

# Clean & green

Colin Ritchie and Juliet Leslie replaced a 1960s bungalow with a contemporary low-carbon, timberframed house clad in pale stone, buff facing bricks and untreated timber.

STORY: DEBBIE JEFFERY PICTURES: MARTIN GARDNER

#### **EXTERIOR**

Building a sustainable timber-framed house involved working within planning constraints for the sensitive village site, including height restrictions. The flat-roofed building has been clad in Cotswold buff facing bricks and untreated Idiabo timber, which serve to visually anchor the house to the site.





or more than five years, Colin Ritchie and his partner, Juliet Leslie, had been on a quest to find a site, with the ambition of building a sustainable modern dwelling in their Oxfordshire village.

"I'd previously lived in a listed thatched cottage, which was expensive to heat and maintain, so the idea of building an energy-efficient house was appealing," says Colin. "At the time, Juliet and I were thinking of moving in together, and she wanted to stay in her village, where she volunteers as a part-time postmistress in the shop, so we began looking for land in the area."

The couple realised that they would need to find a 'donor' house to replace, as plots in the village were scarce, but their bids proved unsuccessful. Then a nondescript bungalow on an acre of land came onto the market in the same lane as Juliet's cottage, which seemed ideal.

## "Coming from old cottages we were keen to make the new house as energy efficient as possible."

The leafy and secluded site was not without planning constraints: located right on the edge of the village Conservation Area, with a neighbouring historic cottage directly overlooking the front of the property, and the garden bisected by Green Belt.

"These issues and restrictions did mean that developers weren't interested in the plot, which was in our favour, although it still went to sealed bids and we paid over the odds," recalls Colin. "We knew that the old 1960s bungalow would have to go and began looking for an architect to design a sustainable new home. A friend recommended Allister Godfrey, and we began discussing our ideas with him."

Allister Godfrey Architects is an awardwinning practice based in Wantage, specialising in contemporary residential design, and Allister is experienced in working with challenging sites.

"Coming from old cottages, we were keen to make the new house as energy efficient as possible, without necessarily going down the Passivhaus route," Colin continues. "We wanted four bedrooms, an open-plan living/dining/kitchen space, and also a separate snug."

The modern form of the house Allister designed is driven partly by context and the inherent planning considerations, and partly from the functionality of a sustainable house.

Almost as a palimpsest of a previous building, a ribbon of stone appears on the ground near the entrance. Becoming a wall to the double-height hallway, it directs the view through to the south-facing rear, while Cotswold buff facing bricks and unfinished Idigbo cladding serve to visually anchor the house to its location.

"The plot is long, but only 25m wide, with a kink in it where the house was going to be positioned," says Colin,



#### THE BUILD

The old bungalow on the one-acre site has been replaced with a timber-framed new build which is highly energy efficient and is designed to make the most









The ground floor was designed for the shape of the site, with a kicked- out living/dining area open plan to the kitchen and entrance, and a snug. A garage, plant room, utility, WC, larder, and lobby are on this level, with provisional space for a lift shaft. The first floor has four bedrooms, two en suites, a bathroom, dressing room, and storage.

#### **HOMES** NEW BUILD

who is retired. "Allister's design clipped the groundfloor dining and living space at an angle to the rear, to match the plot shape, and he future-proofed the house with wide doorways, a wheelchair-accessible walk-in shower and space for a lift shaft to be installed should we need it. Planning was a hellish process, with the original design tweaked. This reduced the upper storey facing a neighbour, to avoid being overbearing."

Planning permission was granted following a challenging planning campaign, and the demolition of the old bungalow then kickstarted the 10-month build of a low-carbon timber-framed home.

Builders' quotes to build the new house had varied from £600,000 to £850,000, and the couple chose an award-winning local company, Lemontree, which was introduced to them by their architect.

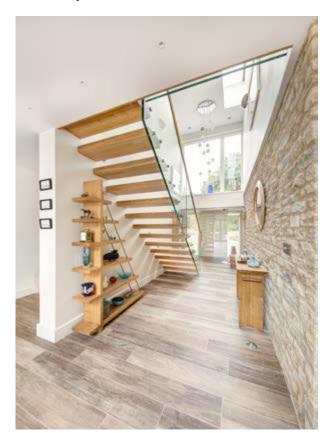
"We were living in Juliet's cottage, which is literally 50m down the lane, so we were nearby and not in a rush to move out," says Colin. "We knew what was going on without having to make too many site visits, and Allister was called in on an ad hoc basis, which worked really well."

Excavating concrete strip foundations caused issues when they hit the water table, so the building inspector was called in and the design changed to make these wider and shallower.

Allister suggested timber-frame construction for its build speed, airtightness, and insulation properties, and the pre-insulated panels were fabricated off site and installed by the manufacturer.

Sunk down into the plot to reduce its presence, the new house is half a metre lower than the old bungalow. "There's no overriding street scene, and we never wanted a pastiche, so the flat roof satisfied the planners' height restrictions, with Juliet suggesting the angled upstand to add interest," says Colin.

The timber frame is clad in Idigbo hardwood and handmade buff-coloured facing bricks, with soldier courses used to differentiate and break up areas of brickwork.







#### **GROUND FLOOR**

A ribbon of Cotswold stone passes from close to the entrance through the intelligentglass lobby, to become a wall in the doubleheight hallway - leading the eye past the oak and glass suspended staircase and through to the southfacing rear.













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#### KITCHEN/ **DINING** AREA

The 1950sinspired retro kitchen with its red composite counters adds a splash of colour to the open-plan space and offers views of the rear aarden through expansive alazina. A vibrant yellow heat-resistant panel behind the woodburner in the living area is a colourful feature

"At the time there was a brick shortage, so I put in our order extremely early, which meant they were ready when we needed them," says Colin. "Although the frame went up quickly, I hadn't been aware of how much more would be involved in completing the house."

Allister suggested the Cotstwold stone wall which runs through the building, starting at the entrance. Intelligent glazing was used for the lobby, which means that privacy can be ensured without the need for blinds or curtains. At the flick of a switch, the opaque glass clears when visitors arrive, creating a showstopping feature and revealing a clear view past the suspended oak and glass staircase and through to glass doors at the rear of the open-plan kitchen/ dining space. Windows and glazed doors are a durable composite of internal timber and external aluminium.

A glazed landing forms a bridge across the doubleheight entrance, which opens directly into the openplan kitchen/diner. Juliet preferred to install a retrostyle kitchen with character, and the colourful curved cabinets were sourced from John Lewis of Hungerford and made in Wantage, in a factory next to Colin's gym.

"We visited their flagship London showroom, where we could see the Crème De La Crème range, which is copied from an original 1950s English Rose kitchen," says Juliet. "It surprises visitors who expect something modern, but we love the fun vintage style and high gloss finish. Everything was tailor made for us."

The main bathroom incorporates another unusual idea: a photograph of the island of Tresco in Cornwall, where the couple have a timeshare, has been printed onto glass and used instead of tiles in the shower, while the glass door is etched with the profile of an agapanthus, which grows on the Scilly Isles. Sinks ground out from fossilised wood were purchased in a sale, with timber-effect tiles used for the wall.

"We didn't get hands-on with the building work, but I was very involved with the technology," says Colin, 65, who has a master's degree in engineering. "We couldn't find anybody to give independent advice for a single house, so I ended up taking the lead with the builders in terms of the various systems."







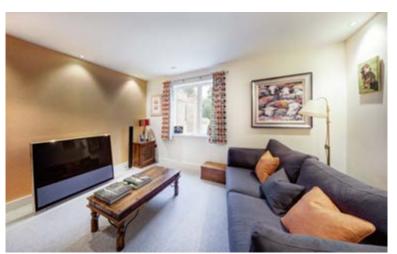


#### **UPSTAIRS**

A beach scene, bonded to glass, brings the shower to life. Radiators in the bedrooms are rarely needed.

#### STUDY

A useful study area has been created on the landing. SNUG The snug is a TV lounge.



The building benefits from state-of-the art renewable energy elements, including a ground source heat pump and thermal boreholes under the drive, underfloor heating downstairs with fan-assisted radiators on the first floor.

Hidden 10kW photovoltaic panels are mounted on the roof, with a Tesla powerwall battery backup - an integrated battery system that stores electrical energy. A rainwater harvesting system supplies toilet cisterns and garden watering, and the wood-burner is vented directly from outside to avoid piercing the airtight building envelope.

"We needed to install the wood-burner against a heat-resistant panel to meet regulations for timberframed buildings, so we thought we might as well make it a feature and chose yellow, which is picked up with some pieces of furniture," says Juliet.

Leaving behind comfortable, but dark and draughty thatched stone cottages, Colin and Juliet have truly embraced their warm, mechanically ventilated, ground source heated, modern and light-filled home.

"This was our first and probably our last self build, as the house has been so well future-proofed," says Colin. "It's been an exciting, sometimes challenging project that's delivered exactly the home we'd imagined, which is virtually self sufficient for energy."

#### FINAL WORD

#### What were the high points of the project?

Designing the various ecofriendly systems to work together and reaping the benefits since living here.

#### ...and the low point?

The mess of the site after drilling boreholes - it was a quaamire, with ducks swimming on it. Also, the lorry delivering the site hut collapsed into the mud, so we had to get an all-terrain crane. That was a long day!

#### Your best buy?

Our architect and the lighting designer we employed, which was money well spent. It was a blank canvas, and we would never have come up with the lighting effects by ourselves.

### Biggest extravagance?

Our oak and glass suspended staircase cost around



£20,000 but would have been double that if we hadn't found a supplier in the Czech Republic. It was fitted at the very last minute.

#### Top tip?

Line up materials well in advance so that you can tender accurately for exactly what you're fitting. Allister gave us room data sheets, which are a very simple idea but got us thinking early on about things like power points and flooring.