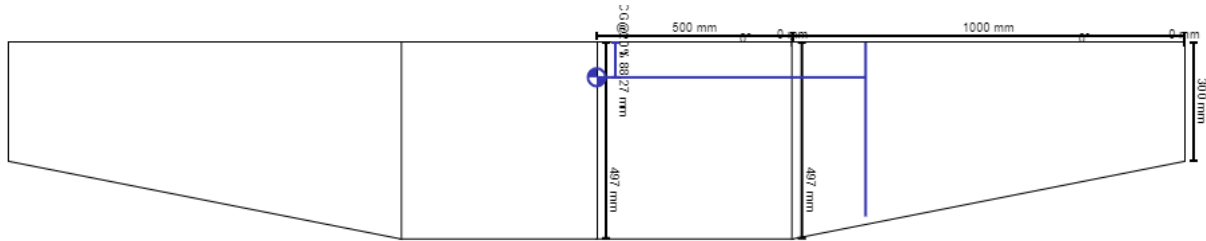# PELICAN

Wing Area = 129.4 sq dm,   2006 sq inch

Wing Loading = 30.9 gm/sq dm, 10.1 oz/sq inch

Wing cubic loading = 2.7

MAC distance = 686.57 mm

MAC length = 441.33 mm

CG @ 20% = 88.27 mm

Aspect Ratio = 6.9

EDA = 4.66 (this calculated value is lower than the standard norms. ..... but proved adequate when tested in flight. ... maybe the calculation method would need to slightly modified for a plank flying wing)

Vertical tail volume : 0.018

Stall Speed = 3.8 x (10.1)^0.5 = 15 mph (@ higher side)

AU Wt = 3800 gms (with 2 X 4S 1500 li Ions)

Power

2 x 5010 750kv motors, driving 12x45 props.. 4S battery

Rpm : Kv x V = 750x14.8 = 11100 (@4s)

Pitch speed (PS) = 2.5 to 3 x stall speed = 2.7 x 15 = 40.5 mph

Reqd prop pitch (PP) = (PS x 1056)/rpm = (40.5 x1056)/11100 = 3.8 (at 4S & 750Kv)

Static thrust : @ 2750 gms