

**simplified
construction**

flexible

efficient

quality

maintainable

customizable

How do we CREATE
the HOME of the
FUTURE?

“ New innovations and a faster pace of life mean that homes built even ten years ago may not meet our needs today. We have less time to spend maintaining our homes and yards. Yet, our homes remain an important part of our American culture—a reflection of who we are, our safe haven, our financial success, our greatest investment. The PATH Concept Home uses technological innovation with an eye to affordability to show us how to face change and create homes that meet our needs as individuals. ”

— David Engel
Partnership for Advancing
Technology in Housing

It starts with a CONCEPT that is translated into a DESIGN

American homeowners want high quality, affordable, flexible housing. Builders need solutions to reduce cycle time and the impact of the ongoing skilled labor shortage. Manufacturers and architects are interested in producing innovative products and designs, but they need to see the demand.

The PATH Concept Home brings this together. Through market research we identify needs. Technology scanning and R&D helps us to identify building systems to meet these needs.

The PATH Concept Home offers a flexible design approach that utilizes innovation to allow owners to customize their home to meet their needs and budget even if these change over time.

Meet some families and
their PATH Concept Homes . . .



Michael & Emily

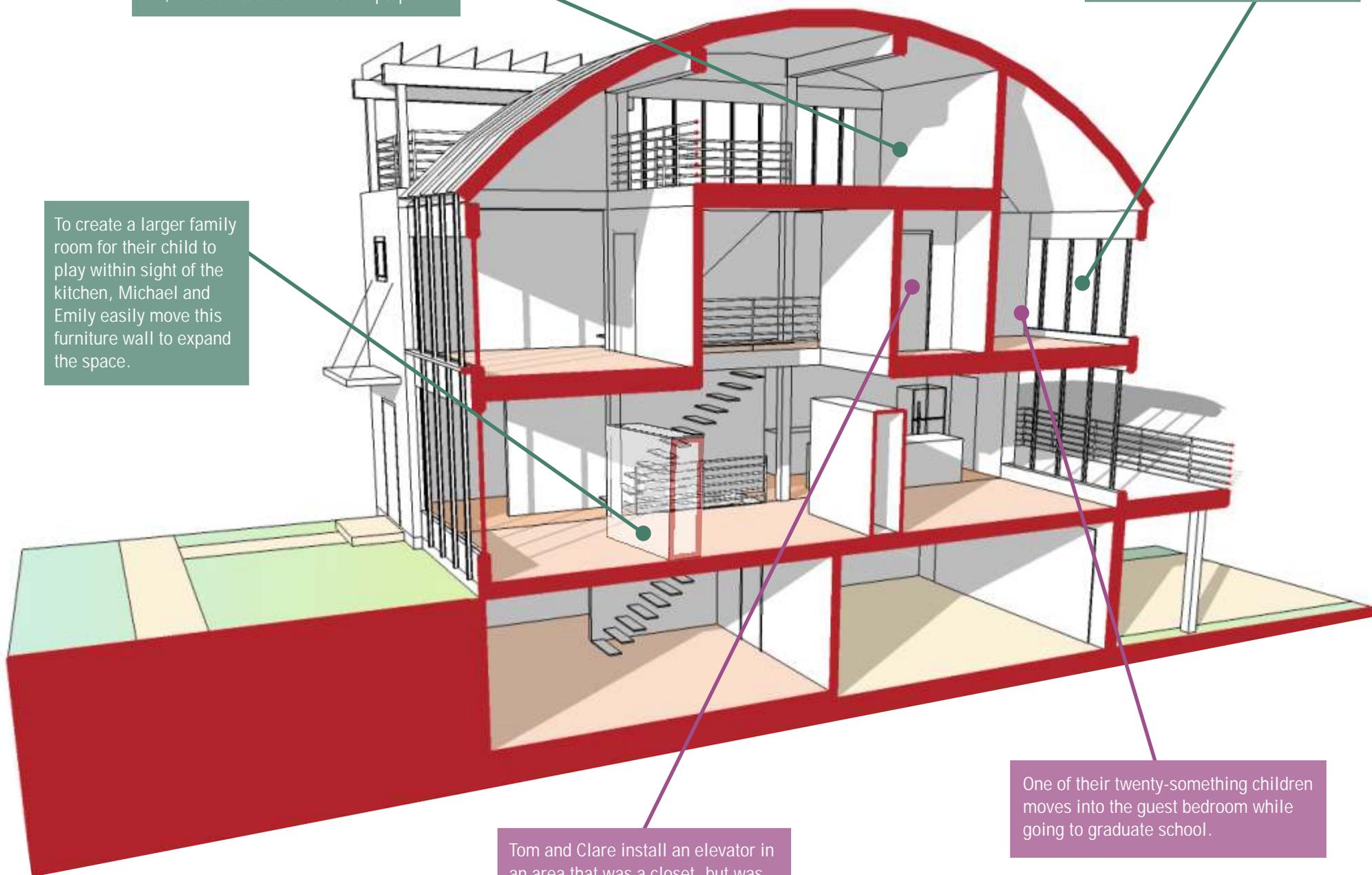
Meet Michael and Emily, a recently married young couple, who purchased a home downtown so that they could easily commute to work and enjoy the restaurants and nightlife the city has to offer. Emily works at a start-up biotechnology company and Michael works for the local government. They both frequently bring work home.

They take public transportation to work and only have one car for their expeditions to the suburbs for serious shopping. When they find out that Emily is pregnant with their second child, they realize that they need more space and amenities for the kids. So, they decide to move to a nearby suburb. We'll see them again later.

With the arrival of the baby, Michael's fozz ball table is removed and the loft becomes a quiet retreat to read, watch TV, or do a little work on the laptop.

After Michael and Emily have their first child they transform their home office into a nursery.

To create a larger family room for their child to play within sight of the kitchen, Michael and Emily easily move this furniture wall to expand the space.



Tom and Clare install an elevator in an area that was a closet, but was designed to easily accommodate an elevator in the future.

One of their twenty-something children moves into the guest bedroom while going to graduate school.

Tom and Clare just moved from the local suburbs where they raised their children. They always wanted to live in the city and enjoy all of the amenities it has to offer. Tom is retired, but Clare continues to enjoy work since she took time off to raise their children. She works

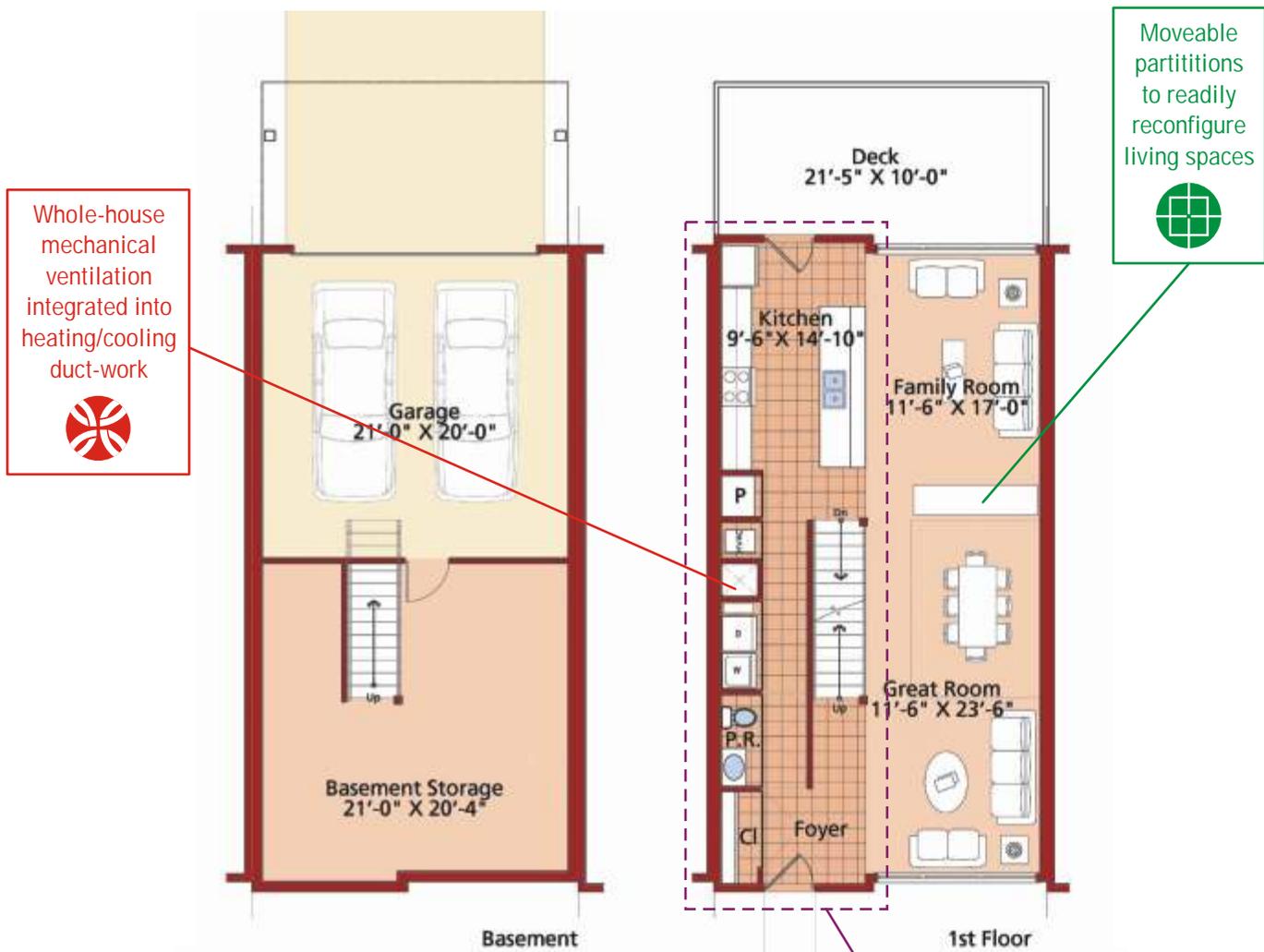
at a small non-profit organization just outside the city. They own one car for Clare's reverse commute. Tom and Clare are very active now, and they plan to age-in-place in their urban townhouse.

Tom & Clare



"The organizing principle for my project was to divide the house into two distinct zones: the service area and the served area. The majority of the building systems are contained in the spatially efficient service zone. This frees the served zone for complete flexibility of use and adaptation to changing needs over time."

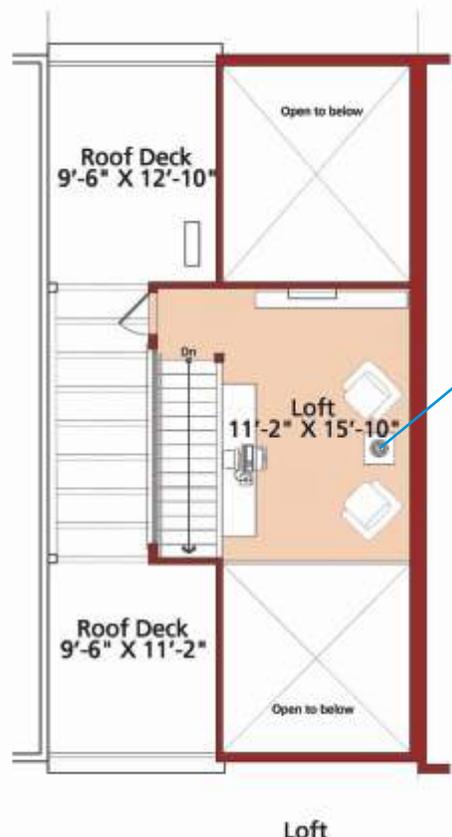
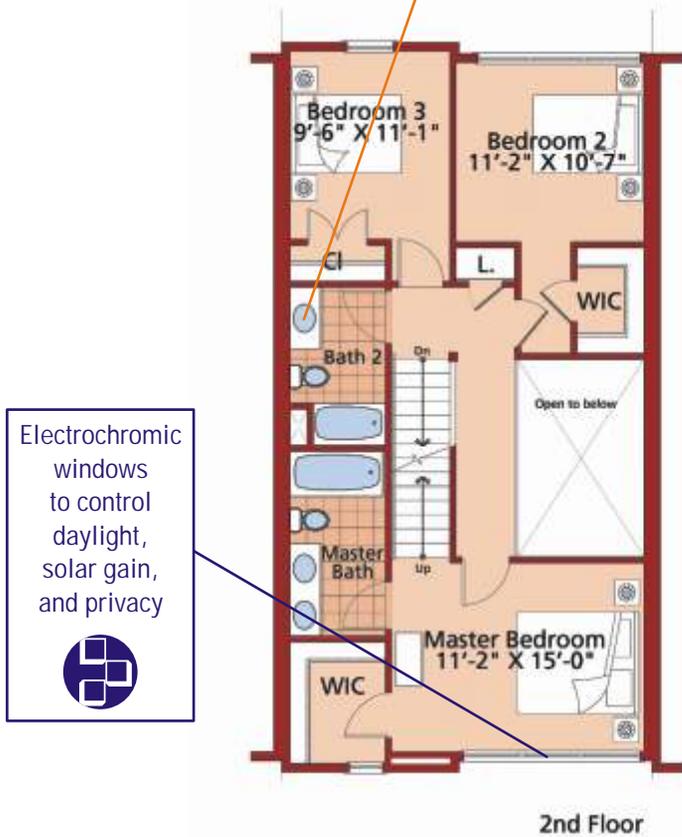
—Mark Bombaugh, Torti Gallas and Partners



Modular plumbing connections to simplify installation and equipment change-outs



Consolidated mechanical systems with the option of modular construction for the house



Self-powered wireless switches eliminate wiring and add flexibility



The PATH Concept Home designs are based on six principles:

-  Flexible Floor Plans feature designs and building systems that enable interior spaces to be reconfigured more easily.
-  Organized and Accessible Systems disentangle mechanicals from each other and separates them from the structure and floor plan providing easy access for repairs, upgrades and remodeling.
-  Improved Production Processes increase building quality and efficiency while reducing production time.
-  Alternative Basic Materials are new advanced materials or those adapted from other industries and applied to home building.
-  Standardization of Measurements and Component Interfaces simplifies product installation and enhances design flexibility by adopting a standardized approach throughout the design and fabrication of a house.
-  Integrated Functions combine systems to increase efficiency, reduce equipment needs and promote multi-functional designs.

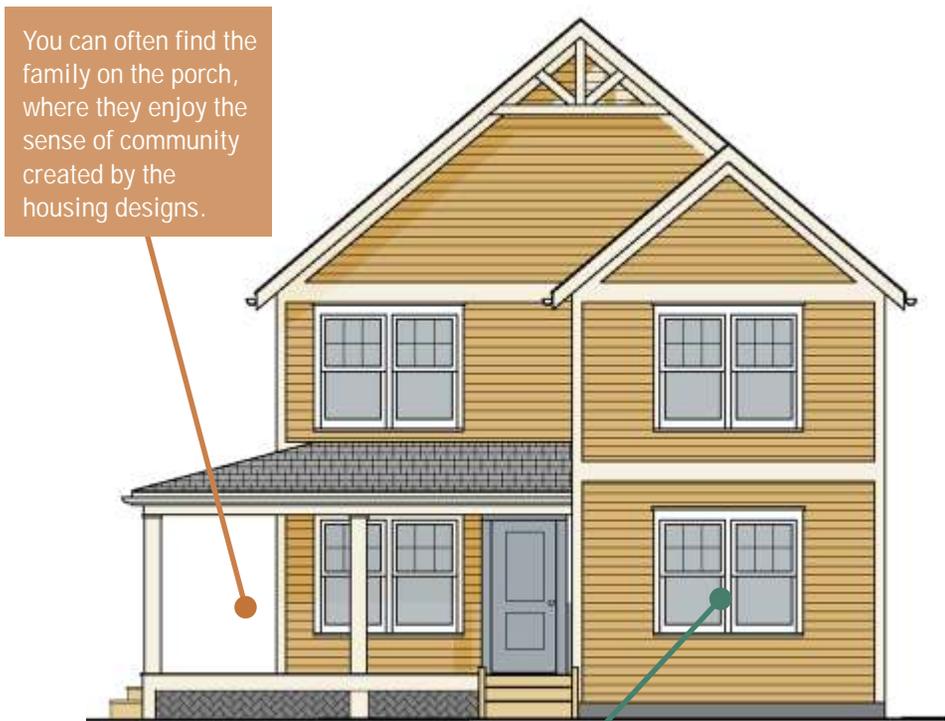
Examples of each principle are noted on the floor plans.



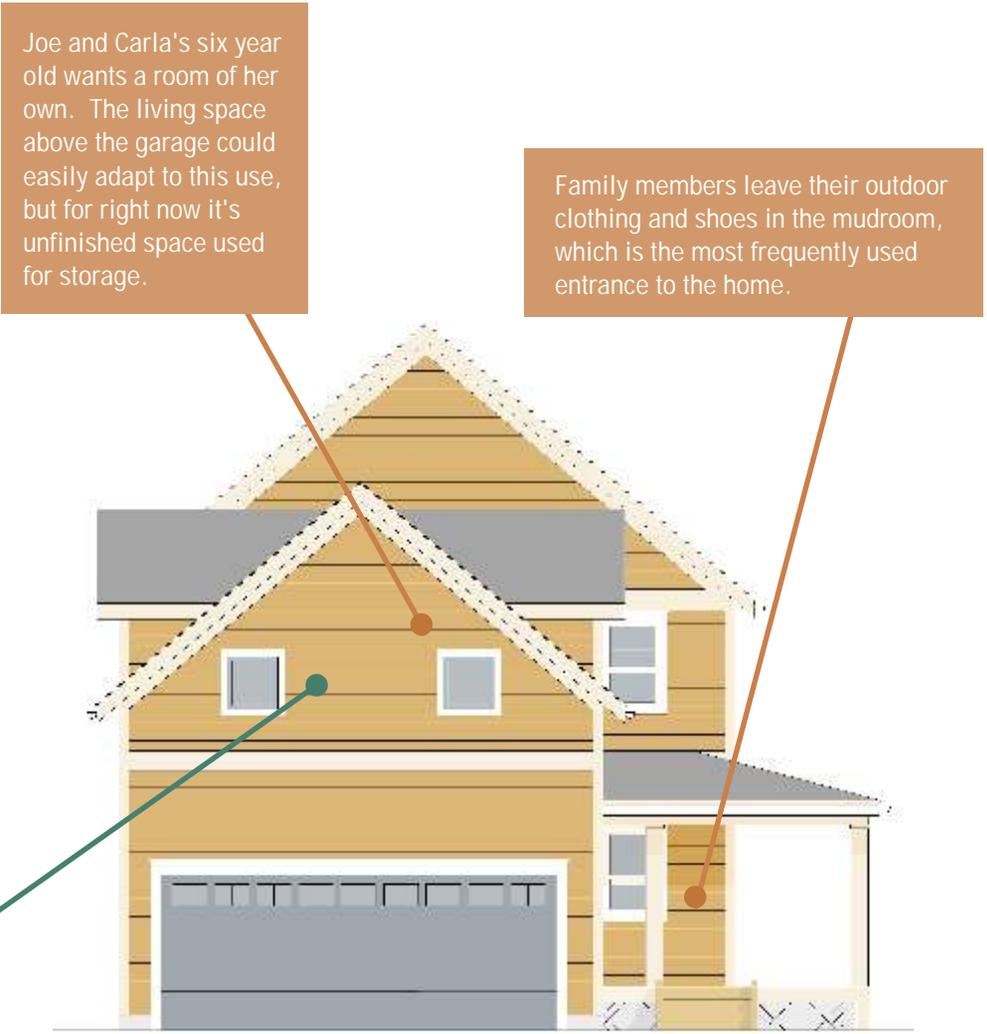
Joe and Carla, like most Americans, choose to live in the suburbs. They purchase their first home in a new planned community. They love the community for its rich diversity. Carla is a first-generation American. Her family moved to the United States from the Philippines when she was just one year old. Much of her family

lives in other nearby suburban communities. Joe and Carla also like the community because they can walk to schools, parks, shops, restaurants and the grocery store. They have three children, aged one, three and six.

Joe & Carla

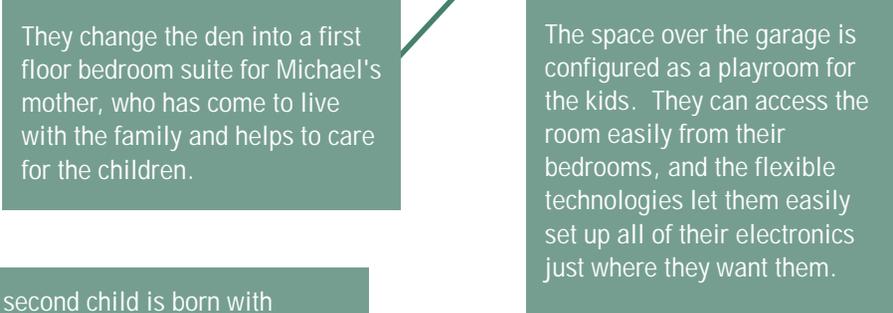


You can often find the family on the porch, where they enjoy the sense of community created by the housing designs.



Joe and Carla's six year old wants a room of her own. The living space above the garage could easily adapt to this use, but for right now it's unfinished space used for storage.

Family members leave their outdoor clothing and shoes in the mudroom, which is the most frequently used entrance to the home.



They change the den into a first floor bedroom suite for Michael's mother, who has come to live with the family and helps to care for the children.

The space over the garage is configured as a playroom for the kids. They can access the room easily from their bedrooms, and the flexible technologies let them easily set up all of their electronics just where they want them.

Their second child is born with physical disabilities so they install a ramp along the porch and an elevator in the open space of the stair well.



Michael & Emily

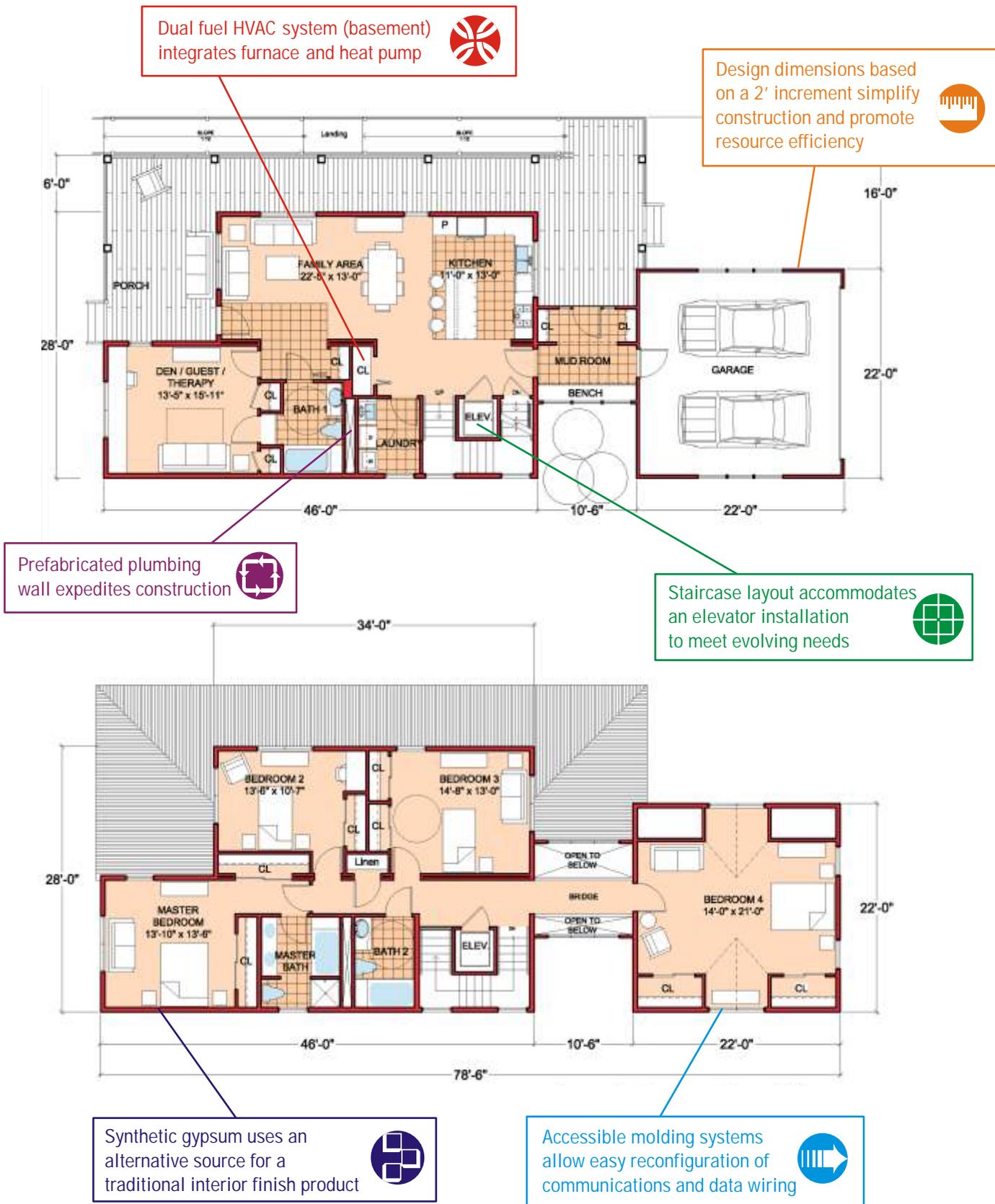


Remember Michael and Emily? When they learned they were pregnant with their second child they moved to the suburbs where they would have more space and amenities.

Detached Home

"This PATH Concept Home is designed in a traditional, Arts and Crafts style that could adapt to either New Urbanist or conventional 50' wide subdivisions. The 2,200 square foot home could be substantially reduced in size without seriously changing the amenities. One key design element is the flexible floor plans. The plan responds to a growing family by allowing the later finishing of second story spaces, especially the playroom/bedroom over the garage. Elevator space and visitability features anticipate aging-in-place needs, or may serve the needs of a disabled family member."

—Alex Grinnell, Steven Winter Associates



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-  Improved Production Processes
-  Alternative Basic Materials
-  Standardization of Measurements and Component Interfaces
-  Integrated Functions

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CREATING the HOME of the FUTURE . . . through INNOVATION.

The PATH Concept Home allows you to customize your homes to meet your clients' needs and budgets—even as they change over time.

"The PATH Concept Home demonstrates how to incorporate innovations that improve housing and positively impact the quality of my customers' lives."

— Fernando Pagés Ruiz, Brighton Construction, First PATH Concept Home Builder

INNOVATION Improves Housing

The PATH Concept Home showcases the best ideas and innovations from industry leaders. Technology Reports on PATH Concept Home Principles provide an in-depth look at the innovation technologies, advanced materials and improved production processes that serve as the foundation for the PATH Concept Home.

The Partnership for Advancing Technology in Housing (PATH) is a public-private partnership, supported by HUD, that seeks to improve the quality and value of America's housing by accelerating the use of innovative technologies.



To learn more or get the latest information on the PATH Concept Home, visit www.pathnet.org/concepthome
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