

ReVerie Ltd Unit 2, Chandlers Row Port Lane Colchester Essex, CO1 2HG Tel: 01206 866663 02081 235997 Fax: 01206 868144 E-mail: sales@reverie.ltd.uk Skype: Reverie_Composites



R01SB0160, R01SB0215, R01SB0269, R01SB0335





INTRODUCTION

ReVerie have available a range of high performance wing profiles, these profiles have been designed by Aero dynamists & writer Simon McBeath using CFD. The 225mm profile has also been wind tunnel tested at Mira and correlated well to the CFD results. The 150/225mm profile Wings feature clever internal autoclaved carbon stringers running the length of the wind to add high strength and little weight.

The 150 and 225mm profiles are available in a curved plan view radius to match that of the back of Elise / Exige. This looks right and also allows the boot or tailgate to open normally as well as ensuring the tip of the 150/225mm rear wings does not extend back past the maximum silhouette for GT racing regulations. For customers that require the maximum possible down force from a single element wing then choose the 300mm chord straight wing and suffer the boot issues. Dual element wings are available on request but should not be considered for Elise / Exige S2.

Our recommendation for Elise / Exige s2 is the 225mm chord plan view curved wing, in either 1245mm or 1650mm width (depending on your choice of aero modifications at the front). Please see <u>http://www.reverie.ltd.uk/en/data/techdata.php</u> for wind tunnel and cfd data on the profiles.

The Carbon internal boot supports which take the loads down to the chassis longerons and Aluminium wing support posts have been developed to allow adjustment to the wings angle of attack to allow tuning of the aero balance when required.

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Experienced Fitters only for fitting wing. Check before drilling holes in clamshell, best to loosely position carbon/foam uprights in foam first and bolt alloy supports to lower side wing tabs so threads on alloy mounts underside approx 900mm apart as boot drill template.

Position all first for a visual check.

Parts available:

<u>R01SB0160</u>	Elise S2 / Exige S2 Motorsport Rear Wing, 225mm Chord, Curved Adjustable Clam Mounted
R01SB0215 R01SB0269	Elise S2 / Exige S2 Motorsport Rear Wing, 150mm Chord, Curved Adjustable Clam Mounted Elise S2 / Exige S2 Motorsport Rear Wing, 225mm Chord, Straight Adjustable Clam Mounted (may restrict boot access)
<u>R01SB0335</u>	Elise / Exige S2 Motorsport Rear Wing 300mm Chord, Straight Adjustable Clam Mounted (restricts boot access)
R01SU0151	10x 5mm, 90°Angle, Curved Rear Gurney Flap, Double-Side Gloss (1800mm Length, 1600mm Radius)
R01SU0152	10x10mm, 90°Angle, Curved Rear Gurney Flap, Double-Side Gloss (1800mm Length, 1600mm Radius)
<u>R01SU0149</u>	10x 5mm, 90°Angle, Straight Rear Gurney Flap, Double-Side Gloss (1800mm Length)
<u>R01SU0150</u>	10x10mm, 90°Angle, Straight Rear Gurney Flap, Double-Side Gloss (1800mm Length)

WARNING, MOTORSPORT OR DRIVING CAN BE DANGEROUS RESULTING IN DEATH OR PERSONAL INJURY. READ OUR FITTING INSTRUCTIONS CAREFULLY

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UV-PROTECTION

Please Note Epoxy Pre-preg products are not UV stable. Texallium products are particularly liable and can yellow in only 2 – 6 weeks. The epoxy resin will 'yellow' with prolonged exposure to UV radiation and material strength properties will slowly deteriorate. We recommend exterior products or those exposed to constant UV are either colour painted or at least Lacquered. We use predominately 2K car lacquers of medium solids, the DBS range has been found very suitable, although people have had equally good results with Urethanes varnishes and epoxy clear coats.

The surface should be sanded with 180, 240 then 320 grit and a cleaning solvent used to remove grease or dirt prior to paint application. Several coats may be required (normally 3 to 4 light coats) to avoid pin-holing, common with painting composite products. Pin holes may be dubbed in carefully with a brush, then wet flatted for a final application of 3 thin coats. **Let air dry only**, you may stove the paint at 70'c once fully air dried.

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ELISE S2 ADJUSTABLE REAR WING KIT CONTENTS

CLAMSHELL SCALE WING FEET DRILL JIG PAPER PLOT

1 X CARBON REAR WING With End plates & Lower tabs fitted - Choose from: 150mm or 225mm chord profile Plan view curved to allow boot opening (225mm

recommended if using with front splitter)

150mm, 225mm or 300mm chord profile Plan view Straight (Cannot open boot!) Choose your span width 1245 and 1650mm are normally stock items, any span available to special order

Specify optional gurney flap if required for straight or curved profiles

2 X Carbon / 15mm Foam Sandwich internal boot supports LH/RH

2 X Carbon 90' angle internal boot support base brackets

6 X 200mm Strips 3mmX20mm thick self adhesive foam 2 for under alloy clam mounts, 4 for top of carbon internal clam shell Carbon/foam brackets

2 X Black Powder coated 12mm CAST ALUMINIUM Boot Mounts Low level recommended, High level versions available if required.

4 X M6 X 30mm Cap head bolts S/Steel (to fix wing tabs to alloy supports)

8 X M6 X 14 dia Washers S/Steel (to fix wing tabs to alloy supports)

4 X M6 S/Steel Nyloc Nuts (to fix wing to supports)

4X M6 X 20mm Cap head bolts Black to fix internal boot supports, through clam to alloy mounts

4 X M6 X 20 dia Washers BZP to fix internal boot supports, through clam to alloy mounts 4 X M6 S/Steel lock Nuts to fix boot supports to 90' carbon brackets

4X BOLTS M6 X 40mm S/Steel to fix internal boot supports, to 90' carbon brackets

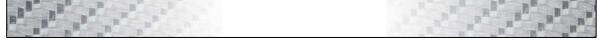
8 X M6 X 25 dia Washers BZP to fix internal boot supports, to 90' carbon brackets 2 X M6 X 50mm Cap head Bolts to go through 90' carbon bracket and 15mm spacer into longeron through boot floor.

2 X White Nylon M6 spacer 12mm long

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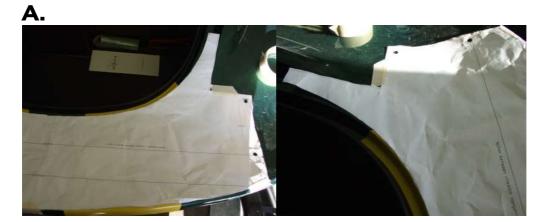
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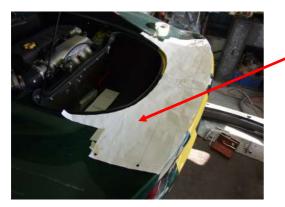
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FITTING INSTRUCTIONS





TAPE IN PLACE ON THE REAR CLAM THE PROVIDED DRILLING TEMPLATE, NOTE LINE FOR ELISE AND EXIGE S2 BOOT OPENING IS DIFFERENT





Bolt the Alloy Wing mounts to the wing at a mid angle of attack position. Then sit the wing and supports carefully on the boot, Centralise the wing on the boot using the lines on the template as reference to help. Check the boot can open if using the curved wing profile. Check the holes marked are in the right position if not then re-mark them in a new position you are happy with.

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WITH A SMALL DRILL BIT (3-4mm IS IDEAL) PILOT DRILL THE FOUR MOUNTING HOLES INDICATED ON THE TEMPLATE, THEN REMOVE THE TEMPLATE AND DRILL THE HOLES OUT TO 7.5mm. Remove the paper template

N.

D.



Unbolt the two rear fixings between boot floor and chassis longerons. Lift the boot floor mat out and fit the carbon / foam supports inside the boot. With the top curved 90' return pointing inwards and the vertical edge of support to the front. Make sure the bolt holes you have drilled will be in the middle of the top curved carbon return as you need to drill and bolt through. Check they are vertical with a small set. They should be a tight fit, grind/sand the bottom if required to get them in situ.

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Ε.



Position the 90' carbon lower bracket along the bottom inside edge on elise S2 (outside i.e behind on Exige S2) and Then mark the hole positions required in the mount to match those in the floor of the boot (Elise and Exige are different, See section G). Next drill 8mm holes in the base. Then bolt the bracket in place to the supports and boot floor/chassis. (ELISE CLAM SHOW!)



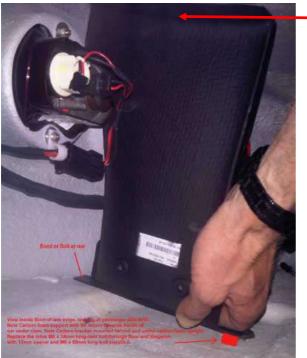
Now drill through the 4 clamshell mounting holes into the carbon curved 90' support of the internal carbon/foam boot strengtheners. Inject some silicone into the top 4 clamshell holes to stop water ingress. Stick some 3mm self adhesive neoprene to the underside of the alloy supports and trim around with a sharp knife. Next bolt the alloy supports in place and refit the wing.

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G.



EXIGE S2 - Carbon foam support shown looking into clam RHD nearside. Carbon 90' bracket at base fitted behind carbon / foam upright with tallest upstand up. Replace the oem bolt through the floor into longeron with supplied 12mm nylon spacer and 50mm long M6 bolt through support into floor. Affix the rear of the bracket to boot floor with adhesive or bolt through. Once the carbon 90' bracket is correctly affixed, drill through the alloy bushes in the carbon foam upright to the support bracket and firmly bolt together.

B

Н.

THE WING'S ANGLE OF ATTACK CAN SIMPLY BE ALTERED BY MOVING THE REAR BOLT EACH SIDE INTO A DIFFERENT HOLE IN THE ARRAY OF 9 HOLES.



WITH THE VEHICLE ON A FLAT SURFACE AND THE RIDE HEIGHT EQUAL ALL-ROUND, SET THE WING TO THE ANGLE OF ATTACK YOU REQUIRE. TUNE THIS AT A RACE CIRCUIT OR WIND TUNNEL TO GIVE A NEUTRAL AERO BALANCE. NOTE ADD APPROX 2 DEGREES TO THE READING AS IT SHOULD BE TAKEN TO THE CENTRE OF FRONT WING RADIUS NOT TOP.

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