

Vivace Elliptical 126" Materials List (glider or electric)							WF-06
Item	Material	Quant	Price	Total	Vendor	Code no.	
2 X 1 X 12 Balsa block fuselage hatch	Balsa	1	1.99	1.99	National Balsa	316336CT	
1/2 X 1/2 X 48 strip flap spar	Balsa	4	3.03	12.12	National Balsa	121248	
1/2 X 3/8 X 48 balsa aileron spars	Balsa	1	1.00	1.00	National Balsa		
1/2 X 3/8 X 48 light balsa tail parts	Balsa	3	1.00	3.00	National Balsa		
3/8 X 36 Triangle stock hard balsa fuselage pod doublers	Balsa	3	1.00	3.00	National Balsa		
1/4 x 2 x 24 sheet fuselage pod top	Balsa	2	1.00	2.00	National Balsa	UP-03-0	
3/16 x 3 x 36 sheet tail parts	Balsa	1	2.00	2.00	National Balsa		
1/8 X 3/8 X 48 hard balsa inner LE	Balsa	1	2.78	2.78	National Balsa		
1/8 X 1/2 X 48 hard balsa center outer LE	Balsa	6	0.81	2.25	National Balsa		
1/8 X 3/8 X 48 balsa tip outer LE	Balsa	2	0.40	0.80	National Balsa		
1/8 X 3 X 36 sheet tail parts	Balsa	6	0.81	4.86	National Balsa		
1/16 X 4 X 48 balsa wing sheeting	Balsa	1	2.00	2.00	National Balsa		
1/16 X 3 X 48 balsa wing sheeting	Balsa	4	3.03	12.12	National Balsa	121248	
1/16 x 1/4 x 36" Balsa stab ribs	Balsa	2	0.40	0.80	National Balsa		
1/32 X 3 X 36 balsa sheeting tail sheeting and flap/aileron caps	Balsa	4	1.47	5.88	National Balsa	116448	
1/32 x 1/4 x 36" Balsa stab rib doublers	Balsa	2	0.40	0.80	National Balsa		
2 X 3 X 6 Basswood block fuselage pod nose	Bass wood	1	5.00	5.00	National Balsa		
1/16 X 1/4 X 36 (TE edge)	Spruce	4	1.00	4.00	National Balsa	1161436SS	
5/16" OD x 12 Aluminum 6061-T6 Round Joiner Rod	Aluminum	1	10.00	10.00	Amazon.com		
1/8" ID x 12" brass tubing for incidence pins	Brass	1	1.00	1.00	Amazon.com		
0.125 OD CF rod x 12" incidence pins	Brass	1	5.00	5.00	CST		
5/16" ID x 12 brass tubing for joiner rods	Brass	1	4.00	4.00	Amazon.com		
0.007" to .028" to .007" x 0.375" X 72 CLT7 Double-tapered CF laminate outer panel spar caps	Carbon Fiber	2	3.45	6.90	APC	CL6-42	
0.060" x 0.5" x 48" Rectangular Carbon Fiber Laminate center panel top spar cap	Carbon Fiber	1	6.33	6.33	APC		
0.030" x 0.5" x 48 Rectangular Carbon Fiber Laminate center panel bottom spar cap	Carbon Fiber	2	6.50	13.00	CST		
CF laminate - 0.014" x 0.25" x 48" flap/aileron cap strips and tail parts	Carbon Fiber	4	2.50	10.00	CST		
1/2" (0.05 oz.) 6' CF tape optional lost foam fuselage pod fuselage reinforcement	Carbon Fiber	1	5.00	5.00	CST		
.73 oz., 38" x 72" Fiberglass Cloth Fuselage pod glass	Fiberglass	1	8.50	8.50	APC	CLT7-41A	
1.4 oz., 50" X 72" Fiberglass Cloth optional lost foam fuselage pod glassing	Fiberglass	1	9.95	9.95	CST		
3K Aramid Tow, 100 Ft. wing spar wrapping	Kevlar	1	9.00	9.00	APC		
3K Aramid Tow, 50 Ft. wing spar wrapping	Kevlar	1	4.50	4.50	APC		

1" X 14' bias cut strips from 1.7 oz., 38" wide Aramid for flap/aileron/rudder hinges	Kevlar	1	14.00	14.00	CST	
Braided Fiberglass Sleeves 1.5" Dia. Tube (\$/Ft.) optional lost foam fuselage pod	Fiberglass	1	2.00	2.00	APC	BCS-06
Braided Kevlar Sleeve 1.5" Dia. Tube (\$/Ft.) optional lost foam fuselage pod	Kevlar	1	2.25	2.25	APC	C1133
White expanded foam block (2" X 12") for carving optional lost foam pod plug	Foam	1	5.00	5.00	Lowes	
10-32 X 2" steel fore wing mounting bolt	Steel	1	2.00	2.00	Amazon.com	
10-32 steel wing mounting nuts	Steel	2	0.50	1.00	Amazon.com	
10-32 X 2" nylon rear wing mounting bolt	Nylon	1	1.00	1.00	Amazon.com	
6-32 X 1" nylon stab mounting bolt	Nylon	1	1.00	1.00	Amazon.com	
Vivace Elliptical 126" wing parts laser cutting from parts sheet drawings (National Balsa or other)	Balsa and Ply	1	80.00	80.00	National Balsa	
Bud Elder CF stab V-mount for BD	Carbon Fiber	1	35.00	35.00	Bud Elder	
Bubble Dancer Boom	Carbon fiber	1	45.00	45.00	Mountain Models	
Wire pushrods in sleeves 48" length		2	2.50	5.00	Art Hobby	
Wing servo linkages		4	1.00	4.00		
24 gauge wing servo wiring 12'		1	5.00	5.00		
6-pin wing wiring harness plug		1	2.00	2.00		
4-pin wing joiner wiring connectors		2	2.00	4.00		
Ultracote covering		4	15.00	60.00		
Good 1-hour epoxy (West Systems, EZ-Lam, G-Flex)		1	20.00	20.00		
Titebond glue		1	5.00	5.00		
Medium CA glue		1	5.00	5.00		
Thin CA glue		1	5.00	5.00		
			TOTAL	452.83		
Wing servos		4	40.00	160.00		
Stab and Rudder servos		2	40.00	80.00		
Optional 36-38 outrunner motor		1	30.00	30.00		
Optional 36-amp ESC		1	50.00	50.00		
Optional prop-spinner		1	25.00	25.00		