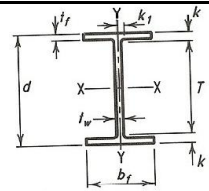
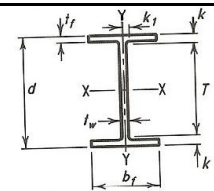


Wide Flange Sizes & Section Properties

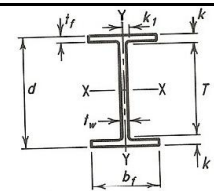


W or I	W(lbs)	A(in <sup>2</sup> )	d(in)	bf(in)	tw(in)	tf (in)	Ix(in <sup>4</sup> )	Zx(in <sup>3</sup> )	Sx (in <sup>3</sup> )	rx(in)	Iy(in <sup>4</sup> )	Zy(in <sup>3</sup> )	Sy(in <sup>4</sup> )	ry(in)
W44X335	335	98.5	44.0	15.9	1.03	1.77	31100	1620	1410	17.8	1200	236	150	3.49
W44X290	290	85.4	43.6	15.8	0.865	1.58	27000	1410	1240	17.8	1040	205	132	3.49
W44X262	262	76.9	43.3	15.8	0.785	1.42	24100	1270	1110	17.7	923	182	117	3.47
W44X230	230	67.7	42.9	15.8	0.710	1.22	20800	1100	971	17.5	796	157	101	3.43
W40X593	593	174	43.0	16.7	1.79	3.23	50400	2760	2340	17.0	2520	481	302	3.80
W40X503	503	148	42.1	16.4	1.54	2.76	41600	2320	1980	16.8	2040	394	249	3.72
W40X431	431	127	41.3	16.2	1.34	2.36	34800	1960	1690	16.6	1690	328	208	3.65
W40X397	397	117	41.0	16.1	1.22	2.20	32000	1800	1560	16.6	1540	300	191	3.64
W40X372	372	109	40.6	16.1	1.16	2.05	29600	1680	1460	16.5	1420	277	177	3.60
W40X362	362	107	40.6	16.0	1.12	2.01	28900	1640	1420	16.5	1380	270	173	3.60
W40X324	324	95.3	40.2	15.9	1.00	1.81	25600	1460	1280	16.4	1220	239	153	3.58
W40X297	297	87.4	39.8	15.8	0.930	1.65	23200	1330	1170	16.3	1090	215	138	3.54
W40X277	277	81.4	39.7	15.8	0.830	1.58	21900	1250	1100	16.4	1040	204	132	3.58
W40X249	249	73.3	39.4	15.8	0.750	1.42	19600	1120	993	16.3	926	182	118	3.55
W40X215	215	63.4	39.0	15.8	0.650	1.22	16700	964	859	16.2	796	156	101	3.54
W40X199	199	58.5	38.7	15.8	0.650	1.07	14900	869	770	16.0	695	137	88.2	3.45
W40X392	392	115	41.6	12.4	1.42	2.52	29900	1710	1440	16.1	803	212	130	2.64
W40X331	331	97.5	40.8	12.2	1.22	2.13	24700	1430	1210	15.9	644	172	106	2.57
W40X327	327	96.0	40.8	12.1	1.18	2.13	24500	1410	1200	16.0	640	170	105	2.58
W40X294	294	86.3	40.4	12.0	1.06	1.93	21900	1270	1080	15.9	562	150	93.5	2.55
W40X278	278	82.0	40.2	12.0	1.03	1.81	20500	1190	1020	15.8	521	140	87.1	2.52
W40X264	264	77.6	40.0	11.9	0.960	1.73	19400	1130	971	15.8	493	132	82.6	2.52
W40X235	235	69.0	39.7	11.9	0.830	1.58	17400	1010	875	15.9	444	118	74.6	2.54
W40X211	211	62.0	39.4	11.8	0.750	1.42	15500	906	786	15.8	390	105	66.1	2.51
W40X183	183	53.3	39.0	11.8	0.650	1.20	13200	774	675	15.7	331	88.3	56.0	2.49
W40X167	167	49.2	38.6	11.8	0.650	1.03	11600	693	600	15.3	283	76.0	47.9	2.40
W40X149	149	43.8	38.2	11.8	0.630	0.830	9800	598	513	15.0	229	62.2	38.8	2.29
W36X848	848	249.0	42.5	18.1	2.520	4.530	67400	3830	3170	16.4	4550	799.0	501.0	4.27
W36X800	800	236	42.6	18.0	2.38	4.29	64700	3650	3040	16.6	4200	743	467	4.22
W36X652	652	192	41.1	17.6	1.97	3.54	50600	2910	2460	16.2	3230	581	367	4.10
W36X529	529	156	39.8	17.2	1.61	2.91	39600	2330	1990	16.0	2490	454	289	4.00
W36X487	487	143	39.3	17.1	1.50	2.68	36000	2130	1830	15.8	2250	412	263	3.96
W36X441	441	130	38.9	17.0	1.36	2.44	32100	1910	1650	15.7	1990	368	235	3.92
W36X395	395	116	38.4	16.8	1.22	2.20	28500	1710	1490	15.7	1750	325	208	3.88
W36X361	361	106	38.0	16.7	1.12	2.01	25700	1550	1350	15.6	1570	293	188	3.85
W36X330	330	97.0	37.7	16.6	1.02	1.85	23300	1410	1240	15.5	1420	265	171	3.83
W36X302	302	88.8	37.3	16.7	0.945	1.68	21100	1280	1130	15.4	1300	241	156	3.82
W36X282	282	82.9	37.1	16.6	0.885	1.57	19600	1190	1050	15.4	1200	223	144	3.80
W36X262	262	77.0	36.9	16.6	0.840	1.44	17900	1100	972	15.3	1090	204	132	3.76
W36X247	247	72.5	36.7	16.5	0.800	1.35	16700	1030	913	15.2	1010	190	123	3.74
W36X231	231	68.1	36.5	16.5	0.760	1.26	15600	963	854	15.1	940	176	114	3.71
W36X256	256	75.4	37.4	12.2	0.960	1.73	16800	1040	895	14.9	528	137	86.5	2.65
W36X232	232	68.1	37.1	12.1	0.870	1.57	15000	936	809	14.8	468	122	77.2	2.62
W36X210	210	61.8	36.7	12.2	0.830	1.36	13200	833	719	14.6	411	107	67.5	2.58
W36X194	194	57.0	36.5	12.1	0.765	1.26	12100	767	664	14.6	375	97.7	61.9	2.56
W36X182	182	53.6	36.3	12.1	0.725	1.18	11300	718	623	14.5	347	90.7	57.6	2.55
W36X170	170	50.1	36.2	12.0	0.680	1.10	10500	668	581	14.5	320	83.8	53.2	2.53
W36X160	160	47.0	36.0	12.0	0.650	1.02	9760	624	542	14.4	295	77.3	49.1	2.50
W36X150	150	44.2	35.9	12.0	0.625	0.940	9040	581	504	14.3	270	70.9	45.1	2.47
W36X135	135	39.7	35.6	12.0	0.600	0.790	7800	509	439	14.0	225	59.7	37.7	2.38
W33X387	387	114	36.0	16.2	1.26	2.28	24300	1560	1350	14.6	1620	312	200	3.77
W33X354	354	104	35.6	16.1	1.16	2.09	22000	1420	1240	14.5	1460	282	181	3.74
W33X318	318	93.6	35.2	16.0	1.04	1.89	19500	1270	1110	14.5	1290	250	161	3.71
W33X291	291	85.7	34.8	15.9	0.960	1.73	17700	1160	1020	14.4	1160	226	146	3.68
W33X263	263	77.5	34.5	15.8	0.870	1.57	15900	1040	919	14.3	1040	202	131	3.66
W33X241	241	71.0	34.2	15.9	0.830	1.40	14200	940	831	14.1	933	182	118	3.62
W33X221	221	65.2	33.9	15.8	0.775	1.28	12900	857	759	14.1	840	164	106	3.59

Wide Flange Sizes & Section Properties

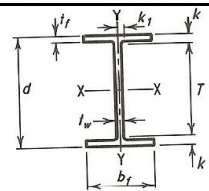


W or I	W(lbs)	A(in <sup>2</sup> )	d(in)	bf(in)	tw(in)	tf (in)	Ix(in <sup>4</sup> )	Zx(in <sup>3</sup> )	Sx (in <sup>3</sup> )	rx(in)	Iy(in <sup>4</sup> )	Zy(in <sup>3</sup> )	Sy(in <sup>4</sup> )	ry(in)
W33X201	201	59.2	33.7	15.7	0.715	1.15	11600	773	686	14.0	749	147	95.2	3.56
W33X169	169	49.5	33.8	11.5	0.670	1.22	9290	629	549	13.7	310	84.4	53.9	2.50
W33X152	152	44.8	33.5	11.6	0.635	1.06	8160	559	487	13.5	273	73.9	47.2	2.47
W33X141	141	41.6	33.3	11.5	0.605	0.960	7450	514	448	13.4	246	66.9	42.7	2.43
W33X130	130	38.3	33.1	11.5	0.580	0.855	6710	467	406	13.2	218	59.5	37.9	2.39
W33X118	118	34.7	32.9	11.5	0.550	0.740	5900	415	359	13.0	187	51.3	32.6	2.32
W30X477	477	140.0	34.2	15.9	1.630	2.950	26100	1790	1530	13.7	1970	390.0	249.0	3.75
W30X391	391	115	33.2	15.6	1.36	2.44	20700	1450	1250	13.4	1550	310	198	3.67
W30X357	357	105	32.8	15.5	1.24	2.24	18700	1320	1140	13.3	1390	279	179	3.64
W30X326	326	95.8	32.4	15.4	1.14	2.05	16800	1190	1040	13.2	1240	252	162	3.60
W30X292	292	85.9	32.0	15.3	1.02	1.85	14900	1060	930	13.2	1100	223	144	3.58
W30X261	261	76.9	31.6	15.2	0.930	1.65	13100	943	829	13.1	959	196	127	3.53
W30X235	235	69.2	31.3	15.1	0.830	1.50	11700	847	748	13.0	855	175	114	3.51
W30X211	211	62.2	30.9	15.1	0.775	1.32	10300	751	665	12.9	757	155	100	3.49
W30X191	191	56.3	30.7	15.0	0.710	1.19	9200	675	600	12.8	673	138	89.5	3.46
W30X173	173	51.0	30.4	15.0	0.655	1.07	8230	607	541	12.7	598	123	79.8	3.42
W30X148	148	43.5	30.7	10.5	0.650	1.18	6680	500	436	12.4	227	68.0	43.3	2.28
W30X132	132	38.9	30.3	10.5	0.615	1.00	5770	437	380	12.2	196	58.4	37.2	2.25
W30X124	124	36.5	30.2	10.5	0.585	0.930	5360	408	355	12.1	181	54.0	34.4	2.23
W30X116	116	34.2	30.0	10.5	0.565	0.850	4930	378	329	12.0	164	49.2	31.3	2.19
W30X108	108	31.7	29.8	10.5	0.545	0.760	4470	346	299	11.9	146	43.9	27.9	2.15
W30X99	99.0	29.1	29.7	10.5	0.520	0.670	3990	312	269	11.7	128	38.6	24.5	2.10
W30X90	90.0	26.4	29.5	10.4	0.470	0.610	3610	283	245	11.7	115	34.7	22.1	2.09
W27X539	539	159	32.5	15.3	1.97	3.54	25600	1890	1570	12.7	2110	437	277	3.65
W27X368	368	108	30.4	14.7	1.38	2.48	16200	1240	1060	12.2	1310	279	179	3.48
W27X336	336	98.9	30.0	14.6	1.26	2.28	14600	1130	972	12.1	1180	252	162	3.45
W27X307	307	90.4	29.6	14.4	1.16	2.09	13100	1030	887	12.0	1050	227	146	3.41
W27X281	281	82.9	29.3	14.4	1.06	1.93	11900	936	814	12.0	953	206	133	3.39
W27X258	258	76.0	29.0	14.3	0.980	1.77	10800	852	745	11.9	859	187	120	3.36
W27X235	235	69.4	28.7	14.2	0.910	1.61	9700	772	677	11.8	769	168	108	3.33
W27X217	217	64.0	28.4	14.1	0.830	1.50	8910	711	627	11.8	704	154	100	3.32
W27X194	194	57.2	28.1	14.0	0.750	1.34	7860	631	559	11.7	619	136	88.1	3.29
W27X178	178	52.5	27.8	14.1	0.725	1.19	7020	570	505	11.6	555	122	78.8	3.25
W27X161	161	47.6	27.6	14.0	0.660	1.08	6310	515	458	11.5	497	109	70.9	3.23
W27X146	146	43.1	27.4	14.0	0.605	0.975	5660	464	414	11.5	443	97.7	63.5	3.20
W27X129	129	37.8	27.6	10.0	0.610	1.10	4760	395	345	11.2	184	57.6	36.8	2.21
W27X114	114	33.5	27.3	10.1	0.570	0.930	4080	343	299	11.0	159	49.3	31.5	2.18
W27X102	102	30.0	27.1	10.0	0.515	0.830	3620	305	267	11.0	139	43.4	27.8	2.15
W27X94	94.0	27.7	26.9	10.0	0.490	0.745	3270	278	243	10.9	124	38.8	24.8	2.12
W27X84	84.0	24.8	26.7	10.0	0.460	0.640	2850	244	213	10.7	106	33.2	21.2	2.07
W24X492	492.0	144.0	59.7	14.1	1.970	3.540	19100	1550	1290	11.5	1670	375.0	237.0	3.41
W24X408	408.0	119.0	28.5	13.8	1.650	2.990	15100	1250	1060	11.3	1320	300.0	191.0	3.33
W24X370	370	109	28.0	13.7	1.52	2.72	13400	1130	957	11.1	1160	267	170	3.27
W24X335	335	98.4	27.5	13.5	1.38	2.48	11900	1020	864	11.0	1030	238	152	3.23
W24X306	306	89.8	27.1	13.4	1.26	2.28	10700	922	789	10.9	919	214	137	3.20
W24X279	279	82.0	26.7	13.3	1.16	2.09	9600	835	718	10.8	823	193	124	3.17
W24X250	250	73.5	26.3	13.2	1.04	1.89	8490	744	644	10.7	724	171	110	3.14
W24X229	229	67.2	26.0	13.1	0.960	1.73	7650	675	588	10.7	651	154	99.4	3.11
W24X207	207	60.7	25.7	13.0	0.870	1.57	6820	606	531	10.6	578	137	88.8	3.08
W24X192	192	56.3	25.5	13.0	0.810	1.46	6260	559	491	10.5	530	126	81.8	3.07
W24X176	176	51.7	25.2	12.9	0.750	1.34	5680	511	450	10.5	479	115	74.3	3.04
W24X162	162	47.7	25.0	13.0	0.705	1.22	5170	468	414	10.4	443	105	68.4	3.05
W24X146	146	43.0	24.7	12.9	0.650	1.09	4580	418	371	10.3	391	93.2	60.5	3.01
W24X131	131	38.5	24.5	12.9	0.605	0.960	4020	370	329	10.2	340	81.5	53.0	2.97
W24X117	117	34.4	24.3	12.8	0.550	0.850	3540	327	291	10.1	297	71.4	46.5	2.94
W24X104	104	30.6	24.1	12.8	0.500	0.750	3100	289	258	10.1	259	62.4	40.7	2.91
W24X103	103	30.3	24.5	9.00	0.550	0.980	3000	280	245	10.0	119	41.5	26.5	1.99



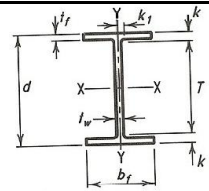
W or I	W(lbs)	A(in <sup>2</sup> )	d(in)	bf(in)	tw(in)	tf (in)	Ix(in <sup>4</sup> )	Zx(in <sup>3</sup> )	Sx (in <sup>3</sup> )	rx(in)	Iy(in <sup>4</sup> )	Zy(in <sup>3</sup> )	Sy(in <sup>4</sup> )	ry(in)
W24X94	94.0	27.7	24.3	9.07	0.515	0.875	2700	254	222	9.87	109	37.5	24.0	1.98
W24X84	84.0	24.7	24.1	9.02	0.470	0.770	2370	224	196	9.79	94.4	32.6	20.9	1.95
W24X76	76.0	22.4	23.9	8.99	0.440	0.680	2100	200	176	9.69	82.5	28.6	18.4	1.92
W24X68	68.0	20.1	23.7	8.97	0.415	0.585	1830	177	154	9.55	70.4	24.5	15.7	1.87
W24X62	62.0	18.2	23.7	7.04	0.430	0.590	1550	153	131	9.23	34.5	15.7	9.80	1.38
W24X55	55.0	16.2	23.6	7.01	0.395	0.505	1350	134	114	9.11	29.1	13.3	8.30	1.34
W21X201	201	59.2	23.0	12.6	0.910	1.63	5310	530	461	9.47	542	133	86.1	3.02
W21X182	182	53.6	22.7	12.5	0.830	1.48	4730	476	417	9.40	483	119	77.2	3.00
W21X166	166	48.8	22.5	12.4	0.750	1.36	4280	432	380	9.36	435	108	70.0	2.99
W21X147	147	43.2	22.1	12.5	0.720	1.15	3630	373	329	9.17	376	92.6	60.1	2.95
W21X132	132	38.8	21.8	12.4	0.650	1.04	3220	333	295	9.12	333	82.3	53.5	2.93
W21X122	122	35.9	21.7	12.4	0.600	0.960	2960	307	273	9.09	305	75.6	49.2	2.92
W21X111	111	32.7	21.5	12.3	0.550	0.875	2670	279	249	9.05	274	68.2	44.5	2.90
W21X101	101	29.8	21.4	12.3	0.500	0.800	2420	253	227	9.02	248	61.7	40.3	2.89
W21X93	93.0	27.3	21.6	8.42	0.580	0.930	2070	221	192	8.70	92.9	34.7	22.1	1.84
W21X83	83.0	24.3	21.4	8.36	0.515	0.835	1830	196	171	8.67	81.4	30.5	19.5	1.83
W21X73	73.0	21.5	21.2	8.30	0.455	0.740	1600	172	151	8.64	70.6	26.6	17.0	1.81
W21X68	68.0	20.0	21.1	8.27	0.430	0.685	1480	160	140	8.60	64.7	24.4	15.7	1.80
W21X62	62.0	18.3	21.0	8.24	0.400	0.615	1330	144	127	8.54	57.5	21.7	14.0	1.77
W21X55	55.0	16.2	20.8	8.22	0.375	0.522	1140	126	110	8.40	48.4	18.4	11.8	1.73
W21X48	48.0	14.1	20.6	8.14	0.350	0.430	959	107	93.0	8.24	38.7	14.9	9.52	1.66
W21X57	57.0	16.7	21.1	6.56	0.405	0.650	1170	129	111	8.36	30.6	14.8	9.35	1.35
W21X50	50.0	14.7	20.8	6.53	0.380	0.535	984	110	94.5	8.18	24.9	12.2	7.64	1.30
W21X44	44.0	13.0	20.7	6.50	0.350	0.450	843	95.4	81.6	8.06	20.7	10.2	6.37	1.26
W18X311	311	91.6	22.3	12.0	1.52	2.74	6970	754	624	8.72	795	207	132	2.95
W18X283	283	83.3	21.9	11.9	1.40	2.50	6170	676	565	8.61	704	185	118	2.91
W18X258	258	75.9	21.5	11.8	1.28	2.30	5510	611	514	8.53	628	166	107	2.88
W18X234	234	68.8	21.1	11.7	1.16	2.11	4900	549	466	8.44	558	149	95.8	2.85
W18X211	211	62.1	20.7	11.6	1.06	1.91	4330	490	419	8.35	493	132	85.3	2.82
W18X192	192	56.4	20.4	11.5	0.960	1.75	3870	442	380	8.28	440	119	76.8	2.79
W18X175	175	51.3	20.0	11.4	0.890	1.59	3450	398	344	8.20	391	106	68.8	2.76
W18X158	158	46.3	19.7	11.3	0.810	1.44	3060	356	310	8.12	347	94.8	61.4	2.74
W18X143	143	42.1	19.5	11.2	0.730	1.32	2750	322	282	8.09	311	85.4	55.5	2.72
W18X130	130	38.2	19.3	11.2	0.670	1.20	2460	290	256	8.03	278	76.7	49.9	2.70
W18X119	119	35.1	19.0	11.3	0.655	1.06	2190	262	231	7.90	253	69.1	44.9	2.69
W18X106	106	31.1	18.7	11.2	0.590	0.940	1910	230	204	7.84	220	60.5	39.4	2.66
W18X97	97.0	28.5	18.6	11.1	0.535	0.870	1750	211	188	7.82	201	55.3	36.1	2.65
W18X86	86.0	25.3	18.4	11.1	0.480	0.770	1530	186	166	7.77	175	48.4	31.6	2.63
W18X76	76.0	22.3	18.2	11.0	0.425	0.680	1330	163	146	7.73	152	42.2	27.6	2.61
W18X71	71.0	20.8	18.5	7.64	0.495	0.810	1170	146	127	7.50	60.3	24.7	15.8	1.70
W18X65	65.0	19.1	18.4	7.59	0.450	0.750	1070	133	117	7.49	54.8	22.5	14.4	1.69
W18X60	60.0	17.6	18.2	7.56	0.415	0.695	984	123	108	7.47	50.1	20.6	13.3	1.68
W18X55	55.0	16.2	18.1	7.53	0.390	0.630	890	112	98.3	7.41	44.9	18.5	11.9	1.67
W18X50	50.0	14.7	18.0	7.50	0.355	0.570	800	101	88.9	7.38	40.1	16.6	10.7	1.65
W18X46	46.0	13.5	18.1	6.06	0.360	0.605	712	90.7	78.8	7.25	22.5	11.7	7.43	1.29
W18X40	40.0	11.8	17.9	6.02	0.315	0.525	612	78.4	68.4	7.21	19.1	10.0	6.35	1.27
W18X35	35.0	10.3	17.7	6.00	0.300	0.425	510	66.5	57.6	7.04	15.3	8.06	5.12	1.22
W16X100	100	29.5	17.0	10.4	0.585	0.985	1490	198	175	7.10	186	54.9	35.7	2.51
W16X89	89.0	26.2	16.8	10.4	0.525	0.875	1300	175	155	7.05	163	48.1	31.4	2.49
W16X77	77.0	22.6	16.5	10.3	0.455	0.760	1110	150	134	7.00	138	41.1	26.9	2.47
W16X67	67.0	19.7	16.3	10.2	0.395	0.665	954	130	117	6.96	119	35.5	23.2	2.46
W16X57	57.0	16.8	16.4	7.12	0.430	0.715	758	105	92.2	6.72	43.1	18.9	12.1	1.60
W16X50	50.0	14.7	16.3	7.07	0.380	0.630	659	92.0	81.0	6.68	37.2	16.3	10.5	1.59
W16X45	45.0	13.3	16.1	7.04	0.345	0.565	586	82.3	72.7	6.65	32.8	14.5	9.34	1.57
W16X40	40.0	11.8	16.0	7.00	0.305	0.505	518	73.0	64.7	6.63	28.9	12.7	8.25	1.57
W16X36	36.0	10.6	15.9	6.99	0.295	0.430	448	64.0	56.5	6.51	24.5	10.8	7.00	1.52
W16X31	31.0	9.13	15.9	5.53	0.275	0.440	375	54.0	47.2	6.41	12.4	7.03	4.49	1.17

Wide Flange Sizes & Section Properties



W or I	W(lbs)	A(in <sup>2</sup> )	d(in)	bf(in)	tw(in)	tf (in)	Ix(in <sup>4</sup> )	Zx(in <sup>3</sup> )	Sx (in <sup>3</sup> )	rx(in)	Iy(in <sup>4</sup> )	Zy(in <sup>3</sup> )	Sy(in <sup>4</sup> )	ry(in)
W16X26	26.0	7.68	15.7	5.50	0.250	0.345	301	44.2	38.4	6.26	9.59	5.48	3.49	1.12
W14X808	808.0	237	22.8	18.56	3.750	5.120	16000	1834.0	1400	8.21	5510	927.00	594	4.82
W14X730	730	215	22.4	17.9	3.07	4.91	14300	1660	1280	8.17	4720	816	527	4.69
W14X665	665	196	21.6	17.7	2.83	4.52	12400	1480	1150	7.98	4170	730	472	4.62
W14X605	605	178	20.9	17.4	2.60	4.16	10800	1320	1040	7.80	3680	652	423	4.55
W14X550	550	162	20.2	17.2	2.38	3.82	9430	1180	931	7.63	3250	583	378	4.49
W14X500	500	147	19.6	17.0	2.19	3.50	8210	1050	838	7.48	2880	522	339	4.43
W14X455	455	134	19.0	16.8	2.02	3.21	7190	936	756	7.33	2560	468	304	4.38
W14X426	426	125	18.7	16.7	1.88	3.04	6600	869	706	7.26	2360	434	283	4.34
W14X398	398	117	18.3	16.6	1.77	2.85	6000	801	656	7.16	2170	402	262	4.31
W14X370	370	109	17.9	16.5	1.66	2.66	5440	736	607	7.07	1990	370	241	4.27
W14X342	342	101	17.5	16.4	1.54	2.47	4900	672	558	6.98	1810	338	221	4.24
W14X311	311	91.4	17.1	16.2	1.41	2.26	4330	603	506	6.88	1610	304	199	4.20
W14X283	283	83.3	16.7	16.1	1.29	2.07	3840	542	459	6.79	1440	274	179	4.17
W14X257	257	75.6	16.4	16.0	1.18	1.89	3400	487	415	6.71	1290	246	161	4.13
W14X233	233	68.5	16.0	15.9	1.07	1.72	3010	436	375	6.63	1150	221	145	4.10
W14X211	211	62.0	15.7	15.8	0.980	1.56	2660	390	338	6.55	1030	198	130	4.07
W14X193	193	56.8	15.5	15.7	0.890	1.44	2400	355	310	6.50	931	180	119	4.05
W14X176	176	51.8	15.2	15.7	0.830	1.31	2140	320	281	6.43	838	163	107	4.02
W14X159	159	46.7	15.0	15.6	0.745	1.19	1900	287	254	6.38	748	146	96.2	4.00
W14X145	145	42.7	14.8	15.5	0.680	1.09	1710	260	232	6.33	677	133	87.3	3.98
W14X132	132	38.8	14.7	14.7	0.645	1.03	1530	234	209	6.28	548	113	74.5	3.76
W14X120	120	35.3	14.5	14.7	0.590	0.940	1380	212	190	6.24	495	102	67.5	3.74
W14X109	109	32.0	14.3	14.6	0.525	0.860	1240	192	173	6.22	447	92.7	61.2	3.73
W14X99	99.0	29.1	14.2	14.6	0.485	0.780	1110	173	157	6.17	402	83.6	55.2	3.71
W14X90	90.0	26.5	14.0	14.5	0.440	0.710	999	157	143	6.14	362	75.6	49.9	3.70
W14X82	82.0	24.0	14.3	10.1	0.510	0.855	881	139	123	6.05	148	44.8	29.3	2.48
W14X74	74.0	21.8	14.2	10.1	0.450	0.785	795	126	112	6.04	134	40.5	26.6	2.48
W14X68	68.0	20.0	14.0	10.0	0.415	0.720	722	115	103	6.01	121	36.9	24.2	2.46
W14X61	61.0	17.9	13.9	10.0	0.375	0.645	640	102	92.1	5.98	107	32.8	21.5	2.45
W14X53	53.0	15.6	13.9	8.06	0.370	0.660	541	87.1	77.8	5.89	57.7	22.0	14.3	1.92
W14X48	48.0	14.1	13.8	8.03	0.340	0.595	484	78.4	70.2	5.85	51.4	19.6	12.8	1.91
W14X43	43.0	12.6	13.7	8.00	0.305	0.530	428	69.6	62.6	5.82	45.2	17.3	11.3	1.89
W14X38	38.0	11.2	14.1	6.77	0.310	0.515	385	61.5	54.6	5.87	26.7	12.1	7.88	1.55
W14X34	34.0	10.0	14.0	6.75	0.285	0.455	340	54.6	48.6	5.83	23.3	10.6	6.91	1.53
W14X30	30.0	8.85	13.8	6.73	0.270	0.385	291	47.3	42.0	5.73	19.6	8.99	5.82	1.49
W14X26	26.0	7.69	13.9	5.03	0.255	0.420	245	40.2	35.3	5.65	8.91	5.54	3.55	1.08
W14X22	22.0	6.49	13.7	5.00	0.230	0.335	199	33.2	29.0	5.54	7.00	4.39	2.80	1.04
W12X336	336	98.8	16.8	13.4	1.78	2.96	4060	603	483	6.41	1190	274	177	3.47
W12X305	305	89.6	16.3	13.2	1.63	2.71	3550	537	435	6.29	1050	244	159	3.42
W12X279	279	81.9	15.9	13.1	1.53	2.47	3110	481	393	6.16	937	220	143	3.38
W12X252	252	74.0	15.4	13.0	1.40	2.25	2720	428	353	6.06	828	196	127	3.34
W12X230	230	67.7	15.1	12.9	1.29	2.07	2420	386	321	5.97	742	177	115	3.31
W12X210	210	61.8	14.7	12.8	1.18	1.90	2140	348	292	5.89	664	159	104	3.28
W12X190	190	55.8	14.4	12.7	1.06	1.74	1890	311	263	5.82	589	143	93.0	3.25
W12X170	170	50.0	14.0	12.6	0.960	1.56	1650	275	235	5.74	517	126	82.3	3.22
W12X152	152	44.7	13.7	12.5	0.870	1.40	1430	243	209	5.66	454	111	72.8	3.19
W12X136	136	39.9	13.4	12.4	0.790	1.25	1240	214	186	5.58	398	98.0	64.2	3.16
W12X120	120	35.3	13.1	12.3	0.710	1.11	1070	186	163	5.51	345	85.4	56.0	3.13
W12X106	106	31.2	12.9	12.2	0.610	0.990	933	164	145	5.47	301	75.1	49.3	3.11
W12X96	96.0	28.2	12.7	12.2	0.550	0.900	833	147	131	5.44	270	67.5	44.4	3.09
W12X87	87.0	25.6	12.5	12.1	0.515	0.810	740	132	118	5.38	241	60.4	39.7	3.07
W12X79	79.0	23.2	12.4	12.1	0.470	0.735	662	119	107	5.34	216	54.3	35.8	3.05
W12X72	72.0	21.1	12.3	12.0	0.430	0.670	597	108	97.4	5.31	195	49.2	32.4	3.04
W12X65	65.0	19.1	12.1	12.0	0.390	0.605	533	96.8	87.9	5.28	174	44.1	29.1	3.02
W12X58	58.0	17.0	12.2	10.0	0.360	0.640	475	86.4	78.0	5.28	107	32.5	21.4	2.51
W12X53	53.0	15.6	12.1	10.0	0.345	0.575	425	77.9	70.6	5.23	95.8	29.1	19.2	2.48

Wide Flange Sizes & Section Properties



W or I	W(lbs)	A(in <sup>2</sup> )	d(in)	bf(in)	tw(in)	tf (in)	Ix(in <sup>4</sup> )	Zx(in <sup>3</sup> )	Sx (in <sup>3</sup> )	rx(in)	Iy(in <sup>4</sup> )	Zy(in <sup>3</sup> )	Sy(in <sup>4</sup> )	ry(in)
W12X50	50.0	14.6	12.2	8.08	0.370	0.640	391	71.9	64.2	5.18	56.3	21.3	13.9	1.96
W12X45	45.0	13.1	12.1	8.05	0.335	0.575	348	64.2	57.7	5.15	50.0	19.0	12.4	1.95
W12X40	40.0	11.7	11.9	8.01	0.295	0.515	307	57.0	51.5	5.13	44.1	16.8	11.0	1.94
W12X35	35.0	10.3	12.5	6.56	0.300	0.520	285	51.2	45.6	5.25	24.5	11.5	7.47	1.54
W12X30	30.0	8.79	12.3	6.52	0.260	0.440	238	43.1	38.6	5.21	20.3	9.56	6.24	1.52
W12X26	26.0	7.65	12.2	6.49	0.230	0.380	204	37.2	33.4	5.17	17.3	8.17	5.34	1.51
W12X22	22.0	6.48	12.3	4.03	0.260	0.425	156	29.3	25.4	4.91	4.66	3.66	2.31	0.848
W12X19	19.0	5.57	12.2	4.01	0.235	0.350	130	24.7	21.3	4.82	3.76	2.98	1.88	0.822
W12X16	16.0	4.71	12.0	3.99	0.220	0.265	103	20.1	17.1	4.67	2.82	2.26	1.41	0.773
W12X14	14.0	4.16	11.9	3.97	0.200	0.225	88.6	17.4	14.9	4.62	2.36	1.90	1.19	0.753
W10X112	112	32.9	11.4	10.4	0.755	1.25	716	147	126	4.66	236	69.2	45.3	2.68
W10X100	100	29.4	11.1	10.3	0.680	1.12	623	130	112	4.60	207	61.0	40.0	2.65
W10X88	88.0	25.9	10.8	10.3	0.605	0.990	534	113	98.5	4.54	179	53.1	34.8	2.63
W10X77	77.0	22.6	10.6	10.2	0.530	0.870	455	97.6	85.9	4.49	154	45.9	30.1	2.60
W10X68	68.0	20.0	10.4	10.1	0.470	0.770	394	85.3	75.7	4.44	134	40.1	26.4	2.59
W10X60	60.0	17.6	10.2	10.1	0.420	0.680	341	74.6	66.7	4.39	116	35.0	23.0	2.57
W10X54	54.0	15.8	10.1	10.0	0.370	0.615	303	66.6	60.0	4.37	103	31.3	20.6	2.56
W10X49	49.0	14.4	10.0	10.0	0.340	0.560	272	60.4	54.6	4.35	93.4	28.3	18.7	2.54
W10X45	45.0	13.3	10.1	8.02	0.350	0.620	248	54.9	49.1	4.32	53.4	20.3	13.3	2.01
W10X39	39.0	11.5	9.92	7.99	0.315	0.530	209	46.8	42.1	4.27	45.0	17.2	11.3	1.98
W10X33	33.0	9.71	9.73	7.96	0.290	0.435	171	38.8	35.0	4.19	36.6	14.0	9.20	1.94
W10X30	30.0	8.84	10.5	5.81	0.300	0.510	170	36.6	32.4	4.38	16.7	8.84	5.75	1.37
W10X26	26.0	7.61	10.3	5.77	0.260	0.440	144	31.3	27.9	4.35	14.1	7.50	4.89	1.36
W10X22	22.0	6.49	10.2	5.75	0.240	0.360	118	26.0	23.2	4.27	11.4	6.10	3.97	1.33
W10X19	19.0	5.62	10.2	4.02	0.250	0.395	96.3	21.6	18.8	4.14	4.29	3.35	2.14	0.874
W10X17	17.0	4.99	10.1	4.01	0.240	0.330	81.9	18.7	16.2	4.05	3.56	2.80	1.78	0.845
W10X15	15.0	4.41	10.0	4.00	0.230	0.270	68.9	16.0	13.8	3.95	2.89	2.30	1.45	0.810
W10X12	12.0	3.54	9.87	3.96	0.190	0.210	53.8	12.6	10.9	3.90	2.18	1.74	1.10	0.785
W8X67	67.0	19.7	9.00	8.28	0.570	0.935	272	70.1	60.4	3.72	88.6	32.7	21.4	2.12
W8X58	58.0	17.1	8.75	8.22	0.510	0.810	228	59.8	52.0	3.65	75.1	27.9	18.3	2.10
W8X48	48.0	14.1	8.50	8.11	0.400	0.685	184	49.0	43.2	3.61	60.9	22.9	15.0	2.08
W8X40	40.0	11.7	8.25	8.07	0.360	0.560	146	39.8	35.5	3.53	49.1	18.5	12.2	2.04
W8X35	35.0	10.3	8.12	8.02	0.310	0.495	127	34.7	31.2	3.51	42.6	16.1	10.6	2.03
W8X31	31.0	9.12	8.00	8.00	0.285	0.435	110	30.4	27.5	3.47	37.1	14.1	9.27	2.02
W8X28	28.0	8.24	8.06	6.54	0.285	0.465	98.0	27.2	24.3	3.45	21.7	10.1	6.63	1.62
W8X24	24.0	7.08	7.93	6.50	0.245	0.400	82.7	23.1	20.9	3.42	18.3	8.57	5.63	1.61
W8X21	21.0	6.16	8.28	5.27	0.250	0.400	75.3	20.4	18.2	3.49	9.77	5.69	3.71	1.26
W8X18	18.0	5.26	8.14	5.25	0.230	0.330	61.9	17.0	15.2	3.43	7.97	4.66	3.04	1.23
W8X15	15.0	4.44	8.11	4.02	0.245	0.315	48.0	13.6	11.8	3.29	3.41	2.67	1.70	0.876
W8X13	13.0	3.84	7.99	4.00	0.230	0.255	39.6	11.4	9.91	3.21	2.73	2.15	1.37	0.843
W8X10	10.0	2.96	7.89	3.94	0.170	0.205	30.8	8.87	7.81	3.22	2.09	1.66	1.06	0.841
W6X25	25.0	7.34	6.38	6.08	0.320	0.455	53.4	18.9	16.7	2.70	17.1	8.56	5.61	1.52
W6X20	20.0	5.87	6.20	6.02	0.260	0.365	41.4	15.0	13.4	2.66	13.3	6.72	4.41	1.50
W6X15	15.0	4.43	5.99	5.99	0.230	0.260	29.1	10.8	9.72	2.56	9.32	4.75	3.11	1.45
W6X16	16.0	4.74	6.28	4.03	0.260	0.405	32.1	11.7	10.2	2.60	4.43	3.39	2.20	0.967
W6X12	12.0	3.55	6.03	4.00	0.230	0.280	22.1	8.30	7.31	2.49	2.99	2.32	1.50	0.918
W6X9	9.00	2.68	5.90	3.94	0.170	0.215	16.4	6.23	5.56	2.47	2.20	1.72	1.11	0.905
W6X8.5	8.50	2.52	5.83	3.94	0.170	0.195	14.9	5.73	5.10	2.43	1.99	1.56	1.01	0.890
W5X19	19.0	5.56	5.15	5.03	0.270	0.430	26.3	11.6	10.2	2.17	9.13	5.53	3.63	1.28
W5X16	16.0	4.71	5.01	5.00	0.240	0.360	21.4	9.63	8.55	2.13	7.51	4.58	3.00	1.26
W4X13	13.0	3.83	4.16	4.06	0.280	0.345	11.3	6.28	5.46	1.72	3.86	2.92	1.90	1.00