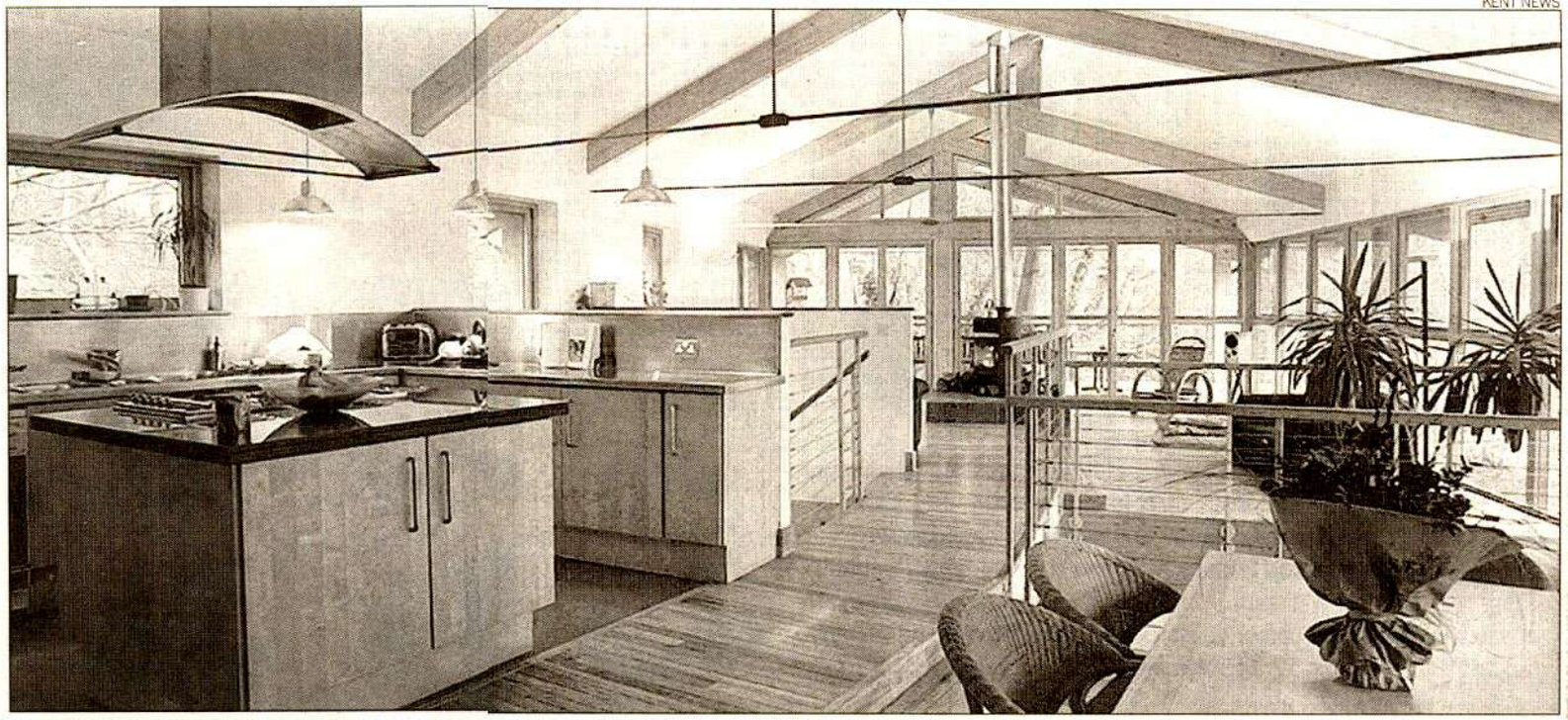
THE TIMES

SATURDAY MARCH 10 2001



KENT NEWS

Michael and Elizabeth Winter outside their environmentally friendly house in Tunbridge Wells; inside, the light, open living area is mostly self-heating, and thanks to efficient insulation and double glazing, fuel and water bills are tiny

Build yourself a greener house

Fancy a £5 annual gas bill? Go for a DIY home, says **Harvey Leatherstock**

A SELF-BUILD house conjures up the image of a spartan brick box set on a smallholding close to an industrial city you do not want to live near.

Doing it yourself sounds as though it ought to involve months of privation, including shivering in a caravan on site while the house is finished at a snail's pace.

But it does not have to be this way. Technological advances have brought about a revolution in building techniques over the past decade and it is possible to create a new house that is practical, stylish and far more ecologically friendly than one you can buy ready-made.

In 1999, the latest year for which figures are available, there were 15,000 self-build houses completed. The self-build market represents 9 per cent of all new homes and 30 per cent of all new detached homes, according to research carried out by Building Link. The market is increasingly constrained, however, by a shortage of suitable building land.

The average household income of self-builders is £31,000, according to Building Link, so the idea of it being a spartan pursuit persists. To build well for yourself, however, you'll need access to funds on a much larger scale — a good-looking, environmentally friendly, new home is still a luxury item.

Elizabeth and Michael Winter followed the more expensive, eco-friendly route. They built an elegant, woodland house on a hillside in Tunbridge Wells, Kent.

A full-height wall of glass runs the length of the main living areas on the upper floor and the house is sited so that all these glazed panels face south to make the most of the sun's heat and light.

The roof, walls and floors are so well insulated that the house doesn't need central heating, and even on the coldest winter day the heat gain through the coated double glazing, backed by a wood-burning stove, keeps it warm.

On hot summer days, the open windows cool the house. The roof is covered in copper, which will eventually go green to help the building merge into its surroundings. Rainwater collected from the roof is stored for household use, making the house almost self-sufficient.

The gas bill is £5 a year and water rates are £10 a year for a single tap supplying drinking water, says Michael, who is an architect in a large London practice.

Only three trees had to be felled to make way for the building. Instead of conventional foundations, concrete pads have been placed between tree roots, on which stand the legs that support what is a massively strong wooden box held together by glued laminate beams.

At 2,900 sq ft, it is double the size of a conventional four-bedroom house, and its high ceilings, bare wood floors and soaring internal spaces create the atmosphere of modern loft living.

It cost £235,000 to build — including its high-specification underground water-collection pool.

Derek Potter took more of a no-frills route to self-building. Potter, a successful potato merchant, says that the bungalow he and his wife Maureen have built on the Romney Marshes near the Kent coast is in many ways rather like the product he sells: sensible, practical and warming.

This no-nonsense project has its foundations firmly in the ground, but an architectural critic might argue that it is more plain spud than dauphinoise.

The elevations are the colour of a King Edward baked in its jacket. They are punctuated by empty expanses of sheet-glass window, and in the foreground a well-kept suburban patio rests slightly incongruously alongside the robust landscape of the marshes.

The house was designed in Sweden, then imported in prefabricated sections, and what it lacks in imaginative external flourishes it more than makes up for in insulation.

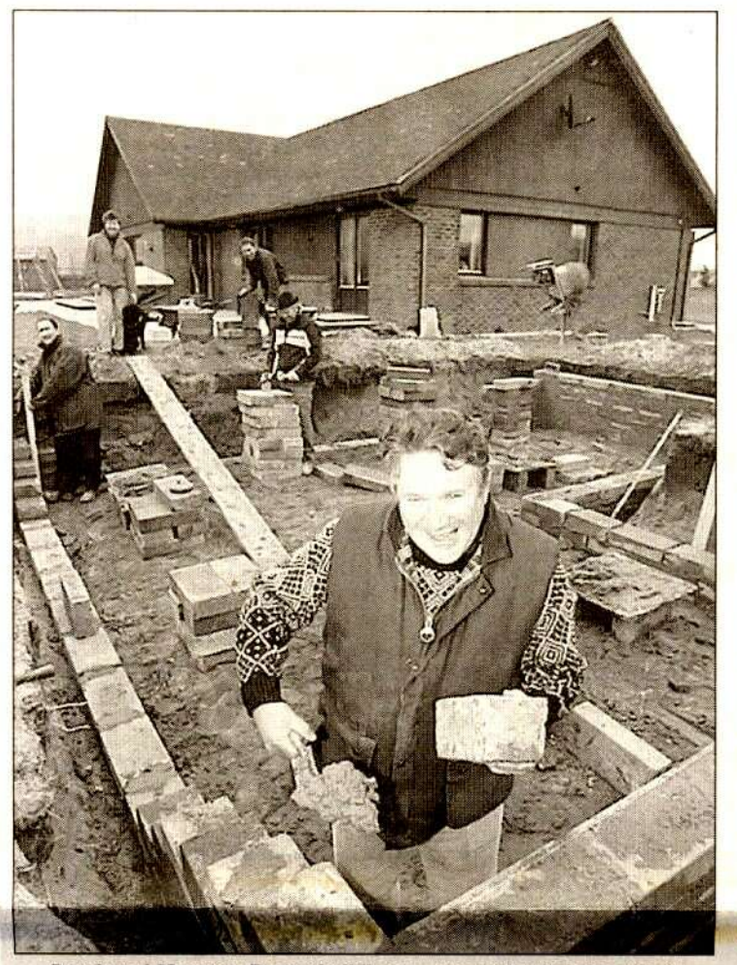
To keep the biting March wind of the marshes at bay, all the windows are triple glazed, which means Potter seldom has to put on a cardigan while strolling around the big, open living area or the equally large kitchen/diner.

The house's heating is via a system of underfloor hot water pipes. Heating bills are less than £250 a year for the three-bedroom house, which is much larger than an average semi.

The Romney marshes are alive with the sound of birdsong, but none of it penetrates the argon-filled panels of glass; in fact the only sound you can hear is the gentle hum of the mechanical ventilation system, necessary to keep the air fresh inside this practically sealed capsule.

Potter compares the house to a Volvo estate, unglamorous but steadfast. "Our dream was to have a low-maintenance, energy-efficient home," he says. "It could be said that the design of a Swedish house is overengineered for the British climate, but we can't help feeling rather smug as well as snug."

● *Times* readers presenting a copy of Weekend may gain half-price admission (£4 instead of £8) to The National Homebuilding & Renovating Show held at the NEC, in Birmingham, this weekend; open 10am-5pm. The show features a programme of free seminars on aspects of building a home for yourself.



Derek and Maureen Potter building an annexe to their bungalow

Don't lose the plot

THE HARDEST thing about building a house of his own was staying inside the budget, admits Michael Holmes, presenter of the BBC TV series on house renovation, *Trading Up*.

He and his wife Emma built a six-bedroom Oxfordshire farmhouse in Georgian style. The land cost £91,000, the budget for the building was £250,000, but they splashed out £320,000.

"We just kept on spending. We had to go back and borrow more money, it was incredibly stressful," he says.

"The problem was that we were not prepared to compromise; everything had to be top quality. It paid off because we sold for £750,000, but the danger is that you will run out of money."

The art of successful property development is to realise the full potential of the land, he says. Calculate what the finished house will sell for. Subtract from this figure a realistic assessment of what it will cost to build. The figure you have left is what you can afford to bid for the land.

That is the theory. Unfortunately the tendency is to overpay for a scarce plot and then gold-plate the house. But in a rising market, house-price inflation should float you out of the red within a few years. In the meantime, there are worse places to be stuck than in your own dream home.