Elevation

Ground floor

Second floor

1

Donkin House

Design on modest means delivers beautifully efficient infill

Carl Darrow

Like all newlyweds, John Donkin and his wife needed a place to live. Money being tight, their first house had to be small and cheap, but well designed; efficient, full of light, with good spaces and a garden. The guiding principal was "How simple can it get?"

The infill lot, purchased for only $23,500 [Canadian dollars] was a mere 10-minute drive from downtown Ottawa, in a circa 1950s working class neighborhood. It had been on the market for 10 years, unsold because of its odd dimensions [32ft. wide x 75ft. long] required a 20 ft. setback from the street, and a 4ft.utility easement down one side. It had once been the laneway to a farm house long departed.

Such a small lot could only take a small house, a circumstance that suited the small budget. With one bedroom, a study [or second bedroom], one bath, a kitchen, dining and living room, plus a tiny hallway library, all in only 1,110sf, this house has been called the world's best apartment. Even the area was precisely calculated to qualify for the lower municipal development fees set for "affordable housing". Allowed an area of only 1,100sf or less, plus a 1% allowance for error, the house was built to the limit. The 1% allowance was used to build the closet that protrudes from the house between the front and side doors on the west elevation.

The house demonstrates that modest means need not be a barrier to architectural design. The resources invested up front in design result in better space and money saved through efficient planning and the judicious and expressive use of standard materials and details.

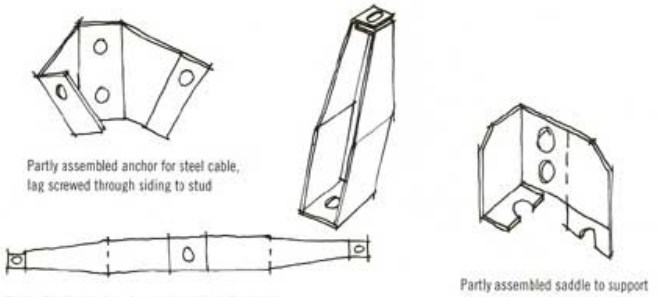
Borrowing from both Japanese tradition and modernist planning principles, the spaces inside and outside the house are allowed to flow together, but their extent is never fully revealed; a part of the space is always hidden around a corner, providing a sense of privacy and mystery. This is in contrast to modern production houses in which many spaces are gathered together, creating a single space of greater dimension, but defined limits.

The corner windows lend an openness by extending the interior into the garden. The effect is felt even in the yard and patio where the corners of the wooden fencing are visually open, closed only by transparent metal mesh.

3

4

1. The Donkin house occupies a narrow 32ft. wide infill lot. The main entrance is on the west side, just to the front of the protruding closet.
2. The serene terrace bordered by a section of fence for privacy and by the house itself, where it is finished with stained MDO plywood and battens.
3. In summer, the terrace becomes part of the living space. Windows are painted finger-joined wood and the floor is parquet.
4. Looking south past the closet and main door to the dining room. The open-riser white ash stair is the prominent feature, with the stair to the basement of more modest medium density fiberboard [MDF].



Wood lattice canopy hardware, stainless steel

Construction was dead easy, making use of inexpensive and reliable platform frame construction. The house is 15ft. wide inside, a dimension chosen based on the maximum span of the smallest and least expensive parallel chord truss offered by the manufacturer [Open Joist 2000]. The 6 in 12 hip roof was easy to build with prefabricated trusses, providing a uniform soffit width, minimum wall height and minimal flashing requirements. The house was completely framed in three days.

The windows are simple double-glazed wood windows with an opaque stain finish. Overlaid plywood with wood battens was chosen as the main "feature" siding element because of cost, the freedom of color choice, and the ease with which a pattern could be developed to complement both the horizontal siding used at the secondary elevations and the wood lattice suspended over the entry door and patio.

Money was invested where it would have the greatest impact; the central open-riser stair, the hardwood flooring, and the clear cedar and custom hardware of the trellis. White ash was used for the flooring and stairs as an economical alternative to maple or birch.

5

Basic construction costs were about $66,000. With land, soft costs and landscaping, the house was built for $120,000 [Canadian dollars]. The "practice what you preach approach" has helped to inform and excite clients about the role architectural design can play in creating housing that is attractive, efficient, and economical.

Carl Darrow is associate editor of Wood Design & Building.

More photos of this project are found at www.woodmags.com, click on Wood Design & Building, then Magazine Rack and issue #24.

ARCHITECT: JOHN DONKIN OAA MRAIC, JOHN DONKIN ARCHITECT, OTTAWA, ON; JDONKIN@JDARCHITECT.CA
CONSTRUCTION: JOHN DONKIN, OTTAWA, ON
LANDSCAPE: PATTI ALLEN, SAGE GARDENING, OTTAWA, ON
PHOTOS: EWALD RICHTER, OTTAWA, ON; ROY GROGAN, OTTAWA, ON [P.12 LEFT AND P.14 RIGHT]

5. View of the light-filled second floor from the studio. The space can be converted to two bedrooms but, for now, a short partition wall defines the master bedroom.

6. Horizontal member of the lattice canopy notched to accommodate the stainless steel hardware.

6

PRODUCT SPECS

Frame

– Platform wood framing of 2x6 studs, roof trusses and OpenJoist 2000 floor joists, depth 9-3/8 in. spanning 15ft. at 20in. o.c., oriented strandboard sheathing and air barrier

Exterior

– Medium Density Overlay [MDO] plywood [paper one side] finished with opaque stain by Pratt & Lambert, seams protected with wood battens; windows by Robert Wood Windows stained to match overlaid plywood; entrance canopy of clear western red cedar [stained] with custom stainless steel fittings

Interior

– Painted drywall, pre-finished ash parquet flooring, painted pine trim, open riser white ash stair, basement stair of medium density fiberboard [MDF]