	C 1929	
S4-1911	S18-1926	CB146, 14X15	
	5	CB145, 14X12	
	S27-1928	CB144, 14X10	
	S35-1930	CB143, 14X8	
		C 1930	

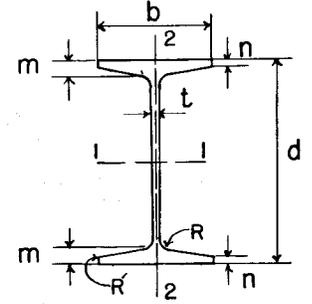


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
14WF 14X16		320.0	94.12	16.81	16.710	1.890	2.093	2.093	.60	0	0	4141.7	492.8	6.63	1635.1	195.7	4.17
7,8,9,13,14,15																	
CB146N 12 14X16		320.0	94.09	16.810	16.710	1.890	2.093	2.093	.65	0	0	4140.7	492.6	6.63	1635.0	195.7	4.17
H14d 7 14X16		314.0	92.39	17.190	16.240	1.420	2.283	2.283	.60	0	0	4401.5	512.1	6.90	1633.0	201.1	4.20
CB146N 12 14X16		314.0	92.36	17.190	16.240	1.420	2.283	2.283	.65	0	0	4400.5	512.0	6.90	1632.9	201.1	4.20
14WF 14X16		314.0	92.30	17.190	16.235	1.415	2.283	2.283	.60	0	0	4399.4	511.9	6.90	1631.4	201.0	4.20
8,9,13,14,15																	
CB146 10 14X15		305.0	89.70	16.890	16.000	1.406	2.250	2.250	.65	0	0	4121.5	488.0	6.78	1539.1	192.4	4.14
H14d 7 14X16		300.0	88.28	17.000	16.180	1.360	2.188	2.188	.60	0	0	4151.5	488.4	6.86	1547.5	191.3	4.19
CB146N 12 14X16		300.0	88.24	17.000	16.179	1.359	2.188	2.188	.65	0	0	4150.1	488.2	6.86	1547.2	191.3	4.19
14WF 14X16		300.0	88.20	17.000	16.175	1.355	2.188	2.188	.60	0	0	4149.5	488.2	6.86	1546.0	191.2	4.19
8,13,15																	
H14 5		298.0	87.63	16.875	15.610	1.390	2.317	2.175	.60	0	2.0	4011.3	475.4	6.77	1406.5	180.2	4.01
CB146 10 14X15		295.0	86.76	16.752	15.956	1.362	2.181	2.181	.65	0	0	3948.1	471.4	6.75	1479.4	185.4	4.13
H14b 1		291.2	85.63	16.880	15.160	1.410	2.317	2.180	.60	0	2.0	3897.7	462.0	6.75	1290.7	170.3	3.88
H14 5		289.0	85.01	16.750	15.570	1.350	2.255	2.112	.60	0	2.0	3857.7	460.6	6.74	1356.1	174.2	3.99
H14 4		288.5	84.50	16.88	14.900	1.410	2.317	2.183	.60	0	2.0	3836.1	454.7	6.74	1226.7	164.7	3.81
H14 2		287.5	84.50	16.88	14.900	1.410	2.317	2.183	.60	0	2.0	3836.1	454.7	6.74	1226.7	164.7	3.81
CB146N 12 14X16		287.0	84.39	16.810	16.133	1.313	2.093	2.093	.65	0	0	3912.3	465.5	6.81	1467.3	181.9	4.17
14WF 14X16		287.0	84.37	16.81	16.130	1.310	2.093	2.093	.60	0	0	3912.1	465.5	6.81	1466.5	181.8	4.17
7,8,9,13,14,15																	
CB146 10 14X15		285.0	83.82	16.614	15.912	1.318	2.112	2.112	.65	0	0	3778.1	454.8	6.71	1420.7	178.6	4.12
H14b 1		282.4	83.07	16.75	15.120	1.370	2.255	2.117	.60	0	2.0	3748.1	447.5	6.72	1244.3	164.6	3.87
H14 5		280.0	82.39	16.625	15.530	1.310	2.192	2.050	.60	0	2.0	3706.9	445.9	6.71	1306.4	168.2	3.98
H14 4		279.5	81.97	16.75	14.860	1.370	2.255	2.120	.60	0	2.0	3688.8	440.5	6.71	1182.4	159.1	3.80
H14 2		278.5	81.97	16.75	14.860	1.370	2.255	2.120	.60	0	2.0	3688.8	440.5	6.71	1182.4	159.1	3.80
CB146 10 14X15		275.0	80.87	16.472	15.870	1.276	2.041	2.041	.65	0	0	3607.8	438.1	6.68	1362.0	171.6	4.10
H14b 1		273.7	80.51	16.63	15.080	1.330	2.192	2.055	.60	0	2.0	3601.2	433.2	6.69	1198.5	158.9	3.86
14WF 14X16		273.0	80.30	16.620	16.070	1.250	1.998	1.998	.60	0	0	3675.1	442.3	6.76	1384.2	172.3	4.15
7																	
CB146N 12 14X16		273.0	80.28	16.620	16.070	1.250	1.998	1.998	.65	0	0	3674.1	442.1	6.77	1384.2	172.3	4.15
14WF 14X16		273.0	80.22	16.620	16.065	1.245	1.998	1.998	.60	0	0	3673.2	442.0	6.77	1382.9	172.2	4.15
8,13,15																	
H14 5		271.0	79.79	16.50	15.490	1.270	2.130	1.987	.60	0	2.0	3558.8	431.4	6.68	1257.3	162.3	3.97
H14 4		271.0	79.44	16.63	14.820	1.330	2.192	2.058	.60	0	2.0	3544.1	426.4	6.68	1138.7	153.7	3.79
H14 2		270.0	79.44	16.63	14.820	1.330	2.192	2.058	.60	0	2.0	3544.1	426.4	6.68	1138.7	153.7	3.79

14" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1, 2, 4, 5, 10
See Page 96
7, 8, 9, 12, 13,
14, 15
See Page 95

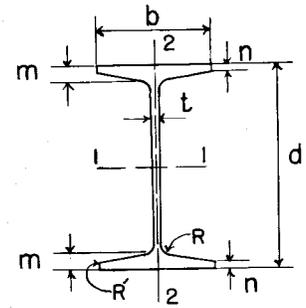


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 14b	1	265.1	77.97	16.500	15.040	1.290	2.130	1.992	.60	0	2.0	3457.0	419.0	6.66	1153.3	153.4	3.85
CB 146 14X15	10	265.0	77.93	16.332	15.826	1.232	1.971	1.971	.65	0	0	3442.4	421.6	6.65	1304.2	164.8	4.09
14WF 14X16 7,8,9,13,14,15		264.0	77.63	16.500	16.025	1.205	1.938	1.938	.60	0	0	3526.0	427.4	6.74	1331.2	166.1	4.14
CB 146N 14X16	12	264.0	77.62	16.500	16.026	1.206	1.938	1.938	.65	0	0	3525.4	427.3	6.74	1331.5	166.2	4.14
H 14	4	262.5	76.93	16.500	14.780	1.290	2.130	1.995	.60	0	2.0	3402.1	412.4	6.65	1095.6	148.3	3.77
H 14	5	262.0	77.20	16.375	15.450	1.230	2.067	1.925	.60	0	2.0	3413.4	416.9	6.65	1209.0	156.5	3.96
H 14	2	261.5	76.93	16.500	14.780	1.290	2.130	1.995	.60	0	2.0	3402.1	412.4	6.65	1095.6	148.3	3.77
H 14b	1	256.5	75.43	16.380	15.000	1.250	2.067	1.930	.60	0	2.0	3315.4	404.9	6.63	1108.7	147.8	3.83
CB 146 14X15	10	255.0	74.99	16.192	15.781	1.187	1.901	1.901	.65	0	0	3280.0	405.1	6.61	1247.1	158.0	4.08
CB 146N 14X16	12	255.0	74.98	16.370	15.992	1.172	1.873	1.873	.65	0	0	3372.3	412.0	6.71	1278.6	159.9	4.13
14WF 14X16 7,8,13,15		255.0	74.98	16.370	15.990	1.170	1.873	1.873	.60	0	0	3372.6	412.0	6.71	1278.1	159.9	4.13
H 14	5	254.0	74.62	16.250	15.410	1.190	2.005	1.862	.60	0	2.0	3270.6	402.5	6.62	1161.2	150.7	3.94
H 14	4	254.0	74.43	16.380	14.740	1.250	2.067	1.933	.60	0	2.0	3262.7	398.5	6.62	1053.2	142.9	3.76
H 14	2	253.0	74.43	16.380	14.740	1.250	2.067	1.933	.60	0	2.0	3262.7	398.5	6.62	1053.2	142.9	3.76
H 14b	1	247.9	72.91	16.250	14.960	1.210	2.005	1.867	.60	0	2.0	3176.3	390.9	6.60	1064.7	142.3	3.82
CB 146N 14X16	12	246.0	72.33	16.250	15.947	1.127	1.813	1.813	.65	0	0	3228.6	397.4	6.68	1227.1	153.9	4.12
14WF 14X16 7,8,9,13,14,15		246.0	72.33	16.250	15.945	1.125	1.813	1.813	.60	0	0	3228.9	397.4	6.68	1226.6	153.9	4.12
H 14	4	245.5	71.94	16.250	14.700	1.210	2.005	1.870	.60	0	2.0	3125.8	384.7	6.59	1011.3	137.6	3.5
CB 146 14X15	10	245.0	72.06	16.050	15.738	1.144	1.830	1.830	.65	0	0	3119.6	388.7	6.58	1190.6	151.3	4.06
H 14	5	245.0	72.05	16.125	15.370	1.150	1.942	1.800	.60	0	2.0	3130.4	388.3	6.59	1114.2	145.0	3.93
H 14	2	244.5	71.94	16.250	14.700	1.210	2.005	1.870	.60	0	2.0	3125.8	384.7	6.59	1011.3	137.6	3.75
H 14b	1	239.3	70.39	16.130	14.920	1.170	1.942	1.805	.60	0	2.0	3039.9	377.0	6.57	1021.4	136.9	3.81
14WF 14X16 7,8,9,13,14,15		237.0	69.69	16.120	15.910	1.090	1.748	1.748	.60	0	0	3080.9	382.2	6.65	1174.8	147.7	4.11
CB 146N 14X16	12	237.0	69.68	16.120	15.911	1.091	1.748	1.748	.65	0	0	3080.2	382.2	6.65	1175.0	147.7	4.11
H 14	4	237.0	69.45	16.130	14.660	1.170	1.942	1.808	.60	0	2.0	2991.5	371.0	6.56	970.0	132.3	3.74
H 14	5	236.0	69.49	16.000	15.330	1.110	1.880	1.737	.60	0	2.0	2992.9	374.1	6.56	1067.8	139.3	3.92
H 14	2	236.0	69.45	16.130	14.660	1.170	1.942	1.808	.60	0	2.0	2991.5	371.0	6.56	970.0	132.3	3.74
CB 146 14X15	10	235.0	69.11	15.908	15.693	1.099	1.759	1.759	.65	0	0	2961.9	372.4	6.55	1134.5	144.6	4.05
H 14b	1	230.8	67.89	16.000	14.880	1.130	1.880	1.742	.60	0	2.0	2905.9	363.2	6.55	978.7	131.5	3.80
H 14	4	228.5	66.98	16.000	14.620	1.130	1.880	1.745	.60	0	2.0	2859.6	357.5	6.53	929.4	127.1	3.72
14WF 14X16 7,8,9,13,14		228.0	67.06	16.000	15.865	1.045	1.688	1.688	.60	0	0	2942.4	367.8	6.62	1124.8	141.8	4.10
CB 146N 14X16	12	228.0	67.03	16.000	15.865	1.045	1.688	1.688	.65	0	0	2941.4	367.7	6.62	1124.7	141.8	4.10

14" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1,2,4,5,10
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7,8,9,12,13,
14,15
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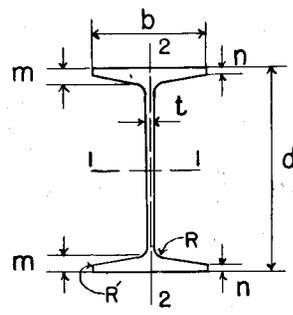


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 14	2	227.5	66.98	16.000	14.620	1.130	1.880	1.745	.60	0	2.0	2859.6	357.5	6.53	929.4	127.1	3.72
H 14	5	227.0	66.94	15.875	15.290	1.070	1.817	1.675	.60	0	2.0	2857.8	360.0	6.53	1022.0	133.7	3.91
CB146 14X15	10	225.0	66.17	15.764	15.650	1.056	1.687	1.687	.65	0	0	2806.2	356.0	6.51	1079.1	137.9	4.04
H14a	1	222.3	65.39	15.880	14.840	1.090	1.817	1.680	.60	0	2.0	2774.5	349.5	6.51	936.6	126.2	3.78
H14	4	220.5	64.52	15.880	14.580	1.090	1.817	1.683	.60	0	2.0	2730.2	344.0	6.51	889.3	122.0	3.71
H14	2	219.5	64.52	15.880	14.580	1.090	1.817	1.683	.60	0	2.0	2730.2	344.0	6.51	889.3	122.0	3.71
H14d	7	219.0	64.44	15.870	15.830	1.010	1.623	1.623	.60	0	0	2799.9	352.8	6.59	1074.2	135.7	4.08
CB146N 14X16	12	219.0	64.42	15.870	15.830	1.010	1.623	1.623	.65	0	0	2798.8	352.7	6.59	1074.2	135.7	4.08
H14	5	219.0	64.40	15.750	15.250	1.030	1.755	1.612	.60	0	2.0	2725.3	346.1	6.51	976.9	128.1	3.89
14WF 14X16 8,9,13,14,15		219.0	64.36	15.870	15.825	1.005	1.623	1.623	.60	0	0	2798.2	352.6	6.59	1073.2	135.6	4.08
CB146 14X15	10	215.0	63.23	15.622	15.604	1.010	1.616	1.616	.65	0	0	2654.7	339.9	6.48	1024.5	131.3	4.03
H14a	1	214.4	63.07	15.750	14.810	1.060	1.755	1.617	.60	0	2.0	2648.7	336.3	6.48	897.0	121.1	3.77
H14	4	212.0	62.07	15.750	14.540	1.050	1.755	1.620	.60	0	2.0	2603.3	330.6	6.48	849.8	116.9	3.70
14WF 14X16 7,8,9,13,14,15		211.0	62.07	15.750	15.800	.980	1.563	1.563	.60	0	0	2671.4	339.2	6.56	1028.6	130.2	4.07
H14	2	211.0	62.07	15.750	14.540	1.050	1.755	1.620	.60	0	2.0	2603.3	330.6	6.48	849.8	116.9	3.70
CB146N 14X16	12	211.0	62.04	15.750	15.800	.980	1.563	1.563	.65	0	0	2670.4	339.1	6.56	1028.6	130.2	4.07
H14	5	210.0	61.86	15.625	15.210	.990	1.692	1.550	.60	0	2.0	2595.4	332.2	6.48	932.4	122.6	3.88
H14a	1	206.0	60.59	15.630	14.770	1.020	1.692	1.555	.60	0	2.0	2522.1	322.8	6.45	856.0	115.9	3.76
CB146 14X15	10	205.0	60.28	15.478	15.559	.965	1.544	1.544	.65	0	0	2505.0	323.7	6.45	970.3	124.7	4.01
H14	4	204.5	59.78	15.630	14.510	1.02	1.692	1.558	.60	0	2.0	2481.9	317.7	6.44	812.6	112.0	3.69
H14	2	203.5	59.78	15.630	14.510	1.02	1.692	1.558	.60	0	2.0	2481.9	317.7	6.44	812.6	112.0	3.69
H14	5	202.0	59.50	15.500	15.180	.96	1.630	1.487	.60	0	2.0	2470.9	318.8	6.44	890.3	117.3	3.87
14WF 14X16 7,8,9,13,14,15		202.0	59.39	15.630	15.750	.930	1.503	1.503	.60	0	0	2538.8	324.9	6.54	979.7	124.4	4.06
CB146N 14X16	12	202.0	59.38	15.630	15.751	.931	1.503	1.503	.65	0	0	2538.1	324.8	6.54	979.8	124.4	4.06
H14a	1	197.6	58.12	15.50	14.73	.98	1.630	1.492	.60	0	2.0	2397.9	309.3	6.42	815.6	110.7	3.75
H14	4	196.0	57.35	15.500	14.470	.980	1.630	1.495	.60	0	2.0	2359.7	304.5	6.41	774.2	107.0	3.68
H14	2	195.0	57.35	15.500	14.470	.980	1.630	1.495	.60	0	2.0	2359.7	304.5	6.41	774.2	107.0	3.68
CB146 14X15	10	195.0	57.34	15.334	15.513	.919	1.472	1.472	.65	0	0	2358.2	307.6	6.41	916.8	118.2	4.00
H14	5	194.0	56.99	15.375	15.140	.920	1.567	1.425	.60	0	2.0	2345.8	305.1	6.42	846.9	111.9	3.86
CB146N 14X16	12	193.0	56.75	15.500	15.713	.893	1.438	1.438	.65	0	0	2402.3	310.0	6.51	930.6	118.5	4.05
14WF 14X16 7,8,9,13,14,15		193.0	56.73	15.500	15.710	.890	1.438	1.438	.60	0	0	2402.4	310.0	6.51	930.1	118.4	4.05
H14a	1	189.3	55.67	15.380	14.690	.940	1.567	1.430	.60	0	2.0	2276.1	296.1	6.39	775.8	105.6	3.73
H14	4	187.5	54.92	15.380	14.430	.940	1.567	1.433	.60	0	2.0	2239.8	291.4	6.39	736.3	102.1	3.66

I 4" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1,2,4,5,10
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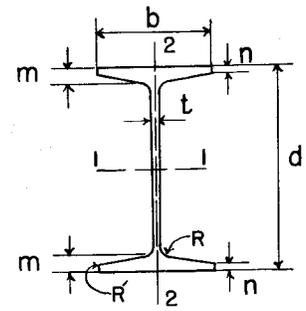


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In ⁴	S In ³	r In.	I In ⁴	S In ³	r In.
H 14	2	186.5	54.92	15.380	14.430	.940	1.567	1.433	.60	0	2.0	2239.8	291.4	6.39	736.3	102.1	3.66
H 14	5	185.0	54.48	15.250	15.100	.880	1.505	1.362	.60	0	2.0	2223.0	291.5	6.39	804.2	106.5	3.84
CB 146 14X15	10	185.0	54.41	15.188	15.469	.875	1.399	1.399	.65	0	0	2213.5	291.5	6.38	863.9	111.7	3.98
H 14d	7	184.0	54.15	15.380	15.665	.845	1.378	1.378	.60	0	0	2276.4	296.0	6.48	883.6	112.8	4.04
CB 146N 14X16	12	184.0	54.12	15.380	15.665	.845	1.378	1.378	.65	0	0	2275.3	295.9	6.48	883.6	112.8	4.04
14WF 14X16 8,9,13,14,15		184.0	54.07	15.380	15.660	.840	1.378	1.378	.60	0	0	2274.8	295.8	6.49	882.7	112.7	4.04
H 14a	1	180.9	53.22	15.250	14.650	.900	1.505	1.367	.60	0	2.0	2156.7	282.8	6.37	736.5	100.5	3.72
H 14	4	179.5	52.51	15.250	14.390	.900	1.505	1.370	.60	0	2.0	2122.3	278.3	6.36	699.0	97.2	3.65
H 14	2	178.5	52.51	15.250	14.390	.900	1.505	1.370	.60	0	2.0	2122.3	278.3	6.36	699.0	97.2	3.65
H 14	5	177.0	51.99	15.125	15.060	.840	1.442	1.300	.60	0	2.0	2102.6	278.0	6.36	762.1	101.2	3.83
CB 146N 14X16	12	176.0	51.73	15.250	15.642	.822	1.313	1.313	.65	0	0	2149.1	281.9	6.45	838.2	107.2	4.03
14WF 14X16 7,8,9,13,14,15		176.0	51.73	15.250	15.640	.820	1.313	1.313	.60	0	0	2149.6	281.9	6.45	837.9	107.1	4.02
CB 146 14X15	10	175.0	51.47	15.042	15.424	.830	1.326	1.326	.65	0	0	2071.7	275.5	6.34	811.6	105.2	3.97
H 14a	1	172.7	50.78	15.130	14.610	.860	1.442	1.305	.60	0	2.0	2039.5	269.7	6.34	697.9	95.5	3.71
H 14	4	171.5	50.11	15.130	14.350	.860	1.442	1.308	.60	0	2.0	2007.0	265.4	6.33	662.3	92.3	3.64
H 14	2	170.5	50.11	15.130	14.350	.860	1.442	1.308	.60	0	2.0	2007.0	265.4	6.33	662.3	92.3	3.64
H 14	5	168.0	49.51	15.000	15.020	.800	1.380	1.237	.60	0	2.0	1984.6	264.6	6.33	720.6	96.0	3.82
CB 146N 14X16	12	167.0	49.10	15.120	15.602	.782	1.248	1.248	.65	0	0	2020.4	267.2	6.41	790.5	101.3	4.01
14WF 14X16 7,8,9,13,14,15		167.0	49.09	15.120	15.600	.780	1.248	1.248	.60	0	0	2020.8	267.3	6.42	790.2	101.3	4.01
CB 146 14X15	10	165.0	48.52	14.896	15.377	.783	1.253	1.253	.65	0	0	1932.6	259.5	6.31	759.9	98.8	3.96
H 14a	1	164.4	48.36	15.000	14.570	.820	1.380	1.242	.60	0	2.0	1924.7	256.6	6.32	659.8	90.6	3.69
H 14	4	163.0	47.71	15.000	14.310	.820	1.380	1.245	.60	0	2.0	1894.0	252.5	6.30	626.1	87.5	3.62
H 14	1	162.2	47.71	15.000	14.310	.820	1.380	1.245	.60	0	2.0	1894.0	252.5	6.31	625.1	87.4	3.62
H 14	2	162.0	47.71	15.000	14.310	.820	1.380	1.245	.60	0	2.0	1894.0	252.5	6.30	626.1	87.5	3.62
H 14	5	161.0	47.33	14.875	15.000	.780	1.317	1.175	.60	0	2.0	1874.4	252.0	6.29	682.5	91.0	3.80
14WF 14X16 7,8,9,13,14,15		158.0	46.47	15.000	15.550	.730	1.188	1.188	.60	0	0	1900.6	253.4	6.40	745.0	95.8	4.00
CB 146N 14X16	12	158.0	46.44	15.000	15.550	.730	1.188	1.188	.65	0	0	1899.6	253.3	6.40	745.0	95.8	4.01
H 14	5	155.0	45.62	14.875	14.270	.780	1.317	1.183	.60	0	2.0	1793.8	241.2	6.27	590.6	82.8	3.60
CB 146 14X15	10	155.0	45.58	14.750	15.330	.736	1.180	1.180	.65	0	0	1796.8	243.6	6.28	709.0	92.5	3.94
H 14	4	155.0	45.33	14.880	14.270	.780	1.317	1.183	.60	0	2.0	1783.3	239.8	6.27	590.5	82.8	3.61
H 14	1	154.1	45.33	14.880	14.270	.780	1.317	1.183	.60	0	2.0	1783.3	239.8	6.27	589.5	82.6	3.61
H 14	2	154.0	45.33	14.880	14.270	.780	1.317	1.183	.60	0	2.0	1783.3	239.8	6.27	589.5	82.6	3.61
H 14	7	153.0	45.01	15.000	14.830	.750	1.188	1.188	.60	0	0	1822.2	243.0	6.36	646.3	87.2	3.79
CB 145N 14X14 1/2	12	153.0	44.98	15.000	14.828	.750	1.188	1.188	.65	0	0	1820.9	242.8	6.36	646.0	87.1	3.79

14" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

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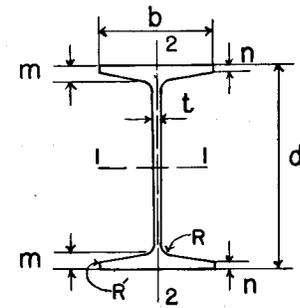


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2					
							d	b	t	m		n	R	R'	I	S	r	I	S	r
H 14 d	7	150.0	44.16	14.88	15.520	.700	1.128	1.128	.60	0	0	1788.3	240.4	6.36	703.2	90.6	3.99			
CB146N 12 14X16		150.0	44.13	14.880	15.520	.700	1.128	1.128	.65	0	0	1787.2	240.2	6.36	703.2	90.6	3.99			
14WF 14X16 8,9,13,14,15		150.0	44.08	14.880	15.515	.695	1.128	1.128	.60	0	0	1786.9	240.2	6.37	702.5	90.6	3.99			
H 14 b	6	149.0	43.82	14.125	14.900	1.410	.942	.808	.60	0	2.0	1379.1	195.3	5.61	468.8	62.9	3.27			
H 14 b	4	149.0	43.52	14.125	14.900	1.410	.942	.808	.60	0	2.0	1368.5	193.8	5.61	468.8	62.9	3.28			
H 14 c	1	148.0	43.52	14.125	14.900	1.410	.942	.808	.60	0	2.0	1368.5	193.8	5.61	468.6	62.9	3.28			
H 14	5	147.0	43.25	14.750	14.230	.740	1.255	1.120	.60	0	2.0	1685.3	228.5	6.24	555.5	78.1	3.58			
H 14	4	147.0	42.95	14.750	14.230	.740	1.255	1.120	.60	0	2.0	1674.7	227.1	6.24	554.4	78.1	3.60			
H 14	1,2	146.0	42.95	14.750	14.230	.740	1.255	1.120	.60	0	2.0	1674.7	227.1	6.24	554.4	77.9	3.59			
H 14	7	145.0	42.64	14.880	14.790	.710	1.128	1.128	.60	0	0	1711.9	230.1	6.34	608.7	82.3	3.78			
CB146 10 14X15		145.0	42.64	14.602	15.284	.690	1.106	1.106	.65	0	0	1662.7	227.7	6.24	658.5	86.2	3.93			
CB145N 12 14X14 1/2		145.0	42.62	14.880	14.789	.711	1.128	1.128	.65	0	0	1710.9	230.0	6.34	608.5	82.3	3.78			
14WF 14X16 7,8,9,13,14,15		142.0	41.85	14.750	15.500	.680	1.063	1.063	.60	0	0	1672.2	226.7	6.32	660.1	85.2	3.97			
CB146N 12 14X16		142.0	41.76	14.746	15.500	.680	1.061	1.061	.65	0	0	1667.8	226.2	6.32	658.9	85.0	3.97			
H 14	5	139.0	40.88	14.625	14.190	.700	1.192	1.058	.60	0	2.0	1578.9	215.9	6.21	520.9	73.4	3.57			
H 14	4	139.0	40.59	14.630	14.190	.700	1.192	1.058	.60	0	2.0	1568.4	214.5	6.21	520.9	73.4	3.58			
H 14	1,2	138.0	40.59	14.630	14.190	.700	1.192	1.058	.60	0	2.0	1568.4	214.5	6.21	519.7	73.3	3.58			
14WF 14X14 1/2 7,8,9,13,14,15		136.0	39.98	14.750	14.740	.660	1.063	1.063	.60	0	0	1593.0	216.0	6.31	567.7	77.0	3.77			
CB145N 12 14X14 1/2		136.0	39.98	14.750	14.740	.662	1.063	1.063	.65	0	0	1592.3	215.9	6.31	567.7	77.0	3.77			
CB146 10 14X15		135.0	39.70	14.452	15.239	.645	1.031	1.031	.65	0	0	1530.4	211.8	6.21	608.4	79.9	3.92			
H 14	5	131.5	38.68	14.500	14.160	.670	1.130	.995	.60	0	2.0	1477.3	203.8	6.18	488.0	68.9	3.55			
H 14	4	131.5	38.38	14.500	14.160	.670	1.130	.995	.60	0	2.0	1466.7	202.3	6.18	487.9	68.9	3.57			
CB146 10 14X15		131.0	38.52	14.162	15.468	.874	.886	.886	.65	0	0	1358.4	191.8	5.94	547.3	70.8	3.77			
H 14	1,2	130.5	38.38	14.500	14.160	.670	1.130	.995	.60	0	2.0	1466.7	202.3	6.18	486.9	68.8	3.56			
CB145N 12 14X14 1/2		127.0	37.33	14.620	14.690	.612	.998	.998	.65	0	0	1476.0	201.9	6.29	527.6	71.8	3.76			
14WF 14X14 1/2 7,8,9,13,14,15		127.0	37.33	14.620	14.690	.610	.998	.998	.60	0	0	1476.7	202.0	6.29	527.6	71.8	3.76			
CB146 10 14X15		125.0	36.75	14.304	15.191	.597	.957	.957	.65	0	0	1402.1	196.0	6.18	559.4	73.7	3.90			
H 14	5	123.5	36.33	14.375	14.120	.630	1.067	.933	.60	0	2.0	1375.1	191.3	6.15	454.4	64.4	3.54			
H 14	4	123.5	36.04	14.380	14.120	.630	1.067	.933	.60	0	2.0	1364.6	189.9	6.16	454.4	64.4	3.55			
H 14	1,2	122.5	36.04	14.380	14.120	.630	1.067	.933	.60	0	2.0	1364.6	189.9	6.16	453.4	64.2	3.55			
14WF 14X14 1/2 7,8,9,13,14,15		119.0	34.99	14.500	14.650	.570	.938	.938	.60	0	0	1373.1	189.4	6.26	491.8	67.1	3.75			
CB145N 12 14X14 1/2		119.0	34.97	14.500	14.649	.571	.938	.938	.65	0	0	1372.2	189.3	6.26	491.7	67.1	3.75			

14" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

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S10-1921	See Page 100
S12-1922	1, 2, 4, 5, 10
S15-1924	See Page 96
S16-1925	7, 8, 9, 11, 12, 13,
S18-1926	14, 15
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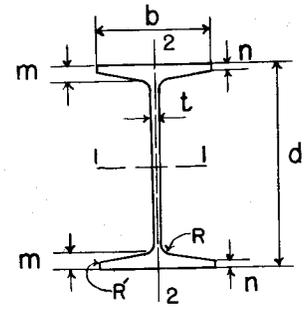


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 14	5	115.5	34.00	14.250	14.080	.590	1.005	.870	.60	0	2.0	1275.1	179.0	6.12	421.4	59.9	3.52
H 14	4	115.5	33.70	14.250	14.080	.590	1.005	.870	.60	0	2.0	1264.5	177.5	6.13	421.3	59.9	3.54
CB 146	10	115.5	33.82	14.154	15.145	.551	.882	.882	.65	0	0	1275.9	180.3	6.14	510.9	67.5	3.89
H 14	1	114.6	33.70	14.250	14.080	.590	1.005	.870	.60	0	2.0	1264.5	177.5	6.13	420.3	59.7	3.53
H 14	2	114.5	33.70	14.250	14.080	.590	1.005	.870	.60	0	2.0	1264.5	177.5	6.13	420.3	59.7	3.53
14WF 14X14 1/2 7,8,9,13,14		111.0	32.65	14.370	14.620	.540	.873	.873	.60	0	0	1266.5	176.3	6.23	454.9	62.2	3.73
CB 145N	12	111.0	32.62	14.370	14.618	.540	.873	.873	.65	0	0	1265.3	176.1	6.23	454.7	62.2	3.73
H 14	5	107.5	31.67	14.125	14.040	.550	.942	.808	.60	0	2.0	1177.2	166.7	6.10	388.9	55.4	3.50
H 14	4	107.5	31.38	14.130	14.040	.550	.942	.808	.60	0	2.0	1166.6	165.2	6.10	388.9	55.4	3.52
H 14	1	106.7	31.38	14.130	14.040	.550	.942	.808	.60	0	2.0	1166.6	165.2	6.10	387.8	55.2	3.52
H 14	2	106.5	31.38	14.130	14.040	.550	.942	.808	.60	0	2.0	1166.6	165.2	6.10	387.8	55.2	3.52
CB 146	11	106.0	31.18	14.018	15.103	.509	.814	.814	.65	0	0	1164.1	166.1	6.11	467.6	61.9	3.87
CB 145	10	105.0	30.88	14.370	12.101	.536	.990	.990	.65	0	0	1169.6	162.8	6.15	292.6	48.4	3.08
CB 145N	12	103.0	30.27	14.250	14.576	.498	.813	.813	.65	0	0	1165.4	163.6	6.20	419.8	57.6	3.72
14WF 14X14 1/2 7,8,9,13,14,15		103.0	30.26	14.250	14.575	.495	.813	.813	.60	0	0	1165.8	163.6	6.21	419.7	57.6	3.72
H 14	5	100.0	29.36	14.000	14.000	.510	.880	.745	.60	0	2.0	1081.2	154.5	6.07	356.9	51.0	3.49
H 14	4	100.0	29.06	14.000	14.000	.510	.880	.745	.60	0	2.0	1070.6	153.0	6.07	356.9	51.0	3.50
H 14	2	99.0	29.06	14.000	14.000	.510	.880	.745	.60	0	2.0	1070.6	153.0	6.07	356.9	51.0	3.50
H 14	1	98.8	29.06	14.000	14.000	.510	.880	.745	.60	0	2.0	1070.6	153.0	6.07	355.9	50.8	3.50
CB 146	11	96.0	28.23	13.866	15.056	.462	.738	.738	.65	0	0	1042.1	150.3	6.08	419.9	55.8	3.86
14WF 14X14 1/2 7,8,9,13,14,15		95.0	27.94	14.120	14.545	.465	.748	.748	.60	0	0	1063.5	150.6	6.17	383.7	52.8	3.71
CB 145	10	95.0	27.93	14.186	12.050	.485	.898	.898	.65	0	0	1044.0	147.2	6.11	262.0	43.5	3.06
CB 145N	12	95.0	27.92	14.120	14.544	.466	.748	.748	.65	0	0	1062.5	150.5	6.17	383.7	52.8	3.71
H 14s	1	93.7	27.56	14.000	13.000	.510	.880	.755	.60	0	2.0	1004.7	143.5	6.04	288.5	44.4	3.24
H 14	5	92.0	27.05	13.875	13.960	.470	.817	.683	.60	0	2.0	987.4	142.3	6.04	325.5	46.6	3.47
H 14	4	92.0	26.76	13.880	13.960	.470	.817	.683	.60	0	2.0	976.8	140.8	6.04	325.4	46.6	3.49
H 14	2	91.0	26.76	13.880	13.960	.470	.817	.683	.60	0	2.0	976.8	140.8	6.04	325.4	46.6	3.49
H 14	5	90.0	26.52	14.000	12.120	.510	.880	.764	.60	0	2.0	956.7	136.7	6.01	235.8	38.9	2.98
H 14	3	90.0	26.22	14.000	12.120	.510	.880	.764	.60	0	2.0	946.1	135.2	6.01	235.8	38.9	3.00
H 14s	1	89.2	26.23	14.000	12.040	.520	.880	.765	.60	0	2.0	942.4	134.6	5.99	231.4	38.4	2.97
CB 145N	12	87.0	25.56	14.000	14.500	.422	.688	.688	.65	0	0	966.2	138.0	6.15	349.7	48.2	3.70
14WF 14X14 1/2 7,8,9,13,14,15		87.0	25.56	14.000	14.500	.420	.688	.688	.60	0	0	966.9	138.1	6.15	349.7	48.2	3.70

14" COLUMNS

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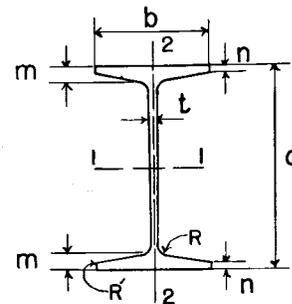


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB146 11 14X15		86.0	25.28	13.714	15.008	.414	.662	.662	.65	0	0	923.0	134.6	6.04	373.1	49.7	3.84
CB145 10 14X12		85.0	24.99	14.000	12.000	.435	.805	.805	.65	0	0	921.3	131.6	6.07	232.0	38.7	3.05
H14 5		84.0	24.76	13.750	13.920	.430	.755	.620	.60	0	2.0	895.5	130.2	6.01	294.5	42.3	3.45
14WF 14X12 8,9,13,14,15		84.0	24.71	14.180	12.023	.451	.778	.778	.60	0	0	928.4	130.9	6.13	225.5	37.5	3.02
H14a 7		84.0	24.69	14.180	12.020	.450	.778	.778	.60	0	0	928.0	130.9	6.13	225.3	37.5	3.02
CB144N 12 14X12		84.0	24.68	14.180	12.021	.451	.778	.778	.65	0	0	927.2	130.8	6.13	225.4	37.5	3.02
H14 4		84.0	24.46	13.750	13.920	.430	.755	.620	.60	0	2.0	884.9	128.7	6.01	294.5	42.3	3.47
H14 2		83.5	24.46	13.750	13.920	.430	.755	.620	.60	0	2.0	884.9	128.7	6.01	294.5	42.3	3.47
H 14 12 5		83.0	24.45	13.875	12.080	.470	.817	.701	.60	0	2.0	874.2	126.0	5.98	215.1	35.6	2.97
H 14 12 3		83.0	24.15	13.880	12.080	.470	.817	.701	.60	0	2.0	863.6	124.5	5.98	215.0	35.6	2.98
H14s 1		82.2	24.17	13.880	12.000	.480	.817	.702	.60	0	2.0	860.4	124.0	5.97	211.0	35.2	2.96
H14s 7		78.0	22.97	14.060	12.000	.430	.718	.718	.60	0	0	851.5	121.1	6.09	206.9	34.5	3.00
14WF 14X12 8,9,13,14,15		78.0	22.94	14.060	12.000	.428	.718	.718	.60	0	0	851.2	121.1	6.09	206.9	34.5	3.00
CB144N 12 14X12		78.0	22.94	14.060	12.000	.430	.718	.718	.65	0	0	850.5	121.0	6.09	206.9	34.5	3.00
H14s 1		77.6	22.81	13.880	11.040	.480	.817	.712	.60	0	2.0	800.6	115.4	5.93	165.9	30.1	2.70
H 14 12 5		76.0	22.39	13.750	12.040	.430	.755	.639	.60	0	2.0	793.5	115.4	5.95	194.7	32.3	2.95
H 14 12 3		76.0	22.09	13.750	12.040	.430	.755	.639	.60	0	2.0	782.9	113.9	5.95	194.7	32.3	2.97
CB144 10 14X10		75.0	22.05	14.382	10.086	.468	.786	.786	.55	0	0	823.5	114.5	6.11	134.5	26.7	2.47
14WF 14X10 8,9,13,14,15		74.0	21.76	14.190	10.072	.450	.783	.783	.60	0	0	796.8	112.3	6.05	133.5	26.5	2.48
H14b 7		74.0	21.76	14.190	10.070	.450	.783	.783	.60	0	0	796.7	112.3	6.05	133.4	26.5	2.48
CB143N 12 14X10		74.0	21.75	14.190	10.071	.451	.783	.783	.65	0	0	795.9	112.2	6.05	133.4	26.5	2.48
H 14 10 5		73.5	21.66	13.875	10.120	.470	.817	.721	.60	0	2.0	753.3	108.6	5.90	129.1	25.5	2.44
H 14 10 3		73.5	21.37	13.880	10.120	.470	.817	.721	.60	0	2.0	742.7	107.1	5.90	129.0	25.5	2.46
H14s 1		71.0	20.88	13.750	11.000	.440	.755	.649	.60	0	2.0	727.0	105.7	5.90	150.2	27.3	2.68
H 14 12 5		69.0	20.34	13.625	12.000	.390	.692	.576	.60	0	2.0	714.6	104.9	5.93	174.7	29.1	2.93
H 14 12 3		69.0	20.04	13.630	12.000	.390	.692	.576	.60	0	2.0	704.0	103.3	5.93	174.7	29.1	2.95
H14b 7		68.0	20.03	14.060	10.040	.420	.718	.718	.60	0	0	724.4	103.0	6.01	121.2	24.1	2.46
CB143N 12 14X10		68.0	20.00	14.080	10.040	.420	.718	.718	.65	0	0	723.4	102.9	6.01	121.2	24.1	2.46
14WF 14X10 8,9,13,14,15		68.0	20.00	14.060	10.040	.418	.718	.718	.60	0	0	724.1	103.0	6.02	121.2	24.1	2.46
CB144 10 14X10		68.0	19.99	14.238	10.043	.425	.714	.714	.55	0	0	738.8	103.8	6.08	120.6	24.0	2.46

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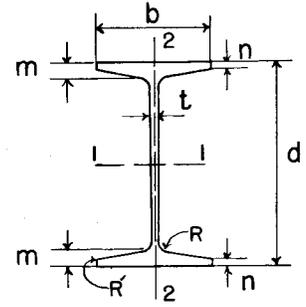
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA SqIn.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 14/10	5	67.5	19.85	13.750	10.080	.430	.755	.658	.60	0	2.0	684.3	99.5	5.87	116.8	23.2	2.43
H 14/10	3	67.5	19.55	13.750	10.080	.430	.755	.658	.60	0	2.0	673.7	98.0	5.87	116.8	23.2	2.44
H 14s	1	66.7	19.61	13.750	10.030	.440	.755	.659	.60	0	2.0	672.5	97.8	5.84	115.1	23.0	2.42
H 14/10	5	61.5	18.04	13.625	10.040	.390	.692	.596	.60	0	2.0	616.9	90.6	5.85	104.8	20.9	2.41
H 14/10	3	61.5	17.75	13.630	10.040	.390	.692	.596	.60	0	2.0	606.3	89.0	5.84	104.8	20.9	2.43
H 14b	7	61.0	17.97	13.910	10.000	.380	.643	.643	.60	0	0	641.8	92.3	5.98	107.3	21.5	2.44
H 14s	1	61.0	17.95	13.630	10.000	.410	.692	.597	.60	0	2.0	607.5	89.2	5.82	103.7	20.7	2.40
CB 144 14X10	10	61.0	17.94	14.094	10.000	.382	.642	.642	.55	0	0	656.2	93.1	6.05	107.1	21.4	2.44
14WF 14X10 8,9,13,14,15		61.0	17.94	13.910	10.000	.378	.643	.643	.60	0	0	641.5	92.2	5.98	107.3	21.5	2.45
CB 143N 14X10	12	61.0	17.94	13.910	10.000	.380	.643	.643	.65	0	0	640.8	92.1	5.98	107.3	21.5	2.45
H 14/8	5	58.5	17.23	13.750	8.120	.430	.755	.678	.60	0	2.0	572.2	83.2	5.76	62.4	15.4	1.90
H 14/8	3	58.5	16.93	13.750	8.120	.430	.755	.678	.60	0	2.0	561.6	81.7	5.76	62.4	15.4	1.92
14WF 14X8 8,13,15		58.0	17.06	14.060	8.098	.406	.718	.718	.60	0	0	597.9	85.0	5.92	63.7	15.7	1.93
H 14c	7	58.0	17.05	14.060	8.095	.405	.718	.718	.60	0	0	597.5	85.0	5.92	63.6	15.7	1.93
CB 143 14X8	10	58.0	17.05	14.242	8.070	.413	.716	.716	.55	0	0	609.4	85.6	5.98	62.8	15.6	1.92
CB 142N 14X8	12	58.0	17.03	14.060	8.096	.406	.718	.718	.65	0	0	596.7	84.9	5.92	63.6	15.7	1.93
H 14s	1	57.1	16.79	13.360	9.040	.410	.692	.606	.60	0	2.0	558.5	82.0	5.77	77.5	17.1	2.15
H 14/10	5	55.0	16.25	13.500	10.000	.350	.630	.533	.60	0	2.0	551.0	81.6	5.82	93.1	18.6	2.39
H 14/10	3	55.0	15.95	13.500	10.000	.350	.630	.533	.60	0	2.0	540.4	80.1	5.82	93.1	18.6	2.42
H 14/8	5	53.5	15.67	13.625	8.080	.390	.692	.616	.60	0	2.0	516.2	75.8	5.74	56.0	13.9	1.89
H 14/8	3	53.5	15.37	13.630	8.080	.390	.692	.616	.60	0	2.0	505.6	74.2	5.74	56.0	13.9	1.91
CB 143 14X8	10	53.0	15.39	14.122	8.035	.378	.656	.656	.55	0	0	552.5	78.2	5.95	56.8	14.1	1.91
14WF 14X8 8,9,13,14,15		53.0	15.59	13.940	8.062	.370	.658	.658	.60	0	0	542.1	77.8	5.90	57.5	14.3	1.92
H 14c	7	53.0	15.59	13.940	8.060	.370	.658	.658	.60	0	0	542.0	77.8	5.90	57.5	14.3	1.92
CB 142N 14X8	12	53.0	15.56	13.940	8.060	.370	.658	.658	.65	0	0	541.0	77.6	5.90	57.5	14.3	1.92
H 14s	1	51.4	15.12	13.500	9.000	.370	.630	.544	.60	0	2.0	498.3	73.8	5.75	68.8	15.3	2.13

14" COLUMNS

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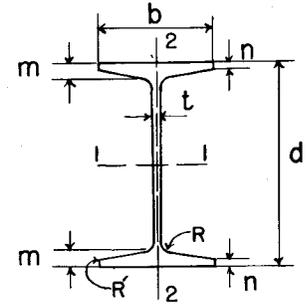


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
CB143 14X8	10	48.0	14.12	14.000	8.000	.343	.595	.595	.55	0	0	496.0	70.9	5.93	50.8	12.7	1.90
H 14c	7	48.0	14.12	13.810	8.030	.340	.593	.593	.60	0	0	485.0	70.2	5.86	51.2	12.8	1.90
H 14/8	5	48.0	14.12	13.500	8.040	.350	.630	.553	.60	0	2.0	461.5	68.4	5.72	49.7	12.4	1.88
14WF 14X8 8,9,13,14,15		48.0	14.11	13.810	8.031	.339	.593	.593	.60	0	0	484.9	70.2	5.86	51.3	12.8	1.91
CB142N 14X8	12	48.0	14.10	13.810	8.030	.340	.593	.593	.65	0	0	484.0	70.1	5.86	51.2	12.8	1.91
H 14/8	3	48.0	13.82	13.500	8.040	.350	.630	.553	.60	0	2.0	450.9	66.8	5.71	49.7	12.4	1.90
H 14s	1	47.8	14.07	13.500	8.040	.370	.630	.553	.60	0	2.0	454.1	67.3	5.68	49.7	12.4	1.88
H 14c	7	43.0	12.67	13.680	8.000	.310	.528	.528	.60	0	0	429.3	62.8	5.82	45.1	11.3	1.89
14WF 14X8 8,9,13,14,15		43.0	12.65	13.680	8.000	.308	.528	.528	.60	0	0	429.0	62.7	5.82	45.1	11.3	1.89
CB142N 14X8	12	43.0	12.64	13.680	8.000	.310	.528	.528	.65	0	0	428.3	62.6	5.82	45.1	11.3	1.89
H 14/8	5	43.0	12.58	13.375	8.000	.310	.567	.491	.60	0	2.0	408.2	61.0	5.70	43.6	10.9	1.86
H 14/8		43.0	12.28	13.380	8.000	.310	.567	.491	.60	0	2.0	397.6	59.5	5.69	43.6	10.9	1.88
H 14s	1	42.6	12.53	13.380	8.000	.330	.567	.491	.60	0	2.0	400.8	59.9	5.66	43.6	10.9	1.87

13" COLUMNS

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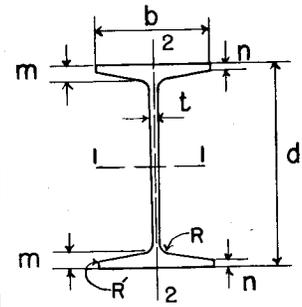
*COMPUTED

SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H13b	I	285.9	84.09	15.875	15.160	1.410	2.312	2.175	.60	0	2.0	3361.9	423.6	6.32	1287.6	169.9	3.91
		277.3	81.56	15.750	15.120	1.370	2.250	2.112	.60	0	2.0	3230.5	410.2	6.29	1241.2	164.2	3.90
		268.8	79.05	15.625	15.080	1.330	2.187	2.050	.60	0	2.0	3101.5	396.9	6.26	1195.4	158.5	3.89
		260.2	76.54	15.500	15.040	1.290	2.125	1.987	.60	0	2.0	2974.9	383.9	6.24	1150.2	152.9	3.88
		251.8	74.05	15.375	15.000	1.250	2.062	1.925	.60	0	2.0	2850.8	370.8	6.21	1105.7	147.4	3.86
		243.3	71.56	15.250	14.960	1.210	2.000	1.862	.60	0	2.0	2729.1	357.9	6.18	1061.8	141.9	3.85
		234.9	69.09	15.125	14.920	1.170	1.937	1.800	.60	0	2.0	2609.7	345.1	6.15	1018.5	136.5	3.84
		226.5	66.62	15.000	14.880	1.130	1.875	1.737	.60	0	2.0	2492.7	332.4	6.12	975.8	131.2	3.83
H13a	I	219.8	64.64	15.000	14.310	1.130	1.875	1.743	.60	0	2.0	2404.9	320.7	6.10	870.2	121.6	3.67
		211.7	62.25	14.875	14.270	1.090	1.812	1.681	.60	0	2.0	2294.2	308.5	6.07	832.4	116.7	3.66
		204.1	60.03	14.750	14.240	1.060	1.750	1.618	.60	0	2.0	2188.4	296.7	6.04	797.0	111.9	3.64
		196.1	57.66	14.625	14.200	1.020	1.687	1.556	.60	0	2.0	2081.9	284.7	6.01	760.3	107.1	3.63
		188.0	55.31	14.500	14.160	.980	1.625	1.493	.60	0	2.0	1977.7	272.8	5.98	724.2	102.3	3.62
		180.1	52.96	14.375	14.120	.940	1.562	1.431	.60	0	2.0	1875.5	260.9	5.95	688.6	97.5	3.61
		172.1	50.63	14.250	14.080	.900	1.500	1.368	.60	0	2.0	1775.5	249.2	5.92	653.6	92.8	3.59
		164.2	48.30	14.125	14.040	.860	1.437	1.306	.60	0	2.0	1677.5	237.5	5.89	619.0	88.2	3.58
H13	I	150.5	44.27	14.000	13.310	.820	1.375	1.250	.60	0	2.0	1511.4	215.9	5.84	504.9	75.9	3.38
		143.0	42.05	13.875	13.270	.780	1.312	1.188	.60	0	2.0	1421.7	204.9	5.82	475.9	71.7	3.36
H13c	I	141.0	41.48	13.125	14.590	1.410	.937	.806	.60	0	2.0	1129.3*	173.7*	5.22*	438.6*	60.1*	3.25*
H13	I	135.5	39.84	13.750	13.230	.740	1.250	1.125	.60	0	2.0	1333.9	194.0	5.79	447.4	67.6	3.35
		128.0	37.64	13.625	13.190	.700	1.187	1.063	.60	0	2.0	1248.1	183.2	5.76	419.3	63.6	3.34
		121.0	35.59	13.500	13.160	.670	1.125	1.000	.60	0	2.0	1166.1	172.8	5.72	392.7	59.7	3.32
		113.6	33.41	13.375	13.120	.630	1.062	.938	.60	0	2.0	1083.9	162.1	5.70	365.5	55.7	3.31
		106.2	31.24	13.250	13.080	.590	1.000	.875	.60	0	2.0	1003.5	151.5	5.67	338.8	51.8	3.29
		98.9	29.08	13.125	13.040	.550	.937	.813	.60	0	2.0	924.8	140.9	5.64	312.5	47.9	3.28
		91.5	26.93	13.000	13.000	.510	.875	.750	.60	0	2.0	847.9	130.5	5.61	286.7	44.1	3.26
		86.6	25.48	13.000	12.040	.510	.875	.760	.60	0	2.0	793.6	122.1	5.58	229.9	38.2	3.00
H13s	I	79.8	23.46	12.875	12.000	.470	.812	.697	.60	0	2.0	723.5	112.4	5.55	209.5	34.9	2.99
		75.6	22.22	12.875	11.040	.480	.812	.707	.60	0	2.0	674.8	104.8	5.51	164.8	29.9	2.72
		69.1	20.33	12.750	11.000	.440	.750	.644	.60	0	2.0	611.2	95.9	5.48	149.1	27.1	2.71
		64.9	19.09	12.750	10.040	.440	.750	.654	.60	0	2.0	565.6	88.7	5.44	114.6	22.8	2.45
		58.9	17.33	12.625	10.000	.400	.687	.591	.60	0	2.0	508.3	80.5	5.42	102.8	20.6	2.44
		55.0	16.17	12.625	9.030	.400	.687	.601	.60	0	2.0	466.5	73.9	5.37	76.6	17.0	2.18
		49.9	14.67	12.500	9.000	.370	.625	.539	.60	0	2.0	417.0	66.7	5.33	68.2	15.2	2.16
		46.3	13.62	12.500	8.040	.370	.625	.548	.60	0	2.0	379.7	60.8	5.28	49.3	12.3	1.90
41.2	12.12	12.375	8.000	.330	.562	.486	.60	0	2.0	334.5	54.1	5.25	43.2	10.8	1.89		

12" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1	6	8	9	9	11	12	13
B1907 4	S40-1931 7	12 WF B12c 12X12 B12b 12X10	12 WF CB 127 CB 126	12 WF CB127 12X14 CB126 12X14	12 WF CB125N 12X12 CB124N 12X10	12 WF CB124 12X12 CB123 12X10	12 WF CB124 12X12 CB123 12X10
S12-1922	12 WF	B12a 12X8 S53-1946	CB 125 CB 124 CB 123 C1927	CB125 12X12 CB123 12X8 C1930	CB123N 12X8 C1931 IL1932	CB122 12X8 C1933 C1934 IL1934 CIL1940	CB122 12X8 CIL1946 CIL1948 US1950
S15-1924	B12c 12X12	S54-1948					
S16-1925	B12b 12X10						
S18-1926	B12a 12X8 S43-1933						
S27-1928	S47-1934						
S35-1930	S51-1938 S53-1943						

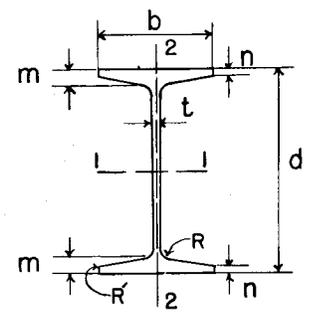


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H12b	1	268.8	79.06	15.000	14.320	1.410	2.308	2.179	.60	0	2.0	2777.0	370.3	5.93	1086.2	151.7	3.71
		260.7	76.68	14.875	14.280	1.370	2.245	2.116	.60	0	2.0	2666.2	358.5	5.90	1046.5	146.6	3.69
		252.8	74.31	14.750	14.240	1.330	2.183	2.054	.60	0	2.0	2557.6	346.8	5.87	1007.5	141.5	3.68
		244.6	71.94	14.625	14.200	1.290	2.120	1.991	.60	0	2.0	2451.1	335.2	5.84	969.0	136.5	3.67
		236.6	69.59	14.500	14.160	1.250	2.058	1.929	.60	0	2.0	2346.9	323.7	5.81	931.0	131.5	3.66
		228.6	67.24	14.375	14.120	1.210	1.995	1.866	.60	0	2.0	2244.7	312.3	5.78	893.6	126.6	3.65
CB127	9	230.0	67.64	12.000	14.980	1.980	1.677	1.677	.65	0	0	1461.9	243.7	4.65	945.5	126.2	3.74
H12b	1	220.7	64.91	14.250	14.080	1.170	1.933	1.804	.60	0	2.0	2144.7	301.1	5.75	856.8	121.6	3.63
CB127	9	220.0	64.70	12.000	14.735	1.735	1.677	1.677	.65	0	0	1426.6	237.8	4.70	898.2	121.9	3.73
H12b	1	212.8	62.58	14.125	14.040	1.130	1.870	1.741	.60	0	2.0	2046.7	289.8	5.72	820.5	116.9	3.62
CB127	9	210.0	61.76	12.000	14.490	1.490	1.677	1.677	.65	0	0	1391.3	231.9	4.75	852.9	117.7	3.72
H12b	1	204.9	60.27	14.000	14.000	1.090	1.808	1.679	.60	0	2.0	1950.8	278.7	5.69	784.8	112.1	3.61
CB127	9	200.0	58.82	12.000	14.245	1.245	1.677	1.677	.65	0	0	1356.1	226.0	4.80	809.5	113.7	3.71
H12a	1	197.1	57.96	14.000	13.310	1.090	1.808	1.685	.60	0	2.0	1862.2	266.0	5.67	676.6	101.7	3.42
H12	5	190.0	55.91	14.000	12.620	1.090	1.808	1.692	.60	0	2.0	1780.9	254.4	5.64	578.7	91.7	3.22
CB127	9	190.0	55.88	12.000	14.000	1.000	1.677	1.677	.65	0	0	1320.8	220.1	4.86	767.8	109.7	3.71
CB125N	11	190.0	55.86	14.380	12.671	1.066	1.736	1.736	.60	0	0	1891.5	263.1	5.82	589.8	93.1	3.25
12WF		190.0	55.86	14.380	12.670	1.060	1.736	1.736	.60	0	0	1892.5	263.2	5.82	589.7	93.1	3.25
6,7,8,12,13		190.0	55.62	14.000	12.620	1.090	1.808	1.692	.60	0	2.0	1773.4	253.3	5.65	578.6	91.7	3.23
H12	4	189.9	55.87	13.875	13.280	1.060	1.745	1.623	.60	0	2.0	1774.7	255.8	5.64	647.5	97.5	3.40
H12a	1	189.9	55.87	13.875	13.280	1.060	1.745	1.623	.60	0	2.0	1774.7	255.8	5.64	647.5	97.5	3.40
H12	5	183.0	53.78	13.875	12.580	1.050	1.745	1.630	.60	0	2.0	1695.4	244.4	5.61	552.4	87.8	3.20
H12	4	183.0	53.48	13.875	12.580	1.050	1.745	1.630	.60	0	2.0	1687.8	243.3	5.62	552.2	87.8	3.21
H12a	1	182.4	53.66	13.750	13.240	1.020	1.683	1.560	.60	0	2.0	1686.9	245.4	5.61	617.4	93.3	3.39
CB126	9	180.0	52.94	12.000	14.735	1.492	1.312	1.312	.65	0	0	1218.1	203.0	4.80	702.4	95.3	3.64
12WF		176.0	51.79	14.120	12.615	1.005	1.606	1.606	.60	0	0	1712.5	242.6	5.75	538.4	85.4	3.22
6,7,12		176.0	51.79	13.750	12.550	1.020	1.683	1.567	.60	0	2.0	1613.9	234.7	5.58	527.7	84.1	3.19
H12	5	176.0	51.79	13.750	12.550	1.020	1.683	1.567	.60	0	2.0	1613.9	234.7	5.58	527.7	84.1	3.19
CB125N	11	176.0	51.75	14.120	12.613	1.008	1.606	1.606	.60	0	0	1710.6	242.3	5.75	538.1	85.3	3.22
H12	4	176.0	51.50	13.750	12.550	1.020	1.683	1.567	.60	0	2.0	1606.3	233.6	5.59	527.6	84.1	3.20
H12a	1	174.9	51.46	13.625	13.200	.980	1.620	1.498	.60	0	2.0	1601.0	235.0	5.58	587.7	89.0	3.38
CB126	9	170.0	50.00	12.000	14.490	1.247	1.312	1.312	.60	0	0	1182.8	197.1	4.86	666.9	92.1	3.65
H12	6	169.0	49.72	14.000	12.575	.965	1.546	1.546	.60	0	0	1628.5	232.6	5.72	513.3	81.6	3.21
CB125N	11	169.0	49.69	14.000	12.574	.969	1.546	1.546	.60	0	0	1626.9	232.4	5.72	513.2	81.6	3.21
H12	5	169.0	49.68	13.625	12.510	.980	1.620	1.505	.60	0	2.0	1532.0	224.9	5.55	502.0	80.3	3.18
H12	4	169.0	49.38	13.625	12.510	.980	1.620	1.505	.60	0	2.0	1524.4	223.8	5.56	502.1	80.3	3.19

12" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

2
S3-1909
S4-1911
1,4,5,6,7,8,9,
11,12,13
See Page 106



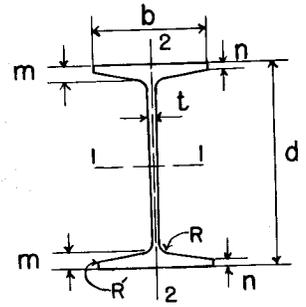
*COMPUTED

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
H12a	1	167.5	49.27	13.500	13.160	.940	1.558	1.435	.60	0	2.0	1516.9	224.7	5.55	558.5	84.9	3.37
H12	5	162.0	47.57	13.500	12.470	.940	1.558	1.442	.60	0	2.0	1451.9	215.1	5.52	477.0	76.5	3.17
H12	4	162.0	47.28	13.500	12.470	.940	1.558	1.442	.60	0	2.0	1444.3	214.0	5.53	477.0	76.5	3.18
12WF 12X12 6,7,8,12,13		161.0	47.38	13.880	12.515	.905	1.486	1.486	.60	0	0	1541.8	222.2	5.70	486.2	77.7	3.20
CB125N 12X12	11	161.0	47.33	13.880	12.513	.908	1.486	1.486	.60	0	0	1540.0	221.9	5.70	486.0	77.7	3.20
H12	2	161.0	47.28	13.500	12.470	.940	1.558	1.442	.60	0	2.0	1444.3	214.0	5.53	477.0	76.5	3.18
H12a	1	160.1	47.09	13.375	13.120	.900	1.495	1.373	.60	0	2.0	1434.6	214.5	5.52	529.8	80.8	3.35
CB126 12X14	9	160.0	47.06	12.000	14.245	1.002	1.312	1.312	.65	0	0	1147.5	191.3	4.94	633.0	88.9	3.67
H12	5	154.5	45.48	13.375	12.430	.900	1.495	1.380	.60	0	2.0	1373.5	205.4	5.50	452.3	72.8	3.15
H12	4	154.5	45.19	13.375	12.430	.900	1.495	1.380	.60	0	2.0	1366.0	204.3	5.50	452.2	72.8	3.16
CB125N 12X12	11	154.0	45.27	13.750	12.481	.876	1.421	1.421	.60	0	0	1455.5	211.7	5.67	461.1	73.9	3.19
H12 12X12	6	154.0	45.27	13.750	12.480	.870	1.421	1.421	.60	0	0	1456.6	211.9	5.67	461.1	73.9	3.19
H12	2	153.5	45.19	13.375	12.430	.900	1.495	1.380	.60	0	2.0	1366.0	204.3	5.50	452.2	72.8	3.16
H12a	1	152.7	44.92	13.250	13.080	.860	1.433	1.310	.60	0	2.0	1354.2	204.4	5.49	501.5	76.7	3.34
CB126 12X14	9	150.0	44.12	12.000	14.000	.757	1.312	1.312	.65	0	0	1112.3	185.4	5.02	600.4	85.8	3.69
H12	5	147.5	43.40	13.250	12.390	.860	1.433	1.317	.60	0	2.0	1296.9	195.8	5.47	428.1	69.1	3.14
H12	4	147.5	43.10	13.250	12.390	.860	1.433	1.317	.60	0	2.0	1289.4	194.6	5.47	428.0	69.1	3.15
12WF 12X12 6,7,12		147.0	43.24	13.620	12.450	.840	1.356	1.356	.60	0	0	1374.4	201.8	5.64	436.8	70.2	3.18
CB125N 12X12	11	147.0	43.21	13.620	12.449	.844	1.356	1.356	.60	0	0	1372.8	201.6	5.64	436.6	70.1	3.18
H12	2	146.5	43.10	13.250	12.390	.860	1.433	1.317	.60	0	2.0	1289.4	194.6	5.47	428.0	69.1	3.15
H12a	1	145.4	42.76	13.125	13.040	.820	1.370	1.248	.60	0	2.0	1275.6	194.4	5.46	473.7	72.7	3.33
H12	5	140.5	41.32	13.125	12.350	.820	1.370	1.255	.60	0	2.0	1222.1	186.2	5.44	404.2	65.5	3.13
H12	4	140.5	41.03	13.125	12.350	.820	1.370	1.255	.60	0	2.0	1214.5	185.0	5.44	404.1	65.4	3.14
H12 12X12	6	140.0	41.20	13.500	12.410	.800	1.296	1.296	.60	0	0	1297.5	192.2	5.61	413.4	66.6	3.17
CB125 12X12	9	140.0	41.18	12.000	12.736	1.376	1.075	1.075	.60	0	0	934.8	155.8	4.76	372.4	58.5	3.01
CB125N 12X12	11	140.0	41.15	13.500	12.407	.802	1.296	1.296	.60	0	0	1295.5	191.9	5.61	413.1	66.6	3.17
H12	2	139.5	41.03	13.125	12.350	.820	1.370	1.255	.60	0	2.0	1214.5	185.0	5.44	404.1	65.4	3.14
H12a	1	138.1	40.61	13.000	13.000	.780	1.308	1.185	.60	0	2.0	1198.8	184.4	5.43	446.4	68.7	3.32
H12c (CORE)	1	134.5	39.57	12.250	14.310	1.40	.933	.804	.60	0	2.0	941.9*	157.0*	4.88*	412.5*	57.7*	1.02*
H12	5	133.5	39.26	13.000	12.310	.780	1.308	1.192	.60	0	2.0	1148.9	176.8	5.41	380.8	61.9	3.11
H12	4	133.5	38.97	13.000	12.310	.780	1.308	1.192	.60	0	2.0	1141.3	175.6	5.41	380.7	61.9	3.13
12WF 12X12 6,7,8,12,13		133.0	39.11	13.380	12.365	.755	1.236	1.236	.60	0	0	1221.2	182.5	5.59	389.9	63.1	3.16
CB125N 12X12	11	133.0	39.10	13.380	12.365	.760	1.236	1.236	.60	0	0	1219.9	182.3	5.59	389.9	63.1	3.16

12" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

IO	2
CB124c 12X12	See Page 07
CB124b 12X12	1,4,5,6,7,8,9,
CB123b 12X9	11,12,13
C1928	See Page 06
C1929	
C1930	

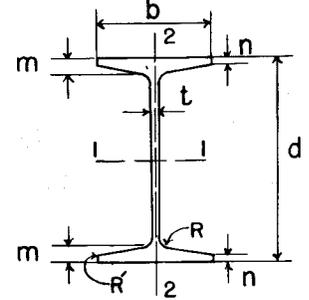


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H12	1,2	132.5	38.97	13.000	12.310	.780	1.308	1.192	.60	0	2.0	1141.3	175.6	5.41	380.7	61.9	3.13
CB125	9	130.0	38.24	12.000	12.491	1.131	1.075	1.075	.60	0	0	899.5	149.9	4.85	350.5	56.1	3.03
H12	5	126.5	37.21	12.875	12.270	.740	1.245	1.130	.60	0	2.0	1077.4	167.4	5.38	357.7	58.3	3.10
H12	4	126.5	36.91	12.875	12.270	.740	1.245	1.130	.60	0	2.0	1069.8	166.2	5.38	357.7	58.3	3.11
CB125N	11	126.0	37.04	13.250	12.331	.726	1.171	1.171	.60	0	0	1142.0	172.4	5.55	366.3	59.4	3.14
H12	6	126.0	37.04	13.250	12.330	.720	1.171	1.171	.60	0	0	1143.2	172.6	5.56	366.3	59.4	3.14
H12	1,2	125.5	36.91	12.875	12.270	.740	1.245	1.130	.60	0	2.0	1069.8	166.2	5.38	357.7	58.3	3.11
12WF	6,7,8,12,13	120.0	35.31	13.120	12.320	.710	1.106	1.106	.60	0	0	1071.7	163.4	5.51	345.1	56.0	3.13
CB125	9	120.0	35.28	12.000	12.245	.885	1.075	1.075	.60	0	0	864.1	144.0	4.95	329.6	53.8	3.06
CB125N	11	120.0	35.26	13.120	12.318	.713	1.106	1.106	.60	0	0	1069.9	163.1	5.51	344.9	56.0	3.13
H12	5	119.5	35.16	12.750	12.230	.700	1.183	1.067	.60	0	2.0	1007.5	158.0	5.35	335.1	54.8	3.09
H12	4	119.5	34.87	12.750	12.230	.700	1.183	1.067	.60	0	2.0	1000.0	156.9	5.36	335.0	54.8	3.10
H12	1	118.6	34.87	12.750	12.230	.700	1.183	1.067	.60	0	2.0	1000.0	156.9	5.36	335.0	54.8	3.10
H12	2	118.5	34.87	12.750	12.230	.700	1.183	1.067	.60	0	2.0	1000.0	156.9	5.36	335.0	54.8	3.10
H12	5	113.0	33.25	12.625	12.200	.670	1.120	1.005	.60	0	2.0	941.0	149.1	5.32	313.7	51.4	3.07
H12	6	113.0	33.24	13.000	12.275	.665	1.046	1.046	.60	0	0	1000.4	153.9	5.49	322.8	52.6	3.12
CB125N	11	113.0	33.21	13.000	12.274	.669	1.046	1.046	.60	0	0	998.8	153.7	5.48	322.7	52.6	3.12
H12	4	113.0	32.96	12.625	12.200	.670	1.120	1.005	.60	0	2.0	933.4	147.9	5.33	313.6	51.4	3.08
H12	1	112.1	32.96	12.625	12.200	.670	1.120	1.005	.60	0	2.0	933.4	147.9	5.33	313.6	51.4	3.08
H12	2	112.0	32.96	12.625	12.200	.670	1.120	1.005	.60	0	2.0	933.4	147.9	5.33	313.6	51.4	3.08
CB125	9	110.0	32.34	12.000	12.000	.640	1.075	1.075	.60	0	0	828.8	138.1	5.06	309.9	51.6	3.10
H12	5	106.0	31.23	12.500	12.160	.630	1.058	.942	.60	0	2.0	874.3	139.9	5.29	291.8	48.0	3.06
12WF	6,7,8,12,13	106.0	31.19	12.880	12.230	.620	.986	.986	.60	0	0	930.7	144.5	5.46	300.9	49.2	3.11
CB125N	11	106.0	31.15	12.880	12.228	.623	.986	.986	.60	0	0	929.9	144.3	5.46	300.7	49.2	3.11
H12	4	106.0	30.94	12.500	12.160	.630	1.058	.942	.60	0	2.0	866.8	138.6	5.30	291.7	48.0	3.07
H12	1	105.2	30.94	12.500	12.160	.630	1.058	.942	.60	0	2.0	866.8	138.6	5.30	291.7	48.0	3.07
H12	2	105.0	30.94	12.500	12.160	.630	1.058	.942	.60	0	2.0	866.8	138.6	5.30	291.7	48.0	3.07
CB124c	10	102.0	29.99	12.000	12.490	.943	.800	.800	.55	0	0	721.4	120.2	4.90	260.6	41.7	2.95
CB124	9	100.0	29.41	12.000	10.613	1.121	.830	.830	.55	0	0	659.0	109.8	4.73	167.5	31.6	2.39
H12	5	99.5	29.21	12.375	12.120	.590	.995	.880	.60	0	2.0	809.2	130.8	5.26	270.3	44.6	3.04
H12	4	99.5	28.92	12.375	12.120	.590	.995	.880	.60	0	2.0	801.7	129.6	5.27	270.1	44.6	3.06
CB125N	11	99.0	29.09	12.750	12.191	.586	.921	.921	.60	0	0	857.3	134.5	5.43	278.3	45.7	3.09
12WF	6,7,8,12,13	99.0	29.09	12.750	12.190	.580	.921	.921	.60	0	0	858.5	134.7	5.43	278.2	45.7	3.09

12" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

2
See Page 107
10
See Page 108
1,4,5,6,7,8,9,
11,12,13
See Page 106

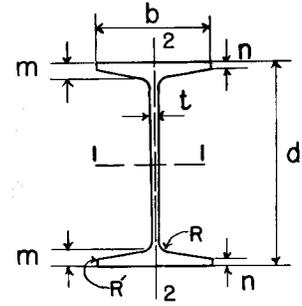


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H12	2	98.5	28.92	12.375	12.120	.590	.995	.880	.60	0	2.0	801.7	129.6	5.27	270.1	44.6	3.06
H12	1	98.3	28.92	12.375	12.120	.590	.995	.880	.60	0	2.0	801.7	129.6	5.27	270.1	44.6	3.06
CB124c	10	95.0	27.93	12.000	12.318	.771	.800	.800	.55	0	0	696.6	116.1	4.99	249.7	40.5	2.99
H12	5	92.5	27.21	12.250	12.080	.550	.933	.817	.60	0	2.0	745.7	121.7	5.23	249.2	41.3	3.03
H12	4	92.5	26.92	12.250	12.080	.550	.933	.817	.60	0	2.0	738.1	120.5	5.24	249.2	41.3	3.04
12WF 12X12 6,7,8,12,13		92.0	27.06	12.620	12.155	.545	.856	.856	.60	0	0	788.9	125.0	5.40	256.4	42.2	3.08
CB125N	11	92.0	27.04	12.620	12.154	.549	.856	.856	.60	0	0	787.4	124.8	5.40	256.3	42.2	3.08
H12	1,2	91.5	26.92	12.250	12.080	.550	.933	.817	.60	0	2.0	738.1	120.5	5.24	249.2	41.3	3.04
CB124	9	91.0	26.76	12.000	10.392	.900	.830	.830	.55	0	0	627.2	104.5	4.84	155.9	30.0	2.41
CB124c	10	88.0	25.88	12.000	12.147	.600	.800	.800	.50	0	0	672.0	112.0	5.10	239.2	39.4	3.04
H12	5	85.5	25.21	12.125	12.040	.510	.870	.755	.60	0	2.0	683.6	112.8	5.21	228.5	38.0	3.01
H12	4	85.5	24.92	12.125	12.040	.510	.870	.755	.60	0	2.0	676.1	111.5	5.21	228.5	37.9	3.03
CB125N	11	85.0	24.98	12.500	12.106	.501	.796	.796	.60	0	0	722.0	115.5	5.38	235.5	38.9	3.07
12WF 12X12 6,7,8,12,13		85.0	24.98	12.500	12.105	.495	.796	.796	.60	0	0	723.3	115.7	5.38	235.5	38.9	3.07
H12	1	84.7	24.92	12.125	12.040	.510	.870	.755	.60	0	2.0	676.1	111.5	5.21	228.5	37.9	3.03
H12	2	84.5	24.92	12.125	12.040	.510	.870	.755	.60	0	2.0	676.1	111.5	5.21	228.5	37.9	3.03
CB124	9	83.0	24.41	12.000	10.196	.704	.830	.830	.55	0	0	598.9	99.8	4.95	147.0	28.8	2.45
CB124c	10	82.0	24.11	12.000	12.000	.453	.800	.800	.55	0	0	650.8	108.5	5.20	230.5	38.4	3.09
H12	5	79.0	23.23	12.000	12.000	.470	.808	.692	.60	0	2.0	623.1	103.9	5.18	208.2	34.7	2.99
CB125N	11	79.0	23.22	12.380	12.081	.476	.736	.736	.60	0	0	661.9	106.9	5.34	216.4	35.8	3.05
12WF 12X12 6,7,8,12,13		79.0	23.22	12.380	12.080	.470	.736	.736	.60	0	0	663.0	107.1	5.34	216.4	35.8	3.05
H12	4	79.0	22.94	12.000	12.000	.470	.808	.692	.60	0	2.0	615.6	102.6	5.18	208.1	34.7	3.01
H12	1,2	78.0	22.94	12.000	12.000	.470	.808	.692	.60	0	2.0	615.6	102.6	5.18	208.1	34.7	3.01
CB124b	10	76.0	22.35	12.000	12.270	.670	.608	.608	.55	0	0	560.2	93.4	5.01	187.5	30.6	2.90
CB124	9	75.0	22.05	12.000	10.000	.508	.830	.830	.55	0	0	570.7	95.1	5.09	138.5	27.7	2.51
H12s	1	73.4	21.60	12.000	11.040	.470	.808	.702	.60	0	2.0	572.8	95.5	5.15	163.7	29.7	2.75
H12	5	72.5	21.25	11.875	11.960	.430	.745	.630	.60	0	2.0	564.1	95.0	5.15	188.2	31.5	2.98
H12	4	72.5	20.96	11.875	11.960	.430	.745	.630	.60	0	2.0	556.6	93.7	5.15	188.2	31.5	3.00
CB125N	11	72.0	21.15	12.250	12.041	.436	.671	.671	.60	0	0	596.2	97.3	5.31	195.3	32.4	3.04
12WF 12X12 6,7,8,12,13		72.0	21.16	12.250	12.040	.430	.671	.671	.60	0	0	597.4	97.5	5.31	195.3	32.4	3.04
H12	2	71.5	20.96	11.875	11.960	.430	.745	.630	.60	0	2.0	556.6	93.7	5.15	188.2	31.5	3.00

12" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

3	2
S10-1921	SeePage107
S12-1922	10
S15-1924	SeePage108
S16-1925	1,4,5,6,7,8,9
S18-1926	11,12,13
	SeePage106

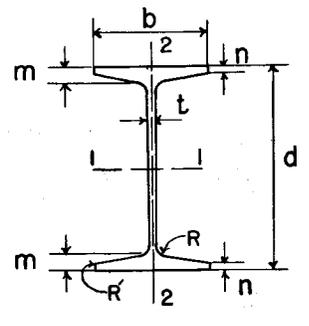


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 12/10	5	70.0	20.59	12.000	10.120	.470	.808	.711	.60	0	2.0	538.8	89.8	5.12	127.3	25.2	2.49
CB124B 12X12	10	70.0	20.58	12.000	12.123	.523	.608	.608	.55	0	0	539.0	89.8	5.12	180.7	29.8	2.96
H 12/10	3	70.0	20.30	12.000	10.120	.470	.808	.711	.60	0	2.0	531.3	88.5	5.12	127.3	25.2	2.50
H 12s	1	67.1	19.74	11.875	11.000	.430	.745	.639	.60	0	2.0	518.0	87.3	5.12	148.0	26.9	2.74
CB123B 12X9	10	66.0	19.41	12.260	9.073	.448	.795	.795	.55	0	0	525.7	85.8	5.20	99.1	21.8	2.26
H 12	5	65.5	19.29	11.750	11.920	.390	.683	.567	.60	0	2.0	506.6	86.2	5.12	168.6	28.3	2.96
H 12	4	65.5	19.00	11.750	11.920	.390	.683	.567	.60	0	2.0	499.0	84.9	5.13	168.6	28.3	2.98
CB124B 12X12	10	65.0	19.11	12.000	12.000	.400	.608	.608	.55	0	0	521.3	86.9	5.22	175.2	29.2	3.03
12WF 12X12 6,7,8,12,13		65.0	19.11	12.120	12.000	.390	.606	.606	.60	0	0	533.4	88.0	5.28	174.6	29.1	3.02
CB125N 12X12	11	65.0	19.09	12.120	12.000	.395	.606	.606	.60	0	0	532.0	87.8	5.28	174.6	29.1	3.02
H 12	2	64.5	19.00	11.750	11.920	.390	.683	.567	.60	0	2.0	499.0	84.9	5.13	168.6	28.3	2.98
H 12/10	5	64.0	18.85	11.875	10.080	.430	.745	.649	.60	0	2.0	488.2	82.2	5.09	115.1	22.8	2.47
H 12a 12X10	6	64.0	18.84	12.310	10.065	.405	.701	.701	.60	0	0	528.6	85.9	5.30	119.2	23.7	2.52
12WF 12X10 7,12		64.0	18.83	12.310	10.060	.405	.701	.701	.60	0	0	528.3	85.8	5.29	119.0	23.7	2.51
CB124N 12X10	11	64.0	18.81	12.310	10.060	.409	.701	.701	.60	0	0	527.5	85.7	5.30	119.0	23.7	2.52
H 12/10	3	64.0	18.56	11.875	10.080	.430	.745	.649	.60	0	2.0	480.6	80.9	5.09	115.1	22.8	2.49
H 12s	1	63.3	18.61	11.875	10.040	.440	.745	.649	.60	0	2.0	480.0	80.8	5.08	113.8	22.7	2.47
CB123B-10 12X9	10	60.0	17.65	12.118	9.034	.409	.724	.724	.55	0	0	472.0	77.9	5.17	89.0	19.7	2.25
H 12/10	5	58.0	17.12	11.750	10.040	.390	.683	.586	.60	0	2.0	438.8	74.7	5.06	103.2	20.6	2.45
H 12a 12X10	6	58.0	17.08	12.190	10.020	.360	.641	.641	.60	0	0	476.5	78.2	5.28	107.5	21.5	2.51
12WF 12X10 7,8,12,13		58.0	17.06	12.190	10.014	.359	.641	.641	.60	0	0	476.1	78.1	5.28	107.4	21.4	2.51
CB124N 12X10	11	58.0	17.04	12.190	10.014	.363	.641	.641	.60	0	0	475.3	78.0	5.28	107.4	21.4	2.51
H 12/10	3	58.0	16.83	11.750	10.040	.390	.683	.586	.60	0	2.0	431.3	73.4	5.06	103.2	20.5	2.48
H 12s	1	57.4	16.89	11.750	10.000	.400	.683	.587	.60	0	2.0	430.8	73.3	5.05	102.0	20.4	2.46
H 12s	1	55.6	15.75	11.750	9.040	.400	.683	.596	.60	0	2.0	395.4	67.3	5.01	76.3	16.9	2.20
H 12/8	5	55.0	16.27	11.875	8.120	.430	.745	.668	.60	0	2.0	406.9	68.5	5.00	61.5	15.2	1.94
CB123B 12X9	10	55.0	16.17	12.000	9.000	.375	.665	.665	.55	0	0	428.4	71.4	5.15	80.9	18.0	2.24
H 12/8	3	55.0	15.98	11.875	8.120	.430	.745	.668	.60	0	2.0	399.3	67.3	5.00	61.5	15.2	1.96

12" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

3
See Page 110
1,5,6,7,8,9,11,
12,13
See Page 106

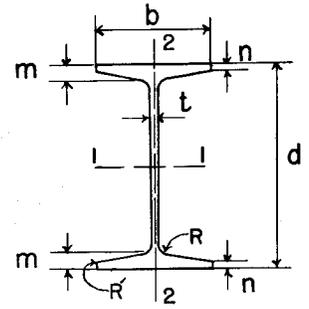


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
12WF 12X10 7,8,12,13		53.0	15.59	12.060	10.000	.345	.576	.576	.60	0	0	426.2	70.7	5.23	96.1	19.2	2.48
CB124N 12X10	11	53.0	15.57	12.060	10.000	.349	.576	.576	.60	0	0	425.4	70.5	5.23	96.1	19.2	2.48
H12a 12X10	6	53.0	15.54	12.060	10.000	.340	.576	.576	.60	0	0	425.7	70.6	5.23	96.1	19.2	2.49
H12 10	5	52.5	15.40	11.625	10.000	.350	.620	.524	.60	0	2.0	390.7	67.2	5.04	91.5	18.3	2.44
H12 10	3	52.5	15.11	11.625	10.000	.350	.620	.524	.60	0	2.0	383.2	65.9	5.04	91.5	18.3	2.46
H12 8	5	50.5	14.79	11.750	8.080	.390	.683	.606	.60	0	2.0	366.1	62.3	4.98	55.1	13.6	1.93
H12 8	3	50.5	14.49	11.750	8.080	.390	.683	.606	.60	0	2.0	358.5	61.0	4.97	55.1	13.6	1.95
12WF 12X8 7,8,12,13		50.0	14.71	12.190	8.077	.371	.641	.641	.60	0	0	394.5	64.7	5.18	56.4	14.0	1.96
H12b 12X8	6	50.0	14.70	12.190	8.075	.370	.641	.641	.60	0	0	394.3	64.7	5.18	56.3	14.0	1.96
CB123 12X8	9	50.0	14.69	12.258	8.071	.361	.655	.655	.50	0	0	400.5	65.4	5.22	57.5	14.2	1.98
CB123N 12X8	11	50.0	14.69	12.190	8.077	.375	.641	.641	.60	0	0	393.0	64.5	5.17	56.4	14.0	1.96
H12s 1		48.1	14.16	11.625	9.000	.360	.620	.534	.60	0	2.0	351.6	60.5	4.98	67.6	15.0	2.19
H12 8	5	45.5	13.31	11.625	8.040	.350	.620	.543	.60	0	2.0	326.4	56.1	4.95	48.9	12.2	1.92
H12 8	3	45.5	13.02	11.625	8.040	.350	.620	.543	.60	0	2.0	318.8	54.8	4.95	48.8	12.1	1.94
12WF 12X8 7,8,12,13		45.0	13.24	12.060	8.042	.336	.576	.576	.60	0	0	350.8	58.2	5.15	50.0	12.4	1.94
H12b 12X8	6	45.0	13.23	12.060	8.040	.335	.576	.576	.60	0	0	350.6	58.1	5.15	50.0	12.4	1.94
H12s 1		45.0	13.23	11.625	8.040	.370	.620	.543	.60	0	2.0	320.8	55.2	4.92	48.9	12.2	1.92
CB123 12X8	9	45.0	13.23	12.130	8.036	.326	.591	.591	.50	0	0	356.9	58.8	5.19	51.2	12.7	1.97
CB123N 12X8	11	45.0	13.21	12.060	8.042	.340	.576	.576	.60	0	0	349.3	57.9	5.14	50.0	12.4	1.95
H12 8	5	40.5	11.85	11.500	8.00	.310	.558	.481	.60	0	2.0	287.7	50.0	4.93	42.8	10.7	1.90
H12 8	3	40.5	11.55	11.500	8.000	.310	.558	.481	.60	0	2.0	280.1	48.7	4.92	42.8	10.7	1.92
H12b 12X8	6	40.0	11.78	11.940	8.000	.295	.516	.516	.60	0	0	310.2	52.0	5.13	44.1	11.0	1.93
12WF 12X8 7,8,12,13		40.0	11.77	11.940	8.000	.294	.516	.516	.60	0	0	310.1	51.9	5.13	44.1	11.0	1.94
CB123 12X8	9	40.0	11.76	12.000	8.000	.290	.526	.526	.50	0	0	313.7	52.3	5.17	44.9	11.2	1.95
H12s 1		40.0	11.76	11.500	8.000	.330	.558	.481	.60	0	2.0	282.1	49.1	4.90	42.8	10.7	1.91
CB123N 12X8	11	40.0	11.75	11.940	8.000	.298	.516	.516	.60	0	0	308.6	51.7	5.13	44.1	11.0	1.94

11" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

B-1907

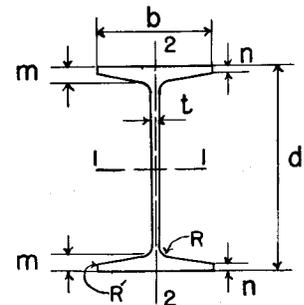


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H11a		175.8	51.70	13.000	12.320	1.060	1.740	1.628	.55	0	2.0	1417.0	218.0	5.24	517.9	84.1	3.17
		168.8	49.65	12.875	12.280	1.020	1.678	1.565	.55	0	2.0	1345.4	209.0	5.21	493.4	80.4	3.15
		161.9	47.60	12.750	12.240	.980	1.615	1.503	.55	0	2.0	1275.5	200.8	5.18	469.4	76.7	3.14
		154.9	45.57	12.625	12.200	.940	1.553	1.440	.55	0	2.0	1207.2	191.2	5.15	445.8	73.1	3.13
		148.1	43.54	12.500	12.160	.900	1.490	1.378	.55	0	2.0	1140.5	182.4	5.12	422.6	69.5	3.12
		141.2	41.53	12.375	12.120	.860	1.428	1.315	.55	0	2.0	1075.5	173.9	5.09	399.8	65.9	3.10
		134.4	39.52	12.250	12.080	.820	1.365	1.253	.55	0	2.0	1011.9	165.2	5.06	377.4	62.5	3.09
		127.6	37.53	12.125	12.040	.780	1.303	1.190	.55	0	2.0	949.9	156.7	5.03	355.4	59.0	3.08
		120.9	35.54	12.000	12.000	.740	1.240	1.128	.55	0	2.0	889.4	148.2	5.00	333.5	55.6	3.06
H11		115.5	33.98	12.000	11.310	.740	1.240	1.135	.55	0	2.0	843.1	140.5	4.98	280.7	49.6	2.87
		109.1	32.10	11.875	11.270	.700	1.178	1.072	.55	0	2.0	787.2	132.5	4.95	262.8	46.6	2.86
		103.1	30.33	11.750	11.240	.670	1.115	1.010	.55	0	2.0	734.0	124.9	4.92	245.9	43.7	2.85
		96.8	28.46	11.625	11.200	.630	1.053	.947	.55	0	2.0	680.8	117.1	4.89	228.6	40.8	2.83
		90.5	26.60	11.500	11.160	.590	.990	.885	.55	0	2.0	628.9	109.4	4.86	211.6	37.9	2.82
		84.2	24.75	11.375	11.120	.550	.928	.822	.55	0	2.0	578.4	101.7	4.83	194.9	35.1	2.81
		77.9	22.91	11.250	11.080	.510	.865	.760	.55	0	2.0	529.2	94.1	4.81	178.6	32.2	2.79
		71.7	21.08	11.125	11.040	.470	.803	.679	.55	0	2.0	481.2	86.5	4.78	162.6	29.5	2.78
		65.5	19.26	11.000	11.000	.430	.740	.635	.55	0	2.0	434.6	79.0	4.75	147.0	26.7	2.76
H11s		61.3	18.02	11.000	11.030	.430	.740	.644	.55	0	2.0	401.2	73.0	4.72	112.6	22.4	2.50
		55.9	16.44	10.875	10.000	.400	.678	.582	.55	0	2.0	360.5	66.3	4.68	101.2	20.2	2.47
		52.1	15.32	10.875	9.040	.400	.678	.591	.55	0	2.0	330.7	60.8	4.65	75.7	16.7	2.22
		46.8	13.76	10.750	9.000	.360	.615	.529	.55	0	2.0	293.5	54.6	4.62	67.0	14.9	2.21
		43.3	12.73	10.750	8.040	.360	.615	.539	.55	0	2.0	266.8	49.6	4.58	48.4	12.0	1.95
		38.4	11.30	10.625	8.000	.320	.553	.476	.55	0	2.0	234.1	44.1	4.55	42.4	10.6	1.94

10" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 B1907 4	5 S27-1928 6	8 10WF B10b 10X10 B10d 10X8	12 C1931 IL1932 13 10 WF CB103,10X10 CB102,10X8
S12-1922	S34-1930	S43-1933	
S15-1924	S35-1930	S51-1938	
S16-1925	7	S53-1943	
S18-1926	S40-1931	10 C1927 C1930	C1933 C1934 IL1934 CIL1940

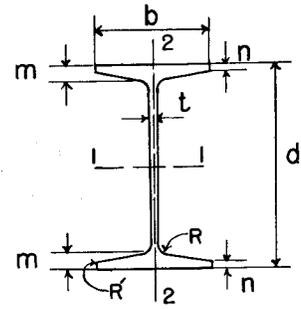


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d in.	FLANGE WIDTH b in.	WEB THICK t in.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							in.	in.	in.	in.		In. ⁴	In. ³	in.	In. ⁴	In. ³	in.
H 10 12	6	246.0	72.30	13.000	14.570	1.220	2.173	2.040	.50	0	2.0	1916.1	294.8	5.15	1071.6	147.1	3.85
		238.0	70.04	12.875	14.530	1.180	2.113	1.980	.50	0	2.0	1835.8	285.1	5.12	1031.9	142.0	3.84
		230.0	67.77	12.750	14.500	1.150	2.048	1.915	.50	0	2.0	1753.1	275.0	5.09	992.4	136.9	3.83
		222.0	65.38	12.625	14.460	1.110	1.983	1.850	.50	0	2.0	1670.5	264.7	5.05	951.3	131.6	3.81
		215.0	63.27	12.500	14.430	1.080	1.923	1.790	.50	0	2.0	1597.2	255.6	5.02	915.2	126.9	3.80
		208.0	61.17	12.375	14.400	1.050	1.863	1.730	.50	0	2.0	1525.5	246.4	4.99	879.6	122.2	3.79
		200.0	58.80	12.250	14.360	1.010	1.798	1.665	.50	0	2.0	1448.4	236.5	4.96	840.0	117.0	3.78
		192.0	56.45	12.125	14.320	.970	1.733	1.600	.50	0	2.0	1373.2	226.6	4.93	801.1	111.9	3.77
		185.0	54.37	12.000	14.290	.940	1.673	1.540	.50	0	2.0	1306.3	217.7	4.90	766.8	107.3	3.76
		177.0	52.18	11.875	14.250	.900	1.613	1.480	.50	0	2.0	1239.6	208.7	4.87	731.3	102.6	3.74
		170.0	49.98	11.750	14.220	.870	1.548	1.415	.50	0	2.0	1170.9	199.3	4.84	695.5	97.8	3.73
162.0	47.78	11.625	14.190	.840	1.483	1.350	.50	0	2.0	1103.9	190.0	4.81	660.0	93.0	3.72		
H10a	1	155.2	45.64	12.000	11.320	1.020	1.673	1.570	.50	0	2.0	1053.6	175.6	4.80	387.2	68.4	2.91
H10	6	155.0	45.62	11.500	14.150	.800	1.423	1.290	.50	0	2.0	1042.0	181.2	4.78	626.0	88.5	3.70
H10a	1	148.8	43.75	11.875	11.280	.980	1.611	1.508	.50	0	2.0	997.6	168.0	4.78	368.0	65.3	2.90
H10	6	148.0	43.46	11.375	14.110	.760	1.363	1.230	.50	0	2.0	981.5	172.5	4.75	592.6	84.0	3.69
H10a	1	142.4	41.87	11.750	11.240	.940	1.548	1.445	.50	0	2.0	943.0	160.5	4.75	349.3	62.1	2.89
H10	6	140.0	41.29	11.250	14.080	.730	1.298	1.165	.50	0	2.0	919.2	163.4	4.72	558.5	79.3	3.68
CB105	10	140.0	41.17	10.000	13.177	1.777	1.016	1.016	.60	0	0	623.2	124.6	3.89	391.4	59.4	3.08
H10	5,6	136.5	40.08	11.750	10.550	.940	1.548	1.452	.50	0	2.0	893.3	152.1	4.72	290.0	55.0	2.69
H10	4	136.5	39.88	11.750	10.550	.940	1.548	1.452	.50	0	2.0	889.7	151.4	4.72	289.9	55.0	2.70
10WF	7,8,13	136.0	40.03	11.880	10.575	.915	1.498	1.498	.50	0	0	917.2	154.4	4.79	295.9	56.0	2.72
CB103N	12	136.0	40.01	11.880	10.575	.915	1.498	1.498	.55	0	0	916.9	154.4	4.79	295.9	56.0	2.72
H10a	1	136.0	40.00	11.625	11.200	.900	1.486	1.383	.50	0	2.0	889.8	153.1	4.72	330.8	59.1	2.88
H10	6	133.0	39.02	11.125	14.040	.690	1.233	1.100	.50	0	2.0	857.4	154.2	4.69	523.7	74.6	3.66
CB105	10	132.0	38.81	10.000	12.941	1.541	1.016	1.016	.60	0	0	603.5	120.7	3.94	369.6	57.1	3.09
H10	5,6	130.0	38.30	11.625	10.510	.900	1.486	1.389	.50	0	2.0	843.0	145.0	4.69	274.5	52.2	2.68
H10	7	130.0	38.24	11.750	10.540	.880	1.433	1.433	.50	0	0	864.4	147.1	4.75	280.2	53.2	2.71
CB103N	12	130.0	38.23	11.750	10.540	.880	1.433	1.433	.55	0	0	864.2	147.1	4.75	280.2	53.2	2.71
H10	4	130.0	38.09	11.625	10.510	.900	1.486	1.389	.50	0	2.0	839.4	144.4	4.69	274.5	52.2	2.68
H10a	1	129.7	38.14	11.500	11.160	.860	1.423	1.320	.50	0	2.0	838.0	145.7	4.69	312.7	56.0	2.86
H10	6	125.0	36.89	11.000	14.000	.650	1.173	1.040	.50	0	2.0	801.4	145.7	4.66	491.7	70.2	3.65

10" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

- 2 | 1,4,5,6,7,8,10,
- S3-1909 | 12,13
- S4-1911 | See Page 113
- 14
- 10WF
- CB103,10X10
- CB102,10X8
- CB101,10X5³/₄
- CIL1946
- CIL1948
- US1950

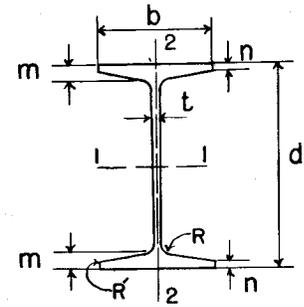


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H10 5,6		124.0	36.52	11.500	10.470	.860	1.423	1.327	.50	0	2.0	794.0	138.1	4.66	259.4	49.5	2.66
10WF 10X10 7,8,13		124.0	36.46	11.620	10.505	.845	1.368	1.368	.50	0	0	813.1	139.9	4.72	264.8	50.4	2.69
CB105 10 10X12		124.0	36.46	10.000	12.706	1.306	1.016	1.016	.60	0	0	583.9	116.8	4.00	349.0	54.9	3.09
CB103N 12 10X10		124.0	36.45	11.620	10.505	.845	1.368	1.368	.55	0	0	812.9	139.9	4.72	264.8	50.4	2.70
H10 4		124.0	36.32	11.500	10.470	.860	1.423	1.327	.50	0	2.0	790.4	137.5	4.67	259.3	49.5	2.67
H10 2		123.5	36.32	11.500	10.470	.860	1.423	1.327	.50	0	2.0	790.4	137.5	4.67	259.3	49.5	2.67
H10a 1		123.4	36.29	11.375	11.120	.820	1.361	1.258	.50	0	2.0	787.4	138.4	4.66	295.0	53.1	2.85
H10 5,6		118.0	34.76	11.375	10.430	.820	1.361	1.264	.50	0	2.0	746.3	131.2	4.63	244.5	46.9	2.65
CB103N 12 10X10		118.0	34.68	11.500	10.461	.801	1.308	1.308	.55	0	0	765.2	133.1	4.70	250.0	47.8	2.68
H10 7 10X10		118.0	34.69	11.500	10.460	.800	1.308	1.308	.50	0	0	765.3	133.1	4.70	249.9	47.8	2.68
H10 4		118.0	34.55	11.375	10.430	.820	1.361	1.264	.50	0	2.0	742.7	130.6	4.64	244.4	46.9	2.66
H10 2		117.5	34.55	11.375	10.430	.820	1.361	1.264	.50	0	2.0	742.7	130.6	4.64	244.4	46.9	2.66
H10a 1		117.1	34.45	11.250	11.080	.780	1.298	1.195	.50	0	2.0	738.2	131.2	4.63	277.6	50.1	2.84
CB105 10 10X10		116.0	34.11	10.000	12.471	1.071	1.016	1.016	.60	0	0	564.3	112.9	4.07	329.4	52.8	3.11
H10 6 12		113.0	33.25	11.000	12.260	.650	1.173	1.057	.50	0	2.0	710.8	129.2	4.62	334.3	54.5	3.17
H10 5,6		112.0	33.00	11.250	10.390	.780	1.298	1.202	.50	0	2.0	699.9	124.4	4.60	229.9	44.3	2.64
CB103N 12 10X10		112.0	32.92	11.380	10.416	.756	1.248	1.248	.55	0	0	718.6	126.3	4.67	235.4	45.2	2.67
10WF 10X10 7,8,9,13,14		112.0	32.92	11.380	10.415	.755	1.248	1.248	.50	0	0	718.7	126.3	4.67	235.4	45.2	2.67
H10 4		112.0	32.80	11.250	10.390	.780	1.298	1.202	.50	0	2.0	696.2	123.8	4.61	229.9	44.3	2.65
H10 2		111.5	32.80	11.250	10.390	.780	1.298	1.202	.50	0	2.0	696.2	123.8	4.61	229.9	44.3	2.65
H10a 1		110.9	32.62	11.125	11.040	.740	1.236	1.133	.50	0	2.0	690.3	124.1	4.60	260.5	47.2	2.83
CB105 10 10X12		108.0	31.76	10.000	12.236	.836	1.016	1.016	.60	0	0	544.8	109.0	4.14	310.7	50.8	3.13
H10 6 12		107.0	31.45	10.875	12.230	.620	1.113	.997	.50	0	2.0	663.5	112.0	4.59	313.5	51.3	3.16
H10 5,6		106.5	31.26	11.125	10.350	.740	1.236	1.139	.50	0	2.0	654.7	117.7	4.58	215.7	41.7	2.63
H10 4		106.5	31.06	11.125	10.350	.740	1.236	1.139	.50	0	2.0	651.0	117.0	4.58	215.6	41.7	2.64
H10 7 10X10		106.0	31.17	11.250	10.380	.720	1.183	1.183	.50	0	0	671.2	119.3	4.64	220.8	42.5	2.66
CB103N 12 10X10		106.0	31.16	11.250	10.380	.720	1.183	1.183	.55	0	0	671.0	119.3	4.64	220.8	42.5	2.66
H10 2		105.5	31.06	11.125	10.350	.740	1.236	1.139	.50	0	2.0	651.0	117.0	4.58	215.6	41.7	2.64
H10a 1		104.7	30.80	11.000	11.000	.700	1.171	1.070	.50	0	2.0	643.6	117.0	4.57	243.7	44.3	2.81
H10 5,6		100.5	29.53	11.000	10.310	.700	1.173	1.077	.50	0	2.0	610.6	111.0	4.55	201.7	39.1	2.61
H10 4		100.5	29.32	11.000	10.310	.700	1.173	1.077	.50	0	2.0	607.0	110.4	4.55	201.7	39.1	2.62

10" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

9
 B10b, 10X10
 B10a, 10X8
 S54- 1946
 S56 1948
 1,4,5,6,7,8,10,
 12,13
 See Page 113
 2,14
 See Page 114



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H10 12	6	100.0	29.54	10.750	12.200	.590	1.048	.932	.50	0	2.0	613.9	114.2	4.56	291.5	47.8	3.14
IOWF 10X12 7,8,9,13,14		100.0	29.43	11.120	10.345	.685	1.118	1.118	.50	0	0	625.0	112.4	4.61	206.6	39.9	2.65
CB103N 12 10X10	12	100.0	29.42	11.120	10.345	.685	1.118	1.118	.55	0	0	624.7	112.4	4.61	206.6	39.9	2.65
CB105 10 10X12	10	100.0	29.40	10.000	12.000	.600	1.016	1.016	.60	0	0	525.1	105.0	4.23	292.8	48.8	3.16
H10 1	1	99.7	29.32	11.000	10.310	.700	1.173	1.077	.50	0	2.0	607.0	110.4	4.55	201.7	39.1	2.62
H10 2	2	99.5	29.32	11.000	10.310	.700	1.173	1.077	.50	0	2.0	607.0	110.4	4.55	201.7	39.1	2.62
CB103N 12 10X10	12	95.0	27.92	11.000	10.322	.662	1.058	1.058	.55	0	0	584.2	106.2	4.58	194.2	37.6	2.64
H10 10X10	7	95.0	27.92	11.000	10.320	.660	1.058	1.058	.50	0	0	584.2	106.2	4.57	194.1	37.6	2.64
H10 5,6	5,6	95.0	27.91	10.875	10.280	.670	1.111	1.014	.50	0	2.0	568.9	104.6	4.51	188.6	36.7	2.60
H10 4	4	95.0	27.71	10.875	10.280	.670	1.111	1.014	.50	0	2.0	565.2	103.9	4.52	188.6	36.7	2.61
H10 1	1	94.2	27.71	10.875	10.280	.670	1.111	1.014	.50	0	2.0	565.2	103.9	4.52	188.6	36.7	2.61
H10 2	2	94.0	27.71	10.875	10.280	.670	1.111	1.014	.50	0	2.0	565.2	103.9	4.52	188.6	36.7	2.61
H10 12	6	94.0	27.63	10.625	12.170	.560	.983	.867	.50	0	2.0	565.7	106.5	4.52	269.7	44.3	3.12
CB104 10	10	92.0	27.06	10.000	10.647	1.162	.805	.805	.50	0	0	423.2	84.6	3.96	163.1	30.6	2.46
H10 5,6	5,6	89.0	26.20	10.750	10.240	.630	1.048	.952	.50	0	2.0	527.2	98.1	4.49	175.2	34.2	2.59
IOWF 10X10 7,8,9,13,14		89.0	26.19	10.880	10.275	.615	.998	.998	.50	0	0	542.4	99.7	4.55	180.6	35.2	2.63
CB103N 12 10X10	12	89.0	26.17	10.880	10.275	.615	.998	.998	.55	0	0	542.1	99.7	4.55	180.6	35.2	2.63
H10 4	4	89.0	25.99	10.750	10.240	.630	1.048	.952	.50	0	2.0	523.5	97.4	4.49	175.1	34.2	2.60
H10 2	2	88.5	25.99	10.750	10.240	.630	1.048	.952	.50	0	2.0	523.5	97.4	4.49	175.1	34.2	2.60
H10 1	1	88.4	25.99	10.750	10.240	.630	1.048	.952	.50	0	2.0	523.5	97.4	4.49	175.1	34.2	2.60
H10 12	6	88.0	25.86	10.500	12.140	.530	.923	.807	.50	0	2.0	522.1	99.4	4.49	249.8	41.2	3.11
CB104 10	10	84.0	24.70	10.000	10.411	.926	.805	.805	.50	0	0	403.6	80.7	4.04	152.0	29.2	2.48
H10 5,6	5,6	83.5	24.49	10.625	10.200	.590	.986	.889	.50	0	2.0	486.6	91.6	4.46	162.0	31.8	2.57
H10 4	4	83.5	24.29	10.625	10.200	.590	.986	.889	.50	0	2.0	483.0	90.9	4.46	162.0	31.8	2.58
H10 7	7	83.0	24.42	10.750	10.235	.575	.933	.933	.50	0	0	499.2	92.9	4.52	166.9	32.6	2.61
CB103N 12 10X10	12	83.0	24.41	10.750	10.235	.575	.933	.933	.55	0	0	498.9	92.8	4.52	166.9	32.6	2.61
H10 1	1	82.6	24.29	10.625	10.200	.590	.986	.889	.50	0	2.0	483.0	90.9	4.46	162.0	31.8	2.58
H10 2	2	82.5	24.29	10.625	10.200	.590	.986	.889	.50	0	2.0	483.0	90.9	4.46	162.0	31.8	2.58
H10 12	6	82.0	23.98	10.375	12.100	.490	.863	.747	.50	0	2.0	478.6	92.2	4.47	229.6	37.9	3.09
H10 5,6	5,6	77.5	22.80	10.500	10.160	.550	.923	.827	.50	0	2.0	447.2	85.2	4.43	149.1	29.4	2.56
H10 4	4	77.5	22.59	10.500	10.160	.550	.923	.827	.50	0	2.0	443.6	84.5	4.43	149.1	29.4	2.57
IOWF 10X10 7,8,9,13,14		77.0	22.67	10.620	10.195	.535	.868	.868	.50	0	0	457.2	86.1	4.49	153.4	30.1	2.60
CB103N 12 10X10	12	77.0	22.65	10.620	10.195	.535	.868	.868	.55	0	0	456.9	86.1	4.49	153.4	30.1	2.60
CB104 10	10	77.0	22.65	10.000	10.206	.721	.805	.805	.50	0	0	386.5	77.3	4.13	142.9	28.0	2.51
H10 2	2	77.0	22.59	10.500	10.160	.550	.923	.827	.50	0	2.0	443.6	84.5	4.43	149.1	29.4	2.57

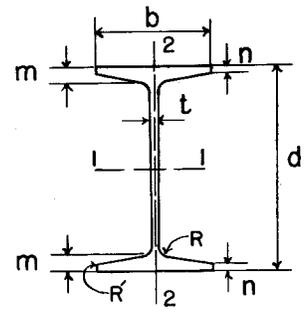
10" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

11
 C 1928 1,4,5,6,7,8,10,
 C 1929 12,13
 C 1930 See Page 113

 2,14
 See Page 114

 9
 See Page 115

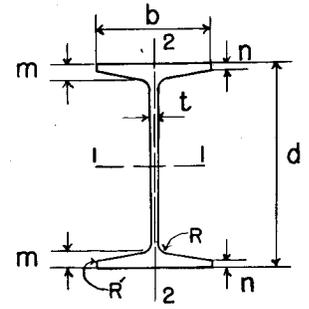


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT Lb.	AREA Sq.in.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 10	1	76.8	22.59	10.500	10.160	.550	.923	.827	.50	0	2.0	443.6	84.5	4.43	149.1	29.4	2.57
H 10/12	6	75.0	22.00	10.250	12.060	.450	.798	.682	.50	0	2.0	433.2	84.5	4.44	208.3	34.5	3.08
LOW 10X10 7,8,9,13,14		72.0	21.18	10.500	10.170	.510	.808	.808	.50	0	0	420.7	80.1	4.46	141.8	27.9	2.59
CB103N 12 10X10		72.0	21.17	10.500	10.170	.510	.808	.808	.55	0	0	420.4	80.1	4.46	141.8	27.9	2.59
H 10	5,6	72.0	21.11	10.375	10.120	.510	.861	.764	.50	0	2.0	408.9	78.8	4.40	136.5	27.0	2.54
H 10	4	72.0	20.91	10.375	10.120	.510	.861	.764	.50	0	2.0	405.2	78.1	4.40	136.5	27.0	2.56
H 10	1	71.1	20.91	10.375	10.120	.510	.861	.764	.50	0	2.0	405.2	78.1	4.40	136.5	27.0	2.56
H 10	2	71.0	20.91	10.375	10.120	.510	.861	.764	.50	0	2.0	405.2	78.1	4.40	136.5	27.0	2.56
CB104	10	70.0	20.59	10.000	10.000	.515	.805	.805	.50	0	0	369.3	73.9	4.24	134.3	26.9	2.55
H 10/12	6	68.0	20.13	10.125	12.030	.420	.733	.617	.50	0	2.0	390.0	77.1	4.40	187.8	31.2	3.05
H 10 10X10	7	66.0	19.44	10.380	10.120	.460	.748	.748	.50	0	0	382.8	73.7	4.44	129.3	25.6	2.58
H 10	5,6	66.0	19.44	10.250	10.080	.470	.798	.702	.50	0	2.0	371.7	72.5	4.37	124.2	24.6	2.53
CB103N 12 10X10		66.0	19.43	10.380	10.120	.460	.748	.748	.55	0	0	382.5	73.7	4.44	129.3	25.6	2.58
LOW 10X10 8,9,13,14		66.0	19.41	10.380	10.117	.457	.748	.748	.50	0	0	382.5	73.7	4.44	129.2	25.5	2.58
H 10	4	66.0	19.23	10.250	10.080	.470	.798	.702	.50	0	2.0	368.0	71.8	4.37	124.2	24.6	2.54
H 10	2	65.5	19.23	10.250	10.080	.470	.798	.702	.50	0	2.0	368.0	71.8	4.37	124.2	24.6	2.54
H 10	1	65.4	19.23	10.250	10.080	.470	.798	.702	.50	0	2.0	368.0	71.8	4.37	124.2	24.6	2.54
CB103A	11	64.0	18.81	10.000	10.441	.791	.558	.558	.45	0	0	308.8	61.8	4.05	106.3	20.4	2.38
CB 103	10	63.0	18.53	10.000	9.412	.787	.610	.610	.45	0	0	300.4	60.1	4.03	85.2	18.1	2.14
H 10/12	6	62.0	18.29	10.000	11.990	.380	.673	.557	.50	0	2.0	350.1	70.0	4.38	168.7	28.1	3.04
H 10	5,6	60.5	17.77	10.125	10.040	.430	.736	.639	.50	0	2.0	335.5	66.3	4.34	112.2	22.3	2.51
H 10	4	60.5	17.57	10.125	10.040	.430	.736	.639	.50	0	2.0	331.9	65.6	4.35	112.2	22.3	2.53
LOW 10X10 7,8,9,13,14		60.0	17.66	10.250	10.075	.415	.683	.683	.50	0	0	343.7	67.1	4.41	116.5	23.1	2.57
CB103N 12 10X10		60.0	17.65	10.250	10.075	.415	.683	.683	.55	0	0	343.5	67.0	4.41	116.5	23.1	2.57
H 10	1	59.7	17.57	10.125	10.040	.430	.736	.639	.50	0	2.0	331.9	65.6	4.35	112.2	22.3	2.53
H 10	2	59.5	17.57	10.125	10.040	.430	.736	.639	.50	0	2.0	331.9	65.6	4.35	112.2	22.3	2.53
CB103A	11	59.0	17.34	10.000	10.294	.644	.558	.558	.45	0	0	296.5	59.3	4.13	101.7	19.8	2.42
CB103	10	56.0	16.47	10.000	9.206	.581	.610	.610	.45	0	0	283.2	56.6	4.15	79.5	17.3	2.20
H 10	5,6	55.0	16.12	10.000	10.000	.390	.673	.577	.50	0	2.0	300.4	60.1	4.32	100.4	20.1	2.50
H 10	4	55.0	15.91	10.000	10.000	.390	.673	.577	.50	0	2.0	296.8	59.4	4.32	100.4	20.1	2.51
H 10	1	54.1	15.91	10.000	10.000	.390	.673	.577	.50	0	2.0	296.8	59.4	4.32	100.4	20.1	2.51

10" COLUMNS

REFERENCES; SEE COLUMN (1) AND PAGE 4

3	1,4,5,6,7,8,10
S10-1921	12,13
S12-1922	See Page 113
S15-1924	2,14
S16-1925	See Page 114
S18-1926	9
	See Page 115
	11
	See Page 116

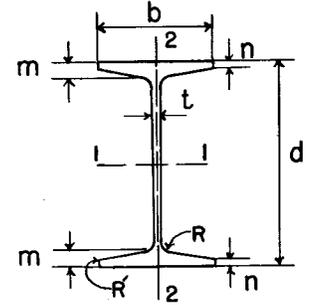


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 10	2	54.0	15.91	10.000	10.000	.390	.673	.577	.50	0	2.0	296.8	59.4	4.32	100.4	20.1	2.51
H 10 10X10		54.0	15.90	10.120	10.030	.370	.618	.618	.50	0	0	305.9	60.4	4.39	104.0	20.7	2.56
CB103N 10X10	12	54.0	15.89	10.120	10.030	.370	.618	.618	.55	0	0	305.6	60.4	4.39	104.0	20.7	2.56
LOW 10X10 8,9,13,14		54.0	15.88	10.120	10.028	.368	.618	.618	.50	0	0	305.7	60.4	4.39	103.9	20.7	2.56
CB103A	11	54.0	15.87	10.000	10.147	.497	.558	.558	.45	0	0	284.3	56.9	4.23	97.3	19.2	2.48
H 10s	1	50.6	14.88	10.000	9.040	.400	.673	.587	.50	0	2.0	272.5	54.5	4.28	75.1	16.6	2.25
H 10	5,6	49.5	14.57	9.875	9.970	.360	.611	.514	.50	0	2.0	267.2	54.1	4.28	89.1	17.9	2.47
H 10	4	49.5	14.37	9.875	9.970	.360	.611	.514	.50	0	2.0	263.5	53.4	4.28	89.1	17.9	2.49
CB103	10	49.0	14.41	10.000	9.000	.375	.610	.610	.45	0	0	266.0	53.2	4.30	74.2	16.5	2.27
CB103A	11	49.0	14.40	10.000	10.000	.350	.558	.558	.45	0	0	272.0	54.4	4.35	93.0	18.6	2.54
LOW 10X10 7,8,9,13,14		49.0	14.40	10.000	10.000	.340	.558	.558	.50	0	0	272.9	54.6	4.35	93.0	18.6	2.54
CB103N 10X10	12	49.0	14.38	10.000	10.000	.340	.558	.558	.55	0	0	272.7	54.5	4.35	93.0	18.6	2.54
H 10	2	49.0	14.37	9.875	9.970	.360	.611	.514	.50	0	2.0	263.5	53.4	4.28	89.1	17.9	2.49
H 10 8	5,6	47.5	13.90	10.000	8.110	.390	.673	.596	.50	0	2.0	251.3	50.3	4.25	54.8	13.5	1.99
H 10 8	3	47.5	13.70	10.000	8.110	.390	.673	.596	.50	0	2.0	247.6	49.5	4.25	54.8	13.5	2.00
H 10s	1	45.4	13.36	9.875	9.000	.360	.611	.524	.50	0	2.0	241.4	48.9	4.25	66.4	14.8	2.23
LOW 10X8 8,9,13,14		45.0	13.24	10.120	8.022	.350	.618	.618	.50	0	0	248.6	49.1	4.33	53.2	13.3	2.00
H 10a 10X8	7	45.0	13.24	10.120	8.020	.350	.618	.618	.50	0	0	248.5	49.1	4.33	53.2	13.3	2.00
CB102N 10X8	12	45.0	13.22	10.120	8.020	.350	.618	.618	.55	0	0	248.3	49.1	4.33	53.2	13.3	2.01
H 10 8	5,6	42.5	12.49	9.875	8.070	.350	.611	.533	.50	0	2.0	223.0	45.2	4.23	48.5	12.0	1.97
H 10 8	3	42.5	12.29	9.875	8.070	.350	.611	.533	.50	0	2.0	219.4	44.4	4.23	48.5	12.0	1.99
CB102	10	42.0	12.35	10.000	8.324	.644	.381	.381	.30	0	0	190.4	38.1	3.93	36.8	8.9	1.73
H 10s	1	42.0	12.34	9.875	8.040	.360	.611	.534	.50	0	2.0	219.2	44.4	4.22	48.0	11.9	1.97
H 10a 10X8	7	41.0	12.07	10.000	8.000	.330	.558	.558	.50	0	0	222.5	44.5	4.29	47.7	11.9	1.99
LOW 10X8 8,13		41.0	12.06	10.000	8.000	.328	.558	.558	.50	0	0	222.4	44.5	4.29	47.7	11.9	1.99
CB102N 10X8	12	41.0	12.06	10.000	8.000	.330	.558	.558	.55	0	0	222.3	44.5	4.29	47.7	11.9	1.99
LOW 10X8 9,14		39.0	11.48	9.940	7.990	.318	.528	.528	.50	0	0	209.7	42.2	4.27	44.9	11.2	1.98
H 10 8	5,6	38.0	11.09	9.750	8.030	.310	.548	.471	.50	0	2.0	195.6	40.1	4.20	42.4	10.6	1.96
H 10 8	3	38.0	10.89	9.750	8.030	.310	.548	.471	.50	0	2.0	192.0	39.4	4.20	42.4	10.56	1.97
H 10s	1	37.2	10.95	9.750	8.000	.320	.548	.471	.50	0	2.0	192.0	39.4	4.19	41.9	10.5	1.96

10" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

3
See Page 117
5, 6, 7, 8, 10, 12,
13
See Page 113
9
See Page 115
14
See Page 114

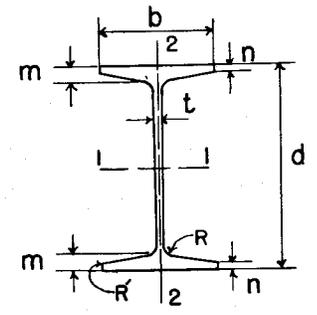


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
IOW 10X8 8,13		37.0	10.88	9.880	7.978	.306	.498	.498	.50	0	0	196.9	39.9	4.25	42.2	10.6	1.97
H10a 7		37.0	10.87	9.880	7.975	.305	.498	.498	.50	0	0	196.8	39.8	4.26	42.1	10.6	1.97
CB102N 12 10X8		37.0	10.85	9.880	7.975	.305	.498	.498	.55	0	0	196.6	39.8	4.26	42.1	10.6	1.97
CB102 10		36.0	10.58	10.000	8.147	.467	.381	.381	.30	0	0	175.6	35.1	4.07	34.4	8.5	1.80
H10 8 5,6		33.5	9.80	9.625	8.000	.280	.486	.408	.50	0	2.0	169.9	35.3	4.16	36.6	9.1	1.93
H10 8 3		33.5	9.60	9.625	8.000	.280	.486	.408	.50	0	2.0	166.2	34.5	4.16	36.6	9.14	1.95
H10a 10X8 7		33.0	9.73	9.750	7.965	.295	.433	.433	.50	0	0	171.1	35.1	4.19	36.5	9.17	1.94
CB102N 12 10X8		33.0	9.72	9.750	7.965	.295	.433	.433	.55	0	0	170.8	35.0	4.19	36.5	9.2	1.94
IOW 10X8 8,9,13,14		33.0	9.71	9.750	7.964	.292	.433	.433	.50	0	0	170.9	35.0	4.20	36.5	9.2	1.94
CB102 10		31.0	9.11	10.000	8.000	.320	.381	.381	.30	0	0	163.4	32.7	4.23	32.5	8.1	1.89

9" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1
B1907
2
C1927
C1930

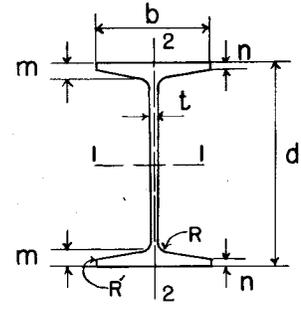


SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT Lb.	AREA Sq. In.				m	n	R	R'		I	S	r	I	S	r
		In.	In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H9a	1	135.6	39.87	11.000	10.310	.980	1.606	1.512	.45	0	2.0	762.8	138.7	4.38	281.6	54.6	2.66
	2	129.7	38.15	10.875	10.270	.940	1.543	1.450	.45	0	2.0	720.0	132.4	4.34	266.9	52.0	2.65
	3	123.9	36.44	10.750	10.230	.900	1.481	1.387	.45	0	2.0	678.3	126.0	4.32	252.6	49.4	2.63
	4	118.1	34.73	10.625	10.190	.860	1.418	1.325	.45	0	2.0	637.8	120.1	4.29	238.6	46.8	2.62
	5	112.3	33.04	10.500	10.150	.820	1.356	1.262	.45	0	2.0	598.4	114.0	4.26	224.8	44.3	2.61
	6	106.6	31.35	10.375	10.110	.780	1.293	1.200	.45	0	2.0	560.1	108.0	4.23	211.3	41.8	2.60
	7	100.9	29.68	10.250	10.070	.740	1.231	1.137	.45	0	2.0	522.9	102.0	4.20	198.1	39.4	2.58
	8	95.3	28.02	10.125	10.030	.700	1.168	1.075	.45	0	2.0	486.8	96.2	4.17	185.2	36.9	2.57
H9	1	90.0	26.46	10.000	10.000	.670	1.106	1.012	.45	0	2.0	452.6	90.5	4.14	173.1	34.6	2.56
	2	85.3	25.08	10.000	9.320	.670	1.106	1.019	.45	0	2.0	424.6	84.9	4.11	140.9	30.2	2.37
	3	80.0	23.52	9.875	9.280	.630	1.043	.957	.45	0	2.0	392.6	79.5	4.09	130.7	28.2	2.36
	4	74.7	21.97	9.750	9.240	.590	.981	.894	.45	0	2.0	361.6	74.2	4.06	120.8	26.1	2.34
	5	69.5	20.43	9.625	9.200	.550	.918	.832	.45	0	2.0	331.6	68.9	4.03	111.0	24.1	2.33
	6	64.3	18.90	9.500	9.160	.510	.856	.769	.45	0	2.0	302.4	63.7	4.00	101.6	22.2	2.32
	7	59.1	17.38	9.375	9.120	.470	.793	.707	.45	0	2.0	274.2	58.5	3.97	92.3	20.2	2.31
	8	54.0	15.87	9.250	9.080	.430	.731	.644	.45	0	2.0	246.8	53.4	3.94	83.3	18.3	2.29
CB93	2	48.0	14.11	9.242	9.082	.398	.591	.591	.50	0	0	221.1	47.8	3.96	73.8	16.3	2.29
H9	1	43.8	12.88	9.000	9.000	.350	.606	.519	.45	0	2.0	194.7	43.3	3.89	65.9	14.6	2.26
CB93	2	43.0	12.65	9.122	9.041	.357	.531	.531	.50	0	0	195.5	42.9	3.93	65.4	14.5	2.28
H9s	1	40.6	11.95	9.000	8.040	.360	.606	.529	.45	0	2.0	177.0	39.3	3.85	47.6	11.8	2.00
CB93	2	38.0	11.17	9.000	9.000	.316	.470	.470	.50	0	0	170.4	37.9	3.91	57.1	12.7	2.26
H9s	1	36.0	10.59	8.875	8.000	.320	.543	.466	.45	0	2.0	154.6	34.8	3.82	41.5	10.4	1.98
CB92	2	35.0	10.29	9.192	6.556	.335	.566	.566	.50	0	0	155.4	33.8	3.89	26.6	8.1	1.61
H9s	1	32.9	9.69	8.875	7.040	.320	.543	.476	.45	0	2.0	138.6	31.2	3.78	28.7	8.2	1.72
CB92	2	32.0	9.40	9.096	6.528	.307	.518	.518	.50	0	0	140.5	30.9	3.87	24.0	7.4	1.60
CB92	2	29.0	8.53	9.000	6.500	.279	.470	.470	.50	0	0	126.0	28.0	3.84	21.5	6.6	1.59
H9s	1	28.8	8.46	8.750	7.000	.280	.481	.414	.45	0	2.0	119.3	27.3	3.76	24.7	7.0	1.71

8" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 B 1907	6 S27-1928	8 S40-1931	10 B8b, B8a, 8X8	16 CB83, 8X8
2 S3-1909	S35-1930	9 S43-1933	S54-1946	CB82, 8X8
S4-1911	14 CB 82	B8b, B8a, 8X8	S56-1948	C1933
5 S12-1922	CB 83	S47-1934	15 C1931	C1934
S15-1924	C1927	S 51-1938	17 C1934	IL1934
S18-1926	C1930	S53-1943	18 C1940	CIL 1940
			17 C1940	CB83, 8X8
			CIL1948	CB82, 8X8
			US 1950	CIL1946

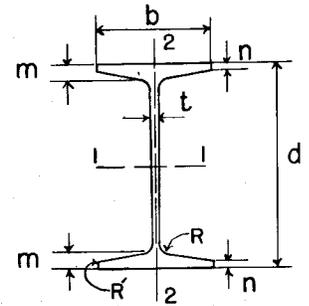


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In.*	In.*	In.	In.*	In.*	In.
H8a	1	117.1	34.45	10.000	9.310	.940	1.538	1.455	.40	0	2.0	535.9	107.2	3.94	199.3	42.8	2.41
H8a	1	111.8	32.89	9.875	9.270	.900	1.476	1.392	.40	0	2.0	503.9	102.1	3.91	188.3	40.6	2.39
H8a	1	106.6	31.35	9.750	9.230	.860	1.413	1.330	.40	0	2.0	472.9	97.0	3.88	177.7	38.5	2.38
H8a	1	101.3	29.81	9.625	9.190	.820	1.351	1.267	.40	0	2.0	442.9	92.0	3.85	167.2	36.4	2.37
H8a	1	96.1	28.28	9.500	9.150	.780	1.288	1.205	.40	0	2.0	413.8	87.1	3.83	157.0	34.3	2.36
H8	6	91.0	26.77	9.500	8.470	.780	1.288	1.212	.40	0	2.0	386.8	81.4	3.80	125.1	29.6	2.16
H8a	1	91.0	26.76	9.375	9.110	.740	1.226	1.142	.40	0	2.0	385.6	82.3	3.80	147.0	32.3	2.34
H8	5	91.0	26.64	9.500	8.470	.780	1.288	1.212	.40	0	2.0	385.3	81.1	3.80	125.1	29.6	2.17
H8	2	90.5	26.64	9.500	8.470	.780	1.288	1.212	.40	0	2.0	385.3	81.1	3.80	125.1	29.6	2.17
CB83	14	90.0	26.47	9.606	8.520	.810	1.203	1.203	.45	0	0	391.2	81.4	3.84	124.4	29.2	2.17
H8	6	86.0	25.33	9.375	8.430	.740	1.226	1.149	.40	0	2.0	360.5	76.9	3.77	117.1	27.8	2.15
H8	5	86.0	25.20	9.375	8.430	.740	1.226	1.149	.40	0	2.0	359.0	76.6	3.77	117.1	27.8	2.16
H8a	1	85.9	25.25	9.250	9.070	.700	1.163	1.080	.40	0	2.0	358.2	77.5	3.77	137.3	30.3	2.33
H8	2	85.5	25.20	9.375	8.430	.740	1.226	1.149	.40	0	2.0	359.0	76.6	3.77	117.2	27.8	2.16
CB83	14	84.0	24.71	9.456	8.469	.759	1.128	1.128	.45	0	0	358.6	75.8	3.81	114.5	27.0	2.15
H8	6	81.5	23.91	9.250	8.390	.700	1.161	1.087	.40	0	2.0	335.0	72.4	3.74	109.2	26.0	2.14
H8	5	81.5	23.78	9.250	8.390	.700	1.163	1.087	.40	0	2.0	333.5	72.1	3.75	109.2	26.0	2.14
H8a	1	81.1	23.84	9.125	9.040	.670	1.101	1.017	.40	0	2.0	332.4	72.9	3.73	128.2	28.4	2.32
H8	2	81.0	23.78	9.250	8.390	.700	1.161	1.087	.40	0	2.0	333.5	72.1	3.75	109.2	26.0	2.14
CB83	14	78.0	22.93	9.302	8.418	.708	1.051	1.051	.45	0	0	326.5	70.2	3.77	104.7	24.9	2.14
H8	6	77.0	22.59	9.125	8.360	.670	1.101	1.024	.40	0	2.0	311.0	68.2	3.71	102.0	24.4	2.12
H8	5	77.0	22.46	9.125	8.360	.670	1.101	1.024	.40	0	2.0	309.5	67.8	3.71	101.9	24.4	2.13
H8	2	76.5	22.46	9.125	8.360	.670	1.101	1.024	.40	0	2.0	309.5	67.8	3.71	101.9	24.4	2.13
H8a	1	76.0	22.35	9.000	9.000	.630	1.038	.955	.40	0	2.0	306.8	68.2	3.70	118.9	26.4	2.31
H8	6	72.0	21.18	9.000	8.320	.630	1.038	.962	.40	0	2.0	287.1	63.8	3.68	94.5	22.7	2.11
CB83	14	72.0	21.17	9.150	8.366	.656	.975	.975	.45	0	0	295.9	64.7	3.74	95.3	22.8	2.12
H8	5	72.0	21.05	9.000	8.320	.630	1.038	.962	.40	0	2.0	285.6	63.5	3.68	94.4	22.7	2.12
H8	1	71.6	21.05	9.000	8.320	.630	1.038	.962	.40	0	2.0	285.6	63.5	3.68	94.4	22.7	2.12
H8	2	71.5	21.05	9.000	8.320	.630	1.038	.962	.40	0	2.0	285.6	63.5	3.68	94.4	22.7	2.12
H8	6	67.5	19.79	8.875	8.280	.590	.976	.899	.40	0	2.0	264.0	59.5	3.65	87.2	21.1	2.10
H8	5	67.5	19.66	8.875	8.280	.590	.976	.899	.40	0	2.0	262.5	59.2	3.65	87.1	21.0	2.11
CB83N 8X8	15	67.0	19.70	9.062	8.285	.575	.931	.931	.45	0	0	275.6	60.8	3.74	88.4	21.3	2.12
8WF 8X8																	
9,10,16,17,18		67.0	19.70	9.000	8.287	.575	.933	.933	.40	0	0	271.8	60.4	3.71	88.6	21.4	2.12
H8, 8X8	8	67.0	19.70	9.000	8.285	.575	.933	.933	.40	0	0	271.7	60.4	3.71	88.6	21.4	2.12
H8	2	67.0	19.66	8.875	8.280	.590	.976	.899	.40	0	2.0	262.5	59.2	3.65	87.1	21.0	2.11

8" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1,2,5,6,8,9,10, 3
14,15,16,17,18 S 4-1911
See Page 120 S12-1922

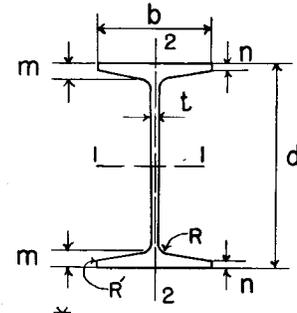


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
H8	1	66.8	19.66	8.875	8.280	.590	.976	.899	.40	0	2.0	262.5	59.2	3.65	87.1	21.0	2.11
CB83	14	66.0	19.40	8.994	8.314	.604	.897	.897	.45	0	0	265.9	59.1	3.70	86.1	20.7	2.11
H8	6	62.5	18.40	8.750	8.240	.550	.913	.837	.40	0	2.0	241.7	55.2	3.62	80.0	19.4	2.09
H8	5	62.5	18.27	8.750	8.240	.550	.913	.837	.40	0	2.0	240.2	54.9	3.63	80.0	19.4	2.09
H8	1	62.1	18.27	8.750	8.240	.550	.913	.837	.40	0	2.0	240.2	54.9	3.63	80.0	19.4	2.09
H8	2	62.0	18.27	8.750	8.240	.550	.913	.837	.40	0	2.0	240.2	54.9	3.63	80.0	19.4	2.09
CB83N 8X8	15	62.0	18.22	8.942	8.230	.520	.871	.871	.45	0	0	252.2	56.4	3.72	81.0	19.7	2.11
H8 8X8	8	62.0	18.22	8.880	8.230	.520	.873	.873	.40	0	0	248.6	56.0	3.69	81.2	19.7	2.11
CB83	14	60.0	17.63	8.838	8.261	.551	.819	.819	.45	0	0	237.1	53.7	3.67	77.1	18.7	2.09
8WF 8X8 9,10,16,17,18		58.0	17.06	8.750	8.222	.510	.808	.808	.40	0	0	227.3	52.0	3.65	74.9	18.2	2.10
CB83N 15 8X8		58.0	17.04	8.810	8.220	.510	.805	.805	.45	0	0	230.3	52.3	3.68	74.6	18.2	2.09
H8	6	58.0	17.03	8.625	8.200	.510	.851	.774	.40	0	2.0	220.1	51.0	3.60	73.1	17.8	2.07
H8	5	58.0	16.90	8.625	8.200	.510	.851	.774	.40	0	2.0	218.6	50.7	3.60	73.1	17.8	2.08
H8	2	57.5	16.90	8.625	8.200	.510	.851	.774	.40	0	2.0	218.6	50.7	3.60	73.1	17.8	2.08
H8	1	57.4	16.90	8.625	8.200	.510	.851	.774	.40	0	2.0	218.6	50.7	3.60	73.1	17.8	2.08
CB83	14	54.0	15.87	8.680	8.208	.498	.740	.740	.45	0	0	209.2	48.2	3.63	68.3	16.6	2.07
H8	6	53.0	15.66	8.500	8.160	.470	.788	.712	.40	0	2.0	199.3	46.9	3.57	66.4	16.3	2.06
H8 8X8	8	53.0	15.60	8.620	8.175	.465	.743	.743	.40	0	0	204.7	47.5	3.62	67.7	16.6	2.08
CB83N 15 8X8		53.0	15.57	8.678	8.175	.465	.739	.739	.40	0	0	207.1	47.7	3.65	67.4	16.5	2.08
H8	3.5	53.0	15.53	8.500	8.160	.470	.788	.712	.40	0	2.0	197.8	46.5	3.57	66.3	16.3	2.07
H8	1	52.8	15.53	8.500	8.160	.470	.788	.712	.40	0	2.0	197.8	46.5	3.57	66.3	16.3	2.07
H8	6	48.5	14.31	8.375	8.120	.430	.726	.649	.40	0	2.0	179.2	42.8	3.54	59.8	14.7	2.04
H8	5	48.5	14.18	8.375	8.120	.430	.726	.649	.40	0	2.0	177.7	42.4	3.54	59.8	14.7	2.05
H8	1	48.2	14.18	8.375	8.120	.430	.726	.649	.40	0	2.0	177.7	42.4	3.54	59.8	14.7	2.05
H8	2	48.0	14.18	8.375	8.120	.430	.726	.649	.40	0	2.0	177.7	42.4	3.54	59.8	14.7	2.05
8WF 8X8 9,10,16,17,18		48.0	14.11	8.500	8.117	.405	.683	.683	.40	0	0	183.7	43.2	3.61	60.9	15.0	2.08
H8 8X8	8	48.0	14.11	8.500	8.115	.405	.683	.683	.40	0	0	183.7	43.2	3.61	60.9	15.0	2.08
CB83N 15 8X8		48.0	14.10	8.562	8.115	.405	.681	.681	.45	0	0	186.3	43.5	3.63	60.7	15.0	2.07
CB83	14	48.0	14.10	8.520	8.155	.445	.660	.660	.45	0	0	182.2	42.8	3.59	59.7	14.6	2.06
H8	6	44.0	12.96	8.250	8.080	.390	.663	.587	.40	0	2.0	159.7	38.7	3.51	53.4	13.2	2.03
H8, 8x8	8	44.0	12.93	8.380	8.090	.380	.623	.623	.40	0	0	165.1	39.4	3.57	55.0	13.6	2.06
CB83N 15 8X8		44.0	12.92	8.442	8.090	.380	.621	.621	.45	0	0	167.5	39.7	3.60	54.8	13.6	2.06
H8 8X8	5	44.0	12.83	8.250	8.080	.390	.663	.587	.40	0	2.0	158.3	38.4	3.51	53.4	13.2	2.04

8" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1,2,5,6,8,9,10, 14,15,16,17,18 See Page 120 3, See Page 121 12 C 1921 C 1923 C 1929 C 1930 C 1931	4 S10-1921 S12-1922 S15-1924 S18-1926 13 C 1923 C 1929 C 1930 C 1931	11 C 1913 C 1915 C 1916 C 1917 C 1919 C 1920 19 K1950-2
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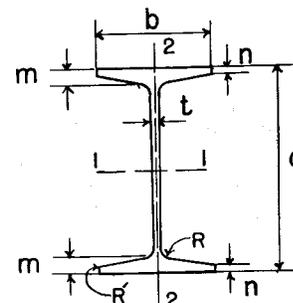
SECT. NO. OR NOM. SIZE	COL. (I)	WEIGHT PER FOOT	AREA Sg. In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H8	1	43.6	12.83	8.250	8.080	.390	.663	.587	.40	0	2.0	158.3	38.4	3.51	53.4	13.2	2.04
H8	2	43.5	12.83	8.250	8.080	.390	.663	.587	.40	0	2.0	158.3	38.4	3.51	53.4	13.2	2.04
CB183	14	42.0	12.34	8.360	8.100	.390	.580	.580	.45	0	0	156.2	37.4	3.56	51.4	12.7	2.04
8WF 8X8 9,10,16,17,18		40.0	11.76	8.250	8.077	.365	.558	.558	.40	0	0	146.3	35.5	3.53	49.0	12.1	2.04
H8 8X8	8	40.0	11.75	8.250	8.075	.365	.558	.558	.40	0	0	146.2	35.5	3.53	49.0	12.1	2.04
CB83N 8X8	15	40.0	11.74	8.312	8.075	.365	.556	.556	.45	0	0	148.3	35.7	3.55	48.8	12.1	2.04
H8	6	39.5	11.63	8.125	8.040	.350	.601	.524	.40	0	2.0	141.0	34.7	3.48	47.2	11.7	2.01
H8	5	39.5	11.50	8.125	8.040	.350	.601	.524	.40	0	2.0	139.5	34.3	3.48	47.2	11.7	2.03
H8	1	39.1	11.50	8.125	8.040	.350	.601	.524	.40	0	2.0	139.5	34.3	3.48	47.2	11.7	2.03
H8	2	39.0	11.50	8.125	8.040	.350	.601	.524	.40	0	2.0	139.5	34.3	3.48	47.2	11.7	2.03
H4	13	37.7	11.00	8.000	8.125	.500	.560	.358	.313	-	5.3*	120.8	30.2	3.31	36.9	9.1	1.83
CB83	14	36.0	10.58	8.198	8.046	.336	.499	.499	.45	0	0	131.3	32.0	3.52	43.4	10.8	2.02
8WF 8X8 9,10,16,17,18		35.0	10.30	8.120	8.027	.315	.493	.493	.40	0	0	126.5	31.1	3.50	42.5	10.6	2.03
H8	8	35.0	10.30	8.120	8.025	.315	.493	.493	.40	0	0	126.4	31.1	3.50	42.5	10.6	2.03
H8	6	35.0	10.30	8.000	8.000	.310	.538	.462	.40	0	2.0	123.0	30.7	3.46	41.1	10.3	2.00
CB83N 8X8	15	35.0	10.28	8.182	8.025	.315	.491	.491	.45	0	0	128.2	31.3	3.53	42.3	10.5	2.03
H8	5	35.0	10.17	8.000	8.000	.310	.538	.462	.40	0	2.0	121.5	30.4	3.46	41.1	10.3	2.01
H8	1	34.6	10.17	8.000	8.000	.310	.538	.462	.40	0	2.0	121.5	30.4	3.46	41.1	10.3	2.01
H8	2	34.5	10.17	8.000	8.000	.310	.538	.462	.40	0	2.0	121.5	30.4	3.46	41.1	10.3	2.01
H 8/65	6	34.5	10.10	8.125	6.600	.350	.601	.538	.40	0	2.0	118.9	29.3	3.43	26.6	8.07	1.62
H 8/65	4	34.5	9.97	8.125	6.600	.350	.601	.538	.40	0	2.0	117.4	28.9	3.43	26.6	8.07	1.63
H 19 8X8	19	34.3	10.09	8.000	8.000	.375	-	-	-	-	-	115.5	28.9	3.40	35.1	8.8	1.87
H4 8X8	18	34.3	10.07	8.000	8.000	.375	.459 [†]	.313	-	-	-	115.5	28.9	3.40	35.1	8.8	1.87
H4	12,17	34.3	10.00	8.000	8.000	.375	.560	.358	.313	-	5.3*	115.5	28.9	3.40	35.1	8.8	1.87
H4	11	34.0	10.00	8.000	8.000	.375	.560	.358	.313	-	5.3*	115.4	28.9	3.40	35.0	8.8	1.87
8WF 8X8 9,16		33.0	9.70	8.060	8.012	.300	.463	.463	.40	0	0	117.9	29.3	3.49	39.7	9.9	2.02
CB83N 8X8	15	33.0	9.70	8.124	8.010	.300	.462	.462	.45	0	0	119.8	29.5	3.51	39.6	9.9	2.02
H8 8X8	8	33.0	9.69	8.060	8.010	.300	.463	.463	.40	0	0	117.9	29.3	3.49	39.7	9.91	2.02
8X8	19	32.6	9.59	8.000	7.938	.313	-	-	-	-	-	112.8	28.2	3.45	34.2	8.6	1.90
H4 8X8	13	32.6	9.50	8.000	7.938	.313	.560	.358	.313	-	5.3*	112.8	28.2	3.45	34.2	8.6	1.90
H8	6	32.0	9.30	7.875	8.000	.310	.476	.399	.40	0	2.0	107.2	27.2	3.40	35.8	8.95	1.96
H8	3,5	32.0	9.17	7.875	8.000	.310	.476	.399	.40	0	2.0	105.7	26.9	3.40	35.8	8.9	1.98

† Average thickness

8" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1,2,6,8,9,10,
14,15,16,17,18
See Page 120
4
See Page 122
21
PH 1938 A



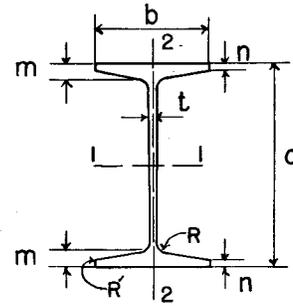
*Computed

SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH d	FLANGE WIDTH b	WEB THICK t	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H 8s	1	31.8	9.35	8.000	7.040	.320	.538	.471	.40	0	2.0	109.1	27.3	3.42	28.5	8.1	1.74
H 8	2	31.5	9.17	7.875	8.000	.310	.476	.399	.40	0	2.0	105.7	26.9	3.40	35.8	8.9	1.98
H 8 8X8	8	31.0	9.13	8.000	8.000	.290	.433	.433	.40	0	0	109.7	27.4	3.47	37.0	9.24	2.01
8WF 8X8 9,10,16,17,18		31.0	9.12	8.000	8.000	.288	.433	.433	.40	0	0	109.7	27.4	3.47	37.0	9.2	2.01
CB83N 8X8	14,15	31.0	9.10	8.060	8.000	.290	.430	.430	.45	0	0	110.9	27.5	3.49	36.7	9.2	2.01
H 8 6.5	6	30.5	8.95	8.000	6.560	.310	.538	.476	.40	0	2.0	103.8	26.0	3.41	23.2	7.07	1.61
H 8 6.5	4	30.5	8.82	8.000	6.560	.310	.538	.476	.40	0	2.0	102.3	25.6	3.41	23.2	7.07	1.62
H 8a 8X6 1/2	8	30.0	8.83	8.120	6.570	.310	.493	.493	.40	0	0	105.4	26.0	3.46	23.3	7.10	1.63
CB82N 8X6 1/2	14,15	30.0	8.81	8.196	6.559	.298	.498	.498	.45	0	0	107.8	26.3	3.50	23.4	7.1	1.63
8WF 8X6 1/2 10,17,18		28.0	8.23	8.060	6.540	.285	.463	.463	.40	0	0	97.8	24.3	3.45	21.6	6.6	1.62
H 8s	1	27.7	8.15	7.875	7.000	.280	.476	.409	.40	0	2.0	93.6	23.8	3.39	24.4	7.0	1.73
H 8a	8	27.0	7.95	8.030	6.535	.275	.448	.448	.40	0	0	94.2	23.5	3.44	20.9	6.38	1.62
CB82N 8X6 1/2	14,15	27.0	7.93	8.098	6.529	.268	.449	.449	.45	0	0	95.9	23.7	3.48	20.8	6.4	1.62
8WF 8X6 1/2 9,16		27.0	7.93	8.030	6.528	.273	.448	.448	.40	0	0	94.1	23.4	3.44	20.8	6.4	1.62
H 8 6.5	6	27.0	7.89	7.875	6.530	.280	.476	.413	.40	0	2.0	89.7	22.8	3.37	20.0	6.11	1.59
H 8 6.5	4	27.0	7.76	7.875	6.530	.280	.476	.413	.40	0	2.0	88.2	22.4	3.37	20.0	6.11	1.60
H 8a 8X6 1/2	8	24.0	7.09	7.940	6.500	.240	.403	.403	.40	0	0	83.4	21.0	3.43	18.5	5.68	1.61
CB82N 8X6 1/2	14,15	24.0	7.06	8.000	6.500	.239	.400	.400	.45	0	0	84.2	21.1	3.46	18.3	5.6	1.61
8WF 8X6 1/2 9,10,16,17,18		24.0	7.06	7.930	6.500	.245	.398	.398	.40	0	0	82.5	20.8	3.42	18.2	5.6	1.61
H 8 6.5	6	23.5	6.85	7.750	6.500	.250	.413	.351	.40	0	2.0	76.1	19.6	3.33	16.8	5.18	1.57
H 8 6.5	4	23.5	6.72	7.750	6.500	.250	.413	.351	.40	0	2.0	74.6	19.2	3.33	16.8	5.17	1.58
+																	
H 8X6 1/2	21	27.0	7.94	8.000	6.610	.355	.476	.320	.40	0	5.0*	88.51	22.13	3.34	17.43	5.27	1.48
+	21	24.0	7.06	8.000	6.500	.245	.476	.320	.40	0	5.0*	83.81	20.95	3.45	16.52	5.08	1.53

6" COLUMNS

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	3	13
S10-1921	S33-1929	C1929
S12-1922	S34-1930	C1931
S15-1924	S35-1930	
S16-1925	4	
S18-1926	S40-1931	
2	5	
S27-1928	B6, 6X6	
S35-1930	S43-1933	
	S47-1934	

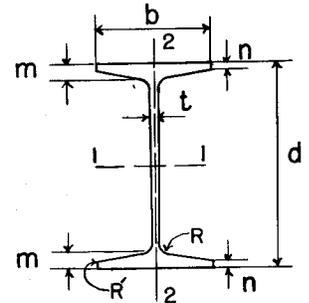


SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H6a 6X10	4	88.0	25.91	7.230	10.420	.990	.990	.990	.30	0	0	215.0	59.5	2.88	187.1	35.9	2.69
H 6/10	3	88.0	25.89	7.265	10.400	.990	1.037	.942	.30	0	2.0	216.9	59.7	2.89	182.0	35.0	2.65
CB6IN 53/4X9 1/2	13	88.0	25.87	6.842	10.046	1.035	1.035	1.035	.45	0	0	187.3	54.7	2.69	175.4	34.9	2.60
H 6/10	3	80.0	23.53	7.096	10.315	.905	.952	.858	.30	0	2.0	191.7	54.0	2.85	162.0	31.4	2.62
H6a 6X10	4	80.0	23.53	7.060	10.335	.905	.905	.905	.30	0	0	189.9	53.8	2.84	166.9	32.3	2.66
CB6IN 53/4X9 1/2	13	80.0	23.52	6.666	9.959	.948	.947	.947	.45	0	0	164.9	49.5	2.65	156.3	31.4	2.58
H 6/10	3	73.0	21.47	6.946	10.214	.831	.877	.783	.30	0	2.0	170.6	49.1	2.82	145.0	28.3	2.60
H6a 6X10	4	73.0	21.47	6.910	10.260	.830	.830	.830	.30	0	0	168.9	48.9	2.80	149.7	29.2	2.64
CB6IN 53/4X9 1/2	13	70.0	20.58	6.440	9.846	.835	.836	.836	.45	0	0	138.7	43.0	2.60	133.3	27.1	2.54
H 6/10	3	67.0	19.70	6.818	10.175	.765	.813	.719	.30	0	2.0	153.3	45.0	2.79	130.9	25.7	2.58
H6a 6X10	4	67.0	19.69	6.780	10.195	.765	.765	.765	.30	0	0	151.6	44.7	2.77	135.3	26.5	2.62
H6a 6X10	4	60.0	17.67	6.630	10.120	.690	.690	.690	.30	0	0	132.6	40.0	2.74	119.3	23.6	2.60
H 6/10	3	60.0	17.65	6.666	10.099	.689	.737	.643	.30	0	2.0	133.9	40.2	2.75	114.9	22.7	2.55
CB6IN 53/4X9 1/2	13	60.0	17.63	6.216	9.733	.722	.722	.722	.45	0	0	113.9	36.7	2.54	111.1	22.8	2.51
H 6/10	3	53.0	15.59	6.512	10.022	.612	.660	.566	.30	0	2.0	115.2	35.4	2.72	99.3	19.8	2.52
H6a 6X10	4	53.0	15.53	6.470	10.040	.610	.610	.610	.30	0	0	113.4	35.1	2.70	103.0	20.5	2.58
CB6IN 53/4X9 1/2	13	50.0	14.70	5.986	9.617	.606	.607	.607	.45	0	0	91.0	30.4	2.49	90.1	18.7	2.48
H6a 6X10	4	46.0	13.55	6.320	9.965	.535	.535	.535	.30	0	0	96.4	30.5	2.67	88.3	17.7	2.55
H 6/10	3	46.0	13.54	6.356	9.944	.534	.582	.488	.30	0	2.0	97.4	30.6	2.68	84.1	16.9	2.49
B6 6X6	5	41.0	12.04	6.750	6.245	.495	.750	.750	.30	0	0	91.2	27.0	2.75	30.5	9.77	1.59
H6 6X6	4	40.5	11.91	6.750	6.225	.475	.750	.750	.30	0	0	90.7	26.9	2.76	30.2	9.71	1.59
H6 2		40.5	11.87	6.750	6.220	.470	.779	.721	.30	0	2.0	90.5	26.8	2.76	29.6	9.52	1.58
H6 1		40.5	11.80	6.750	6.220	.470	.779	.721	.30	0	2.0	90.1	26.7	2.76	29.6	9.52	1.58
CB6IN 53/4X9 1/2	13	40.0	11.76	5.750	9.500	.489	.489	.489	.45	0	0	69.6	24.2	2.43	69.9	14.7	2.44
H6a 6X10	4	40.0	11.72	6.180	9.895	.465	.465	.465	.30	0	0	81.4	26.3	2.64	75.1	15.2	2.53
H 6/10	3	40.0	11.71	6.216	9.875	.465	.512	.418	.30	0	2.0	82.3	26.5	2.65	71.1	14.4	2.46
H6 2		37.0	10.83	6.625	6.180	.430	.716	.659	.30	0	2.0	80.9	24.4	2.73	26.6	8.60	1.57
H6 1		37.0	10.76	6.625	6.180	.430	.716	.659	.30	0	2.0	80.4	24.3	2.73	26.6	8.59	1.57

6" COLUMNS

REFERENCES, SEE COLUMN (I) AND PAGE 4

1,2,4,5 See Page 124	8 6WF(B6)6X6	10 C1921	12 H3-H3a	17 6H,286-287
6	S54-1946	11	C1927	PH 1929
S51-1938	S56-1948	C1923	C1930	18
7	9	C1926	C1931	6H,286;287
6W(B6)6X6	C 1913	15	IL1932	PH 1931
S53-1943	C 1915	CIL 1940	C1933	PH 1938
	C 1916	16	C1934	20
	C 1917	CIL1940	IL1934	H3a,H3,CB56
	C1919	CIL1946		CIL1948
	C1920			US 1950



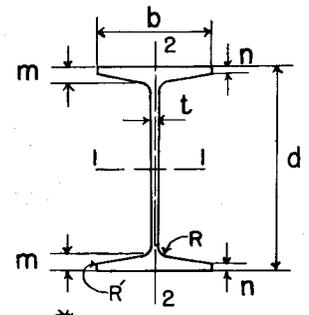
SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT PER FOOT	AREA	DEPTH	FLANGE WIDTH	WEB THICK	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
							m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In.*	In. ³	In.	In.*	In. ³	In.
H6	2	33.5	9.80	6.500	6.140	.390	.654	.596	.30	0	2.0	71.6	22.0	2.70	23.6	7.70	1.55
H6	1	33.5	9.72	6.500	6.140	.390	.654	.596	.30	0	2.0	71.2	21.9	2.71	23.6	7.69	1.56
H6 6X6	4,5	30.0	8.81	6.380	6.100	.350	.565	.565	.30	0	0	63.2	19.8	2.68	21.4	7.02	1.56
H6	2	30.0	8.77	6.375	6.100	.350	.591	.534	.30	0	2.0	62.8	19.7	2.68	20.8	6.82	1.54
H6	1	30.0	8.70	6.375	6.100	.350	.591	.534	.30	0	2.0	62.4	19.6	2.68	20.8	6.82	1.55
6WF 6X6	7	27.5	8.11	6.460	6.112	.352	.500	.500	.30	0	0	59.7	18.5	2.71	19.1	6.2	1.53
CBS6 6X6	15	27.5	8.09	6.460	6.112	.352	.500	.500	.25	0	0	59.6	18.4	2.71	19.0	6.2	1.53
6WF 6X6	6	27.5	8.09	6.280	6.085	.335	.514	.514	.30	0	0	56.6	18.0	2.65	19.3	6.35	1.55
6H	18	27.5	8.09	6.000	6.063	.438	.580	.381	.313	0	7.0*	49.3	16.4	2.47	16.0	5.3	1.41
H3a 12,17		27.5	8.08	6.000	6.063	.438	.580	.381	.313	0	7.0*	49.3	16.4	2.47	16.0	5.3	1.41
H6 6X6	5	27.0	7.92	6.250	6.085	.335	.500	.500	.30	0	0	55.0	17.6	2.63	18.8	6.18	1.54
H3	11	26.7	7.76	6.000	6.125	.438	.542	.360	.313	0	6.4*	47.4	15.8	2.47	15.7	5.1	1.42
H6 6X6	4	26.5	7.80	6.250	6.065	.315	.500	.500	.30	0	0	54.6	17.5	2.65	18.6	6.14	1.54
H6	2	26.5	7.76	6.250	6.060	.310	.529	.471	.30	0	2.0	54.4	17.4	2.65	18.1	5.96	1.53
H6	1	26.5	7.69	6.250	6.060	.310	.529	.471	.30	0	2.0	53.9	17.3	2.65	18.1	5.96	1.53
6WF 6X6	7,8	25.0	7.37	6.370	6.080	.320	.456	.456	.30	0	0	53.5	16.8	2.69	17.1	5.6	1.52
CBS6 6X6	15,16	25.0	7.35	6.370	6.080	.320	.456	.456	.25	0	0	53.5	16.8	2.69	17.1	5.6	1.52
6WF 6X6	6	25.0	7.35	6.190	6.050	.300	.471	.471	.30	0	0	50.9	16.4	2.63	17.4	5.75	1.54
6X6	20	25.0	7.35	6.000	5.938	.313	.481	.481	.313	0	-	47.0	15.7	2.53	14.9	5.0	1.43
H3a 16,17		25.0	7.33	6.000	5.938	.313	.580	.381	.313	0	7.0*	47.0	15.7	2.53	14.9	5.0	1.43
H3	10,11	24.1	7.01	6.000	6.000	.313	.542	.360	.313	0	6.4*	45.1	15.0	2.54	14.7	4.9	1.45
H3	9	23.8	7.00	6.000	6.000	.313	.542	.360	.313	0	6.4*	45.1	15.0	2.54	14.7	4.9	1.45
H6 6X6	4,5	23.0	6.76	6.120	6.025	.275	.435	.435	.30	0	0	46.3	15.1	2.62	15.9	5.27	1.53
H6	2	23.0	6.76	6.125	6.020	.270	.466	.409	.30	0	2.0	46.4	15.2	2.62	15.4	5.12	1.51
H6	1	23.0	6.69	6.125	6.020	.270	.466	.409	.30	0	2.0	45.9	15.0	2.62	15.4	5.12	1.52

† Average thickness

6" COLUMNS

REFERENCES; SEE COLUMN (1) AND PAGE 4

1,2,4,5
See Page 124
6,7,8,11,12,15,16,
17,18,20
See Page 125
14
C 1934
IL 1934
19
K 1950
K 1952



SECT. NO. OR NOM. SIZE	COL. (1)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
		PER FOOT	AREA				m	n	R	R'		I	S	r	I	S	r
		Lb.	Sq.In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
H3	11	22.8	6.63	6.000	5.938	.250	.542	.360	.313	0	6.4*	44.0	14.7	2.58	14.2	4.8	1.46
6WF 6X6	7	22.5	6.63	6.280	6.050	.290	.411	.411	.30	0	0	47.4	15.1	2.67	15.2	5.0	1.51
6H	18,19	22.5	6.62	6.000	6.063	.375	.479	.280	.313	0	7.0*	41.0	13.7	2.49	12.2	4.0	1.36
CBS6	15	22.5	6.61	6.280	6.050	.290	.411	.411	.25	0	0	47.3	15.0	2.67	15.2	5.0	1.52
H3	12,17	22.5	6.61	6.000	6.063	.375	.479	.280	.313	0	7.0*	41.0	13.7	2.49	12.2	4.0	1.36
6WF 6X6	6	22.5	6.61	6.100	6.020	.270	.425	.425	.30	0	0	45.0	14.8	2.61	15.5	5.14	1.53
6WF 6X6	7,8	20.0	5.90	6.200	6.018	.258	.367	.367	.30	0	0	41.7	13.4	2.66	13.3	4.4	1.50
H6 6X6	4,5,6	20.0	5.89	6.000	6.000	.250	.375	.375	.30	0	0	39.2	13.1	2.58	13.5	4.5	1.51
H6	2	20.0	5.89	6.000	6.000	.250	.404	.346	.30	0	2.0	39.1	13.0	2.58	13.0	4.34	1.49
CBS6 6X6	15,16,20	20.0	5.88	6.200	6.018	.258	.367	.367	.25	0	0	41.7	13.4	2.66	13.3	4.4	1.50
6H	18,19,20	20.0	5.88	6.000	5.938	.250	.380†		.313	0	-	38.8	12.9	2.57	11.4	3.8	1.39
H3	12,16,17	20.0	5.86	6.000	5.938	.250	.479	.280	.313	0	7.0*	38.8	12.9	2.57	11.4	3.8	1.39
H6	1	20.0	5.81	6.000	6.000	.250	.404	.346	.30	0	2.0	38.7	12.9	2.58	13.0	4.34	1.50
6WF 6X6	7	18.0	5.31	6.110	6.010	.250	.322	.322	.30	0	0	36.4	11.9	2.62	11.7	3.9	1.48
6W 6X6	6	18.0	5.30	5.910	5.995	.245	.328	.328	.30	0	0	34.1	11.5	2.54	11.8	3.93	1.49
CBS6	15	18.0	5.29	6.110	6.010	.250	.322	.322	.30	0	0	36.2	11.9	2.62	11.6	3.9	1.48
CBS 6X6	14	18.0	5.28	6.090	6.025	.265	.314	.314	.25	0	0	35.5	11.7	2.59	11.0	3.64	1.44
6WF 6X6	7,8	15.5	4.62	6.000	6.000	.240	.269	.269	.30	0	0	30.3	10.1	2.56	9.69	3.2	1.45
CBS6 6X6	15,16,20	15.5	4.59	6.000	6.000	.240	.269	.269	.25	0	0	30.3	10.1	2.56	9.69	3.2	1.45
CBS 6X6	14	15.5	4.59	6.000	6.000	.240	.269	.269	.25	0	0	30.1	10.0	2.56	9.19	3.06	1.42
6WF 6X6	6	15.5	4.57	5.790	5.990	.240	.270	.270	.30	0	0	28.1	9.7	2.48	9.7	3.23	1.46

† Average thickness

BEAMS

WROUGHT IRON

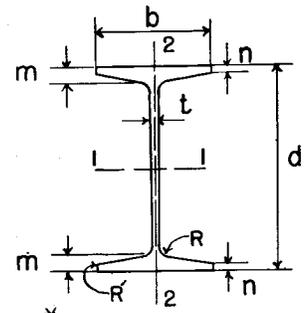
REFERENCES

- CB Carnegie Brothers & Company, Limited
- CK Carnegie, Kloman & Co., Union Iron Mills
- CP Carnegie, Phipps & Co., Limited
- NJ New Jersey Steel & Iron Co.
- PA The Passaic Rolling Mill Co.
- PE A.&P. Roberts Company (Pencoyd Iron Works)
- PH The Phoenix Iron Company
- PO Pottsville Iron & Steel Co.

20" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1
 NJ1885
 NJ1889
 NJ1891
 2
 PH1888



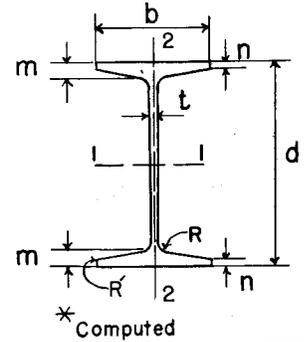
* Computed

COL. (I)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT	AREA		WIDTH b In.					I	S		r	I	S	r		
	Lb.	Sq.In.		In.	m		n	R	R'	In. ⁴		In. ³	In.	In. ⁴	In. ³	In.	
1	90 2/3	27.20	20.000	6.750	.688	1.688	.625	.594	.375	35.1*	1650.3	165.03*	7.79*	46.5	13.78*	1.31*	
2	90.0	27.00	20.000	7.000	.650	1.500	.700	1.000	.250	25.2*	1672.8	167.28*	7.87	51.8	14.8*	1.38	
2	66 2/3	20.00	20.000	6.250	.500	1.220	.500	1.000	.250	25.1*	1243.9	124.39*	7.89	27.35	8.75*	1.17	
1	66 2/3	19.97	20.000	6.000	.500	1.344	.531	.563	.375	29.6*	1238.0	123.8*	7.87*	26.62	8.87*	1.15*	

15" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 CK 1873	4 NJ 1874	8 PE 1888	11 PH 1888
2 CB 1881	5 NJ 1885	9 PE 1889	12 PH 1890
3 CB 1884	6 NJ 1889	10 PE 1891	13 PO 1885
4 CP 1889	7 NJ 1891	11 PE 1891	14 PO 1887
5 CP 1890	8 PA 1884	12 PH 1885	
6 CP 1892	9 PE 1887	13 PH 1888	
	10 PE 1888	14 PH 1890	

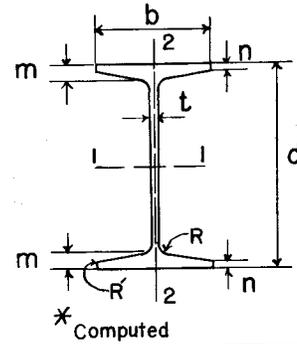


COL. (I)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT Lb.	AREA Sq. In.		WIDTH b In.	WEB THICK t In.		m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
3	87.0	26.1*	15.000	6.220*	.900*	1.560	.810	.880	—	28.2*	853.1*	113.7*	5.72*	41.94*	13.4*	1.26*	
13	83 2/3	25.0	15.000	5.875	.875	1.500	.625	—	—	35.0*	813.0	108.4*	6.38	40.84	13.9*	1.28	
12	83 2/3	25.0	15.000	5.875	.875	—	—	—	—	—	813.0	108.4*	6.38	25.89	8.8*	1.00	
3	80.0	24.0	15.000	6.080	.750	1.560	.810	.880	—	28.2*	813.7	108.5	5.82	38.8	12.8*	1.27	
2	80.0	24.0	15.000	5.810	.930	1.375	.688	.875	—	28.2*	750.0	100.0	5.59	29.9	10.3*	1.12	
11	80.0	24.0	15.000	5.590	.900	1.625	.750	.500	.375	37.3*	755.1	100.7*	5.61	28.9	10.3*	1.10	
8	79.2	24.1*	15.000	6.000	.906	1.313	.750	.875	—	22.1*	766.6*	102.2*	5.64*	33.7*	11.2*	1.18*	
7	77 2/3	23.6*	15.000	5.969	.875	1.313	.750	.875	—	22.1*	757.9*	101.1*	5.67*	33.1*	11.1*	1.18*	
3	70.0	21.0*	15.000	5.650*	.770*	1.250	.690	.750	—	23.0*	681.8*	90.9*	5.70*	26.06*	9.2*	1.11*	
2	67.0	20.1	15.000	5.550	.670	1.375	.688	.875	—	28.2*	677.0	90.3	5.80	25.4	9.2*	1.12	
7,8	67.0	20.4	15.000	5.500	.813	1.125	.625	.750	—	21.3*	636.8*	84.9*	5.59*	21.9*	8.0*	1.04*	
1	67.0	20.1	15.000	5.000	.625	—	—	—	—	—	606.0	80.8	5.49*	21.1	8.4*	1.02*	
6	66 2/3	20.6*	15.125	5.625	.640	1.500	.688	—	—	32.6*	708.0	93.2	5.95	27.2	9.7*	1.17*	
4,5	66 2/3	20.02	15.125	5.750	.600	1.625	.594	.563	.469	40.0*	707.1	94.3*	5.94*	27.46	9.6*	1.17*	
13	66 2/3	20.0	15.000	5.563	.625	1.219	.594	—	—	25.3*	694.0	92.5*	5.89	33.79	12.1*	1.30	
12	66 2/3	20.0	15.000	5.625	.625	—	—	—	—	—	674.0	89.9*	5.83	31.00	11.0*	1.57	
10	66 2/3	20.0	15.000	5.375	.650	1.563	.688	.500	.375	37.0*	676.57	90.2*	5.82	23.93	8.9*	1.09	
7	66 2/3	19.9	15.000	5.750	.656	1.313	.750	.875	—	22.1*	682.06	90.9*	5.86	28.50	9.9*	1.20	
2	65.0	19.5	15.000	5.330	.770	1.125	.375	.750	—	32.9*	614.0	81.9	5.61	20.0	7.5*	1.01*	
8	63 2/3	19.4*	15.000	5.688	.594	1.313	.750	.875	—	22.1*	678.9*	90.5*	5.92*	28.0*	9.8*	1.20*	
8	62.0	19.0*	15.000	5.656	.563	1.313	.750	.875	—	22.1*	669.9*	89.3*	5.94*	27.5*	9.7*	1.20*	
9	61.4	18.4*	15.000	6.000	.813	.781	.422	.609	—	13.8*	551.5*	73.5*	5.47*	19.5*	6.5*	1.03*	
3	60.0	18.0	15.000	5.450	.570	1.250	.690	.750	—	23.0*	625.5	83.4	5.90	23.0	8.4*	1.13	
3	57.0	17.1*	15.000	5.190*	.630*	1.130	.560	.750	—	25.0*	562.0*	75.9*	5.73*	18.79*	7.2*	1.05*	
6	50.0	15.6	15.188	5.000	.500	1.250	.531	—	—	32.0*	520.0	68.8	5.89	14.4	5.8*	.98	
4,5	50.0	15.04	15.188	5.000	.500	1.250	.563	.656	.438	30.5*	523.5	69.8*	5.90*	15.29	6.1*	1.01*	
3	50.0	15.0	15.000	5.050	.490	1.130	.560	.750	—	25.0*	522.6	69.7	5.90	15.5	6.1*	1.02	
2	50.0	15.0	15.000	5.030	.470	1.125	.375	.750	—	32.9*	530.0	70.6	5.94	16.3	6.5*	1.04	
12	50.0	15.0	15.000	5.000	.500	—	—	—	—	—	518.0	69.1*	5.88	17.36	6.9*	1.08	
13	50.0	15.0	15.000	5.000	.469	1.063	.500	—	—	24.9*	528.0	70.4*	5.93	18.34	7.3*	1.10	
10	50.0	15.0	15.000	4.750	.500	1.125	.625	.563	.188	23.5*	506.74	67.6*	5.81	13.62	5.7*	.95	
1	50.0	15.0	15.000	4.500	.500	—	—	—	—	—	463.5	61.8	5.56*	12.3	5.5*	.91*	
7,8	48 1/3	14.55	15.000	5.125	.438	1.125	.625	.750	—	21.3*	521.19	69.5	5.98	16.91	6.6*	1.08	
5	4 1/3	12.36	15.125	5.000	.420	.910	.438	.500	.250	20.6*	434.5	57.9*	5.93*	11.64	4.7*	.97*	
13	4 1/3	12.5	15.000	4.875	.438	.875	.438	—	—	19.7*	430.0	57.3*	5.87	13.13	5.4*	1.03	
11	4 1/3	12.5	15.000	4.625	.420	.938	.531	.500	.250	19.4*	416.19	55.5*	5.77	10.26	4.4*	.90	
9	41.0	12.3*	15.000	5.609	.406	.781	.422	.609	—	13.8*	438.4*	58.5*	5.97*	15.3*	5.5*	1.12*	

12" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4	7
CK1873	NJ1874	PE1891
2	NJ1885	8
GB1884	NJ1889	PH1885
3	NJ1891	9
CP1889	5	PH1888
CP1890	PA1884	PH1890
CP1892	6	10
	PE1887	PO1885
	PE1888	11
		PO1887

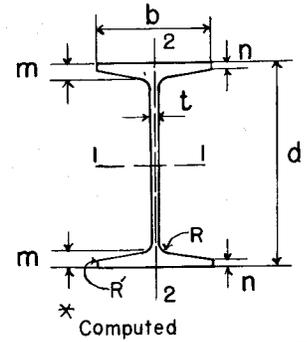


COL. (I)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT Lb.	AREA Sq.in.		WIDTH b In.	THICK		m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
6.7	64 2/3	19.9*	12.000	5.719	.875	1.250	.688	.750	-	23.2*	411.2*	68.5*	4.55*	27.2*	9.5*	1.17*	
3	60.0	18.05*	12.000	5.248	.868*	1.190	.560	.560	-	28.8*	361.1*	60.2*	4.47*	17.9*	6.8*	1.00*	
2	60.0	18.0	12.000	5.090	.960	1.063	.500	.500	-	27.3*	340.0	56.7	4.35	15.5	6.1*	.93*	
1	60.0	18.0	12.000	4.500	.688	-	-	-	-	-	330.6	55.1	4.29*	13.9	6.2*	.88*	
5	56 2/3	17.6*	12.250	5.250	.660	1.438	.625	-	-	35.4*	385.0	63.0	4.75	20.9	8.0*	1.11	
8.9	56 2/3	17.0	12.000	5.500	.590	1.375	.688	.750	.375	28.0*	381.91	63.7*	4.74	24.08	8.8*	1.19	
11	56 2/3	17.0	12.000	5.375	.688	1.000	.563	-	-	18.6*	367.0	61.2	4.65	24.47	9.1*	1.20	
10	56 2/3	17.0	12.000	5.313	.750	-	-	-	-	-	356.0	59.3	4.57	21.89	8.2	1.14	
4	56 2/3	16.77	12.313	5.500	.600	1.313	.625	.750	.375	28.1*	391.2	65.3*	4.83*	25.41	9.2*	1.23*	
3	56.5	17.0	12.000	5.160	.780	1.190	.560	.560	-	28.8*	348.5	58.1	4.53	17.4	6.7*	1.01	
6.7	56.0	16.89	12.000	5.500	.656	1.250	.688	.750	-	23.2*	371.98	62.0*	4.69	23.19	8.4*	1.17*	
6.7	54 1/3	16.5*	12.000	5.156	.813	1.000	.547	.625	-	20.9*	328.5*	54.8*	4.46*	16.0*	6.2*	.98*	
3	54.0	16.2*	12.000	4.930*	.810*	1.060	.500	.500	-	27.2*	318.0*	53.0*	4.43*	13.1*	5.3*	.90*	
7	43.43	12.9*	12.000	5.340	.684	.672	.344	.500	-	14.1*	254.4*	42.4*	4.44*	11.4*	4.3*	.94*	
2	42.0	12.6	12.000	4.640	.510	1.063	.500	.500	-	27.3*	275.0	45.9	4.68	11.0	4.7*	.94	
3	42.0	12.6	12.000	4.630	.510	1.060	.500	.500	-	27.2*	274.8	45.8	4.67	11.0	4.8*	.94	
1	42.0	12.6	12.000	4.000	.500	-	-	-	-	-	247.8	41.3	4.43*	7.6	3.8*	.78*	
5	41 2/3	12.9*	12.250	4.750	.460	1.125	.563	-	-	26.2*	297.0	48.6	4.87	12.2	5.1*	.99	
11	41 2/3	12.5	12.000	4.875	.500	.969	.500	-	-	21.4*	279.0	46.5*	4.72	14.50	5.9*	1.08	
8.9	41 2/3	12.5	12.000	4.750	.490	1.000	.625	.563	.281	17.6*	282.56	47.1*	4.75	12.98	5.5*	1.02	
10	41 2/3	12.5	12.000	4.688	.500	-	-	-	-	-	278.0	46.3	4.72	13.33	5.7*	1.03*	
4	41 2/3	12.33	12.250	4.790	.470	1.063	.500	.750	.375	26.1*	288.0	48.0*	4.83*	11.54	4.8*	.97*	
6.7	40.0	11.95	12.000	4.797	.453	1.000	.547	.625	-	20.9*	272.86	45.5*	4.78	12.22	5.1*	1.01*	
4	40.0	11.73	12.000	4.750	.430	1.063	.500	.750	.375	26.1*	281.3	46.9*	4.90	16.76	7.1*	1.19*	
11	33 1/3	10.0	12.000	4.438	.438	.781	.344	-	-	21.9*	218.0	36.3*	4.66	8.74	3.9*	.94	
9	32.0	9.6	12.000	4.500	.375	.781	.438	.625	.188	16.6*	201.65	33.6*	4.58	7.60	3.4*	.89	
7	29.83	8.95	12.000	5.000	.344	.672	.344	.500	-	14.1*	204.1*	34.01	4.78*	9.0*	3.6*	1.00*	

10 1/2" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	5	8
CK1873	NJ1885	PE1888
2	NJ1889	PE1889
GB1884	NJ1891	PE1891
3	6	9
CPI889	PA1884	PH1885
CPI890	7	PH1888
CPI892	PE1887	10
4		PO1885
NJ1874		11
		PO1887

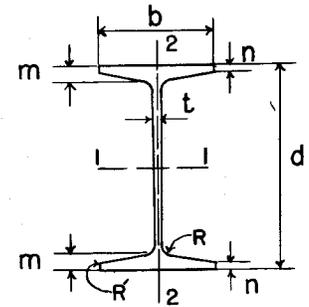


COL. (I)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT Lb.	AREA Sq.In.		WIDTH b In.	WEB THICK t In.		m	n	R	R'		I	S	r	I	S	r
							In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
7,8	53 2/3	16.06*	10.500	5.500	.719	1.125	.656	.500	—	19.6*	265.79*	50.63*	4.07*	22.21*	8.1*	1.18*	
6	45.0	13.96	10.500	5.000	.530	1.313	.563	—	—	33.6*	227.0	43.2	4.1	16.1	6.4*	1.09	
11	45.0	13.5	10.500	5.000	.531	1.250	.531	—	—	32.2*	239.0	45.5*	4.17	17.90	7.2*	1.15	
9	45.0	13.5	10.500	5.000	.500	1.250	.625	.563	.313	20.0*	240.59	45.8*	4.23	16.72	6.7*	1.11	
10	45.0	13.5	10.500	5.000	.500	—	—	—	—	—	239.0	45.5*	4.21	19.10	7.6*	1.19	
3	45.0	13.5*	10.500	4.945*	.695*	.940	.530	.440	—	19.3*	215.7*	41.1*	4.00*	11.55*	4.7*	.93*	
2	45.0	13.5	10.500	4.920	.790	.875	.375	.438	—	24.2*	201.0	38.3	3.86	10.7	4.3*	.89	
7	45.0	13.45*	10.500	5.125*	.656	.938	.531	.500	—	18.2*	219.45*	41.80*	4.04*	14.75*	5.8*	1.04*	
4,5	45.0	13.36	10.500	5.000	.470	1.344	.563	.750	.344	34.5*	233.7	44.5*	4.18*	15.8	6.3*	1.09*	
7,8	44 2/3	13.44	10.500	5.250	.469	1.125	.656	.500	—	19.6*	241.63	46.02	4.24	19.00	7.2*	1.19	
3	40.0	12.0	10.500	4.800	.550	.940	.530	.440	—	19.3*	201.7	38.4	4.10	12.0	5.0*	1.00	
7,8	36 1/3	10.91*	10.500	4.688	.531	.844	.438	.438	—	19.5*	180.36*	34.35*	4.07*	9.61*	4.1*	.94*	
7,8	36.0	10.83	10.500	4.875	.406	.938	.531	.500	—	18.2*	195.42	37.22	4.25	12.45	5.1*	1.07	
6	35.0	10.96*	10.500	4.500	.410	1.188	.438	—	—	36.7*	182.0	34.6	4.16	9.23	4.1*	.94	
3	35.0	10.57*	10.500	4.642*	.512*	.875	.375	.438	—	24.2*	174.8*	33.3*	4.07*	8.71*	3.8*	.91*	
9	35.0	10.5	10.500	4.500	.440	.938	.469	.563	.281	23.1*	175.36	33.4*	4.09	9.03	4.0*	.93	
10	35.0	10.5	10.500	4.438	.500	—	—	—	—	—	176.0	33.5	4.09	9.71	4.4*	.96	
11	35.0	10.5	10.500	4.375	.500	1.063	.375	—	—	35.5*	176.0	33.5	4.08	9.52	4.4*	.95	
4,5	35.0	10.44	10.500	4.500	.375	1.125	.438	.750	.313	33.3*	185.6	35.4*	4.22*	9.43	4.2*	.95*	
2,3	31.5	9.5	10.500	4.540	.410	.875	.375	.438	—	24.2*	165.0	31.4	4.17	8.01	3.5*	.92	
6	30.0	9.24*	10.500	4.375	.340	1.031	.375	—	—	32.5*	163.0	31.0	4.26	7.91	3.6*	.94	
9	30.0	9.0	10.500	4.375	.375	.844	.438	.563	.250	20.3*	158.68	30.2*	4.20	7.63	3.5*	.92	
10	30.0	9.0	10.500	4.125	.438	—	—	—	—	—	151.0	29.0	4.00	6.99	3.4*	.88	
11	30.0	9.0	10.500	4.125	.406	.969	.375	—	—	31.9*	151.0	29.0	4.12	7.36	3.6*	.90	
5	30.0	8.90	10.500	4.500	.313	1.000	.375	.750	.313	29.9*	164.0	31.2*	4.29*	8.09	3.6*	.95*	
7,8	29 2/3	8.94	10.500	4.500	.344	.844	.438	.438	—	19.5*	162.26	30.91	4.26	8.34	3.7*	.97	

10" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1 GK1873	4 PE1887
2 GB1884	5 PO1887
3 CP1889	
4 CP1890	
5 CP1892	

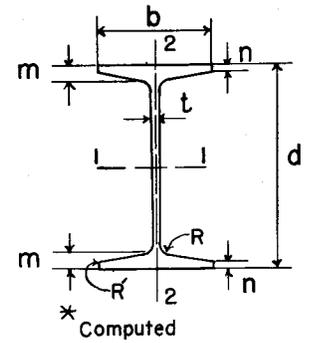


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
3	50.0	15.0*	10.000	4.990*	.740*	1.190	.600	.550	-	27.8*	218.8*	43.76*	3.82*	16.2*	6.5*	1.04*
4	45 2/3	13.95*	10.000	4.875	.750	1.063	.500	.375	-	27.3*	198.62*	39.7*	3.77*	13.17*	5.4*	.97*
2	45.0	13.5	10.000	4.770	.770	1.000	.438	.438	-	28.1*	187.0	37.5	3.73	11.3	4.7*	.91
3	42.0	12.6	10.000	4.750	.500	1.190	.600	.550	-	27.8*	198.8	39.8	3.97	13.74	5.8*	1.04
3	41.0	12.3*	10.000	4.650*	.590*	1.060	.500	.440	-	27.6*	183.1*	36.62*	3.86*	11.24*	4.8*	.96*
1	38.0	11.4	10.000	4.125	.625	-	-	-	-	-	173.0	34.6	3.90	8.3	4.0*	.85*
4	37 1/3	11.17	10.000	4.625	.500	1.063	.500	.375	-	27.3*	173.58	34.72*	3.94	10.64	4.6*	.98
3	36.0	10.8	10.000	4.500	.440	1.060	.500	.440	-	27.6*	170.6	34.1	3.97	10.02	4.5*	.96*
4	35 1/3	10.8*	10.000	4.531	.500	.969	.469	.313	-	24.8*	165.97*	33.19*	3.92*	9.54*	4.2*	.94*
5	35.0	10.5	10.000	4.625	.500	1.000	.375	-	-	30.3*	161.0	32.2*	3.92	11.08	4.8*	1.03
3	35.0	10.5*	10.000	4.460*	.520*	.940	.410	.440	-	26.9*	158.3*	31.66*	3.88*	8.40*	3.8*	.89*
1	30.0	9.0	10.000	3.875	.500	-	-	-	-	-	141.5	28.3	3.97*	6.4	3.3*	.84*
4	30.0	9.04	10.000	4.375	.344	.969	.469	.313	-	24.8*	148.31	29.66	4.05	8.09	3.7*	.95
2	30.0	9.0	10.000	4.320	.320	1.000	.438	.438	-	28.1*	150.0	30.0	4.09	7.94	3.7*	.94
5	30.0	9.0	10.000	4.375	.438	.875	.313	-	-	28.5*	139.0	27.8*	3.93	8.30	3.8*	.96
3	30.0	9.0	10.000	4.310	.370	.940	.410	.440	-	26.9*	145.8	29.2	4.03	7.43	3.4*	.91

9" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (1) AND PAGE 4

1	4	7	10
CK 1873	NJ1874	PE1887	PO1885
2	5	PE1888	11
CB1884	NJ1885	PE1889	PO1887
3	NJ1889	8	
CP1889	NJ1891	PE1891	
CP1890	6	9	
CP1892	PA1884	PH1885	
		PH1888	
		PH1890	

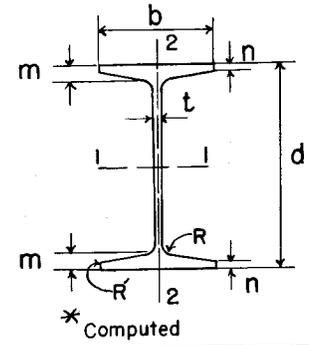


COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
9	50.0	15.0	9.00	5.375	.600	1.313	.750	.500	.188	23.6*	189.07	42.0*	3.55	23.16	8.6*	1.24
2	50.0	15.0	9.00	5.100	.910	1.125	.500	.500	-	29.8*	169.0	37.5	3.34	15.7	6.2*	1.02
3	50.0	15.0*	9.00	5.090*	.840*	1.190	.560	.630	-	29.6*	173.2*	38.5*	3.40*	16.77*	6.6*	1.06*
2	45.0	13.5	9.00	4.940	.750	1.125	.500	.500	-	29.8*	159.0	35.3	3.42	14.0	5.7*	1.01
4	4 1/3	12.42	9.00	4.500	.570	-	-	-	-	-	150.8	33.5*	3.48*	11.23	5.0*	.95*
5	4 1/3	12.33	9.00	4.500	.570	1.438	.500	.625	.313	47.7*	150.8	33.5*	3.50*	11.23	5.0*	.95*
7	4 2/3	12.33*	9.00	4.719	.750	.906	.500	-	-	20.5*	141.42*	31.42*	3.39*	11.12*	4.7*	.95*
8	40.13	12.18*	9.00	5.094	.750	.813	.438	.625	-	17.3*	139.46*	30.99*	3.38*	12.32*	4.8*	1.01*
3	38.5	11.6	9.00	4.710	.460	1.190	.560	.630	-	29.6*	150.1	33.4	3.61	12.84	5.5*	1.05
3	38.0	11.4*	9.00	4.474*	.714*	.88	.440	.500	-	23.4*	129.4*	28.8*	3.65*	8.83	3.9*	.88
2	33.0	9.9	9.00	4.330	.580	.875	.375	.438	-	26.7	117.0	26.0	3.44	7.14	3.3	.85
8	30.23	9.08*	9.00	4.750	.406	.813	.438	.625	-	17.3*	118.52*	26.34*	3.63*	9.69*	4.1*	1.03*
7	30.0	9.07	9.00	4.375	.406	.906	.500	-	-	20.5	118.81	26.40*	3.62	8.44	3.9*	.96
10	30.0	9.0	9.00	4.438	.563	-	-	-	-	-	106.0	23.6	3.42	7.40	3.3	.91
11	30.0	9.0	9.00	4.375	.500	.844	.438	-	-	21.0	110.0	24.4*	3.50	8.18	3.7	.95
1	30.0	9.0	9.00	4.000	.625	-	-	-	-	-	120.0	26.67	3.65	7.6	3.8	.92
7	29 1/3	8.93*	9.00	4.328	.500	.781	.375	-	-	21.2*	108.5*	24.11*	3.49*	6.69*	3.1*	.87*
8	28.73	8.74*	9.00	4.437	.500	.719	.359	.531	-	18.2*	106.10*	23.57*	3.48*	6.79*	3.1*	.88
3	28.5	8.6	9.00	4.160	.400	.880	.440	.500	-	23.4*	110.3	24.5	3.59	6.79	3.3*	.89
6	28 1/3	8.67*	9.00	3.875	.410	1.000	.438	-	-	32.4*	104.5	23.3	3.50	6.34	3.3*	.87
5	28 1/3	8.50	9.00	4.500	.375	1.000	.313	.625	.313	33.3	111.9	24.9*	3.63*	7.35	3.3*	.93
10	28 1/3	8.5	9.00	4.250	.438	-	-	-	-	-	107.5	23.9*	3.56	7.65	3.6*	.95
11	28 1/3	8.5	9.00	4.250	.438	.875	.438	-	-	22.9*	107.0	23.8*	3.54	7.60	3.6*	.94
4	28 1/3	8.32	9.00	4.000	.380	-	-	-	-	-	106.5	23.7*	3.58	5.59	2.8*	.82
3	28.0	8.4*	9.00	4.109*	.489*	.810	.310	.440	-	27.6*	101.4*	22.5*	3.47*	5.32*	2.6*	.80*
9	28.0	8.4	9.00	4.000	.400	1.000	.438	.750	.188	31.2*	110.93	24.7*	3.63	6.28	3.1*	.86
8	23.51	7.06	9.00	4.250	.313	.719	.359	.531	-	18.3*	94.74*	21.05*	3.66*	5.89*	2.8*	.91*
3	23.5	7.1	9.00	3.960	.340	.810	.310	.440	-	27.6*	92.3	20.5	3.62	4.64	2.3*	.81
2	23.5	7.0	9.00	4.010	.260	.875	.375	.438	-	26.7*	97.5	21.7	3.73	5.48	2.7*	.88
6	23 1/3	7.26*	9.00	3.500	.320	.938	.438	-	-	31.8*	89.0	19.8	3.56	3.55	2.0*	.71
10	23 1/3	7.0	9.00	4.125	.375	-	-	-	-	-	89.0	19.8*	3.56	5.67	2.7*	.90
11	23 1/3	7.0	9.00	4.000	.375	.813	.344	-	-	25.9*	83.0	18.4*	3.45	5.37	2.7*	.88
5	23 1/3	7.0	9.00	4.000	.300	.875	.313	.625	.313	30.4*	93.9	20.9*	3.66	4.92	2.5*	.84
1	23 1/3	7.0	9.00	3.750	.438	-	-	-	-	-	105.8	23.51	3.89*	5.3	2.8*	.87*
9	23 1/3	7.0	9.00	3.500	.310	.875	.375	.625	.188	31.3*	86.97	19.3*	3.53	3.62	2.1*	.72
7	23 1/3	6.98	9.00	4.125	.297	.781	.375	-	-	21.2*	94.44	20.99*	3.68	5.59	2.7*	.89
4	23 1/3	6.53	9.00	3.500	.300	-	-	-	-	-	85.6	19.0*	3.62*	3.50	2.0*	.73

8" BEAMS-WROUGHT IRON

REFERENCES, SEE COLUMN (I) AND PAGE 4

1	4	7
CK 1873	NJ 1874	PH 1885
2	NJ 1885	PH 1890
CB 1881	NJ 1889	8
CB 1884	NJ 1891	PO 1885
3	5	PO 1887
CP 1889	PA 1884	9
CP 1890	6	PO 1887
CP 1892	PE 1887	
	PE 1888	
	PE 1891	

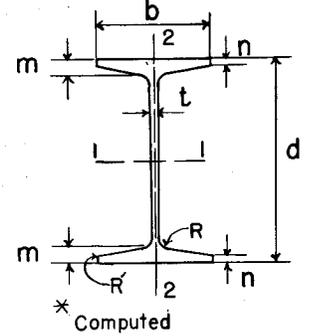


COL. (I)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT	AREA				m	n	R	R'		I	S	r	I	S	r
	Lb.	Sq. In.				In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
3	40.0	12.0*	8.00	4.728	.728*	1.050	.500	.500	-	27.5*	111.7*	27.9*	3.05*	11.91*	5.04*	1.00*
6	36 ² / ₃	11.09*	8.00	4.625	.750	.844	.469	-	-	19.4*	100.37*	25.1*	3.01*	9.78*	4.2*	.94*
2	35.0	10.5	8.00	4.290	.790	.813	.375	.375	-	25.0*	90.4	22.6	2.94	6.96	3.2*	.82
3	34.0	10.2	8.00	4.500	.500	1.050	.500	.500	-	27.5*	102.0	25.5	3.16	10.02	4.5*	.99
3	31.0	9.3*	8.00	4.242*	.562*	.910	.410	.440	-	27.2*	89.0*	22.3*	3.09*	7.06*	3.3*	.87*
6	27.0	8.14	8.00	4.250	.375	.844	.469	-	-	19.4*	83.93	20.98*	3.21	7.23	3.4*	.94
7	27.0	8.1	8.00	4.500	.375	.875	.375	.563	.188	24.2*	84.44	21.11*	3.23	7.69	3.4*	.98
3	27.0	8.1	8.00	4.090	.410	.910	.410	.440	-	27.2*	82.5	20.6	3.19	6.30	3.1*	.88
1	27.0	8.1	8.00	3.750	.625	-	-	-	-	-	82.0	20.5	3.18*	5.4	2.9*	.82*
5	26 ² / ₃	8.36*	8.00	4.125	.370	1.000	.438	-	-	29.9*	81.5	20.4	3.19	7.00	3.4*	.94
4	26 ² / ₃	8.03	8.00	4.500	.375	.844	.375	.625	.250	22.7*	83.9	20.98*	3.23*	7.55	3.4*	.97*
8,9	26 ² / ₃	8.00	8.00	4.156	.500	.813	.313	-	-	27.4*	77.0	19.25*	3.10	6.60	3.2*	.91
6	25.0	7.65	8.00	4.125	.438	.750	.375	-	-	20.3*	75.86*	18.97*	3.15*	5.66*	2.7*	.86*
3	25.0	7.6*	8.00	3.843*	.463*	.780	.340	.380	-	26.0*	73.0*	18.25*	3.10*	4.18*	2.2*	.74*
2	22.0	6.6	8.00	3.810	.310	.813	.375	.375	-	25.0*	69.9	17.5	3.25	4.57	2.4*	.83
5	21 ² / ₃	6.63*	8.00	4.000	.310	.750	.375	-	-	20.3*	71.0	17.7	3.30	5.03	2.5*	.88
6	21 ² / ₃	6.53	8.00	4.000	.313	.750	.375	-	-	20.3*	69.17	17.29*	3.25	5.02	2.5*	.88
7	21 ² / ₃	6.5	8.00	4.000	.380	.750	.313	.563	.188	24.1*	68.54	17.14*	3.25	4.58	2.3*	.84
9	21 ² / ₃	6.5	8.00	4.000	.313	.813	.375	-	-	24.8*	69.0	17.25*	3.26	5.83	2.9*	.95
8	21 ² / ₃	6.5	8.00	4.000	.313	.813	.313	-	-	23.8*	68.0	17.0*	3.26	5.81	2.9*	.95
4	21 ² / ₃	6.37	8.00	4.000	.300	.781	.313	.500	.250	25.3*	67.4	16.85*	3.25*	4.55	2.3*	.85*
3	21.5	6.5	8.00	3.710	.330	.780	.340	.380	-	26.0*	66.2	16.5	3.20	3.95	2.1*	.78
1	21.5	6.45	8.00	3.375	.375	-	-	-	-	-	69.0	17.25	3.27*	4.0	2.4*	.79*

7" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

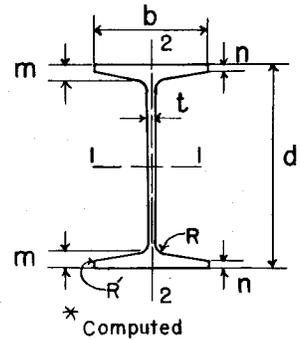
1	4	7	9
CK 1873	NJ 1874	PE 1887	PO 1885
2	5	PE 1888	10
CB 1881	NJ 1885	PE 1891	PO 1887
CB 1884	NJ 1889	8	
3	NJ 1891	PH 1885	
CP 1889	6	PH 1888	
CP 1890	PA 1884	PH 1890	
CP 1892			



COL. (1)	WEIGHT PER FOOT Lb.	AREA SqIn.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
7	29 1/3	8.94*	7.00	4.125	.750	.750	.344	-	-	24.1*	59.7*	17.1*	2.58*	5.66*	2.7*	.80*
7	29 1/3	8.84*	7.00	4.125	.750	.719	.344	-	-	22.2*	58.8*	16.8*	2.58*	5.57*	2.7*	.79*
3	25.0	7.5*	7.00	3.949	.509*	.780	.380	.380	-	23.3*	55.6*	15.9*	2.72*	5.16*	2.6*	.83*
2	25.0	7.5	7.00	3.910	.530	.750	.375	.375	-	22.2*	54.3	15.5	2.69	4.87	2.5*	.81
8	23.0	6.9	7.00	4.000	.375	.875	.375	.500	.250	27.6*	55.74	15.9*	2.84	5.42	2.7*	.89
3	22.0	6.6	7.00	3.820	.380	.780	.380	.380	-	23.3*	51.9	14.8	2.80	4.58	2.4*	.83
7	21.93	6.58	7.00	3.813	.438	.750	.344	-	-	24.1*	49.78	14.2*	2.75	4.15	2.2*	.79
10	21 2/3	6.5	7.00	3.563	.453	.750	.344	-	-	26.1*	48.0	13.7*	2.72	4.11	2.3*	.79
9	21 2/3	6.5	7.00	3.563	.438	-	-	-	-	-	50.5	14.4*	2.79	4.73	2.7*	.85*
3	21.0	6.3*	7.00	3.649	.389*	.750	.340	.380	-	25.2*	47.9*	13.7*	2.76*	3.50*	1.9*	.75*
6	20.0	6.0	7.00	3.500	.400	.750	.344	-	-	26.2*	45.0	12.9	2.74	3.15	1.8*	.73*
1	20.0	6.0	7.00	3.375	.438	-	-	-	-	-	41.3	11.8	2.62*	3.1	1.8*	.72*
4	20.0	5.84	7.00	3.500	.375	-	-	-	-	-	44.5	12.7*	2.76*	3.05	1.7*	.72*
5	18 1/3	5.5	7.00	3.750	.300	.688	.313	.531	.250	21.7*	44.3	12.7*	2.84*	3.90	2.1*	.84*
8	18 1/3	5.5	7.00	3.500	.350	.750	.375	.500	.250	23.8*	44.22	12.6*	2.83	3.27	1.9*	.77
10	18 1/3	5.5	7.00	3.438	.328	.781	.344	-	-	28.2*	43.0	12.3*	2.80	3.51	2.0*	.80
9	18 1/3	5.5	7.00	3.438	.313	-	-	-	-	-	44.0	12.6*	2.83	3.84	2.2*	.84
2	18.0	5.4	7.00	3.610	.230	.750	.375	.375	-	22.2*	45.8	13.1	2.91	3.72	2.1*	.83
3	18.0	5.4	7.00	3.520	.260	.750	.340	.380	-	25.2*	44.2	12.6	2.86	3.28	1.9*	.78
7	17.13	5.14	7.00	3.609	.234	.719	.344	-	-	22.2*	43.08	12.3*	2.89	3.43	1.9*	.82

6" BEAMS-WROUGHT IRON

REFERENCES, SEE COLUMN (I) AND PAGE 4



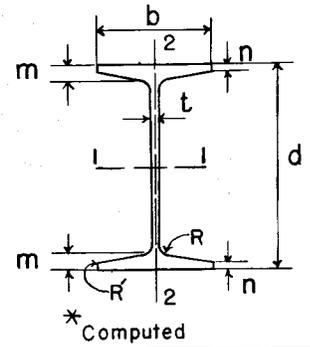
1	5	9
CK1873	NJ1885	PH1885
2	NJ1889	PH1888
GB1884	NJ1891	10
3	6	PO1885
CP1889	PA1884	11
CP1890	7	PO1888
CP1892	PE1887	
4	8	
NJ1874	PE1888	
NJ1885	PE1889	

COL. (1)	WEIGHT PER FOOT Lb.	AREA Sq.In.	DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
						m	n	R	R'		I	S	r	I	S	r
						In.	In.	In.	In.		In. ⁴	In. ³	In.	In. ⁴	In. ³	In.
8	41.0	12.30	6.00	5.375	.750	1.063	.625	-	-	18.9*	65.51	21.84*	2.30	14.70	5.5*	1.09
6	40.0	12.66*	6.00	5.250	.750	1.188	.625	-	-	25.0*	66.48	22.16*	2.29*	19.25*	7.3*	1.23*
5	40.0	11.84	6.00	5.250	.625	1.188	.625	.750	.375	24.3*	64.9	21.63*	2.34*	18.59	7.1*	1.25*
8	38.5	11.55	6.00	5.250	.625	1.063	.625	-	-	18.9*	63.24	21.08	2.34	19.14	7.3*	1.28
8	32.53	9.76	6.00	5.000	.625	.875	.500	-	-	17.1*	51.77	17.26*	2.30	11.79	4.7*	1.09
8	30.33	9.00	6.00	4.875	.500	.875	.500	-	-	17.1*	51.43	17.14	2.38	11.72	4.8*	1.14*
6	30.0	9.04	6.00	4.875	.570	-	-	-	-	-	51.2	17.1	2.38	10.7	4.4*	1.09
5	30.00	8.70	6.00	5.000	.500	.938	.375	.750	.375	25.0*	49.8	16.6*	2.39	10.78	4.3*	1.11*
8	27.87	8.24	6.00	4.313	.750	.688	.375	-	-	17.6*	41.74	13.91*	2.25	6.43	3.0*	.88
7	21.0	6.5*	6.00	3.375	.625	.688	.313	-	-	27.3*	31.95*	10.65*	2.22*	2.83*	1.7*	.66*
7	21.00	6.41*	6.00	3.375	.625	.656	.313	-	-	24.9*	31.44*	10.48*	2.21*	2.78*	1.6*	.66*
8	18.97	5.65	6.00	3.750	.500	.531	.281	-	-	15.4*	29.63	9.88*	2.28	3.15	1.7*	.74
8	18.5	5.47	6.00	3.844	.281	.688	.375	-	-	17.6*	33.26	11.09*	2.46	4.32	2.2*	.88
2	18.0	5.4	6.00	3.460	.460	.625	.250	.313	-	25.0*	28.4	9.48	2.30	2.51	1.5*	.68
3	18.0	5.4*	6.00	3.540	.350*	.720	.310	.370	-	25.7*	30.8*	10.27*	2.39*	3.16*	1.8*	.76*
7	16 ² / ₃	5.04	6.00	3.156	.406	.688	.313	-	-	27.3*	26.92	8.97	2.31	2.15	1.4*	.65
6	16 ² / ₃	5.0	6.00	3.500	.390	-	-	-	-	-	29.0	9.66	2.41	2.74	1.6*	.74
9	16 ² / ₃	5.0	6.00	3.500	.310	.813	.250	.500	.188	35.3*	29.65	9.82*	2.43	2.79	1.6*	.75
10	16 ² / ₃	5.0	6.00	3.438	.313	-	-	-	-	-	29.0	9.66	2.42	3.39	2.0*	.82
11	16 ² / ₃	5.0	6.00	3.281	.406	.625	.281	-	-	23.9*	27.0	9.00*	2.33	2.65	1.6*	.73
4	16 ² / ₃	4.91	6.00	3.500	.300	.750	.281	.375	.188	29.3*	29.0	9.67*	2.43	2.74	1.6*	.75*
3	16.0	4.8	6.00	3.440	.250	.720	.310	.370	-	25.7*	29.0	9.7	2.46	2.87	1.7*	.77
3	15.5	4.7*	6.00	3.340	.340*	.620	.250	.310	-	24.7*	26.3*	8.76*	2.37*	2.21*	1.3*	.69*
2,3	13.5	4.1	6.00	3.240	.240	.625	.250	.313	-	25.0*	24.5	8.16	2.46	2.00	1.2*	.70
1	13.5	4.05	6.00	2.750	.250	-	-	-	-	-	21.4	7.13	2.30*	1.6	1.2*	.63
7	13 ¹ / ₃	4.08	6.00	3.000	.250	.656	.313	-	-	24.9*	24.10	8.03*	2.43	1.8	1.2*	.66
6	13 ¹ / ₃	4.03	6.00	2.938	.270	-	-	-	-	-	23.2	7.73	2.40	1.69	1.2*	.65
4	13 ¹ / ₃	4.01	6.00	3.000	.250	.688	.250	.438	.188	31.9*	23.5	7.83*	2.42*	1.61	1.1*	.64*
10	13 ¹ / ₃	4.0	6.00	3.375	.250	-	-	-	-	-	24.0	8.00*	2.45	2.56	1.5*	.80
11	13 ¹ / ₃	4.0	6.00	3.125	.250	.594	.313	-	-	19.5*	24.0	8.00*	2.44	2.22	1.4*	.74
9	13 ¹ / ₃	4.0	6.00	2.750	.250	.688	.250	.500	.188	35.0*	21.69	7.23*	2.33	1.25	.91*	.56
8	13 ¹ / ₃	3.96	6.00	3.469	.219	.531	.281	-	-	15.4*	24.59	8.20*	2.47	2.42	1.4*	.77

5" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4	8
CK1873	NJ1874	PE1891
2	NJ1885	9
GB1881	5	PH1885
GB1884	PA1884	PH1890
3	6	10
CPI889	PE1887	PO1885
CPI890	7	PO1887
CPI892	PE1888	11
	PE1889	PO1887

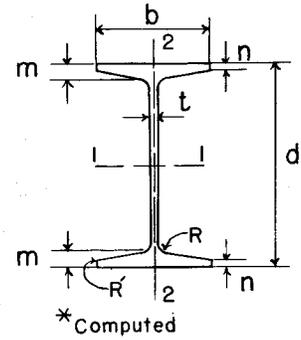


COL. (1)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT Lb.	AREA Sq.In.		WIDTH b In.	R		R'	m In.	n In.	I In. ⁴		S In. ³	r In.	I In. ⁴	S In. ³	r In.	
																	DEPTH
8	13.6	4.08*	5.00	3.280*	.480	.400	.200	.300	-	14.3*	14.25*	5.70*	1.87*	1.56*	.95*	.62*	
7	13.6	4.07	5.00	3.320	.440	.430	.220	-	-	14.6*	14.55	5.82	1.89	1.48	.89	.60	
3	13.5	4.05*	5.00	3.050*	.370*	.560	.250	.310	-	23.1*	15.30*	6.12*	1.94*	1.61*	1.06*	.63*	
6	13 1/3	4.09*	5.00	2.969	.438	.500	.250	-	-	19.8*	14.68*	5.87*	1.90*	1.44*	.97*	.59*	
10	13 1/3	4.00	5.00	3.000	.313	-	-	-	-	-	16.0	6.40*	1.99	2.04	1.36*	.71	
11	13 1/3	4.00	5.00	2.938	.375	.563	.250	-	-	24.4*	16.0	6.40*	1.94	1.75	1.19*	.66	
5	13 1/3	4.00	5.00	2.875	.410	.563	.281	-	-	22.9*	15.1	6.02	1.95	1.45	1.01*	.60	
4	13 1/3	3.90	5.00	3.000	.313	.594	.313	.375	.188	20.9*	15.4	6.16*	1.99*	1.68	1.12*	.66*	
2	13.0	3.90	5.00	2.910	.405	.500	.250	.250	-	20.0*	14.2	5.69	1.91	1.34	.92*	.59	
9	12.0	3.6	5.00	3.000	.300	.500	.344	.250	.125	11.6*	14.91	5.96*	2.04	1.74	1.16*	.70	
3	12.0	3.6	5.00	2.960	.280	.560	.250	.310	-	23.1*	14.4	5.8	2.00	1.46	.99*	.64*	
1	12.0	3.6	5.00	2.375	.219	-	-	-	-	-	11.0	4.40	1.75*	.79	.67*	.47*	
3	11.5	3.45*	5.00	2.940*	.320*	.500	.220	.250	-	21.4*	13.4*	5.36*	1.97*	1.27*	.86*	.61*	
6	11 1/3	3.38	5.00	2.844	.313	.500	.250	-	-	19.8*	13.4	5.31*	1.99	1.21	.85*	.60	
3	10.0	3.0	5.00	2.850	.230	.500	.220	.250	-	21.4*	12.5	5.0	2.04	1.15	.81*	.62	
9	10.0	3.0	5.00	2.750	.250	.469	.281	.250	.125	15.0*	12.42	4.97*	2.03	1.11	.81*	.61	
5	10.0	3.0	5.00	2.750	.230	.406	.281	-	-	10.0*	12.7	5.06	2.06	1.15	.84*	.62	
10	10.0	3.0	5.00	2.750	.188	.563	.250	-	-	24.4*	12.0	4.80*	2.00	1.39	1.01*	.68	
2	10.0	3.0	5.00	2.730	.225	.500	.250	.250	-	20.0*	12.3	4.94	2.03	1.08	.79*	.60	
4	10.0	2.99	5.00	2.750	.250	.500	.250	.375	.188	20.0*	12.1	4.84*	2.01*	1.04	.76*	.59*	
6	10.0	2.94	5.00	2.750	.219	.500	.250	-	-	19.8*	12.5	5.00*	2.06	1.09	.79*	.60	
7	9.9	2.97	5.00	3.100	.220	.430	.220	-	-	14.6*	12.47	4.99	2.05	1.36	.88*	.68	
8	9.9	2.97	5.00	3.060	.260	.400	.200	.300	-	14.3*	12.47*	4.99	2.05*	1.22*	.80*	.64	

4" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (1) AND PAGE 4

CK1873	CPI892	PA1884	PH1885
2	5	8	PH1888
CB1881	NJ1874	PE1887	PH1890
CB1884	NJ1885	9	11
3	NJ1889	PE1888	PO1885
CPI889	NJ1891	PE1889	12
CPI890	6	PE1891	PO1887
CPI892	NJ1885		
	NJ1889		
	NJ1891		

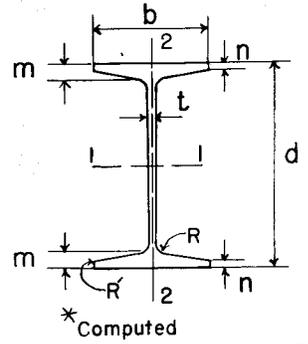


COL. (1)	WEIGHT		DEPTH d In.	FLANGE		WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT	AREA		WIDTH b In.	THICK		m	n	R	R'		I	S	r	I	S	r
	Lb.	Sq.In.		In.	In.		In.	In.	In.	In.		In.	In. ⁴	In. ³	In.	In. ⁴	In. ³
8	12 ² / ₃	3.95*	4.00	3.000	.500	.500	.281	-	-	17.5*	9.02*	4.56*	1.51*	1.59*	1.06*	.63*	
7	12 ¹ / ₃	3.94*	4.00	3.000	.313	.750	.250	-	-	37.2*	9.2	4.6	1.58	1.74	1.16*	.69	
5	12 ¹ / ₃	3.66	4.00	3.000	.313	.625	.313	.375	.188	23.2*	9.2	4.6*	1.59*	1.74	1.16*	.69*	
9	11.1	3.33	4.00	2.820	.440	.420	.240	-	-	15.1*	7.6	3.80*	1.51	.92	.65*	.52	
4	11.0	3.30*	4.00	2.855*	.355*	.530	.220	.250	-	24.8*	8.06*	4.03*	1.56*	1.21*	.85*	.61*	
7	10.0	3.09*	4.00	2.625	.300	.563	.250	-	-	26.7*	7.6	3.8	1.59	1.07	.82*	.60	
10	10.0	3.0	4.00	2.750	.250	.563	.250	.188	.125	25.0*	7.63	3.82*	1.59	1.13	.82*	.61	
2	10.0	3.0	4.00	2.630	.380	.438	.218	.250	-	19.6*	6.99	3.50*	1.53	.87	.66*	.54	
11	10.0	3.0	4.00	2.500	.438	-	-	-	-	-	7.00	3.50*	1.53	.83	.66*	.53	
12	10.0	3.0	4.00	2.438	.422	.438	.250	-	-	18.7*	7.0	3.50*	1.50	.82	.67*	.52	
5	10.0	2.91	4.00	2.750	.250	.500	.250	.375	.188	20.0*	7.5	3.75*	1.61*	1.11	.81*	.62*	
4	9.6	2.9	4.00	2.750	.250	.530	.220	.250	-	24.8*	7.5	3.7	1.61	1.04	.76*	.60	
8	9 ¹ / ₃	2.9	4.00	2.750	.250	.500	.281	-	-	17.5*	7.69	3.85*	1.63	1.17	.85*	.63	
3	9.0	2.7*	4.00	2.650*	.330*	.410	.190	.250	-	21.6*	6.5*	3.25*	1.55*	.79*	.60*	.54*	
1	9.0	2.7	4.00	2.500	.250	-	-	-	-	-	7.0	3.50	1.61*	1.00	.80*	.61*	
9	8.2	2.46	4.00	2.460	.320	.350	.200	-	-	14.0*	5.78	2.89*	1.53	.53	.43*	.46	
9	8.2	2.45	4.00	2.600	.220	.420	.240	-	-	15.1*	6.43	3.22*	1.62	.84	.65*	.59	
2	8.0	2.4	4.00	2.460	.230	.438	.218	.250	-	19.7*	6.19	3.10	1.61	.71	.58*	.55	
11	8.0	2.4	4.00	2.250	.313	-	-	-	-	-	6.50	3.25*	1.66	.59	.52*	.50	
12	8.0	2.4	4.00	2.250	.313	.438	.250	-	-	19.4*	5.60	2.80*	1.53	.58	.52*	.51	
8	7.2	2.23*	4.00	2.328	.250	.375	.219	-	-	15.0*	5.56*	2.78*	1.58*	.56*	.48*	.50*	
3	7.0	2.1	4.00	2.500	.180	.410	.190	.250	-	21.6*	5.7	2.9	1.65	.67	.54*	.57	
8	6.2	1.90	4.00	2.250	.172	.375	.219	-	-	15.0*	5.14	2.57*	1.65	.49	.44*	.51	
9	6.1	1.82	4.00	2.300	.160	.350	.200	-	-	14.0*	4.93	2.47*	1.65	.49	.43*	.52	
7	6.0	1.94*	4.00	2.188	.150	.438	.219	-	-	21.5*	5.1	2.55	1.68	.45	.41*	.50	
12	6.0	1.8	4.00	2.125	.188	.438	.219	-	-	22.6*	4.40	2.20*	1.56	.40	.38*	.47	
11	6.0	1.8	4.00	2.125	.188	-	-	-	-	-	4.00	2.00*	1.50	.42	.40*	.48	
10	6.0	1.8	4.00	2.000	.200	.375	.188	.250	.125	20.7*	4.41	2.21*	1.56	.31	.31*	.42	
3	6.0	1.8	4.00	2.180	.180	-	-	-	-	-	4.6	2.3	1.61	.36	.33*	.45	
6	6.0	1.77	4.00	2.000	.188	.375	.188	.250	.125	20.6*	4.5	2.25*	1.59*	.31	.31*	.42	

3" BEAMS-WROUGHT IRON

REFERENCES; SEE COLUMN (I) AND PAGE 4

1	4
CB1881	PE1887
CB1884	5
2	PE1888
CP1889	PE1889
CP1890	PE1891
CP1892	6
3	PO1887
CP1892	



COL. (1)	WEIGHT		DEPTH d In.	FLANGE WIDTH b In.	WEB THICK t In.	DIMENSIONS				SLOPE INSIDE FLANGE %	AXIS 1-1			AXIS 2-2		
	PER FOOT Lb.	AREA Sq.In.				m In.	n In.	R In.	R' In.		I In. ⁴	S In. ³	r In.	I In. ⁴	S In. ³	r In.
3	11.0	3.35*	3.00	2.810*	.460*	.560	.250	.250	-	26.4*	4.24*	2.83*	1.13*	1.27*	.90*	.62*
4	9.53	2.86*	3.00	2.688	.438	.438	.250	-	-	16.7*	3.72*	2.48*	1.14*	1.01*	.75*	.59*
3	9.50	2.9	3.00	2.660	.310	.560	.250	.250	-	26.4*	3.90	2.60	1.17	1.06	.80*	.81
2	9.0	2.7	3.00	2.580	.400	.470	.220	.250	-	22.9*	3.5	2.4	1.15	.85	.66*	.56
1	9.0	2.7	3.00	2.520	.390	.469	.250	.250	-	20.6*	3.54	2.36	1.15	.84	.67*	.56
3	9.0	2.65*	3.00	2.560*	.370*	.470	.220	.250	-	22.8*	3.44*	2.29*	1.14*	.83	.65*	.56*
5	8.9	2.67	3.00	2.620	.440	.400	.220	.300	.150	16.5*	3.43	2.29	1.13	.63	.48*	.49
6	8.0	2.46*	3.00	2.406	.453	.375	.188	-	-	19.2*	3.05*	2.03*	1.11*	.59*	.49*	.49*
4	7 2/3	2.25	3.00	2.500	.250	.438	.250	-	-	16.7*	3.29	2.19*	1.21	.77	.62*	.59
3	7.25	2.23*	3.00	2.375*	.335*	.380	.190	.250	-	18.6*	2.97*	1.98*	1.15*	.56*	.47*	.50*
3	7.25	2.2	3.00	2.410	.220	.470	.220	.250	-	22.8*	3.10	2.10	1.20	1.00	.83*	.46
4	7.23	2.21*	3.00	2.406	.313	.406	.203	-	-	19.4*	3.01*	2.01*	1.17*	.61*	.51*	.53*
1	7.0	2.1	3.00	2.320	.190	.469	.250	.250	-	20.6*	3.09	2.06	1.21	.55	.47*	.55
5	6.8	2.04	3.00	2.360	.320	.350	.180	.240	.120	16.7*	2.73	1.82	1.15	.43	.36*	.46
5	6.7	2.01	3.00	2.400	.220	.400	.222	.300	.150	16.5*	2.93	1.95	1.21	.57	.48*	.53
6	6 2/3	2.03*	3.00	2.250	.313	.375	.188	-	-	19.3*	2.83*	1.89*	1.18*	.47*	.42*	.48*
4	5 2/3	1.71	3.00	2.250	.156	.406	.203	-	-	19.4*	2.66	1.77*	1.25	.48	.43*	.53
2	5.5	1.7	3.00	2.220	.160	.380	.190	.250	-	18.4*	2.5	1.7	1.24	.44	.40*	.52
6	5 1/3	1.72*	3.00	2.125	.188	.375	.219	-	-	16.1*	2.52*	1.68*	1.21*	.42*	.40*	.49*
5	5.2	1.56	3.00	2.200	.160	.350	.180	.240	.120	16.7*	2.37	1.58	1.23	.40	.36*	.51