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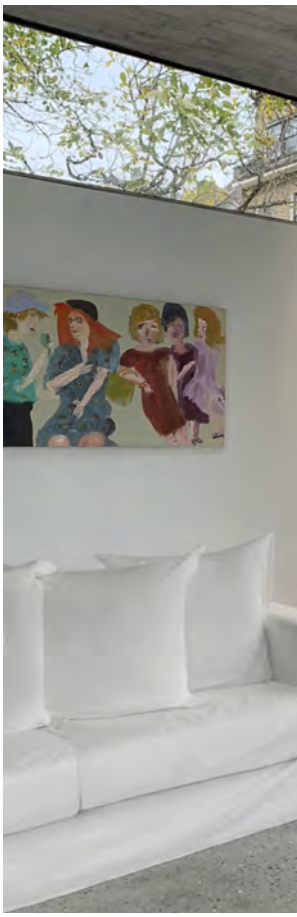
WRINKLE TREATMENT
Steven Holl goes for the crumpled look at Washington DC's Kennedy Center for the Performing Arts

SOCIAL CLIMBER
How Camden's old council offices escaped demolition to become London's hottest new hotel

SECRETS OF A LONG LIFE
The new rules for durable structures and loose-fit design – the key to a low-carbon future



VANISHING TRICKS

The utilitarian materials of Sophie Hicks' Earls Court house conceal a highly sophisticated machine, writes Nick Jones

Sophie Hicks Architects' 1a Earls Court Square is a house that revels in structural honesty, while also managing to conceal most of its working parts. It has been described by its architect as a "quiet machine", with heating and cooling systems, lighting and motorised blinds all discreetly hidden. Yet at the same time, it is a house with nowhere to hide, its walls, floors, ceilings, even some of its furniture, cast in concrete and left entirely exposed. This paradoxical approach required a single-mindedness on the part of the designers, Hicks and her colleague Tom Hope. "If you forget anything or you leave something till later, it will show in the finished building," says Hicks. "You have to design it all on day one – that's the challenge."

The sunken, two-level house, which has been shortlisted for the RIBA's Manser Medal, occupies a tiny 75m^2 plot between two Georgian houses. From the street, its upper, ground floor appears as a minimalist glass box barely rising above the neighbouring property's garden wall, but even this briefest of glimpses is enough to reveal the bold design approach. Set back 1m inside the glazed envelope is a muscular a 600mm-thick roof slab, which seems to hang beneath the glass. On such a tight site, this inset could be felt as an unnecessary encroachment, but the effect is just the opposite. Because the open-plan living space stretches out beyond the shadow of the roof slab, the room height suddenly rises from 3m to 3.6m and feels open to the sky. "You're drawn to the edge of the room because it leads the eye up, it expands upwards and outwards," says Hicks. "The space is not that big but it feels a lot bigger."

While the roof slab deflects the eye to the world outside, it also draws attention to itself: "It's like an artwork," says Hicks, "it's got nothing on it. If you look up, it's framed by sky." In this sense, it could be read as a celebration of unadorned structure – and yet, in a house crying out for hiding places, it's not as honest as it might seem. Rather than a 600mm slab, it's actually 200mm fronted by an upstand, which neatly hides a 200mm layer of insulation, as well as the connections to the glazing's steel frame and a shallow-pitched solar array – a lid for the quiet machine.

The concrete frame plays another important role. Because the house is half-basement and shielded on all sides by a 2m-high garden wall, it was always going to need huge amounts of glass at the top to suck in as much light as possible. This in turn meant that the rest of the structure would have to mitigate the potential for overheating and heat loss. Apart from a few areas of plasterboard in the basement, the concrete is exposed and boardmarked throughout. Hicks specified a "completely bog standard" mix from the nearest distribution centre on the basis that "there's a great pleasure in using what is normal".

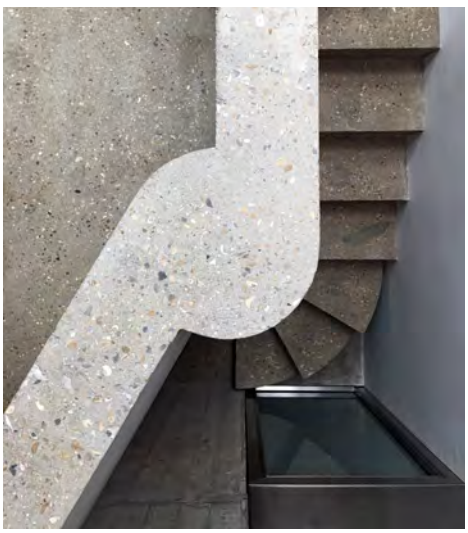
In an example of the all-on-day-one design approach, the finish informed the structure as much as vice versa. Hicks felt the building's four perimeter columns should be precisely two boards wide and worked backwards to make sure this was achievable. In search of an affordable, off-the shelf shuttering solution – in part to mitigate

Photos: Annabel Elston

the costs of bespoke basement construction in west London – she found herself on the phone to a fencing manufacturer in Yorkshire. "I asked for their standard board width, which was 100mm, and that's what we used. The whole thing was set out by the basic unseasoned fence board – that gave us the dimensions." This slightly unconventional approach to structural design gave Hicks 200mm-wide columns, which had to act as another hiding place, incorporating not only large amounts of rebar but also the cabling and 100mm-deep backboxes for the sleek stainless-steel electrical panels that are set into the front of the columns.

The rough-sawn pine fence panels define the finish of all the exposed walls and ceilings and are neatly aligned throughout. The junctions at the soffit appear seamless, as the columns were cast at the same time as the slab above. Hicks has noticed a couple of other benefits to her utilitarian shuttering method. "The concrete is full of little splinters that have come off the wood, which is absolutely beautiful," she says. "The other thing it does is leave tiny holes in the surface, which makes it acoustically absorbent, like a carpet or curtain. It is a very calming, acoustically softening space."

YOU CAN NEVER CHANGE YOUR MIND, BECAUSE EVERYTHING SHOWS IN A SMALL BUILDING ON A SMALL SITE



The floor has been polished throughout, with 10mm ground off the screed to reveal a consistent pattern of aggregate beneath. The screed is the same mix as the rest of the concrete so appears monolithic, but it actually sits on top of a network of heating and cooling pipes – another sleight of hand.

The polished finish continues onto the staircase, which was cast in timber formwork and turns down in a semi-circle to the basement level. Here, cocooned from street level, are the two en-suite bedrooms, both lit via glazed side walls that face onto a sunken, white-painted courtyard. The basement walls are protected by a cavity drain waterproofing membrane, while a mechanical ventilation with heat recovery system draws in fresh air from neighbouring gardens.

There is further evidence down here of design choices made on day one and stuck to: recessed shower heads cast into the bathroom soffits, and in-situ concrete bedside tables projecting from the perimeter columns, their surfaces polished to match the floors. "You can never change your mind," says Hicks, "because everything shows in a small building on a small site." She admits that they forgot one wire during construction – Hope spent a day recently routing it through one of the few plasterboard walls. Perhaps, after all, there is always one last hiding place.

PROJECT TEAM

Architect Sophie Hicks Architects
Structural engineer MLM Consulting Engineers
M&E engineer Libra Services
Concrete contractor GMP
Finishing contractor Advent Developments

CLOCKWISE FROM FAR LEFT

A sunken courtyard draws light into the basement bedrooms; upstairs, the concrete frame is set back from the glass envelope; the concrete upstand rises above the garden wall; the stair, balustrade and floor are all polished to expose a pattern of aggregate