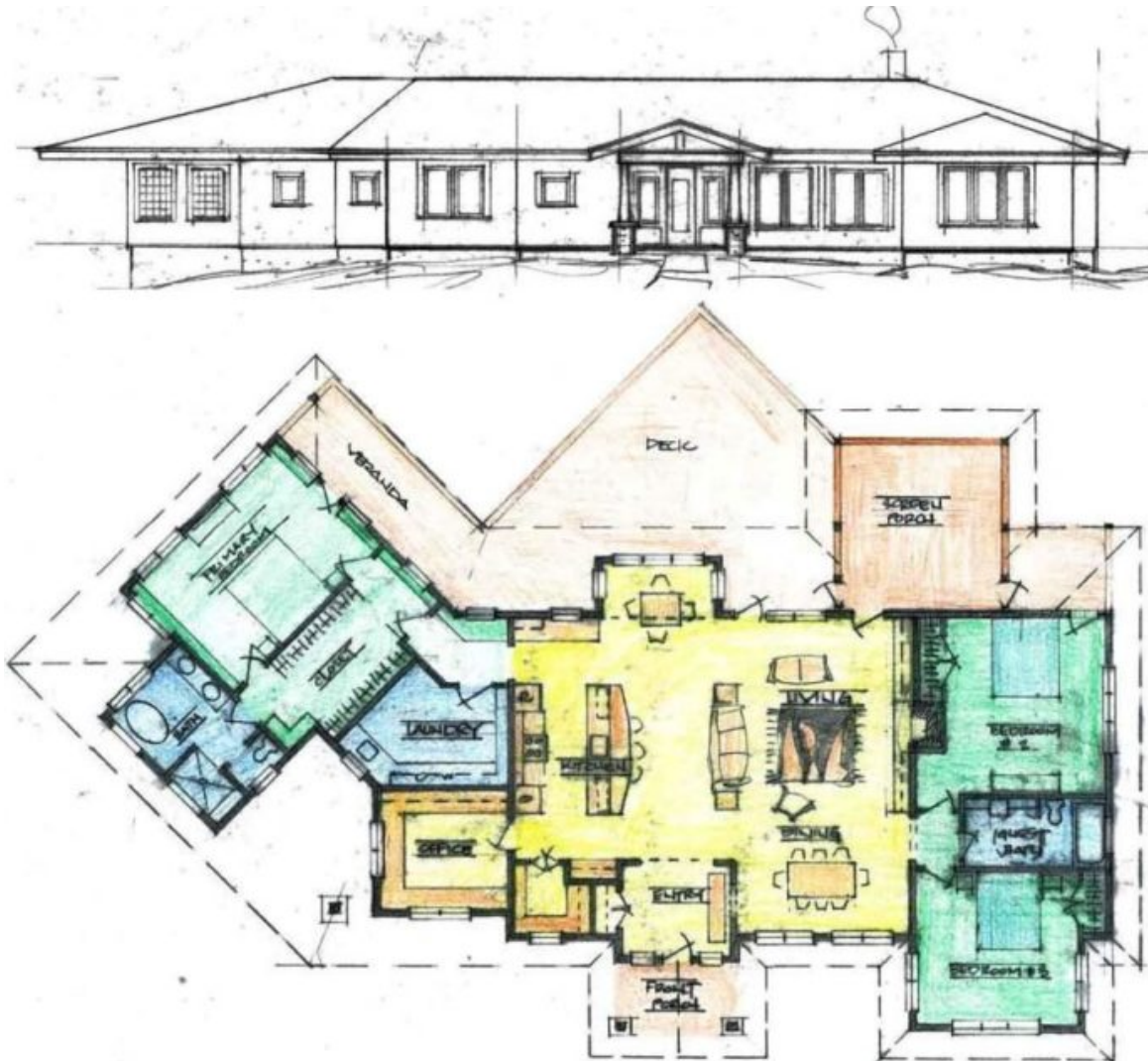


Green Building and Aging-in-Place Design

They go together like chocolate and peanut butter



By Michael Chandler | September 6, 2009



Visit-able design means a sheltered, step-free entry and guest rooms that can also accommodate kids and study, or a mother-in-law suite in addition to a walker-friendly master suite and plenty of incentive to get outside and away from the TV or computer.

Image Credit: Beth Williams, Chandler Design-Build

One of the best ways to set a course for the future of your company is to look back on past customers that you best served and most enjoyed working with. When I do this, I see a trend toward working with what we have come to call “empty-nesters.” These are usually couples with older children who are ready to make a fresh start with a smaller, more energy-efficient, “green” and low-maintenance home to which the kids only visit for family reunions. This may include grandparents (as well as kids) coming to stay for extended periods and the assumption that the owners may gradually begin to lose their sight and mobility.

One of the kindest compliments that Beth and I have received was, “Your design solved problems we didn’t know we had.” As designers, we can best serve our clients by helping them address future needs that they may not be considering going into the design process.

When designing a sustainable home it is arguably more important to focus on aging-in-place and handicap visit-able design than payback or resale value. Our goal is to present all the potential lifestyle options they may need in their home in the future. An aging-in-place design can accommodate all age groups. Carrying an infant around in your arms is easier in an aging-in-place design, and being a place that welcomes grandparents is pretty handy as well.

When clients question us about green payback calculations, we ask them to consider the probable cost of fuel in five or ten years and also what they picture their lifestyle will be at that time. We do this to drive home the advantage of knowing they will have more financial security in the future by minimizing their energy costs now as well as to open the conversation to how their needs will evolve over time. Looking at the big picture during the design process can help identify low or no-cost options that will save big in the years to come.

The difference between aging-in-place and handicap access is more than just designing around walkers rather than wheelchairs. While most interior doors will be 32 in. wide rather than 36 in the goal is not to create a residential hospital setting so much as a gracious and normal-looking home that also accommodates the likely needs of an

aging occupant or of the friends and family they may have come to visit.

Adding aging-in-place sensibilities to the green design process means that, in addition to the resource efficiency, durability, and indoor air quality standards, we will be adding some design criteria to the mix. The NAHB offers training and certification as a Certified Aging in Place Specialist ([CAPS](#)), but the core principles are fairly simple. You can start implementing them immediately to add value to your design and differentiate yourself from your competition.

Start with the thought that arthritis sufferers should be able to get out of bed in the morning and make it through the day operating everything with oven mitts on. Doorknobs and faucets can be lever types; cabinet pulls can accommodate a four-finger grip and visually contrast with the woodwork. The edges of counters and wall cabinets can stand out visually to accommodate failing vision. Lighting can be very important as vision fades, so providing both adequate natural lighting and well-designed and energy-efficient task lighting is essential.

Bathrooms and kitchen can have seated workstations with [offset sink traps and supplies](#) to allow knee room. Dishwashers and laundry equipment can be raised 12 in. to 18 in. off the floor to ease back strain. “Comfort-height” toilets can have blocking preinstalled for future grab bars and a 5-foot clear turning radius in front with walker parking adjacent to the throne. Showers generally need not be [roll-in](#) but can accommodate transferring from a walker to a shower chair.

All doors should be 32 in with the most commonly used exterior doors at 36 in to allow wheelchair access and prevent busted knuckles when using a walker or even just a laundry basket. The transition zone into and out of the car in front of the home can have a roof to protect it from the weather and easy, smooth, and nonslip access to the front door. Trip hazards and slippery floors can be minimized, as many health crises are precipitated by a fall. The main entry lock can have a [wireless key-fob operator](#) like a car. Wireless operators can also activate curtains, ventilation, and lighting.

A big part of aging-in-place design is helping people feel the emotional security that they are still in control of their lives and can continue living at home. A burglar alarm system can allay the feeling of vulnerability: panic buttons in the bedrooms and baths; creating a strong room in the master closet with a deadbolt on the door and buttons inside to call hospital or police; positioning the alarm panel so that occupants can check door and alarm status from the bed (but not from the front door).

Most important, the design can help resist the feeling of isolation by making it easy to get away from the TV or computer and out onto a front porch or screened porch and by providing “family shrines” to showcase photos of family and happy memories. Clients may be resistant to thoughts of their own vulnerability, so Beth finds it useful to remind them that as we age our friends and relatives are aging too, living in a home that is easy to get in and out of and accommodates our friends with disabilities allows them to visit and keep out social network alive.