

# Vigas Perfil Europeo de alas Inclınadas UPN

• Norma mecánica: A-36 • Norma dimensional: A-6

UPN	DIMENSIONES (mm)						ÁREA cm <sup>2</sup>	PESO kg/m	PESO 6 m	MOMENTOS RESPECTO A LOS EJES					
	h	b	s	t	r1	r2				EJE X - X			EJE Y - Y		
										Ix cm <sup>4</sup>	Sx cm <sup>3</sup>	Rx cm	Iy cm <sup>4</sup>	Sy cm <sup>3</sup>	Ry cm
80	80.00	45.00	6.00	8.00	8.00	4.00	11.00	8.65	51.90	106.00	26.50	3.10	19.40	6.36	1.33
100	100.00	50.00	6.00	8.50	8.50	4.50	13.50	10.60	63.60	206.00	41.20	3.91	29.30	8.49	1.47
120	120.00	55.00	7.00	9.00	9.00	4.50	17.00	13.40	80.40	364.00	60.70	4.62	43.20	11.10	1.59
140	140.00	60.00	7.00	10.00	10.00	5.00	20.40	16.00	96.00	605.00	86.40	5.45	62.70	14.70	1.75
160	160.00	65.00	7.50	10.50	10.50	5.50	24.00	18.80	112.80	925.00	116.00	6.21	85.30	18.30	1.89
180	180.00	70.00	8.00	11.00	11.00	5.50	28.00	22.00	132.00	1,350.00	150.00	6.95	114.00	22.40	2.02
200	200.00	75.00	8.50	11.50	11.50	6.00	32.20	25.30	151.80	1,910.00	191.00	7.71	148.00	27.00	2.14
220	220.00	80.00	9.00	12.50	12.50	6.50	37.40	29.40	176.40	2,690.00	245.00	8.48	197.00	33.60	2.30
240	240.00	85.00	9.50	13.00	13.00	6.50	42.30	33.20	199.20	3,600.00	300.00	9.22	248.00	39.60	2.42
260	260.00	90.00	10.00	14.00	14.00	7.00	48.30	37.90	227.40	4,820.00	371.00	9.99	317.00	47.80	2.56
280	280.00	95.00	10.00	15.00	15.00	7.50	53.30	41.80	250.80	6,280.00	448.00	10.90	399.00	57.20	2.74
300	300.00	100.00	10.00	16.00	16.00	8.00	58.80	46.10	276.60	8,030.00	535.00	11.70	495.00	67.80	2.90
320	320.00	100.00	14.00	17.50	17.50	8.70	75.80	59.50	357.00	10,870.00	679.00	12.10	597.00	80.60	2.81
350	350.00	100.00	14.00	16.00	16.00	8.00	77.30	60.60	363.60	12,840.00	734.00	12.90	570.00	75.00	2.72
380	380.00	102.00	13.50	16.00	16.00	8.00	80.40	63.10	378.60	15,760.00	829.00	14.00	615.00	78.70	2.77
400	400.00	110.00	14.00	18.00	18.00	9.00	91.50	71.80	430.80	20,350.00	1,020.00	14.90	846.00	102.00	3.04

**DIMENSIONES:** •h= Altura •b= Ancho del ala •s= Espesor del alma •t= Espesor del ala •r= Angulo

**MOMENTO RESPECTO A LOS EJES:** •I = Momento de Inercia •S= Momento de Resistencia

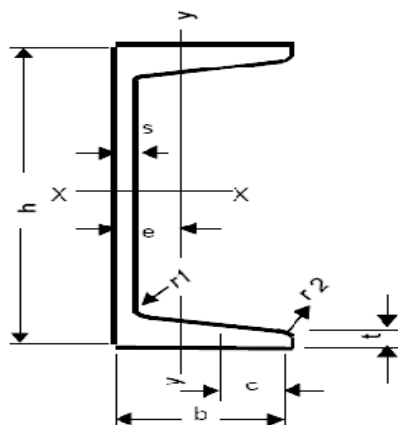
•R = Radio de Inercia siempre referido al eje de reflexión correspondiente

## VENTAJAS

- Fácil manipulación
- Adaptable a estructuras por su peso
- Regulación de carga

## APLICACIONES

- Chasis, Carrocerías
- Vigas, Viguetas, Armaduras
- Soportes
- Reparaciones industriales



# Vigas Wide Flange WF ASTM A-572/992 Gr.50

## Perfil americano de alas anchas

PROPIEDADES DEL PERFIL																													
DENOMINACIÓN (METRI)	G	DIMENSIONES						DIMENSIONES DE CONSTRUCCIÓN						SUPERFICIE		EJE FUERTE Y-Y						EJE DÉBIL Z-Z						DENOMINACIÓN (IMPERIAL)	lbs/ft
		h	b	tw	tf	r	A	hi	d	o	pmin	pmax	AL	AG	Iy	Iy1	Iy2	Iy3	Iy4	Iy5	Iy6	Iy7	Iy8	Iy9	Iy10	Iy11	Iy12		
kg/m	mm	mm	mm	mm	mm	mm	mm <sup>2</sup> X102	mm	mm	mm	mm	mm	m <sup>2</sup> /m	m <sup>2</sup> /t	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x102	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x104	mm <sup>4</sup> x109
W 100 x 100 x 19.3	19.30	106.00	103.00	7.10	8.80	6.00	24.71	88.10	76.10	-	-	-	0.60	30.90	475.9	89.79	1033	4.39	8.27	1606	31.19	47.94	2.55	31.73	6.52	3.79	W 4 x 4 x 13	13	
W 130 x 130 x 23.8	23.80	127.00	127.00	6.10	9.10	8.00	30.30	109.00	93.00	M12	60.00	70.00	0.74	30.95	885.5	139.5	1572	5.41	9.2	311	48.98	74.66	3.2	33.67	8.1	10.8	W 5 x 5 x 16	16	
W 130 x 130 x 28.1	28.10	131.00	128.00	6.90	10.90	8.00	35.99	109.00	93.00	M12	62.00	70.00	0.75	26.42	1099	167.7	190.9	5.53	10.53	381.4	59.6	90.86	3.26	38.03	13.33	13.74	W 5 x 5 x 19	19	
W 150 x 100 x 13.5	13.50	150.00	100.00	4.30	5.50	6.00	17.29	138.90	126.90	-	-	-	0.68	50.19	685.5	91.4	102.4	6.29	7.21	91.8	18.36	28.26	2.3	22.35	1.74	4.79	W 6 x 4 x 9	9	
W 150 x 100 x 18.0	18.00	153.00	102.00	5.80	7.10	6.00	22.84	138.90	126.90	-	-	-	0.69	38.60	915.9	122.1	138.6	6.33	9.69	125.9	25.37	39.29	2.36	27.47	3.86	6.68	W 6 x 4 x 12	12	
W 150 x 200 x 24.0	24.00	160.00	102.00	6.60	10.30	6.00	30.52	138.90	126.90	-	-	-	0.70	29.40	1342	167.8	191.5	6.63	11.43	182.6	35.8	55.24	2.45	34.23	9.35	10.21	W 6 x 4 x 16	16	
W 150 x 150 x 22.5	22.50	152.00	152.00	5.80	6.60	6.00	28.42	138.90	126.90	M16	70.00	82.00	0.89	39.89	1206	158.6	176.1	6.51	9.59	386.6	50.87	77.56	3.68	26.07	4.34	20.42	W 6 x 6 x 15	15	
W 150 x 150 x 29.8	29.80	157.00	153.00	6.60	9.30	6.00	37.90	138.90	126.90	M16	72.00	84.00	0.90	30.33	1714	218.4	243.9	6.73	11.17	555.5	72.62	110.5	3.83	32.23	10.16	30.28	W 6 x 6 x 20	20	
W 150 x 150 x 37.1	37.10	162.00	154.00	8.10	11.60	6.00	47.28	138.90	126.90	M16	74.00	84.00	0.91	24.61	2220	274.1	309.9	6.85	13.93	706.8	91.79	140	3.86	38.36	19.51	39.93	W 6 x 6 x 25	25	
W 200 x 100 x 15.0	15.00	200.00	100.00	4.30	5.20	8.00	19.10	190.00	174.00	-	-	-	0.78	51.86	1280	128	145.2	8.18	9.8	86.89	17.38	27.1	2.13	24.09	1.93	8.22	W 8 x 4 x 10	10	
W 200 x 100 x 19.3	19.30	203.00	102.00	5.80	6.50	8.00	24.83	190.00	174.00	-	-	-	0.79	40.46	1662	163.7	188.1	8.17	13.06	115.4	22.63	35.69	2.15	28.21	3.99	11.1	W 8 x 4 x 13	13	
W 200 x 100 x 22.5	22.50	206.00	102.00	6.20	8.00	8.00	28.65	190.00	174.00	-	-	-	0.79	35.30	2004	194.5	222.8	8.36	14.14	142	27.85	43.72	2.22	31.59	5.97	13.87	W 8 x 4 x 15	15	
W 200 x 135 x 21.4	21.40	203.00	134.00	5.00	6.40	8.00	27.21	190.00	174.00	M12	62.00	76.00	0.92	42.99	1993	196.3	219	8.56	11.4	257	38.35	58.88	3.07	27.17	3.76	24.8	W 8 x 5.25 x 14	14	
W 200 x 135 x 26.6	26.60	207.00	133.00	5.80	8.40	8.00	33.92	190.00	174.00	M12	62.00	76.00	0.92	34.57	2587	250	279.8	8.72	13.49	329.8	49.6	76.17	3.11	32.01	7.35	32.48	W 8 x 5.25 x 18	18	
W 200 x 135 x 31.3	31.30	210.00	134.00	6.40	10.20	8.00	40.02	190.00	174.00	M12	64.00	76.00	0.93	29.59	3139	298.9	335.3	8.87	14.87	409.6	61.13	93.76	3.2	36.12	12.04	40.82	W 8 x 5.25 x 21	21	
W 200 x 165 x 35.9	35.90	201.00	165.00	6.20	10.20	10.00	45.72	181.10	161.10	M16	78.00	96.00	1.03200	28.77	3438	342.1	379.4	8.67	14.77	764.3	92.64	141.1	4.09	38.34	14.56	69.5	W 8 x 6.5 x 24	24	
W 200 x 165 x 41.7	41.70	205.00	166.00	7.20	11.80	10.00	53.10	181.10	161.10	M16	80.00	96.00	1.04200	25.01	4088	398.8	445.6	8.77	17.21	900.5	108.5	165.5	4.12	42.56	22.39	83.95	W 8 x 6.5 x 28	28	
W 200 x 200 x 46.1	46.10	203.00	203.00	7.20	11.00	10.00	58.55	181.10	161.10	M16	84.00	110.00	1.18600	25.81	4545	447.8	495.6	8.81	16.96	1535	151.2	229.5	4.12	40.96	22.27	141.3	W 8 x 8 x 31	31	
W 200 x 200 x 52	52.00	206.00	204.00	7.90	12.60	10.00	66.55	181.10	161.10	M24	94.00	110.00	1.19500	22.88	5268	511.5	569	8.9	18.6	1784	174.9	265.5	5.18	44.79	32.41	166.7	W 8 x 8 x 35	35	
W 200 x 200 x 59	59.00	210.00	205.00	9.10	14.20	10.00	75.60	181.10	161.10	M24	96.00	112.00	1.20500	20.30	6113	582.2	652.9	8.99	21.59	2040	199.1	302.8	5.19	49.26	46.86	195.4	W 8 x 8 x 40	40	
W 200 x 200 x 71	71.00	216.00	206.00	10.20	17.40	10.00	91.03	181.10	161.10	M24	98.00	112.00	1.21800	17.05	7658	709	802.8	9.18	24.52	2537	246.3	374.5	5.28	56.68	82.02	250	W 8 x 8 x 48	48	
W 200 x 200 x 86	86.00	222.00	209.00	13.00	20.60	10.00	110.50	181.10	161.10	M24	100.00	116.00	1.23700	14.26	9467	852.9	980.5	9.26	31.06	3138	300.3	458.2	5.33	65.87	140.8	317.8	W 8 x 8 x 58	58	
W 200 x 200 x 100	100.00	229.00	210.00	14.50	23.70	10.00	126.70	181.10	161.10	M24	102.00	116.00	1.25200	12.58	11330	989.1	1149	9.45	35.33	3663	348.9	532.9	5.38	73.6	211.3	395.5	W 8 x 8 x 67	67	
W 250 x 100 x 17.9	17.90	251.00	101.00	4.80	5.30	8.00	22.79	240.00	224.00	-	-	-	0.88	49.33	2252	179.5	207.8	9.92	13.26	91.34	18.09	28.67	2	24.8	2.5	13.74	W 10 x 4 x 12	12	
W 250 x 100 x 22.3	22.30	254.00	102.00	5.80	6.90	8.00	28.56	240.00	224.00	-	-	-	0.89	39.73	2901	228.4	264.6	10.06	16.08	122.6	24.03	38.2	2.07	29.01	4.68	18.63	W 10 x 4 x 15	15	
W 250 x 100 x 25.3	25.30	257.00	102.00	6.10	8.40	8.00	32.34	240.00	224.00	-	-	-	0.90	35.30	3430	266.9	307.5	10.3	17.06	149.2	29.25	46.2	2.15	32.27	6.77	22.95	W 10 x 4 x 17	17	
W 250 x 100 x 28.4	28.40	260.00	102.00	6.40	10.00	8.00	36.31	240.00	224.00	-	-	-	0.90	31.63	3998	307.5	352.9	10.51	18.02	177.5	34.81	54.71	2.21	35.72	9.8	27.64	W 10 x 4 x 19	19	
W 250 x 145 x 32.7	32.70	258.00	146.00	6.10	9.10	8.00	41.75	240.00	224.00	M16	72.00	76.00	1.07400	32.77	4895	379.4	424.9	10.83	17.19	472.6	64.74	99.48	3.36	33.67	10.05	73.1	W 10 x 5.75 x 22	22	
W 250 x 145 x 38.5	38.50	262.00	147.00	6.60	11.20	8.00	49.29	240.00	224.00	M16	74.00	78.00	1.08500	28.04	6014	459.1	514.1	11.05	18.89	593.7	80.77	123.9	3.47	38.37	17.03	93.24	W 10 x 5.75 x 26	26	
W 250 x 145 x 44.8	44.80	266.00	148.00	7.60	13.00	8.00	57.27	240.00	224.00	M16	74.00	78.00	1.09500	24.36	7118	535.2	603	11.14	21.91	703.5	95.06	146.2	3.5	42.99	26.45	112.4	W 10 x 5.75 x 30	30	
W 250 x 200 x 49.1	49.10	247.00	202.00	7.40	11.00	13.00	62.54	225.00	199.00	M27	90.00	112.00	1.26500	25.76	7069	572.4	633.9	10.63	21.77	1513	149.8	228.5	4.92	44.63	24.53	210.4	W 10 x 8 x 33	33	
W 250 x 200 x 58	58.00	252.00	203.00	8.00	13.50	13.00	74.26	225.00	199.00	M27	90.00	113.00	1.27800	21.92	8736	693.4	770.8	10.85	24.04	1884	185.6	282.8	5.04	50.23	41.11	267.7	W 10 x 8 x 39	39	
W 250 x 200 x 67	67.00	257.00	204.00	8.90	15.70	13.00	85.59	225.00	199.00	M27	90.00	114.00	1.29000	19.20	10360	806.6	902	11	27.01	2224	218	332.2	5.1	55.53	62.61	323.4	W 10 x 8 x 45	45	
W 250 x 250 x 73	73.00	253.00	254.00	8.60	14.20	13.00	92.90	225.00	199.00	M27	102.00	148.00	1.48200	20.33	11290	892.1	986.1	11.02	25.78	3880	305.5	463.3	6.46	52.27	57.94	552.9	W 10 x 10 x 49	49	
W 250 x 250 x 80	80.00	256.00	255.00	9.40	15.60	13.00	102.10	225.00	199.00	M27	102.00	150.00	1.49100	18.59	12570	982.4	1091	11.1	28.1	4314	338.3	513.3	6.5	55.83	76.15	622.9	W 10 x 10 x 54	54	
W 250 x 250 x 89	89.00	260.00	256.00	10.70	17.30	13.00	114.10	225.00	199.00	M27	104.00	150.00	1.50000	16.74	14260	1097	1226	11.18	31.84	4841	378.2	574.5	6.51	60.5	104.4	712.4	W 10 x 10 x 60	60	
W 250 x 250 x 101	101.00	264.00	257.00	11.90	19.60	13.00	128.90	225.00	199.00	M27	106.00	152.00	1.51000	14.92	16380	1241	1398	11.27	35.73	5549	431.9	656.6	6.56	66.37	150.3	828	W 10 x 10 x 68	68	
W 250 x 250 x 115	115.00	269.00	259.00	13.50	22.10	13.00	146.30	225.00	199.00	M27	106.00	154.00	1.52500	13.28	18940	1408	1599	11.38	40.43	6405	494.6	752.8	6.62	72.89	215.3	975.3	W 10 x 10 x 77	77	
W 250 x 250 x 131	131.00																												

# Vigas Wide Flange WF ASTM A-572/992 Gr.50

## Perfil americano de alas anchas

PROPIEDADES DEL PERFIL																												
DENOMINACIÓN (METR)	DIMENSIONES							DIMENSIONES DE CONSTRUCCIÓN					SUPERFICIE		EJE FUERTE Y-Y					EJE DÉBIL Z-Z						DENOMINACIÓN (IMPERIAL)	lbs/ft	
	G	h	b	tw	tf	r	A	hi	d	e	pmin	pmax	AL	AG	Iy	Iwy	Ipy	Iy	Avz	Iz	Iwz	Ipz	Iz	ss	It			Iw
	kg/m	mm	mm	mm	mm	mm	mm <sup>2</sup> X102	mm	mm	mm	mm	m <sup>2</sup> /m	m <sup>2</sup> /t	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x102	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x104	mm <sup>4</sup> x109	mm <sup>4</sup> x104	mm <sup>4</sup> x109		
W 310 x 100 x 32.7	32.70	313.00	102.00	6.60	10.80	8.00	41.81	2911.0	275.10	-	-	-	1.00700	30.68	6507	415.8	480.9	12.47	22.22	191.9	376.2	59.63	214	375.7	12.36	43.61	W 12 x 4 x 22	22
W 310 x 165 x 38.7	38.70	310.00	165.00	5.80	9.70	8.00	49.41	2911.0	275.10	M20	80.00	84.00	1.25500	32.34	8527	5501	611.8	13.12	19.64	726.8	881	134.8	3.83	34.61	12.76	163.7	W 12 x 6.5 x 26	26
W 310 x 165 x 44.5	44.50	313.00	166.00	6.60	11.20	8.00	56.91	2911.0	275.10	M20	80.00	84.00	1.26300	28.27	9934	634.8	708.3	13.21	22.26	854.7	103	157.8	3.88	38.37	19.3	194.4	W 12 x 6.5 x 30	30
W 310 x 165 x 52	52.00	317.00	167.00	7.60	13.20	8.00	66.72	2911.0	275.10	M20	82.00	86.00	1.27300	24.31	11850	747.7	838.5	13.32	25.81	1026	122.9	188.6	3.92	43.39	31.1	236.4	W 12 x 6.5 x 35	35
W 310 x 200 x 60	60.00	303.00	203.00	7.50	13.10	15.00	75.88	2771.0	247.10	M27	90.00	113.00	1.37700	23.12	12860	848.9	940.7	13.02	27.6	1829	180.2	275.2	4.91	51.27	39.15	383.7	W 12 x 8 x 40	40
W 310 x 200 x 67	67.00	306.00	204.00	8.50	14.60	15.00	85.03	2771.0	247.10	M27	102.00	114.00	1.38500	20.75	14510	948.4	1057	13.06	31.08	2069	202.8	310.3	4.93	55.27	54.03	438.5	W 12 x 8 x 45	45
W 310 x 200 x 74	74.00	310.00	205.00	9.40	16.30	15.00	94.84	2771.0	247.10	M27	90.00	115.00	1.39500	18.74	16450	1061	1188	13.17	34.43	2344	228.7	350.2	4.97	59.57	74.05	504.7	W 12 x 8 x 50	50
W 310 x 250 x 79	79.00	306.00	254.00	8.80	14.60	15.00	100.50	2771.0	247.10	M27	90.00	164.00	1.58500	20.09	17670	1155	1275	13.26	31.95	3990	314.2	477.8	6.3	55.57	65.49	846.5	W 12 x 10 x 53	53
W 310 x 250 x 86	86.00	310.00	254.00	9.10	16.30	15.00	110.00	2771.0	247.10	M27	90.00	164.00	1.59200	18.44	19850	1280	1417	13.43	33.55	4455	350.8	533.1	6.36	59.27	86.96	960	W 12 x 10 x 58	58
W 310 x 310 x 97	97.00	308.00	306.00	9.90	15.40	15.00	123.30	2771.0	247.10	M27	102.00	200.00	1.79000	18.50	22240	1444	1591	13.43	35.52	726.8	478.7	747.7	7.69	58.27	91.95	1659	W 12 x 12 x 65	65
W 310 x 310 x 107	107.00	311.00	306.00	10.90	17.00	15.00	136.20	2771.0	247.10	M27	104.00	200.00	1.79800	16.83	24790	1594	1765	13.49	39.08	8123	530.9	805.8	7.72	62.47	122.1	1754	W 12 x 12 x 72	72
W 310 x 310 x 117	117.00	314.00	307.00	11.90	18.70	15.00	149.70	2771.0	247.10	M27	106.00	202.00	1.80600	15.38	27510	1753	1949	13.56	42.68	9024	587.9	892.8	7.76	66.87	161.1	1966	W 12 x 12 x 79	79
W 310 x 310 x 129	129.00	318.00	308.00	13.10	20.60	15.00	165.10	2771.0	247.10	M27	106.00	202.00	1.81600	14.01	30770	1935	2164	13.65	47.07	10040	651.9	990.9	7.8	71.87	214.5	2218	W 12 x 12 x 87	87
W 310 x 310 x 143	143.00	323.00	309.00	14.00	22.90	15.00	182.30	2771.0	247.10	M27	108.00	204.00	1.82800	12.78	34760	2153	2419	13.81	50.82	1109	786	1109	7.86	77.37	288.3	2535	W 12 x 12 x 96	96
W 310 x 310 x 158	158.00	327.00	310.00	15.50	25.10	15.00	200.50	2771.0	247.10	M27	108.00	204.00	1.83700	11.68	39630	2363	2672	13.88	56.26	12470	804.8	1225	7.89	83.27	380.3	2840	W 12 x 12 x 106	106
W 310 x 310 x 179	179.00	333.00	313.00	18.00	28.10	15.00	227.70	2771.0	247.10	M27	112.00	208.00	1.85600	10.39	44530	2675	3053	13.99	65.24	14380	918.7	1401	7.95	91.77	543.7	3338	W 12 x 12 x 120	120
W 310 x 310 x 202	202.00	341.00	315.00	20.10	31.80	15.00	258.00	2771.0	247.10	M27	114.00	210.00	1.87600	9.26200	5182	3049	3510	14.19	73.62	16590	1053	1608	8.02	101.3	782.7	3959	W 12 x 12 x 136	136
W 310 x 310 x 226	226.00	348.00	317.00	22.10	35.60	15.00	288.80	2771.0	247.10	M27	116.00	212.00	1.89400	8.35400	59560	3423	3975	14.36	81.65	18930	1194	1825	8.11	110.9	1089	4611	W 12 x 12 x 152	152
W 310 x 310 x 253	253.00	356.00	319.00	24.40	39.60	15.00	322.10	2771.0	247.10	M27	118.00	214.00	1.91300	7.56700	68230	3833	4490	14.55	91.01	21460	1346	2059	8.16	121.2	1495	5362	W 12 x 12 x 170	170
W 310 x 310 x 283	283.00	365.00	322.00	26.90	44.10	15.00	360.40	2771.0	247.10	M27	120.00	216.00	1.93800	6.85200	78880	4311	5098	14.78	101.5	24590	1527	2340	8.26	132.7	2062	6317	W 12 x 12 x 190	190
W 310 x 310 x 313	313.00	374.00	325.00	30.00	48.30	15.00	399.10	2771.0	247.10	M27	124.00	220.00	1.96200	6.26500	89560	4789	5716	14.98	114.1	27700	1705	2617	8.33	144.2	2742	7329	W 12 x 12 x 210	210
W 310 x 310 x 342	342.00	382.00	328.00	32.60	52.60	15.00	437.20	2771.0	247.10	M27	126.00	222.00	1.98500	5.78400	100500	5262	6334	15.16	125.1	31020	1892	2907	8.42	155.4	3552	8392	W 12 x 12 x 230	230
W 360 x 130 x 32.9	32.90	349.00	127.00	5.80	8.50	10.00	41.70	332.00	312.00	M12	62.00	70.00	1.17700	35.96	8258	473.2	541.5	14.07	22.31	291	45.82	71.8	2.64	34.52	8.65	84.11	W 14 x 5 x 22	22
W 360 x 130 x 39.0	39.00	353.00	128.00	6.50	10.70	10.00	49.80	332.00	312.00	M12	64.00	70.00	1.18800	30.38	10230	579.7	661.5	14.33	25.25	375	58.6	91.6	2.74	39.62	15.04	109.6	W 14 x 5 x 26	26
W 360 x 170 x 44.6	44.60	352.00	171.00	6.90	9.80	10.00	57.31	332.00	312.00	M22	82.00	84.00	1.35700	30.16	12440	690.1	777	14.57	26.29	817.9	95.66	147.7	3.78	38.18	16.1	239.1	W 14 x 6.75 x 30	30
W 360 x 170 x 51	51.00	355.00	171.00	7.20	11.60	10.00	64.42	332.00	312.00	M22	84.00	84.00	1.36200	26.94	14130	796.3	894.5	14.8	28.04	968.1	113.2	174.4	3.87	42.16	25.92	285	W 14 x 6.75 x 34	34
W 360 x 170 x 58	58.00	358.00	172.00	7.90	13.10	10.00	72.13	332.00	312.00	M22	84.00	84.00	1.37100	24.21	16040	896.2	1009	14.91	30.73	1113	129.4	199.5	3.93	45.82	33.46	330.4	W 14 x 6.75 x 38	38
W 360 x 200 x 64	64.00	347.00	203.00	7.70	13.50	15.00	81.38	320.00	290.00	M27	90.00	113.00	1.46500	22.93	17830	1027	1141	14.8	31.66	1885	185.7	284.3	4.81	52.27	43.21	523.4	W 14 x 8 x 43	43
W 360 x 200 x 72	72.00	350.00	204.00	8.60	15.10	15.00	91.04	320.00	290.00	M27	90.00	114.00	1.47300	20.61	20100	1149	1282	14.86	35.26	2140	209.8	321.6	4.85	56.37	59.71	599.1	W 14 x 8 x 48	48
W 360 x 200 x 79	79.00	354.00	205.00	9.40	16.80	15.00	100.90	320.00	290.00	M27	90.00	115.00	1.48300	18.72	22650	1280	1433	14.98	38.67	2416	235.7	361.6	4.89	60.57	80.72	685.7	W 14 x 8 x 53	53
W 360 x 250 x 91	91.00	353.00	254.00	9.50	16.40	15.00	115.70	320.00	290.00	M27	90.00	164.00	1.67700	18.47	26690	1512	1676	15.19	38.83	4483	353	537.8	6.23	59.87	91.18	1269	W 14 x 10 x 61	61
W 360 x 250 x 101	101.00	357.00	255.00	10.50	18.30	15.00	128.90	320.00	290.00	M27	91.00	165.00	1.68700	16.67	30150	1689	1880	15.29	42.98	5062	397	605.5	6.27	64.67	125.3	1450	W 14 x 10 x 68	68
W 360 x 250 x 110	110.00	360.00	256.00	11.40	19.90	15.00	140.30	320.00	290.00	M27	91.00	166.00	1.69500	15.39	33090	1838	2055	15.36	46.67	5570	435.2	664.2	6.3	68.77	160.3	1609	W 14 x 10 x 74	74
W 360 x 250 x 122	122.00	363.00	257.00	13.00	21.70	15.00	155.00	320.00	290.00	M27	93.00	167.00	1.70200	13.99	36530	2013	2266	15.35	52.81	6147	478.4	732	6.3	73.97	211.8	1788	W 14 x 10 x 82	82
W 360 x 370 x 134	134.00	356.00	369.00	11.20	18.00	15.00	170.60	320.00	290.00	M27	100.00	264.00	2.14000	15.98	41510	2332	2562	15.6	45.19	15080	817.3	1237	9.4	64.77	168.8	4305	W 14 x 14.5 x 90	90
W 360 x 370 x 147	147.00	360.00	370.00	12.30	19.80	15.00	187.90	320.00	290.00	M27	100.00	264.00	2.15000	14.58	46290	2572	2838	15.7	49.72	16720	903.9	1369	9.43	69.47	223.7	4836	W 14 x 14.5 x 99	99
W 360 x 370 x 162	162.00	364.00	371.00	13.30	21.80	15.00	206.30	320.00	290.00	M27	102.00	266.00	2.16000	13.34	51540	2832	3139	15.81	53.98	18560	1001	1516	9.49	74.47	295.5	5432	W 14 x 14.5 x 109	109
W 360 x 370 x 179	179.00	368.00	373.00	15.00	23.90	15.00	228.30	320.																				

# Vigas Wide Flange WF ASTM A-572/992 Gr.50

## Perfil americano de alas anchas

PROPIEDADES DEL PERFIL																													
DENOMINACIÓN (METRI)	DIMENSIONES							DIMENSIONES DE CONSTRUCCIÓN					SUPERFICIE		EJE FUERTE Y-Y					EJE DÉBIL Z-Z					DENOMINACIÓN (IMPERIAL)	lbs/ft			
	G	h	b	tw	tf	r	A	hi	d	e	pmin	pmax	AL	AG	Iy	IyL	IyL	Iy	Iz	Iz	Iz	Iz	Iz	Iz			Iz	Iz	Iz
	kg/m	mm	mm	mm	mm	mm	mm <sup>2</sup> X102	mm	mm	mm	mm	mm	m <sup>2</sup> /m	m <sup>2</sup> /t	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x102	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x104	mm <sup>4</sup> x103	mm <sup>4</sup> x103	mm <sup>4</sup> x10	mm <sup>4</sup> x104	mm <sup>4</sup> x109
W 360 x 410 x 347	347.00	407.00	404.00	27.20	43.70	15.00	442.00	320.00	290.00	M27	116.00	298.00	2,350.00	6,773.00	124900	640	719	16.81	113.9	48090	2380	3629	10.43	132.2	2510	15850	W 14 x 16 x 233	233	
W 360 x 410 x 382	382.00	416.00	406.00	29.80	48.00	15.00	487.00	320.00	290.00	M27	118.00	300.00	2,371.00	6,200.00	141300	6794	7965	17.03	126	53620	2641	4031	10.49	143.4	3326	18130	W 14 x 16 x 257	257	
W 360 x 410 x 421	421.00	425.00	409.00	32.80	52.60	15.00	537.00	320.00	290.00	M27	122.00	304.00	2,395.00	5,680.00	159600	7510	8880	17.24	139.9	60080	2938	4489	10.58	155.6	4398	20800	W 14 x 16 x 283	283	
W 360 x 410 x 463	463.00	435.00	412.00	35.80	57.40	15.00	589.50	320.00	290.00	M27	124.00	306.00	2,421.00	5,231.00	180200	8283	9878	17.48	154.3	67040	3254	4978	10.66	168.2	5735	23850	W 14 x 16 x 311	311	
W 360 x 410 x 509	509.00	446.00	416.00	39.10	62.70	15.00	649.00	320.00	290.00	M27	128.00	310.00	2,452.00	4,813.00	204500	9172	11030	17.75	170.6	75400	3625	5552	10.78	182.1	7513	27630	W 14 x 16 x 342	342	
W 360 x 410 x 551	551.00	455.00	418.00	42.00	67.60	15.00	701.40	320.00	290.00	M27	132.00	312.00	2,472.00	4,490.00	226000	9939	12050	17.95	184.9	82490	3947	6051	10.85	194.8	9410	30870	W 14 x 16 x 370	370	
W 360 x 410 x 592	592.00	465.00	421.00	45.00	72.30	15.00	754.90	320.00	290.00	M27	134.00	316.00	2,498.00	4,216.00	250200	10760	13140	18.2	200.3	90170	4284	6574	10.93	207.2	11560	34670	W 14 x 16 x 398	398	
W 360 x 410 x 634	634.00	474.00	424.00	47.60	77.70	15.00	808.00	320.00	290.00	M27	140.00	312.00	2,523.00	3,978.00	274200	11570	14220	18.42	214	98250	4634	7117	11.03	219.4	14020	38570	W 14 x 16 x 426	426	
W 360 x 410 x 677	677.00	483.00	428.00	51.20	81.50	15.00	863.40	320.00	290.00	M27	144.00	316.00	2,550.00	3,762.00	299500	12400	15350	18.62	231.9	106900	4994	7680	11.13	231.8	16790	42920	W 14 x 16 x 455	455	
W 360 x 410 x 744	744.00	498.00	432.00	55.60	88.90	15.00	948.10	320.00	290.00	M27	148.00	320.00	2,587.00	3,476.00	342000	13740	17170	19	256.1	119900	5552	8549	11.25	251	21840	49980	W 14 x 16 x 500	500	
W 360 x 410 x 818	818.00	514.00	437.00	60.50	97.00	15.00	1043.00	320.00	290.00	M27	154.00	326.00	2,629.00	3,210.00	392200	15260	19260	19.39	283.3	135500	6203	9561	11.4	272.1	28510	58650	W 14 x 16 x 550	550	
W 360 x 410 x 900	900.00	531.00	442.00	65.90	106.00	15.00	1149.00	320.00	290.00	M27	158.00	330.00	2,672.00	2,962.00	450200	16960	21620	19.79	313.8	153300	6938	10710	11.55	295.5	37350	68890	W 14 x 16 x 605	605	
W 360 x 410 x 990	990.00	550.00	448.00	71.90	115.00	15.00	1262.00	320.00	290.00	M27	164.00	336.00	2,722.00	2,747.00	518900	18870	24280	20.27	349.2	173400	7739	11960	11.72	319.5	48210	81530	W 14 x 16 x 665	665	
W 360 x 410 x 1086	1086.00	569.00	454.00	78.00	125.00	15.00	1386.00	320.00	290.00	M27	170.00	342.00	2,772.00	2,548.00	595700	20940	27210	20.73	385.8	196200	8645	13087	11.9	345.6	62290	96080	W 14 x 16 x 730	730	
W 360 x 410 x 1202	1202.00	580.00	471.00	95.00	130.00	15.00	1530.00	320.00	290.00	M 27	188.00	360.00	2,828.00	2,353.00	663600	22880	30020	20.82	469.6	228700	9712	15150	12.22	373	79320	114600	W 14 x 16 x 808	808	
W 360 x 410 x 1299	1299.00	600.00	476.00	100.00	140.00	15.00	1650.00	320.00	290.00	M 27	192.00	364.00	2,878.00	2,215.00	754600	25150	33250	21.35	505.2	254400	10690	16670	12.4	398	98140	133100	W 14 x 16 x 873	873	
W 410 x 140 x 388	388.00	399.00	140.00	6.40	8.80	10.00	49.91	381.00	361.00	M12	68.00	82.00	1,328.00	33.90	12620	632.6	727.8	15.93	27.4	403.5	57.65	90.55	2.85	35.67	11.17	153.2	W 16 x 5.5 x 26	26	
W 410 x 140 x 461	461.00	403.00	140.00	7.00	11.20	10.00	58.86	381.00	361.00	M12	68.00	82.00	1,328.00	28.89	15550	771.9	883.6	16.26	30.49	513.6	73.37	114.9	2.95	41.19	19.25	196.6	W 16 x 5.5 x 31	31	
W 410 x 180 x 53	53.00	403.00	177.00	7.50	10.90	10.00	68.03	381.00	361.00	M22	86.00	90.00	1,482.00	27.75	18600	922.9	1045	16.54	32.41	1009	114	176.6	3.85	41.01	22.75	387.2	W 16 x 7 x 36	36	
W 410 x 180 x 60	60.00	407.00	178.00	7.70	12.80	10.00	75.79	381.00	361.00	M22	86.00	90.00	1,493.00	25.10	21570	1060	1194	16.87	33.77	1205	135.4	209	3.99	45.02	32.81	467.4	W 16 x 7 x 40	40	
W 410 x 180 x 67	67.00	410.00	179.00	8.80	14.40	10.00	85.96	381.00	361.00	M22	86.00	92.00	1,501.00	22.25	24530	1196	1354	16.91	38.39	1379	154.1	238.6	4.01	49.28	46.9	538.5	W 16 x 7 x 45	45	
W 410 x 180 x 75	75.00	413.00	180.00	9.70	16.00	10.00	95.42	381.00	361.00	M22	88.00	92.00	1,509.00	20.15	27460	1330	1510	16.98	42.37	1599	173.2	268.7	4.05	53.37	63.79	612.8	W 16 x 7 x 50	50	
W 410 x 180 x 85	85.00	417.00	181.00	10.90	18.20	10.00	108.20	381.00	361.00	M22	90.00	94.00	1,519.00	17.88	31530	1512	1725	17.06	48.05	1803	199.3	310.1	4.08	59.04	93.24	715.2	W 16 x 7 x 57	57	
W 410 x 260 x 100	100.00	415.00	260.00	10.00	16.90	10.00	126.90	381.00	361.00	M27	90.00	170.00	1,833.00	18.40	39760	1916	2129	17	44.05	4954	381.1	581.4	6.25	55.52	99.7	1961	W 16 x 10.25 x 67	67	
W 410 x 260 x 114	114.00	420.00	261.00	11.60	19.30	10.00	145.80	381.00	361.00	M27	92.00	171.00	1,844.00	16.10	46140	2197	2456	17.79	51.2	5725	438.7	670.9	6.27	61.92	149.4	2296	W 16 x 10.25 x 77	77	
W 410 x 260 x 132	132.00	425.00	263.00	13.30	22.20	10.00	168.30	381.00	361.00	M27	95.00	173.00	1,858.00	14.07	53830	2533	2850	17.89	58.87	6739	512.5	785.4	6.33	69.42	227.1	2730	W 16 x 10.25 x 89	89	
W 410 x 260 x 149	149.00	431.00	265.00	14.90	25.00	10.00	190.10	381.00	361.00	M27	95.00	175.00	1,875.00	12.56	61840	2870	3247	18.04	66.35	7765	586.1	899.8	6.39	76.62	324.1	3195	W 16 x 10.25 x 100	100	
W 460 x 150 x 52	52.00	450.00	152.00	7.60	10.80	10.00	66.25	428.00	408.00	M16	76.00	82.00	1,476.00	28.37	21200	942	1088	17.89	36.4	634	83.43	131.5	3.09	40.92	21.24	304.8	W 18 x 6 x 35	35	
W 460 x 150 x 60	60.00	455.00	153.00	8.00	13.30	10.00	75.83	428.00	408.00	M16	76.00	84.00	1,489.00	25.01	25480	1120	1284	18.33	38.85	796.1	104.1	163.1	3.24	46.32	33.58	387.2	W 18 x 6 x 40	40	
W 460 x 150 x 68	68.00	459.00	154.00	9.10	15.40	10.00	87.26	428.00	408.00	M16	78.00	84.00	1,499.00	21.88	29680	1293	1487	18.44	44.31	940.5	123.7	192.1	3.28	51.62	51.07	461.2	W 18 x 6 x 46	46	
W 460 x 190 x 74	74.00	457.00	190.00	9.00	14.50	10.00	94.48	428.00	408.00	M24	92.00	96.00	1,639.00	22.10	33260	1456	1650	18.75	43.67	1661	174.8	271	4.19	49.74	52.03	811.4	W 18 x 7.5 x 50	50	
W 460 x 190 x 82	82.00	460.00	191.00	9.90	16.00	10.00	104.40	428.00	408.00	M24	92.00	98.00	1,647.00	20.11	37000	1608	1829	18.83	48.06	1862	195	303	4.22	53.63	69.55	915.7	W 18 x 7.5 x 55	55	
W 460 x 190 x 89	89.00	463.00	192.00	10.50	17.70	10.00	113.70	428.00	408.00	M24	94.00	98.00	1,656.00	18.55	40960	1769	2013	18.96	51.33	2093	218	338.8	4.29	57.66	91.36	1035	W 18 x 7.5 x 60	60	
W 460 x 190 x 97	97.00	466.00	193.00	11.40	19.00	10.00	123.00	428.00	408.00	M24	94.00	100.00	1,664.00	17.24	44680	1917	2189	19.02	55.76	2282	237.8	370.4	4.31	61.35	113.9	1137	W 18 x 7.5 x 65	65	
W 460 x 190 x 106	106.00	469.00	194.00	12.60	20.60	10.00	134.70	428.00	408.00	M24	96.00	100.00	1,672.00	15.81	48790	2081	2385	19.04	61.34	2515	259.2	405.3	4.32	65.49	146.6	1280	W 18 x 7.5 x 71	71	
W 460 x 280 x 113	113.00	463.00	280.00	10.80	17.30	10.00	144.00	428.00	408.00	M27	90.00	174.00	2,007.00	17.76	55600	2402	2673	19.65	52.45	6335	452.5	691.3	6.63	57.12	118.8	3143	W 18 x 11 x 76	76	

# Vigas Wide Flange WF ASTM A-572/992 Gr.50

## Perfil americano de alas anchas

DENOMINACIÓN (METRI)	PROPIEDADES DEL PERFIL																												DENOMINACIÓN (IMPERIAL)	lbs/ft
	DIMENSIONES						DIMENSIONES DE CONSTRUCCIÓN						SUPERFICIE		EJE FUERTE Y-Y						EJE DÉBIL Z-Z									
	G	h	b	tw	tf	r	A	hi	d	ø	pmin	pmax	AL	AG	Iy	Wply	Iy	Wply	Iy	Avz	Iz	Wplz	Iz	ss	It	Iw				
kg/m	mm	mm	mm	mm	mm	mm <sup>2</sup> X102	mm	mm	mm	mm	mm	m <sup>2</sup> /m	m <sup>2</sup> /t	mm <sup>4</sup> x104	mm <sup>3</sup> x103	mm <sup>4</sup> x103	mm <sup>3</sup> x10	mm <sup>2</sup> x102	mm <sup>4</sup> x104	mm <sup>3</sup> x103	mm <sup>2</sup> x10	mm <sup>4</sup> x104	mm <sup>3</sup> x103	mm <sup>2</sup> x10	mm <sup>4</sup> x104	mm <sup>3</sup> x103				
W 530 x 165 x 66	66.00	525.00	165.00	8.90	11.40	13.00	83.77	501.90	475.90	M22	89.00	93.00	1670.00	25.39	35100	1337	1563	20.47	5013	8573	103.9	166.2	3.2	46.93	3329	562.9	W 21 x 65 x 44	44		
W 530 x 165 x 74	74.00	529.00	166.00	9.70	13.60	13.00	95.28	501.90	475.90	M22	90.00	94.00	1680.00	22.47	41100	1554	1810	20.77	5498	1042	125.5	200.3	3.31	52.13	492	688.6	W 21 x 65 x 50	50		
W 530 x 165 x 85	85.00	535.00	166.00	10.30	16.50	13.00	107.90	501.90	475.90	M22	90.00	94.00	1691.00	19.96	48580	1816	2105	21.22	5915	1264	152.2	241.8	3.42	58.53	745.5	845.5	W 21 x 65 x 57	57		
W 530 x 210 x 72	72.00	524.00	207.00	9.00	10.90	13.00	91.80	501.90	475.90	M27	94.00	104.00	1836.00	25.48	40100	1530	1761	20.9	5046	1615	156.1	244.8	4.2	46.03	354.1	1061	W 21 x 82.5 x 48	48		
W 530 x 210 x 82	82.00	528.00	209.00	9.50	13.30	13.00	104.70	501.90	475.90	M27	94.00	104.00	1851.00	22.52	47700	1807	2064	21.35	5381	1941	162.8	262.9	4.4	51.33	529.6	1340	W 21 x 82.5 x 55	55		
W 530 x 210 x 92	92.00	533.00	209.00	10.20	15.60	13.00	117.80	501.90	475.90	M27	94.00	104.00	1859.00	20.10	55240	2073	2362	21.67	5807	2379	172.7	354.8	4.5	56.59	76.96	1589	W 21 x 82.5 x 62	62		
W 530 x 210 x 101	101.00	537.00	210.00	10.90	17.40	13.00	129.30	501.90	475.90	M27	94.00	104.00	1870.00	18.43	61760	2300	2623	21.85	6272	2692	185.6	399.9	4.56	60.95	102.9	1813	W 21 x 82.5 x 68	68		
W 530 x 210 x 109	109.00	539.00	211.00	11.60	18.80	13.00	138.90	501.90	475.90	M27	96.00	106.00	1876.00	17.20	66730	2476	2826	21.93	6647	2951	193.7	436.5	4.61	64.39	1274	1991	W 21 x 82.5 x 73	73		
W 530 x 210 x 138	138.00	549.00	214.00	14.70	23.60	13.00	176.20	501.90	475.90	M27	98.00	108.00	1902.00	13.75	86160	3139	3617	22.1	8498	3870	261.7	569.1	4.68	77.16	254	2660	W 21 x 82.5 x 93	93		
W 610 x 180 x 82	82.00	599.00	178.00	10.00	12.80	13.00	104.40	573.00	547.00	M24	90.00	100.00	1868.00	22.80	56030	1871	2199	23.17	63.4	1209	135.8	218.3	3.4	50.83	50.58	1034	W 24 x 7 x 55	55		
W 610 x 180 x 92	92.00	603.00	179.00	10.90	15.00	13.00	117.60	573.00	547.00	M24	91.00	101.00	1878.00	20.34	64680	2145	2515	23.45	69.44	1441	161	258.5	3.5	56.13	72.81	1239	W 24 x 7 x 62	62		
W 610 x 230 x 101	101.00	603.00	228.00	10.50	14.90	13.00	129.60	573.00	547.00	M27	94.00	122.00	2075.00	20.40	76470	2536	2905	24.27	67.31	2950	258.8	404.4	4.77	55.57	79.88	2545	W 24 x 9 x 68	68		
W 610 x 230 x 113	113.00	608.00	228.00	11.20	17.30	13.00	144.60	573.00	547.00	M27	94.00	122.00	2083.00	18.36	87570	2881	3290	24.62	71.99	3425	300.5	468.8	4.87	61.01	113.3	2981	W 24 x 9 x 76	76		
W 610 x 230 x 125	125.00	612.00	229.00	11.90	19.60	13.00	159.40	573.00	547.00	M27	96.00	124.00	2094.00	16.74	98650	3224	3679	24.86	77.28	3932	343.4	535.6	4.96	66.37	156	3442	W 24 x 9 x 84	84		
W 610 x 230 x 140	140.00	617.00	230.00	13.10	22.20	13.00	178.60	573.00	547.00	M27	96.00	124.00	2105.00	15.02	112000	3630	4150	25.05	85.02	4514	392.5	631	5.03	72.71	220	3982	W 24 x 9 x 94	94		
W 610 x 325 x 153	153.00	623.00	229.00	14.00	24.90	13.00	195.70	573.00	547.00	M27	94.00	139.00	2112.00	13.74	125200	4019	4602	25.29	91.66	4998	436.5	682.4	5.05	79.03	297.5	4457	W 24 x 9 x 103	103		
W 610 x 325 x 155	155.00	611.00	324.00	12.70	19.00	13.00	197.30	573.00	547.00	M27	96.00	218.00	2470.00	15.95	129000	4222	4728	25.57	81.57	10780	666	1022	7.39	65.93	197.7	943.7	W 24 x 12.75 x 104	104		
W 610 x 325 x 174	174.00	616.00	325.00	14.00	21.60	13.00	222.00	573.00	547.00	M27	98.00	220.00	2482.00	14.24	147200	4778	5362	25.74	90.28	12370	761	1170	7.46	72.43	283.2	1092.0	W 24 x 12.75 x 117	117		
W 610 x 325 x 195	195.00	622.00	327.00	15.40	24.40	13.00	249.30	573.00	547.00	M27	98.00	222.00	2499.00	12.77	167900	5398	6074	25.95	99.83	14240	871	1340	7.56	79.43	400.9	1270.0	W 24 x 12.75 x 131	131		
W 610 x 325 x 217	217.00	628.00	328.00	16.50	27.70	13.00	277.60	573.00	547.00	M27	100.00	222.00	2513.00	11.53	190800	6076	6848	26.21	107.7	16310	995	1531	7.67	87.13	564.6	1468.0	W 24 x 12.75 x 146	146		
W 610 x 325 x 241	241.00	635.00	329.00	17.90	31.00	13.00	308.00	573.00	547.00	M27	100.00	224.00	2528.00	10.46	215400	6785	7671	26.45	117.6	18430	1120	1725	7.74	95.13	776.5	1678.0	W 24 x 12.75 x 162	162		
W 610 x 325 x 262	262.00	641.00	327.00	19.00	34.00	13.00	332.70	573.00	547.00	M27	102.00	222.00	2530.00	9.68700	236000	7363	8349	26.63	125.6	19850	1214	1871	7.72	102.2	998.1	1825.0	W 24 x 12.75 x 176	176		
W 610 x 325 x 285	285.00	647.00	329.00	20.60	37.10	13.00	363.60	573.00	547.00	M27	104.00	224.00	2546.00	8.92300	260700	8059	9175	26.78	136.7	22060	1341	2071	7.79	110	1295	2048.0	W 24 x 12.75 x 192	192		
W 610 x 325 x 307	307.00	653.00	330.00	22.10	39.90	13.00	391.50	573.00	547.00	M27	104.00	224.00	2559.00	8.32900	283700	8688	9929	26.92	147.3	23950	1452	2245	7.82	1171	1608	2246.0	W 24 x 12.75 x 207	207		
W 610 x 325 x 341	341.00	661.00	333.00	24.40	43.90	13.00	433.70	573.00	547.00	M27	108.00	228.00	2583.00	7.58700	318300	9630	11070	27.09	163.4	27090	1627	2522	7.9	1274	2153	2572.0	W 24 x 12.75 x 229	229		
W 610 x 325 x 415	415.00	679.00	338.00	29.50	53.10	13.00	529.40	573.00	547.00	M27	114.00	232.00	2629.00	6.32600	399800	11790	13690	27.48	199.9	34300	2030	3160	8.05	150.9	3824	3347.0	W 24 x 12.75 x 279	279		
W 610 x 325 x 455	455.00	689.00	340.00	32.00	57.90	13.00	578.60	573.00	547.00	M27	116.00	234.00	2652.00	5.83800	444500	12903	15093	27.72	218.5	38090	2241	3496	8.11	163	4948	3777.0	W 24 x 12.75 x 306	306		
W 610 x 325 x 498	498.00	699.00	343.00	35.10	63.00	13.00	634.80	573.00	547.00	M27	120.00	238.00	2677.00	5.37300	494700	14150	16670	27.92	241.1	42580	2483	3885	8.19	176.3	6420	4285.0	W 24 x 12.75 x 335	335		
W 610 x 325 x 551	551.00	711.00	347.00	38.60	69.10	13.00	702.10	573.00	547.00	M27	122.00	242.00	2710.00	4.91800	557500	15682	18599	28.18	267.2	48400	2790	4377	8.3	192	8525	4957.0	W 24 x 12.75 x 370	370		

