

Universally Designed House Built in Tukwila

BY SANDRA C. HARTJE

The first universally designed “spec” house in the Puget Sound area is currently under construction in Tukwila. Designed by students at Seattle Pacific University, the house will accommodate all of the physical, cognitive and sensory changes a person experiences over his or her lifespan. According to the formal definition from the Center for Universal Design: “Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”

Universal Design (UD) is intended to benefit people in all stages of life. This includes people of all capability levels, even those living with diseases and disabilities. The principles of UD state that the architectural features of a house influence the quality of our lives, and can either support or hinder our ability to function safely, comfortably, conveniently and independently.

Incorporating UD features and products during the design and construction phase of a house enables people to live in one home throughout their lives, without the need for extensive modifications or relocation to meet the changing needs of family members.

Some simple UD features considered in the design process for both new homes and modifications to existing homes include:

- Entrances without stairs
- Smooth flooring transitions between rooms
- First-floor master bedrooms and bathrooms
- Wide doorways (at least 36 inches wide)
- Lever door handles
- Light switches at a convenient height (44-48” from the floor)
- Counters, sinks, and showers with adjustable heights.

The Tukwila project began in January of 2005 when students in the UD class at Seattle Pacific University received an assignment to redesign an existing home using the principles of Universal Design. Susan M. Duncan, an adjunct faculty member and design practitioner specializing in universal and accessible design, taught the ten-week class. She divided the class into design teams, assigning each team the responsibility of researching, designing and documenting solutions to a different area of the two-story, three-bedroom house. Students worked closely with the architect and the contractor throughout the design process.

The students re-designed nearly every area of the

2,000 square foot house, including the dining room, kitchen, media room, den, bedrooms, bathrooms, laundry room, garage, stairs, rear entry, backyard, and lighting. The project also included the specification of materials, finishes, appliances, electrical systems, and plumbing systems, all of which were chosen in accordance with UD principles. Each design team presented their final project at the end of the quarter to the class, the contractor, and a representative from the City of Seattle.

Groundbreaking for the project took place on May 19, 2005 when the City of Tukwila presented

the building permit to Jason Running, the contractor. The house is being built according to the students’ revised floor plans, and will be 2,640 square feet. The price is projected to be around \$325,000, an affordable rate for the community in which it is being built. The house is available for purchase.

The Area Plan for Aging and Disability Services (ADS), a program of the City of Seattle’s Human Services Department, has identified UD housing as one of their goals. The Tukwila house will be promoted by ADS as the first UD spec house built in the greater Seattle area and was shown as part of the “home tour” for the National Association of Area Agencies on Aging (N4A) national conference, held in Bellevue July 9 – 13, 2005. A documentary of the project is being filmed under the auspices of the City of Seattle’s SeaTV station, and will be used for education and outreach to promote UD in new residential construction in the Seattle area and in the state of Washington. The goal for UD advocates is to make UD the standard for design and construction of new housing.

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Tukwila mayor Steve Mullet (center) is flanked by SPU students, local contractors, Tukwila council member Joe Duffie (5th from left) and Margaret Casey of the City of Seattle (2nd from right) at the groundbreaking ceremony for the universally designed house in Tukwila. Photo courtesy of Sandra Hartje.