

	CANTIDADES PARA COTIZACIÓN		FPS04-02 Versión 0
CLIENTE:	Convel	FECHA:	28/03/2014
PROYECTO:	Linea directa - Palmas	No COTIZACIÓN:	2016-045
ELABORÓ:		REVISÓ:	

1 Cubierta piso 3	CANTIDAD	1											
DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
1.01 Columnas armadas tipo 1	Tubcol8*x5.5	ASTM A500 Gr C	6m		3.90	28.00	1.00	3,163.52	75.16	3,163.52	75.16	3%	3,258.43
1.02 Perimetrales base 1-1	W8"x31	ASTM A572 Gr 50	12m		1.70	28.00	1.00	2,194.36	55.22	2,194.36	55.22	4%	2,282.13
1.03 Perimetrales - 2-2	Tubcol4*x3	ASTM A500 Gr C	6m		1.40	56.00	1.00	639.74	27.96	639.74	27.96	3%	660.86
1.04 Perimetrales sup 3-3	Tubcol8*x5.5	ASTM A500 Gr C	6m		1.40	28.00	1.00	1,135.62	26.98	1,135.62	26.98	3%	1,169.69
1.05 Diagonales - horizontales	Tubcol4*x3	ASTM A500 Gr C	6m		2.00	42.00	1.00	685.44	29.95	685.44	29.95	3%	708.06
1.06 Diagonales - horizontales base	W8"x31	ASTM A572 Gr 50	12m		2.40	14.00	1.00	1,548.96	38.98	1,548.96	38.98	4%	1,610.92
1.07 Diagonales - verticales	Tubcol4*x4	ASTM A500 Gr C	6m		1.68	168.00	1.00	3,033.29	100.52	3,033.29	100.52	2%	3,098.88
1.08 Columnas secundarias	PTEC6.1/4"x4.5	ASTM A500 Gr C	6m		3.90	6.00	1.00	400.61	11.67	400.61	11.67	3%	410.88
1.09	Tub16"SCH40	ASTM A500 Gr C	6m		3.90	3.00	1.00	1,442.61	14.94	1,442.61	14.94	3%	1,479.60
1.10 Correas	2PHRC305x80x2	ASTM A1011 Gr 50	6m		247.56	1.00	1.00	3.871.84	230.23	3.871.84	230.23	3%	3.968.63
1.11	2PHRC305x80x2	ASTM A1011 Gr 50	6m		297.19	1.00	1.00	4,648.08	276.39	4,648.08	276.39	3%	4,764.28
1.12 Vigas principales - VAT1	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.20	171.45	2.00	1.00	6,837.23	138.91	6,837.23	138.91	5%	7,179.10
1.13	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.58	171.45	1.00	1.00	4,957.00	200.15	4,957.00	200.15	5%	5,204.84
1.14 Vigas principales - VAT2	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.23	55.26	2.00	1.00	2,534.18	51.48	2,534.18	51.48	5%	2.660.89
1.15	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.70	55.26	1.00	1.00	2.890.76	78.10	2.890.76	78.10	5%	3.035.29
1.16	W16"x31	ASTM A572 Gr 50	12m		95.61	1.00	1.00	4,407,61	125.19	4,407,61	125.19	7%	4,702.20
1.17 Correa perimetral armada	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	0.16	158.10	2.00	1.00	1.890.42	101.67	1,890.42	101.67	5%	1,984.94
1.18	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	0.37	158.10	2.00	1.00	4,312.52	231.92	4,312.52	231.92	5%	4,528.15
1.19 VAT3 - perimetral	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	153.20	2.00	1.00	2,290.99	92.50	2,290.99	92.50	5%	2,405.54
1.20	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	153.20	1.00	1.00	2,290,99	92.50	2,290,99	92.50	5%	2,405,54
1.21 Riostras	Var1/2"	ASTM A36	6m	0.00	308.30	1.00	1.00	306.58	12.30	306.58	12.30	3%	316.22
1,22 Conexiones - D1	Lam3/4"	ASTM A572 Gr 50	1.22mX2.44m	0.30	0.83	7.00	1.00	260.65	3.55	260.65	3.55	5%	273.69
1.23 D2	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.30	0.30	2.00	1.00	13.45	0.36	13.45	0.36	5%	14.12
1.24	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.31	1.00	1.00	1.11	0.04	1.11	0.04	5%	1.17
1.25 D3	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.30	0.30	10.00	1.00	67.26	1.82	67.26	1.82	5%	70.62
1.26	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.41	5.00	1.00	11.03	0.30	11.03	0.30	5%	11.58
1.27 D4	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.30	0.30	4.00	1.00	26.90	0.73	26.90	0.73	5%	28.25
1.28	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.55	4.00	1.00	13.48	0.36	13.48	0.36	5%	14.16
1.29 D6	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.25	0.35	28.00	1.00	130.78	3.53	130.78	3.53	5%	137.32
1.30 D8	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.25	0.25	6.00	1.00	28.02	0.76	28.02	0.76	5%	29.43
1.31 09	Lam5/8"	ASTM A572 Gr 50	1.83mX6.09m	0.48	0.48	1.00	1.00	28.70	0.47	28.70	0.47	5%	30.14
1.32	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.40	2.00	1.00	5.07	0.14	5.07	0.14	5%	5.33
1.33 D10	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.41	4.00	1.00	8.82	0.14	8.82	0.14	5%	9.27
1.34 D11	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.06	0.21	104.00	1.00	67.50	2.73	67.50	2.73	5%	70.87
1.35 D12	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.30	48.00	1.00	154.96	4.19	154.96	4.19	5%	162.71
1.36 D13 - portacorreas	Lam3	ASTM A572 Gr 50	1.22mX2.44m	0.14	0.30	92.00	1.00	113.10	9.63	113.10	9.63	5%	118.75
1.37	Lam3	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.29	184.00	1.00	100.53	8.56	100.53	8.56	5%	105.56
1.38	Lam3	ASTM A572 Gr 50	1.22mX2.44m	0.08	0.18	92.00	1.00	31.20	2.66	31.20	2.66	5%	32.76
1.39 D14	Lam3 Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.18	168.00	1.00	31.20 54.43	2.66	31.20 54.43	2.66	5%	32.76 57.16
1.40	L2"x1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05			1.00						
1.40 1.41 D15	L2"x1/4" Lam1/4"	ASTM A572 Gr 50 ASTM A572 Gr 50	1,22mX2,44m 1.22mX2.44m	0.08	0.06	168.00 14.00	1.00	47.88 23.68	1.92	47.88 23.68	1.92	5% 5%	50.27 24.87
1.42 D16	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.40	14.00	1.00	23.68	0.96	23.68	0.96	5%	24.87
1.42 D16 1.43 D17	Lam3/8" Lam1"	ASTM A572 Gr 50	2.44mX6.09m	0.17	0.58	2.00 9.00	1.00	14.65 172.27	0.40	14.65 172.27	0.40 1.77	5% 5%	15.38 180.89
1.43 017		ASTM A572 Gr 50	1,83mX6,09m				1.00	1/2.2/ 50.82					
1.44	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.16	0.18	18.00			1.03	50.82	1.03	5%	53.36
	Lam1/4"		1,22mX2,44m 1.22mX2.44m	0.24	0.12	18.00	1.00	25.73	1.04	25.73	1.04	5%	27.02
1.46	Lam3/8"	ASTM A572 Gr 50		0.16	0.55	18.00	1.00	115.73	3.13	115.73	3.13	5%	121.52
1.47 D18	Lam3/8"	ASTM A572 Gr 50 ASTM A572 Gr 50	1,22mX2,44m 2.44mX6.09m	0.21	0.68	6.00	1.00	62.05	1.68	62.05	1.68	5%	65.15
1.48	Lam1"			0.18	1.20	3.00	1.00	129.20	1.33	129.20	1.33	5%	135.66
1.49	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.12	0.12	6.00	1.00	8.61	0.17	8.61	0.17	5%	9.04
1.50	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.12	0.12	6.00	1.00	4.31	0.17		0.17	5%	
1.51 D21	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.25	0.25	28.00	1.00	130.78	3.53	130.78	3.53	5%	137.32
1.52							1.00	0.00	0.00	0.00	0.00	0%	0.00
1.53							1.00	0.00	0.00	0.00	0.00	0%	0.00
									DTALES	57.385.11	2.072.12	4%	59.832.97

	tecnica aso		CANTIDAD	1											
į	DESCRIPCION	ı	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
2	01 Losa		W12"x16	ASTM A572 Gr 50	12m		5.50	9.00	1.00	1,178.10	48.33	1,178.10	48.33	4%	1,225.22
2	02 Cubierta		2PHRC305x80x1.5	ASTM A1011 Gr 50	6m		5.50	11.00	1.00	709.67	56.27	709.67	56.27	9%	774.18
2	03 Conexiones -D	l	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05	0.25	40.00	1.00	24.92	1.01	24.92	1.01	5%	26.17
2	04 D2		Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.25	0.31	18.00	1.00	102.57	2.77	102.57	2.77	5%	107.70
	05		Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05	0.21	18.00	1.00	9.42	0.38	9.42	0.38	5%	9.89
	06 D4		L3"x1/4"	ASTM A36	6m		0.60	2.00	1.00	8.75	0.35	8.75	0.35	5%	9.19
2	07								1.00	0.00	0.00	0.00	0.00	0%	0.00
										SUBT	OTALES	2 033 43	109 10	6%	2 152 35

				_					SUBTOTALES		2,033.43	109.10	6%	2,152.35
3	Ampliación losa 3	CANTIDAD												
ITEM	DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
3.01	Vigas	W8"x13	ASTM A572 Gr 50	12m		9.14	1.00	1.00	176.34	7.08	176.34	7.08	31%	231.60
3.02		W12"x16	ASTM A572 Gr 50	12m		46.41	1.00	1.00	1,104.61	45.32	1,104.61	45.32	4%	1,148.79
3.03		W21"x44	ASTM A572 Gr 50	12m		36.08	1.00	1.00	2,381.54	59.42	2,381.54	59.42	5%	2,500.62
3.04		W21"x57	ASTM A572 Gr 50	12m		61.90	1.00	1.00	5,261.76	101.98	5,261.76	101.98	7%	5,610.00
3.05		W18"x35	ASTM A572 Gr 50	12m		96.28	1.00	1.00	5,006.56	139.57	5,006.56	139.57	5%	5,256.89
3.06		W16"x26	ASTM A572 Gr 50	12m		50.18	1.00	1.00	1,946.87	65.73	1,946.87	65.73	4%	2,024.74
3.07		W24"x68		12m		19.21	1.00	1.00	1,940.11	39.14	1,940.11	39.14	25%	2,424.00
3.08		W14"x22	ASTM A572 Gr 50	12m		316.25	1.00	1.00	10,404.56	366.97	10,404.56	366.97	3%	10,716.70
	Vigas armadas - VAT1	Lam12	ASTM A572 Gr 50	1,22mX2,44m	0.20	39.02	2.00	1.00	1,470.09	31.59	1,470.09	31.59	5%	1,543.59
3.10		Lam9	ASTM A572 Gr 50	1,22mX2,44m	0.58	39.02	1.00	1.00	1,598.72	45.66	1,598.72	45.66	5%	1,678.65
3.11		Lam25	ASTM A572 Gr 50	2,44mX6,09m	0.15	59.22	2.00		3,486.70	36.42	3,486.70	36.42	5%	3,661.03
3.12		Lam15	ASTM A572 Gr 50	1,83mX6,09m	0.30	59.22	1.00	1.00	2,092.02	36.07	2,092.02	36.07	5%	2,196.62
3.13		Lam19	ASTM A572 Gr 50	2,44mX6,09m	0.23	13.97	2.00		958.47	13.10	958.47	13.10	5%	1,006.39
3.14		Lam15	ASTM A572 Gr 50	1,83mX6,09m	0.70	13.97	1.00		1,151.48	19.85	1,151.48	19.85	5%	1,209.05
3.15		Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	186.50	2.00		2,788.97	112.61	2,788.97	112.61	5%	2,928.42
3.16		Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	186.50	1.00	1.00	2,788.97	112.61	2,788.97	112.61	5%	2,928.42
	Conexiones - D1A	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.29	166.00	1.00	514.48	13.90	514.48	13.90	5%	540.21
3.18		Lam15	ASTM A572 Gr 50	1,83mX6,09m	0.31	0.68	12.00	1.00	297.86	5.14	297.86	5.14	5%	312.75
3.19		Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.09	0.43	24.00		94.65	1.92	94.65	1.92	5%	99.39
3.20		Lam15	ASTM A572 Gr 50	1,83mX6,09m	0.53	0.88	6.00		329.51	5.68	329.51	5.68	5%	345.99
3.21		Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.08	0.57	12.00		68.17	1.11	68.17	1.11	5%	71.58
3.22		Lam15	ASTM A572 Gr 50	1,83mX6,09m	0.53	0.88	2.00		109.84	1.89	109.84	1.89	5%	115.33
3.23		Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.08	0.57	4.00		22.72	0.37	22.72	0.37	5%	23.86
3.24		Lam12	ASTM A572 Gr 50	1,22mX2,44m	0.68	0.78	1.00		49.96	1.07	49.96	1.07	5%	52.46
3.25		Lam12	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.49	2.00		7.57	0.16	7.57	0.16		7.95
3.26		Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.27	0.65	18.00	1.00	318.44	6.47	318.44	6.47	5%	334.36
3.27		Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.13	0.33	96.00	1.00	316.79	8.56	316.79	8.56	5%	332.63
3.28		Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.18	0.58	16.00	1.00	123.76	3.34	123.76	3.34	5%	129.94
3.29								1.00	0.00	0.00	0.00	0.00	0%	0.00
3.30								1.00	0.00	0.00	0.00	0.00	0%	0.00
3.31								1.00	0.00	0.00	0.00	0.00	0%	0.00
3.32								1.00	0.00	0.00	0.00	0.00	0%	0.00
3.33		1						1.00	0.00	0.00	0.00	0.00	0%	0.00
									SUBT	OTALES	46,811.49	1,282.73	6%	49,431.94

Escaleras de emergencia	CANTIDAD												
DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
4.01 Gualdera	Tubcol300x100x7	ASTM A500 Gr C	6m		80.00	1.00	1.00	3,288.00	64.00	3,288.00	64.00	4%	3,419.52
4.02 Columnas armadas	Lam5/16"	ASTM A572 Gr 50	1,22mX2,44m	0.25	13.14	24.00	1.00	4,914.77	158.96	4,914.77	158.96	5%	5,160.50
	Tubcol6*x6	ASTM A500 Gr C	6m		0.95	1.00	1.00	22.92	0.50	22.92	0.50	26%	28.82
4.04 Peldaños	Lam4.5alf	ASTM A36	1,00mX3,00m	0.49	1.32	77.00	1.00	1,834.38	99.01	1,834.38	99.01	5%	1,926.10
4.05 Descansos	Lam4.5alf	ASTM A36	1,00mX3,00m	1.00	4.94	3.00	1.00	551.60	29.77	551.60	29.77	5%	579.18
4.06	Tubcol300x100x7	ASTM A500 Gr C	6m		1.84	6.00	1.00	453.99	8.84	453.99	8.84	4%	472.15
4.07	Tubcol300x100x7	ASTM A500 Gr C	6m		11.99	3.00	1.00	1,477.87	28.77	1,477.87	28.77	4%	1,536.99
4.08	Lam4.5alf	ASTM A36	1,00mX3,00m	1.00	6.90	3.00	1.00	770.45	41.59	770.45	41.59	5%	808.98
4.09	Tubcol300x100x7	ASTM A500 Gr C	6m		21.45	3.00	1.00	2,645.28	51.49	2,645.28	51.49	4%	2,751.09
4.10 Resto estructura soporte	Tubcol300x100x7		6m		36.10	3.00	1.00	4,451.50	86.65	4,451.50	86.65	4%	4,629.56
4.11	Tubcol2*x2*x2	ASTM A500 Gr C	6m		19.50	3.00	1.00	179.56	11.70	179.56	11.70	3%	184.20
4.12	Tubcol160x65x3.4		6m		8.99	3.00	1.00	305.81	12.14	305.81	12.14	11%	340.20
4.13 VAT1	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.10	8.00	2.00	1.00	79.76	3.22	79.76	3.22	5%	83.74
4.14	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	8.00	1.00	1.00	119.63	4.83	119.63	4.83	5%	125.62
4.15 Pasamanos - parales	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.05	1.10	178.00	1.00	731.63	19.77	731.63	19.77	5%	768.21
4.16 Conexión	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05	0.10	89.00	1.00	22.18	0.90	22.18	0.90	5%	23.29
4.17 Rodamanos	Tubcol2*x2*x1.5	ASTM A500 Gr C	6m		80.00	2.00	1.00	364.80	32.00	364.80	32.00	1%	369.36
4.18 Codo	Tubcol1.1/2"x1.5	ASTM A500 Gr C	6m		0.19	89.00	1.00	28.95	2.54		2.54	8%	31.14
4.19 Conexiones - D1	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.30	0.65	1.00	1.00	19.44	0.39	19.44	0.39	5%	20.41
4.20 D2	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.22	0.30	1.00	1.00	6.58	0.13		0.13	5%	6.91
4.21 D3	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.43	0.43	6.00	1.00	221.20	2.28	221.20	2.28	5%	232.26
4.22 D4	Lam3/4"	ASTM A572 Gr 50	1,22mX2,44m	1.47	1.47	36.00	1.00	11,696.67	159.41	11,696.67	159.41	5%	12,281.50
4.23	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.21	144.00	1.00	108.53	4.38	108.53	4.38	5%	113.96
4.24 D5	Lam3/4"	ASTM A572 Gr 50	1,22mX2,44m	0.11	1.32	48.00	1.00	1,045.41	14.25	1,045.41	14.25	5%	1,097.68
4.25	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.21	96.00	1.00	72.35	2.92	72.35	2.92	5%	75.97
4.26 D6	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.21	78.00	1.00	58.79	2.37	58.79	2.37	5%	61.73
4.27 D7	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.20	0.20	1.00	1.00	2.99	0.08	2.99	0.08	5%	3.14
4.28 D9	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.06	0.13	72.00	1.00	28.93	1.17	28.93	1.17	5%	30.37



	CANTIDADES PARA COTIZACIÓN		FPS04-02 Versión 0
CLIENTE:	Convel	FECHA:	28/03/2014
PROYECTO:	Linea directa - Palmas	No COTIZACIÓN:	2016-045
ELABORÓ:		REVISÓ:	

4.29 D10	Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.12	0.29	12.00	1.00	51.67	0.84	51.67	0.84	5%	54.25
4.30							1.00	0.00	0.00	0.00	0.00	0%	0.00
4.31							1.00	0.00	0.00	0.00	0.00	0%	0.00
4.32							1.00	0.00	0.00	0.00	0.00	0%	0.00
								SUBT	OTALES	35 555 62	844.89	5%	37 216 84

5 Intervención piso 2	CANTIDAD												
DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
5.01 Vigas	W14"x22	ASTM A572 Gr 50	12m		5.53	1.00	1.00	181.90	6.42	181.90	6.42	3%	187.36
5.02	W16"x26	ASTM A572 Gr 50	12m		13.99	1.00	1.00	542.93	18.33	542.93	18.33	4%	564.65
5.03	W18"x35	ASTM A572 Gr 50	12m		1.43	1.00	1.00	74.36	2.07	74.36	2.07	5%	78.08
5.04	W21*x44	ASTM A572 Gr 50	12m		9.06	1.00	1.00	597.70	14.91	597.70	14.91	5%	627.58
5.05 VAT4	Lam6	ASTM A572 Gr 50	1,22mX2,44m	0.15	15.00	2.00	1.00	211.95	9.05	211.95	9.05	5%	222.55
5.06	Lam6	ASTM A572 Gr 50	1,22mX2,44m	0.30	15.00	1.00	1.00	211.95	9.05	211.95	9.05	5%	222.55
5.07 Conexiones - D1	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	0.50	2.00	1.00	7.51	0.30	7.51	0.30	5%	7.88
5.08 D2	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	0.50	2.00	1.00	7.51	0.30	7.51	0.30	5%	7.88
5.09 D3	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.43	2.00	1.00	5.27	0.14	5.27	0.14	5%	5.53
5.10 D4	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.13	0.67	2.00	1.00	33.68	0.35	33.68	0.35	5%	35.36
5.11	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	0.50	4.00	1.00	15.01	0.61	15.01	0.61	5%	15.76
5.12	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.12	0.19	4.00	1.00	4.43	0.18	4.43	0.18	5%	4.65
5.13	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.13	0.21	4.00	1.00	8.09	0.22	8.09	0.22	5%	8.49
5.14 D5	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.14	1.25	1.00	1.00	34.89	0.36	34.89	0.36	5%	36.64
5.15	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	0.50	4.00	1.00	15.01	0.61	15.01	0.61	5%	15.76
5.16	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.10	0.13	2.00	1.00	1.30	0.05	1.30	0.05	5%	1.36
5.17	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.17	2.00	1.00	3.62	0.10	3.62	0.10	5%	3.80
5.18 D6	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.14	0.73	2.00	1.00	40.48	0.42	40.48	0.42	5%	42.50
5.19	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	0.50	4.00	1.00	15.01	0.61	15.01	0.61	5%	15.76
5.20	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.10	0.14	4.00	1.00	2.69	0.11	2.69	0.11	5%	2.83
5.21	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.16	4.00	1.00	6.70	0.18	6.70	0.18	5%	7.03
5.22 D7	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.29	9.00	1.00	27.89	0.75	27.89	0.75	5%	29.29
5.23 D8	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.51	0.97	1.00	1.00	98.05	1.01	98.05	1.01	5%	102.95
5.24	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.06	0.31	2.00	1.00	1.85	0.07	1.85	0.07	5%	1.95
5.25	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.13	0.27	2.00	1.00	3.39	0.14	3.39	0.14	5%	3.56
5.26	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.10	0.14	2.00	1.00	2.09	0.06	2.09	0.06	5%	2.20
5.27	Lam1*	ASTM A572 Gr 50	2,44mX6,09m	0.14	0.18	2.00	1.00	10.05	0.10	10.05	0.10	5%	10.55
5.28					· · · · · · · · · · · · · · · · · · ·		1.00	0.00	0.00	0.00	0.00	0%	0.00
								SUBT	OTALES	2,165.31	66.50	5%	2,264.51

6 Intervención piso 1,2 y 3	CANTIDAD	3											
DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
6.01 Vigas nuevas	W14"x22	ASTM A572 Gr 50	12m		2.91	2.00	1.00	191.35	6.75	574.04	20.25	3%	591.26
6.02 Conexiones - D2	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.25	0.40	2.00	1.00	14.95	0.40	44.84	1.21	5%	47.08
6.03	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.06	0.30	2.00	1.00	1.85	0.07	5.56	0.22	5%	5.84
6.04 D3	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.17	0.58	2.00	1.00	9.75	0.39	29.24	1.18	5%	30.70
6.05							1.00	0.00	0.00	0.00	0.00	0%	0.00

7 Escaleras principales	CANTIDAD												
DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
7.01 Gualdera	Tubcol300x100x7	ASTM A500 Gr C	6m		53.38	2.00	1.00	4,387.84	85.41	4,387.84	85.41	4%	4,563.35
7.02 Columnas principales	Tubcol12"x12"x10	ASTM A500 Gr C	6m		17.80	4.00	1.00	6,339.65	85.44	6,339.65	256.32	4%	6,593.23
7.03 Columnas voladizo	PTEC6"x6"x4.5	ASTM A500 Gr C	6m		17.80	2.00	1.00	729.44	21.70	729.44	65.11	4%	758.62
7.04 Vigas principales	Tubcol16"x8"x9	ASTM A500 Gr C	6m		3.81	4.00	1.00	1,228.34	18.29	1,228.34	54.86	4%	1,277.48
7.05 VAT1	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	56.24	2.00	1.00	1,682.17	67.92	1,682.17	203.76	4%	1,749.46
7.06	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.15	56.24	2.00	1.00	1,260.97	34.07	1,260.97	102.20	4%	1,311.41
7.07 VAT1 perimetral	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	20.50	2.00	1.00	613.00	24.75	613.00	74.25	4%	637.52
7.08	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.15	20.50	2.00	1.00	459.51	12.41	459.51	37.24	4%	477.89
	Tubcol3*x3*x3	ASTM A500 Gr C	6m		121.04	1.00	1.00	768.60	36.31	768.60	108.94	4%	799.35
7.10	PTEC8"x4"x4.5	ASTM A500 Gr C	6m		10.80	1.00	1.00	221.29	6.58	221.29	19.75	4%	230.14
7.11 Peldaños	Lam3/16*	ASTM A572 Gr 50	1,22mX2,44m	0.50	1.80	78.00	1.00	2,623.09	141.07	2,623.09	423.20	4%	2,728.02
7.12	Lam3/16*	ASTM A572 Gr 50	1,22mX2,44m	1.80	2.07	6.00	1.00	836.56	44.99	836.56	134.97	4%	870.03
7.13	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	1.80	2.52	6.00	1.00	1,016.95	54.69	1,016.95	164.07	4%	1,057.63
7.14 Cubierta - VAT3	Lam3/16*	ASTM A572 Gr 50	1,22mX2,44m	0.16	3.97	2.00	1.00	47.47	2.55	47.47	7.66	4%	49.37
7.15	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	0.37	3.97	2.00	1.00	108.29	5.82	108.29	17.47	4%	112.62
7.16 VAT3 - perimetral	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	0.16	7.45	2.00	1.00	89.10	4.79	89.10	14.38	4%	92.67
7.17	Lam3/16"	ASTM A572 Gr 50	1,22mX2,44m	0.37	7.45	2.00	1.00	203.27	10.93	203.27	32.80	4%	211.40
7.18 VAT2	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.15	3.82	2.00	1.00	57.13	2.31	57.13	6.92	4%	59.41
7.19	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.30	3.82	1.00	1.00	57.13	2.31	57.13	6.92	4%	59.41
7.20 Correas	2PHRC305x80x2	ASTM A1011 Gr 50	6m		31.02	1.00	1.00	485.15	28.85	485.15	86.55	4%	504.56
7.21 Riostras	Var1/2*	ASTM A36	6m		33.20	1.00	1.00	33.01	1.32	33.01	3.97	4%	34.34
7.22 Conexiones - D1	Lam1 1/4"	ASTM A572 Gr 50	1,83mX6,09m	0.70	0.70	3.00	1.00	366.38	3.03	366.38	9.10	4%	381.03
7.23 Cartelas	Lam3/4"	ASTM A572 Gr 50	1.22mX2.44m	0.18	0.20	12.00	1.00	64.96	0.89		2.66	4%	67.56
7.24	Lam3/4"	ASTM A572 Gr 50	1.22mX2.44m	0.20	0.70	6.00	1.00	125.62	1.71		5.14	4%	130.64
7.25	Lam3/4"	ASTM A572 Gr 50	1.22mX2.44m	0.20	0.30	6.00	1.00	53.84	0.73			4%	55.99
7.26 D2	Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.50	0.70	1.00	1.00	43.60	0.71		2.13	4%	45.35
7.27 D3	Lam1/2"	ASTM A572 Gr 50	1.83mX6.09m	0.22	0.65	2.00	1.00	28.51	0.58	28.51	1.74	4%	29.65
7.28 D4	Lam1"	ASTM A572 Gr 50	2.44mX6.09m	1.25	2.10	12.00	1.00	6.280.79	64.60	6.280.79	193.80	4%	6.532.02
7.29	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.07	0.21	24.00	1.00	18.09	0.73		2.19	4%	18.81
7.30	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.09	0.98	24.00	1.00	105.56	4.26	105.56	12.79	4%	109.78
7.31	Lam3/8"	ASTM A572 Gr 50	1.22mX2.44m	0.15	0.89	12.00	1.00	119.45	3.23	119.45	9.68	4%	124.23
7.32	Lam3/8"	ASTM A572 Gr 50	1.22mX2.44m	0.13	0.05	12.00	1.00	17.22	0.47	17.22		4%	17.91
7.33 D5	Lam5/8"	ASTM A572 Gr 50	1.83mX6.09m	0.85	0.15	10.00	1.00	900.09	14.68	900.09	44.04	4%	936.09
7.34	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.07	0.83	20.00	1.00	15.07	0.61		1.83	4%	15.68
7.35 D6	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.07	0.16	190.00	1.00	109.11	4.41	109.11	13.22	4%	113.47
7.36 D7	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.08	0.21	12.00	1.00	10.30	0.42			4%	10.71
7.37 D8	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.21	12.00	1.00	9.04	0.42		1.10	4%	9.41
7.38 D12	Lam1/4"	ASTM A572 Gr 50	1.22mX2.44m	0.40	0.40	4.00	1.00	31.90	1.29			4%	33.18
7.39	Lam5/8"	ASTM A572 Gr 50	1.83mX6.09m	0.40	0.40	8.00	1.00	31.39	0.51		1.54	4%	32.65
7.40	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.40	0.40	8.00	1.00	95.66	2.58	95.66	7.75	4%	99.48
7.41 D13	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.40	0.40	4.00	1.00	12.40	0.33	12.40		4%	12.89
7.42 D14 - portacorreas	Lam3	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.29	6.00	1.00	7.38	0.33	7.38	1.88	4%	7.67
7.43	Lam3	ASTM A572 Gr 50	1,22mX2,44m	0.18	0.29	12.00	1.00	7.38 6.56	0.63			4%	6.82
7.43		ASTM A572 Gr 50	1,22mX2,44m	0.08	0.29	6.00	1.00		0.56		0.52	4%	
7.45 D15	Lam3	ASTM A572 Gr 50	1,22mX2,44m	0.08	0.18	12.00	1.00	2.03	0.17			4%	2.12 4.04
	Lam1/4" L2"x1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05	0.13	12.00	1.00	3.89	0.16			4%	4.04 3.56
7.47 D16		ASTM A572 Gr 50	1,22mX2,44m										
	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m 1.22mX2.44m	0.27	0.27	2.00	1.00	10.90	0.29			4%	11.33
7.48 D19	Lam3/4"	ASTM A572 Gr 50 ASTM A572 Gr 50	1,22mX2,44m 1.22mX2.44m	0.12	0.29	3.00	1.00	15.50	0.21	15.50	0.63	4%	16.12
7.49 D21	Lam1/4"			0.06	0.21	4.00	1.00	2.60	0.10	2.60	0.31	4%	2.70
7.50 Pasamanos - parales	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.05	1.10	120.00	1.00	493.23	13.33	493.23	39.98	4%	512.96
7.51 Conexión	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.05	0.10	60.00	1.00	14.95	0.60	14.95	1.81	4%	15.55
7.52 Rodamanos	Tubcol2*x2*x1.5	ASTM A500 Gr C	6m		54.00	2.00	1.00	246.24	21.60		64.80	4%	256.09
	Tubcol1.1/2*x1.5	ASTM A500 Gr C	ьm		0.19	60.00	1.00	19.51	1.71	19.51	5.13	4%	20.29
7.54							1.00	0.00	0.00	0.00		0%	0.00
7.55		_	ļ				1.00	0.00	0.00	0.00	0.00	0%	0.00
								SUBT	OTALES	32,513,18	2.343.68	4%	33.813.70

				=					SUBTUTALES		32,513.10	2,343.00	476	33,013.70
8	Escaleras interiores	CANTIDAD												
пЕМ	DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
	Columnas	PTEC10"x4"x5.5		6m		20.00	6.00	1.00	3,496.80	85.34	3,496.80	85.34	4%	3,636.67
8.02		PTEC5"x5"x4.5	ASTM A500 Gr C	6m		3.00	3.00	1.00	152.10	4.57	152.10	4.57	4%	158.18
	Gualdera	Lam5/8"		1,83mX6,09m	0.24	118.00	1.00	1.00	3,586.89	58.50	3,586.89	58.50	4%	3,730.37
	Gualdera rolada	Lam5/8"		1,83mX6,09m	0.24	33.50	1.00	1.00	1,018.16	16.60	1,018.16	16.60	4%	1,058.89
	Vigas descansos	W6"x12	ASTM A572 Gr 50			2.80	13.00	1.00	655.20	24.48	655.20	24.48	4%	681.41
8.06		W8"x13	ASTM A572 Gr 50			2.80	2.00	1.00	108.08	4.34	108.08	4.34	4%	112.40
8.07		W6"x12	ASTM A572 Gr 50	6m		1.51	2.00	1.00	54.36	2.03	54.36	2.03	4%	56.53
8.08		W6"x12	ASTM A572 Gr 50	6m		2.10	7.00	1.00	264.60	9.89	264.60	9.89	4%	275.18
8.09		L2"x3/16"		6m		1.60	2.00	1.00	11.62	0.62	11.62	0.62	4%	12.08
	Peldaños	Lam4.5alf	ASTM A36	1,00mX3,00m	0.53	1.20	126.00	1.00	2,971.41	160.39	2,971.41	160.39	4%	3,090.26
8.11	Platinería	Lam9	ASTM A572 Gr 50	1,22mX2,44m	0.55	0.95	28.00	1.00	1,033.61	29.52	1,033.61	29.52	4%	1,074.95
8.12	Conexiones - D1	Lam1/2"	ASTM A572 Gr 50	1,83mX6,09m	0.21	0.31	4.00	1.00	25.96	0.53	25.96	0.53	4%	27.00
8.13	D1A	Lam5/16*	ASTM A572 Gr 50	1,22mX2,44m	0.24	0.24	3.00	1.00	10.77	0.35	10.77	0.35	4%	11.20
8.14		Lam5/16*	ASTM A572 Gr 50	1,22mX2,44m	0.06	0.06	6.00	1.00	1.35	0.04	1.35	0.04	4%	1.40
8.15	D2	Lam5/16*	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.31	2.00	1.00	5.41	0.17	5.41	0.17	4%	5.63
8.16	D3	Lam2*	ASTM A572 Gr 50	2,44mX6,09m	0.06	0.06	112.00	1.00	160.79	0.85	160.79	0.85	4%	167.22
8.17		Lam9	ASTM A572 Gr 50	1,22mX2,44m	0.14	0.51	7.00	1.00	35.31	1.01	35.31	1.01	4%	36.72
8.18								1.00	0.00	0.00	0.00	0.00	0%	0.00
8.19								1.00	0.00	0.00	0.00	0.00	0%	0.00
	•		•						SUBT	OTALES	13.592.41	399.24	4%	14,136,11

	- "	WEZAIIIIES LECTIICOS	OAITIDAD	_											
	ITEM	DESCRIPCION	MATERIAL	CALIDAD	FORMATO	ANCHO (m)	LONG. (m)	CANTIDAD	FC AREA	PESO (kg)	AREA PINTURA (m2)	PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
9	.01	Columnas	Tubcol150x150x6	ASTM A500 Gr C	6m		4.30	4.00	1.00	454.08	10.32	908.16	20.64	4%	944.49



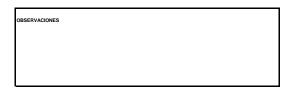
CANTIDADES PARA COTIZACIÓN FP: Ve								
	CLIENTE:	Convel	FECHA:	28/03/2014				
	PROYECTO:	Linea directa - Palmas	No COTIZACIÓN:	2016-045				
	ELABORÓ:	·	REVISÓ:	<u> </u>				

0.00		1071117700 0											
9.02 Vigas principales	W12"x14	ASTM A572 Gr 50			3.65	1.00	1.00	76.65	3.56		7.12	4%	159.43
9.03	W12"x14	ASTM A572 Gr 50			6.10	1.00	1.00	128.10	5.95	256.20	11.90	4%	266.45
9.04	W12"x14	ASTM A572 Gr 50			3.50	1.00	1.00	73.50	3.41	147.00	6.83	4%	152.88
9.05	W12"x14	ASTM A572 Gr 50	12m		6.60	1.00	1.00	138.60	6.44	277.20	12.87	4%	288.29
9.06	W6"x15	ASTM A572 Gr 50	12m		2.00	1.00	1.00	45.00	1.75	90.00	3.50	4%	93.60
9.07	PHRC100x50x1.5	ASTM A1011 Gr 50			6.55	1.00	1.00	16.57	2.93	33.14	5.87	4%	34.47
9.08	PHRC100x50x1.5	ASTM A1011 Gr 50	6m		6.45	1.00	1.00	16.32	2.89	32.64	5.78	4%	33.94
9.09 Vigas secundarias	PHRC100x50x1.5	ASTM A1011 Gr 50			3.53	15.00	1.00	133.85	23.70	267.70	47.40	4%	278.41
9.10 Conexiones - D1	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.20	0.20	4.00	1.00	11.96	0.32	23.91	0.65	4%	24.87
9.11 D2	Lam3/8"	ASTM A572 Gr 50	1,22mX2,44m	0.20	0.20	4.00	1.00	11.96	0.32	23.91	0.65	4%	24.87
9.12 D3	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.11	0.29	30.00	1.00	48.36	1.95	96.72	3.91	4%	100.59
9.13 D4	L51x3,2	ASTM A36	6m		0.10	60.00	1.00	14.76	1.19	29.52	2.37	4%	30.70
9.14 D5	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.11	0.29	4.00	1.00	6.45	0.26	12.90	0.52	4%	13.41
9.15 D6	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.13	0.38	1.00	1.00	2.49	0.10	4.98	0.20	4%	5.18
9.16 D7	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.12	0.19	3.00	1.00	3.48	0.14	6.96	0.28	4%	7.24
9.17 D8	Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.45	0.45	2.00	1.00	50.45	0.82	100.91	1.65	4%	104.95
9.18	Lam1/4"	ASTM A572 Gr 50	1,22mX2,44m	0.07	0.21	2.00	1.00	1.51	0.06	3.01	0.12	4%	3.14
9.19 D9	Lam5/8"	ASTM A572 Gr 50	1,83mX6,09m	0.25	0.65	6.00	1.00	121.47	1.98	242.93	3.96	4%	252.65
9.20							1.00	0.00	0.00	0.00	0.00	0%	0.00
9.21							1.00	0.00	0.00	0.00	0.00	0%	0.00
9.22							1.00	0.00	0.00	0.00	0.00	0%	0.00
, ,									OTHER .				

9 CONEXIONES

E E	DESCRIPCION	MATERIAL	CALIDAD	FORMATO		% DEL PESO			PESO TOTAL (kg)	AREA TOTAL (m2)	DESPUNTE (%)	PESO CON DESPUNTE (kg)
9.1	PLATINERIA	Lam9	ASTM A36	1,83mX6,09m		3%			5,802.64	218.32	0%	5,802.64
							SUBT	OTALES	5,802.64	218.32	0%	5,802.64

		ESTR	UCTURA	PINTURA		
LOCALIZACIÓN	AREA (m2)	PESO (kg)	Ke (kg/m2)	AREA PINTURA (m2)	Kp (m2/Ton)	
Cubierta piso 3	1042.30	61201.09	58.72	2246.66	36.71	
Ampliación losa 3	994.5	48215.84	48.48	1321.21	27.40	
Escaleras de emergencia	320.97	36622.29	114.10	870.24	23.76	
Intervención piso 2	60.64	2230.27	36.78	68.49	30.71	
Intervención piso 1,2 y 3	52.2	673.29	12.90	23.55	34.98	
Escaleras principales	303.4	33488.57	110.4	2413.99	72.08	
Escaleras interiores	132.9	14000.18	105.33	411.21	29.37	
Mezanines tecnicos	42.1	2792.44	66.4	140.30	50.24	
TOTALES	2.949.05	199.223.97	67 56	7.495.65	37.62	





	CANTIDADES PARA COTIZACIÓN		FPS04-02 Versión 0
CLIENTE:	Convel	FECHA:	28/03/2014
PROYECTO:	Linea directa - Palmas	No COTIZACIÓN:	2016-045
ELABORÓ:		REVISÓ:	