

DESIGN & PRODUCTION

REVERIE

This project was undertaken because of the passion ReVerie shares with the owners for the Lotus 340R. We believe that the hardtop is the perfect accessory incorporating style & functionality, giving a true all weather driving experience. It has also provided an excellent platform to showcase our company, capabilities & our extended product range.

CAD



Initial sketches were made of 3 roof style options. After selection of the version to develop, the complete surface of the 340r main body, roll bar, & screen surround was modelled in CAD along with the hardtop. Comprehensive measurements were taken to allow accessibility for tall drivers with crash helmets (for track day use). Details such as the rear screen, package design & ventilation were looked at in detail.

PATTERN



Sections were plotted, & then cut from 100mm styling foam block. This was assembled, hand shaped & trial fitted through the different stages. The pattern was then painted & weired up ready for manufacture of split tooling.

INITIAL PROTOTYPE



A GRP prototype tool was made from the hardtop pattern with no door gutters. A part was made from the tool & successfully trialed & fitted to a 340r. The door aperture was then cut & access tested.

DEVELOPMENT



Gutter returns were modelled in clay to allow modification of the tool. A centre spine was produced combining centre roll hoop fixing & ram-air induction. A dihedral door system was selected & an initial prototype hinge was produced. This was CAD modelled to be produced in machined alloy.

TESTING



Careful attention was paid to the design of door guttering to ensure sealing of door rubber & good drainage. The complete perimeter was sealed to give tested effective weather protection. The hardtop was also extensively tested at high speeds.