

ECCO

HOUSE BOOK



TERENCE CONRAN



THIN END OF THE WEDGE

FOCUS HOUSE | LONDON | UK | ARCHITECTS: JUSTIN BERE, BERE ARCHITECTS

Right: The new zinc-clad eco house occupies a wedge-shaped plot at the end of a terrace of Victorian houses. The house widens towards the rear.

Far right: The stairs leading up to the second floor are decorated in a neutral palette that is naturally space-enhancing.

Below: The ground floor is an open-plan living, dining and cooking area. The floor is oak and the fitted units are clad in rosewood. Large Scandinavian high-performance windows flood the interior with light.

Opposite: The view from the dining area to the front of the house reveals the way the plot tapers. Every opportunity was taken to build in storage space.



Finding a site to build a new house can be difficult, particularly in dense urban areas. When the owners of this striking zinc-clad building wanted to build a new eco-friendly home for their family, the solution came in the form of a wedge-shaped parcel of land attached to a four-bedroom Victorian house in north London, which at the time was being used for car parking. The clients bought the Victorian house and sold it on minus the 'bit on the side' to finance the new project.

The awkward shape of the plot dictated the form of the new house. It's tall and wedge-shaped, stepping back from a width of 2.8 m (9 ft) at the front to 7 m (23 ft) at the rear. The entire ground floor is designated as a general living space and dining area. Large Scandinavian sliding windows open out onto the back garden and allow light to flood in.

Upstairs on the first floor is a study jutting out over the front entrance, and two bedrooms and a bathroom arranged in a linear fashion and connected by a corridor. A second flight of stairs leads up to a second bathroom and master bedroom that overlooks the neighbourhood at the rear.





ECO FACTS:

- Timber structure with low embodied energy, derived from sustainable sources.
- High degree of insulation using 'Foamglas'.
- High-specification Scandinavian windows.
- Heat-recovery ventilation.
- Solar thermal installation to provide hot water heating.
- Low-maintenance and durable exterior.
- Efficient use of space.

SECTION KEY:

- 1 - Existing house
- 2 - Bedroom
- 3 - Study
- 4 - Bathroom
- 5 - Living room
- 6 - Kitchen



Far left, above: Coming from a larger house, the family had to learn to live with fewer possessions. The kitchen occupies the rear of the main living space.

Far left, below: The garden is simple and low in maintenance. Surfaces include paving, pebbles and wooden decking. In addition to a kumquat tree in the centre, there are also olive trees grown in containers.

Left: The master bedroom is up a short flight of stairs from the study.

Central to the brief was to create a low-cost, low-energy and low-maintenance family home that offered more flexible living space than the Victorian property the family had previously occupied. The walls, floors and roof panels consist of cross-laminated timber slabs, 200 mm (7 $\frac{3}{4}$ inches) thick, made from sustainable sources and imported from Austria. Compared to conventional concrete and steel structural systems, the timber structure has low embodied energy. What embodied energy does exist is offset by the carbon dioxide locked within the timber over the course of its lifetime. Used in kit form, the timber slabs can span large distances and be erected very quickly – the entire building, including all final finishes and fittings, was completed in only six months.

A high degree of insulation was provided by wrapping the exterior in a 200-mm (7 $\frac{3}{4}$ -inches) thick layer of 'Foamglas', a black insulating material that serves as an impermeable vapour barrier. This was covered with a zinc skin, which further insulates the structure and serves as a durable low-maintenance cladding. High-specification Scandinavian windows add to the energy efficiency.

Following the same general guidelines as those used in the German 'Passivhaus' system, the house is sufficiently

airtight and well-insulated to require only minimal supplementary heating. The Foamglas insulation also helps to keep the house cool in summer. Heat-recovery ventilation is used throughout the house and half the household's annual hot water requirements are supplied by a solar thermal installation. Electricity bills are very low.

A number of strategies were adopted to enhance the sense of space. Every opportunity was taken to build in storage and rooms are subdivided by partitions, rather than floor-to-ceiling walls. A neutral colour palette of grey and white makes the most of the natural light that spills through the generous windows. For the clients and their family, coming from a larger house meant a considerable degree of downsizing. Possessions were shed, a process that they found ultimately liberating, a 'less is more' approach well in keeping with an eco-friendly lifestyle.

Building a home from scratch can present daunting financial and organizational challenges, particularly when you factor ecological issues into the equation. Recognition of the success of Focus House came when it won three prestigious awards: RIBA London Awards Winner, Grand Designs Awards Best Eco Home and British Homes Awards Small House of the Year.