UNDULATION

9 Combers is part of a cul de sac of similar 1970's style properties which features plenty of thermal bridges, (integral garage) combined with a leaky mixed material construction and internally cellular layouts conversant with that period. Our brief was to bring curves into the makeover and the clients were very open-minded towards new technology and strong contemporary architecture. Accordingly, Ecotecture reworked the building to give an exciting new look, including external retrofit measures to increase the energy efficiency of the property and change and lift the aesthetics out of the ordinary.

The project has been completed in two phases, the first was the rear and the second the front which has just recently been completed.

The rear form is a play on two curves against each other with a combination of materials, cladding and render, helping demarcate the juxtaposition of both in the contract of the main house. The front curve follows on from this design like a sweeping wing across the front, allowing light to penetrate the belly of the building.

The extensions and reworking of the original leaky front porch area have allowed opening up the existing internal layout to form a large open-plan and multi-functional living space. Also, at ground floor, a new playroom was formed conjoining the existing sitting room and new open-plan spaces.

Architect Ecotecture Ecological Design Ltd

Engineer BLB Chartered Engineers

Contractor D C Geoghegan Ltd The playroom is designed to be separate enough for kids to enjoy themselves independently, but close enough for adults to know what they are up to. The playroom floor is finished in brightly coloured rubber flooring, giving the children a real sense of ownership of the space.

At first floor, the new master bedroom was formed with en-suite facilities. The building's curves are strikingly expressed in this space, whilst still providing very usable living accommodation.

The front reworking of the porch to give a dramatic front curve also included the repositioning the of the stairs which were reproduced with curves, of course, to reflect the architecture from outside in linking the whole. A bespoke timber door with peep-holes completed the new dramatic entrance.

The rear extension was constructed using Nudura ICF, which is incredibly energy efficient and versatile. Building it up in lifts (concrete pours) one can then simply cut openings and curves as you wish! The front was rebuilt using highly insulated timber frame. The remaining original external walls have now all been re-clad using insulated render and/or cladding to unify the whole together with other retrofit measures. Internally insulation was placed between joists above the garage to further reduce thermal breaks and draughty leaks and have allowed us to present the project as a unified whole.

The front curve follows on from this design like a sweeping wing across the front, allowing light to penetrate the belly of the building.







North west elevation

Front elevation



South east elevation

Rear elevation





First Floor Plan





Above top Rear elevation view

Above Curved staircase interior



Opposite left Front elevation

ecological design

