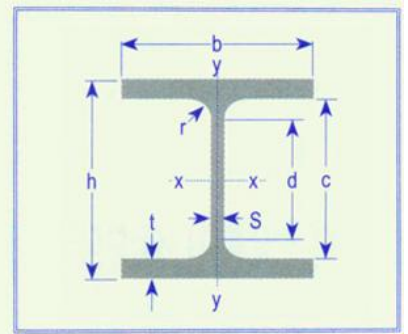


PERFIL H AMERICANO DE ALA ANCHA - WF

DIMENSIONES Y PROPIEDADES PARA EL DISEÑO

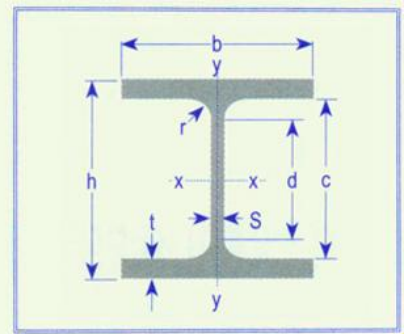
PERFILES WF	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS		AREA	PESO			EJE X-X			EJE Y-Y			Zx	Zy	
DESIGNACION	h	s	b	t	r	c			d	cm ²	kg/mt	Ix	Sx	rx	Iy	Sy	ry	cm ³	cm ³
	mm	mm	mm	mm	mm	mm	mm	cm ²	kg/mt	cm ⁴	cm ³	cm	cm ⁴	cm ³	cm	cm ³	cm ³	cm ⁴	
WF 4 X 13	102.00	6.50	100.00	9.40	6.00	83.20	71.20	24.50	19.35	441.00	86.40	4.24	157.00	31.40	2.53	99.50	48.00	6.90	
WF 4 X 13.8	102.00	8.00	102.00	9.40	6.00	83.20	71.20	26.10	20.54	456.00	89.40	4.18	167.00	32.70	2.53	104.00	50.40	8.13	
WF 4 X 16.3	107.00	7.90	100.00	12.00	6.00	83.00	71.00	30.90	24.26	587.00	110.00	4.36	200.00	40.10	2.55	129.00	61.50	13.70	
WF 5 X 16	127.00	6.10	127.00	9.10	8.00	108.80	92.80	30.30	23.81	886.00	139.00	5.41	311.00	49.00	3.20	157.00	74.70	8.10	
WF 5 X 19	131.00	6.90	128.00	10.90	8.00	109.00	93.20	36.00	28.28	1.099.00	168.00	5.53	381.00	59.60	3.26	191.00	90.90	13.40	
WF 6 X 9	150.00	4.30	100.00	5.50	6.00	139.00	127.00	17.30	13.50	685.50	91.40	6.29	91.80	18.36	2.30	102.40	28.26	1.74	
WF 6 X 12	153.00	5.80	102.00	7.10	6.00	138.40	126.40	22.90	18.00	915.90	122.10	6.33	125.90	25.37	2.36	138.60	39.29	3.86	
WF 6 X 16	160.00	6.60	102.00	10.30	6.00	139.40	127.40	30.60	24.00	1.342.00	167.80	6.63	182.60	35.80	2.45	191.50	55.24	9.35	
WF 6 X 15	152.00	5.80	152.00	6.60	6.00	138.80	126.80	28.40	22.32	1.205.00	159.00	6.51	387.00	50.90	3.69	176.00	77.50	4.31	
WF 6 X 20	157.00	6.60	153.00	9.30	6.00	138.40	126.40	37.90	29.76	1.714.00	218.00	6.73	556.00	72.60	3.83	244.00	111.00	10.20	
WF 6 X 25	162.00	8.10	154.00	11.60	6.00	138.80	126.80	47.30	37.20	2.219.00	274.00	6.85	707.00	91.80	3.87	310.00	140.00	19.50	
WF 8 X 10	200.00	4.30	100.00	5.20	8.00	189.60	173.60	19.10	15.00	1.280.00	128.00	8.18	86.89	17.38	2.13	145.20	27.10	1.93	
WF 8 X 13	203.00	5.80	102.00	6.50	8.00	190.00	174.00	24.80	19.30	1.662.00	163.70	8.17	115.40	22.63	2.15	188.10	35.69	3.99	
WF 8 X 15	206.00	6.20	102.00	8.00	8.00	190.00	174.00	28.60	22.50	2.004.00	194.50	8.36	142.00	27.85	2.22	222.80	43.72	5.97	
WF 8 X 14	203.00	5.00	133.00	6.40	8.00	190.20	174.20	27.08	21.00	1.980.00	195.10	8.55	251.30	37.78	3.05	217.70	58.03	3.74	
WF 8 X 18	207.00	5.80	133.00	8.40	8.00	190.20	174.20	33.90	26.79	2.585.00	250.00	8.73	330.00	49.60	3.12	279.00	76.20	7.31	
WF 8 X 21	210.00	6.40	134.00	10.20	8.00	189.60	173.60	40.00	31.25	3.124.00	299.00	8.86	410.00	61.10	3.20	336.00	93.80	12.10	
WF 8 X 24	201.00	6.20	165.00	10.20	10.00	180.60	160.60	45.70	35.72	3.437.00	342.00	8.67	764.00	92.60	4.09	379.00	141.00	14.50	
WF 8 X 28	205.00	7.20	166.00	11.80	10.00	181.40	161.40	53.10	41.67	4.086.00	399.00	8.77	900.00	108.00	4.12	445.00	165.00	22.30	
WF 8 X 31	203.00	7.20	203.00	11.00	10.00	181.00	161.00	58.60	46.13	4.543.00	448.00	8.81	1.535.00	151.00	5.12	495.00	229.00	22.20	
WF 8 X 35	206.00	7.90	204.00	12.60	10.00	180.80	160.80	66.50	52.09	5.270.00	512.00	8.90	1.784.00	175.00	5.18	569.00	266.00	32.50	
WF 8 X 40	210.00	9.10	205.00	14.20	10.00	181.60	161.60	75.60	59.53	6.111.00	582.00	8.99	2.040.00	199.00	5.20	653.00	303.00	46.80	
WF 8 X 48	216.00	10.20	206.00	17.40	10.00	181.20	161.20	91.00	71.43	7.660.00	709.00	9.17	2.537.00	246.00	5.28	803.00	375.00	82.10	
WF 8 X 58	222.00	13.00	209.00	20.60	10.00	180.80	160.80	110.00	86.31	9.469.00	853.00	9.26	3.138.00	300.00	5.33	981.00	458.00	141.00	
WF 8 X 67	229.00	14.50	210.00	23.70	10.00	181.60	161.60	127.00	99.71	11.330.00	989.00	9.45	3.664.00	349.00	5.38	1.149.00	533.00	211.00	
WF 10 X 12	251.00	4.80	101.00	5.30	8.00	240.40	224.40	22.80	17.90	2.252.00	179.50	9.92	91.34	18.09	2.00	207.80	28.67	2.50	
WF 10 X 15	254.00	5.80	102.00	6.90	8.00	240.20	224.20	28.50	22.30	2.901.00	228.40	10.06	122.60	24.03	2.07	264.60	38.20	4.68	
WF 10 X 17	257.00	6.10	102.00	8.40	8.00	240.20	224.20	32.20	25.30	3.430.00	266.90	10.30	149.20	29.25	2.15	307.50	46.20	6.77	
WF 10 X 19	260.00	6.40	102.00	10.00	8.00	240.00	224.00	36.30	28.40	3.998.00	307.50	10.51	177.50	34.81	2.21	352.90	54.71	9.80	
WF 10 X 16	253.00	5.00	145.00	6.40	8.00	240.20	224.20	31.12	24.00	3.477.00	274.80	10.57	325.60	44.90	3.23	307.50	69.02	4.16	
WF 10 X 22	258.00	6.10	146.00	9.10	8.00	239.80	223.80	41.70	32.74	4.895.00	379.00	10.80	473.00	64.70	3.36	425.00	99.50	10.00	
WF 10 X 26	262.00	6.60	147.00	11.20	8.00	239.60	223.60	49.30	38.69	6.014.00	459.00	11.00	594.00	80.80	3.47	514.00	124.00	17.00	
WF 10 X 30	266.00	7.60	148.00	13.00	8.00	240.00	224.00	57.30	44.65	7.115.00	535.00	11.10	703.00	95.10	3.50	603.00	146.00	26.40	
WF 10 X 33	247.00	7.40	202.00	11.00	13.00	225.00	199.00	62.50	49.11	7.069.00	572.00	10.60	1.513.00	150.00	4.92	634.00	228.00	24.50	
WF 10 X 39	252.00	8.00	203.00	13.50	13.00	225.00	199.00	74.30	58.04	8.736.00	693.00	10.80	1.884.00	186.00	5.04	771.00	283.00	41.10	
WF 10 X 45	257.00	8.90	204.00	15.70	13.00	225.60	199.60	85.60	66.97	10.360.00	807.00	11.00	2.224.00	218.00	5.10	902.00	332.00	62.60	
WF 10 X 49	253.00	8.60	254.00	14.20	13.00	224.60	198.60	92.90	72.92	11.280.00	892.00	11.00	3.880.00	306.00	6.46	986.00	463.00	57.80	
WF 10 X 54	256.00	9.40	255.00	15.60	13.00	224.80	198.80	102.00	80.36	12.570.00	982.00	11.10	4.314.00	338.00	6.50	1.091.00	513.00	76.20	
WF 10 X 60	260.00	10.70	256.00	17.30	13.00	225.40	199.40	114.00	89.29	14.260.00	1.097.00	11.20	4.841.00	378.00	6.51	1.227.00	575.00	105.00	



PERFIL H AMERICANO DE ALA ANCHA - WF

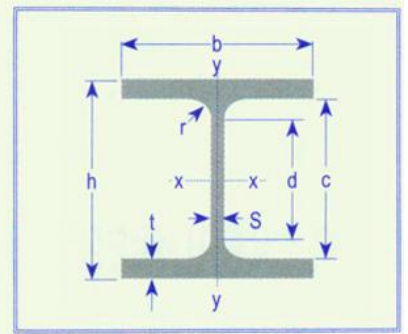
DIMENSIONES Y PROPIEDADES PARA EL DISEÑO

PERFILES WF	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	
	h	s	b	t	r	c	d	Ix			Sx	rx	Iy	Sy	ry	cm3	cm3		
mm	mm	mm	mm	mm	mm	mm	cm4	cm3			cm	cm4	cm3	cm	cm3	cm3			
WF 10 X 68	264.00	11.90	257.00	19.60	13.00	224.80	198.80	129.00	101.20	16.380.00	1.241.00	11.30	5.549.00	432.00	6.56	1.397.00	657.00	150.00	
WF 10 X 77	269.00	13.50	259.00	22.10	13.00	224.80	198.80	146.00	114.59	18.940.00	1.409.00	11.40	6.405.00	495.00	6.62	1.600.00	753.00	216.00	
WF 10 X 88	275.00	15.40	261.00	25.10	13.00	224.80	198.80	167.00	130.96	22.160.00	1.611.00	11.50	7.446.00	571.00	6.68	1.848.00	870.00	316.00	
WF 10 X 100	282.00	17.30	263.00	28.40	13.00	225.20	199.20	190.00	148.82	25.940.00	1.840.00	11.70	8.622.00	656.00	6.74	2.129.00	1.001.00	457.00	
WF 10 X 112	289.00	19.20	265.00	31.80	13.00	225.40	199.40	213.00	166.67	30.020.00	2.078.00	11.90	9.879.00	746.00	6.81	2.427.00	1.139.00	640.00	
WF 12 X 14	303.00	5.10	101.00	5.70	8.00	291.60	275.60	26.80	21.00	3.708.00	244.80	11.75	98.31	19.47	1.91	287.10	31.19	3.17	
WF 12 X 16	305.00	5.60	101.00	6.70	8.00	291.60	275.60	30.40	23.80	4.280.00	280.70	11.87	115.60	22.89	1.95	328.60	36.70	4.50	
WF 12 X 19	309.00	6.00	102.00	8.90	8.00	291.20	275.20	35.90	28.30	5.431.00	351.50	12.27	158.10	30.99	2.09	406.90	49.15	7.72	
WF 12 X 22	313.00	6.60	102.00	10.80	8.00	291.40	275.40	41.80	32.70	6.507.00	415.80	12.47	191.90	37.62	2.14	480.90	59.63	12.36	
WF 12 X 21	306.00	5.00	164.00	7.40	8.00	291.20	275.20	39.38	31.00	6.554.00	428.40	12.90	544.40	66.39	3.72	476.30	101.60	6.25	
WF 12 X 26	310.00	5.80	165.00	9.70	8.00	290.60	274.60	49.40	38.69	8.518.00	550.00	13.10	727.00	88.10	3.84	611.00	135.00	12.70	
WF 12 X 30	313.00	6.60	166.00	11.20	8.00	290.60	274.60	56.90	44.65	9.934.00	635.00	13.20	855.00	103.00	3.88	708.00	158.00	19.30	
WF 12 X 35	317.00	7.60	167.00	13.20	8.00	290.60	274.60	66.70	52.09	11.850.00	747.00	13.30	1.026.00	123.00	3.92	838.00	189.00	31.10	
WF 12 X 40	303.00	7.50	203.00	13.10	15.00	276.80	246.80	75.88	60.00	12.860.00	848.90	13.02	1.829.00	180.20	4.91	940.70	275.20	39.15	
WF 12 X 45	306.00	8.50	204.00	14.60	15.00	276.80	246.80	85.03	67.00	14.510.00	948.40	13.06	2.069.00	202.80	4.93	1.057.00	310.30	54.03	
WF 12 X 50	310.00	9.40	205.00	16.30	15.00	277.40	247.40	94.84	74.00	16.450.00	1.061.00	13.17	2.344.00	228.70	4.97	1.188.00	350.20	74.05	
WF 12 X 53	306.00	8.80	254.00	14.60	15.00	276.80	246.80	100.00	78.87	17.670.00	1.155.00	13.30	3.990.00	314.00	6.30	1.275.00	478.00	65.50	
WF 12 X 58	310.00	9.10	254.00	16.30	15.00	277.40	247.40	110.00	86.00	19.850.00	1.280.00	13.43	4.455.00	350.80	6.36	1.417.00	533.10	86.96	
WF 12 X 65	308.00	9.90	305.00	15.40	15.00	277.20	247.20	123.00	96.73	22.240.00	1.444.00	13.40	7.286.00	478.00	7.69	1.591.00	725.00	91.50	
WF 12 X 72	311.00	10.90	306.00	17.00	15.00	277.00	247.00	136.00	107.15	24.790.00	1.594.00	13.50	8.123.00	531.00	7.72	1.765.00	806.00	122.00	
WF 12 X 79	314.00	11.90	307.00	18.70	15.00	276.60	246.60	150.00	117.57	27.510.00	1.753.00	13.60	9.024.00	588.00	7.76	1.949.00	893.00	161.00	
WF 12 X 87	318.00	13.10	308.00	20.60	15.00	276.80	246.80	165.00	129.47	30.770.00	1.935.00	13.70	10.040.00	652.00	7.80	2.164.00	991.00	214.00	
WF 12 X 96	323.00	14.00	309.00	22.90	15.00	277.20	247.20	182.00	142.86	34.760.00	2.153.00	13.80	11.270.00	729.00	7.86	2.419.00	1.109.00	288.00	
WF 12 X 106	327.00	15.50	310.00	25.10	15.00	276.80	246.80	200.00	157.75	38.630.00	2.363.00	13.90	12.470.00	805.00	7.89	2.672.00	1.225.00	380.00	
WF 12 X 120	333.00	18.00	313.00	28.10	15.00	276.80	246.80	228.00	178.58	44.530.00	2.675.00	14.00	14.380.00	919.00	7.95	3.053.00	1.401.00	544.00	
WF 12 X 136	341.00	20.10	315.00	31.70	15.00	277.60	247.60	257.00	202.39	51.870.00	3.042.00	14.20	16.540.00	1.050.00	8.01	3.502.00	1.603.00	777.00	
WF 12 X 152	348.00	22.10	317.00	35.60	15.00	276.80	246.80	289.00	226.20	59.560.00	3.423.00	14.40	18.930.00	1.194.00	8.10	3.975.00	1.825.00	1.089.00	
WF 12 x 170	356.00	24.40	319.00	39.60	15.00	276.80	246.80	322.00	252.99	66.230.00	3.833.00	14.60	21.460.00	1.346.00	8.16	4.490.00	2.059.00	1.495.00	
WF 12 x 190	365.00	26.90	322.00	44.10	15.00	276.80	246.80	360.00	282.75	78.680.00	4.311.00	14.80	24.590.00	1.527.00	8.26	5.096.00	2.340.00	2.062.00	
WF 12 x 210	374.00	30.00	325.00	48.30	15.00	277.40	247.40	399.00	312.52	89.560.00	4.789.00	15.00	27.700.00	1.705.00	8.33	5.716.00	2.617.00	2.742.00	
WF 12 x 230	382.00	32.60	328.00	52.60	15.00	276.80	246.80	437.00	342.28	100.500.00	5.262.00	15.20	31.020.00	1.892.00	8.42	6.334.00	2.907.00	3.552.00	
WF 12 x 252	391.00	35.40	330.00	57.20	15.00	276.60	246.60	477.00	375.02	112.800.00	5.769.00	15.40	34.370.00	2.083.00	8.49	7.004.00	3.205.00	4.570.00	
WF 12 x 279	403.00	38.90	334.00	62.70	15.00	277.60	247.60	529.00	415.20	129.900.00	6.448.00	15.70	39.080.00	2.340.00	8.60	7.902.00	3.607.00	6.065.00	
WF 12 x 305	415.00	41.30	336.00	68.70	15.00	277.60	247.60	578.00	453.89	147.900.00	7.130.00	16.00	43.610.00	2.596.00	8.66	8.816.00	4.001.00	7.868.00	
WF 12 x 336	427.00	45.10	340.00	75.10	15.00	276.80	246.80	637.00	500.02	168.800.00	7.907.00	16.30	49.420.00	2.907.00	8.61	9.875.00	4.487.00	10.330.00	
WF 14 X 22	349.00	5.80	127.00	8.50	10.00	332.00	312.00	41.90	32.90	8.258.00	473.20	14.07	291.00	45.82	2.64	541.50	71.80	8.65	
WF 14 X 26	353.00	6.50	128.00	10.70	10.00	331.60	311.60	49.60	39.00	10.231.00	579.70	14.33	375.00	58.60	2.74	661.50	91.60	15.04	
WF 14 X 30	352.00	6.90	171.00	9.80	10.00	332.40	312.40	57.30	44.65	12.160.00	691.00	14.60	818.00	95.70	3.78	778.00	148.00	16.20	
WF 14 X 34	355.00	7.20	171.00	11.60	10.00	331.80	311.80	64.40	50.60	14.120.00	796.00	14.80	968.00	113.00	3.88	893.00	174.00	23.80	
WF 14 X 38	358.00	7.90	172.00	13.10	10.00	331.80	311.80	72.10	56.55	16.040.00	896.00	14.90	1.113.00	129.00	3.93	1.009.00	199.00	33.50	
WF 14 X 43	347.00	7.70	203.00	13.50	15.00	320.00	290.00	81.30	64.00	17.830.00	1.027.00	14.80	1.885.00	185.70	4.81	1.141.00	284.30	43.21	
WF 14 X 48	350.00	8.60	204.00	15.10	15.00	319.80	289.80	91.00	72.00	20.100.00	1.149.00	14.86	2.140.00	209.80	4.85	1.282.00	321.60	59.71	
WF 14 X 53	354.00	9.40	205.00	16.80	15.00	320.40	290.40	101.00	79.00	22.650.00	1.280.00	14.98	2.416.00	235.70	4.89	1.433.00	361.60	80.72	
WF 14 X 61	353.00	9.50	254.00	16.40	15.00	320.20	290.20	116.00	90.76	26.690.00	1.512.00	15.20	4.483.00	353.00	6.23	1.676.00	538.00	91.20	
WF 14 X 68	357.00	10.50	255.00	18.30	15.00	320.40	290.40	129.00	101.20	30.150.00	1.689.00	15.30	5.062.00	397.00	6.27	1.880.00	605.00	125.00	
WF 14 X 74	360.00	11.40	256.00	19.90	15.00	320.20	290.20	140.00	110.12	33.090.00	1.838.00	15.40	5.570.00	435.00	6.30	2.055.00	664.00	160.00	
WF 14 X 82	363.00	13.00	257.00	21.70	15.00	319.60	289.60	155.00	122.03	36.530.00	2.013.00	15.40	6.147.00	478.00	6.30	2.266.00	732.00	212.00	



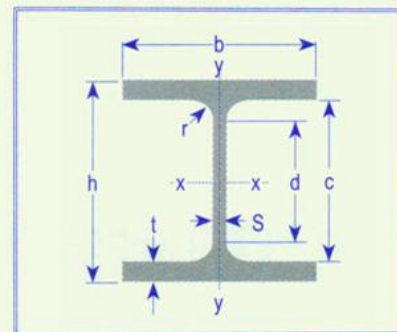
PERFIL H AMERICANO DE ALA ANCHA - WF

PERFILES WF	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	
DESIGNACION	h	s	b	t	r	c	d	cm2	kg/mt	Ix	Sx	rx	Iy	Sy	ry	cm3	cm3	Jt	
	mm	mm	mm	mm	mm	mm	mm			cm4	cm3	cm	cm4	cm3	cm			cm4	
WF 18 X 76	463.00	10.80	280.00	17.30	10.00	428.40	408.40	144.00	113.10	55.600.00	2.402.00	19.60	6.335.00	452.00	6.63	2.673.00	691.00	119.00	
WF 18 X 86	467.00	12.20	282.00	19.60	10.00	427.80	407.80	164.00	127.98	63.700.00	2.728.00	19.70	7.333.00	520.00	6.70	3.049.00	796.00	173.00	
WF 18 X 97	472.00	13.60	283.00	22.10	10.00	427.80	407.80	184.00	144.35	72.610.00	3.076.00	19.90	8.358.00	591.00	6.74	3.454.00	906.00	246.00	
WF 18 X 106	476.00	15.00	284.00	23.90	10.00	428.20	408.20	201.00	157.75	79.630.00	3.346.00	19.90	9.137.00	643.00	6.74	3.774.00	989.00	314.00	
WF 18 X 119	482.00	16.60	286.00	26.90	10.00	428.20	408.20	226.00	177.09	91.010.00	3.776.00	20.10	10.510.00	735.00	6.82	4.280.00	1.131.00	445.00	
WF 18 X 130	489.00	17.00	283.00	30.50	10.00	428.00	408.00	246.00	193.46	102.400.00	4.186.00	20.40	11.540.00	816.00	6.85	4.754.00	1.253.00	607.00	
WF 18 X 143	495.00	18.50	285.00	33.50	10.00	428.00	408.00	271.00	212.81	114.300.00	4.619.00	20.50	12.950.00	909.00	6.91	5.272.00	1.398.00	803.00	
WF 18 X 158	501.00	20.60	287.00	36.60	10.00	427.80	407.80	299.00	235.13	127.300.00	5.083.00	20.60	14.450.00	1.007.00	6.95	5.839.00	1.554.00	1.059.00	
WF 18 X 175	509.00	22.60	289.00	40.40	10.00	428.20	408.20	331.00	260.43	143.700.00	5.646.00	20.80	16.300.00	1.128.00	7.01	6.525.00	1.743.00	1.423.00	
WF 18 X 192	517.00	24.40	291.00	44.40	10.00	428.20	408.20	364.00	285.73	161.100.00	6.231.00	21.00	18.290.00	1.257.00	7.09	7.243.00	1.945.00	1.877.00	
WF 18 X 211	525.00	26.90	293.00	48.50	10.00	428.00	408.00	400.00	314.00	179.800.00	6.851.00	21.20	20.400.00	1.393.090	7.14	8.021.00	2.161.00	2.461.00	
WF 18 X 234	535.00	29.50	296.00	53.60	10.00	427.80	407.80	444.00	348.23	204.200.00	7.635.00	21.40	23.260.00	1.572.00	7.24	9.006.00	2.443.00	3.323.00	
WF 18 X 258	545.00	32.50	299.00	58.40	10.00	428.20	408.20	489.00	383.95	229.400.00	8.417.00	21.70	26.140.00	1.749.00	7.31	10.000.00	2.725.00	4.339.00	
WF 18 X 283	555.00	35.60	302.00	63.50	10.00	428.00	408.00	537.00	421.15	256.600.00	9.246.00	21.90	29.310.00	1.941.00	7.39	11.070.00	3.033.00	5.621.00	
WF 18 X 311	567.00	38.60	305.00	69.60	10.00	427.80	407.80	591.00	462.82	289.900.00	10.230.00	22.20	33.120.00	2.172.00	7.49	12.340.00	3.398.00	7.385.00	
WF 21 X 44	525.00	8.90	165.00	11.40	13.00	502.20	476.20	83.80	65.48	35100.00	1337.00	20.50	857.00	104.00	3.20	1563.00	166.00	33.30	
WF 21 X 50	529.00	9.70	166.00	13.60	13.00	501.80	475.80	95.30	74.41	41100.00	1554.00	20.80	1042.00	125.00	3.31	1810.00	200.00	49.20	
WF 21 X 57	535.00	10.30	166.00	16.50	13.00	502.00	476.00	108.00	84.83	48580.00	1816.00	21.20	1264.00	152.00	3.42	2105.00	242.00	74.50	
WF 21 X 62	533.00	10.20	209.00	15.60	13.00	501.80	475.80	118.00	92.27	55.290.00	2.075.00	21.70	2.379.00	228.00	4.49	2.365.00	355.00	77.20	
WF 21 X 68	537.00	10.90	210.00	17.40	13.00	502.20	476.20	129.00	101.20	61.740.00	2.300.00	21.90	2.692.00	256.00	4.56	2.622.00	400.00	103.00	
WF 21 X 73	539.00	11.60	211.00	18.80	13.00	501.40	475.40	139.00	108.64	66.770.00	2.478.00	21.90	2.951.00	280.00	4.61	2.829.00	437.00	128.00	
WF 21 X 83	544.00	13.10	212.00	21.20	13.00	501.60	475.60	157.00	123.52	76.120.00	2.799.00	22.00	3.377.00	319.00	4.64	3.210.00	499.00	183.00	
WF 21 X 93	549.00	14.70	214.00	23.60	13.00	501.80	475.80	176.00	138.40	86.120.00	3.138.00	22.10	3.870.00	362.00	4.69	3.615.00	569.00	254.00	
WF 21 X 101	543.00	12.70	312.00	20.30	13.00	502.40	476.40	192.00	150.30	100.900.00	3.716.00	22.90	10.290.00	659.00	7.32	4.148.00	1.010.00	218.00	
WF 21 X 111	546.00	14.00	313.00	22.20	13.00	501.60	475.60	211.00	165.19	111.000.00	4.066.00	23.00	11.360.00	726.00	7.34	4.556.00	1.113.00	286.00	
WF 21 X 122	551.00	15.20	315.00	24.40	13.00	502.20	476.20	232.00	181.56	123.600.00	4.486.00	23.10	12.730.00	808.00	7.41	5.042.00	1.241.00	378.00	
WF 21 X 132	554.00	16.50	316.00	26.30	13.00	501.40	475.40	250.00	196.44	134.000.00	4.839.00	23.10	13.850.00	877.00	7.44	5.459.00	1.349.00	475.00	
WF 21 X 147	560.00	18.30	318.00	29.20	13.00	501.60	475.60	279.00	218.76	151.100.00	5.396.00	23.30	15.680.00	986.00	7.50	6.116.00	1.520.00	650.00	
WF 21 X 166	571.00	19.00	315.00	34.50	13.00	502.00	476.00	314.00	247.04	177.500.00	6.219.00	23.80	18.000.00	1.143.00	7.57	7.063.00	1.759.00	986.00	
WF 21 X 182	577.00	21.10	317.00	37.60	13.00	501.80	475.80	346.00	270.85	196.800.00	6.821.00	23.90	20.000.00	1.262.00	7.61	7.793.00	1.947.00	1.289.00	
WF 21 X 201	585.00	23.10	319.00	41.40	13.00	502.20	476.20	382.00	299.12	220.800.00	7.548.00	24.10	22.450.00	1.408.00	7.67	8.672.00	2.176.00	1.718.00	
WF 21 X 223	593.00	25.40	322.00	45.50	13.00	502.00	476.00	422.00	331.86	247.800.00	8.356.00	24.20	25.390.00	1.577.00	7.76	9.658.00	2.442.00	2.290.00	
WF 21 X 248	603.00	26.20	324.00	50.50	13.00	502.00	476.00	460.00	369.07	278.900.00	9.252.00	24.60	28.710.00	1.772.00	7.90	10.730.00	2.739.00	3.030.00	
WF 21 X 275	613.00	31.00	327.00	55.60	13.00	501.80	475.80	521.00	409.25	316.900.00	10.340.00	24.70	32.530.00	1.990.00	7.90	12.120.00	3.096.00	4.191.00	
WF 21 X 300	623.00	33.50	330.00	60.50	13.00	502.00	476.00	569.00	446.45	353.300.00	11.340.00	24.90	36.400.00	2.206.00	8.00	13.380.00	3.438.00	5.400.00	
WF 21 X 333	635.00	37.10	334.00	66.50	13.00	502.00	476.00	632.00	495.56	400.600.00	12.620.00	25.20	41.520.00	2.486.00	8.11	15.000.00	3.885.00	7.236.00	
WF 21 X 364	647.00	40.40	337.00	72.40	13.00	502.20	476.20	692.00	541.69	448.400.00	13.860.00	25.50	46.470.00	2.758.00	8.19	16.600.00	4.319.00	9.364.00	
WF 21 X 402	661.00	43.90	340.00	79.50	13.00	502.00	476.00	762.00	598.24	507.000.00	15.340.00	25.80	52.440.00	3.085.00	8.29	18.520.00	4.841.00	12.350.00	
WF 24 X 55	599.00	10.00	178.00	12.80	13.00	573.40	547.40	104.00	81.85	56.030.00	1.871.00	23.20	1.209.00	136.00	3.40	2.199.00	218.00	50.60	
WF 24 X 62	603.00	10.90	179.00	15.00	13.00	573.00	547.00	118.00	92.27	64.680.00	2.145.00	23.50	1.441.00	161.00	3.50	2.515.00	259.00	72.80	
WF 24 X 68	603.00	10.50	228.00	14.90	13.00	573.20	547.20	130.00	101.20	76.410.00	2.534.00	24.30	2.950.00	259.00	4.77	2.902.00	404.00	79.60	
WF 24 X 76	608.00	11.20	228.00	17.30	13.00	573.40	547.40	145.00	113.10	87.600.00	2.882.00	24.60	3.425.00	300.00	4.87	3.292.00	469.00	113.00	
WF 24 X 84	612.00	11.90	229.00	19.60	13.00	572.80	546.80	159.00	125.01	98.590.00	3.222.00	24.90	3.932.00	343.00	4.97	3.676.00	535.00	156.00	
WF 24 X 94	617.00	13.10	230.00	22.20	13.00	572.60	546.60	179.00	139.89	112.000.00	3.631.00	25.00	4.514.00	393.00	5.03	4.152.00	613.00	220.00	
WF 24 X 103	623.00	14.00	229.00	24.90	13.00	573.20	547.20	196.00	153.00	125.200.00	4.019.00	25.29	4.998.00	436.50	5.05	4.602.00	682.40	297.50	



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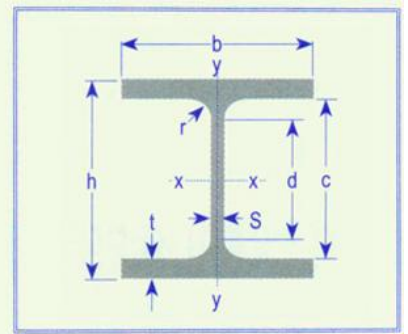
PERFILES WF	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	Jt
	h	s	b	t	r	c	d	lx			Sx	rx	ly	Sx	ry	cm3	cm3	cm4	
mm	mm	mm	mm	mm	mm	mm	cm4	cm3	cm	cm4	cm3	cm	cm3	cm3	cm4				
WF 24 x 104	611.00	12.70	324.00	19.00	13.00	573.00	547.00	197.00	154.77	129.000.00	4.222.00	25.60	10.780.00	666.00	7.39	4.728.00	1.022.00	198.00	
WF 24 x 117	616.00	14.00	325.00	21.60	13.00	572.80	546.80	222.00	174.12	147.200.00	4.778.00	25.70	12.370.00	761.00	7.46	5.362.00	1.170.00	283.00	
WF 24 x 131	622.00	15.40	327.00	24.40	13.00	573.20	547.20	249.00	194.95	167.900.00	5.398.00	26.00	14.240.00	871.00	7.56	6.074.00	1.340.00	401.00	
WF 24 x 146	628.00	16.50	328.00	27.70	13.00	572.60	546.60	278.00	217.27	190.800.00	6.076.00	26.20	16.310.00	995.00	7.67	6.848.00	1.531.00	565.00	
WF 24 x 162	635.00	17.90	329.00	31.00	13.00	573.00	547.00	308.00	241.08	215.400.00	6.785.00	26.40	18.430.00	1.120.00	7.74	7.671.00	1.725.00	776.00	
WF 24 x 176	641.00	19.00	327.00	34.00	13.00	573.00	547.00	333.00	261.92	236.000.00	7.363.00	26.60	19.850.00	1.214.00	7.72	8.349.00	1.871.00	998.00	
WF 24 x 192	647.00	20.60	329.00	37.10	13.00	572.80	546.80	364.00	285.73	260.700.00	8.059.00	26.80	22.060.00	1.341.00	7.79	9.175.00	2.071.00	1.295.00	
WF 24 x 207	653.00	22.10	330.00	39.90	13.00	573.20	547.20	391.00	308.05	283.700.00	8.688.00	26.90	23.950.00	1.452.00	7.82	9.929.00	2.245.00	1.608.00	
WF 24 x 229	661.00	24.40	333.00	43.90	13.00	573.20	547.20	434.00	340.79	318.300.00	9.630.00	27.10	27.090.00	1.627.00	7.90	11.070.00	2.522.00	2.153.00	
WF 24 x 250	669.00	26.40	335.00	48.00	13.00	573.00	547.00	474.00	372.04	353.200.00	10.560.00	27.30	30.170.00	1.801.00	1.98	12.190.00	2.796.00	2.802.00	
WF 24 x 279	679.00	29.50	338.00	53.10	13.00	572.80	546.80	529.00	415.20	399.800.00	11.780.00	27.50	34.300.00	2.030.00	8.05	13.690.00	3.160.00	3.824.00	
WF 24 x 306	689.00	32.00	340.00	57.90	13.00	573.20	547.20	579.00	455.38	444.500.00	12.900.00	27.70	38.090.00	2.241.00	8.11	15.090.00	3.496.00	4.948.00	
WF 24 x 335	699.00	35.10	343.00	63.00	13.00	573.00	547.00	635.00	498.54	494.700.00	14.150.00	27.90	42.580.00	2.483.00	8.19	16.670.00	3.885.00	6.420.00	
WF 24 x 370	711.00	38.60	347.00	69.10	13.00	572.80	546.80	702.00	550.62	557.500.00	15.680.00	28.20	48.400.00	2.790.00	8.30	18.600.00	4.377.00	8.525.00	
WF 24 x 408	725.00	41.90	351.00	75.90	13.00	573.20	547.20	774.00	607.17	630.700.00	17.400.00	28.50	55.060.00	3.137.00	8.43	20.780.00	4.931.00	11.280.00	
WF 24 x 450	739.00	46.00	354.00	83.10	13.00	572.80	546.80	853.00	669.67	709.400.00	19.200.00	28.80	61.920.00	3.498.00	8.52	23.110.00	5.514.00	14.850.00	
WF 24 x 492	753.00	50.00	359.00	89.90	13.00	573.20	547.20	934.00	732.18	793.500.00	21.080.00	29.20	69.930.00	3.896.00	8.66	25.550.00	6.155.00	18.980.00	
WF 27 x 84	678.00	11.70	253.00	16.30	15.00	645.40	615.40	160.00	125.01	118.500.00	3.495.00	27.20	4.410.00	349.00	5.25	4.009.00	546.00	119.00	
WF 27 x 94	684.00	12.40	254.00	18.90	15.00	646.20	616.20	178.00	139.89	136.100.00	3.979.00	27.60	5.174.00	407.00	5.39	4.549.00	636.00	168.00	
WF 27 x 102	688.00	13.10	254.00	21.10	15.00	645.80	615.80	194.00	151.79	150.600.00	4.378.00	27.90	5.777.00	455.00	5.46	5.002.00	710.00	221.00	
WF 27 x 114	693.00	14.50	256.00	23.60	15.00	645.80	615.80	216.00	169.65	169.900.00	4.904.00	28.00	6.618.00	517.00	5.53	5.618.00	809.00	307.00	
WF 27 x 129	702.00	15.50	254.00	27.90	15.00	646.20	616.20	244.00	192.00	197.900.00	5.639.00	28.49	7.643.00	601.80	5.60	6.457.00	941.00	463.20	
WF 27 x 146	695.00	15.40	355.00	24.80	15.00	645.40	615.40	277.00	217.27	234.300.00	6.742.00	29.10	18.510.00	1.043.00	8.17	7.566.00	1.603.00	459.00	
WF 27 x 161	701.00	16.80	356.00	27.40	15.00	646.20	616.20	306.00	239.59	261.200.00	7.451.00	29.20	20.630.00	1.159.00	8.22	8.386.00	1.784.00	612.00	
WF27 x 178	706.00	18.40	358.00	30.20	15.00	645.60	615.60	337.00	264.89	290.300.00	8.223.00	29.40	23.130.00	1.292.00	8.29	9.285.00	1.992.00	817.00	
WF 27 x 194	714.00	19.00	356.00	34.00	15.00	646.00	616.00	367.00	288.70	324.700.00	9.096.00	29.80	25.610.00	1.439.00	8.36	10.270.00	2.215.00	1.099.00	
WF27 x217	722.00	21.10	359.00	38.10	15.00	645.80	615.80	412.00	322.93	369.500.00	10.240.00	30.00	29.430.00	1.640.00	8.45	11.620.00	2.530.00	1.543.00	
WF 27 x 235	728.00	23.10	360.00	40.90	15.00	646.20	616.20	446.00	349.72	401.900.00	11.040.00	30.00	31.870.00	1.771.00	8.46	12.590.00	2.739.00	1.927.00	
WF 27 x 258	736.00	24.90	362.00	45.00	15.00	646.00	616.00	489.00	383.95	447.400.00	12.160.00	30.30	35.670.00	1.971.00	8.54	13.920.00	3.052.00	2.541.00	
WF 27 x 281	744.00	26.90	364.00	49.00	15.00	646.00	616.00	532.00	418.17	493.900.00	13.280.00	30.50	39.500.00	2.170.00	8.61	15.260.00	3.366.00	3.270.00	
WF 27 x 307	752.00	29.50	367.00	53.10	15.00	645.80	615.80	582.00	456.87	545.000.00	14.500.00	30.60	43.890.00	2.392.00	8.68	16.760.00	3.720.00	4.200.00	
WF 27 x 336	762.00	32.00	369.00	57.90	15.00	646.20	616.20	636.00	500.02	604.700.00	15.870.00	30.80	48.670.00	2.638.00	8.75	18.450.00	4.111.00	5.433.00	
WF 27 x 358	772.00	35.10	372.00	63.00	15.00	646.00	616.00	697.00	532.76	671.400.00	17.390.00	31.00	54.290.00	2.919.00	8.82	20.340.00	4.562.00	7.047.00	
WF 27 x 407	784.00	38.60	376.00	69.10	15.00	645.80	615.80	771.00	605.68	754.600.00	19.250.00	31.30	61.540.00	3.273.00	8.93	22.660.00	5.129.00	9.352.00	
WF 27 x 448	798.00	41.90	379.00	75.90	15.00	646.20	616.20	848.00	666.70	848.900.00	21.280.00	31.60	69.270.00	3.656.00	9.04	25.210.00	5.739.00	12.330.00	
WF 27 x 494	812.00	46.00	383.00	83.10	15.00	645.80	615.80	936.00	735.15	954.400.00	23.510.00	31.90	78.350.00	4.091.00	9.15	28.060.00	6.442.00	16.270.00	
WF 27 x 539	826.00	50.00	387.00	89.90	15.00	646.20	616.20	1.021.00	802.12	1.061.700.00	25.710.00	32.20	87.530.00	4.524.00	9.26	30.890.00	7.141.00	20.740.00	
WF 30 x 99	753.00	13.20	265.00	17.00	17.00	719.00	685.00	187.00	147.33	166.100.00	4.411.00	29.80	5.289.00	399.00	5.31	5.110.00	631.00	162.00	
WF 30 x 108	758.00	13.80	266.00	19.30	17.00	719.40	685.40	204.00	160.72	186.100.00	4.909.00	30.20	6.073.00	457.00	5.45	5.666.00	720.00	212.00	
WF 30 x 116	762.00	14.40	267.00	21.60	17.00	718.80	684.80	221.00	172.63	205.800.00	5.402.00	30.50	6.873.00	515.00	5.57	6.218.00	810.00	274.00	
WF 30 x 124	766.00	14.90	267.00	23.60	17.00	718.80	684.80	236.00	184.53	223.000.00	5.821.00	30.80	7.510.00	563.00	5.65	6.691.00	884.00	337.00	
WF 30 x 132	770.00	15.60	268.00	25.40	17.00	719.20	685.20	251.00	196.44	240.300.00	6.241.00	31.00	8.175.00	610.00	5.71	7.174.00	959.00	409.00	
WF 30 x 148	779.00	16.50	266.00	30.00	17.00	719.00	685.00	281.00	220.00	278.200.00	7.143.00	31.40	9.440.00	709.90	5.80	8.198.00	1.113.00	609.00	



PERFIL H AMERICANO DE ALA ANCHA - WF

DIMENSIONES Y PROPIEDADES PARA EL DISEÑO

PERFILES WF	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	
	h	s	b	t	r	c	d	Ix			Sx	rx	Iy	Sy	ry	cm3	cm3	Jt	
mm	mm	mm	mm	mm	mm	mm	cm4	cm3	cm	cm4	cm3	cm	cm3	cm3	cm4				
WF 30 x 173	773.00	16.60	381.00	27.10	17.00	718.80	684.80	328.00	257.45	341.900.00	8.845.00	32.30	25.010.00	1.313.00	8.73	9.934.00	2.019.00	643.00	
WF 30 x 191	779.00	18.00	382.00	30.10	17.00	718.80	684.80	362.00	284.24	381.500.00	9.794.00	32.50	28.000.00	1.466.00	8.80	11.020.00	2.258.00	866.00	
WF 30 x 211	786.00	19.70	384.00	33.40	17.00	719.20	685.20	401.00	314.00	427.700.00	10.880.00	32.70	31.570.00	1.644.00	8.88	12.290.00	2.536.00	1.172.00	
WF 30 x 235	795.00	21.10	382.00	38.10	17.00	718.80	684.40	445.00	349.72	485.700.00	12.220.00	33.00	35.460.00	1.856.00	8.92	13.830.00	2.863.00	1.662.00	
WF 30 x 261	803.00	23.60	385.00	41.90	17.00	719.20	685.20	495.00	388.41	544.000.00	13.550.00	33.20	39.940.00	2.075.00	8.98	15.420.00	3.209.00	2.237.00	
WF 30 x 292	813.00	25.90	387.00	47.00	17.00	719.00	685.00	552.00	434.54	617.700.00	15.190.00	33.40	45.510.00	2.352.00	9.08	17.370.00	3.644.00	3.117.00	
WF 30 x 326	823.00	29.00	390.00	52.10	17.00	718.80	684.80	617.00	485.14	697.600.00	16.950.00	33.60	51.660.00	2.649.00	9.15	19.500.00	4.118.00	4.276.00	
WF 30 x 357	833.00	31.50	393.00	56.90	17.00	719.20	685.20	676.00	531.28	775.500.00	18.620.00	33.90	57.760.00	2.939.00	9.24	21.520.00	4.577.00	5.567.00	
WF 30 x 391	843.00	34.50	396.00	62.00	17.00	719.00	685.00	742.00	581.87	860.400.00	20.410.00	34.10	64.430.00	3.254.00	9.32	23.720.00	5.080.00	7.238.00	
WF 30 x 433	855.00	38.10	399.00	68.10	17.00	718.80	684.80	820.00	644.38	964.400.00	22.560.00	34.30	72.440.00	3.631.00	9.40	26.390.00	5.687.00	9.634.00	
WF 30 x 477	869.00	41.40	403.00	74.90	17.00	719.20	685.20	904.00	709.86	1.086.000.00	24.990.00	34.70	82.140.00	4.077.00	9.53	29.410.00	6.396.00	12.780.00	
WF 30 x 526	883.00	45.50	407.00	82.00	17.00	719.00	685.00	997.00	782.78	1.218.500.00	27.600.00	35.00	92.720.00	4.556.00	9.64	32.700.00	7.170.00	16.860.00	
WF 30 x 581	899.00	50.00	411.00	89.90	17.00	719.20	685.20	1.101.00	864.62	1.372.500.00	30.530.00	35.30	104.800.00	5.099.00	9.76	36.450.00	8.050.00	22.310.00	
WF 33 x 118	835.00	14.00	292.00	18.80	18.00	797.40	761.40	224.00	175.60	246.400.00	5.901.00	33.10	7.823.00	536.00	5.91	6.816.00	844.00	227.00	
WF 33 x 130	840.00	14.70	292.00	21.70	18.00	796.60	760.60	247.00	193.46	278.400.00	6.630.00	33.60	9.029.00	618.00	6.05	7.627.00	971.00	310.00	
WF 33 x 141	846.00	15.40	293.00	24.40	18.00	797.20	761.20	269.00	209.83	310.700.00	7.346.00	34.00	10.260.00	700.00	6.18	8.430.00	1.093.00	409.00	
WF 33 x 152	851.00	16.10	294.00	26.80	18.00	797.40	761.40	289.00	226.20	340.100.00	7.992.00	34.30	11.380.00	774.00	6.28	9.163.00	1.213.00	518.00	
WF 33 x 169	859.00	17.00	292.00	31.00	18.00	797.00	761.00	319.00	251.00	386.500.00	8.999.00	34.79	12.900.00	883.60	6.36	10.304.00	1.383.00	737.60	
WF 33 x 201	855.00	18.20	400.00	29.20	18.00	796.60	760.60	381.00	299.12	479.400.00	11.210.00	35.50	31.190.00	1.560.00	9.04	12.640.00	2.406.00	863.00	
WF 33 x 221	862.00	19.70	401.00	32.40	18.00	797.20	761.20	420.00	328.88	534.800.00	12.410.00	37.70	34.880.00	1.739.00	9.12	14.020.00	2.686.00	1.155.00	
WF 33 x 241	868.00	21.10	403.00	35.60	18.00	796.80	760.80	458.00	358.65	590.600.00	13.610.00	35.90	38.900.00	1.931.00	9.22	15.400.00	2.984.00	1.507.00	
WF 33 x 263	877.00	22.10	401.00	39.90	18.00	797.20	761.20	499.00	391.39	658.600.00	15.020.00	36.30	42.960.00	2.143.00	9.28	17.010.00	3.310.00	2.021.00	
WF 33 x 291	885.00	24.40	404.00	43.90	18.00	797.20	761.20	552.00	433.06	735.300.00	16.620.00	36.50	48.350.00	2.394.00	9.36	18.900.00	3.706.00	2.702.00	
WF33 x 318	893.00	26.40	406.00	48.00	18.00	797.00	761.00	603.00	473.24	812.200.00	18.190.00	36.70	53.670.00	2.644.00	9.43	20.770.00	4.100.00	3.512.00	
WF 33 x 354	903.00	29.50	409.00	53.10	18.00	796.80	760.80	672.00	526.81	914.100.00	20.250.00	36.90	60.730.00	2.970.00	9.51	23.250.00	4.620.00	4.788.00	
WF 33 x 387	913.00	32.00	411.00	57.90	18.00	797.20	761.20	734.00	575.92	1.010.800.00	22.140.00	37.10	67.230.00	3.271.00	9.57	25.540.00	5.100.00	6.190.00	
WF 33 x 424	923.00	35.10	414.00	63.00	18.00	797.00	761.00	804.00	630.98	1.118.600.00	24.240.00	37.30	74.810.00	3.614.00	9.64	28.110.00	5.650.00	8.026.00	
WF 33 x 468	935.00	38.60	418.00	69.10	18.00	796.80	760.80	888.00	696.46	1.252.200.00	26.780.00	37.60	84.510.00	4.043.00	9.76	31.250.00	6.340.00	10.640.00	
WF 33 x 515	949.00	41.90	421.00	75.90	18.00	797.20	761.20	976.00	766.41	1.402.200.00	29.550.00	37.90	94.900.00	4.508.00	9.86	34.670.00	7.083.00	14.030.00	
WF 33 x 567	963.00	46.00	425.00	83.10	18.00	796.80	760.80	1.076.00	843.79	1.569.500.00	32.600.00	38.20	107.000.00	5.035.00	9.97	38.490.00	7.934.00	18.490.00	
WF 33 x 619	977.00	50.00	430.00	89.90	18.00	797.20	761.20	1.175.00	921.18	1.741.700.00	35.650.00	38.50	120.000.00	5.581.00	10.10	42.350.00	8.818.00	23.600.00	
WF 36 x 135	903.00	15.20	304.00	20.10	19.00	862.80	824.80	256.00	200.90	325.200.00	7.203.00	35.60	9.442.00	621.00	6.07	8.356.00	982.00	298.00	
WF 36 x 150	911.00	15.90	304.00	23.90	19.00	863.00	825.20	286.00	223.23	376.800.00	8.273.00	36.30	11.220.00	738.00	6.27	9.540.00	1.163.00	427.00	
WF 36 x 160	915.00	16.50	305.00	25.90	19.00	863.20	825.20	304.00	238.11	406.400.00	8.883.00	36.60	12.290.00	806.00	6.36	10.230.00	1.267.00	519.00	
WF 36 x 170	919.00	17.30	306.00	27.90	19.00	863.20	825.20	323.00	252.99	437.500.00	9.520.00	36.80	13.370.00	874.00	6.43	10.960.00	1.375.00	631.00	
WF 36 x 182	923.00	18.40	307.00	30.00	19.00	863.00	825.00	346.00	270.85	471.600.00	10.220.00	36.90	14.520.00	946.00	6.48	11.780.00	1.491.00	775.00	
WF 36 x 194	927.00	19.40	308.00	32.00	19.00	863.00	825.00	368.00	288.70	504.500.00	10.880.00	37.00	15.640.00	1.016.00	6.52	12.570.00	1.603.00	930.00	
WF 36 x 210	932.00	21.10	309.00	34.50	19.00	863.00	825.00	398.00	312.52	548.200.00	11.760.00	37.10	17.040.00	1.103.00	6.54	13.630.00	1.748.00	1.171.00	



PERFIL H AMERICANO DE ALA ANCHA - WF

PERFILES WF	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	
	DESIGNACION	h	s	b	t	r	c	d	cm2	kg/mt	Ix	Sx	rx	Iy	Sy	ry	cm3	cm3	Jt
	mm	mm	mm	mm	mm	mm	mm			cm4	cm3	cm	cm4	cm3	cm			cm4	
WF 36 x 230	912.00	19.30	418.00	32.00	24.00	848.00	800.00	436.00	342.28	624.900.00	13.700.00	37.90	39.010.00	1.867.00	9.46	15.450.00	2.882.00	1.193.00	
WF 36 x 245	916.00	20.30	419.00	34.30	24.00	847.40	799.40	464.00	364.60	670.500.00	14.640.00	38.00	42.120.00	2.011.00	9.52	16.520.00	3.106.00	1.446.00	
WF 36 x 260	921.00	21.30	420.00	36.60	24.00	847.80	799.80	493.00	386.92	718.300.00	15.600.00	38.20	45.280.00	2.156.00	9.58	17.630.00	3.332.00	1.734.00	
WF 36 x 280	928.00	22.50	422.00	39.90	24.00	848.20	800.20	533.00	416.69	787.600.00	16.970.00	38.50	50.070.00	2.373.00	9.70	19.210.00	3.668.00	2.200.00	
WF 36 x 300	933.00	24.00	423.00	42.70	24.00	847.60	799.60	570.00	446.45	846.800.00	18.150.00	38.60	53.980.00	2.552.00	9.73	20.600.00	3.951.00	2.685.00	
WF 36 x 328	942.00	25.90	422.00	47.00	24.00	848.00	800.00	621.00	488.12	935.400.00	19.860.00	38.80	59.010.00	2.797.00	9.75	22.610.00	4.336.00	3.514.00	
WF 36 x 359	950.00	28.40	425.00	51.10	24.00	847.80	799.80	680.00	534.25	1.031.200.00	21.710.00	38.90	65.560.00	3.085.00	9.82	24.830.00	4.796.00	4.542.00	
WF 36 x 393	960.00	31.00	427.00	55.90	24.00	848.20	800.20	745.00	584.85	1.143.100.00	23.810.00	39.20	72.770.00	3.408.00	9.88	27.360.00	5.310.00	5.932.00	
WF 36 x 439	972.00	34.50	431.00	62.00	24.00	848.00	800.00	832.00	653.31	1.292.100.00	26.590.00	39.40	83.050.00	3.854.00	9.99	30.730.00	6.022.00	8.124.00	
WF 36 x 485	984.00	38.10	434.00	68.10	24.00	847.80	799.80	919.00	721.76	1.444.100.00	29.350.00	39.60	93.200.00	4.295.00	10.10	34.120.00	6.733.00	10.800.00	
WF 36 x 527	996.00	40.90	437.00	73.90	24.00	848.20	800.20	998.00	784.26	1.592.500.00	31.980.00	40.00	103.300.00	4.728.00	10.20	37.340.00	7.424.00	13.730.00	
WF 36 x 588	1.012.00	45.50	442.00	82.00	24.00	848.00	800.00	1.116.00	875.04	1.811.300.00	35.800.00	40.30	118.700.00	5.372.00	10.30	42.090.00	8.463.00	18.850.00	
WF 36 x 650	1.028.00	50.00	446.00	89.90	24.00	848.20	800.20	1.231.00	967.31	2.032.600.00	39.540.00	40.60	133.900.00	6.003.00	10.40	46.810.00	9.486.00	24.930.00	
WF 36 x 720	1.046.00	55.00	451.00	99.10	24.00	847.80	799.80	1.365.00	1.071.48	2.299.000.00	43.960.00	41.00	152.700.00	6.774.00	10.60	52.410.00	10.740.00	33.450.00	
WF 36 x 798	1.066.00	60.50	457.00	109.00	24.00	848.00	800.00	1.514.00	1.187.56	2.607.000.00	48.910.00	41.50	175.000.00	7.659.00	10.80	58.750.00	12.180.00	44.720.00	
WF 36 x 848	1.078.00	64.00	461.00	115.10	24.00	847.80	799.80	1.609.00	1.261.97	2.805.200.00	52.040.00	41.80	189.900.00	8.237.00	10.90	62.800.00	13.120.00	52.910.00	
WF 40 x 149	970.00	16.00	300.00	21.00	30.00	928.00	868.00	282.00	221.74	406.500.00	8.380.00	38.00	9.501.00	633.00	5.80	9.777.00	1.016.00	403.00	
WF 40 x 167	980.00	16.50	300.00	26.00	30.00	928.00	868.00	317.00	248.52	481.100.00	9.818.00	39.00	11.750.00	784.00	6.09	11.350.00	1.245.00	584.00	
WF 40 x 183	990.00	16.50	300.00	31.00	30.00	928.00	868.00	347.00	272.33	553.800.00	11.190.00	40.00	14.000.00	934.00	6.35	12.820.00	1.470.00	822.00	
WF 40 x 211	1.000.00	19.00	300.00	36.00	30.00	928.00	868.00	400.00	314.00	644.700.00	12.890.00	40.10	16.280.00	1.085.00	6.38	14.860.00	1.716.00	1.254.00	
WF 40 x 235	1.008.00	21.00	302.00	40.00	30.00	928.00	868.00	444.00	349.72	722.300.00	14.330.00	40.30	18.460.00	1.222.00	6.45	16.570.00	1.940.00	1.701.00	
WF 40 x 174	970.00	16.50	400.00	21.00	30.00	928.00	868.00	329.00	258.94	504.400.00	10.400.00	39.20	22.450.00	1.123.00	8.26	11.880.00	1.755.00	483.00	
WF 40 x 199	982.00	16.50	400.00	27.00	30.00	928.00	868.00	377.00	296.15	618.700.00	12.600.00	40.50	28.850.00	1.443.00	8.75	14.220.00	2.235.00	757.00	
WF 40 x 215	990.00	16.50	400.00	31.00	30.00	928.00	868.00	409.00	319.96	696.400.00	14.070.00	41.30	33.120.00	1.656.00	9.00	15.800.00	2.555.00	1.021.00	
WF 40 x 249	1.000.00	19.00	400.00	36.00	30.00	928.00	868.00	472.00	370.55	812.100.00	16.240.00	41.50	38.480.00	1.924.00	9.03	18.330.00	2.976.00	1.565.00	
WF 40 x 277	1.008.00	21.00	402.00	40.00	30.00	928.00	868.00	524.00	412.22	909.800.00	18.050.00	41.70	43.410.00	2.160.00	9.10	20.440.00	3.348.00	2.128.00	
WF 40 x 297	1.012.00	23.60	402.00	41.90	30.00	928.20	868.20	564.00	441.99	966.500.00	19.100.00	41.40	45.500.00	2.264.00	8.98	21.780.00	3.529.00	2.545.00	
WF 40 x 324	1.020.00	25.40	404.00	46.00	30.00	928.00	868.00	615.00	482.17	1.067.500.00	20.930.00	41.70	50.710.00	2.510.00	9.08	23.920.00	3.919.00	3.311.00	
WF 40 x 362	1.030.00	28.40	407.00	51.10	30.00	927.80	867.80	687.00	538.72	1.202.500.00	23.350.00	41.80	57.630.00	2.832.00	9.16	26.820.00	4.436.00	4.546.00	
WF 40 x 397	1.040.00	31.00	409.00	55.90	30.00	928.20	868.20	753.00	590.80	1.331.000.00	25.600.00	42.10	64.010.00	3.130.00	9.22	29.530.00	4.916.00	5.927.00	
WF 40 x 436	1.050.00	34.00	412.00	61.00	30.00	928.00	868.00	826.00	648.84	1.473.300.00	28.060.00	42.20	71.450.00	3.468.00	9.30	32.530.00	5.464.00	7.723.00	
WF 40 x 480	1.062.00	37.10	416.00	67.10	30.00	927.80	867.80	910.00	714.32	1.646.600.00	31.010.00	42.50	80.960.00	3.892.00	9.43	36.110.00	6.145.00	10.240.00	
WF 40 x 531	1.075.00	40.90	419.00	73.90	30.00	927.20	867.20	1.006.00	790.22	1.842.200.00	34.270.00	42.80	91.190.00	4.353.00	9.52	40.140.00	6.896.00	13.670.00	
WF 40 x 593	1.092.00	45.50	424.00	82.00	30.00	928.00	868.00	1.125.00	882.48	2.096.400.00	38.400.00	43.20	105.000.00	4.952.00	9.66	45.260.00	7.874.00	18.750.00	
WF 40 x 655	1.108.00	50.00	428.00	89.90	30.00	928.20	868.20	1.241.00	974.75	2.348.700.00	42.400.00	43.50	118.500.00	5.538.00	9.77	50.300.00	8.839.00	24.770.00	
WF 40 x 192	970.00	18.00	450.00	21.00	30.00	928.00	868.00	364.00	285.73	561.600.00	11.580.00	39.30	31.960.00	1.420.00	9.37	13.200.00	2.214.00	574.00	
WF 40 x 221	982.00	18.00	450.00	27.00	30.00	928.00	868.00	418.00	328.88	690.200.00	14.060.00	40.60	41.070.00	1.825.00	9.92	15.830.00	2.821.00	882.00	
WF 40 x 244	992.00	18.00	450.00	32.00	30.00	928.00	868.00	463.00	363.11	799.800.00	16.130.00	41.60	48.670.00	2.163.00	10.30	18.050.00	3.327.00	1.268.00	
WF 40 x 268	1.000.00	19.00	451.00	36.00	30.00	928.00	868.00	509.00	398.83	897.400.00	17.950.00	42.00	55.120.00	2.444.00	10.40	20.100.00	3.757.00	1.724.00	
WF 40 x 298	1.008.00	21.00	453.00	40.00	30.00	928.00	868.00	565.00	443.47	1.005.400.00	19.950.00	42.20	62.070.00	2.740.00	10.50	22.410.00	4.220.00	2.346.00	
WF 40 x 328	1.016.00	23.00	455.00	44.00	30.00	928.00	868.00	622.00	488.12	1.115.700.00	21.960.00	42.40	69.200.00	3.042.00	10.60	24.760.00	4.691.00	3.103.00	
WF 44 x 198	1.090.00	18.00	300.00	31.00	20.00	1.028.00	988.00	374.00	294.66	693.500.00	12.720.00	43.00	14.010.00	934.00	6.12	14.780.00	1.483.00	839.00	
WF 44 x 224	1.100.00	20.00	300.00	36.00	20.00	1.028.00	988.00	425.00	333.35	801.500.00	14.570.00	43.40	16.280.00	1.085.00	6.19	16.950.00	1.728.00	1.253.00	
WF 44 x 248	1.108.00	22.00	302.00	40.00	20.00	1.028.00	988.00	471.00	369.07	897.300.00	16.200.00	43.60	18.460.00	1.223.00	6.26	18.890.00	1.954.00	1.703.00	
WF 44 x 285	1.118.00	26.00	305.00	45.00	20.00	1.028.00	988.00	545.00	424.13	1.034.900.00	18.510.00	43.60	21.440.00	1.406.00	6.27	21.770.00	2.273.00	2.527.00	
WF 44 x 230	1.090.00	18.00	400.00	31.00	20.00	1.028.00	988.00	436.00	342.28	867.400.00	15.920.00	44.60	33.120.00	1.656.00	8.71	18.060.00	2.568.00	1.037.00	
WF 44 x 262	1.100.00	20.00	400.00	36.00	20.00	1.028.00	988.00	497.00	389.90	1.005.400.00	18.280.00	45.00	38.480.00	1.924.00	8.80	20.780.00	2.988.00	1.564.00	
WF 44 x 290	1.108.00	22.00	402.00	40.00	20.00	1.028.00	988.00	551.00	431.57	1.125.600.00	20.320.00	45.20	43.410.00	2.160.00	8.87	23.160.00	3.362.00	2.130.00	
WF 44 x 335	1.118.00	26.00	405.00	45.00	20.00	1.028.00	988.00	635.00	498.54	1.294.100.00	23.150.00	45.10	49.980.00	2.468.00	8.87	26.600.00	3.870.00	3.135.00	