

# HOLOCENE HOUSE

BY  
C PLUS C ARCHITECTS  
AND BUILDERS,  
JASE SULLIVAN AND  
DUNCAN GIBBS

01



# Green in more ways than one, this new home in Sydney explores the synergy of architecture and landscape in its vision for more sustainable living.

Words by Bronwyn Marshall  
Photography by Renata Dominik,  
Michael Lassman

Elevated on a dramatically sloping site in Manly, Holocene House was designed for a family with an ambitious brief for a climate-positive home. The aim, shared by client and architect-builder, was to redefine conventional approaches to residential sustainability, embracing permeability, material innovation and the potential symbiosis between architecture and landscape. “We weren’t designing to tick sustainability boxes,” explains C Plus C Architects and Builders director Clinton Cole. “This was about real-world carbon reductions – how the house performs, how it breathes, and how it integrates into its natural and social context.”

Where conventional builds often focus on enclosing a structure for energy efficiency, Holocene House instead explores the benefits of a permeable approach – one that is well-suited to Sydney’s climate. Also unconventional is its orientation: unlike most homes in Manly, which are oriented almost exclusively toward the best view, Holocene House opens sideways along its long, north-eastern edge to a pool, deck

and terraced garden that occupy half of the site. A distinctive canopy – inset with mesh, planters and fibre-reinforced plastic panels – responds to the movement of the sun through and across the site, filtering light, creating shade during summer, and permitting the house to adapt to seasonal change.

The house is oriented north–south, ensuring sunlight reaches all parts of the home throughout the day. Openings provide adequate cross-ventilation for thermal comfort, eliminating the need for mechanical airconditioning. Materials, from structure to finishes, were sourced to lower the home’s carbon footprint: a lower-carbon concrete skeleton is layered with recycled timbers sourced from demolished houses; low-VOC plywood and cabinetry made from reconstituted paper pulp further reduced the environmental impact. Bushfire controls also required robust, non-combustible materials. Externally, charred timber cladding (shou sugi ban) and galvanised steel elements create a tactile yet durable envelope.

01 A linear plan unfurls down the southern side of the site. Photograph: Michael Lassman.

02 Living spaces open out to a natural pool, one part of a creek-inspired landscape design.

03 A distinctive canopy lined with plants, mesh and fibre-reinforced plastic panels creates varied light and shadow.

Photographs 02, 03: Renata Dominik.





Holocene House is built on the land of the Gayamaygal people.

Kai'yamay/  
Sydney,  
NSW

New house

Family

4

4

3

+ 1 powder  
room

M<sup>2</sup>

Site  
House  
External

697 m<sup>2</sup>  
227 m<sup>2</sup>  
975 m<sup>2</sup>

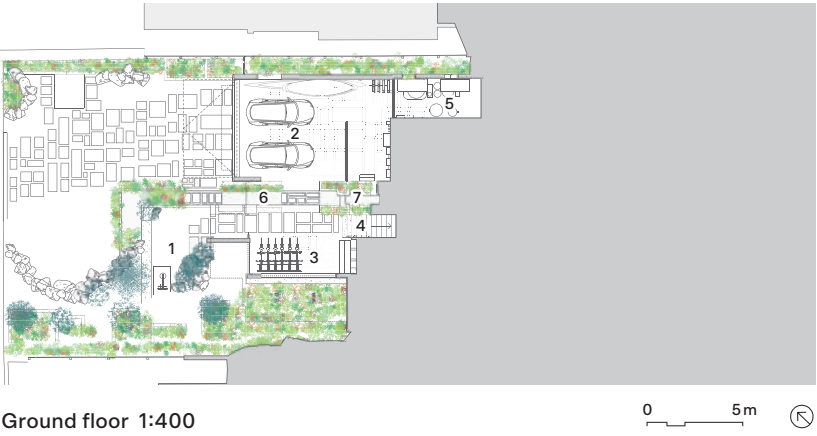
Design  
Build

15 m  
24 m

Beyond its sustainability credentials, the house is manifestly green. The house is enveloped in terraces, roof terraces, rock gardens, a productive garden, even a bubbling creek. A collaboration between C Plus C and landscape architect Duncan Gibbs was crucial to the concept of a rainforest creek, with inspiration drawn from Sydney’s own natural streams and sandstone escarpments. “The idea was to abstract the natural water flow from the escarpments, integrating it into the site,” Duncan explains. A series of water features includes ponds at the rear of the site, a natural pool at its centre, and a watercourse in the front garden – all undertaken by Land Forms, which specialises in natural pools, looped ecosystems and landscaping installation. This approach balances aesthetics with ecological benefits, cultivating endangered indigenous plant species and creating habitats for local wildlife, including a wildlife corridor for bandicoots who reside in the neighbouring national park.

The landscape also acts as an extension of the home. “The house and garden aren’t separate,” Duncan says. “They co-inhabit the site with the family, creating a dynamic environment that changes with the seasons.” The rooftop garden and planting screens further soften the architecture, filtering light and creating intimate outdoor spaces. Over time, plants will envelope the canopy, softening the mass of the home and embedding it further into the landscape.

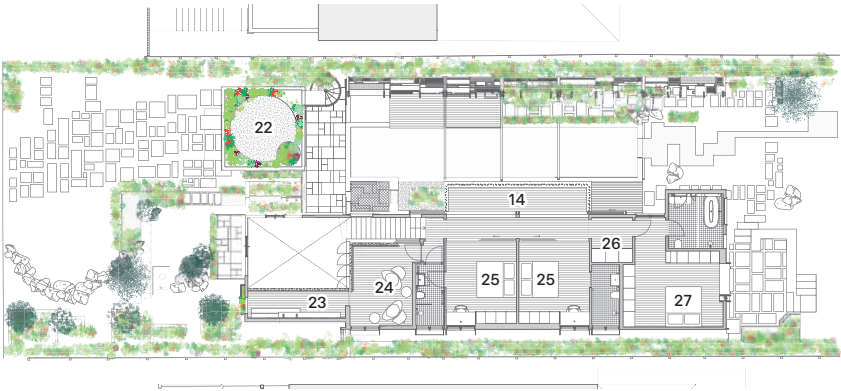
As its own unique system, Holocene House represents how architecture can embody a living philosophy of sustainability, energy generation and reuse, as well as having a minimal environmental impact. As Clinton observes, “This house was born from a desire to create real-world carbon reductions, and a living environment that feels as natural as it is efficient.” ☺



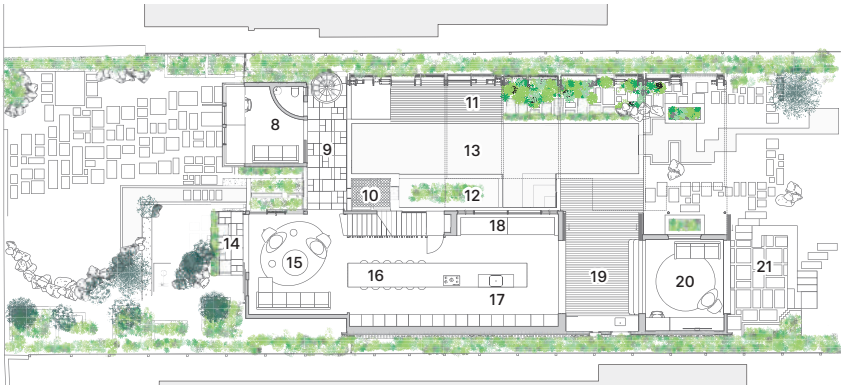
Ground floor 1:400



04



Second floor 1:400



First floor 1:400

- |                   |                   |
|-------------------|-------------------|
| 1 Outdoor shower  | 14 Balcony        |
| 2 Garage          | 15 Living         |
| 3 Bike storage    | 16 Dining         |
| 4 Entry           | 17 Kitchen        |
| 5 Plant           | 18 Day bed        |
| 6 Waterfall       | 19 Outdoor dining |
| 7 Pond            | 20 Art room       |
| 8 Home office     | 21 Courtyard      |
| 9 Terrace         | 22 Rooftop garden |
| 10 Cargo net      | 23 Library        |
| 11 Pool deck      | 24 Guest room     |
| 12 Polishing pond | 25 Bedroom        |
| 13 Pool           | 26 Laundry        |
|                   | 27 Main bedroom   |

04 A home office and roof deck occupy the northern corner. Photograph: Renata Dominik.





05 Timber shutters open the guest room to the void above the living space. Artwork: Elsbeth Shaw.

06 Openings throughout the house encourage cross-ventilation for thermal comfort.

07 Stained-glass windows frame a different perspective of Sydney's famed ocean views.

Photographs 05, 07: Renata Dominik; 06: Michael Lassman.



Products

**Roofing:** Custom Orb from Colorbond in 'Monument'  
**External walls:** Spotted gum in shou sugi ban charred finish; Custom Orb from Colorbond in 'Monument'; Barestone from Cemintel  
**Internal walls:** Adobo vulcanised timber ceilings in Cutek Interior 'Ultra Matt'; birch plywood in Osmo Polyx Oil 'Japan Black' stain; Cemintel Barestone  
**Windows:** Louvres from Breezway; Aneeta sashless windows  
**Doors:** Recycled hardwood frames and rails with clear double-glazed glass and Cemintel Barestone infill  
**Flooring:** Envisia lower-carbon concrete from Boral, burnished; recycled hardwood in Bona Traffic 'Matt'; kiln-dried hardwood stairs in Cutek Interior 'Ultra Matt'  
**Kitchen:** Laminated recycled hardwood benchtop in Orange Oil; joinery in plywood in Osmo Polyx Oil 'Amber' and Paperock; Vola tap in 'Natural Brass'; Miele ovens and dishwasher; Bora cooktop; SubZero integrated fridge-freezer;  
**Bathroom:** Vogue tiles from Classic Ceramics in 'Azzuro,' 'Laguna' and 'Mastice'; Garonne limestone cobbles, tumbled, from Eco Outdoor; Brodware taps and accessories in 'Brushed Brass' and 'Natural Brass'; Studio Bagno basin; Apaier bathtub and basin in 'Cotton'  
**Heating and cooling:** Haiku fans from Big Ass Fans  
**External elements:** FRP canopy panelling; recycled hardwood walls and ceilings; kiln-dried hardwood deck; Paperock joinery; double-glazed tinted glass in recycled hardwood frames; sandstone steps; desert masonry garden beds



Section 1:400

**Architect and builder**  
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[cplusc.com.au](http://cplusc.com.au)

**Project team** Clinton Cole, Hayden Co'burn, Nathan Krstevski, Loretta Law, Alex Bonic, Damien Arnup, Tallon Creber  
**Structural engineer** ROR Consulting Engineers  
**Landscaping and natural pool builder** Land Forms  
**Landscape architect** Duncan Gibbs  
**Geotechnical engineer** Witt Consulting  
**Plumbing and hydraulic services** J. H. Gordon Plumbing  
**Doors and windows** Architectural Hardwood Joinery  
**Carpenter (framing, flooring, linings)** North South Carpentry  
**Carpenter (joinery and finishes)** Red Oak Carpentry  
**Painter** Orange Painting  
**Glazier** Gerry's Glass Tiler (bathrooms)  
**Northset Tiling** Roofer Flash Metal Roofing  
**Photovoltaic consultant** Solarpro  
**Interior stylist** Jase Sullivan