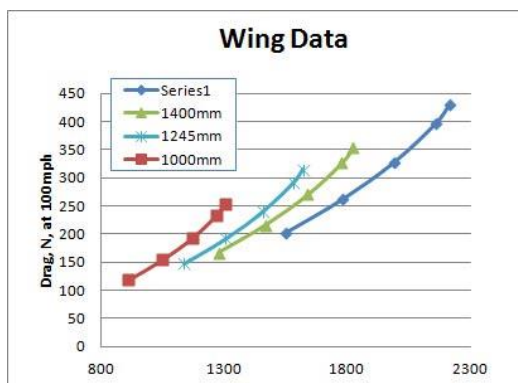
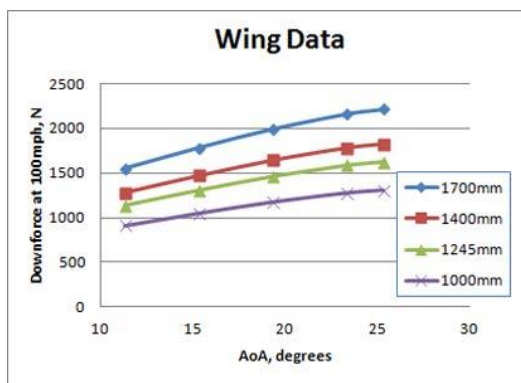


UNIVERSAL DUAL-ELEMENT 300MM + 110MM CHORD CARBON REAR WING

The 1700mm data given was produced by Ansys CFD-Flo software, all other widths have been calculated only using the wing width approximation formula found in our FAQ document.

*** Data marked in red show that the wing has either stalled or was close to stalling and has been omitted from the graphs ***

	1000mm Wingspan				1245mm Wingspan			
AoA	Downforce (N)	Drag (N)	L/D	BHP Absorbed	Downforce (N)	Drag (N)	L/D	BHP Absorbed
11.3	918	119	7.7	7.1	1136	148	7.7	8.8
15.3	1049	154	6.8	9.2	1305	192	6.8	11.4
19.3	1172	193	6.1	11.5	1459	240	6.1	14.3
23.3	1271	234	5.4	13.9	1582	291	5.4	17.4
25.3	1303	253	5.1	15.1	1622	315	5.1	18.8
27.3	1003	260	3.8	15.5	1248	324	3.8	19.3
	1400mm Wingspan				1700mm Wingspan			
AoA	Downforce (N)	Drag (N)	L/D	BHP Absorbed	Downforce (N)	Drag (N)	L/D	BHP Absorbed
11.3	1278	167	7.7	9.9	1552	202	7.7	12.1
15.3	1468	216	6.8	12.9	1783	262	6.8	15.6
19.3	1640	270	6.1	16.1	1992	328	6.1	19.6
23.3	1779	327	5.4	19.5	2160	398	5.4	23.7
25.3	1824	354	5.1	21.1	2215	430	5.1	25.6
27.3	1403	367	3.8	21.7	1704	443	3.8	26.4



To Scale a Force to a Different Speed:

We will use the Notched end plate design figure at 100MPH from above. Then scale it to 150MPH.

New Force (N) = Original Force (N) x (New Speed² (MPH) ÷ Data Speed² (MPH))

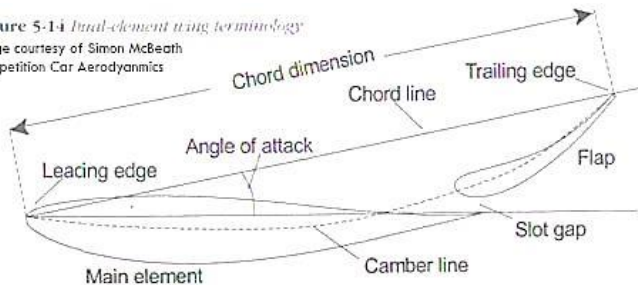
New Force = 937.2 x ((150 x 150) ÷ (100 x 100))

New Force = 937.2 x 2.25

New Force = 2108.7

Figure 5-14 Dual-element wing terminology

Image courtesy of Simon McBeath
Competition Car Aerodynamics



ORDERING INFORMATION

The wings feature internal longitudinal stringers and end spars with 6x M5 threaded inserts for mounting between supports or for affixing end plates. The wing comes supplied with support tabs, rivets and adhesive for post or pillar mounting. Alternatively the end plates can be removed & the wing mounted between wing uprights.

Also specify any special end-mount fixing details when ordering.

You may also like to order the optional 5mm or 10mm high gurney flaps. These can improve the lift / drag performance and reduce the onset of stall at higher angles of attack. These can be bonded on with adhesive or in some cases a high strength double-sided tape with suitable surface preparation. These can be purchased at a later date if required. Replacement end plates are also available separately.

