

Hanging OUT

Tony and Nicky Maude have built an ultra-contemporary sustainable home with a cantilevered first floor and a stunning feature swimming pool.

STORY: ELEANOR WILDE PICTURES: DYER GRIMES ARCHITECTS

Tony and Nicky Maude dreamed of building an ultra-modernist villa in stark contrast to the character, listed manor house where they had lived for many years with their sons, Jamie, now 19, and Harry, 17. The goal was to retain all the luxuries of country living but to de-clutter their lifestyle and create a modern, energy efficient family home.

"We'd completed a number of renovations and extensions in the past but we really liked the idea of building a house from scratch," says Nicky. "It was an exciting prospect and we definitely wanted something more eco-friendly than our dark Arts and Crafts house."

The Maudes sold their old home and moved into rented accommodation in May 2009 so that they would be ready to act quickly when the right plot became available. They eventually found a detached bungalow on a one-and-a-half acre plot in Oxted, in the heart of leafy Surrey, and purchased the dilapidated 1960s prefab in February 2010 without even knowing whether they could obtain planning permission to replace it with an ultra-contemporary sustainable home.

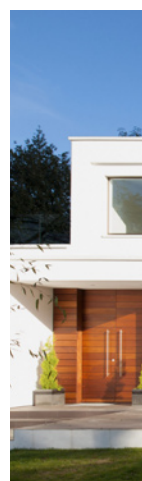
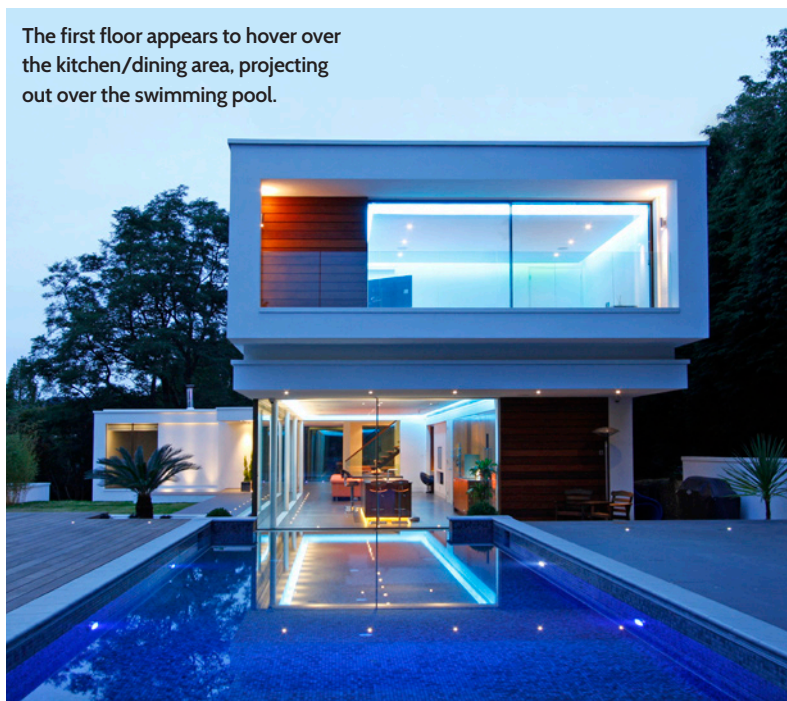
The area is populated by traditional architecture, and the site was surrounded by tall trees and hedging, with far reaching views to the Surrey Downs beyond. The land sloped sharply away to one side, which would have an impact on the overall footprint of the new building and its layout. The family wanted to create a large, flexible, open living space with a feature outdoor swimming pool and extensive glazing to make the most of views over the mature grounds, and approached Dyer Grimes Architects after conducting a search on Google.

"We'd already met a few other architects, but John grasped what we wanted immediately," says Tony, a banker. "We had some ideas already, and Nicky had collected a pile of magazine cuttings for inspiration. The sloping site lent itself to building a lower ground floor area, and we knew we wanted a flat-roofed, contemporary look."



"Living here feels like being on a permanent holiday."

The first floor appears to hover over the kitchen/dining area, projecting out over the swimming pool.





The ultra modern, family home is ideally located in the heart of leafy Surrey. The striking design offers panoramic views of the garden and the swimming pool.





FULLY AUTOMATED

The Control4 multi room audio visual system allows the whole family to enjoy and control their favourite music in any room. Philips Dynalite automated lighting provides a flexible lighting solution. All of the automation system can be accessed via a smart phone to control the lighting, heating and audio/visual systems. (www.caivision-ci.com)



OPEN SPACE

The open-plan sitting room features a contemporary fireplace and a modular Italian sofa. A sliding door connects this space to the hallway and feature staircase beyond.

Tandridge Council had a long-standing planning policy that new builds should match the traditional pitch-roofed houses prevalent in the area.

However, the site is situated at the end of a private road and is surrounded by mature trees, which Dyer Grimes Architects used as an argument to justify what would be an unprecedented design. The council's strict planning requirements also demanded that at least 12 percent of the energy required by the house should be provided by renewable sources.

Responding to the brief, the practice developed a design to work with the sloping topography of the site and make full use of the screening provided by the trees. The resulting three-storey house is approached at the lower ground floor level where a stepped promenade leads to the front ground floor entrance.

Here the main living spaces are arranged around a generous entrance hall, and large sliding walls disappear into pockets to allow the living, dining and reception rooms to become one open-plan space which is perfect for hosting parties.

A structural glass bay window on the north facade provides views back to the entrance gates and arriving visitors, while structural glass walls to the south and west allow panoramic views of the grounds and the inviting nine metre glass-fronted swimming pool. "The pool was a dream of mine, inspired by a picture I'd seen, and the glass front wall faces the house so you get amazing views from the kitchen," says Tony. "It required an awful lot of work, because of the existing levels, and involved building up a flat garden."

The lower ground floor has been designed as a self-contained flat for son Jamie, and four further bedrooms are



located on the first floor, accessed by a feature engineered timber and glass stair.

The luxurious principal bedroom suite has its own dressing room and a private balcony overlooking the pool and grounds, with a large roof terrace to the north of the first floor providing far-reaching views of the Surrey Downs beyond.

The first floor appears to hover above the ground floor, cantilevered out over the swimming pool, and the forms of the building were explained to the Maudes at design stage using 3D modelling.

After three strategic planning applications (changes were made to the overall height of the building and to a retaining wall) permission was granted in August 2010 and Dyer Grimes Architects achieved consent to infill and level the site and build a highly contemporary house of 480 sq m.

The existing bungalow was demolished in April 2011 and White Lodge took 46 weeks to build and was completed one month ahead of schedule in March 2012. Building contractor Galower was suggested by John Dyer Grimes and proved to be the perfect choice.

“There were a couple of issues which were out of their control, such as the glass being delayed coming over from Germany, but they were determined to come in on schedule,” says Nicky. “We had such a good relationship with them and remained friends until the end.”

Modern building technologies were combined with the highest quality materials, including hardwood cladding and white render, with an abundance of glass throughout.

The structure makes use of a hybrid steel frame, load-bearing masonry, prefabricated concrete ground floors,

VAST KITCHEN

The stunning kitchen was made by a local company, and includes a vast island unit. The swimming pool may be viewed through the end glass wall.



TONY & NICKY'S TOP TIP
"Get the right people on board. We had a fantastic team and had complete faith in everyone from the architect to the builders."



and FSC timber upper floors. It is clad with an advanced insulated render system with a high performance finish to minimise maintenance costs. This system also enabled the intricate shadow gap detailing between the ground and first floor levels.

Great emphasis was placed on constructing White Lodge in an environmentally friendly and sustainable way. An impressive sustainability target was set to generate 20 percent of the energy required by using renewable

energy sources, and high specification structural double glazing and aluminium sliding doors minimise potential heat loss.

The heating system comprises an energy efficient gas boiler and underfloor heating, with solar heating panels on the roof and an air source heat pump, which circulates heat around the entire house. A hi-tech home automation system allows access to the lighting, heating and audio/visual systems from a smart phone.

Nicky paid great attention to the design of the interiors, and found companies to build a bespoke kitchen and bedroom furniture. “We couldn’t really bring anything with us from our old house, because the furniture was getting quite old, and wouldn’t have suited such a highly contemporary interior. We literally started again and bought everything new,” she explains. “After living in our rented house for three years it was fantastic to finally be able to move in here and enjoy what we’d built.”

The whole family is delighted with the new home and almost a year after completion it continues to draw surprise and admiration from family, friends and visitors. It has even caught the eye of film location companies, and Ridley Scott was interested in using it in one of his films.

“It’s a real party house and is always swarming with teenagers,” says Nicky. “We love entertaining, and the layout is ideal for that. The swimming pool overflows into a spa, which is popular all year round, and we’re looking forward to the summer when the pool will come into its own. Living here feels rather like being on a permanent holiday.”

Contacts

PROJECT

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Approved inspector Keystone Partnership:
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STRUCTURE

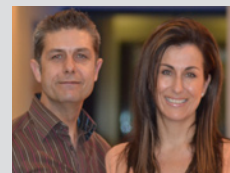
Pool specialist Tanby Pools: 01883 622 335
Decorative glass Stainger: stainger.com

FIXTURES AND FITTINGS

Audio/visual specialist CAI Vision: 0208 299 5100
Air source heat pump Mitsubishi Ecodan:
domesticheating.mitsubishielectric.co.uk
Flat plate solar hot water panels Kingspan:
kingspansolar.co.uk
Paint Dulux: dulux.co.uk
Walnut flooring The Ultimate Flooring:
theultimateflooring.com
Kitchen Chamber Furniture: chamberfurniture.co.uk

Bottom line

Tony and Nicky paid £850,000 for the original bungalow on a 1.5 acre plot and spent around £1.9m building their new 480 sq m house, which is currently worth in excess of £3m.



Home truths

What was the high point of the project?

The high points were seeing everything completed and realising it all looked just as we’d hoped.

...and the low point?

There weren’t really any low points, although we did spend far more than our original budget.

What was your best buy?

The kitchen is a real focal point and was designed to fit the room.

...and your biggest extravagance?

Probably the swimming pool because of the landscaping it involved, but we absolutely love it.



The story behind the dramatic cantilever

The dramatic cantilever was designed to solve a problem! The planners refused to countenance a three-storey front elevation and the Maudes didn't want to lose a bedroom, so the architect asked structural engineer Nick Maclean if he could push the upper floor en masse, towards the back and design a structure without end columns as the pool was in the way? Nick took him to see a completed cantilever in Primrose Hill which Nick had watched being built with huge steels. Nick knew he could achieve the same with a thinner structure.

Further challenges were then thrown at him. Firstly the lower columns had to be set inside the upper ones to maintain space and appearance. The width of the building had been reduced from 11m to 8m because of budget constraints. The upper columns, cantilevered outwards, were also offset along the perimeter because of the bedroom partition layout, and the very long, recessed window panel presented a significant problem as efficient, traditional, diagonal bracing couldn't be used to prevent sway as the end cantilever tried to deflect like a springboard!

To add to the engineering challenge of fitting the upper structure within a 100mm wall thickness, the dramatic horizontal slot (shadow gap), resulted in the already narrow structure zone being further reduced to a neck of just 35mm which had to be cut into structure. The comparable Primrose Hill structure used double the structure width, and proportionately heavier steels, had diagonal bracing and had less cantilever.

A top end analysis computer programme was used to achieve this kind of design. "We are able to use this same programme to show why allegedly distressed structures are working and to achieve exceptionally thin floors in loft conversions and extensions," said Nick.

