

Addition

BY MICHAEL KLEMENT

A new family room and master suite, improved entries, and an updated building envelope saved this home from the wrecking ball, again

I don't know if it was the fact that we had to tuck the dining-room chairs all the way under the table to open the front door, or if it was all the groceries, shoes, and coats we had to move just to get to the basement door, but it was clear the first time I visited the Blakelys' home that better entries and circulation and more practical spaces were desperately needed. What was less obvious was that the key to solving the many problems at the front of the house would take the shape of a two-story addition in back.

The house was turned 90°

The Blakelys' small house was built in 1905. Only 30 years later, it was spared from the wrecking ball and moved down the street to its current lot when the University of Michigan decided to build a new stadium, ironically nicknamed "The Big House." A few years ago, when the Blakelys called my firm about remodeling their home, we

found it was still in pretty good structural condition. It seems that saving the house was a good idea. What might not have been such a good idea was the way the movers set the house on the site: They turned it 90° away from the street.

Without a closet or any sense of transition or celebration, the original front entry was not very practical, but at least it opened on the perimeter of a spacious living room. After the house was moved, the front door dumped visitors abruptly into the dining room, where their first experience in the house was to dodge a table.

Once safely past the table, visitors entered the kitchen, where a lack of counter and storage space meant the room was hardly cutting it as a place to prepare meals. What's worse, a commonly used side entry turned the kitchen into a hallway and the basement-stair landing into a de facto mudroom, perpetually cluttered by briefcases, groceries, mail, and all the accoutrements that accompany young children.

SPECS

Bedrooms: 4

Bathrooms: 2½

Size: 960 sq. ft., remodeled existing space; 1392 sq. ft., additional space (including basement photo studio)

Cost: N/A

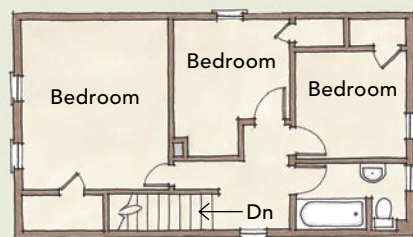
Completed: 2008

Location: Ann Arbor, Mich.

Architect: Michael Klement, AIA, Architectural Resource

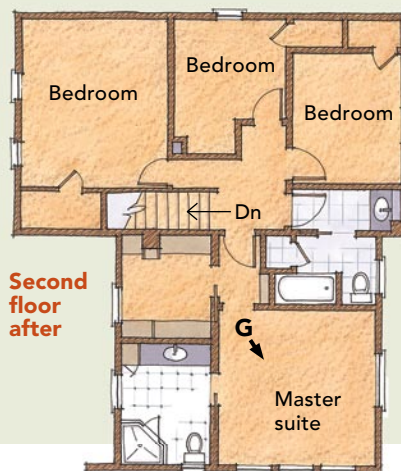
Builder: Doug Selby, Meadowlark Builders

Door to door. Once a dining room with too little space for even a table, the new front entry invites guests to explore the house. Drawn by daylight from the back-door window and intrigued by the built-in bookcases, visitors can visually explore the dining room, the kitchen, and the family room as soon as they enter the house. Photos taken at B on floor plan.



Second floor before

0 2 4 8 ft.



Second floor after



DIG THE DIAGONAL

The longest possible views in a house, and often the most difficult to capture, are the diagonals from room to room. Anchored by the center fireplace and framed by built-ins, columns, and box beams, long views thrive in this home's small footprint. Whether you're looking from the family room to the kitchen or the front door (1), or from the casual breakfast counter through the kitchen to the dining room (2), you'll notice a common denominator: daylight. Even from the dining room's built-in desk (3), you can catch a glimpse of a family member working in the kitchen or arriving at the side entry. Photos taken at C, D, and E, respectively, on the floor plan.



We might have been able to improve the entries and the kitchen and remain within the existing footprint, but the Blakelys also wanted a powder room, a better family-room/backyard connection, and a fireplace on the first floor. Upstairs, they wanted a master suite and a better bathroom for the kids. And somewhere, they hoped to squeeze in a photo studio.

The work began with better entries

As dysfunctional as the existing entries were, one of our first decisions was to keep them in their current locations. The truth is we couldn't move the front door, and the back door was right where it should be, close to the driveway. It always makes economic sense to keep kitchens in place, and here it made sense to keep the dining room close to both the kitchen and the front door, where guests enter. Thus, improving the side entry and finding space for a new family room, mudroom, and powder room could be accomplished only with an addition at the back of the house.

With views through the house in all directions, the front entry now establishes a clear axis of circulation that invites guests to explore the home. We shifted the dining room to the east and separated it from the kitchen with two functional elements: a coat closet on one side of the entry, and a built-in desk and bookcase on the other. Straight ahead, guests can see all the way through the new family room and out the back-door window for a glimpse of daylight and the yard.

The redesigned side entry takes advantage of the addition with a dump zone for mail, keys, and cell phones immediately inside the door, and a mudroom with a bench seat, a coat closet, and a small powder room. The side entry no longer interferes with kitchen workflow and comfort; instead, it welcomes the kitchen

into the addition with a shared high counter and diagonal views across the family room. The kitchen's location and size remain the same, but the room is now free to perform one function: cooking.

To bring warmth and atmosphere to both the kitchen and the family room, we positioned a two-sided sealed-combustion gas fireplace at the center of the house, beneath the stairs. The family room has six large windows for views and light, and a door to the backyard. Maximizing the floor space of the small room, we designed a recessed media cabinet that borrows space from the lower portion of the mudroom closet. As a result, the cabinet doesn't choke off one of the major circulation routes through the house (top photo, facing page).

Upstairs, the addition is almost all master suite. We used just a small amount of space to make the children's bathroom as useful as possible. We separated the vanity from the toilet and tub so that more than one



child could use the bathroom at the same time. In the basement, the addition offered just enough space for a photo studio.

Builder involvement at the right time

Although we do most of our design work before a builder comes on board, there's a point in every project when builder involvement is essential to ensure certain goals are met. These goals include high-quality, energy-efficient construction and thoughtful material selection—and meeting budget. So instead of shopping the plans for the lowest bid, we suggest that clients engage a preferred builder as soon as design work is done, but before construction documents are drawn.

At just the right time, the Blakelys hired Doug Selby of Meadowlark Builders, one of our area's most up-to-date firms, to partner with us. With Doug's assistance, this project went green from the ground up with a number of products and materials worth mentioning (sidebar right). But perhaps the greenest part of this project was when the Blakelys decided to save this little old house from the wrecking ball, again. □

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Products that increase energy efficiency and indoor-air quality go hand in hand

To get us out of the ground, Doug Selby of Meadowlark Builders used an insulating concrete form (ICF) foundation (www.rewardwalls.com). Not only did the Reward Wall system allow us to build in the winter without worries of keeping the concrete warm, but the assembly also provided an effective R-value of about 32 (including the thermal mass of the earth and neutralized air infiltration).

Aboveground, the addition's exterior walls are structural insulated panels (SIPs). The benefits of SIPs are well known. Although most use an expanded polystyrene (EPS) core, Doug had experience using a polyurethane panel from Murus (www.murus.com). The 4½-in. panels have a higher R-value (R-26 vs. R-16 for most EPS panels), and a cam-lock assembly system makes installing and fastening the panels extremely efficient.

For the new roof and the existing wall cavities and rim joists, we used Demilec Sealection low-density polyurethane spray-foam insulation (www.demilecusa.com).

Although the new airtight building envelope allowed us to downsize the furnace, ventilation became a concern. To maintain healthful indoor air, we installed a Venmar air-to-air heat-recovery ventilator (www.venmarces.com) with a heat-exchange manifold that strips heat from outgoing air and adds it to incoming air in the winter. In the summer, the process is reversed.

Another innovative feature of this remodel is the PEX home-run water-distribution manifold system, which reportedly saves a family of four up to 10,000 gallons of water per year. Unlike more common copper trunk-and-branch plumbing, each fixture in this system is fed directly from a central manifold, resulting in less heat loss and less time waiting for hot water to arrive at the tap. Moreover, the flexible tubing allows water to flow more efficiently. The manifold system requires fewer fittings, which means a quicker installation.



Efficient design with light and views to boot. Built with an ICF foundation, SIP walls, and a spray-foam insulated roof, the addition is largely used for a family room and a master suite. Both are well adorned with high-performance windows that maintain a high overall R-value. Photos taken at F and G on floor plan.

