INFILL

NEW HOUSES FOR URBAN SITES

Adam Monnemert & Annabel Biles
Innovative materials and an emphasis on minimizing emissions are two of the defining features of this luxurious house, which is also blessed with enviable views of the Pacific from its location on Venice Beach.

To maximize space on the narrow (9 metre / 30 foot) plot, architect David Hertz used a clear span structural system of wide flange steel columns and beams, diagonal brace frames and concrete decking, so eliminating the need for interior loadbearing walls. An additional consequence of the decision is that prevailing breezes pass unhindered throughout the three-storey house. Vertical air circulation is channelled through the stairwells and the shaft of the pneumatic elevator that links the ground level to the rooftop pool.

Another feature that helps to modulate ventilation, as well as the temperature, is the full-height glass window of the west elevation, which is mounted on a 'worm drive' gear system. When lowered, the living room is open to the elements, and has uninterrupted views of the beach. A system of aluminium louvres was
designed to minimize solar gain and provide privacy.

David Hertz, who is no stranger to invention – he once created a house from a Boeing 747-200 – used the prefabricated panels that give this house its name to create a series of angled walls and reveals in the side elevations. They also offer an insulation rating four times greater than standard residential walls.

Typically used for walk-in refrigerators, each panel is nine metres (30 feet) long and 76 centimetres (30 inches) wide with a foam core 15 centimetres (six inches) deep. They are sheathed in a thin skin of aluminium and finished with Kynar paint, an industrial coating that resists weather damage and oxidation.

The use of the panels minimized on-site labour costs, and obviated the need for timber framing. Other environmentally responsible features include: solar and photovoltaic panels on the roof; a networked thermostat with exterior and interior sensors that help to minimize heating and cooling costs; and the collection of rainwater for use in the garden.
3 Rear elevation.

4 A swimming pool and solar and photovoltaic panels furnish the rooftop, which is accessed from the pneumatic elevator.

5 Ocean views are visible from the open-plan kitchen and dining area.

6 A clear span structural system maximizes the narrow dimensions of the plot, creating interior spaces unhindered by loadbearing walls.
LOWERLINE HOUSE
Architect Byron Mouton, bild Design
www.bildit.com
Contractor Anthony Christiana
Construction crew A.J. Christiana Construction
Millwork Dean Kagelet
Metal specialties Sam Richards

LUCKY DROPS
Architect Yasuhiro Yamashita (Atelier Tekuto) with Masahiro Ikeda (Masahiro Ikeda Co., Ltd)
www.tekuto.com
Construction Hideko Kikushima (Kikushima Co., Ltd), with the cooperation of Shigeki Matsuoka (Home Builder)

MICHAELIS HOUSE
Architect Alex Michaelis, Michaelis Boyd Associates
www.michaelisboyd.com
Project team Alex Michaelis, Tim Boyd, Rodrigo Moreno Massey
Structural engineer P&N
Mechanical engineer Arup

NATURAL WEDGE
Architects Masaki Endo + Masahiro Ikeda / Endo Design House EDH + mias
www.edh-web.com
Principal-in-charge Rio Tomita, Kenji Nawa, Hirofumi Ohno
General contractor RIDEA CONSTRUCTION Co., Ltd

OLD HOUSE
Architects Jackson Clements Burrows Pty Ltd
www.jcb.com.au
Project team Jon Clements, Tim Jackson, Graham Burrows, Kim Stapleton, Josh Flavell, Tim Humphries
Engineer Mayer Consulting
Builder BD Projects
Landscape architect Emma Ferguson (Mantello)
Building surveyor Australian Building Permits
Facade image High Performance Films
Facade glazing Ascott Glass
Client David Clements
Heating/cooling systems Griepink & Ward
Benchtops Ruiso Concrete
Joinery Cattana Kitchens
Kitchen appliances Smeg

ONE WINDOW HOUSE
Architect Touraine Richmond Architects
www.touraine-richmond.com
Design team Terri Moore, Deborah Richmond, Olivier Touraine, Taiyo Watanabe
Structural engineering Anders Carlson, Gilsanz Murray Steficek
Builder Bruce Brown, Brown Oswalddson Builders
Landscape design Touraine Richmond Architects
Curtains/textiles Cathy Pack

PANEL HOUSE
Project designer/project architect David Hertz, FAIA, LEED A.P./John Meachem
Project managers Keith Ireland, Lucas Goettsche, Jared Wright
General contractor Ron Senso Construction
Structural engineer C.W. Howe Partners Inc.
Mechanical Monterey Energy Group (MEG)

ROOFTECTURE S
Architect Shuhei Endo Architect Institute
www.paramodern.com
Consultants Masashi Ooji, Design-Structure Laboratory

SHIP HOUSE
Architect Katsuhiko Miyamoto & Associates
www.kmaa.jp
Principal-in-charge Katsuhiko Miyamoto
Project team Kazuhiro Takeuchi
Collaborator Masahiro Miyake / y+M design office
Structural engineering Masaichi Taguchi / TAPS
General contractor Yamamoto Komuten
Steel construction Nakamitsu Kenko, Mukai Tekkojo

SÁNCHEZ MEDINA HOUSE
Architect Manuel de las Casas
Collaborators Iciar de las Casas (architect), Sergio de las Casas (structures)
Assists P. Enfletaue, L. McNicholl, R. Heras, P. Garcia, J. McNicholl
Collaborator Eusebio Sánchez (quantity surveyor)
Client Sres Sánchez Medina
Construction company Alfonso Paná, S.L.

SKY TRACE
Architect Kyoshi Sey Takeyama + AMORPHE
www.amorphe.jp
Principal in charge Ikuma Yoshizawa
Structural engineer K3 Structure Design Office, Hirofumi Kaneko
Mechanical engineer Sotn Mechanical Engineers, Masami Tanoo, Akhiro Nanjo
Contractor Sobi