SECOT HOUSE

SMALL LOTS + SMART DESIGN = **BIG IDEAS**

From Rural to Suburban to Urban

In the 20th century, Los Angeles evolved from a rural landscape of bean fields, orange groves, and oil derricks to an automobile driven suburb – thinly spread and continuous. Now in the 21st century, Los Angeles reels with the need for higher density urban living that enhances environmental health and a culturally diverse community. The SLOT house is a sustainable urban design solution intended to fit any one of Los Angeles' architecturally varied neighborhoods.

• Sustainability = livability, long term affordability • Timeless and simple design = adaptability

BEDROOM

DECK

BEDROOM

OPEN TO BELOW

- Innovative materials = time savings
- Time savings = affordability

...but

Affordability does *not* have to = low quality

A NEW URBAN VISION, a new presence on the sidewalk, a new attitude about the street

- Parking on the 70' wide street is increased with diagonal parking and the median is redesigned as a more pedestrian
- friendly environment and streetscape.
- One diagonal space is designated for a Flex Car
- (www.flexcar.com) or a communal electric "SMART" car for local trips to be shared by the mini-community.
- Bicycle parking is provided in each unit.
- Electrical outlets are provided in each garage to charge electric vehicle.

The greatest architecture emerges in direct response to its site. The long and narrow site, typical of many Los Angeles lots, led to an investigation

Genius Loci: the recognition and expression of the spirit of a particular place...

of subdividing the site in a similar fashion. This in turn led to an examination of housing types that reflect this horizontality: shotgun houses, bar buildings, and pavilions. (The townhouse was discarded.) The SLOT House emerged – a long and slender pavilion in the sky, where 10 foot ceiling heights and long expanses of glass create a healthful environment and a luxurious sense of space.

The pared down timeless design of the SLOT house reflects not only the existing neighborhood's 1950's and 60's multi-unit housing, but in a larger context, the architectural legacy of 20th century Los Angeles, from Wright, Schindler and Neutra up to and through today's design community. The SLOT house also embraces a similar innovative use of building materials and design concepts – concrete, steel, wood, large expanses of glass, a blurred boundary between indoors and outdoors, courtyard living, pilotis, ease of construction, and affordability.

The SLOT house provides the seed for a new urbanism in which existing architecturally and socially will begin to meet the economic physical, and environmental needs of our time.



DECK BELOW



only for the wealthy.

UNIT 4

BEDROOM



SMALL LOTS + SMART DESIGN **SLOT** HOUSE LOT AND UNIT SIZES:



There are 4 primary types of SLOT House units: The Broad House (main unit, no. 5), The Tea House, The Long House and The Tower. One clear advantage of the SLOT House concept is that each of these housing types can be increased or decreased in size according to need without undermining the principal design concept or aesthetic experience. We have illustrated what we believe should be the maximum unit sizes.

> • Unit 4: LONG HOUSE Lot Size: 1,221 s.f., Unit Size: 1,570 s.f., 3-story, unit with a ground floor studio with 1/2 bath and utility space, living/dining/kitchen, 2 bedrooms, 2 baths, patios

> > • Unit 5: BROAD HOUSE Lot Size: 1,551 s.f., Unit Size: 1,932 s.f., 3-story unit, ground floor utility space with 1/2 bath, living/dining/kitchen, 3 bedrooms, 2 bathrooms, 2 on-site parking spaces, roof deck

• Unit 1: TEA HOUSE space, living/dining/kitchen, 2 bedrooms, 2 baths, roof deck

• Unit 2: LONG HOUSE unit with a ground floor studio, 1/2 bath & utility space, living/dining/kitchen, 2 bedrooms, 2 baths, patios

• Unit 3: TOWER Lot Size: 1,071 s.f., Unit Size: 1,261 s.f., 4-story unit;1 bedroom, mezzanine studio, and 1 1/2 baths

The SLOT house can easily vary its width, length and height to create a broad range of variations and sizes. The Tea House can be reduced in size to a 1-story 807 s.f fully accessible studio; the Broad House can be increased to a 4-story 2,867 s.f. unit. However, even though a 4th story is allowed by the zoning code, we believe it would dwarf the existing fabric of the neighborhood.





The Floating Pavilion (an idea from the 1920s and 30s that has reemerged in the 21st century) raises the primary living space above the ground plane, creates a piano nobile, and increases the usable land at the courtyard level. The courtyard, flowing under the pavilions, encourages neighbor-toneighbor interaction. The 10'0" clear ceiling heights at the garage level provide greater room for storage, and at the living levels, give a luxurious sense of space.

The simple "C" structure (made entirely of SCIPs) minimizes party walls, maximizes glazing, provides excellent sound insulation between neighbors, is easy to build, and allows for open-plan living.

Lot Size: 1,492 s.f., Unit Size: 1,337 s.f., 3-story unit, ground floor studio with 1/2 bath and utility Lot Size: 1,175 s.f., Unit Size: 1,636 s.f., 3-story,





...all seeking an affordable quality lifestyle within a community-

oriented sustainable environment. Quality housing should never be

• extended families in larger or adjacent units

BEDROOM



from the sidewalk at the ground floor level. Entry gardens lead to what could become a neighborhood oriented business (child-care center; fruit and vegetable market; cabinetry shop; translation, cleaning, or landscaping services). A family could work on the ground floor and live in the space above.



SECTION @ BROAD HOUSE Scale 1/8"= 1' 0"

The central garden courtward provides a safe haven for children to play and nei

to interact. It is a shared community space, enlivened with a fountain, protected by garden walls and drought tolerant trees and vines.

The courtyard is an outdoor living room recalling Los Angeles' courtyard housing of the 20s through the 60s. Designed primarily as a pedestrian environment; its secondary use is as an access way for cars to reach their covered spaces.

Glazed entries and pilotis float the buildings off the ground plane visually expanding NEW DIAGONAL STREET PARKING the courtyard. The garden court is oriented to the afternoon sun, and on this particular AND LANDSCAPING site, creates a buffer between the tall SLOT houses and the one story neighbor.





SITE PLAN

Z

Scale 1/8"= 1' 0"

Sustainability:

- SLOT house is, above everything else, about sustainability and creating a humane environment that gives back to the community.
- SLOT house is designed along passive solar principles, with concrete floors for thermal mass, sliding screens to cut solar gain (while allowing for maximum daylight reducing energy consumption), low E glazing, and natural ventilation.
- Energy efficient design and materials will significantly exceed Title 24 requirements.
- Floating the SLOT house off ground level increases air circulation, provides more permeable lot area to minimize run-off, and recharges the water table.
- Nearly all materials used in the SLOT house are "green" from soy-styrofoam
- SCIPs (Structural Concrete Insulated Panels) to FSC certified woods.

Timeless and simple design:

- The SLOT house is designed to be timeless; to fit in comfortably next to a one story
- 1920s bungalow or a 1960s apartment building.
- The variety of materials used in the SLOT house creates an architectural diversity within a specific building vernacular.

Adaptability:

- The design can be altered to fit different lots: on a corner lot, the courtyard can become the entry and the units increase in size; on a wider lot, the units can widen; on a lot with an east / west orientation, the courtyard can be placed on the south side, optimizing solar orientation.
- The units can also be increased or decreased in size (both width and length) depending on need and budget.
- The open floor plans are designed for maximum personalization and utilization.
- The garages are designed to also function as workshops.
- Most importantly, the SLOT house can be adapted to fit subsequent generations.

Innovative materials:

- SCIPs (Structural Concrete Insulated Panels) provide structure, high insulation values (both temperature and sound), smooth integrally colored concrete walls and floors, and the possibility of systematization.
- The rolling window walls provide natural ventilation, day-lighting with solar control, flexibility in layout, and a varied character to the architecture.

Time Savings:

- The SCIP construction process combines under one trade the work normally done by various trades (structure, insulation, waterproofing, exterior wall finish, and interior wall finish), significantly reducing building time, site noise, and neighborhood disruption during construction.
- The design uses a modular system of component units (for the kitchens, bathrooms, closets, windows, and screens) which can be pre-fabricated in a shop atmosphere, providing precision craftsmanship, timely installation, and

Affordability:

reduced cost.

- By utilizing a pared down palette of high-quality green materials, construction costs are lowered (fewer materials, fewer trades, shorter construction time), durability is increased, and long term maintenance costs reduced. All the floors and roofs utilize SCIP technology.
- All the walls are SCIP, rolling glass windows, simple storefront glazing systems, or Profilit glass.

"Green" Systems:

- a central geothermal heating and cooling system linked to a radiant floor system photovoltaics • graywater recycling system with cistern • Shared shredder compactor
- Shared composting

SCIP Panel

• Central water filtration for development

• "Eco-Roof" – by using succulent plants native to our region (with their high water retention, i.e. sedum), insulation value increases, heat gain and rain run-off is reduced, and beautiful roofscapes and fresh oxygen are provided.

"Green" Materials & Products:

- Whenever possible, locally manufactured materials are specified to cut transportation costs, reduce pollution, and benefit the local economy.
- all steel work (columns, stairs, handrails) made from recycled and recyclable materials
- permeable paving at driveways and all parking areas increases water table recharge and reduces run-off • SCIPs made with soy-based Styrofoam
- high fly-ash concrete higher strength, increased waterproofing, recycles an energy waste by-product (fly ash) and eliminates lime off-gassing

• low E high performance dual glazed evergreen glass

- FSC certified woods: Pao Lope sun screens (sun screens may also be made with perforated recycled metals and
 - fabrics), engineered white oak stair treads, ash plywood cabinetry, and birch shelving
 - recycled glass terrazzo flooring and countertops
- recycled glass tile for decorative accents
- low VOC paints and natural oil finishes (used minimally since most surfaces are integrally colored concrete SCIPs) • Energy Star appliances by Bosch, Amana and GE
- dual flush toilets by Caroma
- Bosch or Takagi in-line gas water heaters with solar pre-heat







