

## Universal Design at The Villas

**Universal Design (UD) means that everyone regardless of abilities and disabilities, age, or physical and emotional sensitivities to light or sound, can comfortably use a building.** There is much more to this concept than our now familiar conformance with the ADA (Americans with Disabilities Act). UD takes access much farther so that individuals can use their competence and independence without limitations in the built environment. UD also attempts to promote inclusion by avoiding even the appearance of a second set of improvements geared toward individuals with limitations.

**Universal Design includes the ADA,** but as an example, it also means controlling noise so that those who are hearing-impaired or sound-sensitive can function effectively. This could apply to the 30% of people over 65 years old who have hearing difficulties, the majority of people over 65 who have some type of chronic condition or disability or to autistic people who are confused and agitated by noise. As for visual changes in people over 65, these include problems with seeing in dim light and locating objects. Visual impairments are a leading cause of loss of independence.

Unlike the ADA, UD is not the law, nor are there specific detailed UD guidelines yet. **Universal Design is more concerned with extending the idea of accessibility to usability, inclusive of more uniquely disabled individuals and those who experience illnesses and the normal changes through aging.**

UD's additional benefit for senior citizens is that it allows them to stay in their "lifespan homes" or age in place. Economically, as well as socially, this is important since the cost of living at home with various supports costs about \$45,000 per year and a nursing home costs about \$75,000. Studies, however, suggest that marketing UD features is most successful when they are presented simply as a benefit that makes life better and safer for everyone. When extra clearance is provided in the kitchen or a no-step entry is installed in the home or the bathroom shower, it makes them much easier to use for everyone.

UD features also provide "visitability". This means that a resident can invite a somewhat impaired friend or relative to their home and have them be comfortable.



*The Villas Site Plan*

**The Villas** at the Willows is a development under construction of market rate single and duplex homes for seniors off South Woods Mill Road in Chesterfield, Missouri. It is part of the larger Willows development of garden apartments that has common amenities such as restaurants, indoor swimming pool, art gallery, theater, fitness center and library for seniors; all available to The Villas residents. **St. Andrew's Resources for Seniors** is the developer of The Willows and The Villas. While The Villas could be considered a luxury development, **the Universal Design features that have been incorporated can be applied to any residential design** from moderately priced single family homes to high rise condominiums.



*Street Side View of Villas Unit*

### **Universal Design Features Shown on Villas Unit Plan**

#### **Exterior**

1. **“No-step” access** to the front and rear door entrances and garage entry.

#### **Throughout the unit**

2. **Reinforced corridor walls** to allow for the future installation of grab bars.
3. **Accessible flow** to the floor plan for ease in movement.
4. **32” wide door openings** and **48” wide corridors** and maneuvering clearance for wheelchairs.

#### **Kitchen**

5. **Extra clearance** in the kitchen for circulation.
6. Contiguous **“channeling surfaces”** to allow movement of heavy items.
7. Pivot action **lever-style faucets**.
8. **Contrasting colors** on counters for recognition of edges.
9. **Task lighting** to minimize glare.

#### **Baths**

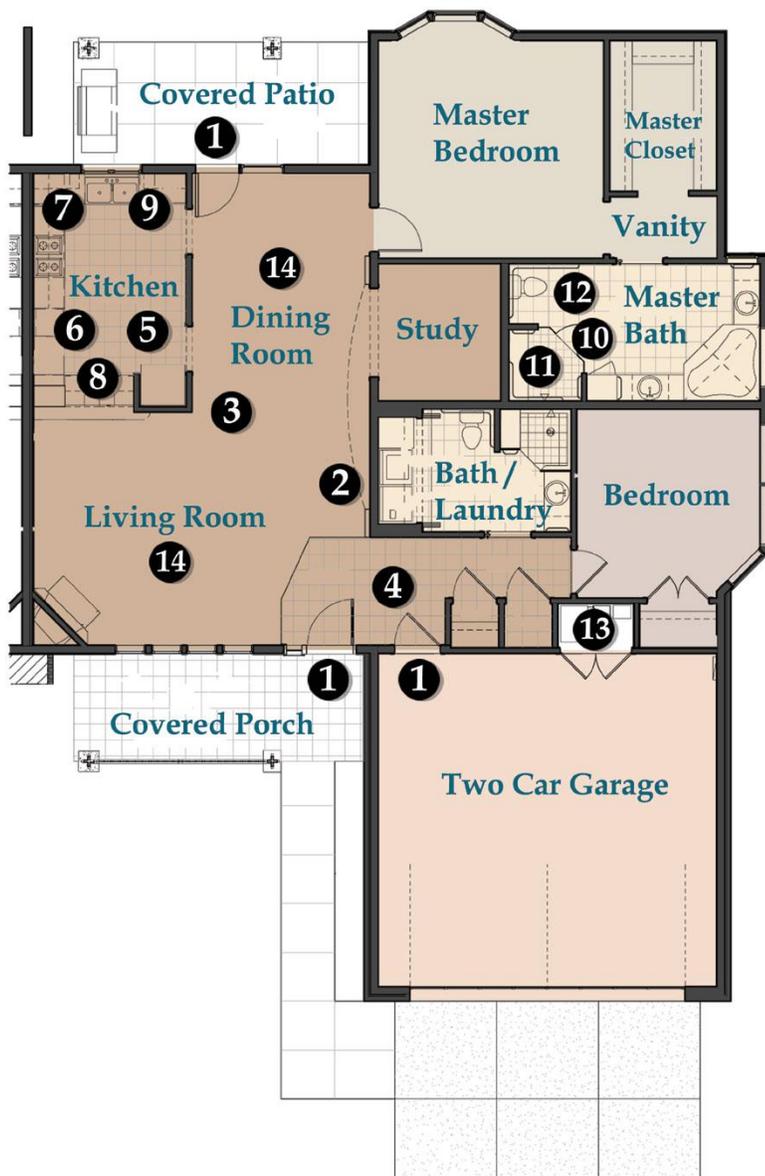
10. **Zero threshold shower** with integrated bench.
11. Handheld **adjustable shower wand** and nozzle.
12. Towel racks that function as **grab bars**.

#### **Electrical, heating and air conditioning**

13. **Insulated ducts** to control HVAC system noise.
14. **Good ambient lighting levels** to assist aging eyes.

#### **Special features**

- Recessed **fire sprinkler system**.
- Provision for elevator installation.



*Plan of Villas Unit showing UD Features*

**Credits:**

- Owner – Saint Andrew’s Resources for Seniors System,  
Mary Alice Ryan, President/CEO
- Owner’s Representative – Hercules Construction Managers
- Architect – TeamFour/Saur, Lou Saur, Design Principal
- Interior Designer – Design Extra
- Structural Engineer - SSC
- Civil Engineer – Stock & Associates
- Construction Manager / General Contractor – PARIC
- Marketing Consultant – Brooks Adams Research