

A window behind the stove? *Sure, it brightens what's more commonly a cave for the cook. The space beyond houses books, toys and a TV—plenty to occupy kids during meal prep. Photo taken at A on floor plan.*

Downtown Infill





The original house *on this site was torn down and sold to be carted off and re-erected elsewhere. The new house (photo left, taken at B on floor plan) sports a roof deck. Reached via a hatchway, it gives a 360° view of downtown Houston along with sunsets and Fourth of July spectaculars.*

No-nonsense materials and exposed trusses distinguish a Houston house with a home office built for less than $100 per sq. ft.

BY SCOTT BALLARD

My 1940s 1200-sq. ft. bungalow in central Houston was fine during my single years, but it was a little tight after I added a family. While many people depart for the suburbs at this stage of life, my wife and I liked the city and our lot, which was uniquely large and had several big, old oak trees. So we opted to replace the old bungalow with a new house tailored to our family's needs (photo above).

As an architect, I've got some strong opinions about what makes a good house. I think that the secret to a great living space is high ceilings, plenty of natural light and exposed structure. I had designed several homes with the main living area on the second floor and knew how different and uplifting it feels to look out at trees and sky instead of streets, fences and cars. Also, because Houston is flat, I wanted to take advantage of the outstanding view that easily can be had once you get above the trees. I resolved to build such a house, and to do it inexpensively.

Building up, not out, makes best use of the lot

I opted to build up, instead of out, to preserve the large trees that surrounded our smaller home, wrapping the house in green and providing privacy from our neighbors. Key to this plan was deciding which functions could go on the first floor.

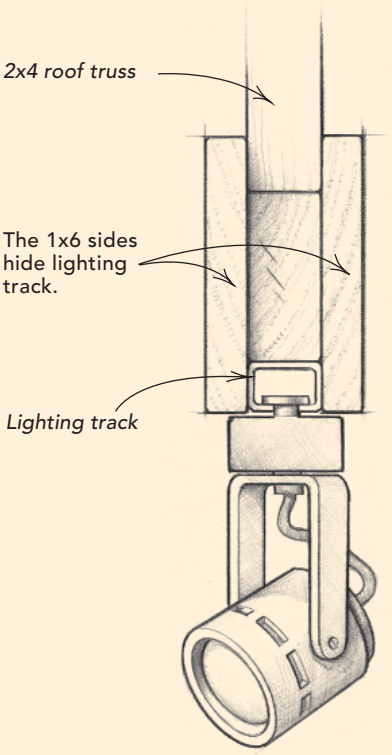
To minimize the driveway, preserve green space and permit flexibility for future expansion, I didn't want the Houston standard of a backyard garage. So my first priority was locating a side-loading garage at the front of the house, opening onto a gated motor court that provides privacy from the street (floor plans, p. 90).

I decided to move my office into the home, which has worked out well for several reasons: I have no commute, I could build more house because I could put what I previously spent on office rent into the house payment,

GREAT IDEA
CHANNEL HIDES LIGHTING TRACKS

To beef up the exposed 2x4 roof trusses in my living room visually, I affixed pine 1x6s to their sides. Dropping these 1x6s a little lower than the bottom chord of the trusses created a channel for the lighting tracks.

— *S. B.*





Standard roof trusses gussied up with 1x6 *make an interesting ceiling. Spacing the trusses several bays apart keeps them from appearing too busy. Photo taken at C on floor plan.*

Drawing this page: Bob La Pointe



A second-floor porch affords some privacy, *yet allows rail-leaning conversations with passing neighbors. Eastern exposure provides morning sun and afternoon shade. Photo taken at D on floor plan.*



Privacy, front and back. *Facing the street, the balcony wall shields the master bath's occupants from passersby while allowing views out. Photo taken at E on floor plan. Leaving the mature trees on the lot protects the master bedroom from all but the prying eyes of squirrels and doves. Photo taken at F on floor plan.*



I got a nice income-tax deduction, and I now have the opportunity to see my kids a lot. The office (photo left, p. 91) is on the ground floor, which is accessible for my clients and keeps the living areas private. However, the ground-floor design is flexible enough to convert easily into an independent apartment or a studio with living quarters in the future.

Second-floor living areas are shielded from the street

I designed the main living areas to be on the second floor, which allowed flexibility in ceiling height and shape because for the most part, nothing was on top. When visiting building sites, I've always enjoyed the drama of roof trusses silhouetted against blue sky. I grabbed some of that drama here by using widely spaced trusses and infill rafters for the roof and ceiling (photo facing page). The windows are large and numerous, allowing ample views out and natural light in. The trees that surround the house ensure privacy.

The rear wall of the living area is all glass and, facing north, receives no direct sun. This orientation may seem backward, but in Houston, the southern sun is rarely your friend. Much of the southern glass is shaded by a second-floor front porch that allows for pleasant sitting and chatting with neighbors (photo above left). The kitchen opens to the dining and family areas, with a raised bar to conceal dirty dishes and clutter (photo p. 86). The pantry connects to the garage with a dumbwaiter. The second floor includes two bedrooms for our boys as well as a laundry area and bar. The stair to the third floor is open and doesn't obstruct the flow of space and light.

Waking up with the squirrels

The master bedroom and bath are on the third floor (photos right). The all-glass north

A home office means no daily grind down the interstate, midday visits with the kids and a sweet tax deduction.



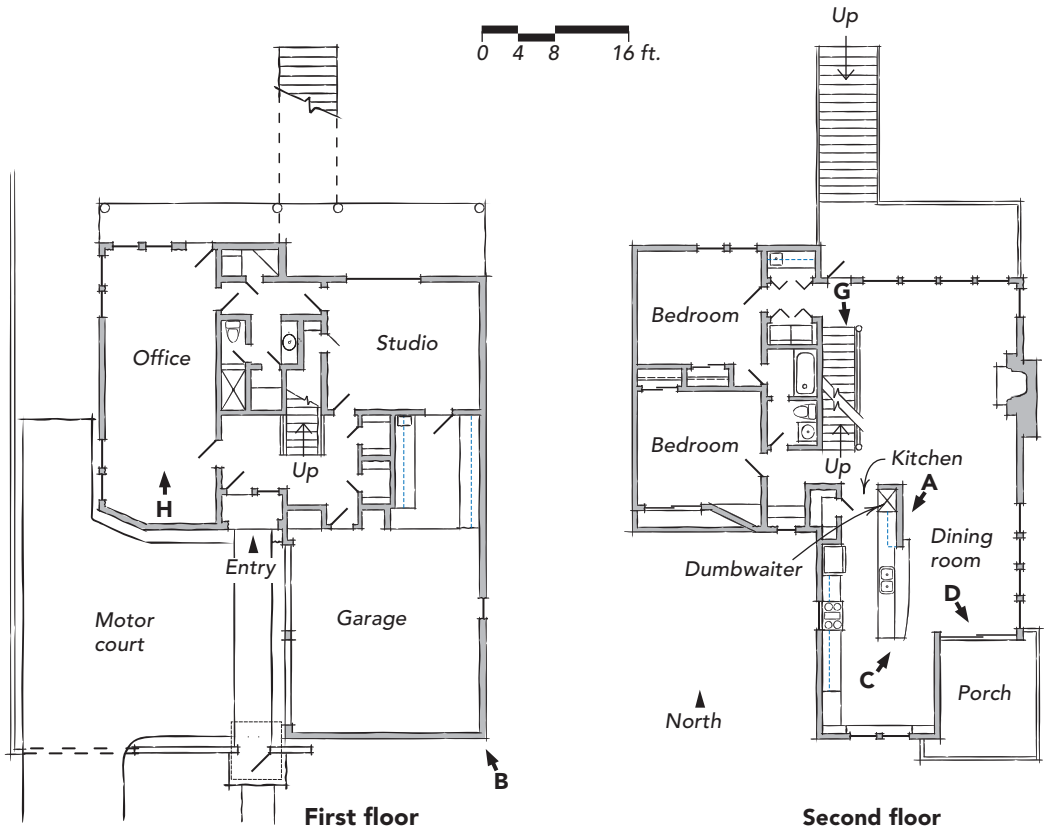


Main living areas on the upper floors provide privacy in an urban setting

The first floor is taken up by garage, office and studio, spaces where ground-level access is key and separation from living quarters is a benefit. The second floor is flooded with cool light from the north and east. The third-floor master bedroom opens onto a balcony and feels as if it's in the treetops.

SPECS

Bedrooms: 3
Bathrooms: 3
Size: 3000 sq. ft.
Cost: $285,000
Completed: 1999
Location: Houston, Texas
Architect/builder: Scott Ballard



Photos taken at lettered positions.

Floor-plan drawings: Paul Perreault



Steel rails are sturdy and inexpensive. *Made by a fence contractor and sealed with epoxy, steel rails add a custom, elemental touch without breaking the bank. Photo taken at G on floor plan.*

Working at home. *Houston's lack of zoning makes home offices easy. This office's ground-floor location disconnects work from family, easing concentration while protecting the family's privacy. Photo taken at H on floor plan.*

wall makes waking up in the treetops with the squirrels and birds a remarkable experience each morning.

Above the attic is a widow's walk (inset photo, p. 87) reached by a series of retractable ladders. The panoramic view overlooks the high-rise buildings downtown. It is especially welcome for viewing brilliant sunsets and the Fourth of July fireworks.

The house works well for a family with young children because the small footprint ensures a big backyard; the gated motor court in the front creates a secure area for basketball, skating and biking. Three floors provide ample privacy for everyone in only 3000 sq. ft.

Nitty-gritty details

I used single-lite aluminum windows and sliding-glass doors with a white factory finish and white wood trim, inside and out, to achieve a nice look at about 50% of the cost of wood windows. I chose HardiePlank (www.jameshardie.com) for exterior siding and trim. This wood-fiber and cement material is impervious to water and termites, is easy to work with, holds paint extremely well, lasts as long as anything and is less expensive than wood siding.

The grade-level floor is concrete with a saw-cut pattern, which I stained one weekend (sidebar right). The second-level floors are 1x6 southern yellow pine, stained white. The pine is softer than oak or maple but much cheaper and, to me, warmer. Bedrooms are carpeted.

I hired a fence contractor to weld the steel-tube handrails for about half of the cost that was quoted by a steel-fabrication shop. The interior steel columns and handrails were brushed clean and sealed with a clear epoxy (photo facing page).

The only real extras in the budget were the standing-seam metal roof, the honed slate and limestone slab countertops and the glass shower enclosure in the master bath.

Controlling costs

I actually made money removing the original bungalow. It was in decent shape, and a newspaper ad scared up a buyer who paid $10,000 for the house. Cut into three pieces, it was moved to a country site.

I paid a general contractor $12,000 to furnish insurance, keep the accounts and provide subcontractors. I did the daily inspections and supervision. Managing the construction of a house costs either money or stress, and although this arrangement resulted in a $30,000 savings, I had a commensurate number of headaches managing subcontractors with whom I had no long-term relationship. I don't think I would recommend saving money this way. Still, the finished house came in at around $285,000, or about $95 per sq. ft. of air-conditioned space, which isn't bad for a custom house. □

Scott Ballard is an architect in Houston.
Photos by Andy Engel.



FEEDBACK



STAINED CONCRETE FLOORS

Because we don't have basements in Texas, typical first-floor construction is a concrete slab on grade finished with wood, tile or carpet. With little effort, however, the slab itself can become a highly finished, durable, unique floor that costs much less than wood or tile.

The first step was to trowel the slab mechanically to a high sheen. Next, I laid out a 4-ft. by 4-ft. grid with a chalkline. My grid is diagonal to alleviate any worry about cuts not lining up with the finished walls.

After the walls were up and painted, I applied the concrete stain (Lithochrome Chemstain's Fern Green; L. M. Scofield Co.; www.lmscofield.com). Overnight, the stain transformed into a layer of foamy bubbles that had to be mopped up the next day. I then mop-applied two coats of Cementone (L. M. Scofield Co.) clear sealer followed by a layer of paste wax.

The floors do not scratch, chip, stain or wear. The natural mottling hides dust. Cleaning takes a broom and mop. And the floor only looks better with age. Although I probably will polish them again, the floor has required no maintenance in two years.

A professionally finished concrete floor costs about $4 per sq. ft. Wood and tile cost at least double that. Doing the job myself, my cost was about 35¢ per sq. ft.

—S. B.